

CATALOGUE of EARTHQUAKES in NORTHERN CALIFORNIA and ADJOINING AREAS

1 January 1910 - 31 December 1972

Bruce A. Bolt Roy D. Miller



Seismographic Stations University of California Berkeley, California 1975



CATALOGUE OF EARTHQUAKES

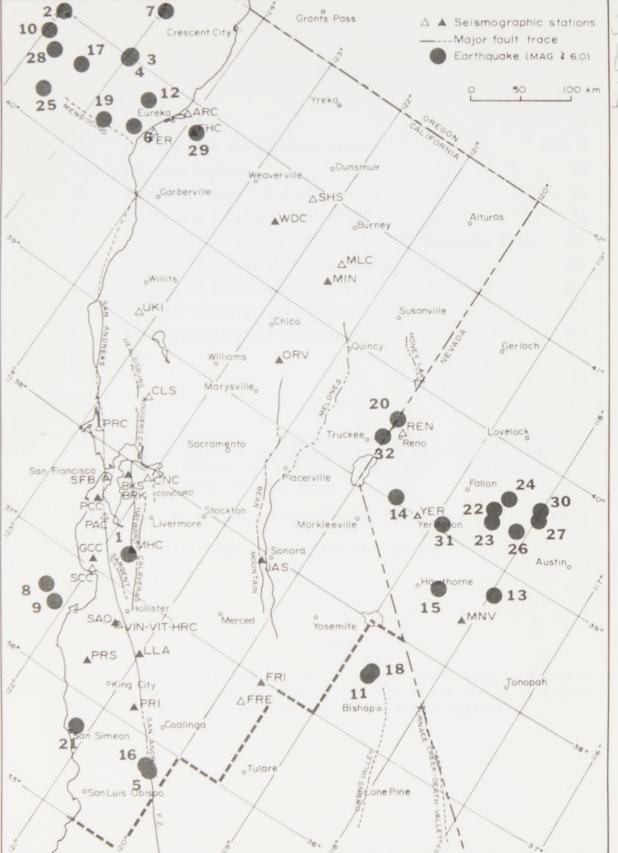
IN NORTHERN CALIFORNIA AND ADJOINING AREAS

1 January 1910 - 31 December 1972

Bruce A. Bolt
Roy D. Miller

ARCATA, BERKELEY, BYERLY, CALISTOGA, CONCORD, CORVALLIS, FALLON, FERNDALE, FICKLE HILL, FRESNO, FRIANT, GRANATE CREEK, HARRIS RANCH, JAMESTOWN, LLANADA, MANZANITA LAKE, MINA, MINERAL, MOUNT HAMILTON(LICK), OROVILLE, PALO ALTO(ERANNER), PARATSO, PTLARCITAS CREEK, POINT REYES, PRIEST, RENO, RUTH, SAN ANDREAS GEOPHYSICAL OBSERVATORY, SANTA CRUZ, SAN FRANCISCO, SHASTA, UKIAH, VINEYARD, YERINGTON

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igure 1 - Map of Northern California and adjoining areas showing the location of all earthquakes with Richter Magnitude 6.0 or greater for the period 1910-1972. For description of each earthquake see Section



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- 1. Map of Northern California and adjoining areas showing it the location of all earthquakes with Richter Magnitude 6.0 or greater for the period 1910-1972. Significant fault traces are also shown.
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COVER

Aerial photograph of the San Andreas fault zone in the area north of San Francisco between Bolinas Bay at the bottom to Bodega Bay at the top. Courtesy Sutherland Aerial Photographs.

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I. Introduction

This catalogue is for the most part a compilation of basic seismological data on earthquakes in Northern California and adjoining areas as contained in the "Bulletin of the Seismographic Stations", Volumes 1-42, covering the years 1910-1972. It incorporates modifications and additional observations that have been made since the time of the original publication. It also includes a number of new maps and specialized listings, as well as some earthquakes within the area of interest which are described in other sources and for which Berkeley information is inadequate.

More specifically, Section IV contains computer plotted seismicity maps illustrating ten year periods of earthquake activity in Northern California. Section V contains a computer print-out listing the earthquakes occurring in Northern California and adjoining areas during the period 1910-1949, while Section VI contains listings of earthquakes with accompanying epicenter maps for three or six month periods for the years 1950-1972. Detailed discussion on the estimation of earthquake parameters and format used in these listings will be found in the introduction to Section IV.

Because of changes in station density and observatory practices over the years, the quality of the hypocenter locations contained herein is not uniform, but depends on the number of stations and types of seismographs in use at the time of recording, and on the method of location. A more thorough discussion of this subject is contained on page 23.

While every effort has been made to include in the catalogue all local earthquakes of magnitude greater than or equal to 3.0, a few were almost surely missed, especially in the early years of operation. On the other hand, even though a large number of shocks of smaller magnitude are given, there is no claim made as to the completeness of such listing. Nuclear explosions and quarry blasts are in general not included, except in cases of uncertain identification, and in these cases an appropriate notation is made (e.g. Blast?).

In addition to the information on local earthquakes summarized in this catalogue, much additional observational material on United States and overseas earthquakes is available at the Berkeley Station. Many back numbers of individual "Bulletins of the Seismographic Stations" are still available and can be sent upon request to the Director. These contain readings of recorded teleseisms as well as the local earthquake lists. Also, the list of earthquakes in Sections V and VI is available in binary or BCD form on magnetic tape, upon request, at a cost of \$50. The magnetic tape list now contains 10,396 earthquakes, including aftershock sequences, and will be updated every six months. This tape is 1200 feet, 1/2 inch, 7 track at 556 cpi. Finally, a considerable library of recorded earthquakes, both regional and teleseisms, is stored on magnetic tape in analog form. Copies of these tapes as well as copies of photographic paper seismograms can be obtained for research purposes upon written request.

"The Seismographic Stations at Mount Hamilton (Lick Observatory) and Berkeley present several items of interest in the history of earthquake science, one of which is that according to the available records they were the first seismographic stations set up in America. Furthermore, they have functioned continuously from their founding to the present day, with improvements in instrumental equipment from time to time as the development of the science and opportunity have permitted.

Several outstanding figures in the seismology of the 1880's were impressed with the importance of these stations, and Ewing, Milne, and Gray each took a personal interest in aiding one or both stations to obtain their own best and most modern types of instruments."

The quotation is from "History of the University of California Seismographic Stations and Related Activities" by Professor George D. Louderback, published in the <u>Bulletin of the Seismological Society of America</u>, Vol. 32, No. 3, pp. 205-229, 1942. In this paper may be found a detailed account of the development of the Berkeley stations from the

installation of the first instruments in 1887 (the first earthquake known recorded at Mount Hamilton was on April 24, 1887) to 1942.

Since 1942, the number of seismographic stations associated with the University of California has increased from six to seventeen in 1972. In 1950, Professor Perry Byerly was appointed Director of the University of California Seismographic Stations by the Regents; he had been in charge of instruction and research in seismology since 1925. Professor Bruce A. Bolt was appointed Director in 1963. Since 1960, the stations have entered into research and service contracts with the Air Force Office of Scientific Research, the Arms Control and Disarmament Agency, the National Science Foundation, the California Department of Water Resources, the California Division of Mines and Geology, the U. S. Geological Survey, the Office of Naval Research and the National Oceanic and Atmospheric Administration.

By 1975, a telemetry network of fifteen stations in Central California, recording on film and magnetic tape, was operated by the University of California together with seismographs with broadband frequency response at Berkeley, Jamestown, San Andreas Geophysical Observatory, and Whiskeytown. A detailed description of station data and instrumentation with seismograph responses for the period 1910-1972 will be found in Sections II and III, pages 5 - 22.

In 1970, a 16 mm movie film, in color, duration 25 minutes, entitled "The Earthquake Observatory" was made describing the work of the Stations. The film is available for sale or rent on request from the Director. The film was reviewed (Adams, 1971) and recommended as educational and of general interest to the public.

In 1974, an interactive computerized seismogram analysis system was designed at the Berkeley Station. The main objective was to enable more rapid and precise analysis of the seismograms from the U.C. Berkeley network, based upon a mini-computer (Modcomp II/45) and a direct-writing graphics screen (Vector General Series 3). It is planned to bring this system into routine operation in 1976.

This Catalogue may be kept current by receiving continuing numbers of the semi-annual "Bulletin of the Seismographic Stations". Requests for inclusion on the mailing list should be sent to the Director.

II. STATION DATA AND INSTRUMENTATION

A notable feature of the University of California Seismographic Stations is the varied range of seismographic equipment operated at them since their beginnings, as the first stations in the Western Hemisphere, 88 years ago. Many types of classical seismographs were installed in the network in the early days, including Ewing, Bosch-Omori, Wiechert, and Wilip-Galitzen instruments. The elegant Bosch-Omori pendulum recorders are again in operation — now for public display: one at the Josephine Randall Junior Museum, San Francisco, and one at the Lawrence Hall of Science, Berkeley. In 1961-63 the conception of a connected regional network of stations with signals telemetered over commercial telephone lines was pioneered successfully at Berkeley and in the late sixties the importance of routine broadband tape recording of signals at an earthquake observatory was demonstrated.

In the following two Sections are listed details on all the stations operated by the University of California, Berkeley, in alphabetical order, during the interval 1887 to 1972. The details include the station name and official abbreviation, agency responsible for the establishment of the station, when established, its location, geology of the site, dates of operation, types of instruments, polarity, periods and magnification curves.

In the tables of Section II, direction of motion is indicated precisely by the order of the symbols under component. Thus WE indicates that W is up on the record while EW indicates that E is up. Common practice in recent years is to have vertical records (Z) read UP to correspond to compression. However, some earlier records may not follow this convention, so that written comments on individual seismograms should be adopted as the proper direction of motion.

The statement "to date" means that the station instruments were still operating on 31 December 1972, but does not imply that these instruments ceased operations at that time. The symbol # preceding "type of instrument" indicates that the record was made at Berkeley on a 16mm Develocorder at magnifications appropriate to an optical

enlargement of 20x. The symbol * preceding "type of instrument" indicates that the signal was recorded at Berkeley on magnetic tape.

Curves have been plotted in Section III to show the frequency response appropriate to each seismograph or recording system that contributed significant records to the extensive Berkeley library of seismograms and magnetic tapes. The longstanding policy is to calibrate the instruments frequently so that, generally speaking, ground motions can be calculated from the records with adequate precision by the use of the response curves.

In Figures 2, 3 and 4 the magnification factor on the ordinate is in terms of record amplitude relative to ground displacement. For the broadband tape-recording systems, listed in Figure 5, the ordinate is the voltage at the output terminals of the tape system per micrometer (i.e. per micron = 10^{-4} cm) of ground displacement. Further information on the response of these systems and phase curves is available upon request.

STATION DATA AND INSTRUMENTATION SEISMOGRAPHIC STATIONS, UNIVERSITY OF CALIFORNIA, BERKELEY

ARC ARCATA (ARC), CALIFORNIA

Established by the University of California in 1948 in cooperation with Humboldt State College 40° 52!6 North 124° 04!5 West Elevation 60 meters Foundation material is Quaternary Sandstone

Dates of Operation	Type of Instrument	Tsec	Tsec	Component	Magnification
27Feb48-14Jun52	Sprengnether, DH	1.9	1.9	WE	
29Feb48-14Jun52	Sprengnether, DH	1.83	1.8	SN	
29Feb48-14Jun52	Sprengnether, DH	1.88	1.9	Z	
20Jun52 to date	Wood-Anderson	0.8		SN, WE	2,800 max
03Jun59-17May60	Sprengnether, DH	1.0	0.2	Z	
17May60-05Ju160	Modified Benioff	0.42	0.2	Z	
05Jun60-010ct64	Slichter-Marion	1.1	0.2	Z	
010ct64-10Dec68	Benioff 14.7kg	1.0	0.2	Z	$5,800$ at $T_{\rm o}$

BKS

¢BERKELEY(BKS), CALIFORNIA (Strawberry Canyon)

Established by the University of California in 1962 37° 52!6 North 122° 14!1 West Elevation 276 meters Foundation material is Miocene Claremont Cherts and Shales

Dates of Operation	Type of Instrument	T sec	Tsec	Component	Magnification
08Jun62 to date	Benioff 100kg	1.0	0.75	NS, EW, Z	25,000 at $T_{\rm o}$
08Jun62 to date	Sprengnether, S5007	30**	100.	NS, EW, Z	3,000 at $T_{\rm O}$
Jul62 to date	Wood-Anderson kg.	0.8		SN, WE	2,800 max
09Dec69 to date	Sprengnether, ULP S5100H, 11kg	100.	300.+	N45°E	230 at $T_{\rm O}$
30Mar71 to date	Sprengnether, ULP S5100H, 11kg	100.	300.+	N45°W	640 at $T_{\rm O}$

on March 20, 1964, the Regents of the University of California named this station the "Byerly Seismographic Station" in recognition of the work of Professor Perry Byerly.

Natural period was changed from 30 to 15 sec on 12 May 1965.

300 sec galvanometer response effected electronically.

BERKELEY(BRK), CALIFORNIA

Established by the University of California in 1887

37° 52.4 North 133° 14.6 West Elevation 81 meters

Foundation material is Jurassic/Cretaceous Franciscan Sandstone

Dates of Operation	Type of Instrument	Tsec	Tsec	Component Magnification
Apr1887-1910	Ewing, 3 Component	5.0	ь	NS, EW, Z
	Ewing Duplex	5.0		Horizontal all azimuths
	Gray-Milne Duplex			"
15Jun06-10Nov10	Omori Tromometers	2.0		NS, EW
300ct10-Sep61	Bosch-Omori 100kg Wiechert 80kg	15.0 6.0		NS, EW, 80 max Z 80 max
28Aug30-01Feb65	Wilip-Galitzin	12.0	12.0	NS, EW 1000 at T_0 Z 600 at T_0
28Aug30-Ju162	Wood-Anderson**	1.0		NS, EW 3000 max
190ct33-Sep62	Benioff 100kg	1.0	0.4	Z 30,000 at To
Jan47-Mar47	Sprengnether, DH	2.0	2.0	Z
Jan48 to 1950	Slichter	1.0		Z
Mar48 to 1950	Slichter	1.0		EW
OlMay59 to date	#Benioff 100kg	1.0	0.2	Z 25,000 at To
21Jun68 to date	Benioff 100kg	1.0	8.0	Z Variable
Jan68 to date	100x torsion	0.8		NS, EW 100 max
19Jan62 to date	4x torsion	0.8		NS, EW 4 max
01May59-29Aug62	Press-Ewing	30.0	90.0	NS, EW, Z
Aug64 to date	Press-Ewing	15.0	30.0	Z 1,000 at To
19Jun64 to date	*Press-Ewing***	30.0 E	Broadba	nd N45°W, N45°E, Z
Mar64-30Mar71	Press-Ewing ULP***	45.0	300.	N45°E 700 at To

[#] Recorded at Berkeley on Develocorder.

^{*} Recorded at Berkeley on magnetic tape.

^{**} Changed in 1954 to T = 0.8 sec, Mag 2,800 max. Moved to BKS Jul62.

^{***} Before O2Aug65 NS, EW, Z.

^{****} Before 22Apr68 EW

CLS CALISTOGA(CLS), CALIFORNIA

Established by the University of California in 1961

on the Terrance Kirk Ranch

38° 38!2 North 122° 35!1 West Elevation 457 meters
Foundation material is Alluvium overlying Quaternary Volcanic Flows

Dates of Operation Type of Instrument T sec T sec Component Magnification 1961 to 21Dec64 #Benioff 14.7kg 1.0 0.2 Z 60.000 at To

CNC CONCORD (CNC), CALIFORNIA

Established by Diablo Valley College in 1960 in cooperation with the University of California 37° 58!0 North 122° 04!3 West Elevation 36 meters Foundation material is Quaternary Alluvium overlying Franciscan

Operation of station was assumed by Diablo Valley College on 6 December 1966 and telemetering discontinued.

COR CORVALLIS (COR), OREGON

Established by Oregon State University in 1959 44° 35!1 North 123° 18!2 West Elevation 123 meters Foundation material is Alluvium overlying Quaternary Volcanic Flows

In 1962 COR was established as WWSSN station under Oregon State University. Records for the period 1950 to 1962 are retained by Oregon State University.

FAL FALLON (FAL), NEVADA

Established by the University of California in 1956 in the City Hall of Fallon, Nevada 36° 28!4 North 118° 46!6 West Elevation 1207 meters Foundation material is Quaternary Alluvium

FER

FERNDALE (FER), CALIFORNIA Established by the University of California in 1933 40° 34'O North 124° 16'O West Elevation 17 meters Foundation material is Quaternary Sandstone (loose)

Dates	of	Operation	Type of Inst	trument	Tsec	Tsec	Component	Mag	gnification
			Bosch-Omori			0	EW		
Jan36	to	1962	Bosch-Omori	25kg	10-15		NS	50	max

The station was transferred to the City of Ferndale in 1962. Records for the period 1933-1962 are available at the University of California.

FHC

FICKLE HILL (FHC), CALIFORNIA Established by the University of California in 1968 in cooperation with Humboldt State College 40° 48!1 North 123° 59!1 West Elevation 610 meters Foundation material is Jurassic/Cretaceous Siltstone over Graywacke (Franciscan)

T sec Component Magnification Dates of Operation Type of Instrument T sec 0.2 80,000 at To 1.0 10Dec68 to date #Benioff 14.7kg

FRE

FRESNO (FRE), CALIFORNIA Established by the University of California in 1935 36° 46!1 North 119° 47!8 West Elevation 88 meters Foundation material is Quaternary Alluvium

Dates of Operation	Type of Instrument	T sec	T sec	Component	Magnification
28Nov35-270ct47	Wood-Anderson	0.9	0	NS	3,000 max
270ct47-1953	Sprengnether, DH	~2.0	~2.0	NS, EW, Z	
1953-02Mar71** 1953-02Mar71** 1953-30Mar67**	Sprengnether, DH	2.0 1.8 1.8	1.9 1.8 2.0	NS EW Z	2,900 at T _o 2,300 at T _o 4,500 at T _o
30Mar67-02Mar71	Benioff 14.7kg	1.0	0.2	Z	8,000 at To

^{**} Station was closed from 30Dec66 to 30Mar67. Operation was transferred to Friant in March 1971.

FRI

FRIANT(FRI), CALIFORNIA
Established by the University of California in 1971
in cooperation with the Bureau of Reclamation
36° 59!5 North 119° 42!5 West Elevation 119 meters
Foundation material is Ouaternary Alluvium

Dates of Operation Type of Instrument T sec T sec Component Magnification 09Mar71 to date #Benioff 14.7kg** 1.0 0.2 Z 64,000 at To

** Recorded locally on Helicorder.

GCC

GRANITE CREEK(GCC), CALIFORNIA

Established by the University of California in 1965
in cooperation with Richard E. Randolph in Santa Cruz area
37° 01!8 North 121° 59!8 West Elevation 122 meters
Foundation material is Jurassic Granite

Dates of Operation	n Type of Instrument	Tsec	Tsec	Component	Magnification
Feb65-12Jan67			_		
12Jan67-08Jan71	#*Willmore	3.0	0.2	N45°E	
08Jan71 to date	#Benioff 14.7kg	1.0	0.2	Z	50,000 at $T_{\rm O}$

HRC

HARRIS RANCH(HRC), CALIFORNIA
Established by the University of California in 1965
transferred from Vineyard(VIN)
36° 45!9 North 121° 24!8 West Elevation 230 meters

Foundation material is Pliocene Alluvium in the San Andreas fault zone

 $\frac{\text{Dates of Operation Type of Instrument}}{17\text{Mar}66-11\text{Jul}66} \quad \frac{\text{Type of Instrument}}{\text{\#Benioff 14.7kg}} \quad \frac{\text{T_sec}}{0.2} \quad \frac{\text{Component}}{\text{Z}} \quad \frac{\text{Magnification}}{25,000 \text{ at T}_0}$

Operation transferred to San Andreas Geophysical Observatory (SAO) on July 11, 1966.

JAS

JAMESTOWN (JAS), CALIFORNIA
Established by the University of California in 1964
in cooperation with the Department of Water Resources
37° 56!8 North 120° 26!3 West Elevation 457 meters
Foundation material is pre-Cretaceous Metamorphic rocks

Dates of Operation	Type of Instrument	Tsec	Tsec	Component	Magnification
	Benioff 100kg				250,000 at $T_{\rm O}$
28Aug64 to date	#*Benioff 14.7kg	1.0	0.2	Z	760,000 at $T_{\rm O}$
16Dec70 to date	*Willmore	3.0	0.2	N45°E	

T.T.A

LLANADA(LLA), CALIFORNIA
Established by the University of California in 1961
on the Charles McCullough Ranch
36° 37!0 North 120° 56!6 West Elevation 475 meters
Foundation material is Quaternary Alluvium overlying Sandstone

Dates of Operation	Type of Instrument	Tsec	Tsec	Component	Magnification
08Sep61 to date	#Benioff 14.7kg	1.0	0.2	Z	75,000 at T _o

MHC

LICK OBSERVATORY, MOUNT HAMILTON (MHC), CALIFORNIA
Established by the University of California in 1887
37° 20!5 North 121° 38!5 West Elevation 1282 meters
Foundation material is Jurassic-Cretaceous Franciscan
Graywacke and Greenstone

Dates of Operation	Type of Instrument	T sec T sec	Component Magnification
24Apr1887-23Mar11	Ewing 3 Component	5.0	NS, EW, Z
24Apr1887-23Mar11	Ewing Duplex	5.0	Hor all Azimuths
23Mar11-30Sep30	Wiechert Hor 160kg	4 to 8**	NS, EW 80 max
23Mar11-30Sep30	Wiechert Vert 80kg	4 to 8**	Z 80 max
08Apr28 to date	Wood-Anderson***	1.0	SN, EW 3,000 max
12Feb48-Jun63	Benioff 100kg	1.0 0.4	Z 100,000 at T _o
May62 to date	#*Benioff 14.7kg	1.0 0.2	Z 85,000 at T _o
08Nov67 to date	*Willmore	3.0 0.2	N45°E

** During this period the free period was not constant. For precise information refer to the Bulletin of the Seismographic Station.
*** Changed in 1954 to T_0 =0.8 sec, Magnification 2,800 max.

MIN MT. LASSEN, MINERAL(MIN), CALIFORNIA
Established by the University of California in 1939
in cooperation with the Lassen Volcanic National Park
40° 21' North 121° 35' West Elevation 1495 meters
Foundation material is Pliocene Volcanic Debris

Dates of Operation	Type of Instrument	T sec	T sec	Component	Magnification
O2Jan39 to date	Wood-Anderson	0.8	8		2,800 max
Mar47 to date	Wood-Anderson	0.8		SN	2,800 max
06Feb48 to date	Benioff 100kg	1.0	0.4	Z	60,000 at T
080ct68-30Jun71	#Benioff 14.7kg	1.0	0.5	Z	90,000 at To

MLC

MANZANITA LAKE(MLC), CALIFORNIA
Established by the University of California in 1956
in cooperation with the National Park Service
40° 32!2 North 121° 33!7 West Elevation 1800 meters
Foundation material is Quaternary Volcanic Pyroclastic Rocks

 $\frac{\text{Dates of Operation Type of Instrument}}{\text{Jun56 to date}} \quad \frac{\text{Type of Instrument}}{\text{Loucks-Omori}} \quad \frac{\text{Type of Instrument}}{\text{6.0}} \quad \frac{\text{Type Component}}{\text{NS, EW}} \quad \frac{\text{Magnification}}{\text{250 max}}$

In service only during summer months.

MNV

MINA(MNV), NEVADA
Established by the Lawrence Livermore Laboratory,
University of California in 1969
38° 26!0 North 118° 09' West Elevation 1524 meters
Foundation material is Mesozoic Limestone

Dates of Operation Type of Instrument Tosc Tosc Component Magnification

1969 to date #Broadband 55100 20 Z 600,000 max

instrument filtered to give short-period response

OROVILLE(ORV), CALIFORNIA

Established and operated by the Department of Water Resources in 1963

39° 33!3 North 121° 30!0 West Elevation 360 meters

Foundation material is Eccene Basalt

Dates of Operation	Type of Instrument	Tsec	T sec Component Magnification
1963-31Aug68	Benioff 100kg		
1963-31Aug68	Geotech S11 & S12, 10kg	20.0	100.0 NS, EW, Z
28Feb69-22Ju170	#Geotech S11, 10kg	20.0	100+ Z
22Ju170 to date	#Benioff 100kg	1.0	4.5Hz+ Z
Jan71 to date	*Willmore	3.0	0.2 N45°E

Paper records for 1963-1968 are on file with the Department of Water Resources.

⁺ Galvanometer response effected electronically.

PAC BRANNER STATION(PAC), STANFORD UNIVERSITY, PALO ALTO, CALIFORNIA
Established by Stanford University in 1927
in cooperation with the University of California
with full operations assumed by the University of California in 1947
37° 35:1 North 122° 10:8 West Elevation 83 meters
Foundation material is Quaternary Sandstone

Dates of Operation Type of Instrument T sec T sec Component Magnification 21Nov27-31May65 Wood-Anderson** 1.0 NS, EW 3,000 max 03Feb48-31May65 Benioff 100kg 1.0 0.4 Z 10,000 at To

** Changed in 1954 to To=0.8 sec, Magnification 2,800 max.

PCC PILARCITOS CREEK(PCC), CALIFORNIA

Established by the University of California on Sare Ranch in 1965

37° 30!3 North 122° 22!9 West Elevation 91 meters

Foundation material is Jurassic Granodiorite (weathered)

Dates of Operation Type of Instrument $\frac{T}{O}$ Sec $\frac{T}{g}$ Component Magnification 02Apr65 to date *#Benioff 14.7kg 1.0 0.2 Z 50,000 at T_{O}

PRC POINT REYES(PRC), CALIFORNIA
Established by the University of California in 1961
in cooperation with the Federal Aviation Agency at Point Reyes Station
38° 04!8 North 122° 52!0 West Elevation 404 meters
Foundation material is Alluvium underlaid by Granite

Dates of Operation Type of Instrument T sec T sec Component Magnification 09Sep61-21Dec64 #Benioff 14.7kg 1.0 0.2 Z 50,000 at To

PRIEST(PRI), CALIFORNIA

Established by the University of California in 1961
in cooperation with the Federal Aviation Agency at Charlie Peak Site
36° 08!5 North 120° 39!9 West Elevation 1187 meters
Foundation material is Jurassic Altered Serpentine

 $\frac{\text{Dates of Operation Type of Instrument}}{15\text{Sep61 to date}} \frac{\text{Type of Instrument}}{\text{\#*Benioff 14.7kg}} \frac{\text{Type of Instrument}}{1.0} \frac{\text{Type of Instrument}}{\text{Recomposition}} \frac{\text{Type of Instrument}}{\text{Type of Instrument}} \frac{\text{Type of Ins$

PRS

PARAISO(PRS), CALIFORNIA

Established by the University of California in 1961
at Paraiso Hot Springs

36° 19!9 North 121° 22!2 West Elevation 363 meters

Foundation material is Jurassic Granodiorite

Dates of Operation	Type of Instrument	T sec	T sec	Component	Magnification
	#*Benioff 14.7kg				
12Jan67-03Dec70	#*Willmore	3.0	0.2	N45°E	
03Dec70 to date	#Benioff 14.7kg	1.0	0.2	Z	75,000 at T _o

REN

RENO(REN), NEVADA

Established by the University of California in 1948 in cooperation with the University of Nevada, Reno 39° 32!3 North 119° 48!8 West Elevation 1375 meters

Foundation material is Quaternary Volcanic Pyroclastic rocks (old river bed)

Dates of Operation	Type of Instrumer	t T sec	T sec	Component	Magnif	ication
13Dec48-07Mar63			0			
13Dec48-07Mar63	Sprengnether, DH	1.9	1.85	NS	2,500	at To
13Dec48-07Mar63	Sprengnether, DH	1.9	1.9	EW	3,000	at To

Station was transferred to the University of Nevada on March 7, 1963. Later readings at Reno (REN) and other Nevada stations may be obtained from the University of Nevada, Reno.

RU RUTH(RU), NEVADA

Established by the California Institute of Technology in 1960 in cooperation with the University of California and Kennecott Copper Corp. 39° 14' North 114° 59' West Elevation 2270 meters

Foundation material is Paleozoic Ely Formation

Dates of Operation Type of Instrument Tosec Type Component Magnification 04Jan60-01Jun61 Press-Ewing moving 30.0 90.0 NS, EW, Z coil

SAN ANDREAS GEOPHYSICAL OBSERVATORY (SAO), CALIFORNIA
Established by the University of California in 1966
36° 45!9 North 121° 26!7 West Elevation 350 meters
Foundation material is Jurassic-Cretaceous Gabilan Granite

SAGO CENTRAL

Dates of Operation	Type of Instrument	Tsec	T sec C	omponent	Magnification
11Jul66 to date	#Benioff 14.7kg	1.0	0.2	Z	75,000 at $T_{\rm o}$
16Sep66 to date	#Sprengnether++ S7000, 0.7kg	0.2	20 Hz**	Z	800,000 max
13Jan67-14Nov70	#*Willmore	3.0	0.2	N45°E	
OlJun67 to date	Magnetometer+++	3 Comp	fluxgat	e	
02Aug67 to date	Sprengnether+++ S5007, 10.7kg++		10 Hz** vel & di	* NS, EW spl	, Z
30Nov67 to date	Telluric current lk	m+++		NW, SW	

SAGO EAST

36° 48!4 North 121° 24!4 West Elevation 130 meters Foundation material is Tertiary Sediments

Dates of Operation	Type of Instrument	T sec	T sec Component	Magnification
OlDec67 to date	Sprengnether+++ S5007, 10.7kg++			
OlDec67 to date	Sprengnether++ S7000, 0.7kg	0.2	20 Hz** Z	

SAGO NW

36° 47!5 North 121° 27!0 West Elevation 490 meters Foundation material is San Andreas Fault Zone Gouge

Dates of Operation	Type of Instrument	T sec	T sec Component Magnification
01-11-	Sprengnether++ S7000, 0.7kg	_	20 Hz** Z

SAGO SOUTH (tunnel installation)

36° 45!2 North 121° 23!7 West Elevation 400 meters Foundation material is Gabilan Granite with Carbonate inclusions

Dates of Operation	Type of Instrument	T sec	T sec Component	Magnification
2011 60 . 1	Sprengnether++ S7000, 0.7kg		20 Hz** Z	

++ Recorded on magnetic tape at SAGO CENTRAL

+++ Recorded on strip chart at SAGO CENTRAL

** Galvanometer response effected electronically
*** Broadband systems with flat velocity or displacement response.
Galvanometer response effected electronically.

SCC

SANTA CRUZ(SCC), CALIFORNIA

Established by the University of California in 1961
in cooperation with the City of Santa Cruz

37° 00!4 North 121° 59!8 West Elevation 128 meters
Foundation material is Pleistocene Sandstone(loose)

Dates of Operation Type of Instrument T sec T sec Component Magnification 11Jun61-Feb65 #Benioff 14.7kg 1.0 0.2 Z 10,000 at T_0

Operations moved to Granite Creek (GCC) in February 1965.

SAN FRANCISCO(SFB), CALIFORNIA
Established by the University of California

Established by the University of California in 1931
in cooperation with the California Academy of Sciences
37° 46' North 122° 28' West Elevation 67 meters
Foundation material is Quaternary Loose Sand
Station moved to the University of San Francisco in November 1935
37° 46' North 122° 27' West Elevation 100 meters
Foundation material is Franciscan Sandstone

** Changed in 1954 to $T_{\rm O}$ =0.8 sec, magnification 2,800 max.

SH

SHASTA(SH), CALIFORNIA
Established by the Bureau of Reclamation in 1942
Operation transferred to the University of California in 1952
40° 41!7 North 122° 23!3 West Elevation 312 meters
Foundation material is Devonian Metavolcanics

Dates of Operation Type of Instrument T sec T sec Component Magnification

OlJul52-30May64 Benioff 50kg 1.5 0.45 NS, EW, Z ca 50,000 at To

35mm film records.

UKI

UKIAH(UKI), CALIFORNIA
Established by U.S. Coast and Geodetic Survey in 1965
39° 08!2 North 123° 12!6 West Elevation 199 meters
Foundation material is Alluvium overlying Granite

VINEYARD (VIN), CALIFORNIA

Established by the University of California in 1959

in cooperation with W. A. Taylor and Co.

39° 45!0 North 121° 23!1 West Elevation 330 meters

Foundation material is Quaternary Alluvium overlying weathered Granite

Dates of Operation	Type of Instrument	T sec	T sec	Component	Magnification
03Feb59-22Mar65	Wood-Anderson	0.8	6	NS, EW**	2,800 max
03Feb59-08Apr60	Slichter-Marion	1.0	0.5	Z	
08Apr60-May61	Benioff 100kg	1.0	0.2	Z	30,000 at $T_{\rm o}$
May61-22Mar65	100x Torsion	0.8		NS	100 max
22Mar65-260ct65	#*Sprengnether, DH	2.0	0.2	NS, EW, Z	
10Feb65-09Mar66	#Benioff 14.7kg	1.0	0.2	Z	

^{**} Direction of motion changed to SN, WE on 8 April 1960.

VIT VINEYARD(VIT), CALIFORNIA

Established by the University of California in 1961

in cooperation with W. A. Taylor and Co.

36° 45!0 North 121° 23!3 West Elevation 360 meters

Foundation material is pre-Cretaceous Dolomite within Gabilan Granite

Dates of Operation Type of Instrument T sec T sec Component Magnification 31May61-10Feb65 #Benioff 14.7kg 1.0 0.2 Z 36,000 at To

Operation of telemetered Benioff was transferred to Vineyard (VIN) in February 1965, then to Harris Ranch (HRC) in March 1966.

YERINGTON (YER), NEVADA

Established by the University of California in 1956
in cooperation with the City of Yerington, Nevada
38° 59!3 North 119° 09!6 West Elevation 1335 meters
Foundation material is Quaternary Alluvium

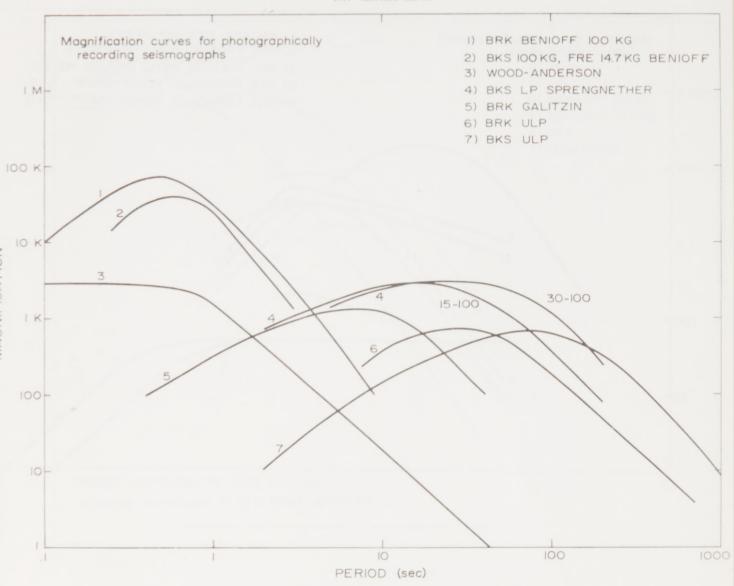


Figure 2 - Response curves for photographically recording seismographs. BK: Benioff and Sprengnether are the WMSSN system. ULP refers to the ultra-long period systems. See Section II.

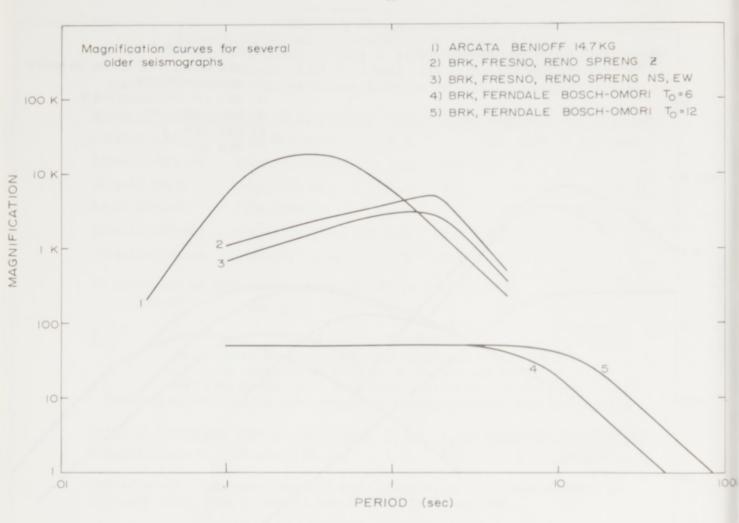


Figure 3 - Response curves for seismographs no longer in operation.

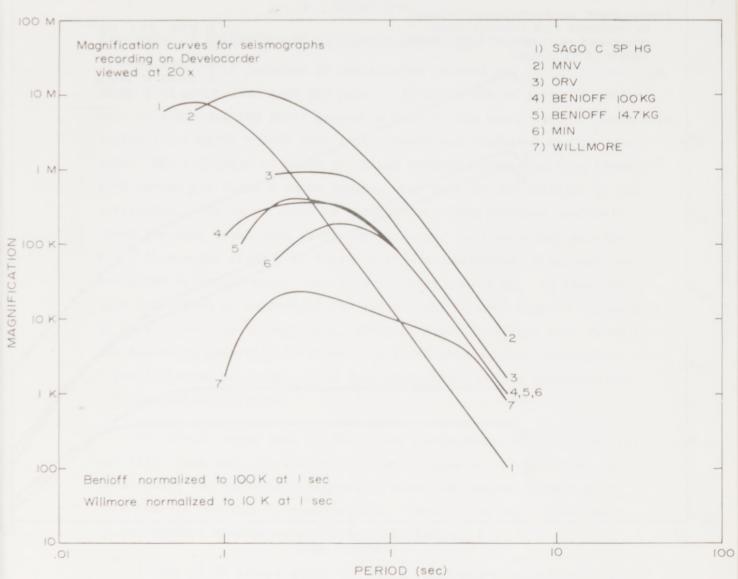


Figure 4 - Response curves for Develocorder channels when viewed at 20 X enlargement. The Benioff and Willmore curves (4, 5, and 7) represent several different stations and are normalized at 1 sec period See Section II for 1 sec gain appropriate to a specific station. The SAGO Central short-period high gain curve (1) is a 5-20 Hz high-gain microearthquake system.

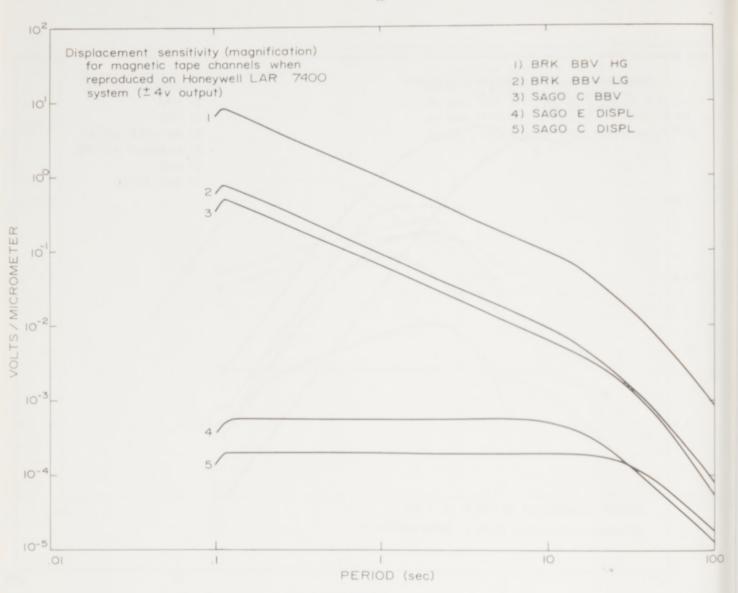


Figure 5 - Response curves for broadband velocity (BBV) and displacement seismographs recorded on slow speed FM magnetic tape at BEK and SAGO

IV. SEISMICITY MAPS

Discussion of Estimation of Earthquake Parameters.

The method of location of earthquakes plotted and listed in Sections IV to VIII has varied over the years. It would now be extremely difficult to summarize the exact procedure used in the early period. Generally, however, intensity values from felt reports and graphical methods were used. The precision of these graphical methods using empirical traveltime curves for P and S waves depends very much on the position of the earthquake focus in relation to the few recording stations available. Under the best conditions (e.g. location near to a recording station, P and S recorded clearly at three or more seismographic stations) the estimated epicenter might have an error less than 5 km. In less favorable conditions of constraint the error might be many tens of kilometers. In fact, from 1910 through June, 1941, Berkeley locations were given in the Bulletins generally in terms of a local geographical description or a point plotted on a map. From July 1941, latitude and longitude coordinates were published.

In certain cases some of the larger earthquakes (see Sections VII and VIII) have been the subject of special studies or revisions. In these cases the earthquake parameters have been estimated with more care than is feasible in routine work. Some of the more recent published special studies are referenced in Section X.

A list of 28 shocks since 1957 with fault-plane solutions is given in "Seismological Evidence on the Tectonics of Central and Northern California and the Mendocino Escarpment", (Bolt, Lomnitz and McEvilly, 1968). As discussed in this paper, the average uncertainty for epicenter locations during the last decade in the Coast Ranges, when a telemetry network of stations was operated, is 5 km. Focal depths are generally less precise, but a major step forward was the discovery about 1963 that depth did not exceed 15 or so km in this region. In Northern California and in the Gorda Basin Area, resolution is generally less than to the south and submarine earthquakes below magnitude 4.0 are usually not

recorded by the Wood-Anderson seismographs, for example, at the Arcata station (see Section II) beyond a distance of 200 km. Since December 1968, the Benioff seismograph at the new station at Fickle Hill (magnification 80,000 at 1 sec) has improved detection capabilities in the region.

Since 1964, the majority of earthquakes in Central California have been located uniformly, using a computer program called LOCAL (Bolt and Turcotte, 1964) which computes a hypocenter by minimizing the sum of squared residuals of first P (and S) arrivals relative to theoretical times; a provisional solution is adjusted successively until a convergence criterion is met. The theoretical times are specified by a crustal model with two horizontal layers of 12 km and 18 km thickness; P and S velocities are (5.6, 3.3), (6.7, 3.9) and (8.0, 4.7) km/sec, respectively.

The LOCAL program has two features of some interest. First a sequence of starting focal depths can be stepped out; at each step the particular depth is held constant in the first iteration before freeing this parameter for further adjustment. Secondly, the residual weighting scheme depends upon the distribution of source-station bearings and uses rotation of azimuthal quadrants from the cardinal directions to maximize the number of observations in each.

Magnitudes are not available for the whole period. The few values given in the period 1910-1931 are from Gutenberg and Richter's Seismicity of the Earth. From 1932 through 1941, they are from this source augmented by local magnitudes assessed at the Seismological Laboratory, California Institute of Technology. From 1942 local magnitudes were calculated at Berkeley using Richter's definition based upon Wood-Anderson recordings at U.C. Berkeley network stations. Station adjustments were estimated in order to bring the mean Berkeley M_L magnitude in agreement with the mean Pasadena magnitude.

Summary values for the regional seismicity rates for Northern California have recently been published (see Bolt and Miller, 1971). The recurrence of earthquakes recorded in the period 1962-1969 was fitted to the log law

log N = -a - bM,

when N is the number of events per year per 1000 sq km for each region, M is the Richter Magnitude, and a and b are constants. Results are as follows.

- A. All Central and Northern California b = 0.78 + 0.04, for 661 earthquakes with 3.0 < M < 5.1.
- B. Cape Mendocino Area Region b = 0.67, with considerable scatter.
- C. Coast Range Region $b = 1.00 \pm 0.04, \mbox{ for 265 earthquakes with } 3.0 \le M \le 4.4.$

In the region covered by this catalogue, the statistics indicate that the interoccurrence time for an earthquake of about magnitude 5 is 2-1/2 years; for an earthquake of about magnitude 4 it is 13 months.

A number of comments on the Catalogue Tables (Section VI) are in order. First, map numbers in the first column are keyed to epicenters plotted on the corresponding epicenter map. A line under a map number indicates that more than one earthquake occurred in nearly the same location or that an aftershock sequence or swarm occurred at this location. All aftershocks which were located are included in the listings, however.

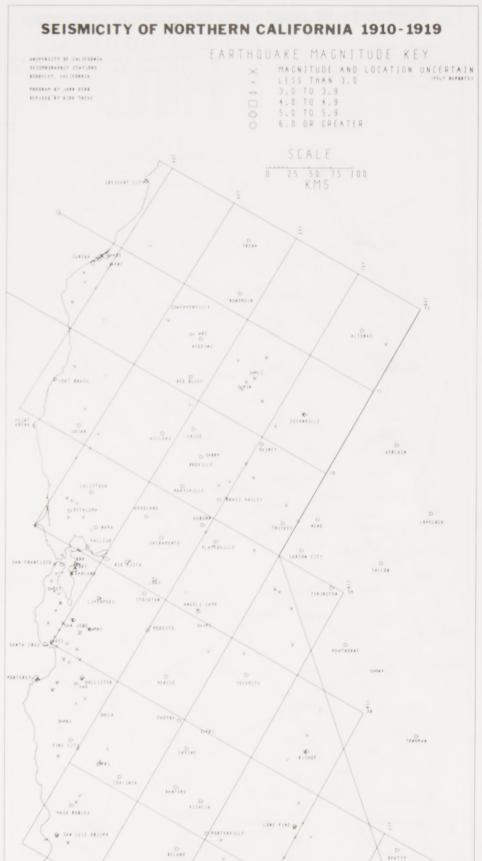
An asterisk (*) appearing before a map number indicates that the location was determined with focal depth fixed at zero (surface focus). On the other hand, a dash (-) appearing in the map number column indicates that the epicenter is outside the boundaries of the regional map. A dollar sign (\$) superscript on the map number denotes a revised solution, compared to the original Bulletin solution. The convention is that the symbols CIT indicate that hypocenter data are from California Institute of Technology, and FELT indicates the source is Abstracts of U.S. Earthquakes.

From January 1962, the column headed Q which contained qualitative indications of the "quality" of a solution was replaced by a column

stating the number of stations used in the least squares estimation of location. It was felt that such a number gave a more quantitative indication of accuracy ("quality"), so long as a uniform telemetry network of stations was available.

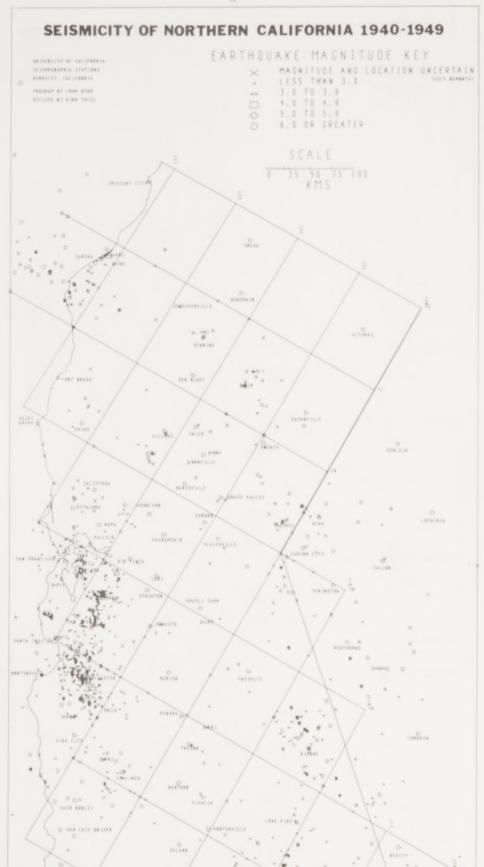
During the period 1950 through 1961, many (but, of course, not all) earthquakes with magnitude smaller than 2.5 are listed, but then another selection rule was adopted. From 1962, magnitude 2.5 is generally the lower limit of events included in the coastal region unless a felt report was available; during the same period, the magnitude threshold was 3.0 for Northern California and 4.0 for neighboring Nevada.

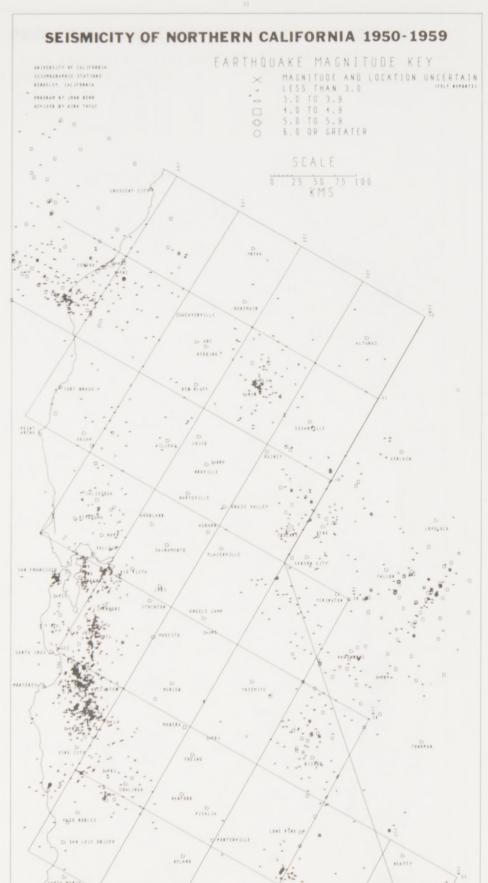
On 20 December 1932 the intensity scale was changed from the Rossi-Forel to the Modified Mercalli, see Section IX.











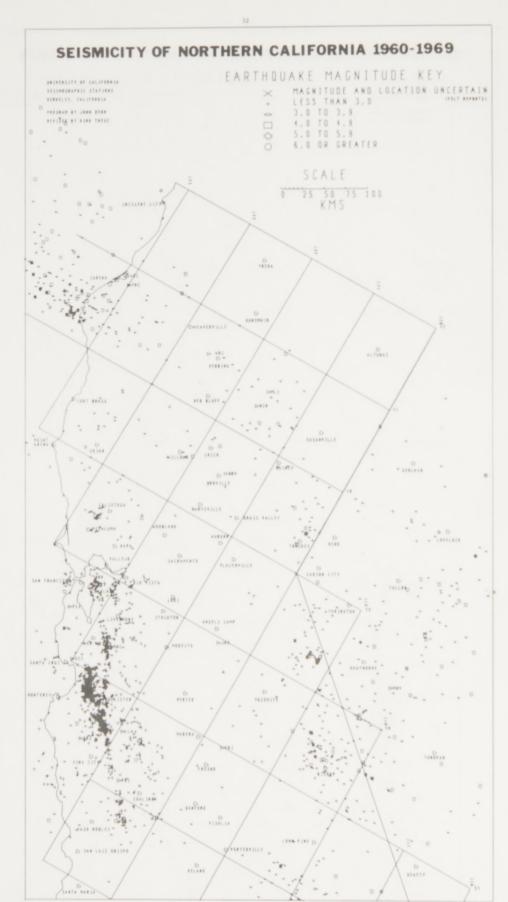


Figure 11 - Selemicity Hen of Northern California, 1860, 1869

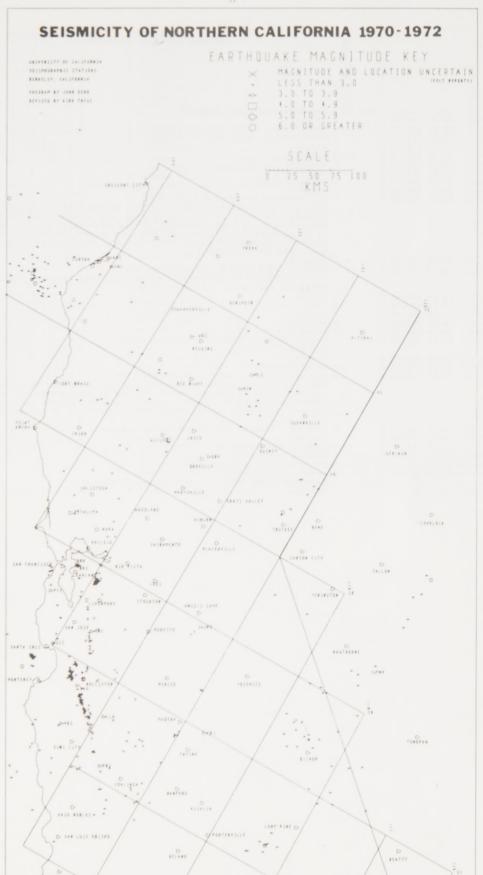


Figure 12 - Seismicity Map of Northern California, 1970-1972.

V. EARTHOUAKE CATALOGUE (1910-1949)

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SF
                                                            TC
                                                            AC
                                                            TR
                H
                    N
                                                            OI E
                                                            NN I
                                                                     MAXIMUM INTENSITY, COMMENTS
                                LAT
                                                            SG T
                               37.83 122.25 D
                                                                   BERKELEY.
                                                                F ROHNERVILLE. ALSO FELT AT EUREKA.
F ROHNERVILLE. ALSO FELT AT EUREKA.
1/29/1910 20-56--0.
                               40.83 124.17 D
                               40.43 124.17 0
                                                                   ALAMEDA.
                               37.75 122.25 D
2/26/1910 19-50--0.
                                37.75 122.25 D
                                                                 F ALAMEDA.
2/29/1910 21-10-0.
3/ 2/1910 23-32-0.
                               37.75 122.25 D
                                                                E ALAMEDA.
                                                                 F HOLLISTER.
                               36.83 121.42 0
                               36.17 120.67 0
                                                                 F PRIEST VALLEY.
3/11/1910 -0--0-0.
                               37.00 121.58 0
                                                                 F CAMPBELL.
3/11/1910 6-52--0.
                                                                 F VII MONTEREY BAY REGION. FELT OVER AN AREA IN FXCESS OF 50,000 SQUARE MILES, TO THE NORTH TO NEVADA CITY, SE TO
                              36.92 121.67 0
                                                                   VISALIA, AND SOUTH TO SAN LUIS OBISPO. VII AT APTOS AND WATSONVILLE. VI AT HOLLISTER, SANTA CRUZ, MONTERRY, AND SALINAS. V AT GAKLAND AND SAN FRANCISCO. II AT NEVADA CITY, VISALIA, AND SAN LUIS OBISPO. REPORTED FROM ALAMEDA, SAN LEANDRO, DAKLAND, CAMPBELL, PRIEST VALLEY, JOLON, SANTA CRUZ, NAPA, NEVADA CITY,
                                                                    AND PEACHLAND (SERASTOPOL).
                                                                   ALAMEDA.
3/19/1910 -0--0-0. 37.75 122.25 0
3/19/1910 0-11--0. 40.83 124.17 0
                                                                 F EUREKA. FELT ALSO AT ANDERSON, NEVADA
CITY, ROHNERVILLE, BLOCKSBURG, DYERVILLE, UPPER MATTOLE, AND BRANSCOMB.
SUBMARINE ORIGIN OFF CAPE MENODCINO.
1/19/1910 0-13--0. 40.83 124.17 D
                               39.17 122.92 D
                                                                 F UPPER LAKE.
                               17.75 122.25 D
36.83 121.42 D
                                                                 E ALAMEDA-
3/24/1910 6-45--0.
4/22/1910 14-53--0.
                                                                 F HOLLISTER.
                                                                 F ALAMEDA.
                               37.75 122.25 D
4/30/1910 18-25--0. 36.17 120.67 D
                                                                 F PRIEST VALLEY. THREE SHOCKS, THE SECOND
                                                                   ONE QUITE VIOLENT.
                                                                 F ALAMEDA.
5/ 2/1910 14--0--1.
                               17.75 122.25 D
                               38.25 119.25 0
                                                                 F IV BRIDGEPORT.
5/ 6/1910 16-40--7. 37.33 118.42 D
                                                                 F VII NEAR BISHOP. AREA OF PERCEPTIBILITY
                                                                   WORE THAN 50,000 SOUARE MILES. CAUSED ROCK SLIDES IN ROCK CREEK CANYON AND TIPPED SHELVES IN BISHOP. FELT BY A FEW IN BAKERSFIELD AND FEEBLY IN SACRAMENTO. FELT BY MANY IN LINDSAY, VISALIA, TULARE, REEDLEY, DINURA, AND FRESHO. ALSO FELT IN HOLLISTER, DASIS, NORTHRAST OF BISHOP, AND EAST INTO
                                                                    BLAIR, NEVADA.
                                                                 F DOBBINS. PERHAPS SAME SHOCK AS FOLLOWING.
                               39.33 121.17 D
38.67 119.83 D
                                                                 F TAMARACK.
               5-45--0.
5/16/1910 6-20--0.
                                38.08 120.58 D
                                                                 F ANGEL'S CAMP. HEAVY.
F ANGEL'S CAMP. HEAVY.
                                38.08 120.58 D
                                                                F HOLLISTER. ALSO AT CAMPDELL.

F ALAMEDA. TWO SHOCKS. ALSO FELT AT
LIVERMORF, SAN JOSE, SAN FRANCISCO, AND WESTLEY.
6/ 9/1910 18-45--0.
                               36.83 121.42 0
6/10/1910 6-30--0. 37.75 122.25 D
6/13/1910 19-40--0. 37.75 122.25 D
                                                                 F ALAMEDA.
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F ALAMEDA.
 6/13/1910 19-41--0. 37.75 122.25 0
 6/14/1910 18-30--0.
                         37.75 122.25 D
                                                   F ALAMEDA.
 6/15/1910 18-25--0.
                         37.75 122.25 D
                                                 F ALAMEDA.
 7/ 2/1910 -0--0--0.
                         37.33 121.92 D
                                                 E SANTA CLARA-
                                                     TAMADACK.
 7/14/1910 4-45--0.
                         38.67 119.83 D
                                                     TAMARACK.
                         38.67 119.83 0
 7/15/1910 5--0--0.
 7/19/1910 7-35--0.
                         37.67 121.75 D
                                                 F LIVERMORE .
 7/20/1910 -0--0--0.
                         37.83 122.25 D
                                                F BERKELEY.
 7/25/1910 -0--0--0.
                         37.83 122.25 D
                                                 F BERKELEY.
                                                 F APTOS AND SANTA CLARA.
 7/25/1910 17-42--0.
                         37.00 121.92 D
                                                    BERKELEY.
                         17-81 122-25 D
 7/36/1910 -0--0--0-
 7/27/1910 19-30--0.
                         37.75 122.25 D
                                                  F ALAMEDA.
                         37.75 122.25 D
 7/27/1910 19-32--0.
                                                  F ALAMEDA.
 8/ 4/1910 -0--0--0.
                         37.33 121.92 D
                                                 F SANTA CLARA.
                                                 F EUREKA. CLOCK STOPPED. VIBRATION LASTED
 8/ 5/1910 1-27--0.
                        40.83 124.17 D
                                                     8 SECONDS. BLOCKSBURG AT 1-40-0.
                                                 F NEVADA CITY.
 8/ 5/1910 1-31-36. 39.25 121.00 D
 8/ 5/1910 1-31-36. 42.00 127.00 C 6.8
                                                 F OFF COAST, WEST OF CRESCENT CITY.
                        40.25 124.17 D
                                                 F UPPER MATTOLE.
 8/11/1910 -0--0--0.
                         37.33 121.92 D
                                                 E SANTA CLADA
 8/14/1910 -0--0-0.
                         40.25 124.17 D
                                                 F HOOFD MATTOLF.
                                                 F SANTA CLARA.
 8/20/1910 -0--0--0-
                         37-33 121-92 D
8/27/1910 4-47-0.

8/27/1910 5-15--0.

9/ 4/1910 3-30--2.

10/ 4/1910 -0--0-0.
                                                    EUREKA.
                         40.83 124.17 D
                                                 F BLOCKSBURG AND UPPER MATTOLE.
                         40.25 123.67 D
                        39.67 121.00 D
                                                 F LA PORTE. RATTLED WINDOWS.
                        37.33 121.92 D
                                                 F SANTA CLARA.
                                                 F IV UPPER LAKE, MORTH LAKEPORT, AND
10/15/1910 20-44--0. 39.17 122.92 0
                                                    HULLVILLE. ALSO AT UKIAH.
                                                    SANTA CLARA.
11/ 5/1910 -0--0--0.
                        37.33 121.92 D
11/ 6/1910 -0--0--7.
                         37.33 121.92 D
                                                    IDYLLWILD.
11/ 8/1910 -0--0--7.
                         37.33 121.92 D
                                                 F INYLLWILD.
                                                 E ALAMEDA.
                         37.75 122.25 D
11/25/1910 -0--0--0-
                         37.33 121.92 D
                                                 F SANTA CLARA.
                                                 F ALAMEDA. SHARP SHOCK ACCOMPANIED BY NOISE
                                                 F LOS GATOS. RECORDED AT BERKELEY.
                                                  F ALAMEDA.
                         37.75 122.25 D
                                                     SAN FRANCISCO.
                         37.75 122.50 D
12/12/1910 17-28--0.
                         37.33 121.67 D
                                                    III MT. HAMILTON. RECORDED AT BERKELEY.
                                                 E FURFKA.
12/13/1910 7-40--7.
                         40.83 124.17 D
12/15/1910 15-28--0.
                                                  F II MT. HAMILTON.
                         37.33 121.67 D
                                                  F ALAMEDA.
12/15/1910 19-45--2.
                         37.75 122.25 D
                                                     II MT. HAMILTON. FELT ALSO AT HOLLISTER
                         37.33 121.67 D
                                                     AND LOS GATOS.
                         37.33 121.67 D
                                                  F III MT. HAMILTON.
12/19/1910 15-28--0.
12/24/1910 4--0--0.
12/29/1910 5-30--0.
12/31/1910 12-11--0.
                        37.75 122.25 0
36.67 121.67 D
36.83 121.42 D
                                                  F ALAMEDA.
                                                  F SALTNAS.
                                                   F VII REGION OF HOLLISTER AND SALINAS. AT
                                                     VII REGION OF HOLLISTER AND SALINAS. AT SALINAS. AT SALINAS BROKE WATER MAIN, LASTED ONE MINUTE. AT HOLLISTER LASTED 35-40 SECONOS, RUT LITTLE DAMAGE. III AT LICK OBSERVATORY AND DAKLAND. FELT AT LOS GATOS, CAMPBELL, ALAMEDA, LIVERMORE, NAPA, GRATON, SAN JOSE, AND SAN FRANCISCO. SEISMOGRAMS IMPLY AN EPICENTER CLOSER TO BERKELEY THAN TO MT. HAMILTON.
                                                  F CALIFORNIA HOT SPRINGS.
 1/ 4/1911 -0--0-0. 35.92 118.67 0
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F SANTA CLARA AND SANTA CRUZ.
  1/ 9/1911 21-25--0.
                           37.33 121.92 D
                                                    F SANTA CLARA. (45 MILES FROM BERKELEY.)
  1/10/1911 23-17--0.
                          37.33 121.92 D
                                                       HOLLISTER. (75 MILES FROM BERKELEY.)
  1/12/1911 5-34--0.
                           36.83 121.42 0
  1/18/1911 -0--0--9.
                                                     F WEITCHPEC.
                           41.17 123.67 D
                                                    F BRANSCOMB AND FORT BRAGG.
F CAMPBELL AND SANTA CLARA.
F CAMPBELL, HOLLISTER, AND BOULDER CREEK.
  1/28/1911 3-45--0.
                           39.67 123.67 D
  1/30/1911 22-43--0.
                           37.00 121.58 D
  2/ 7/1911 13- 5--0.
                           37.00 121.58 D
                                                        HOLLISTER. (75 MILES FROM BERKELEY.)
                           36.83 121.42 D
  2/ 7/1911 13-19--0.
                                                    F LONG VALLEY.
                           40.42 120.67 D
  3/ 3/1911 19--0--0.
                           40.33 121.25 0
                                                    E CHESTED.
  3/ 3/1911 22-30--0.
                           40.33 121.25 0
                                                     F CHESTER.
                                                     F EUREKA.
                           40-83 124-17 D
  3/11/1911 12-30--0.
                                                       VII HOLLISTER. PLASTER CRACKED. ALSO
                          36.83 121.42 D
                                                     FELT AT CAMPBELL, LOS GATOS, SALINAS, AND SAN JOSE, F SAN MIGUEL, QUITE SEVERE.
- 3/22/1911 10-55--0.
                           35.75 120.67 D
  4/ 5/1911 -0--0-0.
6/ 2/1911 -0--0-0.
6/30/1911 4-10--0.
                                                     E HETCH HETCHY.
                           37.92 119.75 D
36.17 120.67 D
                                                       PRIEST VALLEY.
                           37.75 122.25 0
                                                    F ALAMEDA.

F NEAR COYOTE. CONSIDERABLE DAMAGE AT LICK
OBSERVATORY. VI-VIII AT SAN JOSE, SANTA CLARA, GILRDY, AND MORGAN HILL. VI AT
SAN FRANCISCO, DAKLAND, AND RIO VISTA. V AT BEPKELEY AND SANTA CRUZ. FELT OVER
AN AREA OF 60,000 SQUARE MILES.

F II MT. HAMILTON. AFTERSHOCK OF 22-0-0.
                                                        ALAMEDA.
  7/ 1/1911 22- 0- 0.
                           37.25 121.75 6.6
  7/ 2/1911 0-55--0. 37.33 121.67 0
  7/ 2/1911 2- 5--0.
7/ 2/1911 8- 0--0.
                           37.37 121.67 D
                                                    F II MT. HAMILTON.
F MT. HAMILTON.
                           37.33 121.67 D
  7/ 2/1911 13-27--7.
                           17.31 121.67 D
                           37.33 121.67 D
                                                    F II MT. HAMILTON.
  7/ 2/1911 13-14--0.
                                                    F III MT. HAMILTON. ROLLING MOTION.
F MORGAN HILL.
  7/ 3/1911 14-47--0.
  7/ 5/1911 2-15--0.
                           37.08 121.67 D
                                                   F MORGAN HILL.
                           37.04 121.67 D
                           37.0# 121.67 D
  7/ 7/1911 13-15--7.
                                                       I MT. HANILTON.
  7/ 7/1911 19-13--0.
                                                   F LA PORTE.
                           37.67 121.00 D
                           19.67 123.67 D
                                                     F BRANSCOMB.
  7/19/1911 -0--0--0.
                           39.67 123.67 D
                                                     F BRANSCOMB.
                          37.31 121.67 D
37.31 121.67 D
37.31 121.67 D
                                                     F III MT. HAMILTON.
                                                    F III MT. HAMILTON.
  H/ 1/1911 10-23--0.
                                                     F IV MT. HAMILTON. SHOCK REPORTED ON THIS
  A/ 6/1911 19-52--0.
                                                       DATE AT CAMPBELL.
  8/11/1911 H-38--C. 37.33 121.67 D
                                                      F II MT. HAMILTON.
  8/16/1911 1-31--0.
9/ 5/1911 17- 9--0.
                                                   F III MT. HAMILTON.
                           37.33 121.67 D
                           37.33 121.67 D
                                                     F II MT. HAMILTON.
  9/ 5/1911 15-44--0.
                           37.33 121.67 0
                                                     F II MT. HAMILTON.
                           37.33 121.67 D
                                                     F III MT. HAMILTON.
  9/12/1911 2-54--0.
  9/29/1911 17-12--0.
                                                      F III MT. HAMILTON AND MORGAN HILL.
                           37.33 121.67 D
 10/1/1911 0-55--0.
                           37.33 121.67 0
                                                       I MT. HAMILTON.
                                                     F III LOS GATOS.
                                                     F III MT. HAMILTON, LOS GATOS, SAN JOSE, AND
                                                       AND STANFORD UNIVERSITY.
 11/11/1911 14-54--0. 37.33 121.67 0
11/20/1911 20-24--0. 37.33 121.67 0
                                                        I MT. HAMILTON.
                                                      F III MT. HAMILTON. ACCOMPANIED BY A
                                                        DISTANT ROAR.
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11/25/1911 17-33--0-
                           37.33 121.67 D
                                                      E II MT. HAMILTON-
                                                      F HOLLISTER.
11/30/1911 5-52--0.
                           36-83 121-42 D
12/17/1911 22- 0--0.
                                                       F III SAN JOSE .
                           37.33 121.92 D
12/31/1911 21-41--0.
                           37.33 121.67 D
                                                      F III MT. HAMILTON. FELT AT CAMPBELL.
              1-39--0.
                           37.33 121.67 0
                                                       F II MT. HAMILTON.
 17 4/1912
                                                       F VII BISHOP. SHAKEN AREA ABOUT 50,000
 1/ 5/1912 3-54--0
                           37.33 118.42 D
                                                         SQUARE MILES. DAMAGE AT BISHOP. FELT AT VISALIA, FRESHO, BAKERSFIELD, AND AT
                                                         BLAIR, NEVADA.
                                                      F SIERRAVILLE. POSSIBLE THE FOLLOWING
F NEVADA CITY, STERLING CITY, AND WEST
 1/ 7/1912 18-30--0.
                           39.50 120.25 D
                                                                          POSSIBLE THE FOLLOWING SHOCK
 1/15/1912 18-30--0.
                           39.25 121.00 D
                                                         BOANCH-
                                                         IV MT. HAMILTON. FELT ALSO AT SANTA CRUZ.
 1/21/1912 14- 7--0.
                           37.33 121.67 D
 2/ 2/1912 20-19-30.
                                                       F EUREKA.
                           40.83 124.17 D
 2/15/1912 6-30--0.
                                                         ALAMEDA.
                           37.75 122.25 D
                                                       F IV MT. HAMILTON REGION. FELT AT CALAVERAS
                           37.33 121.67 C
                                                         VALLEY, LOS GATOS, PALO ALTO, MAYFIELD, STANFORD UNIVERSITY, BERKELEY, ALAMEDA,
                                                         AND SANTA CRUZ.
              0-15--0-
                           37.75 122.25 D
                                                       F ALAMEDA.
 1/ 1/1912 5- 5--C.
1/ 8/1912 9-48--).
                                                       F III REDWOOD CITY, PALO ALTO, AND MAYFIELD.
                           37.50 122.25 D
                           37.33 121.67 D
                                                       F IV MT. HAMILTON.
 3/12/1912 13-42--0.
                           37.42 122.17 D
                                                       F III PALO ALTO, MAYFIELD, SANTA CLARA, AND
                                                         SAN FRANCISCO.
                                                      F LONE PINE. TWO HEAVY SHOCKS FROM NORTH TO
                           36.58 118.08 D
 4/-0/1912 16-15--0.
                                                       F LONE PINE .
                           36.58 118.08 D
                           37.33 121.67 D
                                                       F III MT. HAMILTON.
 5/21/1912 4-58--0.
                           37.33 121.67 0
                                                      F III MT. HAMILTON.
                                                      E LONE PINE .
                           36.58 118.08 D
 6/19/1912 13- 5--3.
6/19/1912 22-27--0.
7/ 4/1912 22-31--2.
7/12/1912 4- 6--3.
                                                       F JOLON. (RECORDED AT BERKELEY.)
                           36.00 121.17 0
                                                      F II SANTA CLARA.
                           37.33 121.92 D
                                                         IV MONTEREY RAY REGION. FELT AT SANTA
                                                         CRUZ.
                                                       F IV MT. HAMILTON.
 8/31/1912 4-93-0.
                           37.33 121.67 D
                                                       F II MT. HAMILTON.
                                                       E VI EASTERN CALLEDRALA AND NEVADA - ORIGIN
                                                         VI EASTERN CALIFORNIA AND NEVADA. ORIGIN

ABOUT MIDWAY BETWEEN CISCO AND PLASSE'S MEADOW. WHEATLAND MOST DISTANT POINT

REPORTING. WEATHER RUREAU REPORTS FROM DOBBINS, DOWNLEVILLE, GREENVILLE, PILOI

CREEK, WHEATLAND, NEVADA CITY, AND SIERRAVILLE. REPORTED ALSO FROM GRASS

VALLEY, HAMMONTON, PLASSE'S MEADOW, AND CISCO. FELT AT RENO, NEVADA.
8/31/1912 4-53--C. 40.50 124.17 D
-9/12/1912 17-27--2. 37.33 122.17 C
                                                       F ALTON.
                                                       F VII SANTA CRUZ MOUNTAINS. REPORTED FROM
                                                         AN AREA OF ABOUT 10,000 SQUARE MILES. VI AT STANFORD UNIVERSITY. IV AT AQUA AND CALAVERAS. III AT DAKLAND AND SAN FRANCISCO. WEATHER BUREAU REPORTS FROM
                                                         ANTIOCH, DAKLAND, SAN FRANCISCO, MILLBRAE, MOUNTAIN VIEW, CAMPBELL, LOS GATOS,
                                                          MORGAN HILL, APTOS, GLENWOOD, SANTA CRUZ, CASTROVILLE, AND SALINAS.
10/20/1912 9-17--7. 37.33 121.67 C
                                                       F III MT. HAMILTON.
10/25/1912 3-16--0. 36.83 121.42 C
                                                       E V HOLLISTER-SALINAS REGION. EPICENTER ON
                                                         SAN ANDREAS FAULT REGION SOUTH OF HOLLISTER. IV AT STANFORD UNIVERSITY. III AT SANTA CRUZ. II AT BERKELEY. ALSO FELT AT KING'S MOUNTAIN HOUSE, MORGAN HILL,
                                                         CASTROVILLE, AND SALINAS.
                                                      F II SANTA CRUZ. AN AFTERSHOCK. REPORTED
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F II SANTA CRUZ. AN AFTERSHOCK.
 10/25/1912 A- 1--0: 37.00 122.00 D
                                                      F II MT. HAMILTON.
 11/17/1912 4-21--0.
                           37.33 121.67 D
 12/18/1912 7-35--0.
                           37.83 122.25 D
                                                       F SIERRAVILLE.
   1/ 7/1913 18-30--0.
                            39.50 120-25 D
                                                         LA PORTE.
   3/ 3/1913 9-40--0-
                           39-67 121-00 D
   3/ 8/1913 12--0--0.
                           40.17 120.92 D
                                                       E COFENVILLE.
   8/20/1913 15-30--0.
                            39.33 123.25 D
                                                      F UKIAH.
   9/ 8/1913 15-54--0.
                           37.33 121.67 D
                                                       F III MT. HAMILTON.
   9/ 9/1913 6-18--0-
                            37.33 121.67
                            36.83 121.42 D
                                                       F HOLLISTER.
   9/18/1913 21-15--0.
                                                       E TIT MT. HAMTI TON.
   9/26/1913 13-13--0.
                           37.33 121.67 C
                                                       F LA PORTE.
  9/27/1913 5--0--0.
                           39.67 121-00 D
                                                         LA PORTE.
                           39-67 121-00 D
                            37.83 122.25 D
                                                       F II BERKELEY.
 10/ 7/1913 8-40--0.
                                                       F SAN LUIS OBISPO. PASO ROBLES. BETTERAVIA.
 10/20/1913 11-25--0.
                           35.25 120.67 D
                                                         AND SANTA MARIA.
                                                       F IV FELT FROM SEBASTOPOL TO PALO ALTO. IV
10/25/1913 9-45--0. 37.67 122.42 D
                                                         AT STANFORD UNIVERSITY. III AT BERKELEY. ORIGIN NEAR COLMA. FELT ALSO IN
OAKLAND, SAN FRANCISCO, AND ROSS.
                                                       F II BERKELEY.
 10/31/1913 22-35--C. 37.83 122.25 D
11/20/1913 13--O--O. 37.42 122.17 D
11/25/1913 2-58--O. 40.83 124.17 D
                                                       F III STANFORD UNIVERSITY
                                                       F ARCATA AND EUREKA. EXTENDED AT LEAST 80
                                                         ARCATA AND EURERAS ALSO REPORTED FROM ROHNERVILLE AND BLOCKSBURG. FELT IN
                                                         FORT STEWARD.
                                                       FITH MT. HAMILTON REGION. FELT AND
RECORDED AT MT. HAMILTON AND SANTA CLARA. FELT IN SAN JOSE. EPICENTRAL
DISTANCE OF LESS THAN 20 MILES FROM SANTA CLARA AND OVER 10 MILES FROM MT.
 11/29/1913 10- 0--0. 37.33 121.67 D
                                                         HAMTI TON-
                                                                              AFTERSHOCK .
                                                       F II MT . HAMILTON .
 11/30/1913 9-16--0. 37.33 121.67 D
                                                         BUT SEISMOGRAM SHOWS THAT IT COULD HAVE BEEN NOTICED.
 12/20/1913 0-32--0. 37.08 122.00 D
                                                       F GLENWOOD. RECORDED AT BERKELEY AND MT.
                                                         HAMTI TON-
 12/26/1913 12-33- 0.0 36.17 121.00 D
1/24/1914 3-33-0. 37.58 122.42 D
                                                       F SAN LUCAS.
                                                       F VI SAN BRUND . PERCEPTIBLE OVER AN AREA OF
                                                         ABOUT 5,000 SQUARE MILES. V-VI AT PLACES ALONG COAST. IV-V AT SAN FRANCISCO.

III-IV AT BERKELEY. III AT STANFORD UNIVERSITY. SLIGHT AT SANTA CLARA. FELT
                                                         BY A FEW AT LIVERMORE. BARELY PERCEPTIBLE AT CLAYTON. UNFELT AT MT. HAMILTON.
  2/12/1914 -0--0--0. 38.42 122.67 D
2/18/1914 18-15--0. 39.58 120.83 D
                                                       F PEACHLAND.
                                                       F VI-VII AT TRUCKEE MEADOWS, REND, AND
                                                       VIRGINIA CITY, NEVADA. STRONG AT VERDI, SPARKS, AND CARSON CITY, NEVADA. FELT AT DOWNIEVILLE. RECORDED AT BERKELEY.

F II SANTA CLARA. ORIGINATED 10 MILES FROM MT. HAMILTON, BUT NOT REPORTED FELT THERE.
   2/22/1914 22-19--0. 37.33 121.92 D
  3/14/1914 7-42--0. 37.00 122.00 D
                                                       F IV SANTA CRUZ. ALSO FELT AT SANTA CLARA,
                                                         TT.
                                                       F SAN JOSE .
   3/18/1914 11-30--0. 37.33 121.92 D
   3/18/1914 12-20--0.
                            37.00 122.00 D
                                                       F SANTA CRUZ.
   3/18/1914 12-34--7.
                                                       F III SANTA CLARA.
                            37.33 121.92 D
   3/19/1914 0-53--0.
3/19/1914 6-45--0.
                            37.25 122.00 D
                                                       F LOS GATOS.
                                                       E STANFORD UNIVERSITY.
                           37.42 122.17 D
   3/19/1914 12-30--0. 37.42 122.17 D
4/11/1914 3-48--0. 40.83 124.17 D
                                                       F STANFORD UNIVERSITY.
                                                      F IV EUREKA. ALSO FELT AT LOLETA.
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F FLORISTON.
 4/23/1914 16- 4--0. 39.42 120.00 D
                                                     STRONGEST SHOCK OF THE YEAR IN THE U.S.
                                                     FELT OVER AN AREA OF 100,000 SQUARE MILES. EPICENTER PROBABLY NE OF RENO,
                                                      AND GRASS VALLEY. AND SAND PASS AND GERLACH. NEVADA. IV AT SACRAMENTO AND
                                                      STOCKTON.
                                                   F FLORISTON. PROBABLY AFTERSHOCK OF NEVADA
 4/25/1014 19-0-0 39-42 120-00 D
                                                      QUAKE.
                                                   F PILOT CREEK. SAME OR DIFFERENT EARTHQUAKE
 4/27/1914 5-30--0. 38.83 121.00 D
                                                   FELT AT NEVADA CITY AT 5-50-0.

F HALL'S FLAT. CONNECTED WITH ERUPTIONS OF
 5/31/1914 -0--0--0. 40.50 121.50 D
                                                      LASSEN PEAK.
                                                   F VALLEY SPRINGS .
 6/14/1914 6--0--0. 38.17 120.83 D
                                                    F II PALO ALTO.
 6/21/1914 8- 2--0.
                         37.42 122.17 D
 7/ 7/1914 16-38--0.
                                                   F LIVERMORE .
                         37.67 121.75 D
 8/14/1914 12-21--0. 40.83 124.17 D
                                                   E IV FUREKA. RATTLED WINDOWS.
 8/24/1914 6--0-0. 36.67 121.67 D
                                                   F SALTNAS.
                                                   F LAGUNA HONDA. SAN FRANCISCO. FELT BY
                                                      SEVERAL AT BERKELEY. PRECEDED BY LOW RUMBLING SOUND.
 9/ 7/1914 17-19-0. 37.33 121.67 D
                                                      I MT. HAMILTON.
                                                      III MT. HAMILTON. DRIGIN BETWEEN 10 AND
                                                      20 MILES FROM LICK OBSERVATORY, FELT AT SAUSALITO, CAMPBELL, LOS GATOS, SAN JOSE, STANFORD UNIVERSITY (II-III), AND SANTA CRUZ.
9/ 7/1914 18-35--0. 37.33 121.67 N
9/ 7/1914 21-10--^. 37.33 121.67 D
10/23/1914 14-30--0. 40.50 121.50 N
                                                      I MT. HAMILTON.
                                                    F CAMPBELL.
                                                    F LASSEN PEAK . ACCOMPANIED AN EXPLOSIVE
                                                      ERUPTION OF LASSEN PEAK.
                                                    F IV VINA. TWO SHOCKS.
11/ 7/1914 3-25--0. 39.92 122.08 D
                                                    F VIII SANTA CRUZ MOUNTAINS. FELT FROM ST.
                                                     HELENA ON NORTH TO SOLEDAD ON SOUTH, AND FAIRMEAD ON EAST. AREA SHAKEN
                                                      APPROXIMATELY 30,000 SQUARE MILES. EPICENTER NEAR LAUREL, ONE MILE SW OF SAN
                                                      ANDREAS FAULT. IV-VI AT STANFORD UNIVERSITY, IV-V AT MT. HAMILTON, III-IV AT
                                                      BERKELEY, AND III AT SAN FRANCISCO.
11/21/1914 16-24--0. 37.33 121.67 D
                                                   F IV MT. HAMILTON. ORIGIN ABOUT 15 MILES
                                                     DISTANT. ALSO FELT AT SANTA CLARA AND SAN JOSE.
                                                   F II SAN LUIS OBISPO. ABRUPT TREMBLING,
11/24/1914 4-25--0. 35.25.120.67 D
                                                      LASTING 20 SECONDS.
                                                    F CATHEDRAL PARK.
12/ 9/1914 7--0-0. 38.75 120.83 D
12/10/1914 8- 1--0. 40.83 124.17 D
12/12/1914 -0--0-C. 40.83 124.17 D
                                                    F II EUREKA. ABRUPT JOLT.
                                                    F FURFKA.
12/28/1914 10-42--0. 37.17 122.17 D
                                                    E VI SANTA COLIZ MOLINTAINS. FELT OVER AN
                                                      AREA OF ABOUT 10,000 SQUARE MILES. BERKELEY TO THE NORTH AND ARBOLADA TO THE
                                                      AREA OF ABOUT 10,000 SUDARE MILES. SERVED TO THE EXTREME POINTS. VI AT BOULDER CREEK AND FELTON. V AT SANTA CRUZ. IV AT COYOTE AND SALINAS. III-IV AT MONTEREY. III AT STANFORD UNIVERSITY, CAMPRELL, AND BERKELEY. II-III AT OAKLAND. II AT ARBOLADO.
                                                   F IV ROHNERVILLE. SHIVELY.
F III COYOTE. RECORDED AT LICK OBSERVATORY.
ORIGIN NOT MORE THAN 10 MILES DISTANT.
 1/14/1915 15-30--0. 40.83 124.17 D
                                                    F LASSEN PEAK . EARTHQUAKES SHOOK THE REGION
 1/23/1915 16-40--0. 40-52 121-50 D
                                                      FOR 20 MINUTES PRECEDING AN ERUPTION.
 1/23/1915 17- 0--0. 40.50 121.50 0
1/31/1915 8-30--0. 39.67 123.67 0
                                                   F LASSEN PEAK. TIME OF THE ERUPTION.
                                                   F III BRANSCOMB, FOUR SHOCKS,
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2/18/1915 9-47--0. 40.83 124.17 D
                                                         F IV ROHNERVILLE. II-III AT EUREKA.
                                                         F VIII EVENING. TWIN VALLEY, 30 MILES EAST

OF REDDING. VIOLENT LOCAL SHOCK. FISSURES, NEW SPRINGS, HOUSES TIPPED OVER,
                                                            ETC.
2/28/1915 10-44--0. 36.58 121.92 D
                                                         F ARBOLADO. DOUBLE SHOCK OF V. AT HOLLISTER
                                                            IV, SINGLE
                                                         F III ARBOLADO.
3/17/1915 3-25--0. 36.58 121.92 D
3/29/1915 13-40--0. 40.75 124.00 D
                                                         F II CHINA FLAT.
3/31/1915 12-33--0. 37.33 121.92 D
                                                         F III SAN JOSE .
                                                         F COLEVILLE, BRIDGEPORT. II AT SMITH,
NEVADA. REPORTED ALSO FROM COULTERVILLE.
4/ 5/1915 21-40--0. 38.58 119.50 D
                                                         NEVADA. REPORTED ALSO FROM CODE, FRVILLE.

F VI COLEVILLE REGION. PERCEPTIBLE OVER THE

CENTRAL SIERRA REGION FROM NORTHFORK ON THE SOUTH, TO NEVADA CITY ON THE MORTH,

EAST TO BEYOND YERINGTON, NEVADA (IV) AND WEST TO COULTERVILLE AND SONORA.

SHAKEN AREA ABOUT 25,000 SQUARE MILES. AT COLEVILLE ROCKS ROLLED DOWN HILLSIDES
4/ 5/1915 23-11--0. 38.58 119.50 D
                                                            AND QUAKE LASTED 25 SECONDS. AT BRIDGEPORT ARTICLES WERE SHAKEN FROM SHELVES, LASTED 5 SECONDS. V AT GARDNESVILLE, NEVADA. IV AT SMITH AND YERINGTON,
                                                         LASTED 5 SECONDS. V AT GARDNESVILLE, NEVADA. IV AT SMITH AND YERINGTON,
NEVADA. III AT SONORA, PACIFIC, AND COULTERVILLE. II AT NORTHFORK. ALSO AT
MARKLEEVILLE, TOWLE, AND NEVADA CITY.

F V WATSONVILLE. IV AT SPRECKELS, III AT
COYOTE, II-III AT SANTA CLARA.
A/ 6/1915 16-28--0. 36-92 121-75 D
                                                         F IV MARKLEEVILLE. 4 RAPID, BUMPING SHOCKS.
AT SONORA SINGLE SHOCK, IV.
4/17/1915 6-27- 0.0 38.67 119.75 D
                                                         F IV SAN LUIS OBISPO. ALSO FELT 3 MILES NW
4/21/1915 9-58--0. 35.25 120.67 D
                                                            OF PRIEST VALLEY.
5/ 3/1915 7-30--0. 39.67 123.67 D
                                                         F III BRANSCOMB.
                                                         E III CUCANVILLE - 2 ROIFF SHOCKS.
5/ 3/1915 19-52--0. 40.42 120.67 D
5/ 4/1915 1--0--0 40.42 120.67 D
5/ 6/1915 12- 9--0 39.50 126.50 C 6.8
                                                         F SUSANVILLE.
                                                            V MENDOCINO COUNTY COAST. ORIGIN OFF
                                                            SHORE. STRONGEST AT FORT BRAGG. BRANSCOMB. II AT SHIVELY AND EUREKA. ALSO AT
                                                            WILLITS.
                                                         F HAT CREEK VALLEY AND BURNEY.
5/22/1915 -0--0--0. 40.75 121.50 D
                                                                                                   AFTERNOON .
                                                         F VI SOUTHERN SIERRA. ORIGIN IN SIERRA
5/29/1915 6-46--1. 36:08 118:83 D
                                                            REGION EAST OF SPRINGVILLE. V AT BAKERSFIELD AND LONE PINE. IV+ AT GLENNVILLE.

III AT CALIFORNIA HOT SPRINGS. II AT FRESNO. REPORTED ALSO FROM MERCED,
                                                         HANFORD, VISALIA, AND PORTERVILLE.
F SOUTHERN SIERRA. AFTERSHOCK. FELT AT
5/29/1915 8-30--0. 36.08 118.83 D
                                                           LONE PINE .
6/ 4/1915 21-10-0. 40.50 124.00 D
6/ 6/1915 17-51-0. 37.75 122.50 D
                                                         F V SHIVELY .
                                                                           3 SHOCKS.
                                                         F IV SAN FRANCISCO AND DAKLAND. ALSO FELT
                                                            IN SAUSALITO, AND AS FAR SOUTH AS COYOTE (II). REPORTED ALSO FROM STANFORD
                                                            UNIVERSITY AND FROM SEVERAL POINTS IN SAN MATED COUNTY.
                                                         F II SANTA CLARA. DRIGIN SOME 30 MILES
6/10/1915 16-12--0. 37.33 121.92 0
                                                            SOUTH OF SANTA CLARA.
                                                         F II CHESTER.
6/15/1915 8-55--0. 40.33 121.25 D
6/26/1915 -0--0-0. 36.58 121.67 D
                                                           SPRECKELS .
7/15/1915 18--0--0. 40.42 121.58 D
                                                         F II DRAKESBAD.
7/19/1915 23-10--0.
                           37.33 121.67 D
                                                         F IV MT. HAMILTON. ORIGIN 10-15 MILES DIST.
7/22/1915 0--0-0. 40.42 121.58 D
7/22/1915 11--0-0. 40.33 121.58 D
                                                         E IV DRAKESBAD.
                                                         F MINERAL . 2 SHOCKS .
                                                         F III EUREKA.
7/22/1915 20-36--0. 40.83 124.17 D
   5/1915 16-30--0. 40.42 121.58 D
                                                         F IV DRAKESBAD.
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0.4.5.4.015.40.70.0	74 50 101 47 0	F IV SPRECKELS.
8/ 5/1915 18-300. 8/ 6/1915 6-31-40.		F MY HAMILTON
8/ 6/1915 18-400.		F III MINERAL, LASTED 2 OR 3 MINUTES.
9/ 8/1915 12-450		F V REGION EAST OF PASO ROBLES. ANTELOPE.
7 1713 12 43 33	33101 120101 1/	2 SHOCKS, FIRST THE HEAVIER, DIL CAME UP WITH WATER IN WELL AFTER SHOCK. AT SHANDON A SEATED MAN WAS SHAKEN SO HARD HE THOUGHT A PERSON WAS SHAKING HIM. AT CRESTON THE SHOCK WAS SHORT AND SHARP. A SLIGHT LANDSLIDE AT PORT SAN LUIS. WEATHER BUREAU REPORTS - PASO ROBLES, V AND SAN LUIS OBTSPO III-IV.
10/ 1/1915 15-260.	37.50 122.33 D	F V SAN FRANCISCO PENINSULA. FELT FROM PETALUMA TO SAN JOSE, AND EAST TO LIVERMORE. ESTIMATED INTENSITIES— SAN FRANCISCO III, BERKELEY AND STANFORD UNIVERSITY III—IV, SAN JOSE, OAKLAND, AND LIVERMORE II.
10/ 2/1915 9-170.	37.50 122.33 N	F III CRYSTAL SPRINGS LAKE. ALSO FELT IN BURLINGAME, PILARCITOS STATION, AND REDWOOD CITY.
10/ 3/1915 1-490.	39.42 121.08 D	F CAMPTONVILLE, AND PLEASANT VALLEY, NEVADA.
10/ 8/1915 3- 20.		F III SEBASTOPOL.
10/ 8/1915 5-260.		F VIII PIEDMONT, NORTH TO SEBASTOPOL AND
		SOUTH TO SANTA CLARA. A FEW CHIMNEYS THROWN DOWN IN PIEDMONT. ORIGIN IN HAYWARD FAULT ZONE, 3-5 MILES SE OF BERKELEY, FOCUS OF SHALLOW DEPTH. VI AT BERKELEY, IV AT SAN FRANCISCO, II-III AT STANFORD UNIVERSITY.
10/ 8/1915 5-350.	37.83 122.25 R	F IV AFTERSHOCK. BERKELEY AND SAN FRANCISCO
10/ 8/1915 5-520.	37.83 122.25 B	F III AFTERSHOCK. BERKELEY.
10/ 3/1915 6-310.		F !! AFTERSHOCK. BERKELEY.
10/ 8/1915 21-200.		F III PETALUMA.
10/22/1915 6-180.	37.83 122.25 B	F IV BERKELEY AND DAKLAND. WEAK, LOCAL QUAKE.
10/30/1915 -000-	40.75 121.50 D	F HAT CREEK VALLEY. ACCOMPANIED ERUPTIONS OF LASSEN PEAK.
11/ 1/1915 10-300.	37.75 122.50 D	F II SAN FRANCISCO. 2 SHOCKS.
12/27/1915 7-232.	36.83 121.42 D	F V MONTEREY BAY REGION. SHAKEN AREA PROBABLY ABOUT 10,000 SQUARE MILES. V AT SPRECKELS, WATSONVILLE, AND SANTA CRUZ. III AT PRIEST VALLEY AND MT. HAMILTON. FELT ALSO AT SOLEDAD AND SAN JOSE
12/31/1915 12-20).	41.00 126.00 C 6.5	F x AT SEA, OFF HUMBOLDT COUNTY COAST. OF DESTRUCTIVE ENERGY, BUT EPICENTER SO FAR FROM LAND THAT HIGHEST INTENSITY REPORTED WAS III AT EUREKA AND SHIVELY.
1/14/1915 18- 50.	37.67 121.75 D	F LIVERMORE.
1/16/1916 0-410.	39.42 122.83 D	F III SERASTOPOL.
2/ 4/1916 20-320.	36.83 121.42 D	F REGION OF HOLLISTER. REPORTED FROM HOLLISTER AND SPRECKELS.
2/19/1916 15- 50.	38.25 119.25 D	F III BRIDGEPORT.
4/ 1/1916 6-300.	36.58 118.08 D	F LONE PINE.
4/ 1/1916 7-350.	36.58 118.08 D	F LONE PINE.
4/13/1916 4-230.	36.58 118.08 D	F IV LONE PINE. 3 ROCKING SHOCKS.
5/ 3/1916 0-300.		F SALINAS AND SPRECKELS.
5/ 5/1916 -00-0.		F SPRECKEL'S.
5/ 7/1916 0-580.		F [[EUREKA. SHIVELY.
5/ 7/1916 = 4-140.		F LONE PINE.
5/14/1916 -000.		F SPRECKELS.
6/27/1916 13-430.	36.67 121.25 D	F V ORIGIN PROBABLY SE OF SALINAS IN REGION OF SAN ANDREAS RIFT. HOLLISTER AND SALINAS. ALSO AT KING CITY, PRIEST VALLEY (IV), PASO ROBLES, AND SPRECKELS.
6/27/1916 14-150.	37.33 121.67 D	F IV MT. HAMILTON REGION. ORIGIN SOME 10

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MILES DISTANT. III AT MT. HAMILTON, SAN JOSE, AND SANTA CRUZ.
 7/ 1/1916 14-15--0. 37.33 121.92 D
7/ 5/1916 4-40--0. 40.58 124.25 D
                                                        TIL SAN JOSE .
                                                      F VII HUMBOLDT COUNTY. MOST SEVERE 2 MILES
                                                        WEST OF FERNDALE, WHERE TWO CHIMNEYS WERE CRACKED, A WOODPILE OVERTURNED, AND MILK SPILLED FROM PANS. IN FERNDALE TREES SWAYED, VASES WERE THROWN FROM
                                                         SHELVES. AND A PLATE GLASS WINDOW WAS BROKEN. ALSO FELT AT EUREKA, ROHNERVILLE,
                                                         AND SHIVELY.
                                                      F IV SAN JOSE .
 7/ 6/1916 19-20--0. 37.33 121.92 D
                                                      F III COVELO. FELT ALSO 7 MILES EAST OF
 8/ 2/1916 0-44--0. 39.75 123.25 D
                                                         COVELO.
                                                      F VIII PAICINES. FELT FROM SAUSALITO ON THE
 8/ 6/1916 19-38--0. 36.67 121.25 D
                                                        VILL MALLINES. FELL FROM SAUSALITU UN THE
MORTH JO MERCED ON THE EAST AND PASO ROBLES ON THE SOUTH. PERCEPTIBLY AFFECTED
AN AREA OF 30,000 SQUARE MILES. VIII AT PAICINES, DESTROYED HOTEL CHIMMEYS AND
                                                        AN AREA OF 30,000 SQUARE MILES. VII AT PAICINES, DESTROYED MOTEL CHIMNEYS A DAMAGED SHELF GOODS. VII AT HOLLISTER, VI AT SALINAS. III-IV AT MERCED AND PASO ROBLES. IV AT SANTA CRUZ, III AND LOS GATOS, AND II AND SAN FRANCISCO. ALSO FELT AT PRIEST VALLEY.
 8/ 6/1916 20-56--0.
                                                      F V SALINAS. SLIGHT AT HOLLISTER.
                          36 67 121 67 D
 8/ 7/1916 16-15--0. 36.67 121.67 D
                                                      F III SALINAS.
                           36.67 121.67 D
                                                      F III SALINAS.
 8/ 8/1916 10-45--0
 8/ 8/1916 16-50--0. 37.00 122.00 D
                                                      F V MONTEREY BAY REGION. DRIGIN ON SAN
                                                         ANDREAS FAULT SW OF MT. HAMILTON. V AT SANTA CRUZ, IV AT SPRECKELS AND SALINAS.
                                                         III-IV AT LOS GATOS. III AT PALO ALTO AND STANFORD UNIVERSITY. ALSO AT SOLEDAD
                                                      F LONE PINE.
F VI EUREKA. ROCKING FOR 10 SECONDS AND
 8/14/1916 7-20--0. 36.58 118.08 D
 8/23/1916 14-55--0.
                          40.83 124.17 D
                                                        TREMBLING CONTINUED ABOUT 20 SECONDS LONGER. SHOCK AS HEAVY AT BLUE LAKE AS AT EUREKA. IV AT ROHNERVILLE. ALSO FELT BY MANY AT SHIVELY.
                                                      F SPRECKELS.
 9/ 1/1916 2-30--0.
                           36.58 121.67 D
 9/ 6/1916 19-40--0.
                           36.58 121.67 D
                                                      F SPRECKELS.
 9/ 9/1916 16-50--0.
                           36.58 121.67 D
                                                      F SPRECKELS.
9/28/1916 3-45--0.
10/ 9/1916 4-50--0.
10/23/1916 7-40--0.
                           36.83 121.42 D
                                                      E HOLLISTER.
                                                        III ROUND VALLEY.
                           36.50 118.00 D
                           38.17 121.67 D
                                                      F RIO VISTA AND MARTINEZ.
10/23/1916 18-57--0.
                           38.17 121.67 D
                                                      F RIO VISTA, MARTINEZ, LODI, STOCKTON,
                                                        DAKLAND. AND STANFORD UNIVERSITY.
                                                      F II SAN LUIS OBISPO. PROBABLY NEXT SHOCK,
10/24/1916 13- 3--- 35.25 120.67 D
                                                      WITH TIME ERROR.

F V JOLON. III AT POINT THREE AND A HALF
10/24/1916 13-30--0. 36.00 121.17 D
                                                        MILES NW OF PRIEST VALLEY.
11/ 3/1916 9- 3--0- 37-01 122-00 0
                                                      F V SANTA CRUZ. PROBABLY TIMING ERROR AND
                                                         IS SAME AS NEXT SHOCK .
11/ 3/1916 10- 4--2. 37.25 122.00 0
                                                      F III LOS GATOS. ORIGIN ABOUT 20 MILES
                                                        FROM MT. HAMILTON.
                                                      F IV SPRECKELS. EPICENTRAL DISTANCE
APPROXIMATELY 50 MILES FROM LICK OBSERVATORY.
11/28/1916 7- 3--7. 36-58 121-67 D
                           36.58 121.67 D
                                                      F IV SPRECKELS.
11/28/1916 7- 8--0.
11/28/1916 7-30--0.
                           36.58 121.67 D
                                                      F IV SPRECKELS.
                           36.58 121.67 D
                                                        I RECORDED AT MT. HAMILTON AND BERKELEY.
12/ 1/1916 22-53--0.
                                                      F VII AVILA. CONSIDERABLE GLASS BROKEN AND
                           35-17 120-75 D
                                                        GOODS IN STORES THROWN FROM SHELVES. SAN LUIS OBISPO. WATER IN BAY DISTURBED.
                                                        PLASTER IN COTTAGES JARRED LOOSE, SMOKESTACKS OF UNION OIL CO. REFINERY TOPPLED OVER. SEVERE AT PORT SAN LUIS. III AT SANTA MARIA.
12/ 7/1916 20-30--0. 37.33 118.42 0
                                                      F III BISHOP.
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F ITT TABLE BLUFF.
                     40.83 124.17 D
1/ 3/1917 16--0--0-
                                             F SALINAS.
1/13/1917 15-15--0.
                     76 67 121 67 0
                      36.58 118.08 D
                                             F LONE PINE .
1/18/1917 12-30--0.
                      36.58 118.08 D
                                             E I ONE PINE .
1/19/1917 8-50--0.
1/21/1917 17-10--0.
                      37.33 118.42 D
                                             E BISHOD.
                                             E TIT SAN INSE.
2/ 7/1917 15-27--0.
                     37. 33 121.92 D
                                             F III OWENS VALLEY. REPORTED FROM DLANCHA
                     36-25 118-00 D
2/10/1917 4-30--0.
                                               AND ALSO FROM NORTH AND SOUTH HAIWEE DAMS.
3/ 3/1917 16--0--0. 40.83-124.17 D
                                             F VI TABLE BLUFF. BROKE MANTLE IN
                                               I IGHTHOUSE.
3/13/1917 15- 4--0.
                     36-67 121-67 D
                                             E IT SALTNAS.
                                             F IV LONE PINE .
3/18/1917 12-30--0.
                     36.58 118.08 D
                                             F V LONE PINE.
3/19/1917 8-53--0-
                     36.58 118.08 D
                                             F IV BISHOP. FELT ALSO AT CROOKED CREEK
3/21/1317 17-10--0.
                     37.33 118.42 D
                                               CAMP OF THE LOS ANGELES POWER BUREAU. NOTICEABLE IN TUNNEL BEING DRIVEN. ROCKS
                                               DISLODGED ON MOUNTAIN SIDES WEST OF BISHOP.
                                             F III STANFORD UNIVERSITY.
3/29/1917 12-59--0. 37.42 122.17 0
                                             F IV BERKELEY. ORIGIN ABOUT 15 MILES FROM
4/ 2/1917 9- 1--0.
                     37.83 122.25 D
                                               BERKELEY.
                                             F III CEDARVILLE. DURATION 1 MINUTE.
4/13/1917 12-30--0. 41.50 120.17 D
4/16/1917 6--0--0. 41.50 120.17 D
5/11/1917 22-33-30. 38.67 119.75 D
                                             F III CEDARVILLE.
                     38.67 119.75 D
                                             F V MARKIFFVILLE AND TOWLE.
                                             F V SOLEDAD. IV AT CARMEL, SALINAS, AND SAN
6/ 9/1917 3-34- 0.0 36.58 121.33 D
                                               MIGUEL .
                                             F V DWENS VALLEY. REPORTED FROM
6/21/1917 19-21--1. 36.83 118.17 D
                                               INDEPENDENCE. FELT ALSO AT DIVISION CREEK POWER HOUSE, II MILES NW OF
                                               INDEPENDENCE.
6/26/1917 13-26--0. 40.83 124.17 D
                                             F IV EUREKA.
                                             F VII OWENS VALLEY. FELT FROM LITTLE LAKE
7/ 6/1917 11- 1--0. 36.58 118.08 D
                                               AT THE SOUTH TO DIVISION CREEK POWER HOUSE, 11 MILES NW OF INDEPENDENCE TO THE
                                               NORTH.
                                             F LOPEZ CANYON. ALSO AT SAN LUIS OBISPO.
7/ 7/1917 20-57--0. 35.25 120.50 D
                                             F LOPEZ CANYON.
7/ 7/1917 21- 2--0.
7/ 7/1917 21-15--0.
                     35.25 120.50 D
                      35.25 120.50 D
                                             F LOPEZ CANYON
                      35.25 120.50 D
                                             F IV LOPEZ CANYON.
7/ 9/1917 11-29--).
7/ 9/1917 5-15--0.
7/ 9/1917 22-22--0.
                      37.33 118.42 D
                                             F III BISHOP.
                                             F VII LOPEZ CANYON. IV AT SAN LUIS OBISPO.
                      35.25 120.50 D
                                             F LOPEZ CANYON.
7/ 9/1917 22-38--0.
7/10/1917 0-43--0.
                     35.25 120.50 D
                     35.25 120.50 D
                                               LOPEZ CANYON.
7/10/1917 0-45--0.
                                             F LOPEZ CANYON.
                      35.25 120.50 D
7/21/1917 16-50--0.
                     40.58 124.25 D
                                             F III FERNDALE. 3 OR 4 SHOCKS.
                                             F BERKELEY. WEAK LOCAL SHOCK.
8/23/1917 2-30--0.
                      37.83 122.25 D
                                             F V OWENS VALLEY. FELT FROM BIG PINE TO
8/28/1917 0-40--0.
                     37.33 118.42 D
                                               BENTON. MOST SEVERE AT BISHOP (V), LAWS, AND TUNGSTEN. IV AT BIG PINE. III AT
                                               RENTON.
                                             F IV OWENS VALLEY. FELT LESS WIDELY THAN
THE PREVIOUS ONE. IV AT BISHOP. REPORTED AT BIG PINE AND LAWS.
8/28/1917 8-40--0. 37.33 118.42 D
9/ 2/1917 4--0-0. 36.58 121.92 D
9/ 4/1917 19-13--0. 36.67 118.00 D
                                             F III PACIFIC GROVE.
                                             F II OWENS VALLEY. REWARD GOLD MINE, 9
                                               MILES SE OF INDEPENDENCE .
                                             F III SAN FRANCISCO BAY REGION. FELT FROM
9/12/1917 11-25--0. *37.33 121.92 D
                                               SANTA CRUZ TO BERKELEY. III AT LOS GATOS, SAN JOSE, AND SANTA CRUZ. II-III AT
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MOUNTAIN VIEW AND SAN EDANCISCO.
                                                 F IV EUREKA: DOUBLE SHOCK:
F IV MONTERFY HAY REGION: FELT FROM SALINAS
9/13/1917 2-14--0. 40.83 124.17 D
                                                   TO SAN FRANCISCO. HIGHEST INTENSITY (IV) REPORTED AT HOLLISTER, WATSONVILLE, AND SANTA CRUZ. III AT LOS GATOS, SALINAS, AND CAMPBELL. II-III IN SAN
                                                                ORIGIN ABOUT 30 MILES FROM MT. HAMILTON, IN SOUTHERLY DIRECTION.
                                                   FRANCISCO.
                                                 F III SAN FRANCISCO. 3 SHOCKS. MAY NOT
10/ 3/1917 7-40--0. 37.75 122.50 D
                                                   HAVE BEEN SEISMIC.
                                                 HAVE BEEN SCISMIC.

F IV SALIMAS. III AT SPRECKELS AND STANFORD

UNIVERSITY. ORIGIN ABOUT 30 MILES SOUTH OF LICK OBSERVATORY.
10/11/1917 21-26--0. 36.67 121.67 D
10/14/1917 0-50--0. 37.75 122.50 D
10/26/1917 9-20--0. 37.33 121.75 B
                                                 F II SAN FRANCISCO.
                                                 F VI MT. HAMILTON. EPICENTER ON HAYWARDS
FAULT, 5-10 MILES W OF MT. HAMILTON. V AT SAN JOSE. IV AT LOS GATOS. III AT
                                                   STANFORD UNIVERSITY, SAN FRANCISCO, AND BERKELEY.
                                                   II EUREKA.
10/27/1917 3-49--0. 40.83 124.17 D
11/ 5/1917 , 9- 4--0.

12/ 1/1917 6-37--0.

1/14/1918 -0--0--0.
                        38.83 123.00 D
                                                 F III CLOVERDALE AND LAKEPORT.
                        36.92 121.75 D
                                                 E TIT WATSONVILLE.
                                                 F EUREKA.
                        40.83 124-17 D
 2/11/1918 22-45--0.
                                                 F V BISHOP
                        37.33 118.42 D
 2/24/1919 0-12--0.
                        40.83 124.17 D
                                                 F IV EUREKA.
                                                 F II POUND VALLEY, LASTED 15 SECONDS. FELT
 3/ 1/1918 2-40--2.
                        37.50 118.50 D
                                                   6 MILES W OF ROUND VALLEY. II AT BISHOP. FELT ALSO IN FRESHO AND MONO COUNTIES
 3/ 3/1918 4-30--0. 40.83 124.17 D
 3/12/1918 10-30--0.
                        39.58 120.83 D
                                                 F VIII DOWNIEVILLE. CHIMNEYS THROWN DOWN.
 3/12/1918 12-30--0.
                        39.58 120.83 D
                                                 F DOWNIEVILLE.
                                                 F V EUREKA. CENTERED AT SEA OFF HUMBOLDT
 4/17/1918 6-43--0.
                       40.83 124.17 D
                                                   COUNTY COAST.
 5/13/1918 8-30--0. 36.58 118.08 D
                                                 F IV LONE PINE. 3 SHOCKS.
 5/24/1918 9-35--0. 36.58 118.08 D
                                                 F LONE PINE.
F V 18 MILES SW OF BISHOP. 2 SHOCKS. IV AT
                                                   BENTON. III+ AT BISHOP.
                                                 F IV SALINAS. III AT SPRECKELS.
F III SALINAS. 2 SHOCKS.
                        36.67 121.67 D
 6/29/1918 16-16--0.
 7/ 1/1918 5-15--0.
7/12/1918 17-20--).
                        36.67 121.67 D
                                                 F TIT SALTNAS.
 7/15/1918 0-23- 0. 41.00 125.00 C 6.5
                                                 F IX OFF HUMBOLDT COUNTY COAST. RECORDED
                                                   OVER CONSIDERABLE PART OF THE EARTH. HIGHEST REPORTED INTENSITY AT EUREKA - VI.
                                                   FELT ALSO AT FORT BRAGG AND BIG BAR.
 7/15/1918 0-26--0. 37.17 122.17 D
7/17/1918 -0--0-0. 36.25 118.00 D
                                                 E TV BOULDER CREEK AND MORGAN HILL .
                                                 E TIT DEANCHA. FELT 12 MILES SOUTH DE
                                                   DLANCHA. RATTLED DISHES. DOORS. AND WINDOWS.
                                                 F III EUREKA.
 7/22/1913 0-55--0. 40.83 124.17 D
 7/27/1918 21-40--0.
                        36.58 117.83 D
                                                 F IV KEELER.
F III STANFORD UNIVERSITY.
                                                 F V COULTERVILLE. PRECEDED BY LOUD RUMBLE.
                                                   IV AT KAISER DIGGINGS, 15 MILES NE OF NORTH FORK.
                                                 F IV EUREKA.
 8/20/1918 10-41--0. 40.83 124.17 D
                                                 F IV MORGAN HILL.
 8/20/1918 19-45--0.
                        37.08 121.67 D
10/12/1918 12-30--0-
                                                 F III LAKEPORT.
                        39.00 122.92 D
                                                 F IV LONE PINE. 3 SHOCKS.
11/15/1918 7-47--0.
                        36.58 118.08 D
11/29/1918 23-24--0.
                        40.83 124.17 D
                                                F V EUREKA AND TABLE BLUFF.
12/ 5/1918 2-38--0. 35.67 120.67 D
                                                F IV PASO ROBLES. II AT SAN LUIS OBISPO.
F SAN LUIS OBISPO.
                        35.67 120.67 D
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1/ 1/1919 11-43-0. 40.42 120.67 D
                                                  F HONEY LAKE VALLEY AND SUSANVILLE.
                                                 F VIIT SHASTA COUNTY, 30 MILES EAST OF
REDDING. HIGH INTENSITY, VERY LOCAL SHOCK.
F V NAPA. IV AT ST. HELENA AND VALLEJO.
 1/20/1019 9-25--0. 38-25 122-33 0
                                                    ORIGIN ABOUT 20 MILES FROM BERKELEY.
 2/ 6/1919 19- 7--0. 37.42 122.17 D
                                                  F STANFORD UNIVERSITY.
 2/11/1919 0--0-0. 37.33 118.42 D
2/20/1919 8-50--0. 36.58 118.08 D
                                                  F IV BISHOP.
                                                  E LONE DINE.
                                                                 A SHOCKS.
                                                  E VI NORTH OF BAY COUNTIES. ORIGIN
 2/25/1919 22-39--0.
                       38,33 122,50 D
                                                    PROBABLY IN GLEN ELLEN REGION. VI AT NAPA, PETALUMA, SANTA ROSA, AND POINT REYES. FELT ALSO AT SEBASTOPOL, SAN FRANCISCO, DAKLAND, STAMFORD UNIVERSITY,
                                                    AND MT. HAMILTON.
 3/ 1/1919 4-19--0. 36.17 120.67 D
                                                 F IV PRIEST VALLEY.
                                                  F SAN LUIS OBISPO.
 3/15/1919 7-53--0.
                        35.25 120.67 D
 4/13/1919 14-15--0. 37.42 122.17 D
                                                  F III STANFORD UNIVERSITY.
                                                  F IV SHASTA COUNTY. KENNETT.
F III SHASTA COUNTY. REDDING AND ANDERSON.
 5/ 2/1919 8-30--0. 40.58 122.92 0
 5/ 2/1919 8-38--0.
                        40.58 122.92 D
                                                  F IV LONE PINE .
 5/10/1919 7-55--0.
                        36.58 118.08 D
 6/14/1919 7-54--0.
6/21/1919 6-55--0.
                        40.83 124.17 D
                                                  F IV EUREKA. 2 SHOCKS.
                        36.58 118.08 D
                                                  F III LONE PINE.
                                                  F V LONE PINE.
 6/21/1919 19-59--0.
                        36.58 118.08 D
                                                  F V LONE PINE.
                                                                   DUPATTON 25 OP 30 SECONDS.
 6/24/1010 23-24--0
                        76.59 118-09 D
                                                  F V SAN BENITO COUNTY. FELT AT IDRIA.
 7/31/1919 21-31--C. 36.33 120.67 D
                                                    ORIGIN SOME DISTANCE FROM IDRIA.
 8/10/1919 4-50--0. 37.33 118.42 D
9/ 4/1919 20-16--0. 38.00 122.33 D
                                                  F 91SHOP. 2 SHOCKS.
                                                  F VI HERCULES. CRACKED CEMENT PIPE AND
                                                  RESERVOIR. III AT BERKELEY, OAKLAND, AND SAN FRANCISCO.
F IV EUREKA. DOUBLE SHOCK.
F V EUREKA. DOUBLE SHOCK.
 9/12/1919 17- 7--0. 40.83 124.17 D
 9/12/1919 19-30--0. 40.83 124.17 0
 9/12/1919 19-33--0. 40.83 124.17 0
                                                  F III EUREKA.
 9/12/1919 19-35--0. 40.83 124.17 D
                                                  F III EUREKA.
 9/12/1919 21-55--0. 40.83 124.17 D
                                                  F III EUREKA.
 9/15/1919 14- 7--0. 40.83 124.17 D
                                                  F VII EUREKA. SOME CHIMNEYS DEMOLISHED AND
                                                   WINDOWS BROKEN.
 9/15/1919 16- 8--0. 40.83 124.17 0
                                                  F IV FUREKA.
                                                  F IV EUREKA.
 9/15/1919 19-16--0. 40.83 124.17 0
 9/15/1919 19-21--0. 40.83 124.17 D
                                                  F IV EUREKA.
10/ 5/1919 2-36--0.
                        40.83 124.17 D
                                                  F III EUREKA.
10/13/1919 20-35--0.
                        36.67 121.67 D
                                                  F SAL INAS.
10/18/1919 15-31--C. 37.42 122.17 D
                                                  E ITT STANFORD UNIVERSITY. BUILDINGS
                                                    CREAKED AND WINDOWS PATTLED.
10/25/1919 22-40--0. 36.67 121.67 D
                                                  F SALINAS .
11/25/1919 11- 3--0. 37.08 121.83 D
                                                  F V SANTA CRUZ MOUNTAINS. ORIGIN ABOUT 10
                                                   MILES NE OF SANTA CRUZ, IN REGION OF SAN ANDREAS FAULT. SALINAS IV, SPRECKELS,
                                                    STANFORD UNIVERSITY III, SAN JOSE III, CENTERVILLE V, LIVERMORE, LOS GATOS, SAN
                                                 FRANCISCO III-IV, AND PETALUMA. PROBABLY III-IV AT ALL REPORTING POINTS.
F IV SAN FRANCISCO. FELT ALSO AT LAGUMA
12/ 5/1919 10-34--0. 37.75 122.50 D
                                                   HONDA.
12/11/1919 23-27--0. 37.00 122.00 0
                                                  F V SANTA CRUZ. FELT ALSO AT LOS GATOS, AND
                                                    STANFORD UNIVERSITY III.
12/18/1919 7-15--0. 35.67 120.67 D
12/20/1919 9-30--0. 38.42 122.75 D
                                                 F PASO ROBLES.
                                                 F TV SANTA POSA.
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3/20/1920 7- 4--0. 35.25 120.67 D
                                                   E II SAN LUIS OBISPO.
                                                   F IV EUREKA. DURATION 20 SECONDS. FELT ALSO
                                                      AT BLOCKSBURG. ORIGIN AT SEA, SW OF CAPE MENDOCINO.
                                                      III EUREKA.
 4/20/1920 6-20--0. 40.83 124.17 D
 5/ 7/1920 1-59--0. 35.25 120.67 D
6/ 3/1920 5-55--0. 40.58 122.92 D
                                                      TV SAN LUIS DRISPO.
                                                    E VENNETT 2 SHOCKS.
                                                   F KENNETT. 2 SHOCKS.
F IV LAKEPORT.
F V SPRECKELS. 2 SHOCKS. FELT ALSO IN
 6/10/1920 10-53--0. 39.00 122.92 D
6/16/1920 12- 9--0. 36.58 121.67 D
                                                   SALINAS. DISTANCE ABOUT 50 MILES SOUTH OF MT. HAMILTON.
F V SAN LUIS OBISPO.
 6/28/1920 9-1--0. 35.25 120.67 D
7/23/1920 3-55--0. 40.50 121.83 D
                                                   F VII HOT SPRINGS. CHIMNEYS AND WINDOWS
                                                      BROKEN, AND DISHES JARRED FROM SHELVES. FELT FROM REDDING, NE TO FALL RIVER
                                                      MILLS, AND MCARTHUR, AND ALONG MCCLOUD RIVER. ALSO AT MCCLOUD.
 7/23/1920 14--0--0. 40.50 121.83 D
                                                   E HOT SPRINGS.
                                                   F HOT SPRINGS.
 7/23/1920 16--0-0. 40.50 121.83 D
7/23/1920 20--0-0. 40.50 121.83 D
                                                    F HOT SPRINGS.
 9/ 9/1920 16-47-0 37-33 121-92 D
                                                   F III SALINAS.
                                                   F V SANTA CLARA COUNTY. ORIGIN ABOUT 8
MILES NE OF SAN JOSE, WHERE A SEWER PIPE WAS CRACKED AND A FEW BOTTLES UPSET.
                                                      CENTERVILLE. V AT SANTA CLARA. III AT STANFORD UNIVERSITY. II AT SAN
                                                      ERANCISCO.
                                                    F III LAKEPORT . RATTLED WINDOWS .
 9/17/1920 6-20--0. 39.00 122.92 0
                                                    F III FUREKA.
10/ 4/1920 13-31--0. 40.83 124.17 D
                                                    F V EUREKA.
                                                   F V MONTEREY PENINSULA. FELT AS FAR AS SAN
FRANCISCO. HIGHEST INTENSITIES AT SPRECKELS AND SALINAS. UPSET A DISPLAY
FIGURE IN WATSONVILLE. III AT SAN FRANCISCO, LOS GATOS, AND SAN JOSE.
10/ 5/1920 19- 4--0. 36.58 121.67 D
                                                   F II SAN FRANCISCO, WESTERN SECTION.
10/ 7/1920 5-33--0. 37.75 122.50 D
                                                    F III SANTA ROSA.
10/ 9/1920 22-11--0.
                         38.42 122.75 D
                          35.25 120.67 D
                                                    F SAN LUIS ORISPO.
                                                    F TY LONE PINE . RUMBLING SOUNDS.
12/13/1920 17-37--0.
                          36.58 118.08 D
                                                    F II SPRECKELS.
12/18/1920 19-15--0.
                         36-58 121-67 D
                                                    F III SPRECKELS.
                          36.58 121.67 D
12/18/1920 20-30--).
12/19/1920 12-15-0. 36.58 121.67 D
                                                   F III SPRECKELS. 2 TREMORS.
F IV SPRECKELS. 3 SHOCKS. FELT ALSO AT
                                                      SAL THAS.
12/22/1920 4-18--0. 36.58 121.67 D
12/29/1920 9-59--0. 39.50 122.17 D
                                                    F IV SPRECKELS .
                                                      V WILLOWS. 2 SHOCKS. FELT ALSO AT GLENN
                                                      AND AT DRLAND.
                                                   F V WILLOWS. ALSO FELT 10 MILES E OF
 1/13/1921 10-30--0. 39.50 122.17 0
                                                      WILLIAMS.
 1/14/1921 12--0--0. 36.58 118.08 D
                                                      III LONE PINE.
 1/14/1921 13-0-0 36.58 118.08 D
                                                   F IV LONE PINE .
                                                    F V LONE PINE.
 1/14/1921 13-50--0.
 3/12/1921 2-51--0. 37.83 122.25 D
                                                    F II BERKELEY.
 3/22/1921 15-33--0. 40.83 124.17 D
                                                    F III EUREKA.
 4/24/1921 15- 6--0. 40.83 124.17 D
                                                    F IV EUREKA.
 6/12/1921 3-24- 0.0 36.75 122.00 D
                                                   F VI MONTEREY BAY. ORIGIN PROBABLY AT SEA
                                                     OFF MONTEREY BAY. IV AT SALINAS. FELT ALSO AT SANTA CRUZ. SANTA CLARA. AND SAN
                                                      JOSE .
 7/19/19/1 16-15--0. 40.67 120.75 D
7/18/19/1 20-15--0. 40.67 120.75 D
                                                   F EAGLE LAKE.
                                                   F EAGLE LAKE.
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F EAGLE LAKE.
 7/20/1921 14-30--0. 40.67 120.75 D
                                                             F VI EAGLE LAKE.
 7/21/1921 20-17- 0.0 40.67 120.75 D
                                                             F VII AT FAGIF LAKE, MAIN SHOCK OF SERIES. V
                                                                AT CHEANUTLE
 7/21/1921 20-20- 0.0 40.67 120.75 D
                                                             F VI AT FAGLE LAKE.
                                                             F V CHITTENDEN. OVERTURNED DBJECTS AND
 7/25/1921 5- 5--0. 36.92 121.67 D
                                                                SLOPPED MILK FROM PANS. ORIGIN NEAR CHITTENDEN, WHERE SAN ANDREAS FAULT PASSES.
                                                                FELT OVER AN AREA OF 6,000 SQUARE MILES, ELLIPTICAL IN SHAPE WITH LONG AXIS FROM SAN FRANCISCO (II) TO SAN ARDO (II). IV AT WATSONVILLE, DURATION 21 SECONDS.

III AT SAN JOSE. II AT IDRIA AND CENTERVILLE. FELT ALSO AT SALINAS.
                                                             E TIT FINEKA.
 9/20/1921
               2- 5--0. 40.83 124.17 D
8/29/1921 2-5--0. 40.83 124.17 0
9/25/1921 25-5--0. 36.83 121.42 0
11/29/1921 9-20--0. 40.83 124.17 0
12/ 4/1921 16-57--0. 39.00 122.92 0
1/ 1/1922 1-10--0. 38.25 122.67 0
1/26/1922 9-31-20. 41.00 126.00 C 6.0
                                                             F III HOLLISTER. 3 SHOCKS, 2 MINUTES APART.
                                                             F II EUREKA.
                                                             F LAKEPORT.
                                                             F PETALUMA. 3 SHOCKS.
                                                               AT SEA. NW OF CAPE MENDOCINO. NOT
                                                                REPORTED FELT.
 1/31/1922 13-17-22. 41.00 125.50 C 7.3 99 F AT SEA, NW OF CAPE MENDOCINO. RECORDED
                                                                WORLD-WIDE BY 106 STATIONS. FELT OVER AN AREA OF 400,000 SQUARE MILES. VI AT EUREKA. FELT FROM SAN JOSE NORTH TO ROSEBURG, OREGON.
 2/ 4/1922 20-20--0. 36.67 121.67 D
2/ 5/1922 1-28--0. 40.83 124.17 D
2/28/1922 19-51--0. 37.25 122.00 D
                                                             F IV SALINAS AND SPRECKELS.
                                                             F TIT FUREKA.
                                                           E TY LOS GATOS. DOUBLE SHOCK. LIKE
                                                                EXPLOSION.
 3/10/1922 11-21-20: 35.75 120:25 C 6.5 43 F IX CHOLAME VALLEY, REGION OF SAN ANDREAS
                                                                FAULT. FELT OVER AN AREA OF 100,000 SQUARE MILES. CRACKS IN THE GROUND AND NEW
                                                                SPRINGS. VII-VIII AT PARKFIELD AND SHANDON. VI-VII AT SIMMLER AND SAN LUIS OBISPO. V AT LOS ANGELES.
                                                             F VI CHOLAME VALLEY. RATHER STRONG
 3/16/1922 23-12-C. 35.75 120.33 D
                                                                AFTERSHOCKS. V AT SAN LUIS OBISPO AND PASO ROBLES. IV AT ANTELOPE VALLEY.
                                                                ALSO AT SHANDON.
                                                             F III PASO ROBLES.
 3/19/1922 11--0--0. 35.67 120.67 D
 3/23/1922 10--0-0. 35.67 120.67 D
                                                        F III PASO ROBLES.
 3/25/1922 12--0--0.
                              35.67 120.67 D
                                                            F III PASO ROBLES.
 5/14/1922 10-12--0. 37.75 122.17 D
5/15/1922 20-30--0. 39.92 120.92 D
                                                            F II DAKLAND. QUESTIONABLE.
                                                             F IV QUINCY .
                                                            F III PASO ROBLES.
 5/31/1922 1-25--0.
                                                                                         2 SHOCKS.
                              35.67 120.67 D
 6/10/1922 14-55--0. 36.83 121.42 D
                                                             F IV HOLLISTER. III AT SALINAS.
 6/10/1922 14-55--0. 36-83 121-42 0
6/10/1922 20- 5-0. 36-83 121-42 0
8/ 6/1922 3-30--0. 40-83 124-17 0
8/ 6/1922 3-40--0. 40-83 124-17 0
8/ 6/1922 5-45--0. 40-83 124-17 0
8/18/1922 5-12--0. 35-75 120-33 0
                                                            F IV HOLLISTER AND SALINAS.
                                                           F III EUREKA. ALSO FELT AT RUTH.
F IV EUREKA. ALSO FELT AT RUTH.
F III EUREKA. ALSO FELT AT RUTH.
F VII CHOLAME VALLEY. V AT SAN LUIS OBISPO
                                                                AND PASO ROBLES.
 8/18/1922 6-13--0. 40.83 124.17 D
8/19/1922 -0--0-0. 36.58 118.08 D
                                                             F III EUREKA.
                                                            F INYO COUNTY.
                                                                                   SUPPOSED TO HAVE BROKEN LOS
                                                                ANGELES AQUEDUCT NEAR HAIWEE.
                                                             F III ATASCADERO.
 8/20/1922 21-14--0. 35.50 120.67 D
8/20/19/2 2[-14--], 35.50 120.67 0
9/ 4/1922 10-15--0, 35.67 120.67 0
9/ 5/1922 9- 5--0, 35.25 120.67 0
9/18/1922 11-55--0, 40.83 124.17 0
10/17/1922 5-30--0, 36.83 121.42 0
                                                             F IV PASO ROBLES.
                                                             F V SAN LUIS OBISPO. 2 SHOCKS.
                                                            F III EUREKA.
                                                           F V HOLLISTER.
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F III HOLLISTER.
10/17/1922 5-40--0. 36.83 121.42 D
                                                     F III EUREKA. ORIGIN PROBABLY AT SEA.
11/ 4/1922 3-19--0. 40.83 124.17 D
                                                     F III AT EUREKA.
12/ 4/1922 16-57--0. 39.00 122.92 D
                                                     F III LAKEPORT.
                                                     F SAN FRANCISCO. NIGHT. QUESTIONABLE.
12/ 7/1922 -0--0-0. 37.75 122.50 D
                                                     F III PASO ROBLES.
12/20/1022 11-0-0- 35-67 120-67 D
                                                     F III PASO ROBLES.
12/29/1922 12-11- 0.0 35.67 120.67 D
                                                     F III PASU RUBLES.
F NORTHEASTERN CALIFORNIA. CENTER PROBABLY
IN LAKE COUNTY, DREGON. REPORTED FROM CEDARVILLE, ALTURAS (WHERE PLASTER WAS
 1/11/1923 4-29--0. 41.50 120.17 D
                                                        DISLODGED). AND SUSANVILLE.
 1/15/1923 22- 0-0. 38.83 123.00 D
                                                     F CLOVERDALE.
                                                     F III SUSANVILLE. MAY REFER TO LAKE COUNTY,
                                                       DREGON QUAKE OF 1/11/23.
                                                     F HOLLISTER.
 1/21/1923 23-15--0. 36.83 121.42 D F HOLLISTER.
1/22/1923 9-4-18. 40.50 124.50 C 7.2 71 F IX SUBMARINE, OFF CAPE MENDOCINO. VIII-IX
                                                        IX SUBMARINE, UPF CAPE MENUDCING. VIII-IX
AT UPPER MATTOLE, PETROLIA, DYERVILLE, AND PEPPERWOOD. VI-VIII AT FERNDALE,
SCOTIA, LOLETA, FORTUNA, AND ALTON. VI-VII AT EUREKA. V-VI AT WILLOWS, RED
                                                        BLUFF , AND ORLAND .
                                                     F UPPER MATTOLE. AFTERSHOCK OF 1/22.
F UPPER MATTOLE. AFTERSHOCK OF 1/22.
F UPPER MATTOLE. AFTERSHOCK OF 1/22.
 2/ 3/1923 10--0--0. 40.25 124.17 D
 2/ 8/1923 11-30--0. 40.25 124.17 D
 2/ 8/1923 12--0--0.
                          40.25 124.17 D
                                                     F II EUREKA. AFTERSHOCK OF 1/22.
F III EUREKA. AFTERSHOCK OF 1/22.
                         40.83 124.17 D
 2/ 9/1923 11-15--0.
 3/28/1923 22-13--0.
                         40.83 124.17 D
 4/1/1923 4-19--0. 38.42 122.75 D
4/15/1923 7-15--0. 39.25 121.00 D
4/29/1923 2-31-29. 41.00 125.00 C 5.0
                                                     E TT SANTA BOSA.
                                                     F NEVADA CITYA
                                                        AT SEA, WEST OF CAPE MENDOCING. NOT
                                                        REPORTED FELT.
                                                     F V SAN LUIS OBISPO. 2 SHOCKS, SECOND II.
 5/ 4/1923 22-45--0. 35.25 120.67 D
              5- 2--0.
                          35.75 120.33 D
                                                     F II CHOLAME.
 5/ 8/1923
                                                     F IV PASO ROBLES. DURATION 15-20 SECONDS.
 6/16/1923 20-40--0. 35.67 120.67 D
                          35.25 120.67 D
                                                     F II SAN LUIS ORISPO.
 6/25/1923 13-21--2
                                                     F V SPRECKELS, DURATION 30 SECONDS. III+ AT
 8/25/1923 11-21--C. 36.58 121.67 D
                                                        SALINAS. FELT ON MONTEREY PENINSULA.
                                                     F III STANFORD UNIVERSITY.
 9/ 2/1923 6-23--0. 37.42 122.17 D
                                                        IV EUREKA.
 9/ 3/1923 12-19--0. 40.83 124.17 D
 9/ 6/1923 12--0--0. 38.42 122.75 D
                                                      F III SANTA ROSA.
 9/17/1923 9-26--0.
                          40.83 124.17 D
                                                     F TV FURFKA.
                                                      F VI CORRALITOS. GOODS KNOCKED FROM SHELVES
 9/19/1923 22-54--0.
                         37.00 121.83 D
                                                        AS FRAME BUILDING JERKED AND SWAYED. FELT AT SAN FRANCISCO AND DAKLAND ON THE
                                                        NW, AND NEARLY AS FAR SE AS SAN BENITO . NOT FELT EAST OF MT. HAMILTON RANGE AND
                                                        ON MONTEREY PENINSULA.
10/24/1923 14-30--0. 39.00 122.92 D
10/27/1923 18-47- 0.0 39.00 122.92 D
11/ 8/1923 20-39--0. 38.42 122.75 D
12/ 4/1923 20-50--0. 39.42 121.08 D
                                                     F II LAKEPORT.
                                                       IV AT LAKEPORT.
                                                      F III SANTA ROSA .
                                                      F IV CAMPTONVILLE, DURATION 60 SECONDS. AT
                                                       QUINCY AT 21-05. DURATION 10 SECONDS.
 1/ 4/1924 21-40--0. 36.67 121.67 D
                                                      F III SALINAS.
 1/ 9/1924 10-21--0. 40.83 124.17 D
                                                        IV EUREKA.
 2/ 9/1924 11-40--0. 37.33 121.92 D
                                                       I SANTA CLARA.
                                                     F V SPRECKELS. III AT SALINAS. FELT AT SANTA CLARA. ORIGIN NEAR LOMA PRIETA, IN SAN ANDREAS FAULT REGIDN. F CALAYERAS VALLEY. ORIGIN NOT FAR FROM MT.
 3/ 9/1924 11-33--0. 36.58 121.67 D
 A/ 3/1924 23-54--0. 37-33 121-67 D
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HAMILTON. V-VI AT LOS GATOS AND SAN JOSE. IV AT HAYWARD. III AT SAN FRANCISCO
                                                 (3 SHOCKS), AND SALINAS. ALSO FELT AT WRIGHT'S AND STOCKTON.
4/ 4/1924 1-55--0. 37.75 119.58 D
                                              F II YOSEMITE VALLEY.
4/11/1924 6-12--0.
                      37.67 122.08 D
                                              E TI HAVWARD.
                                              E SANTA CLADA AND MT. HAMEL TON-
4/15/1924 21-11--0.
                      37.33 121.67 0
                                              F III SAN JOSE . ORIGIN ABOUT 7 MILES NW OF
A/22/1924 10- 8--0. 37.33 121.83 D
                                                 MT. HAMILTON.
                      37.83 122.25 D
                                              F BERKELEY.
                                                           RATTLED WINDOWS.
5/26/1924 11- 5--0. 36.67 121.67 D
6/6/1924 19- 2--0. 37.33 121.67 D
                                              F II SALINAS.
                                              F IV ORIGIN ABOUT 4 MILES FROM MT.
                                              HAMILTON. II IN SAN FRANCISCO.
6/20/1924 4--0--0. 40.83 124.17 D
6/20/1924 4-30--0. 40.25 124.17 D
                                              F UPPER MATTOLE. POSSIBLE SAME AS ABOVE.
                                              F UPPER MATTOLE.
6/20/1924 13-20--0. 40.25 124.17 D
                                                IV SAN JOSE. MAY BE MISDATED REPORT OF
 7/ 3/1924 23-55--0. 37.33 121.67 D
                                              E IV SAN INSE.
                                              F II SANTA ROSA.
 7/ 6/1924 17-48--0. 38.42 122.75 D
7/18/1924
            3-26--0. 40.83 124.17 D
                                              F IV FUREKA.
9/ 1/1924 20-16--0.
                                              F III SANTA ROSA.
                      38.42 122.75 D
                                              F III EUREKA.
9/ 7/1924 13-30--0.
                      40.83 124.17 D
11/13/1924 6-23--0. 37.17 122.00 D
                                              F IV SANTA CRUZ MOUNTAINS. N OF SANTA CRUZ.
                                              FELT FROM BERKELEY TO SALINAS. FELT IN LOS GATOS. F VI SALINAS. ORIGIN POSSIBLY ON SAN
12/28/1924 4-21--0. 36.67 121.67 0
                                                ANDREAS FAULT NEAR SAN JUAN. HIGHEST INTENSITY IN SALINAS, CONSIDERABLE MINOR DAMAGE TO PLASTERING. FELT FROM KING CITY TO PALO ALTO, AND W OF MT. HAMILTON
                                                PANGE -
                                              BETWEEN PALO ALTO AND REDWOOD CITY. FELT FROM SAN FRANCISCO TO MORGAN HILL.
12/30/1924 7-27--0. 37.42 122.17 D
                                                 FELT AT HAYWARD.
12/30/1924 7-50--0. 36.67 121.67 D
                                              F III SALINAS.
                                              F II EUREKA.
1/26/1925 5-46--0. 40.83 124.17 D
2/10/1925 9- 5--0. 37.50 122.33 0
                                              F V CRYSTAL SPRINGS LAKE. IV AT HAYWARD.
                                                FELT IN SAN FRANCISCO AND DAKLAND.
 3/ 3/1925 2-50--0. 40.83 124.17 D
                                              F IV EUREKA. REPORTED AT 2-55 AT UPPER
                                                MATTOLE.
3/ 3/1925 11-55--0. 40.83 124.17 D
                                                III EUREKA. FELT AT UPPER MATTOLE.
3/29/1925 18- 1--0. 36.67 121.67 D
                                              F II SALINAS.
3/31/1925 5-47--0. 39.33 120.33 D
                                              F VI NEAR TROY, BETWEEN EMIGRANT GAP AND
                                                DONNER LAKE.
                                                               10 OR 11 OTHER SHOCKS UNTIL 7-50, INCLUDING THE ONE FOLLOWING.
                                              F V NEAR LAKEVIEW OR EDEN.
3/31/1925 6- 5--0. 39.33 120.33 D
5/10/1925 13- 4--0. 38.42 122.75 D
6/ 4/1925 12- 2-52. 41.50 125.00 C 6.0
                                              F II SANTA POSA.
                                              F AT SEA, OFF CAPE MENDOCINO. NOT REPORTED
                                                FFLT.
6/29/1925 15-20--0. 35.25 120.67 D
                                              F III SAN LUIS OBISPO.
7/19/1925 19-24--0. 37.25 122.00 D
                                              F V NEAR EVERGREEN. ORIGINATED AT DEPTH OF
                                                20 MILES. FELT FROM SANTA ROSA TO SALINAS, BUT NEVER ATTAINED INTENSITY MUCH
                                                GREATER THAN III. HIGHEST INTENSITY IN LOS GATOS-SARATOGA REGION, 10 MILES SW
                                                OF EPICENTER.
7/26/1925 23-50--0. 40.83 124.17 D
8/21/1925 11-14--C. 38.00 118.50 D
                                                III EUREKA AND WADDINGTON.
                                              F VI CALIFORNIA-NEVADA BOUNDARY SW OF MINA,
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NEVADA. VI AT MINA AND CANDELARIA, NEVADA. 2 AFTERSHOCKS FELT AT MINA, 4 AT

LITTLE SUMMIT, NEVADA. III AT BODIE AND MONO LAKE, CALIFORNIA.

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F III PETALUMA.
F II BERKELEY. ORIGIN ABOUT 4 MILES DISTANT
F IV DAKLAND-BERKELEY REGION. ORIGIN ABOUT
 8/22/1925 18-15--0. 38.25 122.67 D
 8/26/1925 6-50--0. 37.83 122.25 D
9/30/1925 15-23--0. 37.75 122.17 D
                                                                 4 MILES DISTANT. IV AT DAKLAND. II AT SAN FRANCISCO.
10/14/1925 10-26--0. 36.67 121.67 D
                                                              E TTT SALTNAS.
                                                              ORIGIN NEAR PAICINES. NO REPORT OF
PERCEPTION, BUT FEW FELT SHOCKS IN THIS AREA ARE REPORTED.

F IV FERN, REDDING, AND WHITMORE. RATTLED
DOORS AND WINDOWS. ALSO FELT AT ANDERSON, PITT, AND RED BLUFF.

F IV NORTH BERKELEY. LOCAL.
                                                                 ORIGIN NEAR PAICINES. NO REPORT OF
12/18/1925 9- 5--0. 40.58 122.92 D
12/21/1925 11-12--0. 37.92 122.33 B
                                                               F NEWMAN AND STOCKTON.
12/26/1925 11-12-0 37.92 122.33 0
12/26/1925 0-28-0 38.00 122.33 0
                                                              F V MARIN COUNTY. ORIGIN 9 MILES NW OF
                                                                 BERKELEY. FELT DOWN THE SAN FRANCISCO PENINSULA TO MENLO PARK, WHERE IT WAS
                                                                 STRONGER THAN IN SAN FRANCISCO (III). 2 SHOCKS IN DAKLAND. III-IV IN BERKELEY.
                                                                 FELT AT BOLINAS, KENTFIELD, NOVATO, PETALUMA, AND AT MILL VALLEY.

IV GEYSERVILLE. RATTLED DOORS AND
                                                              F IV GEYSERVILLE.
 4/13/1926 2-20--0. 38.67 122.92 D
                                                                 WINDOWS. LASTED 15 SECONDS IN HEALDSBURG. FELT IN DRY CREEK VALLEY.
                                                                 HEALDSBURG.
 4/13/1926 3-20--0. 38.67 122.92 D
                                                                 IV FORT BRAGG.
 4/27/1926 12--0--0.
                              39.42 123.83 D
 5/15/1926 3-17-0. 40.50 124.08 D
                                                              E TY SCOTIA-
 5/26/1926 17-38--0
                                                              F IV STANFORD UNIVERSITY.
                               37.42 122.17 D
                                                               F II PALO ALTO AND STANFORD UNIVERSITY.
 5/30/1926 16-53--0.
                               37.42 122.17 D
                                                            3 F VII NEAR IDRIA. FELT OVER AN AREA OF
 7/25/1926 17-57-49
                              36.60 120-80 D
                                                                 VII NEAR IDMIA. FELT OVER AN AREA OF
30,000 SQUARE MILES. VI-VII AT IDRIA AND PANOCHE. IV AT LOS BANOS, RIVERDALE,
PORTERVILLE, AND VISALIA. III-IV AT GILROY, SANGER, PRIEST, AND FOWLER. ALSO
                                                                 FELT AT PARKFIELD AND FRESNO. DEPTH OF FOCUS 10-15 KM. DATA FROM BSSA. V.17.
                                                               F IV EUREKA
 9/21/1926 14-55--0. 40.83 124.17 D
10/13/1926 19--0--0. 40.83 124.17 D
                                                               E EINEKA.
10/13/1926 19-40--0.
                              40.75 122.92 D
                                                              F WFAVERVILLE.
                                                                 SCOTIA.
10/22/1926 7-23--0.
                               40.50 124.08 D
                                                               F IV SCOTIA. BUILDINGS SWAYED.
                              40.50 124.08 D
                                                               F III PASO ROBLES.
10/22/1926 10-10--2.
                               35.67 120.67 D
                               36.61 122.35 A 6.1 4 F VIII MONTERY BAY REGION. FELT OVER AN
10/22/1926 12-35- 7.
                                                                 AREA OF 100,000 SQUARE MILES. VIII AT SANTA CRUZ. VI-VII AT POINT AND NUE
CAPITOLA, SALINAS, SQUEL, POINT PINOS, LAKESIDE, MONTEREY, SAN FRANCISCO,
                                                                                                                                           VI-VII AT POINT AND NUEVO,
                                                                  APTOS, BOULDER CREEK, CARMEL, CASTROVILLE, DAVENDORT, AND PIGEON POINT. V-VI AT ALVARADO, KING CITY, PESCADERO, SAN GREGORIO, AND WATSONVILLE. V AT IRVINGTON,
                                                                  MORGAN HILL, BERKELEY, COLMA, CRYSTAL SPRINGS, GONZALES, HALFMOON BAY, HAYWARD,
                                                                 MORGAN HILL, BERKELEY, COLMA, CRYSTAL SPRINGS, GONZALES, HALFMOON BAY, HAYMARD, LOS GATOS, MARTINEZ, MILPITAS, MODESTO, NOVATO, NILES, OAKLAND, PALO ALTO, PARKFIELD, PETALUMA, PINOLE, POINT REVES STATION, RICHMOND, SAN FRANCISCO, SAN JOSE, SAN LEANDRO, SAN LORENZO, SAN LUCAS, SANTA CLARA, SARATOGA, SAUSALITO, SUISUN, AND WALNUT CREEK. THIS AND QUAKES ON OCTOBER 22, AT 13-35, 14-41, 16-3, OCTOBER 24 AT 22-51, AND FEBRUARY 15, 1927, AT 23-54 WERE ESPECIALLY INVESTIGATED BY GEORGE D. MITCHELL JR. SEE BSSA, V. 18, P. 153.
10/22/1926 13-30--). 38.42 122.75 D
10/22/1926 13-35-22. 36.57 122.18 A 6.1
                                                               F III SANTA ROSA.
                                                            A E VIII MONTEREY BAY.
                                                                                             SIMILAR IN ALMOST
                                                                  EVERY WAY TO THE SHOCK I HOUR EARLIER. SHAKEN AREA SLIGHTLY LESS. SLIGHTLY
                                                                  HIGHER INTENSITY AT SAN FRANCISCO, SANTA ROSA, SANTA CRUZ, AND A FEW PLACES
                                                                  TOWARD THE NORTH.
10/22/1926 13-50--0. 37.00 122.00 D
                                                               E SANTA CRUZ.
                                                              F II SANTA ROSA.
10/22/1926 13-51--0. 38.42 122.75 D
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10/22/1926 13-55--0. 37.00 122.00 D
                                                            F SANTA CRUZ.
                                                          4 F V SANTA CRUZ AND MONTEREY BAY REGION.
                                                              FELT AS FAR AS BERKELEY.
                                                         2 F MONTEREY BAY REGION. FELT AS FAR AS
10/22/1926 16- 3-49. 36.65 122.10 A
                                                               BERKELEY.
10/22/1926 18-55--0. 37.00 122.00 D
                                                            F SANTA CRUZ.
                                                             F SANTA CRUZ.
10/24/1926 22-51-49.5 37.02 122.20 A
                                                          3 F MONTEREY BAY. FROM SANTA ROSA ON N TO LOS
                                                            ALAMOS ON S. SHAKEN AREA ABOUT 50,000 SQUARE MILES.
F CHUALAR. DURATION 45 SECONDS.
10/26/1926 16-30--0. 36.58 121.58 D
10/27/1926 12--0--0. 38,42 122.75 0
10/31/1926 17-45--0. 37.25 122.00 D
12/ 9/1926 0- 3--0. 35.67 120.67 D
                                                            F III SANTA ROSA.
                                                            F II LOS GATOS.
                                                           F IV PASO ROBLES. PROBABLY MISTIMED REPORT
                                                            OF SHOCK AT 0-41.

F NE OF SAN LUIS ORISPO. AT SAN LUIS ORISPO
12/ 9/1926 0-41--0. 35.25 120.67 0
                                                               DURATION 20 SECONDS. FELT AT COALINGA. ORIGIN ABOUT 120 MILES FROM MT.
                                                               HAMILTON.
12/10/1926 8-38-53. 40.75 126.00 C 6.0
12/27/1926 9-19--0. 36.17 120.33 D
                                                               OFF COAST, WEST OF CAPE MENDOCINO.
                                                            F VI NEAR COALINGA. FELT OVER AN AREA OF
25,000 SQUARE MILES. FFLT AT SAN LUIS OBISPO, PORTERVILLE, OAKDALE, FRESNO,
OILFIELDS, LOS BANOS, FIREBAUGH, AND MENDOTA.
12/27/1926 10-36--0. 40.83 124.17 D
1/ 3/1927 10-29--0. 40.83 124.17 D
1/ 4/1927 9-35--0. 40.50 124.08 D
2/ 4/1927 10-2-0. 36.58 121.58 D
2/12/1927 8-46--0. 40.83 124.17 D
                                                            F TIT FURFKA.
                                                            F IV EUREKA.
                                                             F V SCOTIA. FELT AT FORTUNA AND RIO DELL.
                                                            F IV CHUALAR.
                                                            F IV EUREKA.
                                                          2 F VII SUBMARINE, JUST OFF SANTA CRUZ.

SLIGHT DAMAGE AT SANTA CRUZ. IV AT CHUALAR AND SAN JOSE. FELT TO NAPA ON NORTH, TO LEMOGRE ON THE SE, AND TO SAN LUCAS ON THE SOUTH. INDICATED SHAKEN
 2/15/1927 23-54- 3.5 36.95 122.26 A
                                                               AREA ABOUT 30,000 SQUARE MILES.
 3/ 1/1927 15--0--0. 40.50 121.50 D
3/ 1/1927 22-26--0. 40.50 121.50 D
3/ 8/1927 9- 2--0. 39.42 123.83 D
                                                            F LASSEN PEAK REGION. 6 SHOCKS.
                                                            F LASSEN PEAK REGION.
                                                           F IV FORT BRAGG. FELT ALSO AT CASPER AND
                                                              UKIAH. 2 SHOCKS SWAYED BUILDING SLIGHTLY AT UKIAH.
 3/31/1927 14-30--0. 37.33 122.92 D
4/12/1927 23-30--0. 37.00 122.00 D
5/16/1927 14-52--0. 40.83 124.17 D
                                                            F III SAN JOSE.
                                                            F SANTA CRUZ.
                                                           F IV HUMBOLDT COUNTY. FELT AT EUREKA AND
                                                               SCOTIA, 2 SHOCKS.
                                                            F VI NEAR EVERGREEN. VI AT SAN JOSE, 2
 5/28/1927 17-39--0. 37.33 122.92 0
                                                            SHOCKS. III AT IRVINGTON, LIVERMORE, NILES, AND SAN FRANCISCO. F III SAN JOSE.
 6/24/1927 0-53--0. 37.33 122.92 D
8/10/1927 12-11--0. 40.83 124.17 D
                                                            F V EUREKA. CRACKED PLASTER AND STOPPED CLOCKS. FELT ALSO AT SCOTIA.
                                                            F III HUMBOLDT BAY. REPORTED ONLY AT
                                                               CAPETOWN.
 8/20/1927 20- 5-44. 41.00 124.60 D
                                                         2 F VIII AT ARCATA, FERNDALE, FUREKA, AND
                                                               FORTUNA. VI AT WADDINGTON. V AT FIELDBROOK AND HOOPA. [V-VI AT TABLE BLUFF. IV AT CAPE TOWN, DYFRVILLE, KNEELAND, AND TRINIDAD. III-IV AT GARBERVILLE AND SMITH RIVER. DATA FROM BSSA V. 17, P. 213.
 9/ 2/1927 -0--0-0. 37.33 121.83 D
                                                            F VI ALUM ROCK PARK, 7 MILES E OF SAN JOSE.
                                                              LOCAL .
                                                            F III HUMBOLDT COUNTY. III AT FUREKA. ALSO
 9/ 6/1927 17-34--0. 40.83 124.17 D
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FELT AT SCOTIA.
                                                            F V EUREKA.

F VII SIERRA NEVADA, W OR NW OF BISHOP.

FELT OVER AN AMEA OF 75,000 SQUARE MILES. VII+ AT BISHOP. VI AT BASS LAKE.

IV-V AT BIG PINE, ABERDEEN, DEEP SPRING, FRESNO, BENTON, MOND LAKE, MARIPOSA,

YOSEMITE, HANFORD, TULARE, PORTERVILLE, AND VISALIA, AND AT MINA, TONOPAH,

CANDELIA, AND GOLDFIELD, NEVADA.

F IV ROCK CREEK CANYON, NW OF BISHOP. NOT
 9/16/1927 8-40--0. 40.83 124.17 D
9/18/1927 2- 7- 7. 37.50 118.75 C 6.0
                                                             E W EUDEKA
 9/19/1927 5-23--0. 37.33 118.50 D
                                                               FELT IN BISHOP
                                                             F III SANTA ROSA.
 9/20/1927 15-40--0. 38.42 122.75 D
                                                             F SANTA ROSA.
F II SANTA ROSA.
10/ 2/1927 19-22--0.
                             38.42 122.75 D
                                                             E II SANTA POSA.
                                                             F III DAKLAND. EVENING. ALSO AT CONCORD.
12/ 2/1927 4-33- 0.0 37.75 122.17 D
12/ 8/1927 0-14--0. 40.50 124.08 D
                                                             F II SCOTIA.
                                                             F V EUREKA. FELT ALSO NEAR DYERVILLE.
F V EUREKA. FELT BY A FEW IN SCOTIA.
F III GRASS VALLEY.
12/ 8/1927 22-25--0. 40.83 124.17 D
                              40.83 124.17 D
12/ 9/1927 6-13--0.
12/29/1927 0-12--0 39-17 121-08 D
1/ 8/1928 1- 0--0 36-67 121-67 D
1/ 9/1928 2-50--0 37-00 121-58 D
                                                             F SALINAS AND HOLLISTER.
                                                             F VII AT GILROY. ALSO FELT AT HOLLISTER,
SALINAS, AND WATSONVILLE.
 1/13/1928 7--5--0. 37.30 121.90 D
3/ 6/1928 4-46--0. 40.50 124.08 D
3/16/1928 3-30--0. 39.17 119.75 D
3/20/1928 4-8--0. 40.50 124.08 D
                                                             F SAN JOSE
                                                            F SCOTIA.
                                                             F CARSON CITY, NEVADA.
 3/20/1928 4-49--0. 40.50 124.08 D F SCOTIA.
4/15/1928 21-57-15. 40.50 121.50 D 4.5 I F LASSEN PEAK. V AT WILLOWS AND RED BLUFF.
                                                                ALSO FELT AT UKTAH.
                                                            F LASSEN REGION.
 4/16/1928 8- 0--0. 40.50 121.50 D
 4/17/1928 10-39--0.
                              39.50 119.83 D
                                                             F RENO, NEVADA.
 5/16/1928 23-17--0.
                             37.33 118.42 D
                                                             E BICHOD.
                                                             F SCOTIA.
 5/27/1928 18-49--0.
                             40.50 124.08 D
                                                             F SCOTIA.
 5/27/1928 23-33--0. 40.50 124.08 D
 5/29/1928 1-59--0. 40.50 124.08 D
6/ 4/1928 5-30--0. 40.75 122.92 D
                                                             F SCOTIA.
                                                            F VI AT TRINITY CENTER, CARRVILLE, AND
                             40.75 122.92 D
                                                               WEAVERVILLE. ALSO FELT AT EUREKA AND SCOTIA.
                                                             F EUREKA.
 7/28/1928 2-20--0. 40.83 124.17 D
 7/28/1928 22- 2--0. 37.42 122.17 D
8/ 9/1928 6-35--0. 37.33 121.92 D
                                                             F PALO ALTO. WITHIN 10 MILES OF STANFORD.
                                                             F SAN JOSE, WATSONVILLE, AROMAS, PALO ALTO,
                                                                AND SAN ERANCISCO.
                                                             F HAYWARD.
 8/14/1928 0- 0--0. 37.67 122.08 D
 9/12/1928 1-20- 0.0 37.00 120.08 D
                                                             F VI MADERA.
 9/16/1928 10-30-0 40.50 124.08 D
9/16/1928 11-30-0 40.50 124.08 D
                                                             F SCOTIA AND EUREKA.
                                                             E SCOTIA.
 9/16/1928 11-30--0.
10/ 1/1928 4-45--0. 40.83 124.17 0
11/ 6/1928 1- 0--0. 40.50 124.08 D
                                                             F EUREKA.
                                                             F SCOTIA.
11/16/1928 11-30--0. 40.83 124.17 D
                                                             F BAY POINT .
11/16/1928 21-15--0. 37.75 122.17 D
                                                             E DAKLAND.
                                                             F SCOTIA.
12/ 9/1928 21-43--0. 40.50 124.08 D
                                                             F WITHIN 10 MILES OF REND, NEVADA.
 2/ 4/1929 15-57--0. 39.50 119.83 D
 2/18/1929 3-25--0. 38.42 122.75 0
3/ 3/1929 1-10--0. 40.50 124.08 D
3/11/1929 3-30--0. 38.00 122.33 D
                                                             F SANTA ROSA.
                                                             F SCOTIA.
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E STOCKTON-

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3/19/1929 23- 0--0. 38.00 122.33 D
                                         F STOCKTON.
 4/25/1929 22- 0--0.
                       40.83 124.17 D
 5/ 4/1929 10-50--0.
                       36.75 120.42 D
                                             E MENDOYA
 5/ 4/1929 23-30--0.
                       40.83 124.17 D
                                             E MONTERELLO.
                                              F SCOTIA AND FORTUNA.
 5/19/1020 4-44--0-
                       40-50 124-08 D
                                              F SAN FRANCISCO.
 5/23/1929 23-17--0.
                       37.75 122.50 D
                                              F COALINGA.
 5/28/1929 7-10--0.
                       36.17 120.33 D
 6/14/1929 23- 0--0.
                       40.42 122.83 D
                                              F COTTONWOOD.
 6/23/1929 22-12--0.
                       40.50 124.08 D
                                             E SCOTIA.
 7/ 6/1929 23- 0--0.
                       41.75 124.17 D
                                             E CRESCENT CITY.
 7/12/1929 13-10--0-
                       76 17 120 77 0
                                             E COAL INGA.
 7/14/1929 10-43--0. 36.58 118.08 D
                                                LONE PINE .
                                            1 F 3 MILES NORTH OF BERKELEY, ON HAYWARD
 8/ 2/1929 10- 2--0. 37.83 122.17 D
                                                FAULT.
                                                       IV-V IN BERKELEY, EL CERRITO, AND RICHMOND.
                                              F MIDDLETOWN, CALISTOGA, AND ST. HELENA.
9/ 2/1929 17-45--0. . 38.58 122.58 D
9/ 8/1929 18-45--0.
                                             F CALISTOGA.
                      38.58 122.58 D
                                              F SANTA ROSA.
                       38.42 122.75 D
9/11/1929 15- 0--0.
 9/15/1929 5-30--0.
                       38.50 122.50 D
                                              F ST. HELENA.
 9/16/1929 3-16--0.
                       35.42 120.92 D
                                              F CAYUCOS.
 9/16/1929 6-15--0.
                       35.42 120.92 D
                                              E CAVILORS
 9/24/1929 17-27--0.
                       36.58 121.92 D
                                             E MONTEDEY
 9/24/1929 17-37--0-
                       36.58 121.92 D
                                                MONTEREY.
9/24/1929 17-52--0.
                                             F MONTEREY.
                       36.58 121.92 D
10/ 5/1929 20- 3--0.
                       36.17 120.33 D
                                                COALINGA AND LIGHTHIPE.
10/ 6/1929 21-14--0.
                                                COALINGA.
                       36.17 120.33 D
10/ 7/1929 8- 0--0.
                       36.17 120.33 D
                                              F COALINGA.
10/11/1929 17-55--0.
                       36.17 120.33 D
                                             F COALINGA.
                                             F EUREKA AND SCOTIA.
F PRIEST VALLEY, KETTLEMAN HILLS, COALINGA,
10/15/1929 7-57--0. 40.50 124.08 D
10/15/1929 22- 2--0.
                      36.17 120.67 D
                                                AND DILFIELDS.
                                              F SCOTIA.
10/31/1929 18-54--0. 40.50 124.08 D
11/ 4/1929 17-50--0.
                       39.42 123.33 D
                                              F WILLITS.
11/ 5/1929 10- 0--0.
                       36.58 121.92 D
                                             E MONTEREY AND SANTA CRUZ.
                                             F MOCAL NO AND BIG CREEK .
11/ 6/1929 17-55--0.
                       37.17 119.25 D
11/ 7/1929 6-30--0.
                       36.33 119.67 D
                                             F HANFORD.
                                                MCKITTRICK, BITTER WATER, AND COALINGA.
11/ 9/1929 2-30--0-
                       36-17 120-33 D
                       37.17 119.25 D
11/13/1929 10-40--0.
                                              F MOCALNO.
11/20/1929 22-50--0.
                       36.42 121.00 D
                                              F BITTER WATER.
11/24/1929 9-54--0.
                       36.42 121.00 D
                                             F LONE OAK, BITTER WATER, AND LEWIS CREEK.
F V SAN ARDO AND BITTER WATER. FELT FROM
                      36.42 121.00 D
                                                HOLLISTER TO SANTA MARGARITA.
11/26/1929 9- 0--0. 36.42 120.83 D
11/26/1929 19- 6--0. 36.42 121.00 D
11/28/1929 19-49--0. 36.90 118.20 A
                                             F HERNANDEZ.
                                                BITTER WATER.
                                            1 F FELT OVER AN AREA OF 35,000 SQUARE MILES.
                                                VIII NEAR ABERDEEN.
11/29/1929 10- 5--0.
                       37.67 119.83 D
                                              F EL PORTAL .
11/29/1929 20- 7--0.
                                             F KAWEAH.
                      36.42 119.00 D
12/ 1/1929 7-15--0.
12/ 2/1929 7- 0--0.
                                              F BENTON AND MOCALNO.
                      37.83 118.58 D
                                              F ABERDEEN.
                      37.00 118.17 D
12/ 4/1929 10- 0--0. 37.33 123.25 D
                                              F UKIAH.
12/ 4/1929 12-29- 0.0 40.50 124.00 D
                                             F V ARCATA, WESTPORT, ALDERPOINT, ZENIA,
                                                CAPETOWN, BAYSIDE, SCOTIA, HOLMES, BRIDGEVILLE, MIRANDA, BLOCKSBURG, MCCANN.
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FORTUNA, GARBERVILLE, DYERVILLE, EEL ROCK, YAGER, FIELDS LANDING, ETTERSBURG, BRICELAND, BEATRICE, EUREKA, AND FOREST GLEN.
12/ 5/1929 6-45--0. 39.42 123.33 D
                                                  E WILLITE
12/ 5/1929 7-40--0.
                        36.33 119.67 D
                                                  F HANFORD.
                                                  F ABERDEEN.
12/ 8/1929 12-45--0
                        37-00 118-17 D
12/11/1929 9-15--0.
                        36.92 121.75 D
                                                  F WATSONVILLE.
12/25/1929 19-29--0.
                         37.17 118.33 D
                                                  E DIC DINE.
                                                  F BIG PINE.
                        37.17 118.33 D
12/25/1929 19-44--0.
                                                  F BIG PINE.
12/25/1929 22-29--0.
                                                  F SAN ANDREAS FAULT IN SAN BENITO OR SANTA
 1/ 9/1930 7-30--0.
                        37.00 122.00 D
                                                  CRUZ COUNTY. FELT FROM LONGAK TO SANTA CRUZ.

F AFTERSHOCK OF 7-30.
1/ 9/1930 8- 6--0.
1/ 9/1930 8-16--0.
1/ 9/1930 9-56--0.
1/11/1930 7-18--0.
                        37-00 122-00 D
                                                  F AFTERSHOCK OF 7-30.
                        37-00 122-00 D
                        37.00 122.00 D
                                                  F AFTERSHOCK OF 7-30.
                                                  F AFTERSHOCK OF 1-9, 7-30. 11 MILES S OF
                        36.58 121.67 D
                                                    SAL INAS.
                                                  F AFTERSHOCK OF 1-9, 7-30. 11 MILES S OF
 1/12/1930 10-41--0. 36.58 121.67 D
                                                    SAL THAS.
 1/16/1930 8-15--0. 36.75 120.42 D
1/19/1930 5-43--0. 39.92 121.33 D
                                                  E MENDOTA.
                                                  F IV STORRIF.
                        39.92 121.33 D
36.75 121.75 D
 1/19/1930 20-52--0.
                                                  F IV AT CASTROVILLE.
                                                 F IV DAKLAND. FELT FROM SAN FRANCISCO TO
CONCORD AND FROM SAN RAFAEL TO ALVARADO. AFTERSHOCK FELT AT CANYON.
 1/23/1930 4-17--0.
                        37.83 122.25 D
                                                  F TULARE. PORTERVILLE, LINDSAY, AND
 1/28/1930 8-23--0. 36-17 119-33 D
                                                    BAKERSFIELD.
                                                  F EL GRANADA.
 2/ 2/1930 10- 0--0.
                        37.50 122.42 D
 2/ 2/1930 1- 0--0. 37.92 122.92 D
2/ 6/1930 1- 0--0. 39.92 120.92 D
2/11/1930 21- 0--0. 41.92 122.50 D
                                                  E CARTRON.
                                                  E CARTROU.
                                                  F AGER.
 2/11/1930 21-21--0.
                                                  F NEAR LOS ALTOS. FELT OVER AN AREA OF
                        37.42 122.00 D
                                                    4,700 SQUARE MILES. IV-V AT ALVISO, CUPERTINO, LA HONDA, PALO ALTO, AND LOS
                                                    AL TOS.
                                                  F BIG PINE.
 2/27/1930 12-26--0. 37.17 118.33 D
                                                  F BIG PINE.
                        37.17 118.33 D
 2/27/1930 21-15--0.
 3/10/1930 6- 0--0.
                        41.25 123.33 D
                                                  F FORKS OF SALMON.
 3/14/1930 5-52--0.
                        36.08 118.00 D
                                                  E GRAND CANYON AND LITTLE LAKE.
 3/20/1930 2- 1--0.
                                                  E BIG PINE.
                        37.17 118.33 D
 3/27/1930 10-30--0
                        37.58 122.33 D
                                                  F SAN MATEO.
 3/27/1930 21-30--0. 40.67 124.25 D
                                                  F III ARCATA, BRIDGEVILLE, AND BUCKSPORT.
                                                    FELT OVER AN AREA OF 1,600 SQUARE MILES.
 4/ 2/1930 9-15--0.
                                                 F GENESSEE AND TAYLORSVILLE.
                        40.08 120.75 D
 4/ 4/1930 9-15--2
                        A0-08 120-75 D
                                                  F GENESSEE AND TAYLORSVILLE.
 4/ 4/1930 20-45--0.
                        40.08 120.75 D
 4/ 6/1930 4-23--0.
4/ 6/1930 4-28--0.
                        36.83 118.25 D
                                                  F SUGAR PINE, BIG CREEK, AND LAWS.
                                                 F SUGAR PINE, BIG CREEK, AND LAWS.
F NEAR LAKE TAHOE. FELT OVER AN AREA DF
                        36.83 118.25 D
 A/ 9/1930 22- 0--0.
                        39-25 120-00 D
                                                                             IV AT LAKE TAHDE AND GLENBROOK, NEVADA. V AT TRUCKEE AND
                                                    19,000 SQUARE MILES.
                                                    STOCKTON. IV AT CLEMENTS, GEORGETOWN, SACRAMENTO, STANISLAUS, AND STRAWBERRY
                                                    VALLEY, AND CARSON CITY, GENDA, MINDEN, AND REND, NEVADA.
 4/ 9/1930 22-14--0. 39.25 120.00 D
4/12/1930 12-57--0. 39.25 119.17 D
                                                  F AFTERSHOCK OF 22-0.
                                                  F NEAR FERNLEY AND FALLON, NEVADA. FELT
                                                    OVER AN AREA OF 15,000 SQUARE MILES. VI AT FERNLEY AND FALLON. V AT
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GARDNERSVILLE, MASON, STEAMBOAT, WABUSKA, AND WEEKS, NEVADA, AND TAHOE, CALIF.
 4/20/1930 0- 0--0. 40.67 121.92 D
4/29/1930 20-13--0. 40.58 122.92 D
                                                       E WHITMORE.
                                                       F MILLVILLE. REDDING. KENNET, AND PAYNES
                                                         CREEK.
 5/ 2/1930 7- 3--0. 37.92 122.08 D
5/ 7/1930 13-38--0. 37.00 121.92 D
                                                       F LAFAYETTE
                                                       F APTOS, CAPITOLA, SANTA CRUZ, AND
                                                         WATSONVELLE.
 5/11/1930 23-59--0. 36.42 121.25 D
                                                       F PINNACLES
5/13/1930 10-18--0. 37.67 121.75 D
5/15/1930 15-30--0. 40.50 124.17 D
                                                       F LIVERMORE.
                                                       F ALTON, LOLETA, UPPER MATTOLE, AND SCOTIA.
                                                         FELT OVER AN AREA OF 1,500 SQUARE MILES.
                                                       F AGNEW
 5/18/1930 11-15--0. 37.42 122.00 D
                                                       E CAN ANDREAS FAIRT. FELT AT DOS DALOS.
 5/29/1930 13-15--0. 37.08 120.83 D
                                                         TRENT. LOS BANDS. AND BRITO. NUMEROUS FORESHOCKS AND AFTERSHOCKS.
 7/21/1030 7-25--0 36.58 121-67 D
                                                       F SPRECKELS.
 8/ 5/1930 0-11- 6. 39.75 127.42 C 5.3 1
                                                        OFF COAST, WEST OF CAPE MENDOCINO.
 8/ 8/1930 3-45--0. 36.58 121.58 D
8/ 8/1930 7-41--0. 36.58 121.92 D
                                                       F CHUALAR.
                                                       F MONTERFY AND SPRECKELS.
                                                       F LONE PINE, OWENYO, INDEPENDENCE, AND
 8/11/1930 13- 0--0. 36.58 118.08 D
                                                         KEELER.
                                                       F SOLEDAD.
 8/28/1930 5-15--0. 36.42 121.33 D
9/ 2/1930 16-25--0. 37.00 122.00 D
9/ 3/1930 19-44--0. 37.17 119.25 D
                                                       F SANTA CRUZ.
                                                       F BIG CREEK, BASS LAKE, AND THE PINES.
                                                       F BOL INAS.
 9/19/1930 7-55--0. 37.92 122.92 D
 9/22/1930 22- 0--0. 37.92 122.08 D
9/23/1930 2-58--0. 40.83 124.17 D
                                                       E LAFAVETTE.
                                                       F EUREKA AND FIELDS LANDING. FELT OVER AN
                                                         AREA OF 4,600 SQUARE MILES ON LAND. VIII AT EUREKA AND FIELDS LANDING. VI AT CAPETOWN, CRANNELL, HOLMES, KORBEL, SAMOA, AND STUMPVILLE. V AT ALTON,
                                                          BAYVIEW, BRIDGEVILLE, DYERVILLE, FERNBRIDGE, FIELDBROOK, FRESHWATER, GRIZZLY
                                                       BLUFF, LOLETA, PEPPERWOOD, SCOTIA, SHOWERS PASS, SKELLY, TRINIDAD, AND WEDTT. F AFTERSHOCK OF 2-58. FELT OVER AN AREA OF 1,200 SQUARE MILES. FELT AT BRIDGEVILLE, FERNBRIDGE, FERNDALE, EUREKA,
 9/23/1930 13-55--0. 40.83 124.17 0
                                                          TRINIDAD, AND WHITLOW.
9/26/1930 9-30--0. 39.83 120.50 D
9/28/1930 3-0-0. 40.92 124.08 D
10/28/1930 13-57--0. 35.42 120.92 D
                                                       F PORTOLA.
                                                       F ARCATA.
                                                       F OFF COAST NEAR CAYUCOS. FELT AT NIPOMO.
10/29/1930 10-30--0. 40.58 122.42 D
                                                       F REDDING. SERIES OF 13 SHOCKS, FIRST OF 7
                                                        PRINCIPAL ONES LISTED HERE.
                                                      F INGOT, BAIRD, AND REDDING.
F INWOOD, MINERAL, MILLVILLE, REDDING, AND
10/29/1930 11-30--0. 40.58 122.42 D
                                                        LAMOINE .
10/29/1930 19-28--0. 40.50 122.08 D
                                                       F INWOOD AND MILLVILLE.
                                                       F BATED AND MINERAL .
10/29/1930 19-38--0. 40.33 121.58 D
                                                      F REDDING AND INGOT.
10/29/1930 19-50--0. 40.58 122.42 D
10/30/1930 4-29--0. 40.33 121.58 D
11/ 1/1930 0-0-0. 40.58 122.42 D
11/ 7/1930 7-13--0. 37.08 120.83 D
                                                       F MINERAL AND MILLVILLE.
                                                       F KENNET.
                                                       F IOWA HILL.
11/10/1930 7-13--0. 37.08 120.63 0
11/10/1930 5-11--0. 36.92 118.17 D
11/11/1930 8-55--0. 40.33 123.33 D
                                                       F ABERDEEN.
                                                       F FOREST GLEN.
E ENDEST GIEN.
                                                      E BRIDGEVILLE.
                                                      F UPPER MATTOLE.
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12/ 8/1930 22- 0--0。 39.33 123.25 D
                                                     F UKTAH.
                                                     F AT SEA. FELT OVER AN AREA OF 11.800
                                                       AT SEAS. FEET UVER AN AREA OF 11,000
SQUARE MILES. VI AT FERNDALE, SPYROCK, HARRIS, AND WADDINGTON. V AT ALTON,
CHICO, ETTERSBURG, FERNBRIDGE, WEDTT, AND ZENIA. 15 AFTERSHOCKS ON THE 11TH.
                                                        AFTERSHOCK OF 9-0. FELT AT HYDESVILLE,
12/11/1930 12-28- 0.0 40.92 124.08 D
                                                        AFTERSHOCK OF 9-0. FELT AT HTDESVILLE, SAMOA, BRIDGEVILLE, EUREKA, FERMBRIDGE, AND SCOTIA. AFTERSHOCK OF 12/11, 9-0. FELT AT HYDES-
                                                     F AFTERSHOCK OF 12/11. 9-0.
12/12/1930 4-50--0. 40.92 124.08 D
                                                     P AFTERDMUCK UP 12/11, 9-0. PELT AT HTDES-
VILLE, FERNDALE, SCOTIA, ALTON, AND WEDTT.
F AFTERSHOCK OF 12/11, 9-0. PELT OVER AN
AREA OF 3,600 SQUARE MILES. V-VI AT CUMMINGS. V AT WADDINGTON. IV AT UPPER
12/12/1930 9-32--0- 39-83 123-58 D
                                                        MATTOLE, WEDTT, ALDER POINT, HARRIS, ETTERSBURG, AND WHITLOW. 21 AFTERSHOCKS ON
                                                        THE 12TH
                                                     F AFTERSHOCK OF 12/11, 9-0. FELT AT UKIAH.
12/12/1930 10- 0-0. 39.33 123.25 D
12/12/1930 20-16--0. 40.67 124.32 D
                                                     F AFTERSHOCK OF 12/11. 9-0.
                                                        FERNBRIDGE, WEDTT, AND WADDINGTON.
                                                     F AFTERSHOCK OF 12/11, 9-0. FELT AT UKIAH.
12/12/1930 22- 0--0: 39:33 123:25 D
                                                     F AFTERSHOCK OF 12/11, 9-0. FELT AT SCOTIA
12/14/1930 1-39--0. 40.50 124.08 D
                                                     AND ALTON. 3 AFTERSHOCKS ON THE 13TH.

F AFTERSHOCK OF 12/11, 9-0. UPPER MATTOLE.

F AFTERSHOCK OF 12/11, 9-0. EUREKA AND
12/14/1930 20- 0--0. 40.25 124.17 D
12/15/1930 8-39--0. 40.83 124.17 D
                                                        WHITLOW.
                                                     F AFTERSHOCK OF 12/11, 9-0. BLOCKSBURG AND
12/15/1930 20-35--0. 40.25 123.67 D
                                                        CCOTIA.
                                                     F AFTERSHOCK OF 12/11, 9-0. EUREKA AND
12/23/1930 9-10--0. 40.83 124.17 0
                                                        SCOTIA
                                                     F AFTERSHOCK OF 12/11, 9-0. BRIDGEVILLE, FERNDALE, ALTON, SCOTIA, WHITLOW, AND UPPER MATTOLE. 4 AFTERSHOCKS ON THE 24TH. F AFTERSHOCK OF 12/11, 9-0. FERNDALE,
13/34/1930 9-11-0- 40-50 123-83 D
12/27/1930 22-14--0. 40.58 124.25 D
                                                       LOLETA. AND ALTON.
                                                     F SPRECKELS.
                          36.58 121.67 D
12/28/1930 10-22--0.
                          38.75 120.58 D
                                                     F POLLOCK AND ANTLER.
12/29/1930 13-30--0
                                                    F SIMS, REDDING, DUMSMUIR, AND CASTELLA.
F NEAR JUNE LAKE.
12/30/1930 13-37--0.
                          40.58 122.42 D
 1/ 1/1931 1-15--0.
                          37.75 119.08 D
                                                     F UPPER MATTOLE.
 1/ 2/1931 18-35--0.
                          40.25 124.17 D
 1/ 3/1931 5-49-0.
1/ 4/1931 6-0-0.
1/ 4/1931 6-10-0.
                          40.50 124.08 D
                                                     F IV AT ALTON. ALSO FELT AT SCOTIA.
                          40.25 124.17 D
                                                    E HODEO MATTON E.
                          40.25 124.17 D
                                                     F UPPER MATTOLE.
                                                     F UPPER MATTOLE.
 1/ 4/1931 18-35--0. 40.25 124.17 D
                                                     F ON SAN ANDREAS FAULT BETWEEN SAN MATED AND
 1/ 5/1931 9-43--0. 37.58 122.42 D
                                                        HALF MOON BAY. V AT SAN BRUNG AND BURLINGAME. IV AT SAN MATED AND EL GRANADA.
                                                     F SANTA CRUZ, SAN MATEO, APTOS, AND
 1/ 5/1931 11-15--0. 37.58 122.33 D
                                                        BURL INGAME.
 1/ 5/1931 12-10--0. 37.58 122.33 D
1/ 6/1931 23-28-40.0 36.50 121.40 D 4.0
                                                     F BURLINGAME.
                                                     F EAST OF CHUALAR (V). ALSO FELT AT HOLLIS-
                                                                            SANTA CRUZ. AND APTOS.
                                                        TER, SPRECKELS,
                                                     F UPPER MATTOLE.
 1/ 7/1931 23- 4--0. 40.25 124.17 D
                                                     F UPPER MATTOLE AND SCOTIA.
 1/ 7/1931 23-40--0. 40.25 124.17 D
 1/ 8/1931 1-15--0 40.08 123.92 D
                                                        BRICELAND.
                                                     F EL GRANADA
                          37.50 122.33 D
                                                     F WILLITS AND REDWOOD VALLEY.
 1/20/1931 10-30--0.
                          39.42 123.33 D
 1/21/1931 11-20--0. 39.50 119.83 D
                                                     F REND, NEVADA.
                                                     F IV AT ORLAND AND LAS PLUMAS. ALSO FELT
 1/24/1931 7-21- 0.0 39.75 121.80 D
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AT DROVILLE, LIVE DAK, BIGGS, EL GRANADA, DE SABLA, CHICO, GRIDLEY, AND RED
                                                   BLUFF .
1/29/1931 7-24--0. 37.50 122.42 D
                                                 F EL GRANADA
            7-40--0. 36.92 121.58 D
                                                 E SADCENT
2/ 7/1931
2/12/1931 21-25--0. 37.42 122.17 D
                                                 E STANFORD.
2/17/1931 15-59--0. 36.92 121.58 D
                                                 F SARGENT.
2/21/1931 8-10--0. 35.67 121.33 0
                                                F NW OF SAN LUIS OBISPO. FELT AT PIEDRAS
                                                   BLANCAS AND BRYSON.
                                                F FELT OVER AN AREA OF 5,000 SQUARE MILES.
2/23/1931 10- 1--0- 35-83 120-50 0
                                                   V AT TEMPLETON, PARKFIELD, AND CAYUCOS.
2/23/1931 10-33--0. 35.83 120.50 D
                                                F SAME AS ABOVE.
                                                F 100 KM WEST OF CAPE MENDOCINO. IV AT
                                                   ARCATA, BRIDGEVILLE, FERNDALE, AND UPPER MATTOLE.
4/ 2/1931 11- 0--0.
                                                 F GOAT ISLAND.
                       37.83 122.33 D
4/ 4/1931 5-45--0.
                       37.75 122.50 D
                                                 F SAN FRANCISCO.
                                                E TY SAN ERANCISCO.
4/ 4/1931 6- 0--0.
                       37.75 122.50 D
4/ 4/1931 7-45--0. 38.58 122.58 D
                                                F CALISTOGA.
                                                 F SE OF KING CITY.
A/ 5/1931 1- 0--0- 36-17 121-00 D
4/ 6/1931 8- 7--0.
                       38.58 122.58 D
                                                 F CALISTOGA .
4/15/1931 17- 0--0. 37.42 118.33 D
                                                 F LAWS.
4/26/1931 1-40-0 40.83 124.17 D
                                                 E HUMBOLDT BAY AND FUREKA.
                                                F EUREKA, ALTON, SCOTIA, AND HUMBOLDT BAY.
                                                 F CALISTOGA.
5/29/1931 10-43--0. 38.58 122.58 D
6/ 4/1931 5-25--0. 40.17 120.92 D
6/ 4/1931 5-40--0. 39.92 120.92 D
                                                F GREENVILLE.
                                                 F QUINCY AND CARIBOU.
                                                 F PUNTA GORDA.
6/ 5/1931 11-30--0. 40.25 124.33 D
6/ 5/1931 12-45--0. 36.08 118.00 D
                                                 F LITTLE LAKE
6/ 5/1931 22-30--0.
                      40.25 124.17 D
                                                F UPPER MATTOLE.
6/ 6/1931 2-10--0 38-50 118-17 D
6/ 6/1931 9-30--0 37-08 121-67 D
6/ 7/1931 7-45--0 36-58 121-92 D
                                                E LIWING NEVADA -
                                                 F MORGAN HILL.
                                                F III AT CARMEL. ALSO FELT AT SPRECKELS,
                                                CHUALAR, CAPITOLA, GONZALES, HOLLISTER, SALINAS, AND SANTA CRUZ.
F III AT ALVARADO. ALSO FELT AT BOULDER
6/ 9/1931 12-15--0. 37.58 122.08 D
                                                   CREEK AND CAPITOLA.
6/10/1931 7-20--0. 37.00 122.00 D
                                                F IV AT SANTA CRUZ AND OLYMPIA. ALSO FELT
                                                AT AND NUEVO, BOULDER CREEK, LAUREL, GILROY, SAN JOSE, AND PIGEON POINT.
F IV AT SAN JOSE, ALVISA, AND AGNEW. ALSO
6/11/1931 12-20--1. 37.33 121.92 D
                                                   FELT AT ALVARADO, SANTA CRUZ, SARATOGA, GILROY, BOULDER CREEK, CENTERVILLE,
                                                   IRVINGTON, LAUREL, LIVERMORE, LOS GATOS, CAMPBELL, DAVENPORT, AND HALF MOON BAY.
6/10/1931 13-14--0.
                       37.08 122.08 D
                                                 E BROOKDALE.
6/12/1931 7- 0--0. 37.00 122.00 D
6/16/1931 14-54--0. 37.08 121.67 D
                                                E SANTA CRUZ.
                                                F MORGAN HILL.
6/28/1931 10- 9- 0.0 37.95 122.33 D
                                                F RICHMOND, BERKELEY, SOUTHHAMPTON SHOAL, AND SAN FRANCISCO.
                                                F SACRAMENTO.
7/18/1931 6=39--0. 38.58 121.50 D
7/21/1931 3-25--0. 35.25 120.67 D
7/21/1931 12- 8--0. 35.25 120.67 D
                                                 F SAN LUIS OBISPO.
                                                F IV AT HALCYON, NIPOMO, TEMPLETON, OCEANO,
AND LOS ALAMOS. ALSO FELT AT PORT SAN LUIS, SANTA MARIA, SANTA MARGARITA,
GAVIOTA, CAMBRIA, SAN LUIS OBISPO, AND PIEDRAS BLANCAS.
                                                F HOLLISTER.
7/22/1931
           6-55--0. 36.83 121.42 D
7/28/1931 19- 0--0. 36.83 121.75 D
                                                 F MOSS LANDING .
                                                F FORTUNA AND CAPE MENDOCINO.
8/ 5/1931 1-10--0. 40.58 124.17 D
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F EUREKA.
8/ 9/1931 1- 0--0. 40.83 124.17 D
8/12/1931 9-32--0. 37.33 121.92 D
                                                        F SANTA CLARA.
F IV AT SAN MATED AND BURLINGAME.
8/19/1931 16-50--0 37.58 122.33 D
8/21/1931 16-50--0 37.58 122.33 C
                                                           WITHIN 4 MILES OF SAN MATEO. FELT AT
8/21/1931 16-50--0. 37.58 122.33 C F WITHIN 4 MILES UP SAN MATEO.

8/23/1931 18- 1-35. 40.20 125.60 D 5.3 I F OFF CAPE MENDOCINO. FELT OVER A LAND AREA

OF 4,500 SQUARE MILES. VI AT PUNTA GORDA AND HYDESVILLE. V AT ALTON,

BRICELAND, FERNARIDGE, GARBERVILLE, HUMBOLDT BAY, EUREKA, LOLETA, METROPOLITAN,
                                                           AND PEPPERWOOD.
                                                        E ALAMEDA.
8/24/1931 0-30--0. 37.75 122.25 D
                                                        F HUMBOLDT BAY AND WILLOW CREEK.
8/24/1931 5- 0--0. 40.83 124.17 D
9/ 2/1931 15-34-28. 41.80 123.00 D 4.5
                                                           CALIFORNIA-OREGON BORDER . BERKELEY S-P =
                                                           AA SECONDS.
                                                          A MILES NW OF BERKELEY.
                                                                                          IV AT RICHMOND.
 9/ 5/1931 11-25--0. 37.92 122.33 8
                                                           ALSO FELT AT BERKELEY, DAKLAND, EL CERRITO, SAN ANSELMO, AND SOUTHAMPTON SHOAL.
9/ 8/1931 14-40--0. 40.58 124.08 D
                                                          CARLOTTA.
 9/ 9/1931 13-40-30. 40.80 125.00 D 5.8 1 F OFF COAST NEAR EUREKA. FELT OVER AN AREA
                                                          OFF COAST NEAR EUREKA. FELT OVER AN AREA
OF 15,000 SQUARE MILES. VI AT BLOCKS PURG, DYERVILLE, FERNBRIDGE, FERNDALE,
HOLMES, AND WEOTT. V AT ALDERPOINT, BRICELAND, BELL SPRINGS, BRANSCOMB, COVELO,
CHICO, DOS RIOS, EEL ROCK, EUREKA, FORT SEWARD, FRUITLAND, FORTUNA, GARBERVILLE,
ISLAND MOUNTAIN, KNEELAND, MIRANDA, PEPPERWOOD, PUNDA GORDA, SCOTIA, SKELLY,
                                                           UPPER MATTOLE, WHITLOW, AND ZENIA.
                                                        F AFTERSHOCK OF 13-40. FELT AT KNEELAND AND
9/ 9/1931 14-16--0 40-67 124-00 0
                                                           FRUITL AND.
9/ 9/1931 14-45--0. 40.50 124.08 D
                                                        F AFTERSHOCK OF 13-40. FELT AT EEL ROCK,
                                                          HAYFORK. AND SCOTIA.
                                                        F AFTERSHOCK OF 13-40. FELT AT FORTUNA,
9/10/1931 0-30--0. 40.50 124.08 D
                                                           SCOTIA, AND WADDINGTON.
                                                        F CHICO.
                           39.75 121.83 D
 9/10/1931 13-30--0.
 9/10/1931 14-35--0.
                           35.50 120.67 D
                                                        E ATASCADERO.
                                                        F CAPE MENDOCINO.
F NEAR TINEMAHA. VI AT ABERDEEN, BIG PINE,
9/20/1931 6-41-0. 40.42 124.42 D
                                                           HAIWEE, AND LONE PINE.
                                                        E ATASCADERO.
                           35.50 120.67 D
10/ 9/1931 13-30--0. 40.33 123.42 0
                                                        F PUTH.
1C/ 9/1931 19-50--0. 36.67 121.67 D
                                                        F V AT ANTELOPE VALLEY. ALSO FELT AT
                                                           SAL INAS.
10/ 9/1931 19-50--0. 37.75 122.50 D
                                                        F SAN FRANCISCO.
10/13/1931 12-25--0. 36.33 121.67 D
10/13/1931 19-53--0. 36.33 121.67 D
                                                        F IAMESBURG.
                                                        F IV AT JAMESBURG, HOLLISTER, AND SPRECKELS.
ALSO FELT AT APTOS. CARMEL, CHUALAR. MONTEREY, MOSS LANDING, PARAISO, SALINAS,
                                                           AND SANTA CRUZ.
10/20/1931 18-56--0. 36.58 121.58 D
                                                        E CHILAL AD.
10/20/1931 19-15--0.
                           38.00 122.50 D
                                                        F SAN RAFAFI.
                                                        F MONTEREY.
10/21/1931 16-55--0-
                           36.58 121.92 D
10/25/1931 19-27--0.
                                                           FORTUNA.
                           40.58 124.17 D
10/27/1931 16-37--0.
                           36.92 121.58 D
                                                        F SARGENT
11/5/1931
              5-43--0.
                           39.00 118.17 D
                                                        E AREDDEEN.
11/11/1931 11- 5--0.
                           39.42 123.33 D
                                                        F WILLITS.
11/16/1931 6-45--0. 38.25 122.92 D
                                                        F NEAR TOMALES BAY. FELT AT BOLINAS AND
                                                           SUISUN CITY
11/22/1931 10-52--0. 39.25 123.25 D
                                                        F CALPELLA, COMPTCHE, FORT BRAGG, REDWOOD
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VALLEY. AND UKTAH.

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11/22/1931 11-30--0. 39.17 122.92 D
11/25/1931 12-18--0. 39.17 118.25 D
                                                F UPPER LAKE.
                                                F NW OF TINEMAHA. FELT AT ABERDEEN, BIG
                                                   CREEK. FLORENCE LAKE, AND LEMON COVE.
                                                 F ABERDEEN.
11/25/1931 18-45--0
                        79.00 119-17 0
                                                E MONTEREY.
                        36.67 121.83 D
11/25/1931 19- 9--0.
11/27/1931 14-14-0. 40.58 124.17 D
                                                   FORTUNA .
                        37.17 119.25 D
                                                 F BIG CREEK.
11/27/1931 20-17--0.
                        39.80 125.60 D 4.0 1 F IV AT FERNBRIDGE AND SAMOA. ALSO FELT
AT HUMBOLDT BAY, TABLE BLUFF, ALTON, BAYSIDE, BEATRICE, FERNDALE, CRESCENT CITY,
FORTUNA, SHIVELY, WADDINGTON, AND EUREKA.
11/28/1931 14-12-51.
                                                  10 MILES S OF SPRECKELS. FELT AT METZ,
12/ A/1931 0-53--0. 36.50 121.67 D
                                                   HOLLISTER, SPRECKELS, PIGEON POINT, AND SANTA CRUZ.
12/5/1931 5-30-0. 36.83 121.42 D
12/11/1931 9-1-0. 40.50 124.08 D
                                                F HOLLISTER.
                                                E SCOTIA.
12/14/1031 16-30-0 30.83 120.50 0
                                                F PORTOLA. SPRING GARDEN, QUINCY, AND
                                                   SUSANVILLE.
12/15/1931 16-20--0.
                        39.83 120.50 D
                                                F PORTOLA, SUSANVILLE, AND QUINCY.
12/17/1931 20- 6--0.
                                                F AGNEW, CAMPBELL, SAN JOSE, AND APTOS.
                        37.25 122.00 D
                        38.00 123.00 D
                                                F V POINT REYES.
                                                E CONSTAL SPOINGS LAKE. FELT AT SAN
 1/ 3/1932 21- 7--0. 37.50 122.33 D
                                                   FRANCISCO.
 1/ 5/1932 13-59- 4. 40.42 124.42 D 4.5 1 F NEAR CAPE MENDOCINO. IV AT ALDERPOINT,
                                                   ARCATA, BLOCKSBURG, CAPE MENDOCINO, FERNDALE, FORTUNA, HYDESVILLE, SAMOA,
                                                   SHIVELY, AND WESTPORT .
 1/ 8/1932 18-16-59. 36.67 121.33 D 4.0 1 F III IN HOLLISTER, SALINAS, AND SARGENT.
 1/11/1932 2-55- 0.0 36.92 121.75 D F IV AT WATSONVILLE.
1/14/1932 3-16-16. 36.58 117.82 B 3.0 1 F SALINE VALLEY. IV AT KEELER.
                                                F IV AT POTTER VALLEY.
 1/14/1932 14-10--0.
                        39.33 123.08 D
                        36.83 121.42 D 3.5
                                                F III AT HOLLISTER AND SALINAS.
 1/29/1932 4-14- 9-
                        36-56 120-60 C 3-5 | F EAST OF PANOCHE. ILL AT METZ.
35-83 121-47 C 3-5 | F COAST OF MONTEREY COUNTY. FELT AT
 2/ 2/1932 20-51-47.
 2/ 5/1932 4-14-45.
                                                   PIEDRAS BLANCAS LIGHT AND SALMON CREEK.
                        35.83 121.47 C 3.5 1 F COAST OF MONTEREY COUNTY. FELT AT
 2/ 5/1932 6-46-54.
                                                   PIEDRAS BLANCAS LIGHT AND SALMON CREEK.
                                                 F AFTERSHOCK OF PRECEDING.
 2/ 5/1932 7-10--0. 35.83 121.47 C
 2/11/1932 6-55- 0.0 36.83 121.75 D
2/25/1932 7-35--0. 37.70 122.16 B
                                                 F III AT WATSONVILLE.
                                                 F EIGHT KM NW OF HAYWARD. IV AT ALAMEDA AND
                                                   DAKLAND.
                                                F IV APTOS. ASILOMAR. GONZALES. METZ.
 2/26/1932 16-58--0. 36.00 121.00 5.0
                                                  CARMEL, PERBLE BEACH, MONTEREY, PACIFIC GROVE, DELMONTE.
                                                F MONTEREY.
 2/29/1932 17-15--0.
                        36.58 121.92 D
                                                  WEST OF CAPE MENDOCINO.
 3/ 2/1932 17-14-36.
                        40.20 127.00 D 5.6 1
                        36.67 121.22 C 4.5 1 F III GUSTINE, MERCED. (EPICENTER IN
 4/16/1932 18-48-10.
                                                   SAN BENITO COUNTY) .
 4/16/1932 18-55- 4.
                                                   AFTERSHOCK OF 18-48-10.
                        37.20 120.80 D
                                                   AFTERSHOCK OF 18-48-10.
 4/16/1932 18-57- 0.
                        37.20 120.80 D 3.0
                        35.50 120.67 D 3.0
                                                F ATASCADERO.
 4/21/1932 3-36-20.
                        38.25 122.67 D
                                                F PETALUMA.
 4/21/1932 12-24--0.
                        36.78 120.75 C 4.0
                                                 SW OF ORD LOMA, FRESHO COUNTY.
 4/22/1932 0- 8-16.
                                                F NEAR CAPE MENDOCINO. IV AT UPPER MATTOLE
AND PUNTA GORDA.
 4/26/1932 22-50--0.
                        40.42 124.42 D
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5/ 4/1932 8- 0--0. 40.33 124.25 D
5/ 4/1932 9-30--0. 40.83 124.16 D
                                                                                       F UPPER MATTOLE.
                                                                                       F FELT AT EUREKA, FORTUNA, SCOTIA, AND
                                                                                           WADDINGTON-
                                                                                       F PARKFIELD.
  5/16/1932 3-37- 8.0 36.00 120.50 C 3.0
                                                                                           SOUTHERN ESMERALDA COUNTY, NEVADA.
 5/22/1932 8-16-56. 37.33 117.50 C 4.0
5/28/1932 6-40-0. 40.58 124.16 D
                                                                                  1
                                                                                       F FORTUNA, UPPER MATTOLE, AND SCOTIA.
  6/ 2/1932
                     2- 5--0. 40.58 124.16 D
                                                                                       F FORTUNA .
F EUREKA . AFTERNOON .
 6/ 5/1932 20-52- 0.0 40.83 124.16 D
                                                                        6.4 1 F VIII AT ARCATA, BAYSIDE, BEATRICE, BLUE
                     8-44-22 40.75 124.50
 6/ 6/1932
                                                                                           LAKE, BLUNTS REEF, BRIDGEVILLE, EEL RIVER, CRESCENT CITY, EUREKA, FIELDS
                                                                                           LANDING, FORT DICK, FORTUNA, HUMBOLDT BAY, KORBEL, LOLITA, SOUTH BAY, TABLE
                                                                                            BLUFF.
                                                                                            AFTERSHOCK OF 8-44-22.
 6/ 6/1932 9-26- 7. 41.00 125.00 D 4.0 1
 67 671937 6-38--0. 40.58 124.16 D
671271932 6-38--0. 37.33 122.08 D
671371932 9-5--0. 38.08 122.58 D
671471932 9-44-17. 37.25 122.08 D 4.5 1
F CUPERTING.
F NOVATO.
F NOVATO.
BOULDER CREEK, BURLINGAME, CAMPBELL, CENTERVILLE, COLMA, HALF MOON BAY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
IRVINGTON, LOS GATOS, MILPITAS, MT. HERMON, OAKLAND, PETALUMA, REDWOOD CITY,
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 6/16/1932 11-10--0. 39.67 121.00 D
                                                                                       F III AT POINT ARENA.
 6/23/1932 7-29--0. 38.92 123.75 D
 6/37/1932 5-17-25. 36.00 122.00 D 4.0
6/30/1932 0-23--0. 37.58 122.00 D 3.0
                                                                                           COAST OF MONTEREY COUNTY.
                                                                                      F IRVINGTON .
  7/11/1932 13- 0--0. 40.50 123.16 D
7/12/1932 4-33-41.0 37.60 121.83 B 3.0
                                                                                       F IV AT PEANUT .
                                                                                       F FIVE MI. WEST OF LIVERMORE. III AT
  7/19/1932 23-35--). 36.67 121.16 D 3.5 1 F BETWEEN CORRALITOS AND WATSONVILLE. FELT
                                                                                            AT APTOS.
 7/22/1932 1-14--C. 39.33 123.25 D F UKIAH.
7/26/1932 6-51-58. 35.80 118.53 8 4.5 1 F VI AT MINERAL KING AND SPRINGVILLE.
                                                                                            CALIFORNIA HOT SPRINGS, GREENHORN MOUNTAIN, INDEPENDENCE, KAWEAH, KERN RIVER,
                                                                                           KERNVILLE, LEMON COVE, LINDSAY, PORTERVILLE, POSEY, SEQUOIA NATIONAL PARK,
                                                                                           VISALTA-
                                                                                       F HAIWEE POWER HOUSE.
  7/29/1932 6-53--C. 36.16 118.00 D
 8/ 3/1932 5-47-25.
                                                                                          NEVADA, 180 KM FROM TINEMAHA.
                                           38.00 117.00 D 4.0
                                                                                      F IV AT LAWS.
  8/23/1932 19-10--0.
                                          37.42 118.33 D
 8/24/1932 9- 8-38. 37.33 118.82 C
8/25/1932 6-13--0. 37.42 118.33 D
                                                                                          SIERRA NEVADA. WEST OF BISHOP.
                                           37.33 118.82 C 4.0 1
                                                                                      F IV AT LAWS.
  9/16/1932 22- 7-58. 40.00 126.20 D
                                                                                            WEST OF CAPE MENDOCINO.
  9/22/1932 20-50--0.
                                          38.58 122.58 D
                                                                                       F CALISTOGA .
  9/23/1932 7-48--0.
                                                                                      F TV AT CALISTOGA AND ST. HELENA.
                                           38.58 122.58 D
 9/23/1932 11-45--0. 38.58 122.58 D
9/23/1932 11-52-45. 40.00 126.20 D 5.0 1
                                                                                       F CALISTOGA.
                                                                                          WEST OF CAPE MENDOCINO.
 9/28/1932 21-30--0. 37.42 118.33 D
9/29/1932 15-31--0. 37.33 121.47 B
                                                                                       F IV AT LAWS.
                                                                                       F TEN MILES EAST OF MT. HAMILTON. IV AT
                                                                                          MT. HAMILTON.
10/ 6/1932 0-38- 0.0 40.50 124.08 D
                                                                                      F III AT SCOTIA.
F III AT ALTON.
                                                                            F IV AT GILROY, HOLLISTER, AND WATSONVILLE.
F IV AT DEL MONTE. MONTEREY. AND SANTA CRUZ.
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F III AT WATSONVILLE.
10/20/1932 21-25--0. 36.92 121.75 D
10/21/1932 10-30--0.
                         38.25 122.67 D
                                                   F TIT AT PETALUMA.
10/23/1932 14-30--0.
                         36-58 121-92 D
                                                   E MONTEDEY DENTINGILLA.
                                                   E PASO PORI ES-
10/24/1072 4-45--0
                         35.75 120.75 D
                                                  F IV AT SAN FRANCISCO.
F IV AT OAKLAND, SAN FRANCISCO, AND SOQUEL.
                         37.75 122.50 D
10/24/1932 10- 5--0.
10/25/1932 1- 7--0.
                          37.75 122.50 D
                          37.67 122.42 D
                                                  F III AT COLMA.
10/31/1932 15- 0--0.
                         39.00 123.08 D
                                                   F IV AT HOPLAND.
11/ 3/1932 5-58--0.
                         36.58 121.67 D
                                                   E III AT SPRECKEIS.
                                                    F SLIGHT DAMAGE AT ALVISO AND BOULDER CREEK.
11/ 3/1932 18-56--0. 37.16 122.16 D
                                                      IV IN THE SAN FRANCISCO BAY REGION.
                                                    F SAN JOSE .
11/ 9/1932 18-58--0. 37.33 121.92 0
12/ 4/1932 0-53--0. 36.58 121.92 0
12/12/1932 0-20--0. 36.83 121.42 0
                                                   F MONTEREY BAY REGION.
                         36.83 121.42 D
                                                   F III AT HOLLISTER.
                                                   F IV AT MODESTO.
12/13/1932 6-12--0. 37.67 121.00 D
12/17/1932 1-33- 0.0 37.90 122.00 D
12/21/1932 6-10- 5. 38.75 118.00
                                                    F IV AT COWELL. BRK LOCATION AND TIME.
                                          7.2 1 F VI AT NEWMAN.
                                                                       V AT BIG PINE, COALINGA,
                                                      CORCORAN, FRESNO, FREEPORT, GRASS VALLEY, GUSTINE, HERALD, KEELER, LAWS, LODI,
                                                      LONE PINE, LOS BANOS, MODESTO, NEVADA CITY, OWENYO, PITTSBURG, SACRAMENTO,
                                                    SATTLEY, SANGER, SELMA, STOCKTON, THREE RIVERS, TULARE, WATERFORD, WOODLAND, YOLO. EPICENTER IN NEVADA.

F IV AT WABUSKA AND POTTS, NEVADA.
 1/ 5/1933 6-10--0. 39.16 118.67 0
1/ 5/1933 6-50-20. 38.75 118.00 5.7
                                                   F RATTLED WINDOWS IN SONORA. BERKELEY S-P =
                                                      45 SECONDS. EPICENTER IN NEVADA.
 1/13/1933 6-20--0. 37.08 121.83 0
                                                F IV AT MT. HERMON, OLYMPIA, SAN FRANCISCO.
                                                      SOQUEL, AND WRIGHTS.
                                                   F SIMON, NEVADA. 5 EARTHQUAKES STRONG
ENOUGH TO SHAKE HOUSES BETWEEN JAN. 20-27.
 1/20/1933 -0--0--2. 39.00 118.00 0
                                                  F SANTA CRUZ.
 1/28/1933 6-39--0. 37.00 122.00 D
                                                  F IV AT LAWS.
F IV AT BENTON, BIG CREEK, AND LAWS.
 2/ 3/1933 1-45-0. 37.42 118.33 D
2/ 3/1933 3-23-0. 37.42 118.33 D
 2/13/1933 22-15--2. 37.83 118.58 D
                                                  F IV AT BENTON.
 2/26/1933 9-34-32. 36.40 121.30 D
                                                   F III AT HOLLISTER, SPRECKLES, AND SALINAS.
                                                 F IV AT HUMBOLDT BAY.
F II AT SATTLEY.
F IV AT REESE RIVER.
 3/10/1933 1-52--2.
                         39.58 120.42 D
 37(17)1933 12-52-7. 38.56 120.42 0
37(12)1933 22-0-0. 38.50 116.75 0
37(2)7(1933 10-45-0. 40.58 122.42 0
37(2)7(1933 13-1-3. 37.83 118.58 0
                                                   F IV AT REDDING, AND AT CANDELARIA, NEVADA.
                                                   F IV AT BENTON, BIG CREEK, DAKHURST, AND
                                                     PAYNES CREEK.
 3/27/1033 13= 6==0. 37.83 118.58 D
                                                 E IV AT BENTON. BIG CREEK, DAKHURST. AND
                                                      PAYNES CREEK.
 4/ 6/1933 16-12--3. 39.92 120.92 D
                                                   F CARIBOU.
 4/12/1933 10- 3- 0.0 36.33 119.15 D
                                                    F IV AT PORTERVILLE AND VISALIA.
 4/15/1933 12-20--C. 37.75 122.25 P
5/ 9/1933 21- 0--C. 38.08 117.25 P
                                                F III AT ALAMEDA, DAKLAND, AND PIEDMONT.
F SILVER PEAK AND TONOPAH, NEVADA.
                          38.08 117.25 D
 5/16/1933 11-45-26. 37.6C 122.CO D 4.5 1 F FELT OVER AN AREA OF 8,000 SQUARE MILES OF
                                                     WEST-CENTRAL CALIFORNIA. V AT HAYWARD, MARTINEZ, NILES, DAKLAND, PLEASANTON,
                                                       SAN FRANCISCO, SANTA CRUZ, SOUTHAMPTON SHOAL.
 5/25/1933 4- 5--^. 40.58 124.16 D
                                                   F FORTUNA, HOLMES FLAT, PEPPERWOOD, SCOTIA,
                                                     AND WHITLOW.
 6/ 4/1933 2-43--0. 37.50 122.25 D
6/ 4/1933 14-10--0. 38.50 118.16 D
                                                   F IV AT DEDWOOD CITY AND SAN EPANCISCO.
                                                   F V AT LUNING. NEVADA.
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F IV AT SMOKEY VALLEY, NEVADA.
6/ 7/1933 14- 0--0. 38.67 117.08 D
6/12/1933 8-30--0. 38.67 117.08 D
6/12/1933 15- 0--0. 40.33 121.58 D
6/22/1933 12-36-32. 37.70 118.50 D
                                                            F IV AT ROUND MOUNTAIN, NEVADA.
                                                            F IV AT MINERAL.
                                                            F IV AT CORCORAN, FRESNO, HUNTINGTON LAKE,
                                                               KINGSBURG, LAWS, PARLIER, PORTERVILLE, SANGER, SEQUOIA NATIONAL PARK, TULARE,
                                                                VISALIA.
                                                            F SAME PLACES AS ABOVE.
6/22/1933 12-41- 5. 37.70 118.50 D
                                                               NORTH OF BISHOP.
                                                            F IV 20 MILES SOUTH OF MAMMOTH LAKES.
 6/23/1933 14- 0--0.
                             37.33 119.00 D
                                                            F FELT OVER AN AREA OF 30,000 SQUARE MILES.
                                                            IV AT CAMINO, COURTLAND, FALLEN LEAF, PORTOLA, AND QUINCY, AND CANDELARIA, GOLD HILL, IONE, NIXON, RENO, AND RODERICK, NEVADA.

F IV AT ZEPHYR COVE, NEVADA.
 6/23/1933 19-55--0. 39.08 119.33 D
6/25/1933 8- 5--0. 39.00 120.00 D
                                                 6.1 1 F FELT OVER AN AREA OF 40,000 SQUARE MILES
                                                               FELL UVEN AN AREA UP 40,000 SQUARE MILES
CENTERED IN WESTERN NEVADA. VII AT WABUSKA, VIRGINIA CITY, AND YERINGTON,
NEVADA. VI AT CARSON CITY, DAYTON, FALLON, FORT CHURCHILL, LAHONTON,
                                                               NEVADA. VI AT CARSON CITY, DAYTON, FALLON, FORT CHURCHILL, LAHONTON, MANHATTAN, MASON, MINDEN, SCHURZ, STEWART, NEVADA, AND AT LODI, MARKLEEVILLE, AND TAHOE CITY, CALIFORNIA. V AT GOLD HILL, HAWTHORNE, HAZEN, RAWHIDE, RENO, RODERICK, AND VERDI, NEVADA, AND AT GRASS VALLEY, LOCKFORD, LOG CABIN, MT. GREGORY, NEVADA CITY, OMO RANCH, SANTA ROSA, VARNER, AND VOLCANOVILLE,
                                                               CAL I FORNIA .
                                                            F IV AT BECKWOURTH.
6/25/1933 21-30--0. 39.83 120.33 D
6/29/1933 8-43-47. 37.60 122.00 D
7/ 4/1933 -0--0-0. 40.50 121.50 D
                                                               NEAR NILES.
                                                            F LASSEN PARK. 8 QUAKES SEVERELY SHOOK
                                                               BUILDINGS. 17 QUAKES SINCE JULY 1.
                                                            F V ON NORTH SHORE OF MONTEREY BAY.
 7/17/1933 0-32--(. 37.00 122.00 D
                                                            F IV AT NEWARK.
                             37.58 122.08 D
 7/18/1933 9-10--0-
                              38.50 118.16 D
                                                            E TV AT LUNTNG. NEVADA.
 7/21/1933 2-55--0.
 7/21/1933 3- 7--).
                              38.42 118.16 D
                                                            F MINA. NEVADA.
 8/10/1933 23-41--0.
                                                            F IV AT NEWARK.
                              37 58 122 - 08 D
                                                            F IV AT LUNING, NEVADA.
 8/28/1933 22- 5--0+
                              38.50 118.16 D
                                                            F IV AT SCHURZ, NEVADA.
F IV AT BENBOW, BRICELAND, CAPE MENDOCINO
 8/30/1933 14-30--2.
                             37.00 118.50 D
 9/28/1933 11-55-+0. 40.08 123.92 D
                                                              LIGHT, ETTERSBURG, SCOTIA, SHIVELY, AND UPPER MATTOLE.
10/ 6/1933 4-52--0. 40.16 121.08 D
                                                            F IV AT ALMANDR DAM.
10/27/1933 11-0-0-0 38-92 117-58 D
                                                            F V AT TONE, NEVADA.
                                                            F CALIFORNIA-NEVADA BORDER. FELT AT
                                                               COLEVILLE, MARKLEEVILLE, AND TOPAZ, AND MINDEN, NEVADA.
                                                            F SAN JOSE.
12/11/1933 9-50--0.
12/11/1933 10- 1--0.
12/13/1933 15-34--0.
                             36.92 121.75 D
36.83 121.42 D
37.20 122.00 D
                                                            F IV AT WATSONVILLE.
                                                            F SAN FRANCISCO BAY REGION. FELT OVER AN
                                                            AREA OF 5,000 SQUARE MILES. IV AT CARMEL, GILROY, HOLLISTER, MONTEREY, MORGAN HILL, SAN FRANCISCO, SAN JOSE, SANTA CRUZ, SQUEL, AND WATSONVILLE. F IV AT BROKEN HILL, NEVADA.
12/15/1933 8-55--0.
                             38-92 117-58 D
 1/ 2/1934 7- 4--0.
1/ 9/1934 7-43--0.
                              36.08 117.95 C 2.0
                                                              SOUTH OF LONE PINE
                              38.50 118.65 D
                                                             F IV HAWTHORNE, NEVADA.
 1/ 9/1934 12-49--0.
                              35.13 120.08 C 3.0
                                                               SE OF SAN LUIS OBISPO
 1/ 9/1934 15-44--0.
                              35.83 117.65 8 3.5
                                                               OWENS VALLEY
 1/12/1934 6-0-C. 38.10 121.40 D
1/30/1934 3-12-0. 38.30 118.40 D
                             38.10 121.40 D
                                                            F IV RIO VISTA.
                                                             F FORESHOCK OF 20-16. III AT BENTON. ALSO
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F FORESHOCK OF 20-16. IV AT POTTS, NEVADA.
1/30/1034 19- 5--0. 38.30 118.42 D
                                               ALSO FELT AT SMOKY VALLEY. NEVADA.
                                             F FORESHOCK OF 20-16. HAWTHORNE, NEVADA.

F STRONG FORESHOCK OF 20-16. VII AT MINA,

NEVADA. VI AT HAWTHORNE AND YERINGTON, NEVADA.
1/30/1934 19-17--0. 38.30 118.40 D
                                             F FORESHOCK OF 20-16. FALLON, IONE, AND
1/30/1034 10-30--0. 38-30 118-40 D
                                               HAWTHORNE, NEVADA.
                                             BORDER. FELT OVER AN AREA OF 110,000 SQ. MI. VII AT SILVER DYKE, MINA, AND SODAVILLE, NEVADA. IV AT HAWTHORNE, NEVADA. V AT DIXIE VALLEY, FALLON,
1/30/1934 20-16-31. 38.28 118.36 A 6.3
                                               GOLDFIELD, HAZEN, LUNING, IDNE, SCHURZ, AND YERINGTON, NEVADA. (BSSA V.25,
                                               P. 161.)
1/30/1934 20-30--0. 38.30 118.40 D
                                             F AFTERSHOCK OF 20-16. HAWTHORNE, NEVADA
                                               AND BRIDGEPORT, CALIFORNIA.
                                             F AFTERSHOCK OF 20-16. CALIENTE, FALLON,
1/30/1934 21- 4--0. 38.30 118.40 D
                                             HAWTHORNE, AND VERDI, NEVADA, AND BENTON, CALIFORNIA.

F AFTERSHOCK OF 20-16. AUBERRY, MENTON, AND
1/30/1034 23-40--0. 38.30 118.40 D
                                               BRIDGEPORT. ALSO FALLON, IONE, DIXIE VALLEY, SCHURZ, AND YERINGTON, NEVADA.
                                             F AFTERSHOCK OF 20-16. BENTON AND FALLON,
1/31/1934 3-49--0. 38.30 118.40 D
                                               NEVADA.
1/31/1934 19-45--0. 37.45 119.05 D
                                             F IV OR V AT JUNE LAKE.
1/31/1934 20-30--0. 39.00 120.00 D
                                             E TIT TAHOE.
                                             F V LUNING, NEVADA.
2/ 1/1934 11-15--0. 38.50 118.25 D
                                             F MINA. NEVADA.
2/ 5/1934 3-10--0. 36.58 120.50 D 3.2
                                              NW OF COALINGA
                                             F IV AT BENTON. BISHOP AND DOUGLASFLAT.
                                               CALIF., AND AT BROKEN HILLS AND MASON, NEV. ALSO MANTECA, MENDOTA, AND MODESTO.
                                             F IV AT SANTA ROSA.
2/11/1934 21-42- 0.0 38.40 122.75 D
                                             F 40 MI. W OF PUNTA GORDA. IV AT FORTUNA.
2/12/1934 12-40--0. 40.50 125.30 D
2/13/1934 -0--0--C. 38.42 122.75 D
                                             F BAY (NEAR SANTA ROSA).
2/14/1934 18-43--0. 38.42 122.75 D
                                             F V SANTA ROSA.
2/14/1934 18-51--0. 38.42 122.75 D
                                             F SANTA ROSA.
2/14/1934 19-15--0.
                     38.42 122.75 D
                                            F SANTA ROSA .
                                            F 2 MI. SE OF SANTA ROSA. V SANTA ROSA.
2/14/1934 22-24--0. 38.42 122.75 D
                                             F V SANTA ROSA. IV MONTE RIO AND SEBASTOPOL.
2/14/1334 22-34--0.
                     38.42 122.75 D
2/15/1934 22-30-0. 38.42 122.75 D
                                             F IV SEBASTOPOL .
                                             F V SANTA ROSA.
                                                               ALSO FELT AT BAY, FULTON,
                                              FORESTVILLE, JENNER, KENWOOD, RINCON VALLEY, SEBASTOPOL, AND WINDSOR.
2/16/1934 5-47--0. 38.42 122.75 D
                                            F SAME PLACES AS ABOVE.
2/16/1934 5-50--0.
                     38.42 122.75 D
                                            F SAME PLACES AS ABOVE.
2/16/1934 6-45--0. 38.42 122.75 D
                                            E SAME PLACES AS ABOVE.
                     38.42 122.75 D
                                             F SANTA ROSA.
2/16/1934 7-30--0.
                     38.42 122.75 0
                                            F SAME PLACES AS 5-37 ABOVE.
2/16/1934 14- 1--0.
                                             F SAME PLACES AS 5-37 ABOVE.
                      38.42 122.75 0
2/16/1934 15- 0--).
                     39.42 122.75 D
                                             E SANTA ROSA.
2/16/1934 15-58--0.
                     38.42 122.75 n
                                             E STRONGEST OF SERIES. FELT SAME PLACES.
2/18/1934 9= 3--7.
                     38.42 122.75 D
                                             F SANTA ROSA.
2/19/1934 11-19--0.
                                             F 4 MI. NE OF WATSONVILLE. IV WATSONVILLE.
                     36.95 121.70 D
2/24/1934 4-39--0. 37.00 121.70 D
                                             F 3 MILES W OF GILROY HOT SPRINGS. IV AT
3/ 1/1934 13- 7--0. 36.13 117.97 R 2.5
                                              S OF LONE PINE
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F SANTA ROSA.
3/12/1934 16-10--0.
                           38.42 122.75 D
                                                        F III AT HANTHORNE, NEVADA.
                           38.00 118.00 D 4.5
3/13/1934 16-11--0.
                                                        F HAWTHORNE, NEVADA.
F 10 MI. N OF WATSONVILLE. III MORGAN HILL.
3/13/1934 16-20--0.
                           38.00 118.00 D 5.0
3/14/1934 1-15--0.
3/19/1934 10-41--0.
                           37.15 121.70 D
                           38 00 118 00 0 4-5
                                                        F IV AT LUNING, NEVADA.
                                                        F 14 MI. E OF SPRECKELS. III HOLLISTER AND
                           36.65 121.35 D
3/20/1934 11-49--0.
                                                           SPOECKELS.
                                                           NEVADA.
                           38-00 118-00 D 4-5
3/23/1934 22-49--0.
                                                        F 6 MI. SE SPRECKELS. FELT AT SPRECKELS.
3/27/1934 1-36--0•
4/ 2/1934 8- 5--0•
4/18/1934 2-48--0•
                           36.60 121.50 D
                           38.00 118.00 D 4.5
                                                          NEVADA.
                                                           NEVADA.
                           38.00 118.00 D 4.0
                                                        F 18 MI. FROM FERNDALE. IV AT ARCATA AND
4/20/1934 14- 7--0.
                           40-85 124-20 D
                                                           ORICK. III AT FERNDALE.
                                                           NEWADA
4/21/1934 23-18--0.
                           39.00 117.00 D 4.0
4/21/1934 23-22--0.
                           39.00 117.00 D 4.5
                                                           NEVADA .
                                                        F IV AT SANTA CRUZ AND WATSONVILLE. ALSO
4/23/1934 16- 8--2. 37.00 122.00 D 4.0
                                                           AROMAS, HOLLISTER, SALINAS, SOQUEL, SPRECKELS, AND WRIGHTS.
                                                        F AROMAS, GILROY, SALINAS, SPRECKELS, AND
4/23/1934 17-35--0. 37.00 122.00 D
                                                           WATSONVILLE.
                                                        F ABOUT 5 MI S OF HOLLISTER. V-VI AROMAS.
IV HOLLISTER. III SALINAS, SPRECKELS, AND WATSONVILLE.
4/23/1934 21-20--0. 36.75 121.40 D 3.5
                                                        S OF BISHOP.

F 4 MI. W OF COYOTE. IV SAN JOSE, SANTA

CLARA AND WILLOW GLEN. III BERKELEY AND DAKLAND.
4/26/1934 12-52--0. 37.17 118.28 B 3.0
4/28/1934 17-20--0.
                           37.25 121.82 D
5/ 6/1934 20-14--0. 35.83 120.75 B 3.5
                                                           N OF PASO ROBES.
6/ 1/1934 5-55--0.
6/ 5/1934 9-51--0.
                           39.00 118.00 D 4.0
                                                           NEVADA.
                                                        F COALINGA AND KETTLEMAN HILLS. ALSO FELT
                           35.80 120.33 D
                                                           MONTEREY AND SANTA CRUZ.
                                                         F SAN MIGUEL AND SHANDON.
                           35.80 120.33 D
6 / E / 1 07 A 11 = 3 2 == 0 -
                            35.80 120.33 R 3.0
                                                           CHOLAME VALLEY.
6/ 5/1934 11-47--0.
6/ 5/1934 13-46--0.
                                                           CHOLAME VALLEY.
                           35.80 120.33 C 3.0
                           35.80 120.33 D
                                                         F SAN MIGUEL.
6/ 5/1934 21-30--0.
                                                         F VAIT ADELAIDA, PARKFIELD, AND PRIEST.

IV AT ATASCADERO, AVENAL, BIG SUR, BRYSON, CARMEL, MANFORD, KING CITY, LEMODRE,
LONDAK, PARAISO, SAN MIGUEL, SANTA CRUZ, SHANDON, AND TEMPLETON. III AT APTOS,
                           35.80 120.33 B 5.0
6/ 5/1034 21-44--0-
                                                           LONDAK, PARAISO, SAN MIGUEL, SANTA CRUZ, SHAMDON, AND TEMPLETON. III AT APTOS, ROULDER CREEK, CAMBRIA, CHUALAR, COALINGA, GONZALES, HOLLISTER, MONTEREY, MORRO BAY, PASO ROBLES, SALINAS, SAN FRANCISCO, SAN JOAQUIN VALLEY, SAN LUIS ORISPO, SOLEOAD, SPRECKELS, ETC. NOT FELT AT ANTIOCH, BAKERSFIELD, FRESNO, GILROY, LIVERMORE, LOS GATOS, MARICOPA, MERCED, MODESTO, MORGAN HILL, REDWOOD CITY, SAN JOSE, SANTA MARIA, TULARE, OR WATSONVILLE.
                                                         F 22 MI. NW OF MINERAL. IV JACKSONVILLE.
6/ 5/1934 22-15--0. 40.50 122.00 D
                                                         F VI AT ADELAIDA. IV AT ATASCADERO.
F V LEMOGRE. ALSO FELT CASTROVILLE.
CHOLAME VALLEY.
                           35.80 120.33 C 4.0
6/ 5/1934 22-52--0.
6/ 5/1934 23-30--0.
                            35.80 120.33 D
                           35.80 120.33 C 3.0
35.80 120.33 C 3.5
6/ 6/1934 0-55--0.
                                                            CHOLAME VALLEY.
6/ 6/1934 16-40--20
6/ 6/1934 22-14--> 40.00 121.00 D 4.5
                                                            IV AT CARIBOU, CHESTER, CRESCENT HILLS,
                                                            JANESVILLE, AND STIRLING CITY.
                                                         F ADELAIDA, GRAEAGLE, AND PAYNES CREEK.
 6/ 6/1934 22-40--0.
                           35-80 120-33 ( 3-5
                                                         F IV AND NUEVO LIGHT.
6/ 7/1934 8-53--0.
                            37.17 122.58 D
6/ 7/1934 22-30--0. 35.80 120.33 D
                                                         F STONE CANYON.
6/ 8/1934 4-15--0. 35.80 120.33 D
6/ 8/1934 4-30--0. 35.80 120.33 D
                                                         F IV GONZALES AND MCKITTRICK.
                                                       F VI TO VII AT CHOLAME RANCH, PARKFIELD,
                           35.80 120.33 B 5.0
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AND STONE CANYON. DURATION 30 SECONDS. DAMAGE SLIGHT. V AT ATASCADERO, AND STONE CANTON. DORATION 30 SECUNDS. DAMAGE SLIGHT. VAI ATACADERO, COALINGA, HOLLISTER, KING CITY, LEMOORE, AND SAN MIGUEL. IV AT ANTELOPE, BIG SUR, CAMBRIA, CASTROVILLE, DELANG, MONTEREY, PASO ROBLES, SAN LUIS OBISPO, SANTA BARBARA, SANTA MARGARITA, SANTA MARIA, SOLEDAD, TAFT, VENTURA, VISALIA, III OR LESS AT ARVIN, BAKERSFIELD, DELAND, FRESNO, KERNVILLE, LOMPOC, LOS FTC. ANGELES, MENDOTA, PORTERVILLE, SALINAS, SAN BENITO, SANTA ANA, SANTA BARBARA, TULARE, WATSONVILLE, ETC. NOT FELT AT BIG BASIN, CAJON, COYOTE, GILROY, HUNTINGTON BEACH, INDEPENDENCE, INYOKERN, LANCASTER, MERCED, POMONA, OR SAN INSE .

6/ 8/1934 4-37--0. 35.60 121.30 D

F IV PIEDRAS BLANCAS. SAN LUIS OBISPO AND SANTA CRUZ. ALSO FELT BRYSON AND LOS ALAMOS.

6/ 3/1934 4-45--0. 35.80 120.33 D

ATASCADERO, COALINGA, LOCKWWOD, PASO ROBLES, PORT SAN LUIS, PRIEST, SAN MIGUEL, WESTHAVEN.

6/ 8/1934 4-47--0. 35.80 120.33 B 6.0

EPICENTER NEAR THE SOUTHEASTERN ANGLE OF MONTEREY COUNTY. VII TO VIII AT PARKFIELD. VI AT COALINGA, KETTLEMAN CITY, LEMOORE, AND STONE CANYON. ATASCADERO, DUDLEY, HOLLISTER, KING CITY, DILFIELDS, SAN MIGUEL, SEASIDE, SHALE ATASCADERO, DUDLEY, HULLISTEN, KING CITY, UILFIELDS, SAN HIGGEL, SEASIDE, SANLE DUMP STATION, AND SHANDON. IV AT ANTELOPE, AVILA, CONOGA PARK, HANFORD, LOS ALAMOS, MARICOPA, MORRO BAY, NIPOMO, PASO ROBLES, PRIEST, SAN LUIS OBISPO, SANTA CRUZ, SANTA MARIA, SOLEDAD, VISALIA, ETC. III OR LESS AT APTOS, FRESNO, KERNVILLE, LONE PINE, LOS BANDS, MENDOTA, MONTEREY, OAKLAND HARBOR, SALINAS, SAN BENITO, SANTA ANA, TEHACHAPI, TULARE, ETC.

6/ 8/1934 5- 0--0- 35-60 121-30 D

F PIEDRAS BLANCAS LIGHT . ALSO BRYSON. KERNVILLE, LA PANZA, LEMOORE, PARKFIELD, SANDBERG, SAN FERNANDO.

6/ 8/1934 5-20--0. 35.80 120.33 D

F III ATASCADERO.

6/ 8/1934 5-23--0. 35.80 120.33 C 3.5 6/ 8/1934 5-36--0. 35.80 120.33 C 3.0 6/ 8/1934 5-42--0. 35.80 120.33 B 4.5

F SAN MIGUEL AND ATASCADERO.

6/ 8/1934 5-50--0. 35.80 120.33 D

CHOLAME VALLEY. F ATASCADERO, BIG SUR, COALINGA, KING CITY, PASO ROBLES, AND WESTHAVEN.

F IV ATASCADERO. ALSO FELT COALINGA AND SAN LUIS OBISPO.

6/ 8/1934 9-30--0. 35.80 120.33 B 4.0 6/ 8/1934 15-30--0. 35.80 120.33 C 3.5

E ATASCADERO AND PARKETELD. CHOI AME VALLEY

6/ 8/1934 16-30--0. 35.80 120.33 D

F PARKFIELD. F NEAR PARKFIELD.

6/ 8/1934 23-23--0. 35.80 120.33 B 4.0 6/10/1934 6-47--0. 35.80 120.33 C 3.0

CHOLAME VALLEY.

6/10/1934 8- 3--0. 35.80 120.33 B 4.5 6/10/1934 20- 2--0. 35.80 120.33 D 6/11/1934 3-25--0. 35.80 120.33 C 3.0 F NEAR PARKFIELD. IV AT SAN MIGUEL. F IV SAN MIGUEL . ALSO PARKFIELD AND WOODY . CHOLAME VALLEY.

6/12/1934 10-47--0. 35.80 120.33 C 3.5 38.00 118.00 D 4.0 6/12/1934 20-27--0.

CHOLAME VALLEY NEVADA.

6/14/1934 14-55--0. 35.80 120.33 C 4.0

F IV AT ATASCADERO. ALSO FELT AT SAN MIGUEL AND TEMPLETON.

35.80 120.33 C 4.0

F III AT ATASCADERO AND SAN MIGUEL.

6/14/1934 19-26--0. 35.80 120.33 C 4.5 6/14/1934 22- 2--0. 35.80 120.33 C 3.5

F ATASCADERO AND TEMPLETON. F ATASCADERO.

35.80 120.33 C 3.0

CHOLAME VALLEY. IV AT HOLLISTER AND MONTEREY.

GONZALES, PARKFIELD, AND SALINAS. F IV DILLON BEACH. ALSO PETALUMA.

6/20/1934 12- 0--0. 38.30 123.00 D 6/20/1934 13-40--2. 37.50 122.50 D

ALCATRAZ, BELMONT, BRISBANE, BURLINGAME, DALY CITY, EL GRANADA, HALF MOON BAY,

LOMITA PARK, MONTARA, MONTEREY, REDWOOD CITY, SAN BRUNG, SAN CARLOS, SAN

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LURITA PAME, MUNTANA, MUNTEREY, REDWOOD CITY, SAN BRUND, SAN CARLOS, SAN FRANCISCO, SAN LORENZO, SAN MATEO. IV BERKELEY. ALSO MARTINEZ, OLEMA, RICHMOND. F IV BERKELEY. ALSO MARTINEZ, OLEMA, AND
 6/20/1934 14-30--0. 37.80 122.30 D
                                                       RICHMOND.
S OF LONE PINE.
 7/ 1/1934 6- 3--0. 35.82 117.65 C 2.5
 7/ 2/1934 18-44--0.
                          35.80 120.33 B 3.0
                                                        CHOLAME VALLEY.
                                                     CHOLAME VALLEI.

S OF LONE PINE.

F OFF COAST W OF EUREKA. V AT BEATRICE,

CRESCENT CITY, AND EUREKA. IV AT ARCATA, BRIDGEVILLE, CARLOTTA, FORTUNA, SCOTIA,

AND PETROLIA, AND AT GOLD BEACH AND NORTH BEND, OREGON.

F NEAR PORTOLA. IV NEVADA CITY, SATTLEY.
 7/ 3/1934 19-46--0.
                          36.20 117.72 R 2.5
 7/ 6/1934 22-49--0. 41.70 124.60 D
 7/13/1934 13-56- 0.0 39.83 120.50 D
                                                       CHOLAME VALLEY.
              0-19--0.
                          35.80 120.33 B 3.0
 9/ 4/1034
 8/18/1934 16-51--0.
                          36.40 118.00 C 3.0
                                                       S OF LONE PINE.
 8/19/1934 1- 9--0.
8/19/1934 2-54--0.
8/19/1934 3-30--0.
                          36.40 118.00 B 3.5
                                                     S OF LONE PINE.
                          36.40 118.00 B 3.5
                          36.40 118.00 B 3.5
                                                     F KEELER.
 8/20/1934 11-53--2.
                          36.40 118.00 C 3.0
                                                       S OF LONE PINE.
                                                     E IV STONE CANYON.
 8/21/1934 3-37--0.
                          36.08 120.58 D
                          36.40 118.00 C 3.0
                                                      S OF LONE PINE.
 8/23/1934 10-52--0.
                          36.40 118.00 B 3.0
                                                      S OF LONE PINE.
 8/23/1934 17-43--0.
 8/25/1934 13- 9--0.
                          38.83 119.00 D 4.0
                                                       NEVADA.
                                                     F NEAR MUSSEL ROCK. FELT IN SAN FRANCISCO.
 9/ 1/1934 16-15--0.
                          37.75 122.50 D
                                                       NEVADA.
 9/ 6/1934 6-57--0.
                          39-00 118-00 D 4-0
                          36.00 120.55 C 3.0
                                                       CHOLAME HILLS.
                                                     F IV PORTERVILLE.
                          36.13 118.80 R 3.0
 9/12/1934 11-29--0.
 9/13/1934 18-40--0.
                          39.00 118.00 D 4.0
                                                       NEVADA -
                                                       PARKFIELD.
 9/16/1934 14-38--0.
                          35.83 120.33 C 3.5
                          37-42 118-33 C 3-0
                                                       BISHOP.
 9/20/1934 11-10--0.
9/20/1934 11-10-0.
9/24/1934 3-20-0.
9/25/1934 7-14-0.
9/27/1934 7-12-0.
9/3)/1934 8-37-0.
                          39.00 117.00 D 4.0
                                                        NEVADA.
                          39.00 117.00 D 4.0
                                                        NEVADA.
                                                     F KEDDIE, QUINCY, SPRING GARDEN.
                          35.83 117.65 C 2.0
                                                       S OF LONE PINE.
                                                     F V AT COLMA, SAN FRANCISCO, AND SAUSALITO.
FELT OVER AN AREA OF 2100 SQ. MI.
F V AT COLMA, SAN FRANCISCO, AND SAUSALITO.
10/ 2/1934 20-20--0. 37.60 122.80 0 4.0
10/ 2/1934 20-30--0. 37.60 122.80 D 4.0
                                                        FELT OVER AN AREA OF 2100 SQ. MI.
                                                     F BENECIA, MILE ROCK, DAKLAND, AND S.F.
10/ 3/1934 6-17--0. 37.60 122.80 D
10/ 6/1934 2-17--2.
                          37.85 122.35 D
                                                     F 3 MI. NW OF BERKELEY. IV EL CERRITO.
                          37.60 122.80 D
                                                     E IV CAN EDANCISCO.
10/ 8/1934 8-40--0.
10/13/1934 3-57--0.
                          39.50 119.80 D
                                                     F IV RENO AND SPARKS, NEVADA.
10/16/1934 19-33--0.
                          37.60 122.80 D
10/16/1934 23-12--0.
                          39.00 118.00 D 4.0
                                                        NEVADA.
                          35.80 120.33 C 3.0
37.60 122.80 D
10/19/1934 15-39--0.
                                                       PARKETELD.
10/25/1934 3-20--0.
                                                     F V SAN FRANCISCO.
                          37.60 122.80 D
                                                     F SAN FRANCISCO.
                          39.30 125.10 D
                                                     F 70 MI. W OF CAPE MENDOCINO. IV EUREKA.
11/17/1934 17-42--0.
                                                     F V SHIVELY. IV ALDERPOINT, PETROLIA, AND
                         40.50 124.08 D
                                                        SCOTIA.
                                                     F IV FORTUNA AND UPPER MATTOLE.
11/18/1934 12-38--7. 40.58 124.08 D
11/30/1934 19-31--0.
                          38.00 118.00 D 4.0
                                                       NEVADA.
                                                     F 15 MILES S OF PARAISO. V AT PIEDRAS
12/ 1/1934 13- 5--0. 36.00 121.50 D
                                                        BLANCAS LIGHT. IV AT PARAISO.
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12/ 2/1934 16- 7--0. 35.97 120.58 C 4.0
                                                          F SAN MIGUEL .
                                                          F 5 MI. NW OF MT. HAMILTON. FELT SAN JOSE
                                                             AND SANTA CLAPA.
                                                          AND SANIA CLARA.

F IV AT BRYSON, KING CITY, AND PARAISO.

ALSO FELT AT PARKFIELD. PASO ROBLES. SAN LUCAS. AND SAN MIGUEL.
12/ 3/1934 1-54--0. 35.95 121.50 C 4.5
12/ 4/1934 6-17--0. 38.00 118.00 D 4.0
                                                             NEVADA -
12/11/1934 6-19-0. 40.58 124.08 D
12/11/1934 10-42-0. 35.83 117.65 B 2.5
                                                           F IV UPPER MATTOLE.
                                                            S OF LONE PINE.
12/13/1934 2-30--0.
                                                          E NEAD COLMA IV SAN ERANCISCO
                           37.60 122.80 D
12/15/1934 17- 0--0. 40.60 124.20 D
                                                          F 6 MI. FROM FERNDALE. V FORTUNA. IV
                                                          SCOTIA, SHIVELY, AND UPPER MATTOLE.
F IV AT LOS ALAMOS AND SHANDON. ALSO FELT
12/24/1034 16-26--0- 35-93 120-48 8 5-0
                                                             AT KING CITY AND TEMPLETON.
12/29/1934 11-47--0. 37.33 118.50 B 3.5
                                                             RICHOP
                                                          E NEAD SANTA CLAPA. FELT OVER AREA OF 3.000
                                                             SQUARE MILES. V AT ALVISO, LAUREL, LOS GATOS, SAN JOSE, SANTA CRUZ, SUNNYVALE.
12/31/1934 5-51--0. 38.00 118.00 D 4.0
                                                           F IV AT LOS GATOS. IV AT PIGEON POINT,
                                                             SAN FRANCISCO, AND PALO ALTO.
 1/ 2/1935 12-29--0. 36.15 117.95 B 2.5
1/ 2/1935 22-40-58. 40.25 125.25 5.8
                                                            S OF LONE PINE.
                                                          F OFF CAPE MENDOCINO. V AT ALDERPOINT,
FORT BRAGG, HOLMES, KORBEL, ORLEANS, SHELLY. IV AT ALBION, ARCATA, BAYSIDE,
BENBOW, ELK RIVER, EUREKA, FERNDALE, HONEYDEW, RIO DELL, ROHNERVILLE, SCOTIA,
SOUTH FORK, UPPER MATTOLE, WADDINGTON, WEOTT, AND WHITLOW.
 1/ 3/1935 5-45--0. 40.80 124.20 D
1/ 3/1935 5-45--0. 37.25 122.00 D
1/ 3/1935 17-36- 0.0 37.20 122.00 D
                                                          F HUMBOLDT.
                                                          F LOS GATOS.
                                                          F 6 MI. NW OF SANTA CLARA. AFTERSHOCK
                                                             OF 12/30/34, 13-55-00. V SANTA CRUZ AND SUNNYVALE.
 1/ 6/1035 4- A-- - 35-93 120-48 C 4-0
                                                          F IV AT PARKFIELD. ALSO FELT AT SHANDON.
 17 6/1935 4-4--0- 35-90 120-48 C
17 6/1935 4-40--0- 35-90 120-45 D
17 6/1935 2-35--0- 36-95 121-75 D
                                                          F IV PARKFIELD.
                            35.93 12C.48 C 4.0
                                                          F IV AT PARKFIELD. III AT SHANDON.
                                                          F 3 MI. NE OF WATSONVILLE. IV HOLLISTER.
 1/ 3/1935 15-50--0.
                            36.85 121.60 D
                                                          F 8 MI. S OF GILROY.
 17 37/913 12-38--1. 36.63 121.600 0
17/14/1915 22-45--0. 36.67 116.50 C
17/18/1935 9-43--2. 37.40 122.35 D
17/21/1935 0-9--2. 38.00 118.00 D
27 37/1915 15-35--2. 40.85 124.15 D
27 87/1935 4-22--0. 36.83 118.00 B
                                                            E OF LONE PINE.
                            36.67 116.50 C 3.0
                                                          F 4 MI. E OF COLMA. III SAN FRANCISCO.
                            39.00 118.00 D 4.0
                                                            NEVADA.
                                                          F EUREKA, FIELDS LANDING, TABLE BLUFF STA.
                                                          F V AT ONYX .
                            35.83 118.00 B 4.0
                                                                            IV AT BROWN, KERNVILLE, AND
                                                             OLANCHA. III AT INYOKERN AND SPRINGVILLE.
 2/19/1935 4- 2--0. 35.93 120.48 C 3.5
                                                             PARKETELD.
 2/19/1935 14-17--0.
                                                            PARKFIELD.
                            35-93 120-48 D 3-0
                                                             E OF LONE PINE.
 2/27/1935 -7-15--0.
                            36.67 117.17 B 3.0
                                                             PARKFIELD.
 2/28/1935 19- 6--0.
                            35.80 120.33 C 3.0
                            38.00 118.00 D 3.0
                                                             SE OF HAWTHORNE, NEV.
 3/ 3/1935 5-49--0.
 3/ 3/1935 10-19--0.
                            40.25 124.10 D
                                                          F V UPPER MATTOLE. IV BRIDGEVILLE, SHIVELY, SOUTH FORK AND WHITLOW.
 3/ 3/1935 11-26--0. 36.42 121.75 C 3.0
                                                            MONTEREY.
 3/ 6/1935 0-55--0. 36.15 117.95 B
3/ 6/1935 4-52--0. 37.40 119.80 D
                            36.15 117.95 B 2.5
                                                             S OF LONE PINE.
                                                             NEAR HORITOS. IV AHWAHNEE, CHOWCHILLA.
III EL PORTAL, LE GRAND AND RAYMOND.
 3/23/1935 8-26--0. 38.95 123.10 D
                                                          F IV HOPLAND.
 3/25/1935 10-15--0. 37.08 118.35 B 3.0
3/30/1935 12-40--0. 35.88 118.28 B 3.0
                                                            S OF BISHOP.
                                                            S OF LONE PINE.
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4/ 5/1935 10-13--0. 35.93 120.48 C 3.5
                                                       PARKFIELD.
                                                     F IV CARIBOU.
E OF LONE PINE.
4/16/1935 3-42--0.
4/17/1935 4-39--0.
                          39.90 120.90 D
                          36.65 117.22 C 2.5
                                                       E OF LONE PINE.
                          36.65 117.22 8 3.0
 A/17/1935 A-41--0.
                                                       E OF LONE PINE.
                          36.65 117.22 8 3.5
 A/17/1935 5- A--0-
                                                       NORTH OF BENTON.
E OF LONE PINE.
 4/18/1935 6- 7--2.
                          37.90 118.53 C 4.0
 4/24/1935 17-26--0.
                          36.67 117.25 C 3.5
                                                       E OF LONE PINE.
                          36 67 117 25 C 3-0
 A/2A/1035 19-23--0.
                                                     F III FERNDALE.
                          40.60 124.25 D
 4/26/1935 15-33--0.
                          36.68 116.97 C 3.5
   8/1935 14-29--0.
                                                     F NEAR PALO ALTO. III MOUNTAIN VIEW.
5/15/1935 16-50--0.
                          37.40 122.15 D
                                                     F IV AT BENTON. III AT BIG CREEK, AND
 5/16/1075 7-25--0: 37.38 118.92 B 4.5
                                                       HUNTINGTON LAKE.
5/16/1935 10-12--0. 37.38 118.92 B 3.5
5/17/1935 3-22--0. 37.15 119.25 D
                                                       W OF RISHOP
                                                     E BIG CREEK. HUNTINGTON LAKE AND FLORENCE
                                                       LAKE.
                                                     F III AT TEMPLETON.
SW OF BISHOP.
 5/27/1935 16- 8--0. 35.37 120.97 C 3.0
 5/31/1935 17-22--0.
                          37.08 118.75 C 3.0
                         41.00 124.00 D 5.0
                                                        WEST OF EUREKA.
 6/ 3/1935 17- 8--0.
                                                        NEVADA.
                          38.00 118.00 D 4.0
6/ 6/1935 19-33--0.
                          36.75 121.70 D
                                                     F SALINAS AND WATSONVILLE.
6/14/1935 18-45--0.
6/18/1935 4-15-0.0 37.00 121.40 D 4.0
                                                     F IV AT HOLLISTER.
                                                     F FELT OVER AN AREA OF 13.000 SQUARE MILES
                                                           CENTRAL CALIFORNIA.
                                                                                     V AT MUNTINGTON LAKE, LAWS, AND TERRA BELLA. IV AT
                                                        BISHOP, DELPIEDRA, FRIANT, HANFORD, LAKESHORE, MIRAMONTE, MOUNTAIN VIEW,
                                                     ORANGE COVE, SANGER, SHAVER LAKE, TULARE, AND BIG PINE.

F AFTERSHOCK OF 9-55-0. IV AT BISHOP AND
6/19/1935 10- 7--0. 37.25 118.50 C 4.0
                                                       BIG PINE.
6/19/1935 13- 0--0. 37.25 118.40 D
6/19/1935 13-21--0. 37.25 118.37 C 3.0
6/21/1935 17-17--0. 40.50 121.50 D
                                                       BIG PINE AND BISHOP.
                                                     F IV LAWS.
                                                     E PRECEDING THIS AND QUAKE AT 17-40-0.
                                                       LASSEN PEAK EMITTED PUFF OF STEAM.
                                                     F SEE COMMENT FOR 17-17-0.
 6/21/1935 17-40--0. 40.50 121.50 D
 6/27/1935 11-44--0.
                          37.80 122.20 D
                                                     F BERKELEY AND OAKLAND.
                                                     F 2 MI. NE OF NILES. IV FAST OAKLAND, NILES.
F SE OF SALINAS. III AT HOLLISTER.
F WASHINGTON TOWNSHIP, BERKELEY, OAKLAND.
 6/30/1935 15-25--0.
                          37.60 122.00 D
 6/30/1935 23-28--0.
                          36-02 121-00 D 4-0
                          37.80 122.20 D
 7/ 3/1935 15-20--0.
7/ 3/1935 15-20--0. 37.80 122.20 0
7/12/1935 0-4--0. 40.25 124.00 0
7/12/1935 1-22--0. 40.00 121.00 0
7/25/1935 24-16--0. 35.80 120.33 C
7/26/1935 23- 7- 0.0 36.80 121.30 0
7/27/1935 2-45--0. 37.17 118.32 B
7/28/1935 6-0--0. 35.70 121.12 B
8/ 9/1935 17-14--0. 36.17 120.98 C
                                                     F IV BRICELAND, FOREST GLEN, SCOTIA, WHITLOW
                                                     F VI KEDDIE, PAXTON. V QUINCY, TAYLORSVILLE.
                         35.80 120.33 C 3.0
                                                     F V AT PARKETELD.
                                                     F 5 MI. E OF PAICINES. FELT AT MULBERRY.
                          37.17 118.32 B 3.5
                                                        BISHOP.
                          35.70 121.12 B 4.0
                                                     F SAN SIMEON .
                          36.17 120.98 C 3.5
                                                     F PRIEST VALLEY.
                                                     F HAYWARD FAULT. V AT BERKELEY.
 9/10/1935 23-55- 0.C 37.85 122.25 D
10/48/1935 9-24--0. 35.80 120.70 D 3.5
                                                     F IV AT PARKFIELD. AFTERSHOCK OF 6/7/1934.
10/18/1935 10-47--0.
                          35.80 118.52 C 3.0
                                                     F IV AT BAKERSFIELD. III OR IV AT KERNVILLE.
10/22/1935 18-37--0.
                          35.93 120.48 C 4.0
                                                     F PARKETELD.
10/25/1935 19-43--0.
                          36.40 121.55 D
                                                     F 13 MI. W OF SOLEDAD. IV SAN BENITO.
10/25/1935 20-44- 0.0 37.00 121.60 D
                                                     F FORESHOCK OF 20-56
                                                     F FORMANDRAS FAULT NEAR WATSONVILLE. FELT
OVER AN AREA OF 3,300 SQUARE NILES. IV AT CASTROVILLE, HAYWARD, HOLLISTER, AND
10/25/1935 20-56--0. 36.90 121.75 D 4.0
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WATSONVILLE.
10/26/1935 10-46- 0.0 36.85 121.40 D
                                                       F AFFERSHOCK OF 20-56-0. HOLLISTER.
10/28/1935 2-50-0. 40.85 124.15 D
11/26/1935 21- 1-0. 37.42 118.83 C 3.5
                                                        F IV EUREKA. III FIELDS LANDING.
                                                        W OF BISHOP.
1/26/1935 21- 1--0. 37.42 118.83 C 3.5
1/ 7/1936 6-30--0. 37.75 122.50 0
1/ 7/1936 6-58--0. 37.75 122.50 0
1/11/1936 6-9--0. 38.00 118.00 D 4.0
1/14/1936 5-30--0. 38.00 117.00 D 4.0
                                                       E IV SAN EDANCISCO
                                                       F LAKE MERCED. SAN FRANCISCO.
                                                          NEVADA.
                                                         NEVADA.
 1/24/1936 17-49- 1.0 37.80 122.15 C
                                                       F 4 MI. SW OF UNIV. OF CALIF. CAMPUS, BERK.
                                                         III AT ALAMEDA, BERKELEY, HAYWARD, LAFAYETTE, MARTINEZ, ORINDA, ROSS, RICHMOND,
                                                          SAN FRANCISCO, SAN RAFAEL, AND SUISUN BAY BRIDGE.
 1/30/1936 18-32--0. 38.00 118.00 D 4.5
                                                          NEVADA.
1/30/1936 18-32--0. 38.00 118.00 0 **5.2/ 9/1936 3-6--0. 40.20 124.00 0 2/27/1936 0-40--0. 41.00 119.00 0 4.5 3/ 6/1936 3-45- 0.0 36.50 121.25 0 3.0 3/11/1936 13-56--0. 37.30 121.75 0
                                                       F III OR IV ETTERSBURG.
                                                         NEVADA-
                                                         STONE CANYON.
                                                       1.600 SQUARE MILES. V COYOTE DAM. IV GILROY, MT. HAMILTON, SAN MARTIN.
                                                       F IV AT CHUALAR. HOLLISTER AND TRES PINOS.
 3/17/1936 1-55- 0.0 36.60 121.20 C 4.0
              9- 7--0. 35.93 120.48 C 2.5
                                                         PARKFIELD.
 3/26/1936 22-43--0. 38.00 118.00 D 4.0
3/30/1936 8- 5--0. 37.40 121.90 D
4/ 3/1936 17-17--0. 36.90 121.50 D
                                                       F SAN JOSE AND E SAN JOSE FOOTHILLS.
                                                       F 9 MI. NW OF HOLLISTER.
F 7 MI. NW OF HOLLISTER.
4/ 3/1936 23-11--0.
4/ 7/1936 1-32--0.
                           36-90 121-45 D
                                                         SW OF LONE PINE.
                          35-80 118-52 C 3-0
 4/12/1936 12-24--0.
                           35.83 118.00 C 2.5
                                                         S OF LONE PINE.
4/19/1936 20-19--0.
                           38.00 118.00 D 4.0
                                                          NEVADA.
4/21/1936 4-34--0. 36.15 117.95 R 3.5
                                                         S OF LONE PINE.
4/24/1936 19- 0--0.
                           36.15 117.95 B 4.0
                                                         NEAR HATWEE.
4/25/1936 18- 4--0. 36.15 117.95 B 2.5
                                                         NEAR HATWEE
4/26/1936 16-25--0.
                          36.15 117.95 B 3.5
                                                      F NEAR HATWEE.
                                                                          TV AT OLANCHA.
5/ 9/1936 7-44--0. 40.50 121.55 D
5/ 9/1936 H-12--0. 40.50 121.55 D
                                                       F LASSEN VOLCANIC NATIONAL PARK.
F LASSEN VOLCANIC NATIONAL PARK.
5/ 9/1936 3-40--0.
                          40.35 121.60 D
                                                       F MINERAL. LASSEN VOLCANIC NATIONAL PARK.
5/ 9/1936 11- 4--0.
5/ 9/1936 12-30--0.
                          40.35 121.60 D
                                                       F MINERAL. LASSEN VOLCANIC NATIONAL PARK.
                          40.35 121.60 D
                                                       F MINERAL. LASSEN VOLCANIC NATIONAL PARK.
5/ 9/1936 19-41--0.
                          40.35 121.60 D
                                                       F MINERAL. LASSEN VOLCANIC NATIONAL PARK.
5/ 9/1936 20-21--0. 40.50 121.65 D
                                                       LAKE. ONE OF STRONGEST OF 18 QUAKES ON MAY 8 AND 9.
5/10/1936 2-18--0. 40.50 121.65 D
5/10/1936 7-44--0. 39.50 119.80 D
                                                       F MANZANITA LAKE. LASSEN VOL. NATIL. PARK.
                                                       F RENO, NEVADA.
5/10/1936 17-40--0. 37.50 118.53 C 5.0
                                                      F NORTH OF BISHOP. FELT OVER AN AREA OF
                                                         6,000 SQUARE MILES. V AT BISHOP. IV AT BENTON, BIGPINE, BURGYN'S RDAD CAMP,
                                                         6,000 SQUARE MILES. V AT BISHOP. IV AT BENTUN, DIDMINE, BURGIN'S NUMBER AND CAMP, DEEP SPRINGS, DELPIEDRA, INDEPENDENCE, JUNE LAKE, KEELER, LITTLE ROUND VALLEY, MCGEE CREEK, MAMMOTH LAKES, MIRAMONTE, MCCALNO, MONO LODGE, DNYX, DWENS RIVER
                                                          GORGE, PORTERVILLE, AND STRATFORD.
5/10/1936 19-36--0. 36.92 117.50 C 3.5
                                                         NE OF LONE PINE.
5/10/1936 20-19--0. 39.50 119.80 D
5/14/1936 11-15--0. 40.50 121.65 D
                                                      E BEND. NEVADA.
                                                      F MANZANITA LAKE. LASSEN VOL. NAT'L. PARK.
                                                         ONE OF 125 QUAKES IN AREA SINCE MAY 4.
                                                     F V AT ADAMS PLANT. IV AT BENTON, YOSEMITE,
5/15/1936 4-34--0. 37.50 118.53 C 4.0
                                                         AND CRESTVIEW.
5/15/1936 7- 4--0. 40.50 121.65 D
                                                      F V MANZANITA LAKE.
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5/20/1936 17-22--0. 35.93 120.48 C 3.0
5/23/1936 4-41--0. 36.17 120.92 C 4.0
5/27/1936 7-18--0. 40.35 121.60 D
                                                       PARKETELD.
                                                      F IV AT KING CITY.
                                                      F IV MINERAL.
5/27/1936 19-55--0. 36.50 121.17 C 4.5
                                                      F 4 MI. N OF PANOCHE. III OR IV KING CITY.
5/29/1936 6-56--0. 36.70 120.95 D
5/30/1936 10-8--0. 37.10 121.70 D
                                                      F 4 MI. NW OF MORGAN HILL. IV MORGAN HILL
                                                         AND SAN MARTINA
6/ 2/1936 14-30-0. 40.50 121.65 D
6/ 3/1936 9-15- 0.0 40.16 126.45 D 5.8
                                                      F V MANZANITA LAKE
                                                      F OFF CAPE MENDOCINO. V AT FERNDALE, PUNTA
                                                        OFF CAPE MEMDOCINO. V AT FERNDALE, PUNTA
GORDA, UPPER MATTOLE, AND WEOTT. IV AT ALDERPOINT, ALTON, ARCATA, BAYSIDE,
BEATRICE, BENBOW, BRICELAND, BRIDGEVILLE, CAPETOWN, EUREKA, FERNBRIDGE, FIELDS
LANDING, FORT BRAGG, FORTUNA, GARBERVILLE, HARRIS, HOLMES, KORBEL, LOLETA,
                                                         RID DELL, ROHNERVILLE, SOMDA, SCOTIA, SOUTH FORK, TRINIDAD, WADDINGTON, AND
                                                         WESTPORT.
6/12/1936 6-20--0. 38.40 122.75 D
                                                      E SANTA POSA.
6/14/1936 22-26--0. 40.50 121.55 D
                                                      F LASSEN VOL. NATIL. PARK.
6/24/1936 12-23-0。 35-12 120-08 C 3-0
6/29/1936 12-45-0。 40-50 121-65 D
                                                      F FSAN LUIS OBISPO CO. IV AT LOS ALAMOS.
                                                      F IV OR V MANZANITA LAKE.
                                                      F TV OR V MANZANITA LAKE.
6/29/1936 15- 5--0. 40.50 121.65 D
6/29/1936 19-52--0. 40.50 121.65 D
6/30/1936 6-30--0. 40.35 121.60 D
                                                      F IV OR V MANZANITA LAKE.
F IV OR V MINERAL, MT. HARKNESS, SUSANVILLE.
                                                        OVER 100 SMALL QUAKES ON JUNE 30 THIS AREA.
                                                      F V MANZANITA LAKE. IV CARIBOU.

F IV MANZANITA LAKE. MINERAL, PRATTVILLE,
6/30/1936 10-27-0. 40.50 121.65 D
                                                         AND CARIBOU.
6/30/1936 20-36--C. 40.50 121.65 D
                                                      F V MANZANITA LAKE.
6/30/1936 23-50--0. 40.50 121.65 D
7/ 1/1936 11-50--0. 40.45 121.30 D
                                                      F TV MANZANTTA LAKE, MINERAL.
                                                      F V MT. HARKNESS.
7/ 1/1936 12-43--0. 40.45 121.30 D
                                                      F V MT. HARKNESS
7/ 1/1936 15-50--0. 40.50 121.65 D
                                                      F V MANZANITA LAKE.
7/ 2/1936 153500 38.00 118.00 D
7/ 2/1936 7-20-0. 40.45 121.30 D
                          38.00 118.00 D 4.0
                                                        NEVADA.
                                                      F V MT. HARKNESS.
7/ 2/1936 16-29--0. 39.20 117.50 0 5.0
                                                      F NEVADA.
                                                     F V TO VI MINERAL. 7 QUAKES OF INTENSITY V
7/ 2/1936 17-38--0. 40.35 121.60 D
                                                      F V MT. HARKNESS.
7/ 6/1936 10-16--0. 40.45 121.30 D
7/ 6/1936 11-11--C. 40.45 121.30 D
                                                      F V MT. HARKNESS.
                                                      F V MT. HARKNESS.
7/ 6/1936 15-41---- 40.45 121.30 D
7/ 6/1936 17-35--0.
                         40.45 121.30 D
                                                      F V MT. HARKNESS
                                                      F IV LONEPINE AND OWENYO.
F SEQUOIA NAT'L PARK. LOUD ROAR.
F SEQUOIA NAT'L PARK. NEAR CLOUGH CAVE.
7/10/1036 11-45--0
                          36-60 118-10 D
7/10/1936 15-30--0. 36.60 118.75 D
7/10/1936 20-43--0.
7/10/1936 20-45--C. 36.60 118.75 D
                                                      F SEQUOTA NAT'L PARK. NEAR CLOUGH CAVE. THIS
                                                        AND SHOCKS AT 15-30-0 AND 20-43-0 FELT ALSO IN OWENS VALLEY.
7/11/1936 3-47--0. 36.67 118.10 C 4.0
                                                     F OWENS VALLEY. IV AT LONEPINE AND OWENYO.
                                                         III AT SEQUOIA NATIONAL PARK.
7/11/1936 8-30--0. 36.60 118.10 D
7/11/1936 8-43--0. 36.67 118.10 C 3.0
                                                      F LONEPINE. AFTERSHOCK OF 3-47-0.
                                                      F AFTERSHOCK OF 3-47-0. IV AT OWENYO. THREE
                                                        SHORT SHOCKS AT SEQUOIA NATIONAL PARK.
                                                      F AFTERSHOCK OF 3-47-0. IV AT OWENYO.
7/11/1936 11-30-0. 36.60 118.10 D
7/13/1936 10-43-0. 40.45 121.30 D
                                                      F LONEPINE. AFTERSHOCK OF 3-47-0.
                                                     F V MT. HARKNESS.
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F IV AT LUNING AND MINA. NEVADA.
 7/25/1936 19-39--0. 38.00 118.00 D 4.0
                                                 SE OF BISHOP.
 8/11/1936 7-17-0. 36.63 117.85 C 3.5
8/20/1936 16-49-0. 37.00 121.60 D
                                               F 2 MI. S OF GILROY. III HOLLISTER.
                                               F IV ARCATA, FIELDS LANDING, FORTUNA, SAMOA.
 8/23/1936 10- 2--0. 40.70 124.10 D
                                                 III FUREKA.
                                                 SE OF LONE PINE.
 9/ 5/1936 16-52--0.
                      35.83 116.50 C 3.0
                                                 SE OF LONE PINE.
 9/ 5/1936 22-24--0. 35.83 116.50 C 2.5
                                                 S OF LONE PINE.
                                               F MANZANITA LAKE, AT OPPOSITE END OF NATIL
 9/23/1936 17-14--0. 40.50-121.65 D
                                                 PARK FROM CENTER OF TREMORS EARLIER THIS YEAR. STRONGEST SHOCK THUS FAR.
                                               F SAN FRANCISCO BAY REGION. V AT MENLO PARK
 9/24/1936 3- 9--0. 37.60 121.88 D
                                                                  IV AT ALVARADO, BOULDER CREEK, BURLINGAME, CENTERVILLE, HAYWARD,
                                                 AND INVINCTON.
                                                 LIVERMORE, MILPITAS, MORGAN HILL, MOUNT EDEN, NEWARK, NILES, PLEASANTON, REDWOOD
                                                  CITY. SAN JOSE, SAN LORENZO, SUNNYVALE, AND WARM SPRINGS.
                                               F SAN FRANCISCO BAY REGION. FELT OVER AN
APPA DE 2,700 SQUARE MILES. V AT REDWOOD CITY AND WARM SPRINGS. IV AT ALVISO,
9/24/1936 14-11--0. 37.60 122.88 0 4.0
                                                 ALVADADO. APTOS. CENTERVILLE. IRVINGTON, LIVERMORE, MILPITAS, NEWARK, NILES,
                                                 PLEASANTON, SAN JOSE, SUNNYVALE, AND SUNOL.
 9/29/1936 3-22--0. 36.67 117.42 C 3.0
                                                 NE OF LONE PINE.
10/ 2/1936 15-53--0. 37.25 118.67 C 3.0
                                                 BISHOP.
                                               F 6 MILES N OF KERNVILLE.
10/ 4/1936 9-31--0. 35.80 118.00 D 2.5
10/ 6/1936 10-30--0.
                       37.40 118.35 D
                                               FIAWS.
10/ 6/1936 12-31--2.
                       37.25 118.67 C 3.0
                                               E BICHOD
10/ 6/1936 12-33--0.
                      37.25 118.67 C 4.0
                                               FIAWS.
                                                 LAWS.
10/ 6/1936 12-46--7.
                       37. 25 118-67 C 3.0
10/ 6/1936 12-53--0. 37.25 118.67 C 3.0
                                               FIAWS.
10/ 7/1936 3- 1--0.
                       37.25 118.67 C 4.0
                                               F LAWS .
10/ 7/1936 15- 1--0.
                       38.00 118.00 D 4.0
                                                 150 KM NORTH OF TINEMAHA.
10/10/1936 1-25--0. 41.00 125.00 D 5.0
                                                 DEE COAST DE NORTHERN CAL LEDRNIA.
                                               F IV AT BISHOP AND LAWS.
10/10/1936 18-49--0.
                       37.87 118.50 C 4.0
                      37.87 118.50 C 3.5
                                                N OF BISHOP.
10/10/1936 19- 7--0.
10/10/1936 20-10--0. 37.87 118.50 C 3.0
                                               F TV AT LAWS.
                       39.00 119.00 D 4.0
                                                 WESTERN NEVADA.
10/13/1936 12-28--0.
                                                 SW OF BISHOP.
10/19/1936 4- 9--0. 37:17 118:83 C 3:0
10/21/1936 15- 4--0.
                       38.00 118.00 D 4.0
                                                 NEVADA.
10/21/1936 23-17--0.
                       37.25 118.67 C 3.5
                                                 TAWS
                                                 NEVADA.
10/26/1935 12-34--0.
                       38.00 118.00 D 4.0
11/ 5/1936 14-30- C.O 36.85 121.40 D
                                              F HOLLISTER.
                                                 N OF BISHOP.
11/ 7/1936 13-11--0. 37.88 118.50 C 3.5
11/10/1936 9-58--0.
11/11/1936 2-25--C.
                                                 SW OF BISHOP.
                       37.10 118.90 0 2.5
                                               F 6 MI. S OF ANTIOCH. IV OR V PITTSBURG.
                       37.90 121.85 D
                                               F SAN LUIS ORISPO, SANTA MARGARITA, POZO.
11/18/1936 17-15--0.
                       35.35 120.60 D
                                               F FORTUNA. FELT ALSO FERNDALE.
11/23/1936
            2-54--C. 40.60 124.15 D
                                               F 6 MI. SE OF NILES. III CENTERVILLE.
11/23/1936 15-53--0. 37.50 122.00 D
                                                 S OF LONE PINE.
11/25/1936 19-19-0. 36.15 117.95 B 2.5
12/ 4/1936 15-51-0. 37.40 122.20 D
                                               F 5 MI. SW OF PALO ALTO SEISMOGRAPHIC STA.
IV AT MOUNTAIN VIEW.
12/ 4/1936 16-14--0. 37.40 122.20 D
12/23/1936 17-16--0. 35.93 120.48 B 3.5
12/25/1936 16- 5--0. 40.50 121.50 D
                                               F AFTERSHOCK OF 15-51-0. III MOUNTAIN VIEW.
                                                 PARKFIELD.
                                               F FELT OVER AREA OF 1,000 SQUARE MILES IN
                                                 NORTH-CENTRAL CALIFORNIA. V AT LAKE ALMANDR, MANZANITA LAKE, TAYLORSVILLE. IV
                                                  AT LAS PLUMAS, WESTWOOD, CARIBOU, MEADOW VALLEY, CHESTER, MINERAL, TAYLORSVILLE.
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F 9 MI. NW OF WATSONVILLE. V WATSONVILLE.
1/ 9/1937 0-47--0. 37.00 121.80 D
                                                             IV GILROY .
                                                          F 6 NI. S OF PALO ALTO SEISMOGRAPHIC STA.
FELT IN MOUNTAIN VIEW.
1/20/1937 11-11--0. 37.30 122.15 D
                                                           F 12 MI. W OF HOLLISTER.
1/23/1937 14-31--0. 36.85 121.65 D
                                                             SW OW FONE PINE
1/25/1937 10-10--0. 36.30 118.50 D 2.5
                                                           F 12 MI. W OF HOLLISTER.
F 12 MI. W OF HOLLISTER.
2/ 5/1937 18- 2--0.
                           36.85 121.65 D
2/ 5/1937 23-17--0.
                           36.85 121.65 D
                                                           F FELT OVER AN AREA OF 10,000 SQUARE MILES
2/ 7/1937 4-41-34. 40.50 125.25
                                                             PELT TIVER AN AREA UP 10,000 SOURCE MILES
OF NORTHWESTERN CALIFORNIA. V AT ALDER POINT, ARCATA, CAPE MENDOCINO,
CAPETOWN, EUREKA, FERNDALE, FIELDS LANDING, ORLEANS, SCOTIA, SHIVELEY,
                                                              TRINIDAD, AND UPPER MATTOLE.
                                                           E BISHOP AND LAWS.
2/12/1937 22-26--C. 37.50 118.42 C 4.0
                                                           F 9 MILES SE OF PAICINES. FELT AT ANTELOPE,
2/17/1937 3-33- 0.0 36.70 121.20 C 4.5
                                                             HOLLISTER AND PANOCHE.
                                                           F FELT OVER AN AREA OF 5,000 SQUARE MILES OF
2/19/1937 9- 9--0. 38.30 118.30 C 5.0
                                                              WEST-CENTRAL NEVADA. V AT HAWTHORNE AND YERINGTON, NEVADA. IV AT BRIDGEPORT
                                                             AND LUNING, MINA, AND TONOPAH, NEVADA.
                                                             S OF LONE PINE.
2/19/1937 16-42--0. 35.83 118.25 C 2.5
2/19/1937 23- 6--0. 38.00 118.00 D 4.5
2/20/1937 9-58--0. 35.93 120.48 C 4.0
                                                           F LUNING AND MINA, NEVADA.
                                                           F PARKETELD AND PASO ROBLES.
                            35.93 120.48 C 4.0
2/22/1937 18-10--0.
                                                           F KING CITY.
                           36.17 121.53 C 4.0
                                                             S OF LONE PINE.
2/22/1937 18-23--0.
                            35.83 118.25 C 2.5
                            38.30 123.00 D
                                                           F DILLON BEACH. SEVERAL QUAKES.
2/26/1937 10- 0--0.
                                                           F LUNING AND MINA, NEVADA.

F NEAR OLIVE. FELT EL MODENO AND BREA.
2/29/1937 18-17--0.
                            38.00 118.00 D 4.0
2/29/1937 2-14--0. 35.83 117.85 D
3/ 5/1937 12-47--0. 36.70 121.70 D 4.5
                                                           F 12 MI. W OF HOLLISTER. FELT OVER AREA OF
                                                          F 12 MI. W OF HOLLISTER. FELT OVER AREA OF 2,000 SQUARE MILES. V AT HOLLISTER, SAN JUAN BAUTISTA, SPRECKLES, AND WATSONVILLE. IV AT APTOS, CHUALAR, GILROY, LOMA MAR, MILPITAS, MONTEREY, MORGAN HILL, MOUNTAIN VIEW, SALINAS, SAN MARTIN, SANTA CRUZ, SOQUEL, AND SUNNYVALE. F HAYWARD FAULT, 1 MI. N OF UNIV. OF CALIF.
3/ 8/1937 10-31--0. 37.80 122.20 D 4.5
                                                             CAMPUS, BERKELEY. FELT OVER AN AREA OF 5,000 SQUARE MILES. VII AT BERKELEY.
                                                             VI AT ALBANY, EL CERRITO, ELMHURST AND ORKLAND. V AT ALVARADO, ATHERTON, RODED, HAYWARD, LAFAYETTE, LA HONDA, LOS ALTOS, MENLO PARK, MORAGA, MOUNTAIN VIEW, SAN
                                                             FRANCISCO, PESCADERO, PIEDMONT, REDWOOD CITY, RICHMOND, SAN JOSE, VALLEY FORD.
3/ 9/1937 15-41--0. 37.88 118.50 B 4.0
3/11/1937 6-25--0. 38.25 122.90 0
                                                              NEAR BENTON.
                                                           F TOMALES, MARIN COUNTY.
3/17/1937 13-19- C.O 39.40 12C.13 D
                                                           F HORART MILLS.
3/22/1937 12- 9--0. 37.75 122.50 D
4/11/1937 20-29--0. 35.98 117.28 B 3.5
4/25/1937 4-28--0. 39.00 117.00 D 4.5
                                                           E SAN FRANCISCO.
                                                             SE OF LONE PINE.
WEST CENTRAL NEVADA. V AT POTTS, NEVADA.
IV AT CARSON CITY, IDNE, LUNING, MINA, ROUND MOUNTAIN, AND STEAMBOAT, NEVADA.
                                                           F SAN JOSE
4/28/1937 22-32--C. 37.35 121.90 D
                                                             5 MI. SW OF GILROY. V GILROY.
5/26/1337 2-11--0. 36.95 121.60 D
5/31/1937 15-33- 0.0 37.20 120.70 C 3.0
                                                             10 MILES NORTH OF DOS PALOS.
5/31/1937 20-0--0. 38.50 118.25 D
6/5/1937 19-52--0. 39.90 120.90 D
6/5/1937 21-5--0. 39.90 120.90 D
                                                           F LUNING, NEVADA.
6/12/1937 16-57--0. 39.90 120.90 D
                                                           F CARIBOU.
                                                           F NEAR S TIP OF LOWER LAKE , MODOC COUNTY.

FELT OVER AREA OF 15,000 SQARE MILES. V AT EAGLEVILLE, RAVENDALE, AND RED ROCK,

CALIF., AND FLANIGAN, GERLACH, LOVELOCK, MILL CITY, SULPHUR, AND VYA, NEV. IV
6/18/1937 9- 8--0.
                           41.25 120.00 D
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AT DAVIS CREEK, LIKELY, MADELINE, PULGA, SUSANVILLE, AND WENDEL, CALIF., AND
                                                             JUNGO AND SUTCLIFFE. NEV.
                                                             SW OF LONE PINE.
 6/37/1037 3-40--0.
                            35.98 118.48 C 3.5
 6/27/1937 4-26--0. 37.60 118.27 C 4.0
                                                          F MOCALNO.
                            37.60 118.27 C 3.5
                                                             MOCALNO.
 6/30/1937 6-12--0.
                                                             MOCALNO.
 6/30/1937 6-39--0. 37.60 118.27 C 3.0
                                                             S OF LONE PINE.
 7/18/1937 0-37--0.
                            36.15 117.95 B 3.5
                                                          F SAN FRANCISCO BAY REGION. IV AT LARKSPUR,
 7/18/1937 11-59--0. 37.75 122.38 D
                                                            LOS ALTOS, MILE ROCKS LIGHT STA., MILL VALLEY, REDWOOD CITY, SAN FRANCISCO, AND
                                                             SAN INSE.
 7/29/1937 16-59--C. 36.42 118.17 C 3.5
                                                          F OWENYO, CLOUGH & CAVE RANGER STATION, KERN
                                                            DIVER CANYON.
                                                          E V AT BEAR RIVER. CAMP CONNELL, AND SALT
 8/ 6/1937 3-24--0. 38.80 120.10 0 4.5
                                                             SPRINGS. IV AT BLUE LAKE, COLEVILLE, DARDANELLE, GARDEN VALLEY, MATHER, MOKELUMNE HILL, TOPAZ, AND VADE, CALIFORNIA, AND MINDEN, NEVADA.
                                                          F 4 MI. SE OF UNIV. OF CALIF. CAMPUS,
 8/ 6/1037 3-38--0. 37.83 122.20 0
                                                             BERKELFY. FE
S OF LONE PINE.
                                                                           FELT IN DAKLAND.
8/ 8/1937 9-44--0. 36:10 117:90 C 2:5
8/ 9/1937 7-15--0. 40:00 120:40 D
8/ 9/1937 16-16- 0:0 36:95 121:60 D
8/12/1937 7-31--0. 40:40 124:40 D
                                                          F SPRING GARDEN AND TAYLORSVILLE.
                                                          F 6 MI. SW OF GILDOY. IV AT MOSS LANDING.
F IV CAPE MENDOCINO. FELT ALSO FERNDALE,
                                                             FERNBRIDGE, AND KORBEL.
 8/15/1937 19- 1--0. 36.50 120.70 D 3.0
                                                            S OF FRESNO.
 8/16/1937 7-36-0. 37.12 118.67 B 3.5
8/19/1937 7-3-0. 38.00 118.00 D 4.5
                                                            SW OF BISHOP
                                                          F V AT GILBERT. NEVADA. IV AT BENTON, LAWS,
                                                            AND BISHOP, CALIF., AND GOLDFIELD, MT. MONTGOMERY, AND SILVER PEAK, NEV.
                                                            SE OF HAWTHORNE, NEV.
 8/19/1937 7-49--0. 38.00 118.00 D 3.5
 8/19/1937 20-42--0. 38.00 118.00 0 3.5
8/20/1937 14-51--0. 36.60 121.45 0
8/23/1937 0-32- 0.0 37.50 120.00 4.0
                                                            SE OF HAWTHORNE, NEV.
                                                          F 7 MI. E OF CHUALAR.
F 10 MI. W OF MARIPOSA. FELT AT YOSEMITE,
                                                            EL PORTAL, AND TUOLOMNE MEADOWS.
                                                          F 9MI . N OF LICK OBSERVATORY . FELT AT SAN
 8/29/1937 5-19- 0.0 37.50 121.65 D
                                                            JOSE , BLACK MTN . , AND BEN LOMOND .
9/ 9/1937 22-11--0. 35.97 117.92 C 3.0
9/10/1937 11-10--0. 35.97 117.92 C 3.0
9/10/1937 19-34--0. 35.97 117.92 R 4.0
9/11/1937 21-59- 0.0 36.80 121.50 D
                                                            S OF LONE PINE.
                                                            S OF LONE PINE.
                                                             VICINITY OF LITTLE LAKE.
                                                          BAUTISTA.
 9/16/1937 2-49-0. 35.93 120.48 B 3.5
9/17/1937 14-0-0. 39.55 119.80 D
9/19/1937 B-37-0. 36.00 118.03 B 4.0
                                                          F NEAR PARKFIELD. FELT AT BRADLEY.
                                                          F REND, NEVADA.
                                                            SIERRA NEVADA WEST OF LITTLE LAKE.
                                                          F 9 MILES SE OF PAICINES. FELT AT SALINAS,
 9/18/1937 13-29- 0.0 36.50 121.20 D 4.0
                                                             CHUAL AR. AND SPRECKELES.
                                                             NEAR BENTON.
 9/25/1937 12-20--0.
                            37.70 118-47 C 4-0
                                                          F 5 MI. N OF LONEPINE. FELT OWENYO.
10/21/1937 0-1--0. 36.65 118.10 0
10/27/1937 15=41--0. 36.75 121.50 0
                                                          F HOLLISTER AND SALINAS.
                                                          F 6 MI. N OF GONZALES. IV AT APTOS, CHUALAR
GONZALES, HOLLISTER, KING CITY, SALINAS, SAN LUCAS, SPRECKELES, BIG SUR,
BOULDER CREEK, SAN JAUN BAUTISTA, AND WATSONVILLE.
10/27/1937 15-53- 0.0 36.60 121.50 D 4.5
10/27/1937 15-58--0. 37.17 118.32 C 3.0
10/27/1937 19- 0--0. 36.03 117.57 C 3.0
10/27/1937 20-25- 0.0 36.60 121.50 D
                                                            S OF BISHOP.
                                                          SE OF LONE PINE.
F IV SPRECKELES AND SALINAS.
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10/28/1937 9- 3--0. 36.80 121.40 0
                                                            F HOLLISTER.
10/28/1937 12-27--0. 36.80 121.40 D
                                                            F HOLLISTER.
10/30/1937
               3-26--0. 40.60 124.25 D
                                                            E EEDNOM E.
                                                            F 6 MI. N OF GONZALES.
11/ 1/1937 21-40--0.
                             36-50 121-40 D
                                                            F V SAN LUCAS. FELT ALSO KING CITY, SAN ARDO
F 8 MI. ESE OF U. OF CAL. CAMPUS, BERKELEY.
F 6 MI. E OF GILROY. IV APTOS, GILROY.
11/ 3/1937 10- 0--0-
                             36-15 121-00 D
11/ 5/1937 14-43--0
                              37.83 122.10 D
11/10/1937 12-32-0 •
11/10/1937 14-29-0 •
                             37.00 121.50 D
                                                            F IV GILROY AND WATSONVILLE.
                             37.00 121.60 D
37.00 122.00 D 4.0
11/12/1937 2-50--0.
                                                               SAN BENITO COUNTY.
                                                            F 3 MI. SW OF TRES PINOS. FELT HOLLISTER.
                             36.75 121.40 D
                                                            F HAWTHORNE , NEVADA .
11/27/1937 20-40--0.
                             38.50 118.65 D
                                                           F 19 MI. S OF LOS BANDS. V AT LOS BANDS.
12/ 5/1937 1-36- 0.0 36.80 120.70 D 3.5
12/ 5/1937 1-37- 0.0 36.80 120.70 D 4.0
                                                               SAN BENITO COUNTY.
                                                            F 19 MI. S OF LOS BANOS.
F 4 MI. SE OF CASTROVILLE. III HOLLISTER.
F NEAR AUBERRY. FELT NAVELANCIA.
                2- 5- 0.0 36.80 120.70 D 3.0
12/13/1937 10-15--0. 36.75 121.75 D
12/22/1937 19-24--0.
                             37-10 119-50 D
12/25/1937 13- 1--0.
                                                              COALINGA AREA.
                             36.00 120.00 D 3.0
 1/11/1938 2-25--0.
                                                            F NEAR HOPLAND. FELT OVER AREA OF 1,200
                            39.00 123.10 D
                                                                                    V AT BACHELOR, TALMADGE, UKIAH. IV AT BLUE LAKES, CLOVERDALE.
                                                               SOUARE MILES.
                                                               HOPLAND, LAKEPORT, PHILO, POTTER VALLEY, PRESTON, UPPER LAKE.
                                                            F AFTERSHOCK OF 00-25-0. FELT AT BACHELOR,
CLOVERDALE, HOPLAND, LAKEPORT, PRESTON, TALMADGE, UKIAH.
 1/11/1938 18- A--0. 39-00 123-10 D
 1/17/1938 1-54--0. 35.90 117.90 C 2.5
2/12/1938 20- 0-14. 37.00 122.00 D 4.5
                                                               S OF LONE PINE
                                                              10 MILES WSW OF SANTA CRUZ. FELT OVER A
                                                               LAND AREA OF 3,000 SQUARE MILES. VI AT COYOTE, MORGAN HILL AND SANTA CRUZ. V
AT MOUNTAIN VIEW AND WATSONVILLE. IV AT APTOS, SALINAS, SAN BRUND, SAN MATED,
BELMONT, BEN LOMOND, BERKELEY, BIG SUR, BOULDER CREEK, CARMEL, DAYENPORT,
                                                               FELTON, HALFMOON BAY, LAFAYETTE, LA HONDA, LOMA MAR, LOS GATOS, MILPITAS,
                                                               MONTEREY, MOSS LANDING, NILES, PACIFIC GROVE, PARADISE VALLEY, PIGEON POINT, SAN FRANCISCO, SARATOGA, SEASIDE, AND SOQUEL.
2/21/1938 10-59--0. 35.93 120.48 C 3.0
3/ 1/1933 20-25--0. 40.40 124.00 D 3/14/1938 21-21--0. 38.00 118.00 D 4.0
5/10/1938 10-32--0. 36.20 121.40 D 4.0
                                                               DADVETEID
                                                            F BRIDGEVILLE AND PETROLIA.
                                                               NEVADA.
                                                            F FELT AT HOLLISTER, KING CITY, PINNACLES,
BIG SUR, SALINAS, SOLEDAD, SOOUEL, TRES PINOS. SIX SHOCKS FELT AT PINNACLES.
F FELT AT HOLLISTER, KING CITY, PINNACLES,
 5/10/1938 10-34- 0.0 36.20 121.30
                                                               BIG SUR, SALINAS, SOLEDAD, SOQUEL, TRES PINOS.
                                                            F SAN BENITO.
 5/10/1938 10-41--0. 36.20 121.30 D 4.0
 52(13/1938 19-34--0. 36.20 121.30 0 4.0 52(13/1938 19-34--0. 37.33 118.50 C 3.5 52(27/1938 17-30-0. 39.70 120.25 0
                                                               MONTEREY COUNTY.
                                                              BISHOP.
                                                            F IN CALIFORNIA. 25 MI. FROM RENO. NEVADA.
                                                               FFLT AT CALPINE, CHILCOOT, DOWNIEVILLE, GRANITEVILLE, JOHNSVILLE, LOYALTON,
                                                               SATTLEY, SIERRAVILLE, AND SIERRA CITY.
 5/27/1919 22- 1- 0-0 36-20 121-00 D 3-5
                                                               BEAR VALLEY.
5/77/1948 22-3-0.0 36.20 121.00 D 3.5
7/ 1/1988 18-13-0. 41.00 124.00 D 5.0
7/ 6/1938 6-26-0. 35.80 116.67 C 3.5
7/18/1938 5-40-0. 36.15 117.95 C 2.5
9/ 2/1948 20-39-0. 39.25 123.00 D
9/12/1938 6-10--C. 40.0C 124.00 D 5.5
                                                               COAST OF NORTHERN CALIFORNIA.
                                                               E OF CHINA LAKE
                                                            F NEAR HAIWEE.
                                                            E PENMOOD VALLEY.
                                                                                     FELT UKIAH.
                                                            F FELT OVER AN AREA OF 20,000 SQUARE MILES
                                                               IN NORTHERN CALIFORNIA. VI AT ALDER POINT, BRIDGEVILLE, EEL ROCK, FERNDALE,
                                                               FORTUNA, GARBERVILLE, GRIZZLY CREEK, HARRIS, HOLMES, OCEAN HOUSE, PEPPERWOOD.
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SCOTIA, SHIVELY, UPPER MATTOLE, AND WEDTT. V AT ALTON, ARCATA, BAYSIDE,

BEATRICE, BELL SPRINGS, BENBOW, BRANSCOMB, CAPETOWN, CAPE MENDOCINO, CARLOTTA. COMPICHE, COVELO, CUMMINGS, CUTTEN, DEL LOMA, ETTERSBURG, EUREKA, FERNBRIDGE, FIELDS LANDING, FORT BRAGG, FORT SEWARD, HONEYDEW, ISLAMO MOUNTAIN, LAKE MOUNTAIN, LOLETA, LOW GAP, MIRANDA, PETROLIA, PUNTA GORDA, RIO DELL, SOUTH FORK, SPY ROCK. AND ZENIA. PINNACLES.

9/16/1938 6-11--0. 36.40 121.20 D 4.0 9/17/1938 10-41--0. 37.17 118.32 B 3.0 9/23/1938 8-20--0. 38.00 118.00 D 4.5 9/27/1938 12-23- 0.0 36.45 121.25 C 5.0

- C OF BICHOP NEVADA -
- FELT OVER AN AREA OF 9.000 SQUARE MILES OF WEST CENTRAL CALIFORNIA, ALONG THE COAST AS FAR AS PESCADERO AND TO THE SOUTH TO SAN LUIS OBISPO. INLAND IT WAS FELT AT STEVENSON, MENDOTA, AND COALINGA, V AT BIG SUR, BRYSON, CHUALAR, GONZALES, GREENFIELD, HARMONY, HOLLISTER, JOLON, LOCKWOOD, PAICINES, PARAISO, PINNACLES, SAN ARDO, SAN BENITO, SAN LUCAS, SOLEDAD, AND SPRECKELS. IV AT BEN LOMOND, CAMBRIA, CASTROVILLE, CARMEL, DOS PALOS, GILROY, KING CITY, LOS BANOS, MENDOTA, MONTEREY, PASO ROBLES. PRIEST, SALINAS, SAN LUIS OBISPO, TRES PINOS, WATSONVILLE, ETC.
- F PINNACLES AND PAICINES. VERY UNCERTAIN (PASADENA REPORT) . 3 MILES NE OF GONZALES.
- F OFF COAST. FELT AT EUREKA AND UPPER MATTOLE.
- F PINNACLES AND HOLLISTER. PARKFIELD. SE OF SAN LUIS OBISPO
- F OFF COAST. FELT ARCATA, BEATRICE, EUREKA, AND FIELDS LANDING.
- F E CENTRAL MENDOCINO CO. V TO VI AT POTTER VALLEY, REDWOOD VALLEY, CALPELLA, CLEARLAKE DAKS, TALMADGE, AND UPPER LAKE.
- F NEAR PARKFIELD. FELT AT CRESTON, CAMBRIA, ATASCADERO, MORRO BAY, PARKFIELD, PASO ROBLES, SHANDON, AND SAN MIGUEL. W OF RISHOP
- F FELT AT BELVEDERF, BRISBANE, BURLINGAME, COLMA, FAIRFAX, FORT BAKER, FORT BARRY, HAYWARD, LARKSPUR, MILE ROCKS, MONTARA, MORAGA, DAKLAND, PALO ALTO, ROCKAWAY BEACH, ROSS, SAN BRUND, SAN FRANCISCO, SAN PABLO, SAN RAFAEL, SAUSALITO, SHARK PARK, AND STINSON BEACH.
- 12 MI NW OF MT. HAMILTON. V-VI SAN JOSE.
 V SARATOGA. IV ALVISO. ALSO REPORTED FELT BEN LOMOND, CHUALAR, COYOTE, CUPERTINO, IRVINGTON, (AND PASO ROBLES).
 F FELT OVER AN AREA OF 24,000 SQUARE MILES
- VI AT DELPIEDRA, INDEPENDENCE, TERRA BELLA, AND OF SOUTH-CENTRAL CALIFORNIA. VISALIA. V AT CEDAR GROVE, DUNLAP, FRESNO, SEQUOIA NATIONAL PARK, HETCH HETCHY, LAWS, MAMMOTH LAKES, MATHER, PINEHURST, PINERIDGE, AND STANISLAUS.

F AFTERSHOCK OF 17-42-0. E AFTERSHOCK OF 17-42-0 .

F AFTERSHOCK OF 17-42-0 . F AFTERSHOCK OF 17-42-0. F AFTERSHOCK OF 17-42-0 .

F AFTERSHOCK OF 17-42-0. E BENTON.

F FELT AT BERKELEY. EMERYVILLE. FORT BAKER.

10/14/1938 13-10-0. 37.00 120.00 D 3.5 10/14/1938 15-31-0. 36.58 121.40 D 4.0 10/18/1938 5- 5--0. 40.00 124.00 D 4.5 10/24/1038 13-40--0. 36.45 121.25 D 10/28/1938 10- 7-0. 35.80 120.33 C 3.5 11/ 1/1938 22-46-0. 35.12 120.08 C 3.0

11/10/1938 5-22- 0.0 40.00 124.00 D

9/27/1938 16-20--0. 36.45 121.25 D

11/15/1938 13-48--0. 39.25 123.00 D 11/16/1938 13-39--0. 35.80 120.33 C 3.0

11/25/1938 2-35-0. 37.45 119.00 C 3.5 11/30/1938 5-50- 0.0 37.75 122.55 D

12/ 1/1938 16-17--C. 37.50 121.80 D 4.5

12/ 3/1938 17-42--0. 37.50 118.77 B 5.5

12/ 3/1938 17-45--0. 37.50 118.77 B 4.0

3.5 12/ 3/1938 17-51--0. 37.50 118.77 12/ 3/1938 17-57--0. 37.50 118.77 12/ 3/1938 18-41--0. 37.50 118.77 4.5 12/ 3/1938 22-17--0. 37.50 118.77 4.0 37.50 118.77 4.0 12/ 3/1938 22-20--0.

12/ 4/1938 18-49--0. 37.50 118.77 12/16/1938 10-48--0. 37.67 118.42 C 4.0 12/23/1938 3-20--0. 37.85 122.25 D

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FORT BARRY, LAFAYETTE, MOREGA, PINOLE, AND SAN PABLO.
12/26/1938 5-14--C. 36.00 116.00 C 3.0
                                                            E OF DEATH VALLEY.
 1/ 3/1939 17-39--0. 36.00 117.73 B 2.5
                                                            S OF LONE PINE.
                                                            S OF LONE PINE.
                            36.00 117.73 R 3.0
 1/ 3/1939 17-50--0.
                                                            S OF LONE PINE.
                            36.00 117.73 B 3.0
 1/ 3/1939 17-56--0.
                                                            S OF LONE PINE.
 1/ 3/1030 18= 2==0.
                                                            S OF LONE PINE.
 1/ 3/1939 18- 2-0. 36.00 117.73 B 3.5
                                                            S OF LONE PINE.
                                                          F NEAR COSO HOT SPRINGS. TWENTY-TWO SMALL
 1/ 7/1939 20-21--0.
                           36.00 117.73 B 5.0
                                                            AFTERSHOCKS RECORDED AT HAIWEE. FELT AT BODFISH, DARWIN, HOSPITAL ROCK, KERN
                                                            CANYON, ISABELLA, KERNVILLE, AND TRONA.
 1/ 7/1939 20-34--0. 36.00 117.73 B 3.0
1/ 9/1939 16-18--0. 36.00 117.73 B 3.5
1/11/1939 22- 0--0. 39.00 119.20 D 5.5
                                                            AFTERSHOCK OF 20-21--0.
                                                          F FELT OVER AN AREA OF 8,000 SQUARE MILES IN
                                                            FELL UVER AN AREA UF 0,000 SQUARE MILES IN
EAST-CENTRAL CALIFORNIA AND WEST-CENTRAL NEVADA. VI AT COLEVILLE. V AT
ALTAVILLE AND TUDLUMNE, AND GARDNERVILLE AND HUDSON, NEVADA.
 1/15/1939 23- 0--0. 36.00 117.73 B 3.0
1/21/1939 7- 8--0. 36.45 121.25 D
1/25/1939 2-55--0. 38.20 118.60 D 3.0
                                                         F PINNACLES.
                                                            S OF HAWTHORNE. NEV.
                                                         F 50 MI. W OF EUREKA. FELT WIDELY.
 1/28/1939 20-20--0. 41.15 125.75 D
 2/ 5/1939 3-30--0.
                            35.65 120.65 D
                                                         E DASO POR ES.
                                                         F NEAR PARKFIELD.
 2/ 9/1939 6-44--0.
                            35.93 120.48 C 3.0
 2/18/1939 3-33--0. 40.60 124.10 D
                                                         F CARLOTTA.
                            36.00 117.73 C 3.5
 2/20/1939 5-48--0.
                                                           S OF LONE PINE
                                                         F 9 MI. NW OF SAN BENITO. FELT CHUALAR,
KING CITY, AND PINNACLES.
 2/24/1939 5-27--C. 36.60 121.15 D
                                                            S OF LONE PINE.
 2/25/1939 14-15--0. 36.00 117.73 C 3.5
 2/28/1939 8-36--0. 35.87 117.87 8 3.5
2/28/1939 1-10--0. 38.40 122.75 D
3/ 1/1939 20-51--0. 35.87 117.87 C 3.0
                                                            S OF LONE PINE.
                                                         F SANTA ROSA.
S OF LONE PINE.
 3/ 2/1939 20-13--2. 38.65 122.90 D
                                                         F NEAR GEYSERVILLE. FELT CLOVERDALE AND
                                                            SKAGGS SPRINGS .
 3/ 8/1939 9- 0--0. 39.00 120.40 D
3/12/1939 22- 5--0. 41.00 125.90 D
3/16/1939 3-11--0. 36.00 117.73 C 2.5
                                                         F 2 MI. E OF SONORA.
F 90 MI. W OF TRINIDAD. FELT FERNDALE.
                                                            S OF LONE PINE.
 3/17/1939 13- 9--0. 40.75 126.00 D
                                                         F 100 MI. W OF EUREKA. FELT SCOTIA AND
                                                            UPPER MATTOLE.
 3/20/1939 22-19--0. 36.00 117.73 C 2.5
3/22/1939 3-19--0. 39.90 120.50 D
                                                            S OF LONE PINE.
                                                         F 5 TO 10 MI. N OF PORTOLA. FELT PORTOLA
                                                            AND BLUE CANYON.
 3/25/1939 3-45--0. 36.45 121.25 D
3/27/1939 0-45--0. 37.62 122.05 D
3/23/1939 20-32--0. 40.50 124.00 D
                                                         F PINNACLES.
                                                         F 3 MI. SE OF HAYWARD. FELT CASTRO VALLEY. F BRIDGEVILLE, FORTUNA, SCOTIA, UPPER
                                                            MATTOLE. AND WHITLOW.
 3/29/1939 21- 1--C. 41.00 121.50 D
                                                         F ADIN, BIEBER, BIG VALLEY, FALL RIVER
                                                            MILLS, AND HAT CREEK.
SIERRA NEVADA, SOUTH OF MAMMOTH.
 4/ 3/1939 7-10--0. 37.45 119.00 C 4.0
 4/ 5/-1939 21-43--C. 37.78 122.10 D
                                                         F BERKELEY. CANYON. EAST DAKLAND. DAKLAND.
                                                            AND SAN LEANDRO.
 4/ 9/1939 0- 8--0. 36.30 118.10 D 3.0
                                                            S OF LONE PINE.
 4/26/1939 15-43--0. 36.15 117.95 B 3.0
4/26/1939 16-13--0. 36.15 117.95 B 3.0
                                                            S OF LONE PINE
                                                            S OF LONE PINE.
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4/28/1739 21-59--0. 39.00 117.00 D 4.5
4/28/1939 22-34--0. 40.10 124.30 D
                                                         NEVADA.
                                                       F 30 MI. S OF FERNDALE. FELT EUREKA.
                                                         FERNDALE, SCOTIA, UPPER MATTOLE, AND WHITLOW.
                                                       F FELT AT ARCATA, BLUE LAKE, BRICELAND,

CAPE MENDOCINO, CAPETOWN, CARLOTTA, DYERVILLE, ETTERSBURG, EUREKA, FERNDALE,

GARBERVILLE, HONEYDEW, PETROLIA, SCOTIA, UPPER MATTOLE, AND WESTPORT.
5/ 1/1939 21-54--0. 40-20 124-70 0 4-5
                                                       F IV AT PARKFIELD.
5/ 2/1939 18-49--0. 35.93 120-48 C 4.0
5/11/1939 12-39-0. 35.65 120.65 D
5/11/1939 2-42-0. 38.00 118.00 D 4.5
                                                       E PASO ROBLES.
                                                         NEVADA .
5/11/1939 18- 4--C. 38.58 117.83 C 5.5
                                                       F NEAR MINA, NEVADA. FELT OVER AN AREA OF
                                                         NEAR MINN, NEVAUA. FELL UVER AN AREA UF
38,000 SQUARE MILES. VI AT RAWHIDE, NEVADA. V AT BODIF AND CARSON CITY,
GILBERT, MINA, MT. MONTGOMERY, SCHURZ, AND YERINGTON, NEVADA. IV AT BENTON AND
                                                         BRIDGEPORT, AND DYER, EUREKA, FALLON, GOLDFIELD, HAWTHORNE, HAZEN, HUDSON, IONE,
                                                         LOYELOCK, LUNING, MASON, ROUND MOUNTAIN, SILVER PEAK, AND TONOPAH, NEVADA.
                                                         AFTERSHOCK OF 18-4-0.
AFTERSHOCK OF 18-4-0.
5/11/1939 20-59--C. 38.58 117.83 C 4.5
5/12/1939 6-42--0. 38.58 117.83 C 3.5
5/12/1939 7-49--0. 38.58 117.97 C 4.0
                          38.58 117.83 C 3.5
                                                         AFTERSHOCK OF 18-4-0.
                          38.58 117.83 C 4.5
                                                         NEVADA.
5/13/1939 2-49--0.
                                                         AFTERSHOCK OF 18-4-0.
5/13/1939 21- 8--0.
                          38.58 117.83 C 3.5
5/14/1939 7-59--0.
                          37.50 118.53 C 3.5
                                                         RISHIP.
5/16/1939 8-24--0. 40.35 121.00 D
                                                       F 30 MI. E OF MINERAL. FELT GREENVILLE.
                                                       F NEAR LAWS. FELT AT KEELER AND BISHOP.
5/17/1939 3-42--0.
                          37.50 118.53 C 4.0
                                                       S OF LONE PINE.
5/17/1939 11- 7--0.
                          36.17 117.83 B 3.0
                                                         NEAR MINA. NEVADA.
5/17/1939 18-19--2.
                          38.58 117.83 C 4.5
                          35.80 120.33 C 3.0
                                                         PARKFIELD.
5/18/1939 23- 0--0.
                          38.58 117.83 C 4.0
5/22/1939 3-12--2.
                                                         NEAR MINA. NEVADA.
5/21/1939 19-59--0. 37.50 118.53 C 4.0
                                                      F LAWS.
             2- 5--0.
                          37.20 122.00 D
                                                       F APTOS, LOS GATOS, SANTA CRUZ, SOQUEL.
                                                       F HEALDSBURG-JENNER AREA. FELT HEALDSBURG.
6/ 7/1939 15-14--0. 38.58 122.83 D
6/12/1939 18- 5--0. 37.02 117.25 C 3.5
6/12/1939 18- 8--0. 37.02 117.25 C 3.5
6/12/1939 18-24--0. 37.02 117.25 C 3.5
6/13/1939 17-15--0. 37.02 117.25 B 5.0
                                                       SE OF BISHOP
                                                         SE OF RISHOP
                                                         SE OF BISHOP.
                                                       F FELT AT DARWIN, DEATH VALLEY, AND
                                                         TINEMAHA, AND AT BEATTY, NEVADA.
                                                       F DEATH VALLEY.
6/13/1939 18-10--0. 36.50 116.90 D
                                                        NEAR MINA. NEVADA.
6/21/1939 11-23--J. 38.60 117.80 C 4.5
6/21/1939 13-40--0. 37.65 122.10 D
                                                       F HAYWARD.
6/21/1939 16-34--0. 40.60 124.25 D
                                                       F FERNDALE.
                                                       F 6 MI. NW OF PUNTA GORDA. FELT OVER AREA
6/22/1939 18-42--0. 40.30 124.40 D
                                                         OF 1,000 SQUARE MILES. Y AT UPPER MATTOLE. FELT ALSO CAPE MENDOCINO, CAPETOWN,
                                                         ETTERSBURG, EUREKA, FERNDALE, FIELDS LANDING, LOLETA, PETROLIA, PUNTA GORDA, SCOTIA, AND UPPER MATTOLE.
                                                       F 12 MI. FROM MINERAL. V AT BROKE OFF MTN.
6/23/1939 17-28--0. 40.50 121.50 D
                                                         LOOKOUT STA. FELT MANZANITA LAKE AND MINERAL.
                                                       F MORGAN HILL.
6/24/1939 12-15--0. 37.10 121.65 D
6/24/1939 12-40--0. 36.60 121.85 D
                                                       F MARINA.
6/24/1939 12-55--0. 35.85 120.85 D
6/24/1939 12-59--0. 37.10 121.60 D
6/24/1939 13- 2- 0.0 36.80 121.45 C 5.5
                                                       F BRADIEY.
                                                       F SAN MARTIN.
                                                       F FELT OVER AN AREA OF 10,000 SQUARE MILES
                                                         IN WEST CENTRAL CALIFORNIA, ALONG THE COAST AS FAR NORTH AS HALF MOON BAY AND TO THE SOUTH TO ESTERO BAY. INLAND IT WAS FELT AT VOLTA, TRANQUILITY, AND COALINGA. VII AT HOLLISTER. VI AT KING CITY AND PAICINES. V AT CAYUCOS,
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SOLEDAD, AND SPRECKELS. IV AT APTOS, BEN LOMOND, BIG BASIN, BIG SUR, BOULDER CREEK, CAMBRIA, CARMEL, CASTROVILLE, CHUALAR, GILROY, GONZALES, LOCKMOOD, MILPITAS, MONTEREY, NIPOMO, PASO ROBLES, PINNACLES, SALINAS, SAN ARDO, SAN
                                                           BENITO, SAN JUAN, SAN MIGUEL, SAN SIMEDN, SANTA CRUZ, TRES PINGS. AND
                                                           WATSONVILLE.
6/25/1939 20-53--0。 36.85 121.40 D
6/26/1939 12-45--0。 36.85 121.40 D
6/26/1939 13-36--0。 36.85 121.40 D
                                                        F HOLLISTED.
                                                         F HOLLISTER.
                                                        F AFTERSHOCK OF 13-02-0 ON 6/24/39. IV AT
                                                           HOLLISTER. FELT ALSO CHUALAR.
 6/28/1939 16-54--0. 36.85 121.40 D
                                                        F HOLLISTER.
 7/ 4/1939 10-49- 0.0 36.85 121.40 C 4.0
                                                        F FELT AT HOLLISTER, PAICINES, AND SALINAS.
 7/ 5/1939 6-45--0. 36.65 121.25 D
                                                        F PAICINES.
                                                        F HOLLISTER.
 7/10/1939 18-17- 0.0 36.40 121.25 D
                                                           PINNACLES.
7/12/1939 3-45--0. 40.90 121.50 D
7/15/1939 3-30--0. 38.20 121.50 D
                                                        F CASSEL.
                                                        F SACRAMENTO. BSSA, OCTOBER 1939.
7/16/1939 19- 7--0. 37.33 121.50 D
7/17/1939 9-25--C. 36.85 121.68 D 4.5
                                                        F 9 MI. E OF LICK OBSERVATORY. FELT SAN JOSE
F 4 MILES SE OF WATSONVILLE. V AT MONTERY,
                                                           DLYMPIA, SAN JOSE, WATSONVILLE. IV AT APTOS, AROMAS, BIG BASIN, BLANCO, CARMEL.
                                                           CAPITOLA, CASTROVILLE, FELTON, GILROY, HOLLISTER, HOLY CITY, KING CITY, LAUREL.
                                                           LOS GATOS, MARINA, MOSS LANDING, REDWOOD CITY, SAN FRANCISCO, SANTA CRUZ, SEASIDE, SUNNYVALE, AND WRIGHTS.
7/17/1939 9-45--C. 36.85 121.40 D
7/17/1939 11-55--O. 36.90 121.75 D
7/24/1939 9-30--O. 36.25 121.80 D
                                                        F HOLLISTER
                                                        F WATSONVILLE AREA.
                                                        F BIG SIIP.
7/24/1939 13- 0--C. 36.00 121.15 D
                                                        F JOLON.
S OF LONE PINE.
7/25/1939 11-22--0.
                           36.13 117.92 B 3.0
8/ 8/1939 21-53--0.
                           36.60 121.45 D
                                                        F 12 MI. E OF SPRECKLES. FELT S OF HOLLISTER
8/11/1939 17-36-35.
                           37.02 117.25 C 3.0
                                                        SE OF BISHOP.
F GRASS VALLEY. BSSA. OCTOBER 1939.
8/14/1939 13-44- 0.0 39.15 121.10 D
8/15/1939 8-57- 0.0 36.85 121.40 D
8/15/1939 8-59- 0.0 36.85 121.40 D
                                                        F HOLLISTER.
                                                        F HOLLISTER .
8/15/1939 15-48-18. 36.00 117.58 R 4.0
8/23/1939 11-53-39. 36.50 118.08 C 3.5
                                                          ARGUS MOUNTAINS.
                                                        F NEAR OWENS LAKE. FELT AT CARTAGO. DARWIN.
                                                           KEELER, LONE PINE, AND OWENYO.
                                                        F OWENYO.
8/23/1939 12-20--0. 36.70 118.05 D
8/25/1939 4- 7--0. 40.35 121.60 D
                                                        F MINERAL AND BROKE OFF MIN. LOOKOUT STA.
9/ 1/1939 16-56- 0.0 37.40 121.70 D
                                                        F 9 MI. NW OF LICK OBSERVATORY. FELT IN
                                                          SAN JOSE .
9/ 1/1939 19-18--0
                           36.75 121.35 D
                                                        F 11MI. SW OF HOLLISTER. FELT HOLLISTER.
9/ 5/1939 16-58--0. 37.35 121.90 0
9/ 5/1939 2-50-30. 35.42 121.08 C 3.0
9/12/1939 0-44-38. 36.00 117.73 C 3.0
                                                        F EAST SAN JUSE.
                                                        F OFF SAN LUIS OBISPO CO. FELT AT CAMBRIA.
                                                         S OF LONE PINE.
9/13/1939 14-42-49.
                          35.83 116.58 C 3.0
                                                          E OF CHINA LAKE.
9/20/1939 2-45-29, 36.68 121.56 C 4.0
                                                        F FELT AT BIG SUR, CASTROVILLE, FELTON,
                                                          HOLLISTER, MOSS LANDING, PINNACLES, SALINAS, SAN JOSE, SAN MARTIN, AND SEASIDE.
9/20/1939 11-15--0. 38.60 117.80 D 4.0
                                                          NEVADA.
9/21/1939 9-17--0. 37.00 117.00 D 4.0
9/22/1939 10-55- 0.0 37.75 122.50 D
                                                          ESMERALDA COUNTY, NEVADA.
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F DAKLAND AND SAN FRANCISCO.

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F BRIDGEVILLE. F SALINAS. F HOLLISTER.

9//22/1939 10-55- 0.0 3/*/5 122.50 0 9//22/1939 20-25--0. 40.52 123.85 0 9//23/1939 5-30--0. 36.65 121.65 0 9//23/1939 5-38--0. 36.85 121.40 0

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9/23/1939 6-49- 0.0 36.65 121.65 D
9/24/1939 11-57-40. 36.40 121.00 D 3.5
10/ 3/1939 22-17-0. 40.50 124.10 D
                                                      STONE CANVON
                                                    F SCOTIA.
                                                       S OF HOLLISTER.
10/ 6/1939 4-39- 0.0 36.50 121.50 D 3.5
10/10/1939 6-10--C. 40.50 124.10 D
                                                    F FERNDALE, SCOTIA, UPPER MATTOLE.
10/13/1939 17-30--0.
                          36.65 121.65 D
                                                    F SALINAS.
10/15/1939 7-17-38-0 37-50 118-53 C 3-0
10/19/1939 5-30-17 37-45 119-00 C 3-5
11/ 4/1939 14-11-33 36-20 120-90 D 3-0
                                                      BISHIP.
                                                    F OWENS DIVED GODGE NEAD BISHOP.
                                                    F SALINAS AND SAN LUCAS.
11/ 5/1939 16-14-0. 38.00 118.00 D 4.0
11/ 8/1939 3-25-0. 39.15 121.10 D
                                                       NEVADA.
                                                    F GRASS VALLEY AND AREA. FELT BY MINERS
                                                       DOWN TO 4,500 FEET VERTICAL DEPTH.
11/15/1939 16-12--0. 38.50 118.25 0
                                                    F LUNING, NEVADA.
11/17/1939 20-40-45. 36.15 117.95 B 3.0
11/19/1939 12-37--0. 40.00 121.50 D
                                                      S OF LONE PINE.
                                                      INSKIP BUTTE LOOKOUT (FOREST SERVICE).
12/ 1/1939 13- 5- 4. 36.37 118.02 R 4.0
                                                    F OWENS LAKE. FELT AT CARTAGO AND KEELER.
12/ 1/1939 19-12--0.
                         37.75 122.50 D
                                                    F SAN FRANCISCO.
2/14/1939 3-45-18.
                         36.10 120.00 D 3.0
                                                      E OF COALINGA.
12/17/1939 15-45--0. 40.00 120.80 D
                                                    F TAYLORSVILLE.
12/19/1939 20-12- 9. 35.93 116.87 C 4.0
                                                      SOUTHERN END OF DEATH VALLEY.
12/28/1939 12-15-38. 35.80 120.33 B 5.0
                                                    F FELT OVER AN AREA OF 15,000 SQUARE MILES
                                                      IN WEST-CENTRAL CALIFORNIA, ON THE COAST FROM SANTA CRUZ SOUTH TO POINT ARGUELLO
                                                       AND INLAND TO LOST HILLS AND FRESNO. V AT COALINGA. FRESNO. GREENFIELD. PRIEST.
                                                       SAN ARDO, AND SAN LUCAS. IV AT APTOS, ATASCADERO, BIG SUR, CAMBRIA, CARMEL, CASTROVILLE, CAYUCOS, CHUALAR, COALINGA, GONZALES, HOLLISTER, KING CITY,
                                                       MENDOTA, MONTEREY, MORRO BAY, PARKFIELD, PASO ROBLES, PINNACLES, SALINAS, SAN
                                                       JUAN BAUTISTA, SAN LUIS DRISPO, SANTA CRUZ, SOLEDAD, TAFT, FTC.
12/29/1939 4- 0--C. 36.40 121.25 D
                                                    F PINNACLES.
12/29/1939 9-27-20. 35.83 117.00 C 3.0
12/39/1939 5- 0-47. 35.83 117.00 B 4.0
                                                      SE OF LONE PINE.
                                                       PANAMINT MOUNTAINS.
12/30/1939 15-24-37. 35.80 120.33 B 3.5
                                                    F NEAR PARKFIELD. FELT AT SAN LUCAS.
12/31/1939 10- 3- 0.0 40.85 124.15 D
                                                    F FLIDEKA.
1/14/1940 3- C--0. 38.00 122.35 D
1/16/1940 6- 5- 0.0 37.75 122.15 D
1/23/1940 5-11--0. 37.35 121.90 D
2/ 4/1940 19-23--0. 39.25 120.25 D
                                                    E SOUTH OF NAPA.
                                                    F FASTERN SAN FRANCISCO BAY REGION.
                                                    F NEAR SAN JOSE.
                                                     F LAKE TAHOE REGION. FELT BOCA, CLIO,
                                                       FLORISTON, SODA SPRINGS, TAHDE, AND TRUCKEE.
 2/ 5/1940 2-44- 0.0 37.75 122.50 D
2/ 8/1940 8- 5-59.0 40.00 121.60 5.7
                                                    E SAN ERANCISCO.
                                                    F FELT OVER AN AREA OF 28.000 SOLIARE MI.
                                                       OF NORTH CENTRAL CALIFORNIA, VI AT ALMANOR, BANGOR, BUTTE CITY, CHICO, GRIDLEY
LA PORTE, NEVADA CITY, PARADISE, TEHAMA, AND VINTON, V AT BAXTER, BECKWOARTH,
                                                       BELDEN, BLAIRSDEN, CARIBOU, CHESTER, CORNING, CRESCENT MILLS, DE SABLA, DUTCH
                                                       FLAT, FEATHER RIVER, CAJON, FOREST RANCH, GRANITEVILLE, GREENVILLE, GRIMES,
                                                       MEADOW VALLEY, MILFORD, MILLVILLE, MINERAL, OROVILLE, PORTOLA, QUINCY, SENECA,
                                                    WOODLAND, AND YOLO. NEW BERKELEY SOLUTION 1973. F NO. CALIFORNIA COAST. FELT STRONGLY UKIAH,
 2/13/1940 23-53--0. 40.00 124.00 D
                                                       BRANSCOMB, ELK, FERNDALE, SCOTIA, WESTPORT, FELT ALSO BENBOW, CASPER, COMPTCHE,
                                                       ETTERSBURG, MANCHESTER, NASHMEAD, POTTER VALLEY, SPYROCK, UPPER MATTOLE.
 2/24/1940 9-38- 0. 37.50 118.53 C 4.5
                                                    F SIERRA NEVADA, NORTH OF BISHOP. FELT AT
                                                      DWENS BIVER GORGE.
                                                    F SIERRA NEVADA. NORTH OF BISHOP. FELT AT
 2/24/1940 9-48-37. 37.50 118.53 C 3.5
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YOSEMITE NATIONAL PARK.

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F 2 MILES WEST OF HOLLISTER. V AT GILROY
 3/ 2/1940 13-27--0. 36-80 121-45 B 4-0
                                                    AND MORGAN HILL. IV AT HOLLISTER, MADRONE, SALINAS, SAN FRANCISCO, SAN JOSE, SAN MARTIN, AND WATSONVILLE.
                                                  F NO. CALIFORNIA COAST. FELT AT ARCATA.
 3/ 5/1940 21-56--0- 40-00 124-00 D
                                                    FIFLDS LANDING AND TRINIDAD.
                                                  F NO. CENTRAL CALIFORNIA. FELT STRONGLY AT

DUNSMUIR, KENNETT, MT. SHASTA, REDDING. FELT ALSO AT BAYLES, BIG BEND,

CARRYILLE, CASTELLA, CLAYTON, HAZEL CREEK, AND MCCLOUD.
 3/11/1940 5-23--0. 41-00 122-50 D
 3/19/1940 0-16--0. 36.75 121.75 D
                                                    MONTEREY BAY AREA. FELT HOLLISTER, SALINAS
  3/25/1940 21-19-18. 36.80 117.10 D 4.0
                                                    NORTHERN END OF DEATH VALLEY.
                                                  F FELT AT BIG CREEK, BISHOP, DELPIEDRA,
DUNLAP. HORSE SHOE BEND. LAWS. OWENS RIVER GORGE. AND WOODLAKE.
 4/ 8/1940 13-34-39. 37.58 118.42 B 4.0
 4/18/1940 10-30- 0.0 37.35 121.65 B
                                                  F SAN JOSE, SANTA CLARA, SARATOGA, MORGAN
                                                    HILL, AND MADRONE.
 5/ 4/1940 13-21-38. 35.90 117.80 C 3.0
                                                    S OF LONE PINE.
 5/ 8/1940 17-40- 0-
                         37.88 118.50 C A.O
                                                    MONO COUNTY -
 5/21/1940 10- 5-34.
                         35.28 120.48 B 4.0
                                                  F FELT AT CAMBRIA, CAYUCOS, MORRO BAY, SAN
                                                    LUIS OSISPO, PISMO BEACH, PASO ROBLES, AND ATASCADERO.
 6/ 3/1940 5-42-48.
                         38.80 117.80 D 4.0
                                                    NEVADA.
 6/ 4/1940 1-15--0. 37.35 121.90 D
                                                    SAN INSE.
                                                  F HUMBOLDT COUNTY. FELT FERNDALE, SCOTIA,
                                                    FORTUNA, AND DYERVILLE.
 6/26/1940 8-56- 0. 36.08 120.32 C 3.5
                                                    COALINGA.
 7/ 8/1940 10- 4-45-
                                                  F NEAR MINA. NEVADA. FELT AT BENTON.
                         38.58 117.83 C 4.5
 7/ 8/1940 10-57-40. 37.45 119.00 C 5.0
                                                  F SIERRA NEVADA, SOUTH OF MAMMOTH. FELT AT
                                                    BENTON, RISHOP, HOT CREEK, HUNTINGTON LAKE, LAKESHORE, AND YOSEMITE VALLEY.
 7/21/1940 14-14-50. 37.45 119.00 C 3.5
                                                  F NEAR MANMOTH LAKES. FELT AT BENTON AND
                                                    HOT CREEK.
 7/21/1940 22-15-40.
                         37.45 119.00 C 3.5
                                                  F NEAR MAMMOTH LAKES. FELT AT BENTON AND
                                                    HOT CREEK.
 7/22/1940 23- 0-33.
                        37.63 118.87 B 4.5
                                                  F FELT AT BIG CREEK, BENTON, AND HOT CREEK.
 7/23/1940 4-32-12.
                         37.63 118.87 C 3.5
                                                   NW OF BISHOP.
DEPT. WATER RESOURCES DATA
                         36.23 120.32 B 4.0
 8/13/1940 22- 7-29.
 8/21/1940 6-55-18.
                         37.00 117.00 D 3.5
                                                    S OF AUSTIN, NEV.
 8/26/1940 17-15-28.
                        36.33 118.25 C 3.5
                                                    SW OF LONE PINE.
                                                  MULE PEAK, NEEDLES, AND TOBIAS LOOKOUTS, THE FROG MEADOW AND POSO GUARD STAS.,
CALIF. HOT SPRINGS, GLENDALE, HALEY MEADOWS, KERN RIVER, SEQUOIA NAT'L PARK,
 8/28/1940 4-53-41.
                                                    AND QUAKING ASPEN.
 9/ 7/1940 10-36-30. 36.50 121.50 D 3.5
                                                    S OF HOLLISTER.
 9/ 7/1940 10-38-36. 36.50 121.50 D 3.5
                                                    S OF HOLLISTER.
 9/ 7/1940 13- 2- 6.
                         36.50 121.50 D 4.5
                                                  F FELT AT CARMEL AND SALINAS.
 9/10/1940 1-40-36. 36.13 117.95 R 2.5
9/19/1940 8-20-18.0 37.90 121.70 A 4.0
                                                    S OF LONE PINE.
                                                  F FELT AT BYRON, ISLETON, AND STOCKTON.
 9/20/1940 18-59- 0.0 37.90 121.70 A 4.0
                                                  F FELT AT BYRON.
 9/27/1940 17- 3- 0.0 40.50 125.00 D 4.5
                                                  F V AT BLUE LAKE AND UPPER MATTOLE. IV AT
                                                    ARCATA, EUREKA, AND FERNDALE. ALSO FELT AT BRICELAND, BRIDGEVILLE, CARLOTTA,
                                                    DYERVILLE, ETTERSBURG, GARBERVILLE, KNEELAND, MIRANDA, ORICK, PEPPERWOOD,
                                                    PETROLIA, ROCKPORT, SCOTIA, AND TRINIDAD.
10/6/1940 20:56- 0.0 40:50 124:08 D
10/11/1940 23- 1- 4: 37:17 118:32 C 3:0
10/20/1940 19- 0--0: 37:75 122:15 D
                                                  F SCOTIA AND UPPER MATTOLE.
                                                   BISHOP.
                                                  F SAN FRANCISCO BAY REGION. FELT WALNUT
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						CREEK AND LAFAYETTE.
10/22/1940	11-10.	40.50	124.10	()	-	VI AT SCOTIA. FELT STRONGLY BRIDGEVILLE,
						FERNDALE, FORTUNA, ALTON, UPPER MATTOLE, WEDTT. FELT ALSO ARCATA, BLUE LAKE, BRICELAND, ETTERSBURG, EUREKA, GARBERVILLE, LOLETA, MIRANDA, PEPPERWOOD,
						PETROLIA, YAGER. THREE AFTERSHOCKS SAME DAY FELT AT SCOTIA.
10/27/1040	10-300.	40.50	124.10	D	F	AFTERSHOCK OF 11-01-0. FELT ALTON, FIELDS
1077371940	10-300.	40.50	124010	U		LANDING, BRIDGEVILLE, FORTUNA, SCOTIA, UPPER MATTOLE, YAGER.
10/23/1940	14-500.	40.50	124-10	D	F	AFTER SHOCK OF 11-01-0.
	8-350.					SANTA ROSA - POSSIBLY AN EXPLOSION.
	10-32-12.					BISHOP.
	19-150.					ALTON AND SCOTIA.
	7-240.					FELT OVER LAND AREA OF 2,500 SQUARE MILES.
1171771940	7-740.	40.00	124020		,	V AT FERNDALE, FORTUNA, FIELDS LANDING. IV AT CARLOTTA, KLAMATH, ROCKPORT, UPPER MATTOLE, WESTPORT. V AT CAPETOWN, EUREKA, FORTUNA.
11/10/1040	18-35- 0.0	40.75	124.90	D	F	FELT OVER LAND AREA OF 8,000 SQUARE MI.
11/14/1440	18-33- 0.0	40.15	124.90	0		VI AT BRICELAND, BRIDGEVILLE, HONEYDEW, PUNTA GORDA, UPPER MATTOLE. V AT
						EUREKA, GARBERVILLE, AND FORTUNA.
12/20/1040	23-40-42.	40-00	124-00	0 5	. 5 E	FELT OVER AN AREA OF 9,000 SQUARE MILES OF
12/20/1940	23-40-42.	40.00	124.00	1) 5	• 5 ,	NORTHERN CALIFORNIA. VI AT BENROW, BRICELAND, ETTERSBURG, FERNDALE, FORT BRAGG,
						GARBERVILLE, AND ROCKPORT. V AT FIELDS LANDING, FOREST GLEN, HARRIS, PETROLIA,
						PUNTA GORDA, UPPER LAKE, UPPER MATTOLE, WEDIT, AND WILLITS.
12/24/1940	11-45- 6.	36-00	118.40	R 3	- 0	SW OF LONE PINE.
	6-140.					EUREKA, BLUE LAKE, UPPER MATTOLE, SCOTIA.
	12- 30.					HUMBOLDT BAY REGION. FELT OVER LAND AREA
.,, .,,						OF 2,000 SQUARE MILES. V AT DYERVILLE, EUREKA, FERNDALE, FIELDS LANDING, PUNTA
						GORDA LIGHT STA., MIRANDA, RIO DELL, SHELTER COVE, SHIVELY, WEDTT, BRIDGEVILLE.
1/28/1941	7- 80.	37.10	118.15	D	F	TINEMAHA.
	7-260.					FALLON, NEVADA.
	9-230.					TINEMAHA.
	9-44-42.0				. 4 F	FELT OVER AN AREA OF 17,000 SQUARE MILES
						OF NORTHWESTERN CALIFORNIA AND SOUTHWESTERN OREGON. VI AT ARCATA, EUREKA,
						FERNDALE, PUNTA GORDA, AND SHELTER COVE. V AT BRIDGEVILLE, CARLOTTA, CRESCENT
						CITY, FIELDS LANDING, FOREST GLEN, FORT SEWARD, FORTUNA, GARBERVILLE, KLAMATH,
						LOLETA, ORICK, ORLEANS, SCOTIA, SOUTH FORK, TRINIDAD, UPPER MATTOLE, WEDTT, AND
						WILLOWS CREEK, AND GRANTS PASS AND PORT ORFORD, OREGON.
2/11/1941	4-510.	40.00	125.00	0 4	.5 F	AFTERSHOCK OF 9-44-42. FELT AT SCOTIA.
2/21/1941	11-33-56.	36.15	117.95	C 3	. 5	S OF LONE PINE.
2/28/1941	20-140.	40.50	124.00	D	F	WEDTT AND SCOTIA.
3/ 6/1941	7-180.	37.75	122.15	D	F	SAN LEANDRO AND DAKLAND.
3/16/1941	7-550.	37.10	118.15	D	F	BENBOW AND TINEMAHA.
3/17/1941	4-20-33.	36.13	117.97	C 3	. 0	S OF LONE PINE.
3/19/1941	0-150.	36.75	121.55	D	F	HOLLISTER AND SALINAS.
3/27/1941	10-44-42.	37.20	119.80	C 3	• 5 F	MADERA COUNTY. FELT AT RAYMOND, YOSEMITE
						NATIONAL PARK, KNOLLS, AND MARIPOSA COUNTY.
3/31/1941	20- 1- 0.0	37.60	121.80	В	F	SUNOL.
	12-410.					WOODFORDS, MARKLEEVILLE, YOSEMITE PARK.
4/14/1941	16-16-54.0	37.03	121.97	B 4	.0 F	FELT OVER AN AREA OF 5,000 SQUARE MI. OF
						THE SAN FRANCISCO-MONTEREY HAY REGION. VI AT ALMA, APTOS, CAPITOLA, SANTA CRUZ,
						AND SOQUEL. V AT SAN FRANCISCO, SAN MARTIN, SARATOGA, AND WATSONVILLE.
	2-37-53.					HAIWEE.
5/ 1/1941	13-290.	40.00	121.00	0 4	• 5 F	FELT AT ALMANOR, BUCKS, CARIBOU, DE SABLA,
						PRATTVILLE, AND STIRLING CITY.

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NORTH OF BISHOP.
5/ 8/1941 14-53-40. 37-50 118-53 C 4-0
                                                    NORTH OF BISHOP.

F FELT AT ARCATA, BEN LOMOND, BLUE LAKE,
BOLINAS, CARLOTTA, ETTERSBURG, EUREKA, FERNDALE, FORT BRAGG, LOLETA, PETROLIA,
REDWOOD CITY, RIO DELL, ROCKPORT, SAN FRANCISCO, SANTA CRUZ, SCOTIA, SHIVELEY,
TRINIDAD, UKIAH, UPPER MATTOLE, WILDWOOD, AND WILLITS. ALSO FELT AT DEPDE BAY
5/13/1941 16- 1-54.0 40.30 126.40
                                                       AND KNAPPA. OREGON.
5/15/1941 1-29- 0.0 36.15 120.35 D
                                                    F COAL THEA.
                                                    F COALINGA.
5/15/1941 6- 0-0. 36.15 120.35 D
5/16/1941 2-36-42.0 40.30 125.00 4.5
                                                       AFTERSHOCK OF 16-01-54 OF 5/13.
                                                    AFTERSHOCK OF 16-01-34 OF 3713»

F FELT OVER AN AREA OF 4.500 SQUARE MI. OF

THE SAN FRANCISCO-MONTEREY BAY REGION. VI AT SAN MARTIN. V AT BOULDER CREEK,
5/28/1941 6-23-18.0 37.08 121.75 B 4.5
                                                       KENTFIELD, LOS GATOS, MANOR, SAN CARLOS, SAN FRANCISCO, NILES, AND SOQUEL.
                                                    F INDEPENDENCE.
6/ 8/1941
             2-18- 0.
                         36.72 118.17 R 3.5
                                                    F SMALL SIZE. IV AT HOLLISTER.
SMALL SIZE.
7/ 1/1941 16-14--0.
                         36.85 121.52 A
7/ 6/1941 3-51--0.
                         37.12 121.43 B
                                                    F UKIAH.
7/ 6/1941 8-47--0.
                         39.33 123.25 D
7/13/1941 23-51--0.
                         37.22 122.25 B
                                                       SMALL SIZE .
7/14/1941
            1-44-46.
                         36.05 118.33 C 3.0
                                                       SW OF LONE PINE.
7/15/1941 20-38--0.
                         37. 22 122.25 B
                                                       SMALL SIZE.
                                                    F WADSWORTH, NEVADA.
            3-53-42. 40.00 119.00 D 5.0
7/18/1941
7/19/1941 18-28--0. 37.18 122.30 C
                                                       TINY SIZE
                                                    E MODERATE SIZE. V AT IGNACIO AND NOVATO.
7/23/1941 21-12--0. 38.13 122.55 B
                                                       IV AT KENTFIELD, DLEMA, ROSS, SAN RAFAEL, AND SAUSALITO. III AT PETALUMA.
            1-53-30. 36.00 117.80 C 2.5
                                                       S OF LONE PINE
7/25/1941
7/26/1941 16-51--0. 37.97 121.78 B
7/28/1941 17-22--0. 36.77 121.58 B
                                                       SMALL SIZE .
7/30/1941 21-35--0.
                        37.98 121.97 B
                                                       SMALL SIZE.
                                                       SMALL SIZE.
8/ 2/19A1 13-21-- 0-
                         36.85 121.52 0
                                                       MODERATE SIZE.
8/ 2/1941 17-35--0.
                         37.02 121.55 A
8/ 8/1941 23-43--0.
                         37.20 122.20 D
                                                   SMALL SIZE.

F OWENS VALLEY. FELT KEELER AND LONE PINE.
8/17/1941 11-14-18.
                         36-50 118-00 D 3-5
                                                       MODERATE SIZE.
8/19/1941 21-10--0. 40-17 124-23 C
                                                       SMALL SIZE.
             5-30--0.
                         37.02 121.65 B
8/23/1941
8/25/1941 19-40--0.
                         36.82 121.60 B
                                                       SMALL SIZE.
8/26/1941 A-31--0. 36-82 121-60 B
                                                   F SMALL SIZE. III AT HOLLISTER.
8/27/1941 21-32-14.
                         37.50 118.77 C 3.5
                                                    W OF BISHOP
F MODERATE SIZE. IV AT ST. HELENA.
9/ 2/1941 5-48--0.
                         38.57 122.45 C
9/ 3/1941 1-37--0. 36.90 121.50 D
                                                       TINY SIZE .
9/12/1941 19-56--0.
                         36.77 121.45 C
                                                       TINY SIZE
9/13/1941 20-59- 6. 35.90 116.80 C 3.0
9/14/1941 16-43-32. 37.57 118.73 B 6.0
                                                       SE OF LONE PINE.
                                                    F DWENS VALLEY. FELT OVER AN AREA OF 30,000
                                                       SQUARE MILES.
                                                                        VI AT BENTON, COLUMBIA, COULTERVILLE, GROVELAND, INCLINE,
                                                       OAKHURST, AND TUDLUMNE. V AT AUBERRY, BIG CREEK, CATHAY VALLEY, DELPIEDRA,
DUNLAP. FRESNO. FRIANT. JAMESTOWN, KINGS CANYON NATIONAL PARK, LAKESHORE, LAWS,
                                                       LONE PINE, MAMMOTH LAKES, PINE CREEK CANYON, PORTERVILLE, RAISEN, REDS MEADOW,
                                                       SHAVER LAKE, AND SONORA, AND DYER AND MT. MONTGOMERY, NEVADA.
                                                    F AFTERSHOCK OF 16-43-32.
9/14/1941 16-54-58. 37.57 118.73 8 4.5
9/14/1941 18-21-19-0 37-57 118-73 8 5-5
                                                    F AFTERSHOCK OF 16-43-32. FELT OVER AN
                                                       AREA OF 27,000 SQUARE MI. VI AT PINEDALE AND PINERIDGE. Y AT ASH PEAK, BIG
                                                    CREEK, BRECKENRIDGE, EL PORTAL KINGS CANYON NATIONAL PARK, PORTERVILLE, RAISIN, REEDLEY, AND RIVERDALE, AND MT. MONTGOMERY, NEVADA.

F OWENS VALLEY. FELT OVER AN AREA OF
9/14/1941 18-39-12, 37-57 118-73 8 6-0
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36.000 SQUARE MILES. VI AT NORTH FORK AND YOSEMITE VALLEY. V AT BIG CREEK.

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36,000 SQUARE MILES. VI AT NORTH FORK AND TOSEMITE VALLEY. V AT BIG GREEK, BRECKENRIDGE, DUNLAP, EL PORTAL, KAWEAH, KINGS CANYON NATIONAL PARK, MADERA, MAMMOTH LAKES, NEWMAN, OAKHURST, O<sup>8</sup>NEALS, PINERIDGE, POPTERVILLE, AND RAISIN,
                                                       AND DYER AND MT. MONTGOMERY, NEVADA.
 9/14/1941 18-54-18. 37.57 118.73 8 4.0
                                                       AFTERSHOCK OF 18-39-12.
                                                    F AFTERSHOCK OF 18-39-12. FELT AT BIG CREEK
 9/14/1941 21-16- 1. 37.57 118.73 B 5.0
                                                                      III AT HOLLISTER.
 9/15/1941 4-43--0.
                         36.98 121.48 C
                                                    F SMALL SIZE.
 9/17/1941 14-24--0. 37.38 121.68 B
                                                       MODERATE SIZE. ONE OF LARGER FORESHOCKS
                                                       OF NEXT.
 9/18/1941 7-33--0. 37.38 121.68 A 4.0
                                                    F V AT ALVARADO, ALVISO, BERKELEY, BOULDER
                                                      CREEK, BURLINGAME, COLMA, EL GRANADA, FELTON, HALF MOON BAY, HAYWARD, MILL VALLEY, MILPITAS, MT. HAMILTON, NEWARK, OLYMPIA, REDWOOD CITY, SAN FRANCISCO, SANTA CRUZ, SARATOGA, SQQUEL, AND SUNNYVALE.
                                                    F OWENS VALLEY. FELT AT BISHOP AND HIGH
 9/22/1941 3-55-57. 37.57 118.73 8 3.5
                                                       STERRA RANGER STATION.
 9/24/1941 13-50--0. 37.70 121.80 D
                                                       TINY SIZE.
                                                       SE OF LONE PINE
 9/24/1941 18-34-25.
                         35.93 116.87 C 3.0
                                                       SE OF LONE PINE.
9/25/1941 9-50-59.
                          35.88 117.58 C 3.0
                         36.80 121.45 A
                                                    F SMALL SIZE. IV AT HOLLISTER. ALSO FELT
                                                       AT SALINAS.
                                                       SMALL SIZE.
 9/26/1941 20-25--0.
                          36.70 121.40 D
                                                       SMALL SIZE.
                                                       OWENS VALLEY AFTERSHOCK.
 9/27/1941 19-48-37.
                          37.57 118.73 B 4.0
                                                      OWENS VALLEY AFTERSHOCK.
 0/28/1941 15- 5-14.
                          37.57 118.73 B 4.0
                                                    F FELT OVER AN AREA OF 12,000 SQUARE MILES
10/ 3/1941 16-13- 8. 40-40 124-80 C 6-4
                                                       OF NORTHWESTERN CALIFORNIA AND SOUTHWESTERN DREGON. VII AT EUREKA. VI AT
                                                       FERNDALE, FIELDS LANDING, KORBEL, PEPPERWOOD, PUNTA GORDA, RIO DELL, ROCKPORT, AND UPPER MATTOLE. V AT ARCATA, BENBOW, BRICELAND, CAPE MENDOCINO, CARLOTTA, DYERVILLE, GARBERVILLE, HOLMES, HYAMPOM, KNEELAND, LOLETA, PETROLIA, AND
                                                       WILDWOOD.
                                                       FUREKA AFTERSHOCK.
107 6/1941 6-59--0. 40-40 125-00 B 5-0
                                                       OWENS VALLEY AFTERSHOCK.
10/ 7/1941 20-16-20. 37.57 118.73 B 3.5
10/ 8/1941 10-11-47.
                          37.57 118.73 P 3.0
                                                       OWENS VALLEY AFTERSHOCK.
10/ 9/1941 2-26-11.
                          36.63 117.85 B 3.5
                                                       E OF LONE PINE.
10/ 9/1941 14-20-45.
                          37.57 118.73 R 3.5
                                                       OWENS VALLEY AFTERSHOCK.
10/11/1941 23-21--^.
                          37.18 122.27 C
                                                       TINY SIZE.
                                                    F OWENS VALLEY. FELT AT BISHOP.
10/13/1941 7-24-51.0 37.57 118.73 B 3.5
10/14/1941 16-11--0. 39.40 119.60 D
                                                    F FORESHOCK OF 16-32-0.
                                                    F FELT STRONGLY AT LOYALTON, NORDEN, AND
10/14/1941 16-32--0. 39.40 119.60 C
                                                       TRUCKEE, AND RENO, NEV. ALSO FELT AT BOCA AND DONNER SUMMIT AND VERDI, NEV.
                                                    NE OF LONE PINE.
F OWENS VALLEY. FELT AT BISHOP.
10/15/1941 4-49- 0.
                         37.00 117.50 D 3.0
10/18/1941 10-37-59.
                          37.57 118.73 8 3.5
                          37.57 118.73 B 3.5
10/23/1941 4- 1-48.
                                                      OWENS VALLEY
10/23/1941 20-44-31.
                          37.57 118.73 B 4.5
                                                    F OWENS VALLEY. FELT AT DELPIEDRA.
10/24/1941 17-48-57.
                                                      OWENS VALLEY AFTERSHOCK .
                          37.57 118.73 B 4.0
10/25/1941 7- 8--0.
                          39.50 122.17 D
                                                    F LAS PLUMAS AND WILLOWS.
10/26/1941 9-46--0.
                          37.80 122.20 D
                                                      TINY SIZE. NW OF HAYWARD.
10/26/1941 14-20--0.
                          37.05 121.68 C
                                                       TINY SIZE
10/27/1941 0-42-22. 37.57 118.73 P 3.5
10/27/1941 6-59--0. 37.58 121.78 C
11/ 4/1941 2- 9-28.0 37.57 118.73 P 4.0
                          37.57 118.73 8 3.5
                                                   F OWENS VALLEY. FELT AT BISHOP.
                                                       TINY SIZE .
                                                  F FELT IN BISHOP .
11/ 4/1941 23-13--0. 37.20 122.30 D
                                                      TINY SIZE .
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F EUREKA, FERNDALE, PETROLIA.
11/ 6/1941 10-32--0. 40.83 124.17 D
11/ 6/1941 11-59--0.
                        36.60 121.20 D
                                                    TINY SIZE.
11/10/1941 14-56- 6.
                         77.57 119.73 ( 3.0
                                                  F TULARE CO. FELT KAWEAH, SPRINGVILLE.
11/12/1941 5-33--0-
                         36.42 119.00 D
11/12/1941 12-34--0
                         36.58 121.32 C
                                                    TINY STIF
11/15/1941 16-43- 5.
                         37.57 118.73 B 4.0
                                                    OWENS VALLEY.
                                                  F TINY SIZE. FELT AT TRES PINOS.

F SMALL SIZE. FELT AT CAPE MENDOCINO AND

PETROLIA. FORESHOCKS AT 0218, 0228, AND 0312. AFTERSHOCK AT 0419.
11/17/1941 11-14-0. 36.76 121.40 C
                        36.76 121.40 €
                                                    SMALL SIZE.
11/19/1941 5-57--0.
                         37.05 121.55 C
                                                    SMALL SIZE .
11/20/1941 3-20--0.
                         36.87 121.23 C
                                                    SMALL SIZE.
11/20/1941 11-42--0.
                         36.72 121.50 C
11/21/1941 13- 8--0.
                         37.20 122.30 D
                                                    SMALL SITE.
                                                  F MODERATE SIZE. FELT AT CAPE MENDOCINO.
11/24/1941 10-51--0.
                         40-20 124-20 D
                         37.57 118.73 C 3.0
                                                    OWENS VALLEY.
11/25/1941 14-45-25
                         36.58 121.27 C
                                                     SMALL SIZE .
11/26/1941 2-59--0
11/26/1941 10-31-35.
                         37.37 118.08 C 3.5
                                                  E OF BISHOP.
F ORLEANS: HOOPA, SALYER RANGER STATION.
12/ 7/1941 7-35--0.
                         A1-00 123-50 D
                         36-00 121-00 D 3-5
                                                    NEAR KING CITY.
                                                  F TINY SIZE. FELT AT GILROY.
12/16/1941 19-48--0.
                         36.80 121.40 D
                                                    SMALL SIZE.
12/18/1941 7-25--0.
                         37.53 121.48 A
 2/18/1941 20-59- 0.
                         37-57 118-73 8 4.0
                                                  F NEAR PARKFIELD. NOT RECORDED ON BERKELEY
12/22/1041 0-54- 0- 35-93 120-48 ( 4.0
                                                    NETWORK.
                                                  SMALL SIZE.

F OWENS VALLEY. FELT DVER AN AREA DF 28,000
12/25/1941 3-24--0. 36.92 122.28 8
12/31/1941 6-48-44. 37.57 118.73 R 5.5
                                                    SQUARE MILES. VI AT OWENS RIVER GORGE. V AT BENTON, FRESNO, KINGS CANYON NATIONAL PARK, LAWS, MIRAMONTE, TIMEMAHA, AND YOSEMITE, AND DYER, NEVADA.
                                                  F AFTERSHOCK OF 6-48-44. OWENS RIVER GORGE.
F AFTERSHOCK OF 6-48-44. OWENS RIVER GORGE.
12/31/1941 8- 8-15. 37.57 118.73 8 4.0
12/31/1941 11- 2-25.
                         37.57 118.73 B 4.0
                                                  F AFTERSHOCK OF 6-48-44. OWENS RIVER GORGE.
F AFTERSHOCK OF 6-48-44. OWENS RIVER GORGE.
12/31/1941 11-14-57
                         37-57 118-73 B 4-0
                         37.57
                                118.73
12/31/1941 12-20-15.0
                                                  E AFTERSHOCK OF 6-48-44. OWENS RIVER GORGE.
12/31/1941 18- 5-44.
                         37.57 118.73 B 4.5
                                                    OWENS VALLEY.
12/31/1941 20-30-58.
                         37.57 118.73 B 3.5
                         37.57 118.73 B 3.5
 1/ 1/1942 1- 2-21.
                                                    OWENS VALLEY.
                         37.57 118.73 B 4.5
 1/ 1/1942 21-56-31.
                         37.57 118.73 B 3.0
                                                    OWENS VALLEY.
                                                    OWENS VALLEY.
 1/ 2/1942 15- 9- 8.
1/ 3/1942 16- 0- 6.
                         37.57 118.73 B 3.0
                                                    OWENS VALLEY.
                         37.57 118.73 C 2.5
 1/ 6/1942 0- 9-32.
1/ 6/1942 8- 1-44.
                         37.57 118.73 C
                                                     OWENS VALLEY.
                         37.57 118.73 C 3.5
                                                     OWENS VALLEY
                                                  F PRIEST VALLEY. RECORDED AT TIMEMAHA.
F PRIEST VALLEY. RECORDED AT TIMEMAHA.
 1/ 6/1942 9-20--0.
                         36.15 120.65 D
                         36.15 120.65 D
 1/ 6/1942 13- 9-58.
                         37.57 118.73 C 3.5
                                                    OWENS VALLEY.
    9/1942 20-23-10.
                         36.70 121.50 D 2.6
                                                     SW OF VINEYARD
  1/11/1942 20-27-56.
                         36.23 118.00 C 3.0
                                                    S OF LONE PINE
                                                     S OF LONE PINE.
                         36.23 118.00 C 3.0
 1/12/1942 3-28-49.
 1/13/1942 20-10-26.
                         37.57 118.73 C 3.0
                                                     OWENS VALLEY.
 1/14/1942
            9-44-40.
                         36.65 121.22 B 4.2
                                                  F FELT STRONGLY AT CHUALAR AND HOLLISTER.
                                                    ALSO FELT AT BIG SUR, GONZALES AND PINNACLES. DEPTH ABOUT 5KM.
 1/15/1942 11-47-54。 37.57 118.73 C 3.0
1/15/1942 12-30-0。 40.25 124.10 D
                                                  F UPPER MATTOLE.
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1/15/1942 13-23-20. 36.25 118.00 C 3.0
1/18/1942 3- 3-54. 36.67 121.17 B 3.8
1/18/1942 7-17-17. 40.20 125.10 D 4.1
                                                                               F AV AT KING CITY AND PINNACLES.
                                                                              F IV AT FERNDALE AND SCOTIA. FELT AT CAPE
                                                                                 MENDOCINO AND PETROLIA.
                                                                              E DINNACI ES
 1/19/1942 11-35--0. 36.40 121.25 D
                                                                              F PINNACLES.
                                     36-40 121-25 D
 1/18/1942 16-50--0.
 1/19/1942 2- 5-19. 37.02 121.82 C 3.0
                                                                              NORTH OF WATSONVILLE.
                                                                                 WEST OF HOLLISTER.
 1/21/1942 19-16-41.
                                       36.85 121.52 C 3.4
 1/23/1942 11-11-31.
                                      37.57 118.73 C 3.0
                                                                                 OWENS VALLEY.
2/ 1/1942 0-49- 9. 37.57 118.73 C 3.5
                                                                               F BISHOP.
2/ 4/1942 3-25-26.0 37.57 118.73 B 4.0
2/ 4/1942 3-32- 3.0 37.57 118.73 B 4.0
                                                                               F RISHOP.
                                                                               F RISHOP.
2/ 4/1942 3-47-12. 37.57 118.73 B 3.5
2/ 4/1942 9- 9-24. 37.00 121.30 D 4.0
                                                                                  BISHOP.
                                                                              E WOLL ISTED
 2/ 4/1942 11- 5--0.
                                     37-00 121-30 D
                                                                               F HOLLISTER.
2/11/1942 3- 4--0. 37.00 121.30 D
2/11/1942 3- 4--0. 37.00 121.30 D
2/11/1942 3- 8--0. 37.00 121.30 D
2/11/1942 6-17-22. 37.57 118.73 C 3.0
                                                                               F HOLLISTER.
                                                                              F HOLLISTER.
                                                                                OWENS VALLEY.
2/11/1942 3- 3-33. 36.92 121.68 C 3.3
2/12/1942 3- 7-3H. 37.02 121.70 C 2.7
2/19/1942 13-33--0. 36.40 121.25 D
                                                                             F III AT HOLLISTER.
                                                                             E DINNACIES.
2/21/1942 1-33--0. 36.80 121.25 D
2/21/1942 0-57-29. 36.80 121.50 D 2.5
2/21/1942 1- 2- 0. 36.80 121.50 D 2.5
2/21/1942 9-35-15. 36.80 121.50 D 2.5
2/22/1942 8- 4- 4. 36.80 121.50 D 2.4
                                                                              WEST OF HOLLISTER.
                                                                                   WEST OF HOLLISTER.
                                                                                   WEST OF HOLLISTER.
                                                                                  WEST OF HOLLISTER.
2/22/1942 8- 4- 4. 36.80 121.50 H 2.+
2/25/1942 16- 9-24. 38.40 118.50 D 3.5
2/25/1942 16-12-24. 38.40 118.50 D 4.0
2/26/1942 18-32-39. 37.57 118.73 8 4.0
2/27/1942 1-22-50. 37.57 118.73 C 4.0
                                                                              F HAWTHORNE, NEVADA.
                                                                                 OWENS VALLEY.
                                                                                  OWENS VALLEY.
2/27/1942 1-22-50. 37.57 118.73 C 4.0
3/ 1/1942 1-12-10. 37.57 118.73 C 3.0
3/ 1/1942 3-59-20. 37.57 118.73 C 3.0
3/ 2/1942 23-27- 2. 37.57 118.73 C 3.0
3/ 6/1942 1-1-12. 36.78 121.52 C 3.7
3/ 6/1942 11- 0--0. 40.35 121.60 0
                                                                                  OWENS VALLEY.
                                                                                  OWENS VALLEY
                                                                                 OWENS VALLEY
                                                                                   FELT IN PAJARO VALLEY.
                                                                              F MINERAL .
3/ 8/1942 11- 0--0. 40.55 121.60 0
3/ 8/1942 4-47- 6. 37.57 118.73 C 3.0
3/ 9/1942 0- 5-36. 37.57 118.73 C 3.5
                                                                                  OWENS VALLEY.
                                                                                  OWENS VALLEY.
 3/20/1942 12-55-14.
                                     37.57 118.73 C 3.0
                                                                                 OWENS VALLEY
                                                                              F STEWARTS POINT.
 3/21/1942 17-10--0. 38.65 123.40 D
3/21/1942 17-10-0. 38.65 123.40 0
3/22/1942 14-32-36. 36.80 121.60 C 3.3
3/25/1942 0-0-0. 36.40 121.25 D
3/31/1942 13-26-12. 36.25 118.08 C 3.5
3/31/1942 14-21- 7. 36.72 121.25 C 3.3
4/ 4/1942 14-10-0. 40.00 121.00 D
4/ 7/1942 6- 9-29. 36.78 121.55 C 3.1
4/ 7/1942 11- 3-0. 37.00 121.30 D
                                                                                 WEST OF HOLLISTER.
                                                                              F PINNACLES. LIGHT SHOCK.
                                                                                S OF LONE PINE.
                                                                                    IV AT HOLLISTER.
                                                                              F BUCKS LAKE, CARIBOU, PRATTVILLE. LIGHT.
                                                                                   DEPTH ABOUT 5 KM.
                                                                              F HOLLISTER.
4/ 7/1942 11- 3--0. 37.00 121.30 0
4/ 7/1942 11- 3-18. 37.00 121.30 0 2.9
4/ 8/1942 14-20-14. 36.60 121.30 A 4.0
4/10/1942 7-26-30. 36.93 121.43 C 2.9
4/11/1942 8-40-59. 36.75 121.32 8 4.0
4/11/1942 9-20-0. 36.65 121.65 D
4/13/1942 18-22-26. 37.38 121.75 C 2.8
                                                                                 EAST OF GILROY.
                                                                                    IV AT GREENFIELD, PINNACLES AND SOLEDAD.
                                                                               EAST OF GILROY.
                                                                                    IV AT HOLLISTER AND SOLEDAD.
                                                                             F SALINAS. LIGHT SHOCK.
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4/17/1942 12-34-36. 37.60 118.70 D 3.0
                                                   OUTS UATTEV
                                                   NE OF VINEYARD
4/18/1942 1-22-35. 36.80 121-20 D 3.4
4/21/1942 19-19- 0.
                        37.90 121.80 D 1.9
                                                   SW OF LONE PINE.
4/29/1942 1-26-40.
                        35.95 118.58 C 3.0
5/ 3/1942 18-12-10.
                                                   SW OF UTNEVADO
                        36-77 121-48 C 3-0
                                                     DEPTH ABOUT 10 KM. NW OF MT. HAMILTON.
5/ 3/1942 20-22- 5.
                        37.37 121.73 A 2.5
                        37.60 118.70 D 3.0
                                                   RICHOR
5/ 5/1942 12-33--0.
                        37.25 122.00 D
                                                 E LOS GATOS.
5/ 6/1942 22-46- 0-
                        37.60 118.70 D 3.5
                                                   RICHOP
                                                   COALINGUA. (BSSA, JULY 1942).
5/27/1942 4- 0--0.
                        37.25 122.00 D
5/31/1942 16-38- 7.
                        37.97 121.67 B 3.2
                                                   IV AT WATSONVILLE.
5/31/1942 23-57-50.
                        37.20 121.70 D 2.3
                                                    NORTHERN OWENS VALLEY .
6/ 5/1942 3-19-38.
6/ 5/1942 9-14-16.
                        37.57 118.73 C 4.0
                        37.57 118.73 D 3.0
                                                   NORTHERN OWENS VALLEY.
                                                 F FELT OVER AN AREA OF 2,500 SQUARE MILES IN
THE MONTEREY BAY AREA. V AT APTOS, BOULDER CREEK, WATSONVILLE. ALSO FELT AT
BIG SUR, CARMEL, HOLLISTER, LAUREL, LOS GATOS, MARINA, MONTEREY, MORGAN HILL,
6/ 5/1942 12-33-25。 36.98 121.67 B 4.2
                                                    SALINAS, SAN ANSELMO, SAN JOSE, SOQUEL, AND SOUTH SAN FRANCISCO.
6/ 9/1942 14-10--0. 37.00 121.30 D
                                                 F HOLLISTER.
                                                 E VI AT VERRI. NEVARA. V AT FALLON. RENO.
6/ 9/1942 22-51--0. 39.50 119.90 D
                                                   AND STEAMBOAT . NEVADA .
                        37.60 118.70 D 3.0
                                                   OWENS VALLEY.
6/10/1942
            0- 5-12.
6/18/1942 23-33- 2.
                        37.47 121.68 C 3.0
                                                 F FELT SAN JOSE.
6/22/1942 22-13-51.
                        36.25 117.97 B 4.0
                                                 E COSO MINCTION (SOUTH HATWEE).
                                                 F COSO JUNCTION (SOUTH HAIWEE).
6/22/1242 23-51- 7
                        36.25 117.07 B A.O
6/22/1942 23-53-27
                        36.25 117.97 C 3.5
                                                   COSO JUNCTION (SOUTH HAIWEE).
6/29/1942 21- 7-30.
                        35.60 120.80 D 4.0
                                                 F IV AT CAMBRIA AND SAN LUIS OBISPO.
7/ 4/1942 8-52-25.
7/ 5/1942 -0--0-0
                                                 F NEAR HAIWEE. FELT COSO JUNCTION.
F HEALDSBURG. FOUR SHOCKS. BSSA. OCT. 1942.
                        36.25 117.97 C 3.5
                        38.60 122.85 D
7/ 6/1942 21-11-40.
                       37.57 118.73 C 4.5
                                                 F IV AT BISHOP
                        37.30 118.68 C 3.8
                                                   WEST OF BISHOP.
   8/1942 10- 5-50.
7/ 9/1942 12-23--0.
                        39.15 122.15 D
                                                 F WILLIAMS, COLUSA CO.
7/10/1942 22-57--0.
                        39,20 119,75 D
                                                 F CARSON CITY, NEVADA.
7/13/1942 5-12--0.
                        39.15 122.15 D
                                                 F WILLIAMS.
                        39.15 122.10 D
7/14/1942 16-42--0.
                                                 F WILLIAMS AND COLUSA.
7/16/1942 9-26-30.
7/16/1942 9-29--0.
                        37.18 122.22 8 2.8
                                                   SW OF SAN JOSE .
                       37.20 122.40 D
                                                 F PIGEON POINT LIGHT STA. (PESCADERO).
7/19/1942 10-42- 7.
                       36-A0 121-10 D 1-6
                                                   SW OF II ANADA.
                                                   HAIWEE.
                        36.25 117.97 C 3.5
8/ 4/1942 1- 2- 5.
                                                     FORESHOCK OF QUAKE AT 2105.
8/ 4/1942 21- 5-53. 37.15 121.40 B 2.9
8/ 7/1942 2- 2-26. 37.57 121.67 B 2.5
                                                   NE OF GILROY.
                                                   SE OF LIVERMORE,
8/ 8/1942 22-30-27.
                       36.90 121.28 C 3.5
8/ 9/1942 1-17-47. 36.9C 121.28 B 2.2
                                                 F AFTERSHOCK OF QUAKE ON AUGUST 8 AT 2230.
                                                 III IN HOLLISTER. DEPTH ABOUT 10 KM.

F IV IN MILL VALLEY, III IN SAN FRANCISCO.

F V AT MANZANITA LAKE.
8/10/1942 11-50-46. 37.90 122.57 C 2.8
8/11/1942 5-30--0. 40.50 121.65 D
8/14/1942 15-14-13. 37.98 121.88 A 3.6
                                                    IV AT ANTIOCH.
8/18/1942 21-55-24. 38.60 118.50 D 5.0
                                                 F FELT OVER AN AREA OF 7,000 SQUARE MILES
                                                   NEAR HAWTHORNE, NEVADA. VI AT MASON AND MT. MONTGOMERY, NEVADA. IV AT BENTON,
BODIE, AND BRIDGEPORT, AND FALLON, HAWTHORNE, AND YERINGTON, NEVADA.
8/20/1942 11-11-48. 37.57 118.73 C 4.0
                                                   NORTHERN OWENS VALLEY.
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8/20/1942 12- 9-38. 37.57 118.73 C 4.0
                                                  NORTHERN OWENS VALLEY .
                       37.57 118.73 C 4.0
                                                   NORTHERN OWENS VALLEY.
 8/20/1942 15-26-31.
                                                   NORTHERN OWENS VALLEY.
 8/21/1942 23-36-41.
 8/28/1942 6-13-33.
8/31/1942 5-27-52.
                        37.95 121.73 B 2.9
                                                   EAST OF ANTIOCH
                        36.90 121.70 D 3.2
                                                 F PAJARO VALLEY. (BSSA, OCT. 1942.)
 9/ 2/1942 22- 3--0.
                        38.95 118.80 D
                                                 F SCHURZ, NEVADA.
                        37.57 118.73 C 4.0
                                                  NOTHERN OWENS VALLEY
 9/ 7/1942 19-50-11.
                                                    IV AT HOLLISTER.
 9/12/1942 17-49- 9.
                        36 78 131 A7 8 3 A
                                                   SW OF KING CITY.
 9/15/1942 16-36-33.
                        36.13 122.18 B 3.0
 9/19/1942 0-13-50.
9/23/1942 8- 6-22.
                       37.47 121.75 B 2.5
                                                   SOUTH OF LIVERMORF.
                       37.27 121.75 C 1.7
                                                   SW OF MT. HAMILTON.
                                                 F 5 MI. FROM UNIV. OF CALIFORNIA CAMPUS,

BERKELEY. FELT IN BERKELEY AND EL CERRITO.
 9/25/1942 7-19--0.
                        37.90 122.25 D
9/28/1942 8-37--^. 39.15 122.15 0
9/29/1942 8-29--0. 39.25 122.15 0
                                                  IV AT WILLIAMS. (BSSA, DCT. 1942).
                                                 F V AT WILLIAMS AND WILLOWS. FELT ALSO AT
                                                   MONTICELLO AND MERIDAN. (BSSA, OCT. 1942)
                                                   EAST DE SONODA.
10/ 4/1942 17-49-54. 38.07 120.27 C 3.8
                                                   NEAD WATCONVILLE
10/ 4/1942 23-24-13. 36.93 121.78 C 2.1
                                                 F CRANE FLAT, YOSEMITE VALLEY, AND MATHER.
10/ 6/1942 19-45--0.
                        37.75 119.75 D
10/ 7/1942 2-31-32.
10/ 8/1942 2-30-45.
                                                  S OF LONE PINE.
                       36-25 117-97 C 3-0
                                                   SOUTH OF DOS PALOS.
                        36.87 120.65 C 3.5
10/11/1942 23-48-23.
                        36.48 121.40 C 1.9
                                                    FORESHOCK OF QUAKE ON OCTOBER 15 AT 1353.
                       37.65 119.85 D
10/13/1942 19-45--0.
                                                F EL PORTAL .
10/15/1942 12- 9--0.
                       39.00 120.00 D
                                                 F CAMP RICHARDSON AND TRUCKEE.
                                                  IV AT BIG SUR, GONZALES, GREENFIELD, HOLLISTER, SALINAS AND SOLEDAD.
10/15/1942 13-53-56. 36.48 121.40 B 4.3
10/16/1942 10- 7-27. 36.25 117.97 C 4.0
                                                   NEAR HAIWEE.
10/17/1942 6-10--0. 38.50 122.50 D
10/18/1942 8- 0--0. 36.00 121.00 D
                                                F ST. HELENA (POPE VALLEY).
                                                F CAMBRIA.
10/18/1942 12- 1-42.
                                                F V AT CAMBRIA.
                       36.00 121.00 D
10/20/1942 10-25--0.
                                                F V AT CAMBRIA.
                       36.00 121.00 D
                        36.92 121.53 C 3.3
                                                   SOUTH OF GILROY.
10/22/1942 12- 0--0. 39.25 120.00 D
                                                 F LAKE TAHOE. FELT AT TRUCKEE.
10/26/1942 1- 9- 1.
                        36.40 121.60 D 1.8
                                                    DEPTH ABOUT 12 KM.
10/29/1942 17- 6-18.
                       37.57 118.73 D 3.5
                                                  OWENS VALLEY.
10/29/1942 19-25-16.
                       37.57 118.73 C 3.0
                                                  OWENS VALLEY
                                                F NORTHERN OWENS VALLEY. FELT AT YOSEMITE.
F NEAR PARKFIELD. FELT AT PARKFIELD, PASO
10/30/1942 3-55-18.
                       37.57 118.73 C 4.0
10/31/1942 10-51-13.0 35.77 120.25 C 4.0
                                                   ROBLES AND SAN MIGUEL .
                                                    FORESHOCK OF QUAKE AT 12-56-10.
10/31/1942 12-14-37. 36.57 121.30 C 3.1
10/31/1942 12-56-10.
                        36.57 121.30 B 3.7
                                                   SE OF VINYARD.
                                                F DYERVILLE. SLIGHT SHOCK.
F NO. OWENS VALLEY. V BISHOP. III SANGER.
11/ 2/1942 21-55--0.
                       40.35 123.85 D
11/ 3/1942 3-56-18.
                       37.57 118.73 C 3.5
                       37.77 121.75 C 2.6
11/13/1942 20- 0-10.
                                                 PROBABLY A BLAST.

F VI STIRLING CITY. ALSO FELT CHICO,
11/18/1942 20-20--0. 39.90 121.50 D
                                                   FEATHER RIVER CANYON, LAS PLUMAS, AND STORRIE.
                                                 F SAME FELT REPORTS AS 20-20-0.
11/18/1942 20-35--0.
                        39.90 121.50 D
            3-35-47.
11/21/1942
                        37.90 122.60 D 2.5
                                                  NEAR MT. TAMALPIAS.
11/27/1942 21-30--0.
                                                 F CARIBOU AND BUTTE VALLEY.
                       39.90 120.90 D
12/ 3/1942 9-44-42. 39.70 119.30 D 5.5
                                                F NEAR WADSWORTH, NEVADA. FELT OVER AN AREA
OF 24,000 SQUARE MILES. VI AT FALLON, FERNLEY, AND REND, NEVADA. V AT EMIGRANT
                                                   GAP, MARYSVILLE, AND NEVADA CITY, AND AT LOYELOCK, MINDEN, AND STEAMHOAT,
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NEVADA. IV AT ALLEGHANY, BRIDGEPORT, CHILCOAT, COLOMA, DOWNIEVILLE, FORESTHILL, GRASS VALLEY, GRIZZLY FLATS, JACKSON, PLACERVILLE, QUINCY, AND SACRAMENTO, AND

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AT CARSON CITY, MASON, NIXON, SMITH, STILLWATER, SULPHUR, AND WINNEMUCCA, NEVADA
                                                         NORTHERN OWENS VALLEY.
12/ 5/1942 18-52- 7. 37.57 118.73 B 4.5
12/ 6/1942 16-57-49 · 35.93 120.48 C 3.5
                                                        DADVETEID
12/ 7/1942 0- 6-45.
                          36.90 122.00 D 2.4
                                                        COUTH OF CANTA COUT.
                                                        SW OF LONE PINE.
124 041042 3-43-30
                          75 79 119 39 6 3.0
                                                        OWENS VALLEY.
12/10/1942 4-30-47-
                           37.57 118.73 C 3.0
12/12/1942 8-59-54.
                          37.60 118.70 D 2.5
                                                      E DICHOR
                                                      F MARKLEEVILLE. SLIGHT SHOCK.
12/12/1942 10-10--0.
                          38.80 119.80 D
                                                        NE OF MT. HAMILTON.
                          37.43 121.58 B 2.3
12/14/1942 11-26-42.
                                                     F IV AT MARKLEEVILLE AND MINDEN, NEVADA.
F V AT BRIDGEPORT, MARKLEEVILLE AND TOPAZ.
IV AT GRIZZLY FLATS, JACKSON AND SONORA.
12/14/1942 12-13-51.
                          38.70 119.60 D 4.0
12/17/1942 15- 7-43. 38.87 119.90 C 5.1
                                                      F AFTERSHOCK OF 15-07-43.
12/17/1942 19-59- 6. 38-87 119-90 D
                                                        AFTERSHOCK OF 15-07-43.
12/17/1942 20- 3--0.
                           38.87 119.90 D
                                                      F AFTERSHOCK OF 15-07-43.
12/17/1942 21-46-12. 38.87 119.90 D
                                                         IV AT HOLL ISTER
12/18/1942 0-14-45.
                          36.83 121.53 R 3.4
                                                     F NEAR SWEETWATER, NEVADA. FELT STRONGLY
IN CARSON VALLEY AND TO THE S AND E OF REND, NEVADA.
                         39-00 119-50 D
12/19/1942 0-47-56. 38.93 119.90 C 2.9
                                                    F MARKLEEVILLE. TWO SHOCKS.
                                                     F FELT AT MARKLEEVILLE.
12/20/1942 5-47-39.
                          38.72 119.73 B 4.5
12/20/1942 11-12-42. 38.80 119.80 D
                                                      F MARKLEEVILLE. STRONG SHOCK.
                                                      F MARKLEEVILLE.
12/21/1942 6- 0--0.
                          38.80 119.80 D
12/21/1942 6-10--0.
                           38.80 119.80 D
                                                      E MARKIFFVILLE.
                                                     F NEAR JACKSON.
12/22/1942 5-58--0.
                          38.53 120.75 D
12/22/1942 6- 2-36. 38.53 120.75 D
                          38.53 120.75 D
                                                     F MARKLEEVILLE .
                                                      NE OF LLANADA.
12/27/1942 23-26-24.
                          36.78 120.78 C 3.4
12/28/1942 18-10--0. 37.90 122.50 D
12/29/1942 18-18-14. 37.72 122.12 A 4.3
                                                      F FELT OVER AN AREA OF 2.200 SQUARE MILES.
                                                        FELT OVER AN AREA OF 2,200 SQUARE MILES., HALF MOON BAY, DAKLAND, DRINDA, SAN FRANCISCO. IV AT BURLINGAME, HAYWARD, LAFAYETTE, MARTINEZ, MILL VALLEY, MOSS BEACH, PETALUMA, REDWOOD CITY, SAN BRUND, SAN MATED, WALNUT CREEK. NORTHERN OWENS VALLEY.
 1/ 1/1943 22-24-17. 37.57 118.73 C 4.0
1/14/1943 1- 0- 2. 38.60 119.20 D 3.6
2/ 4/1943 21-22-54. 36.20 118.50 D 3.0
                                                        SOUTH OF YERINGTON, NEVADA.
                                                        KERN RIVER, W OF HAIWEE. IV IN GIANT
FOREST, SEQUOIA NATIONAL PARK.
                                                        NW DE COLEVILLE.
 2/ 6/1943 8-47-19. 38.68 119.65 C 4.3
                                                        S OF LONE PINE.
 2/13/1943 23-30-59. 36.02 117.95 C 2.5
                                                         NORTHERN OWENS VALLEY.
 2/18/1943 14-53-19.
                          37.57 118.73 C 4.0
                          36.25 117.97 C 3.5
                                                        S OF LONE PINE.
 2/25/1943 20-28-25.
 2/26/1943 2- 1-50.
                          36.25 117.97 C 3.5
                          36.75 121.00 C 2.9
                                                         NORTH OF LLANADA.
 2/27/1943 11-34-23.
                           39.55 119.80 D
                                                      F REND, NEVADA. SHARP SHOCK.
 2/29/1943 5-25--0.
 2/29/1443 5-25--0. 34.55 119.65 1. 34.94 3. 4/1943 22-54-15. 36.97 118.25 C 3.0 3/10/1943 18- 5-22. 37.37 121.45 R 3.1 3/11/1943 1-13-16. 39.20 123.45 C 3.7
                                                       S OF BISHOP.
                                                        EAST OF MT. HAMILTON.
                                                         IV AT COMPTCHE, POTTER VALLEY AND
                                                     STONYFORD. II IN UKIAH.

F NEAR HATWEE. THREE TO SIX SHOCKS PER DAY
REPORTED FOR REMAINDER OF MARCH BY OBSERVER NEAR OLANCHA.
 3/11/1943 15- 2--0. 36.15 117.95 D
 3/12/1943 20-18--0. 36.12 117.95 D
                                                      F NEAR HAIWEE. FELT NEAR DLANCHA.
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3/13/1943 3-11-12. 36.88 121.32 C 2.9
                                                NE OF HOLLTSTER.
3/16/1943 9-59--0.
                       36.12 117.95 D
                                               F NEAR HAIWEE. FELT NEAR OLANCHA.
3/19/1943 22- 8-40.
                       38.80 121.10 D 3.9
                                                NEAR AUBURN.
3/23/1943 20-57--0
                       36.12 117.95 D
                                               F NEAR HAINEE.
                                                               FELT NEAR OLANCHA. DURING
                                              REMAINDER OF MARCH, 149 TREMORS RECORDED AT HAIWEE.
F NEAR HAIWEE. FELT AT OLANCHA.
FORESHOCK OF QUAKE ON MARCH 29 AT 1145.
3/26/1943 3-50-44.
                       36.15 117.95 C 3.5
 3/28/1943 5-52-45.
                       37.63 121.87 B 2.8
3/29/1943 10-28-20.
                       36.13 117.97 C 2.5
                                               F NEAR HAIWEE. FELT AT OLANCHA.
                                               F PLEASANTON.
3/29/1943 11-33--0.
                       37.63 121.87 D
3/29/1943 11-45-55.
                       37.63 121.87 A 4.2
                                                 IV IN EL GRANADA AND PLEASANTON.
3/29/1943 11-55--0.
                                               E EL CRANADA
                       37.63 121.87 0
3/29/1943 12- 4--0.
                       37.63 121.87 D
                                               F PI FASANTON.
3/29/1943 18-18--0.
                       36.15 117.95 D
                                                 NEAR HAIWEE. FELT NEAR OLANCHA.
3/30/1943 0- 0-47.
                      39.30 119.40 D 4.2
                                                 EAST OF VIRGINIA CITY, NEVADA.
3/30/1043 31- 7-39
                       39.43 120.40 C 5.3
                                                 FELT WIDELY IN THE NORTHERN SIERRA
                                                 NEVADA. V AT BLUE CANYON, TRUCKEE AND STEWART, NEVADA. IV AT EMIGRANT GAP,
                                                 MARKLEFYLLE, NEVADA CITY AND CARSON CITY, MINDEN AND REND, NEVADA. II AT
BIJOU, COLUSA, LAS PLUMAS, SACRAMENTO, SODA SPRINGS AND STEAMBOAT, NEVADA. II
                                                 AT MARYSVILLE AND SIERRA CITY.
3/31/1943 7- 6- 9. 37.68 121.85 B 3.6
                                                 NW OF LIVERMORE.
4/ 1/1943 21- 6--0.
                       39.35 120.15 D
                                              F TRUCKEE.
4/ 4/1943 15-48-45.
                      36 13 117 07 C 7 5
                                                 S OF LONE PINE.
4/ 4/1943 15-51-50.
                      36.13 117.97 C 3.5
4/ 5/1943 6-24-48.
                       37.72 121.68 C 2.2
                                                EAST OF LIVERMORE.
4/ 7/1943 0-15- 1.
                       37.65 121.78 B 3.4
                                                 WEST OF LIVERMORE.
4/ 8/1943 0-13- 4.
                      37.68 121.80 B 3.0
                                                 WEST OF LIVERMORE.
                                                EAST OF VINEYARD.
WEST OF LIVERMORE.
4/ 9/1943 3-17-18-
                      36.75 121.13 C 2.9
4/11/1943 2-16-29.
                      37.70 121.78 B 2.5
4/12/1943 21-20-42.
                      37.68 121.77 B 2.9
                                                 WEST DE LIVERMORE.
                                              FORESHOCK OF QUAKE AT 1531.

F LIVERMORE VALLEY. LIGHT SHOCK.

LARGE FORESHOCK OF QUAKE AT 1531.
4/15/1943 12-28-11.
                       37.68 121.77 B 3.2
                      37.65 121.75 D
4/15/1943 13-23--0.
4/15/1943 15-23- 4.
                      37.68 121.77 A 4.0
4/15/1943 15-31- 2. 37.68 121.77 A 4.1
                                              F LARGEST OF SERIES ON 4/15/43. FELT OVER
                                                 2,000 SQUARE MILES IN WEST CENTRAL CALIFORNIA. V TRACY. IV BYRON, LAFAYETTE,
                                                MOSS BEACH, NEWARK, SAN FRANCISCO, STOCKTON, VERNALIS, WALNUT CREEK.
                                              F LIVERMORE VALLEY. LIGHT SHOCK.
4/15/1943 15-32--0.
                      37.65 121.75 D
4/15/1943 15-35--0.
                                              F LIVERMORE VALLEY. LIGHT SHOCK.
                      37.65 121.75 D
4/15/1943 15-38--0.
                      37.65 121.75 D
                                              F LIVERMORE VALLEY. LIGHT SHOCK.
A/15/19A3 15-50--0
                      37.65 121.75 D
                                                LIVERMORE VALLEY. LIGHT SHOCK.
4/15/1943 16- 3--0.
                      37.65 121.75 D
                                              F LIVERMORE VALLEY. LIGHT SHOCK.
4/15/1943 17-33-30.
                      38.35 122.00 D
                                              F VACAVILLE.
4/15/1943 18- 0--0.
                       37.65 121.75 D
                                              F LIVERMORE VALLEY. SHARP SHOCK.
4/15/1943 18- 0- 8.
                      37.90 121.70 D
                                              F BRENTWOOD. SLIGHT SHOCK.
4/16/1943 1- 8--0.
4/17/1943 19-59- 1.
                      37.65 121.75 D
                                              F LIVERMORE VALLEY. LIGHT SHOCK.
                      36.82 121.47 C 3.2
                                                 DEPTH ABOUT 15 KM.
4/18/1943 7-48--0.
                      39.35 120.15 D
                                              F TRUCKEE.
4/20/1943 2- 0-19.
                      37.65 121.85 C 2.2
                                               WEST OF LIVERMORE.
4/21/1943 2-18-41.
                      36.87 120.87 C 3.2
                                                NE OF LLANADA.
4/21/1943 9- 1-22.
                      36.63 121.08 C 3.6
                                                 DEPTH ABOUT 6 KM.
4/21/1943 17-12-53.
                      37.56 121.75 D
                                              F LIVERMORE.
4/21/1943 23-29- 0-
                      37.56 121.75 D
                                              F LIVERMORE .
4/21/1943 23-39-44. 37.68 121.72 A 4.2
                                             F IV IN DUBLIN. NEWARK. LIVERMORE.
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DI FASANTON AND SAN FRANCISCO.

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F LIVERMORE.
4/21/1943 23-58-46.
                       37.56 121.75 D
                                                 SE OF LONE PINE.
                      36.00 117.60 C 3.5
4/24/1943 1-12-12.
4/24/1943 5- 3-15.
                                                 CE OF LONE PINK
                                               F V AT DUBLIN, LIVERMORE, MORAGA, AND NILES.
4/26/1943 11-54- 0.
                      37.62 121.78 A 4.1
                                                 IV AT ALVARADO, HOLT, DIABLO, AND RIO VISTA.
                                                 IV AT DECOTO, LIVERMORE, PLEASANTON.
A /26 /10A3 12- 2-58-
                      37.56 121.75 D
4/26/1943 12-15--0.
                       37.56 121.75 D
                                               E I IVERMORE.
                                               E ISLETON.
4/26/1943 15-40--0.
                      38.15 121.60 D
                                                 LIVERMORE .
4/26/1943 18-24--0.
                      37.56 121.75 D
4/29/1943 6-11-29.
4/29/1943 8- 9--0.
                      37.65 121.75 D
                                                 LIVERMORE.
                       37.65 121.75 D
                                               F LIVERMORE.
                                               F V AT LIVERMORE.
F GRASS VALLEY. (BSSA, JULY 1943).
5/ 1/1943 2-52-0.
5/ 1/1943 5- 0--0.
                      37.65 121.75 D
                      39.15 121.10 D
                      37.65 121.75 D
                                                 LIVERMORE .
5/ 5/1943 11-49--0-
5/ 5/1943 18- 7--0.
                                               E LIVERMORE.
                      37.65 121.75 D
5/ 6/1943 5- 5--0.
                      39.60 120.75 D
                                               E SIEDDA CITY.
5/ 6/1943 6- 3--0.
5/ 7/1943 2- 1- 4.
5/ 8/1943 9-30--0.
                                               F LIVERMORE.
                      37.65 121.75 D
                      36.60 121.10 D 3.5
                                                  WEST OF LLANADA.
                      37.65 121.75 D
                                               F LIVERMORE.
                                               F LIVERMORE.
5/ 8/1943 10-20--0.
                      37.65 121.75 D
                                               F V AT LIVERMORE. IV AT HAYWARD, HOLT AND
                      37.73 121.70 B 3.4
5/ 8/1943 12-29-39.
                                                 MILPITAS. III AT BANTA, CENTERVILLE, AND SUNOL.
                                               F I I VERMORE.
5/ 8/1943 13-30--0.
                      37.65 121.75 D
                      37.65 121.75 D
                                               E I TVERMORE.
                                               NE OF HOLLISTER.
F NEAR FERNDALE. IV AT BRICELAND. III AT
                      36.90 121.40 D 3.0
5/19/1943 12- 4-14.
5/23/1943 11-38--0. 40.60 124.25 D
                                                 FERNDALE, SCOTIA AND UPPER MATTOLE.
                                                 SE OF LONE PINE.
                                                 NORTH OF LIVERMORE.
5/27/1943 6-10-1.
5/29/1943 4-57-50.
                      37.72 121.75 C 2.8
37.67 121.80 C 2.7
                                               F IV AT LIVERMORE.
                      37.67 121.80 C 3.7
                                                  IV AT LIVERMORE.
5/30/1943 1- 4- 9.
5/30/1943 7-50-54.
                                               F IV AT HAIWEE.
F VI AT BISHOP. Y AT OLANCHA AND TUNGSTEN
                      36.13 117.97 C 4.0
5/31/1943 20-16-53.
                      37.38 118.60 C 4.5
                                                 CITY. IV AT BENTON, BIGPINE, DUNLAP, AND KINGS CANYON NATIONAL PARK.
                                               F NNE OF WILLITS.
6/ 4/1943 2-19--0.
                      39.40 123.35 D
6/ 4/1943 5-10--0.
                                               F NNE OF WILLITS.
                      39.40 123.35 D
6/ 4/1943 9-50--0.
                      39.40 123.35 D
6/ 4/1943 11-53--0.
                                               F NNE OF WILLITS.
                      39.40 123.35 D
                                               F IV AT MONTEREY. POSSIBLY GUN FIRE.
6/ 8/1943  8-56--0.
6/10/1943  5-55-27.
                      36.60 121.90 D
                                                 WEST OF LIVERMORE.
NORTHERN OWENS VALLEY.
                      37.63 121.83 C 2.5
6/22/1943 15-31-21.
                      37.53 118.67 C 4.0
                                                 NEAR STOCKTON.
6/22/1943 18-50- 7.
6/25/1943 17- 0--0.
                                               F III 5 MI. S OF MIRANDA.
                      40.20 123.80 D
6/29/1943 2-50-53.
6/29/1943 4-54-23.
                      36.50 121.10 D 3.1
                                                 SW OF LLANADA.
                                               F IV LIVERMORE. 36TH OF SERIES BEGUN MARCH.
                      37.73 121.70 B 3.4
                                               F DAKLAND HILLS.
6/30/1943 15-15-41.
                      37.75 122.20 D
                                                 SOUTH OF ANTIOCH.
7/ 5/1943 13-13-13.
                      37.95 121.83 C 2.9
7/ 5/1943 16-30-29.
                                                  SOUTH OF SALINAS.
                      36.38 121.83 C 3.9
                      37.87 121.87 R 3.2
                                                 SE DE CONCORD.
7/ 6/1943 13-35-29.
                                               F LIVERMORE.
                      37-65 121-75 D
7/ 6/1943 21- 5--0.
7/15/1943 0-44-42. 36.00 120.15 D
                                               F NEAR AVENAL .
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E BICOINE DOMEDHOUSE NO. 3.
 7/17/1943 13- 2--0.
                         37.15 118.35 D
 7/22/1943 0-10--0.
7/24/1943 8-12-30.
                          39.35 123.25 D
                                                     F IV AT UKIAH AND REDWOOD VALLEY.
                                                     HAIWEE.
                          36.23 118.00 8 3.0
 7/27/1943 3- 4- 5.
                          37.67 120.75 C 3.5
                                                       EAST OF DAKDALE.
    3/1943 18-46- 1.
                          37.30 121.20 D 2.9
                                                       EAST OF MY. HAMILTON.
                                                     F LIVERMORE. LIGHT SHOCK.
 3/ 4/1943 20-50- 5.
                          37.65 121.75 D
 8/ 4/1943 21-17-46.
                          37.65 121.75 D
                                                     F FORESHOCK OF 5-30-04.
 8/ 9/1943 5-23--0.
                          38.20 118.20 D
                                                     F FORESHOCK OF 5-30-04.

F NEAR FILBEN, NEVADA. FELT OVER AN AREA OF

34,000 SQUARE MILES. VI AT BASALT, DYER, AND FALLON, NEVADA. V AT KEFLER AND
MIRAMONTE, CALIF., AND GOLDFIELD AND SCHURZ, NEV. IV WIDELY IN CALIF. AND NEV.
F AFTERSHOCK OF 5-30-04. FELT AT BISMOP
 8/ 9/1943 5-30- 4. 38.20 118.20 C 5.5
 94 041047 6-27- 0.0 39.20 119.20 0
                                                       BRIDGEPORT AND LEEVINING
                                                     F AFTERSHOCK OF 5-30-04.
 8/ 9/1943 7-24- 0.0 38.20 118.20 D
 8/ 9/1943 11-17- 0.0 36.60 118.10 D
                                                     FINE PINE
 8/10/1943 4-42-40.0 37.87 117.65 C 3.5
8/13/1943 4-49-0. 37.65 121.75 D
8/18/1943 0-30-16. 35.77 116.52 C 3.5
                                                     E AFTERSUNCK OF 5-70-04
                                                     F IV AT LIVERMORE.
                                                    E OF CHINA LAKE.
 8/18/1943 0-30-16.
9/ 2/1943 1- 6-20.
                          36.93 121.63 C 2.5
                                                        DEPTH ABOUT
                                                                       5 KM.
 9/ 3/1943 23-26- 9.
                          37.70 120.90 D 2.9
                                                      NE OF MODESTO.
 9/ 6/1943 8-30--0.
                         40.60 124.25 D
                                                     F FERNDALE.
 9/11/1943 17-30--0. 40.50 123.10 D
                                                     F SCOTIA.
 9/13/1943 12-40--0.
                                                     F PASO ROBLES. POSSIBLY GUN FIRE.
                          35-65 120-65 D
                          37.47 121.78 C 2.6
                                                        DEPTH ABOUT 12 KM.
 9/13/1943 22-10-19-
                          39.50 120.25 D
 9/14/1943 15-46-24.
                                                     F SIERRAVILLE.
                                                    S OF LONE PINE.
 9/15/1943 10-57-33.
                          36.02 117.93 C 3.0
 9/15/1943 12-38- 2.
                         36.02 117.93 C 3.0
9/16/1943 0-16-11.
9/16/1943 0-47-19.
9/16/1943 7-52--0.
9/16/1943 8-13-36.
                          36.02 117.93 C 4.0
                                                      NEAD HATMEE.
                         36.02 117.03 6 3.0
                                                     NEAR HAIWEE.
                          36.02 117.93 C 4.5
                                                      NEAR HAIWEE.
                          36.02 117.93 C 3.0
 9/17/1943 20-49-41.
                          36.02 117.93 C 2.5
                                                       NEAR HAIWEE.
9/19/1943 9-53-30.
9/20/1943 6-20-24.
                          37.40 121.33 C 2.4
                                                        EAST OF MY . HAMILTON .
                          36.02 117.93 C 3.0
                                                       NEAR HAIWEE.
 9/22/1943 20-16- 4.
                          36.02 117.93 C 2.5
                                                       NEAR HATWEE
 9/24/1943 13- 0--0.
                          36.65 121.65 0
                                                     F SALINAS.
                          37.50 121.73 B 3.5
 9/26/1943 17-48-26.
                                                     F IV AT SAN JOSE.
F IV AT FERNDALE. FELT ALSO AT FORTUNA AND
10/ 2/1943 6-56-41. 40.50 124.60 D 4.6
                                                       CAPE MENDOCINO.
10/ 5/1943 0-17--0. 37.75 122.50 D
                                                     F SAN FRANCISCO.
                                                    F FERNDALE. ALSO FELT UPPER MATTOLE.
F IV AT MAXWELL AND WILLIAMS. III AT
10/ 5/1943 20-20-0. 40.60 124.25 D
10/14/1943 5-50-15. 39.25 122.40 C 3.6
                                                      GRIDLEY AND DROVILLE.
                          39.28 122.30 C 3.7
                                                     F V AT COLUSA. IV AT GRIDLEY AND MAXWELL.
10/21/1943 12- 2-51.
10/22/1943 12= 0--0.
                          36.02 117.93 C 2.5
                                                      NEAR HAIWEE.
                          36.00 120.90 D
                                                     F SAN ARDO. TWO SHOCKS.
10/26/1943 4-50-33. 37.43 121.68 B 4.9
                                                     F CALAVERAS FAULT, 4 TO 5 MI. NW OF MT.
                                                       HAMILTON. FELT OVER AN AREA OF 20,000 SQUARE MILES. VI AT ALVISO, BOULDER CREEK, CASTROVILLE, CUPERTINO, DECOTO, HALF MOON BAY, LA HONDA, LOS GATOS, PALO
                                                        ALTO, MILPITAS, MOUNTAIN VIEW, SAN GREGORIO, SAN JOSE, SAN MATEO, SAN MARTIN,
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SANTA CRUZ, SAUSALITO, SUNNYVALE, TRACY, VALLEJO, AND WATSONVILLE. V IN 33

ADDITIONAL CITIES. DEPTH OF FOCUS, ABOUT 12KM.

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IV AT LAKEPORT, POTTER VALLEY, UKIAH, AND
10/26/1043 11-58-57. 30-20 122-70 0 3-8
                                                 UPPER LAKE.
                                                 FAST OF ANTIOCH.
10/30/1943 13- 8-28-
                       37.97 121.77 C 3.0
                                                 DARKETEID
10/31/1943 17-54- 6.
                       35.80 120.40 D 3.5
10/31/1943 20- 0--0.
                       36-40 121-00 D
                                               F LONEDAK .
                       37.57 118.73 C 3.5
11/ 3/1943 4-18-50
                                                 LONG VALLEY
                                               LONG VALLEY.

F KETTLEMAN HILLS. FELT AVENAL.
11/ 3/1943 4-23-39.
                       37.57 118.73 C 4.0
11/ 8/1943 11-33-46.
                       36-00 119-92 C 3-0
                       40.50 124.00 D
                                               F DYERVILLE. EUREKA, FERNDALE, SCOTIA, AND
11/11/1943 10-10--0-
                                                 UPPER MATTOLE
                                               F FELT AT TOWN AND DAM OF BRIDGEPORT.
11/14/1943 4-45-48.
                       38.20 119.00 D 3.0
                                               F NEAR COLUSA.
11/14/1943 18-29--0.
                       39.25 122.20 D
                                               F FELT AT WILLOWS.
                       39.50 122.15 D
11/14/1943 22- 3--0.
                                               F LARGEST OF SERIES OF SHOCKS NEAR COLUSA.
11/15/1943 5-36-28.
                       39.22 122.23 C 4.0
                                                                                           V AT COLUSA AND DROVILLE. IV AT BUTTE
                                                 FELT OVER AREA OF 5.000 SQUARE MILES.
                                                 CITY, DUNNIGAN, MAXWELL, MERIDAN, SITES, WILLIAMS, WILLOWS, AND YUBA CITY.
11/15/1943 6-59--0. 39.25 122.20 D
                                               E NEAR COLUSA.
                                               F VI STONYFORD. V COLUSA AND DROVILLE. IV
                                                 VI STONYFUND. V COLUSA AND UNDVILLE. IV
BUTTE CITY, CHICO, LAS PLUMAS, MAXWELL, MERIDAN, SITES, WILLIAMS, AND YUBA CITY.
WILLIAMS. FOUR SHOCKS REPORTED.
11/16/1943 11-25--7。 39.25 122.20 D
                                               F WILLIAMS.
                                               F IV AT BUTTE CITY, COLUSA, MAXWELL, SITES,
                                                 AND WILLIAMS.
                                               F VI SAN LEANDRO . V DAKLAND AND CENTERVILLE .
11/16/1943 21-38-47. 37.78 122.12 8 3.6
                                                 IV SAN RAMON, DECOTO, DIABLO, HAYWARD, AND PLEASANTON.
                                               F COLUSA.
11/17/1943 7-12--0.
                       39.25 122.20 D
11/23/1943 13-40-39.
                       37.67 121.85 C 2.5
                                                 WEST OF LIVERMORE.
                       36.30 120.50 D 4.0
                                                 NEAD COAL THEA.
11/30/1943 21-57-18.
                                               E SAN BENTTO.
12/ 1/1943 4-51--0.
                       36.50 121.10 D
                       39.18 122.20 C 4.0
                                                  IV AT COLUSA. MERIDIAN AND WILLOWS.
12/ 4/1943 20-13-43.
12/ 8/1943 3-43-49.
12/17/1943 0-19-25.
                                                 SOUTH OF GUSTINE.
                       37.10 121.07 C 3.5
                                               F NEAR TINEMAHA. FELT AT BIGPINE.
F BIGPINE AND TINEMAHA RESERVOIR.
                       37.10 118.27 C 4.0
12/17/1943 3-54-35.
12/17/1943 4-38- 0.
                       37.10 118.27 C 3.0
                       37-10 118-27 C 4-0
                                               F IV AT BIGPINE AND TINEMAHA RESERVOIR.
12/18/1943 11-34- 0.0 36.65 118.15 D
                                               F INDEPENDENCE.
12/19/1943 1-52-28.
                       37.68 121.82 A 3.1
                                               F LIVERMORE.
                                               F LIVERMORE . (BSSA, JAN. 1944) .
12/20/1943 0-57-16.0 37.73 121.68 B 3.0
                                               F PLEASANTON.
12/20/1943 1-45--0. 37.65 121.90 D
12/21/1943 6-11-23. 37.77 122.58 C 2.5
                                                 WEST OF SAN FRANCISCO.
12/30/1943 8-30--0.
                       40.15 120.90 D
                                               F GREENVILLE.
 1/10/1944 14-39--0.
                       40.35 121.60 D
                                               E MINERAL.
 1/11/1944 4-55--0.
                      40.35 121.60 D
                                               F MINERAL .
                       40.35 121.60 D
                                               F MINERAL.
 1/12/1944 15- 2-40. 40.30 124.90 D 5.1
                                                  V AT CAPE MENDOCINO, EUREKA AND FERNDALE.
                                               IV AT CUMMINGS, SCOTIA, UPPER MATTOLE, AND WESTPORT.
F IV AT SAN ANSELMO.
 1/12/1944 23-30--0. 38.00 122.55 D
 1/15/1944 4-24--0. 40.50 124.20 D
1/16/1944 2-20-29. 40.30 125.10 D
                                               F IV AT FERNDALE AND UPPER MATTOLE.
                       40.30 125.10 D 5.1
                                                  V AT UPPER MATTOLE, IV AT FERNDALE.
 1/17/1944 14-23--0.
                       40.35 121.60 D
                                              F MINERAL.
NORTH OF LIVERMORE. (BSSA, APRIL 1944.)
                       37.68 121.77 B 2.6
 1/20/1944 0-29-10.
 1/25/1944 12-26-51
                       37.27 121.72 B 2.4
                                                 SW OF MT. HAMILTON.
 1/27/1944 21-10-12.
                       37.35 121.90 D
                                               F SAN JOSE.
 1/27/1944 23-11- 6. 37.38 121.67 B 3.2
                                              F SAN JOSE. DEPTH OF FOCUS ABOUT 10KM.
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2/ 2/1944 11- 5-39. 36.87 120.90 C 3.6
                                                     NORTH OF LLANADA.
2/ 5/1944 11- 5-35.
2/ 5/1944 9-24-32.
2/15/1944 20-15-31.
                                                     EAST OF VINEYARD.
                        36.65 121.13 C 3.2
                        37.62 122.02 B 2.0
                                                   F 5 MI. S OF BERKELEY. VI SAN LEANDRO. V
ALAMEDA AND MORAGA. IV EMERYVILLE, HAYWARD, DAKLAND, SAN LORENZO, WALNUT CREEK.
2/17/1944 4-33-40-
                        37.82 122.05 B 3.1
                                                      WEST OF PRIEST.
2/21/1944 13- 2-11.
                        36-17 120-93 C 3-8
                                                      OWENS VALLEY
2/29/1944 10-45- 2.
                         37.57 118.73 C 3.4
3/ 5/1944 19-37- 9.
                         37.40 121.70 B 2.6
                                                       DEPTH ABOUT 10 KM.
3/ 6/1944 21-32-16.
                         36.40 121.25 C 3.4
                                                      NE DE PARAISO.
3/12/1944 21-48--0-
                        37.75 122.15 D
                                                   E DAVI AND
                                                   F OAKLAND.

F NW OF MT. HAMILTON. FELT SAN JOSE.

F V APTOS AND SAN JOSE. IV BEN LOMOND.

CASTROVILLE, CHUALAR, FELTON, GILROY, HOLLISTER, MADRONE, MORGAN HILL, MOSS
LANDING, SALINAS, SAN CARLOS, SAN JUAN BAUTISTA, SAN LEANDRO, SAN MARTIN, SANTA
CRUZ, SOUTH SAN FRANCISCO, SUNNYVALE, AND WATSONVILLE.

FAST OF GILROY.
3/13/1944 14-43-15.
                         37.45 121.77 B 3.9
                        36.83 121.62 C 3.9
3/15/1944 8-14-45.
3/18/1944 13-46-22. 36.98 121.47 D 3.0
                                                   F PT. BONITA LIGHT STATION.
3/30/1944 4-15--0.
                        37.85 122.50 D
4/ 2/1944 20-58-42.
                        37.72 121.70 B 2.6
                                                      EAST OF LIVERMORE.
                                                       DEPTH ABOUT 10 KM.
4/ 7/1944 3-48-55.
                         37.28 122.20 C 2.3
4/20/1944 13-33-27.
                        37.75 122.62 C 2.1
                                                       PROBABLY A BLAST.
4/25/1944 13-40-10. 37.70 122.10 D 2.3
                                                      III AT SAN LEANDRO.
5/ 3/1944 4- 5-37.0 37.32 121.82 B 2.5
                                                   F 15 MI. SE OF SAN JOSE. FELT SAN JOSE.
                                                     SANTA CLARA, BEN LOMOND, AND LICK DBSERVATORY. (BSSA, JULY 1944).
5/ 4/1944 20- 4-27.
                        37.63 122.02 R 3.3
                                                   F III AT HAYWARD.
5/ 5/1944 22- 7-37.
                        37.53 122.62 C 2.1
                                                       PROBABLY A BLAST.
5/12/1944 20-29-30.
                         36.65 121.27 C 3.0
                                                     SE OF VINEYARD.
                                                   F II AT LOS BANOS. (BSSA, JULY 1944).
SOUTH OF PALO ALTO.
                        37.00 121.00 D 3.9
37.17 122.23 B 2.3
5/16/1944 1-43-33.
5/21/1944 23-37-17.
6/ 2/1944 6-27-53.
                        40.60 122.40 D
                                                   F NEAR REDDING.
   3/1944 23- 3-56.
                         37.22 122.15 C 2.0
                                                      SOUTH OF PALO ALTO.
6/ 5/1944 23-40--0.
                         40.85 124.15 D
                                                   F EUREKA.
6/ 6/1944 0-38-53.
6/ 6/1944 1-39--0.
                         40.65 124.25 D
                                                   F LOLETA.
                         37.85 118.35 D
                                                   F OWENS RIVER GORGE. ADAMS POWERHOUSE.
6/ 7/1944 12-35-38.
                        36.58 121.28 B 4.0
                                                     SE OF VINEYARD.
6/ 8/1944 1-11-55.
6/ 8/1944 1-32-14.
6/10/1944 7- 1-29.
                        37.53 118.67 C 4.0
                                                     LONG VALLEY.
                        37.53 118.67 C 3.7
                                                      LONG VALLEY.
                         36.75 121.52 C 2.4
                                                      NEAR SAN JUAN BAUTISTA.
6/11/1944 16-17-42.
                         36.88 121.22 C 3.3
                                                      V AT HOLLISTER, II AT TRES PINOS.
                                                   F RENO, NEVADA.
6/14/1944 23-40--0.
                        39.55 119.80 D
6/15/1944 0-22--0.
                         39.55 119.80 D
                                                    PROBABLY A BLAST.
PROBABLY A BLAST.
6/15/1944 22- 5-35.
                         37.70 122.60 D 2.4
6/21/1944 4-51-30.
6/22/1944 5- 1-41.
                        37.88 122.62 B 2.0
                         37.87 122.67 B 2.6
                                                      NEAR BOLINAS.
6/22/1944 7-15-0.
6/24/1944 7-23-0.
                         36.85 121.40 D
                                                   F HOLLISTER.
                         36.85 121.40 D
                                                   F HOLLISTER.
                                                     NORTH OF MT. HAMILTON.
6/26/1944 16-22- 7.
                        37.47 121.70 B 2.7
7/ 1/1944 5-28-34.
                        37.18 122.30 B 2.8
37.50 118.58 C 3.7
                                                      OFF COAST, WEST OF SANTA CRUZ.
7/ 1/1944 5-25-34.
7/ 9/1944 1-54-39.
7/ 9/1944 2-47-50.
                                                   F NEAR OWENS RIVER GORGE.
                        40.80 124.80 D 4.2
                                                     OFF COAST, WEST OF EUREKA.
7/11/1944 22-30--0.
                        36.50 121.10 D
                                                   F SAN BENITO.
                        40.40 126.60 D 4.7
                                                     DEE CAPE MENDOCINO.
7/12/1944 15-24-30.
                                                      NE OF SANTA ROSA .
7/14/1944 1-22-25, 38.50 122.30 D 2.3
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7/14/1944 1-34-57。 36.80 121.20 D 3.0
                                                           NE OF VINEYARD
                                                           NORTH OF GILROY.
 7/15/1944 6-14-13.
                            37.07 121.57 C 2.6
  7/17/1944 21-46-15.
                            37.03 121.53 8 3.4
                                                         F CROWS LANDING. (BSSA, DCT. 1944).
                            37.40 121.10 D
  7/19/1944 15-28--0-
                                                           CROWS LANDING. (BSSA, DCT. 1944). SEVERE.
  7/19/1944 17-20--0
                            37.40 121.10 D
  7/20/1944 14-16-59.
                            37.50 118.58 C 3.9
                                                         BISHOP
 7/23/1944 2-26-27.
                                                            DEPTH ABOUT 5 KM.
                            37.08 121.50 B 2.7
                            37.65 121.75 D
                                                         F LIVERMORE. (BSSA, OCT. 1944).
  7/29/1944 11-37-15.
                            40.30 125.80 D 4.5
                                                          OFE CAPE MENDOCINO.
                                                        F WEAVERVILLE (FOREST SERVICE).
 7/30/1944 3-42-0.
8/ 1/1944 18-48- 3.
                            40.75 122.90 D
                            37.17 122.17 B 3.0
                                                           SOUTH OF PALO ALTO.
 8/ 7/1944 1-18-54。
8/ 8/1944 0-37-39。
                            39.50 120.00 D 4.2
                                                        F IV AT REND, NEVADA.
                                                           WEST OF WINTERS.
EAST OF LITTLE LAKE.
                            38.55 122.03 C 2.7
 8/ 9/1944 14- 1- 5.
8/10/1944 13-43--0.
                            35.93 117.77 C 4.0
                                                        F BISHOP, ADAMS MAIN POWERHOUSE.
EAST OF LITTLE LAKE.
                            37.85 118.35 D
                            35.93 117.77 C 4.1
 8/12/1944 8-25-20-
                            35.93 117.77 C 3.4
 8/12/1944 21-21-20 •
                                                           EAST OF LITTLE LAKE.
 8/13/1944 0-10-0. 37.00 120.00 D
8/13/1944 0-11-0. 37.00 120.00 D
                                                        F FIVE POINTS (FRESHO COUNTY).

F FIVE POINTS (FRESHO COUNTY).
                            37.00 120.00 D
                                                           RANGER STATION.
 8/13/1944 6-27-57. 35.93 117.77 C 3.7
8/26/1944 18-34-49. 37.43 121.73 B 3.1
8/29/1944 18-52-10. 40.30 121.30 D 3.3
                                                           EAST OF LITTLE LAKE.
                                                           II AT SANTA CLARA.
 8/30/1944 6-32-28. 40.30 121.30 D 3.6
8/30/1944 6-52--0. 40.60 122.40 D
                                                          EAST OF MINERAL
                                                        F REDDING AND SHASTA.
 8/30/1944 6-57--0. 40.60 122.40 D
                                                        F REDDING AND SHASTA.
                                                        F 15 MI. SE OF SHASTA DAM.
 9/ 1/1944 5-29- 0.0 40.60 122.40 D
 9/ 1/1944 22-56-53。 37.20 122.20 D 2.4
9/ 9/1944 10-15-0。 39.35 121.70 D
9/14/1944 2- 2-20。 37.57 118.73 C 3.9
                                                           SOUTH OF PALO ALTO.
                                                        F GRIDLEY .
                                                        F LONG VALLEY AND OWENS RIVER GORGE NEAR
                                                           BISHOP.
 9/16/1944 17-35-25. 37.42 121.65 8 2.5
9/18/1944 1-30- 0. 35.80 120.00 0 3.5
9/18/1944 23- 3-28. 37.18 122.22 C 2.5
                                                           NEAR MT. HAMILTON.
                                                           PARKFIELD.
                                                           SOUTH OF PALO ALTO.
 9/21/1944 4-20-33。
9/21/1944 7-21-32。
                            37.85 122.60 C 1.1
                                                           NEAR MILL VALLEY.
                            37-73 122.20 C 2.8
                                                           NEAR DAKLAND.
                                                         F CAPE MENDOCINO. IV SCOTIA AND EUREKA.
 9/21/1944 17-18--0.
                            40.40 124.40 D
 9/21/1944 20-43- 4.
                            37.93 122.88 F 2.9
                                                             PROBABLY AN UNDERWATER BLAST.
                                                        F SCOTIA.
 9/22/1944 10-55--0. 40.50 124.10 D
                                                        F SANTA CRUZA
 9/24/1944 23- 0--0. 37.00 122.00 D
                                                        F SANTA CRUZ.
 9/25/1944 8- 0--0. 37.00 122.00 D
9/28/1944 17- 8-40. 36.80 121.50 C 3.1
                                                            DEPTH ABOUT 10 KM.
                                                        F POTTER VALLEY.
    1/1944 15-18- 0.0 39.35 123.10 D
10/ 6/1944 14-28-25. 36.78 121.45 C 2.9
10/10/1944 12-51-25. 37.10 118-27 B 2.5
10/19/1944 8-37--0. 38.42 122.75 D
                                                          WEST OF VINEYARD.
S OF BISHOP.
                                                        F SANTA ROSA. THIS AND THE THREE FOLLOWING
                                                           SHOCKS MAY NOT HAVE BEEN EARTHQUAKES.
                                                        F SANTA ROSA. SEE ABOVE.
10/19/1944 9- 7--0. 38.42 122.75 D
10/19/1944 10-0-0. 38.42 122.75 D
10/19/1944 13-0-0. 38.42 122.75 D
10/20/1944 13-0-0. 38.42 122.75 D
10/20/1944 20-46-32. 37.60 122.70 C 2.7
                                                                           SEE ABOVE.
                                                        F SANTA ROSA.
                                                          NEAR HAWTHORNE, NEVADA.
                                                            PROBABLY A BLAST.
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10/26/1944 22-50-30. 37.18 121.23 8 2.6
                                                  NE OF GURDY.
                                                  FAST OF LOS GATOS.
10/30/1944 21-14-15.
                       37.20 121.80 D 2.1
11/ 2/1944 5- 0-34.
11/ 4/1944 8-12- 1.
                                                  NORTH OF LLANADA.
                       36.80 121.00 D 3.7
                        36.33 120.08
                                      C 3.4
                                                  E OF COALINGA.
11/ 4/1944 18-33-41.
                       36.60 121.10 D 3.5
                                                  WEST OF LLANADA.
11/ 8/1944 11- 8-44.
                        41.50 125.00 C 4.7
                                                   DEDT. WATER RESOLIRCES DATA
11/ 9/1944 7- 2-16. 36.60-121.30 D 3.6
11/10/1944 8- 6-42. 40.60 121.17 C 3.2
11/15/1944 6-52-26. 36.88 121.72 C 3.1
                                                SE OF VINEYARD.
                                                   DEPTH ABOUT 10 KM. FELT IN HOLLISTER.
11/16/1944 18- 4-49. 37.77 122.15 8 3.2
                                                F 5 TO 10 MI. FROM UNIV. OF CALIF. CAMPUS,
                                                  BERKELEY.
                                                             IV AT ALAMEDA, BERKELEY, BRENTWOOD, LAFAYETTE, DAKLAND, SAN GREGONIO.
                                                  AND SAN LEANDRO.
11/16/1944 23-54--0. 40-30 124-10 D
                                                F V AT UPPER MATTOLE. IV AT FERNDALE.
                                                  FIELDS LANDING. AND SCOTIA.
                                                F. OWENS RIVER GORGE (ADAMS MAIN POWERHOUSE).
11/17/1944 0-32-49. 37.32 118.38 C 4.2
11/18/1944 23- 1-17.
                        37.18 122.20 C 2.7
                                                  SOUTH OF PALO ALTO.
11/19/1944 22-20-48.
                       36.50 117.00 D 2.5
                                                E TY IN DEATH VALLEY.
11/20/1944 7-29-57.
                       36.77 121.63 C 3.3
                                                   DEPTH ABOUT 8 KM.
                       36.63 121.03 C 3.1
                                                   DEPTH ABOUT 10 KM-
11/25/1944 16- 0--0.
                                                F SAN JOSE AND WILLOW GLEN. SMALL SHOCK.
                       37.35 121.90 D
11/25/1944 3-41- 9.
11/26/1944 3-44-43.
11/26/1944 3-47-30.
                       37.42 121.70 A 2.6
                                                 NEAR MT. HAMILTON.
                              121.70 A 3.2
                                                  NEAR MT. HAMILTON.
                       37.42 121.70 D
                                                F BEN LOMOND.
11/26/1944 15-30--0.
                       37-35 118-40 D
                                                F NEAR BISHOP.
                                               NEAR GOLDFIELD, NEV.
11/27/1944 23-35-40.
                       37.55 117.12 C 3.7
11/28/1944 16-36- 0.
                       35.80 120.00 D 3.3
                                                  NEAR KETTLEMAN HILLS.
12/ 2/1944 15- 9-12.
                        35.80 120.00 D 3.2
                                                  NEAR KETTLEMAN HILLS.
KERN RIVER POWERHOUSE NO. 3 AND KERNVILLE.
12/ 5/1944 9- 1-12.
                       35.88 118.40 C 2.6
                                                F KERN RIVER POWERHOUSE NO. 3 AND KERNVILLE.
12/ 5/1944 10-30--0.
                       35.88 118.40 D
12/ 5/1944 12- 1-22.
                       35.88 118.40 C 2.2
                                                F KERN RIVER POWERHOUSE NO. 3 AND KERNVILLE.
12/ 6/1944 4-16-46.
12/ 8/1944 9-20-48.
                       35.88 118.40 C 2.4
                                               F KERN RIVER POWERHOUSE NO. 3 AND KERNVILLE.
                                                N OF TONOPAH. NEV.
                       38.40 117.40 D 3.4
12/ 8/1944 17-24-45.
                       37.77 122.10 C 1.7
                                                  EAST OF DAKLAND.
                       37.37 118.63 C 3.4
                                                  W OF BISHOP.
12/11/1944 11-12-11.
12/15/1944 20- 8-54.
                       36.57 121.45 C 3.6
12/16/1944 7-10--0.
                                               F NAVELANCIA, N. OF REEDLEY.
                       36.65 119.50 D
                       38.20 122.03 C 3.0
                                                 NEAD FAIDETELD.
12/19/1944 11-44-16.
                       36.95 121.60 C 2.1
                                                  NEAR GURDY.
12/19/1944 22-17-49.
                       37.37 121.80 B 2.5
                                                  EAST OF SAN JOSE.
12/23/1944 8-16-22.
                                                F DWENS LAKE. V AT KEELER AND LONE PINE.
                       36.40 117.92 A 4.7
                       37.10 118.27 C 3.8
12/24/1944 7-25--0.
                                                 NEAR TINEMAHA.
12/30/1944 18-16-43.
                       40.35 121.60 D
                                                F MINERAL
 1/ 2/1945 2-36-10.
                       36.40 117.92 C 3.5
                                                  OWENS LAKE
 1/ 7/1945 22+25-33. 36.73 121.20 8 4.7
                                                F SAN BENITO CO. FELT OVER AREA OF 13,000
                                                  SQUARE MILES IN WEST CENTRAL CALIFORNIA. VI HOLLISTER, PAICINES, SAN BENITO.
                                                  CARMEL, LOS BANOS, MONTEREY, MOSS LANDING, SNELLING. IV 29 TOWNS FROM SAN
                                                  FRANCISCO TO AHWAHEE TO SAN ARDO.
 1/ 8/1945 0-24--0. 36.85 121.40 D
1/ 8/1945 2-30--0. 36.85 121.40 D
1/ 8/1945 10-22--0. 36.85 121.40 D
1/10/1945 18-34--0. 40.25 124.10 D
                                               F HOLLISTER. SLIGHT SHOCK.
                                                F IV AT HOLLISTER.
                                                F V AT UPPER MATTOLE. IV AT BRICELAND,
                                                  CARLOTTA, ETTERSBURG, FERNDALE, FIELDS LANDING, FORTUNA, PETROLIA, AND SCOTIA.
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1/24/1945 12- 0--0. 39.55 120.70 D
                                                  F SIERRA CITY.
                                                    NE OF MT. HAMILTON.
2/ 2/1945 23- 9-18.
                        37.50 121.50 D 2.4
                        37.27 121.78 B 2.6
2/10/1945 14-10-37
                                                     SE OF VINEYARD
2/11/1945 19-32-36-
                        36.70 121.20 D 3.2
                                                    EAST OF CONCORD.
2/13/1945 21-19-31.
                        37.98 121.95 C 3.2
2/17/1945 19-44-50.
                        36.93 121.65 C 3.0
                                                  F MEYERS. LIGHT SHOCK.
                        38.85 120.00 D
2/19/1945 23-25--0.
2/22/1945 18-58--0.
                        39.00
                               118.00 D
                                                  F GABBS. NEVADA. HEAVY SHOCK.
                                                    PARKFIELD.
2/25/1945 20-13-38.
                        36.00 120.48 C 3.6
2/26/1945 23- 7-35.
                        37. 20 122. 20 B 2.7
                                                     NE OF RENO. NEVADA.
                        39.90 119.40 D 4.0
3/ 5/1945 12-12-32.
                        37.40 121.80 B 2.2
                                                     NW OF MT. HAMILTON.
                                                    TONG VALLEY
3/10/1945 9-13-50.
                        37.53
                               118.67 C 3.7
                                                     FORESHOCK OF QUAKE ON MARCH 19 AT 1450.
3/14/1945 23-24-12.
                       36.97 121.62 C 2.8
                                                    SW OF MT. HAMILTON.
                        77. 22 121.77 C 2.3
3/16/1945 12-49-26-
                        36.92 121.62 B 3.3
                                                     SW OF GILROY.
3/19/1945 14-50- 0.
                        36.73 121.63 B 3.3
3/19/1945 19- 0-19.
                                                    NE DE SALTNAS.
                                                    NEAD PETROLIA.
3/27/1945 17- 6-47.
                        40-20 124-30 D 4-1
                                                    WEST OF LLANADA.
4/13/1945 14-39-31.
                        36-60 121-10 C 3-5
                        37.42 122.32 C 1.9
                                                     WEST OF PALO ALTO.
4/17/1945 2-23-20.
4/19/1945 10-10-48.
                                                  EAST OF LOS GATOS.
F VI AT PARADISE. IV AT LAS PLUMAS.
                        37.18 121.83 B 3.0
4/20/1945 5-36-10.
                       39.75 121.65 D
                                                     STORRIE. AND NE BUTTE CO.
4/22/1945 21-20- 0. 36.67 121.62 C 2.5
4/23/1945 3- 3-54. 36.30 118.00 D 3.1
                                                     NEAR SALINAS.
                                                     HATWER
                                                     NORTHERN OWENS VALLEY
4/25/1945 12-44-55.
                        37.53 118.67 C 3.2
                                                  F SAN JOSE AND SANTA CLARA.
5/ 2/1945 6-25-26. 37.25 121.90 B 2.7
5/ 2/1945 9-57-30. 37.50 118.30 D 3.5
                                                     NORTHERN OWENS VALLEY.
                                                  NUMBERS OWERS VALLET.

F NEAR SCOTT MT. FELT OVER AREA OF 3,500
SOUARE MILES IN NW CALIFORNIA. VI ETNA AND BURNT RANCH. V CALLAHAN, CLEAR
CREEK, EUREKA, HYAMPOM, SALYER, WEAVERVILLE, AND WEITCHPEC.
5/ 2/1945 19-47-54. 41.20 123.50 D 5.0
5/ 6/1945 9-49-16. 36.70 120.90 D 2.8
5/ 8/1945 18- 8-46. 37.50 118.57 C 4.4
                                                     NEAR LLANADA.
                                                  F NORTHERN DWENS VALLEY. V AT DWENS RIVER GORGE, 20 MILES FROM BISHOP.
NORTH OF BERKELEY.
5/ 9/1945 0-55-27. 37.98 122.25 C 2.6
                                                     SOUTH OF PALO ALTO.
                        37.22 122.22 B 2.6
5/10/1945 22-45-50.
                                                     SW OF LLANADA.
5/13/1945 10-25- 7. 36.52 121.13 C 2.7
                                                  F KERN COUNTY. SLIGHT SHOCK.
5/17/1945 9-45--0.
                        36.20 118.40 D
                                                  F HOLLISTER. FELT OVER 6.000 SQUARE MILES.
5/17/1945 15- 6-47- 36-82 121-37 B 4-6
                                                     VI HOLLISTER, GILROY, AND SAN MARTIN. Y CARMEL, SAN JOSE, AND TRES PINOS. IV
AT 29 TOWNS FROM DALY CITY TO SAN LUCAS.
                                                     KERN RIVER FAULT, WEST OF HATWEE.
5/18/1945 9-44-40. 36.20 118.38 C 4.0
5/18/1945 18-10--0. 37.00 119.70 D
5/19/1945 15- 7- 0. 40.40 126.90 D 6.0
                                                  F FRIANT.
                                                  F OFF COAST OF NO. CALIFORNIA. FELT OVER
                                                     1,500 SQUARE MILES FROM CRESCENT CITY TO WILLITS. V UPPER MATTOLE. IV ARCATA, BLUE LAKE, CARLOTTA, EUREKA, FERNDALE, FIELDS LANDING, KLAMATH, DRICK, PIERCY,
                                                     AND SCOTTA-
5/25/1945 19-41-56. 37.97 121.55 C 2.2
                                                     WEST OF STOCKTON.
                       37.08 117.50 C 5.0
                                                     NORTH END OF DEATH VALLEY.
6/14/1945 3-30-13.
6/14/1945 22-57-48.
                        36.70 121.45 B 3.7
                                                     IV AT HOLLISTER.
6/18/1945 22- 6-26.
                        36.70 121.10 D 2.7
                                                   NW OF LLANADA.
6/21/1945 21-58--0. 36.85 121.40 D
                                                  F HOLLISTER. (BSSA. OCT. 1945).
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WEST OF SAN RAFAEL.
6/22/1945 C-16-35. 37.98 122.58 B 2.6
 7/ 4/1945 12- 8-10.
                                                       NORTH OF GILROY.
                         37.13 121.60 C 2.4
 7/ 7/1945 23-54-29.
                         36.57 121.47 C 3.0
                                                    F CENTRAL EL DORADO CO. FOUR SHOCKS.
7/ 8/1945 20-56-17.
                         37.93 121.78 B 2.8
                                                      NEAD ANTIOCH
 7/ 9/1945 20-22- 0.0 36.90 121.75 0
                                                    F WATSONVILLE.
7/11/1945 12-57- 0.0 36.90 121.75 D
                                                    F WATSONVILLE. FELT ALSO AT BIG SUR.
                                                    F NEAR SAN SIMEON. IV AT CAMBRIA.
 7/11/1945 16-13- 0.
                         35.67 121.25 D 4.0
7/14/1945 0-37- 1.
                         38.20 123.00 D 2.7
                                                      NEAR INVERNESS.
7/21/1945 20-19--0.
                         37 85 122 30 D
                                                    F BERKELEY. ALBANY. RICHMOND.
                         37.78 121.40 B 2.5
7/23/1945 17-13-48.
                                                      NEAD TRACY.
7/26/1945 10-19-56.
                                                       NEAR HAIWEE.
                         36.05 117.87 C 4.1
 7/29/1945 13-50-19.
                         37.38 121.53 B 2.6
                                                       FAST OF MT. HANTI TON.
7/30/1945 6- 6-10.
8/ 1/1945 3-46-26.
8/ 1/1945 5-23-20.
                         37.17 118.07 C 4.1
                                                       NEAR TINEMAHA.
                         37.33 122.32 B 2.6
                                                       SW OF PALO ALTO.
                                                       SOUTH OF SAN ERANCISCO
                         37.58 122.48 C 2.4
8/ 1/1945 5-23-20.

8/ 4/1945 1-1-27.

8/ 7/1945 4-38-27.

8/ 7/1945 23-37-1.
                                                       SOUTH OF PALO ALTO.
                         37.20 122.20 B 2.4
                         37.52 121.77 B 2.5
                                                       SOUTH OF LIVERMORE.
                         37.52 121.77 B 2.6
                                                       SOUTH OF LIVERMORE.
8/11/1945 11-14-59.
                         37.42 117.33 C 3.3
                                                       SE OF LIDA, NEV.
                                                      WEST OF WINTERS.
8/13/1945 19- 3-16.
                         38.50 122.13 B 2.8
8/17/1945 20-21-14.
8/17/1945 21- 6-54.
                         37.42 118 58 C 4 2
                         37.57 122.65 C 2.5
                                                       PERHAPS A BLAST.
8/22/1945 9-19- 3.
                         37.30 122.28 C 1.4
                                                       SW OF PALO ALTO.
                                                      SE OF VINEYARD.
8/23/1945 17-33-51.
                         36.58 121.30 C 3.7
8/24/1945 20-27- 0.0 36.60 118.10 D
                                                    F LONE PINE. (BSSA, OCT. 1945).
8/25/1945 1-53-22. 37.30 122.20 D 2.7
8/27/1945 7-10-42. 37.57 121.88 B 2.8
8/27/1945 9-13- 4. 37.27 121.80 C 4.5
                                                      SOUTH OF PALO ALTO.
                                                      WEST OF LIVERMORE.
                                                    F SAN JOSE. FELT OVER 13,000 SQUARE MILES.

VI AT MT. HAMILTON AND SAN JOSE. V AT ALMA, ALVISO, BOULDER CREEK, HOLLISTER,
SAN FRANCISCO, AND SAN MARTIN. IV AT 64 TOWNS FROM ST. HELENA TO HUNTINGTON
                                                      LAKE TO BIG SUR.
8/29/1045 4-30--0. 40.35 121.60 D
8/29/1945 4-45--2. 40.35 121.60 D
8/29/1945 19-40- 7. 38.4P 121.93 C 3.6
                                                    E WINERAL .
                                                    F MINERAL .
                                                      FAST OF WINTERS.
8/30/1945 2-30- 0.0 39.20 121.00 D
                                                    F GRASS VALLEY AND NEVADA CITY.
9/ 4/1945 11-13-56. 37.33 118.12 C 4.2
9/ 7/1945 0-30-44. 38.57 122.12 C 3.5
9/ 7/1945 11-34-23. 35.83 120.75 C 4.2
                                                      NEAR TINEMAHA.
                                                      NW OF WINTERS.
                                                    F NEAR BRADLEY. IV AT CAMBRIA, PARKFIELD,
                                                     PASO ROBLES, AND SAN MIGUEL.
SUMMIT LAKE (LASSEN VOLCANIC NAT'L PARK).
9/ 8/1945 11-20--0. 40.50 121.40 D
                                                    F SUMMIT LAKE (LASSEN VOLCANIC NAT'L PARK).
9/ 8/1945 11-30--0.
                        40.50 121.40 D
                                                      NEAR SALINAS.
9/ 9/1945 11-15-24.
                        36.70 121.70 D 2.9
9/11/1945 2- 1- 8.
                         36.53 117.17 C 3.4
                                                      E OF LONE PINE.
                         38.07 122.50 B 2.6
                                                      NORTH OF SAN RAFAEL.
9/16/1945 23-55-35.
                         38.48 122.00 C 3.3
                                                      NEAR WINTERS.
9/17/1945 23-22- 0.0 36.75 119.60 D
                                                    F DUNL AP.
9/18/1945 7- 5-29. 37.50 121.55 B 2.5
                                                      NE OF MT. HAMILTON.
9/20/1045 22-45-37.
                         37.45 121.75 B 2.9
                                                      NW OF MT. HAMILTON.
9/21/1945 0-28-23.
                        38.47 121.87 C 2.9
                                                       THIS EARTHQUAKE AND THOSE ON AUGUST 13,
                                                      AUGUST 29, SEPTEMBER 7, AND SEPTEMBER 16 MAY HAVE HAD A COMMON FOCUS.
9/24/1945 15-10-28. 36.63 121.98 R 2.9
9/24/1945 19-52-18. 36.80 121.70 D 2.8
                                                      NEAD MONTEREY.
                                                      SE OF WATSONVILLE.
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E NEAR HOLLISTER.
9/26/1945 17-20- 0.0 36.85 121.40 D
9/27/1945 5-24-47. 37.07 121.08 B 3.5
9/28/1945 22-24- 5. 41.90 126.70 D 6.0
                                                  SOUTH OF GUSTINE.
                                                USCGS GIVES 41.7 N, 126.9 W.
F GUERNSFY CAMP (LASSEN VOL. NAT'L PARK).
 9/30/1945 4-30- 0.0 40.35 121.55 D
DERTH ARRIVE 10 KM.
                                                  NEAR WINTERS.
                                                F MINERAL.
                                                  NW OF MT. HAMILTON.
10/16/1945 22-12-28. 37.45 121.80 C 2.5
10/17/1945 0- 8-15. 37.20 122.20 B 2.4
                                                F MINERAL.
                                                  DEE COAST. SW OF EUREKA.
10/22/1945 19-26- 6. 40.70 124.70 D 4.3
                                                E MINERAL .
10/25/1945 16-45- 0.0 40.35 121.60 D
11/ 3/1945 15-50-22. 36.63 121.25 C 4.2

11/ 4/1945 0-46-34. 36.38 121.28 C 3.3

11/ 8/1945 0-45-19. 38.53 122.10 C 3.4
                                                   INTENSITY V 7.5 MILES SOUTH OF HOLLISTER.
                                                 NEAR SOLEDAD.
                                                   LARGE SINUSDIDAL SURFACE WAVES ON ALL
                                                  DECOROS.
                                                F VI AT MADRONE. IV AT PESCADERO, SAN
11/ 8/1945 20- 9-17. 37.17 121.52 C 4.2
                                                  MARTIN, SOQUEL, AND SAN FRANCISCO.
                                                F SOUTH OF LIVERMORE. FELT AT LIVERMORE AND
11/13/1945 1-12- 8.0 37.63 121.82 B 3.7
                                                  HAVWARD.
                                                F III AT SANTA ROSA. (BSSA, JAN. 1946.)
11/21/1945 22-56-10. 38.42 122.78 B 3.5
                                                SOUTH OF MT. HAMILTON.
F III BERKELEY, DAKLAND, AND SAN FRANCISCO.
11/25/1945 22-40-49. 37.25 121.57 C 3.5
12/ 3/1945 4-30-21. 37.88 122.20 A 2.9
                                                F NEAR MINERAL . ALSO FELT AT BUCKS CREEK
12/ 4/1945 21- 7--0.
                      40.35 121.60 D
                                                  POWERHOUSE.
                                                  NW OF MT. HAMILTON.
                        37.48 121.82 C 2.3
12/ 6/1945 7- 0- 7-
                                                  NEAR CANDELARIA, NEV.
12/ 8/1945 21-55-53.
                       39.15 118.05 C 3.8
                                                   INTENSITY IV AT HOLY CITY.
12/14/1945 3-17-24
                       37.15 121.90 C 2.5
                                                F MOSS BEACH. TWO SLIGHT SHOCKS.
12/19/1945 16-10--0.
                       36.75 121.75 D
                                                F MONO OBSERVATORY, COLEVILLE.
 1/ 8/1946 19- 0--0-
                       38.65 119.50 D
                                                  WEST OF LLANADA.
 1/ 8/1946 22-30-58.
                       36.60 121.17 C 3.4
                                                E WEST OF BISHOP. VI AT OWENS RIVER GORGE.
 1/13/1946 16-31-15. 37.32 118.65 C 4.7
                                                  V AT LAWS.
 2/ 6/1346 20-51-55. 36.90 121.40 D 3.6
                                                  NORTH OF HOLLISTER.
 2/ 6/1946 23-32-36. 37.00 121.20 C 3.1
                                                  NE OF HOLLISTER.
 2/10/1946 2-56--0.
                                                F BRUCITE, NEV., W OF PARADISE MINS.
                       38.85 117.90 D
                                                F FELT OVER AREA OF 2000 SQUARE MILES IN
 2/10/1946 11- 1-19. 36.50 121.00 D 4.2
                                                  WEST CENTRAL CALIFORNIA. V SAN BENITO. IV BIG SUR, CHUALAR, GREENFIELD, SANTA
                                                  CRUZ, HOLLISTER, LONDAK, SAN LUCAS, SAN MIGUEL, AND SOLEDAD.
                                                F FRESNO. MILD SHOCK.
 2/13/1946 23-58--0. 36.75 119.75 0
 2/14/1946 17-50--0.
                       39.30 120.20 D
                                                F WASHOE VALLEY, NEV. (BSSA, APRIL 1946.)
                                                F PARKFIELD. LIGHT SHOCK.
SOUTH OF LIVERMORE.
 2/15/1946 12- 7--0. 35.90 120.45 D
 2/19/1946 6- 7-58. 37.55 121.75 A 2.0
 3/ 5/1946 14- 4-27.0 38.70 120.30 C 4.1
                                                F VI AT BIJOU AND CAMINO. ALSO FELT AT CAMP
                                                  RICHARDSON, HOMEWOOD, KYBURZ, MEYERS, TAMOE VISTA, AND WOODFORDS, CALIF.,
AND CARSON CITY, LAKE TAMOE, MINDEN, STEAMBOAT, AND VIRGINIA CITY, MEYADA.
                                                F AFTERSHOCK OF 13-49-36.
 3/15/1946 15- 0- 9. 35.78 118.05 B 4.4
 3/17/1946 7-30--C. 40.00 121.00 D
3/17/1946 8- 0--0. 40.00 121.00 D
                                                F QUINCY AND FEATHER RIVER REGION.
                                                F QUINCY AND FEATHER RIVER REGION.
 3/17/1946 14-45-53. 38.30 117.90 D 5.0
                                                F SW OF HAWTHORNE, NEVADA. V AT LUNING,
NEVADA. IV AT BRIDGEPORT, COLEVILLE, EL PORTAL, LAWS, AND YOSEMITE, AND CARSON
                                                  CITY, FALLON, HAWTHORNE, MINA, SCHURZ, SMITH, SMOKEY VALLEY, TONOPAH, AND
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YERINGTON. NEVADA.
                                                   E ASTERCHOCK OF 3/15/46, 13-49-36, VI AT
3/18/1946 15-49-26. 35.78 117.92 8 4.8
                                                      AFTERSHOCK OF 3/13/46, 13-49-30. VI AT BROWN, LOS ANGELES, TRONA, AND WELDON. V AT COSO JUNCTION, DUCOR, LITTLE LAKE, AND MURDIC. IV AT 17 TOWNS.
                                                      AND MURDC.
                                                    F 12 MI. S OF LITTLE LAKE.
3/26/1946 8-38--0. 35.90 118.00 D
                                                    F SAN MARTIN
3/27/1946 16-30--0. 37.10 121.70 D
3/29/1946 10-40-11.0 37.95 121.98 8 2.5
                                                   F IV AT MARTINEZ AND LAFAVETTE.
                                                   F CASSEL AND FALL RIVER MILLS.
3/29/1946 11-58--0. 40.90 121.70 D
                                                    F 7 MI. S OF HOLLISTER.
4/10/1946 5-16--0-
                         36-70 121-40 D
4/16/1946 10-37- 5.
                         35.78 118.20 B 4.1
                                                   F SAND CANYON.
4/17/1946 8-57-54.
                         36.60 121.20 D 3.1
                                                      SE DE VINEYARD
                                                   F IV AT SAN MARTIN AND WATSONVILLE.
4/17/1946 13-33-20.
                         36.92 121.75 C 3.4
                                                   F LAYTONVILLE.
4/19/1946 21- 0--0.
                         39.70 123.50 D
A/22/19A6 7-A2- 8.
                         37-72 121.57 B 3.5
                                                   F FELT IN VERNALIS.
                                                     SW OF MT. HAMILTON.
4/23/1946 10-39- 7.
                         37.28 121.73 B 2.8
4/25/1946 11-45-47. 36.78 121.60 A 2.8
                                                   F IV AT WATSONVILLE.
                                                   F NEAR SANTA CLARA. VI AT MILPITAS AND
PLEASANTON. V AT ALVISO, AGNEW, MISSION SAN JOSE, MORAGA, AND NEWARK.
AROUND MINA, NEVADA.
4/25/1946 21-50-38. 37.57 121.92 A 3.8
4/27/1946 2-18-24. 38.50 118.00 D 4.7
4/28/1946 15-50-58. 37.70 121.40 D 2.7
                                                      SOUTH OF TRACY.
                                                   F 4/29 THROUGH 5/4 12 OR MORE SHOCKS FELT AT
                                                      CHILDS MEADOWS, MANZANITA LAKE, AND MINERAL.
4/29/1946 19-39- 9. 37.57 121.92 R 2.2
5/ 1/1946 17-30-10. 37.08 118.00 C 4.0
5/ 2/1946 1-26-12. 37.68 121.60 A 4.6
                                                      NEAR PLEASANTON.
                                                   F E OF TINEMAHA. IV DEEP SPRINGS AND LAWS.

F FELT OVER 3,000 SQ. MI. IN WEST CENTRAL

CALIFORNIA. VI TRACY. V BYRON, MORAGA. IV AGNEW, ALMA, DECOTO, DIABLO, SUNDL,
                                                      ISLETON, IRVINGTON, LAFAYETTA, LATHROP, LIVERMORE, MISSION SAN JOSE, MOUNT EDEN,
                                                      MILES, PINOLE, PLEASANTON, RIPON, SAN GREGORIO, SAN LORENZO, SAN FRANCISCO.
5/ 2/1946 2-11-37. 37.68 121.62 A 3.2
                                                      EAST OF LIVERMORE.
5/ 2/1946 19- 9-35.
                        37.43 121.72 B 2.4
                                                      NW OF MT. HAMILTON.
5/13/1946 1-16-57. 36.05 117.92 R 3.0
5/13/1946 1-18-33. 36.05 117.92 B 3.0
                                                   E HATWEE.
                                                   F HAIWEE.
5/13/1946 1-18-33.

5/13/1946 1-26- 9.

5/14/1946 0-23-30.

5/14/1946 2-34-28.

5/18/1946 3-55- 0.

5/18/1946 6-45-49.

5/21/1946 5-36-24.
                         36.05 117.92 B 2.9
                                                      HATWEE
                         37.33 118.83 C 3.9
                                                   F W OF BISHOP. FELT AT LAWS.
                         37.33 118.83 C 3.5
                                                      W OF BISHOP.
                        37.37 118.83 C 4.1
                                                   F WEST OF BISHOP. IV AT LAWS.
                                                     AFTERSHOCK OF 3-55-0.
                         37.37 118.83 C 4.0
                                                   F KERN RIVER POWERHOUSE NO. 3.
                        35.90 118.50 D
5/22/1946 19- 1-53. 36.13 117.95 B 2.5
                                                   F HATWEE.
5/24/1946 6-19-27. 36.05 117.92 C 2.8
5/25/1946 12- 1-30. 36.57 121.18 A 3.6
5/29/1946 5-58--2. 37.80 122.20 D
                                                      HAIWEE.
                                                      SE OF VINEYARD.
                                                   F 10 MI. SE OF UNIV. OF CALIF., BERKELEY.
                                                      V MOREGA. IV ALAMEDA, ALBANY, BERKELEY, CANYON, HAYWARD, DAKLAND, PIEDMONT,
                                                      RODED. AND WALNUT CREEK.
                                                   F V HOLLISTER. IV SAN JUAN BAUTISTA AND SAN
MARTIN. III SALINAS AND WATSONVILLE. DEPTH ABOUT 10 KM.
5/29/1946 17-51- 3. 36.77 121.42 C 4.5
                                                      N OF CHINA LAKE.
6/ 1/1946 20-28-50. 35.88 117.37 C 3.5
                                                      S OF HAIWEE.
F MINERAL . BETWEEN 6-56-0 AND 15-30-0
                                                      TWENTY SHOCKS WERE FELT.
6/24/1946 5-25--0. 40.35 121.60 D
                                                   F MINERAL.
7/ 5/1946 10-44-32.
                         37.33 119.08 C 3.1
                                                     W OF BISHOP.
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7/ 7/1946 6-55-15. 40-50 121-50 B 5-0

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F FELT OVER ABOUT 7,000 SQ. MI. IN MO. CALIF
VI MILL CREEK AND MINERAL. V CARIBOU AND GRASS VALLEY. IV CHESTER, CHICO,
DUTCH FLAT, GRIDLEY, QUINCY, REDDING, AND SUSANVILLE. III MARYSVILLE.
F MINERAL. FELT ALSO AT CARIBOU.
 7/ 8/1946 12- 4--0. 40.35 121.60 D
                                                      SW OF TRACY.
                         37.70 121.50 A 3.4
 7/13/1946 23-12-20-
                         37.50 121.68 B 2.4
                                                      SE OF LIVERMORE.
 7/14/1946 10-16-44.
                                                   F HEAVY SHOCK AT NINE MILE ADDT. STA.
F EUREKA. (BSSA. OCT. 1946.)
                         35.83 118.00 C 3.4
 7/23/1946 11-25-58.
 8/ 3/1946 4- 0--0.
8/ 5/1946 4- 8-45.
                         40 95 124 15 D
                                                     SAN ANDREAS FAULT, NEAR ALMA AND LOS
                         36.85 121.78 C 4.1
                                                     GATOS. IV AT ALMA, ALVISO, APTOS, LOS GATOS, SAN GREGORIO, AND WATSONVILLE.
III AT SAN FRANCISCO.
                                                      NORTH OF MONO LAKE.
                         38.17 119.28 C 4.2
8/ 8/1946 10- 5-14.
                                                     NORTH OF MONO LAKE.
8/ 8/1946 11-15- 5.
                         38.17 119.28 D 3.6
 8/ 8/1946 11-17- 9.
                         38.17 119.28 D 3.3
                                                     NORTH OF MONO LAKE.
                                                   F SCOTTA AND UPPER MATTOLE.
 8/ 8/1946 20-13--0.
                         40.40 124.10 D
                                                    NORTH OF OWENS LAKE.

INTENSITY IV AT ROCKAWAY BEACH, III AT SAN FRANCISCO AND DAKLAND.
                         36.48 117.92 R 3.0
 8/10/1946 21-28-28.
                         37.72 122.73 B 3.2
 8/14/1946 21-57-59.
                                                   E S MI S OF MARKIFFYTILF.
 8/19/1946 10-20--0.
                         38-50 110-75 D
8/24/1946 12-16-28.
                         35.88 118.07 C 2.9.
                                                    S OF HATWEE.
                                                     N OF CHINA LAKE.
0/ 5/1046 17-38-33-
                         35.98 117.38 C 3.7
 9/14/1946 17-18-38.
                         36.07 117.32 C 3.1
                                                     N OF CHINA LAKE.
9/19/1946 6-35-44
                                                   NEAR TULARE LAKE BASIN.
NE OF MT. HAMILTON.
F N OF MT. HAMILTON. FELT AT SAN JOSE.
                         35.83 119.67 C 3.2
                         37.47 121.45 D 2.2
10/ 1/1946 19-23- 3-
                         37.52 121.68 B 3.5
                                                      (BSSA, OCTOBER 1946.)
                                                   NW OF GILROY.

F CANYON. VERY SLIGHT SHOCK.

WEST OF GILROY.
                         37.15 121.58 8 3.1
10/30/1946 20-10--0.
                         37.85 122.20 D
                         37-00 121-73 D 2-9
                                                     SW OF HAIWEE.
11/ 7/1946 21- 9-55.
                          35.92 118.20 D 2.9
11/10/1946 8-23- 2.
                         37.95 122.27 A 2.0
                                                     NORTH OF BERKELEY.
SOUTH OF DAKLAND. IN SAN FRANCISCO BAY.
11/15/1946 3-23-58.
                         37.65 122.25 C 2.0
                                                      NE OF MT. HAMILTON.
11/22/1946 16- 6-24.
                         37.37 121.55 A 2.7
                                                     N OF OWENS LAKE.
11/24/1946 21-30-14.
                         36.60 117.87 C 3.8
11/25/1946 1- 2--0.
11/25/1946 7-16-44.
                         40.85 124.15 D
                                                   F EUREKA. FELT AT ARCATA.
                         36.82 121.52 B 2.9
                                                   F NEAR CAYUCOS. V AT MORRO BAY AND SANTA
11/27/1946 14-44-51.
                         35.50 120.92 C 4.3
                                                      MARGARITA: ALSO FELT ATASCADERO, LOS ALAMOS, PISMO BEACH, AND SAN LUIS OBISPO.
                                                     NEAR GOLD MOUNTAIN, NEV.
12/ 1/1946 6-23- 3.
                         37.17 117.33 C 3.5
                                                     NEAR GOLD MOUNTAIN, NEV.
12/ 1/1946 11-54-35.
                                                     NEAR GOLD MOUNTAIN. NEV.
                         37.20 117.32 C 3.3
                                                      NEAR GOLD MOUNTAIN, NEVADA.
                         37.30 117.30 D 4.1
12/ 7/1946 2- 2-29.
12/ 9/1946 14-35-17.
                         35.77 117.78 C 3.0
                                                     W OF CHINA LAKE.
                                                   F FELT OVER 3,500 SQ. MI. IN NO. COASTAL
12/18/1946 14-20-28.
                         40.30 124.60 C 4.7
                                                                    VI FERNDALE AND CAPETOWN. V ARCATA, BLUE LAKE, EUREKA, FIELDS
                                                      CALIFORNIA.
                                                      LANDING, FORTUNA, HONEYDEW, PEPPERWOOD, PETROLIA, SHELTER COVE, UPPER MATTOLE.
                                                      IV BENBOW, BRIDGEVILLE, COLUSA, FORT BRAGG, GARBERVILLE, ORICK, SCOTIA, TRINITY
                                                      CENTER, TRINIDAD, WESTPORT, ROCKPORT, REDDING, PIERCY, ORLEANS, AND OTHERS.
                                                               VERY SLIGHT SHOCK.
                                                   F FUREKA.
12/21/1946 4-25--0. 40.85 124.15 D
12/24/1946 1-39-50. 37.48 121.53 C 3.4
12/27/1946 7-6-0. 37.52 119.00 C 3.8
                                                       IV IN SAN JOSE .
                                                   F NO. OWENS VALLEY. FELT LONG VALLEY RES.
12/27/1946 8-22-59. 37.52 119.00 C 3.3
                                                     NORTHERN OWENS VALLEY.
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12/30/1946 0-46-26. 37.35 121.35 C 2.6
                                                   FAST OF MT. HAMILTON-
1/ 4/1947 14-50--0.
                        36-60 121-10 D 2-9
                                                    WEST OF LLANADA.
 1/ 6/1947 21- 5-47. 35.85 120.47 C 3.6
                                                    N OF SAN SIMEON.
 1/ 7/1947 17-28-39.
                        37.17 118.12 C 3.3
                                                 F NE OF TINENAHA. FELT BIGPINE AND LAWS.
                                                 F N OF BISHOP. VI OWENS RIVER GORGE (N OF
BISHOP). V TINEMAHA RESERVOIR. VI BIGPINE CAMP, BISHOP, AND WOODLAKE.
 1/11/1947 11-57-48. 37.60 118.43 C 4.4
                                                 F EMIGRANT RANGER STA. (DEATH VALLEY).
 1/12/1947 22-10--0.
                        36.60 117.15 D
 1/14/1947 2-47-48.
                        37.23 117.37 C 3.9
                                                   S OF GOLDFIELD. NEV.
 1/14/1947 2-50-11.
                        37.23 117.37 C 3.5
                                                    S OF GOTDFIELD. NEV.
 1/19/1947 19-32- 0.
                        35.60 120.30 D 3.1
                                                 F PASO ROBLES.
                                                   SW OF COLEVILLE
 1/21/1247 6-59--0-
                        38-40 119-70 B 3-8
 1/25/1947 11-49--0.
                                                    MONTEREY BAY.
                        36.73 121.88 B 3.7
                                                    SW OF MT. HAMILTON.
1/26/1947 4-13--0.
                        37.23 121.73 A 2.6
 1/28/1947 5-54--0.
                        36.60 121.17 8 3.0
                                                    SW OF VINEYARD.
1/31/1947 4- 2-- 3.
                        36.80 121.60 C 2.4
                                                    NEAR SAN JUAN BAUTISTA.
2/ 1/1947 1-45-17.
                        35.92 119.05 C 2.8
                                                   S OF PORTERVILLE.
                                                   S OF PORTEXVILLE.

VI AT LONDAK, V AT COALINGA, IDRIA,

KING CITY. IV AT BIG SUR, HURON, PARKFIELD, SAN ARDD, AND WESTHAVEN.
2/ 5/1947 6-14--0. 36.23 120.65 B 5.0
                                                    NEAR SAN JUAN BAUTISTA.
2/ 9/1947 16-21--0. 36.80 121.60 C 3.0
2/12/1947 0-47-0. 36.70 121.00 C 3.0
2/12/1947 7-44-0. 37.15 117.38 C 3.4
2/20/1947 12-45-0. 37.55 119.45 B 3.6
                                                    NW OF LLANADA.
                                                   S OF GOLDFIELD, NEV.
                                                     IV AT ELLERY LAKE AND GLEN
                                                 LAKE (LEEVINING, MOND COUNTY).

NEAR COALINGA. AFTER SHOCK OF 2/5/47, 6-14

F NE OF INYOKERN. V AT NINE MILE AQUEDUCT
2/25/1947 11-45-18. 36.20 120.50 D 4.2
3/ 9/1947 21-10-44. 35.82 117.68 C 4.0
                                                    STATION. ALSO FELT AT JAWBONE AND SAND CANYON AQDT. STAS., TRONA, AND WELDON.
3/11/1747 20-30--0. 39.30 120.20 D
                                                 F WASHOE VALLEY, NEVADA.
3/11/1947 21-45--0.
                        39.30 120.20 D
                                                 F WASHOE VALLEY, NEVADA.
3/14/1947 11-36--0. 40.30 124.30 C 4.0
                                                 F NEAD DETONITA. TV HODED MATTHE.
3/17/1947 8-46--0. 40.30 124.90 C 4.4
                                                 F FELT AT FERNDALE AND PETROLIA.
 3/23/1947 12- 0--0.
                        37.97 122.10 R 2.9
                                                   NEAR CONCORD.
3/23/1947 15- 4-51.
                       35.15 121.30 D 3.7
                                                    W OF SAN LUIS OBISPO.
3/30/1947 7-44--0.
                       40.38 124.68 B 4.6
                                                   FELT OVER AN AREA OF 2,000 SQUARE MILES IN
                                                    SOUTHWESTERN HUMBOLDT COUNTY, VI AT BRIDGEVILLE, V AT EUREKA, HOLMES, HONEYDEW.
                                                   FIELDS LANDING, FORTUNA, UPPER MATTOLE, IV AT ARCATA, ABNOOW, BLUE LAKE, CAPE MENDOCINO LIGHT STATION, CARLOTTA, DYERVILLE, FORT BRAGG.
4/ 2/1947 5-48--0. 37.53 121.75 A 2.5
                                                    SOUTH OF LIVERMORE.
4/12/1947 23- 7--0.
                        36.52 121.58 B 3.5
                                                    WEST OF GONZALES.
4/13/1947 9-12-- ).
                        37.57 121.85 C 2.0
                                                    SW OF LIVERMORE.
4/14/1947 16-35-44.
                                                    INTENSITY IV IN CARMEL.
                        36.52 121.58 B 3.6
4/22/1947 2-24--0.
                       37.73 122.07 A 2.5
                                                   FAST OF DAKLAND.
4/22/1947 15-33--0.
                        37.30 121.80 D 2.8
                                                   NEAR SAN JOSE .
4/26/1947 11-20--0.
                        36.88 121.43 C 3.1
                                                   NEAR HOLLISTER.
                       37.05 121.68 C 2.3
4/29/1947 13-17--0.
                                                   NW OF GILROY.
5/ 3/1947 6- 4--0.
5/ 4/1947 8-45--0.
                       37.70 121.77 C 2.6
                                                   NEAR LIVERMORE
                                                   EAST OF HOLLISTER.
                       36.82 121.20 B 3.4
5/ 7/1947 15-41--0.
                       36.82 121.20 C 3.6
5/10/1747 8-10-42.
                       39.60 120.30 B 4.2
                                                 F IV SIERRA CITY AND SIERRAVILLE.
5/13/1947 2- 1--0.
                        36.80 121.42 C 2.7
                                                   NEAR HOLLISTER.
5/15/1947 1-55--0. 37.30 121.80 D 2.4
5/26/1947 0-22-23. 35.78 118.03 C 3.0
5/26/1947 3-5--0. 37.70 121.98 C 2.3
                                                   NEAR SAN JOSE.
                                                 F NEAR WALKER PASS. FELT SAND CANYON AQ. ST.
                                                   FAST OF HAYWARD.
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5/27/1947 19-35--0. 40.25 124.10 D
5/27/1947 20-59--0. 40.40 124.70 B 5.2
                                                      F UPPER MATTOLE.
                                                      F FELT OVER ABOUT 2.400 BQ. HI. FROM HOOPA
                                                         TO FORT BRAGG TO TRINIDAD. VI MONEYDEW AND UPPER MATTOLE. V CAPE MENDOCING LT.
STA., EUREKA, FERNOALE, FORT BRAGG, GARBERVILLE, PETROLIA, AND SCOTIA. IV
                                                         ALDERPOINT, ARCATA, 7 MI. N OF BRIDGEVILLE, CARLOTTA, FORTUNA, AND TRINIDAD.
6/ 6/1947 3-36--0. 37.20 121.70 D 2.5
6/22/1947 23-30--0. 37.00 121.77 A 4.7
                                                         COUTH OF MT. HAMTI TON.
                                                      F FELT OVER ABOUT 7.000 SQ. MI. FROM SANTA
                                                         ROSA TO STEVENSON TO SAN ARDO. INTENSITY VI AT ALMA, APTOS, BENICIA, COYDTE, FELTON, FREEDOM, GILROY, MADROME, MORGAN HILL, MOSS LANDING, MOUNTAIN VIEW, SAN CARLOS, ROCKAWAY BEACH, SAN JOSE, SAN MARTIN, SPRECKELS, WATSONVILLE, AND BEN
                                                         LOMOND. V AT FORTY ADDITIONAL TOWNS.
                                                      F III AT WATSONVILLE.
6/23/1947 0- 8- 0.0 36.90 121.75 D
7/ 7/1947 4-40--0. 36.77 121.42 A 4.3
                                                         EAST OF LLANADA.
                                                      E SOUTH DOS PALOS.
                                                          V AT HOLLISTER. IV AT
                                                         MONTEREY, SAN MARTIN, SOUTH SAN FRANCISCO AND TASSAJARA HOT SPRINGS, I TO III
                                                         AT APTOS, CASTROVILLE, CHUALAR CANYON, PINOLE, SALINAS AND SAUSALITO.
7/13/1947 5-35--0. 36.08 121.10 D 3.4
7/14/1947 5-40- 6. 35.92 119.92 C 4.0
                                                         SOUTH OF KING CITY.
                                                      E KETTI FMAN HILLS. IV AT KETTLEMAN CITY.
                                                        NEAR HAIVEE.
7/16/1947 8- 1-22.
                          36-00 118-08 C 2-7
                          37.20 122.25 C 2.4
7/22/1947 17-36--0.
                         38.65 119.75 D
                                                       F MARKLEEVILLE.
7/24/1947 8-45--04
                                                       F UPPER MATTOLE. ALSO FELT AT SCOTIA.
7/26/1947 7-55--0.
                           40.25 124.10 D
                                                      F TOBIAS PK .. SEQUOIA NAT'L. FOREST.
7/27/1947 -0--0--0-
                          35-80 118-50 D
                                                        OFF CAPE MENDOCINO.
                         40.70 135.70 C A-A
7/31/1947 8-16--0.
A/ A/1947 22- 2--0. 37.20 122.25 8 2.5
                                                         SOUTH OF PALO ALTO.
8/10/1947 21-58--0. 36.88 121.42 A 4.4
                                                          VI AT HOLLISTER. V AT LOS
                                                         VI AI HULLISIEM, V AI LUS
MANDS CREEK, PINNACLES AND TRES PINOS. VI AT CHUALAR, GLENWOOD, MONTEREY,
SALINAS AND SOLEDAD. III AT BIG SUR, GILROY, SAN ARDO AND SAN JUAN BATISTA.
8/13/1947 7-33--0. 36.92 121.35 A 3.1
                                                         NE OF HOLLISTER.
8/15/1947 0-15--0. 36.92 121.35 A 2.9
                                                         NE OF HOLLISTER.
                                                         NEAR PLEASANTON.
8/16/1947 16-45--0.
                          37.60 121.80 D 2.5
                                                          IV AT CHUALAR CANYON. III
8/19/1947 13-31-56. 36.58 121.57 8 3.4
                                                         7 MILES SOUTH OF HOLLISTER.
                                                         NEAR HOLLISTER.
8/21/19A7 7-58--0. 36.88 121.42 B 3.4
8/23/1947 9-29--0. 37.32 121.83 B 3.0
8/24/1947 21-13--0. 36.88 121.42 B 3.2
                                                         WEAD SAN INSE.
                                                          AFTERSHOCKS AT 2121, 2136,
                                                          AND 0004 (AUGUST 25).
                                                      F WASHOE VALLEY AND CARSON, NEVADA.
F NEAR TRUCKEE. FELT STRONGLY IN CARSON AND
9/ 8/1947 5-45--0. 39.30 120.20 D
9/ 8/1947 5-52--0. 39.30 120.20 B 4.5
                                                                                    ALSO FELT AT MARLETTE LAKE, MINDEN, AND REND, NEV.
                                                         WASHOE VALLEY. NEV.
                                                       F WASHOE VALLEY, NEVADA.

F WASHOE VALLEY AND CARSON, NEVADA.

F FELT IN RENO AND WASHOE
9/ 8/1947 6-20--0. 39.30 120.20 D
9/ 8/1947 6-30--0. 39.30 120.20 D
9/ 8/1947 7-13--0. 39.30 120.20 B 4.7
                                                         VALLEY.
                                                                    THREE SMALLER SHOCKS.
                                                         SE OF LIVERMORE.
9/10/1947 22-30--0. 37.60 121.60 D 2.6
9/20/1947 18- 1-52.0 36.87 121.87 R 3.8
                                                       F VI AT WATSOMVILLE. FELT AT MOSS LANDING.
                                                         AFTERSHOCK AT 21-00.
9/23/1947 6-20-40. 37.15 116.00 3.5
9/23/1947 13-52-55. 40.40 125.20 C 5.3
                                             3.5
                                                         NW OF LAS VEGAS.
FELT OVER LAND AREA OF 4,000 SQ. MI. FROM
                                                                                          HEAVY VIBRATIONS FELT AT SEA AT 40 51 N. 124 45 W.
                                                         ORICK TO REDDING TO ELK.
                                                         VII AT PUNTA GORDA LT. STA. VI AT BRIDGEVILLE, EUREKA, FERNDALE, KNEELAND.
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FIELDS LANDING, AND UPPER MATTOLE. V AT 18 TOWNS.
 9/25/1947 12-27-51. 36.87 122.18 B 3.7
9/27/1947 7-40-0. 40.30 120.60 C 4.4
                                                      IV AT SANTA CRUZ AND SOQUEL.
                                                     SOUTH OF SUSANVILLE.
10/ 1/1947 12-11--0. 40.60 122.40 D
                                                   F REDDING.
10/ 2/1947 2-53--0. 40.25 124.10 D
                                                    F V UPPER MATTOLE. IV FERNDALE, SCOTIA.
                         36.57 121.25 8 3.2
                                                     SE OF VINYARD.
10/ 6/1947 4-19--0.
                         37.27 121.77 C 2.9
                                                     SE DE SAN INSE.
                                                     FAST OF GONZALES.
10/6/1047 18-09-0 36.50 121-23 4 3.2
10/ 8/1947 14-25--0.
                         37.70 122.18 C 2.7
                                                      FELT IN SAN LEANDRO.
10/9/1947 8-36-48. 36.70 116.00 D
10/13/1947 5-40--0. 40.50 123.75 D
                         36.70 116.00 D 3.6
                                                     NW OF LAS VEGAS.
                                                  F 7 MI . NE OF BRIDGEVILLE .
10/15/1947 10-29--0.
                         37.30 121.80 D 2.1
                                                    NEAD SAN INSE.
10/15/1947 17-52--0. 37.30 121.80 D 2.8
10/21/1947 2-45-58. 37.33 121.97 C 2.9
10/25/1947 0-29--0. 38.03 122.43 B 2.7
10/28/1947 21-59-17. 35.97 117.67 B 3.2
                                                     NEAR SAN JOSE
                                                      FELT 6 MILES EAST OF SAN JOSE.
                                                     SAN PABLO BAY.
                                                     N OF CHINA LAKE.
                                                  SW OF HAIWEE.
10/30/1947 2-52-36. 35.82 118.18 B 3.0
10/31/1947 13-20--0. 37.70 122.33 C 2.5
11/ 2/1947 7-1--0. 40.10 125.30 C 4.8
11/ 3/1947 8-15--0. 37.70 122.20 D
                                                       FORESHOCK AT 1257. SAN FRANCISCO BAY.
                                                     OFF CAPE MENDOCINO.
                                                   F SAN LEANDRO.
11/ 3/1947 15-55-17.
                         35.92 117.53 B 3.3
                                                     N OF CHINA LAKE.
11/ 7/1947 6-50--2.
                         39.75 121.65 D
                                                  F PARADISE.
                         39.80 122.70 D 3.9
                                                  F IV AT CHROME. II AT PARADISE.
11/12/1947 3-20--0.
                         39.30 120.40 D
                                                   F SODA SPRINGS.
11/12/1947 13-22-35. 37.28 121.85 ( 1.9
                                                 E VI IN ALUM POCK DISTRICT.
                                                     V 6 MILES SOUTHEAST OF SAN JOSE.
11/12/1947 21-27-0. 36.87 121.35 B 3.1
11/15/1947 22-29-36. 36.78 122.12 B 4.1
                                                     NEAR HOLLISTER.
                                                       IV AT SANTA CRUZ AND
                                                     PFEIFFER BIG SUR STATE PARK.
11/17/1947 11-23--0. 37.67 122.05 C 2.5
                                                     NEAD HAYWARD.
11/25/1947 19- 3- 2.
                         39.30 119.80 C 4.0
                                                      FELT IN CARSON CITY. NEVADA.
11/26/1947 8-46--1.
11/29/1947 5-16--0.
                         37.00 121.10 D 3.3
                                                   NE OF HOLLISTER.
                         37.35 121.72 C 3.1
                                                     NEAR MT. HAMILTON.
12/ 1/1947 13- 3--0.
                         39.20 120.20 D 3.7
                                                      SOUTH OF TRUCKEE.
12/ 1/1947 19-25-22.
                         36.10 118.07 B 3.1
                                                      HAIWEE.
12/ 4/1947 21-22-0.
12/ 5/1947 21-22-0.
12/ 5/1947 0-35-0.
12/ 6/1947 2-6-0.
12/ 8/1947 8-29-0.
                                                     NE OF GILROY.

CRYSTAL SPRINGS RESERVOIR.
                         37.10 121.50 D 1.0
                         37.60 122.43 C 2.2
                         37.60 122.43 C
                                                       TINY SIZE. CRYSTAL SPRINGS RESERVOIR.
                         36.87 121.35 C 3.0
                                                     NE OF HOLLISTER.
12/12/1447 1-49-0.
12/13/1947 8-35-0.
12/14/1947 5-42-0.
                                                     EAST OF CONCORD.
                         37.92 121.75 B 3.0
                         37.07 121.23 C 2.2
                         36.45 121.08 R 3.4
                                                     SW OF LLANADA.
12/14/1947 13-43--0. 40.25 124.10 D
                                                   F IV UPPER MATTOLE. ALSO FELT FERNDALE.
12/16/1947 9-21- 3. 36.25 120.77 C 3.6
                                                  F IV AT SAN LUCAS.
F IV AT MORGAN HILL.
12/18/1947 11-19-33.
                         37.07 121.68 A 3.4
                         37.07 121.68 A 3.1
12/18/1947 1-3-29--0.
                                                     NW OF GILROY .
12/18/1947 19-30- 6. 36.12 120.90 D
                                                  F IV PARKETELD
12/19/1947 2-36-41. 36.35 117.48 C 3.5
                                                  SE OF LONE PINE.
F STRONGEST OF 16 SHOCKS, THIS EPICENTER
                                                     RECORDED AT BERKELEY. 8 SHOCKS FELT IN SAN RAMON, DANVILLE, AND WALNUT CREEK.
12/24/1947 23-36-55.0 36.65 120.67 C 3.5
                                                     EAST OF PANOCHE.
12/25/1947 6- 5--0. 35.60 121.10 D
                                                   F CAMBRIA.
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F CAMBRIA.
F FULTON. LIGHT SHOCK.
12/25/1947 6-20--0. 35.60 121.10 D
1/ 2/1948 8-35--0. 38.50 122.85 D
                                                      F SAND CANYON AGDT. STA.
F IV SEVEN MILES SOUTH OF HOLLISTER.
 1/ 4/1948 1-30-35.
                          35.83 117.73 C 3.5
 1/ 9/1948 16-26-47.
                          36.82 121.32 C 2.8
36.70 121.28 C 3.5
                                                        SE OF VINEYARD.

OFF COAST, WEST OF CRESCENT CITY.

IV IN HOLLISTER.
 1/ 9/1948 21-56- 5-
F FELT OVER 3,000 SQ. MI. IN SAN JOAQUIN
                                                        VALLEY. VI BRENTWOOD, BYRON, STOCKTON, WATERMAN. V HOLLISTER, HOLT, MANTECA.
                                                      F VISALIA.
 1/24/1948 9-30- 0.0 36-35 119-35 D
1/28/1948 21-11-0. 36.75 119.75 D
1/28/1948 21-21-0. 36.75 119.75 D
                                                     F IV AT FRESHO.
                                                      F TV AT CAMINO.
 1/29/1948 22- 0--0.
                          38.75 120.70 D
                          36.75 119.75 D
                                                      F IV AT FRESHO
 1/30/1948 22-15--0.
                          37.60 120.90 D
                                                      F IV AT WATERFORD.
1/31/1948 2-54-54, 37.97 121.95 8 3.6
1/31/1948 23-42-12, 40.70 122.35 D
2/ 6/1948 13-14-13, 37.22 117.90 C 4.2
                                                         IV AT SAN RAMON.
                                                      F IV AT CENTRAL VALLEY.
                                                      F EAST OF BIG PINE. V AT BISHOP, LAWS, AND
2/ 7/1948 10-55-48. 37.22 117.90 C 3.3
                                                        E OF BIG PINE.
2/ 9/1948 11-15--0 37*50 117*80 D
2/11/1948 3-29-28 36*10 118*80 C 4*9
                                                      F REDDING.
F 9 MI. E OF OASIS.
                                                     F 9 MI. E OF UASIS.

F FELT OVER AREA OF 18,000 SQ. MI. IN SAN
JOAQUIN VALLEY AND SG. SIERRA NEVADAS. VI AT CLOVIS, DINUBA, DUCAR, FRESNO,
KINGSBURG, MIRAMONTE, SPRINGVILLE, THREE RIVERS, TIPTON, WOODY. V AT COTTONWOOD
                                                        GATES (LONE PINE), MIRACLE HOT SPRINGS, ORANGE COVE, POSEY, SEQUOIA NAT'L. PK.
                                                        (ASH MTN.), WOODLAKE. IV AT 19 TOWNS.
                          36.85 118.15 D
                                                      E IV NEAD INDEPENDENCE.
2/15/1948 7-30--0.
                                                        EAST OF PARKFIELD.
2/15/1948 8- 4- 6. 35.88 120.37 A 3.4
2/17/1948 6- 1-36. 41.00 125.00 D 4.0
                                                        OFF COAST, WEST OF EUREKA.
 2/17/1948 19-52-36.
                          37.20 122.23 C 2.0
                                                        SOUTH OF PALO ALTO.
 2/18/1948 18-56-39.
                          37. 20 122.23 C 2.2
                                                        OFF CAPE MENDOCINO. FELT AT EUREKA.
 2/19/1948 8-25- 9. 41.00 124.90 C 4.8
 2/21/1948 4-19--0.
                          38.40 122.75 D
                                                      F IV AT SANTA ROSA.
2/22/1948 1- 9- 2·
2/22/1948 15- 5--0·
                          36.93 121.65 A 3.6
                                                         IV IN SAN MARTIN AND HOLLISTER.
                                                      F SAN FRANCISCO.
                          37.75 122.50 D
 2/24/1948 2-12-57.
                          37.20 121.60 D 2.8
                                                        SOUTH OF MT. HAMILTON.
                                                        EAST OF CONCORD.
 2/25/1948 16-45-53.
                          37.93 121.87 C 2.1
                                                        NEAR LIVERMORE.
 2/25/1948 19-18-58.
                           37.58 121.77 A 3.2
                                                        NEAR COALINGA.
 3/ 7/1949 7-46-22.
                          36.10 120.40 D 3.0
                                                        SOUTH OF PALO ALTO.
 3/11/1948 21-19-53.
                          37.15 122.25 C 2.3
 3/16/1948 11- 2-12.
                          37.58 121.83 B 2.3
 3/22/1948 9-13-28.
                                                          V IN BALLINGER CANYON, SAN RAMON.
                           37.82 121.65 B 3.0
 3/22/1948 20-55-20.
                          37.18 122.28 C 2.2
                                                        SOUTH OF PALO ALTO.
                                                     F V FERNDALE. IV BENBOW AND MIRANDA.
SMALL SHOCK FROM SAME SOURCE AT 0719.
 3/27/1948 21- 9-36.
                          40.3C 124.80 D 4.0
 3/28/1948 1-56-46.
                          37.80 122.10 D 1.2
                                                     F III IN REND, NEVADA.
F FORESHOCK OF 22-38-03. FELT REPORT SAME.
 3/28/1948 18-26-20. 39.00 119.90 D 4.6
 3/28/1948 22-36--0. 36.85 121.57 C 4.0
3/28/1948 22-38- 3. 36.85 121.57 A 4.6
                                                     F FELT OVER AREA OF 4,100 SQ. MI. VI AT
MONTEREY, MORGAN HILL, SALINAS. V AT DALY CITY, MONTARA, HOLLISTER, SANTA CRUZ.
F AFTERSHOCK OF 22-38-03. FELT REPORT SAME.
3/28/1948 22-45--0. 36.85 121.57 C 4.5
                                                     F IV AT HOLLISTER.
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NEAR HOLLISTER.
3/29/1948 9-34-25. 36.80 121.43 C 2.8
                                                 NW OF SAN FRANCISCO.
4/ 2/1948 11-24-47.
                      36.90 121.60 D 2.3
                                                 FAST OF WATSONVILLE.
                                               E IV AT FUREKA.
4/ 3/1948 7- 5--0.
                      40.85 124.15 D
                                               F CHUALAR CANYON. SLIGHT SHOCK.
4/ 3/1948 15-45--2.
                       36.60 121.60 D
                       37.07 121.47 C 3.4
                                                 NE OF GILROY.
A / A / 10AB 13-18-3A
                       38.00 122.00 D 2.8
                                                  IV IN MARTINEZ. (BSSA, JULY 1948.)
4/ 5/1948 15-29-51.
4/ 9/1948 20-55-12.
                       36.73 121.38 C 2.8
                                                NEAR VINEYARD.
                                                 MONTEREY BAY.
4/14/1948 19-56-59.
                      36.77 121.97 B 3.3
4/17/1948 3-11- 4·
                      37.03 121.78 C 2.8
                                               F INDEPENDENCE .
                       36.85 118.15 D
                      38.17 122.53 C 3.6
                                               F NO. SAN FRANCISCO BAY AREA. VI IN FAIRFAX.
A/18/19A8 21-25-10-
                                                 ALSO FELT IN KENTFIELD, PETALUMA, RICHMOND, SAN ANSELMO, SAN FRANCISCO, SAN
                                               RAFAEL, AND VALLEJO.

F. PIT RIVER POWERHOUSE AND CAMP.
4/20/1948 23-32--0. 41.00 122.00 D
                      37.40 121.55 B 3.0
                                                 NE OF MT. HAMILTON.
4/21/1949 10-55- 1.
                      38.00 122.50 D
                                               F FAIRFAX. VERY SLIGHT SHOCK.
4/22/1948 19-37--0.
                       37.22 122.23 C 1.8
                                                 SOUTH OF PALO ALTO.
4/26/1948 20-57-23.
                                               FAST OF VINEYARD.

F VI AT HOLLISTER. ALSO FELT AT BIG SUR,
                      36.77 121.27 A 4.0
4/27/1948 16-41- 8.
4/27/1948 20-22-25.
                      36.77 121.27 A 4.4
                                                 CHUALAR. MORGAN HILL, BEN LOMOND, AND SALINAS. 38 AFTERSHOCKS WERE RECORDED
                                                  AT MT. HAMILTON, AT LEAST 8 OF WHICH WERE FELT.
4/28/1948 7-30--0. 36.75 121.40 D
5/ 4/1948 2-34-15. 37.85 122.22 C
                                               F V AT HOLLISTER.
                      37.85 122.22 C 2.4
                                               F IV IN EAST DAKLAND.
5/ 7/1948 12- 0-32- 36-20 121-90 D 3-0
5/ 9/1948 6- 0- 1- 37-40 122-00 D 2-3
                                                WEST OF PRIEST.
                                                 NEAD SAN INSE.
                                               E TY AT HOLLISTER.
5/ 9/1948 12-45--0.
                       36.75 121.40 D
                                               F IV TO V 7 MI. S OF HOLLISTER.
5/11/1948 12-45--2.
                      36.78 121.40 D
                      37.80 122.20 D 2.0
                                                 DAKLAND HILLS.
5/12/13/48 10=57= 2.
5/12/1949 17- 2-23.
                      37.22 122.23 C 1.9
                                                  SOUTH OF PALO ALTO.
5/13/1949 12-59- 6.
                       36.63 121.02 C 3.3
                                                 NEAR LLANADA.
5/14/1949 2-17-32. 36.78 121.60 8 3.3
5/20/1949 14-29-31. 37.18 122.28 C 3.5
                                                 NEAR SAN JUAN BAUTISTA.
                                                 SOUTH OF PALO ALTO.
                      38.00 122.30 D 1.7
                                                 NORTH OF RICHMOND.
5/21/1948 16-57-21.
5/22/1948 9-39-53.
5/22/1948 20-39-48.
                      36.78 121.40 B 2.8
                                                  IV 7 MILES SOUTH OF HOLLISTER.
                      37.08 121.48 B 3.1
                                                 NE OF GILPOY.
5/24/1948 5-52-12.
                      36.65 121.40 C 3.2
                                                 SOUTH OF VINEYARD.
                                                 NW OF SAN FRANCISCO.
5/24/1948 17- 1-56.
                      37.83 122.58 C 2.4
                                                 NORTH OF WATSONVILLE.
5/24/1948 18-34-44.
                      37.03 121.77 C 2.1
5/25/1948 22-20--0. 36.50 118.85 D
6/ 7/1948 14-23-15. 36.78 121.72 C 2.5
                       36.50 118.85 D
                                               F KFFI FR.
                                               SE OF WATSONVILLE.

F WEST OF BIG PINE. V AT BISHOP.
                       37.20 118.70 C 4.2
6/ 7/1948 15- 5-22.
6/ 7/1948 15-49- 9. 36.78 121.72 C 3.2
                                                  SF OF WATSONVILLE.
6/ 8/1943 3-27-13.
6/10/1948 7-25--:
                      36.78 121.72 C 2.8
                                                  SE OF WATSONVILLE.
                      37.40 118.40 D
                                               F TV AT BISHOP AND LAWS.
                      36.60 121.20 D 4.0
                                                 SE OF VINEYARD.
6/11/1 348 - 8-28-11.
6/11/1448 11-52- 9. 36.60 121.20 D 3.5
                                                  SE OF VINEYARD.
6/12/1948 21-13-28.
                      37.92 122.18 R 2.2
                                                  SOUTH OF CONCORD.
6/16/1948 12- 36-36. 37.15 121.77 C 2.5
6/16/1948 12-36-35. 37.32 118.77 C 3.8
6/17/1948 0-53-47. 36.12 117.87 B 3.4
                                                  WEST OF MORGAN HILL.
                                                  W OF BISHOP.
                                               F NEAR HAIWEE . FELT HAIWEE AND COSO
                                                  JUNCTION. 9 SHOCKS FELT AND ABOUT 40 SMALLER ONES RECORDED AT HAIWEE.
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F NEAR HAIWEE.
6/17/1948 0-55-49.
                          36.12 117.87 B 3.0
                         36.12 117.87 B 2.6
39.07 123.28 C 3.8
6/17/1948 1-10-14.
                                                     F NEAR HAIWEE.
                                                     F VI AT LAKEPORT, TALMADGE, UKIAH. V AT
6/18/1948 10-35- 0.
                                                        CALPELLA, CLEARLAKE DAKS, FINLEY, POTTER VALLEY, REDWOOD VALLEY, UPPER LAKE.
6/19/1948 5-40--0.
                         39-00 122-90 0
                                                     F LAKEPORT. SLIGHT SHOCK.
                                                       NEAR VINEYARD.
                         36.78 121.45 C 2.3
6/20/1948 4-25-17.
6/20/1948 20-34-38.
                         36.95 121.67 B 3.2
                                                         IV AT WATSONVILLE.
                                                     F V PETROLIA. IV FERNDALE AND SCOTIA.
6/24/1948 3-51--0.
                         40.35 124.25 D
                          36-58 121-10 B 3-2
                                                       WEST OF LLANADA.
6/24/1948 16-49-11.
                          36.58 121.10 B 3.2
                                                        WEST OF LLANADA.
6/24/1948 16-49-11 • 6/25/1948 11-26-8 • 6/25/1948 19-10-29 • 6/30/1948 9-56-29 • 6/30/1948 9-56-29 •
                          36.58 121.10 B 3.2
                                                        S OF HAIWEE.
                          35-82 118-05 B 3-0
                                                        NEAR POINT REYES STATION.
                          38.03 122.82 C 2.2
                                                     SE OF MT. HAMILTON.
F WEST CENTRAL DEATH VALLEY NAT'L. MON.
                         37.23 121.47 C 3.1
7/ 1/1948 12- 8--0.
                          36-50 117-00 0
                                                        WEST OF LIVERMORE.
7/ 5/1948 9-18-32
                          37.70 121.80 D 1.7
7/ 5/1948 10-14--0.
                         40.50 121.65 D
                                                     F V MANZANITA LAKE (LASSEN VOL. NAT'L. PK.).
7/ 8/1948 1-15--C.
7/ 8/1948 2-36-23.
                          39-00 122-90 D
                                                      F LAKEPORT.
                                                         IV IN SAN FRANCISCO, III IN BERKELEY AND
                         37.82 122.57 B 2.9
                                                       ROSS. TINY AFTERSHOCKS AT 0308 AND 0910.
7/11/1948 19-58-43.
                         37.28 121.77 B 3.6
7/13/1948 11- 2-48. 40.60 122.40 D
7/15/1948 4-10-54. 37.72 121.72 C
                                                     F IV AT REDDING.
                         37.72 121.72 C 2.1
                                                        NORTH OF LIVERMORE.
7/15/1948 4-13-54.

7/17/1948 15- 7-40.

7/18/1948 1- 7-59.

7/20/1948 5-30-22.

7/20/1948 8-11-41.
                         36.93 121.55 B 3.5
                                                        NW OF GONZALES.
                         36.60 121.33 B 3.0
                         37.20 121.80 D 2.3
                                                        SE OF SAN JOSE.
                         37.45 121.82 B 3.7
                                                     F VI MILPITAS. V COYOTE, GILROY, SAN JOSE.
                                                        IV AGNEW, APTOS, BOULDER CREEK, HOLY CITY, MISSION SAN JOSE, NILES, SAN FRANCISCO, SAN RAFAEL, SARATOGA.
                                                         IV IN BERKELEY. DEPTH ABOUT 6 KM.
                          37.88 122.27 B 2.4
7/24/1948 13-23-20.
                         40.33 124.97 C 4.2
36.65 121.28 C 2.6
                                                       OFF CARE MENDOCINO
SE OF VINEYARD.
                                                        SOUTH OF SAN JOSE.
7/28/1948 1-30-57.
                         36.05 120.53 C 3.1
                                                        SE OF PRIEST.
                                                        E OF SAN LUIS OBISPO.
7/29/1948 13-16-23.
                          35.12 120.47 C 3.4
7/29/1948 13-16-23.
8/ 1/1948 21-21- 2.
8/ 3/1948 16-40- 3.
8/ 4/1948 7-39--0.
                          36.88 121.55 R 3.3
                                                        NEAR SAN JUAN BAUTISTA.
                                                        SOUTH OF WATSONVILLE. W OF BISHOP.
                          36.82 121.73 B 3.4
                         37.42 118.95 C 3.3
35.92 120.33 C 3.6
8/ 4/1948 10-22-57.
                                                        PARKFIELD.
8/ 6/1948 4-22-57.
                         37.45 118.58 C 4.3
                                                     F WEST OF BISHOP. IV AT BISHOP AND SEQUOTA
                                                       NATIONAL PARK.
WEST OF MONO LAKE.
EAST OF WATSONVILLE.
8/ 6/1948 23-20- 3.0 38-12 119-55 D 3-3
87 671948 23-20-3+0 38+12 119+55 0 3+3
87 771948 0-10-46+ 36-90 121-62 8 3+6
87 871948 17-47-9+ 40+42 124+12 0 3+0
87 971948 11-44-49+ 40+42 124+12 0 3+3
                                                        SOUTH OF SCOTIA.
8/ 9/1948 11-44-49.
                                                     F V IN SAN RAMON.

F V IN SUREKA, FERNDALE, FIELDS LANDING AND
LOLETA. FELT ALONG THE COAST FROM ORICK TO PUNTA GORDA.
8/10/1948 7- 2-47.
                         37.85 121.87 A 3.0
8/18/1948 19-11-57. 40.50 124.70 D 5.0
                                                        EUREKA AND SCOTIA.
8/19/1948 10-54--0. 40.75 124.10 D
8/20/1948 5-53-41. 37.40 121.60 D 2.5
8/26/1948 6-55--0. 37.35 118.40 D
                                                       NEAR MT. HAMILTON.
                                                     E BISHOP.
                                                        NEAR DOWNIEVILLE.
8/27/1948 20-59-45. 39.60 120.80 D 4.0
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NU OF TAS VECAS
 8/29/1948 11-25-57. 36.80 116.55 C 3.4
                                                           SOUTHEAST OF BEATTY, NEVADA.
 8/30/1948 19- 2-21. 36.55 116.17 C 4.0
8/31/1948 16-31-14. 37.48 121.78 B 3.3
                                                           SOUTH OF LIVERMORE.
 9/ 1/1948 21-27-47.
                           38.33 122.58 B 3.3
                                                        F FELT IN SANTA ROSA AND COTATI.
 9/ 2/1948 20- 3-29.
                            36.73 121.28 C 2.8
 9/ 2/1948 22-39-16.
                                                           SOUTH OF PALO ALTO.
                           37.18 122.23 C 2.5
                                                        F NEAR PETROLIA. III IN EUREKA.
 9/8/1948 4-28-13. 40.25 124.27 B 4.0
9/9/1948 3-29-0. 37.43 118.77 C 3.6
                                                           W OF BISHOP.
 9/11/1948 12-17-39. 36.72 119.33 C 2.9
                                                        F V AT MIRAMONTE AND PINEHURST.
9/27/1948 6-28-13. 37.47-121.82 C 2.7
10/ 1/1948 1-11-21. 36.83 116.45 D 3.6
                                                          NE DE SAN JOSE.
                                                           NW OF LAS VEGAS.
                                                           NW OF SAN FRANCISCO. DEPTH ABOUT 12 KM.
NW OF MT. HAMILTON. DEPTH ABOUT 17 KM.
10/ 3/1948 9- 9-38.
                           37.83 122.58 B 1.9
10/ 8/1948 1-26-23.
                           37.43 121.73 A 3.0
10/ 9/1948 16- 0--2.
                            36.60 118.10 D
                                                        F LONE PINE AND KELLES.
10/10/1948 11-21- 8.
                           36.90 121.80 D 2.9
                                                            V AT MOSS LANDING, IV AT WATSONVILLE.
                                                        E V AT ST. HELENA.
10/13/1949 0-23--0.
                           38-50 122-50 D
                           35.83 118.47 C 2.7
                                                        F KERN RIVER POWERHOUSE NO. 3.
10/14/1948 0-57-22.
10/14/1948 9-51-23. 37.37 121.53 C 2.5
10/16/1948 C- 6-53. 40.27 124.27 B 3.9
                                                          NE OF MT. HAMILTON.
                                                        NEAR PETROLIA.
                                                            DEPTH ABOUT 15 KM. IV AT DALY CITY AND
10/17/1948 5-21-47. 37.72 122.53 B 2.1
                                                          SAN FRANCISCO.
                                                           NEAD CAN ILLAN BALLTISTA
10/20/1948 7-33-18. 36.82 121.63 C 2.6
10/20/1948 14-41-50. 37.20 122.20 D 2.4
                                                           SOUTH OF PALO ALTO.
                                                          NEAR SAN FRANCISCO. DEPTH ABOUT 15 KM.
                                                           SIX SMALL AFTERSHOCKS RECORDED AT BERKELEY.
10/23/1943 23-21-34. 37.42 121.72 A 3.3
                                                           NW OF MT. HAMILTON.
10/29/1948 19- 1-15. 37.20 122.20 0 2.5
11/ 8/1948 18- 3-45. 37.20 122.20 0 2.5
11/ 8/1948 23- 4-45. 37.40 121.70 0 2.0
                                                           SOUTH OF PALO ALTO.
                                                           SOUTH OF PALO ALTO.
                                                          NEAR MT. HAMILTON.
                                                        F V AT EL PORTAL, EXCHEQUER DAM, MARIPOSA,
AND MIDPINES. IV AT BEN HUR, BIG OAK FLAT, CATHAY, COULTERVILLE, INCLINE, MOUNT
11/11/1948 1-29--0. 37.50 120.00 D
                                                           BULLION, PLANADA, TUDLUMNE, AND YOSEMITE NATIONAL PARK.
11/12/1948 12-47--0. 39.55 119.80 D
                                                        F RENO, NEVADA.

F FELT AT PETROLIA.
11/12/1948 23-10-25. 40.40 124.32 B 4.5
11/13/1948 12-54-->. 39.55 119.80 D
                                                        F RENO, NEVADA.
NEAR MORGAN HILL.
11/14/1948 4-43-50.
                            37.20 121.70 C 2.4
11/14/1948 10-30--0.
                           39.75 121.85 D
                                                        F CHICO.
11/15/1948 7-32- 9. 37.72 122.25 C 2.2
11/15/1948 23-25- 1. 37.20 122.20 D 2.4
                                                          DAKLAND.
                                                           SOUTH OF PALO ALTO-
                                                           SOUTH OF PALO ALTO.
11/22/1948 18- 4-44.
                           37.20 122.20 D 2.4
11/25/1949 21-34-52.
                                                           SE OF HAYWARD.
                           37.57 121.95 B 2.8
                                                           SOUTH OF PALO ALTO.
12/ 1/1948 22-43-25. 37.20 122.20 D 1.8
12/ 5/1948 3-55--0. 40.40 123.60 D
                                                        F E OF BRIDGEVILLE. V AT HYAMPOM.
F F OF BRIDGEVILLE. FELT AT HYAMPOM.
12/ 5/1948 16-35--C. 40.4C 123.60 D
12/ 5/1943 17-29-22. 40.40 123.60 D 4.1
                                                        F EAST OF BRIDGEVILLE. ONE OF FIVE SHOCKS
RECORDED AT ARCATA ON DECEMBER 5. FELT AT HYAMPOM.
12/ 7/1948 18- 2-59. 37.20 122.20 D 2.5
12/12/1948 12- 8-52. 37.10 121.50 D 2.4
12/18/1948 2-19-40. 39.90 119.90 D 3.0
                                                           SOUTH OF PALO ALTO.
                                                           NE OF GILROY .
                                                           NORTH OF RENO, NEVADA.
                                                        F OFF COAST, NEAR PIEDRAS BLANCAS POINT.
III AT SAN SIMFON.
F V AT VIRGINIA CITY, NEVADA. ALSO FELT AT
12/20/1948 4-42-46. 35.80 121.50 C 4.5
12/27/1948 12-45--0. 39.25 120.00 D
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/28/1948 //29/1948 //30/1948 //31/1949 //31/1948	2-25-42. 5-26- 8. 12-53-28. 6- 00. 14-17-23.0 14-35-46. 0-35-52.0 1-17-54.	39.55 39.55 38.65 35.67 35.67	120.08 (120.08 f 119.75 (121.40 (121.40 (B 6.0	OROVILLE AND TAMOE PINES. F STRONG FORESHOCK OF 12-53-38. FELT REPORT ABOUT SAME AS AT 5-26-08. F STRONGEST OF SEVERAL FORESHOCKS OF 12/29/48, 12-53-38. VI AT EMIGRANT GAP (LAKE SPAULDING). V AT BIJOU, TAMOE, GEORGETOWN, PLACERVILLE, AND TROWBRIDGE, AND CRYSTAL BAY, RENO, AND VERDI, NE IV AT BAXTER, COLFAX, FORESTHILL, FULLER LAKE, LONG BARN, POLLOCK PINES, VINT TRUCKEE, AND WESTPOINT, AND STEAMBOAT AND WELLINGTON, NEVADA. F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SO. MI. 5 FORESHOCKS WERE FELT AT RENO ON DEC. 27, AND MORE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE POLY OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITT CAMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEV MARKLEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FRON LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
/28/1948 //29/1948 //30/1948 //31/1949 //31/1948	5-26- 8. 12-53-28. 6- 00. 14-17-23.0 14-35-46. 0-35-52.0	39.55 39.55 38.65 35.67 35.67	120.08 (120.08 f 119.75 (121.40 (121.40 (B 6.0	ABOUT SAME AS AT 5-26-08. STRONGEST OF SEVERAL FORESHOCKS OF 12/29/48, 12-53-38. VI AT EMIGRANT GAP (LAKE SPAULDING). V AT BIJOU, TAHOE, GFORGETOWN, PLACERVILLE, AND TROWBRIDGE, AND CRYSTAL BAY, REND, AND VERDI, NE IV AT BAXTER, COLFAX, FORESTHILL, FULLER LAKE, LONG BARN, POLLOCK PIMES, VINITRUCKEE, AND WESTPOINT, AND STEAMBOAT AND WELLINGTON, NEVADA. F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SO. MI. 5 FORESHOCKS WERE FELT AT REND ON DEC. 27, AND MORE THAN 750 AFTERSHOCKS, MANY FELT IN REND, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND REND VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITTOMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEW MARKLEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING, PIEDRAS
//29/1948 //30/1948 //31/1948 //31/1948	12-53-28. 6- 00. 14-17-23.0 14-35-46. 0-35-52.0	39.55 38.65 35.67 35.67	120.08 F	B 6.0	F STRONGEST OF SEVERAL FORESHOCKS OF 12/29/A8, 12-53-38. VI AT EMIGRANT GAP (LAKE SPAULDING). V AT BIJOU, TAMOE, 12/29/A8, 12-53-38. VI AT EMIGRANT GAP (LAKE SPAULDING). V AT BIJOU, TAMOE, GEORGETOWN, PLACERVILLE, AND TROWBRIDGE, AND CRYSTAL BAY, RENO, AND VERDI, NE IV AT BAXTER, COLFAX, FORESTHILL, FULLER LAKE, LONG BARN, POLLOCK PINES, VINITRUCKEE, AND WESTPOINT, AND STEAMBOAT AND WELLINGTON, NEVADA. F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SO. NI. S FORESHOCKS WERE FELT AT RENO ON DEC. 27, AND MORE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE POPE JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAMOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITTOMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEVER HARKLEEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING, PIEDRAS
//29/1948 //30/1948 //31/1948 //31/1948	12-53-28. 6- 00. 14-17-23.0 14-35-46. 0-35-52.0	39.55 38.65 35.67 35.67	120.08 F	B 6.0	12/29/48, 12-53-38. VI AT EMIGRANT GAP (LAKE SPAULDING). V AT BIJOU, TAMOE, GORGETOWN, PLACERVILLE, AND TROWBRIDGE, AND CRYSTAL BAY, RENO, AND VERDI, NO IV AT BAXTER, COLFAX, FORESTHILL, FULLER LAKE, LONG BARN, POLLOCK PINES, VINTURKEE, AND WESTPOINT, AND STEAMBOAT AND WELLINGTON, NEVADA. F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SO. MI. 5 FORESHOCKS WERE FELT AT RENO ON DEC. 27, AND WORE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE? OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITTCAMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEW MARKLEEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING, PIEDRAS
/30/1948 /31/1949 /31/1948 / 1/1949	6- 00* 14-17-23*0 14-35-46* 0-35-52*0	38.65 35.67 35.67	119.75 (121.40 (121.40 (D 3.9	F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SQ. MI. 5 FORESHOCKS WERE FELT AT RENO ON DEC. 27, AND MORE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE ? OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO ? VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CIT: CAMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEV F MARKLEEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
/30/1948 /31/1949 /31/1948 / 1/1949	6- 00* 14-17-23*0 14-35-46* 0-35-52*0	38.65 35.67 35.67	119.75 (121.40 (121.40 (D 3.9	40,000 SO. MI. 5 FORESMOCKS WERE FELT AT RENO ON DEC. 27, AND MORE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA BEFORE ? OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO ? VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CIT. CAMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEV. F MARKLEEVILLE. LIGHT SHOCK. F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
/30/1948 /31/1948 /31/1948 / 1/1949	14-17-23.0 14-35-46.	35.67 35.67	121.40	D 3.9	VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, SIERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITTOMY RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEVER MARKLEEVILLE. LIGHT SHOCK. FORESHOCK OF 14-35. FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
/31/1949 /31/1948 / 1/1949	14-17-23.0 14-35-46.	35.67 35.67	121.40	D 3.9	F FORESHOCK OF 14-35. F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CATUCOS, CRESTON, MOSS LANDING, PIEDRAS
/31/1949 /31/1948 / 1/1949	14-17-23.0 14-35-46.	35.67 35.67	121.40	D 3.9	F FELT ALONG THE COAST FROM LOMPOC TO MOSS LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
/31/1948	0-35-52.0	35.67	121.40		LANDING. VI AT SAN SIMEON. V AT CAYUCOS, CRESTON, MOSS LANDING, PIEDRAS
					BLANCAS LIGHT STATION.
/ 1/1949	1-17-54.				AFTERSHOCK OF14-35.
		36.90	121.62	3 4.5	F FELT OVER AREA OF 3,500 SQ. MI. IN COASTAL CENTRAL CALIFORNIA. VII IN A SMALL REGION NEAR THE PAJARO RIVER NEAR CHITTENDEN. VI AT HOLLISTER AND SANTA CRUZ. V AT SAN FRANCISCO. IV FROM OAKLAND TO BIG SUR TO KING CITY.
/ 1/1949	14-30-42.	36.90	121.70	3.0	F AFTERSHOCK OF 1/1/49, 1-17-54. IV 7 MILES SOUTH OF HOLLISTER.
/ 2/1949	22- 3-54.	38.70	119.00	0 4.5	F WEST OF WALKER LAKE, NEVADA. IV AT SCHURZ, NEVADA.
6/1949	19- 1-40.	37.20	122.20	0 2.5	SOUTH OF PALO ALTO.
					F, IV 7 MI. S OF BIG PINE AND TINEMAHA RES.
8/1949	3-39-21.	39.55	120.08	A 4.3	F AFTERSHOCK OF 12/29/48, 12-53-28. FELT STRONGLY IN RENO-VERDI, NEV. AREA. ALSO FELT PEAVINE MT., LONG VALLEY, LOYAL
8/1949	3-56-24.	39.55	120.08	3 3 . 8	F AFTERSHOCK OF 12/29/48, 12-53-28. SAME FELT REPORT AS 3-39-21.
					F RENO AND VERDI, NEVADA.
					F VERDI, NEVADA.
					SOUTH OF PALO ALTO.
					F AFTERSHOCK OF 12/29/48, 12-53-28. IV AT BAXTER AND RENO, NEV. ALSO FELT IN TRUCKEE AND GRASS VALLEY AREA, NEV. AND GRIZZLY FLATS AND QUINCY, CALIF.
					F IV SEVEN MILES SOUTH OF HOLLISTER.
					EAST OF OAKLAND.
					NW OF LAS VEGAS.
					NEAR CONCORD. DEPTH ABOUT 16 KM.
					SMALL FORESHOCK OF 22-55-44 AND 23-45-36.
/30/1949	22-55-44.	37.72	122.07	A 2.8	F DEPTH ABOUT 16 KM. FELT AT CASTRO VALLEY, DAKLAND, ASHLAND, SAN LORENZO, AND POINTS SOUTH. (BSSA, APRIL 1949).
/30/1949	23-45-36.	37.72	122.07	A 3.0	F SAME DESCRIPTION AS FOR 22-55-44.
					F EAST OF WATSONVILLE. DEPTH ABOUT 10 KM.
					NE OF SALINAS. DEPTH ABOUT 10 KM.
					EAST OF WATSONVILLE. DEPTH ABOUT 10 KM.
	7 2/1949 7 6/1949 7 6/1949 7 8/1949 7 8/19	7 2/1949 22- 3-54. 7 6/1949 19- 1-40. 7 7/1949 22-18-0. 7 8/1949 3-39-21. 7 8/1949 3-56-24. 7 10/1949 16-57-0. 7 12/1949 0-45-0. 7 12/1949 0-45-0. 7 12/1949 0-10-32. 7 12/1949 10-6-23. 7 12/1949 10-6-23. 7 12/1949 10-6-23. 7 12/1949 22-55-44. 7 13/1949 23-45-36. 7 13/1949 22-58-56.	7 2/1949 22- 3-54. 38.70 7 6/1949 19- 1-40. 37.20 7 7/1949 22-180. 37.10 7 8/1949 3-39-21. 39.55 7 8/1949 3-56-24. 39.55 7 8/1949 16-570. 39.55 7 12/1949 0-450. 39.55 7 12/1949 23-19-53. 37.20 7 20/1949 7-59-23. 39.55 7 224/1949 4-57-11. 37.72 7 28/1949 10-6-23. 36.37 7 29/1949 9-26-58. 37.92 7 30/1949 22-55-44. 37.72 3 30/1949 23-45-36. 37.72 3 31/1949 6-38-18. 36.90 3 31/1949 22-58-56. 36.78	7 2/1949 22-3-54. 38,70 119,00 (7 6/1949 19-1-40. 37,20 122,20 (7 7/1949 22-18-0. 37,10 118,30 (8 8/1949 3-39-21. 39,55 120,00 (7 88/1949 3-56-24. 39,55 120,00 (7 12/1949 16-57-0. 39,55 120,00 (7 12/1949 0-45-0. 39,55 120,00 (7 14/1949 23-19-53. 37,20 122,20 (7 14/1949 23-19-53. 37,20 122,20 (7 14/1949 0-10-32. 36,63 121,33 (7 14/1949 4-57-11. 37,72 122,07 (7 12/1949 10-6-23. 36,37 116,92 (7 12/1949 9-26-58. 37,92 122,07 (7 13/1949 21-44-25. 37,72 122,07 (7 13/1949 23-45-36. 37,72 122,07 (7 13/1949 23-45-36. 37,72 122,07 (7 13/1949 23-45-36. 37,72 122,07 (7 13/1949 22-58-56. 36,78 121,58 (7 13/1/1949 22-58-56. 36,78 121,58 (7 13/1/1949 22-58-56. 36,78 121,58 (7 13/1/1949 22-58-56. 36,78 121,58 (7 13/1/1949 22-58-56. 36,78 121,58 (7 1/1949 14-30-42. 36.90 121.70 C 3.0 7 2/1949 22- 3-54. 38.70 119.00 D 4.5 7 6/1949 19- 1-40. 37.20 122.20 D 2.5 7 7/1949 22-18-0. 37.10 118.30 D 7 8/1949 3-39-21. 39.55 120.08 B 4.3 7 8/1949 3-56-24. 39.55 120.08 B 4.3 7 8/1949 16-57-0. 39.55 120.00 D 7 12/1949 0-45-0. 39.55 120.00 D 7 12/1949 0-45-0. 39.55 120.00 D 7 12/1949 7-59-23. 37.20 122.20 B 2.4 7 20/1949 7-59-23. 37.20 122.20 B 2.4 7 20/1949 10-6-23. 36.63 121.33 C 3.7 7 224/1949 4-57-11. 37.72 122.07 B 2.1 7 28/1949 10-6-23. 36.37 116.92 C 3.2 7 29/1949 9-26-58. 37.92 122.07 B 2.0 7 30/1949 21-44-25. 37.72 122.07 C 7 30/1949 22-55-44. 37.72 122.07 A 2.8 7 30/1949 23-45-36. 37.72 122.07 A 2.8 7 30/1949 23-45-36. 37.72 122.07 A 3.0 7 31/1949 6-38-18. 36.90 121.70 C 3.1 7 31/1949 14-38-55. 36.90 121.70 C 2.4

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2/ 9/1949 14-55-47. 37.17 121.43 C 2.7
2/10/1949 21-16-21. 37.57 122.02 R 2.3
2/11/1949 21- 5-24. 37.08 117.75 C 5.6
                                                        NE OF GILPOY.
                                                        SE DE HAYMARD.
                                                      F E OF TINEMAHA.
                                                                            FELT OVER 18.000 SQ. MI.
                                                        IN S CENTRAL CALIF. AND SW NEV. VI AT ASH MTN., BAKERSFIELD, BIG PINE, FRESNO, CORCORAN, INDEPENDENCE, HANFORD, LONE PINE, AND DLANCHA. Y AT DEATH VALLEY, LAWS, MINERALKING, OWENYO, PINEHURST, AND PORTERVILLE. I TO IV FROM MODESTO TO
                                                        MOJAVE TO GOLDFIELD. NEVADA.
2/12/1949 2-56-16. 37.62 121.95 D 3.4
                                                      F E OF HAYWARD. FELT SAN FRANCISCO BAY AREA
2/12/1949 5-25-56.
                         37.08 117.75 C 3.8
                                                        NE OF LONE PINE.
2/12/1949 19-13-36.
                         36.87 118.53 C 3.5
                                                         NE OF LONE PINE.
2/12/1949 22-39-34.
                          36.77 121.58 C 3.1
                                                        NE DE SALTNAS.
                                                        NE OF SAN RAFAEL .
2/24/1949 0-37-45.
                         38.05 122.48 D 1.6
                                                        OFF CAPE MENDOCINO.
2/24/1949 11-49-33.
                         40.40 126.10 D 4.7
                                                          FELT AT LOS BANOS.
2/25/1949 2-28- 2.
                          36.90 120.70 D 3.9
                                                      F PIT RIVER POWERHOUSE NO. 3. LIGHT SHOCK.
F PIT RIVER POWERHOUSE NO. 3. LIGHT SHOCK.
                         41.00 122.00 D
2/25/1949 11-20--0.
                         41.00 122.00 D
2/26/1949 8-30- 4.
                         37.20 118.70 D 3.6
                                                        SH DE BISHOD
2/26/1949 16-10--0.
                                                      F REND AND VERDI. NEVADA.
                         39.55 120.00 D
2/27/1949 13-35-47. 41.20 125.20 D 4.8
                                                        OFF COAST. NW OF EUREKA.
                                                      F LIGHT SHOCKS IN STRAWBERRY VALLEY (YUBA
                                                        CO.) REPORTED FELT AT 0323, 0502, AND 1030, AND ON 3/4/49 AT 1210.
3/ 7/1949 17-42-20. 37.20 122.20 D 2.0
                                                        SOUTH OF PALO ALTO.
3/ 8/1949 8-53-47. 37.73 118.45 C
3/ 9/1949 3- 0--0. 38.45 123.10 D
                         37.73 118.45 C 3.7
                                                        N OF BISHOP.
                                                      E IENNED
3/ 9/1949 12-28-39. 37.02 121.48 8 5.2
                                                      F FELT OVER AN AREA OF 20,000 SQUARE MILES
ALONG THE PACIFIC COAST OF CENTRAL CALIFORNIA FROM SANTA ROSA SOUTH TO SANTA
                                                        MARGARITA. DAMAGE WAS CONFINED MOSTLY TO THE CITY OF HOLLISTER, WHERE THE
                                                         INTENSITY WAS RATED AS VII (FALL OF SOME CHIMNEYS, SOME DAMAGE TO BUILDINGS).
                                                        VI AT ALAMEDA, ALVISO, APTOS, BEN LOMOND, BERKELEY, CANTHERS, CASTROVILLE, CHUALAR, COYOTE, FAIRFAX, FELTON, FOREST KNOLLS, GILROY, HALF MODN RAY, HAYWARD, LA HONDA, LOMA MAR, LOS BANDS, MADRONE, MORGAN HILL, MT. HERMON, MOSS
                                                        LANDING. NEWARK, NILES, DAKLAND, PALO ALTO, PESCADERO, PINOLE, REDWOOD CITY.
                                                         SALINAS, SAN ANSELMO, SAN FRANCISCO, SAN GREGORIO, SAN JOSE, SAN MARTIN, SAN
                                                        RAMON, SANTA CRUZ, SAUSALITO, SEASIDE, SHARP PEAK, SOLEDAD, SOQUEL, SPRECKELS, SUNNYVALE, TRES PINOS, WALNUT CREEK, AND WATSONVILLE.

AFTERSHOCK OF QUAKE AT 1228.
3/ 9/1949 12-57-28. 37.02 121.48 B 3.3
3/11/1949 14-54-16. 37.73 118.45 C 3.6
3/13/1949 20-37-56. 37.02 121.48 B 3.1
                                                        N OF BISHOP.
FORESHOCK OF QUAKE ON MARCH 14 AT 0610.
                                                       MINOR FORESHOCK AT 1530. FELT AT SAN MARTIN.
3/14/1949 -0--0-0. 39.55 120.00 D
                                                      F RENO, NEV. ABOUT 400 EARTHQUAKES RECORDED
                                                      SINCE 12/29/49, 12-53-38. (BSSA, APRIL, 1949.)
F AFTERSHOCK OF 3/4/49, 12-28-39. VI AT
3/14/1949 6-10-15. 37.02 121.48 B 4.4
                                                        GILROY. HOLLISTER. AND MORGAN HILL. V AT ALVISO. APTOS. BOLINAS. FIREBAUGH.
                                                        MADRONE, MOSS BEACH, REDWOOD CITY, SAN FRANCISCO, SAN JOSE, SAN MARTIN, SANTA
                                                        CRUZ, SARATOGA, SUNNYVALE, AND WATSONVILLE.
3/22/1949 13- 0--0. 40.60 124.25 D
                                                      F FERNDALE. SHARP SHOCK.
3/24/1949 18- 3--0.
                         37.10 121.65 D
                                                      F SAN MARTIN. LIGHT SHOCK.
                                                        USCGS EPICENTER 42 N, 126.5 W. FELT AT
SEVERAL LOCATIONS ALONG THE OREGON AND CALIFORNIA COAST.
3/24/1949 20-56-56. 41.30 126.00 D 5.9
                                                      F OFF COAST, WEST OF CRESCENT CITY. FELT AT
3/25/1949 4-56-48. 42.00 126.50 6.2
                                                        GRANTS PASS, OREGON.
3/29/1949 15-26-36. 36.90 121.47 C 3.0
                                                        NORTH OF HOLLISTER.
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E IN TO WAT BEDDING AND TOYON.
4/ 5/1949 4-36--0. 40.60 122.40 D
                                                     F SW OF RISHOP. IV AT BISHOP AND YOSEMITE
4/13/1949 7-58-25. 37.30 118.60 D 4.9
                                                       PARK.
                                                     F IV 7 MI. S OF HOLLISTER.
4/16/1949 10-55--0. 36.75 121.40 D
4/18/1949 1-33- 7. 37.62 121.50 B 1.9
                                                     F IV AT GUALALA (FISH ROCK).
                                                       NORTH OF PARAISO.
4/23/1949 9-18- 9.
                        36.38 121.37 C 3.7
                         37.18 122.20 A 2.5
4/26/1949 19-59-43.
                                                         IV AT WATSONVILLE, III AT MOSS LANDING.
4/28/1949 23-35-14. 36.93 121.80 B 3.3
                                                       DEPTH ABOUT 10 KM.
4/29/1949 5-31-47. 37.65 121.77 B 2.8
5/4/1949 1-34- 3. 40.40 124.30 D 4.1
                                                     F FELT OVER 900 SQ. MI. IN SO. HUMBOLDT CO.
                                                       V AT CAPE MENDOCINO LT. STA., FERNOALE, AND FIELDS LANDING. IV AT ALDERPOINT, BRICFLAND. FORTUNA, HONEYDEW, HOLMES, PETROLIA, SCOTIA, AND WEDTT.
5/ 5/1949 13-50-51- 30-87 121-03 B 3-6
                                                        NEAR AUBURN.
                                                     F SANTA MARIA. SLIGHT.
F SANTA MARIA. SLIGHT.
F NEAR GILROY. IV AT SAN MARTIN.
5/10/1949 6-20--0.
                          35.90 120.40 D
5/10/1949 11- 0--0.
                         35.90 120.40 D
5/10/1949 11-34-56.
                         37.02 121.57 C 2.7
                                                     F NEAR WATSONVILLE. IV AT SAN MARTIN.
5/10/1949 12-27- 2.
                         36.92 121.75 C 2.5
                                                       NEAR WATSONVILLE.
5/10/1949 17- 2-36.
                         36.92 121.75 C 2.7
                        40.70 124.70 D 4.3
                                                       OFF CAPE MENDOCINO.
5/13/1949 2-19-34.
5/17/1949 23-57-55.
                                                     F IV AT SAN SIMEON.

IV AT KERN RIVER POWERHOUSE NO. 3. ALSO
                         35.63 121.15 D 4.1
5/18/1949 5-57- 1. 35.87 118.50 R 3.2
                                                       FELT AT KERNVILLE.
5/22/1949 3-34-34. 37.08 121.87 R 2.9
                                                       NE OF SANTA CRUZ.
5/22/1949 8-27-15. 36.60 121.50 D
5/24/1949 1-51-16. 37.10 122.10 D 1.8
5/25/1949 5- 6-48. 36.95 121.73 B 2.3
                                                     F LONDAK.
                                                       NW OF SANTA CRUZ.
                                                        NORTH OF WATSONVILLE.
5/26/1949 4-43--0. 36.80 121.40 D
                                                     E TY NEAD HOLLTSTED.
                                                       CHINA LAKE AREA.
                        35.83 117.72 B 3.0
5/27/1949 4-22-33.
5/28/1949 17-58-35.
                         36.53 121.22 P 3.5
                                                        SE OF VINEYARD,
5/28/1949 23- 5-34.
                         36.53 121.22 B 3.2
                                                        SE OF VINEYARD.
                                                     SE OF VINEYARD.
SOUTH OF LOS GATOS.
F IV 7 MI. S OF HOLLISTER.
SOUTH OF PALO ALTO.
5/29/1949 0-34-40.
                         36.53 121.22 B 3.1
                         37.15 121.97 C 2.2
5/30/1949 23-47-15.
6/ 4/1949 0-45--0. 36.75 121.40 D
6/9/1949 18-59-46. 37.20 122.20 D 2.2
6/10/1949 3-6-40. 37.30 121.67 B 4.6
                                                       FELT OVER 8,000 SQ. MI. IN W CENTRAL CALIF
                                                       VI AT SAN JOSE. V AT MORGAN HILL, MT. HAMILTON, SAN FRANCISCO. IV AT ALAMEDA, BEN LOMOND, BURLINGAME, CASTRO VALLEY, FAIRFAX, GILROY, HOLLISTER, LA HONDA, LIVERMORE, LOS GATOS, NAPA, OAKLAND, PETALUMA, PINNACLES, REDWOOD CITY, SAN
                                                        RAFAEL, SANTA CRUZ, SHARP PARK.
6/14/1949 4-54-12. 36.05 117.33 C 3.5
6/16/1949 3-47-34. 36.75 121.67 B 3.9
                                                        NE OF CHINA LAKE.
                                                        IV AT HOLLISTER AND SAN JUAN BAUTISTA.
                                                       DEPTH ABOUT 7 KM.
                                                        DEATH VALLEY.
6/16/1949 20- 0-30.
                         37.20 122.20 D 2.4
36.75 119.75 D
                                                        SOUTH OF PAID ALTO.
6/17/1949 22-30--0.
                                                     F IV AT FRESHO.
6/22/1949 18- 8-46.
                         37.33 121.68 B 4.1
                                                        FELT AT SAN FRANCISCO, SAN MATED AND SAN
                                                       JOSE. DEPTH ABOUT 7 KM.
V AT SAN ARDO AND SAN MIGUEL. ALSO FELT
6/27/1949 10-35-31. 35.80 121.10 D 4.5
                                                       AT SAN LUIS OBISPO, SANTA MARGARITA, AND PASO ROBLES.
6/28/1949 8-41- 8. 37.33 121.68 C 2.3
                                                       NEAR MT. HAMILTON.
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7/ 6/1949 19-56-54. 37.20 122.20 D 2.3
                                                   SOUTH OF PALO ALTO.
                       37.85 122.20 D
                                                 F IV AT ST. MARY'S COLLEGE.
7/ 8/1949 11- 0--0.
7/ 9/1949 16-45-34.
                       36.80 121.70 D 2.5
                                                   WEST OF SAN JUAN BAUTISTA.
                                                   W OF CUINA TAVE
7/ 9/1949 20-31-34.
                        35.78 117.98 8 3.0
                                                   SE DE GILBOY.
7/10/1949 15-17- 7.
                        36-90 121-50 C 3-0
7/15/1949 4-50--0.
                                                 F FRESNO.
                        36.75 119.75 0
7/18/1949 15-31- 5.
                                                   NORTH OF REND. NEVADA.
                        39.70 119.80 D 4.5
7/21/1949 16-50--0.
                        36.15 120.35 D
                                                 F IV AT COALINGA.
7/21/1949 17- 1--0.
                        36.15 120.35 D
                                                F IV AT COALINGA.
7/23/1949 13-58- 5.
                       37.25 121.73 B 2.3
                                                SW OF MT. HAMILTON.
SOUTHERN WASHOE COUNTY, NEVADA.
7/23/1949 16- 7-44. 40.00 120.00 D 2.8
7/24/1949 3- 4- 5.
                       36.00 120.00 D 2.3
                                                   SO. KINGS CO. AFTERSHOCK AT 0626, MAG. 2.
7/27/1949 12-38- 6.
                                                    IV SIX MILES EAST OF SAN JOSE.
                        37.17 121.88 A 3.1
7/28/1949 19-59-50.
                       37.22 122.18 B 2.3
                                                   SOUTH OF PALO ALTO.
7/31/1949 1-27-44.
7/31/1949 4-58-58.
                       35.78 118.45 C 3.0
                                                   TAKE TSARFITA
                                                   NEAR MT. HAMILTON.
SOUTH OF KING CITY.
                       37.35 121.62 C 2.0
8/ 1/1949 0- 7-24.
                        35.90 121.20 D 3.0
8/ 1/1949 7-56-14.
                                                    NW OF WATSONVILLE.
                        37.00 121.80 D 2.4
8/ 2/1949 3- 8-36.
8/ 2/1949 7-14-14.
                       37.57 121.33 C 2.4
                                                    WEST OF VERNALIS.
                       36.70 121.10 D 2.9
                                                   NW OF LLANADA
8/ 7/1949 1-36-43. 36.50 121.50 D 2.3
8/ 7/1949 3-42-46. 37.50 121.72 R 2.7
8/ 8/1949 11- 0- 3. 37.95 122.32 R 3.3
                                                   NO. MONTEREY CO.
                                                   SOUTH OF LIVERMORE.
                                                F FELT OVER 300 SQ. MI. IN SAN FRANCISCO BAY
                                                   AREA.
                                                           VI AT RICHMOND, PINOLE AND VALLEJO. V AT BERKELEY AND LAFAYETTE.
8/ 9/1949 0-39-27. 38.58 122.67 B 3.6
                                                    WEST OF CALISTOGA.
8/10/1949 9-17-39. 36.50 121.00 D 2.6
8/14/1949 8-19-59. 38.58 122.67 D 2.5
                        36.50 121.00 D 2.6
                                                   CENTRAL SAN BENITO CO.
                                                    AFTERSHOCK OF QUAKE ON AUGUST 9 AT 0039.
                                                   MAY BE AFTERSHOCK OF 8/9/49, 0-39-27.
8/15/1949 23-52-54
                       38.50 122.50 D 2.2
                                                    IV SEVEN MILES SOUTH OF HOLLISTER.
8/16/1949 5-37-13.
                       36.78 121.37 C 2.7
8/17/1949 0- 8-29.
                                                   NE OF SAN RAFAEL.
                        38.12 122.45 C
                                         1.9
8/17/1949 0-19-51.
                        37.07 122.27 C 2.9
                                                   NW OF SANTA CRUZ.
8/18/1949 14-25-16.
                        38.80 118.60 D 3.7
                                                   NORTH OF HAWTHORNE, NEVADA.
8/19/1949 0-12-21.
8/19/1949 2-45- 5.
8/21/1949 5-38-23.
                       36.80 121.40 D 2.4
                                                   NEAR HOLLISTER.
                                                   NE DE CTI POY
                       37.17 121.38 C 2.2
                                                 S OF GOLDFIELD, NEV.
F FORESHOCK OF 20-48-16. FELT REPORT SAME
                       37.07 117.22 C 3.8
8/21/1949 5-33-23. 37.07 117.22 C 3.8
8/21/1949 10-51- 3. 40.28 121.17 B 3.8
                                                    AS FOR 20-48-16 EXCEPT NOT FELT AT MINERAL.
8/21/1949 11-45-20. 40.28 121.17 C 3.9
                                                 F FORESHOCK OF 20-48-16. FELT REPORT SAME
                                                   AS FOR 20-48-16 EXCEPT NOT FELT AT MINERAL.
                                                   FORESHOCK OF 20-48-16
8/21/1949 12- 5-53. 40.17 121.23 C 3.2
8/21/1949 17-27-50. 40.17 121.23 C 3.0
8/21/1949 20-48-16. 40.27 121.23 C 4.5
                                                   FORESHOCK of 20-48-16
                                                   IV AT CARIBOU, LAKE ALMANOR, BUTTE, LAS
                                                   PLUMAS, MINERAL, CHESTER, AND VALLEY. 12 SHOCKS SMALLER THAN MAG. 2.7 WERE
                                                   RECORDED AT MINERAL BETWEEN 1050 AND 2048, APPARENTLY FROM SAME SOURCE.
8/21/1949 23-29-10. 40.17 121.23 C 2.7
                                                    IV AT CARIBOU, LAKE ALMANOR, BUTTE, LAS
                                                 PLUMAS, MINERAL, CHESTER, AND VALLEY. 12 SHOCKS SMALLER THAN MAG. 2.7 WERE F KETTLEMAN HILLS. FIFTH SHOCK IN 2 WEEKS.
8/22/1949 3- 1--1. 36.00 120.00 D
8/22/1949 5- 3--0. 37.90 122.10 D
                                                 F LAFAYETTE.
8/23/1949 18-47-20.
                       40.37 124.47 C 4.0
                                                   NEAR CAPE MENDOCINO.
8/27/1949 21-10--0. 38.45 123.10 D
8/28/1949 3-47-54. 35.78 118.17 R 3.5
8/29/1949 1-56- 1. 37.68 121.53 A 3.4
                                                 F JENNER AREA
                                                  SW OF HAIWEE.
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IV IN AVENAL AND KETTLEMAN CITY.
 8/29/1949 12- 7-20. 36.00 120.10 D 3.0
                                                       DEATH VALLEY.
 8/30/1949 3-20-43. 35.83 116.67 C 2.7
8/30/1949 20-56-45. 36.58 117.62 C 3.0
                                                        E OF LONE PINE.
                                                        SW OF WATSONVILLE.
 9/ 3/1949 18-29-54. 36.80 121.78 C 2.4
                                                     SW OF WATSONVILLE.

F OFF CAPE MENDOCINO. FELT IN EUREKA.

NORTH OF GILROY. DEPTH ABOUT 15 KM.

F E OF VINEYAD. IV GILROY, SAN JUAN BAUTISTA

SOUTH OF PETALUMA.

OFF CAPE MENDOCINO.
                           40.38 124.70 C 4.1
 9/ 7/1949 17-13-25.
                          37.13 121.52 C 2.5
 0/ 9/1040 3-28- 8-
                           36.78 121.47
 9/10/1949 14-40- 9.
                          38.15 122.57 B 2.9
40.40 126.20 D 5.0
 9/14/1949 5-27-42.
 9/14/1949 20- 0-16.
                           37.18 122.20 B 2.2
                                                        SOUTH OF PALO ALTO.
                                                        MT. DIABLO TEST STATION (SLICHTER Z)
S-P = 1.4 SEC.
 9/16/1949 7-14-50. 37.88 122.02 A 1.8
                                                     F IV AT KERN RIVER POWERHOUSE NO. 3 AND
 9/17/1949 16-21-57. 35.82 118.50 C 3.1
                                                        KERNVILLE. ALSO FELT AT TOBIAS PEAK LOOKOUT STA. (SEQUOIA NAT#L. FOR.).
                                                        SE OF WATSONVILLE.
 9/18/1949 13- 3- 6. 36.80 121.70 D 2.2
                          37.37 121.55 A 2.9
                                                        NW OF MT. HAMILTON. DEPTH ABOUT 10 KM.
 9/18/1949 14-40- 3.
 9/24/1949 9-28-20.
                                                         MINERAL COUNTY, NEVADA.
                           38.10 118.60 D 3.2
                          38.10 118.60 D 3.3
                                                        EAST OF WATSONVILLE.
 9/28/1949 13-52-43.
                          36.90 121.60 D 1.8
                                                     F DAKLAND AND SAN LEANDRO.

F BERKELEY. DAKLAND, AND SAN LEANDRO.
10/ 2/1949 20-36-46.
                           37.80 122.13 B 1.7
10/ 3/1949 9-34--0.
                          37.80 122.15 D
                          36.98 121.63 C 3.1
                                                         IV AT MORGAN HILL.
10/11/1949 11-45- 1.
                          37.78 122.05 B 1.9
                                                       SOUTH OF WALNUT CREEK.
                                                        NEAR SAN RAFAEL .
10/11/1949 19-59-31. 38.00 122.50 D 1.8
                                                        NW OF SAN FRANCISCO.
10/16/1949 4-15- 5-
                          37.82 122.57 C 1.8
10/16/1949 16- 5-22.
                           37.67 118.67 C 3.1
                                                     F NO. OWENS VALLEY. IV NEAR LONG VALLEY DAM
10/16/1949 23-32-
                          36.68 120.70 C 2.6
                                                       EAST OF LLANADA.
                                                        NE OF HOLLISTER.
10/17/1949 2-41-45.
                          37.00 121.22 A 3.8
                          37.00 121.22 A 2.9
                                                        AFTERSHOCK OF 2-41-45.
10/17/1949 2-44-52.
                                                        AFTERSHOCK OF 2-41-45.
10/17/1949 4-45- 4.
                                                        AFTERSHOCK OF 2-41-45.
                          37.00 121.22 A 3.0
                                                        AFTERSHOCK OF 10/17/49. 2-41-45.
10/18/1949 12-25-38.
                          37.00 121.22 A 3.6
10/19/1949 7- 0--0. 38.40 122.45 D
                                                     F IV AT SANTA ROSA.
10/19/1949 15-38- 9.
                                                     SE OF VINEYARD.
F N OWENS VALLEY. FELT NEAR LONG VALLEY DAM.
                         36.68 121.32 B 2.8
10/19/1949 15-38- 9. 36.68 121.42 M 2.8
10/20/1949 3-26-35. 37.67 118.67 C 3.5
10/22/1949 3-42-32. 40.50 126.60 D 4.4
                                                        OFF CAPE MENDOCINO.
10/22/1949 3-47-35. 36.70 121.12 B 3.2
                                                        WEST OF LLANADA.
                                                     F V HOLLISTER. IV BIG SUR AND MORGAN HILL. SOUTH OF LIVERMORE.
                          36.58 121.17 C 4.7
37.52 121.70 C 2.3
10/22/1949 21-45-20.
10/23/1949 9-35-22.
10/23/1949 21-50--0.
                          37.75 122.50 D
                                                     F SAN FRANCISCO. VERY LIGHT.
                                                      N OF BISHOP.
SOUTHEAST OF BENTON.
OFF CAPE MENDOCINO.
                         37.75 118.52 C 3.3
37.67 118.30 C 4.1
10/24/1949 1-52-58.
10/24/19A9 2-22-33.
10/25/1949 4-18-52.
                          40.60 125.20 D 3.9
                                                     EAST OF VINEYARD.

F NEAR ARCATA. V IN EUREKA.

NW OF PRIEST.
10/27/1949 2-22-26.
                          36.77 121.22 C 2.8
10/28/1040 2-20-16-
                          40-90 124-20 D 4-5
10/28/1949 8- 7- 2.
                          36.30 120.90 C 2.6
10/29/1949 0- 6-20.
                          37.50 121.00 D 3.4
                                                        SOUTH OF MODESTO.
                                                     CHINA LAKE.

F IV 7 MI. S OF HOLLISTER.

SW OF CAPE MENDOCINO.

NORTH OF CHICO.

SOUTH OF VINEYARD.
10/30/1949 6- 9-55. 35.83 117.58 C 2.0
11/ 1/1949 11- 5--0.
                          36.75 121.40 D
11/ 1/1949 11-56- 0.
                          39.90 126.10 D 4.7
11/ 1/1949 23- 7-34. 39.93 121.72 C 2.0
11/ 2/1949 1-36- 1. 36.70 121.40 D 2.2
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11/ 2/1949 13-45- 1. 37.90 123.00 D 2.7
11/ 3/1949 5- 0--0. 38.40 122.75 D
11/ 4/1949 9-31-21. 36.75 121.75 B 2.7
                                                             NEAR POINT REYES LIGHTHOUSE.
                                                         F IV AT SANTA ROSA.
                            38.40 122.75 D
11/ 4/1949 14-45--0.
                                                          F SANTA ROSA.
11/ 4/1949 14-50--0.
                                                          F SANTA ROSA.
                            38 AA 122 75 D
11/ 5/1949 17-23-38.
                            36.58 121.30 C 2.2
                                                             SOUTH OF VINEYARD.
11/ 6/1949 7-53--0.
11/ 6/1949 8-26- 9.
                            36.90 121.75 D
                                                          F WATSONVILLE.
                                                            EAST OF CONCORD.
                            37.92 121.73 B 1.8
11/ 6/1949 8-42-57.
                            37.92 121.73 B 1.9
                                                             EAST OF CONCORD.
11/ 6/1949 9-11-18. 37.92 121.73 B 1.8
                                                          F IV NEAR WATSONVILLE (SAN MIGUEL CANYON RD)
11/ 9/1949 12-41-16. 38.50 122.70 D 2.5
                                                            NORTH OF SANTA ROSA.
                                                             FORESHOCK OF 11/10/49, 5-16-35.
11/ 9/1949 18-48-54. 36.63 121.13 B 3.3
                                                          F W OF LLANADA. IV 7 MI. S OF HOLLISTER.

NW OF FALLON, NEVADA.

NW OF FALLON, NEVADA.
11/10/1949 5-16-35.
                            36.63 121.13 A 3.9
                            39-80 119-00 D 3-2
11/12/1949 20-42-34.
                            39.80 119.00 D 3.1
                                                             EAST OF CONCORD.
11/13/1949 14-58- 4.
                            37.93 121.98 B 2.2
11/13/1949 21- 4- 2. 38.20 123.10 D 2.3
                                                             NW OF POINT REYES LIGHTHOUSE.
11/14/1949 10-41-59.
                            39.38 119.70 C 3.5
                                                             SE OF RENO, NEVADA.
                                                            N OF BISHOP.
11/14/1949 17-12-43. 37.48 118.42 C 3.8
11/14/1949 18-11- 6. 37.43 122.25 8 1.8
11/16/1949 8- 1--0. 40.53 121.58 C 2.6
11/16/1949 8- 4-20. 40.53 121.58 C 3.2
                                                          NEAR PALO ALTO. DEPTH ABOUT 15 KM.
F FORESHOCK OF 8-4-20. FELT AT MINERAL.
                                                          MINERAL BY 1600 SAME DAY.
                                                             SE OF CONCORD.
11/18/1949 19-45-54. 37.92 122.00 C 2.2
                                                             NEAR VACAVILLE.
11/18/1949 23-57-48.
                            38.30 122.00 D 2.0
11/22/1949 0-18- 9.
                                                             FELT IN PETROLIA AND FERNDALE.
                            40.20 124.20 D 3.5
                                                          F NW OF CHINA LAKE. FELT NINE MILE AQDT. STA
                            35.85 117.80 B 2.6
                                                            NEAR MT. HAMILTON.
                            37.38 121.60 B 3.0
11/27/1949 14- 6-46.
11/27/1949 21-53-19.
                            37.38 121.67 C 2.2
                                                             NEAR MT. HAMILTON. DEPTH ABOUT 15 KM.
11/20/1949 21-33-19. 37.35 121.67 C 2.0
11/29/1949 6-51-38. 37.35 121.70 C 2.0
11/29/1949 7-14-33. 36.80 121.38 R 2.7
11/30/1949 8-31-54. 38.00 124.00 C 4.4
11/30/1949 8-31-54. 38.62 122.13 R 4.0
                                                          F DEPTH ABOUT 10 KM. IV IN SAN JOSE.
F IV 7.5 MILES SOUTH OF HOLL[STER.
                                                          DEPT. WATER RES. LIST, QUESTIONABLE.
F NW OF WINTERS. IV IN FAIRFIELD. ALSO
FELT IN SACRAMENTO.
                                                          F FELT IN FERNOALE AND PETROLIA.
12/ 4/1949 22-38-54. 40.30 124.30 D 3.8
12/ 6/1949 22- 7- 4. 38.30 117.70 D 3.7
                                                            WEST OF TONOPAH, NEVADA.
12/ 7/1949 18-44-40.
                            39.00 119.80 D 3.8
                                                          F NEAR MINDEN, NEVADA. V IN CARSON CITY.
                            36.92 117.25 C 3.3
36.07 117.67 B 3.1
12/ 9/1949 20-44-41.
                                                           N OF DEATH VALLEY.
12/ 9/1949 4-34-49. 36.07 117.67 R 3.1
                                                             N OF CHINA LAKE,
NORTH OF BISHOP. FORESHOCK OF 12-39-2.
                                                          F NORTH OF
                                                             FELT AT BISHOP, LAWS, YOSEMITE NAT'L. PK., AND JUNE LAKE.
                                                          F NORTH OF BISHOP. V AT BIG PINE, BISHOP,
AND LAWS. ALSO FELT AT JUNE LAKE AND YOSEMITE NAT'L. PARK.
OFF COAST, WEST OF SANTA CRUZ.
12/ 9/1949 12-39- 2. 37.47 118.37 C 4.6
12/ 9/1949 23-52-56. 37.00 122.60 D 2.8
                                                             OFF COAST, WEST OF SANTA CRUZ.

OFF CAPE MENDOCINO.
12/ 9/1949 23-53-24. 37.00 122.60 D 3.0
12/10/1949 24- 5-39. 40.50 125.30 D 3.9
12/13/1949 5- 5-16. 38.67 119.83 C 3.4
                                                          F NW OF COLEVILLE. IV AT MARKLEEVILLE.
12/13/1949 5-5-16. 38.67 119.63 C 3.4
12/14/1949 17-32-21. 37.87 116.33 C 3.9
12/19/1949 3-30- 9. 35.77 118.00 C 2.5
12/21/1949 23- 8-41. 40.40 124.30 D 3.6
                                                            E OF GOLDFIELD, NEY.
                                                            S OF HAIWEE.
POSSIBLY DEEPER THAN NORMAL. IV AT
                                                            BRIDGEVILLE, FERNDALE AND SCOTIA.
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12/25/1949 9-41- 6. 36:13 117:95 8 2:1
12/25/1949 9-47-12. 37:33 121:63 8 2:1
12/25/1949 22- 2-30. 36:13 117:95 8 1:6
12/26/1949 16-37--0. 37:60 122:35 D
12/28/1949 9-17-12. 36:20 120:70 D 2:6
12/28/1949 11-58-39. 39:40 118:00 D 2:9
12/28/1949 16-48-11. 39:20 119:60 D 2:6
12/29/1949 2-28-16. 35:83 118:03 8 2:2
12/31/1949 6-16- 6. 35:85 117:58 8 2:2

HAIWEE.
NEAR MT. HAMILTON.
HAIWEK.
F SAN MATEO.
NEAR PRIEST.
EAST OF FALLON, NEVADA.
F III AT CARSON CITY, NEVADA.
S OF HAIWEE.
N OF CHINA LAKE.

VI. EARTHQUAKE CATALOGUE (1950-1972) WITH EPICENTER MAPS

EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1950

January - June 1950										
	Date 1950		lagni-	tude	tude Qu	ual-	Remarks			
	Jan									
1	1	70 shocks 1 and 160 1600, Jan	record 0, Jan . 3 to	ded at Mi . 2; 154 1600, Ja	neral from 1600 an. 4; 21	m sa , Ja from	IV at Mineral, California. ame source between 2254, Jan. an. 2 to 1600, Jan. 3; 37 from m 1600, Jan. 4 to 1600, Jan. 5 ; 35 from 1600, Jan. 6 to 1600			
2	3	21-41-41	2.2	39° 30'	120° 00'	d	Near Reno, Nevada.			
3	6	23-49-03	1.8	37° 12'	122° 11'	а	Blast?			
4	9	04-43-23	2.5	41° 00'	121° 00'	d	Modoc County, California.			
5	9	15-45-32	2.8	37° 14'	121° 36'	a	S of Mt. Hamilton.			
6	11	13-51-36	2.9	39.1°	117.4°	d	SW of Austin, Nevada.			
7	12	23-50-41	2.6	38° 01'	122° 35'	С	N of San Francisco.			
8	13						V at Ferndale, IV at Scotia ftershock at 1233.			
9	14	03-03-55	3.4	36° 40'	121° 11'	С	W of Llanada.			
8	14	the coast	of Hu	mboldt Co	ounty, Cal	ifo	Felt over a small area along rnia. Maximum intensity VI aftershock at 2030.			
10	16	19-21-25	3.8	40° 15'	121° 23'	С	V at Manzanita Lake (Lassen Volcanic National Park),			
3	17	22-32-08	1.8	37° 12'	122° 13'	Ъ	Blast?			
11	19	10-47-24	1.9	36° 57'	121° 41'	С	E of Watsonville.			
12	21	17-11-41	3.5	38° 36'	119° 09'	Ъ	W of Hawthorne, Nevada.			
13	21	23-02-45	3.5	39.2°	117.7°	d	SW of Austin, Nevada.			
14	27	10-47-20	4.7	42.0°	125.1°	d	NW of Crescent City.			
15	29	00-25-07	2.0	37° 44'	120° 17'	С	NE of Merced.			

Map I		Time M	agni-		tude Q	ual ty	Remarks
	2	00-11-33	2.0	36° 42°	121° 27'	С	S of Hollister.
17	3	08-07-21	2.1	39.0°	120.0°	d	Douglas County, Nevada.
3	6	23-51-04	2.1	37° 12'	122° 10'	Ъ	Blast?
18	7	04-35-01	3.6	40.1°	124.9°	d	SW of Ferndale.
19	9	20-47-03	3.5	40° 48°	122° 03'	С	IV at Shasta Dam. Felt by many at Power Plant.
20	10	23-41-09	4.0	41.2°	124.3°	d	NW of Arcata. I♥ at Eureka.
21	12	00-21-23	2.2	37° 26'	121° 37'	Ъ	N of Mt. Hamilton.
3	13	20-10-08	1.8	37° 11'	122° 14'	Ъ	S of Palo Alto.
22	15	12-38-22	2.0	37° 33'	122° 52'	С	SE of Farallon Islands.
23	19	07-04-46	2.5	38° 45°	123° 03'	С	NW of Santa Rosa.
24	19	11-17-02	2.1	37.0°	121.5°	d	Northern San Benito County.
25	2.3	22-16-18	2.0	37° 23°	121° 42'	Ъ	NW of Mt. Hamilton.
25	23	22-24-03	2.6	37° 23'	121° 42°	Ъ	NW of Mt. Hamilton.
25	23	22-30-40	2,2	37° 23'	121° 42'	Ъ	NW of Mt. Hamilton.
21	25	14-10-21	2.7	37° 29'	121° 39'	a	N of Mt. Hamilton,
16	26	06-29-41	2.3	36.7°	121.4°	d	S of Hollister.
26	26	06-45-40	3.0	39° 51'	120° 39'	С	IV at Sierra City, Sierra County.
CIT	28	14-51-03	3.1	37.17°	118.53°	С	SW of Bishop.
27 <u>M</u>	lar 8	03-23-57 at Lafaye	3.3 tte, I	37° 46' Berkeley	122° 10' and San Fr	b anc	V at Moraga and Oakland. IV
28	8	05-50-46	2,8	40.0°	119.0°	d	Near Pyramid Lake, Nevada.
29	8	20-16-43	2.9	40.0°	119.5°	d	Near Pyramid Lake, Nevada.
30	9	00-06-12	2.3	37° 42'	122° 31'	a	San Francisco.
31	9	23-43-19	3.2	36° 21'	121° 13'	С	V at Robles Del Rio.

No.	Date	Time M	lagni-	r Lati- tude North	Longi- tude West	Qual ity	
	Mar 10	12-26-32	3.4	40.7	124.8°	d	W of Eureka. Felt at Ferndale and Petrolia.
33	11	08-03-12	3.3	38° 40'	119° 52'	Ъ	Markleeville.
34	12	04-22-52	3.3	39° 10'	121° 06'	С	S of Grass Valley.
35	12	17-05-28	3.3	39° 55'	118° 52'	С	N of Fallon, Nevada.
36 ^{\$}	13	17-17-39	3.5	39° 33'	120° 05'	С	Aftershock of Verdi, Nevada shock of Dec. 29, 1948.
37	17	01-15-38	1.6	38° 22'	122° 14'	С	N of Napa.
38	19	08-01-15 magnitude				Ъ	E of Concord. Aftershock of
39	19	16-46-00	2.7	40.5°	124.0°	d	Cape Mendocino. Felt in Ferndale.
40	20	Lassen quin northe Manzanita Mill Cree at severa ing Sacra	akes. astern Lake k, and sca mento from	Felt the Califor Chester Susanvittered po	roughout nia. Max , Chico, lle. The ints sepa nia and R	an a cimum Grid qua rate	Main shock in a swarm of Mt. rea of about 4000 square miles intensity V at Mineral, ley, Lake Almanor, Magalia, ke was reported as felt slightly from the main felt area, includ- and Yerington, Nevada. No damage cial summary of the swarm follow-
21	20	17-22-24	2.4	37° 26'	121° 39'	С	N of Mt. Hamilton.
21	20	17-47-32	2.3	37° 26'	121° 39'	С	N of Mt. Hamilton.
CIT	22	01-31-57	3.7	35.97°	120.63°	С	SW of Coalinga.
41	23	13-25-10	4.4	41° 08'	125° 14'	С	NW of Arcata.
24	23	19-11-29	2.1	37° 02'	121° 31'	Ъ	Near Gilroy.
9	25	03-25-32	3.6	36° 38'	121° 11'	b	W of Llanada.
42	27	19-09-28	4.2	40° 16'	123° 59'	С	IV at Garberville.
CIT	29	12-43-20	3.5	35.97°	120.88°	d	SW of Coalinga.
43	Apr 3	22-07-52	2.7	36° 47'	122° 07'	Ъ	S of Santa Cruz.

CIT 4 09-40-52 2.5 37° 17' 117.92° b SE of Bishop.

Map Date	(GCT) to	agni- t	ati- Lor ude tuo orth Wes		Remarks	
44 Apr 9		3.5 40°	27 124	° 41° c	W of Ferndale.	
45 10	20-43-54	3.2 37.	6° 121	.3° d	NE of Mt. Hamilton.	
46 10	22-55-54	3.0 37°	58' 118	° 44° c	E of Mono Lake.	
<u>40</u> 13	17-46-41 Mineral se				27 aftershocks recorded hours.	on
21 14	01-31-48	2.8 37°	27' 121	° 40° b	N of Mt. Hamilton.	
CIT 15	11-56-32 V at Kern				S of Fresno near Lost H	ills.
47 16	18-47-32	3.4 37°	56' 122	° 16' a	IV at Berkeley.	
38 24	09-06-14	1.7 37°	51' 121	° 55' b	SE of Concord.	
38 24	09-09-27	1.7 37°	51' 121	° 55' b	SE of Concord.	
<u>11</u> 26	03-18-11	2.6 36°	58' 121	° 40° c	W of Gilroy.	
CIT 26	07-23-29	3.5 35.	20° 120	.60° c	V at Santa Maria.	
Felt 26	07-38-00	- 35.	20° 120	.60° d	Felt at Santa Maria.	
3 May 1	20-01-33	1.7 37°	12' 122	° 12' b	Blast?	
_ 2	04-43-05	3.8 40.	6° 127	.6° d	W of Cape Mendocino.	
48 5	11-01-49	3.5 39°	06' 119	° 41' c	S of Reno.	
49 6	02-14-35	1,8 37	43' 121	° 55' ъ	NW of Livermore.	
33 8	12-28-18	3.4 38.	7° 119	.9° d	Felt slightly at Bijou (Lake Tahoe).	
11 11	08-48-21	2.8 37	00 121	° 41' b	W of Gilroy.	
- 13	08-46-10	4.5 40.	5° 127	.5° d	W of Cape Mendocino.	
50 16	23-20-35	3.6 40	14' 124	° 06' c	S of Ferndale.	
51 20	09-15-27	1.5 37	58' 121	° 59' c	NE of Berkeley.	
CIT 21	19-26-48	3.4 35	.88° 119	.73° c	S of Fresno.	
52 24	01-46-57	2.9 36	26' 120	° 46' c	SE of Llanada.	
53 27	23-54-11	2.4 37	.9° 120).3° d	Near Sonora.	

Map Date	Time Mag		Longi- tude Qua West ity	
54 May 29	10-21-10 3	.9 41.4°	122.3° d	N of Shasta.
June				
55 2	10-35-51 4	.2 41.3°	123.4°	d NE of Arcata.
<u>11</u> 2	17-25-10 3	.6 36° 56°	121° 39'	c E of Watsonville.
Felt 3	02-30-00	- 41.25°	123.25°	d VI in Salmon River area,
56 . 3	05-39-16 4	.0 40.8°	124.4°	d "Sharp" at Eureka.
47 3	06-34-03 2	.7 38° 01'	122° 18'	a N of Richmond,
<u>36</u> 6	16-34-06 3	.1 39° 33'	120° 05'	c NW of Verdi, Nevada.
57 6	17-46-55 3	.0 40.8°	123.7°	d E of Arcata.
49 8	01-19-56 2	.3 37° 48'	121° 56'	b Mt. Diablo area.
58 9	13-07-44 4	.8 41° 17'	125° 44'	c NW of Arcata.
<u>11</u> 10	03-28-55 2	.2 36° 56'	121° 39'	b E of Watsonville.
59 13				b II near Jackson, Amador t 0832 and 1339.
<u>49</u> 17	23-37-25 2	.8 37° 53'	121° 56'	a Mt. Diablo. Aftershock at 2346.
60 22	12-44-46 3	.6 39.7°	120.4°	d Foreshock of 1713.
60 22	17-13-18 4	.1 39.7°	120.4°	d NW of Truckee.
61 23	08-45-32 2	.2 37° 13'	121° 27'	c E of Mt. Hamilton.
<u>27</u> \$ 23	15-38-49 1	.9 37° 50'	122° 04'	b Felt in East Oakland.

MT. LASSEN SHOCKS - MARCH 1950

The shock at 0722 P.S.T. (1522 G.C.T.) on Mar. 20, 1950 was the largest in a swarm of earthquakes. Twenty-nine small foreshocks were recorded on the seismograph at the Lassen Volcanic National Park Headquarters at Mineral between 0552 P.S.T. and the main shock at 0722 on March 20. The Benioff short-period vertical component seismograph at Mineral showed almost continuous activity for several hours after the main shock. Approximately 7,000 identifiable aftershocks were recorded on the short period torsion seismographs at Mineral through April 9, 1950. Many additional smaller shocks were recorded on the Benioff seismometer in the same period.

Table I shows the daily count of aftershocks recorded on the torsion seismographs, as well as the daily count of quakes with a double trace amplitude of over 10 mm.

TABLE I. SHOCKS RECORDED PER 24 HOURS.

8 A.M. to 8 A.M. P.S.T.			No. on Wood-Andersons with Double Amp. > 10 mm.
March, 1950			
20-21 21-22 22-23 23-24 24-25 25-26 26-27 27-28 28-29 29-30 30-31 31 - April 1	768 500 855 660 605 600 400 174 111 118 142 330		69 141 75 141 53 59 9 7 6 3 6
April, 1950			
1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-9	420 615 276 61 75 70 87 22	84 101 91 105 57	39 42 10 2 1 4 9

TABLE II. SHOCKS FELT AT MINERAL.

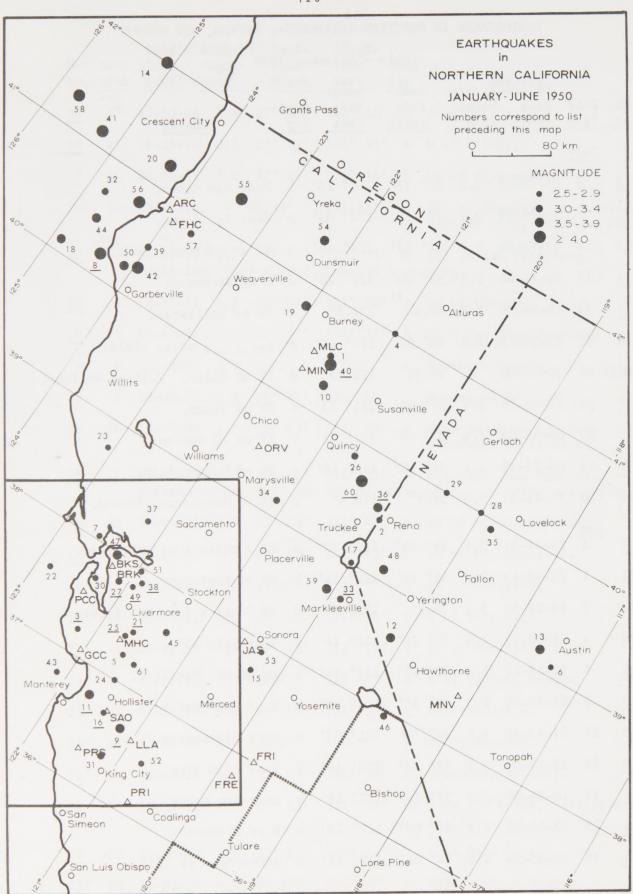
Table II is a summary of the reports of shocks felt at the Park Headquarters at Mineral, about 10 miles from the epicenter. These reports were collected by Paul E. Schulz, Park Naturalist at Lassen Volcanic National Park.

Date March 1950	Time P.S.T.	Remarks		Date March 1950	Time P.S.T.	Remarks
20	0725	Main shock.	See	25	"AMI	One felt.
		local shock for felt are			2025	Felt by many.
	0855	Felt by few.			2027	
	0920	11 11 11		26	0200+	With a noticeable 5-second
	1018	11 11 11		20	0200	preliminary vibration
	1138	11 11 11				causing sustained rattling.
	1442		eral.		1030+	
	1635	" " few.		27	"About 3 A.M."	
21	0401	11 11 11		April		
	0647	17 11 11		1	1500+	
	0738	11 11 11			2040	
	1227	11 11 11			2041	
	1305	11 11 11			2050	
	2316	ff 11 11			2058	
22	1430+	11 11			2100	
	2045+	11 11 11			2116	
	2137	11 11 11			2130	
	2203	11 11 11			2140	
23	0200+	11 11 11			2308	
2)	0300+	11 11 11		2	0230	
	0910	11 11 11			0232	
	1345	11 11 11			0455	Felt by many.
	1630	11 11 11			0630	
	1633		eral.		1157	
	1641	11 11 11	ale.		1458	Felt by several.
	2100	11 11 11			1545	
					1600+	
5/1	1407				2012	Felt by many.
	7/17/1				2225	11 11

TABLE III. INSTRUMENTAL MAGNITUDES OF MT. LASSEN EARTHQUAKES.

Table III lists all aftershocks through March 24 with an instrumental magnitude of 2.3 or over.

Time P.S.T.	Magnitude	Time P.S.T.	Magnitude	Time P.S.T.	Magnitude
March 20		March 21 (contd.)		March 23	
0646	2.5	0648	2.6	0001	3.4
0722	5.5	0733	2.7	0033	2.7
0916	2.5	1228	3.0	0155	2.7
0918	2.6	1304	2.6	0245	2.6
1000	2.5	1600	2.8	0304	2.6
1016	2.7	March 22		0308	2.7
.1019	2.5	1352	2.4	0912	2.8
1103	3.11	1812	2.7	1004	2.7
1135	2.8	1819	2.6	1346	2.5
1227	2.3	1822	2.9	1631	2.8
1229	2.8	1902	2.8	1642	3.5
7/1/13	3.6	1935	3.0	1906	2.9
1601	2.5	2017	3.8	2051	2.5
1633	3.1	2137	3.5	2146	2.6
1701	2.8	2747	2.5	23,32	2.7
1827	2.5	2203	2.8	March 24	
2035	2.6	2356	2.7	0459	2.7
2233	2.9			1408	3.0
March 21				1414	2.8
0105	2.5			1422	3.5
0239	2.7			1428	3.1
0401	3.4			1432	2.8
0424	2.7			1649	3.0
0642	2.5			1313	3.4
				1833	2.8



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1950

	Date		lagni-	tude North		Qual-	Remarks
NO a		(601)	ude	MOLCII	WEST	TLY	Welling Welling
	July						
1	5	05-44-22	2.2	37° 37'	122° 18'	Ъ	Near San Mateo.
2	7	19-06-59	0.7	37° 24°	122° 03'	Ъ	Near San Jose.
3	9	01-29-09	2.9	37° 53°	122° 10'	С	II at Oakland. Felt.
4	17	12-14-44	2.1	38° 00'	122° 20	c	N of Richmond.
5	20	20-56-39	3.2	36.9°	121.5°	d	NW of Hollister.
6	21	17-37-15	2.9	38° 091	122° 00'	С	Fairfield area. Felt.
Feli	t 22	06-37-00	-	39.75°	121.85°	d	IV at Chico. Felt at Willows.
7	22	11-46-10	2,4	37° 50'	121° 33	C	NW of Tracy.
8	23	09-45-09	2.4	37° 48'	122° 02	c	IV at SE Oakland.
9	24	08-23-35	2.1	36° 58¹	121° 40	C	NE of Watsonville.
10	30	20-41-33	3,6	38.3°	118.4°	d	SE of Hawthorne, Nevada.
9	Aug 1	20-24-51	3.4	36° 56¹	121° 40	ъ	IV 7 miles S of Hollister.
11	1	21-08-43	2.0	36° 12°	122° 14	ъ	SW of Monterey.
12	2	13-26-30	3.1	36.7°	121.4°	d	IV 7 miles S of Hollister.
13	4	04-40-39	2.0	37° 20°	122° 14	b b	S of Palo Alto.
14	5	22-23-17	2.3	37° 15'	121° 44	ъ	SW of Mt. Hamilton.
5	8	05-10-18	2.3	36° 55'	121° 37	b b	E of Watsonville.
15	11	03-43-44	1.9	37° 36'	121° 57	b b	Near Pleasanton.
13	14	17-25-03	1.8	37° 12'	122° 14	° ь	S of Palo Alto.
1	15	18-34-06	2.9	37° 36'	122° 18	' Ъ	Near San Mateo.
4	15	23-52-58	2.9	37° 59'	122° 22	' b	N of Richmond.
4		18-33-34	1.8	38° 02'	122° 25	' b	Aftershock of 2352,

No.		Time M	agni-			Qual-	Remarks
	17	22-53-06	2.0	37° 12'	122° 13'	Ъ	S of Palo Alto.
16	21	06-35-10	2.1	37° 12'	121° 33'	Ъ	N of Gilroy.
7	24	06-52-02	2.8	37° 49'	121° 39'	b	NE of Livermore.
Felt		18-15-00	_ 4	10.35°	121.25°	d	III at Chester. Aftershocks felt at 1818, 1819 and 1822.
17	Sep 2	09-02-58 Ingleside					III at San Francisco,
18	4	18-58-19	3.0	37° 04'	121° 30'	С	NE of Gilroy.
19	8	03-49-26	2.4	36° 47'	121° 35'	Ъ	Near San Juan Bautista.
-	8	19-15-32	3.7	41.5°	117.3°	d	Northern Nevada.
19	9	16-06-39	2.3	36° 47'	121° 32'	С	Foreshock of 1342.
19	10	13-42-26	2.5	36° 47'	121° 32'	С	Near San Juan Bautista. Foreshock at 13-37-42.
19	10						Near San Juan Bautista. rshocks at 19-36 and 19-49.
14	12	04-04-32	2.9	37° 18'	121° 43'	Ъ	SW of Mt. Hamilton.
14	13	10-56-38	2.6	37° 18'	121° 43'	Ъ	SW of Mt. Hamilton.
20	19	05-45-01	2.6	36.6°	121.7°	d	SE of Monterey.
13	19	18-16-21	1.8	37° 12'	122° 12'	Ъ	S of Palo Alto.
21	21	20-22-57	1.5	37° 23'	122° 15'	С	IV at Mountain View,
22	21	22-02-13	3.7	39.4°	118.0°	d	E of Fallon, Nevada,
23	24	07-27-18	3.8	40° 15'	124° 24'	С	Near Petrolia.
24	24	21-51-44	2.9	36.2°	120.5°	d	NW of Llanada.
25	25	13-05-28	1.8	37° 13'	121° 58'	Ъ	Foreshock of 1313.
25	25	13-13-31	1.9	37° 13'	121° 58'	Ъ	S of Los Gatos. Aftershock at 1837.
13	25	20-00-33	2.1	37° 12'	122° 12	Ъ	S of Palo Alto.
CIT	28	11-03-22	4.1	37.48°	118,58°	С	Felt. NW of Bishop.

V at Bishop.

No.	Date		agni-		tude Q	ual·	Remarks
	Sep 29	04-42-51	2.5	36° 58'	121° 43'	С	N of Watsonville.
5	30	21-26-33	4.1	36° 54'	121° 23'	Ъ	N of Hollister.
_	Oct	10 10 22	0 7	36° 55†	121° 25'	Ъ	N of Hollister.
5	2	18-10-33	2.7				
26	3	11-38-00	2.7	39° 24'	123° 51'	С	II at Fort Bragg.
27	6	15-39-44	4.1	40° 23'	124° 45'	С	SW of Arcata.
Felt	7	05-47-00	-	40.70°	122.40°	d	IV at Project City.
28	7	19-11-47	3.3	39° 32¹	123° 04'	С	NE of Willits.
27	8	12-24-19	4.6	40° 17°	124° 48'	Ъ	SW of Arcata.
29	9	12-18-41	2,2	37° 54'	121° 54°	Ъ	Mt. Diablo area.
30	9	20-26-22	3.3	36° 47'	121° 15'	С	SE of Hollister.
31	17	03-54-12	4.5	39° 36'	116° 41'	С	E of Austin, Nevada.
32	20	08-23-25	2.7	36° 02'	121° 04'	С	S of King City.
17	23	07-12-04	1.3	37° 42'	122° 28'	Ъ	San Francisco.
33	23	08-12-46	4.5	39.5°	117.5°	d	NW of Austin, Nevada.
34	26	03-18-08	4.2	39° 37'	119° 42'	С	V at Reno, Nevada. Also felt at Verdi.
35	29	08-56-39	2.6	36° 54'	121° 23†	С	NE of Hollister.
13	30	23-51-05	1.8	37° 13'	122° 12'	Ъ	Blast? S of Palo Alto.
5	31	22-36-19	3.0	36° 57'	121° 28'	Ъ	SE of Gilroy.
20	Nov	0/ 10 00	2.0	269 /21	1010 111	1.	CE of Helliston
30	2						SE of Hollister.
36	2	05-07-22	3.9	39° 37'	119° 55'	Ъ	IV at Reno, Nevada.
34	7	01-34-21	2.6	39.7°	119.7°	d	NE of Reno.
30	7	19-21-59	2,5	36° 42'	121° 11'	С	SE of Hollister.
35	8	01-31-30	2.5	36° 52'	121° 26'	a	NE of Hollister.
34	10	17-28-15	4.0	39° 38'	119° 41'	С	Felt at Reno, Nevada.

V	D	_		Lati-	Longi-	. 1	
Map No.		Time (GCT)	Magni- tude	North	West	Qual- ity	Remarks
19	11	13-11-33	2.5	36° 50'	121° 32	Ъ	Near San Juan Bautista.
37	12	08-26-26	3.7	40.7°	124.9°	d	V at Ferndale.
13	12	16-02-52	1.6	37° 10'	122° 15	c	S of Palo Alto.
38	14	02-04-40	4.1	40° 29'	121° 30'	a	Foreshock. Felt at Mineral.
38	14	Lassen e Alamanor	arthqua, and H	akes. Ma Butte Val	ximum int ley. IV	tensi	Main shock in a swarm of Mt. ty V at Mineral, Chester, Lake anyon Dam and Las Plumas. See ng this list.
38	14	06-34-32	4.5	40° 29°	121° 30	ъ	Mt. Lassen aftershock.
38	14			40° 29' erhouse (ъ	Mt. Lassen aftershock. Felt
38	15	03-22-42	4.1	40° 29'	121° 30	ъ	Mt. Lassen aftershock.
35	15	09-17-10	2.5	37° 00'	121° 23	b	E of Gilroy.
9	16	02-14-56	2.8	36.9°	121.6°	d	E of Watsonville.
19	16	06-38-11	2.8	36° 40'	121° 36	° c	Near Salinas.
39	19	07-55-22	3.4	37° 18'	122° 08	' a	Felt at Saratoga, Cupertino and Monte Vista.
4	19	09-10-12	2.0	37° 54'	122° 14	¹ a	N of Berkeley.
-	19	23-43-31	4,2	39° 43'	125° 31	' c	SW of Arcata.
29	20	03-11-54	2.2	37° 57'	121° 59	' b	E of Concord.
Felt	20	07-55-00	-	37.40°	122.00°	d	Felt Saratoga, Cupertino, Monte Vista area.
40	20	09-51-43	3.0	40.1°	121.3°	d	SE of Mineral.
9	22	09-53-18	3.0	36° 55'	121° 43	' Ъ	Near Watsonville.
5	23	13-58-24	4.1	36° 49'	121° 31	' C	IV at Hollister and Watsonville.
5	24	06-09-01	2.9	36° 52'	121° 33	' b	SE of Gilroy.
-	30	23-15-45	3,2	40.1°	116.5°	d	E of Lovelock, Nevada.
	_						

Dec 18 1 04-35-47 2.7 37° 03' 121° 34' a N of Gilroy.

	Date	Origin Time (GCT)	Richter Magni- tude		Longi- tude West	Qual-				
41	Dec 1	07-42-09	2.5	38° 31'	122° 11	¹ a	W of Winters.			
_	5	01-11-15	5 4.2	40.0°	116.7°	d	E of Lovelock, Nevada.			
5	6	06-40-10	2.8	36° 53'	121° 35	¹ c	S of Gilroy.			
42	6	11-38-39	3.0	38° 46'	119° 22	° c	Near Wellington, Nevada.			
CIT	7	03-51-09	9 2.7	36.38°	118.23°	С	W of Lone Pine. IV at Cottonwood Gates.			
CIT	7	03-53-15	5 2.3	36.40°	118.13°	С	W of Lone Pine.			
34	7	12-54-14	4 3.3	39° 40°	119° 44	* c	NE of Reno, Nevada.			
43	11	22-29-03	1 4.1	40° 05†	120° 04	' c	Herlong foreshock. IV at Doyle.			
5	13	00-24-33	3 2.6	36° 58'	121° 32	† c	Near Gilroy.			
43	14	08-59-3	4 4.5	40° 05'	120° 04	¹ c	Herlong foreshock. Felt at Wendel.			
43	14	09-19-59	9 4.0	40° 05'	120° 04	¹ c	Herlong foreshock.			
43	14	09-29-53	1 4.0	40° 05'	120° 04	† c	Herlong foreshock. Felt at Vinton.			
43	14	11-02-30	0 4.0	40° 05'	120° 04	† c	Herlong foreshock.			
43	14	13-10-3	8 4.0	40° 05'	120° 04	† c	Herlong foreshock.			
43	14	13-24-19 5.6 40° 05' 120° 04' b Main shock in a series of earthquakes centered near Herlong. Felt over about 20,000 square miles of northeastern California and western Nevada. Maximum intensity VII at Herlong, VI at Beckwourth, Doyle, Litchfield, Portola, and Wendel, California, and at Flanigan, Nevada. See special summary of the series following this list.								
43	14	16-41-1	1 4.1	40° 05'	120° 04	t c	Herlong aftershock.			
18	15	07-50-4	1 2.5	37° 06°	121° 28	' c	NE of Gilroy.			
43	15	18-01-1	5 4.4	40° 05'	120° 04	' с	Herlong aftershock. Felt at Herlong and Wendel.			
44	16	03-33-5	3 2.7	37° 27'	121° 40	' c	N of Mt. Hamilton.			
43	17	01-18-4	4 4.0	40° 05'	120° 04	t c	Herlong aftershock.			

Map Date No. 1950 Dec	Origin Rick Time Mag (GCT) tud	ni- tude	,	ıal-	Remarks
	00-16-09 3	.5 37.33°	118.07°	c E of	Bishop.
<u>16</u> 25	15-19-22 3	.2 37° 09'	121° 38'	b N of	Gilroy.
CIT 26	12-26-14 3	.0 37.27°	118.55°	c Near	Bishop.
CIT 26	14-20-57 2	.3 37.27°	118.55°	c Near	Bishop.
45 28	00-15-01 2	.9 38° 35'	122° 50'	c Felt	at Windsor.
CIT 30	16-08-52 3	.2 36.43°	118.22°	c W of	Lone Pine.

MT. LASSEN SHOCKS - NOVEMBER 1950

The shock at 0235 G.C.T. on November 14, 1950 was the largest in a swarm of earthquakes. One hundred sixty-five foreshocks were recorded on the Wood-Anderson seismographs between 1630 G.C.T. on November 13 and the main shock, including the shock felt at Mineral at 0204 G.C.T. The Benioff short-period vertical component seismegraph at Mineral showed almost continuous activity commencing at about 0140 G.C.T. and lasting for several hours after the main shock. Approximately 1700 identifiable aftershocks were recorded on the short-period torsion (Wood-Anderson) seismographs through November 22, 1950. Many additional smaller shocks were recorded on the Benioff seismometer in the same period.

Table I. Shocks Recorded Per 24 Hours.

Table I gives the daily count of aftershocks recorded on the torsion seismographs at Mineral, as well as the daily count of quakes with a double trace amplitude of over 10 mm.

16 h. to 16 h., G.C.T. Nov., 1950	Shocks recorded on Wood-Andersons	No. on Wood-Andersons with double amp.> 10 mm.		
After 0235, Nov. 14	735	100		
14 - 15	590	31		
15 - 16	175	8		
16 - 17	70	7		
17 - 18	53	2		
18 - 19	32	2		
19 - 20	28	2		
21 - 22	, 32	5		

TABLE II. INSTRUMENTAL MAGNITUDES OF MT. LASSEN EARTHQUAKES

Time G.C.T. Ma	gnitude	Time G.C.T. M	agni tude	Time G.C.T.	Magnitude
Nov. 14					
01710	3.4	0415	3.2	0954	2.6
0149	2.6	0444	2.6	1519	2.4
0204	4.1	0535	3.6	1600	3.8
0235	4.6	0634	4.5	2156	4.0
0246	3.8	0736	2.6	Nov. 15	
0250	2.8	0826	3.5	0322	4.1
0301	2,6	0831	2.9	0935	2.9
0307	2.4	0906	2.9	Nov. 16	
0319	3.0	0939	2,8	0854	3.3
0356	2.8	0945	2.6		

HERLONG SHOCKS - NOVEMBER-DECEMBER, 1950

The shock at 13-24-19 G.C.T. on December 14, 1950 was the largest in a swarm of earthquakes centered in the Herlong-Doyle area on the eastern border of Northern California. More than 50 foreshocks of magnitude greater than 2 occurred between 0632 G.C.T. on November 22 and the main shock. More than 200 aftershocks of magnitude greater than 2 had occurred by the end of December.

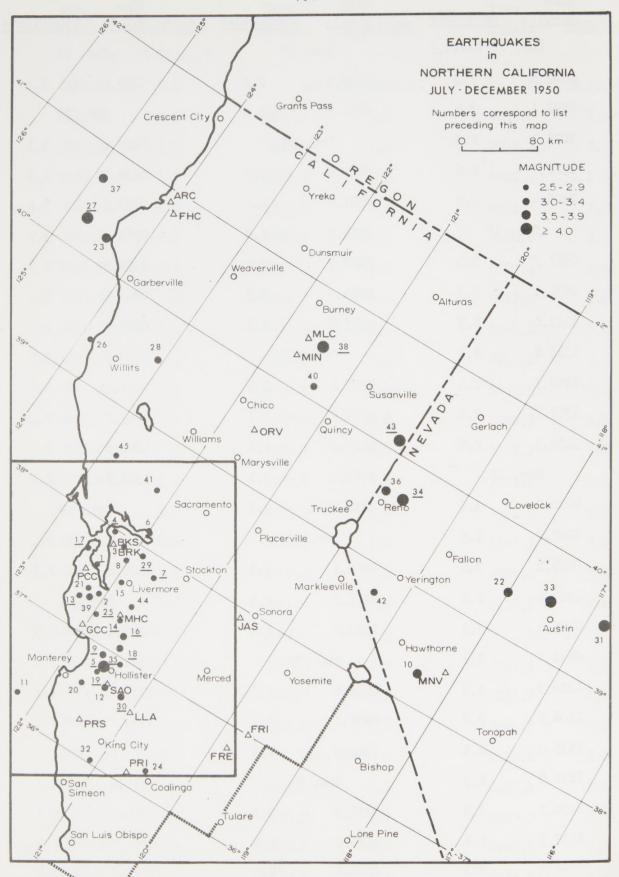
Following is a list of the instrumental magnitudes of the Herlong shocks:

Time G.C.T. Ma	ngnitude	Time G.C.T.	Magnitude	Time G.C.T. Ma	agnitude
Nov. 22		Dec. 1	1	Dec. 1	1
0632.7	2.9	0453.5	2.3	0332.4	2.5
0635.4	3.9	2229.0	4.1	0459.6	2.7
0640.8	2.2	Dec. 1	2	0732.1	2.5
0641.6	2.3	0112.6	2.3	0859.5	4.5
0647.6	3.3	0557.8	3.9	0904.0	2.7
0859.2	2.7	0557.8	3.8	. 0920.0	4.0
Nov. 23	}	0829.0	2.3	0923.2	2.3
0921.1	3.0	0852.1	2.7	0927.4	2.4
Nov. 25		1101.9	2.3	0929.8	4.0
0757.7	2.4	1109.8	2.4	0932.3	3.4
Nov. 26	S	1306.3	2.9	0934.0	2.8
1708.7	3.1	1432.9	2.8	0934	2.9
Nov. 30)	1517.2	2.3	0934	2.9
0311.5	2.3	1837.8	2.5	0935.6	2.7
Dec. 2		Dec. 1	3	0944.0	2.3
1231.8	2.4	0329.5	2.4	0946.8	2.5
Dec. 10)			0947.6	2.4
0922.4	2.9				

Time G.C.T. Magnitude	Time G.C.T. Magnitude	Time G.C.T. Magnitude
Dec. 14 (Cont.)	Dec. 14 (Cont.)	Dec. 14 (Cont.)
0953.8 2.6	1641.2 4.1	2105.8 3.0
1008.3 2.3	1643.2 3.1	2136.8 3.3
1023.0 2.3	1645.3 2.8	2159.9 2.7
1059.8 2.4	1647.0 2.6	2210.4 3.2
1102.5 4.0	1648,2 2.6	2219.9 2.9
1106.8 2.3	1653.0 2.5	2223.3 2.9
1233.3 2.5	1653.0 2.9	2228.0 2.4
1243.4 2.9	1655.1 2.6	2239.4 2.5
1310.6 4.0	1659.2 2.5	2240.7 2.6
1324.3 5.6	1659 2.4	2250.6 3.5
(Main shock)	1659 2.3	2304.0 2.7
1327.8 3.2	1711.1 3.4	Dec. 15
1332.4 3.5	1727.1 2.7	0008.1 2.5
1335.0 3.2	1729.5 2.5	0042.3 2.6
1341.3 3.6	1737.5 2.5	0105.4 2.5
1342.4 3.5	1819.2 2.6	0107.0 3.9
1344.5 3.3	1830.5 2.4	0112.1 3.4
1352.5 3.2	1838.2 2.5	0131.0 2.3
1352.5 2.6	1850.2 2.7	0146.2 2.3
1400.6 3.1	1850 2.9	0152.8 2.5
1449.2 2.6	1926.4 2.4	0241.8 2.6
1521.0 3.0	1959.3 2.2	0359.1 3.0
1527.6 2.3	2036.3 2.7	0414.8 2.2
1528.7 2.1	2051.0 2.9	0435.7 3.2
1629.2 3.6	2059.6 2.4	0444.3 2.3

Time G.C.T. M	agnitude	Time G.C.T.	Magnitude	Time G.C.T. Ma	gnitude
Dec. 1	5 (Cont.)				
0451.8	3.5	Dec	, 15 (Cont.)	Dec. 16	(Cont.)
0452.8	2.9	1411.2	2.4	0230.6	2.4
0517.3	2.5	1440.9	2,6	0245.7	2.7
0519.3	2.5	1526.3	3.2	01475.7	2.3
0523.4	2,6	1627.6	3.8	0551.6	2.3
0556.1	3.2	1801.2	4.4	0648.6	2.7
0612.5	3.1	1803.9	3.5	0703.6	2.4
0629.7	2.3	1803.9	2.7	0817.0	2.4
0643.3	2.4	1819.3	2.6	0904.1	2.4
0657.3	2.3	1830.8	2.3	0944.4	2.3
0824.6	2.3	1845.4	2.3	1031.0	2.3
0825.5	2.3	1855.0	2.8	1036.5	2.4
0925.6	2.9	1922.1	3.3	1102.2	2.7
0928.6	3.2	1929.8	2.4	1321.9	2.5
0934.4	3.9	1933.0	2.6	1334.8	2.7
0937.4	2.6	1939.6	2.3	1709.3	2.5
0938.2	3.4	2018.2	2.6	2207.9	2.4
0939.2	3.7	2121.9	2.5	2215.7	2.2
0946.3	2.7	2127.7	2.3	Dec. 1	7
0948.1	3.0	2155.6	2.7	0118.7	4.0
0951.0	2.4	2214.9	2.3	0333.7	2.1
0952.3	2.7	2304.8	2.4	0444.9	2.4
1047.2	2.3	Dec	. 16	0449.2	2.6
1245.2	2.1	0033.8	2.4	0452.4	2.1
1300.6	2.1	0129.0	2.7	0520.0	2.1
1326.0	3.8	0143.0	2.5	0724.6	2.7
1400.7	2.7	0229.2	2.3	0733.2	2.4

		135		
Time G.C.T. Magnit	Time G.C.T.	Magnitu	Time G.C.T.	Magnitude
Dec. 17 (Con	nt.) D	ec. 20	De	ec. 27
0803.4 2.3	0419.2	2.1	1159.2	2.1
0922.1 3.9	0955.2	2.1	De	ec. 28
1021.1 2.3	3 D	ec. 21	0407.6	3.1
1222.7 2.5	0452.0	2.2	0636.1	2.1
2328.4 2.5	0841.0	2.1	0753.5	3.4
Dec. 18	1254.4	2.2	0753	3.7
0557.9 2.1	2119.7	3.4	0759.8	2.9
0934.1 2.3	2316.2	3.3	0807.4	2.5
1341.6 2.5	2317.6	2.1	0808.7	2.1
1342.8 2.6	5 D	ec. 22	0810.2	3.5
1355.7 2.1	0257.4	3.4	0817.4	3.2
1359.7 2.1	0727.9	2.1	0845.2	2.4
1432.1 2.7	0729.6	2.1	1040.6	2.1
Dec. 19	1023.2	2.1	1305.3	2.1
0010.0 3.5	1337.5	2.7	De	ec. 29
0207.6 2.5	De	ec. 23	1404.1	2.1
0259.1 3.1	0902.5	2.1	2330.4	2.3
0303.6 2.3	1105.5	2.1	De	ec. 30
0405.4 2.3	1437.5	2.1	1147.4	2.5
0536.8 2.3	De	ec. 24	1528.1	2.4
1236.3 2.3	0916.8	2,2	1930.2	2.7
1306.5 2.8	0918.2	2.1	1935.7	2.7
1535.0 2.1	1321.8	2.6	De	c. 31
1831.0 2.3	B De	ec. 25	0474.4	2.7
2136.3 2.9	0837.3	2.1	0430.3	2.1
2138.3 2.5	1135.0	2.4	0701.5	2.4
2315.6 3.3	1532.8	2.4	0702.7	3.4



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1951

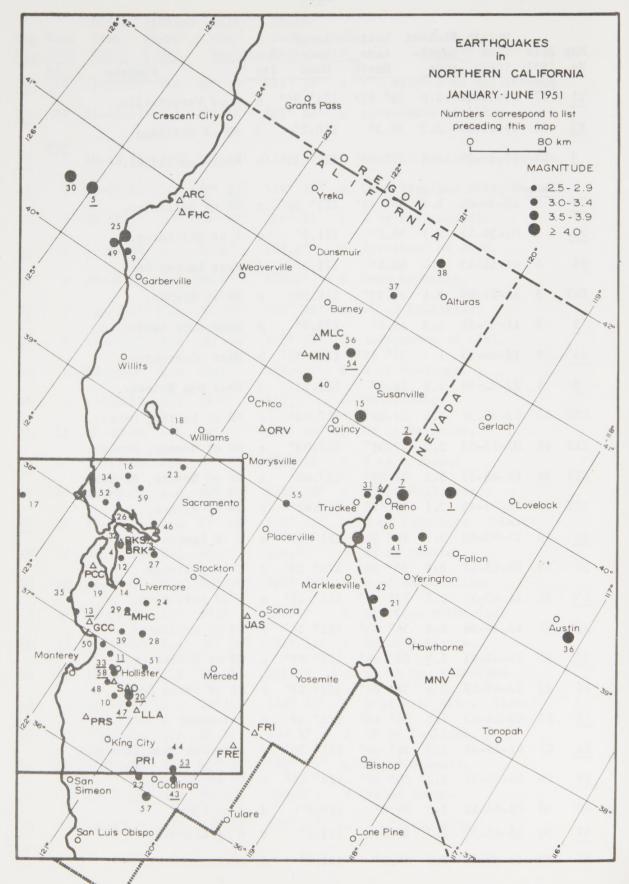
	Date 1951	Time M	lagni-	tude North		Qua ity	
	Jan						
Felt	2	10-25-00	-	37.30°	118.35°	d	IV at Laws.
CIT	2	12-06-57	3.1	37.33°	118,35°	С	IV at Laws.
1	2	23-31-21	4.4	39.9°	119.3°	d	NE of Reno.
1	2	23-49-00	3.4	39.9°	119.3°	d	NE of Reno.
CIT	4	14-03-58	3.8	37.30°	118,00°	d	Southern Tulare County, California.
CIT	4	14-06-06	2.9	37.30°	118.00°	d	Southern Tulare County, California.
2	4	20-43-45	3.0	40° 05†	120° 04'	С	Herlong aftershock,
2	4	21-45-42	3.1	40.00°	120.00°	d	Southern Washoe County, Nevada.
3	6	00-31-00	1.7	38° 00'	122° 33'	С	Near San Rafael.
4	6	19-06-56	2.6	37° 53'	122° 10'	С	SW of Concord.
2	7	08-56-57	3.4	40° 08'	120° 07'	С	Herlong aftershock.
2	7	17-30-35	3.8	40° 05'	120° 04'	С	Herlong aftershock.
2	8	13-20-07	3.2	40° 05'	120° 04'	С	Herlong aftershock,
CIT	10	01-04-12	3.0	37.70°	118.83°	С	IV at Bishop.
5	13	20-31-32	4.8	40.4°	125.0°	d	IV at Arcata, Eureka, and Ferndale. III at Trinidad.
6	13	21-49-49	3.0	39.50°	120.00°	d	W of Reno, Nevada.
7	21	06-28-27	4.1	39° 37'	119° 48'	Ъ	Felt at Reno, Nevada.
8	22	and at Ph Plumas, S	illips oda Sp	and Taho	oe City. nd Trucke	IV e.	V at Marlette Lake, Nevada, at Camino, Grizzly Flats, Las III at Norden, Vallecito and arson City and Reno, Nevada.
9	22	16-29-16	3.3	40.2°	124.2°	d	S of Ferndale.
6	22	21-04-26	2.8	39.50°	120.00°	d	Near Reno, Nevada.

No.	Date 1951 Jan		agni-		Longi- tude West	Quality	
10	23	12-19-23	2.6	36.6°	121.3°	d	SE of Hollister.
11	23	19-06-42	2.6	36° 58'	121° 34†	С	Near Gilroy.
12	25	area of th	he Sar	rancis	co East B	ay r	Sharp shock felt over a small egion. VI at San Leandro and Hayward and Moraga.
CIT	26	06-28-01	3.5	37.67°	118.75°	С	NW of Bishop.
3		00-35-25	1.5	38° 04°	122° 32'	С	Near San Rafael.
13	Feb 2	20-02-31	2.6	37° 09¹	122° 11'	Ъ	S of Palo Alto.
Felt	2	22-44-00	-	41.00°	121.90°	d	Felt. III at Big Bend.
3	3	01-29-57	2.0	38° 03'	122° 30'	С	Near San Rafael.
14	3	21-29-50	2.4	37° 31'	121° 57'	а	SE of Hayward.
_	6	16-33-12	4.8	40° 14°	126° 49'	Ъ	W of Arcata.
_	6	17-06-35	4.4	40° 14°	126° 49'	С	W of Arcata.
11	6	17-15-49	2.5	36° 55'	121° 36'	С	S of Gilroy.
3	9	00-36-29	1.8	38° 03'	122° 32'	С	Near San Rafael.
CIT	10	17-03-51	2.5	37.28°	118.30°	С	SW of Bishop.
15	19	22-36-07	4.2	40° 04°	120° 42'	Ъ	VI at Spring Garden. IV at Butte Valley, Caribou and Quincy.
16	20	06-52-47	2.2	38° 25'	122° 39'	С	Near Santa Rosa.
17	20	14-38-57	2.3	37° 44'	123° 32'	С	SW of Point Reyes.
18	21	12-52-17	2.9	39.0°	122.5°	d	E of Clear Lake.
19	22	09-08-06	2.5	37° 22'	122° 16'	а	W of Palo Alto.
20	22	09-50-36	2.5	36° 44'	121° 14'	С	SE of Hollister.
21	Mar 1	01-11-03	3.4	38.6°	119.2°	d	W of Hawthorne, Nevada.
22	2	02-13-44			120.6°		W of Coalinga.
44	2	02-13-44	J. T	30.1	120.0	u	" of oddring".

	1951	Time M	agni-	Lati- tude North	Longi- tude West	Qual-	Remarks
23	$\frac{\text{Mar}}{3}$	23-05-29	2.2	38° 47'	122° 10	b	NE of Santa Rosa.
24	7	22-35-53	2.5	37.5°	121.6°	d	SE of Livermore.
25	10	small are at Bridge	a of H ville a. IV	Humboldt (County, dale. V	Califo at Ca	Sharp earthquake felt over a prnia. Maximum intensity of VI arlotta, Fields Landing, Loleta Garberville, Miranda, Petrolia,
26	11	19-28-29	2.3	38° 01'	122° 17	' c	N of Berkeley.
20	12	11-20-32	3,1	36° 41'	121° 11	° c	SE of Hollister.
CIT	13	01-12-40	2.8	37.13°	118,63°	С	SW of Bishop.
27	13	20-05-27	3.0	37° 56'	121° 52	ъ	Near Mt. Diablo.
28 CIT 29	13 15 24	22-17-02 13-50-43 00-02-17	3.8	37° 14' 35° 01' 37° 20'	121° 26 120° 29 121° 44	' c	SE of Mt. Hamilton, SE of San Luis Obispo SW of Mt. Hamilton.
30	Apr 1	19-21-08	5.0	40° 28'	125° 18	' с	Off Cape Mendocino. III at Ferndale.
7	4	02-46-35	3.0	39.7°	119.8°	d	Near Reno.
31	5	11-19-38	2.7	39° 26'	120° 06	, c	Near Truckee.
32	6	15-36-40	1,5	37° 51'	122° 14	' b	Near Berkeley.
33	7	09-02-58	2.5	36° 50'	121° 33	* c	Near San Juan Bautista.
34	7	19-19-21	2.6	38.3°	122.7°	d	S of Santa Rosa.
35	9	23-52-50	2.5	37° 09'	122° 22	' c	SW of Palo Alto.
36	11	15-06-25	4.0	39.3°	117.2°	d	SW of Austin, Nevada.
31	14	21-59-03	3.2	39.5°	120.1°	d	W of Verdi, Nevada.
37	15	01-19-32	3,0	41.2°	121.2°	d	NE of Burney,
38	16	16-42-23	3.7	41.7°	120.9°	d	NW of Alturas.
39	24	05-37-28	2.0	37° 09'	121° 40	' b	Near Morgan Hill.
40	26	15-21-26	3,6	40.1°	121,5°	d	S of Mineral,

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Origin Richter
                            Lati-
                                     Longi-
           Time
                  Magni-
                            tude
                                     tude
                                             Qual-
Map Date
No. 1951
                                                           Remarks
                  tude
                            North
                                     West
                                             ity
    Apr
                                                 V 7 miles S of Hollister.
     27
                     3.8
                          36° 40'
                                    121° 10'
                                               a
          11-34-53
20
                          36° 40°
                                    121° 10°
                                                  Aftershock of 1134.
     27
                     3.1
20
          11-43-07
    May
                          39° 131
                                    119° 371
                                                  S of Virginia City, Nevada.
                     3.1
41
      1
          10-13-27
                                                  Near Virginia City, Nevada,
                          39° 171
                                    119° 33'
41
      2
          01-00-18
                     3.4
                                    119° 24'
                                                  E of Markleeville.
42
          20-27-58
                     3.6
                          38° 40°
                                               b
                     3.1
                                    120.2°
                                                  Foreshock of 2008.
43
          03-28-36
                          36.2°
                                    120.2°
                                                  Near Coalinga.
43
          20-08-10
                     3.2
                          36.2°
                                                  SW of Hollister.
33
          13-13-07
                     2.9
                          36° 491
                                    121° 28'
                                               b
      5
          14-07-42
                     2.5
                          36° 48'
                                    121° 28'
                                                  Aftershock of 1313.
33
      5
                     2.8
                          36.4°
                                    120.4°
                                                  N of Coalinga.
44
          03-18-03
                                               d
                          39.4°
                                    119.3°
                                                  SE of Reno.
          13-35-54
                     3.3
45
      8
                                    122° 03'
                     1.9
                          38° 07'
                                                  NE of Berkeley.
46
     11
          05-31-54
                                    121° 05'
                          36° 41'
                                                  W of Llanada.
47
     12
          20-15-45
                     2.4
                                               C
                                    121° 281
                                                  SW of Hollister.
          23-28-11
                     2.6
                          36° 42'
48
     12
                                    122° 11'
                                                  S of Palo Alto. Blast?
                     2.1
                          37° 13'
13
     15
          22-50-26
                                               Ъ
                          40.2°
                                    124.6°
49
     17
          07-29-00
                     3.5
                                               d
                                                   SW of Arcata.
                                    121° 46'
                          36° 58'
                                                  N of Watsonville.
                     2.3
50
     18
          01-15-00
                                    125.0°
                                                  Off Cape Mendocino.
                     4.0
                          40.5°
 5
     19
          03-02-53
                                               d
                           36° 58'
                                    121° 13'
                                                   NE of Hollister.
51
     21
          02-47-43
                     2.4
                                    122.7°
                                                  NW of San Francisco.
52
      23
          11-02-17
                     2.6
                          38.1°
                                               d
                                    122° 13'
                                                   S of Palo Alto, Blast?
13
      24
          17-58-38
                     2.3
                           37° 12'
                                    120.3°
          05-11-18
                     3.1
                           36.3°
                                                   NE of Coalinga.
53
      25
      25
          12-00-05
                     3.2
                          40° 31'
                                    121° 16'
                                               C
                                                   NE of Mineral.
54
                           39.0°
                                    120.9°
                                               d
                                                   NE of Auburn.
55
      25
          17-52-06
                     3.0
                           37° 10'
                                    122° 17'
                                                  S of Palo Alto.
          19-02-47
                     2.4
13
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	Date 1951 May	Time M	agni-	tude North	tude	Qual-	Remarks
11	27	05-56-14	2.6	36° 52'	121° 36'	Ъ	E of Watsonville.
53	31	06-28-42	2.7	36.3°	120.2°	d	NE of Coalinga.
3	31	18-59-09	1.7	38° 00'	122° 35'	Ъ	Near San Rafael.
20	June 1	20-36-01	2.7	36° 47'	121° 20'	С	SE of Hollister.
20	3	01-36-12	2.7	36.8°	121.2°	d	E of Hollister.
56	5	08-54-43	3.4	40.5°	121.4°	d	Near Lassen Peak.
CIT	5	12-29-06	3.1	37.33°	118.50°	С	SW of Bishop.
5	8	11-33-55	3,3	40.5°	125.0°	d	Near Cape Mendocino.
14\$	9	10-14-05	1.7	37° 35'	122° 52'	Ъ	Near Pleasanton.
3	9	22-31-16	2.5	38.0°	122.5°	d	Near San Rafael.
CIT	16	05-52-56	4.5	37.08°	117.08°	С	NW of Beatty, Nevada.
CIT	16	07-27-03	3.0	37.08°	117.08°	С	NW of Beatty, Nevada.
CIT	16	14-48-19	3.1	37.08°	117.08°	С	NW of Beatty, Nevada.
CIT	16	23-05-35	3,1	37.47°	118.42°	Ъ	NW of Bishop.
54	18	21-03-10	3.7	40° 31'	121° 12'	С	E of Lassen Peak.
57	19	06-13-47	3,6	35° 58'	120° 25'	С	S of Coalinga.
13	21	14-45-24	2.2	37° 15'	122° 15'	а	S of Palo Alto.
20	21	22-44-56	2.8	36° 43'	121° 14'	С	SE of Hollister.
58	23	19-42-01	2.5	36° 46'	121° 26'	С	SW of Hollister.
59	23	22-48-29	2,4	38° 24'	122° 27'	С	SE of Santa Rosa,
58	27	01-24-23	2.6	36° 48'	121° 32'	С	Foreshock of 0129.
58	27	01-29-48	3.3	36° 46'	121° 30'	С	Near San Juan Bautista.
58	28	05-52-51	3.2	36° 49'	121° 25'	Ъ	IV at Hollister.
60	30	02-54-32	3.3	39.4°	119.8°	d	S of Reno.
47	30	10-46-57	2.7	36.6°	121.1°	d	W of Llanada.
47	30	12-38-33	2.5	36.6°	121.1°	d	Aftershock of 1046.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1951

	Date 1951	Origin Time (GCT)	Richter Magni- tude		Longi- tude West	Qual-	Remarks
1	July 1	00-13-19	9 3.2	36° 12'	120° 57	' b	E of King City.
2	3	11-49-1	8 3.8	38.1°	118.3°	d	SE of Hawthorne, Nevada.
3	4	09-14-5	6 ?	37° 53'	121° 43	' Ъ	E of Berkeley.
4	6	18-35-50	0 1.5	38° 03'	122° 33	' Ъ	Near San Rafael.
5	8	21-11-3	0 ?	40.2°	124.5°	d	Off coast, SW of Arcata.
6	9	05-00-0	8 3.8	36° 37'	121° 01	¹ c	W of Llanada.
7	9	08-18-5	0 2.6	37° 14'	122° 10	† b	S of Palo Alto.
8	10	07-06-3	7 2.8	37° 12'	121° 38	† b	Near Morgan Hill. Depth about 10 km.
7	17	22-53-1	4 2.2	37° 13'	122° 11	° b	S of Palo Alto.
9	20	08-25-1	4 1.6	37.50°	121.80°		About 13 km W of Mt. Hamilton,
7	20	22-52-5	9 2.3	37° 17'	122° 12	† C	S of Palo Alto.
10	21	01-55-2	9 2.0	37.00°	122,00°		About 20 km S of Palo Alto.
11	21	06-21-0	6 2,6	36° 32'	121° 38	† c	SE of Salinas.
12	24	at Lafa	yette,	Moraga, P	inole, R	edwoo	V at Berkeley, Oakland; IV d City, Richmond, San Pablo, rito, Pescadero, Walnut Creek.
13	24	02-39-1	5 2,5	36° 50'	121° 32	¹ a	Near San Juan Bautista.
12	24	1500 sq intensi Berkele Francis Redwood	uare mi ty of V y, El C co, and City,	les in th I reporte errito, O Sausalit	e San Fr d from O rinda, P o; IV at s Colleg	ancis aklan inole Fair ge, So	Felt over an area of about co Bay area. A maximum d; V at Alameda, Albany, Richmond, Rodeo, San fax, Lafayette, Piedmont, uth San Francisco, Vallejo;
14	25	01-00-0	4 2.6	37° 01'	121° 07	b b	E of Gilroy.
15	25	09-12-4	4 3.8	40.4°	124.8°	d	Off Cape Mendocino.

-	Date 1951 July 26	Time M (GCT) t	agni- ude	Not an adjusted to hard to the second	tude Qu West it		Remarks N of Burney. Foreshock July 25 0223.
8	26	03-58-18	2.6	37° 14'	121° 42†	а	S of Mt. Hamilton.
17	26	20-14-34	3.2	39° 31'	120° 28°	С	Near Downieville,
18	26	23-05-36	2,6	36.7°	121.7°	d	Near Salinas.
19	28	21-34-20	3.0	39.4°	120.0°	d	24 km SW of Reno.
20	29	an area o It was fe as far so	f abo lt as uth a	ut 10,000 far nort s Shandon	square mil h as Santa . A maximu	es Cr	This earthquake was felt over of west central California. uz, as far east as Mendota, and intensity of VI was reported ito and Soledad.
20	29	11-12-40	2.6	36° 35'	121° 11'	С	Aftershock of 1053.
20	29	11-14-10	2.5	36.6°	121.2°	d	Aftershock of 1053.
20	29	11-24-51	2.7	36° 35'	121° 11'	С	Aftershock of 1053.
20	29	11-30-43	2.8	36° 35'	121° 11'	С	Aftershock of 1053.
20	29	12-13-50	2.2	36° 35'	121° 11'	С	Aftershock of 1053.
20	29	12-18-48	2.7	36° 35'	121° 11'	Ъ	Aftershock of 1053.
20	29	13-13-31	3.4	36° 35'	121° 11'	С	Aftershock of 1053,
20	29	13-50-00	2.8	36° 35'	121° 11'	Ъ	Aftershock of 1053.
12	29	19-17-03	0.5	37° 56†	122° 15'	Ъ	5 km N of Berkeley Station.
20	29	22-40-26	3.5	36° 34'	121° 09'	С	Aftershock of 1053.
20	30	07-43-43	3.0	36° 35'	121° 11'	С	Aftershock of July 29 at 10-53.
21	30	08-08-10	2.7	36° 45'	121° 05'	Ъ	NW of Llanada.
20	31	02-04-10	3,2	36° 35'	121° 11'	С	Aftershock of July 29 at 10-53.
20	31	11-47-30	2.6	36° 35'	121° 11'	С	Aftershock of July 29 at 10-53.
6	Aug 1	00-57-16	3.0	36° 38'	121° 05'	ь	W of Llanada.
22	1	09-45-41		41.00°	124.50°		Epicenter 35 km W of Arcata.
23	2	05-09-25	3.9	36° 21'	121° 16'	Ъ	Near Greenfield.

_	Date 1951 Aug 3	Time M (GCT) t	agni- ude	r Lati- tude North	West_ i	ual	Remarks S of Hollister.
		15-17-01		36° 35'			
20						С	
20	4	15-29-08					Aftershock of July 29 at 1053.
20	6	series of miles of reported Gonzales, Lucas, Sa Davenport	shock west- from Monte nta C	ks, was f central C Hollister erey, Mor ruz; IV a pitas, Sa	elt over a alifornia. and 7 mil gan Hill, t Ben Lomon Francisc	n a A es Red ond,	This shock, the largest of a crea of approximately 2500 square maximum intensity of VI was S of Hollister; V at Aptos, wood City, Robles Del Rio, San Big Sur, Bitterwater, Capitola, Salinas, Watsonville; I to III Pacific Grove.
20	6	09-54-28	3,8	36° 37'	121° 13'	Ъ	Aftershock. Intensity V at Gilroy, 7 miles S of Hollister and Monterey. IV at Watsonville.
20	6	10-26-21	2.8	36° 35'	121° 11'	Ъ	Aftershock of 0905.
20	6	17-21-45	3.9	36° 37'	121° 13'	Ъ	Intensity IV at Hollister, Parkfield, San Lucas and Watsonville.
-	8	01-47-02	4.4	40.5°	127.7°	d	W of Arcata.
18	8	16-55-27	3,6	36° 40¹	121° 41'	Ъ	Near Salinas.
25	8	19-15-33	2.0	37° 13'	121° 17'	С	NE of Gilroy.
11	8	19-56-26	2.3	36° 36'	121° 40'	С	Near Spreckels.
11	8	19-57-24	2.6	36° 36'	121° 40'	С	Near Spreckels.
13	8	21-54-36	3.0	36° 48'	121° 33'	С	Near San Juan Bautista.
26	9	04-21-30	2.0	37,00°	121.50°		23 km S of Mt. Hamilton.
27	9	09-20-48	2.2	36° 09'	121° 45'	С	Near Big Sur.
24	9	13-20-06	2.8	36° 33'	121° 18'	С	S of Hollister.
28	9	20-07-21	3.2	39° 40'	120° 17'	С	SE of Susanville. Foreshock at 20-05-55.
13	9	20-40-43	2.7	36.8°	121.5°	d	SW of Hollister.
29	10	05-51-22	2.5	37° 14'	121° 40'	а	SW of Mt. Hamilton.

No.	Date		lagni-	Lati- tude North	Longi- tude Qu West it	ual-	Remarks
18	Aug 11	10-37-45	2.9	36° 46'	121° 40°	a	N of Salinas.
18	11	11-38-00	2.8	36° 46'	121° 40°		Aftershock of 1037.
30	11	14-15-59	2.8	38.50°	122.50°		Near Santa Rosa.
31	15	18-06-28	2.0	37° 44°	122° 06'	Ъ	In East Oakland.
32	16	13-17-09	3	38° 30'	120° 18'	Ъ	SE of Placerville.
33	17	06-04-05	2.2	37° 19'	121° 30'		SE of Mt. Hamilton.
20	25	00-12-12	3.6	36° 38¹	121° 13†	С	IV 7 miles S of Hollister.
34	25	01-04-10	3.1	36° 28'	121° 09'	Ъ	SW of Llanada.
35	25	01-52-21	4.2	40.40°	125.30°	d	Off Cape Mendocino.
36	31	13-48-11	2.2	37° 34°	121° 56'	Ъ	Foreshock of 1535,
36	31	15-35-35	2.5	37° 34°	121° 56'	а	SE of Niles.
7	Sep 2	11-04-16	2.2	37° 17'	122° 12'	С	S of Palo Alto.
15	6	11-00-02	3.9	40.5°	124.7°	d	Off Cape Mendocino.
37	6	18-59-41		36° 38'	121° 28'	C	15 km N of Gonzales.
38	6	19-20-47	1.8	37° 18'	121° 47'	С	SE of San Jose.
Fel	t 9	18-49-35	4.0	38.2°	118.7°	d	Excelsior Mtns., Nevada.
39	12	14-12-30		38.8°	117.9°	d	NW of Tonopah, Nevada.
40	14	02-39-35	2.5	38° 24'	123° 14'	C	Off coast, NW of Pt. Reyes.
Fel	t 18	02-30-00		36.25°	121.80°	d	Felt. IV at Big Sur.
13	19	19-19-57	3	36.8°	121.5°	d	Near San Juan Bautista.
Fe1	t 19	22-50-00		36.25°	121.80°	d	Felt. IV at Big Sur.
41	22	14-11-05	3.6	38.0°	118.5°	d	E of Mono Lake.
42	22	21-17-36	2,2	37° 09'	121° 58'	С	Near Santa Cruz. Aftershock at 21-18-40.
26	24	10-28-30	2.0	37° 05'	121° 30'	Ъ	NE of Gilroy.

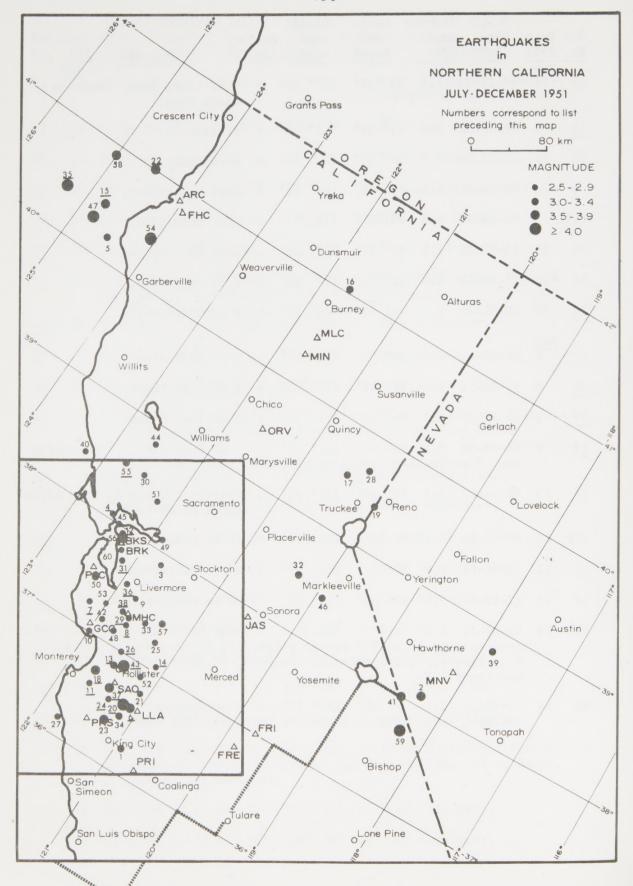
Map D	951		Magni-	Lati- tude North	,	ual-	Remarks
	ер 28	04-20-34	2.6	36° 35'	121° 10'	С	W of Llanada.
43	28	11-11-00	2.7	36° 52'	121° 25†	С	Near Hollister.
44	28	18-45-49	2.5	38° 48'	122° 35'	С	N of Santa Rosa.
45	29	00-17-57	1.4	38° 00'	122° 25†	Ъ	N of Berkeley.
6	29	12-32-34	3.2	36° 35'	120° 55'	С	Near Llanada.
13	30	12-10-12	2.7	36° 50'	121° 32'	С	Near San Juan Bautista.
41	oct 1	18-19-59	4.0	38° 00'	118° 50'	С	E of Mono Lake.
6	3	13-09-19	3.3	36° 35'	121° 05'	С	W of Llanada.
CIT	3	13-44-33	3.8	35,92°	120.52°	С	SW of Coalinga.
43	3	14-45-14	3.7	36° 47'	121° 18'	С	IV at Hollister and 7 miles S of Hollister.
46	4	19-20-23	3.0	38° 25'	119° 55'	d	10 km NW of Dardanelle.
47	8	widely i from Fer and Bell	n north ndale a Spring at Or:	nern Cali and Bridge gs. V at	fornia. <i>A</i> eville, VI Hyampom,	A ma Lat Hay	Off Cape Mendocino. Felt ximum intensity of VII reported Kneeland, Blocksburg, Alderpoint fork, Red Bluff, Willows, Blue Comptche; III at Tehama and
48	10	23-52-05	2.5	37° 07'	121° 46'	С	NW of Gilroy.
29	12	13-22-40	2.1	37° 20'	121° 42'	Ъ	Near Mt. Hamilton.
7	12	19-59-09	2.4	37° 13'	122° 13'	b	SE of Pescadero.
49 ^{\$}	14	01-09-24	2.1	38° 05'	121° 54'	b	N of Pittsburg.
50	14	05-00-04	3.0	37° 27'	122° 18'	а	W of Redwood City. Felt at Redwood City, San Mateo and San Carlos.
24	16	04-36-12	2.9	36° 35'	121° 24'	С	NE of Gonzales. Aftershock at 05-05-16.
14	16	16-39-23	3 2.9	36° 58'	121° 05'	Ъ	In foothills SW of Los Banos.
Felt	18	08-37-00)	36.75°	121.40°	d	Felt. Near Hollister.
38	21	01-19-24	2.3	37° 22'	121° 46'	С	SE of San Jose.

-	Date 1951 Oct	-	mi- t	ati- ude orth	Longi- tude West	Qual- ity	Remarks
43		15-47-21	3.6 36°	55 '	121° 32	2' c	Near Chittenden Junction. Aftershock at 16-15-43.
7	24	01-51-40	.4 37°	12 *	122° 12	2 1 в	NW of Los Gatos.
26	24	04-43-22	2.1 37.	0°	121.5°	d	Near Gilroy.
26	25	11-46-18 2	2.5 37°	00 9	121° 23	3 т Ъ	E of Gilroy.
7	26	01-55-04 2	2.2 37°	12'	122° 12	2 * Ъ	NW of Los Gatos.
22	26	10-41-33	3.9 41°	00 °	124° 30	0° c	NW of Arcata.
43	30	19-55-14 Hollister.					Near Hollister. Felt in 30-17.
43	30	19-59-18	.2 36°	541	121° 25	5′ Ъ	Near Hollister.
43	30	21-08-46	3.9 36°	54	121° 25	5 ° a	Near Hollister.
43	31	16-59-50	3.4 36°	541	121° 2	5' a	Near Hollister.
43	31	20-58-19 A IV at Santa					VI at Hollister, V at Gilroy, lejo and Tres Pinos.
13	$\frac{\text{Nov}}{1}$	07-46-13	3.0 36°	52'	121° 3	0' a	NW of Hollister.
43	1	08-08-20	3.9 36°	541	121° 2	5 ° c	NE of Hollister.
43	1	12-29-30	3.0 36°	541	121° 2	5 ° c	Aftershock of 0808.
26	3	00-52-34	2.9 37	001	121° 2	5' c	Near Gilroy.
31	4	12-14-04	L.1 37°	44*	122° 0	8' a	N of Hayward.
51	9	23-57-04	1.9 38	22 1	122° 1	2' c	Near Napa.
52	12	13-15-10	2.5 36.	9°	121.2°	d	E of Hollister.
53	13	03-36-10	2 37	15'	122° 0	0' c	SE of San Jose.
35	13	11-24-42	4.8 40.	4°	125.3°	d	Off Cape Mendocino.
54	14		d, Kneel	and, l	Miranda		VI at Eureka and Fortuna. V arberville. IV at Hoopa,
13	14	09-06-54	2.6 36	531	121° 3	0' c	N of Hollister.

13 26 05-12-25 2-1/2 36° 56' 121° 30' a N of Hollister.

_	Date		lagni-	tuc	le	tude	2	Qual-	Remarks
	Nov 26	07-21-53	3.4	38° 3	31'	122°	45	ь	N of Santa Rosa. Felt in Santa Rosa.
55	26	08-53-30	3.2	38° 3	32 *	122°	46'	Ъ	Aftershock.
55	26	13-21-26	2.1	38° 3	31'	122°	45	С	Aftershock.
4	28	00-46-52	2.4	38° 0	2 1	122°	32 '	Ъ	Near San Rafael.
Felt	28	04-49-50	4.0	38.00)°	119.0	00°	d	Near Mono Lake.
56	29	13-05-09	2.5	37° 5	7'	122°	18'	а	Near El Cerrito.
57	30	07-54-45	3.3	37° 2	25'	121°	201	С	W of Patterson.
13	30	10-51-25	2.7	36° 5	53'	121°	361	Ъ	E of Watsonville.
43	Dec 1	16-08-36	2.6	36° 5	55'	121°	25	Ъ	N of Hollister.
43	8	12-58-11	3.0	36° 4	47 '	121°	25	Ъ	W of Tres Pinos.
43	8	14-24-35	2.4	36° 4	47 °	121°	28	Ъ	W of Tres Pinos.
13	9								S of Hollister. Aftershocks 10 at 06-18-42.
37	13	20-42-23	3.2	36° 4	40 '	121°	22	С	Central Gabilan Range. After- shock at 20-43-53.
CIT	20	04-13-06	3.7	36.00)°	120.0)5°	С	SW of Coalinga.
43	22	11-40-08	2.3	36° 5	55'	121°	291	Ъ	N of Hollister.
58	23	17-19-26	3.5	40° 5	551	125°	00	С	Under ocean off Arcata.
59 ^{\$}	28	over an a	rea of	10,0	000 s	square	e mi	iles.	Near Owens River Gorge. Felt VI at Long Valley Reservoir. 7, 37.57° N, 118.58° W,
60	20	12 10 20	2 0	270	103	1220	12		Near Montalair Dist

60 28 13-19-39 2.8 37° 50' 122° 12' a Near Montclair Dist., Oakland. Felt by many people in North and East Oakland.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - June 1952

	Dat	e Time	Richter Magni- tude			Qual	
	Jan						
1	1	21-45-02	3.3	36° 57'	121° 29'	С	Near Gilroy.
2	3	00-00-02	2.0	38° 18'	122° 13'	С	Between Vacaville and Napa.
3	10	11-30-19	3.3	40° 05'	120° 47'	С	Near Genesee.
4	11	01-58-45	1.2	37° 15'	121° 45'	С	SE of San Jose.
5	11	11-12-28	3.4	36° 52'	121° 40'	Ъ	Near Watsonville.
6	19	23-10-30	3.0	37° 05'	121° 39'	Ъ	Near Gilroy.
7	21	16-40-36	2.5	37° 02'	122° 07'	Ъ	Near Santa Cruz.
8	26	23-10-54	2.5	37° 37'	121° 59'	а	Near Niles.
CIT	29	01-13-16	3.3	37.15°	117.05°	С	S of Tonopah, Nevada.
9	30	11-05-33	2.7	36° 18'	121° 08'	С	Near King City.
10	31	14-24-12	2.0	38° 27'	122° 20'	С	N of Napa.
11	31	21-33-12	3.6	36.4°	121.4°	С	SE of Soledad.
	Feb						
CIT	1	13-30-24	2.9	37.8°	118.7°	d	SE of Mono Lake.
CIT	1	13-52-00	3.0	37.8°	118.7°	d	SE of Mono Lake.
12	3	03-02-36	2.3	37° 02'	121° 40'	Ъ	W of Gilroy.
CIT	4	18-25-37	3.9	37.57°	118.58°	С	Owens R. Gorge, III at Long Valley Dam.
13	5	00-12-51	1.9	37° 57'	121° 53'	Ъ	Between Concord and Brentwood.
14	7	12-25-40	2.7	38° 50'	122° 23†	Ъ	Between Middletown and Rumsey.
15	8	04-07-37	4.0	40.0°	125.0°	d	Under ocean off Petrolia.

	Origin 1	Magni-		tude (
	20-11-01	2.2	37° 12'	122° 14'	Ъ	W of Los Gatos.
Felt 8	20-30-00	-	37.75°	122.5°	d	Sunset Dist. of San Francisco.
CIT 9	08-21-31	2.5	37.00°	117.95°	С	N of Lone Pine.
		Owenyo	. I to I			NE of Lone Pine. VI at Lone ash, Independence, Keeler
CIT 9	08-54-46	3.7	36.67°	117.85°	С	NE of Lone Pine.
17 9	11-24-17	3	40.4°	123.8°	c	Near Bridgeville.
18 9	18-48-12	2.4	38.7°	122.7°	d	Near Geyserville.
CIT 9	19-44-25	3.7	36.67°	117.85°	С	NE of Lone Pine .
19 10	16-53-19	3	38.6°	117.8°	d	E of Luning, Nevada.
20 10	21-35-11	2.1	37° 29'	121° 32'	Ъ	NE of Mt. Hamilton.
21 13	11-52-58	3.9	38.6°	117.6°	d	E of Luning, Nevada.
Felt 13	14-05-00	-	36.6°	118.1°	d	Lone Pine. Shock felt at 1635 also.
<u>16</u> 15	22-15-03	2.5	37° 12'	122° 14°	Ъ	NW of Port Ano Nuevo.
22 19	06-41-25	3.8	40.6°	125.0°	d	Under ocean off Ferndale.
CIT 19	21-27-15	2.7	36.57°	118.23°	С	W of Lone Pine. Felt at Lone Pine.
23 22	12-38-55	2.8	37° 53'	121° 45°	а	Near Brentwood.
24 26	23-25-08	2.0	37° 45¹	121° 59'	С	E of Hayward.
CIT 28	16-05-04	3.2	36.97°	118.03°	Ъ	IV at Aberdeen and Fort Independence,
Mar						
Felt 5	07-19-00	-	37.95°	122.35°	d	III at Corde Madera.
Felt 7	00-00-00	-	40.6°	122.4°	d	IV at Redding. Time approximate.

EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - June 1952

	Dat	e Time	Richter Magni- tude		Longi- tude (ual ity	
	Jan						
1	1	21-45-02	3.3	36° 57'	121° 29'	С	Near Gilroy.
2	3	00-00-02	2.0	38° 18'	122° 13'	С	Between Vacaville and Napa.
3	10	11-30-19	3.3	40° 05'	120° 47'	С	Near Genesee.
4	11	01-58-45	1.2	37° 15'	121° 45'	С	SE of San Jose.
5	11	11-12-28	3.4	36° 52'	121° 40¹	Ъ	Near Watsonville.
6	19	23-10-30	3.0	37° 05'	121° 39'	Ъ	Near Gilroy.
7	21	16-40-36	2.5	37° 02'	122° 07'	Ъ	Near Santa Cruz.
8	26	23-10-54	2.5	37° 37'	121° 59'	а	Near Niles.
CIT	29	01-13-16	3.3	37.15°	117.05°	С	S of Tonopah, Nevada.
9	30	11-05-33	2.7	36° 18'	121° 08'	С	Near King City.
10	31	14-24-12	2.0	38° 27'	122° 20'	С	N of Napa.
11	31	21-33-12	3.6	36.4°	121.4°	С	SE of Soledad.
	Feb						
CIT	1	13-30-24	2.9	37.8°	118.7°	d	SE of Mono Lake.
CIT	1	13-52-00	3.0	37.8°	118.7°	d	SE of Mono Lake.
12	3	03-02-36	2.3	37° 02°	121° 40'	Ъ	W of Gilroy.
CIT	4	18-25-37	3.9	37.57°	118.58°	С	Owens R. Gorge, III at Long Valley Dam.
13	5	00-12-51	1.9	37° 57'	121° 53'	Ъ	Between Concord and Brentwood.
14	7	12-25-40	2.7	38° 50'	122° 23'	Ъ	Between Middletown and Rumsey.
15	8	04-07-37	4.0	40.0°	125.0°	d	Under ocean off Petrolia.

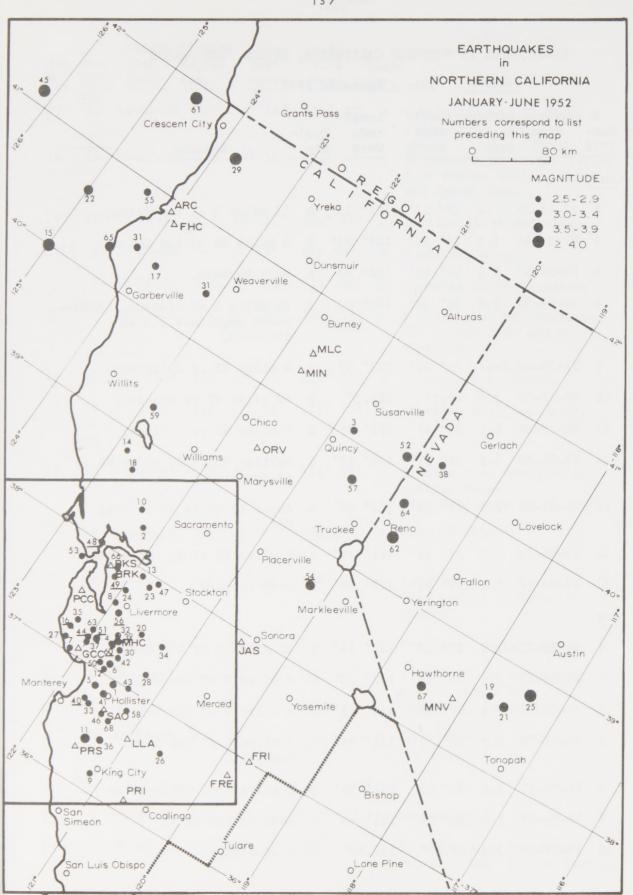
No.	195	Time (GCT)	Magni-	tude	Longi- tude West	-	
	Feb 8	20-11-01	2.2	37° 12'	122° 14'	Ъ	W of Los Gatos.
Fel	t 8	20-30-00	-	37.75°	122.5°	d	Sunset Dist. of San Francisco.
CIT	9	08-21-31	2.5	37.00°	117.95°	С	N of Lone Pine.
CIT	9		Owenyo.	I to I			NE of Lone Pine. VI at Lone ash, Independence, Keeler
CIT	9	08-54-46	3.7	36.67°	117.85°	С	NE of Lone Pine.
1.7	9	11-24-17	3	40.4°	123.8°	c	Near Bridgeville.
18	9	18-48-12	2.4	38.7°	122.7°	d	Near Geyserville.
CIT	9	19-44-25	3.7	36.67°	117.85°	С	NE of Lone Pine .
19	10	16-53-19	3	38.6°	117.8°	d	E of Luning, Nevada.
20	10	21-35-11	2.1	37° 29'	121° 32'	Ъ	NE of Mt. Hamilton.
21	13	11-52-58	3.9	38.6°	117.6°	d	E of Luning, Nevada.
Felt	13	14-05-00	-	36.6°	118.1°	d	Lone Pine. Shock felt at 1635 also.
16	15	22-15-03	2,5	37° 12°	122° 14'	Ъ	NW of Port Ano Nuevo.
22	19	06-41-25	3.8	40.6°	125.0°	d	Under ocean off Ferndale.
CIT	19	21-27-15	2.7	36.57°	118.23°	С	W of Lone Pine. Felt at Lone Pine.
23	22	12-38-55	2.8	37° 53'	121° 45'	а	Near Brentwood.
24	26	23-25-08	2.0	37° 45'	121° 59'	С	E of Hayward.
CIT	28	16-05-04	3.2	36.97°	118.03°	Ъ	IV at Aberdeen and Fort Independence,
	Mar						
Felt	5	07-19-00	-	37.95°	122.35°	d	III at Corde Madera.
Felt	7	00-00-00	-	40.6°	122.4°	d	IV at Redding. Time approximate.

Map Date No. 1952 Mar			tude	Quality	Remarks
25 7	01-00-42 4	38.8°	117.4°	d	Shoshone Mountains, Nevada.
26 8	21-11-30 2.9		120° 36'	С	W of Tranquillity
CIT 9 Felt 12	00-25-48 3.4 07-30-00 -	35° 42' 37.95°	120° 30' 122.35°	d d	Aftershock at 17-14-12; M=3.2 III at Corte Madera.
27 14	00-53-55 -	37° 07'	122° 12'	Ъ	N of Davenport.
<u>28</u> 15	14-39-30 1.9	37° 12'	121° 12'	Ъ	SE of Mt. Hamilton.
28 15	15-27-34 2.0	37° 09'	121° 16'	Ъ	NW of Gilroy.
29 16	10-05-15 4.3	41° 35'	123° 45'	С	Between Klamath and Clear Creek.
30 17	18-37-03 2.4	37° 15'	121° 38'	С	10 km S of Mt. Hamilton. Aftershocks at 18-42-52 and 19-05-30,
<u>16</u> 18	18-45-24 2.2	37° 13'	122° 15'	Ъ	NE of Point Ano Nuevo.
Felt 22	07-45-00 -	37.95°	122,35°	d	III at Corte Madera.
31 23	10-46-03 3.2	40° 25'	124° 08'	С	S of Scotia.
Felt 23	13-36-13 -	40.50°	121.65°	d	V at Manzanita Lake,
32 25	02-53-53 2	37° 22'	121° 45'	С	NW of Mt. Hamilton.
33 29	23-14-52 2.5	36° 42'	121° 35'	С	10 miles S of Hollister.
34 ^{\$} 31	01-27-45 2,4	37° 29'	121° 15'	Ъ	20 miles NE of Mt. Hamilton.
Apr					
35 2	00-52-45 2.1	37° 16'	122° 13'	Ъ	About 12 miles W of San Jose.
36 2	05-21-10 3.1	36° 27'	121° 15'	Ъ	Near Soledad.
37 2	06-03-38 1.7	37° 08'	122° 00'	Ъ	6 miles S of Los Gatos.
38 2	11-16-00 3.0	40° 13'	119° 42'	С	10 miles E of Flanegan, Nevada. Aftershock at 1120.
39 2	12-44-07 2.1	37° 20'	121° 46'	Ъ	6 miles W of Mt. Hamilton.
40 2	21-05-02 2.7	36° 43'	121° 40'	С	Near Salinas.
41 3	17-44-52 3.1	36° 50'	121° 31'	С	Near San Juan Bautista.

	Date 1952 Apr	Origin R Time M (GCT) t	agni-	Lati- tude North	tude Q	ual ty	
42	5	02-18-28	1.6	37° 10'	121° 37'	Ъ	12 miles S of Mt. Hamilton.
43	7	04-21-15	2.3	37° 00'	121° 18'	С	14 miles E of Gilroy.
44	8	08-36-09	2.5	37° 12'	122° 01'	Ъ	2 miles S of Los Gatos.
45	9	17-11-23	4.8	41.1°	126.1°	d	100 miles W of Ferndale.
46	11	10-26-19	2.6	36° 40'	121° 24'	С	Midway between Tres Pinos and Gonzales.
47	17	18-08-42	2.0	37° 58'	121° 40'	Ъ	Near Brentwood.
48	18	19-39-21	2.0	37° 59¹	122° 31'	С	Near San Rafael.
49	19	04-37-02	2.3	37° 46'	122° 10'	а	Near Diamond Dist., Oakland.
50	19	11-31-15	2.3	37° 04'	121° 45'	С	10 miles N of Watsonville.
51	19	17-35-06	2.2	37° 17'	121° 58'	Ъ	Near Los Gatos.
49	20	02-05-16	2.5	37° 49'	122° 06'	а	Near Diamond Dist., Oakland.
52	21	09-20-09	3.6	40.1°	120.1°	d	Near Doyle.
53	23	00-30-27	1.3	37° 49'	122° 35'	С	5 miles W of Golden Gate.
16	23	00-49-48	2.9	37° 11'	122° 18'	С	Santa Cruz Mountains.
54	25	06-25-40	3,2	38.7°	120.2°	đ	20 miles SE of Pacific, Eldorado County.
39	25	11-22-14	2.1	37° 21'	121° 44'	а	14 miles W of Mt. Hamilton.
44	25	11-47-26	1.5	37° 12'	122° 03†	С	5 miles SW of Los Gatos.
40	27	01-30-04	2.7	36° 42'	121° 42'	С	Near Salinas.
55	28	00-48-43	3.0	40° 55'	124° 25'	С	20 miles W of Arcata.
44	28	02-15-31	2.2	37° 12'	122° 00°	Ъ	Near Los Gatos.
56	28	03-01-30	3.1	37° 30'	121° 55'	Ъ	7 miles S of Niles. After-shock magnitude 2.0 at 03-03-01.
57	30	04-58-15	3.5	39.7°	120.5°	d	Near Calpine.
Fel	t 30	06-05-00	-	36,75°	121.40°	d	7 miles S of Hollister. Weak shock.

Map I		Time Ma	agni-				Remarks
1	lay						
58	5	10-43-23	2.8	36° 48'	121° 12'	С	6 miles E of Tres Pinos.
59 ^{\$}	5	13-01-49	3,1	39.3°	122.9°	d	12 miles E of Potter Valley. V at Potter Valley and Willits.
60	5	23-07-36	1.7	37° 17'	121° 46'	Ъ	10 miles SE of Mt. Hamilton.
61	6	17-21-10 in Crescer	4.7 nt Ci	41.9° ty and Fe	124.6° rndale. U	d ISCG	25 miles W of Klamath, Felt S gives 41.0° N as latitude,
51	8	08-21-07	1.5	37° 12'	121° 56†	Ъ	5 miles SE of Los Gatos.
44	8	09-16-37	1.5	37° 11'	122° 04†	Ъ	5 miles SW of Los Gatos.
62	9	15-31-32	5.1	39° 25'	119° 47'	С	12 miles S of Reno, Nevada. VI at Carson City and Virginia City.
63	11	17-57-50	2.6	37° 16†	122° 02'	Ъ	5 miles NW of Los Gatos. Aftershock magnitude 2.3 at 18-13-50.
64	13	19-17-26	3,4	39° 45'	119° 51'	С	12 miles N of Reno, Nevada.
65	17	14-02-39	3.7	40.3°	124.4°	d	6 miles W of Petrolia.
66	18	10-52-58	2,2	37° 53'	122° 12'	а	5 miles NE of Berkeley. Felt Orinda.
54	22	18-07-39	3.5	38° 40'	120° 16'	С	14 miles SE of Pacific, Eldorado County.
48	23	17-40-46	1.4	38° 01'	122° 29'	С	4 miles NE of San Rafael.
39	28	07-00-50	2.0	37° 12†	121° 35'	Ъ	Depth about 10 km, 10 miles S of Mt. Hamilton.
67	29	12-51-11	3.7	38,4°	118,5°	d	Near Hawthorne, Nevada.
	June						
Felt	1	11-45-00	-	37.45°	121.95°	d	IV at Warm Springs.
16	4	18-59-18	2.5	37° 14'	122° 13'	Ъ	About 13 miles S of Palo Alto.

	1952	Origin R Time M (GCT) t	lagni-	tude	tude (
68	June 9	09-21-27	2.6	36° 39'	121° 18'	С	9 miles S of Tres Pinos.
48	14	00-33-34	1.6	37° 59'	122° 34'	Ъ	Near San Rafael.
CIT	17	17-19-31	3.4	37.62°	118.67°	С	Owens R. Gorge. IV at Long Valley Dam.
51	20	22-39-35	1.3	37° 14'	121° 57'	Ъ	Near Los Gatos.
60	21	20-49-21	2.6	37° 14'	121° 42'	С	7 miles SW of Mt. Hamilton.
56	23	20-22-14	1.9	37° 34'	121° 51'	Ъ	6 miles S of Pleasanton.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1952

	Date 1952	Origin Time (GCT)	Magni-		tude Q	ual-	Remarks
	July						
1	1	17-46-29	2.2	37° 13'	122° 15'	Ъ	13 miles W of Los Gatos.
2	4	09-33-44	1.5	37° 11'	122° 02°	Ъ	4 miles SE of Los Gatos.
3	6	04-06-57	2.4	37° 40°	122° 02'	Ъ	Near Hayward.
4	6	12-09-52	2.9	36° 35†	121° 07'	С	12 miles W of Llanada. After-shock magnitude 2.5 at 12-16-03,
5	9	22-04-48	3 2-1/2	38° 32'	122° 37'	С	4 miles SE of Calistoga.
6	10	09-52-52	2.8	40.5°	121.3°	d	22 miles NE of Mineral.
7	12	00-20-36	2.5	36° 42'	121° 35'	С	5 miles NE of Salinas.
8	14	01-04-56	3.2	36° 35'	121° 17'	Ъ	Gabilan Range 10 miles NE of Gonzales.
9	15	06-07-55	2,5	36° 25'	121° 00'	С	About 15 miles NE of King City.
10	30	23-55-33	3 2.5	37° 14'	121° 43'	а	7 miles SW of Mt. Hamilton.
11	31	11-28-50	1.8	37° 57'	122° 00'	Ъ	Near Concord,
	Aug						
1	1	00-11-23	3 2.2	37° 13'	122° 14'	С	12 miles W of Los Gatos.
12	2	16-28-45	2.9	37° 39'	122° 00°	b	4 miles E of Hayward.
13	5	00-03-19	2.4	37° 58'	122° 28'	Ъ	6 miles E of San Rafael.
14	5	13-41-28	3 2,5	36° 53'	121° 34'	С	2 miles N of San Juan Bautista.
15	8	18-55-11	3.2	36° 45'	121° 39'	С	6 miles E of Castroville.
16	9	09-36-09	2.5	36° 58'	121° 43'	С	Near Watsonville,
CIT	10	14-37-50	3.2	37.32°	117.62°	С	E of Bishop.

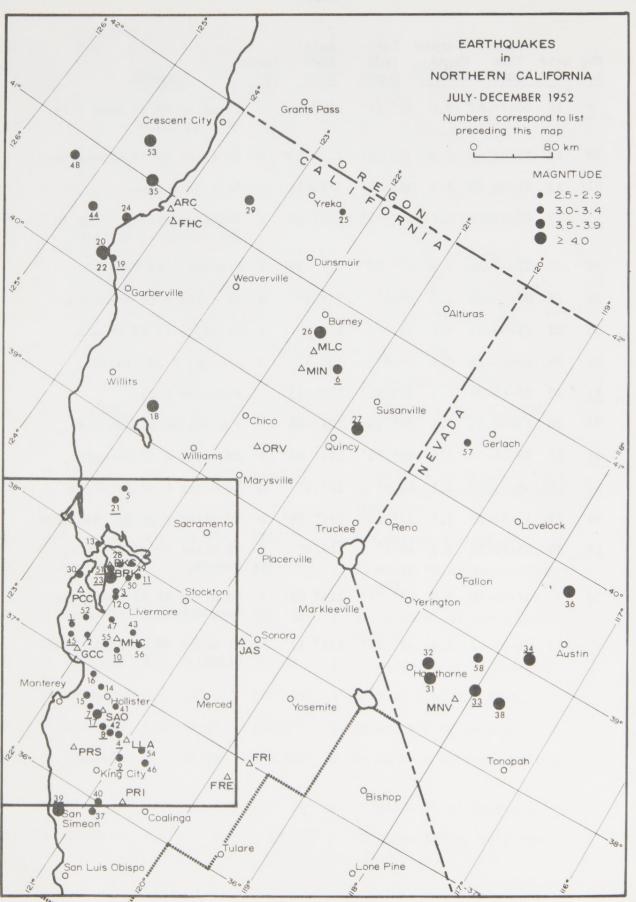
No.	Date 1952 Aug	Time	Magni-	tude North	Longi- tude West	Qual-	Remarks
17	11	16-01-35	3.2	36° 42'	121° 27	t C	Gabilan Range, 12 miles N of Gonzales.
18	14	06-47-07	4.0	39° 18'	122° 53	c	12 miles E of Potter Valley. V at Potter Valley, Ukiah and Upper Lake.
19	20	05-42-10	3.4	40° 11'	124° 15	C	3 miles SE of Petrolia.
Felt	22	12-30-00	_	37.95°	119.10°	d	V at Leevining.
4	24	10-16-51	3.0	36° 35'	121° 10'	c	15 miles NE of Gonzales.
10	27	15-17-37	2.9	37° 14'	121° 38'	Ъ	6 miles S of Mt. Hamilton, III at San Jose and Mt. Hamilton,
11	29	11-59-52	2.2	37° 55"	121° 55'	С	11 miles E of Orinda.
1	29	19-03-41	2.2	37° 13'	122° 13'	С	12 miles W of Los Gatos.
	Sep						
17	13	09-06-47	3.8	36° 37'	121° 25'	Ъ	6 miles N of Gonzales in Gabilan Range. V at Hollister.
CIT	14	11-46-06	3.3	35.9°	120.3°	d	Near Parkfield
20	22	11-41-25	5,2	40° 12'	124° 25'	С	12 miles SW of Petrolia. Felt widely in Humboldt County.
Felt	24	13-10-00	-	40.6°	124.25°	d	Ferndale. Slight shock.
21	26	04-35-43	3.2	38° 25'	122° 35'	С	7 miles SE of Santa Rosa. Felt in Santa Rosa, St. Helena and Kenwood.
22\$	28	18-26-36	3.0	40.3°	124.2°	d	Near Petrolia, Humboldt County,
	Oct						
23	3	08-30-32	1.7	37° 44'	122° 08'	Ъ	SE Oakland.
24	4	12-40-15	3.7	40° 35'	124° 25'	С	10 miles W of Ferndale. Depth 15 km. III at Scotia.

Map Da	52	Origin Ri Time Ma (GCT) tu	agni-	Lati- tude North		ual.	Remarks
	8	05-34-26	2.8	41.7°	122.3°	d	18 miles ESE of Yreka.
<u>23</u> 1	13		cally	in Bay at			Near Diamond Dist., Oakland. um intensity of V Diamond
Felt 1	L4	09-00-00	-	37.15°	122.15°		IV at Boulder Creek.
<u>19</u> 1	L7	05-00-13	3.2	40° 12'	124° 14'	С	25 miles S of Ferndale.
26 1	L7	11-34-39	4	40° 40'	121° 45'	С	23 miles N of Mineral.
<u>23</u> ^{\$} 2	22	Felt throu	ighout	Bay are		m iı	10 miles SE of Berkeley. ntensity of IV at Berkeley,
7 2	24	13-53-45	2.4	36.7°	121.5°	d	11 miles SSW of Hollister.
27 2	25	14-36-20	3.5	40.1°	120.7°	d	12 miles NE of Quincy.
28 2	2.5	19-31-44	1.9	37° 55†	122° 10'	a	5 miles NE of Berkeley.
<u>27</u> 2	26	11-36-40	4.3	40° 05°	120° 46'	Ъ	12 miles NE of Quincy. Aftershock magnitude 3.3 at 15-28-55. III at Quincy.
<u>1</u> 2	29	00-46-29	2.3	37° 12'	122° 13'	Ъ	15 miles S of Palo Alto.
3 2	29	15-11-33	1.4	37° 42'	122° 02'	Ъ	16 miles SE of Berkeley.
29 3	31	10-28-24	3,5	41° 20'	123° 18'	С	45 miles SW of Yreka.
No	v						
30	8	19-37-54	3.4	37° 39'	122° 28'	b	S of Daly City. IV at Daly City, Mill Valley, San Anselmo and San Francisco.
CIT]	12	03-01-51	4.2	38.7°	118.2°	d	N of Mina, Nevada.
31 1	13	00-55-16	4.8	38.5°	118,5°	d	Near Hawthorne, Nevada.
32	14	08-05-42	4.2	38.6°	118.6°	d	Near Hawthorne, Nevada.
CIT 1	14	09-05-42	4.1	39.0°	118.0°	d	Western Nevada.
33	14	23-24-18	4.2	38.6°	118.0°	d	Nevada.
33	14	23-33-07	4.1	38.6°	118.0°	d	Nevada,

Map I		Origin Time (GCT)	Magni-		tude	Qual	Remarks
	15	02-29-52	4.3	39.1°	117.7°	d	Nevada.
34	15	04-38-10	4.0	39.1°	117.7°	d	Nevada.
6	15	22-56-50	3.8	40° 28'	121° 20'	Ъ	15 miles NE of Mineral.
6	16	07-03-56	3.8	40° 28'	121° 20'	Ъ	15 miles NE of Mineral.
35	16	21-29-45	4.1	41° 00'	124° 25'	С	18 miles NW of Arcata.
CIT	17	03-20-23	3.9	36.25°	118.38°	С	SW of Lone Pine.
36	18	04-04-08	4.6	39.8°	117.7°	d	35 miles NW of Austin, Nevada.
37 ^{\$}	19	10-06-27	3.1	35.9°	120.9°	d	26 miles SE of King City.
38	20	11-33-17	4.0	38,6°	117.7°	d	45 miles NW of Tonopah, Nevada.
21	21	23-27-25	2.4	38° 24'	122° 40'	Ъ	4 miles SE of Santa Rosa.
4	22	02-12-10	2,8	36° 38'	121° 05'	Ъ	10 miles W of Llanada.
39	22	07-46-37	6.0	35° 44¹	121° 12'	Ъ	6 miles N of San Simeon.
39	22	08-02-40	3,2	35° 44†	121° 12'	Ъ	Aftershock.
39	22	08-29-47	3.1	35° 44'	121° 12'	Ъ	Aftershock.
39	22	08-53-04	3.4	35° 44'	121° 12'	b	Aftershock.
39	22	11-08-44	3.1	35° 44'	121° 12'	Ъ	Aftershock.
39	22	11-45-31	3.1	35° 44†	121° 12'	Ъ	Aftershock.
39	22	12-38-44	3.0	35° 44'	121° 12'	b	Aftershock.
39	22	13-37-31	4.0	35° 44†	121° 12'	Ъ	Aftershock,
39	22	19-25-21	3.9	35° 44'	121° 12'	Ъ	Aftershock.
39	22	19-36-27	3.1	35.7°	121.2°	d	Aftershock.
39	22	23-39-20	3.1	35.7°	121.2°	d	Aftershock.
40	23	09-22-35	3,2	36.0°	120.9°	d	20 miles SE of King City.
39	23	18-40-19	4.2	35° 40'	121° 10'	С	San Simeon aftershock,

	Date		agni-			ial-	Remarks
41	Nov 24	01-37-22	2.7	36.8°	121.3°	d	8 miles SE of Hollister.
CIT	25	19-17-42	3.2	36.2°	120.0°	d	Near Coalinga.
39	25	20-14-45	3.6	35° 44'	121° 12'	С	San Simeon aftershock.
39	25	21-59-17	4.4	35° 44¹	121° 12'	С	San Simeon aftershock.
39	26	13-32-09	3.5	35° 44¹	121° 12'	С	San Simeon aftershock.
39	27	17-37-05	3.3	35.7°	121.2°	d	San Simeon aftershock.
42	27	18-02-58	3,2	36° 34'	121° 13'	С	20 miles SE of Hollister.
39	28	10-22-33	3.0	35.9°	121.2°	d	San Simeon aftershock.
Felt	29	16-00-00	-	36.0°	121.15°	d	IV at Jolon.
39	29	23-15-58	3.5	35.7°	121.2°	d	San Simeon aftershock.
43	30	01-49-05	2.9	37° 27°	121° 37'	а	7 miles N of Mt. Hamilton.
	Dec						
44	2	05-45-12	3.7	40° 30°	124° 47'	С	30 miles W of Ferndale. Felt by several along coast near Ferndale.
39	2	19-33-15	3.5	36.7°	121.2°	d	San Simeon aftershock,
45	3	00-43-51	2.0	37° 09'	122° 12'	С	13 miles NW of Santa Cruz. Blast?
45	3	00-44-11	2.5	37° 09'	122° 12'	С	13 miles NW of Santa Cruz. Blast?
46	5	01-05-57	3.0	36.5°	120.7°	d	14 miles SE of Llanada.
47	6	01-34-16	2.1	37° 27'	121° 54'	а	8 miles N of San Jose.
48	6	16-03-35	3.9	40.8°	125.3°	d	55 miles W of Arcata.
Fel	t 6	23-50-00	-	35.65°	120.65°	d	IV at Paso Robles. Felt at Adelaida.
49	9	23-49-36	2.6	37° 59'	122° 04'	а	12 miles NE of Berkeley.
8	10	07-36-16	2.8	36° 35'	121° 18'	Ъ	20 miles SSE of Hollister.

	Date 1952	Time h	lagni-	Lati- tude North		Qual-	Remarks
9	Dec 12	00-27-07	3.0	36° 24'	120° 58'	Ъ	17 miles NE of King City. Felt in Lonoak.
50	12	12-43-42	2.3	37° 51'	122° 00'	а	14 miles NW of Livermore.
CIT	13	01-50-23	3.3	36.63°	118.05°	С	Near Lone Pine.
51	13	07-34-34	3.0	37° 52†	122° 13'	Ъ	Berkeley Hills. Felt in San Francisco Bay Area.
52	15	11-52-26	2.4	37° 20'	122° 10'	Ъ	6 miles S of Palo Alto.
22	18	03-24-55	2.8	40.4°	124.2°	d	12 miles S of Ferndale.
53	19	21-40-21	4.2	41.3°	124.7°	d	40 miles NW of Arcata.
54	20	19-51-18	3.3	36.6°	120.8°	d	6 miles E of Llanada.
51	20	20-42-20	1.7	37° 49'	122° 13'	С	Berkeley Hills.
55	20	23-52-43	2.1	37° 14'	121° 48'	Ъ	8 miles SE of San Jose.
11	22	08-26-19	2.6	37° 53'	121° 55'	Ъ	18 miles E of Berkeley.
44	26	06-05-19	3.1	40.5°	124.8°	d	30 miles W of Ferndale.
56	29	10-38-36	2.1	37° 23'	121° 28'	Ъ	10 miles E of Mt. Hamilton,
57	30	14-23-32	3,2	40.5°	119.6°	d	18 miles SW of Gerlach, Nevada.
58	31	02-20-50	3.5	38° 52'	118° 08'	С	40 miles NE of Hawthorne, Nevada.
45	31	21-01-17	2.4	37° 06°	122° 11'	С	11 miles NW of Santa Cruz, Blast?



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1953

	Date 1953	Time	Magni-	r Lati- tude North	tude	Qual ity	Remarks
	Jan						
1	2	03-08-36	2.0	40.5°	121.4°	d	14 miles NE of Mineral.
2	2	10-47-53	2.5	36° 37'	121° 05'	С	8 miles W of Llanada.
3	2	19-05-02	3.2	40.5°	121.6°	d	10 miles N of Mineral. Felt at Mineral and Sulphur Works.
4	3	18-40-06	3.6	40.7°	124.4°	d	10 miles NW of Ferndale.
5	7	06-55-20	2.5	38° 27'	122° 06'	Ъ	32 miles E of Santa Rosa.
6	8	23-22-08	3.0	40.7°	121.6°	d	25 miles N of Mineral.
6	8	23-23-07	3.2	40.7°	121.6°	d	25 miles N of Mineral.
7	11	03-19-40	3.1	39° 21'	120° 07'	С	Near Truckee. Aftershock of magnitude 2.6 at 0329.
8	11	17-07-11	2.7	36° 44'	121° 17'	С	10 miles SE of Hollister.
8 9 3	12	13-05-18	3.2	35.8°	121.1°	d	14 miles NE of San Simeon.
3	12	21-58-17	2.6	40.5°	121.5°	d	10 miles N of Mineral.
10	15	00-49-05	2.1	37° 11'	122° 12'	С	16 miles S of Palo Alto. Identical shock 18-1/2 seconds later. Blasts?
11	15	17-07-50	3.0	41.0°	121.6°	d	7 miles NE of Burney.
12	15	21-39-13	2.0	37° 57'	122° 15'	С	7 miles N of Berkeley.
13	22	14-20-32	2.4	36° 51'	121° 49'	С	12 miles SE of Santa Cruz.
14	23	08-02-28	2.0	37° 04'	121° 34'	С	20 miles S of Mt. Hamilton.
Felt	24-31	00-00-00	-	35.9°	121.0°	d	Ten shocks reported felt from 1/24 to 1/31 at Bryson.
15	24	09-59-50	3.9	39.5°	123.0°	d	20 miles ENE of Willits.

Map I	1953	Origin R Time M (GCT) to	agni-	tude North	Longi- tude West	Qual-	Remarks
16	Jan 26	00-43-14	2.3	37° 34°	121° 34'	Ъ	9 miles SE of Livermore.
CIT	27	04-12-59	3.0	36.33°	118.17°	С	SW of Lone Pine.
17	27	22-10-12	2.5	36.6°	121.2°	d	15 miles W of Llanada.
17	27	23-10-35	3.3	36° 36'	121° 09	Ъ	13 miles W of Llanada.
9	29	20-31-19	3.1	35.8°	12.1.1°	d	14 miles NE of San Simeon.
18	29	21-52-48	3.6	38.5°	118.0°	d	30 miles E of Hawthorne, Nevada.
19	31	00-38-29	2.1	37.0°	119.6°	d	20 miles NE of Fresno.
1	Feb						
12	2	08-48-14	2.4	37° 52'	122° 14'	° c	Berkeley Hills. Felt at Albany, Berkeley and El Cerrito.
17	3	07-36-26	2.7	36° 34'	121° 12	ъ	15 miles W of Llanada.
20	3		USCGS	: V at A			12 miles NNW of San Luis eston, Morro Bay, Pleyto,
21	3	17-43-29	2.5	37° 57'	121° 53	b	20 miles ENE of Berkeley.
Felt	5	02-54-12	2.8	35,9°	121,0°	d	IV at Bryson (E. Weferling Ranch).
8	6	01-15-53	3.1	36° 42'	121° 19	° c	10 miles SSE of Hollister.
8	6	04-27-09	3,1	36° 42'	121° 18	° C	10 miles SSE of Hollister.
3	6	22-12-00	2.8	40.5°	121,6°	d	10 miles N of Mineral.
10	6	22-52-10	2.2	37° 12'	122° 15	° c	10 miles SSW of Palo Alto.
CIT	7	00-03-26	3,9	37.42°	118.17°	С	E of Laws, IV at Laws.
22	12	00-12-15	2.5	41.3°	123.3°	d	40 miles SW of Yreka.
23	13	22-10-06	3.2	37° 23†	121° 39	¹ a	4 miles N of Mt. Hamilton. Shock of slightly smaller magnitude 18 seconds later.

Map I	1953	Origin Ri Time Ma (GCT) tu	agni-	tude		ial-	Remarks
Felt	15	09-10-00	-	41.0°	122,0°	d IV	V at Fall River Mills.
Felt	15	15-30-00	_	35.9°	121.0°	d Br	ryson (E. Weferling Ranch).
17	15	17-45-50	3.1	36° 34'	121° 13'	c 16	miles W of Llanada.
Felt	17	08-06-00	-	35.9°	121.0°	d II	II at Bryson (Pleyto School)
24	17	16-35-03	2.2	37° 51'	121° 58'	c 15	miles E of Berkeley.
24	18	07-26-51	1.9	37° 48'	121° 58'	c 17	7 miles ESE of Berkeley.
Felt	18	14-10-00	-	35.9°	121.0°		ryson (E. Weferling Ranch).
25	20		of ma	agnitude :	3.1 at 23-		miles NE of Reno, Nevada. Aftershock of magnitude
10	21	00-10-48	1.9	37° 13'	122° 13'		B miles NW of Santa Cruz.
CIT	21	20-51-12	2,8	35,98°	118.83°	b SV	V of Lone Pine,
26	23	00-00-56	2.7	37° 38'	121° 47'	a 3	miles S of Livermore.
27	23	07-42-51	4.7	41° 30'	125° 56'		bout 100 miles WNW of rcata.
28	23	09-09-50	3.7	40° 57'	121° 29'		miles NE of Burney. IV
8	24	20-59-27	3.0	36° 43¹	121° 15'	c 12	2 miles SE of Hollister.
29	25	08-44-43	3,4	40° 40'	121° 38'	c 23	l miles N of Mineral.
10	25	21-44-08	1.8	37.2°	122.2°		3 miles S of Palo Alto. last?
Felt	26	01-15-00	_	41.5°	120.2°	d II	II at Cedarville.
30	26	20-05-51	2.9	40° 18'	124° 12'	c 18	8 miles S of Ferndale.
29	27	16-55-01	3.3	40° 40°	121° 35'	c 2:	1 miles N of Mineral.
17	28	01-00-20	3.5	36° 34'	121° 09'	a 12	2 miles W of Llanada.
24	28	11-47-55	1.7	37° 50'	121° 57'	b 1	7 miles E of Berkeley.
31	28	15-07-42	2.7	40.9°	121.9°	d 12	2 miles W of Burney.

Map Date		i- tude	tude (ual-	Remarks
Mar					
Felt 1	18-53-00 -	35.9°	121.0°	d	V at Bryson.
<u>6</u> 2	21-00-22 2.	9 40.7°	121.6°	d	12 miles S of Burney.
23 3	19-15-12 2.	0 37° 23'	121° 36'	С	4 miles NE of Mt. Hamilton.
Felt 4	03-40-00 -	35.9°	121.0°	d	Bryson (Pleyto School). Light.
<u>10</u> 5	11-48-58 1.	7 37° 08'	122° 07'	С	12 miles NNW of Santa Cruz. Blast?
<u>10</u> 5	12-30-28 1.	7 37° 08†	122° 07'	С	12 miles NNW of Santa Cruz. Blast?
26 7	08-55-05 1.	6 37° 37'	121° 46'	Ъ	3 miles S of Livermore.
32 8	07-37-26 3.	4 37° 45'	118° 26'	С	26 miles N of Bishop.
33 8	12-28-26 1.	9 37° 15'	121° 42'	С	7 miles SW of Mt. Hamilton.
10 8	23-06-45 2.	5 37° 12'	122° 07'	Ъ	15 miles S of Palo Alto.
34 9	00-17-00 2.	4 40.6°	123.5°	d	30 miles West of Weaverville,
35 12	09-38-18 1.	8 37° 50'	123° 04'	С	30 miles W of San Francisco.
36 12	21-35-30 3,	5 40.7°	125.5°	d	70 miles W of Arcata.
37 14	05-01-04 2.	1 37° 18'	121° 27'	С	10 miles E of Mt. Hamilton.
38 14	08-22-51 2.	6 41.0°	122.0°	d	17 miles WNW of Burney.
39 14	17-22-36 2.	3 37° 39°	122° 30'	a	S of San Francisco. Felt at Hayward.
Felt 15	05-15-00 -	37.65°	119.8°	d	IV at El Portal.
40 16	01-16-49 2.	5 37° 18'	121° 34'	Ъ	5 miles SE of Mt. Hamilton.
41 16	at Gilroy an	d Santa Cru	z. IV at	Mon	18 miles E of Santa Cruz. V terey, Morgan Hill, San Jose, e 2.3 at 10-13-13.
Felt 18	05-03-00 -	35.9°	121.0°	d	III at Bryson (Pleyto School).
42 19	06-20-04 3.	0 38° 21'	122° 07'	С	32 miles ESE of Santa Rosa.

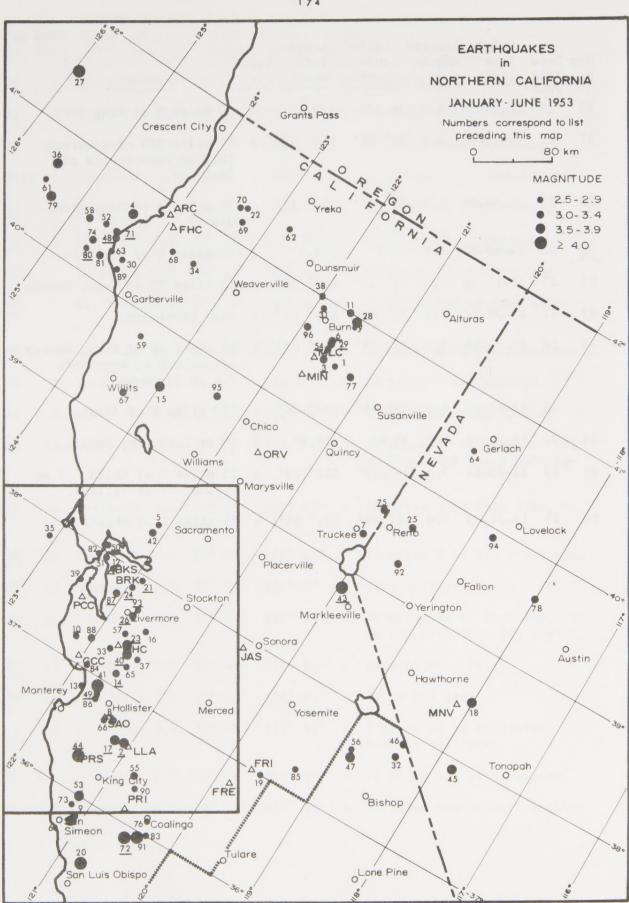
Map No.		Time N	Magni-	r Lati- tude North	tude Q	ual ty	
43	22	V at Meye	ers.	IV at Emi		Ma	13 miles NW of Markleeville. rkleeville, Tahoe City, a.
43	22	05-57-56	2.9	38° 49'	119° 59'	b	Aftershock.
43	22	06-32-29	3.1	38° 49'	119° 59'	Ъ	Aftershock,
43	22	14-10-25	4,3	38° 49'	119° 59'	b	Aftershock. V at Meyers. IV at Markleeville and Tahoe City.
CIT	29	17-19-36	3.7	35.9°	120.2°	d	Dudley.
	Apr						
44	2	16-20-16	2.4	36.8°	121.4°	d	4 miles S of Hollister.
6	2	22-56-12	3.2	40.7°	121.6°	d	15 miles S of Burney.
	6	18-28-20	3,6	42.4°	122.9°	d	20 miles ESE of Grants Pass, Oregon.
45	7	01-12-01	3.5	37.9°	117.8°	d	30 miles WSW of Tonopah, Nevada.
46	7	06-07-19	3.4	37.9°	118.3°	d	40 miles SSE of Hawthorne, Nevada.
10	9	22-56-48	2.2	37° 12'	122° 15'	Ъ	16 miles S of Palo Alto.
47	10	05-11-44	3,9	37° 32'	118° 59'	С	30 miles NW of Bishop. IV at June Lake, III at Long Valley Dam.
8	10	07-20-02	2.7	36° 42'	121° 17'	С	13 miles SE of Hollister.
48	11	03-26-14	3,2	40° 26°	124° 18'	С	10 miles S of Ferndale. Felt at Ferndale.
49	12	19-35-11	2.7	36° 49'	121° 33'	С	7 miles W of Hollister.
9	15	00-29-10	3,1	35° 50'	121° 04'	С	14 miles NNE of San Simeon. IV at Bryson.
Felt	15	05-30-00	-	35.9°	121.0°	d	Bryson, Light.
50	16	19-05-48	2.2	38° 04'	122° 28'	Ъ	17 miles NW of Berkeley.
51	24	23-40-15	2.1	37° 56'	122° 24'	а	Quarry blast at Richmond, 8 miles NW of Berkeley.

Map Da	53		Richter Magni- tude	Lati- tude North		Qual-	Remarks
permutati	5	00-42-30	2.7	37° 21'	121° 38'	Ъ	Near Mt. Hamilton.
2	2.5	16-34-45	4.1	40.5°	126.2°	d	100 miles W of Ferndale.
52 2	26	03-28-55	2.9	40.5°	124.6°	d	20 miles WSW of Ferndale.
14 2	27	10-04-10	2.6	37° 08'	121° 36'	С	15 miles S of Mt. Hamilton.
53 2	29	05-26-53	3.5	36° 00'	121° 09'	С	14 miles S of King City.
54	30	14-00-48	2.9	40.6°	121.6°	d	15 miles N of Mineral.
Ma	ay						
54	1	03-35-38	2.1	40.6°	121.6°	d	15 miles N of Mineral.
55	1	22-16-51	3.0	36.4°	120.8°	d	22 miles NE of King City.
56	3	13-28-55	2.2	37.6°	118.9°	d	33 miles NW of Bishop.
57	4	05-40-26	2.4	37° 27°	121° 44	а	9 miles NW of Mt. Hamilton.
CIT	6	00-51-31	3,4	37.07°	118.0°	Ъ	Waucoba Mountain.
3	6	04-00-24	2.5	40° 28'	121° 33'	С	10 miles N of Mineral.
58	6	21-48-23	3.3	40° 27'	124° 38'	С	10 miles SW of Ferndale.
59	10	13-18-35	2.9	39.8°	123.5°	d	30 miles N of Willits.
3	11	09-28-49	2.6	40° 30'	121° 30'	С	12 miles N of Mineral.
CIT :	14	03-36-00	3.3	36.00°	120.00°	d	Polvadero Gap.
60	14	09-36-09	3.7	35° 45'	121° 05'	Ъ	9 miles NE of San Simeon.
8	14	21-06-51	2.4	36° 45'	121° 19	c	8 miles SE of Hollister.
2	15	03-43-17	3.9	36° 36'	121° 02'	С	7 miles W of Llanada.
Felt :	15	07-15-00	-	35.9°	121.0°	d	IV at Bryson.
61	17	10-02-50	2.5	40.5°	125.5°	d	65 miles W of Ferndale.
62	17	13-56-21	2.0	41° 21'	122° 42	c	25 miles S of Yreka.
63	18	09-27-59	2.9	40° 18'	124° 21'	Ъ	18 miles S of Ferndale.
64	18	11-46-56	2.3	40.5°	119.5°	d	SW of Gerlach, Nevada.

Map :		Time Ma	agni-		tude Q	ual ty	
65		22-42-07	2.4	37° 12'	121° 32'	С	12 miles SE of Mt. Hamilton.
Felt	19	19-14-00	-	41.0°	122.0°	d	IV at Fall River Mills.
66	20	21-27-26	2.4	36.7°	121.4°	d	S of Hollister.
40	23	21-16-22	3.6	37° 18'	121° 37'	а	Near Mt. Hamilton. III at Lick Observatory.
40	24	10-58-08	2.3	37° 18'	121° 37'	Ъ	Aftershock.
44	25						5 miles SW of Hollister. Vill, and San Juan Bautista.
67	25		ella a	and Ukiah	. V at Po		Between Ukiah and Willits. r Valley. IV at Hopland,
68	25	14-57-53	2.8	40° 35'	123° 45'	С	26 miles E of Ferndale.
69	25	16-34-58	2.9	41° 10'	123° 18'	С	34 miles NW of Weaverville.
70	26	08-35-39	2.6	41.3°	123,4°	d	42 miles NW of Weaverville.
71	28	01-54-08	3.0	40.5°	124.4°	d	10 miles SW of Ferndale.
72	28	03-51-13	4.3	35° 53†	120° 30'	Ъ	20 miles SW of Coalinga. IV at Paso Robles, III at San Miguel.
72	28	07-58-33	3.5	35° 53'	120° 30'	С	Aftershock, Felt at San Miguel.
73	29	10-20-16	2.9	35.9°	121.2°	d	20 miles S of King City.
74	30	11-12-39	3.0	40.3°	124.6°	d	30 miles SW of Ferndale.
75	30	14-55-53	3.2	39° 38'	120° 00'	Ъ	12 miles NW of Reno, Nevada.
71	30	20-45-44	3.6	40° 28'	124° 27'	С	13 miles SW of Ferndale.
76	31	23-51-17	3.2	36.1°	120.4°	d	Near Coalinga.
3	June						
77	1	02-30-39	3.0	40° 30'	121° 11'	С	25 miles ENE of Mineral.

Map Da		Origin Time (GCT)	Magni-			Qual- ity	Remarks
to continue		03-16-54	3.3	39.6°	118.0°	d	40 miles E of Fallon, Nevada.
21	4 (00-28-27	2.2	37° 57'	121° 54'	Ъ	20 miles ENE of Berkeley.
79	4 (09-20-29	3.9	40° 26'	125° 20'	С	55 miles W of Ferndale.
Felt	4	11-40-00	_	35.5°	120.5°	d	V at Creston. Probably a blast.
80	4	12-28-55	2.8	40.2°	124.6°	d	30 miles SW of Ferndale.
80	5	12-03-08	2.9	40° 12†	124° 38'	С	30 miles SW of Ferndale.
81	5	12-11-43	3.0	40° 13'	124° 28°	С	25 miles SSW of Ferndale.
10	5	21-21-12	1.9	37° 14'	122° 15'	Ъ	12 miles SSW of Palo Alto. Blast?
82	6	18-00-20	1.8	37° 58'	122° 28'	Ъ	12 miles N of San Francisco.
83	6	20-26-33	2.9	36.0°	120.3°	d	10 miles S of Coalinga.
84	9	01-49-57	2.4	37° 02'	121° 55'	С	6 miles NE of Santa Cruz.
85 1	0 (05–28–39	2.5	37.2°	119.3°	d	40 miles NE of Fresno. Felt at Big Creek (near Hunting-ton Lake).
10 1	0	21-19-03	2.0	37° 13'	122° 12'	Ъ	14 miles S of Palo Alto. Blast?
50 1	1 :	23-35-43	2.2	38° 03'	122° 28'	С	18 miles N of San Francisco.
86 1	2	02-45-36	2.2	36° 52'	121° 37'	С	Near Hollister.
<u>87</u> 1	2 :	17-50-00	3.1	37° 44†	122° 04'	а	12 miles SE of Berkeley. IV in San Francisco Bay region.
87 1	3	00-00-30	2.8	37° 44'	122° 04'	С	Aftershock, Felt,
88 1	3	00-01-14	3.1	37° 15'	122° 01'	С	SW of San Jose.
<u>8</u> 1	3	22-54-05	3.2	36° 46'	121° 17'	а	8 miles SE of Hollister. Felt at Hollister.
49 1	4	11-05-19	2.5	36° 48'	121° 38'	С	12 miles WSW of Hollister.
89 1	8	03-31-15	2.5	40° 12'	124° 12'	С	22 miles WNW of Garberville.

-	Date 1953 June	Time N	Magni-	tude North	tude Q	ual ty	Remarks
90	19	11-24-50	2.8	36.3°	120.7°	d	20 miles E of King City.
91	22	15-22-35	4.3	35° 56'	120° 23'	С	15 miles SSW of Coalinga. Felt at Paso Robles and Coalinga.
10	23	21-38-05	1.9	37° 15†	122° 15'	С	12 miles S of Palo Alto. Blast?
48	26	05-40-32	3.1	40.4°	124.3°	d	12 miles S of Ferndale.
92	27	14-15-58	3.3	39° 17'	119° 35'	С	15 miles SE of Reno, Nevada.
93	27	22-39-22	2.5	37° 42°	121° 46'	С	Near Livermore,
75	28	01-43-16	3.7	39° 38'	120° 02'	Ъ	14 miles NW of Reno, Nevada. Aftershock of magnitude 2.6 at 03-00-59.
	28	12-45-13	4.6	40° 45†	127° 26'	С	170 miles W of Arcata.
94	28	13-24-24	3.3	39.9°	118.8°	d	SW of Lovelock, Nevada.
95	29	11-08-24	3.1	39° 43†	122° 23'	С	25 miles W of Chico. V at Orland, IV at Willows.
96	29	13-24-03	3.0	40° 40°	121° 56'	С	25 miles E of Shasta.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON July - December 1953

Map l			agni-		Longi- tude West	Qual-	Remarks
3	July						
1	1	09-56-08	2.4	40.5°	123.6°	d	35 miles E of Ferndale.
	3	22-00-45	3.8	40.4°	126.0°	d	90 miles W of Ferndale.
2	6	19-38-51	3.8	38.6°	118.1°	d	E of Hawthorne, Nevada.
	8	03-01-15	3.5	42.4°	119.1°	d	SE Oregon.
3	8	03-37-37	3.1	40.6°	124.3°	d	4 miles W of Ferndale.
4	11	11-01-47	1.5	37° 20'	121° 40'	Ъ	Near Mt. Hamilton.
Felt	13	13-00-00	-	37.5°	117.7°	d	III at Palmetto, Nevada (SE of Dyer).
5	14	01-48-12	2,8	36.6°	121.2°	d	15 miles SE of Hollister.
6	14	09-28-10	2.6	36° 55'	121° 29'	С	6 miles NW of Hollister.
7	15	16-00-28	2.9	38° 39'	120° 10'	С	20 miles W of Markleeville.
8	17	07-28-34	3.9	40° 14'	124° 30'	С	27 miles SSW of Ferndale. III at Westport.
9	24	20-55-51	2,5	37° 12'	122° 12'	Ъ	15 miles S of Palo Alto. Blast?
10	25	16-13-58	3.8	37° 07'	121° 46'	Ъ	15 miles SSE of San Jose, Felt as light shock in San Francisco Bay area.
11	28	03-27-40	2.4	36° 48'	121° 18'	С	7 miles SE of Hollister,
12	28	15-54-32	2	37° 17'	121° 37'	Ъ	Near Mt. Hamilton,
13	29	10-34-06	3.3	40.6°	125.1°	d	45 miles W of Ferndale.
14	30	23-32-23	2.5	38.8°	120.0°	d	12 miles NW of Markleeville.

-	Date 1953		Richten Magni- tude			Qual ity	Remarks
	Aug						
15	1	17-19-13	3.0	40° 36°	121° 26'	Ъ	19 miles NE of Mineral.
16	1	20-48-16	3.3	40.3°	120.0°	d	35 miles ESE of Susanville.
17	4	14-23-24	3.3	40° 29'	125° 11'	С	50 miles W of Ferndale.
12	6	00-09-33	1.6	37° 18'	121° 41'	Ъ	Near Mt. Hamilton.
18	6	21-33-25	1.3	38° 12'	122° 10'	С	25 miles N of Berkeley.
19	7	00-22-48	3.1	40.6°	124.0°	d	10 miles E of Ferndale.
20	7	05-16-20	3.1	39° 59'	120° 01'	С	31 miles NNW of Reno.
21	7	23-51-34	3,5	40.7°	123.8°	d	20 miles SE of Arcata.
22	10	03-04-27	3.1	36° 41'	121° 21'	Ъ	11 miles S of Hollister.
23	10	23-35-56	1.5	38° 03°	122° 28'	а	17 miles N of San Francisco.
CIT	13	20-41-36	3.4	37.9°	118.2°	d	60 miles N of Bishop.
24	14	01-40-06	2.9	36.3°	120.3°	d	8 miles N of Coalinga.
25	14	09-22-50	2.3	36.5°	121.2°	d	20 miles N of King City.
26	15	04-15-41 Press rep		40° 28' a light			11 miles SE of Ferndale. the Ferndale area.
27	15	04-54-49	3.3	40° 20°	124° 22'	С	17 miles S of Ferndale.
28	16	23-07-23	2.2	36° 58'	122° 15'	a	11 miles W of Santa Cruz.
29	20	01-39-03	2.7	40.8°	122.1°	d	NE of Shasta.
29	20	01-48-09	3.2	40.8°	122.1°	d	NE of Shasta.
30	20	05-37-45	3.2	39° 40'	119° 40'	С	12 miles NE of Reno.
31	21	10-28-00	2.1	38.3°	122.6°	d	SE of Santa Rosa.
32	22	11-31-28	2.7	39° 13'	120° 13'	Ъ	SW of Truckee,
33	23	12-21-58	3.3	40° 29†	121° 43'	b	10 miles NW of Mineral. V at Mineral. Awakened some people at Manzanita Lake.

-	Date		Magni-	tude North	Long- itude Qua West ity		Remarks
34	Aug 24	10-42-56	3.5	39° 15'	120° 18'	Ъ	8 miles SW of Truckee.
35	26	00-00-10	2.0	37° 59'	122° 26'	а	14 miles N of San Francisco. Tiny aftershock at 0035.
36	28	07-00-29	2.1	38° 42'	122° 04'	а	NE of Berkeley.
37	30	04-16-47	2.6	40.8°	121.6°	d	SE of Burney.
	Sep						
38	1	04-50-52	2.8	36° 47'	121° 26'	С	Near Hollister.
9	1	19-17-54	2,2	37° 15'	122° 13'	Ъ	11 miles S of Palo Alto. Blast?
39	2	09-41-20	3.0	35.9°	120.8°	d	30 miles SE of King City.
Fe1	t 3	11-00-00	-	35.5°	120.5°	d	Felt in Creston.
40	4	03-54-25	3.5	35° 54'	120° 19'	С	15 miles S of Coalinga. IV at Creston and Paso Robles.
41	5	17-28-00	2.2	37° 31'	121° 48'	а	10 miles S of Livermore.
42	6	04-38-21	2.4	36° 45'	121° 13'	С	SE of Hollister.
43	9	04-54-53	2.2	37° 25'	121° 37'	Ъ	N of Mt. Hamilton.
44	9	18-04-30	2,3	37° 12'	122° 19'	С	16 miles SSW of Palo Alto.
45	11	17-07-58	1.9	37° 36'	121° 52'	С	SW of Livermore.
	12	18-54-33	4.6	40.6°	126.7°	d	115 miles W of Ferndale.
46	13	20-57-08	2,1	37° 13'	121° 55'	С	S of San Jose.
47	13	22-28-26	3,3	38.7°	119.7°	d	Near Markleeville.
5	15	01-24-33	3 2.7	36° 35'	121° 12†	С	15 miles W of Llanada. Aftershock of magnitude 2.3 at 02-23-00.
48	15	09-40-41	3,6	40° 16'	124° 18'	С	20 miles S of Ferndale, III at Westport (Mendocino County),
CIT	16	15-41-21	3.9	37.33°	117.0°	С	20 miles E of Bishop.
49	18	03-12-19	3.0	40.3°	124.3°	d	25 miles S of Ferndale.

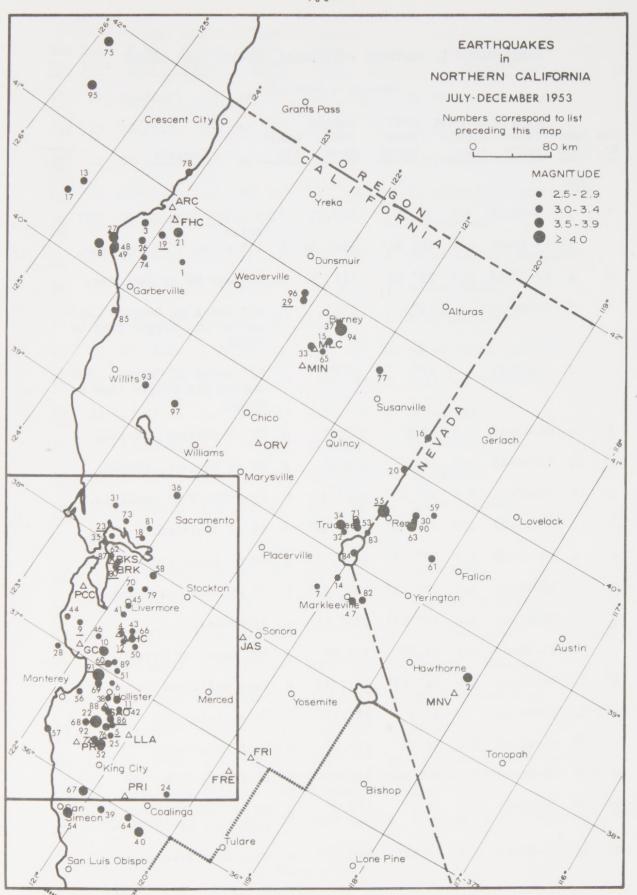
- An	Date 1953	Origin R Time M (GCT) t	agni-	tude		Qual- ity	Remarks
23	Sep 19	22-59-28	1.9	38° 03'	122° 26'	а	15 miles NW of Berkeley.
50	20	06-14-57	2.0	37.3°	121.5°	d	Near Mt. Hamilton.
51	22	07-30-27	2.7	37° 01'	121° 33'	С	14 miles NW of Hollister.
52	22	07-36-58	3.8	36.4°	121.2°	d	N of King City.
53	22	20-46-20	3.4	39° 12'	120° 08'	С	S of Truckee.
54	23	06-21-51	3.5	35.7°	121.1°	d	Near San Simeon. V at Bryson.
.55	26	Sharp sho Nevada an Maximum i and at Fl	ck fe d nor ntens orist nd Vi	lt over a theastern ity VI at on, Calif rginia Ci	pproximat Californ Olinghou ornia. V	ely laia. se Ca	8 miles W of Reno, Nevada. 12,000 square miles of western Minor damage at Reno, Nevada. anyon, Reno and Vista, Nevada, Cinnabar Hill Ranch, Fernley, and at Baxter, Chilcoot, and
55	26	03-43-19	2.7				Aftershock.
55	26	04-16-33	3.0				Aftershock,
55	26	04-17-20	3.0				Aftershock.
55	26	04-37-54	2.8				Aftershock.
55	26	05-04-00	3.4				Aftershock,
56	26	17-16-18	2.5	36° 42'	121° 45'	С	9 miles NE of Monterey.
5	28	22-52-45	2.7	36.6°	121.2°	d	15 miles W of Llanada.
55	29	10-16-43	3.1				Aftershock of Sept. 26 at 03-34.
	Oct						03-34.
57	1	03-56-15	3.4	36° 15'	121° 50'	С	25 miles S of Monterey. IV at Big Sur.
58	3	03-18-05	3.2	37° 58'	121° 46'	a	25 miles W of Stockton,
59	4	01-19-57	2.7	39° 45'	119° 27'	С	20 miles NE of Reno.
60	5	14-17-44	3.0	37° 02'	121° 39'	Ъ	20 miles S of Mt. Hamilton. Aftershock of magnitude 2.8 at 14-36-42.
61	5	16-53-34	3.3	39.4°	119.2°	d	W of Fallon, Nevada.

Map Date	e Time M	Richter Lati Magni- tude Lude Nort	tude (ual ty	Remarks
5 Oct 6		2 36.6°	121.3°	d	SE of Hollister.
60 7	20-51-07	3.0 37° 04	' 121° 39'	С	S of Mt. Hamilton.
<u>27</u> 8	23-40-46	3.9 40° 19	' 124° 25'	b	20 miles SSW of Ferndale. Felt at Ferndale.
62 11	00-08-17	2.6 37° 53	' 122° 13'	b	Near Berkeley.
63 12	19-37-00	3.7 39° 31	' 119° 36'	С	E of Reno, Nevada. Felt Reno.
64 16	03-45-35	3,4 35° 57	' 120° 32'	С	SW of Coalinga.
65 18	10-19-58	2.8 40.5°	121,6°	d	N of Mineral.
66 19	23-35-25	3.8 37° 21	' 121° 35'	а	Near Mt. Hamilton.
67 24	13-24-30	3.6 35.9°	121,1°	d	S of King City.
68 25	06-43-25	3.2 36.5°	121.5°	d	NW of King City.
19 26	01-43-55	2.9 40° 36	' 123° 56'	С	15 miles E of Ferndale,
Felt 26	05-00-00	- 36.75°	121.4°	d	Slight shock 7 miles S of Hollister.
69 26	15-50-57	3.0 36° 52	' 121° 37'	С	11 miles W of Hollister, IV.
70 28	01-27-38	2.0 37° 45	' 121° 55'	С	NW of Livermore.
71 29	12-41-11	3.3 39° 21	120° 13'	Ъ	Near Truckee,
27 29	19-19-49	3.4 40° 20	124° 24'	С	17 miles SSW of Ferndale.
<u>11</u> 29	23-58-46	3.4 36° 47	' 121° 21'	С	5 miles SE of Hollister, IV.
CIT 30	07-35-45	4.4 37.63°	118.3°	С	White Mtns. IV at Yosemite Village.
30	18-53-27	4.2 44°	130°	d	Off coast of Oregon.
Nov					
72 2	00-52-06	3.4 36.4°	121.3°	d	NW of King City.
73 2	03-02-56	2.5 38° 16	' 122° 24'	С	SE of Santa Rosa.
74 2	07-18-12	2.8 40° 22	' 123° 59'	С	20 miles SE of Ferndale.

-	Date	Time	Magni-	Lati- tude North	Longi- tude West	Qual-	Remarks
75	Nov 4	06-10-21	3.5	41.8°	125.8°	d	75 miles W of Crescent City.
	4	21-58					Near Corvallis, Oregon. Felt at Corvallis.
76 76	6	16-29-12 17-14-15 12-20-51	3.1	36° 33' 36° 33' 41.3°	121° 16 121° 16 127.3°		20 miles SSE of Hollister. 20 miles SSE of Hollister. 165 miles W of Arcata. Fore- shocks at 1039, 1130 and 1133 Aftershocks at 1231 and 1234.
	12	13-25-33	3.5	40.3°	125.9°	d	75 miles off Cape Mendocino.
77	13	05-02-04	3.4	40° 37°	120° 55	' с	40 miles NE of Mineral.
78	18	06-57-08	3.2	41.2°	124.1°	d	20 miles N of Arcata.
79	19	23-04-02	2.0	37° 48'	121° 47	' b	8 miles N of Livermore.
76	20	00-06-08	3.3	36° 33'	121° 16	° c	20 miles W of Llanada,
80	20	05-18-12	2.2	37° 49'	122° 12	a	5 miles SE of Berkeley. Felt in East Oakland and San Leandro.
4	23	11-16-48	2.1	37° 20°	121° 45	' с	6 miles W of Mt. Hamilton. Foreshock of magnitude 2.0 at 10-46-58.
81	25	23-54-10	2.2	38.3°	122.1°	d	30 miles N of Berkeley.
82	26	14-30-52	3.2	38° 45'	119° 36	' c	ENE of Markleeville.
83	27	04-41-05	2.4	39.3°	120.0°	d	E of Truckee,
18	27	09-25-46	2.5	38.2°	122.1°	d	25 miles NE of Berkeley.
	Dec						
84	7	20-10-01	3.2	39.1°	120.0°	d	Lake Tahoe region.
85	8	01-45-10	2.7	39.8°	123.9°	d	20 miles S of Garberville.
86	8	10-59-01	3.1	36° 38'	121° 17	' Ъ	15 miles SE of Hollister.
86	8	11-36-23	3.0	36° 38'	121° 17	' Ъ	Aftershock.
86	8	13-55-26	2.5	36° 38'	121° 17	¹ c	Aftershock.
87	10	02-12-50	1.8	37° 55'	122° 18	' b	NW of Berkeley.

Map Date No. 1953 Dec	GCT) tude No		al- Y Remarks
60 10		02' 121° 36'	b 20 miles S of Mt. Hamilton.
88 12	22-07-01 2.4 36.	7° 121.4°	d S of Hollister.
89 15	06-13-08 2.2 37.3	1° 121.6°	d NW of Hollister.
90 15	06-13-08 2.0 39.6	6° 119.6°	d NE of Reno, Nevada. Origin time almost identical to preceding shock.
<u>91</u> 16		tsonville. IV a	b Foreshock of Dec. 17 at 0513. t Aptos. Also felt at Gilroy,
16	over an area of app Oregon and across	the Columbia Riv um intensity VI	Northwestern Oregon. Felt square miles in northwestern er at a few localities in at Portland, Oregon, and
92 16	10-54-22 3.7 36°	33' 121° 24'	c 20 miles S of Hollister. V at Hollister and 7 miles S of Hollister.
Felt 16	12-10-00 - 38.	75° 123.5°	d III 6-7 miles N of Gualala.
91 16			b Foreshock of Dec. 17 at 0513. Francisco and South San Francisco.
<u>91</u> 17			b Foreshock of 0513. IV at Moss Landing, and San Juan
91 17	04-53-54 2.6 36°	55' 121° 40'	c Foreshock of 0513.
<u>91</u> 17	Felt over approximate of west-central Calland on the Chitten	ately 3500 squar lifornia, Maxim den Pass road 5 n road). V at A	a 14 miles NW of Hollister. e miles of the coastal region um intensity VI at Watsonville miles W of Chittenden Junction lviso, Chualar Canyon, Gilroy, and Santa Cruz.
91 17	05-39-41 3.6 36°	55' 121° 40'	b Aftershock. IV at Moss Landing and 7 miles S of Hollister.
91 17	06-54-47 3.5 36°	55' 121° 40'	b Aftershock. II at Moss Landing.
9 17	22-11-26 1.9 37°	13' 122° 15'	b 15 miles S of Palo Alto. Blast?

No.		Time M (GCT) t	agni-		Longi- tude Qu West it		
	-	06-37-39					14 miles E of Willits. IV -44-43 and 09-10-09.
Felt	21	13-00-00	-	37.5°	118.25°	d	IV at Laws.
4	21	14-03-39	1.7	37° 22'	121° 44°	a	NW of Mt. Hamilton.
CIT	23	03-42-18	2.4	37.5°	118.0°	d	E of Bishop. IV at Laws.
	23	11-45-03	3.7	42.5°	127.1°	d	200 miles NW of Arcata.
94	24	07-17-39	4.0	40° 45'	121° 33'	С	30 miles N of Mineral.
95	27	04-45-52	3.7	41.4°	125.7°	d	85 miles NW of Ferndale.
80	27	12-46-53	2.3	37° 50'	122° 13'	a	3 miles SE of Berkeley.
96	27	19-42-24	3.4	40.9°	122.2°	d	NE of Shasta.
91	28	01-32-42	3.8	36° 54°	121° 37'	С	Aftershock of Dec. 17 at 0513. IV at Gilroy and Hollister.
97	28	06-44-08	3.1	39.4°	122.7°	d	30 miles NE of Ukiah.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1954

	Date 1954	Time M	Richte Magni-	r Lati- tude North		ual ty	Remarks
	Jan						
1	1	13-30-00	3.4	39.0°	123.2°	d	8 miles S of Ukiah. III at
	1	17-16-00	4.4	40° 24°	126° 34'	b	Ukiah. 115 miles W of Ferndale.
2	2	13-21-52	2.0	37° 27'	121° 51'	С	6 miles NE of San Jose.
	3	09-48-33		43°	125°		Off coast of Oregon. Epicenter and origin time by USCGS.
	3	11-14-52		43°	125°		Off coast of Oregon. Epi- center and origin time by USCGS.
3	4	04-41-33	3.3	40.5°	119.5°	d	SW of Gerlach, Nevada.
3	4	11-44-40	3.9	40.5°	119.5°	d	SW of Gerlach, Nevada.
4	4	23-03-11	3.2	36° 07'	120° 37'	b	14 miles W of Coalinga.
5	5	00-23-23	3.0	35° 56'	120° 00'	С	SE of Coalinga.
6	6	22-45-30	1.8	37° 12'	122° 17'	С	NW of Santa Cruz.
7	7	07-46-11	3.7	40° 19'	124° 45'	b	30 miles SW of Ferndale.
7	7	08-04-06	3.0	40° 19'	124° 45'	С	Aftershock.
	7	21-39-47	3.5	42.5°	125.9°	d	Off coast of Oregon.
8 ^{\$}	11	20-17-44	3,2	36° 53'	121° 28'	С	Near Hollister.
Felt	11	23-34-00	-	37.4°	122.15°	d	II at Palo Alto.
9	15	03-27-43	3.4	38.4°	119.0°	d	N of Mono Lake.
10	15	22-02-18	2.6	36° 30°	121° 14'	С	N of King City.
11	16	10-12-11	2.2	38.1°	122.8°	d	NW of San Francisco. Foreshock at 09-53-57.
CIT	17	05-55-14	3.3	37.55°	118.55°	С	Mono Lake area.

No.	Date 1954 Jan	Time	Magni-	Lati- tude North	Longi- tude West	Qual-	Remarks
12	19	08-38-15	2.7	37° 25'	121° 42'	Ъ	NW of Mt. Hamilton.
CIT	22	09-27-36	3.4	37.32°	118.0°	С	30 miles E of Bishop.
13 ^{\$}	22	09-32-17	2.6	36° 48'	121° 25'	С	S of Hollister.
14	23	11-21-55	2.7	36° 57'	121° 48'	С	11 miles E of Santa Cruz.
14	24	06-37-26	2.0	36.9°	121.7°	d	Aftershock,
15	24	19-06-45	3.1	35° 47'	121° 05'	С	30 miles S of King City.
16	25	16-45-26	2.9	39.3°	122.8°	d	NE of Ukiah.
17	25	23-11-19	1.7	37° 31'	121° 58'	С	N of San Jose,
18	29	07-36-56	2.8	38° 30'	122° 39'	С	NE of Santa Rosa.
19	29	22-41-27	1.6	37° 38'	122° 29'	Ъ	S of San Francisco.
20	31	17-45-26	2.4	37° 51'	121° 53'	С	Foreshock,
20	31	17-49-34	2.1	37° 51'	121° 52'	С	Foreshock,
20	31	17-50-13	2.6	37° 51'	121° 52	Ъ	Foreshock,
20	31	23-58-20	2.8	37° 51'	121° 53'	Ъ	NW of Livermore.
	Feb						
20	1	00-20-31	1.9	37° 52'	121° 55	Ъ	Aftershock,
21	1	04-58-54	2.6	36.8°	121.5°	d	6 miles SW of Hollister.
13	2	08-51-07	2.6	36° 48'	121° 25	Ъ	S of Hollister.
22	3	09-34-37	1.7	37° 17'	121° 38	c	Near Mt. Hamilton.
23	4	00-55-12	3,2	40.4°	123.5°	d	NE of Garberville.
24	4	11-12-18	3.4	40° 32'	121° 30	C	NE of Mineral.
25	4	Felt ove	er about	500 squa	are miles	s of	10 miles SE of Berkeley. the San Francisco Bay region, alnut Creek.
25	6	20-40-37	1.9	37° 47†	122° 08	' a	9 miles SE of Berkeley.

No.	Date 1954 Feb	Time M (GCT) t	agni- ude	North	tude Q West i	ty	Remarks
25	8	in San Fr	anciso	co Bay re	gion from :	Mar	8 miles SE of Berkeley. Felt tinez south to Hayward. Maxi- , Oakland, and San Francisco.
26	10	05-40-04	2.5	37° 53'	121° 57'	Ъ	17 miles E of Berkeley.
27	14	17-38-15	2.5	37° 48'	122° 04†	Ъ	11 miles ESE of Berkeley. Felt by one person in El Cerrito.
25	16	09-02-02	2.0	37° 43°	122° 09'	Ъ	10 miles SE of Berkeley.
28	17	02-34-29	2.9	36.6°	121.2°	d	W of Llanada.
21	17	03-00-34	2.2	36.8°	121.5°	d	SW of Hollister.
28	17	05-32-05	2.3	36.6°	121.2°	d	W of Llanada.
Felt	18	22-13-00	-	37.85°	118.6°	d	Benton (Quarantine Station) IV.
25	19	21-06-28	3.1	37° 46'	122° 08'	Ъ	10 miles SE of Berkeley. V at Canyon and Moraga.
29	20	22-07-13	3.3	39.5°	120.0°	d	9 miles W of Reno, Nevada. Felt by a few residents of Reno.
30	26	13-31-49	2.8	39.3°	120.1°	d	Near Truckee.
30	26	15-40-16	2.7	39.3°	120.2°	d	Near Truckee,
	Mar						
31	2	12-09-26	3.6	40.4°	125.2°	d	50 miles WSW of Ferndale.
26	2	13-32-07	2.0	37° 52'	121° 58'	Ъ	17 miles E of Berkeley.
32	3	13-08-50	1.8	36° 55'	121° 39'	С	Foreshock of Apr. 25 at 2033.
26	4	03-19-18	2.1	37° 52'	122° 00'	С	13 miles E of Berkeley.
33	4	05-00-47	3,2	38.7°	119.8°	d	Near Markleeville.
34	9	19-55-30	3.6	35.9°	120.5°	d	16 miles SSW of Coalinga.
CIT	13	22-43-30	3.4	35.0°	120.42°	d	West of Santa Maria
35	14	03-03-56	2.5	39.3°	119.6°	d	SE of Reno, Nevada.
36	14	19-08-20	1.9	37.0°	122,5°	d	W of Santa Cruz.

Map Da	te Time 54 (GCT)		r Lati- tude North	tude	Qual ity	
37 1.	5 10-44-	46 2.6	36° 58'	121° 20'	С	NE of Hollister.
38 1	6 01-42-	57 3.4	37° 27'	121° 47'	Ъ	NE of San Jose.
38 1	6 03-31-	05 2.6	37° 27°	121° 47'	С	Aftershock.
39 10	6 06-26-	58 2.4	36.6°	121.1°	d	W of Llanada.
Felt 1	7 21-40-	00 -	39.8°	120.15°	d	IV at Chilcoot.
40 1	8 12-07-	53 3.0	35,4°	120.9°	d	NW of San Luis Obispo.
41 19	9 04-32-	31 3.4	39.1°	119.6°	d	30 miles SSE of Reno, Nevada. III at Carson City.
<u>13</u> 2:	1 15-59-	29 3.6	36.8°	121.4°	d	Near Hollister.
22 2	2 00-43-	29 1.9	37° 16'	121° 40'	С	Near Mt. Hamilton,
42 2	2 11-26-	30 2.1	37° 18'	121° 30'	С	E of Mt. Hamilton.
38 2	3 09-23-	31 2.3	37° 25'	121° 45'	С	NW of Mt. Hamilton.
43 2.	5 00-59-	33 3.9	38.2°	118.8°	d	SW of Hawthorne, Nevada.
44 2	at Pin	nacles N		lonument.		15 miles WSW of Llanada. V at Greenfield, San Benito,
45 2	7 16-49-	07 3.2	40.6°	124.8°	d	30 miles W of Ferndale.
46 2	9 03-23-	27 2.1	38° 08'	122° 33'	Ъ	23 miles NW of Berkeley.
47 2	9 13-33-	38 4.1	41.0°	125.2°	d	60 miles W of Arcata.
48 3	0 18-35-	13 3.9	41.1°	120.7°	d	SW of Alturas.
49 3	0 23-41-	33 3.7	39.3°	119.1°	d	SW of Fallon, Nevada.
Ap	r					
50	1 00-36-	24 3.5	36° 44'	121° 18'	Ъ	10 miles SE of Hollister. V 7 miles S of Hollister.
51	1 12-04-	38 3.3	36° 03'	120° 12'	С	6 miles SE of Coalinga.
52	2 00-38-	52 1.5	38° 07'	122° 07'	С	19 miles NNE of Berkeley.
53	3 03-13-	30 2.5	37° 14'	121° 57'	d	6 miles SSW of San Jose.

Map I	1954	_	Magni-	Lati- tude North	tude	Qual-	Remarks
54	Apr 3	21-13-18	3 2.7	37° 49'	122° 12	' Ъ	5 miles SE of Berkeley. Felt.
30	7	07-05-02	2 4,3	39° 22'	120° 09		NE of Truckee. Felt: IV at Reno, Nevada.
55	9	01-48-24	2.4	37° 22°	122° 18	¹ c	9 miles SW of Palo Alto.
15	9	07-38-23	3.1	35° 47'	121° 05	' d	10 miles NE of San Simeon.
56	9	09-52-25	3,0	39° 45'	119° 45	* c	14 miles NNE of Reno, Nevada.
Felt	9	14-50-00) –	35,9°	121.0°		IV at Bryson (Pleyto School). Second shock reported felt at 2340.
57	9	23-44-34	4 2.6	38° 04¹	122° 42	° c	25 miles NW of Berkeley.
	10	15-03-58	3 4.7	40° 30'	126° 08		Off Cape Mendocino, 100 miles W of Ferndale.
58	10						14 miles SW of Mt. Hamilton. San Martin. III at Glenwood.
59	11	07-42-46	3.7	40° 00°	120° 00	¹ c	40 miles NNW of Reno, Nevada.
	11	13-17-47	7 4.0	40° 44'	126° 41	t c	139 miles W of Arcata.
60	12	22-53-01	1 2.0	37° 14'	122° 10	' d	13 miles S of Palo Alto.
61	13	01-06-40	1.2	37° 33'	122° 25	¹ c	16 miles S of San Francisco.
62	13	11-41-59	2.7	36° 36'	121° 00	¹ c	4 miles W of Llanada.
63	14	11-43-27	7 4,3	38° 45†	116° 30	' d	62 miles NE of Tonopah, Nevada.
25	16	19-03-20	1,0	37° 44'	122° 08	* c	11 miles SE of Berkeley.
64	17	07-22-43	3 3,1	40° 21'	125° 01	, c	43 miles WSW of Ferndale.
65	17	23-23-26	5 2.5	37° 48'	121° 50	, c	9 miles NNW of Livermore.
66	20	00-05-18	8 1.8	37° 13'	121° 52	, c	7 miles S of San Jose.
67	20	09-32-13	3 2.6	36° 23'	121° 02	' d	12 miles NE of King City.
68	21	02-36-43	3 3,8	37° 02'	121° 39	† b	21 miles S of Mt. Hamilton.
69	21	14-45-24	4 2.6	37° 15'	121° 48	° ь	6 miles SE of San Jose.
32	22	18-44-10	3.8	36° 54'	121° 41	t b	15 miles WNW of Hollister.

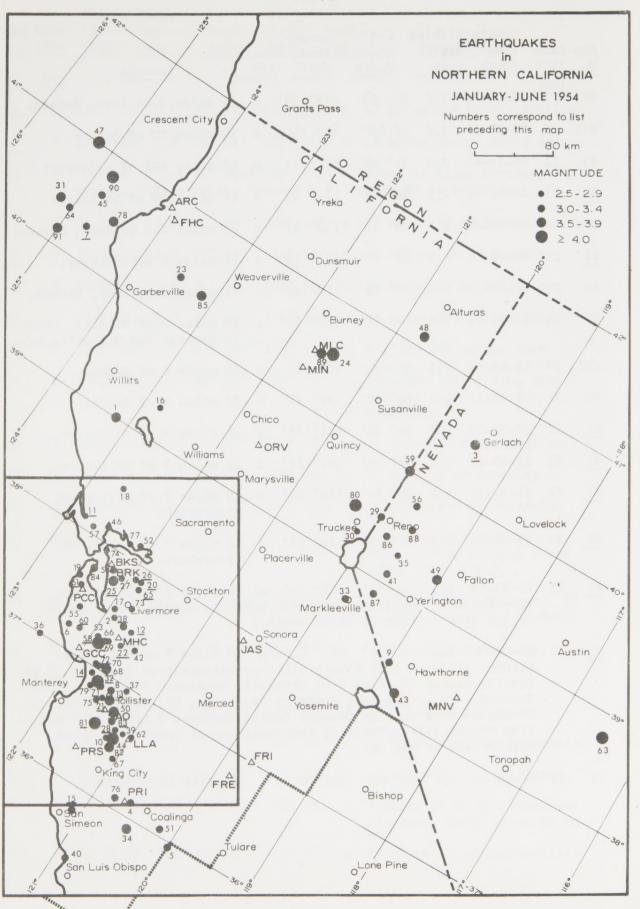
Foreshock of 18-50-13.

Map Date	Time Mag		Longi- tude Qua West ity		
32 Apr 22	Felt over a region of w at Aptos an	n area of ap est-central d Gilroy. V ollister, Sa	proximately California. , Moss Landi	2500 square miles of the coast Intensity: VI, slight damage Ing, IV, Bolinas, Chualar, San Juan Bautista, San Martin	е
<u>32</u> 22	19-08-32 3	.0 36° 54'	121° 41' b	15 miles WNW of Hollister. Aftershock of 18-50-13.	
<u>60</u> 23	23-46-33 2	.0 37° 13'	122° 12' c	2 12 miles S of Palo Alto.	
32 25	Strong shoc square mile area about the S bank Hollister, Castroville	k. Felt ove s. Maximum 10 miles E o of the Pajar Watsonville. , Corralitos	r a land are intensity of f Watsonvill o River. VI VI Aptos, (Enos Ranch	to 16 miles WNW of Hollister. The a of approximately 12,000 TOVIII occurred in a very small The along the Chittenden Road of The Aromas, Freedom, Gilroy, Boulder Creek, Capitola, The Cupertino, Glenwood, Los Till, Moss Landing, Mt. Hermon	n
32 25	21–25–25 3	.5 36° 56'	121° 41' c	2 16 miles WNW of Hollister. Aftershock of 20-33-28.	
<u>32</u> 26	01-32-05 2	.8 36° 56'	121° 41' c	Ditto.	
32 26	02-35-02 2	.6 36° 56'	121° 41' c	Ditto.	
<u>32</u> 26	04-04-39 2	.3 36° 56'	121° 41' c	Ditto.	
70 27	14-12-00 2	.3 37° 01'	121° 44' c	21 miles NW of Hollister.	
<u>71</u> 27	19-35-33 2	.8 36° 53'	121° 34' b	9 miles WNW of Hollister.	
<u>32</u> 28	04-53-07 3	.0 36° 56'	121° 41' c	16 miles WNW of Hollister. IV at Moss Landing; II at Salinas.	
CIT 28	08-43-41 3	.1 36.98	117.53 ь	40 miles NE of Lone Pine,	
<u>72</u> 29	10-36-34 2	.2 37° 02'	121° 47' d	22 miles SSW of Mt. Hamilton	n.
<u>25</u> 29	19-15-50 1	.3 37° 43'	122° 07' b	13 miles SE of Berkeley.	
72 30	12-47-28 2	.8 37° 02'	121° 47' c	22 miles SSW of Mt. Hamilton IV Watsonville.	ı.
73 30	13-30-24 2	.1 37° 37'	121° 47' c	Near Livermore.	
32 30	18-26-57 2	5 36° 56'	121° 41' c	16 miles WNW of Hollister.	

						_							
	Date		agni-	tu	iti- ide orth	Long tude West	Q	ual-		Re	emarks		
	May												
14	1	03-50-38	2.7	36°	581	121°	49 1	Ъ	27 n	niles	SSW of	Mt. Ha	milton.
11	3	23-30-50	1.8	38°	06 *	122°	51'	d	24 n	miles	SSW of	Santa	Rosa.
74	4	00-10-04. Quarry, C											5
7	7	05-38-16	3.4	40°	20 *	124°	44 *	а	29 r	miles	SW of I	Ferndal	e.
26	7	10-38-21	1.3	37°	491	121°	571	С	17 1	miles	ESE of	Berke1	ey.
75	8	21-49-50	2.6	36°	45 *	121°	33'	d	10 1	miles	SW of H	Hollist	er.
71	9	02-34-03	2.3	36°	531	121°	36 1	d	10 1	miles	WNW of	Hollis	ter.
58	10	12-21-28	2.1	37°	12 *	121°	51'	Ъ	9 m	iles	SSE of S	San Jos	e.
76	10	14-24-23	3.1	36°	05 1	120°	48*	С	Fe1		ESE of slight s		
12	15	06-42-30	2.5	37°	27 *	1:21°	38'	С	7 1	miles	N of M	t. Hami	lton.
77	24	19-59-45	1.5	38°	07*	122°	14'	d	16 1	miles	N of Be	erkeley	
78	27	18-20-20	3.6	40°	28	124°	30'	b	14 1	miles	WSW of	Fernda	le.
79	28	11-54-54	2.9	36°	50†	121°	42 *	Ъ	Fel	t at	W of Ho Moss Lar	nding S	team
80	29	04-20-20	4.1	39°	28*	120°	20'	С			NW of Canyon		
81	31	20-27-39	3.1	36°	351	121°	25 1	С	28 1	miles	E of M	onterey	
	June												
82	4	11-58-38	3.5	36°	271	121°	081	С	16	miles	SW of	Llanada	
61	4	19-13-48	1.1	37°	35 1	122°	26	С	14	miles	S of S	an Fran	cisco.
83	5	02-59-36	3.1	36°	40 1	121°	17'	С	14	miles	SSE of	Hollis	ter.
84	5	10-59-26	1.6	37°	451	122°	24*	a			SW of S Depth		
85	6	14-55-00	3.8	40°	21'	123°	10'	а	29	miles	NE of	Garberv	ville.

management waste	954	(GCT) t	agni-	tude	tude Q	ual-	Remarks
86 <u>Ju</u>	7	03-04-21	3.2	39° 23'	119° 49'	d 11	miles S of Reno, Nevada.
CIT	7	10-57-22	3.6	37.53°	118.75°	c 20) miles NW of Bishop.
83	11	09-14-41	3.0	36° 40°	121° 17'	c 14	miles SSE of Hollister.
32	12	03-51-46	2.5	36° 56'	121° 38'	d 12	miles NW of Hollister.
87	14	08-51-52	3.2	38° 53'	119° 35'	c 46	miles SSE of Reno, Nevada.
65	16	00-22-11	2.0	37° 49'	121° 52†	d 22	2 miles E of Berkeley.
88	16	03-02-33	3.4	39° 32'	119° 37'	d 11	miles E of Reno, Nevada.
89	16	16-03-26	3.6	40° 29'	121° 36'		miles N of Mineral. Felt Mineral and Manzanita Lake.
CIT	19	12-45-47	3.3	37.67°	118.33°	c 20) miles N of Bishop.
90	22	06-24-49	4.2	40° 46°	124° 47'	ъ 38	B miles W of Arcata.
81	22	09-33-03	3.9	36° 34°	121° 25'	a 18	B miles S of Hollister.
81	22	11-49-29	4.4	36° 34'	121° 25'	a 18	B miles S of Hollister.
81	22	11-51-17	3.8	36° 34'	121° 25'		B miles S of Hollister. Etershock.
81	22	12-50-04	4.3	36° 34'	121° 25'		B miles S of Hollister. Etershock.
81	22	(Two shoc	ks.	Magnitud		refer	8 miles S of Hollister, r to second larger shock.
81	22	17-08-00	3.6	36° 34'	121° 25'	a 18	8 miles S of Hollister.

- 22 17-08-00 3.6 36° 34' 121° 25' a 18 miles S of Hollister.
 USCGS: 1149 and 1250 shocks felt approximately as follows: V at
 Chualar Canyon (9 miles E of Chualar), Gonzales, Hollister,
 Soledad. IV at Big Sur, Monterey Peninsula, Mt. Hermon, Salinas.
 15 shocks were felt at Chualar Canyon (between 2 a.m. and 7 a.m.).
 Five shocks felt on Monterey Peninsula and at Gonzales. Three
 shocks felt at Big Sur.
- 91 24 06-15-25 3.6 40° 08' 125° 00' d 72 miles SW of Arcata.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1954

_	Date 1954	Time N	Magni-	tude		ual-	Remarks
	July						
1	1	14-39-48	2.0	40.8°	124.5°	С	22 miles West of Arcata.
2	2	10-43-13	4.9	38° 10'	116° 22'	b	45 miles E of Tonopah, Nevada.
3	2	21-01-46	3.8	40° 45'	124° 59'	d	40 miles W of Ferndale.
	4	02-44-22	4	38°	115.5°	d	E of Tonopah, Nevada.
4	5	07-25-39	3.2	36.2°	121.8°	d	30 miles S of Monterey.
5	5	19-18-52	3.6	40° 26'	124° 16'	С	10 miles S of Ferndale. Felt slightly in Eureka and Ferndale.
CIT	6	10-09-36	3.0	39.50°	118.83°	-	Near Fallon, Nevada.
6	6	over an Californithe ground Stillwate Stillwate	area on ia, Orend frace ar Ranger, and	f approximegon and cture are ge about	mately 130 Utah. Max a on the B 15 miles S 11s, Nevad	o,00 kimu E ed SE o da.	Near Fallon, Nevada. Felt O square miles of Nevada, m intensity of IX assigned to ge of Rainbow Mtn. in the f Fallon. VIII at Fallon, A list of the larger is listing.
7	6	22-07-41	6.0	39.3°	118.5°	а	Near #6 above. Felt at Fallon.
8	8	06-39-12	3.1	36° 32'	121° 29'	Ъ	30 miles S of Hollister.
9	10	15-07-35	1.7	37° 25'	121° 42'	С	6 miles NW of Mt. Hamilton.
10	11	03-25-24	4.0	40° 22'	125° 16'	b	55 miles SW of Ferndale.
11	17	18-55-12	4.2	41° 18'	123° 34'	Ъ	38 miles NE of Arcata. V at Cecilville.
2	17	22-02-42	4,3	38,2°	116.4°	Ъ	45 miles E of Tonopah, Nevada.
CIT	20	00-11-38	5.0	38.2°	116.4°	d	45 miles E of Tonopah, Nevada.
12	29	07-09-42	2.7	37° 54'	121° 59'	а	15 miles E of Berkeley. Felt in Walnut Creek.
13	29	08-51-36 Felt at Peninsul	Hollis	37° 25' ter, Gilr	121° 20'	b n Hi	17 miles ENE of Mt. Hamilton. 11, San Jose, and San Francisco

Map Date	e Time Magni- tude t	ongi- ude Qual- est ity Remarks
Aug	<u>g</u>	
14 10	01-38-01 2.3 36° 50' 12	1° 29' d 8 miles SW of Hollister.
15 10	13-24-42 3.1 37° 57' 12	1° 59' b 18 miles NE of Berkeley. Felt in Walnut Creek and Concord.
<u>16</u> 12		1° 39' b 18 miles NW of Hollister. er. Also felt Moss Landing, Bakers-
CIT 17	19-33-06 3.8 38.2° 11	6.4° d E of Tonopah, Nevada.
17 19	21-46-32 3.2 39° 27' 12	3° 29' c 6 miles NW of Willits. III at Comptche.
<u>18</u> 20	08-00-45 4,4 37° 40' 11	8° 40' c 20 miles NW of Bishop. V at Long Valley Reservoir. IV at Benton.
CIT 20	11-06-27 3.6 37.67° 11	8.67° c 20 miles NW of Bishop.
19 21	04-55-06 2.1 37° 57' 12 Felt in El Cerrito, Berkel	2° 19' c 6 miles NW of Berkeley. ey, Richmond, Oakland.
20 21	22-50-49 3.3 36° 28' 12	1° 20' b 40 miles S of Hollister.
21 22		9.4° d E of Markleeville. III at eported felt at 1130 at Markleeville.
<u>22</u> 24	over an area of approximat California, Oregon, Idaho, assigned to the ground fra VIII at Fallon, Lovelock,	8° 27' a Near Fallon, Nevada. Felt ely 150,000 square miles of Nevada, and Utah. Maximum intensity of IX cture area about 15 miles E of Fallon. Stillwater, and Upsal Hogback. A list appears at the end of this listing.
<u>16</u> 26	09-25-30 2.7 36° 53' 12	1° 38' b 15 miles NW of Hollister.
<u>16</u> 26	09-28-49 2.7 36° 53' 12	1° 38' b 15 miles NW of Hollister.
23 28	19-40-50 1.7 38° 02' 12	2° 31' b 18 miles NW of Berkeley.
Sep		
24 4	18-33-40 3.1 37° 46' 12	1° 57' b 20 miles SE of Berkeley.
25 16	04-51-04 2.5 37° 18' 12	0° 01' b 25 miles E of Merced. VI at Coarsegold (Madera County).

	Date	Origin Richte Time Magni- (GCT) tude	tude	Longi- tude Qual West ity	
	Sep 22	06-58-43 3,5	40.1°	125.8° c	110 miles SW of Arcata.
18	22	07-01-55 4.1	37° 40'	118° 40' c	20 miles NW of Bishop.
26	22	21-53-08 3.5	37° 29'	118° 57' c	30 miles NW of Bishop.
27	25	15-51-55 2.8	37° 26'	121° 45' a	8 miles NW of Mt. Hamilton.
	Oct				
28	7	00-00-49 2.8	38° 09†	121° 48' b	30 miles NE of Berkeley.
29	13	18-29-05 1.7	37° 40'	122° 24° c	10 miles SE of San Francisco.
30	14	08-42-03 2.3	37° 25'	121° 43' a	7 miles NW of Mt. Hamilton.
CIT	16	04-32-12 4.3	39.5°	118.5° d	E of Fallon, Nevada.
31	17	00-52-43 1.0	37° 50'	122° 08' c	IV at Canyon. Very small, probably a blast.
29	18	17-13-14 1.8	37° 41'	122° 24' b	7 miles SE of San Francisco.
CIT	20	19-53-52 4.4	39.0°	119.0° d	E of Fallon, Nevada.
32	21	03-14-55 2.5	40,4°	124.3° d	S of Ferndale.
33	22	09-11-55 3.2	40° 14'	121° 06' c	29 miles E of Mineral.
34	25	18-33-24 2.9	37° 57'	121° 48' a	25 miles NE of Berkeley.
35	27	02-25-42 3.1	38° 02'	121° 50' a	25 miles NE of Berkeley, Felt at Contra Costa sub- station,
	Nov				
36	1				15 miles S of Merced. V at , O'Neals, El Portal.
37	3	18-50-07 3.6	40° 29'	125° 28' b	80 miles SW of Arcata.
38	4	14-44-48 2.1	37° 18'	121° 44' a	6 miles SW of Mt. Hamilton.
39	6	18-25-59 2.1	38° 03'	122° 23' a	14 miles NW of Berkeley.
40	10	over 2500 squa	re miles	of Lake and I	10 miles SE of Ukiah. Felt Mendocino counties in northern t Hopland, Willits.

Map Date		i- tude	tude Qua	
41 Nov 11	16-25-08 2.	8 36.7°	121.1° d	10 miles NW of Llanada.
<u>24</u> 14	10-54-33 1.	8 37° 44°	121° 55° a	20 miles SE of Berkeley.
Felt 15	00-20-00 -	37.65°	118.0° d	IV at Dyer, Nevada.
42 17	07-23-57 4.	1 36° 28'	118° 00' c	S of Lone Pine. V at Keeler. VI at Coso Jct.
43 17	09-50-35 2.	8 36° 59'	121° 19' b	12 miles NE of Hollister.
44 19	05-53-51 3,	5 40.5°	124.1° d	SE of Ferndale. Near Scotia, IV at Eureka.
45 22	05-19-23 2.	7 36.9°	121.2° d	12 miles E of Hollister.
46 25	11-06-15 3.	8 40.7°	121.3° c	35 miles NE of Mineral.
47 25	Felt over an	area of 90	000 square mi	75 miles WSW of Ferndale. les of Mendocino and Humboldt ridgeville, Eureka, Ferndale,
48 26	10-38-35 3.	3 37.3°	118.9° b	W of Bishop.
Dec				
49 1	06-30-41 2.	7 36° 43¹	121° 29' c	SSW of Hollister. V at Hollister.
50 7	04-32-36 4.	6 40.5°	126° d	W of Eureka and perhaps an aftershock of Nov. 25.
<u>29</u> 8	18-46-24 1.	5 37° 40°	122° 23' b	S of San Francisco. Possibly a blast.
51 10	00-30-49 3.	0 37° 18'	121° 15' a	21 miles SE of Mt. Hamilton.
52 10	17-13-00 3.	3 40° 33'	121° 22' b	13 miles NE of Mineral.
53 12	14-04-34 2.	3 37° 00¹	121° 45' a	25 miles SW of Mt. Hamilton.
54 13	02-16-11 1.	9 37° 46'	122° 32' a	NW of San Francisco.
55 13	10-49-26 3.	6 39° 17'	120° 10' Ь	Near Truckee, V at Norden.
56 14	17-17-19 3.	7 39.9°	124.1° c	W of Garberville.
57 14	18-46-36 2.	8 40.3°	124.5° c	W of Ferndale.

No.	Date 1954	Time M	lagni-		Longi- tude West	Qual ity	Remarks
	-	06-30-40	4.0	39.5°	118°	d	E of Fallon, Nevada.
58	16	Epicenter Felt over intensity	near an a X ass	Frenchma rea of ap signed to list of t	n's Stat proximat surface	ion, ely 2 rupt	Major Nevada earthquake. about 30 miles ESE of Fallon. 00,000 square miles. Maximum ure in Dixie Valley-Fairview ershocks appears at the end
58	16		f 110	7. Felt			Epicenter probably about 30 ea including Sacramento and
58	16	13-15-03	5.0	39° 19'	118° 12	' b	Aftershock of 1107.
58	16	14-16-57	5.8	39.5°	118°	Ъ	Aftershock of 1107,
58	16	15-09-42	5.1	39.5°	118°	Ъ	Aftershock of 1107.
59	17	Felt over	an a	rea of 45	00 squar	e mil	12 miles SE of Berkeley. es. Maximum intensity V in Hayward, Oakland, and San
60	17	15-22-31	2.6	36° 44	121° 20) t c	SE of Hollister. IV at Hollister.
61	19	19-26-35	3.2	38.3°	119.3°	d	California-Nevada border, S of Reno.
62\$	21	Felt over	50,0	00 square	miles o	of nor	East of Eureka and Arcata. thern California and Oregon, eka, Ferndale.
62 ^{\$}	22	18-33-02	3,5	40° 47°	123° 52	2' c	Aftershock of #62. IV at Arcata.
63	22	21-12-24	3,7	36.0°	121.0°	d	SE of King City, III at King City.
64	23	19-04-59	3.4	36° 47'	121° 26	; c	S of Hollister. IV at Hollister
65	24	09-10-11	3.5	40° 44†	124° 04	, c	Aftershock of #62, V at Eureka.
66	29	10-49-32	3,3	38° 59'	119° 54	t' c	20 miles N of Markleeville. II at Markleeville.
62	30	09-16-13	4.7	40° 47'	123° 52	2' b	9 miles SE of Arcata. VI at Arcata, Eureka, Ferndale.
67	31	16-56-53	4.0	37.6°	118.5°	d	Northern Owens Valley. IV at

Bishop.

NEVADA EARTHQUAKE SERIES 1954

Following the two strong earthquakes in the vicinity of Fallon, Nevada on July 6 and August 24 and the Dixie Valley-Fairview Peak earthquake of December 16, there were many aftershocks, of which the following is a partial list. These are the earthquakes partially identified as originating in this particular region of Nevada. The origin time is obtained by subtracting a constant time from the arrival time of P at Reno. All are assumed to have the same epicenter as the associated major earthquake although some spread of epicenters would seem likely. The arbitrary lower limit of magnitude included in this list is approximately 4, so the current list cannot be considered a complete record of the aftershocks of the Nevada earthquake series.

	Coordinates	of	Epicenter	of	the	Major	Earthquakes
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Date	Latitude	Longitude	Magnitude
July 6	39° 25' N	118° 32' W	6,8
Aug. 24	39° 35' N	118° 27' W	6,8
Dec. 16	39° 19' N	118° 12' W	7.2

Aftershock Series

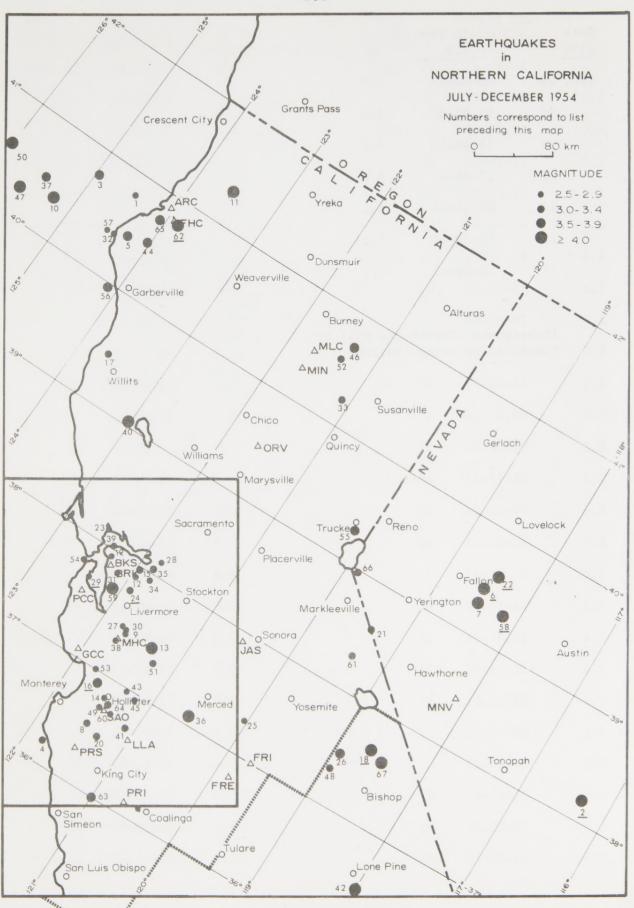
Date 1954	Origin Time (G.C.T.)	<u>M</u>	Date 1954	Origin Time (G.C.T.)	<u>M</u>
July 6	11-13-20	6.8	July 6	22-07-41	6.0
6	11-26-55	4.8	6	22-53-00	4.1
6	11-41-00	4.5	6	23-11-18	4.1
6	11-49-00	5.7	6	23-57-07	4.1
6	12-53-59	4.5	7	00-22-58	4.4
6	12-56-30	4.9	7	01-29-51	4.1
6	13-15-11	5.2	7	02-13-56	4.1
6	13-36-01	4.5	7	02-22-45	4.1
6	14-55-15	4.5	7	04-33-53	4.1
6	15-51-21	4.4	7	06-11-08	4.6
6	17-38-25	4.2	7	10-31-32	4,1
6	17-57-37	4.1	7	10-52-48	4.4
6	17-57-40	4,3	7	12-40-53	4.2
6	18-42-03	4.2	7	16-02-24	4.2

Date 1954	Origin Time (G.C.T.)	<u>M</u>	Date 1954		Origin Time (G.C.T.)	<u>M</u>
July 7	18-00-55	4.3	July	26	13-16-28	3.9
7	21-47-47	4.1		28	03-56-38	3.6
7	23-50-45	4.3		28	03-58-03	3.7
8	02-13-55	4.8		28	23-17-16	4.0
8	04-08-19	4.5		30	02-00-10	5.1
8	06-58-36	4.3		31	13-54-35	4.3
8	12-55-10	4.7		31	17-24-14	4.5
8	19-31-57	5,3		31	17-31-16	4.3
9	08-50-03	4.9	Aug.	2	10-18-53	5.4
10	01-22-20	4.6		3	21-24-54	4.7
11	00-18-02	4.0		5	05-03-08	4.7
11	07-04-00	4,6		6	15-41-16	4.2
11	09-58-12	4.6		9	14-28-34	4.0
12	10-17-06	4.5		10	06-23-10	4.0
12	16-05-25	4.6		10	23-00-41	4.0
14	01-57-12	3.9		10	23-04-22	4.0
15	01-31-34	3.9		16	06-29-42	4,1
16	11-55-20	4.0		22	10-50-08	4.0
17-	00-02-16	4.2		24	05-51-32	6.8
17	01-53-11	4.4		24	05-57-46	5.2
20	01-41-55	4.1		24	06-14-50	4.1
20	12-13-22	3.9		24	06-32-31	4.4
20	15-28-12	4.1		24	06-36-02	4.4
20	17-56-04	4.0		24	06-54-10	4.3
23	06-33-35	3.9		24	14-47-18	4.0
23	20-41-58	3.6		24	21-20-53	4.4

Date 1954		Origin Time (G.C.T.)	M	Date 1954		Origin Time (G.C.T.)	M
Aug.	25	02-17-13	4.8	Sept.	14	16-19-02	4.0
	25	02-49-59	4.0		23	08-12-19	3.8
	25	12-12-35	4.0	Oct.	2	22-15-34	3.8
	25	22-21-10	4.7		16	04-32-12	4.3
	26	12-44-15	4.2		20	19-53-52	4.4
	26	12-56-15	4.6		26	18-29-56	3.8
	27	07-05-03	4.0	Nov.	12	19-12-22	4.2
	28	04-51-34	4.0		13	22-06-25	4.2
	29	03-09-51	4.2		15	09-56-07	3.8
	29	03-41-06	4.7	Dec.	13	03-43-18	3.9
	29	03-58-05	4.8		16	11-07-13	7.2
	30	11-15-58	4.1		16	11-11-29	7.1
	30	19-11-57	4.1		16	11-50-36	5.0
	30	19-57-19	4.1		16	11-57-30	5.0
	31	13-29-02	3.9		16	13-15-03	5.0
	31	13-34-07	4.0		16	14-16-57	5.8
	31	22-19-29	4.4		16	14-24-10	5.3
	31	22-20-32	5.8		16	15-09-42	5.1
Sept.	1	05-18-46	5.5		16	21-48-43	4.5
	1	11-29-25	4.3		17	10-15-26	4.5
	2	07-53-17	3.9		17	10-33-29	4.7
	4	04-24-22	4.0		17	20-27-06	5.0
	5	20-15-59	4.4		18	01-45-36	4.7
	8	07-17-30	4.3		18	22-23-05	4.0
	9	09-21-05	4.7		19	02-02-17	4.0
	9	22-31-38	4.4		19	03-59-56	4.2

Date 1954		Origin Time (G.C.T.	<u>M</u>
Dec.	19	05-01-27	4.0
	20	02-27-33	4.0
	20	15-48-54	4.2
	20	17-36-47	5.0
	22	07-14-12	4.1
	22	10-39-18	4.2
	26	22-06-45	4.1

(Subsequent aftershocks will be found in following listings.)



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1955

-	Date		ichten agni- ude		-	ial-	Remarks
	Jan						
1	1	12-13-54	5.1	39°	118°	-	Fairview Peak, Nevada.
2	2	02-49-21	4.0	40° 57'	124° 00'	С	NE of Arcata. IV at Blue Lake and Eureka.
3	2	07-14-36	3.0	41° 11'	124° 11'	С	N of Arcata. Felt.
1	2	21-43-36	3.7	39°	118°	-	Fairview Peak, Nevada.
1	2	22-07-00	4.2	39°	118°	-	Fairview Peak, Nevada.
1	5	08-20-40	4.2	39°	118°	-	Fairview Peak, Nevada.
4	6	One of a	series	s of explo		San	S of San Francisco. Blast? Francisco Bay. Special 1956.
1	6	08-32-32	3.7	39°	118°	-	Fairview Peak, Nevada.
1	7	04-56-10	3,9	39°	118°	-	Fairview Peak, Nevada,
1	7	07-41-14	4.1	39°	118°	-	Fairview Peak, Nevada.
1	7	08-00-41	4.2	39°	118°	-	Fairview Peak, Nevada.
5	7	19-52-20	1.8	38° 04'	122° 28'	а	18 miles NW of Berkeley.
1	8	08-43-17	3,6	39°	118°	-	Fairview Peak, Nevada.
6	8	11-45-34	3.0	40.9°	124.4°	d	W of Arcata.
1	8	18-09-50	4.0	39°	118°	-	Fairview Peak, Nevada.
1	8	22-32-53	4.2	39°	118°	-	Fairview Peak, Nevada.
7	9	06-57-48	2.8	36° 45'	121° 45'	а	19 miles SW of Hollister.
1	9	09-10-50	5,0	39°	118°	-	Fairview Peak, Nevada.
1	9	11-58-40	4.2	39°	118°	С	Fairview Peak, Nevada.
6	10	06-47-48	2,6	40.9°	124.4°	d	W of Arcata.

No.	Date 1955 Jan	Time M	agni-	r Lati- tude North	tude (Qual ity	Remarks
	10	10-44-00	-	37,75°	119.6°	d	IV reported felt Yosemite Valley.
8	10	11-23-05	2.6	37° 58'	122° 17'	Ъ	N of Berkeley. Felt at Orinda, Albany, Richmond IV.
9	10	13-15-54	4.1	39.9°	118.4°	d	SE of Lovelock, Nevada. VI at Battle Mountain.
10	11	02-15-18	3,0	38° 02'	121° 48'	b	25 miles NE of Berkeley. Felt at Niles.
1	11	10-21-40	4.7	39°	118°	-	Fairview Peak, Nevada.
4	12	01-15-17	1.8	37° 40'	122° 25'	Ъ	S of San Francisco. Blast?
1	12	03-21-25	4.0	39°	118°	-	Fairview Peak, Nevada.
1	12	11-00-09	3.7	39°	118°	-	Fairview Peak, Nevada.
1	12	11-57-37	4.1	39°	118°	-	Fairview Peak, Nevada.
11	12	15-45-08	3.3	41.1°	123.9°	d	NE of Arcata.
12	13	01-30-30	2.1	37° 08'	121° 37'	С	S of Mt. Hamilton.
1	14	00-45-50	3.9	39°	118°	-	Fairview Peak, Nevada.
1	14	02-57-04	3.9	39°	118°	-	Fairview Peak, Nevada.
1	14	12-21-11	3,8	39°	118°	-	Fairview Peak, Nevada.
13	15	08-17-59	3.9	38,4°	118.9°	Ъ	SE of Reno, Nevada.
1	15	20-47-02	4.2	39°	118°	-	Fairview Peak, Nevada.
Felt	18	13-30-00	-	36.2°	121.85°	d	IV reported felt at Big Sur.
1	19	01-48-54	3.9	39°	118°	-	Fairview Peak, Nevada.
1	19	01-53-48	4.1	39°	118°	-	Fairview Peak, Nevada.
1	19	02-10-10	4.6	39° 21'	118° 15'	С	Fairview Peak, Nevada. IV at Gabbs, Nevada.
1	19	03-29-21	4.4	39°	118°	-	Fairview Peak, Nevada.
4	21	03-05-18	1.2	37° 41'	122° 22'	Ъ	S of San Francisco. Blast?

Map Da	955		Magni-		tude	Qual- ity	Remarks
	an 21	05-26-23	2.7	36.8°	121.3°	С	10 miles SE of Hollister.
	21	11-57-44	3.8	37° 09'	118° 20'	b	Near Big Pine (Pasadena location). IV at Tinemaha Reservoir.
16 ^{\$} 2	21	12-21-02	4.0	36° 49¹	118° 01'	С	Near Big Pine (Pasadena location). IV at Tinemaha.
17 2	21	19-56-26	2.6	36.6°	121.4°	С	S of Hollister.
1 2	21	23-23-36	3.8	39°	118°	-	Fairview Peak, Nevada.
1 2	22	19-34-19	4.1	39°	118°	С	Fairview Peak, Nevada.
Felt 2	23	05-28-00	-	36.8°	121.4°	d	Felt Hollister.
1 2	23	13-21-55	3.9	39°	118°	-	Fairview Peak, Nevada.
	23	15-37-32	3.9	39°	118°	-	Fairview Peak, Nevada.
-	24	21-04-37	1.6	37° 41'	122° 24'	b	S of San Francisco. Blast?
	25	04-48-34	3.8	39°	118°	-	Fairview Peak, Nevada.
1 2	25	23-26-46	4.7	39°	118°	-	Fairview Peak, Nevada.
1 2	26	09-40-21	4.1	39°	118°	-	Fairview Peak, Nevada.
18 2	26	16-41-37	3.1	37° 14'	121° 30'	а	S of Mt. Hamilton. 10 km depth.
12 2	26	17-22-41	3.7	37° 11'	121° 36'	а	SW of Mt. Hamilton. 10 km depth.
18	27	03-38-54	2,3	37° 11'	121° 31'	а	S of Mt. Hamilton. 10 km depth.
1 2	27	09-04-22	3,8	39.1°	118° 04'	С	Fairview Peak, Nevada. V at Gabbs.
19	27	14-28-28	1.9	37° 58'	121° 59'	а	NE of Berkeley.
1 2	28	15-38-05	4.2	39.8°	118.0°	С	Fairview Peak, Nevada.
Felt	30	19-20-00	_	41.1°	124.0°	d	IV reported felt Eureka.
20\$	31	10-34-38	3 2.3	37° 17'	121° 46'	Ъ	SW of Mt. Hamilton.

Map D		Origin Ri Time Ma (GCT) tu	agni-		Longi- tude Qu West it		Remarks
E	eb						
Felt	1	05-02-00	-	41.1°	124.0°	d	15 miles from Arcata. IV at Eureka. Felt.
Felt	1	06-35-00	-	39.0°	118,0°	d	Nevada aftershock. IV Frenchman's Station, Nevada. Felt.
4	3	00-58-18	1.3	37° 40°	122° 23'	а	S of San Francisco. Blast?
1	3	18-30-31	3.8	39° 12'	118° 32'	Ъ	Fallon, Nevada.
19	4	13-23-29	3.2	37° 58'	122° 01'	а	15 miles NE of Berkeley. IV at Canyon.
19	4	13-45-10	2.4	37° 58'	122° 01'	Ъ	Aftershock of preceding.
19	4	19-55-02	3.2	37° 58†	122° 01'	а	15 miles NE of Berkeley. Felt in Diamond Dist. of Oakland.
21	5	07-10-19	3.3	35.6°	121.4°	С	W of San Simeon.
22	5	15-32-58	2,5	37° 25'	122° 17'	a	W of Palo Alto. Blast?
1	7	02-30-43	3,6	39° 03'	118° 03'	С	Fairview Peak, Nevada.
23	7				124° 32' rille. Off		25 miles SW of Ferndale. IV
4	7	23-04-39	1.1	37° 41'	122° 22'	a	S of San Francisco. Blast?
1	9	11-11-22	3.7	39° 06'	118° 08'	Ъ	Fairview Peak, Nevada.
1	10	19-44-08	3.7	39° 02'	118° 11'	Ъ	Fairview Peak, Nevada.
1	11	16-12-32	4.7	39° 28'	118° 06'	Ъ	Fairview Peak, Nevada.
CIT	12	11-29-00	4.6	39.0°	118.0°	-	Nevada aftershock.
23	12	23-50-41	3.4	40° 16'	124° 40'	Ъ	W of Arcata.
24	13	00-23-03	4.1	36° 58'	118° 14'	Ъ	S of Tinemaha (Pasadena epicenter).
1	14	09-40-24	3.7	38° 54'	118° 11'	b	Fairview Peak, Nevada.

-	Date 1955 Feb	Time M	lagni-	r Lati- tude North	tude (ual ty	Remarks
25	14	14-23-06 parts of	2.9 San F	37° 28'	121° 56' Bay area a	cand	NW of Mt. Hamilton. Felt in the Santa Clara Valley.
4	14	18-32-08	1.2	37° 41'	122° 23'	а	S of San Francisco. Blast?
26	14	20-24-05	2.0	37° 43'	122° 32'	Ъ	W of San Francisco.
1	16	00-46-40	4.1	39° 07'	118° 02'	Ъ	Fairview Peak, Nevada.
27	16	17-24-38	3.2	36° 32'	121° 22'	b	SE of Hollister.
1	17	01-36-20	3.8	39° 10'	118° 01'	b	Fairview Peak, Nevada.
4	18	21-22-38	1.4	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?
28	19	06-11-33	3.6	39° 28'	120° 16'	С	NW of Truckee. II at Norden and Donner Summit.
1	19	23-49-20	4.1	39.3°	117.8°	С	Fairview Peak, Nevada.
1	19	23-50-07	4.8	39.3°	117.8°	С	Fairview Peak, Nevada.
1	20	19-31-59	3.8	39° 02'	118° 02'	Ъ	Fairview Peak, Nevada.
4	21	18-37-27	1.4	37° 40'	122° 22'	a	S of San Francisco. Blast?
1	22	05-40-17	3,8	39° 03'	118° 10'	С	Fairview Peak, Nevada.
1	23	14-11-16	3.6	39.7°	118.1°	d	Fairview Peak, Nevada.
29	24	19-36-15	2.7	38° 24'	122° 07'	С	49 miles N of Berkeley.
30	24	20-06-28	1.4	37° 58'	122° 35'	a	NW of Berkeley.
8	24	23-45-39	2.3	37° 58'	122° 16'	Ъ	N of Berkeley. Felt in Albany.
31	25	00-50-05	2.8	38,4°	122.6°	C	E of Santa Rosa.
29	25	01-44-27	3,3	38° 25'	122° 08'	а	E of Santa Rosa.
32	25	12-56-20	2,5	37.0°	121.9°	С	NE of Santa Cruz.
33	27	03-17-51	2.9	36° 15'	120° 50'	С	E of King City. IV at Priest Valley.
4	28	20-48-04	1.4	37° 41'	122° 22'	a	S of San Francisco. Blast?

_	Date 1955		ichter agni- ide		Longi- tude Qu West it	ual.	Remarks
	Mar						
34	2	06-04-43	3.7	36° 52'	121° 39'	b	W of Hollister. V at Gilroy.
35	2	over an a	rea of	7000 squ	uare miles	of	18 miles SE of King City. Felt west-central California. VI San Ardo, San Lucas, Templeton.
35	2	20-02-53	3,7	36° 001	120° 56'	Ъ	Aftershock of preceding.
4	2	23-34-53	1.8	37° 41'	122° 23'	Ъ	S of San Francisco. Blast?
4	3	23-17-12	1.3	37° 41'	122° 23'	a	S of San Francisco, Blast?
2	5	08-05-27	3.1	41.0°	124.0°	d	N of Arcata. Felt in Humboldt Bay area.
36	5	08-46-36	2.0	36.1°	121.1°	d	S of King City.
37	5	23-58-27	2.4	38° 00†	122° 29'	Ъ	NW of Berkeley.
38	6	10-47-32	3.2	35° 55'	120° 54'	d	SE of King City.
18	7	13-20-51	2.6	37° 15'	121° 34'	С	SE of Mt. Hamilton.
4	7	23-01-50	1.2	37° 41'	122° 23'	Ъ	S of San Francisco. Blast?
39	7	23-53-05	3.5	40° 39'	124° 15'	b	SW of Arcata.
1	8	20-05-17	4.5	39° 12'	118° 33'	С	Fallon, Nevada.
1	8	23-28-04	4.2	39° 39'	118° 00'	Ъ	Fairview Peak, Nevada.
40	10	05-09-23	3.6	38° 33¹	119° 45'	b	SW of Markleeville.
41	10	10-50-12	3.6	40° 36°	125° 12'	Ъ	W of Arcata.
4	10	23-14-18	1.4	37° 40°	122° 22'	Ъ	S of San Francisco. Blast?
1	11	14-22-35 14-23-16		39.3°	118.1°	d	Fairview Peak, Nevada.
42	11	17-26-42	3.5	41.0°	125.5°	d	W of Arcata.
8	11	18-26-45	2.5	37° 59¹	122° 18'	Ъ	N of Berkeley.
4	11	23-03-18	1.1	37° 40'	122° 24'	ь	S of San Francisco. Blast?
1	13	08-41-04	4.6	39° 34'	118° 03'	Ъ	Fairview Peak, Nevada.

	Date 1955 Mar	Time 1	Magni-	Lati- tude North		Qual- ity	Remarks
1	13	21-08-27	4.0	39° 10'	118° 07'	Ъ	Fairview Peak, Nevada.
1	14	18-23-47	4.7	39° 25'	118° 15'	С	Fairview Peak, Nevada.
4	14	18-34-12	1.5	37° 40'	122° 22'	Ъ	S of San Francisco. Blast?
43	14	23-08-59	1.7	37° 46'	122° 02'	а	SE of Berkeley.
Felt	15	01-23-00	-	36.8°	121.4°	d	III reported felt Hollister.
4	15	18-59-29	1.4	37° 40'	122° 25'	b	S of San Francisco. Blast?
Felt	: 15	23-56-00	-	40.9°	124.15°	d	Reported felt at Eureka,
Felt	16	00-37-00	-	40.9°	124.15°	d	Reported felt at Eureka.
4	16	22-42-31	1.2	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?
4	18	18-30-52	1.6	37° 39'	122° 24'	а	S of San Francisco. Blast?
4	18	22-45-54	1.2	37° 40'	122° 23'	d	S of San Francisco. Blast?
4	21	18-46-49	1.4	37° 40'	122° 23'	С	S of San Francisco. Blast?
4	21	23-20-25	1.4	37° 40'	122° 23'	С	S of San Francisco. Blast?
1	22	03-15-40	4.4	39° 33'	118° 01'	Ъ	Fairview Peak, Nevada.
1	22	04-06-14	4,4	39° 30'	118° 12'	С	Fairview Peak, Nevada.
1	25	19-54-39	3.8	39° 07'	118° 16'	Ъ	Fairview Peak, Nevada.
1	26	03-51-28	4.2	39° 20'	118° 00'	Ъ	Fairview Peak, Nevada.
4	28	19-24-47	1,3	37° 40'	122° 23'	Ъ	S of San Francisco, Blast?
44	29	00-47-29	2.0	37° 13'	122° 14'	С	S of Palo Alto. Blast?
45	29	06-09-05	3.3	37.3°	118.5°	d	SW of Bishop.
1	30	09-24-28	4.3	39° 06'	118° 10'	С	Fairview Peak, Nevada.
	Apr						
1	2	02-22-51	4.2	39° 26'	118° 00'	С	Fairview Peak, Nevada.
43	2	21-32-04	1.8	37° 50'	121° 59'	Ъ	SE of Berkeley,

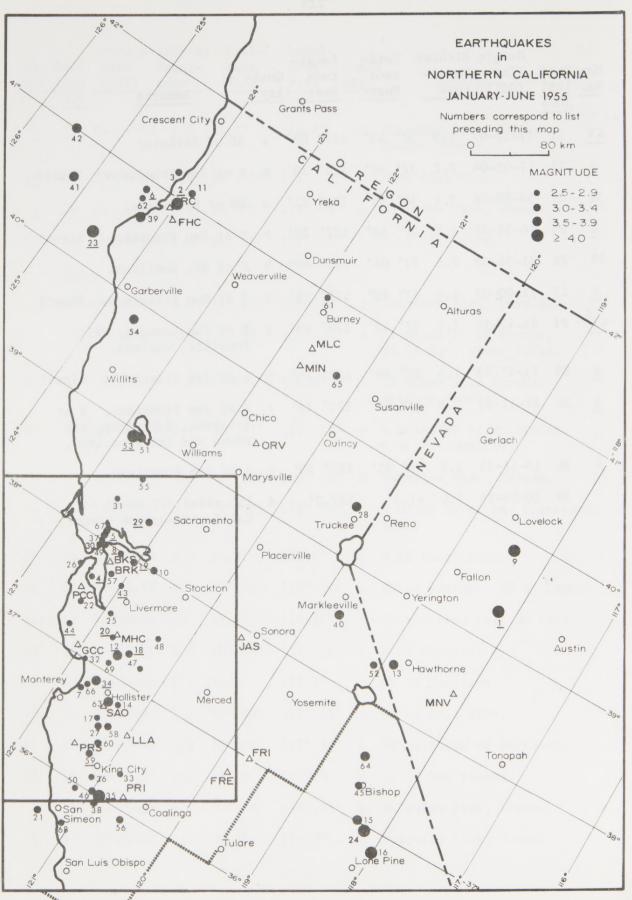
-	Date 1955 Apr	Time M (GCT) to	agni-	tude West	tude Q	ual ty	Remarks
1	4	01-36-02	4.1	39° 30†	118° 01'	С	Fairview Peak, Nevada.
4	4	17-34-32	1.6	37° 42'	122° 23†	а	S of San Francisco.
46	4	20-56-56	3.2	36° 05'	121° 00'	С	SE of King City.
47	4	22-23-38	2.5	37° 11'	121° 18'	С	SE of Mt. Hamilton.
1	5	01-07-37	3.9	39° 00'	118° 11'	С	Fairview Peak, Nevada.
1	8	11-50-08	3.8	39.3°	118.0°	d	Fairview Peak, Nevada.
5	9	17-43-24	1.8	38° 01'	122° 30'	Ъ	N of San Francisco.
48	11	13-03-38	2,8	37° 30'	121° 20'	Ъ	NE of Mt. Hamilton.
1	13	11-32-57	4.4	39° 32°	118° 05'	Ъ	Fairview Peak, Nevada.
8	14	19-28-48	2.0	37° 57'	122° 17'	а	N of Berkeley.
43	15	11-33-28	2.1	37° 43'	122° 04†	Ъ	14 miles SE of Berkeley. Felt at Hayward.
49	15	20-24-26	2.1	37° 58'	122° 26'	Ъ	NW of Berkeley.
20	17	08-07-55	2.1	37° 19'	121° 43'	b	W of Mt. Hamilton.
1	23	02-17-45	3.9	39° 00'	118° 04'	Ъ	Fairview Peak, Nevada.
4	26	17-58-50	1,1	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?
50	27	09-28-08	2.8	35.9°	121.2°	d	SW of King City.
4	27	16-58-50	1.4	37° 40'	122° 23'	Ъ	S of San Francisco, Blast?
4	28	17-13-32	1.3	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?
1	28	22-11-33	3.9	39° 25'	118° 04'	Ъ	Fairview Peak, Nevada.
51	29	Felt over	900 8	square mi		Cl	35 miles NE of Santa Rosa, lear Lake region in Lake County, 11e.
4	29	16-43-06	1.2	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?

<u>1</u> 30 16-29-15 3.8 39° 00' 118° 20' c Fairview Peak, Nevada.

Map I	1955	-	agni-		Longi- tude Qua West ity		Remarks
	May						
4	2	16-37-41	1.4	37° 40'	122° 23'	Ъ	S of San Francisco. Blast?
4	3	16-36-15	1.3	37° 40'	122° 25'	Ъ	S of San Francisco. Blast?
1	3	18-17-01	4.0	39.2°	118.0°	С	Fairview Peak, Nevada.
52	4	22-07-12	3.1	38.3	119.1°	d	SE of Markleeville.
4	6	19-22-36	1.2	37° 40'	122° 23'	b	S of San Francisco. Blast?
Felt	7	08-48-07	-	38,93°	122.87°	d	Foreshock of 11-50-39.
53	7	Felt over	appro ar Lal	oximately ke Highlan	1700 squa:	re 1 Lal	Near Clear Lake, California. miles. Of maximum intensity ke, Clearlake Oaks,
53	7	14-56-15	4.2	38° 56'	122° 52'	Ъ	Aftershock of quake at 1150.
= 1	8	10-38-31	4.5	38° 56'	118° 07'	Ъ	Fairview Peak, Nevada.
4	9	16-35-21	1.6	37° 42'	122° 30'	Ъ	SW San Francisco. Blast?
54	13	01-09-26	3.5	39° 50'	123° 37'	С	17 miles NW of Willits. IV at Branscome.
Felt	13	21-35-00	-	39.85°	123.60°	d	Reported felt at Branscome.
Felt	14	20-00-00	-	36,35	121,85	d	IV reported felt Big Sur and Santa Cruz.
55	15	21-15-55	2.8	38° 40'	122° 33'	Ъ	NE of Santa Rosa.
4	16	16-19-43	1.1	37° 40'	122° 25'	Ъ	S of San Francisco. Blast?
56	16	18-22-52	3.0	35° 55'	120° 35'	С	SW of Coalinga.
57	17	10-22-02	2.0	37° 47'	122° 11'	a	SE of Berkeley.
4	18	18-08-54	1.2	37° 40'	122° 25'	С	S of San Francisco. Blast?
1	20	10-49-00	3.6	39.2	118.8	d	Fallon, Nevada.
58	22	00-12-23	3.0	36° 35'	121° 15'	С	SE of Hollister.
4	23	16-49-05	1.2	37° 40'	122° 25'	С	S of San Francisco. Blast?

Map I		Time (GCT)	Magni-	Lati- tude North	tude Q	ual- ty	Remarks
1	29	04-44-06	4.0	39.2°	118.2°	d	Fairview Peak, Nevada. Double tremor.
59	30	09-38-29	3.0	36° 15'	121° 15'	С	W of King City.
1	30	21-28-26	5 4.5	39° 25'	118° 00'	С	Fairview Peak, Nevada.
60	31	01-45-53	3,0	36° 24°	121° 15'	b	N of King City.
	June						
1	6	09-20-10	4.3	39° 10'	118° 10'	С	Fairview Peak, Nevada.
61	7	11-40-13	3 2.9	40° 58'	121° 52'	d	12 miles NW of Burney. IV at Fall River Hills.
62	8	02-26-44	4 2.9	40.8°	124.4°	d	12 miles W of Eureka. Felt at Eureka.
63	8	06-02-59	3.8	36° 47'	121° 26'	С	4 miles SSW of Hollister. V at Watsonville.
1	8	12-22-1	1 4.5	38° 53'	118° 10'	Ъ	Fairview Peak, Nevada.
4	8	16-26-56	5 2.5	37° 40'	122° 32'	Ъ	9 miles SW of San Francisco. Felt.
59	10	14-55-12	2 2.5	36.3°	121.3°	С	N of King City.
64	10	18-26-3	7 3.6	37° 31'	118° 40'	Ъ	NW of Bishop. IV at Laws.
Felt	13	04-50-0	0 -	37.4°	118.35°	d	IV reported felt at Laws,
65	13	06-32-1	1 3.0	40° 24'	121° 16'	С	E of Mineral.
66	13	19-32-4	4 2.2	36.8°	121.7°	d	NE of Monterey.
44	16	23-53-0	3 2.4	37° 09'	122° 16'	С	SW of Palo Alto.
67	18	18-33-4	0 2.2	38° 06'	122° 30'	a	20 miles NW of Berkeley.
68	19	05-36-3	3 2.5	35° 37'	121° 06'	С	SE of San Simeon.
1	19	19-20-0	0 5.2	38° 58'	118° 15'	Ъ	Fairview Peak, Nevada.
1	19	19-25-1	6 5.0	39.0°	118.5°	d	Fairview Peak, Nevada.

_	Date 1955 June		lagni-	tude	tud		Qual- ity	Remarks
43	21	11-32-07	1.5	37° 43	3' 122°	08	a	SE of Berkeley.
4	21	17-33-04	1.2	37° 40	122°	23	Ъ	S of San Francisco. Blast?
34	22	08-28-56	3.1	36° 55	' 121°	41'	а	NW of Hollister.
4	24	16-59-26	1.2	37° 40	122°	23'	Ъ	S of San Francisco. Blast?
69	24	21-06-38	2.5	37° 04	' 121°	40 *	Ъ	S of Mt. Hamilton.
4	27	21-00-03	1.4	37° 40	' 122°	25'	С	S of San Francisco. Blast?
<u>43</u> \$	27	22-42-51	2.4	37° 45	' 122°	091	С	E of San Leandro. Felt Danville, Oakland.
4	29	21-47-28	1.4	37° 40	' 122°	24	Ъ	S of San Francisco, Blast?
4	30	11-11-51	2.8	37° 42	' 122°	29 '	С	S of San Francisco. V at Brisbane, Daly City, San Bruno and San Francisco.
4	30	13-16-55	2.6	37° 41	' 122°	30'	a	S of San Francisco.
	30	20-29-16	4.0	41.5°	127.	2°	d	150 miles off coast of California-Oregon border.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1955

-	Date 1955	_	Magni-	tude North	tude	Qual-	Remarks
	July						
1	1	15-09-36	2.4	36° 53'	121° 45'	Ъ	SE of Santa Cruz.
2	3	17-48-21	4.3	39° 11'	118° 07'	Ъ	Fairview Peak, Nevada.
2	4	12-37-13	4.1	39° 26'	118° 05'	С	Fairview Peak, Nevada.
1	5	00-24-13	2.8	36° 50'	121° 46'	Ъ	SE of Santa Cruz.
3	5	07-07-03	3.1	39.3°	118.5°	d	SE of Fallon, Nevada. Felt at Salt Wells.
4	5	17-53-56	1.0	37° 40'	122° 25'	d	S of San Francisco. Blast?
4	5	19-08-29	1,3	37° 40'	122° 27'	С	S of San Francisco. Blast?
Felt	: 6	10-15-00	-	39.3°	118.5°	d	Reported felt at Salt Wells, Nevada.
5	6	11-29-18	3.4	36° 30'	121° 25'	С	S of Hollister.
5	6	13-18-53	2.7	36.5°	121,5°	d	S of Hollister.
4	6	20-40-40	1,2	37° 40'	122° 29'	С	S of San Francisco. Blast?
4	7	19-28-27	1.3	37° 40°	122° 29'	Ъ	S of San Francisco. Blast?
4	12	23-19-22	1.3	37° 40'	122° 29'	d	S of San Francisco. Blast?
6	13	00-24-52	3.5	40,4°	125,8°	С	SW of Arcata.
7	13	23-33-54	3.4	40° 13'	124° 16'	Ъ	S of Arcata.
8	15	01-08-58	3.0	37° 10'	121° 40'	а	S of Mt. Hamilton.
9	17	10-13-37	2,8	40.7°	124.4°	d	W of Arcata.
5	19	11-51-58	2.5	36,6°	121.5°	d	S of Hollister.
10	24	22-18-32	3,4	40° 46'	121° 34'	С	N of Mineral.
11	24	22-22-30	4.3	41° 15'	125° 40'	С	NW of Arcata.
5	28	12-07-52	2.6	36.5°	121.4°	d	S of Hollister.

Map I		Origin Ri Time Ma (GCT) tu	agni-	tu	iti- ide orth	Long tude West	Qı	ial-	Remarks
4	28	17-51-35	1.3	37°	40 *	122°	291	С	S of San Francisco. Blast?
Felt	28	22-42-00	-	38.7	75°	122.1	L5°	d	Felt at Oakland Airport and San Leandro.
1	29	04-10-44	2.7	36°	51'	121°	45 *	С	SE of Santa Cruz.
5	29	08-58-43	2.8	36°	371	121°	24	С	S of Hollister.
4	29	23-13-03	1.0	37°	40 %	122°	28	С	S of San Francisco. Blast?
<u> </u>	Aug								
4	2	21-18-32	1.1	37°	40 *	122°	28*	Ъ	S of San Francisco. Blast?
12	4	05-47-53	2.5	37°	19†	121°	43*	Ъ	W of Mt. Hamilton.
13	6	21-01-58	2.7	36°	541	121°	16'	С	E of Hollister.
	6	23-56-22	3.0	40.4	40	127.	6°	d	W of Arcata.
14	8	Felt over intensity	9000 V at	squa	are mi	iles a	of Ne	vada Yer:	Mineral County, Nevada. a and California. Maximum ington, Nevada, and Bridge- ter is S of Hawthorne, Nevada
2	9	05-24-21	4.2	39°	15 1	118°	02 1	С	Fairview Peak, Nevada.
15	12	03-55-52 over 400 Maximum i	square	e mi	les in	a Ala	meda	a and	Near Berkeley. Felt Contra Costa counties.
15	14	07-05-37 East Oak1	2.6 and, 1	37° Mont	51' clair	122° Dist	13'	c wnt	Near Berkeley. Felt in own Oakland and Berkeley.
4	16	17-02-55	2.4	37°	41*	122°	28'	Ъ	S of San Francisco. Blast?
15	17	20-18-03	1.3	37.	9°	122.	3°	-	Slight earthquake felt in the Berkeley-Oakland area.
15	17	20-37-51	1.3	37.	9°	122,	3°	-	Slight earthquake felt in the Berkeley-Oakland area.
15	18	00-01-09	2.5	37°	56'	122°	16'	Ъ	Slight earthquake felt in the Berkeley-Oakland area.
16	18	08-44-52	3.5	39°	18'	120°	16'	Ъ	W of Truckee.

No.	Date 1955 Aug	Time M	agni-	tude North	tude Q	ual ty	Remarks
17	19	02-54-28	2.0	37.6°	119.4°	d	SE of Yosemite.
18	19	22-06-22	1.9	37° 46'	122° 10'	а	SE of Berkeley.
Felt	22	09-17-39	-	37.68°	122,78°	d	Near Colma. IV at San Francisco.
-	23	15-32-37 Oregon.			128.0° nd, Oregon	d	170 miles off coast of
-	24	06-56-20	4,5	44.5°	129.5°	d	Off coast of Oregon. USCGS epicenter.
19	24	20-37-29	3.6	40.3°	123.5°	d	SW of Arcata.
4	24	22-25-42	1.6	37° 40†	122° 23'	Ъ	S of San Francisco. Blast?
20	27	07-00-26	4,5	40° 23'	124° 30'	С	18 miles SW of Ferndale. III at Eureka.
- 1	27	17-45-25	2.7	36° 56'	121° 42'	Ъ	NW of Hollister.
21	30	01-57-15	4.1	40° 25'	124° 11'	С	10 miles S of Ferndale. Felt over 2000 square miles Humboldt County.
21	30	02-14-43		40° 25'	124° 11'		Aftershock of quake at 0157.
	Sep						
22	1	08-52-01	3.9	39.8°	118.0°	С	Dixie Valley, Nevada.
23	3	11-06-49	3.3	38° 10'	119° 15'	b	NE of Yosemite.
24	4	11-03-12	2.3	37° 22'	121° 24'	С	E of Mt. Hamilton.
12	5	Felt over central C	an an alifon V at	rea of app rmia. Max	proximatel ximum inte	y 1: nsi	6 miles W of Mt. Hamilton. 2,000 square miles of west- ty VII at San Jose and E of central California including
12	5			37° 22'	121° 47'	b	Aftershock of quake at 0201.
25					117.5°		NW of Tonopah, Nevada.
26					121° 48'		N of Livermore.

	Date 1955 Sep				tude Qu	ual-	Remarks
4	7	14-22-53	2.8	37° 43'	122° 30'	Ъ	SW of San Francisco. Felt in San Francisco, Daly City and Colma.
2	10		o be a	a double			Fairview Peak, Nevada. This th the events separated by
27	11	12-47-43	2,8	36° 58¹	121° 32'	Ъ	NW of Hollister.
CI	r 11	23-24-35	3.3	37.9°	118.5°	d	N of Bishop.
28	12	11-25-25	2.3	37° 25¹	121° 51'	а	NW of Mt. Hamilton. Felt E San Jose.
24	17	11-04-31	2.1	37° 23'	121° 21'	Ъ	NE of Mt. Hamilton.
29	17	16-12-17	2.8	36° 38'	121° 18'	С	S of Hollister.
2	18	19-44-02	3.9	39° 25'	118° 00'	С	Fairview Peak, Nevada.
12	19	19-48-33	2.7	37° 22'	121° 47'	а	Aftershock of quake on Sept. 5 at 0201.
30	21	07-37-28	4.1	40° 05°	119° 40'	С	N of Reno, Nevada, near Pyramid Lake.
31	21	18-06-42	3.3	36.5°	121° 00'	d	N of King City.
2	25	22-11-51	4.1	39,6°	117.9°	С	Fairview Peak, Nevada.
23	28	09-52-33	4.2	38.2°	119.3°	С	SE of Markleeville. V in Mono County.
2	29	05-40-51	4.5	39° 13'	118° 12'	С	Fairview Peak, Nevada.
	Oct						
12	4	03-37-24	1.9	37° 21'	121° 48'	С	8 miles WNW of Mt. Hamilton.
2	6	07-15-42	4.1	39° 17'	118° 03'	С	Nevada aftershock.
32	9	08-44-30	1.8	37° 12'	121° 56'	Ъ	Near San Jose.
Fe1	t 12	02-44-00	-	40.85°	124.15°	d	IV reported felt Eureka.
12	18	09-58-31	1.9	37° 22'	121° 53'	С	Near San Jose.

	Date 1955 Oct	(GCT) tuo	gni- tu	ti- Lor ide tuo orth Wes	,	Remarks
27	20	04-08-52	3.0 37°	00' 121'	31' a	16 miles NW of Hollister.
8	21	02-43-28 2	2.6 37°	13' 121'	38' a	10 miles S of Mt. Hamilton.
33	22	07-04-13	4.2 36°	13' 120'	° 20 ° c	N of Coalinga. V at Coaling and 14 miles NW of Coalinga.
34	22	17-52-30 2	2.0 38°	02' 122'	14' a	12 miles NNE of Berkeley.
35	23	02-24-43	2.2 37°	12' 121	46° c	SW of Mt. Hamilton.
36	24	Concord. Me mately 12,0 in the Walr intensity to occurred or windows, credise. The caused by a Berkeley, 0	Magnitude 000 squar nut Creek VII. Mod ver a con racked wa press at a fire st Canyon, (e by Pasac re miles of region of derate pro- asiderable alls and partibuted carted by Concord,	dena. Fe of west-c of Contra operty da e area, a olaster, one deat the eart Cowell, M	Between Walnut Creek and It over an area of approxientral California, centering Costa County. Maximum mage, estimated at \$1,000,000 and consisted mainly of broker and loss from broken merchanh in Oakland to the shock, hquake. Intensity VII at Toraga, Pacheco, and Walnut an Francisco Bay area.
36	24	04-27-49	3.0 38°	01' 121	° 56' a	Aftershock.
36	24	06-03-56	2.3 38°	00' 121	° 58' a	Aftershock. Felt at Walnut Creek.
36	24	08-18-25	2.7 38°	00' 121	° 56' a	Aftershock,
36	24	09-45-33	3.1 38°	02' 121	° 57' a	Aftershock,
36	25	00-00-45	2.6 38°	00' 121	° 56' b	Aftershock,
37	25	13-23-23	2.6 36.7	7° 121	.1° d	SE of Hollister.
36	26					Walnut Creek aftershock. .nda, Canyon and Martinez.
36	26	03-46-21	2.1 38°	00' 121	° 56' a	Walnut Creek aftershock.
36	26	08-02-10 Reported for				Walnut Creek aftershock.
36	26					Walnut Creek aftershock. For damage in Martinez.

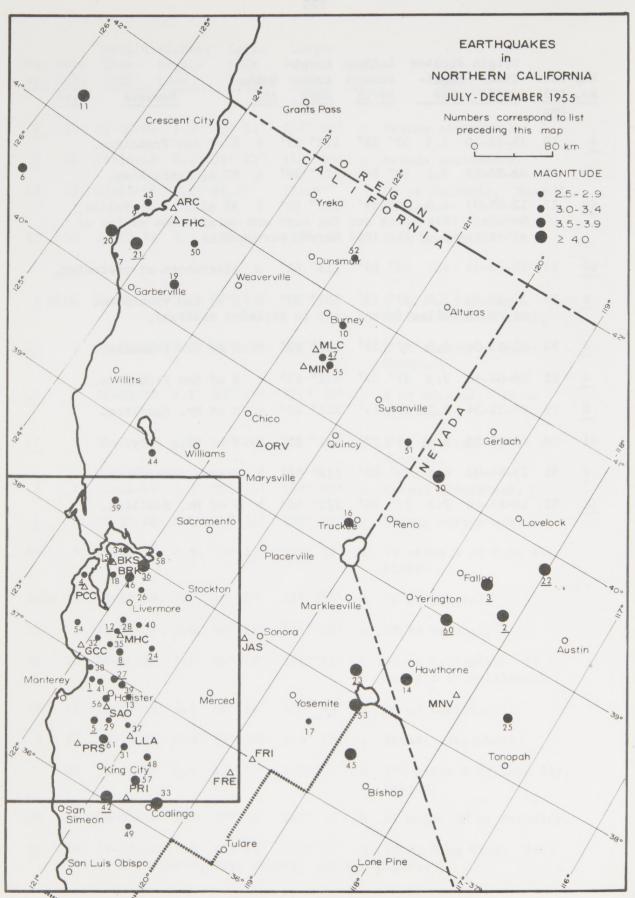
Map Date No. 1955	(GCT) tude North West ity Remarks
Felt 27	19-33-32 - 38.02° 121.97° d Walnut Creek aftershock. V generally in San Francisco Bay region.
12 27	21-38-20 2.5 37° 16' 121° 46' b 10 miles SW of Mt. Hamilton.
28 28	11-09-23 2.3 37° 32' 121° 45' c NE of San Jose.
38 28	13-33-25 2.5 36° 59' 121° 49' b E of Santa Cruz.
36 28	16-42-21 2.7 38° 02' 121° 58' b Walnut Creek aftershock.
39 28	17-48-53 3.1 36° 57' 121° 25' b N of Hollister.
36 28	19-54-37 2.5 38.03° 121.98° - Walnut Creek aftershock.
36 29	01-17-53 2.6 38° 02' 121° 59' b Walnut Creek aftershock.
40 31	17-22-53 2.8 37° 30' 121° 38' b 8 miles N of Mt. Hamilton.
Nov	
<u>36</u> 1	08-50-54 3.7 37° 59' 122° 02' c Walnut Creek aftershock. V in the East Bay region. Press reported some windows cracked and many people awakened in Concord.
41 1	16-00-15 2.6 36° 54' 121° 38' b NW of Hollister.
2 2	06-15-17 4.6 39° 30' 118° 03' b Nevada aftershock.
42 . 2	19-40-06 5.2 36° 00' 120° 55' a 55 miles NNW of San Luis Obispo. Felt over an area of approximately 7000 square miles of the coastal region of west-central California. Maximum intensity VI. Slight damage reported. VI at Adelaida Road (14 miles W of Paso Robles), Bryson, King City, Paso Robles, San Ardo, San Lucas, and San Miguel.
<u>36</u> 3	22-04-45 3.3 37°58' 122°02' a Walnut Creek aftershock. Felt in Berkeley and at several points in Contra Costa County.
43 5	04-49-35 3.0 40.8° 124.3° d SW of Arcata. IV at Eureka.
44 6	02-18-02 3.0 38.9° 122.6° d 30 miles N of Santa Rosa.
28 7	19-51-38 2.6 37° 27' 121° 51' b NE of San Jose.
45 8	02-40-52 4.2 37° 30' 118° 48' Epicenter, origin time, and magnitude by Pasadena. V at Long Valley Dam (Bishop). IV at

Yosemite Valley.

Map I		Origin R Time M (GCT) t	agni-		tude	Qual ity	Remarks
28	9	20-57-59	2,5	37° 27'	121° 47'	Ъ	NE of San Jose.
46	10	18-02-16	3.6	37° 50'	122° 03'	b	Near Danville. IV at Canyon and Moraga.
47	11	12-18-00	3.2	40° 30'	121° 34'	С	N of Mineral.
36	12	12-55-18	3.0	37° 57'	122° 01'	Ъ	Walnut Creek aftershock.
48	12	18-36-59	3,1	36° 31'	120° 40'	С	SE of Llanada.
49	13	09-03-30	2.9	35.9°	120.5°	d	SW of Coalinga.
47	14	07-15-59 Mineral.			121° 35' Manzanita		N of Mineral, IV at e.
39	14	08-03-02	2.7	36° 54'	121° 27'	С	NW of Hollister.
47	14	13-12-58	3.1	40° 28'	121° 36'	С	N of Mineral. V at Manzanita Lake.
50	15	21-54-52	3.2	40.7°	123.6°	d	SE of Arcata. IV near Eureka.
36	17	23-02-40	2.9	37° 55'	122° 00'	Ъ	Walnut Creek aftershock.
21	18	09-38-43	3.6	40° 25'	124° 05'	Ъ	12 miles SE of Ferndale, IV at Rio Dell,
51	18	17-13-20	3.3	40.2°	120.2°	d	SE of Susanville.
42	19	10-59-41	3.3	36° 02'	120° 54'	С	SE of King City.
36	20	17-59-05	3.4	37° 55'	122° 01'	а	Walnut Creek aftershock. Felt at Walnut Creek.
2	21	20-25-33	5.5	39° 25'	118° 05'	С	Nevada aftershock.
2	21	20-40-35	4.4	39° 25'	118° 05'	d	Nevada aftershock.
CIT	21	21-14-18	3.5	36.1°	119.9°	d	E of Coalinga.
4	22	12-31-47	2,2	37° 36'	122° 26'	Ъ	S of San Francisco. Felt in San Francisco Bay area.
22	23	04-24-08	4.1	39° 52'	118° 02'	С	Nevada aftershock.

-	Date 1955 Nov	Origin R Time M (GCT) to	agni-	r Lati- tude North	tude Q	ual- ty	Remarks
2	25	16-30-01	4.3	39° 23'	118° 03'	c Nev	ada aftershock.
2	25	18-26-49	4.2	39° 23 [†]	118° 00'	c Nev	ada aftershock.
52	29	18-55-56	3.1	41.4°	121.9°		of Dunsmuir. Near Mt. sta.
53	30	23-12-29	3.7	37° 54†	119° 02'	сЕо	f Yosemite.
	Dec						
4	1	04-46-12	2.4	37° 37'	122° 31'		f San Francisco. Felt San Mateo (Press).
47	1	06-01-38	2.9	40° 28'	121° 33'		f Mineral, IV at eral.
47	1	06-03-38	2.9	40° 28°	121° 33'		f Mineral, IV at eral.
47	1	06-26-54	2.2	40° 28'	121° 33'		f Mineral. Felt at eral.
2	1	10-24-57	4.3	39° 24'	118° 03'	c Nev	ada aftershock.
2	1	15-31-16	4.0	39° 11'	118° 07'	c Nev	ada aftershock.
54	3	00-49-16	2.5	37° 13'	122° 14'	a 15 Bla	miles S of Palo Alto. st?
Fel	t 5	06-50-00	_	40,45°	121.55°	d IV	at Mineral.
55	8	21-55-27	3.0	40° 26'	121° 27'	c NE	of Mineral.
56	10	04-16-30	3.0	36° 48°	121° 28'		of Hollister. IV 7 es S of Hollister.
57	11	20-10-38	3.5	36° 16†	120° 43'	c NE	of Coalinga.
3	12	18-16-34	4.0	39° 34'	118° 29'	c Nev	ada aftershock.
	12	19-41-20	4.2	43.4°	127.3°		miles W of Coos Bay,
58	15	08-52-30	2.3	38° 10'	121° 53'	ь 22	miles NE of Berkeley.
42	16				120° 52' les, and S		of King City. Felt el.

-		Time	Magni-	Lati- tude North	tude Qua	
4	19	19-55-10	2.3	37° 38'	122° 29' ь	S of San Francisco.
59	22	08-04-50	3,1	38° 20'	122° 38' b	SE of Santa Rosa.
60	22	Nevada.	This s	shock and		35 miles S of Fallon, e outside the region of hquakes.
60	22	12-06-54	4,6	38° 59'	118° 42° c	Aftershock of preceding.
4	23					S of San Francisco. Felt eley station).
4	24	03-33-04	2.8	37° 37'	122° 27' b	S of San Francisco.
4	25	19-04-50	2.3	37° 37'	122° 27° c	S of San Francisco.
8	29	08-19-34	2.1	37° 14'	121° 40' c	S of Mt. Hamilton.
61	29	13-33-17	7 3.4	36° 27'	121° 15' c	N of King City.
2	31	13-51-04	4.5	39° 00'	118° 02° b	Nevada aftershock,
12	31	18-17-48	3 2.3	37° 18'	121° 46′ b	W of Mt. Hamilton.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - June 1956

	Date 1956		agni-	tude	Longi- tude West	Qual-	Remarks
	Jan						
1	1	06-10-05	2.6	36.8°	121.6°	d	SW of Hollister.
2	2	20-21-50	2.4	37° 24'	121° 42'	Ъ	Near Mt. Hamilton.
3	3	15-34-45	3.5	39° 18'	118° 05'	c	Nevada aftershock.
Felt	4	05-23-00	-	39.35°	123.25°	d	V reported felt at Ukiah.
3	4	09-13-16	3.6	39.4°	118.0°	d	Nevada aftershock.
4	6	11-37-14	2.2	37° 55'	121° 58'	С	ENE of Berkeley.
2	9	07-01-24	1.5	37° 25'	121° 45'	Ъ	NW of Mt, Hamilton.
5	9						SW of San Francisco. IV at and Ingleside Districts.
6	10	08-37-24	4.1	41.5°	119.1°	d	60 miles N of Gerlach, Nevada.
	10	12-32-15	4.9	43,4°	127.3°	d	Off coast of Oregon.
	10	15-24-37		43,4°	127.3°	d	Coast of Oregon aftershock,
7	13	10-43-30	3.0	39° 23'	119° 43'	Ъ	12 miles SE of Reno, Nevada.
2	13	16-31-56	2,3	37° 25'	121° 44'	Ъ	NW of Mt. Hamilton.
2	14	00-43-21	2.5	37° 22'	121° 42'	Ъ	Near Mt. Hamilton.
2	14	09-54-49	2.5	37° 25'	121° 42'	Ъ	NW of Mt. Hamilton.
Felt	15	17-20-00	-	39.05°	118,05°	d	IV reported felt at Kaiser Mine, Nevada.
3	17	18-17-56	4.2	39° 30'	118° 02'	Ъ	40 miles E of Fallon, Nevada.
3 3	23	02-27-14	3.5	39.5°	118.0°	d	Nevada aftershock.
8	24	07-29-33	3.4	37.3°	118.8°	d	W of Bishop.
2	24	13-32-11	2.0	37° 29'	121° 46'	С	NW of Mt. Hamilton.

-	Date 1956 Jan		Richten Magni- tude			Qual- ity	Remarks
2	24	18-52-38	2.7	37° 25'	121° 47'	а	NW of Mt. Hamilton.
9	25	01-02-06	2.0	40.8°	122.4°	d	Shasta Reservoir.
CIT	26	21-04-16	3.4	37.42°	118.58°	С	W of Bishop.
3	28	22-55-26	4.2	39° 20'	118° 03'	С	40 miles ESE of Fallon, Nevada.
10	30	14-58-17	2.9	39.1°	119.0°	d	NE of Yerington, Nevada.
11	31	01-37-44	4.0	38° 15'	118° 55'	С	California-Nevada border, SW of Hawthorne, Nevada.
	Feb						
12	1	18-04-07	3.0	40.3°	124.8°	d	Off Cape Mendocino.
4	1	19-22-54	2.3	37° 56'	122° 02'	С	12 miles NE of Berkeley.
4	2	06-26-22	2.0	37° 59'	122° 01'	С	NE of Berkeley.
4	2	16-33-59	2.5	38° 00'	122° 04'	Ъ	NE of Berkeley.
13	3	00-35-18	2.9	39° 26†	120° 15'	Ъ	NW of Truckee.
2	5	18-29-08	2.5	37° 21'	121° 42'	Ъ	Near Mt. Hamilton,
3	6	11-19-03	3.8	39.5°	118.5°	d	Nevada aftershock.
3	6	18-41-47	3,6	39° 04'	118° 11'	С	Nevada aftershock,
14	7	00-04-54	2.1	38° 03'	122° 30'	а	18 miles N of San Francisco.
15	8	23-41-38	2.0	37° 15'	122° 18'	ь	SW of Palo Alto. Blast?
16	10	07-45-34	3.0	40.1°	122.5°	d	SW of Red Bluff.
2	10	10-10-14	2.8	37° 23'	121° 42'	а	NW of Mt. Hamilton.
17	10	18-39-34	1.5	37° 42'	122° 23'	а	S of San Francisco. One of a series of explosions.
18	12	12-06-03	3.5	40.3°	124.5°	d	SW of Ferndale.
4	13	21-36-38	2.3	37° 57'	122° 01'	С	ENE of Berkeley.
19	14	17-26-28	2.3	38° 33'	122° 33'	С	NE of Santa Rosa.
20	14	21-02-11	3.3	40° 30'	121° 34'	ь	10 miles N of Mineral.

_	Date 1956 Feb	Origin R Time M (GCT) t	agni-	tude	tude	e Q	ual- ty	Remarks
21	14	22-15-08	2.8	36.5°	121.	1°	d	SW of Llanada.
22	18	Felt over and Monte	an an rey co anyon,	ea of ounties 7-1/2	approxima. Maximal miles	mately mum in S of	y 13 nter	12 miles SSE of Hollister, 300 square miles of San Benito nsity V at Paicines. IV at lister, Paloma Station
22	19	00-05-08	2.6	36° 40)' 121°	19'	С	Aftershock.
22	19							Aftershock. Felt 7-1/2 miles (Carmel Valley).
22	19	00-10-33	2.8	36° 40)' 121°	18'	С	Aftershock.
22	19	00-38-14	2.6	36° 40)' 121°	18'	С	Aftershock,
22	19	01-16-27	2.3	36° 40)' 121°	18'	С	Aftershock,
22	19	02-52-56	2.6	36° 40)' 121°	18'	С	Aftershock,
22	19							Aftershock. Felt at Big Sur, ma Station (Carmel Valley).
22	19	10-25-48	3.2	36° 40)' 121°	18'	С	Aftershock.
22	21	01-57-49	2.8	36° 40)' 121°	18'	С	Aftershock.
22	21	05-20-29	2.9	36° 40)' 121°	18'	С	Aftershock.
2	21	21-40-05	2.4	37° 22	2' 121°	41'	С	Near Mt. Hamilton.
2	21	21-41-22	3.0	37° 22	2' 121°	41'	С	Near Mt. Hamilton.
23	24	03-24-15	3.0	39° 20)' 120°	05'	С	Near Truckee.
1	24	22-50-29	2.3	36° 50)' 121°	34 '	Ъ	W of Hollister.
24	25	00-11-42	2.4	38.4°	122.	4°	d	E of Santa Rosa.
	Mar							
2	3	22-36-57	1,8	37° 23	3' 121°	46 '	Ъ	NW of Mt. Hamilton.
25	5	19-46-49	3.8	40° 50	0° 124°	52 1	Ъ	40 miles W of Arcata.
26	7	11-09-30	2.1	37° 50	o' 121°	45 1	а	10 miles N of Livermore.
3	7	17-54-47	3.9	39° 4	3' 118°	00'	С	Nevada aftershock,

No.	Date 1956 Mar	Time M	agni-	r Lati- tude North	tude Q	ual	Remarks
26	8	07-11-08	2.7	37° 51'	121° 50'	Ъ	12 miles N of Livermore.
27	8						45 miles SE of Fallon, miles NW of Gabbs).
28	10	area of ap California Alderpoin	pprox a. M t, Ar	imately 2 aximum in cata, Car	500 square tensity V. lotta, Ett	mi N ers	S of Ferndale. Felt over an les of Humboldt County, o damage reported. V at burg, Ferndale, Fields Rio Dell and Weott.
28	10	06-03-21	3.6	40° 22°	124° 13'	С	Aftershock, Felt.
28	10	06-05-42	2.6	40.3°	124.2°	d	Aftershock.
29	10	14-07-56	4.2	39° 19'	118° 28'	С	20 miles SE of Fallon, Nevada. IV at Fallon.
20	11	07-49-18 Mineral.	2.8 Main	40° 28' shock of	121° 33' series of	b ab	8 miles N of Mineral. IV at out 70 shocks.
28	11	17-43-00	3.1	40° 18'	124° 17'	С	S of Ferndale, II at Scotia.
30	11	19-05-43	3.8	36° 33'	121° 11'	С	SE of Hollister. IV at Paloma.
30	12	01-24-47	3.1	36° 33'	121° 11'	С	Aftershock.
15	13	22-35-21	2.0	37.2°	122.3°	d	S of Palo Alto. Blast?
22	15	10-16-11	3.6	36° 37'	121° 20'	С	S of Hollister.
30	15	15-26-11	2.6	36.5°	121.2°	d	SE of Hollister.
31	16	21-44-10	3,5	40.9°	123.4°	d	E of Arcata.
3	18	00-27-06	3,6	39° 35'	118° 33'	С	Nevada aftershock.
20	18	10-17-41	3.5	40° 31'	121° 36'	С	10 miles N of Mineral. Felt.
20	18						10 miles N of Mineral. VI and Mineral.
32	19		id Lal	ke). IV a			40 miles NNE of Reno, Nevada Nevada. Also felt at Empire

24 20 19-32-07 2.0 38.4° 122.4° d 35 miles N of Berkeley.

_	Date 1956 Mar	Origin R Time M (GCT) t	agni-	tude	Longi- tude West	Qual-	Remarks
22	21	02-38-31	2,5	36.6°	121.3°	d	SE of Hollister.
2	21	20-14-08	2.4	37° 25'	121° 47	ъ	NW of Mt. Hamilton.
15	23	22-58-03	1,9	37° 14'	122° 13	° c	S of Palo Alto. Blast?
33	25	19-45-07	3.8	41.7°	125.9°	d	85 miles W of Crescent City.
34	31	00-49-18	2.0	38° 05'	122° 26	' Ъ	NW of Berkeley.
	Apr						
35	1	10-49-45	2,5	40° 45'	121° 40) b	S of Burney.
36	2	Also felt to the Pr College A	at E ess, ve, a	l Cerrito this eart nd Bancro	and Ber hquake c ft Way,	keley aused Berkel	NW of Berkeley. IV at Canyon. (phone reports). According a leak in a gas main at ley. Escaping gas caused a
		persisten					
37	2	14-53-47		39.0°	122,5°		ESE of Ukiah.
30	3	09-26-02	2.7	36° 27'	121° 14	' Ъ	SSE of Hollister.
38	4	00-53-28	2,2	38° 03'	122° 20) в	NW of Berkeley. Felt in Richmond (Press).
20	5						N of Mineral, Largest of a IV at Manzanita Lake,
19	5	(near St. were felt coastal r Slight da	Helen over egion mage : Helen	na). Thi an area of north reported. na, and Y	s shock of appro -central VI at	and it ximate Calif Angwir	12 miles NE of Santa Rosa ts aftershock at 04-29-32 ely 3000 square miles of the fornia. Maximum intensity VI. n-Sanitarium area, Calistoga, at Bolinas, Cotati,
19	5	04-29-32	4.2	38° 32'	122° 31	.' с	Aftershock. See preceding for felt reports.
19	5	04-32-29	2.5	38° 32'	122° 31	. c	Aftershock,
19	5	04-33-28	2,3	38° 32'	122° 31	. t c	Aftershock,
19	5	04-33-52	2.7	38° 32'	122° 31	. ' c	Aftershock.
19	5	06-17-49	2,5	38° 32'	122° 31	, c	Aftershock,

No.	Date 1956 pr		Richter Magni- tude		e t	Longi Lude Vest		al-	Remarks
39	8	06-15-31	2.4	37° 5	8' 12	21° 4	1' 1	Ь	NE of Berkeley.
40	8	06-47-14	3.8	40° 3	6' 12	24° 4	91 1	b	W of Ferndale.
3	9	04-42-25	4.3	39° 1	1' 11	18° 0	7 1		Fairview Peak, Nevada after- shock,
41	10	10-45-53	1.5	37° 5	0' 12	21° 5	51	С	Foreshock of 14-09-20.
41	10	10-52-39	2.9	37° 5	0' 12	21° 5	51	а	Foreshock of 14-09-20,
41	10	11-09-15	1.6	37° 5	0' 12	21° 5	51	С	Foreshock of 14-09-20.
41	10	11-20-54	1.8	37° 5	0' 12	21° 5	55	С	Foreshock of 14-09-20,
42	10	11-24-21	2.9	36° 2	6' 12	21° 2	9 *	С	SE of Monterey.
41	10	13-07-52	2,4	37° 5	0' 12	21° 5	31	C	Foreshock.
41	10	13-51-05	1.9	37° 5	50' 12	21° 5	31	С	Foreshock.
41	10	14-05-08	1.2	37° 5	50° 12	21° 5	31	С	Foreshock.
41	10	14-09-20 Felt in		37° 5 Creek		21° 5 Berke		а	12 miles NW of Livermore.
41	10	14-29-56	1.2	37.8°	12	21.9°		d	Aftershock.
41	10	16-25-14	1.7	37° 5	50,1 12	21° 5	53"	С	Aftershock.
41	10	17-44-41	2.4	37° 5	50' 1	21° 5	531	С	Aftershock,
41	10	17-52-52	2 1.6	37° 5	50' 1	21° 5	531	С	Aftershock,
43	10	20-53-23	L 2.9	36.3°	1	21.09	0	d	NE of King City.
19	11	13-12-17	7 3.3	38° 2	281 1	22° 2	29 *		E of Santa Rosa. IV in St. Helena-Angwin area.
19	11	13-14-45	5 2.8	38° 2	28' 1	22° 2	291	Ъ	Aftershock,
19	11	13-15-05	3.1	38° 2	28' 1	22° 2	291	Ъ	Aftershock,
15	12	15-43-56	5 1.9	37° 0	09' 1	22°]	13'	С	NW of Santa Cruz. Blast?
44	13	03-19-03	3 3.9	41.6	° 1	26.2	0	d	Off coast of Humboldt County.
45	14	19-01-5	1 3.2	4.1° 0	05' 1	23° 2	21'	С	NE of Arcata.

46 16 05-27-06 2.0 37° 17' 121° 33' a SE of Mt. Hamilton,

	Date 1956 Apr		lagni-	r Lati- tude North	tude (ual ty	
20	19	05-45-05	2.9	40.5°	121.5°	d	NE of Mineral.
47	19	06-58-57	1.8	37° 13'	121° 47'	С	SW of Mt. Hamilton.
48	19	14-03-42	2.0	37° 13'	121° 39'	С	S of Mt. Hamilton.
15	19	19-13-12	1.9	37° 09'	122° 14'	Ъ	NW of Santa Cruz, Blast?
49	20	20-26-51	3.2	40.4°	123.0°	d	S of Weaverville.
3	23	15-03-00	3.0	39.5°	118.0°	d	Fairview Peak, Nevada, aftershock,
50	25	01-46-22	2,2	36.7°	121.5°	d	SSW of Hollister.
51	25	13-17-51	1.8	37° 53'	122° 02†	Ъ	E of Berkeley.
24	25	23-57-54	1.9	38° 19'	122° 23'	Ъ	NW of Berkeley.
52	27	22-28-59	2.9	37° 30'	121° 42'	Ъ	N of Mt. Hamilton. IV at San Jose.
53	27	22-39-27	3.4	38° 13'	118° 00'	Ъ	W of Tonopah, Nevada.
22	28	11-03-38	2.7	36° 33'	121° 18'	С	SSE of Hollister.
22	29	04-19-35	2.9	36,6°	121.3°	d	SSE of Hollister.
54	29	07-36-22	3,0	39,5°	118.5°	d	Fairview Peak, Nevada, aftershock,
55	29	08-46-03	3,0	38° 44'	120° 09'	С	S of Lake Tahoe.
30	29	20-16-15	2.4	36.6°	121,2°	d	SE of Hollister.
56	30	03-05-12	2.1	37° 15'	121° 53'	а	SW of Mt. Hamilton.
	May						
21	1	15-06-33	2.5	36.5°	121.0°	d	SE of Hollister.
47	3	00-58-13	2.2	37° 15'	121° 42'	d	SW of Mt. Hamilton.
57	3	03-30-30	3.0	38° 26'	122° 32'	С	SE of Santa Rosa.
58	4	08-16-14	3.1	35° 45'	121° 04'	Ъ	NE of San Simeon.
2	5	18-33-47	2.6	37° 24'	121° 45'	а	NW of Mt. Hamilton.

Map No.		Time M	lagni-	r Lati- tude North	tude Q	ual ty	Remarks
2	5	21-59-09	2.4	37° 22°	121° 47'	а	NW of Mt. Hamilton.
2	8	12-02-05	2.1	37° 20°	121° 41'	Ъ	W of Mt. Hamilton,
15	8	22-55-04	2.0	37° 13'	122° 13'	Ъ	14 miles S of Palo Alto.
3	9	06-57-19	3.0	39° 32†	118° 03'	С	Fairview Peak, Nevada, aftershock.
59	10	04-07-04	2.4	36° 57'	121° 41'	Ъ	NW of Hollister.
60	10	05-03-18	3.8	39.9°	125.2°	d	SW of Ferndale.
20	10	09-07-56	3,3	40° 30°	121° 33'	С	N of Mineral. V at Mineral.
61	10	17-51-05	3.0	40.5°	121.8°	d	NW of Mineral. IV at Mineral.
2	12	13-28-24	2,2	37° 22'	121° 46†	a	NW of Mt. Hamilton.
29	13	Fallon, I	I 5-1	/2 miles	W of Fallo	n.	SE of Fallon, Nevada. V at Also felt at Austin and s SE of Fallon).
20	15	a minor s	warm	centered	near Lasse	n P	Felt at Mineral. Largest of eak. A more complete discus-lowing this list.
20	15	19-37-53	2,8	40° 32'	121° 29'	С	Felt at Mineral.
20	15	19-42-44	3,4	40° 32'	121° 29'	С	Felt at Mineral.
Felt	17	18-57-00	-	37.25°	122.0°	d	III reported felt at Los Gatos.
Felt	18	10-30-00	-	40,53°	121.48°	d	IV Manzanita Lake.
62	20	06-05-39	3.7	40° 30°	125° 06'	Ъ	W of Ferndale.
54	22	23-51-07	3.8	39° 27'	118° 27'	С	E of Fallon, Nevada.
63	23	16-54-00	2.4	36° 55'	121° 59'	С	Monterey Bay,
20	24	05-10-56	3.0	40.5°	121.5°	d	N of Mineral.
48	24	22-49-10	2.3	37° 12'	121° 37'	С	S of Mt. Hamilton.
14	25	00-01-09	1.4	38° 00'	122° 26'	С	NW of Berkeley.

4 25 12-04-01 2.1 37° 58' 121° 58' a NE of Berkeley.

Map Date No. 1956 May		tude	tude Qual	
Felt 26	09-27-00 -	36.75°	121.4° d	IV reported felt 7.5 miles S of Hollister.
<u>14</u> 26	19-32-23 2.2	37° 57'	122° 33' ь	NW of Berkeley.
<u>26</u> 28	18-00-41 2.5	37° 49'	121° 50' a	N of Livermore.
64 28	23-22-25 3.1	40° 26'	124° 32' ь	SW of Ferndale.
65 29	07-08-56 2.5	41.1°	124.0° d	NNE of Arcata.
<u>3</u> 30	19-19-36 3.9	39° 24'	118° 01' b	Fairview Peak aftershock.
Felt 31				III reported felt at Eureka), 2230, 2241 and 2330 on June 1.
June				

	June						
66	1	02-06-01	3.8	41° 13'	125° 16'	С	WNW of Arcata.
67	3	21-41-36	2.9	40° 12'	121° 34'	С	S of Mineral.
68	4	13-05-08	2.6	37° 39'	121° 40'	а	E of Livermore,
69	5	01-26-18	2.2	38° 11'	121° 51'	С	NE of Berkeley.
52	5	16-28-09	2.3	37° 32'	121° 41'	Ъ	N of Mt. Hamilton.
70	6	23-50-07	4.0	41.2°	118.5°	d	NW Nevada.
71	7	15-52-45	3.1	40° 26'	121° 21'	С	E of Mineral.
Felt	8	22-25-00	-	37,8°	122.1°	d	IV reported felt at Canyon.
72	11	00 /0 27					
	TT	00-48-37	3.2	36° 00'	120° 58'	С	SE of King City.
22	14	04-17-40			120° 58'	c d	SE of King City. S of Hollister.
<u>22</u> <u>50</u>			2.3	36,6°		d	
	14	04-17-40 12-31-14	2.3	36,6°	121.4°	d c	S of Hollister.
50	14 15	04-17-40 12-31-14	2,3 2,6 2,8	36,6° 36° 40' 36,3°	121.4° 121° 30'	d c d	S of Hollister. SSW of Hollister.
50 73	14 15 15	04-17-40 12-31-14 23-42-03 21-12-02	2.3 2.6 2.8 2.5	36.6° 36° 40' 36.3° 40° 18'	121,4° 121° 30' 121,8°	d c d	S of Hollister. SSW of Hollister. S of Monterey.

No.	Date 1956 June		ichten agni- ude			Qual- ity	Remarks
22	18	05-52-17	2.5	36° 35'	121° 18'	а	SE of Hollister.
22	18	22-30-08	2.5	36.6°	121.4°	d	SE of Hollister.
74	19	18-32-57	2.3	38° 17'	122° 31'	Ъ	SE of Santa Rosa.
75	20	18-34-35	3.9	40° 43¹	124° 58'	Ъ	W of Arcata.
15	21	21-25-25	1.4	37° 11'	122° 09'	С	S of Palo Alto. Blast?
3	23	10-45-09	3.5	39° 10'	118° 09'	Ъ	Fairview Peak, Nevada, aftershock.
22	23	20-03-20	3.3	36° 31'	121° 18'	Ъ	WSW of Llanada,
46	24	07-23-14	2.2	37° 17'	121° 40'	a	S of Mt. Hamilton,
59	24	12-47-48	2.6	36° 58'	121° 46'	Ъ	E of Santa Cruz.
30	24	23-46-15	2.7	36° 33¹	121° 09'	С	WSW of Llanada.
3	28	02-17-08	3.2	39.5°	118.1°	d	Fairview Peak, Nevada, aftershock.
20	28	21-57-31	3.1	40° 30°	121° 36'	С	NW of Mineral,
20	29	05-31-21	2.9	40° 29'	121° 36'	С	NW of Mineral,

EXPLOSIONS IN SAN FRANCISCO BAY

Between October 1954 and March 1956 a number of explosive charges were set off in connection with a project of the State Division of Highways to relocate the Bayshore Freeway through the tidal mud flat between Candlestick Point and Sierra Point in the northeastern corner of San Mateo County.

These explosions were recorded on the seismographs at Berkeley, San Francisco, Palo Alto, and Mt. Hamilton. Determination of Richter magnitudes by methods applicable to local earthquakes yielded magnitudes from 1.1 to 1.8 for these explosions. The District IV Office of the Division of Highways has kindly supplied the approximate times of each of their explosions, which were set off in the Bay muds in order to obtain uniform displacement of the underlying Bay mud as embankment construction progressed. All shots during the 18 months period were fired between 1 mile and 1.9 miles south of the San Francisco-San Mateo County line at an approximate elevation of 30 feet below sea level. In the following list, origin times were determined instrumentally from seismograms.

Date 1955	Origin Time G.C.T.	Date 1955	Origin Time G.C.T.
and produced and produced.	h. m. s.		h. m. s.
Apr. 4	17 34 32	Aug. 22	17 17 39
7	22 59 19	29	17 05 26
- 11	18 48 19	Sept. 6	20 36 50
19	00 09 07	13	18 02 41
26	21 31 30		
May 2	19 13 35	1956	
9	17 42 53	Feb. 10	18 39 54
16	21 36 12	10	21 57 43
31	19 09 30	10	22 05 (not
June 6	17 54 08		recorded)
15	20 55 48	13	22 00 14
16	21 10 11	24	21 36 39
22	18 04 33	27	00 15 57
23	17 25 47	Mar. 1	17 34 15
27	18 05 09	2	17 46 42
28	22 21 56	2	18 00 (not
July 12	18 01 34		recorded)
18	20 59 10	5	21 35 06
Aug. 1	18 03 22	12	00 29 49
8	15 56 52	20	19 12 11
15	16-45-06		

The approximate location of these explosions is shown on the epicenter map $(37^{\circ} 40^{\circ} \text{ N}, 122^{\circ} 23^{\circ} \text{ W})$. During the period covered by this report a number of additional disturbances with similar seismographic appearance occurred in the same area. The Division of Highways suggests that these shocks may have been caused by other blasting by scavenger companies operating nearby. These disturbances which have not been confirmed as Freeway construction blasts have been listed separately in the list of local shock epicenters.

LASSEN PEAK EARTHQUAKE SWARM, MAY 1956

The earthquake of May 15, 1956 at 18-36-48 G.C.T. was the largest of a minor swarm of earthquakes centered near Lassen Peak. By the end of May 25, the activity had again subsided to the normal level for the area.

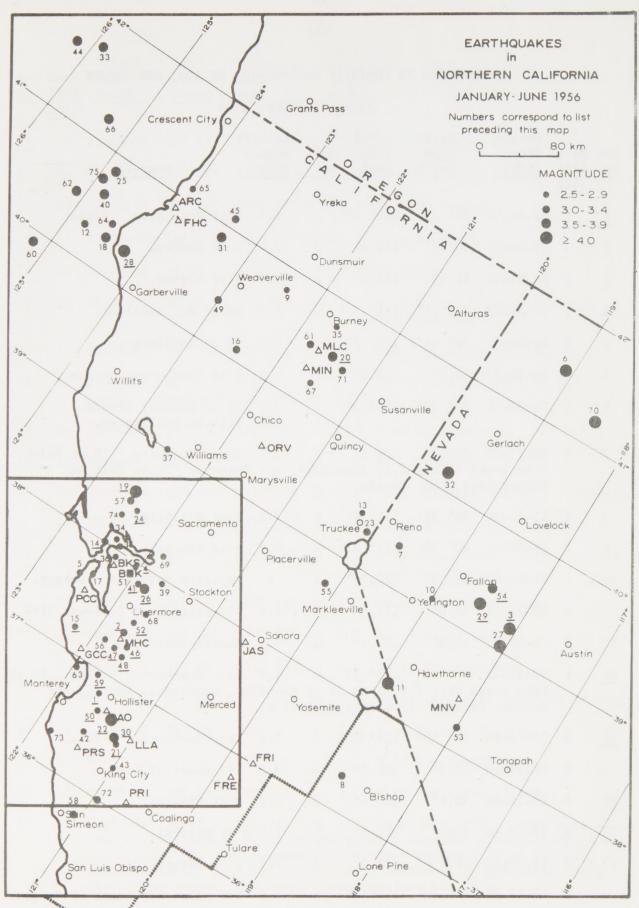
Table I below lists the dates, origin times, and Richter magnitudes of the larger shocks of the swarm. Table II gives a count, by six-hour periods, of earthquakes large enough to register on the N-S Wood-Anderson seismograph at Mineral with an amplitude of at least one millimeter. Mineral is about 30 km from the epicenter of the main shock, so that the smallest shocks counted in Table II are of Richter magnitude of approximately 1-1/2.

Table I

Date 1956	Origin Time (G.C.T.)	Magnitude	Date 1956	Origin Time _(G.C.T.)	Magnitude
May 15	17 40 28	2.6	May 16	05 34 02	2.7
15	18 36 48	3.6	16	05 53 45	2.8
15	18 50 12	2.4	16	08 25 36	2.7
15	19 37 53	2.8	17	23 29 23	3.2
15	19 42 44	3.4	19	02 30 03	2.6
15	21 16 46	3.0	19	03 59 35	3.1
15	21 39 51	2.9	19	06 26 56	2.4
16	03 54 38	2,3	24	05 10 56	3.0

_		-		-	-
T	0	-	Le	- 1	- 1
_	a_{1}	J			

		runshmeter.	The state of the s					
Date 1956	Oh to 6h G.C.T.	6 ^h to 12 ^h G.C.T.	12 ^h to 18 ^h G.C.T.	18 ^h to 24 ^h				
May 15	1	4	3	30				
16	26	16	7	6				
17	4	11	10	4				
18	5	6	4	7				
19	12	5	4	8				
20	8	7	3	9				
21	12	17	3	3				
22	3	1	1	3				
23	4	1	2	2				
24	4	3	2	1				
25		2						



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1956

Map D			Lati- tude North		Qual-	Richt Magni tude	
1	2	01-44-52	37° 12'	122° 07'	С	1.5	S of Palo Alto. Blast?
2	3	01-50-39	40.7°	121.6°	d	2.4	S of Burney.
2	3	06-05-32	40.7°	121.6°	d	2.4	S of Burney.
3	3	17-28-43	37° 24°	121° 51'	Ъ	2.3	NW of Mt. Hamilton.
4	3	22-26-31	36° 48'	121° 29'	С	3.0	SW of Hollister.
5	4	03-10-27	38.5°	119.2°	d	3.3	W of Hawthorne, Nevada.
6	4	04-35-36	39° 20'	118° 30'	С	3.7	SE of Fallon, Nevada. Felt at Stillwater.
7	4	05-57-28 Powerhous Silver La	e (P.G.&	E.), June			SE of Yosemite. IV at Balch Yosemite. Also felt at
8	4	20-21-30	36° 32'	121° 25'	С	3.1	S of Hollister.
9	5	19-58-04	40° 30'	121° 37'	С	2.6	N of Mineral.
Felt	5	21-18-00	38.35°	120.75°	d	-	Reported felt near Jackson.
	6	02-21-55	42.0°	127.0°	d	4.9	140 miles W of Crescent City.
10	6	03-30-22	40.8°	122.4°	d	2.4	Shasta Reservoir.
11	6	Dead Hors	e Well (E of 1	Rawhid	Near Hawthorne, Nevada. IV at e), Hawthorne, Luning, and
11	6	07-23-40	38° 30'	118° 34'	С	3.6	Near Hawthorne, Nevada.
-	6	08-13-10	42.3°	126.5°	d	3.5	Off coast of Oregon.
12	6	16-16-46	40.6°	121.6°	d	2.1	N of Mineral.
12	6	17-47-16	40.5°	121.5°	d	2.2	N of Mineral.
13	7	11-17-27	40.9°	121.1°	d	2.7	E of Burney.
-	8	02-01-29	42° 12'	126° 22'	С	3.9	100 miles off coast of Oregon.

No.	Date 1956 July	Time (GCT)	tude	Longi- tude Qual- West ity	Magni.	
14	9	23-03-03	37° 57'	122° 00° c	2.0	NE of Berkeley.
14	10	04-34-21	37° 59'	122° 00° b	2.6	NE of Berkeley.
15	10	07-18-46	36° 54'	121° 31' b	2.8	NW of Hollister.
2	11	19-04-55	40° 41'	121° 32' b	2.9	N of Mineral.
16	12	11-24-15	39.8°	120.5° d	2.9	SE of Quincy.
17	13	05-32-52	40.8°	123.6° d	3.5	E of Arcata. Felt at Korbel and Blue Lakes.
11	13	06-03-21	38° 28'	118° 41' c	3.8	Near Hawthorne, Nevada.
18	13			121.4° d s at 2308 an		SE of Burney. Felt at Hat
8	14	13-36-28	36° 33'	121° 21' b	2.7	S of Hollister.
19	15	04-44-23	40° 33'	121° 21' b	2.2	NE of Mineral.
20	15	15-50-04	37° 40'	123° 13' d	2.1	W of Farallon Islands. Explosion?
21	16	05-26-36	37° 49'	122° 01' a	2.3	SE of Berkeley.
22	18	23-03-07	38° 39'	122° 44' a	3.5	N of Santa Rosa, Felt at Santa Rosa and Windsor,
23	20	02-07-50	38° 45¹	117° 45' c	3.7	NW of Tonopah, Nevada.
24	20	14-00-49	37° 06'	121° 30' b	2.2	NW of Hollister.
3	20	15-37-15	37° 26'	121° 49' a	2.0	NW of Mt. Hamilton.
25	21	01-52-00	40° 16'	124° 22' b	3.9	SW of Ferndale, Felt at Ferndale.
26	21	10-09-18	39° 28'	118° 05' d	3.2	E of Fallon, Nevada.
27	22	02-13-23	37° 41'	122° 28' d	2.1	S of San Francisco.
28	22	08-08-24	38° 26'	119° 03' b	3.4	W of Hawthorne, Nevada.
29	23	area of Californi Chualar (4000 squan La. No da Canyon, Go	re miles of t amage reporte onzales, Gree	the coa ed. Ma enfield	NW of King City. Felt over an astal sections of west-central aximum intensity V at Big Sur, I, 7 miles S of Hollister, King San Juan Bautista.

Map Date No. 1956 July	(GCT)	Lati- tude North	tude (Magn	1
30 23	08-20-37	36.5°	121.4°	d	3.1	Aftershock.
Felt 25	04-52-00	37,25°	120.45°	d	-	Reported felt 3.5 miles E of Merced.
<u>31</u> 25			122° 06' nd Fairfi		2.9	NE of Berkeley. Felt at Napa,
30 26	00-30-08	36° 35'	121° 26'	Ъ	2.9	S of Hollister.
<u>32</u> 26			118° 27' rater, Nev		5.1	E of Fallon, Nevada. Felt at
33 26	11-29-59	40° 27'	124° 18'	С	3.2	S of Ferndale.
34 28	22-46-38	36° 41'	120° 57'	С	3.0	N of Llanada.
35 31	15-59-14	37° 42†	122° 18'	С	1.7	S of San Francisco.
Aug						
Felt 1	16-03-00	37.75°	122.5°	d	-	Reported felt in San Francisco.
<u>1</u> 1	21-47-00	37° 09'	122° 14'	Ъ	2.3	S of Palo Alto.
36 2	01-15-16	40° 25'	124° 05'	С	3.0	SE of Ferndale,
<u>37</u> 2	16-23-57	36° 55'	121° 42'	Ъ	3.1	NW of Hollister.
Felt 2	22-05-00	37.75°	122,5°	d	-	Reported felt in San Francisco.
<u>19</u> 3	03-39-41	40.6°	121.4°	d		NE of Mineral, IV at Manzanita Lake.
Felt 3 38 3	15-55-00 18-21-25		122,5° 121° 28'		3.2	Reported felt in San Francisco.
39 6	01-02-12	39° 05'	118° 03'	Ъ	3.4	SE of Fallon, Nevada.
27 6	15-47-48	37° 41'	122° 25'	С	1.8	S of San Francisco.
<u>38</u> 7	07-03-29	40.5°	121.5°	d	3.2	Near Lassen Peak, Felt at Manzanita Lake,
40 9	21-34-12	37° 46'	122° 12'	a	2.2	SE of Berkeley.
26 10	13-45-21	39° 20'	118° 02'	Ъ	3.8	E of Fallon, Nevada.
41 10	19-26-00	38° 02'	122° 27'	Ъ	1.9	NW of Berkeley. Felt in Richmond.

Richmond.

-	Date 1956 Aug	Origin Time (GCT)	Lati- tude North		Qual- ity	Richt Magn: tude	i-
42	10	23-24-03	35.9°	121.3°	d	3.0	SW of King City.
43	12	04-04-06	38.1°	117.9°	d	4.0	W of Tonopah, Nevada.
44	14	05-32-12	37° 16'	121° 41	ъ	2.2	SW of Mt. Hamilton.
45	19	09-16-56	38.9°	118.3°	d	3.8	NE of Hawthorne, Nevada.
46	20	05-10-33	36° 29'	121° 29	Ъ	3.2	S of Hollister. Near Gonzales. IV at Pinnacles National Monument.
32	21	18-55-42	39° 32'	118° 27	C	3.5	E of Fallon, Nevada.
47	23	15-25-17	38.9°	122.8°	d	2.3	SE of Ukiah.
14	23	18-43-00	37° 54'	122° 00	С	2.1	NE of Berkeley.
-	30	05-24-52	40.7°	126.4°	d	5.3	Off Cape Mendocino.
48	30	14-00-24	37° 29'	121° 47	Ъ	2.7	NW of Mt. Hamilton.
	Sep						
-	1	19-16-29	40.9°	126.6°	d	3,8	W of Arcata.
49	2	13-03-35	37° 27'	121° 46	' a	2.2	NW of Mt. Hamilton.
49	2	14-17-11	37° 25'	121° 43	' Ъ	3.4	NW of Mt. Hamilton. IV at San Jose.
27	4	21-34-42	37° 38'	122° 26	Ъ	1.8	S of San Francisco.
27	4	23-48-01	37° 42'	122° 30	C	1.7	S of San Francisco.
49	5	16-22-29	37° 27'	121° 45	Ъ	2.2	NW of Mt. Hamilton.
50	7	23-57-02	38° 07'	122° 26	c	1.6	NW of Berkeley.
51	8	15-27-51	38.4°	119.4°	d	2.5	SE of Markleeville.
-	10	04-30-16	40.5°	127.2°	d	4.5	W of Arcata.
	14	09-22-12	40° 28'	126° 05	С	4.2	W of Arcata.
36	14	10-01-17	40.4°	124.1°	d	3.2	SE of Ferndale.
49	14	14-28-32	37° 25'	121° 46	a	2.3	NW of Mt. Hamilton.
52	15	00-34-37	36.3°	120.3°	d	2.7	N of Coalinga.

Map Date No. 1956 Sep		Lati- tude North	tude Q	ual-	Rich Magn tude	1-
53 15	12-21-49	36° 36'	121° 31'	Ъ	3.2	SSW of Hollister.
<u>27</u> 17	19-39-02	37° 41°	122° 28'	а	2.0	S of San Francisco.
41 17	23-46-16	37° 59†	122° 27'	Ъ	2.4	NW of Berkeley.
<u>12</u> 18	13-52-06	40° 35'	121° 35'	С	2.9	Near Lassen Peak.
49 20	04-43-00	37° 21'	121° 44'	Ъ	2.0	NW of Mt. Hamilton.
49 20	07-41-11	37° 21°	121° 42'	Ъ	2.0	NW of Mt. Hamilton.
Felt 23	07-15-00	37.45°	118.8°	d		IV Long Valley Dam (20 miles NW of Bishop).
27 24	16-50-26	37° 42†	122° 25'	С	1.8	S of San Francisco. Blast?
39 25	04-53-08	39° 07'	118° 05'	С	3.8	SE of Fallon, Nevada.
54 26	17-53-26	41° 45†	125° 21'	С	4.1	NW of Arcata.
55 26	18-47-52	38° 25°	122° 21'	Ъ	2.5	N of Berkeley.
56 29	16-49-47	40° 20°	124° 27'	С	3.1	SW of Ferndale.
48 30	04-31-17	37° 27'	121° 53'	b	2.9	NW of Mt. Hamilton.
Oct						
<u>21</u> 2	20-57-53	37.7°	122.1°	d	1.8	SE of Berkeley.
38 4	of a mino	r swarm w	121° 29' hich commen tly for abo	iced a	at 06	NE of Mineral. Largest shock 647 GCT, October 4, and con-
57 6	11-38-51	38° 38'	119° 29'	Ъ	3.4	E of Markleeville.
<u>36</u> 6	12-30-42	40° 25†	124° 00°	b	3.3	SE of Ferndale. IV at Phillipsville.
<u>26</u> 6	14-19-17	39° 31'	118° 06'	Ъ	4.0	E of Fallon, Nevada.
58 7	02-38-19	37° 49†	121° 50'	С	3,6	N of Livermore. Felt at San Ramon, Berkeley, and Oakland.
<u>59</u> 7	18-12-04	36.6°	121.2°	d	2.6	W of Llanada,
44 9	09-01-59	37° 15'	121° 39'	Ъ	3.0	S of Mt. Hamilton.

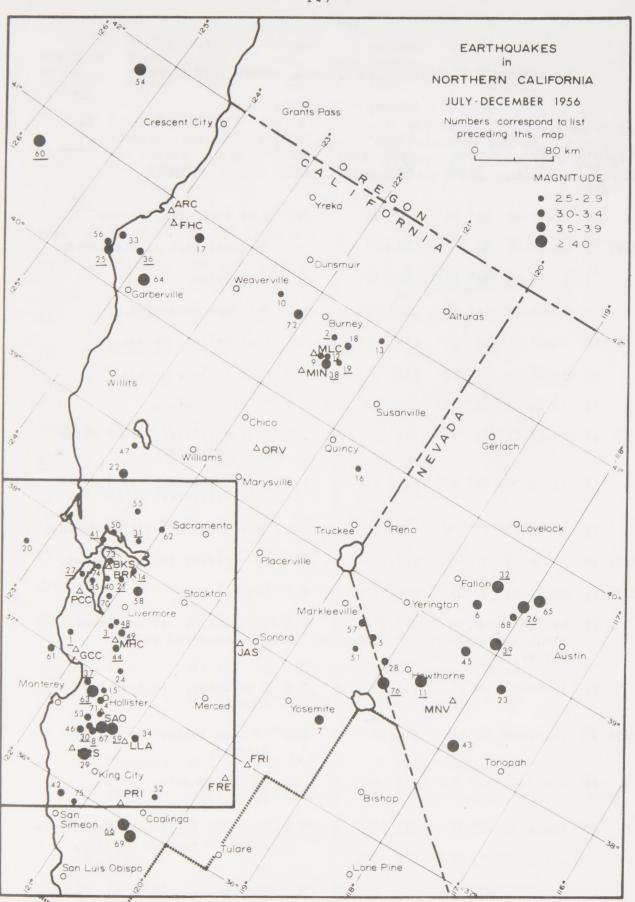
Map No.		(GCT)	Lati- tude North	Longi- tude Qu West it	a1-	Richt Magni tude	
37	10	12-53-51	36° 51'	121° 46'	С	3.1	W of Hollister.
60	11	ally repo County. intensity and Shady	rted felt Outside o at Bucks Cove, Or nnell, Eu	over a la f this are Creek Pow egon. Max reka, Fern	nd a a, t erho	rea o he sh use i inte	100 miles W of Ferndale. Gener- of 3500 square miles of Humboldt cock was reported felt with slight on Plumas County, and at Medford consity V. V at Bayside, Blue olds Landing, Fortuna, Korbel,
60	11	17-18-19	40° 45'	125° 48'	С	4.8	Aftershock. Felt,
60	11	17-22-30	40.7°	125.8°	d	4.8	Aftershock. Felt.
60	11	19-38-58	40.7°	125.8°	d	4.3	Aftershock.
Felt	12	09-25-00	40,6°	124.1°	d	-	III reported felt at Carlotta.
Felt	13	19-43-00	40,85°	124.15°	d	-	IV reported felt at Eureka.
60	13	22-55-23	40° 45'	125° 48'	С	4.3	Aftershock of 1648 event, Oct. 11.
60	15	09-04-15	40.7°	125.8°	d	3,6	Aftershock of 1648 event, Oct. 11.
41	16	00-33-27	38° 03'	122° 32'	С	1.9	N of San Francisco.
49	17	22-48-04	37° 24'	121° 44'	Ъ	2.5	NW of Mt. Hamilton.
	18	07-15-27	42,5°	126.2°	d	4.2	Off Cape Blanco, Oregon.
	18	09-11-41					Cape Blanco aftershock,
59	19	12-32-03	36° 39†	121° 14'	С	4.1	W of Llanada. Felt on Monterey Peninsula.
	19	23-58-31	42.5°	126.6°	d	4.7	Off Cape Blanco, Oregon.
61	21	land area	of 150 s	quare mile	s of	Sant	W of Santa Cruz, Felt over a a Cruz County, Intensity IV at Mt, Hermon and Santa Cruz,
38	21	20-33-01	40,5°	121.5°	d	2.7	Near Lassen Peak.
38	23	11-22-56	40,4°	121.5°	d	2.9	Near Lassen Peak,
41	27	00-05-20	38° 05'	122° 32'	С	2.6	N of San Francisco.
59	27	23-03-27	36° 38'	121° 10'	С	2.9	W of Llanada.

Map Date No. 1956 Nov		tude	Longi- tude Q West i	ual-	Magn	i-
1 2	22-45-22	37° 09'	122° 17'	С	2,3	NW of Santa Cruz. Blast?
62 3	09-00-30	38.4°	122.0°	d	2.6	SW of Sacramento.
Felt 4	04-37-00	36.75°	121.4°	d	-	II reported felt 7.5 miles S of Hollister.
<u>63</u> 5	20-17-20	36° 49'	121° 37'	С	3.0	W of Hollister.
<u>31</u> 6	15-37-13	38.2°	122.2°	d	2.3	N of Berkeley.
49 7	13-09-01	37° 29°	121° 45'	С	2.5	NW of Mt. Hamilton.
59 7	23-21-36	36° 40°	121° 12°	С	3.4	W of Llanada.
59 7	23-40-34	36.7°	121.2°	d	2.6	W of Llanada.
<u>63</u> 8	03-41-02	36° 47°	121° 40'	С	3.0	SW of Hollister. Felt at Hollister.
64 10	09-06-34	40° 13'	123° 48'	Ъ	4.1	SE of Ferndale. V at Eureka, IV at Phillipsville.
10	18-09-18	42.5°	126.6°	d	3	Off Cape Blanco, Oregon.
65 10	20-27-53	39.6°	117.9°	d	4.1	E of Fallon, Nevada.
CIT 12	10-13-00	36.3°	120,1°	С	3,3	NE of Coalinga.
Felt 14	13-49-23	37.47°	118.82°	С	3.7	V at Long Valley Dam (20 miles NW of Bishop).
66 16		000 squa	re miles.			SW of Coalinga. Felt over an ty VI at Mee Ranch (Lonoak),
16	08-26-10	41° 02'	116° 27°	Ъ	4.7	Northeastern Nevada.
66 19	13-53-53	35° 59°	120° 34°	С	3.3	SW of Coalinga. III at Adelaida (15 miles W of Paso Robles).
67 22	16-43-58	36.6°	121.3°	d	4.2	W of Llanada. IV at Big Sur and 7-1/2 miles S of Hollister.
23	02-51-40	42.8°	126.4°	d	3.2	Off Cape Blanco, Oregon.
38 25	08-41-38	40° 28°	121° 32'	a	3.5	Near Lassen Peak,
38 28	16-34-18	40° 30'	121° 30'	Ъ	2.8	Near Lassen Peak.

14 30 12-55-17 37° 59' 122° 01' a 2.6 NF of Berkeley Felt at Concord

Map Date No. 1956 Dec	(GCT)	tude	tude Q	ual-	Rich Magr tude	i-
63 1	land area of west-c reported.	of appro entral Ca V at Ar	ximately 3 lifornia.	,200 Max:	squa imum	W of Hollister. Felt over a are miles of the coastal area intensity V. No damage City, Morgan Hill, San Jose,
41 1	19-55-12	38° 02'	122° 30'	b	2.0	N of San Francisco.
68 3	14-48-08	39° 22'	118° 05'	С	3.0	E of Fallon, Nevada.
<u>39</u> 5	18-05-15	39° 08'	118° 04'	Ъ	4.1	E of Fallon, Nevada.
<u>39</u> 6	05-47-23	39° 12'	118° 07'	С	3.9	E of Fallon, Nevada.
26 7	04-22-58	39° 39'	118° 00'	С	3.9	E of Fallon, Nevada.
CIT 7	04-29-49	37.5°	118.9°	С	3.3	NW of Bishop.
26 7	07-12-52	39.5°	118.0°	d	3.6	E of Fallon, Nevada.
69 11	10-56-53	35° 53'	120° 28'	С	4.1	Near Parkfield.
<u>63</u> 11	16-01-50	36° 53'	121° 33'	С	3.0	W of Hollister.
70 13	02-35-16	37° 38'	122° 03'	а	1.5	SE of Berkeley. Felt at Hayward.
Felt 15	12-30-00	38.6	119.5°	d	-	Reported felt Coleville (time uncertain).
71 17	06-35-51	36.7°	121.4°	d	2.6	S of Hollister.
<u>3</u> 18	12-30-51	37° 26'	121° 52'	С	2.9	NW of Mt. Hamilton.
72 19	Whitmore.	III at	Ono. Also	felt	t at	15 miles E of Shasta. V at Cottonwood, Kilare, Pit and Redding.
73 20	00-27-35	37° 55'	122° 17'	а	2.1	Near Berkeley. Felt at Berkeley.
74 22	11-09-55	37° 49'	122° 22'	а	2,1	Near Treasure Island, San Francisco Bay.
75 28	13-39-37	35.9°	121.1°	d	2.6	NE of San Simeon.
<u>25</u> 29	09-42-44	40° 17'	124° 24†	Ъ	3.3	Near Punta Gorda.
41 29	22-12-23	38° 00'	122° 30'	а	1.9	N of San Francisco. Blast?

No.	Date 1956 Dec	Origin Time (GCT)	Lati- tude North	0	Qual-	Richter Magni- tude	Remarks
76	31	17-36-16	38° 16'	118° 55'	Ъ	3.8 Hawthorn	ne foreshock.
76	31	17-37-45	38° 15'	118° 56'	Ъ	5.0 Hawthorn	ne foreshock.
76	31	Reported Nevada and the locat	felt over d eastern ion S of	an area Califorr Hawthorne	of 600 nia. l where	00 square mile Maximum intens	sity VI assigned to eported two cracks



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - June 1957

Map Dat No. 195	7 (GCT)	Lati- tude North	Longi- tude Qual- West ity	Richter Magni- tude	Remarks
1 1	05-10-36	38° 16'	118° 43' c	3,8 S	of Hawthorne, Nevada.
Felt 1	09-25-00	35.5°	120.65° d	- Re	ported felt at Atascadero.
2 7	12-39-00	39° 15'	122° 38' c	3.3 E	of Ukiah.
3 8	00-46-43	40° 20'	125° 03' ь	3.7 Of	f Cape Mendocino.
4 10	03-37-54	39° 25'	118° 04° c	3.7 E	of Fallon, Nevada.
4 12	13-35-52	39° 20'	118° 05' c	3.8 E	of Fallon, Nevada.
<u>5</u> 12	15-18-11	38° 00'	122° 00' c	2.5 NE	of Berkeley.
<u>6</u> 12	23-05-11	36° 34'	121° 23' b		of Hollister. IV 7 miles of Hollister.
<u>6</u> 12	23-14-30	36° 32'	121° 27' b		of Hollister. IV 7 miles of Hollister.
4 13	19-35-29	39° 30'	118° 05' c	4.0 35	miles E of Fallon, Nevada.
Felt 19	11-36-00	37.8°	121.1° d	- IV	reported felt at Canyon.
CIT 21	04-01-03	37.63°	118,55° d	3.5 N	of Bishop.
<u>7</u> 22	Glenhaven		ille, Lakeport		of Ukiah. IV at Finley, e, Nice and Scotts
<u>7</u> 22	19-03-10	39.1°	122.9° d		of Ukiah. Felt in Lake
Felt 25	15-07-18	37.8°	118.8° d		Long Valley Dam (NW of shop).
<u>8</u> 26	17-37-27	40° 24'	124° 01' b		of Ferndale. II at trolia.
<u>9</u> 29	04-11-31	37.3°	121.7° d		of Mt. Hamilton. Small fore- ock 45 seconds earlier.

Map I			tude	tude Q		Rich - Magn	ni-
	29	Simeon, the coast	Felt over al areas	a land ar of west-ce	ea d	of appal Cal	Off California coast NW of San proximately 5000 square miles of lifornia. Intensity V at Big, King City, Lucia, Marina, and
<u>I</u>	Feb						
Felt	4	10-00-00	37.65°	121.0°	d	-	IV reported felt at Modesto.
10	4	15-15-30	38° 00'	122° 13'	С	1.3	N of Berkeley. III in the Berkeley-Oakland area.
11	5	12-02-33	36° 39'	121° 18'	Ъ	2,8	SE of Hollister.
12	8	04-45-38	36,5°	121.2°	d	2,8	N of King City.
Felt	8	21-20-00	36.5°	122.0°	d	-	Sharp shock felt Monterey Peninsula (BSSA),
Felt	9	08-10-00	35,5°	120.65°	d	-	IV reported felt at Atascadero.
13	9	16-38-07	41° 10°	126° 18'	Ъ	5.4	115 miles WNW of Arcata.
13	9	17-38-25	41° 12'	126° 17'	Ъ	4.7	Aftershock,
14	10	08-39-38	38.3°	119.4°	d	3.0	SE of Markleeville.
15	11	07-54-54	36° 58'	121° 46'	Ъ	2.5	E of Santa Cruz.
CIT	14	10-30-27	36.0°	120.6°	С	3.6	W of Coalinga.
16	14	13-03-48	37° 25'	121° 46'	Ъ	2.7	NW of Mt. Hamilton. IV at San Jose.
17	15	08-26-07	36° 56'	121° 39'	Ъ	2.9	WNW of Hollister.
17	15	10-39-13	36° 56'	121° 39'	Ъ	2.7	Aftershock.
18	16	02-22-02	38° 35'	122° 12'	С	2.4	ENE of Santa Rosa.
CIT	17	03-45-15	37.2°	118,5°	d	3,5	Near Bishop.
19	18	19-05-03	41,0°	124.2°	d	2.7	NW of Arcata. Felt at Eureka.
20	28	00-26-38	41.7°	125.8°	d	3,5	100 miles NW of Arcata.
	28	09-26.8				3.5	Off coast of Oregon.

21 28 13-15-44 37° 31' 121° 51' b 2.1 NW of Mt. Hamilton.

Map I			Lati- tude North	Longi- tude Q West i	ual-		i-
22	2	16-39-52	40.0°	122.3°	d	3.0	SW of Red Bluff.
9	4	00-07-40	37° 22°	121° 46'	С	2.7	W of Mt. Hamilton. Felt in San Jose area.
23	9	00-51-44	40.9°	123.2°	d	3,8	NW of Weaverville.
24	9	05-31-55	37° 14'	121° 39'	Ъ	2.6	S of Mt. Hamilton.
25	13	21-50-57	40.7°	123.9°	d	3.0	SE of Arcata. Felt in Eureka.
26	14	19-27-42	40° 16'	123° 50†	Ъ	4.0	SE of Ferndale. IV at Eureka, Fortuna, Petrolia.
16	18	05-38-39	37° 28'	121° 45'	С	2.4	NW of Mt. Hamilton.
27	22	Felt at D later sho	aly City, cks of th	San Bruno is series	, and	d San	First foreshock of 19-44. Francisco. This list includes f magnitude 3 or above. A more this series follows this list.
Felt	22	18-18-00	37° 67°	122° 48'	d	-	IV reported felt at San Bruno.
27	22		and San F				Foreshock, IV at Daly City, t at Berkeley, Hollister and
27	22						Principal shock. Magnitude by ault near Mussel Rock in San

27 22 19-44-21 37° 40' 122° 29' a 5.3 Principal shock. Magnitude by Pasadena. Epicenter on San Andreas fault near Mussel Rock in San Mateo County. Focal depth probably 7 to 10 km. This was reportedly the strongest shock felt in the city of San Francisco since 1906. Felt land area was approximately 13,000 square miles of west-central California. No lives lost, about 40 minor injuries reported. Damage of all types was estimated by engineers to be in the neighborhood of one million dollars. Principal building damage occurred to one- and two-story wood-frame houses in the Westlake Palisades tract west of Daly City along the ocean. State Highway 1 was closed by numerous landslides between Mussel Rock and Thornton.

Separate list of foreshocks and aftershocks follows this list.

A brief preliminary report on various phases of this earthquake appeared in Mineral Information Service, Vol. 10, No. 5, May 1, 1957, published by the California Division of Mines.

- 27 22 19-50-16 37° 40' 122° 30' b 3.2 Aftershock. Felt in San Francisco.
- 27 22 19-51-51 37° 40' 122° 30' b 3.0 Aftershock.

Map Date No. 1957 Mar		Lati- tude North		ual-		i	rks
<u>27</u> 22	19-52-30	37° 44'	122° 30'	Ъ	3.4	Aftershock.	Felt in San Francisco.
<u>27</u> 22	20-00-26	37° 42'	122° 31'	а	3.1	Aftershock. Francisco.	Felt in San
<u>27</u> 22	20-03-48	37° 41'	122° 29'	а	3.1	Aftershock.	
<u>27</u> 22	20-16-41	37° 41'	122° 31'	а	3.0	Aftershock.	
<u>27</u> 22	20-32-16	37° 42°	122° 31'	а	3.0	Aftershock. Francisco and	
<u>27</u> 22	21-07-47	37° 41'	122° 29°	а	3.6	Aftershock. Francisco.	III in San
27 22			122° 29' mo, and Sa				Felt at Martinez,
<u>27</u> 22			122° 27' Oakland, a				V at Millbrae.
<u>27</u> 23	00-26-55	37° 39†	122° 29'	a 4	4.0	V at San Fran San Mateo.	cisco. IV at
<u>27</u> 23						Aftershock. San Leandro.	V at San
<u>27</u> 23	03-28-53	37° 40°	122° 27'	а	3.2	Aftershock, Francisco.	IV at San
<u>27</u> 23	05-42-13	37° 42'	122° 30'	а	3.2	Aftershock.	V at San Francisco.
<u>27</u> 23	07-54-00	37° 40'	122° 29'	а	3.0	Aftershock.	
<u>27</u> 23						Aftershock. Land, and Port	VI at Menlo Park Costa.
<u>27</u> 23	12-54-32	37° 39'	122° 29'	а	3.8	Aftershock. and San Franc	Felt at Fallon
<u>27</u> 23	17-36-14	37° 40'	122° 31'	а	3.3	Aftershock.	
<u>27</u> 23	22-48-00	37° 39'	122° 27'	а	3.5	Aftershock. Francisco.	IV at San
<u>27</u> 24	00-35-28	37° 40'	122° 29'	а	3.1	Aftershock. Francisco.	IV at San
			and the same				

27 24 03-35-59 37° 41' 122° 30' a 3.2 Aftershock. IV at San

Francisco.

No.	Date 1957 Mar		Lati- tude North		ual-		i-
28	25	22-45-42	37° 07'	122° 12'	С	1.8	NW of Santa Cruz. Blast?
27	27	02-13-25	37° 40°	122° 30'	а	3.1	Aftershock of Mar. 22. Felt at San Francisco.
27	27	10-41-53	37° 42†	122° 31'	а	3.1	Aftershock of Mar. 22. Felt at San Francisco.
29	27	13-22-12	39° 19†	118° 32'	С	3.6	SE of Fallon, Nevada. Felt at Salt Wells, Nevada.
30	28	19-59-33	38.4°	122.2°	d	2.0	ESE of Santa Rosa.
31	28	22-37-48	40.1°	122.3°	d	3.1	SW of Red Bluff.
	31	02-23-01	43° 45°	128° 10'	С	4.0	Off coast of Oregon.
9	31	11-50-14	37° 19'	121° 44'	Ъ	2.0	W of Mt. Hamilton.
	Apr						
32	4	06-25-42	37° 23†	121° 45†	Ъ	2.4	NW of Mt. Hamilton.
	5	00-04-10	40.4°	126.2°	d	4.1	100 miles W of Ferndale.
27	7	16-20-30	37° 40°	122° 30'	а	3.3	Aftershock of Mar. 22 at 19-44-21. IV at Millbrae.
33	8	09-00-39	37° 36'	121° 56'	С	1.7	SW of Livermore.
21	8	14-30-33	37° 32'	121° 50'	а	2.6	SW of Livermore.
34	10	06-34-51	40,4°	124.2°	d	3.3	S of Ferndale.
21	15	23-50-05	37° 31'	121° 46'	Ъ	2.7	S of Livermore,
21\$	19	01-29-38	37° 30'	121° 50'	С	1.8	S of Livermore.
35	25	06-45-46	39.2°	118.0°	d	4.2	SE of Fallon, Nevada.
CIT	26	03-08-09	37.12°	118.08°	С	3.8	Felt Tinemaha.
34	26	10-06-29	40° 20'	124° 08'	С	3.1	SE of Ferndale.
Felt	26	17-54-00	37.75°	122.5°	d	-	III reported felt in San Francisco.
35	26	18-03-07	39° 15'	118° 04'	С	4.0	SE of Fallon, Nevada.

No.	Date 1957 Apr		tude		ual-		i-
27	27	00-15-04	37° 44°	122° 32'	а	3.0	Aftershock of Mar. 22 at 19-44-21. Felt in Westlake and Daly City.
36	27	00-58-07	38° 00'	122° 22'	Ъ	2.6	NW of Berkeley.
29	27	05-39-27	39.4°	118,5°	d	4.2	E of Fallon, Nevada. Felt at Fallon,
9	28	23-05-11	37° 22'	121° 44'	Ъ	3,3	NW of Mt. Hamilton. IV at San Francisco Sunset Dist.
5	29	08-07-38	37° 57'	122° 00'	Ъ	3.5	NE of Berkeley. Felt at Concord, Walnut Creek and Canyon.
35	29	14-06-15	39.2°	118.1°	d	3.9	SE of Fallon, Nevada.
27	30						Aftershock of Mar. 22 at cisco. IV at Canyon and San Mateo.
37	30	20-31-36	38° 05'	122° 30'	Ъ	2.1	N of San Francisco.
	May						
27	1			122° 28' Westlake a			Aftershock of Mar. 22 at Valley.
16	8	16-39-29	37° 25'	121° 47'	Ъ	3.0	NW of Mt. Hamilton.
Felt	8	18-34-00	40.6°	124.1°	d	-	IV reported felt in Fortuna.
36	15						NW of Berkeley. IV in the errito, Richmond).
36	15	05-35-39	38° 00'	122° 22'	а	2.3	Aftershock,
36	15	11-06-44	38° 00'	122° 21'	а	2.6	Aftershock,
36	17	05-34-05	37° 59'	122° 21'	Ъ	2.1	Aftershock.
38	17	05-40-50	38° 18'	118° 15'	С	3,6	SE of Hawthorne, Nevada.
18	22	13-13-43	38.6°	122.2°	d	2.2	NE of Santa Rosa.
24	24	13-01-53	37° 17'	121° 34'	Ъ	3.1	SE of Mt. Hamilton.
24	25	16-12-14	37° 14'	121° 34'	Ъ	3.0	Aftershock,
39	26	09-04-18	37° 21'	121° 29'	С	2.0	E of Mt. Hamilton.

Map Date No. 1957 May			_	al-	Magni	i-
40 28	17-48-34	38° 43'	119° 46'	Ъ	3.2	N of Markleeville.
16 29	17-30-06	37° 27'	121° 44'	Ъ	2.8	NW of Mt. Hamilton.
41 30	10-48-19	39.6°	118.2°	d	3.8	NE of Fallon, Nevada.
42 30			122° 03' 2228, and 2			SE of Berkeley. Foreshocks at
June						
Felt 5	15-02-52	36.3°	119.03°	Ъ	3.5	N of Haiwee, IV at Olancha,
<u>8</u> 5	18-32-55	40° 30°	124° 00'	С	3.4	SW of Ferndale. IV at Petrolia.
Felt 7	22-50-00	36° 25'	118.5°	d	-	IV reported felt at Olancha.
37 7	23-03-24	38° 04†	122° 31'	С	2.2	N of San Francisco.
43 10	17-59-22	39.5°	118.6°	d	3.0	E of Fallon, Nevada. Felt at Stillwater.
44 10	21-27-36	40.7°	125.0°	d	3.7	W of Ferndale.
45 11	16-57-55	39.2°	118.3°	d	4.2	SE of Fallon, Nevada.
<u>27</u> 13			122° 31' San Franciso		3.0	Aftershock of Mar. 22 at
<u>5</u> 18	08-09-13	37° 58'	122° 00'	а	2.6	NE of Berkeley.
46 18	18-30-07	38° 17'	122° 07'	С	2.2	SW of Sacramento.
<u>17</u> 19	06-16-17	36° 54'	121° 43'	С	3.1	E of Santa Cruz. Felt at Watsonville.
<u>21</u> 20	01-40-52	37° .38'	121° 51'	Ъ	2.5	SW of Livermore.
47 21						E of Yosemite. V at the Lake, and Wawona.
<u>30</u> 21	18-34-46	38° 22'	122° 16'	С	1.8	E of Santa Rosa.
CIT 21	20-46-42	35,1°	120.9°	d	3.7	Off coast. Felt San Luis Obispo, Morro Bay.
11 22	19-52-58	36.6°	121.3°	d	2.8	SE of Hollister.

	Date 1957 June	Origin Time (GCT)	Lati- tude North		ual-	Richt Magni tude	Le la dia dia dia dia
18	25	21-12-43	38.6°	122.2°	d	2.5	W of Sacramento.
17	26	13-03-37	36° 54'	121° 40'	С	2.2	WNW of Hollister.
17	26	13-27-38	36° 54'	121° 40'	С	2.3	WNW of Hollister.
17	26	13-50-12	36° 54'	121° 40'	С	2.2	WNW of Hollister.
17	26	16-20-04	36° 54'	121° 40'	С	2.4	WNW of Hollister.
11	29	09-31-32	36.7°	121.3°	d	2.7	SE of Hollister.
11	30	10-44-02	36.7°	121.2°	d	2.6	SE of Hollister.

THE SAN FRANCISCO EARTHQUAKE OF MARCH 22, 1957

Foreshocks and Aftershocks

The following list tabulates the foreshocks and aftershocks of the earthquake near San Francisco at 19^h44^m21.0^s G.C.T., March 22, 1957 (Map No. 27). The list includes shocks of magnitude at least 2.0 through June 30, 1957, and is complete for such shocks with the exception of the first four minutes after the main shock (when seismograms from all local stations were hopelessly tangled) and with the possible exception of small shocks which might have occurred immediately after several of the larger aftershocks. The preceding regional list of earthquakes includes all shocks of this series of magnitude 3.0 and above.

Epicenters of the aftershocks are all within about six km of that of the main shock. The focal coordinates which have been given for some of the shocks were determined by use of arrival times at the three stations (Berkeley, San Francisco, Palo Alto), which are within 45 km of the foci. The San Francisco station is at epicentral distances of 8 to 14 km (ca) from the foci, which is the same order of distance as the depths of focus. For this reason, focal depths of these shocks can be computed with far more assurance than if the nearest station were farther from the foci.

The time marking system at San Francisco was inoperative at the time of the principal shock, and intermittently during the remainder of March. Consequently, some determinations were necessarily carried through using the sharp S minus P interval at San Francisco instead of an absolute P arrival time. Comparison of such shocks with similar shocks for which absolute time was available at San Francisco indicates that the probable error of a focal distance derived from an S minus P interval is no greater than that due to small timing errors when a focal distance is derived from a P arrival time.

Date	Time G.C.T.	Magni- tude	Date	Time G.C.T.	Magni- tude
Mar. 22	16-38-00.7	2.7	Mar. 22	19-48-22	2.8
	18-48-10	2.1		19-49.1	2.7
	18-48-23.0	3.8		19-50-16	3.2
	18-52-27.8	2.2		19-51-51	3.0
	19-04-19.8	2.6		19-52-30.4	3.4
	19-19-14.7	2.3		19-53.1	1.7
	19-25-18	1.4		19-53.6	2.3
	19-33-15	1.6		19-53-44	2.5
	19-44-21.0	5.3		19-54-26	2.0

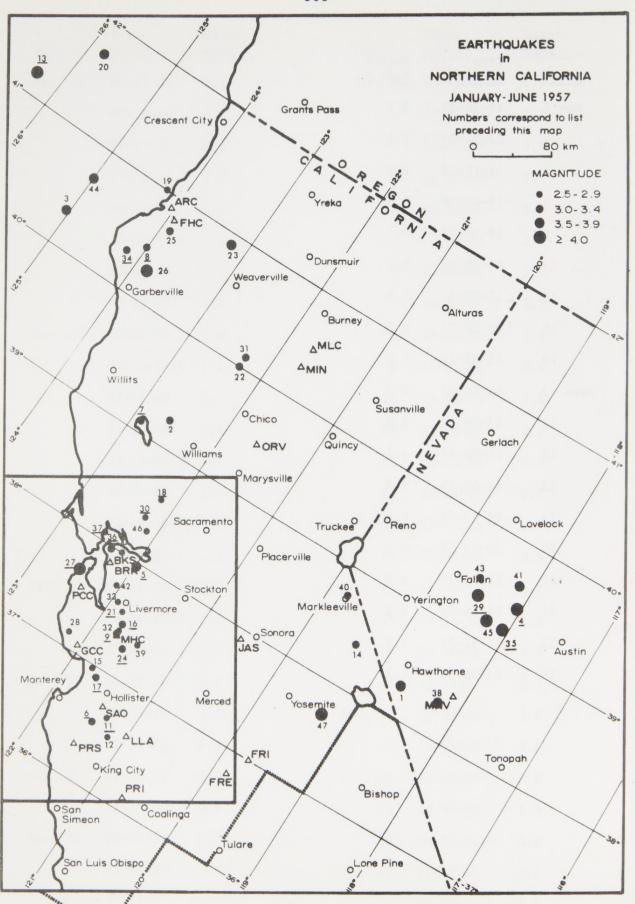
Date		Magni- tude	Date	Time G.C.T.	Magni- tude
Mar. 22	19-54-34	2.6	Mar. 22	20-42-33	1.7
	19-54-57	1.9		20-45-19	1.7
	19-56-33.6	2.7		20-45.4	2,2
	19-57-36	2,2		20-59.0	1.6
	20-00-26.4	3.1		20-59-37.7	2.7
	20-03-10	2.3		21-01-29	2,0
	20-03-48,2	3.1		21-07-46.8	3.6
	20-05-15	2.5		21-10.0	1.7
	20-07.5	2.0		21-12-51	1.7
	20-07-41	2.2		21-14-18	2.0
	20-08-12	2.7		21-18-29.4	3,8
	20-11-37	2,2		21-26-31	1.7
	20-13.3	2.0		21-29-43.1	2.7
	20-15.6	2,0		21-32-00	2.6
	20-16-40.8	3.0		21-32-45	2,2
	20-18,6	2,6		21-34.8	1.6
	20-21-36	1.9		21-35-46	2.3
	20-22-17	2.4		21-37-54	2.7
	20-27.6	2,1		21-46-20	2.6
	20-28,5	2.5		21-52-22	2.0
	20-29-01	2.1		22-01-44	2.2
	20-32-16.0	3,0		22-26-30.1	2.8
	20-35-35	2,3		22-30-22	1.9
	20-37-05	1,9		22-39-57.7	2,8
	20-39-47	1.7		22-53-29	2.0
	20-41-23	2.1		23-01-45	1.7

]	Date		Time G.C.T.	Magni- tude	Date		Time G.C.T.	Magni- tude
]	Mar.	22	23-03-53	1.8	Mar.	23	03-27-32	1.6
			23-14-35.0	4.4			03-28-53.2	3.2
			23-22.1	1.7			04-52-49	1.6
			23-38.6	1.7			05-42-13.3	3,2
			23-50.5	1.7			06-14-23.5	2.7
			23-59.2	2.5			06-19-41	1.6
	Mar.	23	00-02,1	2.2			06-22-57	1.9
			00-15-09	2,0			07-52-17	2.1
			00-26-55.1	4.0			07-53-59.6	3.0
			00-34-38	1.7			08-13-48.3	4.2
			01-03-22	2.2			08-48-07	1.6
			01-04-49	2.0			09-18-55	1.8
			01-07-05	1.6			10-34-54	1.6
			01-13-15	1.7			10-57-18	2,2
			01-15-33	2.4			10-59-45	1.6
			01-26-02	2,3			11-00.1	1.6
			01-28-57	2.0			11-02-06	2.0
			01-43-29	1.7			11-17-06	1.6
			01-45-30.2	2.9			11-52-08	2,8
			02-27-48	2.6			12-54-32.5	3.8
			02-34-11	2,2			13-02-17	1.8
			02-38-06	1.7			13-24-03	2.3
			02-48-07.9	3.4			13-33-59	1.9
			02-59.6	2,4			13-48-42	1.7
			03-00-15	1.9			13-56-11	2,0
			03-08-11	2.2			14-22-33	2.6
			03-09-43	1,6			14-59-03	1.8

Date	Time G.C.T.	Magni- tude	Date	Time G.C.T.	Magni- tude
Mar. 23	16-02-48	2.5	Mar. 24	04-46-12	2.0
	16-40-51	2.4		05-09-17	1.6
	16-48-54	1.9		05-30-14	2.5
	16-56-31.9	2.8		05-43-13	2,2
	17-36-13.7	3,3		06-26-50.6	2.7
	17-48-17	1.7		07-41-34	2,0
	18-11-54	2,6		09-02.5	1.6
	18-26-42	2,2		11-31,5	1.7
	18-42-58	1,6		14-59-05	1.7
	19-43-36	1.7		15-34-12	2.4
	19-50-52	1,7		17-43-13	1,6
	20-11-53	2.5		19-11-16.4	2.8
	21-33-44	2,2		19-52-33,1	2,5
	22-12-09	2.0	Mar. 25	00-22-23.7	2.7
	22-48-00,5	3.5		02-39-12	2.0
	22-49-16	2.6		03-01-59	2.3
	22-53-55	1.9		04-27-31	1.7
	22-55-16	2.3		04-42-07	1,6
	23-06-24	1.6		05-04-48	2.0
	23-23-18	1.8		08-05-09.8	2.7
Mar. 24	00-35-27.6	3.1		09-31-11,2	2.6
	01-37-22	1,7		10-27-30	1.7
	02-00-07	2.3		12-36-09	2.0
	02-54-54	2.3		17-20-17	1.8
	03-35-59.5	3.2	Mar. 26	05-13-57	1.7
	03-52-00.3	2.8		05-52-14	1.6

Date	Time G.C.T.	Magni- tude	Date	Time G.C.T.	Magni- tude
Mar. 26	07-13-32	1.8	Apr. 1	07-48-17	1.9
	07-48-56	2.0	2	11-46-10	1.9
	09-14-30	2.2	2	21-21-18	2.0
	14-51-29.1	2.7	3	19-47-26	2.2
	14-51.8	2.6	4	17-32-34	1.8
	15-20-53,4	2,4	4	20-06-45	2.8
	20-58-19	2,4	4	23-39-08	2.8
	23-19-49	1.8	7	16-20-30.3	3.3
Mar. 27	00-51-41	2,0	8	00-18-24	2.9
	02-13-24.6	3,1	9	22-21-23	2.4
	07-04-49	2.3	10	11-08-43	2.1
	09-09-48	2,8	10	11-42-27	2.2
	10-41-52.8	3,1	11	06-25-10	2.8
	12-03-01	1.7	13	13-21-09	2.2
	13-05-18	1.7	13	20-23-35	2.9
	15-58.3	1.9	14	23-00-02	2.9
Mar. 28	06-14-19	2,0	15	15-24-55	1.8
	06-24-05	1.6	15	15-57-56	2.2
	07-46-44	2.2	16	15-30-46	2.1
Mar. 29	04-52-13	1.6	17	12-53-57	2.1
	07-05-49	1.6	Apr. 19	03-53-44	1.8
	19-27-26	2.8	21	18-55-24	2.8
Mar. 30	07-48-33	2,9	21	21-38-09	2.9
	21-12-36	2,4	23	14-34-40	1.9
Mar. 31	00-03-51	2.0	27	00-15-04.0	3.0
	01-35-28	1.6	28	11-12-07	2.7
	16-43-26	2.4	30	06-27-46.1	3.4

Dat	:e	Time G.C.T.	Magni- tude
May	7 1	19-36-22.5	3.3
	1	23-26-33	2.4
	5	01-12-25	1.8
	6	18-43-59	2.1
	8	19-36-04	2.7
	13	01-08-27	2.3
	16	11-22-37	2.4
	19	03-22-35	2.6
	19	15-03-14	2.5
June	3	18-14-47	2.7
	12	07-39-00	2.0
20	12	09-04-47	1.7
	13	10-40-55.5	3.0
	14	03-43-02	2.6
	14	10-22-55	2.1
	15	18-51-18	1.8
	27	04-38-02	2.9
	27	21-32-51	1.9
	28	09-58-20	2.2



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

July - December 1957

-	Date 1957 July	Time (GCT)		Longi- tude Q West i	ual-	Rich Magn tude	i-
1	1	19-54-53	39.8°	119.8°	d	2.7	N of Reno.
2	2	02-36-23	37° 13'	121° 45'	С	2.2	SW of Mt. Hamilton.
3	2	20-15-14	36.6°	121.3°	d	2.7	W of Llanada.
4	3	06-29-09	38° 16'	122° 02'	С	3.1	NE of Berkeley. Felt at Fairfield.
4	3			122° 02' SW of Fai			NE of Berkeley. Felt at
5	5	11-28-31	37.3°	119.0°	d	3.3	W of Bishop.
6	11	00-31-36	40° 32'	125° 46°	Ъ	3.6	W of Ferndale.
7	12	08-27-24	37° 39'	122° 30'	a	2.1	Aftershock of Mar. 22, 1957.
8	15	06-40-08	37° 23'	121° 42'	Ъ	2.5	Near Mt. Hamilton.
9	15	23-23-47。	3 41° 01'	125° 12'	С	4,4	W of Arcata.
10	21	01-29-20	36° 26'	121° 13'	Ъ	3.1	N of King City.
11	22	06-22-25	37° 31'	121° 34'	С	2,3	SW of Livermore.
12	22	17-24-01	39° 34'	118° 24°	Ъ	4.0	NE of Fallon, Nevada.
7	23	04-28-54	37° 39†	122° 29'	Ъ	1.9	Aftershock of Mar. 22, 1957.
13	26	04-50-22	41° 57'	125° 37†	Ъ	4.3	W of Crescent City.
14	26	08-42-49	40° 04†	121° 17'	С	3,2	NW of Quincy.
15	26	22-37-53	38° 05†	122° 34'	Ъ	2.1	NW of Berkeley.
16	28	13-56-06	40° 29'	123° 58'	С	3.2	SE of Ferndale.
<u>17</u>	29	06-03-54	37° 03°	121° 35'	Ъ	2.5	NW of Hollister.
	Aug						
18	2	18-27-59	38.4°	122,9°	d	2.3	W of Santa Rosa.
19	3	09-31-22	36° 15'	120° 53'	С	2.5	E of King City.

No.	Date 1957 Aug		Lati- tude North	,	ual-		i-
2	7	16-28-22	37° 15'	121° 41'	а	2.9	SW of Mt. Hamilton.
CIT	12	08-42-04	37.02°	118,25°	Ъ	3.1	SSE of Bishop.
20	12	17-19-30	37° 03†	121° 40°	Ъ	2.4	NW of Hollister.
21	13	14-36-06	41° 55'	125° 48°	С	4.2	Off California-Oregon border.
22	13	22-52-45	36,8°	121.6°	d	2.5	Foreshock of 2314.
21	13	22-55-08	41.9°	125.8°	d	3,2	Aftershock of 1436.
22	13	23-14-06	36° 45'	121° 38'	С	3.5	SW of Hollister. Felt at San Juan Bautista.
23	15	04-41-14	37° 54'	121° 58'	Ъ	1.9	E of Berkeley.
2	15	09-03-13	37° 17'	121° 45'	Ъ	2.9	SW of Mt. Hamilton.
Felt	: 16	18-02-00	36.85°	121.5°	d	-	V reported felt at San Juan Bautista.
7	17	05-24-11	37° 39†	122° 28†	а	2.9	Aftershock of Mar. 22, 1957. IV in San Francisco area.
24	19	16-36-23	37° 45'	122° 35'	Ъ	2.3	W of San Francisco.
25	20	00-47-47	40.8°	121.7°	d	3.5	Near Burney.
26	21	07-38-34	36° 28°	121° 31'	С	3.6	NW of King City.
27	21	19-01-18	37° 12'	122° 14'	С	1.9	S of Palo Alto. Blast?
Felt	21	19-39-00	36.75°	121.4°	d	-	IV reported felt 7.5 miles S of Hollister.
7	27	12-34-34	37° 40°	122° 30'	Ъ	1.8	Aftershock of Mar. 22, 1957.
<u>7</u> <u>3</u>	29	13-48-45	36.6°	121.2°	d	2.8	W of Llanada.
28	31	09-36-35	36° 45'	121° 24'	С	2.6	S of Hollister.
	Sep						
29	3	01-20-07	40.7°	123.9°	d	3.0	SW of Arcata.
17	3	approxima to Watson	tely 1500 ville. N	square mi	les epor	of co	NW of Hollister. Felt over pastal area from San Francisco IV at Aromas, Coyote, Gilroy,

Morgan Hill, Mt. Hermon, San Francisco, San Jose, San Martin, and

Watsonville.

Map Date No. 1957 Sep	(GCT)	tude	Longi- tude Q West i	ual-		i-
<u>7</u> 3	11-42-07	37° 40'	122° 34'	Ъ	1.9	Aftershock of Mar. 22, 1957.
30 3	12-43-12	36° 55'	121° 41'	С	2.3	E of Santa Cruz.
31 3	16-38-41	41° 32'	125° 35'	Ъ	4.5	NW of Arcata.
32 4	04-59-08	40° 15'	124° 18'	С	3.7	S of Ferndale, Felt at Ferndale.
<u>27</u> 4	21-05-44	37° 12'	122° 15'	С	2.2	S of Palo Alto. Blast?
33 5	21-59-45	37.0°	122.4°	d	2.0	W of Santa Cruz,
34 6	05-46-08	39° 45'	120° 18'	С	3.5	NW of Reno.
35 6	22-55-02	38° 23'	122° 13'	С	2.0	E of Santa Rosa.
<u>3</u> 7	19-05-51	36.6°	121.3°	d	2.4	S of Hollister.
<u>7</u> 11			122° 32' t., San Fr			Aftershock of Mar. 22, 1957.
Felt 12	21-36-00	35.5	121,0	d	-	II felt at PG&E Plant, Morro Bay.
7 14	02-25-20	37° 40'	122° 32'	а	2.1	Aftershock of Mar. 22, 1957.
36 15	08-28-55	39° 55'	119° 25'	С	3.7	NE of Reno.
37 18	09-37-30	38° 34'	122° 19'	С	2.3	NE of Santa Rosa.
38 18	12-21-06	37° 11'	121° 37'	Ъ	2.0	S of Mt. Hamilton.
<u>39</u> 19	10-50-13	39.3°	118.1°	d	3.7	SE of Fallon, Nevada.
40 19	19-02-23	40° 41'	125° 04'	С	3.7	W of Ferndale.
41 21	00-02-30	40.4°	123.8°	d	2.7	Foreshock.
41 21	01-19-37	40.4°	123.8°	d	3.3	SE of Ferndale.
42 21	06-54-26	36,4°	121.1°	d	2.8	N of King City.
43 21	14-30-05	36.6°	121.4°	d	2.5	S of Hollister.
Felt 21	15-32-00	35,5°	121,0°	d	-	II felt at PG&E Plant, Morro Bay.
<u>7</u> 23	15-29-11	37° 39'	122° 31'	a	1.7	Aftershock of Mar. 22, 1957.

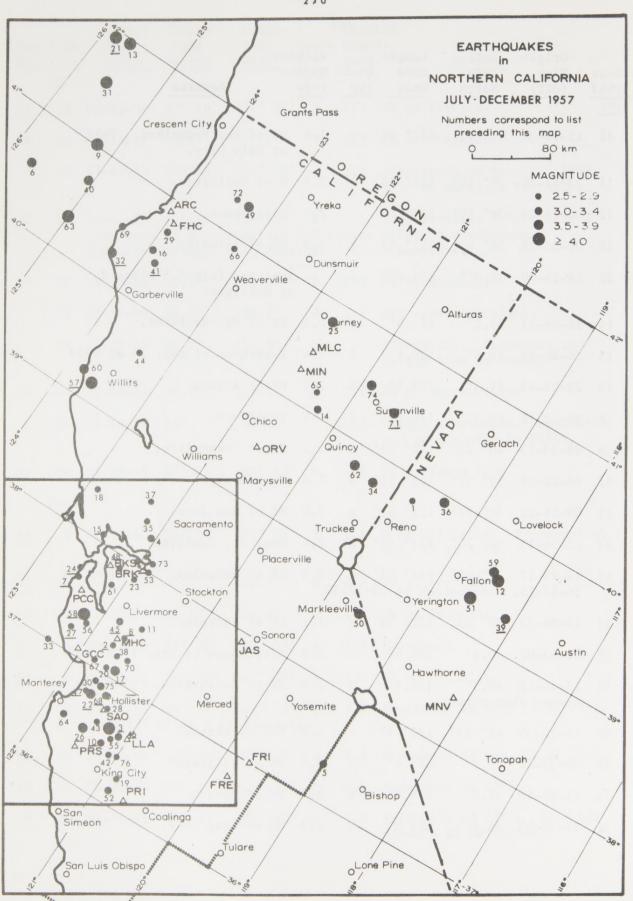
	Date 1957 Sep			tude Q	ual-		i-
7	24	00-27-16	37° 38'	122° 30'	а	1.7	Aftershock of Mar. 22, 1957.
44	25	12-35-22	39° 38'	123° 22°	С	2.7	N of Ukiah. Several small aftershocks recorded at Ukiah.
26	25	23-33-31	36,5°	121.5°	d	2.7	S of Hollister.
45	28	15-17-19	37° 31'	121° 48'	Ъ	3.1	NW of Mt. Hamilton,
46	28	19-10-14	36° 39'	121° 08†	С	2.8	W of Llanada.
3	28			121° 14' s S of Hol			SE of Hollister. IV at Big
3	29	01-38-10	36° 36'	121° 14†	С	2.7	Aftershock,
47	30	05-16-09	36° 46'	121° 43°	b	2.9	NE of Monterey.
	Oct						
10	1	12-55-57	36° 28'	121° 14'	С	3.3	SW of Llanada.
48	1	17-29-42	37° 52'	122° 12°	Ъ	2.2	Near Berkeley. Felt.
3	2	09-57-42	36° 37'	121° 15'	Ъ	2.7	W of Llanada.
49	6	17-27-02	41.3°	123.3	d	3.6	NE of Arcata.
17	13	22-02-43	37° 05'	121° 33'	С	2.4	NW of Hollister.
50	16	01-07-35	38° 41'	119° 35'	С	3,8	E of Markleeville.
51	17	10-14-09	39° 17'	118° 26'	С	4.6	SE of Fallon, Nevada. Felt at Fallon.
52	19	00-04-38	36° 06'	120° 52'	Ъ	3,3	SE of King City.
53	19	09-47-57	38° 00'	121° 51'	С	2.9	NE of Berkeley.
54	20	10-46-32	38° 00'	122° 01'	b	2.0	NE of Berkeley.
55	25	15-36-27	36° 32'	121° 10'	С	2.7	SW of Llanada.
39	25	15-40-54	39.3°	118.2°	d	3.9	SE of Fallon, Nevada.
56	26	06-03-05	37° 17'	122° 07'	Ъ	2.8	S of Palo Alto.
48	26	13-00-00	37° 51'	122° 08'	С	1.8	E of Berkeley.

-	Date 1957 Oct	(GCT)	tude	tude	Qual-		i–
7	28	02-38-12 Felt in o	37° 40' uter Miss	122° 31' sion Dist.	a of S	2.4 San Fr	Aftershock of Mar. 22, 1957. ancisco.
8	29	04-42-55	37° 21'	121° 43'	Ъ	1.6	NW of Mt. Hamilton.
57	31	area of a County. knacks fe	pproximat Slight da 11 and br 11e, Calp	ely 4000 mage repo oke at Co	squar rted: mptch	e mil pla e. V	W of Ukiah, Felt over a land es, principally in Mendocino ster cracked at Willits; knick-T at Willits and Comptche, Vo, Nashmead, Navarro, Philo,
57	31	14-37-54	39.2°	123.7°	d	2.4	Aftershock. Felt at Comptche and Philo.
58	31	land area west-cent	of appro	ximately ornia. V	2500 at B	squar en Lo	SW of Palo Alto. Felt over a e miles of the coastal area of mond. IV at Alvarado, Aptos, Pescadero, and Soquel.
58	31	20-13-07	37° 20'	122° 12'	Ъ	2.2	Aftershock.
	Nov						
59	1	04-51-57	39.6°	118.5°	d	3.8	NE of Fallon, Nevada.
60	1	20-50-57	39° 15'	123° 47'	С	3.6	NW of Ukiah. V at Comptche. IV at Philo.
15	2	21-23-57	38° 05'	122° 30'	С	2.0	NW of Berkeley.
15	9	00-43-30	38° 00'	122° 28'	а	2.5	NW of Berkeley.
61	9	17-33-16 San Leand	37° 43' ro, Castr	122° 07' o Valley,	b and	2.5 Haywa	SE of Berkeley. Felt at rd.
46	12	11-39-52	36.6°	121.1°	d	3.0	W of Llanada.
62	16	02-36-55	39° 49'	120° 34'	С	3.2	SE of Quincy.
47	16	07-59-54	36.8°	121.7°	d	2.4	NE of Monterey.
	17	over a lan	nd area o	f approxim	matel:	y 450	Northwestern Oregon. Felt O square miles of northwestern ewberg, Otis, Willamina, and
63	17	06-32-21	40° 18'	125° 00'	Ъ	4.2	Off Cape Mendocino.

10 18 01-11-42 36° 23' 121° 14' c 3.1 NW of King City.

	Date 1957 Nov	Origin Time (GCT)	Lati- tude North			Richt Magni tude	
54	18	05-01-34	37° 58'	122° 00'	С	2,3	NE of Berkeley.
64	18	07-26-32	36.5°	121.7°	d	3.3	SE of Monterey.
7	20	07-47-53	37° 39'	122° 30'	а	2.5	Aftershock of Mar. 22, 1957. Felt in Westlake Palisades.
32	20	land area	of approx	ximately 50	00 s	quare	S of Ferndale. Felt over a miles of southwestern at Honeydew.
65	22	23-48-33	40.2°	121.4°	d	2.7	SE of Mineral.
	25	18-55-09	44.6°	130.7°	d	5.1	Off coast of Oregon.
	25	20-32-25	44.5°	129.5°		5	Aftershock. Epicenter and origin time by USCGS.
66	25	22-08-44	40.9°	123.1°	d	2.9	NW of Weaverville.
	25	22-16-44	45°	130°	L	4-3/4	Oregon aftershock. Epicenter and origin time by USCGS.
67	26	12-26-48	37° 03'	121° 49'	Ъ	2.2	NE of Santa Cruz.
	Dec						
68	1	08-42-40	36° 50'	121° 32'	С	2.6	W of Hollister. Foreshock of Dec. 11 at 2345.
41	4	06-23-41	40.4°	123.9°	d	2.3	SE of Ferndale.
69	5	11-10-23	40.5°	124.4°	d	3.0	SW of Ferndale.
54	6	00-11-10	38° 02'	122° 03'	С	1.8	Foreshock.
54	6	04-25-52	38° 00'	122° 00'	Ъ	2.6	NE of Berkeley.
68	10			121° 28' f Holliste		3.0	Foreshock of Dec. 11 at 2345.
68	10	23-22-41	36° 50'	121° 28'	С	2.8	Foreshock of Dec. 11 at 2345.
68	11	00-30-39	36° 50'	121° 28'	С	2.4	Foreshock of 2345.
68	11	01-41-18	36° 50'	121° 28'	С	3.0	Foreshock of 2345. IV 7-1/2 miles S of Hollister.

	Date 1957 Dec		Lati- tude North			Rich Magn tude	í-
24	11	15-59-34	37° 42'	122° 34'	С	1.6	SW of San Francisco. Felt at Daly City.
68	11	23-45-50	36° 50'	121° 28'	С	3.2	W of Hollister.
68	12	00-18-04	36° 50'	121° 28'	С	2.4	Aftershock.
54	12	08-33-22	38° 01'	121° 59'	С	2.0	NE of Berkeley.
Felt	12	18-25-00	36,75°	121.40°	d		Reported felt 7.5 miles S of Hollister.
70	14	16-38-37	37.2°	121.5°	d	2.5	SE of Mt. Hamilton.
71	15	16-46-52	40.4°	120.6°	d	3.4	Foreshock of Dec. 16 at 0933.
72	15	22-28-43	41.3°	123.5°	d	2.7	NE of Arcata.
71	16	09-33-16	40.4°	120.6°	d	3.1	Foreshock.
71	16	09-33-23	40° 22 °	120° 33'	С	3.7	SE of Susanville.
45	17	06-22-48	37° 27'	121° 51'	а	2.8	Foreshock,
45	17	08-24-22	37° 27'	121° 51'	а	3.0	NE of San Jose.
8	17	15-56-27	37° 20'	121° 39'	а	2.4	Near Mt. Hamilton.
73	19			121° 53' ock at 15-			NE of Berkeley. Foreshock at
15	19	19-04-37	38° 03'	122° 34'	С	1.7	NW of Berkeley.
71	19	22-43-07	40.4°	120.6°	d	2.9	Aftershock of Dec. 16 at 0933.
74	19	23-44-12 deeper th			d	3.8	NW of Susanville. Probably
	26	12-20-35	41° 27'	127° 19'	С	4.7	WNW of Arcata.
75	28	08-37-06	36.9°	121.6°	d	3.0	NW of Hollister.
	29	21-56-58	42.0°	126.4°	d	3.7	NW of Arcata.
76	31	22-32-55	36.4°	121.0°	d	2.9	NE of King City.

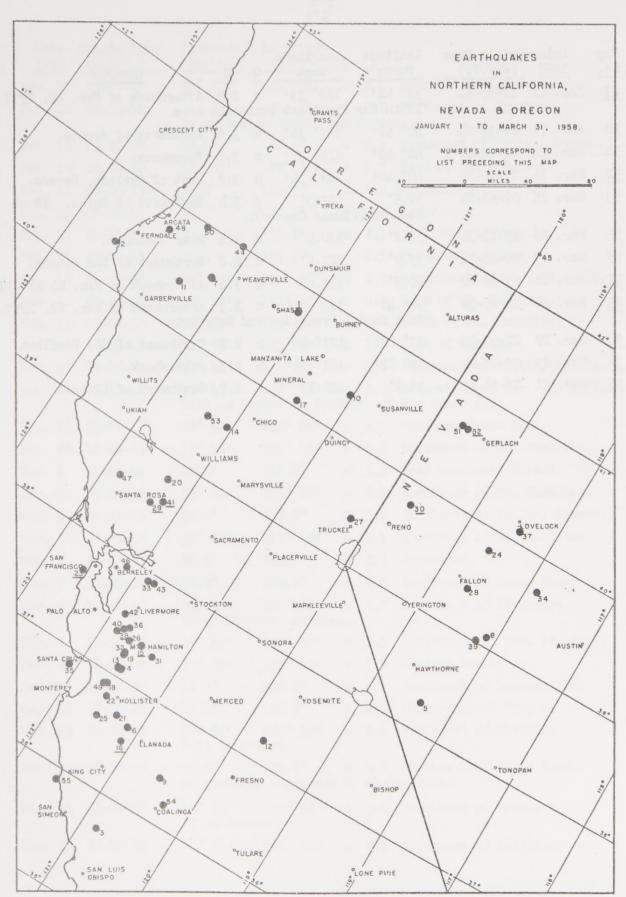


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January-March 1958

Map No.	Date 1958	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
1	Jan. 1	04-14-44	40.8°	122.1°	d	3.4	Northeast of Shasta.
**	Jan. 4	17-27-34	38.9°	115.5°	d	4.5	Southeast of Eureka, Nevada.
2	Jan. 7	09-05-37	40° 23'	124° 241	b	3.4	Southeast of Ferndale.
3	Jan. 7	17-13-16	35.7°	120.8°	d	3.0	North of San Luis Obispo.
4	Jan. 11	19-46-47	37° 061	121° 32'	С	2.6	South of Mt. Hamilton.
5	Jan. 13	04-17-27	38° 15'	118° 22'	С	4.2	Southeast of Hawthorne, Nevada.
6	Jan. 18	02-17-28	36° 391	121° 061	c	2.9	Northwest of Llanada.
7	Jan. 18	11-48-02	40.6°	123.2°	d	3.3	Southwest of Weaverville.
8	Jan. 18	16-33-35	39.1° Felt at Fr	118.1° enchman's S	d		Southeast of Fallon, Nevada. Nevada.
9	Jan. 21	21-22-08	36.4°	120.5°	d	2.9	Northwest of Coalinga.
-	Jan. 22	12-59-31	44.5°	124.2°	d	. 3	Near the coast of Oregon.
10	Jan. 25	03-39-54				y).	East of Mineral. IV at Also felt at Hamilton Branch werhouse (Plumas County).
11	Jan. 26	20-05-56	40.4°	123.5°	d	2.9	Northeast of Garberville.
12	Jan. 26	20-22-33	37.2°	119.7°	d	3.4	North of Fresno.
13	Jan. 27	02-24-09	37.1°	121.6°	d	2.4	South of Mt. Hamilton.
14	Jan. 27	15-22-02	39° 30°	122° 03'	C	2.9	Southwest of Chico.
15	Jan. 28	02-51-23	37° 21'	121° 30°	Ъ	2.3	East of Mt. Hamilton.
15	Jan. 28	03-01-01	37° 21'	121° 30'	C	1.7	Aftershock.
16	Jan. 28	07-12-54	36.5°	121.1°	d	2.2	Southwest of Llanada.
17	Jan. 28	09-46-04	700 O71	121° 31°	C	3.2	South of Mineral.
18	Jan. 29	17-53-18	36.9°	121.6°	d	2.3	West of Hollister.
19	Jan. 31	16-10-32	37° 13'	121° 361	C	1.7	South of Mt. Hamilton.
20	Feb. 1	07-08-44	38.8° IV at Cali				Northeast of Santa Rosa. Lower Lake.
21	Feb. 4	19-33-46	36.7	121.3	d	3.2	Southeast of Hollister.
22	Feb. 6	00-30-33	36° 48' IV at Holl	121° 321 ister.	С	3.2	Southwest of Hollister.
-	Feb. 6	00-56-06	40.5°	126.7°	d	3.9	125 miles west of Ferndale.
23	Feb. 7	03-58-13	37° 41° Felt in Sa	122° 33° in Francisco		2.2	Aftershock of Mar. 22, 1957.
24	Feb. 8	05-04-45	39.8°	118.6°	d	3.5	Northeast of Fallon, Nevada.
25	Feb. 8	23-50-58	36.6°	121.5°	d	2.7	East of Monterey.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
26	Feb. 11	13-58-29	37° 221	121° 408	C	2.4	Near Mt. Hamilton.
27	Feb. 12	02-25-44	39° 23° IV at Domn	120° 13° er Summit a	c		Northwest of Truckee.
28	Feb. 16	03-20-20	39.4°	118.6°	d	3.4	Southeast of Fallon, Nevada.
29	Feb. 16	07-56-36	38° 321	122° 19 8	С	2.7	East of Santa Rosa.
29	Feb. 16	08-26-53	38.5°	122.3°	d	2.3	Aftershock.
29	Feb. 16	08-54-46	38.5°	122.2°	d	2.6	Aftershock.
30	Feb. 17	10-11-10	39.8°	119.7°	d	2.3	Northeast of Reno.
30	Feb. 18	12-03-43	39.8°	119.7°	d	2.9	Northeast of Reno.
23	Feb. 18	21-34-24	37° 42°	122° 321	ъ	1.7	Aftershock of Mar. 22, 1957.
31	Feb. 20	06-20-05	37° 201	121° 19'	b	2.8	East of Mt. Hamilton.
32	Feb. 21	14-08-50	37° 748	121° 381	С	2.0	South of Mt. Hamilton.
33	Feb. 22	18-55-45	37° 551	121° 49:	b	2.6	East of Berkeley.
34	Feb. 23	02-25-01	39° 41°	117° 52°	С	3.8	Northwest of Austin, Nevada.
23	Feb. 23	21-15-12	37° 43' Felt in In	122° 33' gleside Dis	b tri	1.7 ct of	Aftershock of Mar. 22, 1957. San Francisco.
35	Feb. 26	23-03-27	36° 521	122° 041	С	1.6	South of Santa Cruz.
36	Feb. 28	11-47-25	37° 281	121° 43°	ъ	2.4	Northwest of Mt. Hamilton.
37	Mar. 1	11-29-41	40.1°	118.4°	d	3.3	Near Lovelock, Nevada.
38	Mar. 4	05-19-15	37° 248	121° 46°	a	2.8	Northwest of Mt. Hamilton.
39	Mar. 5	05-11-56	39.0°	118.2°	d	3.8	Southeast of Fallon, Nevada.
40	Mar. 5	05-31-16	37° 231	121° 49;	b	2.1	Northwest of Mt. Hamilton.
47	Mar. 5	05-53-32	38.6°	122.2°	d	2.3	Foreshock.
47	Mar. 5	17-10-08	38.6°	122.2°	d	2.6	Northeast of Santa Rosa.
42	Mar. 6	14-58-38	37° 33° IV at Miss	121° 52° ion San Jos	a e.	2.8	Southwest of Livermore.
23	Mar. 6	21-42-52	37° 408	122° 30°	b	2.4	Aftershock of Mar. 22, 1957.
43	Mar. 9	18-26-09	37° 551	121° 45°	C	2.9	West of Stockton.
44	Mar. 11	10-48-20	41.0°	123.1°	d	2.7	Northwest of Weaverville.
45	Mar. 12	12-09-16	42.40	120.0°	d	4.5	South-central Oregon.
46	Mar. 12	22-54-09	37° 55° Felt in Or	122° 09°	b	2.4	Northeast of Berkeley.
47	Mar. 14	06-30-35		122.8° magnitude			Northwest of Santa Rosa. 6-32-48.
48	Mar. 14	14-01-36	40° 46° IV at Eure		С	3.0	Southeast of Arcata.
119	Mar. 19	03-46-15	36° 53°	181° 381	c	2.4	Northwest of Hollister.

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
23	Mar. 19	11-58-51	37° 42° IV in San	122° 33° Francisco Pe			Aftershock of Mar. 22, 1957 area.
50	Mar. 21	11-33-24	40° 59 °	123° 36°	c	3.6	Northeast of Arcata.
51	Mar. 24	00-22-10	40° 40°	119° 398	С	3.6	Foreshock.
52	Mar. 24	03-10-28	140° 1408	119° 34°	C	3.9	West of Gerlach, Nevada.
53	Mar. 25	02-58-23	39.5° Storrie (P	122.3° lumas Count		3.4	Southwest of Chico. IV at
54	Mar. 26	13-12-30	36.2°	120.3°	d	2.4	Near Coalinga.
55	Mar. 27	20-26-14	35.9°	121.5°	d	2.8	Northwest of San Simeon.
52	Mar. 28	07-22-22	40.7°	119.6°	d	3.4	Aftershock of Mar. 24 at 0310.
23	Mar. 28	14-05-39	37° 40° Felt in Sa	122° 31¹ n Francisco			Aftershock of Mar. 22, 1957. City.
38	Mar. 29	22-30-26	37° 221	121° 461	b	2.2	Northwest of Mt. Hamilton.
38	Mar. 29	22-47-24	37° 221	121° 46'	b	2.1	Aftershock.
16	Mar. 31	17-38-23	36.5°	121.1°	d	2.7	Southwest of Llanada.



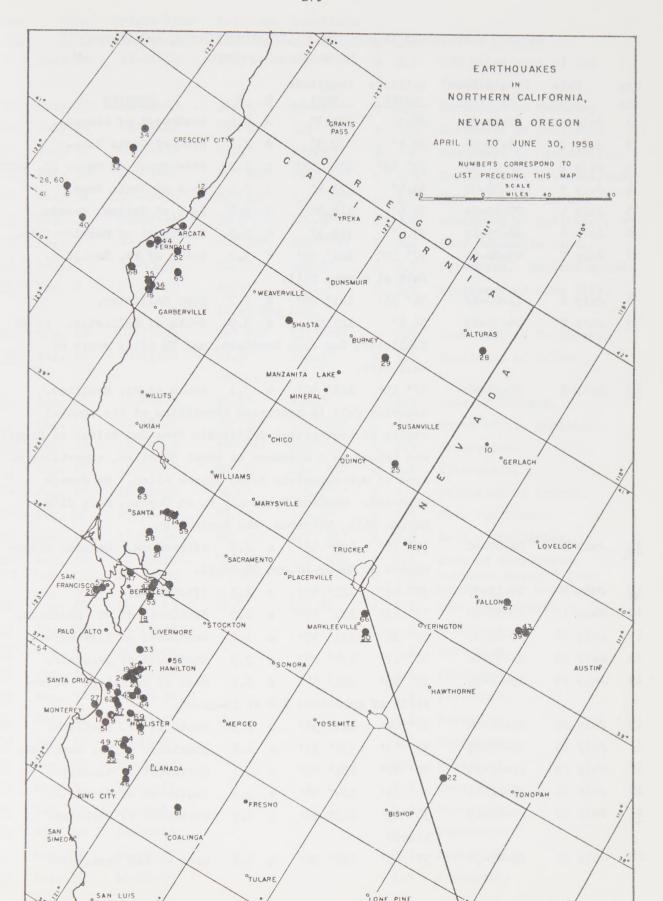
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON April-June 1958

Date	Origin Time (G.C.T.)	Latitude North			М	Remarks
Apr.2	21-54-37	37.82°	118.58°	С	4.2	Near Benton.
Apr. 3	00-07-01	41.2°	125.1°	d	3.5	West of Arcata.
Apr. 4	01-45-12	37° 00'	121° 41'	С	3.2	Northwest of Hollister.
Apr. 4	17-05-48	36° 40' 7 miles so	121° 20' uth of Hol			Southeast of Hollister. IV
Apr. 5	04-50-33	37° 00'	121° 49'	С	2.2	East of Santa Cruz.
Apr. 8	10-22-13	40° 32°	125° 29'	C	4.4	West of Ferndale.
Apr. 10	07-39-14	38.1°	121.9°	d	1.8	Foreshock.
Apr. 10	08-28-52	38° 05'	121° 52'	b	2.4	Northeast of Berkeley.
Apr. 10	08-32-33	36° 27'	121° 07'	С	2.9	Southwest of Llanada.
Apr. 10	12-26-15	36° 49'	121° 35'	С	2.6	West of Hollister.
Apr. 10	18-17-53	40.7°	119.6°	d	3.8	West of Gerlach, Nevada.
Apr. 15	03-19-05	37.1°	121.5°	d	2.1	Northwest of Hollister.
Apr. 16	02-54-03	41.2°	124.1°	d	2.4	North of Arcata.
Apr. 20	21-06-58	38° 37' Santa Rosa	122° 21' . Felt at			25 miles northeast of llo Dam, west of Winters.
Apr. 20	21-16-27	38° 37' Monticello		С	2.7	Aftershock. Felt at
Apr. 21	06-40-26	36° 52'	121° 18'	С	3.6	East of Hollister.
Apr. 24	07-24-55	40.2°	124.0°	d	3.5	Northwest of Garberville.
Apr. 30	06-36-15	36° 44°	121° 45'	С	3.0	Northeast of Monterey.
May 1	03-06-27	37° 45'	121° 57'	b	2.5	Foreshock.
May 1	03-13-42	37° 45'	121° 57'	b	2.5	Northwest of Livermore.
May 1	03-30-56	37.2°	121.7°	d	2.0	South of Mt. Hamilton.
May 2	13-10-47	37° 41' IV in Daly	122° 31' City.	С	2.1	Aftershock of March 22, 1957.
May 2	20-49-08	38.3°	122.2°	d	2.2	North of Berkeley.
May 3	00-22-00	37° 45'	121° 57'	С	1.4	Aftershock of May 1 at 0313.
May 3	17-35-57	37.9°	118.0°	d	4.1	Southwest of Tonopah, Nevada.
May 4	07-52-44	37° 40' IV at Daly	122° 30' City.	а	2.7	Aftershock of Mar. 22, 1957.
May 4	15-21-58	37° 11'	121° 36'	b	3.6	South of Mt. Hamilton.
May 5	01-46-53	37° 12'	121° 41'	С	1.8	South of Mt. Hamilton.
	1958 Apr. 2 Apr. 3 Apr. 4 Apr. 5 Apr. 8 Apr. 10 Apr. 10 Apr. 10 Apr. 10 Apr. 16 Apr. 20 Apr. 21 Apr. 24 Apr. 24 Apr. 30 May 1 May 1 May 2 May 2 May 3 May 4 May 4	1958 (G.C.T.) Apr. 2 21-54-37 Apr. 3 00-07-01 Apr. 4 01-45-12 Apr. 4 17-05-48 Apr. 5 04-50-33 Apr. 8 10-22-13 Apr. 10 08-28-52 Apr. 10 08-32-33 Apr. 10 12-26-15 Apr. 10 18-17-53 Apr. 15 03-19-05 Apr. 16 02-54-03 Apr. 20 21-06-58 Apr. 20 21-16-27 Apr. 21 06-40-26 Apr. 24 07-24-55 Apr. 30 06-36-15 May 1 03-06-27 May 1 03-13-42 May 1 03-30-56 May 2 13-10-47 May 2 20-49-08 May 3 00-22-00 May 3 17-35-57 May 4 07-52-44 May 4 15-21-58	Apr. 2 21-54-37 37.82° Apr. 3 00-07-01 41.2° Apr. 4 01-45-12 37° 00' Apr. 5 04-50-33 37° 00' Apr. 8 10-22-13 40° 32' Apr. 10 08-28-52 38° 05' Apr. 10 08-32-33 36° 27' Apr. 10 12-26-15 36° 49' Apr. 10 18-17-53 40.7° Apr. 16 02-54-03 41.2° Apr. 20 21-06-58 38° 37' Monticello Apr. 21 06-40-26 36° 52' Apr. 24 07-24-55 40.2° Apr. 30 06-36-15 36° 44' May 1 03-06-27 37° 45' May 1 03-30-56 37.2° May 2 13-10-47 37° 41' IV in Daly May 2 20-49-08 38.3° May 3 00-22-00 37° 45' May 4 07-52-44 37° 40' IV at Daly May 4 15-21-58 37° 11'	Apr. 2 21-54-37 37.82° 118.58° Apr. 3 00-07-01 41.2° 125.1° Apr. 4 01-45-12 37° 00' 121° 41' Apr. 4 17-05-48 36° 40' 121° 20' 7 miles south of Hol Apr. 5 04-50-33 37° 00' 121° 49' Apr. 10 07-39-14 38.1° 121.9° Apr. 10 08-32-33 36° 27' 121° 52' Apr. 10 12-26-15 36° 49' 121° 35' Apr. 10 12-26-15 36° 49' 121° 35' Apr. 10 18-17-53 40.7° 119.6° Apr. 15 03-19-05 37.1° 121.5° Apr. 16 02-54-03 41.2° 124.1° Apr. 20 21-06-58 38° 37' 122° 21' Santa Rosa. Felt at Apr. 20 21-16-27 38° 37' 122° 16' Monticello Dam. Apr. 21 06-40-26 36° 52' 121° 18' Apr. 24 07-24-55 40.2° 124.0° Apr. 30 06-36-15 36° 44' 121° 57' May 1 03-05-27 37° 45' 121° 57' May 1 03-30-56 37.2° 121.7° May 2 13-10-47 37° 41' 122° 31' IV in Daly City. May 3 17-35-57 37.9° 118.0° May 4 07-52-44 37° 40' 122° 30' IV at Daly City. May 4 15-21-58 37° 11' 121° 36'	Apr. 10 08-32-33 36° 27' 121° 35' c Apr. 10 08-32-33 37.1° 121° 35' c Apr. 10 02-54-03 37.1° 121° 52' b Apr. 10 08-32-33 37.1° 121° 52' b Apr. 10 08-32-33 37.1° 121° 52' b Apr. 10 08-32-33 37.1° 121° 52' b Apr. 10 18-17-53 40.7° 119.6° d Apr. 10 02-54-03 41.2° 124.1° d Apr. 10 33-19-05 37.1° 121.5° d Apr. 10 02-54-03 41.2° 124.1° d Apr. 20 21-16-27 38° 37' 122° 16' c Apr. 20 37° 45' 121° 57' b May 1 03-30-56 37.2° 121.7° d May 2 20-49-08 38.3° 122.2° d May 4 07-52-44 37° 40' 122° 30' a May 4 15-21-58 37° 11' 121° 36' b May 4 15-21-58 37° 11' 121° 36' b May 4 15-21-58 37° 11' 121° 36' b Apr. 20 31-36' b North West Q 121.858° c 118.58° c 118.58° c 118.58° c 118.58° c 121° 41' c 121° 49' c 7 miles south of Hollis 26° 49' 121° 52' b 27° 121° 52' c 7 miles south of Hollis 28° 49' c 7 miles south of Hollis 29° 29' c 7 miles south of Hollis 29° 29' c 49° 20' 49' 21° 52' b 40° 31° 49' 121° 57' b 40° 40' 122° 31' c 40° 40' 122° 30' a	Apr. 10 08-28-52 38° 05' 121° 52' b 2.4 Apr. 10 08-32-33 36° 49' 121° 35' c 2.6 Apr. 10 18-17-53 40.7° 119.6° d 3.8 Apr. 20 21-16-27 38° 37' 122° 21' b 4.0 Apr. 30 06-36-15 36° 44' 121° 57' b 2.5 Apr. 20 21-34-27 37° 45' 121° 57' c 1.4 May 2 20-49-08 May 3 17-35-57 May 4 07-52-44 May 4 07-52-44 37° 40' 121° 57' c 1.4 Apr. 10 12-26-0 37° 41' 122° 30' a 2.7 May 4 15-21-58 37° 45' 121° 57' c 1.4 May 4 15-21-58 37° 11' 121° 36' b 3.6

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	2	M	Remarks
25	May 5	22-18-20	40.10	120.4°	d	2.9	Southeast of Susanville.
26	May 5	22-57-39	40.40	127.8°	d	4.0	Off Cape Mendocino.
2.7	May 7	04-27-32	36° 481	121° 50'	С	2.6	Southeast of Santa Cruz.
28	May 7	07-18-53	41.40	120.2°	d	3.2	East of Alturas.
29	May 7	15-31-43	40.9°	121.2°	d	3.0	East of Burney.
30	May 7	16-20-12	37° 17'	121° 36'	b	3.0	Near Mt. Hamilton.
-	May 7	17-28-01	45.1°	122.0°	d	3.4	Southeast of Portland, Oregon.
20	May 8	23-31-20	37° 41'	122° 32'	a	1.5	Aftershock of Mar. 22, 1957.
31	May 16	21-26-39	37° 15'	121° 38'	b	2.2	South of Mt. Hamilton.
32	May 18	04-58-44	41.00	125.2°	d	2.8	West of Arcata.
33	May 19	02-13-32	37° 27' Aftershock	121° 43' (M = 1.6)			Northwest of Mt. Hamilton. 2-41.
34	May 24	18-43-02	41.40	125.1°	d	3.2	Northwest of Arcata.
<u>35</u>	May 24	23-04-47	northweste	rn Califor	app: nia lot	roxim	Southeast of Ferndale. Felt ately 3,500 square miles of ncipally in Humboldt County. erndale, Garberville, Honeydew,
35	May 24	23-08-20				3.7	Aftershock.
35	May 24	23-18-14				2.0	Aftershock.
35	May 24	23-23-10				2.3	Aftershock.
35	May 24	23-35-10				2.0	Aftershock.
35	May 25	03-12-48				2.7	Aftershock.
36	May 25	05-06-32	40° 17° Also felt	123° 59° at Hydesvi			Aftershock. III at Eureka. Scotia.
36	May 25	07-18-42				3.1	Aftershock.
36	May 25	12-31-29				2.8	Aftershock.
36	May 25	12-47-27				2.5	Aftershock.
37	May 27	23-09-32	36.9° Felt over the region V at San M	an area of east of S	ap	proxi	Northwest of Hollister. mately 150 square miles of z, from Aptos to San Martin.
37	May 28	03-59-10	36.9°	121.6°	d	3.0	Aftershock.
38	May 28	05-45-29	38° 00°	122° 01'			Northeast of Berkeley.
39	May 28	15-16-50	39.4°	118.1°	d		East of Fallon, Nevada.
40	May 31	02-49-03	40.40	125.1°	d		Southwest of Ferndale.
41	May 31	15-55-59	40.3°	126.6°	d		Off Cape Mendocino.
CIT	May 31	21-17-40	37.55°	118.75°	С	3.7	

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks
42	May 31	22-07-11	the San Fr	rancisco Ba V at Danvil	a lay r	and a	Northeast of Berkeley, near area of 1,500 square miles of a, principally in Contra Costada, Port Costa, Rodeo, and
42	May 31	22-17-59	37° 58°	122° 00'	b	2.3	Aftershock.
42	May 31	22-25-55	37° 58'	122° 00'	C	1.9	Aftershock.
42	May 31	23-20-53	37° 58'	122° 00'	b	3.0	Aftershock.
42	June 1	05-11-39	37° 59'	122° 01'	ь	3.0	Aftershock. Felt at Canyon.
42	June 1	09-37-56	37° 59'	122° 01'	С	2.0	Aftershock.
43	June 1	16-40-24	39.4°	118.0°	d	3.7	Foreshock.
43	June 1	16-50-25	39° 25'	118° 03'	С	3.9	East of Fallon, Nevada.
44	June 3	09-15-42	40.6°	124.2°	d	2.8	Near Ferndale.
45	June 3	14-43-59	37° 03'	121° 31'	b	3.3	Northwest of Hollister.
-	June 5	11-05-04	42.8°	126.5°	d		Off Cape Blanco, Oregon.
46	June 5	17-12-50	36.4°	121.1°	d	3.1	North of King City.
47	June 6	14-40-29	37° 581	122° 18'	С	2.0	North of Berkeley.
48	June 7	19-35-32	36.6°	121.2°	d	2.7	Southeast of Hollister.
49	June 8	16-15-45	36° 31'	121° 28'	С	3.0	South of Hollister.
50	June 9	10-59-25	38° 40°	119° 40'	С	3.4	Foreshock.
50	June 9	11-59-56	38° 40'	119° 40'	b	3.9	Near Markleeville.
51	June 10	21-09-42	36° 43' III at Mos	121° 38' ss Landing.	С	3.1	Northeast of Monterey.
43	June 11	06-06-05	39° 26'	118° 01'	С	3.4	East of Fallon, Nevada.
52	June 11	16-25-36	40° 39° III in nor	123° 59' oth section	c n of		Northeast of Ferndale. ka.
53	June 15	11-49-56	37° 55'	121° 59'	b	2.3	East of Berkeley.
54	June 17	19-16-56	36° 58'	123° 04'	С	2.4	West of Santa Cruz.
55	June 18	07-02-58	36° 30'	121° 23'	С	2.9	Foreshock.
55	June 18	07-05-34	36° 30'	121° 23'	С	3.3	South of Hollister.
56	June 18	20-42-22	37° 31'	121° 24'	С	2.4	Northeast of Mt. Hamilton.
57	June 18	22-54-03	37° 43' Francisco.	122° 30' Felt in	b Por	1.4 tola	Near Lake Merced, San District of San Francisco.
58	June 19	18-43-20	38.4°	122.4°	d	2.0	East of Santa Rosa.
59	June 20	16-59-35	38.6°	122.1°	d	2.4	West of Sacramento.
60	June 20	17-39-50	40.5°	126.4°	d	3.4	Off Cape Mendocino.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West		_M_	Remarks
61	June 21	01-03-31	36.4°	120.40	d	2.1	Southwest of Fresno.
62	June 21	14-34-57	36° 56'	121° 40'	b	2.6	Northwest of Hollister.
63	June 22	06-21-02	38° 39' sharply at	122° 44' Healdsbur	c g.	-	North of Santa Rosa. Felt felt at Rio Nido.
64	June 24	21-11-01	37° 031	121° 23'	С	2.5	North of Hollister.
65	June 27	05-51-59	40.5°	123.8°	d	2.8	East of Ferndale.
66	June 29	01-25-18	38° 49'	119° 46'	b	3.3	North of Markleeville.
67	June 29	08-37-12	39° 33'	118° 25'	С	3.7	East of Fallon, Nevada.
68	June 29	15-29-24	40.3°	124.3°	d	2.6	South of Ferndale.
69	June 29	21-14-01	36° 53' Hollister.	121° 25'	b	3.1	Near Hollister. IV at
69	June 29	21-50-32	36° 53'	121° 25'	C	3.0	Aftershock.
70	June 30	01-48-41	36° 36'	121° 17'	C	3.0	Southeast of Hollister.



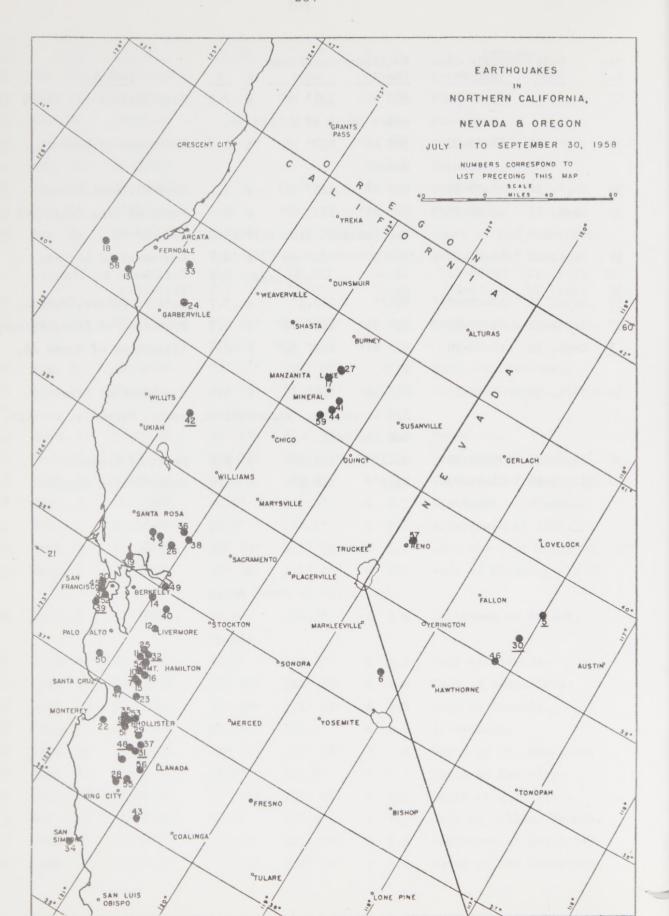
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
July-September 1958

Map No.	-	Origin Time (G.C.T.)	Latitude North	Longitude West	9	М	Remarks
1	July 2	17-54-26	36.5°	121.3°	d	2.8	Southwest of Llanada.
2	July 2	18-30-56	38.4°	122.3°	d	2.1	East of Santa Rosa.
3	July 2	20-01-31	37° 421	122° 33'	С	1.9	Aftershock of March 22, 1957.
4	July 3	00-08-00	38.40	122.40	d	2.5	East of Santa Rosa.
5	July 4	07-49-54	39.6°	118.0°	d	3.6	East of Fallon, Nevada.
6	July 6	18-25-17	38.40	119.3°	d	2.9	Southeast of Markleeville.
7	July 7	09-00-49	37° 10'	121° 39'	c	3.2	South of Mt. Hamilton.
			Felt at M	lorgan Hill.			
8	July 8	11-00-52	36° 51'	121° 26'	b	2.7	Near Hollister.
9	July 9	04-37-43	36.8°	121.5°	d	3.0	South of Hollister. IV at
			Hollister	, San Juan	Bau	tista,	and 7½ miles south of
			Hollister				
10	July 9	05-23-40	37° 15°	121° 40°	b	4.1	South of Mt. Hamilton.
			Reported	felt in sca	tte	red lo	calities of the coastal
			region of	westcentra	1 C	alifor	mia from San Rafael to Carmel
			and inlan	d to a dist	anc	e of a	bout 30 miles, comprising an
			area of a	pproximatel	y 3	,000 s	quare miles. No damage
			reported.	Maximum i	nte	nsity	V, at Coyote, Holy City,
			Morgan Hi	ll, Milpita	8,	and Sa	nta Cruz.
10	July 9	06-07-40	37° 16'	121° 42'	С	2.6	Aftershock. Smaller after-
			shocks at	06-07-10 a	nd	06-07-	26.
10	July 9	06-12-37	37° 16'	121° 42°	c	2.2	Aftershock.
11	July 13	20-56-24	37° 23'	121° 45°	Ъ	2.0	Northwest of Mt. Hamilton.
12	July 14	00-41-33	37° 38°	121° 45'	a	1.9	Southeast of Livermore.
13	July 14	21-43-00	40° 17'	124° 23'	C	3.5	Southwest of Ferndale.
14	July 15	19-18-59	37° 53°	121° 59'	a	2.1	East of Berkeley. After-
			shock of	magnitude 1	.4	at 19-	52-29.
15	July 18	05-46-54	37° 091	121° 36'	b	2.5	South of Mt. Hamilton.
16	July 19	09-46-03	37° 14°	121° 33'	С	1.8	Southeast of Mt. Hamilton.
17	July 19	20-47-24	40° 27°	121° 40°	С	2.1	Northwest of Mineral.
18	July 21	16-12-17	40° 231	124° 48°	C	3.8	Southwest of Ferndale.
19	July 22	19-02-29	38° 05'	122° 29'	С	1.9	Northwest of Berkeley.
			Blast?				Value of North
20	July 24	22-49-34	37° 45'	122° 36'	b	1.8	West of San Francisco.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	М	Remarks
21	July 26	11-51-57	37.7°	124.9°	d	3.1	130 miles west of San
							Francisco.
22	July 27	18-29-42	36.7°	121.7°	d	2.7	Northeast of Monterey.
23	July 29	08-27-01	37° 021	121° 31'	C	2.5	Northwest of Hollister.
24	July 30	07-34-17	40.3°	123.6°	d	3.1	Northeast of Garberville.
25	July 30	19-01-20	37° 261	121° 43'	C	2.5	Northwest of Mt. Hamilton.
26	July 31	17-47-50	38° 23'	122° 09'	C	1.8	East of Santa Rosa.
9	Aug. 3	07-17-44	36.8°	121.5°	d	2.2	Southwest of Hollister.
27	Aug. 3	14-16-36	40° 34°	121° 34°	b	2.2	Near Manzanita Lake.
28	Aug. 8	13-43-01	36.3°	121.2°	d	2.7	Foreshock. Records mixed.
28	Aug. 8	13-43-15	36.3°	121.2°	d	3.9	Northwest of King City.
			IV at Big	Sur.			
29	Aug. 10	02-13-04	36° 46°	121° 16'	C	2.5	Southeast of Hollister.
30	Aug. 10	20-23-04	39.3°	118.1°	d	3.6	Southeast of Fallon,
			Nevada.				
31	Aug. 11	18-43-43	36.6°	121.2°	d	2.3	West of Llanada.
32	Aug. 13	17-18-26	37° 25'	121° 40°	a	3.1	North of Mt. Hamilton.
32	Aug. 13	17-27-17	37° 251	121° 40°	b	2.4	Aftershock.
32	Aug. 13	17-46-53	37° 25'	121° 40°	a	2.8	Aftershock.
33	Aug. 15	10-52-35	40.6°	123.80	d	3.3	Southeast of Arcata.
34	Aug. 18	05-30-42	35.6°	121.3°	d	3.4	Near San Simeon.
35	Aug. 18	18-01-39	36° 52'	121° 31'	b	2.8	West of Hollister.
36	Aug. 20	12-03-19	38° 33'	122 07	С	2.3	West of Sacramento.
CIT	Aug. 22	23-42-02	37.58°	118.47°	c	4.0	Northern Owens Valley Southeast of Hollister
37 38	Aug. 26 Aug. 29	16-29-04 06-23-15	36.7° 38.5°	121.2° 122.0°	d		West of Sacramento.
39	Aug. 30	16-13-53				1.6	Foreshock.
39	Aug. 30	16-15-07				1.6	Foreshock.
39	Aug. 30	16-15-19				1.6	Foreshock.
39	Aug. 30	16-15-30				1.6	Foreshock.
39	Aug. 30	16-16-13				1.2	Foreshock.
39	Aug. 30	16-16-35				1.8	Foreshock.
39	Aug. 30	16-16-37				2.0	Foreshock.
39	Aug. 30	16-17-11				1.6	Foreshock.
39	Aug. 30	16-19-42				1.2	Foreshock.
39	Aug. 30	16-20-38				2.1	Foreshock.
39	Aug. 30	16-21-09				2.6	Foreshock.
39	Aug. 30	16-21-49				1.4	Foreshock.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	9	M	Remarks
39	Aug. 30	16-22-00				2.1	Foreshock.
39	Aug. 30	16-27-53				1.5	Foreshock.
39	Aug. 30	16-28-28				2.9	Foreshock.
39	Aug. 30	16-31-16				1.8	Foreshock.
39	Aug. 30	16-32-18				1.7	Foreshock.
39	Aug. 30	16-37-56				1.0	Foreshock.
39	Aug. 30	16-40-27				2.2	Foreshock.
39	Aug. 30	16-43-54.9	37° 34°	122° 30'	a	3.2	South of San Francisco.
			Felt (IV)	in San Mat	ceo	County	and parts of western
			San Franc	cisco.			
39	Aug. 30	16-47-53				2.5	Aftershock.
19	Aug. 30	18-41-48	38° 04°	122° 29'	a	2.1	North of San Francisco.
-			Blast?				
40	Aug. 31	09-52-40	37° 51'	121° 47'	b	2.3	North of Livermore.
41	Aug. 31	21-49-22	40° 18°	121° 24'	C	2.8	East of Mineral. II at
		and the local	Storie.				
42	Sept. 1	10-09-01	39° 281	122° 48°	c	2.1	Foreshock.
42	Sept. 1	11-01-52	39° 281	122° 48'	b	3.8	Northeast of Ukiah.
43	Sept. 1	11-31-42	36.1°	120.8°	d	3.2	Southeast of King City.
44	Sept. 1	19-45-48	40.2°	121.4°	d	2.7	Southeast of Mineral.
42	Sept. 1	20-06-49	39.5°	122.8°	d	2.1	Aftershock of 1101.
45	Sept. 4	19-16-30	37° 44°	122° 33'	b	1.6	Aftershock of March 22, 1957
31	Sept. 5	18-29-32	36° 36°	121° 13'	b	3.3	West of Llanada. IV 71/2
			miles so	uth of Holl:	iste	r.	
46	Sept. 8	07-31-11	39.0°	118.2°	d	3.6	Southeast of Fallon,
			Nevada.				
31	Sept. 10	05-28-02	36.6°	121.2°	d	2.5	West of Llanada.
47	Sept. 11	05-59-48	37° 00'	121° 45'	С	2.6	East of Santa Cruz.
48	Sept. 11	20-46-03	36° 37'	121° 19'	b	2.8	West of Llanada.
48	Sept. 11	21-51-26	36.6°	121.3°	d	2.4	Aftershock.
10	Sept. 11	23-49-16	37° 13'	121° 38'	a	2.0	South of Mt. Hamilton.
49	Sept. 12	21-29-39	38.0°	121.9°	d	2.1	North of Berkeley.
50	Sept. 13	19-04-00	37° 11'	122° 09'	b	2.8	South of Palo Alto.
5	Sept. 16	23-26-37	39.6°	118.0°	d	3.5	East of Fallon, Nevada.
51	Sept. 17	20-34-52	36° 45°	121° 29'	b	2.5	Southwest of Hollister.
52	Sept. 18	22-56-54	37° 41°	122° 28°	b	1.3	South of San Francisco.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	9	M	Remarks
53	Sept. 19	03-27-50	36° 51'	121° 28'	c	2.2	Near Hollister. IV 7½
			miles sou	th of Holli	iste	r.	
19	Sept. 20	18-39-08	38° 06°	122° 29'	b	2.2	Northwest of Berkeley.
			Blast?				
54	Sept. 20	23-37-57	37° 18'	121° 37°	a	3.3	Near Mt. Hamilton.
55	Sept. 21	07-24-55	36° 21'	121° 07'	С	4.6	North of King City. VI at
			San Benit	to. Also fe	elt	at Sol	Ledad.
56 CIT 30 30	Sept. 21 Sept. 22 Sept. 22 Sept. 22	10-20-42	36° 30° 37.58° 39.3° 39.3°	121° 03' 118.47° 118.1° 118.1°	c c d d	2.7 3.3 3.5 3.7	Southwest of Llanada. Northwest of Bishop. Foreshock East of Fallon, Nevada.
57	Sept. 22	11-32-46	39° 35'	119° 45'	С	2.7	Northeast of Reno, Nevada.
3	Sept. 22	18-42-54	37° 41'	122° 32'	a	2.4	Aftershock of March 22,
			1957.				
58	Sept. 23	03-50-15	40° 16°	124° 35'	b	4.4	Southwest of Ferndale.
			III at E	ureka. Als	o fe	elt at	Arcata, Ferndale, Fortuna,
			and Rio	Dell.			
59	Sept. 23	05-29-30	40.10	121.5°	d	2.8	South of Mineral.
60	Sept. 29	- 0	42.3°	118.1°	d	4.0	Southeastern Oregon.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON October-December 1958

Map No.	Date 1958	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
1	Oct. 1	21-42-11	39° 34'	120° 18'	b	4.6	West of Reno. Felt over
_	0000						00 square miles of north-
							rn Nevada. Maximum intensity
							O miles northwest of Reno),
							cracked. V at Blue Canyon,
					_		ut, Sierraville, and Vinton,
				a, and at R			
2	Oct. 4	03-16-11	36.6°	121.6°			Southwest of Hollister.
-	Oct. 7	16-09-41	440	127.5°	d		Off coast of Oregon.
~	Oct. 7	20-11-06	44°	127.5°			Aftershock.
3	Oct. 10	13-05-16	35° 56'	120° 30'	b	4.5	Southwest of Coalinga.
			Felt over	an area of	ар	proxi	mately 3,500 square miles
							ion of California. Appears
			to have b	een more st	ron	gly f	elt at Parkfield than else-
							Roberts, Coalinga, Harmony,
			Tana Dina	T 017.61	7 7	D	
			Lone Pine	Inn, Ollii	eld	, Par	kfield, Paso Robles, and
			San Ardo.		.e.a	, Par	kfield, Paso Robles, and
4	Oct. 14	10-48-08				, Par	
4 5	Oct. 14	10-48-08 02-30-40	San Ardo.				
			San Ardo.	122° 18'	С	2.2	Southwest of Palo Alto. Northwest of Mt. Hamilton.
5	Oct. 15	02-30-40	San Ardo. 37° 15' 37° 27'	122° 18'	c	2.2	Southwest of Palo Alto. Northwest of Mt. Hamilton.
5	Oct. 15	02-30-40 16-16-44	San Ardo. 37° 15' 37° 27' 35.6°	122° 18' 121° 48' 121.2°	c c	2.2 2.1 3.2	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister.
5 6 7	Oct. 15 Oct. 15 Oct. 16	02-30-40 16-16-44 13-22-18	San Ardo. 37° 15' 37° 27' 35.6° 36° 39'	122° 18' 121° 48' 121.2° 121° 15'	c c d	2.2 2.1 3.2 2.4	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister.
5 6 7	Oct. 15 Oct. 15 Oct. 16	02-30-40 16-16-44 13-22-18	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00'	122° 18' 121° 48' 121.2° 121° 15'	c c d c	2.2 2.1 3.2 2.4 2.5	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister.
5 6 7 8	Oct. 15 Oct. 15 Oct. 16 Oct. 17	02-30-40 16-16-44 13-22-18 00-33-17	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast?	122° 18' 121° 48' 121.2° 121° 15' 122° 27'	c c d c b	2.2 2.1 3.2 2.4 2.5	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley.
5 6 7 8	Oct. 15 Oct. 15 Oct. 16 Oct. 17	02-30-40 16-16-44 13-22-18 00-33-17	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2°	122° 18' 121° 48' 121.2° 121° 15' 122° 27'	c c d c b	2.2 2.1 3.2 2.4 2.5	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada.
5 6 7 8	Oct. 15 Oct. 15 Oct. 16 Oct. 17	02-30-40 16-16-44 13-22-18 00-33-17	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2° 38° 08'	122° 18' 121° 48' 121.2° 121° 15' 122° 27'	c c d c b	2.2 2.1 3.2 2.4 2.5 3.0 2.2	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada.
5 6 7 8 9	Oct. 15 Oct. 15 Oct. 16 Oct. 17 Oct. 17	02-30-40 16-16-44 13-22-18 00-33-17 06-31-53 17-57-23	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2° 38° 08' Blast?	122° 18' 121° 48' 121.2° 121° 15' 122° 27' 118.1° 122° 27'	c c d c b	2.2 2.1 3.2 2.4 2.5 3.0 2.2	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada. Northwest of Berkeley. Foreshock.
5 6 7 8 9 10	Oct. 15 Oct. 16 Oct. 17 Oct. 17 Oct. 18	02-30-40 16-16-44 13-22-18 00-33-17 06-31-53 17-57-23	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2° 38° 08' Blast? 37° 44'	122° 18' 121° 48' 121.2° 121° 15' 122° 27' 118.1° 122° 27'	c c d c b	2.2 2.1 3.2 2.4 2.5 3.0 2.2	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada. Northwest of Berkeley. Foreshock.
5 6 7 8 9 10	Oct. 15 Oct. 16 Oct. 17 Oct. 17 Oct. 18 Oct. 22 Oct. 22	02-30-40 16-16-44 13-22-18 00-33-17 06-31-53 17-57-23 00-58-59 02-04-04 05-01-42	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2° 38° 08' Blast? 37° 44' 37° 44'	122° 18' 121° 48' 121.2° 121° 15' 122° 27' 118.1° 122° 27' 122° 06' 122° 06'	c c d c b d b a d c	2.2 2.1 3.2 2.4 2.5 3.0 2.2 1.9 2.1 3.5 2.9	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada. Northwest of Berkeley. Foreshock. Southeast of Berkeley. West of Arcata. South of Ferndale.
5 6 7 8 9 10 11 11 12	Oct. 15 Oct. 16 Oct. 17 Oct. 17 Oct. 18 Oct. 22 Oct. 22 Oct. 23	02-30-40 16-16-44 13-22-18 00-33-17 06-31-53 17-57-23 00-58-59 02-04-04 05-01-42 07-26-41	San Ardo. 37° 15' 37° 27' 35.6° 36° 39' 38° 00' Blast? 39.2° 38° 08' Blast? 37° 44' 40.8°	122° 18' 121° 48' 121.2° 121° 15' 122° 27' 118.1° 122° 27' 122° 06' 122° 06' 125.8°	c c d c b d b a d c	2.2 2.1 3.2 2.4 2.5 3.0 2.2 1.9 2.1 3.5 2.9	Southwest of Palo Alto. Northwest of Mt. Hamilton. Near San Simeon. Southeast of Hollister. Northwest of Berkeley. Southeast of Fallon, Nevada. Northwest of Berkeley. Foreshock. Southeast of Berkeley. West of Arcata.

Map	Date	Origin Time	Latitude	Longitude			
No.	1958	(G.C.T.)	North	West	9	M	Remarks
14	Oct. 24	02-59-24	40.40	121.6°	d	3.0	North of Mineral.
15	Oct. 29	00-19-08	36.7°	121.4°	d	2.2	South of Hollister.
16	Oct. 29	12-17-02	40° 22'	124° 12'	C	2.5	South of Ferndale.
17	Oct. 29	14-10-59	37° 44°	121° 47'	С	2.2	Near Livermore.
18	Oct. 31	00-26-14	37° 29'	121° 47'	a	4.2	Southwest of Livermore.
			Reported	felt in sca	atte	red 1	ocalities over a land area
			of approx	cimately 1,5	500	squar	e miles, principally in
			southwest	Alameda Co	ount	y and	along the east shore areas
			of the Sa	an Francisco	pe:	ninsu	la. Maximum intensity VI
			at Milpi	tas, where a	a wa	ter m	ain was reported cracked.
			V at Berl	keley, Brish	ane	, Mof	fett Field, Mount Eden,
			Niles and	d San Carlos	3 .		
18	Oct. 31	17-53-30	37° 28'	121° 48'	С	2.5	Aftershock.
19	Oct. 31	23-55-02	. 38.4°	122.2°	d	2.3	East of Santa Rosa.
20	Nov. 3	00-32-14	40.60	122.0°	d	2.5	Between Mineral and Shasta.
21	Nov. 6	20-11-57	36° 05'	120° 53'	C	3.1	Southeast of King City.
22	Nov. 7	03-21-20	40.6°	124.1°	d	2.4	East of Ferndale.
23	Nov. 7	21-33-24	36° 52'	121° 53'	b	4.3	Monterey Bay, southeast of
			Santa Cr	uz. IV at l	Moss	Land	ling, San Jose, and
			Santa Cr	uz.			the state of the s
24	Nov. 8	07-43-51	36° 59'	121° 47'	b	2.4	East of Santa Cruz.
25	Nov. 8	07-50-28	36° 57'	121° 43'	С	2.5	East of Santa Cruz.
26	Nov. 8	13-17-39	37° 20'	122° 17'	a	2.7	Southwest of Palo Alto.
27	Noy. 8	20-23-12	37° 00'	121° 51'	b	2.4	East of Santa Cruz.
28	Nov. 9	08-09-58	37° 23'	121° 42'	b	2.9	Northwest of Mt. Hamilton.
29	Nov. 9	21-40-05	39.3°	118.6°	d	3.3	Southeast of Fallon, Nevada.
30	Nov. 9	23-09-06	36.8°	121.7°	d	2.0	Northeast of Monterey.
31	Nov. 10	16-44-11	38.4°	118.4°	d	3.8	Southeast of Hawthorne,
			Nevada.				
32	Nov. 10	19-18-41	36.9°	121.5°	d	2.5	Near Hollister.
33	Nov. 11	02-35-27	37° 37'	121° 40°	b	1.8	Southeast of Livermore.
34	Nov. 11	14-11-47	36° 40'	121° 31'	b	3.1	
35	Nov. 12	04-05-22	40° 16'	125° 30'	С	3.9	
36	Nov. 16	05-56-33	37.4°	121.8°	d	2.4	Northwest of Mt. Hamilton.

Map No.	Date 1958	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	_M_	Remarks
37	Nov. 16	12-24-30	37.0°	121.8°	d	2.6	East of Santa Cruz.
38	Nov. 16	16-07-35	39° 05'	123° 01'	ъ	2.8	Southeast of Ukiah.
39	Nov. 19	11-14-57	37° 43°	122°36'	C	1.4	Southwest of San Francisco.
40	Nov. 24	07-43-56	37° 20'	121° 40°	b	2.5	Near Mt. Hamilton.
41	Nov. 24	15-21-48	40° 22°	125° 17'	C	3.5	Off Cape Mendocino.
42	Nov. 25	13-19-16	40° 35'	123° 26'	С	2.9	East of Ferndale.
43	Nov. 26	03-30-27	37° 03'	121° 30'	С	2.1	Northwest of Hollister.
44	Nov. 26	22-23-26	39.5°	118.1°	d	3.4	East of Fallon, Nevada.
45	Nov. 27	06-04-26	36° 221	121° 09'	С	3.9	West of Llanada. Felt
			slightly	at Carmel.			
46	Nov. 27	06-37-21	41.1°	124.3°	d	3.5	Northwest of Arcata.
47	Nov. 27	13-39-01	36.2°	120.8°	d	3.1	East of King City.
48	Nov. 29	11-40-54	40.40	123.1°	d	3.1	Southwest of Weaverville.
49	Nov. 30	10-30-47	40.5°	122.0°	d	2.2	West of Manzanita Lake.
50	Dec. 2	00-10-19	38° 031	122° 11'	C	1.8	Northeast of Berkeley.
51	Dec. 2	05-06-15	40.5°	121.6°	d	3.1	North of Mineral.
52	Dec. 2	17-43-33	40° 15'	124° 41'	С	4.3	Southwest of Ferndale.
			Felt over	a land are	ea c	of app	proximately 2,000 square
			miles. N	No damage re	epor	ted.	V at Briceland, Carlotta,
			Ferndale,	Fields Lar	ndin	ig, Lo	leta, Pepperwood, and
			Petrolia				
53	Dec. 3	13-01-46	40.10	123.2°	d	2.6	East of Garberville.
54	Dec. 3	19-44-37	40.60	122.2°	d	2.3	Southeast of Shasta.
55	Dec. 8	02-40-56	36.8	121.3°	d	2.4	Southeast of Hollister.
56	Dec. 9	14-55-31	37° 42'	122° 33'	a	2.5	Foreshock of Dec. 11 at
			0952. Fe	elt in San B	rar	cisco	and Daly City.
57	Dec. 10	00-28-04	36.7°	121.1°	d	2.7	Northwest of Llanada.
56	Dec. 10	12-41-03	37° 421	122° 34'	b	2.2	Foreshock. Felt in Daly
			City.				
56	Dec. 11	09-52-27	37° 42'	122° 34'	а	4.7	Southwest of San Francisco.
			Felt over	r a land are	ea c	of app	proximately 6,500 square
			miles. S	Slight damag	ge o	occuri	red, consisting of some
			cracked]	plaster, fev	w br	roken	dishes and windows, and
			slight lo	oss of falle	en n	nercha	andise. Minor slide occurred

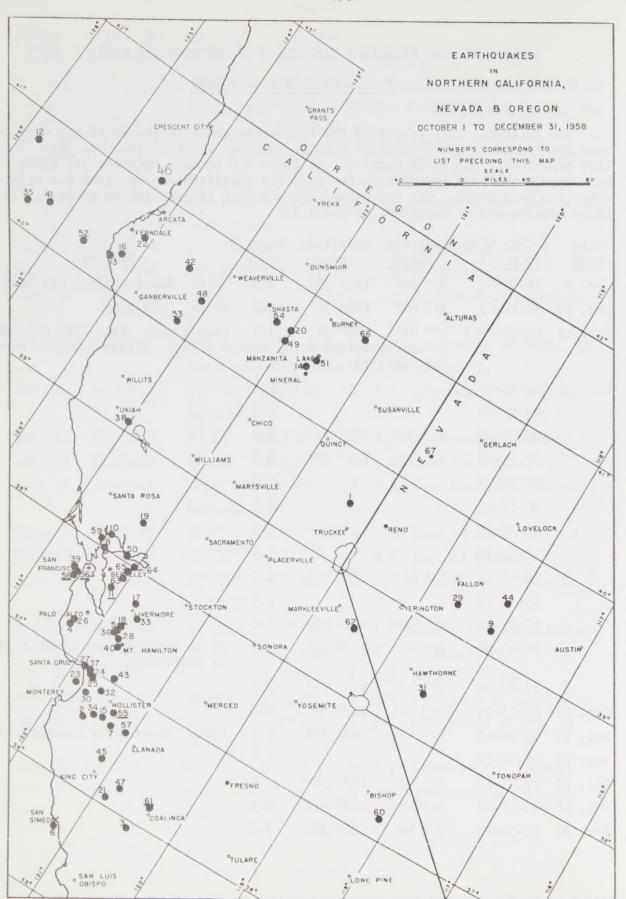
Map No.	Date 1958	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks				
			on State	Highway 1 w	hic	h run	s along the coast. VI at				
			Daly City	, Colma, Laf	aye	tte,	Moffett Field, Rodeo, San				
			Bruno, ar	nd San Franc	isc	0.					
			Afte	ershocks hav	e b	een i	ncluded in this regional				
			list only if of magnitude 2.5 or above. A separate tab-								
			ulation of all identifiable shocks of this series fol-								
			lows this	list.							
58	Dec. 11	09-58-50	37° 39'	122° 33'	b	2.8	Aftershock.				
58	Dec. 11	09-59-46	37° 39'	122° 33'	b	2.8	Aftershock.				
59	Dec. 11	19-57-51	38° 05'	122° 31'	С	1.5	Northwest of Berkeley.				
			Blast?								
58	Dec. 11	21-40-08	37° 39'	122° 33'	b	3.3	Aftershock of 0952. IV at				
			San Franc	cisco. Also	fe	lt at	Brentwood.				
58	Dec. 13	01-53-24	37° 40'	122° 33'	b	2.8	Aftershock of Dec. 11				
			at 0952.								
60	Dec. 13	14-48-54	37.2°	118.1°	d	3.4	Southwest of Bishop.				
61	Dec. 15	14-58-49	36.2°	120.40	d	3.0	Near Coalinga.				
61	Dec. 15	15-24-01	36.2°	120.4°	d	3.0	Near Coalinga. IV at				
			Coalinga								
62	Dec. 17	08-12-45	38.6°	119.5°	d	3.1.	East of Markleeville.				
63	Dec. 17	10-22-50	37° 53'	122° 04'	b	2.0	East of Berkeley.				
58	Dec. 17	17-41-13	37° 40'	122° 33'	b	2.7	Aftershock of Dec. 11				
			at 0952.								
64	Dec. 18	22-43-39	37° 591	122° 01'	С	1.6	Northeast of Berkeley.				
65	Dec. 19	10-43-13	37° 56'	122° 02'	b	2.1	Northeast of Berkeley.				
66	Dec. 22	10-41-50	40.9°	121.2°	d	2.5	East of Burney.				
55	Dec. 26	16-32-27	36.8°	121.3°	d	2.4	Southeast of Hollister.				
58	Dec. 28	11-51-15	37° 40°	122° 32'	a	2.6	Aftershock of Dec. 11				
			at 0952.								
CIT	Dec. 30	01-34-15	35.92°	119.8°	С	3.2	Southeast of Coalinga				
67	Dec. 30	06-15-40	40.3°	119.8°	С	3.0	Southwest of Gerlach,				
			Nevada.								

THE SAN FRANCISCO EARTHQUAKE OF DECEMBER 11, 1958

Foreshocks and Aftershocks

The following list tabulates the foreshocks and aftershocks of the earthquake near San Francisco at 09^h52^m27.2^s G.C.T., December 11, 1958 (Map No. 56). The list contains 13 shocks of magnitude at least 2.0 through December 31, 1958, and is complete for such shocks with the possible exception of the first two minutes after the main shock. The preceding regional list of earthquakes includes only those aftershocks of magnitude at least 2.5.

Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	Remarks
Dec. 9	14-55-31	37° 42'	122° 33'	2.5	Felt: San Francisco and Daly City.
Dec. 10	12-41-03	37° 421	122° 341	2.2	Felt: Daly City.
Dec. 11	09-52-27.2			4.7 00 squar	Main shock. Felt over a land area re miles. Slight damage. Maximum
Dec. 11	09-57-00			1.8	
	09-57-04			1.7	
	09-58-50	37° 39'	122° 33'	2.8	
	09-59-46	37° 39'	122° 33'	2.8	
	10-19-45			1.5	
	10-32-03			2.1	
	11-22-06			1.5	
	12-21-32			1.2	
	12-43-15	37° 40'	122° 33'	1.9	
	13-27-11			1.3	
	16-05-31	37° 421	122° 34'	2.0	
	21-40-08	37° 39'	122° 33'	3.3	IV at San Francisco. Also felt at Brentwood.
	23-27-35	37° 42'	122° 34'	2.1	
Dec. 13	01-53-24	37° 40'	122° 33'	2.8	
Dec. 14	03-56-03	37° 421	122° 33'	1.5	Felt: Stonestown District, S.F.
Dec. 16	03-38-14			1.8	
Dec. 17	17-41-13	37° 40°	122° 33'	2.7	
Dec. 18	23-47-28	37° 43'	122° 34'	2.3	
Dec. 28	11-51-15	37° 40'	122° 32'	2.6	



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
January-March 1959

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	2	М	Remarks
1	Jan. 2	08-30-24	40.70	124.6°	d	3.3	Northwest of Ferndale.
2	Jan. 4	17-09-29	39° 51'	121° 57'	c	2.4	Northwest of Chico.
3	Jan. 5	05-15-05	40° 47° 125° 24° c 4.0 Wes		West of Arcata.		
4	Jan. 7	19-47-32	36° 40'	121° 09'	С	3.2	West of Llanada.
5	Jan. 11	04-16-45	37.0°	121.8°	d	2.5	East of Santa Cruz.
6	Jan. 11	05-18-26	36.2°	120.8°	d	2.5	West of Coalinga.
7	Jan. 14	05-48-13	37° 41°	1220 341	b	1.7	Southwest of San Francisco.
			Aftersho	ck of Mar.	22,	1957	•
-	Jan. 15	08-42-09	440	130°			About 300 miles off coast
			of Orego	n. Epicent	ter	and o	rigin time by USCGS.
8	Jan. 16	09-30-15	37° 26'	121° 45'	C	2.2	Northwest of Mt. Hamilton.
8	Jan. 17	07-23-55	37° 241	121° 45'	b	2.5	Northwest of Mt. Hamilton.
-	Jan. 18	17-15-03	440	127½°			About 150 miles off coast
			of Orego	n. Epicent	ter	and o	rigin time by USCGS.
9	Jan. 19	11-32-32	41.3°	120.4°	d	3.7	Southeast of Alturas.
10	Jan. 20	04-18-47	37° 19'	121° 41°	b	1.9	Near Mt. Hamilton.
11	Jan. 21	10-04-27	40° 53°	123° 57'	C	.3.2	East of Arcata.
12	Jan. 22	18-38-39	37° 29'	121° 46'	b	1.8	Northwest of Mt. Hamilton
Felt	Jan. 22	23-25-00	37.5°	119.65°	d	-	III reported felt Wawona.
13	Jan. 24	15-20-11	40.80	121.3°	d	2.6	East of Burney.
14	Jan. 28	12-50-17	37° 31'	121° 47°	a	3.0	Northwest of Mt. Hamilton.
15	Jan. 28	13-54-39	37° 201	121° 40°	a	2.7	Near Mt. Hamilton.
			Aftersho	ck, magnitu	ıde	1.9,	at 14-28-17.
16	Jan. 28	19-36-22	37° 081	122° 21'	C	2.5	Northwest of Santa Cruz.
17	Jan. 29	16-41-23	37° 081	121° 34°	a	4.3	Northwest of Hollister.
			IV at Mo	organ Hill.	Fe	elt by	a few persons in
			San Fran	cisco.			
18	Jan. 30	12-51-48	36° 31'	121° 13'	b		Southwest of Llanada.
19	Feb. 1	20-40-59	37° 28'	121° 49'	C	1.8	Northwest of Mt. Hamilton.
17	Feb. 2	10-14-25	37° 08'	121° 34°	b	2.8	South of Mt. Hamilton.
20	Feb. 2	11-59-33	37° 45'	122° 07'	b	2.2	Southeast of Berkeley.
			Felt in	San Leandre	٥.		

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Map No.	Dat 195		Origin Time (G.C.T.)	Latitude Longitude North West Q M Remarks
				slide occurred on Chittenden Pass Road east of
				Watsonville, and boulders fell on Hecker Pass Highway
				between Gilroy and Watsonville. VI at Aromas,
				Ben Lomond, Boulder Creek, Felton, Freedom, Gilroy,
				Hollister, Holy City, Madrone, Morgan Hill, New Almaden,
				San Francisco, San Jose, San Juan Bautista, San Martin,
				Santa Cruz, and Watsonville. V throughout most of the
				remainder of the southern part of the San Francisco
				Bay Area.
				Aftershocks of magnitude 3.0 or above are
				included in this list. A separate, more complete
				tabulation of aftershocks appears following this list.
40	Mar.	3	07-23-46	37° 00° 121° 36° b 4.4 Aftershock. V at Madrone,
				Morgan Hill, Soquel, and Watsonville.
40	Mar.	3	08-20-06	37° 00' 121° 36' c 3.1 Aftershock. Felt at
				Gilroy.
40	Mar.	3	18-32-13	36° 59' 121° 36' b 4.0 Aftershock. IV at Aptos.
Felt	Mar.	3	09-30-00	37.2° 121.8° d - IV Reported felt at Madrone
40	Mar.	4	06-25-14	37° 00' 121° 36' c 3.2 Aftershock. III at Aptos.
40	Mar.	4	08-01-43	37° 00' 121° 37' c 3.8 Aftershock. IV at Aptos.
40	Mar.	4	08-57-28	37° 00' 121° 37' c 3.0 Aftershock.
41	Mar.	4	14-13-49	37° 54' 121° 51' b 2.0 North of Livermore.
40	Mar.	4	20-55-06	37° 00' 121° 37' b 3.5 Aftershock of Mar. 2.
				IV at Aptos.
40	Mar.	4	21-06-21	37° 00' 121° 36' b 3.6 Aftershock of Mar. 2.
				Felt at Aptos.
42	Mar.	5	06-41-38	38° 21' 118° 34' c 4.2 South of Hawthorne,
				Nevada.
43	Mar.	6	22-09-22	37° 31' 121° 37' c 2.3 North of Mt. Hamilton.
44	Mar.	7	13-19-50	36.7° 121.5° d 2.6 South of Hollister.
45	Mar.	8	19-34-03	
				1957? Coast Guard reports a plate glass window was
				cracked on this date "around noon" (i.e., around 20h
				GCT) at the Point Bonita Lighthouse.
46\$	Mar.	9	13-13-50	38° 37' 122° 05' c 2.4 West of Sacramento.
40	Mar.	10	00-18-40	36° 59' 121° 35' c 3.5 Aftershock of Mar. 2?

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	М	Remarks
47	Mar. 11	02-49-49	39°.46°	122°06'	C	3.5	Northwest of Chico.
48	Mar. 11	14-57-51	41.00	120.2°	d	3.7	Southeast of Alturas.
49	Mar. 11	23-26-47	37° 071	121° 34°	C	2,5	South of Mt. Hamilton,
50	Mar. 12	08-01-05	36° 351	121° 12'	C	2.5	West of Llanada.
40	Mar. 12	09-51-08	37° 001	121° 36'	b	3.3	Aftershock of Mar. 2.
Third			IV at Ap	tos.			
51	Mar. 13	02-44-27	35.8°	120.3°	d	2.5	South of Coalinga.
52	Mar. 14	02-43-41	35.7°	121.3°	d,	3.6	West of San Simeon,
53	Mar. 15	06-53-28	40.10	119.2°	d	3.2	South of Gerlach, Nevada.
54	Mar. 16	04-30-15	37° 56.1	121° 59'	C	2.3	Northeast of Berkeley,
55	Mar. 16	05-03-49	36° 48°	121° 36'	b	2.8	West of Hollister.
56	Mar. 16	17-36-27	38.8°	116.1°	d	4.1	Northeast of Tonopah,
			Nevada.				Service Telephone
57	Mar. 16	19-38-20	40° 431	124° 50°	¢	3.1	Northwest of Ferndale.
-	Mar. 17	16-19-19	43°	127½°	d		Off coast of Oregon.
58	Mar. 18	14-20-36	38° 39'	118° 30°	b	4.3	Northeast of Hawthorne,
			Nevada.	Felt in C	huro	hill	Lander, and Washoe
			Counties	s, Nevada.	Aft	ersho	ock (M = 3.2) at 16-07-53.
59	Mar. 20	05-12-09	36° 29'	121° 10'	b	2.9	Southwest of Llanada.
	Mar. 20	15-41-47	43.8°	126.2°	d		Off coast of Oregon.
60	Mar. 21	16-02-59	41° 00°	121° 28'	c	3.8	Northeast of Burney. IV
			at Pit	River Power	hous	se No.	, 1 (PG&E).
61	Mar. 22	02-57-31	37° 361	122° 141	a	1.9	Northwest of Palo Alto.
62	Mar. 22	10-47-28	39.3°	117.9°	d	3.9	Southeast of Fallon,
			Nevada.				
63	Mar. 22	16-10-18	38° 15'	121° 47'	C	2.5	Southwest of Sacramento.
64	Mar. 23	07-10-20	39° 36'	118° 01°	C	6.3	Dixie Valley, Nevada
			(east-n	ortheast of	Fa	llon)	. Felt over an area of
			approxi	mately 50,0	00 1	squar	e miles of Nevada and
			northea	stern Calif	orn:	ia.	VI (slight plaster
			crackin	g) at Frenc	hmai	188	tation and Carson City,
			Nevada.	V at Aust	in,	Eure	ka, Fallon, Fernley,
			Flaniga	n, Genoa, G	erl	ach,	Golconda, Hawthorne, Hazen,
			Imlay,	Lovelock, L	uni	ng, M	inden, Palisade, Schurz,
			Silver	Springs, Sm	ith	, Ste	amboat, Stewart, Tungsten,

Map No.	Date	Origin Time (G.C.T.)	North West Q M Remarks								
			Virginia City, Wabuska, Wellington, and Yerington,								
			Nevada, and at Coleville, California.								
			Aftershocks of magnitude 4.0 or above are								
			included in this list. A separate, more complete								
			tabulation of aftershocks appears following this list.								
64	Mar. 23	07-13-55	4.4 Aftershock.								
27	Mar. 23	11-49-23	39° 32° 118° 07° c 4.2 Aftershock.								
65	Mar. 24	02-21-13	37° 16' 121° 43' c 4.1 Southwest of Mt. Hamilton.								
			IV at Moss Landing and San Mateo. III at Aptos. Also								
			felt at San Francisco.								
66	Mar. 26	05-55-41	39.7° 118.1° d 3.7 Aftershock of March 23 at								
			0710.								
67	Mar. 27	11-30-33	39.6° 118.1° d 3.9 Aftershock of March 23								
			at 0710.								
67	Mar. 27	11-59-48	39° 38' 118° 06' c 4.2 Aftershock of March 23								
			at 0710.								
64	Mar. 27	13-55-21	39° 37' 118° 01' c 4.0 Aftershock of March 23								
			at 0710.								
68	Mar. 28	16-03-12	38.0° 122.0° d 2.0 Northeast of Berkeley.								
12	Mar. 30	01-08-08	37° 29' 121° 46' c 1.7 Foreshock.								
69	Mar. 30	06-29-08	37° 30' 121° 49' b 1.9 Northwest of Mt. Hamilton.								
		-									

THE GILROY EARTHQUAKE OF MARCH 2, 1959

The following list of aftershocks of the earthquake near Gilroy at 23^h27^m17^s G.C.T., March 2, 1959 (Map No. 40) includes 25 of magnitude at least 2.0 through March 31, 1959. The tabulation is probably complete for shocks of magnitude above 24 with the exception of the first several minutes after the main shock, when seismograms from all nearby stations were hopelessly tangled, and with the possible exception of small shocks which might have occurred immediately after several of the larger aftershocks.

The preceding regional tabulation includes shocks of this series (through March 31, 1959) only if the magnitude was 3.0 or above. For these larger shocks, more detailed information on intensities may be found in the regional list.

Date 1959	Origin Time	Latitude North	Longitude West	М	R	emarks				
Mar. 2	23-27-17	36° 591	121° 36'	5.3	Main shock.	Focal	depth	about	30	km.
Mar. 3	04-03-49	37.0°	121.6°	2.6	Felt.					
	07-23-46	37° 001	121° 36'	4.4	Felt.					
	08-20-06	37° 00°	121° 36'	3.1	Felt.					
	08-22-58	37.0°	121.6°	2.7	Felt.					
	18-32-13	36° 59'	121° 36'	4.0	Felt.					
	19-59-50	37° 01°	121° 37'	2.8						
Mar. 4	05-29-39	37° 00°	121° 36'	2.7						
	06-03-15	36° 58°	121° 35'	2.7						
	06-25-14	37° 001	121° 36'	3.2	Felt.					
	08-01-43	37° 001	121° 37'	3.8	Felt.					
	08-18-45	37.0	121.6°	2.7						
	08-57-28	37° 001	121° 37'	3.0						
	15-28-21	37.0°	121.6°	2.4						
	16-14-42	37° 001	121° 36'	2.5						
	20-55-06	37° 001	121° 37'	3.5	Felt.					
	21-06-21	37° 00°	121° 36'	3.6	Felt.					
Mar. 5	02-05-28	37° 01'	121° 37'	2.4						
	04-21-08	37° 01'	121° 37'	2.3	Felt.					
	06-20-25	37.0°	121.6°	2.1						
	12-30-57	37.0°	121.6°	1.9						
	13-38-16	37.0°	121.6°	2.5						
	23-20-06	37.0°	121.6°	2.4						

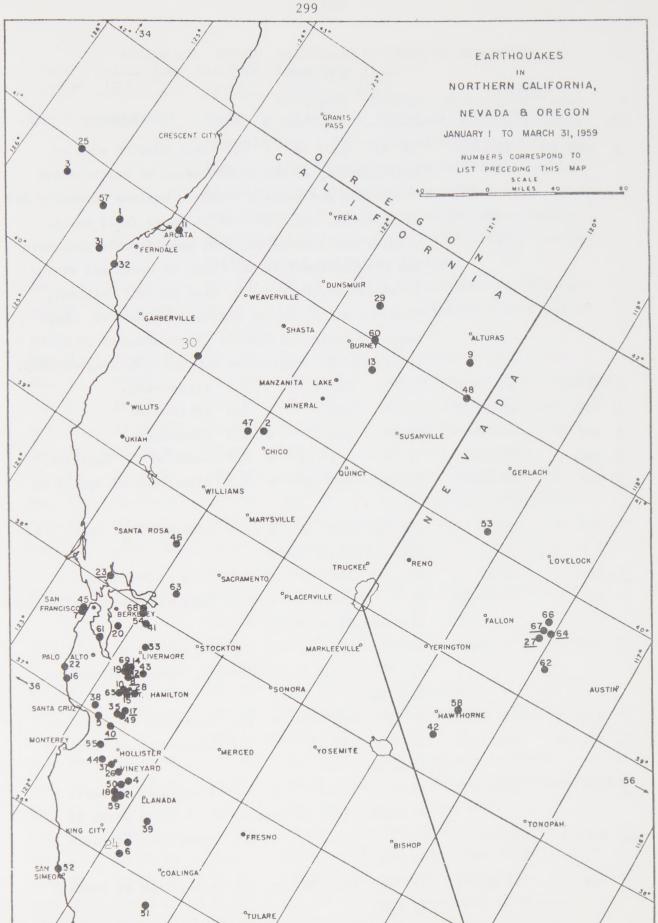
	Origin Time (G.C.T.)			M		Remarks
Mar. 10	00-18-40	36° 59°	121° 35'	3.5		
Mar. 12	09-51-08	37° 00'	121° 36'	3.3	Felt.	
Mar. 12	12-22-09	37" 00"	121° 36'	2.5		
Mar. 17	10-51-07	37.0°	121.6°	2.7		

THE CENTRAL NEVADA EARTHQUAKES OF MARCH 23, 1959

The following list of aftershocks of the earthquake in Dixie Valley, Nevada at $07^{h}10^{m}20^{s}$ G.C.T., March 23, 1959 (Map. No. 64) includes 23 of magnitude at least 3.0 through March 31, 1959. The tabulation is probably complete for shocks of magnitude above 3% with the exception of the first several minutes after the main shock.

The preceding regional tabulation includes shocks of this series (through March 31, 1959) only if the magnitude was 4.0 or above.

	Date	Origin Time (G.C.T.)	Magnitude	Date 1959		Origin Time (G.C.T.)	Magnitude	
1	far. 23	07-10-20 (Main shock	6.3	Mar.	24		3.2	
		07-13-55	4.4			03-35-32	3.2	
		08-21-36	3.2			06-03-02	3.3	
		08-25-46	3.0	V	25	19-10-00	3.2	
		08-46-02	3.3	Mar,	25	04-10-18	2.9	
		08-58-11	3.4	Mar.	26	05-55-41	3.7	
		11-00-00	3.1	Mar.		11-26-11	3.4	
		11-40-26	3.4			11-30-33	3.9	
		11-49-23	4.2			11-59-48	4.2	
		13-42-25	3.2			13-55-21	4.0	
		16-57-32	3.3	Mar.	28	14-20-44	3.2	
		20-53-47	3.3	Mar.	30	01-56-15	3.0	



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON April-June 1959

			April-June 1939
Map No.		Origin Time (G.C.T.)	Latitude Longitude North West Q M Remarks
1	Apr. 1	18-18-30	39° 43' 120° 12' b 5.6 Felt over an area of
			approximately 25,000 square miles of northeastern
			California and western Nevada. Maximum intensity VII
			at Loyalton, where several chimneys fell; walls,
			plaster and windows cracked; considerable glassware
			and merchandise fell and broke in homes and stores.
			VI at Baxter, Beckwourth, Blue Canyon, Chilcoot,
			Crescent Mills, Doyle, Hallelujah Junction, Kings
			Beach, Portola and Vinton. Foreshocks at 17-05-49
			and 18-02-12. Magnitudes 2.0 and 2.2, respectively.
1	Apr. 1	18-27-37	39.7° 120.1° 3.1 Aftershock.
1	Apr. 1	20-57-27	39.7° 120.1° d 3.0 Aftershock.
1	Apr. 1	21-28-16	39.7° 120.2° d 3.5 Aftershock.
2	Apr. 2	02-22-05	37° 06' 121° 33' c 2.6 South of Mt. Hamilton.
3	Apr. 2	02-51-11	39° 47' 120° 10' c 3.3 Aftershock of Apr. 1 at
			1818.
4	Apr. 2	04-33-44	36° 59' 121° 35' b 3.1 Aftershock of March 2 at
			2327. Felt at Aptos.
5	Apr. 2	23-47-33	40° 30' 124° 53' c 3.9 West of Ferndale.
6	Apr. 3	04-32-22	39.6° 118.1° d 3.1 East of Fallon. Aftershock
			of March 23 at 0710.
3	Apr. 3	17-12-00	39.8° 120.2° d 3.7 Aftershock of April 1
			at 1818. Felt in Sierraville, Reno, Chilcoot and
			Loyalton.
7	Apr. 4	03-21-17	37° 50' 122° 10' b 2.0 Southeast of Berkeley.
8	Apr. 4	06-11-22	39.5° 118.1° d 3.7 Aftershock of March 23
			at 0710.
3	Apr. 4	09-00-13	39.7° 120.2° d 2.7 Aftershock of April 1
			at 1818. Felt at Sattley and 4 miles north of Sattley.
78	Apr. 4	21-04-56	39.5° 118.0° 3.1 Aftershock of March 23
			at 0710.
9	Apr. 4	22-27-49	37° 00' 121° 36' c 2.5 Aftershock of March 2
			at 2327.

Map		Origin Time (G.C.T.)	Latitude North	Longitude West		<u>M</u>	Remarks
10	Apr. 6	06-08 22	39.3°	123.2°	d	3.6	Felt over an area of
			approxim	nately 1,20	a 0	quare	miles of Mendocino and
			Lake cou	nties in n	ort	hwest	ern California, prin-
			cipally	in the Red	woo	d Val	ley - Ukiah areas. Maxi-
			mum inte	ensity VI a	t R	edwoo	d Valley where chimneys
			cracked	and dishes	br	oke.	V at Calpella, Lakeport,
			Potter V	Valley and	Wit	ter S	prings.
11	Apr. 6	23-43-37	36° 48'	121° 30'	С	2.2	Southwest of Hollister.
78	Apr. 7	08-23-01	39.5°	118.0°	d	3.3	Aftershock of March 23
			at 0710.				
12	Apr. 8	07-41-57	36° 22'	121° 12'	b	3.4	North of King City.
13	Apr. 9	09-08-47	37° 28'	121° 48'	b	1.9	Northwest of Mt. Hamilton.
14	Apr. 9	14-03-11	36° 23'	121° 09!	C	2.5	North of King City.
15	Apr. 9	17-16-58	40.1°	119.9°	d	3.1	North of Reno, Nevada.
16	Apr. 11	10-43-34	37.3°	120.0°	d	2.8	East of Merced.
17	Apr. 11	14-04-30	40° 18'	124° 27'	С	3.5	Off Cape Mendocino.
18	Apr. 13	01-30-50	37° 00'	121° 46'	b	2.2	East of Santa Cruz.
19	Apr. 13	08-46-32	37.0°	121.7°	d	2.0	Aftershock.
20	Apr. 13	18-35-21	39.8°	122.1°	d	3.2	Northwest of Chico.
			Felt nea	ar Orland.			
9	Apr. 14	19-51-43	37.0°	121.6°	d	2.4	Aftershock of March 2
			at 2327.				
21	Apr. 15	03-17-53	36.9°	121.6°	d	1.9	Aftershock of March 2
			at 2327.				
22	Apr. 18	01-46-45					Southeast of Santa Cruz.
23	Apr. 18	18-07-47	38° 04'	122° 31'	C	1.9	Northwest of Berkeley.
			Quarry h				
24	Apr. 19	21-10-52	37° 40'	121° 59'			West of Livermore.
25	Apr. 20	12-33-36	39.8°	118.1°			Northeast of Fallon, Nevada.
8	Apr. 21	07-11-04	39° 30'	118° 05'			Aftershock.
26	Apr. 21	09-36-23	36.40	120.40	d		North of Coalinga.
27	Apr. 21	12-31-10	36.1°		d		Near King City.
28	Apr. 22	19-04-25	36.2°	120.9°	d		Near King City.
CIT	Apr. 24	16-53-10	36.98°	117.97°	С	3.4	Southeast of Bishop.
			0	_ 0	7	0 1	

b 3.6 Southeast of Bishop.

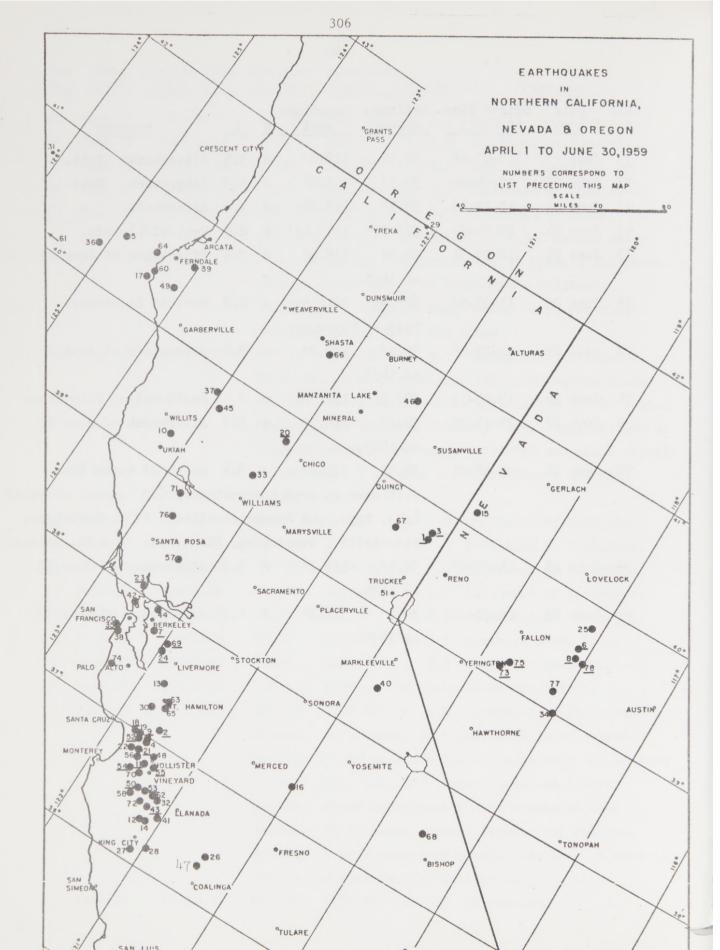
Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	2	<u>M</u>	Remarks
30	Apr. 25	22-44-20	37° 16'	121° 46'	b	2.2	Near Mt. Hamilton.
31	Apr. 26	04-01-28	40.7°	126.1°	d	3.5	Off Cape Mendocino.
32	Apr. 27	03-18-25	36° 361	121° 08'	c	3.4	West of Llanada.
21	May 1	07-04-43	36° 51'	121° 39'	b	2.4	West of Hollister.
33	May 2	00-38-14	39.40	122.2°	d	3.2	North of Williams.
34	May 3	17-38-09	39° 00'	118° 01'	C	3.5	Southeast of Fallon, Nevada.
35	May 4	07-47-15	37.7°	122.6°	d	1.7	Southwest of San Francisco.
35 Felt		07-47-41 13-18-00	37° 42' 37.0°	122° 32' 122.0°	b d	1.9	Southwest of San Francisco. IV reported felt at Mt. Hermon
36	May 4	20-11-32 03-53-26	40° 18' 37.2°	125° 05' 121.5°	b	4.0	Off Cape Mendocino. Southeast of Mt. Hamilton.
35	May 6	12-37-45	37° 39'	122° 32'	С	1.8	Southwest of San Francisco.
36	May 7	20-32-08	40.30	125.2°	d	3.8	Off Cape Mendocino.
37	May 9	12-46-04	39° 50'	123° 01'	С	2.7	Southeast of Garberville.
38	May 9	17-26-03	37° 37'	122° 30'	b	3.5	South of San Francisco.
			IV at Sa	n Bruno, a	lso	felt	in San Francisco.
39	May 11	03-26-40	40.60	124.1°	d	2.5	East of Ferndale.
21	May 11	14-15-53	36° 55'	121° 38'	b	2.6	Northwest of Hollister.
40	May 12	18-10-33	38.40	119.8°	d	3.0	South of Markleeville.
41	May 13	14-28-10	36° 29'	121° 02'	С	2.6	Southwest of Llanada.
42	May 14	01-21-15	37° 55'	122° 33'	С	2.2	North of San Francisco.
43	May 14	01-34-09	36.5°	121.2°	d	2.4	Southwest of Llanada.
44	May 14	03-31-08	37° 58'	122° 15'	С	1.9	North of Berkeley.
18	May 14	08-36-22	37° 00'	121° 46'	b	1.7	North of Watsonville.
45	May 18	04-04-13	390.421	122° 56'	С	2.9	Northeast of Ukiah.
46	May 19	02-21-06	40.7°	121.1°	d	2.9	Northeast of Mineral.
7	May 20	02-09-13	37° 521	122° 15'	a	2.4	Near Berkeley.
47	May 20	10-15-55	36.3°	120.40	d	2.6	Northwest of Coalinga.
8	May 21	17-51-40	39° 28'	118° 07'	C	4.8	East of Fallon, Nevada.
48	May 23	03-49-11	36° 53'	121° 28'	C	2.6	Near Hollister.
6	May 23	12-48-59	39.6°	118.1°	d	3.7	East of Fallon, Nevada.
49	May 23	20-45-44	40° 21'	124° 06'	С	2.7	South of Ferndale.
50	May 24	06-59-08	36° 35'	121° 25'	b	3.2	South of Vineyard.
50	May 24	12-12-19	36° 35'	121° 25'	Ъ	3.2	Aftershock.
50	May 24	12-14-53	36° 36'	121° 26'	b	3.1	Aftershock.

Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
50	May 24	12-16-10	36° 36'	121° 26'	С	3.1	Aftershock.
51	May 24	15-53-08	39.2°	120.2°	d	3.1	Southwest of Reno.
50	May 24	16-01-21	36° 35'	121° 25'	b	3.2	Aftershock of 0659.
50	May 24	16-33-33	36° 36'	121° 26'	C	2.8	Aftershock of 0659.
50	May 24	20-03-32	36° 36'	121° 26'	С	2.0	Aftershock of 0659.
52	May 25	10-32-12	36° 58'	121° 43'	b	1.7	East of Santa Cruz.
11	May 25	10-51-41	36° 47'	121° 32'	b	3.0	Foreshock.
11	May 25	10-54-15	36° 49'	121° 31'	b	3.0	Foreshock.
11	May 25	13-35-48	36° 47'	121° 32'	b	3.1	Southwest of Hollister.
			IV at Ho	ollister an	d S	alina	S.
53	May 26	01-19-16	36° 37'	121° 19'	С	2.4	South of Vineyard.
50	May 26	14-39-48	36° 38'	121° 28'	С	2.0	Southwest of Vineyard.
54	May 26	15-58-01	36° 43'	121° 37'	c	4.6	West of Hollister. Felt
			over an	area appro	xim	ately	4,500 square miles of the
			coastal	area of we	st-	centr	al California, max. int.
			VI at Ca	amp McCallu	m,	Holli	ster, and Salinas.
54	May 26	22-03-32	36° 40'	121° 37'	C	2.4	Aftershock.
54	May 27	19-08-53	36° 421	121° 38'	C	2.4	Aftershock.
55	May 27	21-41-21	36.8°	121.40	d	2.1	Near Vineyard.
56	May 28	04-15-55	36.8°	121.6°	d	2.1	West of Hollister.
23	May 28	19-11-23	38° 03'	122° 31'	b	2.0	Northwest of Berkeley.
			Felt in	San Franci	isco) .	
53	May 30	12-42-07	36.6°	121.3°	d	2.6	Southeast of Vineyard.
55	May 31	05-02-06	36.8°	121.40	đ	2.1	Near Vineyard.
43	June 1	03-47-24	36° 30'	121° 14'	C	2.4	Southwest of Llanada.
57	June 1	08-11-34	38° 25'	122° 23'	C	2.1	East of Santa Rosa.
58	June 2	01-42-29	36° 31'	121° 27'	b	3.2	South of Vineyard.
59	June 2	18-49-00	43.7°	119.7°	đ	4.7	Central Oregon.
20	June 3	04-26-11	39° 51'	122° 05'	C	3.0	
60	June 4	22-02-18	40.40	124.40	d	2.7	
11	June 6	04-25-35	36° 47'	121° 27'	C		
61	June 6	07-46-35	40.1°	126.9°	d	4.3	Off Cape Mendocino.
CIT	June 6	16-30-46	37.33°	118.63°	С	4.0	Near Bishop
62	June 8	10-23-38	36° 37'	121° 14'	С	3.6	Southeast of Vineyard.

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Map No.		Origin Time (G.C.T.)	Latitude Longitude North West Q M Remarks
63	June 11	01-28-58	37° 20' 121° 39' a 3.7 Near Mt. Hamilton.
64	June 11	06-38-32	40.5° 124.5° d 3.3 Southwest of Ferndale.
65	June 12	14-00-32	37.3° 121.6° d 1.9 Near Mt. Hamilton.
66	June 13	14-19-59	40.6° 122.2° d 2.8 Southeast of Shasta.
67	June 14	01-26-32	39° 40' 120° 33' b 4.5 Southeast of Quincy.
			Felt over an area approximately 4,500 square miles
			of northeastern California, and at Pyramid and Verdi,
			Nevada. Max. int. V at Beckwourth, Chilcoot,
			Downieville, Emigrant Gap, Nevada City, Portola,
			Sattley, Sierra City, and Sloat.
68	June 18	00-29-40	37° 33' 118° 34' c 4.7 Northwest of Bishop.
			Felt over an area approximately 3,000 square miles
			of east-central California, principally in the region
			southwest of Yosemite National Park. Max. int. VI at
			Mammoth Lakes, where plaster cracked and small objects
			overturned. V at Bass Lake, Big Creek, and Long
			Valley Dam.
11	June 18	10-45-34	36.8° 121.5° d 3.0 Southwest of Hollister.
52	June 18	14-25-07	36° 55' 121° 39' c 2.7 Northwest of Hollister.
69	June 19	04-51-58	37° 47' 121° 59' c 1.9 Northwest of Livermore.
69	June 19	14-54-36	37° 47' 121° 58' c 1.9 Northwest of Livermore.
70	June 19	22-00-32	36.7° 121.5° d 2.5 Southwest of Vineyard.
71	June 20	03-37-25	38.9° 122.8° d 3.0 North of Santa Rosa.
72	June 20	15-01-17	36.5° 121.3° d 2.9 South of Vineyard.
73	June 23	14-32-35	39° 07' 118° 47' c 4.4 Foreshock. Felt.
73	June 23	14-35-00	39° 05' 118° 49' b 6.1 Northeast of Yerington,
			Nevada. Main shock, felt over an area of approx-
			imately 35,000 square miles of California and eastern
			Nevada. Max. int. VI. Minor damage at Schurz,
			Nevada. Minor rockslides in the mountains near
			Schurz. VI at Genoa, Mason, Schurz, and Wabuska,
			Nevada. V at a number of communities in west central
			Nevada and east central California.
73	June 23	14-52-36	39° 05' 118° 49' c 3.8 Aftershock.

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West		_M_	Remarks		
73	June 23	15-03-44	39.1°	118.8°	d	3.9	Aftershock. Felt.		
73	June 23	15-04-34	39.1°	118.8°	d	5.5	Aftershock. Felt.		
73	June 23	15-22-45	39.1°	118.8°	d	4.2	Aftershock.		
43	June 24	09-04-59	36° 32'	121° 11'	C	2.9	West of Llanada.		
73	June 24	12-07-31	38.9°	118.9°	d	3.4	Aftershock of June 23		
			at 1435.						
24	June 25	11-03-52	37° 41'	121° 59'	a	2.8	West of Livermore.		
			Felt at	Hayward.					
73	June 25	12-53-06	39.1°	118.9°	d	3.8	Aftershock of June 23		
			at 1435.						
74	June 26	17-03-32	37° 21'	122° 21'	С	2.1	Southwest of Palo Alto.		
75	June 27	21-14-29	39.2°	118.7°	d	3.3	Aftershock of June 23		
			at 1435	•					
76	June 28	07-58-01	38.7°	122.7°	d	3.4	North of Santa Rosa.		
			Felt ov	er an area	app	roxin	nately 600 square miles of		
			Lake, N	Lake, Napa, and Sonoma counties. IV at Calistoga,					
			Forestv	ille, Heald	lsbı	irg, h	Middletown, and St. Helena.		
77	June 28	14-56-47	39.2°	118.1°	d	3.2	Aftershock of June 23		
			at 1435	•					
75	June 29	05-20-22	39.2°	118.80	d	4.1	Aftershock of June 23		
			at 1435						



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
July-September 1959

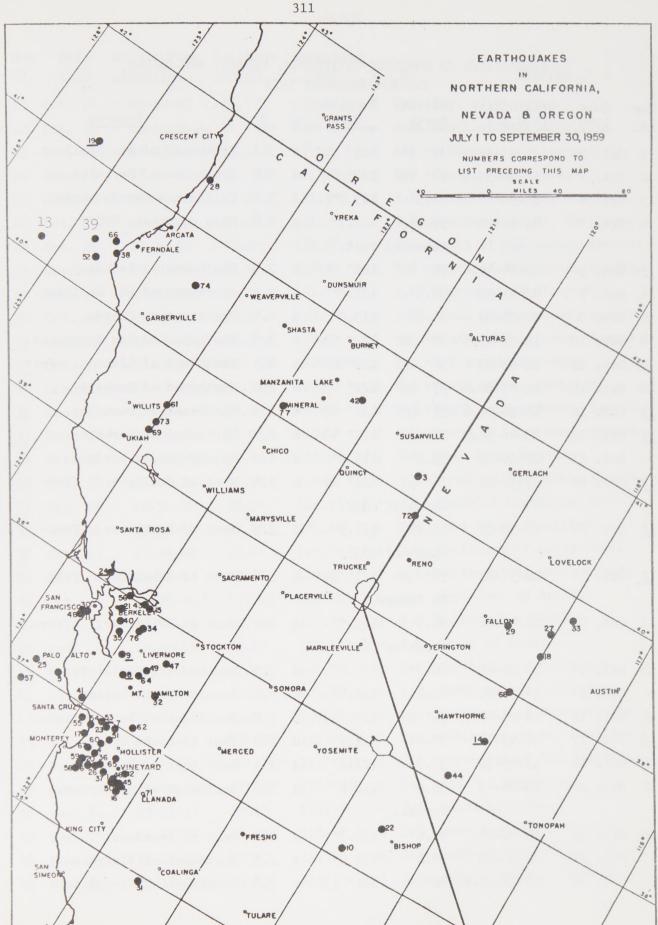
			July-Sep	tember 195	9		
Mar No.		Origin Time (G.C.T.)	Latitude North	Longitude West	9	<u>M</u>	Remarks
	July 2	19-43-59	40.50	126.9°	d	4.2	Off Cape Mendocino.
-	July 2	19-59-39	40.5°	126.9°	d	4.1	Aftershock.
-	July 2	20-06-41	40.5°	126.9°	d	3.8	Aftershock.
-	July 3	00-32-05	40.5	126.6°	d	3.9	Aftershock.
-	July 3	09-37-46	40.7°	126.2°	d	3.9	Aftershock.
1	July 4	19-24-36	36° 34'	121° 19'	C	3.2	South of Vineyard.
2	July 5	06-25-03	36° 35'	121° 09'	С	2.6	West of Llanada.
3	July 8	09-43-15	40.20	120.2°	d	2.5	Northwest of Reno.
4	July 8	21-58-58	36.7°	121.6°	d	2.5	Southwest of Vineyard.
5	July 9	00-39-52	37.1°	122.40	d	1.8	Northwest of Santa Cruz.
			Blast?				
6	July 9	05-44-49	36° 34'	121° 41'	С	2.9	South of Vineyard.
7	\$ July 10	02-12-34	36° 59'	121° 34'	b	2.5	Northwest of Hollister.
8	July 11	11-21-04	37° 24'	121° 48'	b	2.2	Northeast of San Jose.
			Felt at	San Jose.			
9	July 13	19-47-59	37° 33'	121° 55'	a	3.0	Southwest of Livermore.
9	July 14	00-21-28	37° 33'	121° 55'	С	2.0	Aftershock.
10	July 14	00-48-20	37.1°	118.8°	d	3.2	East of Fresno.
8	July 14	23-30-15	37.40	121.8°	d	2.1	Northwest of Mt. Hamilton.
11	July 15	03-50-54	37.7°	122.5°	d	1.9	Southwest of San Francisco.
12	July 15	06-25-25	36.7°	121.2°	d	1.6	Southeast of Vineyard.
13	July 15	08-24-26	40° 20'	125° 10'	С	3.8	Off Cape Mendocino.
14	July 16	10-31-45	38.5°	118.0°	d	3.4	Foreshock.
14	July 16	14-06-11	38° 31'	118° 04'	С	3.8	East of Hawthorne, Nevada.
15	July 17	23-29-51	38° 00'	121° 56'	С	2.0	Northeast of Berkeley.
16	July 18	01-11-47	36.5°	121.3°	d	2.5	South of Vineyard.
17	July 18	13-34-35	36.80	121.8°	d	2.3	Southeast of Santa Cruz.
18	July 19	07-12-10	39.40	118.0°	d	3.8	East of Fallon, Nevada.
19	July 24	01-23-09	41° 08'	125° 18'	р	5.8	West-northwest of Arcata.
			Felt alo	ong the coa	ast	of Hu	umboldt and Del Norte counties

Felt along the coast of Humboldt and Del Norte counties from Crescent City to Rio Dell. IV at Eureka. No damage was reported.

Map No.	Date 1959		Origin Time (G.C.T.)	Latitude North	Longitude West	Q	_M_	Remarks
19	July :	24	01-51-15	41.1°	125.3°	d	3.8	Aftershock.
19	July :	24	03-35-54	41° 06'	125° 19'	b	4.4	Aftershock.
20	July :	24	21-59-26	36.6°	121.6°	d	2.7	Southwest of Vineyard.
21	July :	25	06-37-42	37° 52'	122° 13'	a	2.8	Near Berkeley. Felt.
19	July :	26	17-00-22	41° 06'	125° 18'	Ъ	3.4	Aftershock of 0123, 7/24.
22	July :	29	12-37-56	37° 25'	118° 32'	C	3.8	Northwest of Bishop.
23	July :	29	15-21-24	36° 57'	121° 39'	b	2.8	Northwest of Hollister.
24	July :	29	21-01-55	38° 05'	122° 30'	С	2.4	NW of Berkeley. Blast?
25	Aug.	1	00-37-21	37° 06'	122° 40°	С	2.1	West of Santa Cruz.
26\$	Aug.	1	04-41-03	36° 36'	121° 32'	С	2.0	Southwest of Vineyard.
27	Aug.	2	22-16-40	39° 37'	118° 02'	С	4.4	East of Fallon, Nevada.
28	Aug.	3	10-41-35	41.4°	124.0°	d	3.4	North of Arcata.
29	Aug.	4	05-13-20	39.5°	118.5°	d	ca4.0	East of Fallon, Nevada.
CIT	Aug.	4	07-36-59	37.35 an area	118.55 of 12,000	c sq.	5.2 mil.	West of Bishop. Felt over VI at Bishop.
CIT	Aug.	4	07-41-33	37.35	118.65	Ъ	4.2	Bishop aftershock.
FEL	TAug.	4	09-55-00	37.6	122.5	d	-	IV reported felt at Pacifica.
30	Aug.	4	18-50-54	37° 41'	122° 32'	d	2.2	Southwest of San Francisco.
CIT	Aug.	4	19-12-35	37.47	118.65	С	4.0	Bishop aftershock (V).
31	Aug.	5	.03-00-34	35° 57'	120° 29'	С	3.5	Southwest of Coalinga.
32	Aug.	7	19-01-41	37.4°	121.4°	d	2.7	East of Mt. Hamilton.
33	Aug.	10	08-52-48	39.8°	117.9°	d	3.2	East of Fallon, Nevada.
34	Aug.	10	09-14-52	37° 50'	121° 52'	С	1.5	East of Berkeley.
35	Aug.	12	10-00-29	37° 42'	122° 05'	Ъ	2.0	Southeast of Berkeley.
36	Aug.	14	21-58-49	36° 39'	121° 39'	С	2.6	Southwest of Hollister.
37	Aug.	15	22-58-31	36.6°	121.4°	d	2.4	South of Vineyard.
38	Aug.	20	03-48-56	40° 16'	124° 25'	С	4.2	Southwest of Ferndale.
				Felt Eel	River val	ley.	y, par	ticularly in Rio Dell.
-	Aug.	21	00-28-17	44.8°	124.7°	d	4.6	Off coast of Oregon.
39	Aug.	21	10-55-11	40.4°	124.8°	d	3.2	Southwest of Ferndale.
40	Aug.	24	15-19-36	37° 47'	122° 08'	Ъ	2.1	Southeast of Berkeley.

Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	2	M	Remarks
41	Aug. 24	17-00-33	37° 03'	122° 03'	C	2.7	North of Santa Cruz.
42	Aug. 26	09-56-46	40.5°	121.2°	d	3.1	East of Manzanita Lake.
43	Aug. 27	22-14-46	38° 00'	122° 00'	b	2.1	Northeast of Berkeley.
44	Aug. 28	01-52-38	38.1°	118.2°	d	4.3	Southeast of Hawthorne,
			Nevada.				
-	Aug. 28	12-36-17	40.20	126.7°	d	3.9	Off coast of Northern
			Californ	ia.			
45	Aug. 29	02-04-18	36.6°	121.2°	d	2.4	Southeast of Vineyard.
46	Aug. 29	03-59-19	36° 36'	121° 18'	С	3.0	Near Hollister.
47	Aug. 30	22-43-50	37° 41'	121° 28'	С	2.4	South of Tracy.
48	Aug. 31	03-44-23	37° 39'	122° 33'	С	2.7	Southwest of San
			Francisc	0.			
49	Aug. 31	10-43-58	37° 32'	121° 36'	b	2.0	Northeast of Mt. Hamilton.
50	Aug. 31	23-50-36	36° 341	121° 16'	С	2.8	South of Hollister.
51	Sept. 1	05-00-24	36° 52'	121° 33'	С	3.2	Northwest of Vineyard.
52	Sept. 1	19-38-15	40.30	124.60	d	3.7	Southwest of Ferndale.
53	Sept. 3	12-11-20	36° 59'	121° 42'	С	2.6	North of Watsonville.
			Felt.				
54	Sept. 3	12-13-18	36.9°	121.8°	d	2.3	Near Watsonville.
55	Sept. 3	14-28-29	36.9°	121.9°	d	2.6	Near Watsonville.
56	Sept. 3	14-55-21	38.0°	122.2°	d	2.3	Northeast of Berkeley.
57	Sept. 5	00-45-08	36.9°	122.7°	d	2.0	West of Santa Cruz.
58	Sept. 5	05-45-34	36.5°	121.7°	d	3.8	Southwest of Vineyard.
59	Sept. 5	06-09-08	36° 36'	121° 41'	С	2.9	Southwest of Vineyard.
-	Sept. 5	08-14-29	40.3°	127.5°	d	4.5	Off coast west of Arcata.
60	Sept. 5	17-20-13	36.80	121.6°	d	2.9	West of Vineyard.
61	Sept. 6	00-24-21	39° 341	123° 00'	С	3.0	Northeast of Willits.
62	Sept. 6	16-28-31	37° 03'	121° 24'	С	3.1	North of Vineyard.
53	Sept. 7	07-53-23	36° 581	121° 43'	c	2.1	Northeast of Watsonville.
64	Sept. 7	18-51-34	37° 28'	121° 39'	С	2.2	North of Mt. Hamilton.
CIT	Sept. 10	0 18-22-08	37.57°	118.93°	d	3.5	Northwest of Bishop.
65	Sept. 1	1 18-05-03	36.7°	121.3°	d	4.0	Southeast of Vineyard.
66	Sept. 11	22-02-34	40.5°	124.5°	d	3.1	Southwest of Ferndale.
67	Sept. 12	2 11-23-48	36.7°	121.7°	d	2.3	
68	Sept. 15	06-35-18	39.0°	118.1°	d	3.I	Southeast of Fallon, Nevada.

Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	<u>M</u>	Remarks
53	Sept. 18	02-45-02	36° 56'	1210 441	С	2.4	Near Watsonville.
71	Sept. 20	15-18-55	36.60	120.9°	d	3.2	Southeast of Vineyard.
_	Sept. 20	23-26-45	40° 07'	126° 07'	C	4.4	Off coast southwest of
			Arcata.				
72	Sept. 24	04-22-25	39.9°	120.0°	d	ca 3.	O Northwest of Reno, Nevada.
73	Sept. 24	17-02-09	39.40	123.0°	d	3.6	Northeast of Ukiah.
			Felt at	Willits VI	, b	out no	major damage.
24	Sept. 24	22-41-40	38° 05'	122° 31'	b	2.4	Northwest of Berkeley.
-	Sept. 26	08-20-48	43.70	128.3°	d	6.1	Off Oregon coast.
74	Sept. 27	15-03-54	40° 34°	123° 29'	С	3.0	Southeast of Arcata.
-	Sept. 28	01-50-32	420 021	126° 42'	С	4.1	Off coast of Oregon.
53	Sept. 28	12-38-42	36° 57'	121° 42'	С	2.7	Near Watsonville.
76	Sept. 29		37.8°	121.9°	d	2.5	Southeast of Berkeley.
77	Sept. 30	10-21-36	40.1°	121.9°	d	2.5	Southwest of Mineral.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON October-December 1959

Map No.			Origin Time (G.C.T.)	Latitude North	Longitude West		_ <u>M</u>	Remarks
1	Oct.	2	20-23-46.4	37° 24'	121° 50'	C	3.2	Northwest of Mt. Hamilton.
2	Oct.	4	12-50-55.3	37° 45'	122° 00'	С	2.6	Southeast of Berkeley.
3	Oct.	4	15-34-12	38.3°	119.2°	d	3.4	California-Nevada border.
4	Oct.	5	01-12-20	39.1°	122.7°	d	2.8	East of Ukiah, USCGS:
				reported	felt.			
5	Oct.	5	23-54-44.6	37° 42'	122° 04'	С	2.5	Southeast of Berkeley.
6	Oct.	7	02-41-32	37.5°	121.8°	d	2.5	Northwest of Mt. Hamilton.
7	Oct.	9	22-55-02	42.60	119.0°	d	4.4	Southeastern Oregon.
8	Oct.	10	12-01-45.5	37° 30'	122° 541	С	3.3	Southwest of San Francisco.
9	Oct.	11	02-03-09	36° 27'	121° 07'	C	4.1	Southwest of Llanada. Felt.
10	Oct.	11	10-47-30.5	37° 43'	122° 08'	С	2.0	Southeast of Berkeley.
11	Oct.	12	16-36-01.1	38° 00'	121° 47'	С	2.9	Northeast of Berkeley.
11	Oct.	12	23-48-33.0	38° 00'	121° 48'	С	2.7	Northeast of Berkeley.
	Oct.	13	07-29-25	43.20	119.2°	d	4.0	Nevada-Oregon border.
12	Oct.	14	07-57-01	36° 52'	121° 29'	С	3.4	West of Hollister. Fore-
				shock of	0837.			
12	Oct.	14	07-59-01	36.9°	121.5°	d	2.5	West of Hollister. Fore-
				shock of	0837.			
12	Oct.	14	08-37-51	36° 52'	121° 29'	С	3.6	West of Hollister. Felt.
				No damage				
12	Oct.	14	08-46-26	36.9°	121.5°	d	2.9	West of Hollister. After-
				shock of	0837.			
13	Oct.	14	10-29-42	36.7°	121.6°	d	2.5	Southwest of Hollister.
-	Oct.	14	14-34-49	42.2°	118.4°	d	3.9	Nevada-Oregon border.
14	Oct.	16	08-05-43.7	39° 07'	119° 35'	C	3.0	Southeast of Reno, Nevada.
15	Oct.	17	07-41-38	37.0°	121.7°	d	2.7	East of Santa Cruz.
16	Oct.	18	13-45-32	37.9°	122.2°	d	2.1	Northeast of Berkeley.
17	Oct.	21	00-06-45	38.0°	118.0°	d	3.8	Southeast of Hawthrone,
				Nevada.				
18	Oct.		20-40-38	40.60	126.3°	d	4.4	West of Ferndale.
19	Oct.	24	04 01-13	37.0°	121.0°	d	2.5	Northeast of Vineyard.
20	Oct.	24	05-24-36.4	36° 38'	121° 13'	C	2.8	Southeast of Vineyard.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	<u>M</u>	Remarks
21	Oct. 24	05-57-27	36.7°	120.6°	d	2.9	East of Vineyard.
22	Oct. 24	23-12-54.4	36° 28'	121° 24'	С	3.2	South of Hollister.
23	Oct. 25	03-33-13	36.5°	121.2°	d	2.4	Southeast of Vineyard.
24	Oct. 25	03-34-01.9	36° 30'	121° 19'	C	3.0	South of Vineyard.
25	Oct. 25	09-59-52	37.0°	121.3°	d	3.6	Southeast of Mt. Hamilton.
26	Oct. 25	14-47-00	37.0°	121.2°	d	2.8	Southeast of Mt. Hamilton.
27	Oct. 25	20-17-42	37.9°	118.8°	d	3.6	South of Hawthorne, Nevada.
28	Oct. 26	07-20-53	37.9°	118.6°	d	3.7	South of Hawthorne, Nevada.
29	Oct. 26	09-56-01	36.40	121.1°	d	3.0	Southeast of Vineyard.
30	Oct. 26	23-05-27	38.0°	118.5°	d	3.8	South of Hawthorne, Nevada.
31	Oct. 27	03-46-27	38.0°	118.7°	d	3.3	South of Hawthorne, Nevada.
32	Oct. 27	06-12-17	42° 23'	126° 32'	С	5.1	Off coast of Oregon.
33	Oct. 27	08-13-18	37.5°	121.7°	d	2.6	North of Mt. Hamilton.
31	Oct. 27	17-26-22	38.0°	118.7°	d	3.6	South of Hawthorne, Nevada.
31	Oct. 27	20-15-26	38.0°	118.7°	d	3.7	South of Hawthorne, Nevada.
34	Oct. 28	02-31-32	39.6°	119.9°	d	3.7	Near Reno, Nevada.
28	Oct. 28	04-07-27	37.9°	118.6°	d	3.9	South of Hawthorne, Nevada.
31	Oct. 28	12-54-36	38.0°	118.7°	d.	3.9	South of Hawthorne, Nevada.
35	Oct. 28	17-57-40	37.40	121.5°	d	2.6	East of Mt. Hamilton.
36	Oct. 29	23-29-02	38.40	122.5°	d	2.9	Southeast of Santa Rosa.
37	Oct. 30	03-06-33	39.7°	120.1°	d	4.1	Northwest of Reno, Nevada.
38	Oct. 31	17-36-40.7	41° 13'	125° 09'	С	3.6	Northwest of Arcata.
39	Oct. 31	19-42-14	41.30	125.5°	d	4.5	Northwest of Arcata.
40	Nov. 1	12-29-18	40.10	122.6°	d	2.8	South of Shasta.
15	Nov. 1	23-17-18	37.0°	121.7°	d	2.4	Northwest of Hollister.
41	Nov. 1	23-27-50	36.9°	121.7°	d	1.7	Northwest of Hollister.
42	Nov. 2	22-21-10	40.00	120.40	d	3.4	Northwest of Reno, Nevada.
43	Nov. 3	02-20-03	37° 27'	121° 47'	b	2.1	Northwest of Mt. Hamilton.
44	Nov. 4	06-33-33	37° 30'	121° 21'	С	2.3	Northeast of Mt. Hamilton.
45	Nov. 5	16-49-10	37° 53'	121° 36'	C	2.6	East of Berkeley.
46	Nov. 6	03-11-34	37.1°	118.4°	d	3.6	South of Bishop.
47	Nov. 7	12-11-37	38.40	118.6°	d	3.8	Near Hawthorne, Nevada.
48	Nov. 7	17-23-23	37.9°	122.0°	d	1.8	East of Berkeley.
49	Nov. 8	10-18-03	38.5°	118.5°	d	3.5	Near Hawthorne, Nevada.

Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	9	_M_	Remarks
50	Nov. 9	01-13-27	36° 32'	121° 13'	С	3.0	Southeast of Vineyard.
51	Nov. 1	1 00-12-01	39.3°	123.3°	d	3.2	Near Ukiah.
52	Nov. 1	2 04-37-20	36.6°	121.3°	d	1.7	South of Vineyard
53	Nov. 1	2 17-27-39	40.40	124.20	d	3.1	Southeast of Ferndale.
54	Nov. 1	5 07-06-39	38.3°	118.5°	d	3.4	South of Hawthorne, Nevada.
55	Nov. 1	5 19-05-41	38.3°	118.2°	d	3.4	Southeast of Hawthorne,
			Nevada.				
56	Nov. 1	6 00-22-56	37.6°	122.4°	d	1.7	South of San Francisco.
57	Nov. 1	6 00-23-37	37.7°	123.2°	d	2.4	Off coast of San Francisco.
58	Nov. 1	7 02-02-13	40° 22'	125° 10'	С	4.1	Off Cape Mendocino.
59	Nov. 1	9 15-58-53	37° 05'	121° 50'	С	2.5	Northeast of Santa Cruz.
60	Nov. 1	9 23-52-19	38.40	122.2°	d	2.4	East of Santa Rosa.
32	Nov. 1	9 23-53-45	42.40	126.9°	d	5.1	Off coast northwest of
			Arcata.				
61	Nov. 2	08-45-48	37.1°	121.6°	d	2.0	South of Mt. Hamilton.
62	Nov. 2	3 04-55-26	40.40	124.40	d	2.8	Southwest of Arcata.
63	Nov. 2	3 09-54-50	36° 35'	121° 18'	С	2.8	South of Vineyard.
52	Nov. 2	3 23-08-36	37° 12'	121° 41'	b	2.6	South of Mt. Hamilton.
64	Nov. 2	5 09-28-22	35.2°	121.2°	d	3.5	South of King City.
65	Nov. 2	6 07-02-05	36.40	121.40	d	2.7	South of Vineyard.
66	Nov. 2	6 21-37-26	36° 48'	121° 38'	С	2.7	West of Vineyard.
67	Nov. 2	7 12-59-04	39.80	122.1°	d	2.7	Northwest of Chico.
68	Nov. 2	9 04-39-45	40.40	124.9°	d	3.4	Southwest of Arcata.
69	Nov. 2	9 10-30-33	40.30	126.40	d	4.1	West of Arcata.
70	Dec. 2	09-44-43	37° 28'	121° 08'	b	3.6	East of Mt. Hamilton.
71	Dec. 2	22-16-09	36.7°	121.7°	d	2.6	West of Vineyard.
72	Dec. 3	15-36-04	40.30	125.7°	d	4.3	Off Cape Mendocino.
73	Dec. 5	08-13-42	40° 18'	125° 25'	С	5.1	Off Cape Mendocino. Felt
			over an	area of ap	pro	ximat	ely 2,000 square miles of
			Humboldt	County.	No	damag	e reported. Max. Int. V.
74	Dec. 6	08-04-15	40° 21'	121° 00'	С	3.6	East of Mineral.
75	Dec. 6	23-48-33	37.4°	123.3°	d	2.4	West of San Francisco.
76	Dec. 1	0 13-55-14	39,80	120.2°	d	2.5	Northwest of Reno, Nevada.
77	Dec. 1	0 19-33-51	37.3°	122.2°	d	2.0	South of Palo Alto.

Map No.	Date 1959	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	<u>M</u>	Remarks
78 \$	Dec. 11	05-55-26	36.6°	120.6°	d	3.5	Southeast of Vineyard.
79	Dec. 11	08-30-47	37° 481	121° 56'	b	2.0	Northwest of Livermore.
80	Dec. 11	22-14-08	37° 57'	122° 24'		2.7	Blake Bros. Quarry blast,
			Point Ri	chmond. Fe	elt	Rich	mond, Berkeley.
81	Dec. 14	09-19-08	37° 58'	122° 01'	b	3.4	Northeast of Berkeley.
			Felt Max	rtinez-Conco	ord	area	. IV at Canyon.
82	Dec. 15	16-28-36	40° 18'	124° 22'	С	3.4	South of Ferndale.
83	Dec. 15	21-02-59	37.0°	121.8°	d	2.4	Near Watsonville.
84	Dec. 16	02-28-42	38° 35'	122° 22'	С	4.1	Northeast of Santa Rosa.
			Felt.	IV. Guerne	vil	le ar	ea, felt also at St. Helena,
			Napa and	d Calistoga.	•		
85	Dec. 16	05-39-42	37° 46'	121° 57'	C	2.0	Northwest of Livermore.
86	Dec. 17	22-55-22	37° 58'	122° 19'	b	2.3	Northwest of Berkeley.
			Felt at	Richmond, I	El i	Sobra	ante, Mira Vista district
			of El C	errito.			
87	Dec. 22	02-38-57	40° 16'	124° 31'	С	4.7	Southwest of Ferndale. Felt
			over an	area of app	pro	ximat	cely 3,000 square miles of the
			coastal	areas of no	ort	hern	California, principally in
			Humbold	t county. !	Max	. Int	. V. at Briceland, Ferndale,
			Fields 1	Landing, Gar	rbe	rvill	Le, Honeydew, Loleta.
88	Dec. 24	11-24-24	39.5°	117.9°	d	4.2	East of Fallon, Nevada.
89	Dec. 25		36.0°		d	3.1	
36	Dec. 26		38.40				East of Santa Rosa. Northwest of Mt. Hamilton.
90			37° 26'		C		South central Oregon.
	Dec. 26						Southwest of Ferndale.
92	Dec. 27 Dec. 28						Southeast of Hawthorne,
20	Dec. 20	00-44-41	Nevada.	110.2	•	,,,,	
12	Dec. 29	02-32-53		121° 29'	b	4.7	Northwest of Hollister.
							oximately 5,000 square miles
							est central California, from
							el and inland to a distance
							Int. VI at Hollister. Minor
							Gilroy, Harris Ranch, Morgan
CIM	D 20	1/ 52 00					nd San Martin.
CII	Dec. 29	14-53-08	35 45	120 18	C	3.5	Felt at Paso Robles

EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January - March 1960

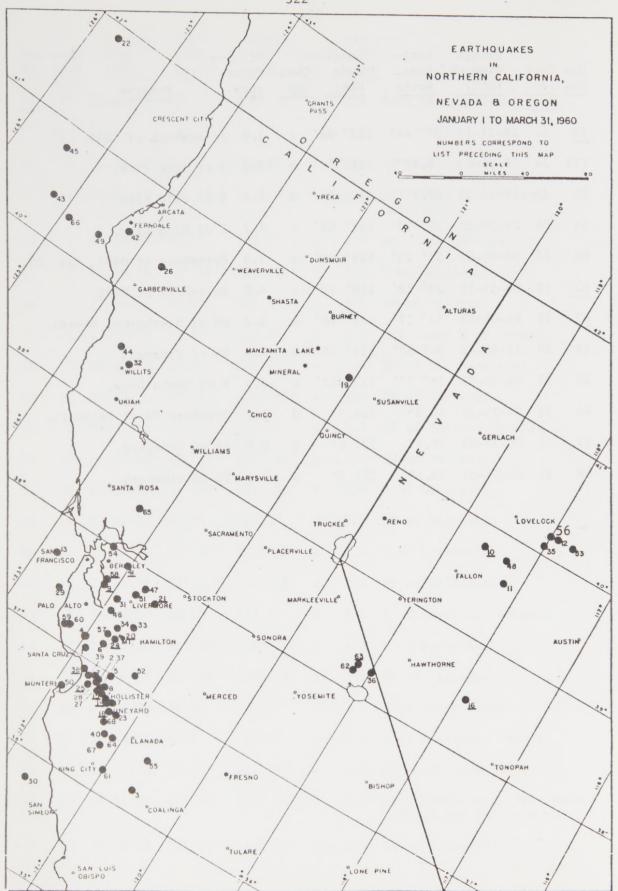
No.	Date 1960 Jan	Origin Time (GCT)	Lati- tude North		Qual- ity	Rich: Magn: tude	
1	2	12-16-11	37° 07'	121° 56'	Ъ	3.4	NE of Santa Cruz.
CIT	2	22-51-48	35.4°	121.2°	d	4.0	NW of San Luis Obispo.
2	4	04-28-02	36.9°	121.6°	d	2.0	SE of Santa Cruz.
3	4	12-18-20	36.2°	120.7°	d	3.2	W of Coalinga.
4	7	01-25-09	37° 10'	122° 00'	b	2.3	N of Santa Cruz.
5	7	05-19-26	37.0°	121.5°	d	2.0	E of Santa Cruz.
6	7	06-12-05	37.2°	121.8°	d	2.4	SW of Mt. Hamilton.
CIT	11	19-08-40	37.17°	117.98°	Ъ	3.7	E of Tinemaha.
7	12	06-25-33 Felt 3.7				3.4	SE of Santa Cruz.
8	13	08-43-38	36° 53'	121° 30'	С	2.3	SE of Santa Cruz.
9	15	16-23-22	37° 47'	122° 08'	a	2.2	SE of Berkeley.
9	15	19-30-06	37° 47'	122° 08'	а	2.6	Aftershock of 1623. $h = 20 \text{ km}$.
10	16	06-47-55	39.8°	117.6°	d	3.8	NE of Fallon, Nevada.
10	16	08-19-27	39.8°	117.6°	d	3.6	Aftershock of 0647.
11	16	11-50-12	39° 35'	118° 11'	С	3.9	E of Fallon, Nevada.
12	16	22-57-14	40.2°	117.9°	d	3.9	E of Lovelock, Nevada.
13	17	18-54-58	37.7°	122.8°	d	2.0	W of San Francisco. Felt in San Bruno.
14		area of a areas of occurred Cienega F line crac chimney o	approximat Californi at the W. Road: und eks in asperacked at	ely 7500 a. Maxin A. Taylor derground chalt pay croof li	squar mum in Wine pipel ement; ne.	e mil tensi ry, a ine h smal	S of Hollister. Felt over an es of west-central coastal ty (damage) VI. Minor damage about 7 miles S of Hollister on broken: several 20-foot-long hair-liportions of ceiling fell:
14	20	03-47-51	36° 47'	121° 26	' Ъ	3.6	Aftershock of 0325. Felt.

Map I		Origin Time (GCT)	Lati- tude North	tude Qu		Rich Magn: tude	i-
15	20	13-12-40	36° 50'	121° 28'	С	2.7	Aftershock of 0325. Felt.
16	21	14-29-56	38° 28'	117° 53'	С	4.2	E of Hawthorne, Nevada.
16	21	15-27-21	38° 28'	117° 53'	С	4.1	Aftershock of 1429.
17	22			121° 20' S of Holl:			SE of Hollister. Felt Harris
Felt	24	18-24-56	36.70°	121.30°	d	-	Felt 7.5 miles S of Hollister.
18	24	18-35-27	36.7°	121.3°	d	2.1	SE of Vineyard.
19	24	23-49-47	40° 27'	121° 03'	С	3.0	E of Mineral.
Felt	25	05-15-55	36.8°	121.5°	d	-	Felt 7.5 miles S of Hollister.
15	25	05-52-45	36.8°	121.5°	d	2.8	NW of Hollister.
CIT	26	04-17-36	38.0°	116.5°	-	4.9	Nevada.
20	26	05-52-23	37° 21'	121° 39'	Ъ	3,3	At Mt. Hamilton.
21	26	13-57-51	37° 47'	121° 31'	Ъ	2.5	NE of Livermore.
18	26	14-44-34	36° 43'	121° 18'	С	3.2	Near Vineyard,
21	26	14-48-49	37° 47'	121° 31'	С	2.5	Aftershock of 1357.
22	27	00-10-37	41° 54°	125° 40'	С	4.4	Off coast of northern California.
23	27	20-50-57	36.7°	121.2°	d	2.6	SE of Vineyard.
24	30	00-49-24	37.3°	121.7°	d	2.6	Near Mt. Hamilton.
	Feb						
25	1	11-08-18	36.8°	121.7°	d	2.9	SE of Santa Cruz.
15	3	08-51-42	36° 49'	121° 28'	С	2.8	Near Hollister.
26	4	08-49-48	40° 24'	123° 40'	b	3.4	SE of Ferndale.
27	6	09-41-14	36° 49'	121° 33'	С	3.4	W of Hollister.
Felt	: 6	19-48-00	36.75°	121.4°	d	-	III reported felt 7.5 miles S of Hollister.
Felt	7	10-20-00	36,75°	121.4°	d		III reported felt 7,5 miles S of Hollister.

Map Date No. 1960 Feb		Lati- tude North	*			i-
Felt 11	23-38-00	36.8°	121.8°	d	_	Reported felt at Moss Landing.
28 13			121° 32' s Power Pl			W of Hollister. Felt Moss E).
29 13	18-16-34	37° 25'	122° 33'	С	1.9	W of Palo Alto.
30 14	08-34-30	35.8°	121.7°	d	2.8	W of San Simeon.
31 ^{\$} 14	15-21-51	37° 49'	121° 56'	С	2.1	W of Livermore.
32 15	19-03-56 and Potte		123.3° Power Plan		2.9	NE of Willits. Felt at Willits
<u>15</u> 16	16-54-33	36.8°	121.5°	d	2.8	SW of Hollister.
33 17	08-10-44	37° 29'	121° 35'	b	2.9	NE of Mt. Hamilton.
34 19	16-33-17	37° 24'	121° 45'	Ъ	3,3	NW of Mt. Hamilton.
<u>15</u> 20	03-06-36	36° 47'	121° 30'	С	3.0	SW of Hollister.
35 22	21-34-37	40.1°	118.0°	d	3.4	E of Lovelock, Nevada.
<u>14</u> 22	22-18-40	36.8°	121.4°	d	2.3	Near Hollister.
36 23	09-52-08	38° 15'	118° 58'	С	2.9	SW of Hawthorne, Nevada.
37 23	10-31-15	36° 52'	121° 37'	b	2.9	W of Hollister.
20 24	10-04-25	37° 22'	121° 43'	С	1.8	Near Mt. Hamilton.
38 24	17-37-53	36° 55'	121° 48'	Ъ	2.6	E of Santa Cruz.
39 24	23-44-57	36° 53'	121° 43'	Ъ	2.8	W of Hollister. Felt at Harris Ranch. Small shock.
40 25	06-34-31	36.5°	121.2°	d	2.7	SW of Llanada.
<u>15</u> 26	05-07-53	36° 49'	121° 27'	С	2.8	Near Hollister.
41 27	Francisco centering	Bay area	. Slight Valnut Cree	shoc	ks (i	NE of Berkeley. Felt in San ncluding aftershocks below) re reported felt in some
41 27	19-23-15	37° 56'	122° 01'	Ъ	2.7	Aftershock of 1922. Felt.
41 27	19-27-12	37° 56'	122° 01'	Ъ	2.7	Aftershock of 1922. Felt.

-	Date 1960 Feb	Origin Time (GCT)	Lati- tude North	Longi- tude West	Qual- ity	Rich Magn tude	i-
24	29	07-45-31	37° 19'	121° 42	¹ a	2.4	Near Mt. Hamilton.
	Mar						
42	1	02-24-40	40,5°	124.2°	d	2.3	SE of Ferndale.
	1	06-00-18	40° 22°	127° 30'	Ъ	4.3	Off coast of northern California.
43	2	08-29-08	40.4°	125.2°	d	3.0	Off Cape Mendocino.
25	3	00-55-18	36° 49'	121° 40'	c	2.8	W of Hollister.
44	3	17-06-11	39.6°	123.5°	d	3.0	NW of Willits.
45	4	23-13-15	40.8°	125.4°	d	3.4	Off coast W of Arcata.
46	5	10-57-28	37.5°	121.9°	d	1.6	NW of Mt. Hamilton.
47	7	22-40-16	37° 51'	121° 42'	Ъ	3.3	SW of Stockton.
48	8	04-42-45	39.8°	118.3°	d	3.5	NE of Fallon, Nevada.
49	10	23-46-18	40° 17'	124° 30'	Ъ	3.4	SW of Ferndale.
50	12	17-35-12	36° 40'	121° 55'	Ъ	2.4	N of Monterey.
18	14	07-05-23	36.7°	121.3°	d	2.5	SE of Vineyard.
51	14	20-47-25	37° 45'	121° 46'	С	2.2	N of Livermore.
52	16	23-44-32	37° 07'	121° 16'	С	2.5	NE of Hollister.
53	18	04-28-44	40,2°	117.7°	d	3.5	E of Lovelock, Nevada.
54	19	20-46-34	38° 00'	122° 16'	С	1.5	N of Berkeley.
55	21	20-46-39	36° 30'	120° 44'	С	2.5	SE of Llanada.
38	22	05-34-26	36.9°	121.8°	d	2.6	E of Santa Cruz.
56	22	06-58-55	40.2°	118.0°	d	3.7	E of Lovelock, Nevada.
57	22	16-34-08	37.3°	121.8°	d	2.2	SW of Mt. Hamilton.
58	22	18-31-33	37° 44'	122° 08'	а	2.6	SE of Berkeley, Felt East Oakland and San Leandro.
59	22	19-30-41	37° 11'	122° 15'	С	2.2	SW of Palo Alto.

	Date 1960 Mar	Origin Time (GCT)	Lati- tude North	Longi- tude West	Qual-	-	i-
58	22	19-32-10	37° 44°	122° 08'	С	1.4	Aftershock of 1831.
CIT	24	09-56-08	36,22°	118.3°	b	3.2	S of Lone Pine.
60	25	19-34-33	37.2°	122.2°	d	2.2	S of Palo Alto.
61	26	21-39-21	36° 13'	121° 00'	С	2.7	E of King City.
62	27	01-40-01	38° 13'	119° 12'	С	3.8	Foreshock of 0401, Mar. 29.
63	29	03-31-12	38° 18'	119° 11'	С	4.0	Foreshock of 0401.
63	29	04-01-57	38° 17'	119° 10'	С	4.2	SW of Hawthorne, Nevada.
64	29	11-46-42	36° 30'	121° 06	c	2.4	SE of Vineyard.
65	31	01-35-08	38° 27'	122° 17	ь	2.3	E of Santa Rosa.
66	31	04-23-36	40.3°	124.9°	d	3.7	Offshore SW of Ferndale.
67	31	08-35-09	36.4°	121.2°	d	2,6	SE of Vineyard.
68	31	09-06-02	36.6°	121.3°	d	2.6	SE of Vineyard.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON April - June 1960

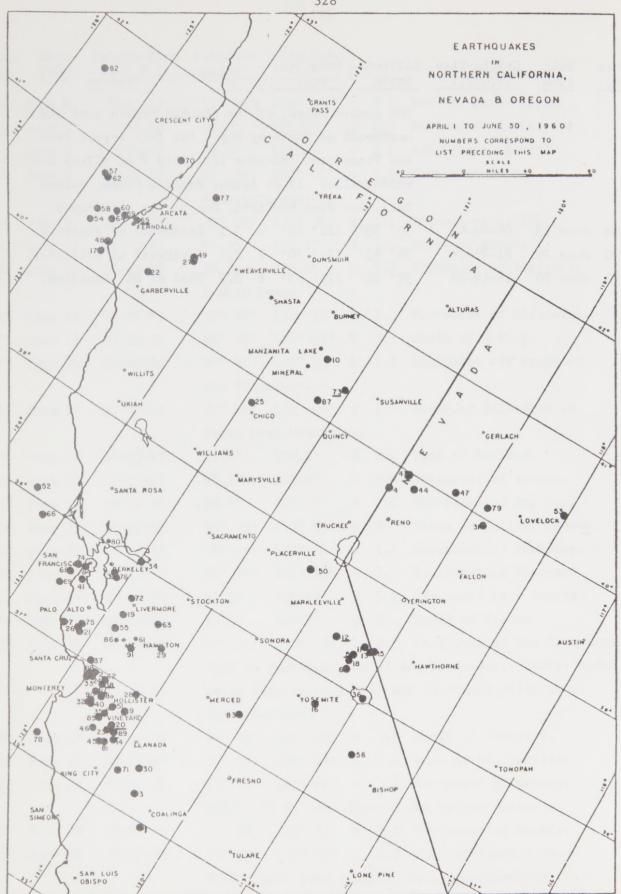
Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West		M	Remarks
1	Apr. 2	13-02-10	35° 58'	120° 20'	С	2.7	South of Coalinga.
2	Apr. 2	18-28-36	36° 581	121° 43'	a	2.5	East of Santa Cruz.
3	Apr. 2	19-01-12	36.2°	120.6°	d	3.4	West of Coalinga.
4	Apr. 3	11-59-00	39.8°	120.0°	d	2	North of Reno, Nevada.
5	Apr. 5	03-33-59	38° 18'	119° 20'	b	3.1	North of Yosemite.
5	Apr. 5	03-34-47	38° 18'	119° 20'	b	3.1	North of Yosemite.
6	Apr. 5	04-02-21	38° 10'	119° 20'	b	2.8	Northeast of Yosemite.
7	Apr. 5	19-32-14	37.2°	122.3°	d	1.8	Santa Cruz Mountains.
8	Apr. 6	08-47-25	36.8°	121.5°	d	2.1	Northwest of Vineyard.
9	Apr. 6	13-59-04	36.8°	121.2°	С	2.4	East of Hollister.
10	Apr. 8	13-53-00	40.5°	121.40	d	2.9	Mt. Lassen.
11	Apr. 9	03-38-19	38° 24'	119° 15'	b	3.6	Foreshock of 0437.
12	Apr. 9	03-38-56	38° 22'	119° 35'	d	3.2	Foreshock of 0437.
13	Apr. 9	04-00-23	38° 25'	119° 10'	C	3.9	Foreshock of 0437.
CIT	_	04-00-36	38.3°	118.8°	d	3.9	S of Hawthorne, Nev.
12	Apr. 9	04-37-55	38° 22'	119° 35'	С	4.0	SE of Markleeville.
14	Apr. 9	08-01-14	36° 30'	121° 08'	Ъ	3.6	SE of Hollister
CIT	Apr. 9	08-01-24	38.3°	118.8°	d	3.6	S of Hawthorne, Nev.
15	Apr. 10	19-22-00	38° 25'	119° 07'	b	3.5	W of Hawthorne. Nev.
16	Apr. 12	10-10-47	37° 45'	119° 25'	b	3	Near Yosemite.
17	Apr. 12	14-42-44	40.20	124.4°	C	3.1	Off coast southwest of
			Arcata.				
18	Apr. 12	22-12-06	38° 16'	119° 20'	С	3.3	Southeast of Markleeville.
19	Apr. 13	08-57-15	37° 321	121° 48'	b	2.0	Northwest of Mt. Hamilton.
20	Apr. 18	02-16-21	36° 37'	121° 14'	b	3.5	Southeast of Vineyard.
20	Apr. 18	10-03-06	36° 38'	121° 13'	d	2.4	Aftershock of 0216.
20	Apr. 18	11-19-48	36° 38'	121° 13'	C	2.7	Aftershock of 0216.
21\$	Apr. 19	22-41-50	37.2°	122.1°	d	1.5	Santa Cruz Mountains.
22	Apr. 20	04-10-07	40° 17'	123° 47'	b	3.5	Southeast of Arcata.
23	Apr. 20	06-12-28	36° 33'	121° 15'	b	2.6	Southeast of Vineyard.
24	Apr. 21	00-03-35	36° 55'	121° 46'	b	2.9	East-southeast of
			Santa Ci	ruz.			
25	Apr. 23	02-21-39	39.8°	121.9°	d	3.5	North of Chico.

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West		М	Remarks
26\$	Apr. 25	21-42-33	37° 12'	122° 16'	a	2.1	South of Palo Alto, in
			Santa Cr	uz Mountai	ns.		
27	Apr. 27	01-53-53	40.60	123.40	d	2.6	Southeast of Arcata.
28	Apr. 28	22-02-31	36° 57'	121° 11'	C	2.1	East of Hollister.
29	May 1	22-47-57	37° 27'	121° 14'	b	2.4	East of Mt. Hamilton.
30	May 4	09-44-32	36° 25'	120° 43'	С	3.4	Southeast of Llanada.
31	May 5	02-52-00	39° 56!	118° 48'	b	2-3	North of Fallon, Nevada.
32	May 6	00-36-32	36° 47'	121° 38'	a	2.9	West of Vineyard.
33	May 6	22-54-03	36° 52'	121° 46'	a	3.1	Northeast of Monterey.
34	May 7	05-21-05	38° 02'	121° 58'	b	2.2	Northeast of Berkeley.
35	May 7	21-03-51	36° 43'	121° 23'	a	2.4	At Vineyard.
36	May 8	17-59-42	38° 02'	118° 58'	b	3.5	Northeast of Yosemite.
37	May 9	01-21-54	37° 021	121° 50'	a	2.8	East of Santa Cruz.
38	May 10	23-09-57	36.9°	121.60	d	2.6	Northwest of Hollister.
39	May 11	09-09-02	37° 50'	122° 14'	b	2.4	Southeast of Berkeley.
40	May 11	13-05-54	36° 421	121° 35'	b	2.6	East of Salinas.
41	May 13	05-27-40	37.6°	122.40	d	1.1	South of San Francisco.
42	May 13	23-20-46	36° 57'	121° 35'	b	2.5	Northwest of Hollister.
43	May 14	12-29-12	39° 57'	119° 51'	С	2.4	North of Reno, Nevada.
44	May 14	15-52-25	39.9°	119.7°	d	3.8	Northeast of Reno, Nevada.
45	May 15	06-07-23	36° 26'	121° 16'	С	2.5	South of Vineyard.
46	May 16	18-26-31	36.6°	121.40	d	2.8	South of Vineyard.
47	May 18	06-51-03	40° 05'	119° 17'	С	2.7	Northeast of Reno, Nevada.
48	May 19	10-14-07	40.3°	124.40	d	4.0	South of Arcata.
49	May 20	10-37-52	40° 381	123° 36'	b	2.0	Southeast of Arcata.
50	May 21	08-18-10	38.8°	120.2°	d	2.0	South of Reno, Nevada
			(very po	or locatio	n).		
51	May 23	21-50-32	36° 46'	121° 19'	С	2.9	Near Vineyard. USCGS: IV
			at Harri	s Ranch (7	1/2 m	iles	south of Hollister).
52	May 26	14-29-45	38.1°	123.40	d	2	Northwest of San Francisco.
53	May 27	00-41-03	40.40	118.0°	d	3	Northeast of Lovelock,
			Nevada.				
38	May 31	07-16-00	36.9°	121.6°	à	2.5	Northwest of Hollister.

Map Date Origin Time No. 1960 (G.C.T.)	Latitude Longitude North West Q M Remarks
54 June 1 15-20-26	40.4° 124.7° d 2.7 Southwest off coast of
Leaves IV to the district	Ferndale.
55 June 4 06-34-46	37.4° 121.8° d 2.5 10 km northwest of
	Mt. Hamilton.
56 June 5 07-47-07	37° 31' 118° 44' c 5.2 USCGS: Felt over an area
150/15 (50/5)	of approximately 4,800 square miles of east central
	California, extending on the north from Yosemite
	Village east to Benton, south to Bishop and Laws,
	southwest to Three Rivers and Woodlake, northwest
	through Friant to Snelling, thence northeast through
	El Portal to Yosemite. Maximum intensity VI at
	Crowley Lake (Long Valley Dam). No damage reported.
	Epicenter in unsettled area. V at Bass Lake,
	Bishop, Dinkey Creek, El Portal, and Yosemite Village.
57 June 6 01-17-48	40° 49' 124° 53' c 5.7 USCGS: Felt over a land
	area of approximately 8,000 square miles, principally
	in Humboldt and Trinity Counties. Maximum intensity
	VI at Crannell, Eureka, and Ferndale. V at Alton,
	Bayside, Bluelake, Cutten, Denny, Ettersburg, Fields
	Landing, Fortuna, Freshwater, Garberville, Holmes,
	Hoopa, Kneeland, Korbel, Loleta, McKinleyville,
	Rio Dell, Samoa, and Weltchpec.
58 June 6 01-39-30	40.5° 124.7° d 2.3 Aftershock of Oll7.
59 June 6 02-30-02	40.6° 124.4° d 3.2 Aftershock of Oll7.
60 June 6 03-50-49	40.6° 124.5° d 3.0 Aftershock of Oll7.
61 June b 06-34-32	37° 24' 121° 33' a 2.3 NE of Mt. Hamilton. 40.8° 124.8° d Aftershock of 0117.
FeltJune 6 09-40-00	40.8° 124.8° d Aftershock of 0117. 40.8° 124.8° d 3.3 Aftershock of 0117.
62 June 6 12-03-42 63 June 6 19-13127	37° 38' 121° 24' b 2.7 NE of Mt. Hamilton.
64 June 6 22-13-18	40.5° 124.5° d 3.4 SW of Ferndale.
65 June 8 02-54-19	40° 34' 124° 13' b 4.3 USCGS: Felt from Arcata
ALLERY STREET	north to Fortuna and Rio Dell, 50 miles to the south.
	Intensity III at Eureka. No damage.
65 June 8 12-00-17	40.6 ^d 124.2° d 3.1 Aftershock of 0254.
59 June 8 14-32-19	40.6° 124.4° d 3.8 Aftershock of 0254.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	9	М	Remarks
66	June 8	18-03-15	37° 55'	123° 12'	С	2.1	West of Point Reyes.
67	June 9	03-32-22	36.8°	121.6°	-d	2.3	Northwest of Vineyard.
67	June 9	03-33-13	36.8°	121.6°	d	2.1	Aftershock of 0332.
68	June 9	15-27-39	37° 39'	122° 36'	С	1.9	Southwest of San
			Francisc	o coast.			
69	June 9	15-43-23	37° 29'	122° 36'	C	1.7	Aftershock of 1527.
70	June 11	11-50-31	41.3°	124.2°	d	3.1	North of Arcata.
71	June 11	17-39-48	36.3°	120.9°	d	3.7	Southeast of Vineyard;
			Diablo F	lange.			
72	June 12	02-01-43	37° 421	121° 50'	b	2.0	Northwest of Livermore.
73	June 12	07-15-34	40° 201	121° 03'	b	3.1	North of Quincy.
74	June 16	06-42-32	37° 421	122° 33'	b	1.5	Southwest off coast of
			San Fran	cisco.			
75	June 18	01-46-13.	37° 16'	122° 08'	С	1.8	South of Palo Alto in
			Santa Cr	uz Mountai	ns.		
76	June 18	14-35-47	37.8°	122.1°	d	2.0	East of Oakland.
77	June 19	10-13-02	41.20	123.6°	d	3.9	Northeast of Arcata.
78	June 19	19 51 20	36.2°	121.9°	d	2.6	Southwest of Big Sur.
79	June 23	09-17-55	40° 07'	118° 50'	b	3	North of Fallon, Nevada.
80	June 23	18-11-17	38° 05'	122° 24'	С	1.5	Northwest of Berkeley.
81	June 24	18-13-12	36° 27'	121° 13'	b	3.5	Southeast of Vineyard.
82	June 24	21-11-35	41.5°	125.6°	d	3.9	Off coast near Arcata.
83	June 25	05-07-11	37.3°	120.1°	d	3	North of Fresno.
84	June 25	08-19-37	37° 43 '	122° 33'	b	2.3	Southwest of San Francisco.
			Felt in	Parkside a	area	a of S	San Francisco. USCGS: Light
			shock fe	elt in Daly	r Ci	ity an	d in Sunset District of
			San Fran	ncisco.			
. 85	June 25	08-33-56	36° 37'	121° 25'	С	2.8	South of Vineyard.
86	June 26	00-31-48	37° 18'	121° 44'	b	1.6	West of Mt. Hamilton.
73	June 28	06-41-32	40° 19'	121° 02'	b	3.8	Northwest of Quincy.
			USCGS:	IV in Lake	Aln	nanor	and Quincy areas.
87	June 28	09-41-34	40° 08'	121° 15'	b	2.5	Northwest of Quincy.
88	June 28	12-40-44	36° 55'	121° 45'	c	3.5	East of Santa Cruz.
			USCGS:	Felt over a	a si	nall a	area, approximately

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude Longitude North West Q M Remarks						
			700 square miles, of the coastal region east and						
northeast of Monterey Bay. One felt report									
	San Francisco. Maximum intensity V at Gilroy								
			Watsonville. IV at Aptos, Boulder Creek, Morgan						
			Hill, San Juan Bautista, San Martin and Soquel.						
89	June 29	08-48-42	36° 35' 121° 10' a 3.1 Southeast of Vineyard.						
90	June 29	21-25-24	36° 43' 121° 36' b 2.5 Southwest of Hollister.						
91	June 30	16-19-24	37° 20' 121° 33' b 2.7 East of Mt. Hamilton.						

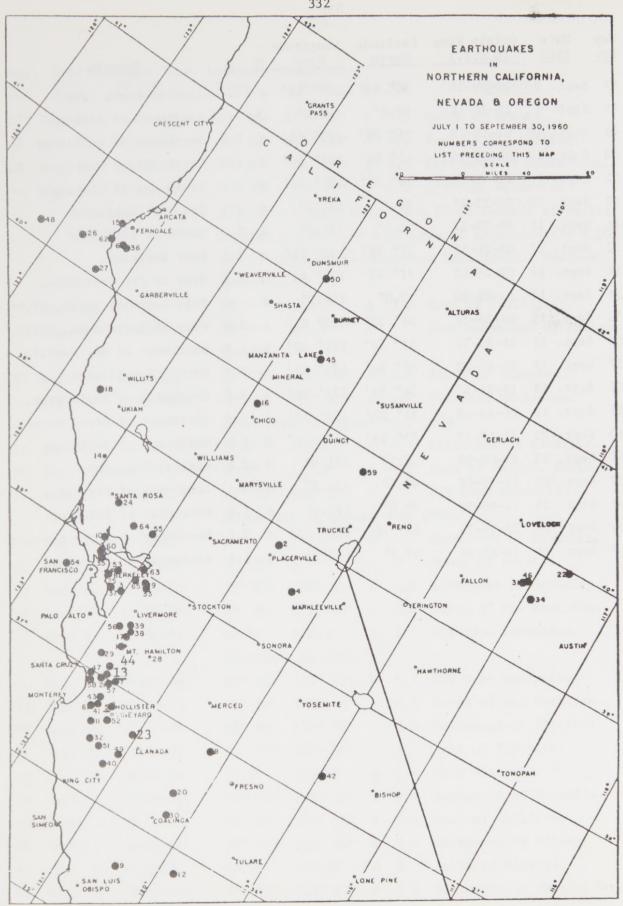


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
July-September 1960

Map No.	Dat 196		Origin Time (G.C.T.)	Latitude North	Longitude West	2	M	Remarks
1	July	3	04-07-43	37° 19'	121° 42'	b	1.8	Southwest of Mt. Hamilton.
2	July	3	11-06-23	38° 52'	120° 47'	d	1.8	North of Placerville.
3	July	6	22-18-48	37.8°	122.0°	d·	1.8	Southeast of Berkeley.
4	July	7	12-59-48	38° 34'	120° 21'	d	2.6	Southeast of Placerville.
5	July	8	18-35-49	36.8°	121.4°	d	3.3	Northwest of Vineyard.
6	July	9	17-11-42	40° 24'	1240 141	b	3.6	South of Ferndale.
7	July	11	04-41-42	37° 00'	121° 30'	С	1.8	North-northwest of
				Holliste	r.			
8	July	11	06-47-30	36° 55'	120° 10'	d	2.0	North-northwest of Fresno.
9	July	14	03-22-23	35.6°	120.40	d	3.0	Northeast of
				San Luis	Obispo.			
10	July	15	22-20-20	38.1°	122.5°	d	2.2	Northwest of Berkeley.
11	July	16	22-16-10	36.6°	121.5°	d	2.8	Southwest of Vineyard.
12	July	20	00-59-36	35.8°	119.8°	d	2.8	Northeast of
				San Luis	Obispo.			
13	July	21	12-54-02	37° 00'	121° 39'	С	2.1	Northwest of Hollister.
14	July	23	20-14-15	38.7°	123.0°	d	1.7	Southeast of Ukiah.
15	July	24	02-25-42	40° 34'	124° 24'	С	3.0	West of Ferndale.
16	July	24	13-12-03	39° 52'	121° 52'	b	2.4	North of Chico.
17	July	24	18-09-21	37° 25'	121° 42'	b	2.3	Northwest of Mt. Hamilton.
13	July	24	19-35-06	37° 00'	121° 38'	С	2.1	Northwest of Hollister.
18	July	24	19-53-47	39.2°	123.5°	d	2.9	West of Ukiah.
19	July	29	13-38-04	37° 55'	121° 50'	b	2.7	East of Berkeley.
20	July	30	02-16-29	36° 26'	120° 17'	С	2.5	Southwest of Fresno.
21	July	30	05-24-48	36° 58'	121° 40'	С	3.1	East of Santa Cruz.
22	July	30	08-13-10	40° 00'	117° 40'	C	3.6	Southeast of Lovelock,
				Nevada.				
23\$	Aug.	1	14-20-37	36° 41'	121° 00'	C	3.1	North-northwest of Llanada.
24	Aug.	5	06-15-53	38.40	122.6°	d	2.0	East of Santa Rosa.
25	Aug.	6	22-11-55	37° 52'	122° 14'	Ъ	3.0	Felt in Berkeley and
				Oakland.				
26	Aug.	7	01-28-10	40.3°	124.7°	d	3.2	Southwest of Arcata.

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West	2	M	Remarks
27	Aug. 7	06-14-07	40° 05°	124° 20'	c	2.5	South of Arcata.
28	Aug. 8	01-09-14	37° 26'	121° 23'	С	2.1	East of Mt. Hamilton.
29	Aug. 8	15-46-04	37° 10'	121° 50'	a	2.5	Northeast of Santa Cruz.
-	Aug. 9	07-39-18	40° 19'	127° 04'	С	6.2	Off Cape Mendocino.
			Felt as	a slight t	rem	or fo	r 10-15 seconds at Eureka.
			Generall	ly felt ove	r l	and a	rea of approximately 6,500
			square n	niles of no	rth	weste	rn California. Maximum
			intensit	ty V.			
30	Aug. 9	08-59-47	36.2°	120.2°	d	3.2	East of Coalinga.
31	Aug. 9	13-22-57	39.7°	118.1°	d	3	East-northeast of Fallon,
			Nevada.				
32	Aug. 10	03-03-50	36° 28'	121° 24'	d	3.2	South of Vineyard.
-	Aug. 10	11-31-42	40° 20'	127° 10'	c	4.6	Off Cape Mendocino.
			Aftersh	ock of Augu	st	9 at	0739.
33	Aug. 10	13-11-02	37.9°	121.8°	d	1	Northeast of Berkeley.
34	Aug. 10	15-43-51	39.6°	117.9°	d	4.0	East of Fallon, Nevada.
-	Aug. 11	07-11-26	40° 10'	126° 17'	C		Off Cape Mendocino.
			Aftersh	ock of Augu	st	9 at	0739.
35	Aug. 11	22-54-07	37.9°	122.40	d	1.7	Northwest of Berkeley.
36	Aug. 15	07-56-54	40° 25'	1240 11'	d	2	South of Arcata.
37	Aug. 16	13-54-33	37° 43'	122° 11'	С	1.8	Southeast of Berkeley.
38	Aug. 17	11-42-34	37° 29'	121° 40'	C	2.6	North of Mt. Hamilton.
-	Aug. 19	03-36-23	40.80	127.40	d	3	Off Cape Mendocino.
			Foresho	ck of 0407.			
	Aug. 19	04-07-08	40° 55'	127° 10'	b	4.5	Off Cape Mendocino.
39	Aug. 23	09-33-41	37° 32'	121° 43'	С	2.5	North of Mt. Hamilton.
40	Aug. 26	08-57-24	36° 20'	121° 08'	c	3.0	Southeast of Vineyard.
41	Aug. 26	22-36-33	36° 45'	121° 32'	d	2.2	West of Vineyard.
5	Aug. 31	21-34-53	36.8°	121.4°	d	2.5	Near Vineyard.
42	Sept. 3	14-40-20	37° 15'	118° 57'	C	2.8	Southeast of Yosemite.
43	Sept. 4	00-09-09	36° 49'	121° 35'	c	2.5	West of Hollister.
44	Sept. 5	10-18-10	37° 07'	121° 40'	b	2.8	
45	Sept. 7	21-35-27	40.5°	121.5°	à	3	North of Mineral.
46	Sept. 8	08-55-45	39° 45'	118° 03'	C	3.5	Northeast of Fallon, Nev.
CIT	Sept. 8	18-41-36	37.5°	118.7°	d	4.0	NW of Bishop

Map No.			Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	<u>M</u>	Remarks
47	Sept. 9	9	06-59-28	36° 59'	121° 48'	С	2.1	East of Santa Cruz.
48	Sept. 9	9	10-24-16	40.2°	125.2°	d	3	Southwest of Arcata.
49	Sept. 1	10	01-18-22	36° 28'	121° 03'	С	2.7	Southeast of Hollister.
50	Sept. 1	10	04-05-10	41° 09'	121° 58'	С	1.8	Northwest of Burney
51	Sept. 1	10	20-49-12	36° 27'	121° 17'	d	2.8	Southwest of Llanada.
52	Sept. 1	10	23-33-27	36.7°	121.3°	d	2.1	South of Hollister
Felt	Sept. 1	11	01-33-27	36.7°	121.3°	d	2.0	South of Hollister
53	Sept. 1	12	08-29-52	37° 54'	122° 11'	С	2.1	Near Berkeley.
54	Sept. 1	12	09-26-10	37° 43'	122° 42'	d	2.2	West of San Francisco.
Felt	Sept. 1	12	13-08-00	37.0°	121.9°	d	made	Felt north of Aptos, IV.
55	Sept. 1	15	09-36-37	38° 22'	122° 05'	С	2.9	West of Sacramento. Felt.
56	Sept.	17	16-22-57	37° 28'	121° 49'	Ъ	1.9	Northwest of Mt. Hamilton.
57	Sept.	18	17-41-23	36° 58'	121° 33'	С	3.1	North of Hollister.
58	Sept.	18	19-01-57	36° 55'	121° 46'	С	1.8	Southeast of Santa Cruz.
59	Sept.	19	06-28-48	39° 50'	120° 22'	d	2.3	Northwest of Reno. Nevada.
60	Sept.	22	21-47-13	37° 59'	122° 31'	Ъ	1.9	Northwest of Berkeley.
61	Sept. 2	22	23-00-02	36.7°	121.6°	d	2.6	West of Vineyard.
62	Sept.	23	13-55-06	40.4°	124.4°	d	3.1	Southwest of Ferndale.
63	Sept.	24	12-36-22	38.0°	121.9°	d	1.9	Northeast of Berkeley.
64	Sept.	26	23-57-35	38° 20'	122° 17'	С	2.1	Southeast of Santa Rosa.
65	Sept.	28	12-53-58	37.9°	122.0°	d	1.8	Northeast of Berkeley.



EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON October-December 1960

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West	9	<u>M</u>	Remarks
1	Oct. 2	10-02-37	37° 24'	121° 43'	b	1.9	Northwest of Mt. Hamilton.
2	Oct. 2	20-43-24	36° 49'	121° 23'	С	2.7	Southeast of Hollister.
			Felt: 7	miles sou	th	of Ho	llister.
3	Oct. 4	02-52-46	37° 10'	121° 13'	С	2.4	Southeast of Mt. Hamilton.
4	Oct. 4	03-49-50	36° 53'	120° 58'	C	2.2	Northeast of Vineyard.
5	Oct. 5	01-18-06	39° 11'	121° 09'	b	3.3	East of Marysville.
6	Oct. 7	00-48-39	37.3°	121.8°	d	2.5	Southwest of Mt. Hamilton.
7	Oct. 8	00-02-29	36° 30'	121° 40'	С	3.0	Southwest of Vineyard.
-	Oct. 10	13-43-33	41.00	127.40	d	4.0	Off west coast of
			Cape Men	docino.			
-	Oct. 17	06-07-10	40.60	117.40	d	4.4	Northeast of Lovelock,
			Nevada.				
-	Oct. 18	12-17-00	35° 41'	118° 23'	С	3.6	East of Bakersfield.
25	Oct. 18	21-38-17	37° 12'	121° 37'	С	2.8	South of Mt. Hamilton.
8	Oct. 19	10-44-45	37° 22'	122° 08'	С	1.6	South of Palo Alto.
16	Oct. 19	21-05-14	37° 45'	121° 58'	С	1.9	Southeast of Berkeley.
9	Oct. 20	05-18-39	37° 16'	121° 34'	a	2.7	Southeast of Mt. Hamilton.
2	Oct. 23	03-43-07	36° 48'	121° 24'	b	3.8	South of Hollister.
			Felt in	Hollister.			
10	Oct. 29	00-38-39	36° 541	120° 55'	С	3.0	East of Hollister.
11	Oct. 29	19-30-43	38.1°	122.5°	d	2.3	North of San Francisco.
12	Nov. 2	04-02-06	40.30	122.8°	d	3.1	Southwest of Shasta.
13	Nov. 3	06-50-24	36° 32'	121° 08'	b	4.1	Southeast of Vineyard.
			Felt ove	r an area	app	roxim	ately 4000 square miles
			of coast	al region	of	west-	central California,
			principa	lly in Mon	ter	ey an	d San Benito Counties.
			Maximum	intensity	٧.		
14	Nov. 3	07-13-40	36° 26'	121° 04'	C	2.7	South-southwest of
			Llanada.				
15	Nov. 4	17-29-25	38° 10'	122° 28'	С	2.0	Northwest of Berkeley.
16	Nov. 5	19-08-17	37° 541	121° 58'	C	1-2	East of Berkeley.
17	Nov. 6	10-35-39	40° 05'	118° 59'	С	3.0	West-southwest of
			Lovelock	, Nevada.			

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West	2	M	Remarks
18	Nov. 6	18-32-20	40.20	125.0°	d	3.6	Southwest of Arcata.
19	Nov. 7	21-11-17	37° 15'	1190 441	С	3.2	North of Fresno.
-	Nov. 8	11-36-27	44.90	125.2°		5.0	Off coast of Oregon.
			Felt: N	Wewport, and	l U	mpqua	, Oregon and Aberdeen,
			Washingt	con.			
20	Nov. 8	12-33-31	36.7°	121.3°	d	2.4	Near Vineyard.
21	Nov. 9	15-25-29	36° 51'	121° 37'	C	2.4	West of Hollister.
22	Nov. 10	07-53-34	39.9°	118.1°	d	2.9	Northeast of Fallon, Nevada.
23	Nov. 10	12-25-33	36° 591	121° 37'	C	1.7	Northwest of Hollister.
-	Nov. 11	12-49-32	40° 22'	127° 28'	С	4.5	Off Cape Mendocino.
24	Nov. 12	06-39-50	40° 15'	125° 25'	d	3.4	Southwest of Arcata.
25	Nov. 12	06-00-51	37° 08'	121° 38' '	С	1.9	South of Mt. Hamilton.
26	Nov. 13	05-11-32	37° 50'	122° 13'	С	2.4	East Oakland. Felt in
			Montcla	ir district	of	Oakl	and.
27	Nov. 15	06-26-18	40° 21'	124° 02'	C	2.3	South of Arcata.
28	Nov. 17	14-44-18	37° 27'	121° 51'	b	2.1	Northwest of Mt. Hamilton.
29	Nov. 18	04-36-44	36° 231	121° 12'	С	3.0	North-northwest of King City.
30	Nov. 18	11-03-14	39° 36'	120° 28'	b	4.4	West of Reno, Nevada. Felt
			over an	area appro	xin	nately	3500 square miles of
			Plumas,	Sierra, Ne	vad	la and	Placer counties. Maximum
			intensi	ty V.			
31	Nov. 20	08-16-20	36° 48'	121° 29'	C	2.6	Southwest of Hollister.
32	Nov. 20	15-52-04	40° 27'	124° 03'	d	2.7	South of Arcata.
33	Nov. 20	23-50-01	36.0 491	121° 27'	С	3.5	Southeast of Hollister.
			Felt in	Hollister,	li	ight s	shock, accompanied by a
			rumble.				
34	Nov. 22	06-13-57	40° 36'	121° 47'	C	2.8	Northwest of Mineral.
35	Nov. 29	00-57-42	37° 15'	121° 27'	b	2.6	Southeast of Mt. Hamilton.
36	Nov. 29	17-08-33	39.9°	117.8°	d	3.9	Northeast of Fallon, Nevada.
37	Nov. 30	01-05-13	37° 55'	121° 58'	b	1.5	East-northeast of Berkeley.
38	Nov. 30	18-16-30	40.20	124.40	d	2.7	South-southwest of Ferndale.
CIT	Dec. 1	05-39-55	37.5°	118.58°	С	3.6	Northwest of Bishop.
39	Dec. 2	08-15-31	36° 44'	120° 59'	C.	2.8	East-southwest of Hollister.
40	Dec. 5	12-32-01	40° 26'	124° 07'	С	4.1	Southeast of Ferndale.

Map No.	Date 1960	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks
41 I	Dec. 8	12-46-28	39°	123.2°	d	3.1	South of Ukiah.
			Felt: s	outheast s	shore	e of	Clear Lake, Lake County.
			Maximum	intensity	IV.		
42 1	Dec. 9	07-04-16	36° 58'	121° 43'	b	2.5	Northwest of Hollister.
43	Dec. 9	14-07-30	36.9°	121.8°	d	3.4	Northwest of Hollister.
44]	Dec. 9	14-09-13	37.1°	122.6°	d	2.6	Off coast southwest of
			Palo Alt				
45	Dec. 12	18-41-24	40° 33'	124° 05'	С	3.7	East of Ferndale.
			Felt: E	lureka.			
46	Dec. 14	05-16-33	37° 38'	122° 25'	С	2.4	South of San Francisco.
47	Dec. 14	13-58-55	40.40	124.20	d	3.0	Southeast of Ferndale.
48	Dec. 15	05-40-26	38° 02'	121° 50'	b	3.9	Northeast of Berkeley.
			Felt ove	er an area	of	appro	ximately 2500 square
			miles of	f the San I	Fran	cisco	Bay region, principally
			in south	nern Soland	o an	d nor	thern Contra Costa counties.
49	Dec. 15	08-28-08	36.40	121.3°	d	3.0	South of Hollister.
50	Dec. 15	12-08-41	37.40	121.7°	d	2.3	Northwest of Mt. Hamilton.
51	Dec. 18	23-23-30	38° 17'	119° 20'	С	4.1	West of Hawthorne.
52	Dec. 19	05-33-23	38.2°	119.40	d	3.5	West of Hawthorne.
53	Dec. 20	00-54-17	37.40	121.40	d	2.1	Northeast of Mt. Hamilton.
54	Dec. 22	19-23-58	37.1°	121.8°	d	2.1	East of Santa Cruz.
55	Dec. 23	02-55-39	36° 56'	121° 49'	С	2.4	East of Santa Cruz.
56	Dec. 24	14-40-34	37° 32'	121° 42'	С	2.6	Northwest of Mt. Hamilton.
57	Dec. 26	00-26-01	36° 361	121° 23'	С	2.1	South of Hollister.
58	Dec. 26	03-42-45	40.40	124.6°	d	2.8	Southwest of Ferndale.
59	Dec. 27	03-57-55	36.0°	121.1°	d	3.3	South of King City.
60	Dec. 27	05-02-03	38.1°	119.40	d	3.0	North of Yosemite.
61	Dec. 27	10-35-26	41° 31'	125° 03'	b	5.4	Northwest of Arcata.
			Felt in	Del Norte	and	Humb	ooldt. Depth about 61 km.
			Maximum	intensity	V.		
62	Dec. 27	10-56-34	41° 21'	125° 04'	C	4.0	Aftershock of 10-35-26.
63	Dec. 27	11-08-44	41° 30'	125° 00'	С	4.7	Aftershock of 10-35-26.
64	Dec. 27	11-27-08	.42.60	123.7°	d	3.3	Northwest of Grants Pass.
65	Dec. 27	16-16-55	40° 37'	125° 20'	С	2.9	Off coast from Ferndale.

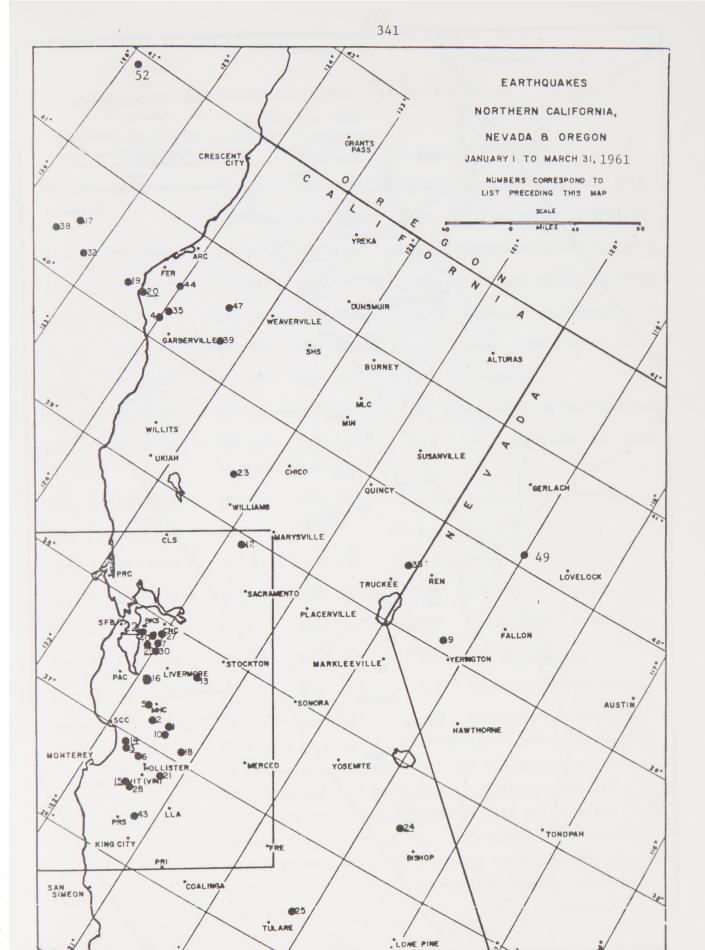
Map No.	-		Latitude North	Longitude West		<u>M</u>	Remarks
66	Dec. 28	10-41-56	40° 40'	125° 15'	C	3.5	Off coast from Ferndale.
67	Dec. 29	06-11-08	37.2°	121.7°	d	2.1	Southwest of Mt. Hamilton.
68	Dec. 29	06-59-58	40° 15'	124° 28'	С	3.6	Southwest of Ferndale.
69	Dec. 31	05-26-21	37° 55'	122° 03'	b	2.6	East of Berkeley. Felt
			in Lafay	ette.			
70	Dec. 31	07-06-10	39.1°	123.7°	d	3.3	West of Ukiah.

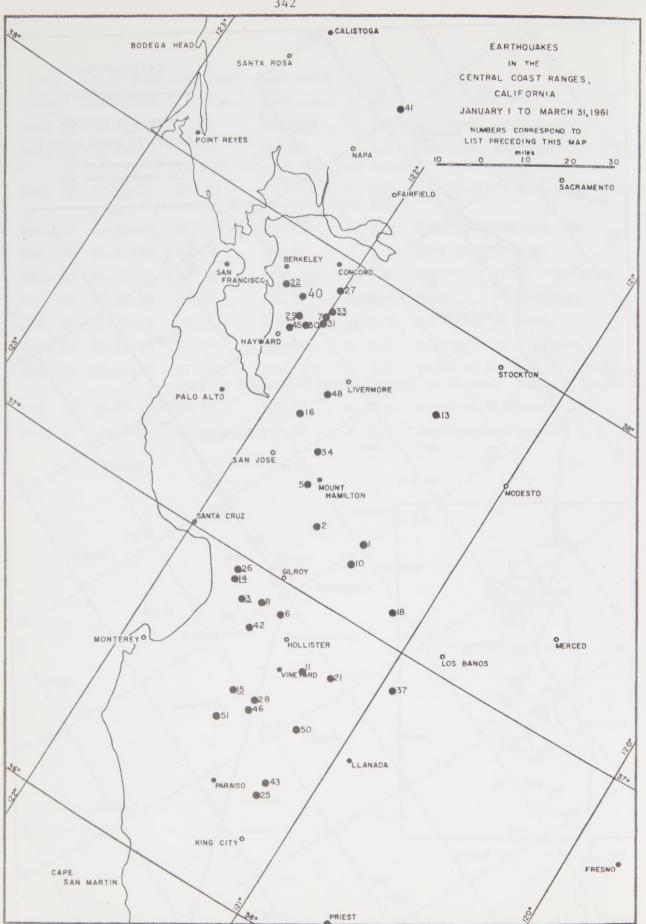
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - March 1961

Map No.	Date 1961	Origin Time (G.C.T.)	Latitude North	Longitude West	9	<u>M</u>	Remarks
1	Jan. 1	10-30-24	37° 14'	121° 22'	Ъ	3.0	Southeast of Mt. Hamilton.
2	Jan. 2	05-40-18	37° 12'	121° 34'	С	2.2	South of Mt. Hamilton.
3	Jan. 3	23-00-21	36° 52'	121° 40'	Ъ	3.6	Northwest of Hollister. Foreshock.
3	Jan. 4	00-30-17	36° 52'	121° 40'	Ъ	4.1	Northwest of Hollister. Felt.
4	Jan. 5	17-08-06	40° 11'	124° 01'	С	3.2	Southeast of Ferndale.
5	Jan. 6	16-47-17	37.3°	121.7°	d	2.6	West of Mt. Hamilton.
CIT	Jan. 6	20-46-36	35.8°	120.2°	d	3.4	Southeast of Parkfield
6	Jan. 7	03-21-26	36° 59'	121° 30'	С	3.4	Northwest of Hollister.
7	Jan. 7	10-26-26	37.8°	122.0°	d	2.3	East of Berkeley.
8	Jan. 8	16-06-22	36.9°	121.6°	d	2.5	Southeast of Santa Cruz.
9	Jan. 8	18-57-30	39.1°	119.3°	d	2.8	Southeast of Reno.
10	Jan. 8	21-19-00	37° 09'	121° 22'	С	2.6	Southeast of Mt. Hamilton.
11	Jan. 10	09-27-31	36° 46' Felt in H	121° 18' Hollister.	С	1.8	Southeast of Hollister; USCGS:
12	Jan. 10	22-22-34	38.9°	121.8°	d	2.5	Northwest of Sacramento.
13	Jan. 10	23-04-58	37° 44'	121° 25'	С	3.1	Northeast of Mt. Hamilton.
14	Jan. 13	08-36-12	36° 55'	121° 45'	С	3.5	Southeast of Santa Cruz.
15	Jan. 16	07-07-40	36.6°	121.5°	d	3.2	Southwest of Vineyard.
14	Jan. 17	22-18-30	36° 55'	121° 43'	С	3.4	Southeast of Santa Cruz.
14	Jan. 18	00-00-00	36.9°	121.7°	d	2.5	Southeast of Santa Cruz.
16	Jan. 22	19-43-39	37° 29'	121° 52'	С	2.3	Northwest of Mt. Hamilton.
17	Jan. 23	18-54-28	40° 30'	125° 21'	С	3.4	West of Ferndale.
18	Jan. 25	05-12-41	37° 05'	121° 08'	С	2.2	Northeast of Vineyard.
19	Jan. 26	03-23-01	40.3°	124.5°	d	3.0	Southwest of Ferndale.
20	Jan. 26	15-49-25	40° 19'	124° 18'	С	2.9	South of Ferndale.
21	Jan. 28	21-07-19	36.8°	121.2°	d	2.5	Northeast of Vineyard.
22	Jan. 29	06-17-24	37° 50'	122° 13'	Ъ	2.5	Foreshock.
22	Jan. 29	07-30-29	37° 50'	122° 13'	Ъ	2.7	Southeast of Berkeley.
23	Jan. 30	08-42-45	39.4°	122.3°	d	3.4	East of Ukiah.
24	Feb. 2	00-04-16					Northwest of Bishop. USCGS reports Taft, Hanford, Fresno, California

Map No.	Date 0	rigin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks	
24	Feb. 2	00-07-42	37° 25'	118° 40'	С	5.1	Aftershock of 0004.	
25	Feb. 2	12-31-00	36° 21'	121.2°	d	2.2	Northwest of King City.	
26	Feb. 6	01-47-19	36° 57'	121° 45'	ъ	2.4	Southeast of Santa Cruz.	
27	Feb. 7	23-09-06	37° 53'	122° 01'	d	1.9	East of Berkeley.	
28	Feb. 8	18-48-09	36° 37'	121° 25'	С	3.1	South of Hollister.	
29	Feb. 11	14-05-30	37° 44°	122° 04'	С	1.2	Foreshock.	
29	Feb. 11	17-08-09			0 sl		Southeast of Berkeley. The were felt at Castro Valley and ported hardest felt.	
29	Feb. 11	17-35-07	37° 45'	122° 05'	b	2.6	Aftershock.	
29	Feb. 11	17-37-53	37° 45'	122° 04'	b	2.6	Aftershock.	
30	Feb. 11	17-38-34	37° 44' at 1758, 1	122° 03' 819, 1904.	С	2.5	Aftershock. Smaller aftershocks	
31	Feb. 12	19-24-14	37° 46'	121° 59'	a	2.0	Foreshock.	
29	Feb. 12	21-14-09	37° 46'	122° 02'	b	2.3	Southeast of Berkeley.	
32	Feb. 13	15-12-01	40° 18' west of Fe	125° 05' rndale.	a	3.6	About 40 miles off coast, south-	
33	Feb. 15	10-02-04	37° 50'	121° 59'	ъ	2.1	Southeast of Berkeley.	
22	Feb. 16	20-12-58	37° 50' 122° 13' a 3.6 Near Berkeley. USCGS: Felt over area of about 1,200 square miles in San Francisco Bay region. Maximum intensity V at Berkeley where cracks in basement floor of Hall of Justice were widened. IV at Bacon Hall, Lawrence Radiation Laboratory, Alvarado, Aptos, Canyon, Lafayette, Moraga Valley, Oakland, and San Francisco.					
34	Feb. 17	05-17-49	37° 25'	121° 44°	С	2.1	Northwest of Mt. Hamilton.	
35	Feb. 19	14-43-23	40° 18°	123° 55'	С	3.2	Southeast of Ferndale.	
36	Feb. 19	22-55-15	39° 301	120° 05'	ъ	3.3	West of Reno.	
36	Feb. 20	01-33-16	39.5°	120.0°	d	2.8	Aftershock.	
37	Feb. 25	17-01-59	36° 541	120° 57'	ъ	2.8	East of Hollister.	
38	Feb. 28	10-05-25	40° 23' Ferndale.	125° 32'	Ъ	3.7	Off coast, west-southwest of	
39	Mar. 3	09-07-28	40.3°	123.3°	d	3.6	Southeast of Ferndale.	
40\$	Mar. 6	13-54-37	37° 49'	122° 10'	c	2.2	Southeast of Berkeley.	
41	Mar. 8	01-43-44	38.5°	122.2°	d	2.3	Southeast of Calistoga.	
42	Mar. 13	08-37-04	36.8°	121.6°	d	2.4	West of Vineyard.	

Map No.	Date Origin 1961 (G.C	Time Latitude .T.) North	Longitude West Q	M	Remarks
43	Mar. 14 04-	15-00 36.4°	121.2° d	3.4	Southeast of Vineyard.
7+7+	Mar. 15 03-2		124.0° d ortuna Rio Dell	3.1 area.	Southeast of Ferndale. USCGS:
45	Mar. 15 23-1		122° 06' c	2.6 III.	Southeast of Berkeley. USCGS:
46	Mar. 17 21-3	5-20 36° 34°	121° 24' c	2.9	South of Vineyard.
47	Mar. 18 05-1	3-46 40.6°	123.4° d	3.7	East of Ferndale.
48	Mar. 20 14-0	0-05 37° 35°	121° 50' c	2.3	Northwest of Mt. Hamilton.
20	Mar. 21 10-5	9-39 40.3°	124.3° d	3.6	South of Ferndale,
49	Mar. 22 11-3	8-15 40.1°	119.0° d	3.0	Northeast of Reno.
50	Mar. 22 21-1	7-20 36.6°	121.2° d	2.8	Southeast of Vineyard.
22	Mar. 24 16-4			3.1 d area	South of Berkeley. USCGS: , no damage. Maximum intensity IV.
51	Mar. 29 16-0	0-11 36.5°	121.5° d	2.5	South of Vineyard.
52	Mar. 30 17-1	2-01 · 41.9°	125.9° d	3.5	Northwest of Arcata.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

Map	Date 1961	Origin Time (G.C.T.)		-June 1961 Longitude West		_M_	Remarks		
1	Apr. 1	02-40-31	36° 33'	121° 24'	ъ	3.0	South of Vineyard. Felt.		
			Intensity	IV at Harri	s R	anch,	$7\frac{1}{2}$ miles south of Hollister.		
2	Apr. 1	06-33-57	37° 28'	121° 47'	Ъ	1.6	Northwest of Mt. Hamilton.		
2	Apr. 1	09-17-57	37° 27'	121° 47'	С	2.5	Northwest of Mt. Hamilton		
3	Apr. 1	13-45-24	37° 561	121° 58'	a	2.0	Southeast of Concord.		
4	Apr. 1	14-01-02	36° 33'	121° 19'	b	2.8	South of Hollister.		
5	Apr. 1	14-22-17	36° 37'	121° 20'	Ъ	2.6	Aftershock.		
6	Apr. 4	19-02-24	37° 22'	121° 48'	C	2.0	Northwest of Mt. Hamilton.		
7	Apr. 6	04-04-45	40° 11' in Humbol	124° 45' dt County.	С	5.1	Off Cape Mendocino. Felt		
8	Apr. 6	19-32-33	38° 05'	122° 29'	С	2.2	Northwest of Berkeley.		
9	Apr. 7	12-21-19	36:2	120:4	d	2.9	North of Coalinga.		
1	Apr. 7	22-04-42	36° 33'	121° 23'	a	3.5	South of Hollister.		
1	Apr. 7	23-54-47	36° 33'	121° 23'	þ	3.4	Aftershock of 22:04.		
10	Apr. 8	04-55-26	36:0	121:2	d	2.7	South of King City.		
11	Apr. 8	09-29-47	36° 061	120° 26'	ъ	3.4	Near Coalinga.		
11	Apr. 8	12-52-16	36° 07'	120° 26'	С	2.7	Aftershock of 09-29-47.		
12	12 Apr. 9 07-23-16 36° 41' 121° 18' a 5.6 Southeast of Vineyard. Felt over an area of approximately 13,500 square miles of west-central California (from San Francisco south to King City and east to Modesto). Maximum intensity VII. Designated as strongest shock in this region since 1906 by many old-time residents. Aftershocks of magnitude 3.0 or above are included in this list. A separate, more complete tabulation of aftershocks appears following								
	this list.								

Map No.		rigin Time	Latitude North	Longitude West	Q	M	Remarks
12	Apr. 9	07-25-41			d	5.5	Aftershock. Felt over much
dumbered			the same	area as ma	in	shock.	
13	Apr. 10	17-18-25	36° 42°	121° 20'	d	3.2	Aftershock of 07-23 on Apr. 9.
14	Apr. 11	09-08-11	36:0	120:1	d	2.7	Southeast of King City.
13	Apr. 11	16-51-44	36° 43°	121° 20'	С	3.3	Aftershock of 07-23 on Apr. 9.
15	Apr. 11	18-23-19	38° 28'	117° 50'	ъ	3.4	Southeast of Hawthorne, Nevada.
16	Apr. 12	04-59-08	35° 55'	120° 30'	С	2.6	Southwest of Coalinga.
12	Apr. 13	22-58-25	36° 40°	121° 17'	С	3.0	Aftershock of 07-23 on Apr. 9.
17	Apr. 14	08-01-25	38° 55'	122° 35'	С	2.3	Southeast of Ukiah.
18	Apr. 14	22-46-21	40° 17°	124° 30'	a	3.5	Southwest of Ferndale.
19	Apr. 15	03-24-09	36° 37'	121° 23'	ъ	3.1	South of Vineyard. (Sequence
			of Apr. 9	, 1961.)			
20	Apr. 16	11-01-17	36° 40'	121° 30'			Southwest of Vineyard.
				of Apr. 9			
21	Apr. 16	23-03-53	36° 35'	120° 43'	С	2.4	Southeast of Llanada.
22	Apr. 17	01-02-01	38° 44 °	119° 33'	b	2.9	East of Markleeville.
-	Apr. 18	05-11-21	43°3	118:7	d	3.5	Southeastern Oregon. (Not on map.
23	Apr. 19	18-16-35	36° 24'	121° 35'	С	3.3	Southeast of Monterey, Calif.
24	Apr. 20	10-45-12	36° 57'	121° 13'	ъ	2.6	Northeast of Hollister (h=20 km).
2	Apr. 22	17-12-58	37° 27'	121° 48'	Ъ	2.2	Northwest of Mt. Hamilton.
25	Apr. 24	06-38-50	36° 41'	121° 25'	С	2.0	Southwest of Vineyard.
26	Apr. 26	10-12-17	37° 51'	122° 05 1	С	2.0	Southeast of Berkeley.
27	Apr. 27	09-04-35	36° 481	121° 29'	a	2.5	Southwest of Hollister (h=15 km).
1	Apr. 27	11-16-10	36° 33¹	121° 241	С	3.4	South of Vineyard.
28	Apr. 28	01-02-52	36° 36'	151° 55;	c	4.2	South of Vineyard. (Sequence
			of Apr. 9	, 1961.)	Fel	t princ	cipally in the Hollister area and
							h of Hollister. Scattered felt
			reports f	rom an area	3 0	f appro	oximately 2,000 square miles. Maxi-

intensity V in Chualar Canyon, Hollister and Paicines.

Map No.	Date Origin Time 1961 (G.C.T.)	Latitude North	Longitude West Q	<u>M</u>	Remarks
29	Apr. 28 03-56-25	36° 32'	121° 21' c	3.2	Aftershock. Felt.
30	Apr. 28 14-05-50	36° 37'	121° 25' b	3.5	Aftershock, Felt.
31	Apr. 28 17-48-53	37° 50'	122° 15' b	2.2	South of Berkeley. Blast?
27	Apr. 29 03-17-01	36:7	121°5 d	3.1	Southwest of Hollister. Felt.
_	Apr. 29 09-19-30	40° 25°	127° 27' c	5.5	Off Cape Mendocino.
-	Apr. 29 16-51-30	40°7	127°7 d	4+	Aftershock.
-	Apr. 29 20-25-29	40° 41°	127° 58' b	4.2	Aftershock.
-	Apr. 30 04-45-13	40° 36'	128° 00' 0	4.4	Aftershock.
-	Apr. 30 14-13-45	40°8	128:3	4.3	Aftershock.
-	Apr. 30 17-30-39	40° 38°	127° 07' k	4.3	Aftershock.
-	May 1 02-41-38	40° 50°	127° 42' 0	2 4.2	Aftershock.
_	May 1 02-50-49	40° 41°	127° 42'	2 4.2	Aftershock.
-	May 1 03-23-50	40° 56'	127° 16' 0	c 4.3	Aftershock.
-	May 1 07-21-26	40° 53'	127° 07' 0	c 4.3	Aftershock.
-	May 1 10-07-30	40.5	126:8	d 3.8	Aftershock.
-	May 1 12-19-06	40° 50'	127° 23'	c 4.5	Aftershock.
-	May 1 12-57-14	40° 23'	126° 17'	c 4.2	2 Aftershock.
-	May 1 18-45-29	40° 37'	127° 00'	c ·4.5	Aftershock.
-	May 1 21-30-02	40:4	126:6	d 4.0	Aftershock.
_	May 2 01-28-59	40.9	127:0	d 4.2	2 Aftershock.
-	May 2 10-10-30	40° 47°	127° 16'	ъ 4.1	Aftershock.
-	May 2 22-37-56	40° 45°	127° 02'	ъ 4.1	Aftershock.
-	May 3 08-48-53	40° 34°	127° 34'	ъ 4.3	3 Aftershock.
-	May 4 02-17-34	40° 47'	127° 03'	c 4.	7 Aftershock.
-	May 4 20-36-42	41:2	127:0	d 4.	l Aftershock.

Map No.	Date 1961	Origin Time (G.C.T.)	Latitude North	Longitude West Q	M Remarks
-	May 4	20-51-39	40° 51'	127° 35' b 3	.9 Aftershock.
-	May 4	20-59-09	41° 04'	127° 05′ ъ 4	.4 Aftershock.
-	May 5	12-02-19	41° 45'	127° 20' b 3	.7 Aftershock.
-	May 5	13-07-54	40:7	126:8 d 4	.O Aftershock.
32	May 6	04-37-37	38° 13'	121° 58' b 2.	.4 Southeast of Fairfield.
33	May 6	04-58-34	37° 39'	121° 38' b 2	.2 East of Livermore.
34	May 6	18-30-18	37° 34 °	121° 46 c 2.	.O South of Livermore.
-	May 7	06-03-04	40° 50' (Sequence	126° 42' b 4, of Apr. 29, 196	
-	May 7	09-01-26	40°2 (Sequence	128°3 d 4, of Apr. 29, 196	
76	May 7	09-05-32	37° 50'	121° 47' a 1.	.9 East of Berkeley.
-	May 7	15-26-31	40° 38' (Sequence	127° 01' c 4. of Apr. 29, 196	
-	May 7	16-19-06	40° 38' (Sequence	127° 05' b 4. of Apr. 29, 196	
35	May 7	19-38-08	140° 140°	125° 11' c 3.	.7 Northwest of Ferndale.
73	May 8	02-01-39	40°7 (Sequence	126:0 d 3.	
-	May 8			126° 55' b 4.	.0 Off Cape Mendocino.
-	May 8	13-57-44		127° 30' c 3. of Apr. 29, 196	.9 Off Cape Mendocino.
-	May 8	23-58-56	43°5	125°5 d	- Off coast of Oregon.
-	May 8	23-59-27	43° 42'	124° 22' d .	- Southwest of Corvallis.
-	May 9	12-03-06		126° 45' c 3.	7 Off Cape Mendocino.

Map No.	Date 1961	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks	
-	May 9	12-06-28		126° 50'	С	4.3	Off Cape Mendocino.	(Sequence.
-	May 11	04-59-30		127° 01' 29, 1961.)	С	4.3	Off Cape Mendocino.	(Sequence
-	May 11	18-48-33		128° 06' 29, 1961.)	ъ	4.7	Off Cape Mendocino.	(Sequence
-	May 11	20-57-12		127° 32'	С	4.2	Off Cape Mendocino.	(Sequence
-	May 11	23-14-21		126° 32'	С	4.1	Off Cape Mendocino.	(Sequence
CIT 36	May 12 May 12		37.63° 37° 38'	118.97° 118° 58'		3.3	Northwest of Bishop. Northwest of Bishop.	
-	May 12	17-37-00		126° 58' 29, 1961.)	С	4.4	Off Cape Mendocino.	(Sequence
74	May 12	21-50-10		126° 07'	ъ	3.9	Off Cape Mendocino.	(Sequence
-	May 13	05-43-16		127° 36' 29, 1961.)	8.	4.3	Off Cape Mendocino.	(Sequence
-	May 13	08-47-37		127° 29' 29, 1961.)	Ъ	4.6	Off Cape Mendocino.	(Sequence
-	May 13	18-19-12	38° 32'	121° 561	С	-	North of Berkeley.	
-	May 13	18-45-44		126° 49' 29, 1961.)	С	3.7	Off Cape Mendocino.	(Sequence
-	May 14	19-31-34		127° 06' 29, 1961.)	Ъ	4.7	Off Cape Mendocino.	(Sequence
37	May 15	08-20-55	37° 23'	121° 50'	ъ	2.3	Northeast of San Jos	e.
-	May 16	12-05-04		126° 22'		3.6	Off Cape Mendocino.	(Sequence
-	May 17	7 03-21-52	40° 50°			4.0	Off Cape Mendocino.	(Sequence

Map No.	Date 0	Origin Time (G.C.T.)	Latitude Longitud		_M_	Remarks
,	May 17	06-34-46	40°5 126°0 of Apr. 29, 1961.)	d	3.7	Off Cape Mendocino. (Sequence
38	May 17	20-09-30	38° 04' 122° 33'	С	2.3	North of San Francisco.
-	May 18	08-51-03	40° 45' 126° 55' of Apr. 29, 1961.)	С	14. 14	Off Cape Mendocino. (Sequence
-	May 18	09-37-55	40° 16' 127° 42' of Apr. 29, 1961.)	Ъ	4.4	Off Cape Mendocino. (Sequence
39	May 18	11-37-50	38° 32' 118° 43'	С	3.8	Vicinity of Hawthorne, Nev.
2000	May 18	19-10-57	41:8 128:0 of Apr. 29, 1961.)	d	3.9	Off Cape Mendocino. (Sequence
-	May 18	23-57-28	40° 45' 126° 40' of Apr. 29, 1961.)	Ъ	4.1	Off Cape Mendocino. (Sequence
40	May 19	08-32-02				Berkeley. Felt in Montclair, num intensity IV in Berkeley,
-	May 19	14-47-43	40° 44' 127° 02' of Apr. 29, 1961.)	С	.4.4	Off Cape Mendocino. (Sequence
-	May 19	14-49-48	40° 48' 127° 20' of Apr. 29, 1961.)	С	4.0	Off Cape Mendocino. (Sequence
41	May 20	07-03-36	36° 48' 121° 37'	С	2.8	Northwest of Vineyard.
42	May 20	08-42-14	37.9 122.2	d	2.3	Northeast of Berkeley.
-	May 21	02-33-42	40°7 127°8 of Apr. 29, 1961.)	d	3.9	Off Cape Mendocino. (Sequence
-	May 21	03-41-16	40° 29' 126° 47' of Apr. 29, 1961.)		4.8	Off Cape Mendocino. (Sequence
-	May 21	07-58-35	40° 35' 126° 40' of Apr. 29, 1961.)		4.0	Off Cape Mendocino. (Sequence
-	May 21	15-15-15	39° 34' 127° 12' of Apr. 29, 1961.)		3.9	Off Cape Mendocino. (Sequence

Map No.	Date Origin Time 1961 (G.C.T.)	Latitude Longitude North West Q M Remarks	
-	May 21 15-18-08	40° 24' 126° 47' a 4.2 Off Cape Mendocino. (Sequen	ice
		of Apr. 29, 1961.)	
-	May 21 19-45-38	40° 02' 127° 08' c 3.8 Off Cape Mendocino. (Sequer	ice
		of Apr. 29, 1961.)	
-	May 24 12-59-54	40° 27' 126° 20' b 4.0 Off Cape Mendocino. (Sequer	ice
		of Apr. 29, 1961.)	
-	May 24 13-34-31	43° 30' 127° 08' c - Off coast of Oregon.	
43	May 25 01-18-42	36° 45' 121° 26' c 2.6 Northwest of Vineyard.	
75	May 25 06-21-03	40° 47' 125° 39' c 3.6 Off Cape Mendocino. (Sequence	e
		of Apr. 29, 1961.)	
44	May 25 14-19-05	36° 20' 121° 00' c 3.4 Northeast of King City.	
44	May 25 14-19-35	36° 20' 121° 00' b 3.4 Northeast of King City.	
45	May 26 04-15-24	36° 44' 121° 27' c 2.8 South of Hollister. Felt.	
46	May 26 12-58-35	36° 47' 121° 33' c 3.5 Southwest of Hollister. Felt	
		by several in Salinas and Hollister. Maximum intensity	
		IV in Hollister.	
_	May 29 01-48-43	35° 41' 117° 43' c 3.5 South of China Lake.	
8	May 29 17-24-04	38° 05' 122° 28' c 1.5 North of San Francisco.	
47	May 30 19-55-24	38°2 122°0 d 2.9 Southeast of Fairfield.	
48	June 1 06-47-20	36° 20' 121° 19' b 2.7 Northwest of King City.	
49	June 1 14-11-30	36° 27' 121° 12' c 2.6 North of King City.	
50	June 3 00-26-16	37° 49' 122° 11' b 2.4 Southeast of Berkeley.	
51	June 3 04-00-40.	37° 50' 122° 13' b 3.3 Felt. Near Berkeley.	
		Maximum intensity IV in Daly City, Canyon and Oakland.	
52	June 3 06-15-52	37° 25' 121° 43' c 2.7 Northwest of Mt. Hamilton.	
-	June 4 10-38-50	40°5 128°3 d 4.3 Off Cape Mendocino. (Sequen	ce

of Apr. 29, 1961.)

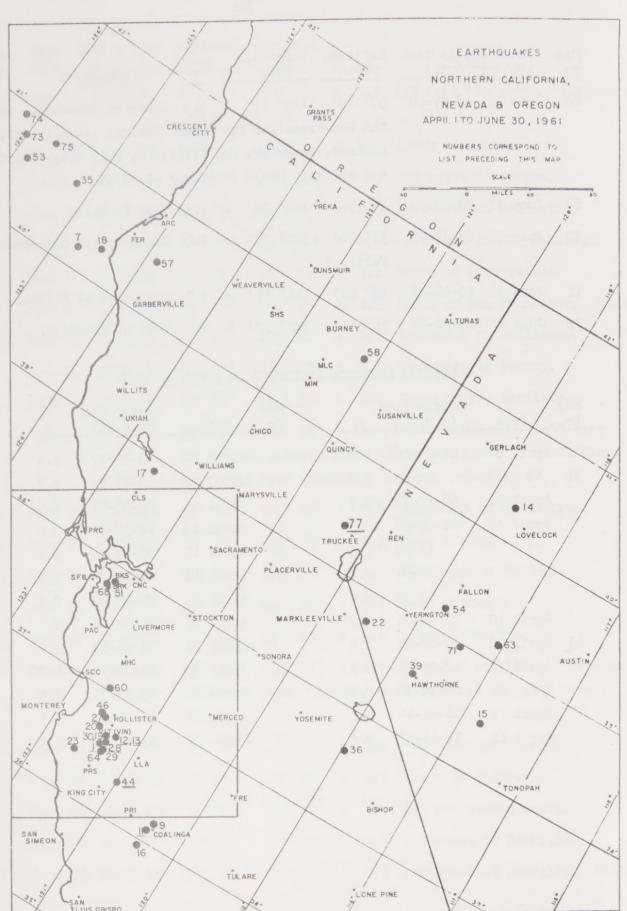
Map No.	Date (Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks
53	June 5	09-47-34	40° 35'	125° 50'	С	3.5	Off Cape Mendocino. (Sequence
			of Apr. 2	29, 1961.)			
54	June 5	11-20-56	39:2	118:8	d	3+	South of Fallon.
-	June 6	03-46-09	42° 58¹	128° 28'	C	4.6	Off coast of Oregon.
55	June 7	22-16-58	36° 57'	121° 34'	a	2.5	Northwest of Hollister.
56	June 9	05-28-52	37° 32'	121° 20'	a	2.5	Northeast of Mt. Hamilton.
57	June 9	17-13-06	40° 29°	123° 55'	ъ	3.1	North of Garberville.
-	June 9	18-55-49	38° 00'	122° 29'	ъ	1.9	North of San Francisco. Blast?
13	June 11	20-21-03	36° 42°	121° 20°	С	2.7	Southwest of Hollister.
58	June 11	22-58-30	40° 44 *	121° 09'	ъ	3.4	Southeast of Burney.
59	June 14	10-53-42	37° 26'	121° 39'	ъ	2.8	North of Mt. Hamilton.
60	June 14	21-56-06	37° 01'	121° 38'	ъ	3.4	West of Gilroy. Felt over
			an area	of approxim	ate	ly 40	O square miles of Santa Clara
			and Santa	Cruz Coun	tie	s. M	aximum intensity IV.
61	June 15	16-40-59	36° 54°	121° 48'	С	2.6	Southeast of Santa Cruz.
62	June 18	12-50-59	36° 11'	120° 50'	c ·	2.1	East of King City.
63	June 20	08-38-06	39° 10'	118° 03'	С	3 <u>+</u>	Southeast of Fallon.
77	June 20	12-28-50	39° 19'	120° 16'	С	2.8	West of Truckee.
77	June 24	16-06-28	39° 19'	120° 22¹	ъ	2.4	West of Truckee.
64	June 25	13-15-26	36° 29¹	121° 21'	С	3.6	South of Hollister. Felt in
			Hollister	area. In	ten	sity	IV $7\frac{1}{2}$ miles south of Harris
			Ranch.				
65	June 26	04-57-58	36° 581	121° 40'	С	2.2	Southwest of Gilroy.
28	June 26	07-03-33	36° 36'	121° 22'	С	2.5	South of Vineyard.
-	June 26	11-30-22 .	35° 46°	122° 00'	С	2.5	Off San Simeon coast.
66	June 26	13-46-06	38° 11:	122° 05'	ū	2.4	Northeast of Berkeley.

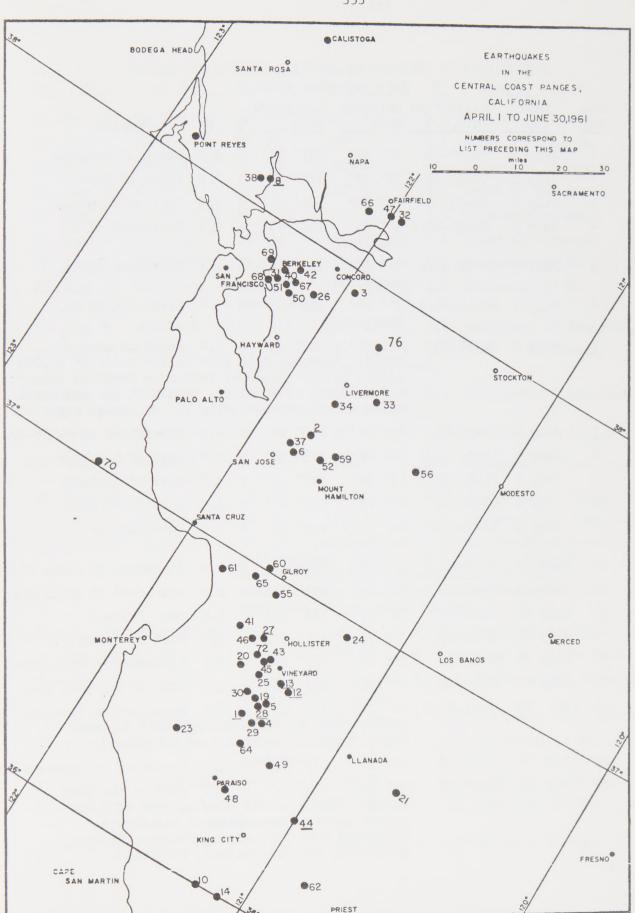
67 June 27 02-57-53 37° 51' 122° 11' b 2.9 Southeast of Berkeley. Felt.

Map Date Origin Time No. 1961 (G.C.T.)	Latitude Longitude North West Q M Remarks
68 June 27 18-27-08	37° 49' 122° 17' b 3.5 South of Berkeley. Felt in
	the San Francisco Bay area. Maximum intensity IV,
	Oakland, Berkeley, San Francisco, Daly City, Canyon
	and Moraga. Small foreshock at 17-35.
69 June 27 22-23-58	37° 52' 122° 21' a 2.1 Near Berkeley.
70 June 29 07-18-32	37° 01' 122° 28' c 2.8 Santa Cruz. Off coast.
	Felt.
71 June 30 10-46-06	38° 58' 118° 25' c 3.3 Southeast of Fallon.
72 June 30 19-00-28	36° 45' 121° 30' b 2.7 West of Vineyard.

HOLLISTER SEQUENCE BEGINNING ON APRIL 9, 1961

Map No.	Date	Origin Time (G.C.T.)	M	Map No.	Date	Origin Time (G.C.T.)	M
12	April 9	07-23-16	5.6		April 12	13-05-17	2.5
12		25-41	5.5		April 12	21-47-51	2.7
	April 10	08-17-33	2.7		April 13	09-08-51	2.5
	April 10	12-09-08	2.9	12	April 13	22-58-25	3.0
		13-39	2.2	19	April 15	03-24-09	3.1
		19-14	2.7	20	April 16	11-01-17	3.4
		30-03	2.6		April 19	09-18-29	2.3
	April 10	13-02-05	2.7		April 26	09-50-01	2.7
13	April 10	17-18-25	3.2	1	April 27	11-16-10	3.4
	April 10	18-37-21	2.5	28	April 28	01-02-52	4.2
	April 11	00-19-36	2.3	29	April 28	03-56-25	3.2
13	April 11	16-51-44	3.3		April 28	14-05-50	3.5
	April 11	18-14-27	2.7	27	April 29	03-17-01	3.1



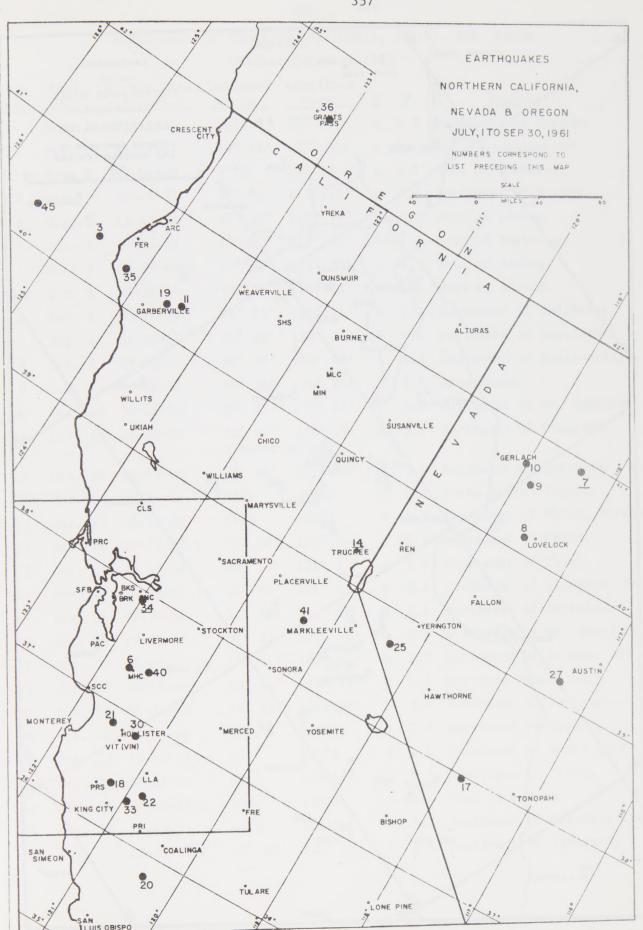


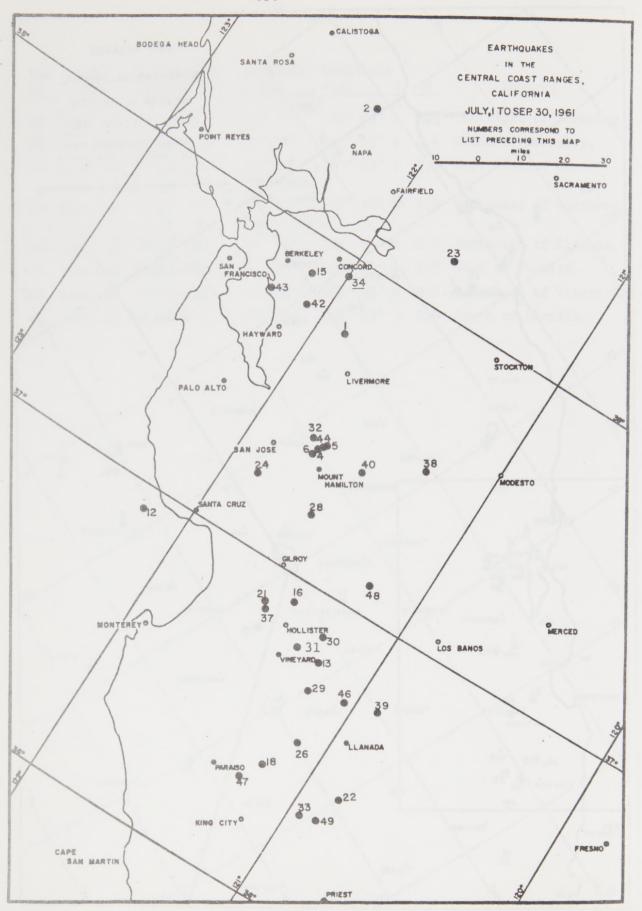
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON July-September 1961

Map No.		Origin Time (G.C.T.)	Latitude North	Longit West	ude	<u>M</u>	Remarks
1	July 1	18-07-32	37° 46'	121° 5	31	2.5	South of Concord.
2	July 1	20-32-21	38° 27'	122° 1	171	2.2	North of Napa.
3	July 2	08-53-19	40° 25'	124° 4	101	3.0	West of Ferndale.
4	July 3	03-32-10.7	37° 23' Hamilton.	121° 4	131 8	2.4	Northwest of Mt.
5	July 3	03-52-25.6	37° 26' Hamilton.	121° 4	li c	2.5	Northwest of Mt.
6	July 3	04-10-08.8	37° 22' Hamilton.	121° 4	3' b	3.4	Northwest of Mt.
7	July 4	04-56-00	USCGS: Pasquare min the no	robable les. R rth to	e felt Report Lovel	area ed fel lock, N	North of Lovelock. on the order of 10,000 t from Paradise Valley evada to the southwest. V. No damage reported.
7	July 4	05-35-05	40° 54 °	118° 2	241 0	4.0	Aftershock of 04-56-00.
8	July 4	11-09-11.0	40° 081	118° 3	61 b	5.0	West of Lovelock.
9	July 4	21-31-21	40° 351	118° 5	01 0	3.7	East of Gerlach.
10	July 6	03-42-32	40° 45°	119° 0	0° c	3.9	East of Gerlach.
11	July 9	09-02-28.1	40° 17.5' Garbervil		51 c	4.0	Northeast of
12	July 11	06-25-11.7	36° 56'	122° 1	.O * C	2.2	Southwest of Santa Cruz.
13	July 13	23-00-09.5	36° 47°	121° 1	4 b	2.0	Southeast of Hollister.
14	July 14	00-13-01	39° 17'	120° 1	31 c	3.4	Near Truckee.
15	July 14	05-34-09.4	37° 53.5'	122° 0	7.5 c	2.3	East of Berkeley.
16	July 16	07-15-53	36° 55	121° 2	71 c	2.4	Northwest of Hollister.
17	July 20	16-25-48.4	37° 581	117° 5	21 c	3.4	West of Tonopah, Nev.
18	July 22	18-01-55.0	USCGS: Fe	elt at	Pinna	4.0 cles N	Northeast of Paraiso. ational Monument f Hollister).
19	July 23	07-54-28	40° 14°	123° 4	21 b	3.4	Northeast of Garberville.
20	July 31		35° 49' Obispo. Usquare mil Intensity	120° 2 JSCGS: Les of V at A	2' c Felt west- tasca	4.7 over central dero,	Felt at San Luis an area of 5,000 l California. Cholame, Creston, Templeton.

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks
21	Aug. 1	01-36-33	36° 521	121° 33'	Ъ	3.0	West of Hollister.
22	Aug. 1	06-12-54.5	36° 261	120° 51'	С	3.1	South of Llanada.
23	Aug. 2	09-32-49.5	38° 10'	121° 40'	С	2.5	Northeast of Concord.
24	Aug. 3	13-38-38	37° 13'	121° 52'	ъ	2.1	South of San Jose.
25	Aug. 4	11-28-17.7	38° 43'	119° 20'	С	3.9	Southeast of Reno.
26	Aug. 4	13-22-32.7	36° 32'	121° 08;	ъ	2.4	South of Vineyard.
27	Aug. 4	16-56-09.1	39.2°	117.4°	d	4.5	Southwest of Austin, Nev.
28	Aug. 5	07-43-49	37° 11' Hamilton.	121° 35'	Ъ	2.4	Southeast of Mt.
29	Aug. 6	05-14-12	36° 41°	121° 12'	Ъ	2.4	Southeast of Vineyard.
30	Aug. 7	01~57~01	36° 52' Intensity	121° 16' IV at Holl:			East of Hollister.
31	Aug. 10	16-43-41	36° 48' Intensity	121° 20' IV at Holl:	c	2.7 er.	Southeast of Hollister.
14	Aug. 12	04-57-20	39° 16'	120° 12'	Ъ	4.0	Near Truckee. III at Norden.
CIT	Aug. 12	16-34-19	36.22°	118.37°	Ъ	3.1	Southwest of Lone Pine.
32	Aug. 16	22-31-29	37° 25'	121° 45'	b	2.8	Northeast of San Jose.
33	Aug. 17	17-14-45	36° 201	120° 57'	b	3.1	Northeast of King City.
34	Aug. 18	01-30-37	approximat Francisco	ely 1,500	: squ Ma	Felt are m ximum	Southeast of Concord. over an area of iles of the San intensity V. At
35	Aug. 19	06-21-54.9	40.3°	124.2°	d	3.4	South of Arcata.
36	Aug. 23	17-59-47	42.4°	123.2°	d	4.6	East of Grants Pass.
34	Aug. 25	17-20-25	37° 56' Aftershock		С	2.7	Southeast of Concord.
37	Sept. 5	14-08-40.7	36° 51'	121° 32'	С	2.4	Northwest of Vineyard.
38	Sept. 5	22-46-34	37° 32' Hamilton.	121° 16'	С	2.8	Northeast of Mt.
39	Sept. 10	22-38-12	36° 45'	120° 54'	С	2.9	North of Llanada.
40	Sept. 13	11-54-44	37° 24' Hamilton.	121° 30'	С	3.0	Northeast of Mt.
41	Sept. 16	10-18-55	38° 29¹	120° 201	C	3.3	North of Sonora.

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West Q	_M_	Remarks
42	Sept. 16	15-36-18	37° 47'	122° 05' b	2.1	Southeast of Berkeley.
43	Sept. 19	04-21-01.4	37° 46'	122° 15' a	2.4	South of Berkeley.
44	Sept. 20	09-54-08.9	37° 24' Hamilton.	121° 42' c	2.3	Northwest of Mt.
45	Sept. 21	19-20-08.4	40° 22' Californi		3.9	Off coast of northern
46	Sept. 24	08-13-31.4	36° 43'	121° 03' b	2.5	Northwest of Llanada.
47	Sept. 27	02-02-06.3	36° 20'	121° 15' c	2.7	East of Paraiso.
48	Sept. 27	19-51-42.9	37° 05'	121° 13' c	2.6	Northeast of Vineyard.
49	Sept. 29	15-39-58	36° 201	120° 53' b	2.4	South of Llanada.



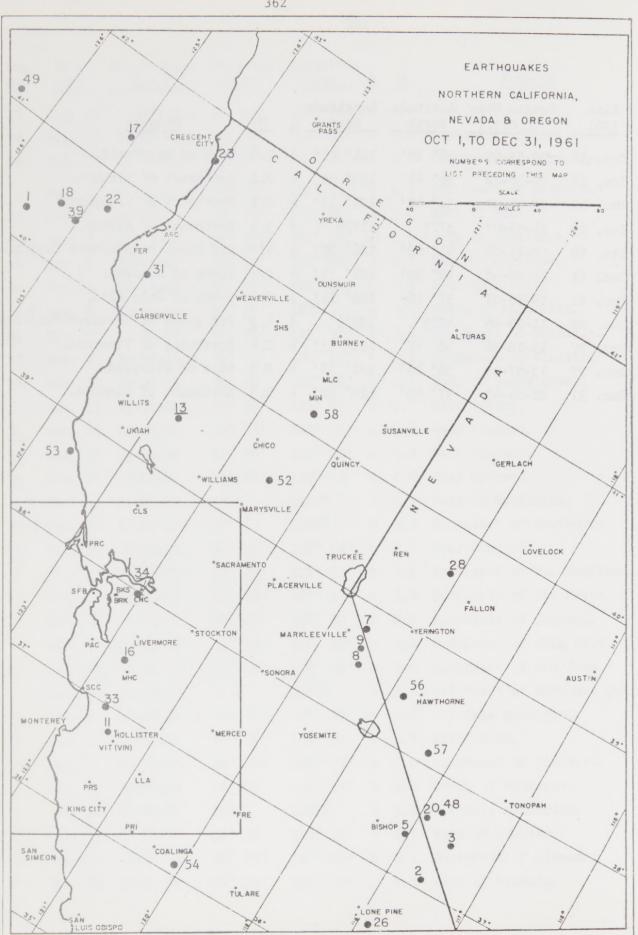


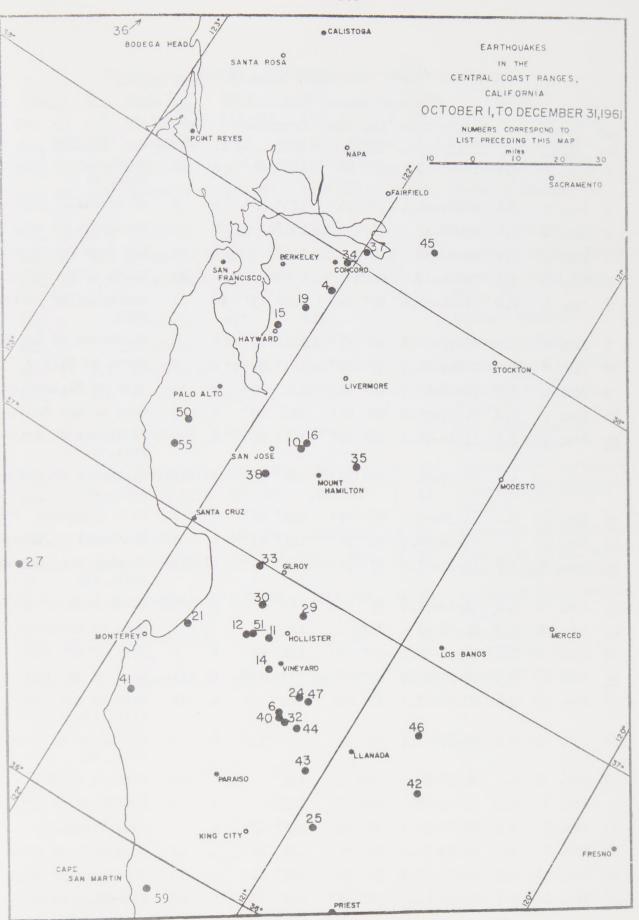
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON October-December 1961

Map No.	Date 1961	Origin Time (G.C.T.)	Latitude North	Longitude West	Q	M	Remarks
_	Oct. 1	17-16-32	36°5	117:0	d	4.2	Southeast of Bishop.
1	Oct. 1	23-17-47	40° 18'	125° 32'	С	3.9	Off Cape Mendocino.
CIT	Oct. 2	07-04-00	37°5	117°83	С	3.1	East of Bishop.
2	Oct. 2	12-49-37	37° 05'	117° 37'	С	3.5	Southeast of Bishop.
3	Oct. 2	16-22-28	37° 28'	117° 32'	Ъ	3.7	East of Bishop.
4	Oct. 2	17-12-51	37° 53'	122° 01'	Ъ	2.0	East of Berkeley.
5	Oct. 3	02-59-08.5	37° 22'	118° 02'	С	3.8	East of Bishop.
CIT	Oct. 3	02-59-16	37°35	118° 73	Ъ	3.6	West of Bishop.
6	Oct. 4	02-26-59	36° 34'	121° 17'	Ъ	2.4	Southeast of Hollister.
7	Oct. 6	01-00-52	38° 48'	119° 36'	Ъ	3.9	Northeast of Markleeville.
8	Oct. 7	07-22-16.5	38° 28†	119° 29'	С	3.2	Southeast of Markleeville.
9	Oct. 9	02-41-23	38° 38'	119° 33'	Ъ	3.5	Aftershock.
10	Oct. 10	04-29-02	37° 23'	121° 47'	С	2.0	Northwest of Mt. Hamilton.
11	Oct. 10	19-20-04	36° 48' h about		Ъ	3.2	Northwest of Vineyard.
12	Oct. 10	19-22-06	36° 46'	121° 34°	a	2.2	Southwest of Hollister. Blast?
59	Oct. 12	2 06-31-11.2	35°8	121°3	d	2.3	North of San Simeon.
13	Oct. 14	4 06-46-48	39°0	122:7	d	2.7	Southeast of Ukiah. Foreshock.
13	Oct. 1	4 12-52-59.6	39° 30'	122° 44'	Ъ	3.5	
52	Oct. 1.	5 23-47-32	39° 26'	121° 25'	С	2.7	
14	Oct. 1	6 14-19-35	36° 42°	121° 25'	Ъ	2.3	
15	Oct. 1	8 07-24-08	37° 42°	122° 08'	Ъ	2.1	
16	Oct. 1	9 08-08-47	37° 25'	121° 46'	Ъ	3.5	
17	Oct. 1	9 20-05-34.5	41° 21'	125° 03'	Ъ		
18	Oct. 2	0 10-18-48	40° 30°	125° 17'	С	3.7	Off Cape Mendocino.
19	Oct. 2	1 05-31-50	37° 47°	122° 04'	Ъ	2.0	
20	Oct. 2	4 06-31-06	37:6	117:9	d	3.2	
21	Oct. 2	5 10-17-12	36.7	121°.8	d	2.1	
53	Oct. 2	26 17-39-06	38°7	123°6	d	2.7	
22	Oct. 2	26 21-49-18.	5 40°.7	124°.8	d	3.3	
23	Oct. 2	26 23-40-31	41°6	124:1	d		
24	Oct. 2	27 17-31-07.	7 36° 40'	121° 15'	C	2.6	Southeast of Vineyard.

Map No.	Date	(Origin Time (G.C.T.)	Latitude North	Longitude West	<u>Q</u>	M	Remarks
25	Oct. 2	9	11-47-33.1	36° 20'	120° 55'	С	2.0	East of Paraiso.
26	Oct. 3	31	00-00-42	36° 30'	117° 52'	C	3.6	Southeast of Lone Pine.
27	Oct. 3	31	23-54-27.6	36° 341	122° 30'	C	2.0	Southwest of Sarta Cruz.
_	Nov. 2	2	06-30-00.0	40° 10'	127° 35'	b	4.0	Off coast of Mendocino.
28	Nov. 3	3	06-09-13	39° 061	119° 06'	d	3.0	East of Reno.
29	Nov. 3	3	23-00-00	36° 55'	121° 25'	С	2.5	North of Hollister.
54	Nov. 5	5	10-43-57	36° 021	120° 06'	d	2.0	East of Coalinga
30	Nov. 7	7	01-00-08	36° 52'	121° 34'	Ъ	2.7	Near Hollister.
55 \$	Nov. 8	3	19-30-04	37° 14'	122° 13'	8.	2.1	South of Palo Alto.
31	Nov.	9	12-10-26	40° 26'	123° 59'	b	3.8	Southeast of Ferndale.
32	Nov.	9	22-50-16.0	36° 35'	121° 15'	ъ	2.5	Southeast of Vineyard.
33	Nov.	12	04-20-11	36° 581	121° 40'	Ъ	3.7	East of Santa Cruz.
	Nov.	15	05-38-54	34° 091	119° 01'	Ъ	5.3	Kern County.
34	Nov.	17	02-16-56	37° 581	122° 021	a	3.8	Near Concord.
34	Nov.	17	03-40-54	37° 581	122° 021	a	3.0	Near Concord.
34	Nov.	18	07-08-10	37° 581	122° 02'	ъ	2.6	Near Concord.
56 \$	Nov.	19	12-03-43	38°4	118:9	d	2.9	West of Hawthorne.
57 \$	Nov.	20	12-47-20	38:1	118:3	d	2.9	Southeast of Hawthorne.
34	Nov.	22	01-32-25	37° 58'	122° 02'	ъ	2.4	Near Concord.
35	Nov.	23	12-39-30	37° 26'	121° 33'	ъ	2.3	Northeast of Mt. Hamilton.
36	Nov.	27	02-18-13	38° 181	123° 19'	С	2.0	Northwest of Pt. Reyes.
37	Nov.	28	06-07-02	38° 031	121° 59'	ъ	2.5	Northeast of Concord.
-	Nov.	29	04-49-03	35° 091	120° 08'	С	3.0	Southeast of King City.
38	Nov.	29	13-30-12	37° 18'	121° 51'	ъ	2.6	Southeast of San Jose.
	Dec.	2	13-22-32	41.8	126:8	d	3.8	Off coast of northern California.
39	Dec.	4	10-26-21	40° 27°	125° 02'	ъ	3.8	Off Cape Mendocino.
39	Dec.	4	12-26-26	40° 27°	125° 02'	ъ	3.4	Aftershock.
40	Dec.	4	19-56-34	36° 361	121° 17'	С	2.0	Southeast of Vineyard.
41	Dec.	6	03-27-30	36° 261	121° 51'	ъ	. 2.4	South of Monterey.
-	Dec.	10	00-03-41	40°5	127:6	d	3.8	Off Cape Mendocino.
42	Dec.	12	20-38-40	36° 361	120° 38'	С	2.7	East of Llanada.
43	Dec.	14	07-28-44	36° 291	121° 05'	Ъ	2.1	Southwest of Llanada.
44	Dec.	15	09-41-42	36° 35¹	121° 12'	С	2.5	West of Llanada.

Map No.	Date 1961	Origin Time Latitude Longitude (G.C.T.) North West Q M		Remarks			
45	Dec. 16	00-33-09	38° 10'	121° 45'	C	2.6	East of Fairfield.
46	Dec. 18	02-38-12	36° 441	120° 45'	C	2.2	Northeast of Llanada.
47	Dec. 19	09-43-50	36° 40'	121° 13'	b	2.1	Southeast of Vineyard.
48	Dec. 19	21-53-07	37°7	117:8	d	3.4	Northeast of Bishop.
49	Dec. 19	22-14-06	41° 08'	126° 27'	С	4.0	Off coast of northern California.
58	Dec. 21	10-25-48	40° 09'	121° 34'	C	2.7	South of Mineral.
50	Dec. 21	19-32-07	37° 16'	122° 14'	С	2.1	South of Palo Alto.
_	Dec. 22	11-26-46	40°5	126°3	d	4.9	Off coast of northern California.
51	Dec. 27	13-12-36	36° 47'	121° 33'	Ъ	2.4	Northwest of Vineyard.
51	Dec. 27	13-57-45	36° 461	121° 33'	b	2.3	West of Vineyard.
34	Dec. 31	21-24-45	37° 59'	122° 02'	C	2.3	Northeast of Concord.

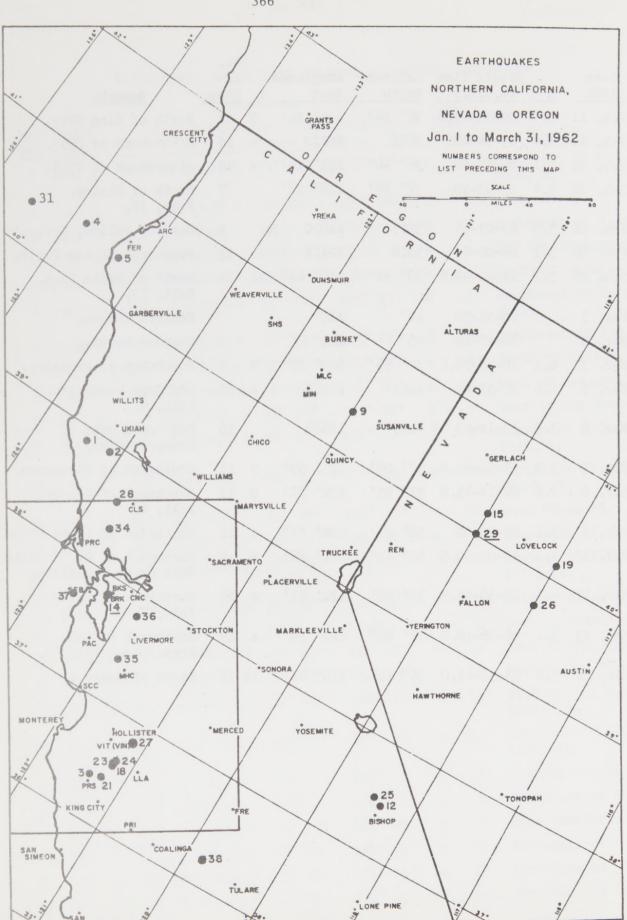


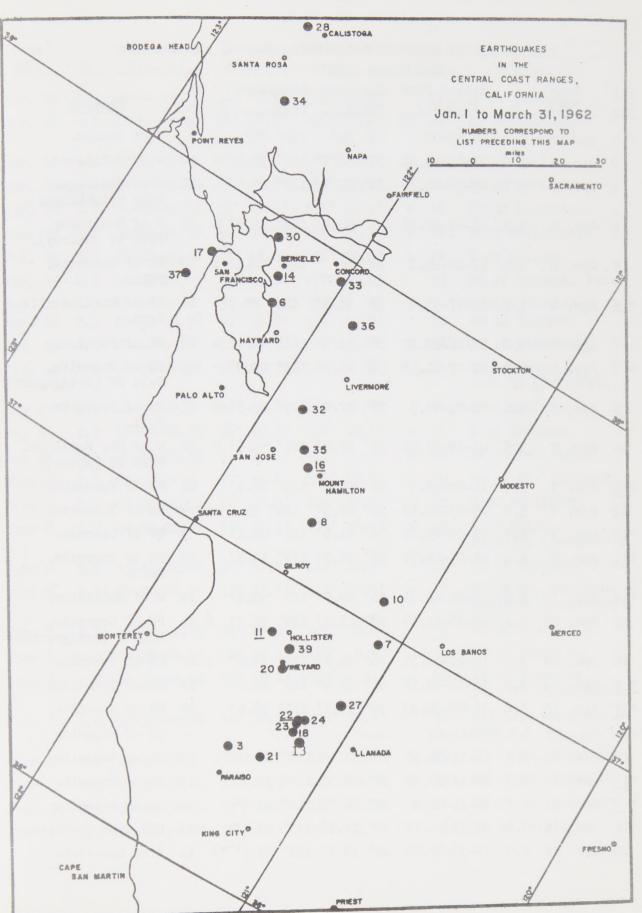


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

	January-March 1962									
Map No.	Date		M	Origin Time (G.C.T.)	Latitude North	Longitude West	h	of Stas.	Remarks	
1	Jan.	-	4.1	17-20-59.5	38° 53'	123° 24'	a	15	Southeast of Ukiah. Felt, V.	
2	Jan.	1	2.5	17-49-26.4	38° 54'	123° 08'	ъ	9	Aftershock. Felt.	
3	Jan.	4	3.0	03-56-10	36:4	121:4	ъ	11	Northwest of King City.	
4	Jan.	4	3.7	15-32-38	40°5	124:8	8	6	Off Cape Mendocino.	
5 \$	Jan.	5	3.8	05-21-17	40:4	124:4	4	13	South of Ferndale.	
6	Jan.	5	2.8	07-40-54.6	37° 44°	122° 13'	18	11	Southeast of Berkeley. Felt.	
7	Jan.	6	2.4	22-33-25.7	36° 57'	121° 06'	8	6	Southwest of Los Banos.	
8	Jan.	8	2.4	08-51-20.9	37° 10'	121° 36'	8.	9	North of Gilroy.	
9	Jan.	8	3.6	10-48-49.0	40° 22'	121° 00°	a	14	West of Susanville.	
10	Jan.	9	2.6	08-27-05.8	37° 04°	121° 10;	4	9	West of Los Banos.	
11	Jan.	15	2.5	12-45-54.2	36° 48'	121° 30'	8	9	Southwest of Hollister. Felt, V.	
12	Jan.	15	3.7	23-17-21	37° 25'	118° 22'	а	12	Northeast of Bishop. Felt, IV.	
39	Jan.	17	2.0	01-35-46	36° 47'	121° 25'		4	Near Vineyard. Felt, IV	
13	Jan.	23	2.0	23-16-38.5	36° 34'	121° 12'	a	6	Southeast of Vineyard,	
14	Jan.	24	3.7	15-13-05.5	37° 50'	122° 15'	2	11	Southeast of Berkeley. Felt, IV.	
14	Jan.	24	1.8	15-19-37.6	37° 50'	122° 16'	5	7	Aftershock of 1513. Felt.	
15	Jan.	27	3.7	16-28-36	40°2	119:0		9	West of Lovelock, Nev.	
16	Jan.	28	2.2	21-47-35.9	37° 19'	121° 44 °	4	9	West of Mit. Hamilton.	
16	Jan.	29	2.5	00-55-02.7	37° 19'	121° 43'	5	11	West of Mt. Hamilton.	
17	Jan.	29	2.6	20-08-17.5	37° 46'	122° 32'	а	12	West of San Francisco. Felt, IV.	
18	Jan.	31	3.9	03-17-21.3	36° 33'	121° 13'	8	15	Southeast of Vineyard. Felt, IV.	
19	Jan.	31	4.0	04-07-32	4091	118°		13	Central Nevada.	
11	Feb.	1	2.7	17-41-38	36:8	121:5	a	7	Southwest of Hollister.	
20	Feb.	1	2.5	22-12-39.5	36° 43'	121° 23'	а	6	Near Vineyard.	
21	Feb.	4	3.2	11-43-34.1	36° 25'	121° 16'	a	12	Foreshock of 0953,	
22	Feb.	11	2.5	06-56-12.2	36° 35'	121° 14'	a	13	Foreshock of 0953.	
22	Feb.	11	2.7	08-14-41.5	36° 35'	121° 13'	2	12	Foreshock of 0953.	

Map	Date		M	Origin Time (G.C.T.)	Latitude North	Longitude West		No. of Stas.	Remarks
23	Feb.		3.4	09-53-11.8	36° 34'	121° 14'	7	17	North of King City.
24	Feb.		3.0	09-54-08	36:6	121:2	a	10	Aftershock of 0953.
22	Feb.	11	3.1	09-55-20	36° 34'	121° 14'	a	15	Aftershock of 0953.
25	Feb.	22	3.4	22-03-20	37° 28'	118° 28'		7	North of Bishop. Felt, IV.
26	Feb.	26	3.6	09-07-15	39:7	118:0		9	East of Fallon, Nev.
27	Feb.	28	3.1	04-00-08	36:8	121:1	ъ	13	Southwest of Los Banos.
28	Feb.	28	3.1	13-40-32.6	38° 34'	122° 44'	11	14	North of Santa Rosa. Felt, IV.
29	Mar.	3		16-51-30	40°	119°			Western Nevada.
29	Mar.	3		18-29-16	40°	119°			Western Nevada.
30	Mar.	3	2.1	18-58-58.6	37° 56'	122° 20'	5	7	Northwest of Berkeley.
31\$	Mar.	5	4.6	20-57-46.	40 ° 3	125°5	a	20	Off Cape Mendocino. Felt, V.
-	Mar.	6	3.9	13-12-58	41.9	126:8		16	Off coast west of Crescent City.
32	Mar.	7	2.9	17-52-49.9	37° 29'	121° 50'	3	11	Southwest of Livermore.
33	Mar.	8	2.6	02-14-45.2	37° 55'	122° 01'	9	11	Southeast of Concord. Felt, V.
34	Mar.	9	3.0	08-39-02	38° 20'	122° 37'	a	12	Northeast of Point Reyes.
35	Mar.	10	3.1	19-02-29.9	37° 22'	121° 46'	9	17	Northwest of Mt. Hamilton. Felt at Mt. Hamilton.
36	Mar.	17	4.1	21-38-44.5	37° 49'	121° 53'	2	20	Northwest of Livermore. Felt, V.
37	Mar.	23	3.1	08-46-18.0	37° 40'	122° 34°	a	15	Southwest of San Francisco. Felt, V.
38	Mar.	24	3.4	03-38-41.8	36° 12'	119° 47'	1	3 19	South of Fresno.





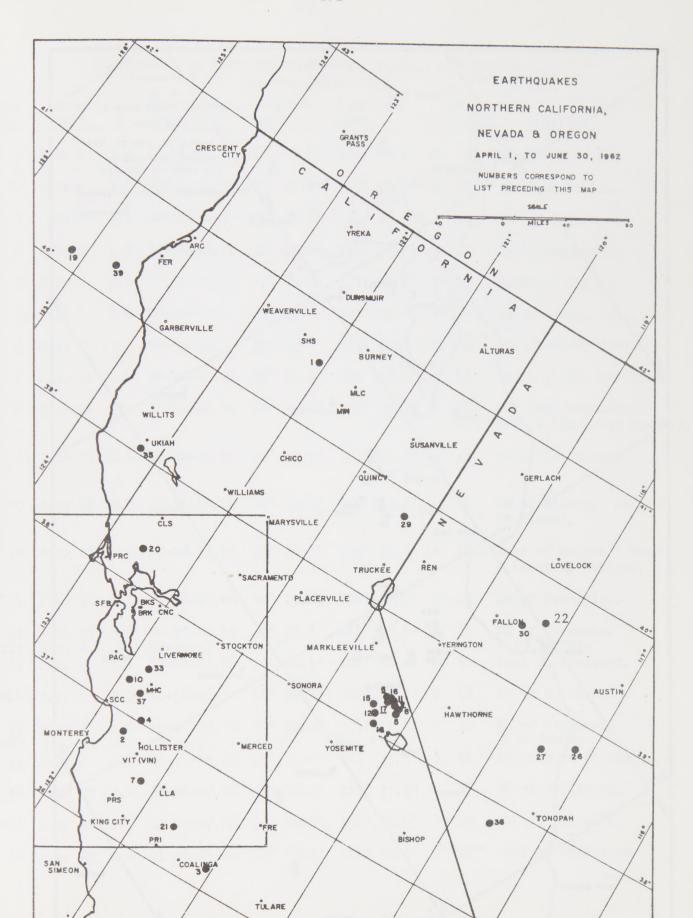
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

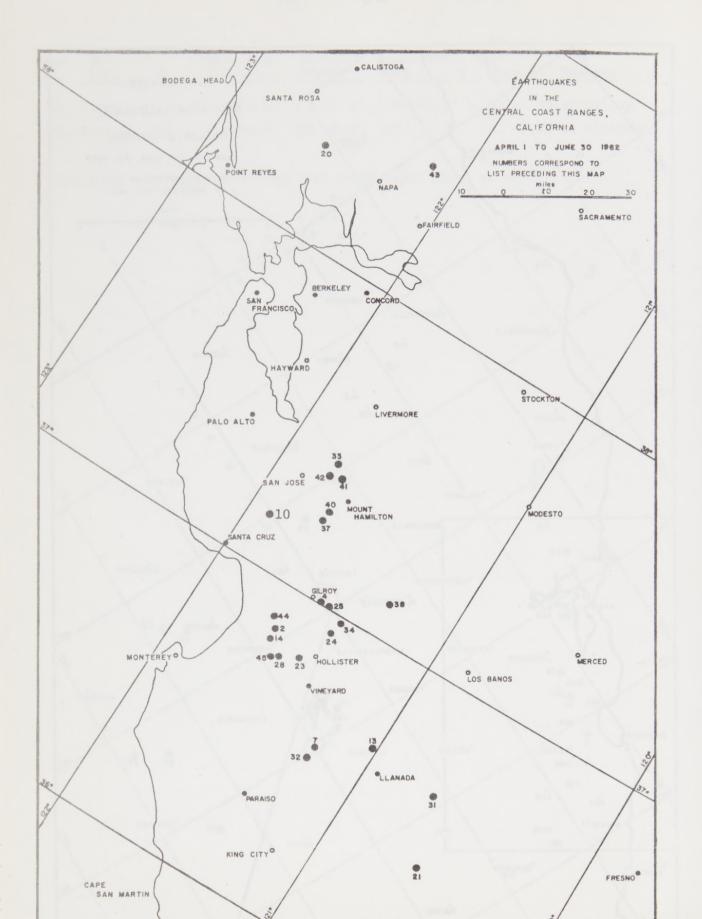
			April-J	June 1962	The branch	No.	
Map	Date		Origin Time			of	71
No.	1962		(G.C.T.)	North	West h	Stas.	Remarks
* 1	Apr. 1	3.0	00-52-02	40° 35°	122° 04°	4	S of Shasta.
2	Apr. 1	3.0	10-40-43.61	36° 51.7'	121° 39.8' a	16	W of Hollister.
3	Apr. 2	3.7	03-06-03.16	36° 15.4°	120° 05.9' a	16	E of Coalinga. Felt V(Tehachapi).
4	Apr. 2	3.5	16-41-57.28	37° 00.9°	121° 32.9' b	20	N of Hollister. Felt IV (Gilroy).
5	Apr. 4	3.5	17-00-29.1	38° 16'	119° 10.1' c	19	NE of Yosemite. Felt.
* 6	Apr. 4	3.5	21-47-55.4	38° 21.5'	119° 22.7'	16	SE of Markleeville. Felt.
7	Apr. 5	3.0	11-16-59.27	36° 35.9°	121° 13.0° a	18	NE of Paraiso.
* 8	Apr. 5	4.1	21-27-51.58	38° 18.5'	119° 09.9'	19	NE of Yosemite. Felt IV (Bridgeport).
9	Apr. 5	3.6	22-01-44.3	38° 17.0'	119° 09.5' c	17	NE of Yosemite. Felt.
10	Apr. 7	3.5	07-19-37.51	37° 17.0'	121° 54.5° 9	20	W of Mt. Hamilton. Felt IV (Aptos).
*11	Apr. 7	3.5	14-52-38.5	38° 20.0°	119° 16.01	21	NE of Yosemite.
12	Apr. 7	3.0	15-03-10.17	38° 09.3°	119° 23.9° c	9	NE of Yosemite.
*13	Apr. 7	2.7	23-00-29.87	36° 41.6°	121° 02.1°	9	NW of Llanada.
*11	Apr. 8	3.9	01-07-14.77	38° 18.7°	119° 14.2'	20	NE of Yosemite. Felt.
*14	Apr. 12	2.6	19-03-49.21	36° 49.91	121° 39.1'	14	W of Hollister.
15	Apr. 13	5.1	15-38-51.94			21	NE of Yosemite. Felt V (Bridgeport).
16	Apr. 13	3.0	16-12-14.57	38° 21.3'	119° 18.8° c	17	NE of Yosemite.
* 6	Apr. 13	3.5	16-31-30.18	38° 17.4°	119° 25.0°	17	NE of Yosemite.
*17	Apr. 13	3.8	16-40-00.23	38° 19.1'	119° 18.4°	20	NE of Yosemite.
Felt	Apr. 13	3.4	16-47-60	38.4°	119.2°	-	NE of Yosemite
18	Apr. 13	3.0	18-45-56.55	38° 04.41	119° 20.10' c	9	NE of Yosemite
*17	Apr. 13	3.6	19-17-39.71	38° 18.9'	119° 20.10'	16	NE of Yosemite
* 9	Apr. 13	4.2	20-21-03.9	38° 20.7'	119° 10.4'	19	NE of Yosemite
*19	Apr. 14	5.4	07-53-14.72	40° 16.1'	125° 18.6'	23	Off Cape Mendocino.
20	Apr. 14	3.0	19-37-37.05	38° 20.7'	122° 35.7' 13	12	\$ of Calistoga.

Map No.	Date 1962	M	Origin Time Latitude (G.C.T.) North		Longitude West	No. of h Stas.		f Remarks
* 9	Apr. 15	3.0	05-01-34.68	38° 21.7'	119° 09.9'		15	NE of Yosemite.
21	Apr. 15	4.7	08-41-02.32	36° 24.9'	120° 37.0'	21	23	SE of Llanada. Felt V (Idria).
*22	Apr. 17	4.3	12-19-13.85	39° 39.2'	118° 14.7'		19	NE of Fallon.
*17	Apr. 22	3.0	12-38-10.89	38° 21.3'	119° 19.7'		14	NE of Yosemite.
23	Apr. 22	2.7	21-02-19.11	36° 49.91	121° 29.3'	С	15	SW of Hollister.
24	Apr. 23	2.8	22-00-51.96	36° 56.41	121° 26.9'	ъ	14	N of Hollister.
25	Apr. 24	2.3	16-18-07.22	37° 00.1'	121° 29.8'	ъ	14	E of Gilroy.
*26	Apr. 25	4.6	08-48-49.05	38° 47.6°	117° 10.81		19	NE of Tonopah. Felt.
CIT *27	Apr. 25 Apr. 26	3.9 3.5	15-54-20 01-31-09.98	39.5° 38° 38.9'	117.2° 117° 30.6'	d	12	Austin, Nevada. NW of Tonopah.
28	Apr. 29	2.7	20-11-54.63	36° 46.91	121° 35.8'	7	18	NW of Vineyard.
*29	Apr. 29	3.8	20-37-26.97	39° 47.7'	120° 17.2'		14	NW of Reno. Felt IV (Portola).
*30	May 2	3.7	08-01-02.3	39° 30.61	118° 27.3'		16	E of Fallon.
31	May 9	2.7	18-59-18.79	36° 39.1'	120° 42.4°	a	16	E of Llanada.
32	May 21	2.4	22-48-00.19	36° 33.5'	121° 14.3'	С	10	NE of Paraiso.
33	June 2	3.1	03-57-16.2	37° 26.4°	121° 48.81	ъ	19	NW of Mt. Hamilton.
*34	June 3	2.4	03-28-55.51	36° 58.0°	121° 25.9'		12	N of Hollister.
35	June 6	5.2	17-50-06.21	39° 04.1'	123° 18.6'	5	20	S of Ukiah. Felt VII (Lakeport).
*36	June 6	3.7	19-46-02.86	37° 45.7'	117° 38.5°		11	SW of Tonopah.
37	June 7	3.8	04-20-58,89	37° 15.7°	121° 43.4°	Ъ	18	SW of Mt. Hamilton. (Felt IV (Daly City).
*38	June 7	2.8	16-40-25.07	37° 07.51	121° 18.8°		5	NE of Gilroy.
*17	June 8	4.2	06-28-04.19	38° 19.5'	119° 18.10	î	20	NE of Yosemite.
* 9	June 8	3.6	08-34-48.64	38° 19.4'	119° 11.0'		18	NE of Yosemite. Felt IV (Bridgeport).
*39	June 10	3.8	12-36-28.04	40° 18.7°	124° 37.6		21	Off Cape Mendocino. Felt V.
*40	June 11	2.8	08-10-20.5	37° 16.0'	121° 43.0'		14	SW of Mt. Hamilton.
41	June 17		04-57-27.64	37° 23.9'	121° 44.9'	10	15	NW of Mt. Hamilton.
42	June 23			37° 23.81	121° 48.5°	a	14	NW of Mt. Hamilton.
*43	June 24	2.7	15-03-50.08	38° 28.4°	122° 09.7'		7	NW of Fairfield.

Map No.	Date 1962	<u>M</u>	Origin Time (G.C.T.)	Latitude North	Longitude West h	No. of Stas.	Remarks	
44	June 27	2.9	22-07-24.46	36° 53.3'	121° 41.3' b	14 SW	of Gilroy.	
*45	June 30	2.4	19-02-44.68	36° 46.31	121° 35.7'	ll NW	of Vineyard.	

^{*}Indicates epicenter determined with focal depth fixed as zero.



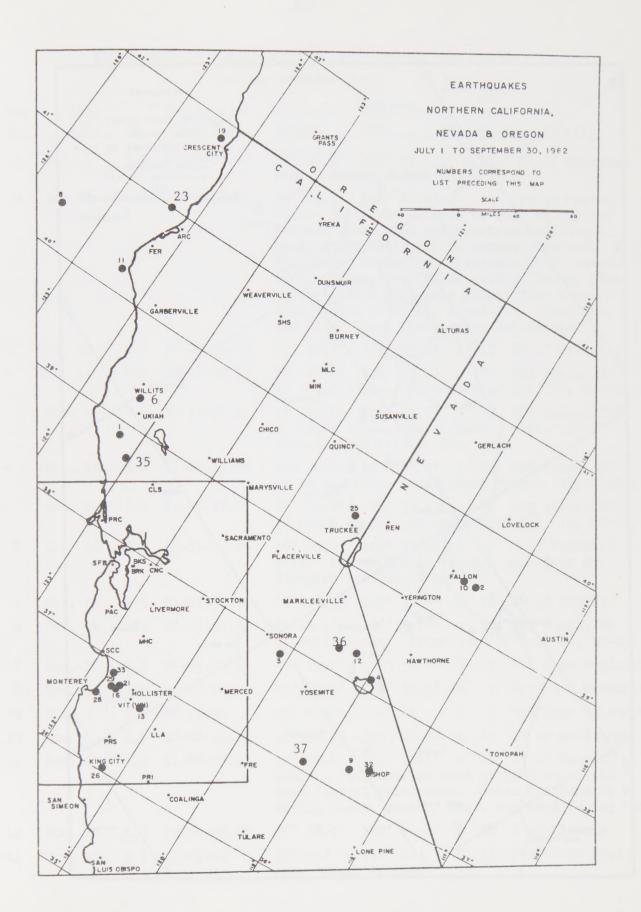


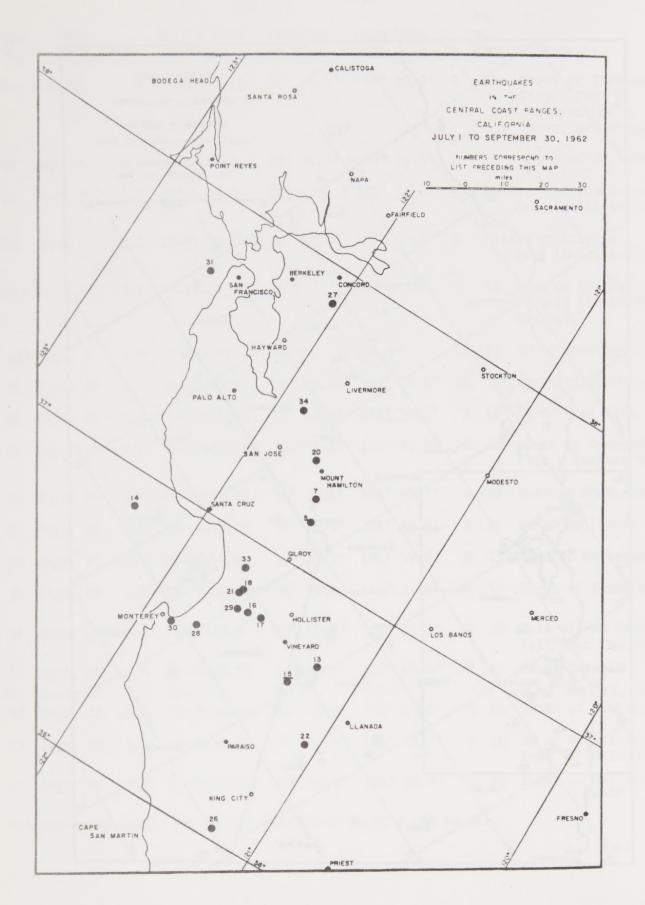
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
July-September 1962

	July-September 1962								
Map No.	Dat 196		_M_	Origin Time (G.C.T.)	Latitude North	Longitude West	h	of Stas.	Remarks
1	July	1	3.4	01-06-51.15	38° 53.9'	123° 14.7'	30	9	South of Ukiah.
*2	July	2	3.6	01-03-40.57	39° 25.9'	118° 25.0'	0	12	East of Fallon.
3	July	4	3.5	08-26-38.20	37° 52.6'	120° 06.2'	1	10	SE of Sonora.
4	July	5	3.3	18-34-19.11	38° 07.1'	118° 56.0'	5	13	SW of Hawthorne.
5	July	5	2.7	19-50-02.12	37° 09.2'	121° 35.6'	7	12	North of Gilroy.
<u>6</u> \$	July	7	2.8	08-18-05.2	39° 20'	123° 20'	2	7	NW of Ukiah. Felt.
6\$	July	7	2.9	08-18-58.2	39° 20'	123° 20'	2	6	NW of Ukiah. Felt.
7	July	11	2.6	20-32-47.25	37° 14.4'	121° 38.4°	1	13	South of Mt. Hamilton.
8	July	14	5.1	19-43-46.24	40° 25.6'	125° 30.7'	30	18	Off Cape Mendocino. Felt V (Humboldt County)
35	July	16	2.9	02-33-34.00	38° 45.01	123° 02.0	2	16	NW of Calistoga.
*9	July	17	3.8	07-53-30.94	37° 13.1'	118° 38.7'	0	15	SW of Bishop. Felt IV (Laws).
10	July	20	4.7	09-02-13.93	39° 26.3'	118° 35.8'	15	18	East of Fallon. Felt V (Austin, Fallon).
11	July	20	4.1	17-15-24.00	40° 15.0'	124° 25.01	2	19	SW of Ferndale.
12	July Aug.		3.9	00-37-26.43	38° 16.7'	119° 18.5°	10	18	NE of Yosemite. N of Bishop.
CIT 13	Aug.		3.1	11-14-57.06	36° 42.1'			15	East of Vineyard.
*14	Aug.	5	2.7	10-58-26.3	36° 52.7'	122° 17.5	C	13	SW of Santa Cruz.
<u>15</u>	Aug.			10-43-59.49	36° 37.4°	121° 17.3°	5	14	SE of Vineyard. N of Bishop.
15 15	Aug.		2.6	14-13-44.22	36° 37.4'		5	11	Aftershock of 10-43.
16	Aug.	22	3.2	21-38-40.73	36° 45.7°	121° 37.1	1	17	SW of Hollister.
*17	Aug.			21-42-57.56					SW of Hollister.
18	Aug.	23	2.6	01-42-04-81	36° 49.3'	121° 40.3	7 2	14	West of Hollister.

Map	Dat	. 6		Origin Time	Latitud	le 1	Longi	tude		No. of	
No.	196		M	(G.C.T.)	North		West			Stas.	Remarks
19	Aug. 2	23	5.6	19-29-13.13	41° 51.	01	124°	20.01	2	21	North of Crescent City. Felt VI (Crescent City, Smith River, Brookings).
20	Aug. 2	29	2.4	17-23-18.0	37° 21.	0 9	121°	43.0:	2	13	North of Mt. Hamilton.
21	Sept.	3	3.1	10-55-44.0	36° 48.	0	121°	35.01	2		West of Hollister. Felt (Hollister).
*22	Sept.	3	2.6	17-53-33.14	36° 27.	7 1	121°	04.41	0		SW of Llanada. Felt (Hollister).
* <u>23</u> \$	Sept.	4	4.9	17-17-22	41.0°		124.4	0	0		West of Crescent City. Felt VI (Humboldt County).
23\$	Sept.	4	4.0	17-32- 42	41.0°		124.4	0	2	15	SW of Crescent City.
25	Sept.	10	3.0	23-39-19.39	39° 25.	0 t	120°	13.1'	16	9	North of Truckee.
26	Sept.	11	3.3	01-34-30-96	36° 02.	11	121°	14.2	3	16	SW of King City.
27	Sept.	11	2.8	11-12-32.45	37° 53.	31	122°	02.51	6	18	South of Concord. Felt V (Walnut Creek).
28	Sept.	14	3.0	00-49-49.92	36° 38.	1 1	121°	46.71	2	17	East of Monterey.
29	Sept.	14	3.0	02-56-48.06	36° 45.	61	121°	39.61	2	17	SW of Hollister.
30	Sept.	17	2.6	07-16-34.32	36° 35.	5:	121°	52.61	9	13	East of Monterey.
36	Sept.	20	2.7	03-08-22.42	38° 14.	0 1	119°	31.41	3	15	North of Yosemite.
31	Sept.	21	2.5	05-37-13.5	37° 44.	,61	122°	35.51	2	10	West of San Francisco. Felt (San Francisco).
37	Sept.		2.9	23-45-00.76	37° 03.			09.61	28	11	SE of Yosemite.
CIT 32	Sept.		3.1	21-29-44	37.6° 37° 19.		117.4	23.01	2	11	S of Tonopah, Nev. South of Bishop.
33	Sept.	26	3.6	10-19-30.57	36° 53.	71	121°	43.7	2	19	NW of Hollister. Felt VI (Gilroy).
34	Sept.	27	2.9	13-05-08.09	37° 29.	,01	121°	53.81	3	20	North of San Jose.

^{*}Indicates epicenter determined with focal depth fixed as zero.



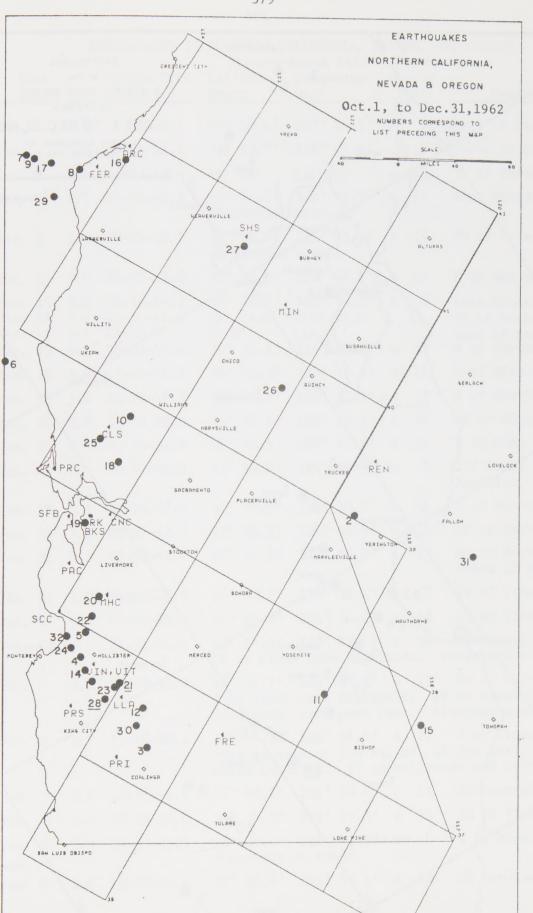


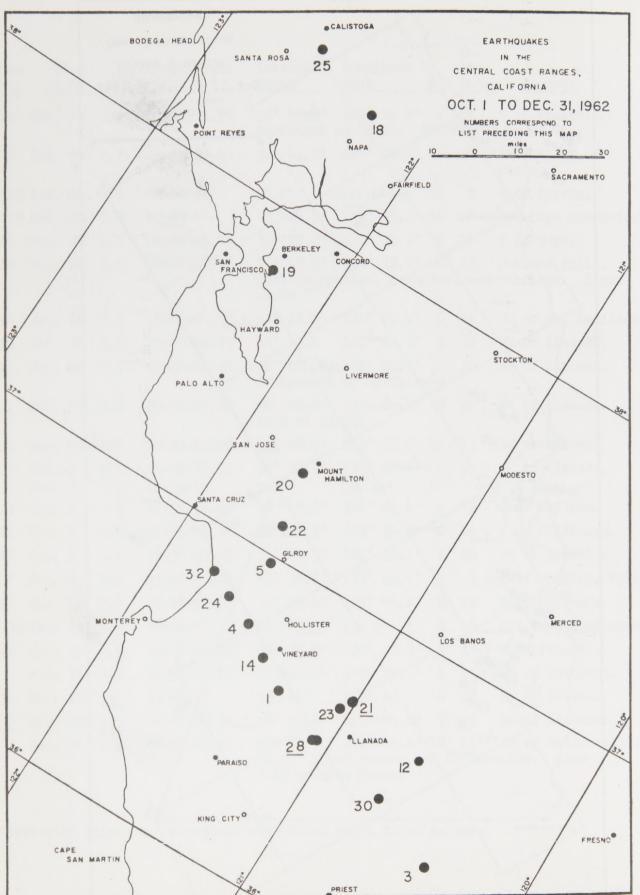
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON October-December 1962

			OCLOB	er-December 1962
Map	Date 1962		Origin Time (G.C.T.)	Latitude Longitude of North West h Stas. Remarks
1	Oct. 1	3.2	14-04-05.63	36° 36.8' 121° 17.3' 7 16 SE of Vineyard near Waterman Ranch.
2	Oct. 2	4.3	03-50-58.44	39° Ol.7' 119° 41.6' a 21 SE of Carson City. Felt over an area of 2500 sq. mi. of western Nevada and northeastern California. Maximum intensity V. No damage reported. V at Dayton, Minden, and Virginia City, Nevada. IV at Carson City, Gardnerville, Genoa, Glenbrook, Silver City, and Zephyr Cove area, Nevada; and at Bijou, Floriston, Stateline, and Tiger Creek Powerhouse, California.
3	Oct. 13	3.7	17-49-39.48	36° 20.7' 120° 24.9' a 17 NE of Priest.
-	Oct. 14	4.1	09-41-00.57	38° 41.8' 124° 05.0' a 20 Off coast, SW of Point Arena. Foreshock of Oct. 14, 10-14.
-	Oct. 14	4.6	10-14-28.11	38° 40.8' 124° 01.7' 0 20 Off coast, SW of Point Arena. Main shock. Felt. IV at Albion, also felt at Elk.
-	Oct. 14	3.6	11-10-15.56	38° 44.5' 124° 03.3' a 19 Off coast, SW of Point Arena. Aftershock of Oct. 14, 10-14.
-	Oct. 14	3.4	11-48-17.47	38° 44.2' 124° 35.1' a 17 Off coast, SW of Point Arena. Aftershock of Oct. 14, 10-14.
4	Oct. 18	3.4	18-50-07.09	36° 45.2' 121° 31.9' 2 20 W of Vineyard. Felt. III at Harris Ranch. Also felt at Vineyard and Hollister.
5	Oct. 23	2.5	01-21-39.18	36° 58.0' 121° 37.5' a 18 SW of Gilroy.
6	Oct. 24	2.8	08-03-27.35	38° 42.4' 123° 55.6' a 12 Off coast, SW of Point Arena. Aftershock of Oct. 14, 10-14.
7	Nov. 1	3.3	22-51-00.74	40° 21.7' 124° 59.7' 8 9 Off Cape Mendocino.
8\$	Nov. 5	3.3	05-23-00	40° 29.2' 124° 23.5' 28 7 Off Cape Mendocino.
*9	Nov. 5	3.4	06-31-41	40° 23' 124° 54' 0 5 Off Cape Mendocino.
10	Nov. 5	2.8	17-08-30.23	38° 48.5' 122° 26.2' a 13 NE of Calistoga.
11	Nov. 6	4.0	11-57-20,36	37° 30.8' 119° 01.1' a 20 SW of Mammoth Lakes. Felt over an area of 3000 sq.mi. of east-central California. Maximum intensity V at Big Creek, Bishop, Laws, and Long Valley Dam.
12	Nov. 10	3.0	12-50-20.46	36° 38.1 120° 40.0' a 18 E of Llanada.
*13	Nov. 12	3.7	07-53-52	36° 00' 117° 10' 0 11 Telescope Peak area, Death Valley.

Map		ate 962	_M_	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. of Stas.	Remarks
14	Nov.	13	2.6	03-32-32.99	36° 40.3° Foreshock	121° 25.3' at 03-04.			S of Vineyard. x at 03-46.
15	Nov.	13	3.7	06-35.30.43	37° 41.7°	117° 55.41	6	16	Nevada, NE of Bishop.
16\$	Nov.	16	3.0	03-00-56	40.6°	124.0°	11	3	E of Eureka.
17\$	Nov.	21	3.8	10-03-57	40° 25.0°	124° 43.2'	26	16	Off Cape Mendocino.
18	Nov.	25	2.7	00-43-35.08	38° 25.2'	122° 16.5'	5	12	N of Napa.
19	Nov.	26	2.5	16-58-18.36	37° 48.3' Felt in Oal shock.	122° 15.7' kland, Berk		13 , and	Oakland Hills. Piedmont. Light
20	Nov.	26	2.6	18-46-24.88	37° 17.8°	121° 42.4°	6	14	SW of Mt. Hamilton.
21	Nov.	28	3.6	03-03-41.79	36° 43.5	121° 01.2'	9	19	NW of Llanada.
21	Nov.	28	2.5	03-20-56.19	36° 42.8' Aftershock	121° 01.3' of 03-03.	7	10	NW of Llanada.
21	Nov.	28	3.6	03-23-07.88	36° 42.8' Twin of 03	121° 01.1'	9	20	NW of Llanada.
22	Nov.	29	2.7	22-43-59.00	37° 06.51	121° 38.6'	15	13	NW of Gilroy.
23	Dec.	1	2.7	03-31-56.23	36° 40.3'	121° 02.7'	5	15	NW of Llanada.
CIT	Dec.		3.0	10-16-19	37.5°	118.63°			N of Bishop
24	Dec.		2.8	05-02-26.63	36° 47.3'	121° 41.4°	0	19	N of Saliras.
25	Dec.	6	2.6	01-41-06.10	38° 31.3'	122° 35.4°	0	11	S of Calistoga.
26	Dec.	6	2.9	12-36-39.28	39° 42.3'	121° 09.1'	d	10	NW of Oroville.
27	Dec.	6	3.1	17-43-36.26	40° 36.81	122° 20.7'	7	3	E of Redding. Felt.
28	Dec.	12	2.7	01-48-25.88	36° 33.4°	121° 04.1'	8	12	SW of Llanada.
29\$	Dec.	13	4.0	08-10-47	40.2°	124.4°	d	16	Off Cape Mendocino.
30	Dec.	15	2.9	00-40-20.90	36° 27.9'	120° 38.21	2	13	N of Priest.
	Dec.	15	4.9	06-34-53.72	41° 02.0°	117° 15.4'	4	15	NE of Golconda.
*31	Dec.	16	3.7	11-06-46	39° 14'	118° 18'	0	12	SE of Fallon.
28	Dec.	19	2.9	16-47-18.36	36° 32.4°	121° 05.2	7	17	SW of Llanada.
32	Dec.	24	3.7	00-16-23.37		at Aromas a			SW of Watsonville. ville. Also

^{*}Indicates epicenter determined with focal depth fixed as zero.



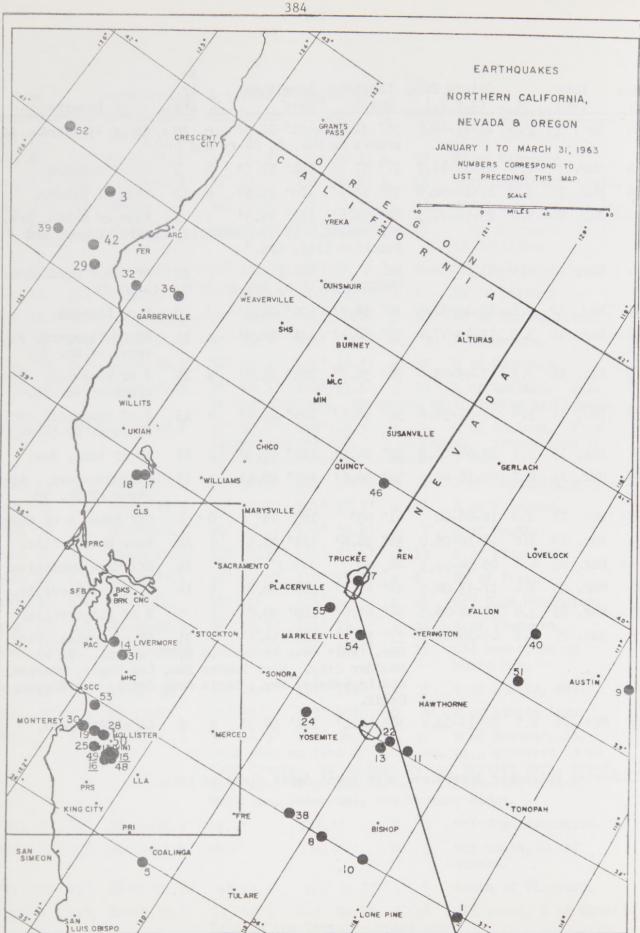


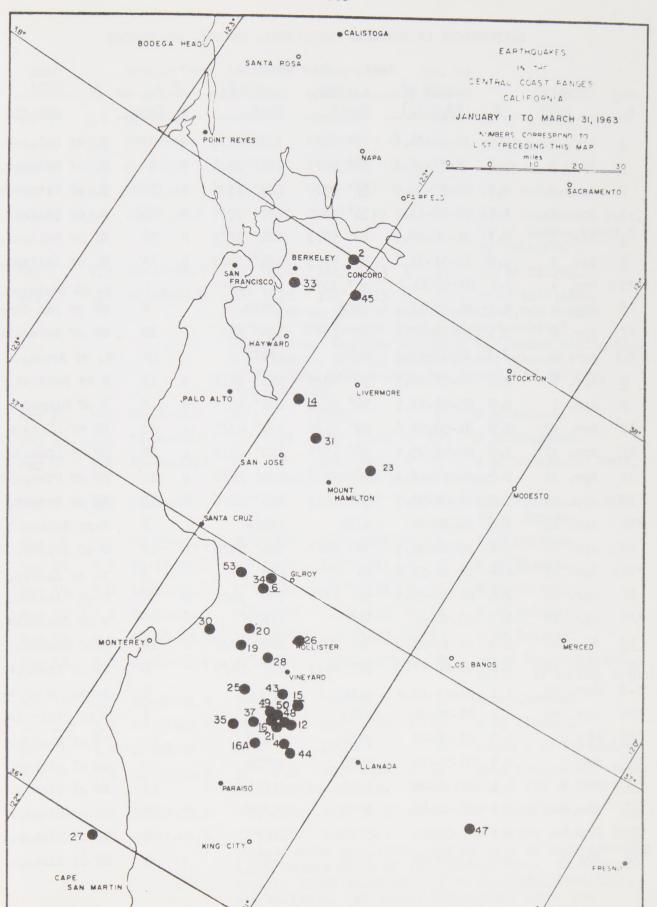
				January-Ma			, , , , , , , , , , , , , , , , , , ,	TID OTLEGOT
Map No.	Date 1963	M	Origin Time (G.C.T.)		ongitude Nest		of tas.	Remarks
1	Jan. 1	3.6	10-28-07.7	36° 58.1' 1	117° 04.	3 b	8	West of Beatty, Nev.
2	Jan. 3	2.5	14-15-17.1	37° 59.7' 1	122° 04.1	a a	10	North of Concord.
3\$	Jan. 5	3.6	21-27-12.0	40° 50' 1	.24° 55'	a	10	W of Eureka.
4	Jan. 9	2.7	04-03-29.2	36° 32.8' 1 at Harris Ra	121° 14.2	2' a	15	Near Vineyard. Felt
5	Jan. 9	3.2	06-04-25.7	35° 58.9' lat Wheeler F	120° 21.6 Ridge.	5° c	14	SE of Priest. III
6	Jan. 13	2.5	04-29-51.8	36° 56.0']	121° 38.	71 c	12	E of Watsonville.
7 8 CIT	Jan. 15 Jan. 18 Jan. 18	2.8 3.6 3.3	20-16-44.2 21-11-46.5 21-12-37	36° 59.4' 1	120° 04.1 18° 50.8 18.1°		6 11	Lake Tahoe. SW of Bishop.
9	Jan. 19	4.3	06-41-51.2		116° 41.	31 a	12	East of Bishop. W of Eureka, Nev.
10	Jan. 19	3.6	19-44-36.7	36° 59.9'	118° 19.	O¹ a	14	S of Bishop.
11	Jan. 23	3.6	13-21-16.8	38° 02.1'	118° 31.	7º a	17	S of Hawthorne, Nev.
12	Jan. 26	2.8	13-40-28.8	36° 36.5'	121° 15.	l'a	16	SE of Vineyard.
13	Jan. 27	2.9	23-15-32.7	37° 56.41	118° 47.	2' a	11	E of Mono Lake.
-	Jan. 29	3.7	02-47-59.0	33° 56.21	121° 29.	9° c	7	Off coast SW of Point Arguello.
6	Jan. 29	2.7	17-19-06.9	36° 56.5'	121° 38.	9' b	11	E of Watsonville.
14	Jan. 31	3.3	08-23-13.3	37° 30.9'	121° 56.	91 Ъ	15	SE of Hayward. Felt.
14	Jan. 31	2.7	08-58-42.9	37° 31.5'	121° 56.	8' a	13	SE of Hayward. After- shock of No. 14.
15	Jan. 31	3.0	21-53-25.8	36° 40.2'	121° 16.	2° a	7	SE of Vineyard.
16	Feb. 2	3.4	04-09-23.2	36° 34.8'	121° 20.	21 a	18	SE of Vineyard.
17	Feb. 2	2.9	11-51-41.4	38° 54.5' : IV at Clear	122° 43. Lake Hi	4' a ghland	16 .s. I	NW of Calistoga. Foreshock of No. 18.
18	Feb. 2	3.1	12-09-37.0	V at Clear	Lake Hig	hlands	. IT	NW of Calistoga. Vat Clear Lake Oaks, Stershock at 12-14-16.
19	Feb. 2	3.7	13-58-20.1	over an are	a of 500	sq. n	i. of	W of Vineyard. Felt San Benito and Santa ter and Libby Ranch.
20	Feb. 3	2.5	12-36-41.5	36° 48.1'	121° 36.	4 ° a	11	Aftershock of No. 19.
21	Feb. 4	2.8	08-23-52.0	36° 34.9'	121° 17.	81 a	11	SE of Vineyard.
22	Feb. 6	3.4	09-52-35.7	38° 02.0' Foreshock a			8	E of Mono Lake.
23	Feb. 6	2.6	19-08-22.8	37° 26.8'	121° 32.	5º a	12	NE of Mt. Hamilton.

Map No.	Date		_M_	Origin Time (G.C.T.)	Lati	itude th	Longi		<u>h</u>	No. cf Stas.	Remarks
24	Feb. 7		2.8	04-43-55.8	37°	52.81	119°	43.91	a	9	NW of Yosemite.
25	Feb. 8		3.6	09-44-24.1	36°	37.9'	121°	29.3	a	19	SW of Vineyard.
26	Feb. 8		2.6	15-16-56.9	36°	51.3'	121°	24.61	ъ	11	Near Hollister. Felt.
27	Feb. 9		2.8	02-52-14.5	35°	58.91	121°	41.5	a	8	Off coast S of Big Sur.
28	Feb. 9		3.2	04-08-01.4	36°	45.3	121°	29.01	ъ	16	W of Vineyard. Felt in Hollister.
29\$	Feb. 1	1	3.0	09-43-35.3	40°	12'	124°	28'	d	6	Off Cape Mendocino.
30	Feb. 1	1	3.1	15-53-57.6	36°	44.1	121°	44.5	d	14	NW of Salinas.
31	Feb. 1	1	3.3	19-48-54.9	37°	26.21	121°	48.21	a	18	NW of Mt. Hamilton.
32	Feb. 1	2	2.9	01-44-04.0	40°	15.5	124°	02.6	c	3	S of Scotia.
16A	Feb.	12	2.6	03-44-30.9	36°	30.01	121°	19.7	a	10	S of Vineyard.
33	Feb.	12	2.0	07-51-39.1		49.1' East Oa		13.6' Fore	a esh	10 cck of	E of Oakland. Felt following earthquake.
<u>33</u>	Feb.	12	2.7	08-50-42.7	Can	50.2' yon and 18 and	Oakla		IV s		E of Oakland. V at aga. Aftershocks at 7 each.
34	Feb.	14	2.5	08-25-35.4	36°	58.91	121°	38.81	Ъ	12	E of Watsonville.
35	Feb.	14	2.7	15-05-49.5	36°	30.91	121°	27.5	a	14	S of Vineyard.
36	Feb.	15	3.1	00-38-48.6	40°	23.3'	123°	34.41	a	4	E of Scotia.
37	Feb.	15	2.8	01-21-40.9	36°	33.1'	121°	23.4	8	15	S of Vineyard.
38	Feb.	18	2.7	11-46-33-1	37°	02.01	119°	16.3	Ъ	6	NE of Fresno.
39\$	Feb.	21	3.8	12-01-16	40°	21'	125°	04 '	a	21	Off Cape Mendocino.
16	Feb.	22	2.8	00-23-42.5	36°	35.71	121°	19.3'	a	11	S of Vineyard.
-	Feb.	22	3.3	15-56-21.9	35°	06.41	121°	26.71	а	15	Off coast, SW of Morro Bay.
40	Feb.	23	3.7	08-22-39.7	39°	31.4	117°	57.41	d	9	W of Austin, Nev.
*-	Feb.	27	3.5	12-57-50	35°	55 °	117°	46 8	0	5	E of Little Lake.
-	Mar.	1	5.1	00-25-57.6	Fel- Kerr and	t over n Count Taft.	an ar y. V V at	ea of 8 I at Fo Bakers	8,00 ort sfi	CO sq. Tejon	S of Bakersfield. mi., centered in SW , Frazier Park, Lebec, hatsworth, Gorman, er Ridge.
- \$	Mar.	2	3.7	10-54-48.0	40.4	40					Off Cape Mendocino.
*42\$	Mar.	3	3.5	01-09-19.8	40.4	0	124.	6°	0	3	Off coast, SW of Eureka.
43	Mar.	4	2.5	18-01-25.5	36°	40.8	121	21.0	a	6	South of Vineyard.
-	Mar.	4	4.4	20-10-30.3		42.3' t in th					Off coast, S of Oxnard.

Map	Da		M	Origin Time (G.C.T.)	Latitude North	Longitude West		No. of Stas.	Remarks
44	Mar.	5	2.6	21-17-49.0	36° 31.6' shocks on 1	121° 11.5' Mar. 6, 04-28		10 1 07-1	SE of Vineyard. After-
45	Mar.	7	2.5	07-33-47.7	37° 53.91	121° 59.2'	C	8	SE of Concord.
46	Mar.	7	3.2	17-18-32.8	39° 58.1'	120° 22.9'	a	12	East of Quincy.
-	Mar.	7	5.4	23-53-26.5				21 is, E	East of Salem, Ore. lmira, Eugene and
* - \$	Mar.	10	4.4	11-40-14.4	40.5° USCGS: 38	127.6° .4° N, 127.2°		12 0 = 3	Off Cape Mendocino.
47	Mar.	12	2.6	09-19-36.3	36° 36.7'	120° 25.3'	d	9	E of Llanada.
48	Mar.	14	3.2	17-42-17.4	36° 36.4°	121° 16.9°	2	13	SE of Vineyard. Foreshock of No. 50.
49	Mar.	14	3.3	17-49-03.0	36° 36.21	121° 21.0'	a	14	S of Vineyard. Fore-shock of No. 50.
50	Mar.	14	3.4	17-57-34.8	36° 36.61	121° 19.4'	2	13	S of Vineyard. After-shock at 17-58-20.
51	Mar.	15	3.5	03-44-26.8	39° 04.9'	117° 50.3°	d	11	NW of Ione, Nev.
49	Mar.	15	2.7	05-18-46.9	36° 36.6°	121° 20.4°	a	13	S of Vineyard. After- shock of No. 50.
*52\$	Mar.	17	3.0	18-06-40	41° 05'	125° 45°	0	4	Off coast W of Eureka.
53	Mar.	19	3.0	18-30-05.0	36° 56.61	121° 45.5°	d	16	Near Watsonville.
-\$	Mar.	23	4.2	05-34-21.5	40. 5°	126.2°		14	Off Cape Mendocino,
54	Mar.	23	3.4	17-33-00.5	38° 42.2°	119° 40.8'	ď	14	E of Markleeville.
55	Mar.	23	3.0	17-46-06.3	38° 47.0°	120° 09.01	o o	7	E of Placerville.
-	Mar.	25	4.9	09-28-41.1	Nev. Felt Boulder Ci	ty. V at Hoo	of ver	9,000 Dam,	SE of Boulder City, O sq. mi. VI at Las Vegas, Overton, Ariz.; and Nipton,
15	Mar.	26	2.5	02-39-02.1	36° 40.1'	121° 16.3'	d	6	SE of Vineyard.

^{*}Indicates epicenter determined with focal depth fixed as zero.





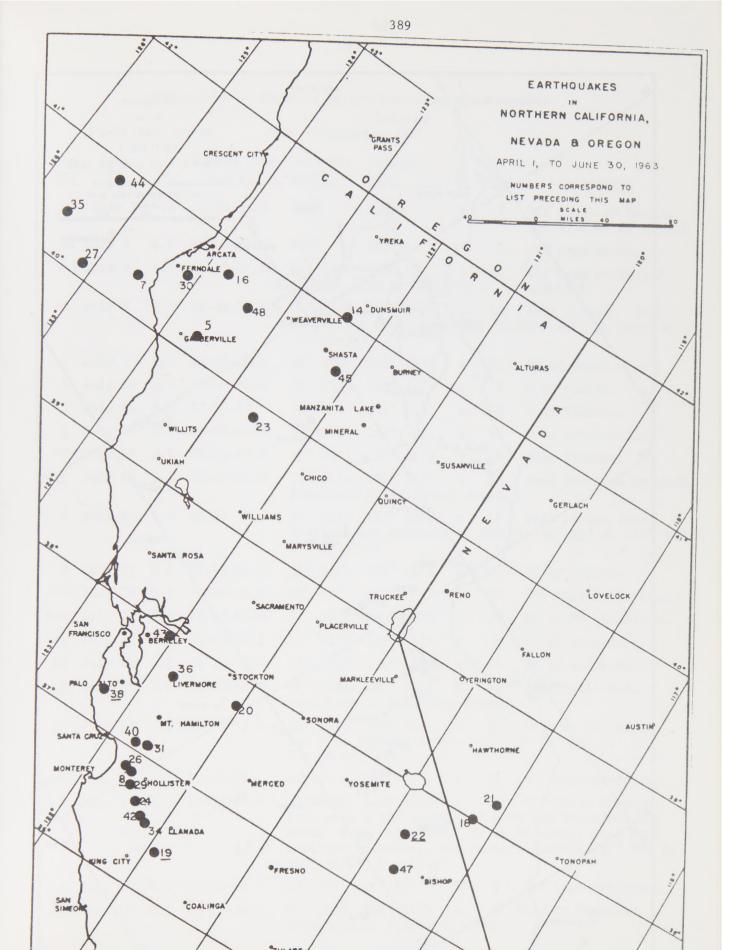
April - June 1963

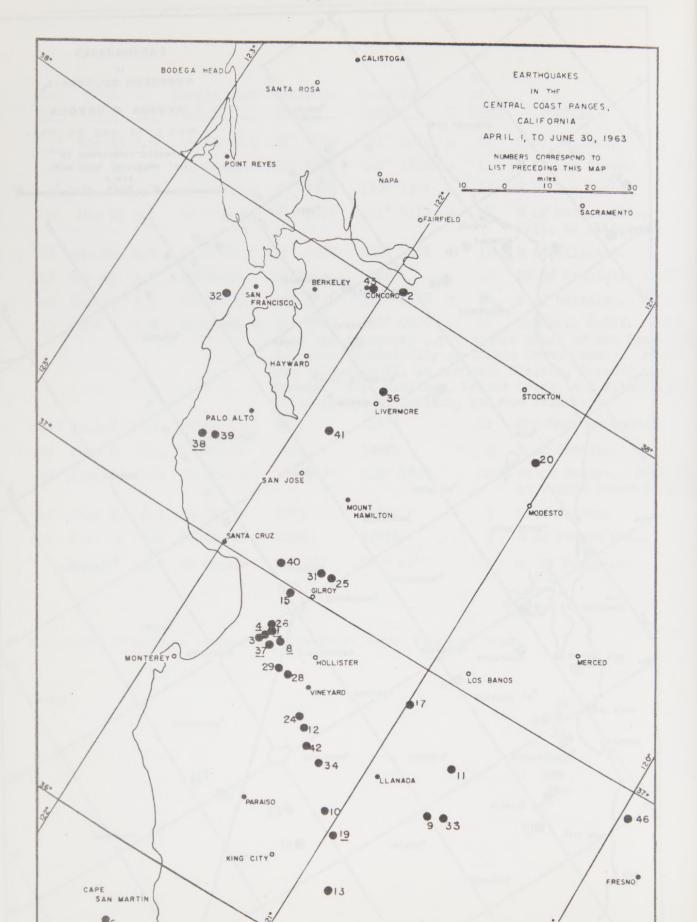
Map No.	Date 1963	_M_	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. of Stas.	
1	Apr. 1	2.5	10-14-34.6	36° 50!4	121° 37!2	a	7	N. of Salinas.
1	Apr. 1	2.8	15-07-04.1	36° 50:1	121° 38:6	Ъ	14	N. of Salinas.
2	Apr. 2	2.7	00-57-29.0	38° 01.'0	121° 55!6	Ъ	12	W. of Pittsburg.
3	Apr. 2	2.7	02-18-11.2	36° 48:0	121° 39!7	a	16	N. of Salinas.
1	Apr. 2	2.7	21-40-28.9	36° 50!3	121° 37:5	Ъ	14	N. of Salinas.
4	Apr. 3	2.6	11-41-55.1	36° 49:3	121° 38!9	b	15	N. of Salinas.
*5\$	Apr. 4	3.9	00-10-21.0	40° 10'	123° 40'		7	E. of Garberville.
6	Apr. 4	2.5	01-00-58	35:8	121:5		6	NW of San Simeon.
*7	Apr. 6	3.5	16-12-42.0	40° 18:	124° 33'		10	SW of Ferndale.
*\$	Apr. 6	3.5	20-18-29.1	40.0	128:0		10	W. of Arcata.
8	Apr. 7	2.6	00-23-34.5	36° 48!5	121° 34:4	a	11	N of Salinas.
9	Apr. 7	2.9	01-56-19.1	36° 35:1	120° 40:7	a	8	E of Llanada.
10	Apr. 10	2.9	01-38-56.8	36° 25:5	121° 03!1	a	11	SW of Llanada
11	Apr. 11	2.9	00-46-33.3	36° 45!3	120° 42:2	a	12	NE of Llanada.
12	Apr. 11	2.8	04-57-18.3	36° 37:6	121° 18:4	a	11	SE of Vineyard.
13	Apr. 11	2.9	14-02-31.8	36° 12!3	120° 52:6		13	NW of Priest.
*14	Apr. 13	3.6	21-10-24	41:0	122:4		6	Near Gibson.
15	Apr. 17	2.6	19-16-31.9	36° 58!7	121° 39!0	ъ	13	W of Gilroy.
*16\$	Apr. 17	3.4	19-40-35.0	40° 45'	123° 40'		2	E. of Arcata.
17	Apr. 18	2.5	01-50-35.5	36° 52:4	120° 59!6	a	6	N of Llanada.
*18	Apr. 19	3.3	03-59-45	38°	118°3		7	W of Coaldale, Nev.
19	Apr. 20	3.0	16-37-33.0	36° 22:6	120° 57:7	a	14	S of Llanada.
20	Apr. 22	3.1	14-06-47.0	37° 46!3	121° 04:9		8	NW of Riverbank.
* \$	Apr. 25	3.5	01-49-16.0	41°0	127°5		6	Ocean, W of Arcata.
*21	Apr. 29	3.7	09-30-50	38:2	118:1		7	W of Coaldale, Nev.
*22	May 3	3.3	01-28-07	37:6	118:8		10	NW of Bishop.
*22	May 3	3.3	01-54-16	37:6	118:8		12	NW of Bishop.
*22	May 3	4.1	02-14-44	37:6	118:8		12	NW of Bishop.
*52	May 3	3.5	08-42-46	37:6	118:8		8	NW of Bishop.
*22	May 3	3.3	11-15-19	37:6	118:8		6	NW of Bishop.
*22	May 3	3.0	13-59-29	37:6	118:8		5	NW of Bishop.

Map No.	Date 1963	M	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. of Stas.	Remarks
*22	May 3	3.6	17-29-01	37:6	118:8		13	NW of Bishop.
*22	May 3	3.3	17-37-10	37:6	118:8		8	NW of Bishop.
*22	May 4	3.3	03-58-35	37:6	118:8		10	NW of Bishop.
*23	May 4	3.2	16-37-15	39° 53'	122° 38'		5	W of Paskenta.
24	Мау б	3.7	03-04-28.8	36° 38!7	121° 21!0	a	19	S of Vineyard. Felt. IV at Harris Ranch S of Hollister.
25	May 7	2.9	00-35-46.5	37° 05:6	121° 32!3	ъ	17	NE of Gilroy.
26	May 7	4.4	07-07-48.0	miles of to California V at Carme	an area of the coastal a. Maximum el, Gilroy, r, Mill Vall	reg int Hol	ion of ensity lister	W of Hollister. tely 3,000 square west-central V. Damage negligible. and Watsonville. IV rancisco, Salinas,
*27\$	May 8	3.3	12-52-35.2	40°2	125°1		6	W of Arcata.
28	May 9	2.7	12-00-09.4	36° 44:4	121° 28:6	C	12	W of Vineyard.
29	May 9	3.4	12-04-19.9	36° 44.7 IV at Hol	121° 31:4 Lister and H		15 is Rand	W of Vineyard. Felt.
*30	May 9	4.0	13-24-08	40° 33°	124° 07°		7	Near Ferndale. Felt. IV at Eureka.
4	May 10	2.5	02-23-57.3	36° 49.5	121° 38:5	ъ	11	N of Salinas.
19	May 10	2.5	10-17-57.1	36° 22:0	120° 59:1	ъ	9	S of Llanada.
31	May 10	3.0	12-06-35.8	37° 04:9	121° 35:2	ъ	17	N of Gilroy.
8	May 11	3.2	22-53-45.0	36° 49:5	121° 35.9	ъ	16	N of Salinas,
8	May 12	3.1	00-56-19.9	36° 49:4	121° 34:8	ъ	14	N of Salinas.
32	May 12	2.6	03-45-09.4	37° 42!1	122° 32.5	a (9	SW of San Francisco. Felt. IV at San Francisco
33	May 13	2.6	21-28-21.8	36° 36:1	120° 37¦3		7	E of Llanada.
34	May 15	3.2	10-38-43.0	36° 32:8	121° 10!7	a	17	W of Llanada.
*35	May 19	3.5	20-48-55	40:4	125:6		4	Ocean W of Ferndale.
36	May 20	3.4	19-57-51.7	37° 42:2 V at Live	121° 46:4 rmore area.	c	14 at Co	Near Livermore. Felt. well. III at Canyon.
37	May 22	2.7	10-18-29.2	36° 48:2	121° 36!9	8.	10	N of Salinas.
38	May 22	4.6	22-41-04.8	in scatte 1,500 squ tensity V	red localiti are miles of I at Sunnyve	ies f th	over a ne coas V at	W of Los Gatos. Felt n area of approximately tal area. Maximum in- Campbell, Cupertino, , Palo Alto, San

							No.	
Map No.	Date		Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	of Stas.	Remarks
37	May 23	2.8	19-43-46.0	36° 47:6	121° 36:2	2	11	N of Salinas.
39	May 23	2.6	22-50-02.6	37° 17.5	122° 16.'0	a	11	W of Los Gatos.
38 M	lay 23	3.1	23-32-46.4	37° 16!3	122° 19!1	a	13	W of Los Gatos.
40	May 25	3.4	08-04-20.3	37° 02:6	121° 45:0	d	14	N of Watsonville. Felt. IV at Aptos.
41 M	lay 25	2.5	23-07-47.7	37° 30.10	121° 52:6	a	11	N of Milpitas.
*18 M	lay 26	3.7	19-44-50	38:2	118:0		12	NW of Coaldale, Nev.
42 M	1ay 30	3.5	20-26-39.4	36° 34:6	121° 15.6	ъ	14	E of Gonzales.
43 J	une 7	3.9	12-04-42.2	Bay area, mum intens Cowell. V	principally ity VI, at at Martine	500 in Ant	Contrioch, Walnut	Concord, Calif. Felt e miles of San Francisco a Costa County. Maxi- Clayton, Concord and Creek, and Pittsburg. an Francisco.
*44\$ J	une 8	4.0	08-51-41.5	40°9	125°3		12	Off Cape Mendocino.
*45 J	une 8	3.1	14-00-32	40.6	122:2		2	E of Redding.
46 J	une 18	2.9	02-27-40.6	36° 54!7	119° 58!0		10	SE of Madera. Felt(?) at Wishon Power Station.
*47 J	une 19	3.3	04-15-08	37:3	118:7		7	W of Bishop.
*48 J	une 20	3.0	02-28-46	40:6	123:4		3	N of Forest Glen.
* Ju	ine 29	5.0	08-09-26	40° 20'	126° 49'		20	W of Ferndale.

^{*}Indicates epicenter determined with focal depth fixed as zero.



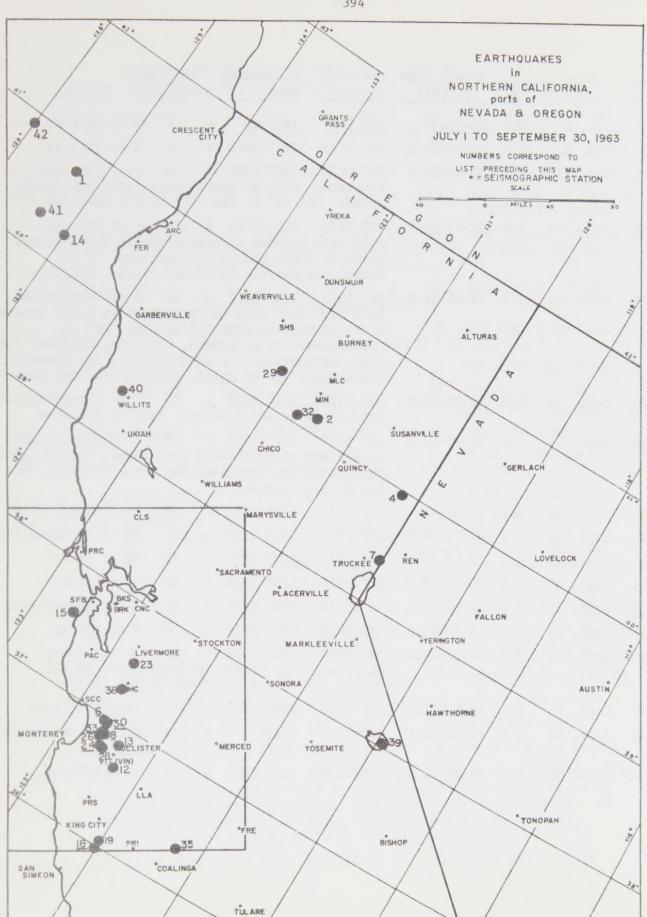


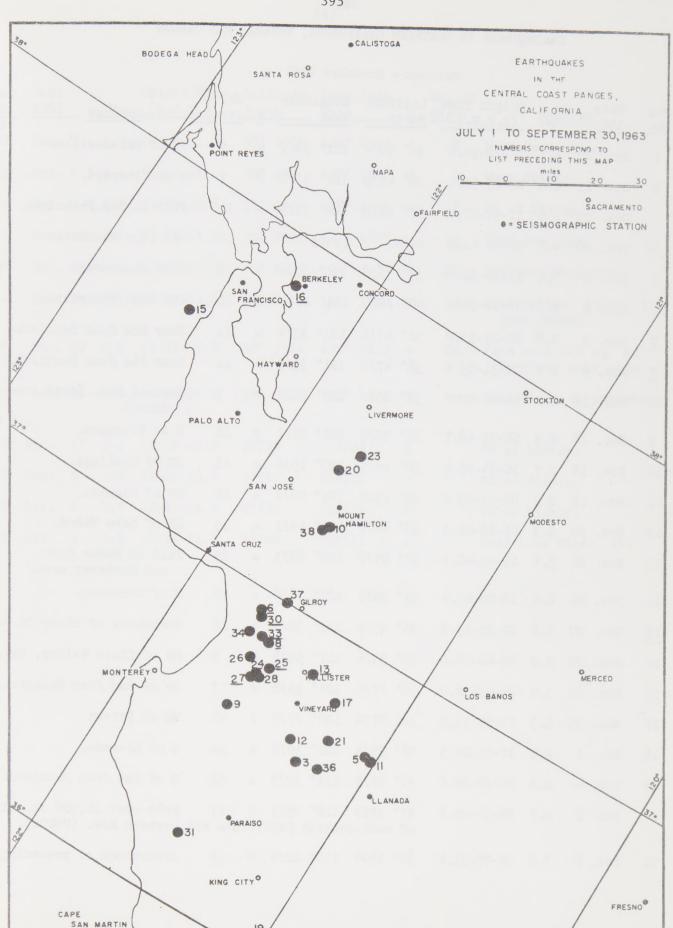
July - September 1963

Map No.	Date	_M_	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. o	
-	July 2	4.1	12-34-34.0	42.9	126:2	d	2	Off coast of Oregon (determined by USCGS).
1\$	July 8	4.1	01-13-50.6	40.8	125°3	d	9	Off Cape Mendocino.
*- \$	July 8	4.1	04-18-41.8	41° 44' USCGS: 4	128° 04' 0:8 N, 125:8	c W,	17 0 = 0	Off Cape Mendocino. 4-19-08.4.
*2	July 8	3.2	05-35-35.5			a sion	12 USC	Near Belden. Felt GS: 40°2 N, 121.0 W,
3	July 8	2.8	12-08-39.2	36° 35:6	121° 15:5	a	11	NE of Gonzales.
4	July 10	3.4	21-30-40.8	39° 58.5	120° 11:7	a	7+	N of Vinton.
5	July 11	2.5	17-59-13	36° 43°	121° 03'	a	8	N of Llanada.
6	July 13	2.7	13-25-54.1	36° 56!8	121° 42:1	d	10	W of Watsonville.
*7	July 15	2.7	20-29-47.0	39° 23.'3	120° 01:9	C	4	Near Truckee.
8	July 16	2.8	18-00-25.9	36° 51:4 Foreshock	121° 35.7 of following	b ng e	10 event.	Near San Juan Bautista.
8	July 16	3.6	18-17-54.6				16 USCGS	Felt at San Juan : 36° 53' N, 121° 32' W,
9	July 17	2.8	07-43-54.3	36° 38:5	121° 36.6	a	6	SE of Salinas.
41\$	July 20	3.7	03-24-13.5	40° 23'	125° 23'	С	20	Off Cape Mendocino.
*10	July 24	2.7	18-42-54.8	37° 16.9	121° 39!1	С	12	SW of Mt. Hamilton.
11	July 25	2.6	02-48-46.1	36° 42:6	121° 01:1	a	8	NW of Llanada.
12	July 26	3.2	11-29-15.4	36° 38:8	121° 19!1	a	14	NE of Gonzales.
13	July 31	2.7	05-08-46.0	36° 51:1 Foreshock	121° 23!0 of following	b ng e	12 event.	Near Hollister.
13	July 31	3.9	06-45-53.4			c GS:	17 36° 5	Felt at Hollister
14\$	Aug. 2	4.4	22-17-33	40.3	125:0	b	13	Off Cape Mendocino.
15	Aug. 4	4.0	17-35-03.6	Felt over area. V Bay, San	at Lagunitas	re n San	niles o	Off Point Montara. of San Francisco Bay Berkeley, Half Moon . USCGS: 37° 36' N,
-	Aug. 4	4.5	21-34-26	41° 43°	126° 53'	a	7	Off Cape Mendocino.
16	Aug. 10	2.3	13-23-34.4		122° 17:6 of following			Felt in Berkeley.

Map No.			Origin Time (G.C.T.)	Latitude Longitude No. of North West h Stas. Remarks
16	Aug. 10	2.7	14-32-24.9	37° 51.5 122° 16.8 a 10 Near Berkeley. Felt in Berkeley, Oakland, and Richmond. USCGS: 37° 52' N, 122° 15' W, 0 = 06-32.
17	Aug. 12	2.8	01-50-42.7	36° 48!6 121° 15!2 b 9 SE of Hollister.
18	Aug. 15	3.6	21-02-32.2	35° 58:0 121° 01:8 b 15 Near Jolon. Foreshock of following event.
18	Aug. 15	3.9	21-21-32.1	35° 54.6 121° 03.8 b 18 Near Jolon. Felt at Harris Ranch south of Hollister. USCGS: 36° 03' N, 121° 00' W, 0 = 21-21-33.
19	Aug. 16	3.2	08-12-13.6	36° 03.7 121° 01.0 a 10 Near Jolon. Aftershock of preceding event.
42\$	Aug. 19	3.6	09-39-00	40°9 126°0 b 8 Off Cape Mendocino. USCGS: 40°9 N, 126°0 W, 0 = 09-39, Mag 4.1
20	Aug. 2]	2.5	20-01-42.1	37° 26!7 121° 44!0 b 9 NW of Mt. Hamilton.
_\$	Aug. 22	4.6	09-27-03	42:0 126:4 16 Off Oregon coast. USCGS: 42:0 N, 126:2 W, 0 = 09-27-09.3, Mag 5.6
21	Aug. 23	2.7	13-23-54.5	36° 41.8 121° 12.4 b 10 SE of Vineyard.
22	Aug. 21	3.8	10-49-16.5	36° 15.4 118° 31.1 a 12 S of Mt. Whitney. USCGS: 36.0 N, 117.6 W, 0 = 10-49-08.4.
23\$	Aug. 25	3.1	13 -22-08.5	37° 30!7 121° 41!9 c 14 S of Livermore.
24	Aug. 31	4.2	16-31-14.2	36° 45.7 121° 35.0 a 19 NE of Salinas. Felt over 1,300 square miles of Monterey and San Benito counties. V in Cienega District, Salinas, San Juan Bautista. IV in Castroville, Hollister, Monterey, Coyote.
25	Aug. 31	2.6	16-35-17.0	36° 47.7 121° 33.0 a 10 Aftershock of No. 24.
26	Aug. 33	3.0	16-35-34.1	36° 46.9 121° 37.0 a 12 Aftershock of No. 24.
27	Aug. 31	2.7	16-37-07.6	36° 44:1 121° 36:4 a 11 Aftershock of No. 24.
24	Aug. 31	2.7	17-12-26.7	36° 45.8 121° 35.2 a 10 Aftershock of No. 24.
6	Sept. 1	3.0	15-05-59.2	36° 57:7 121° 41:0 a 12 NE of Watsonville.
28	Sept. 3	3.0	01-08-16.9	36° 45!1 121° 32!1 a 11 S of Hollister.
-	Sept. 3	3.8	10-27-19.0	40° 01:2 116° 06:6 d 10 N of Eureka, Nevada.
29	Sept. 1	3.3	05-16-46.8	40° 20' 122° 05' a 8 E of Red Bluff. Felt over an area of approximately 900 square miles of southern Shasta and northern Tehama counties. IV in Bella Vista, Redding, Shasta Dam. USCGS: 40°4 N, 122°0 W, 0 = 21-16-52.
30	Sept. 1	3.0	10-26-31.4	36° 55!9 121° 40!7 b 11 E of Watsonville.

Map	Date 1963	M	Origin Time (G.C.T.)	Latitude North	Longitude West	No. of h Stas.	
31	Sept. 6	2.6	03-54-34	36° 13'	121° 29'	a 8	SW of Paraiso.
27	Sept. 6	2.5	22-58-32.3	36° 44:3	121° 36.8	a 7	E of Salinas.
25	Sept. 13	2.6	13-05-35.2			rris Ranch	Near San Juan h near Hollister. O = 05-05-35.
32	Sept. 13	3.4	22-43-16.3	Felt over miles of B	utte and Pl	approxima umas coun	S of Mineral. tely 1,200 square ties. V at lumas, Virgilia.
33	Sept. 14	5.4	19-46-17.0	Felt over miles of w Chittenden Jose, Wats	land area of the control of the cont	f approximation Californ Cap	E of Watsonville. mately 5,000 square ia. VII at itola, Salinas, San ster, San Francisco, oy, Big Sur, Livermore.
30	Sept. 14	3.1	19-58-40.9	36° 55!1 Aftershock	121° 39!9 of above e	a 16 event. Fe	E of Watsonville. lt in San Jose.
30	Sept. 14	4.6	20-28-11.2	Aftershock throughout	of 19-58-4	0.9 this	E of Watsonville. date. Widely felt rea, Monterey, and
33	Sept. 14	2.5	22-46-41	36° 54'	121° 38'	ъ 10	E of Watsonville.
34	Sept. 15	2.5	03-49-54.7	36° 51:5	121° 41:4	a ll	NE of Castroville.
35	Sept. 15	3.0	10-48-31	36° 20'	120° 16'	c 12	NE of Priest.
36	Sept. 17	2.6	01-01-48.0	36° 36:4	121° 10!2	a 12	W of Llanada.
33	Sept. 19	2.9	12-16-28.3	36° 53:6	121° 38!7	a ll	E of Watsonville.
37	Sept. 19	2.6	18-36-05.0	37° 00!2	121° 37:6	a 10	W of Gilroy.
38		3.8	04-32-45.2	Felt in A	121° 40!8 ptos, Gilro 7° 16' N, 1	y, Milpita	N of Gilroy. as, Morgan Hill. 0 = 04-32.
39	Sept. 21	3.1	10-49-11.9	38° 02!8	118° 58:6	c 13	Near Mono Lake.
-\$	Sept. 22	4.3		41°9	126°7	d 12	Off Cape Mendocino. (USCGS)
*40	Sept. 25	3.1	04-16-41.3	39° 26:0	123° 28:4	b 7	W of Willits.

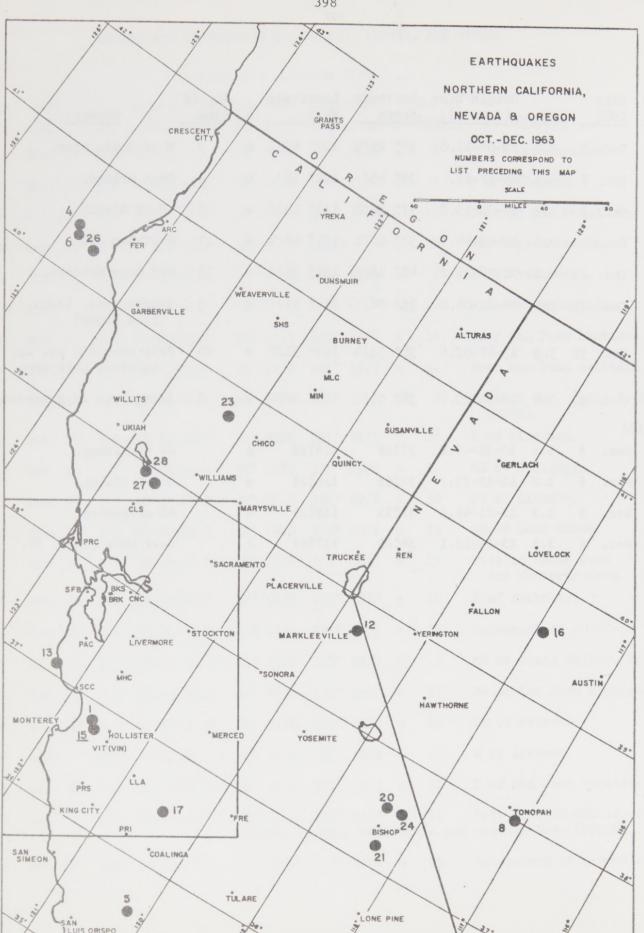


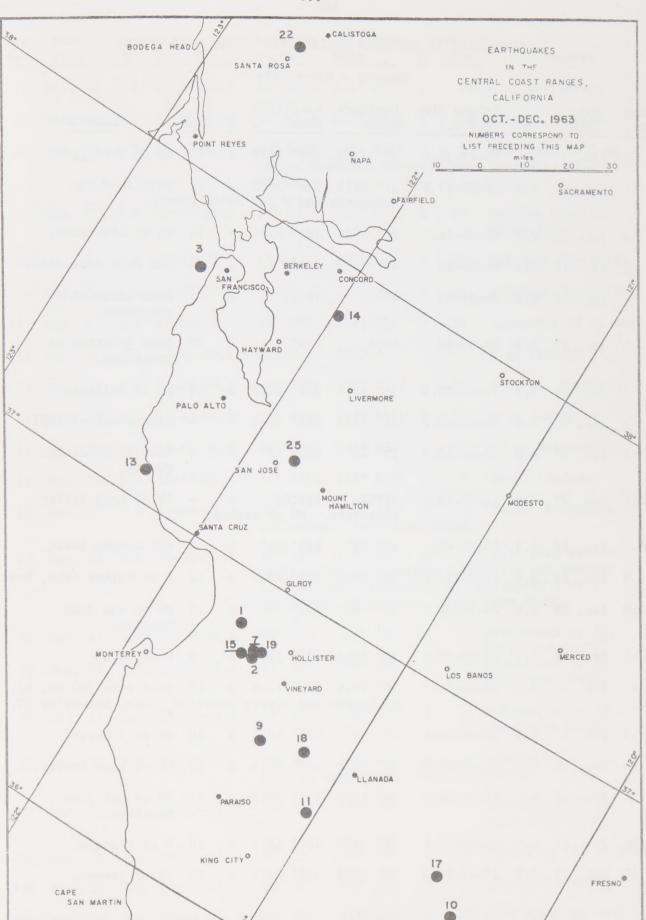


October - December 1963

Map No.	Date 1963	M	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. of Stas.	Remarks
1	Oct. 12	3.1	14-18-30.0	36° 50!4	121° 39!7	a	9	SE of Watsonville.
2	Oct. 15	2.6	23-25-51.1	36° 45.5	121° 33.'0	d	7	W of Vineyard.
3	Oct. 25	2.6	11-07-47.5	37° 44:2	122° 33.'9	a	11	Felt in San Francisco.
4\$	Oct. 29	4.3	07-01-41.4	40.4	124.9	С	18	Off Cape Mendocino.
5	Nov. 1	3.4	14-05-56.0	35° 33.'8	120° 13.'9	a	9	E of Atascadero.
6\$	Nov. 7	3.7	16-39-53.0	40° 24¹	124° 43'	a	10	Off Cape Mendocino.
7	Nov. 9	2.8	00-05-59.8	36° 47!1	121° 33.'4	a	11	Near San Juan Bautista.
7	Nov. 9	2.9	01-31-03.2	36° 47.'0	121° 33.'3	a	11	Near San Juan Bautista.
8	Nov. 16	4.0	16-48-10.2	38° 00.	117° 06.	С	2	Central Nev. (data from USCGS).
9	Nov. 18	2.9	09-31-48.7	36° 32.16	121° 21:1	đ	18	S of Vineyard.
10	Nov. 18	2.7	10-54-45.4	36° 22:5	120° 19:6	a	11	NE of Coalinga.
11	Nov. 19	2.9	03-33-09.2	36° 25:5	121° 02.2	8.	10	SW of Llanada.
12	Nov. 20	3.3	05-28-05.5	38° 44:0	119° 45!1	a	15	SE of Lake Tahoe.
13	Nov. 21	3.4	12-43-48.4	37° 05.'8	122° 18.3	a	15	Felt in Santa Cruz and Monterey area.
14	Nov. 21	2.6	19-25-43.4	37° 50.5	121° 58:8	С	12	E of Berkeley.
15	Nov. 29	3.2	01-35-53.2	36° 45:6	121° 36!1	ъ	15	Foreshock of 20-49-36.0.
16	Nov. 29	3.2	08-48-56.0	39° 33.6	117° 55.'8	0	9	SW of Dixie Valley, Nev.
15	Nov. 29	3.6	20-49-36.0	36° 47:6	121° 35.8	a	17	SW of San Juan Bautista.
17	Nov. 30	3.3	22-55-51.9	36° 27:6	120° 27.'9	d	14	NE of Priest.
18	Dec. 1	2.5	17-01-26.5	36° 35.5	121° 10!6	Ъ	10	W of Llanada.
19	Dec. 4	2.6	06-18-26.6	36° 47:5	121° 32!3	8.	11	S of San Juan Bautista.
20	Dec. 6	4.7	08-34-25.7					Felt over 10,000 sq. mi. western Nev. (USCGS).
21	Dec. 6	3.6	10-09-31.4	37° 10:8	118° 20:4	0	15	Aftershock of preceding.

Map No.	Date		M	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. of Stas.	Remarks
22	Dec.	7	2.7	12-04-11.6	38° 29.'9	122° 42:1	8.	9	N of Santa Rosa.
23	Dec.	7	3.1	15-17-11.	39° 45.	122° 15!	0	3	Near Orland.
24	Dec.	7	3.3	19-20-15.8	37° 32:8	118° 14:8	a	9	NE of Bishop.
25	Dec.	14	2.6	12-42-44.7	37° 22!1	121° 48!7	a	13	E of San Jose.
26	Dec.	21	4.1	01-38-32.2	40° 18.9	124° 34:9	a	13	Off Cape Mendocino.
-	Dec.	29	3.5	04-02-04.0	39° 06!	114° 12!	d	3	Eastern Nev. (data from USCGS).
27	Dec.	30	3.9	13-47-07.8	38° 53.14	122° 31.'2	a	20	Felt over 800 sq. mi. in Clear Lake area.
28	Dec.	30	3.0	16-50-20.7	38° 57!1	122° 42.'0	a	9	Aftershock of preceding.
## A	.dd								
CIT	Dec.	6	3.2	10-36-47.8	37:89	118:88	d		NW of Bishop.
CIT	Dec.	6	3.0	11-19-23.7	37:55	118°25	С		NE of Bishop.
CIT	Dec.	6	2.8	12-21-46.4	37:53	118:29	С		NE of Bishop.
CIT	Dec.	6	3.8	13-54-22.1	36:45	117:91	С		Near Lone Pine. IV.

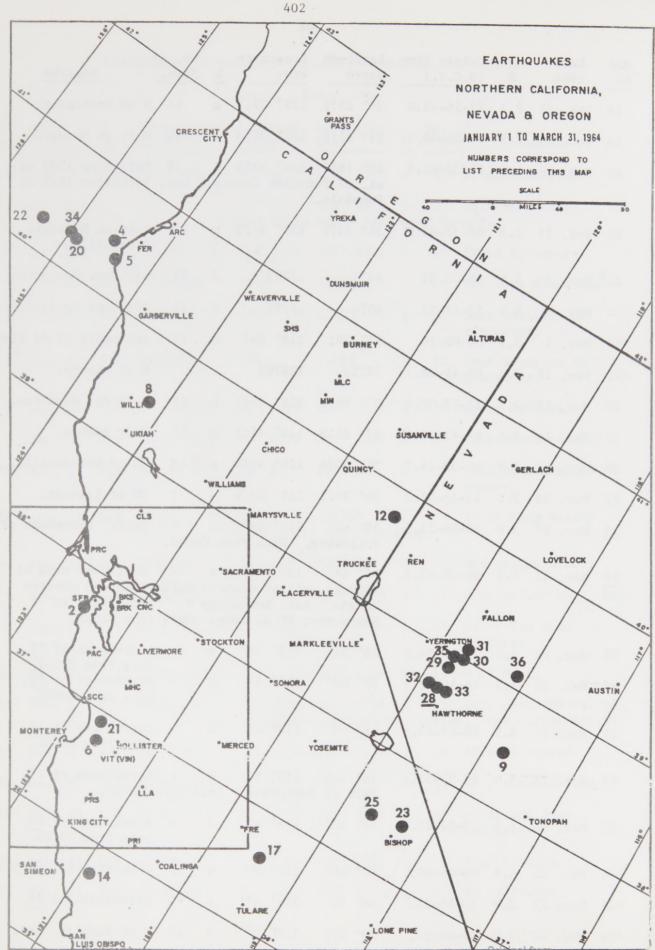


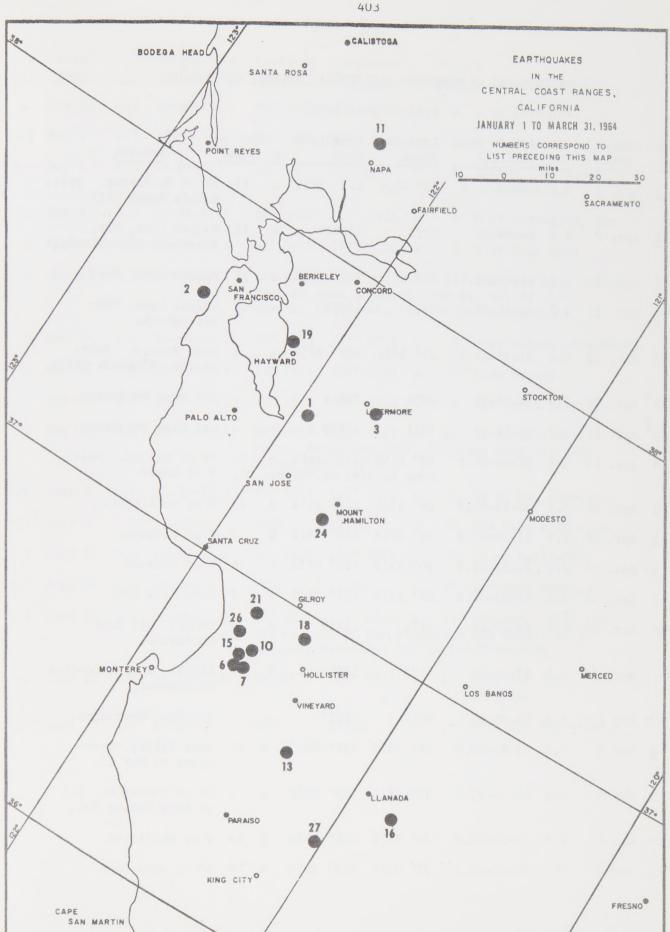


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - March 1964

Map No.	Date 1964	M	Origin Time (G.C.T.)	Latitude North	Longitude West		of Remarks
1	Jan. 7	2.6	20-25-37.6	37° 31!9	121° 55:8	a 15	5 E. of Irvington.
2	Jan. 9	3.0	16-20-17.5		122° 33!2 and W San 1		O Felt in W San County.
3	Jan. 12	2,6	07-48-14.2	37° 39!3	121° 43:1	b 1	4 SE of Livermore.
4\$	Jan. 17	3.7	06-02-20	40°4	124°4	a 10	6 Off Cape Mendocino.
4\$	Jan. 17	3.5	06-04-02	40°5	124°5	а .	5 Same location as preceding.
5\$	Jan. 17	3,4	07-50-24	40°4	124°3	d 1	O Same location as preceding.
6	Jan. 24	3.2	11-09-20.9	36° 44!1	121° 38:6	a 1	8 NE of Salinas.
7	Jan. 25	2.6	19-36-30.2	36° 45 : 1	121° 36¦1	a 1	4 Aftershock of 1109.
*8	Jan. 27	3.0	10-44-10.	39° 28'	123° 11'	0	9 Felt in Mendocino County.
CIT	Jan. 27	3.6	11-56-14.5	37°52 Reservoir	118°64 . NW of Bi		- IV at Long Valley
*_	Jan. 28	4.5	04-56-49.	43° 18'	125° 54'	0	3 Off Oregon coast.
9	Jan. 28	3.4	10-43-55.1	38° 28:6	117° 48!3	a 1	1 E of Walker Lake, Nev.
10	Jan. 29	2.9	01-14-02.3	36° 48 : 4	121° 37!4	ь 1	.5 SW of San Juan Bautista.
11	Jan. 29	2.7	07-29-38.1	38° 22:3	122° 18!3	b 1	.0 N of Napa.
12	Feb. 3	3,5	10-21-24.3	39° 45!8 of Lassen	120° 12:9 and Sierra	a 1	5 Felt over 300 sq. mi.
13	Feb. 8	2.5	22-48-55.4	36° 36!1	121° 18:0	a 1	O SE of Vineyard.
14	Feb. 10	3.9	05-47-25.0	35° 45!0	120° 56¦4	a 1	9 NE of Paso Robles.
15	Feb. 10	2.5	11-06-20,3	36° 47!5	121° 38!7	a 1	3 SW of San Juan Bautista.
16	Feb. 11	2.6	15-26-57.8	36° 34:8	120° 48:5	ь 1	O E of Llanada.
17	Feb. 15	3.0	15-47-25.3	36° 37:2	119° 28:4	b 1	11 SE of Fresno.

Map No.	Date 1964		Origin Time (G.C.T.)	Latitude North	_		No. o	
18	Feb. 15	2.7	22-28-42.0	36° 55 ! 1	121° 27!7	a	14	N of Hollister.
19	Feb. 26	2.5	09-50-00.5	37° 41!8	122° 09!3	a	16	Felt at Hayward.
20	Feb. 26	4.5	20-32-51.4		124° 53¦5 mboldt Coun			Felt over 1200 sq. intensity IV-V at
21	Feb. 27	3.3	08-37-02.6	36° 55!2	121° 41!5	Ъ	20	Felt at Mountain View, III.
22\$	Mar. 3	4.5	20-02-33	40°3	125°3	d	18	Off Cape Mendocino.
-\$	Mar. 5	4.4	11-42-23	40°4	127°4	С	17	Off Cape Mendocino.
*23	Mar. 9	3.9	02-06-29.	37° 29!	118° 20!	0	14	Intensity IV at Bishop.
CIT	Mar. 12	3,5	04-41-08.7	37:33	118:67			W of Bishop.
24	Mar. 13	2.7	22-29-00.8	37° 16:6	121° 39!7	Ъ	15	S of Mt. Hamilton.
25	Mar. 14	3.5	17-42-26.8	37° 25!8	118° 41!1	b	15	W of Bishop.
26	Mar. 16	2.7	14-06-24.7	36° 50!5	121° 42!4	а	10	SE of Watsonville.
27	Mar. 20	2.6	13-15-51.0	36° 2412	121° 01.6	a	7	SW of Llanada.
28	Mar. 22	3,8	15-56-21,3		118° 48' g. Data fro			Felt. Foreshock of
28	Mar. 22	5.5	16-30-55,9	7500 sq. Nevada.	mi. of east Max. intens	err	Calif	Felt over area of fornia and western intensity V at from USCGS.
29	Mar. 22	3.5	16-39-54.5	38° 54'	118° 48'	d		Aftershock of 28. Data from USCGS.
30	Mar. 22	3.5	18-14-52.2	39° 00'	118° 42'	d	-	Aftershock of 28. Data from USCGS.
31	Mar. 22	3,5	18-17-45,8	39° 06'	118° 42'	d		Aftershock of 28. Data from USCGS.
32	Mar. 23	3.9	15-32-57.0		118° 54' Hawthorne.			Aftershock of 28. n USCGS.
33	Mar. 24	3,5	23-57-10.0	38° 42'	118° 42'	d	-	Aftershock of 28. Data from USCGS.
*34	Mar. 25	3.9	08-46-07.	40° 19'	125° 00'	0	15	Intensity III at Scotia.
*35	Mar. 27	3.0	13-51-21.	38° 59'	118° 49'	0	7	Aftershock of 28.
426	W 20	2 0	23_05_54	39° 07.	118° 07'	0	14	E of Rawhide, Nev.

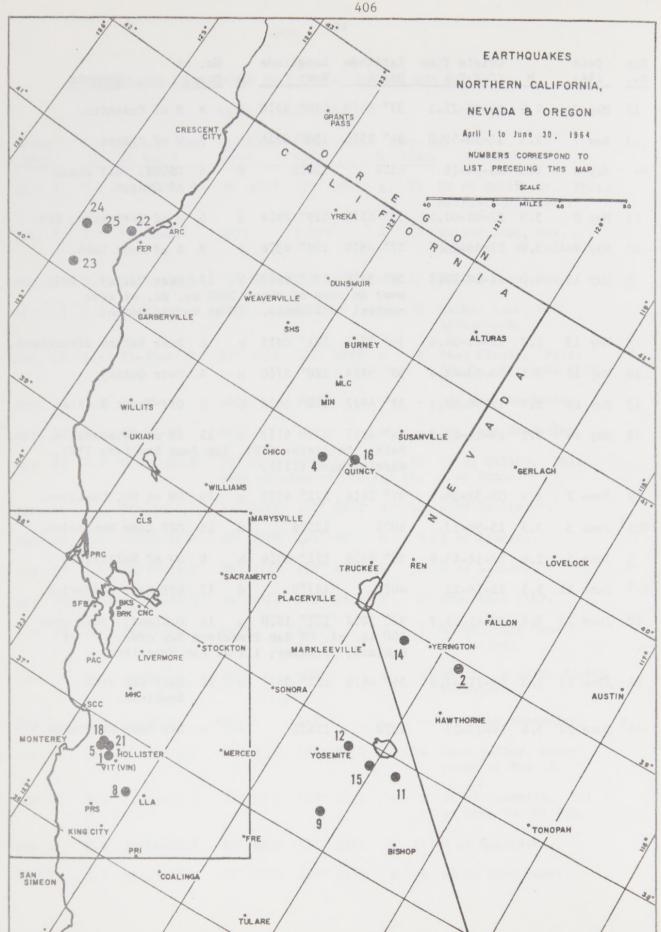


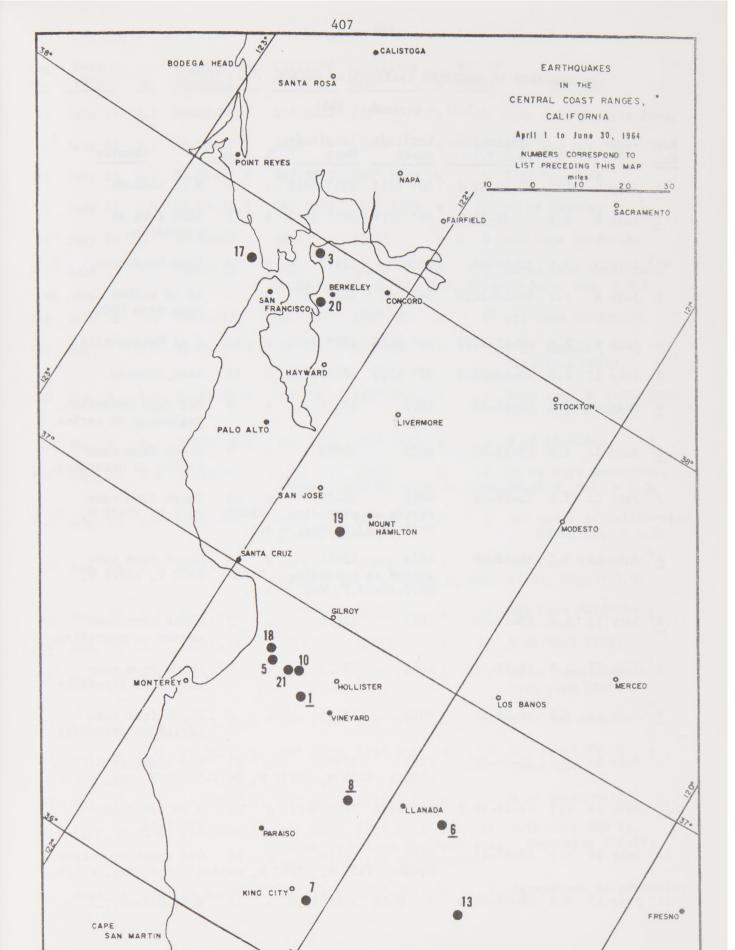


April - June 1964

Map No.	Date 1964	M	Origin Time (G.C.T.)	Latitude	Longitude West	<u>h</u>	No. o	
1	Apr. 3	3.1	06-35-51.7	36° 45!2	121° 30!1	а	11	SW of Hollister. Felt: Harris Ranch (II).
*2	Apr. 7	3.5	19-09-04	38°9	118°7	a	10	Walker Lake, Nev. Foreshock of following.
2	Apr. 9	3.7	18-43-20.4	38° 55:6	118° 43!6	a	11	Walker Lake, Nev.
*2	Apr. 11	3.2	03-25-08	38°9	118:7	a	10	Walker Lake, Nev. Aftershock.
3	Apr. 12	2.4	21-35-47.2	37° 57¦6	122° 22!8	a	8	Near Pinole. Felt: Pinole, Etiwanda (III).
22\$	Apr. 20	3.3	11-56-59	40°6	124°4	-	-	Off Cape Mendocino.
23\$	Apr. 22	3.7	00-22-10	40°1	124°8	-	-	Off Cape Mendocino.
4	Apr. 24	3.4	07-44-02.6		121° 16:2 rea of 900			SW of Quincy. Felt V at Doyle.
5	Apr. 26	3.1	08-29-00.7	36° 47!5	121° 39!8	a	15	W of Hollister.
6	Apr. 26	2.7	21-36-52.9	36° 37!9	120° 46¦2	Ъ	8	E of Llanada.
6	Apr. 26	2.6	21-37-41.9	36° 37¦3	120° 47¦3	Ъ	6	E of Llanada.
7	Apr. 28	2.8	15-01-48.3	36° 13¦8	121° 05:0	Ъ	7	Near King City.
*24	Apr. 29	4.6	19-22-24	41°4	124°9	d	5	USCGS: Off Cape Mendocino.
*_	Apr. 29	4.5	19-46-40	41.8	127:0	d	5	USCGS: N of Mendocino Escarpment.
_\$	May 1	3.8	03-00-15	40°7	126°7	-	-	Off Cape Mendocino.
8	May 5	3.3	13-25-29.2	36° 33!0	121° 09!0	а	16	Bear Valley. Fore- shock of May 13.
9	May 5	2.8	21-14-25.2	37° 18:2	119°-20:3	а	6	SE of Yosemite. III at Long Valley Dam.
10	May 6	2.8	15-58-06.9	36° 49!6	121° 34:6	b	14	W of Hollister.
11	May 7	3.7	02-23-18.3	37° 51¦6	118° 46¦3	а	9	SE of Mono Lake.

Map No.	Date 1964	<u>M</u>	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. of Stas.	Remarks
12	May 7	2.9	04-24-22.1	37° 54!0	119° 24:0	a	9 E c	of Yosemite.
13	May 7	2.5	17-53-58.0	36° 25 : 6	120° 32¦6	a	5 N c	of Priest.
*-	May 8	4.3	10-04-16	43°,4	126°6	d		CGS: Off coast Oregon.
14	May 9	3.0	07-06-02.1	38° 55!2	119° 29:4	a	6 W (of Yerington, Nev.
15	May 9	3.0	21-54-03.5	37° 48:0	119° 03!0	a	8 S (of Mono Lake.
8	May 13	4.0	12-18-37,2	over an a	121° 09:7 area of abou California.	it 3	3000 sq. 1	
8	May 13	2.7	12-44-26.0	36° 33¦3	121° 09!1	Ъ	6 Be	ar Valley aftershock.
16	May 15	3.1	05-33-41,9	39° 59:4	120° 57 : 0	а	4 Ne	ar Quincy,
17	May 24	2.7	16-50-39,1	37° 49!2	122° 36¦4	Ъ	6 Of	f Point Bonita.
18	May 24	3.2	20-12-23,2	Felt: Ho				of Watsonville. Bautista (IV),
19	June 2	2.9	01-37-36.5	37° 14:6	121° 43¦1	a	14 SW	of Mt. Hamilton.
*25	June 3	3.9	13-50-17	40°5	125°6	d	16 Of	f Cape Mendocino.
1	June 6	2.6	12-14-43.9	36° 44.0	121° 30¦6	Ъ	8 SW	of Hollister.
*_\$	June 11	5,5	22-18-12	40°7	127:0	d	17 Of	f Cape Mendocino.
20	June 13	3,4	00-42-56.7	500 sq. 1	122° 18¦0 mi. of San Berkeley;	Fra	ncisco Ba	kland. Felt over ny area. IV at Trancisco.
21	June 13	3,0	08-21-47.8	36° 48:0	121° 35¦7	а		ar San Juan autista.
26	June 23	3.6	16-07-27	40.0	124°2	-	- Of	ff Cape Mendocino.



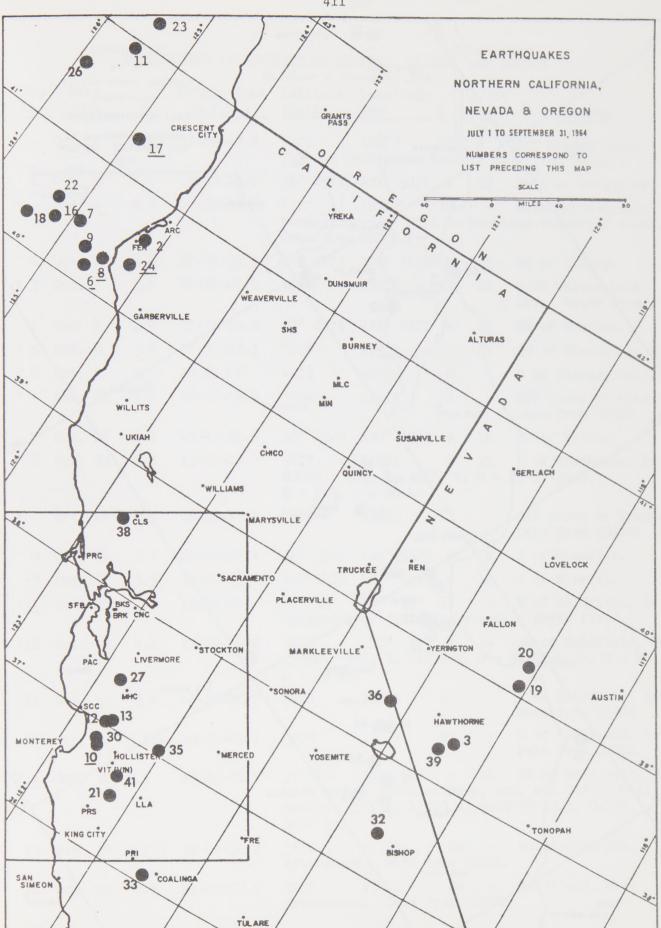


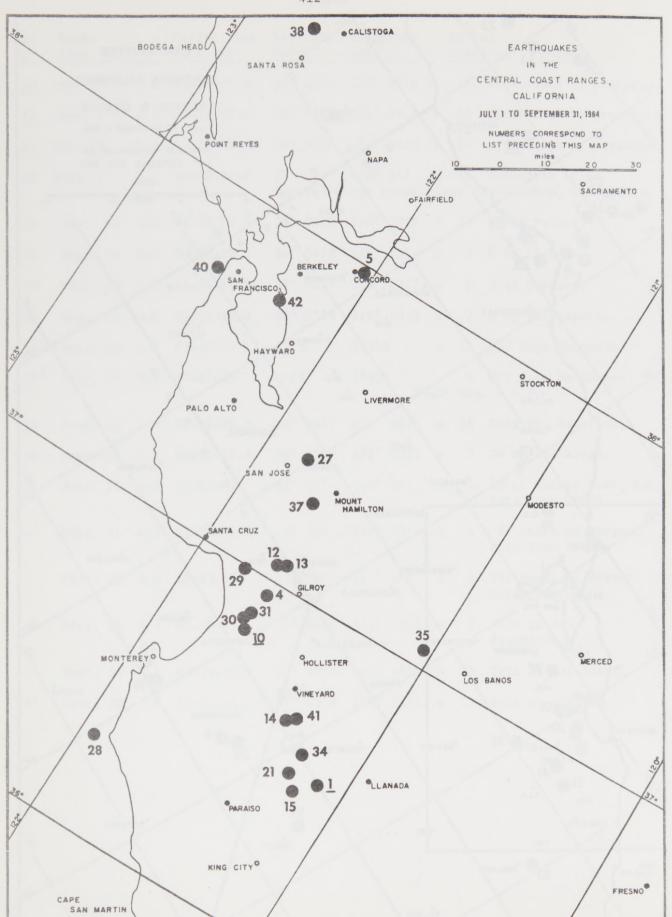
July - September 1964

Map No.	Date 1964	_M_	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. o: Stas.	
1	July 2	2.7	09-29-52.6	36° 31!7	121° 06:6	а	6	W of Llanada.
1	July 2	2.8	12-31-15.9	36° 31!8	121° 06:2	a	7	Same area as preceding.
*2\$	July 3	3.1	17-19-04	40°6	124°2	0	3	Cape Mendocino.
3	July 8	4.4	05-55-42,2	38° 24°	118° 24'	d	\-	SE of Walker Lake, Nev. Data from USCGS.
4	July 9	2.9	00-45-42.7	36° 56!5	121° 39!5	a	13	E of Watsonville.
5	July 11	2.8	13-48-21.3	37° 57!9	122° 02:3	С	11	Near Concord.
<u>6</u> \$	July 12	3.3	04-18-52	40°2	124°6	a	8	Off Cape Mendocino. Beginning of series.
<u>6</u> \$	July 12	3.0	07-18-08	40°2	124°5	а	7	Shock from same series as preceding.
7 ^{\$}	July 12	3.2	11-58-52		124°9 preceding. 7.0, Mag. =	U		Shock from same 40°2 N, 124°7 W,
<u>8</u> \$	July 12	3.7	12-18-28		124°5 preceding. 0.1, Mag. =	U	SCGS:	Shock from same 40°3 N, 126°1 W,
<u>8</u> \$	July 12	3.4	13-48-09	40°3	124°,5	а	9	Shock from same series as preceding.
9\$	July 12	3.3	15-19-47	40°3	124°7	a	7	Shock from same series as preceding.
8	July 12	3.2	18-23-16	40°3	124°5	а	7	Shock from same series as preceding.
_\$	July 13	4.2	11-54-32	42°7 USCGS: 42	128°4 2°5 N, 126°	a 7 W	14, 0=11-	Off coast of Oregon. -54-50.7, Mag. = 5.6.
10	July 14	2.7	11-17-19.8	36° 48 ! 6	121° 39!1	а	13	W of San Juan Bautista.
11\$	July 14	4.3	12-47-22					Off coast of Oregon. -47-25.6, Mag. = 5.4.
12	July 16	3.2	08-05-02.5	37° 03:4	121° 40!9	a	14	W of Gilroy.

Map Date No. 1964		Origin Time (G.C.T.)	Latitude North	Longitude West	No. o	
13 July 17 3	3.1	08-05-00,4	37° 04:2	121° 38!9	a 1.3	Same area as preceding.
-\$ July 23 3	3.7	08-47-07	40°0	127:3	a 10	Off Cape Mendocino.
14 July 23 2	2.7	21-02-55.1	36° 38:7	121° 19!7	b 6	S of Vineyard.
15 July 24 2	2,9	07-09-35.9	36° 27 : 9	121° 10!9	a 15	NE of Paraiso.
16 ^{\$} July 24	3.7	10-56-48	40°4	125°2	a 8	Off Cape Mendocino.
* - \$ July 27 3	3.7	18-40-43				NW of Cape Mendocino. -40-53.4, Mag. = 4.5.
*18 July 31 3	3.7	01-13-11	40° 16'	125° 28'	0 6	Off Cape Mendocino,
19 Aug. 2	4.0	13-29-07.3	39° 06'	118° 06'	c -	E of Rawhide, Nev. Data from USCGS.
20 Aug. 4	3,6	07-22-51.6	39° 18'	118° 06'	c -	Same area as preceding. Data from USCGS.
21 Aug. 4	3.2	22-07-28.9	36° 30!9	121° 14¦2	a 6	W of Llanada.
* - \$ Aug. 13	3.9	06-35-37	42°0 USCGS: 4	126°1 2°2 N, 126°	0 6 1 W, 0=06	NW of Cape Mendocino35-39.0, Mag. = 4.9.
*23 Aug. 13	3.7	08-50-46	42°3 Oregon bo	125°5 rder.	0 5	Off coast at California- USCGS Mag. = 4.9.
22 ^{\$} Aug. 18	3.9	02-13-43	40°5 USCGS: 4	125°2 0°3 N, 125°		Off Cape Mendocino. 2-13-37, Mag. = 5.0.
24 ^{\$} Aug. 22	3.6	22-27-53	40°4	124°2	a 8	Off Cape Mendocino.
24 \$ Aug. 22	3.2	23-45-38	40°4	124°2	a 11	N of Fort Bragg.
*26 Aug. 28	3.1	10-51-28	41° 36'	125° 54'	d -	NW of Cape Mendocino. Data from USCGS.
27 Aug. 29	3.0	00-39-50.5	37° 23:5	121° 47°7	b 11	E of San Jose.
28 Aug. 30	2.9	03-41-10.4	36° 17!8	121° 56:7	a 7	Off coast NW of Point Sur.
29 Aug. 31	2.5	17-10-19.1	36° 59°1	121° 47!0	c 6	N of Watsonville.
30 Sept, 1	3.8	19-49-16.5	miles of	121° 41¦1 Gilroy-Mont y, III at Mo	erey are	Felt over 500 sq. a. Intensity III-IV
31 Sept. 1	2.6	19-52-06.3	36° 52!6	121° 40:4	a 7	Aftershock of preceding.

Map No.	Date	M	Origin Time (G.C.T.)	Latitude North	Longitude West		
10	Sept. 1	3.0	22-33-29.4	36° 49!7	121° 38!9	b 15	Aftershock of preceding.
10	Sept. 2	2.7	01-58-06.4	36° 49!8	121° 38¦6	ь 13	Aftershock of preceding.
10	Sept. 3	3.0	13-56-59.3	36° 49!6	121° 39!7	ъ 14	Aftershock of preceding.
32	Sept. 4	4.1	20-20-24.8	37° 24' Control G	118° 36' orge Power		Intensity IV at ear Bishop, California.
33	Sept. 12	3.1	01-45-53.5	36° 05¦2	120° 29!6	d 10	SE of Priest.
34	Sept. 18	2.7	04-35-29.5	36° 34!8	121° 13!4	a 9	W of Llanada.
35	Sept. 18	3.0	14-35-14.9	37° 03¦5	121° 02:5	a 9	S of Gustine.
36	Sept. 19	3.0	20-24-10.0	38° 25!8	119° 15:0	a 7	N of Bridgeport.
17\$	Sept. 20	3.5	07-41-29	41.3	124°9	a 11	Off Cape Mendocino.
<u>17</u> \$	Sept. 20	3,5	07-42-28	41:3	124°9		Off Cape Mendocino.
37	Sept. 23	2.9	00-36-00.3	37° 16:7	121° 42!1	a 11	Near Mt. Hamilton.
38	Sept. 23	3.0	16-30-12.9	38° 35!0	122° 43¦1	a 7	SW of Calistoga.
*39	Sept. 24	3.5	12-51-33	38° 18'	118° 30°	d -	SE of Walker Lake, Nev. Data from USCGS.
*_	Sept. 24	4.5	13-59-36.8	43° 30°	127° 30'	d -	Off coast of Oregon. Data from USCGS.
-	Sept. 28	4.8	15-43-13	43° 30'	127° 06'	c 4	Off coast of Oregon. Data from USCGS.
40	Sept. 29	2.3	02-48-27.6	37° 44!6	122° 32!1	a 8	Felt in San Francisco.
41	Sept. 30	3.1	08-33-02.2	36° 40!6	121° 18:0	a 13	Felt at Hollister.
42	Sept. 30	2.9	16-11-44.0	37° 45:2	122° 15¦1	a 10	Felt at Oakland.





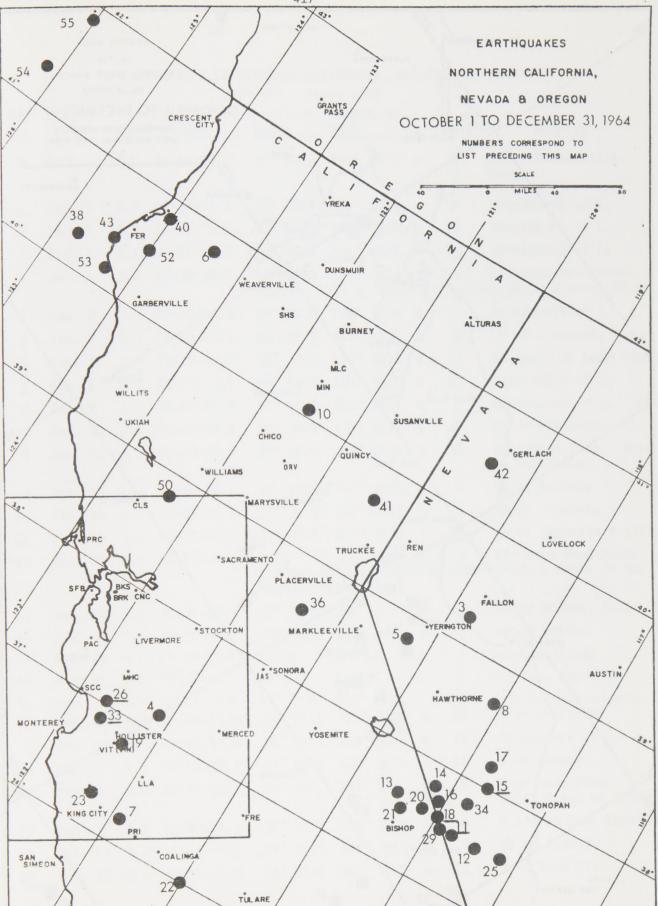
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON
October - December 1964

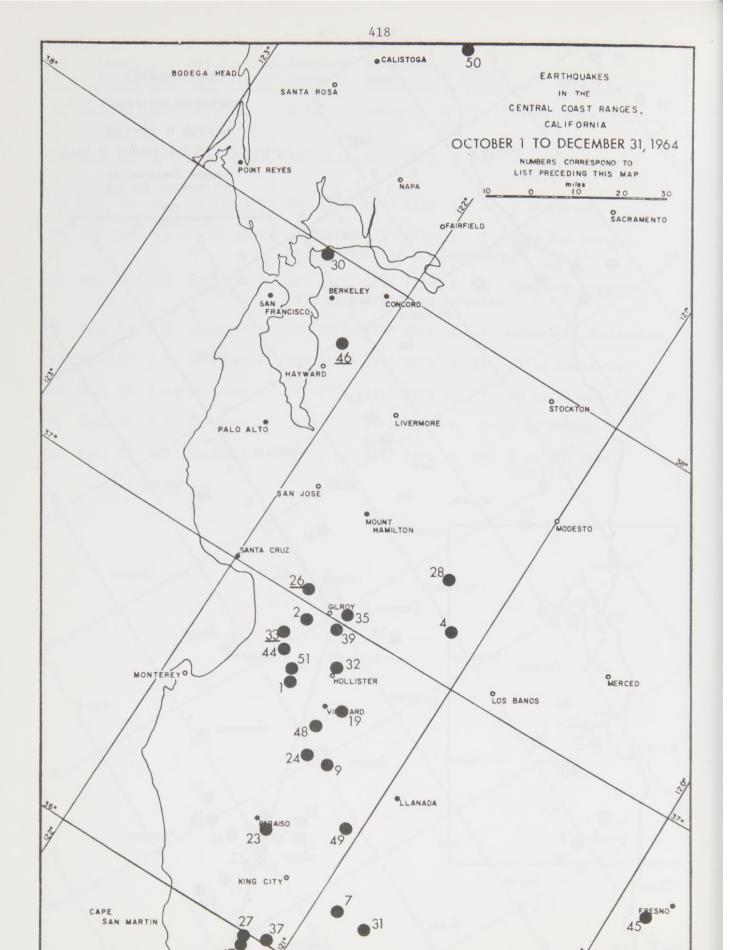
October - December 1964									
Map No.	Date 1964	M	Origin Time (G.C.T.)		Longitude West			Remarks	
-	Oct. 1	6.0	11-00-48.3					Off Oregon coast.	
1	Oct. 1	2.7	12-30-16.8	36° 45:1	121° 32:7	a	12	Felt at Hollister.	
* -	Oct. 1	5.3	12-31-24.6					Washington-Oregon and-Vancouver areas.	
2	Oct. 2	2.6	16-34-39.5	36° 57:1	121° 37:9	ъ	.8	SW of Gilroy.	
* 3	Oct. 7	3.4	07-37-07.1	39:2	118:8	33	10	N of Walker Lake, Nev. Depth fixed.	
4	Oct. 8	3.2	15-32-24.2	37° 09:5	121° 07:7	ъ	14	SW of Gustine.	
* 5	Oct. 9	3.6	07-55-37.3	38:8	119:3	33	14	SW of Yerington, Nev.	
* 6	Oct. 9	3.2	22-23-02	40:8	123:4	2	4	E of Eureka, Calif.	
* -	Oct. 11	4.6	06-10-09.0	43:8	129:3	33	400	Off coast of Oregon. Data from USCGS.	
7	Oct. 17	3.3	23-43-22.6	36° 12:5	120° 55.'C) a	14	NW of Priest.	
* 8	Oct. 23	5.3	13-57-05	38:7 USCGS: 3 M = 5.0,	118:1 8:5 N, 118 h = 26 km.	d 3°4 W,	15 0 =	E of Hawthorne, Nev. 13-57-10.6,	
* -	Oct. 24	4.5	06-37-45.7	44.5	129:5	33	-	Off coast of Oregon. Data from USCGS.	
9	Oct. 24	2.5	10-50-27.4	36° 35.'9	121° 15.0	o b	9	E of Gonzales.	
10	Oct. 27	3.5	00-32-23.2	40° 04:2	121° 33.	2 a	10	S of Mineral.	
*11		3.5	17-44-47	37° 30' Foreshock	117° 48' of follo	33 wing 6	6 events	W of Goldfield, Nev. Depth fixed.	
*12	Oct. 30	4.1	17-50-38	37°5 USCGS: 3 h = 20 km		d 8:2 W,	14, 0 =	SW of Goldfield, Nev. 17-50-47.4, M = 4.1,	
13	Oct. 30	3.8	18-18-06.7	37:6	118:5	20	-	W of Goldfield, Nev. Data from USCGS.	
14	Oct. 30	3 3/4	19-01-45.7	37:8	118.2	20	-	W of Goldfield, Nev. Data from USCGS.	
*11	Oct. 30	4.5	19-03-09.3	Main char	ok Felt.	at Dv	er. N	SW of Goldfield, Nev. fev. and Oasis, Calif. 9-03-12.3, M=4.4,	
15	Oct. 30	3 1/2	19-40-30.2	Aftersho	ck. Data	from	USCGS	Goldfield, Nev.	
16	Oct. 30	4.1	23-02-59.5	37°7 Aftersho	118°1 ck. Data	20 from	USCGS	Goldfield, Nev.	

_	Date 1964	_M_	Origin Time (G.C.T.)	Latitude North				Remarks
17	Oct. 31	3.7	11-57-31.7		117°8 k. Data fr			Goldfield, Nev.
15	Oct. 31	4.0	19-35-24.7	38:0	117:8	20	-	Goldfield, Nev. Aftershock.
15	Nov. 1	3.9	20-41-07.7	38:0 Aftershoc	117°7 k. Data fr	33 com U	SCGS.	Goldfield, Nev.
18	Nov. 2	4.4	11-38-55.7	37:6 and Oasis	118°0 , Calif. D	32 Data	from US	Felt at Dyer, Nev. SCGS.
19	Nov. 3	3.1	02-23-56.8	36° 46:5	121° 19.7	C	17	SE of Hollister.
18	Nov. 3	4.1	18-58-44.0		118°0 k. Data fr			Goldfield, Nev.
20	Nov. 4	3.6	11-50-32.1		118°2 k. Data fr			Goldfield, Nev.
21	Nov. 4 3	3/4-4	11-53-56.2		118°4 k. Data fr			Goldfield, Nev.
* -	Nov. 6	4.6	12-14-29.8	43°5	126:6	33	-	Off coast of Oregon. Data from USCGS.
22	Nov. 8	4.0	01-19-19.0					E of Avenal. 19-17.2, M=4.4,
23	Nov. 8	3.1	13-45-51.1	36° 20:8	121° 19:2	a	16	Near Paraiso.
24	Nov. 9	2.9	10-43-23.8	36° 36.17	121° 19!9	a	7	NE of Gonzales.
18	Nov. 12	3.8	20-07-25.4		118°0 k. Data fr		SCGS.	Goldfield, Nev.
*25	Nov. 13	4.1	05-04-59.6					S of Goldfield, Nev. 05-10.8, M=4.2,
<u>26</u>	Nov. 16	5.0	02-46-41.7	Felt over M ≥ 2.5 at cription (1966), "	central Ca re listed b of this seq The Earthqu alitos, Cal	lifo elow quenc ake	rnia. For e, see Sequence	Near Corralitos. Aftershocks with a complete des- McEvilly, T.V. ce of November 1964 Bull. Seism. Soc.
26	Nov. 16	2.7	02-55-40.5	37° 03:9	121° 40!5	С	**	Corralitos aftershock.
26	Nov. 16	2.5	05-09-13.6	37° 03:8	121° 40:3	С	**	Corralitos aftershock.
27	Nov. 18	2.7	01-47-34.0	35° 59!1	121° 11!2	a	8	SW of King City.
26	Nov. 19	3.2	20-47-40.1	37° 02:3	121° 42:1	С	**	Corralitos after- shock.
28	Nov. 23	2.7	04-08-13.3	37° 17.5	121° 14:0	a	13	Near Mt. Hamilton.
26	Nov. 23	3.5	09-05-08.0	37° 02:14	121° 42.9	С	**	Corralitos after- shock.

Map No.	Date 1964			Latitude North	Longitude West	h St		
29	Nov. 23	4.4	23-52-29.5	37°5 Aftershoc	117°9 k. Data fr			Goldfield, Nev.
30	Nov. 24	2.3	08-50-53.3	37° 58!1	122° 22:2	Ъ	10	Felt in Richmond.
31	Nov. 25	2,8	12-49-41.8	36° 12!6	120° 46!9	a	15	NW of Priest.
* -	Nov. 25	4.3	23-14-11	44°7	119:8	33	3	Central Oregon Depth fixed.
32	Nov. 28	3 2.7	15-07-49.7	36° 52!6	121° 25¦2	a	14	Near Hollister.
33	Nov. 30	3.0	20-44-48.9	36° 53¦2	121° 40¦3	Ъ	12	SE of Watsonville.
33	Nov. 30	3.7	21-16-18.2	36° 52!2	121° 42¦2	Ъ	14	SE of Watsonville.
34	Dec. 1	3.7	15-28-20.9		117:8 ck. Data fr			Goldfield, Nev.
26	Dec. 2	2.7	07-50-35.3	37° 0416	121° 40:7	С	**	Corralitos aftersho
11	Dec. 2	3.9	09-17-50.8		117:9 ck. Data fr			Goldfield, Nev.
35	Dec. 3	2.7	07-20-45.9	37° 03¦8	121° 29¦8	Ъ	15	Near Gilroy.
36	Dec. 4	3.0	04-31-59.2	38° 34†	120° 25'	С	3	SW of Lake Tahoe.
*37	Dec. 5	2.6	13-55-57.5	36° 01!0	121° 04¦8	2	12	W of San Ardo.
52	\$ Dec. 7	3.2	11-29-43	40°5	124°0	-	-	Off Cape Mendocino.
*38	\$ Dec. 7	3.1	14-15-06	40°3	124.8	33	4	Cape Mendocino. Depth fixed.
39	Dec. 8	2.9	15-49-16.2	36° 58:4	121° 29!8	С	14	SE of Gilroy.
*40	\$ Dec. 9	3.5	07-36-33	40.8	124:0	33	4	SE of Arcata.
*41	Dec. 1	0 3,1	10-52-40	39°7	120°4	33	3	S of Honey Lake.
*42	Dec. 1	1 3,1	04-23-48	40°5	119°5	33	12	S of Gerlach, Nev. Depth fixed.
*53	\$ Dec. 1	.2 3.7	21-17-25	40°2 USCGS: Mag. = 5	40°3 N, 125	33 5°1 W,	19 0=23	Off Cape Mendocino. L-17-21.0, h=33 km,
*43	8\$ Dec. 1	6 3.6	05-24-47	40°4	12404	33	5	Cape Mendocino.
*52	\$ Dec. 1	L7 3.8	B 11-25-40 Depth fixed	41°3 . USCGS:	126°1 40°3 N, 127	33 7°3 W,	14 0=1	Off N California 1-25-32, Mag.= 4.2.

Map No.			Origin Time (G.C.T.)	Latitude North	Longitude West	No. o	f Remarks
55 ^{\$}	Dec. 17	4.6	12-11-52	41.9	126:0		Off N Calif. coast.
44	Dec. 22	2.5	19-56-09.8	36° 49!8	121° 38!0	a 10	W of San Juan Bautista.
45	Dec. 23	2.8	23-13-53.8	36° 41!4	119° 53:3	c 5	W of Fresno.
46	Dec. 24	2.6	03-11-56.7		122° 07:4 akland and		Near San Leandro.
46	Dec. 24	2.9	03-13-14.3		122° 11¦6 akland and		Near San Leandro.
*47	Dec. 25	2.6	11-21-16.2	35° 57!9	121° 10!7	2 5	N of Lake Nacimiento.
48	Dec. 27	2.7	12-45-45.2	36° 41!2	121° 22!3	a 11	NE of Gonzales.
49	Dec. 27	2.6	18-58-59.4	36° 27!8	121° 03¦6	b 7	SW of Llanada.
50	Dec. 29	3.1	15-48-40	38°8	122°3	a 5	S of Rumsey.
51	Dec. 30	2.6	16-35-49.5	36° 47:0	121° 33!0	a 10	S of San Juan

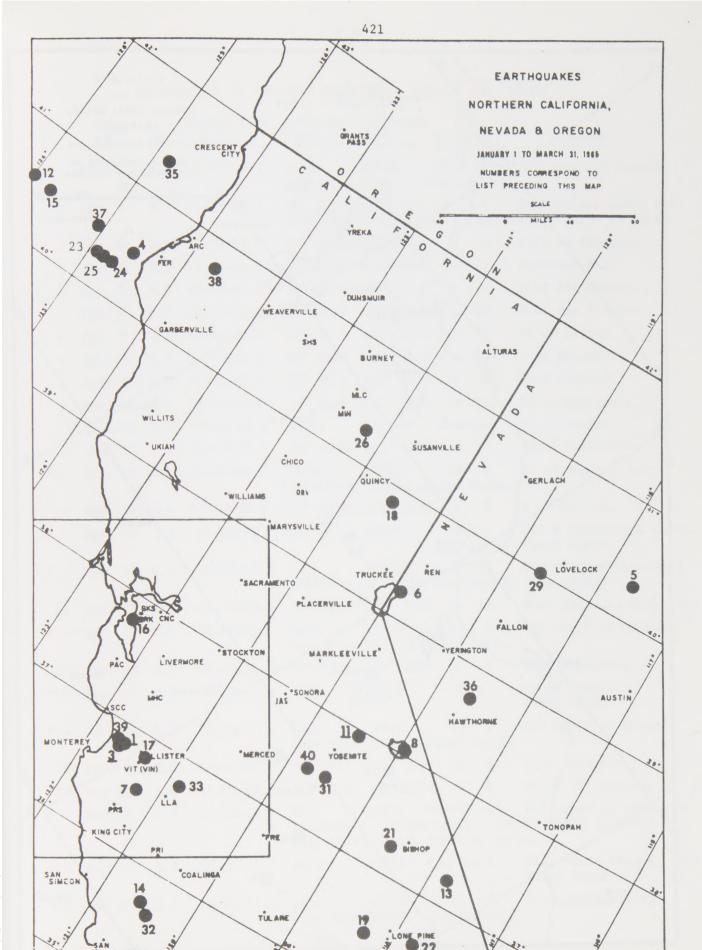


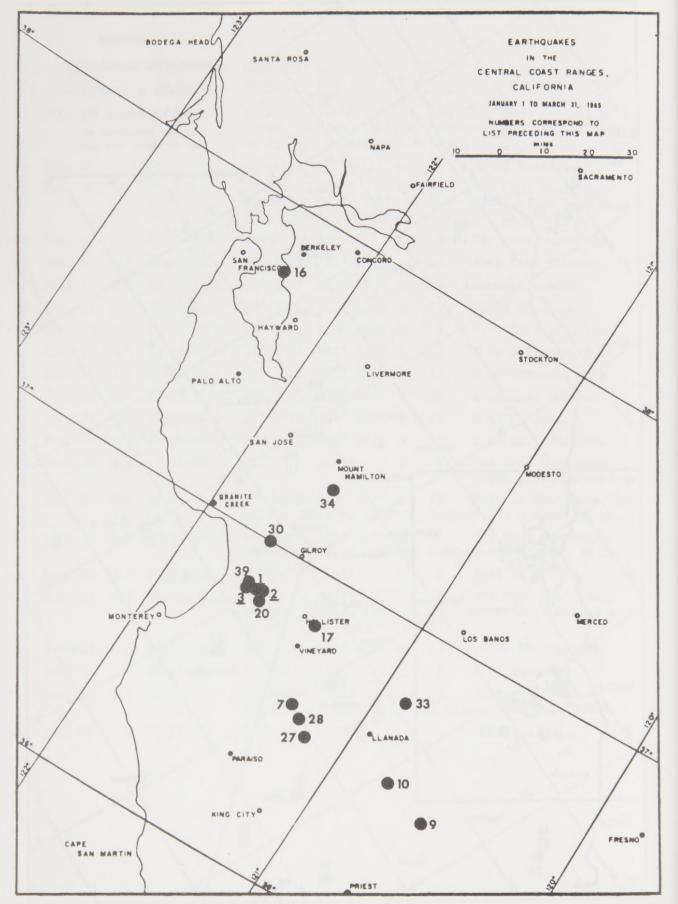


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - March 1965

Map	Date		Origin Time	nuary - Mai Latitude	Longitude		No. of	
No.	1965	M	(G.C.T.)	North	West		Stas.	Remarks
1	Jan. 1	3.5	09-56-51.3	36° 50.15	121° 39.'3	a	14	SE of Watsonville. Felt.
1	Jan. 1	2.6	09-58-59.7	36° 49.'3	121° 39!6	Ъ	7	Aftershock of 1.
2	Jan. 1	2.7	10-47-36.5	36° 51.'5	121° 37:8	b	12	Aftershock of 1.
3	Jan. 1	3.1	12-16-32.0	36° 49:6	121° 41.'8	a	13	Aftershock of 1.
14	Jan. 1	3.6	19-59-36.6		124° 33.'9 0°3 N, 124°	a 6 W;	14 0=19-	Off Cape Mendocino. 59-38.2; h about 20 km.
1	Jan. 2	2.8	00-50-01.2	36° 50:8	121° 38:5	Ъ	11	Aftershock of 1.
5	Jan. 4	3.9	04-06-45.3	40° 17:5	117° 41.11	8.	9	NE of Lovelock, Nev.
6	Jan. 5	3.5	07-32-30.7	39° 13.'9	119° 55!2	a	12	NE shore of Lake Tahoe.
3	Jan. 7	2.7	02-59-37.7	36° 49!3	121° 42.7	a	12	Aftershock of 1.
2	Jan. 7	2.9	03-00-03.9	36° 50.16	121° 37.7	a	7	Aftershock of 1.
7	Jan. 10	3.3	02-00-09.5	36° 34:7	121° 16.'1	b	14	SE of Vineyard.
8	Jan. 13	3.7	03-50-58.9	38° 02.5	118° 59!1	d	16	Near Mono Lake. Felt at Leevining.
9	Jan. 13	2.6	04-20-48.2	36° 27.'0	120° 34.17	a	9	NE of Priest.
10	Jan. 14	2.9	10-09-32.5	36° 30!9	120° 47.'3	Ъ	12	SE of Llanada.
11	Jan. 19	3.1	00-38-26.6	37° 56.'0	119° 27.5	a	14	NE of Yosemite Valley.
*12	Jan. 22	4.1	00-45-40	40°5 USCGS: L Magnitude	126:0 +1:2 N, 129 +4.9 (CGS)	°° W	3 , 0=00-	Off Cape Mendocino. -45-12; h about 47 km.
13	Jan. 22	3.5	10-24-37.3	37° 12!7	117° 50.'5	ъ	9	SE of Bishop, Calif.
14	Jan. 26	3.0	08-36-30.7	35° 43.'3	120° 32.7	a	12	SE of Priest.
CIT	Jan. 26	3.1	08-38-16.4	36.04	120°26	С		Near Coalinga.
*15	Jan. 26	3.9	21-11-53	40.5	125°7	0	4	Off Cape Mendocino.
16	Jan. 29	3.2		37° 47:0	122° 16!8	С	14	Felt in Oakland area. E of Hollister.
17	Jan. 29	3.3		36° 50.1			14	Aftershock of 1.
1	Jan. 29	3.0		36° 51.'1			14	E of Quincy.
18	Feb. 7	3.5		39° 50.15			11	W of Lone Pine.
*19	Feb. 8	3.0	15-54-32	36° 30'	118° 20'	0	0	Depth fixed at surface.
20	Feb. 10	2.8	10-00-04.3	36° 48!8	121° 37.2	a a	14	W of San Juan Bautista.
21	Feb. 11	3.1	01-31-40.7	37° 16.6	118° 33.'3) b	7	SW of Bishop.
22	Feb. 11	3.5	01-35-59.8	36° 37:1	117° 48.5	a	11	E of Lone Pine.

Map	Dat		M	Origin Time (G.C.T.)	Latitude North	Longitude West		No. of Stas.	Remarks
23	Feb.	12	4.5	10-50-18	40°3 USCGS: 4 at 33 km.				Off Cape Mendocino. 50-19.7; depth fixed
11	Feb.	12	3.1	15-19-02.7	37° 57!2	119° 27:5	a	11	NE of Yosemite.
*24	Feb.	12	3.7	20-50-44			0 7 W;	15 0=20-5	Off Cape Mendocino. 50-46; h about 33 km.
*25	Feb.	12	3.3	23-35-30	40°3	124:8	0	3	Off Cape Mendocino.
26	Feb.	13	4.3	21-53-46.4	40° 17:3	121° 13.7	a	10	Near Lake Almanor.
27	Feb.	14	2.8	19-45-31.7	36° 30.17	121° 08:8	a	11	SW of Llanada.
28	Feb.	17	2.7	18-54-13.3	36° 33.'0	121° 12:8	a	11	SW of Llanada.
29	Feb.	19	3.2	12-01-30.0	40° 00.1	118° 39!0	ъ	6	Near Lovelock, Nev.
30	Feb.	19	2.5	13-12-06.0	37° 00.1	121° 43:1	ъ	11	N of Watsonville.
31	Feb.	21	3.1	17-22-07.2	37° 28:1	119° 32:6	a	12	S of Yosemite Park.
32	Feb.	21	3.1	18-39-18.3	35° 39:9	120° 26:1	a	12	E of Paso Robles.
33	Feb.	22	3.8	17-57-11.8	36° 46:0	120° 53:0	ъ	14	N of Llanada.
34	Feb.	26	2.5	17-24-58.5	37° 15.'3	121° 36.'3	a	10	S of Mt. Hamilton.
*35	Feb.	27	3.4	19-58-02	41°3	124:8	0	4	Off Cape Mendocino. Depth fixed at surface.
36	Mar.	8	4.1	22-50-55.9		118° 37!2 88°5 N, 118°		13 0=22-	Felt at Hawthorne, Nev. 50-58; h about 33 km.
37	Mar.	10	3.5	02-52-10.9		125° 01.'9 0.6 N, 125.		12 0=02 -	Off Cape Mendocino. 52-08; h about 33 km.
*38	Mar.	16	3.2	15-42-59	40.8	123°7	0	6	East of Arcata.
* -	Mar.	23	4.4	08-40-49	40°7 USCGS: 4	127°5 10°5 N, 127° Magnitude 4.	0 9 W; 4 (C	0=08-	Off Cape Mendocino. 40-46; depth fixed at
39	Mar.	29	2.8	08-42-59.6	36° 50.'4	121° 40:6	a	10	SE of Watsonville.
40	Mar.	30	3.0	09-45-14.4	37° 28.2	119° 47.'0	a	8	S of Yosemite.
* _	Mar.	30	4.0	17-45-48	38°7 Epicentra	115°5	33 ces a	7 ind ori	Eastern Nevada. gin time from USCGS.
CIT	Mar.	28	3.5	02-32-21	36.2	120°4			Near Coalinga.



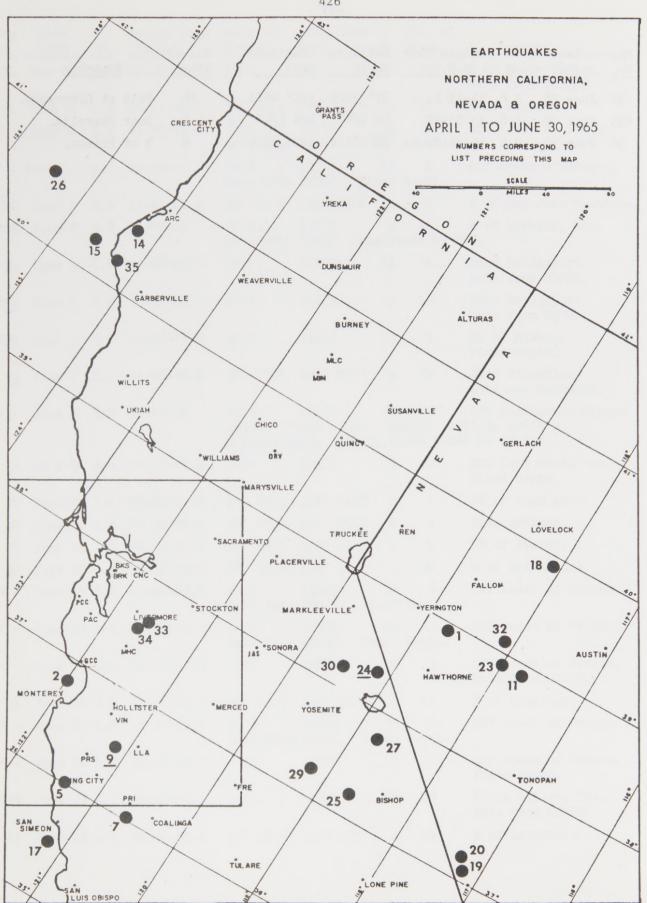


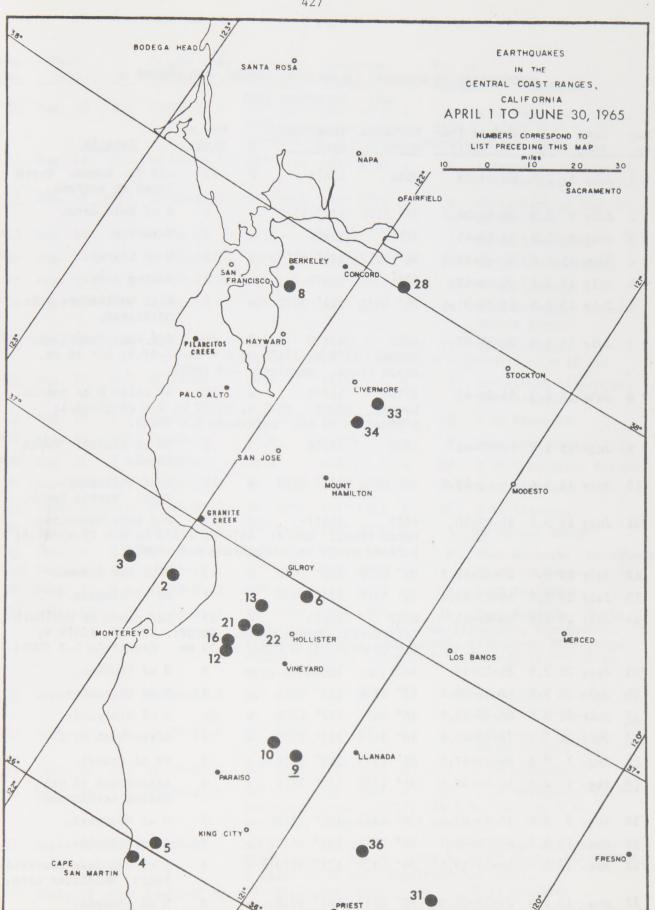
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON April - June 1965

Map No.	Date 1965	M		Latitude North	Longitude No. of West h Stas. Remarks
* -	Apr. 5	5.1	09-27-32.5	43°9 Data from	127:8 33 4 Off coast of Oregon. USCGS. Fixed depth.
1	Apr. 6	3.7	15-57-05.5		118° 42'0 c 9 Near Walker Lake, Nev. °O N, 118°8 W; 0=15-57-05; M=3.9; h= 33 km.
2	Apr. 6	3.3	10-31-59.1	36° 48'	121° 58' a 8 Felt at Capitola.
3	Apr. 6	2.5	11-23-10.4	36° 49!6	122° 06.17 a 8 Monterey Bay.
4	Apr. 6	2.5	20-49-24.4	35° 57.'0	121° 27'3 a 7 N of San Simeon.
5	Apr. 8	3.0	01-05-40.6	36° 01:8	121° 24.0 a 10 N of San Simeon.
6	Apr. 8	2.8	21-41-12.0	36° 57.'9	121° 27.6 b ll SE of Gilroy.
7	Apr. 9	3.0	12-50-19.3	36° 01.'9	120° 38!7 a 10 S of Priest.
8	Apr. 11	2.7	01-19-07.4	37° 48.5	122° 12:5 b 8 Near Oakland.
9	Apr. 11	3.5	05-41-56.6	36° 30:6	121° 09:0 a ll SE of Hollister.
CI	Apr. 12	3.0	08-41-49.5	37:07	117°9 c SE of Bishop.
10	Apr. 13	2.7	03-58-52.4	36° 30!1	121° 14'1 a 7 SE of Hollister.
*11	Apr. 13	4.6	13-14-22.1	38°9 Data from	117°7 33 ll SW of Austin, Nev. n USCGS. Fixed depth.
12	Apr. 14	2.5	23-00-44.3	36° 42.9	121° 36.'8 a 6 E of Salinas.
* -	Apr. 18	3.3	01-16-27	41.9	126°6 0 5 Off N California coast. Fixed depth.
* -	Apr. 18	4.9	06-33-58.8		127°1 20 15 Off California-Oregon Epicentral coordinates from USCGS.
13	Apr. 18	2.8	15-45-09.3	36° 53°5	121° 33.6 a 13 N of San Juan Bautista.
* -	Apr. 18			43°9 Data from	127:2 33 2 Off coast of Oregon. m USCGS. Fixed depth.
14	Apr. 25	3.1	08-25-57.6	40° 33.'9	124° 14.5 c 4 Near Ferndale.
*15	Apr. 27		,	40.3	124:6 0 13 SW of Ferndale. Fixed depth.
* -	Apr. 29	4.2	04-29-16	44°5 Data from	127.9 33 2 Off coast of Oregon. m USCGS. Fixed depth.
16	Apr. 30	2.6	22-08-08.3	36° 43.'3	121° 37.7 a 7 N of Salinas.
	May 12		17-55-08.7	35° 29.5	121° 10.2 c 6 SW of San Simeon.
	May 13			40.7 Californ	127:1 0 6 Off coast of northern ia. Fixed depth. USCGS: 40:3 N, 126:7 W; 23; depth fixed at 33 km.
*18	May 21	3.2	06-51-35	39:9	118.1 0 6 Near Dixie Valley, Nev. Fixed depth.
*19	May 25	3.8	00-48-13.3	37°1 Data fro	117:2 33 6 N of Death Valley. m USCGS. Fixed depth.

Map No.	Date 1965	M	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. of Stas.	Remarks
*20	May 28	3.8	08-18-51	37:2	117:3	15	9	N of Death Valley. Data from USCGS.
21	May 30	2.5	00-21-48.1	36° 47:3	121° 36.17	a	10	N of Salinas.
* -	May 31	5.5	05-07-43.4	44°1 Data from	128°8 USCGS. Fi	33 xed	7 depth.	Off coast of Oregon.
* -	June 1	4.8	12-33-38	44.8 Data from	129:8 USCGS. Fi	33 Exed	l depth.	Off coast of Oregon.
22	June 1	2.6	13-45-21.0	36° 48.3	121° 33.6	a	9	S of San Juan Bautista.
*23	June 2	3.8	20-47-04	38°9 Data from	118°0 USCGS. Ma	a gnit	ll cude by B	E of Rawhide, Nev.
*24	June 3	4.8	16-26-27.4	38:3	119:2	15	14	Near Bridgeport. Data from USCGS.
*24	June 3	4.9	16-31-02.2	38:3	119:3	15	14	Near Bridgeport. Data from USCGS.
*25	June 5	3.2	01-06-18.6	37:2	118:7	33	7	SW of Bishop. Fixed depth.
2	June 7	2.5	15-06-47.6	36° 30!1	121° 07.8	a	10	Near Pinnacles National Monument.
* -	June 8	3.8	12-41-34	41.8 Coast. F O=12-41-4	126°8 ixed depth. 3.0. M=4.7	0 US 7; de	10 SCGS: 42 epth fixed	Off California-Oregon 21 N, 126°4 W, 1 at 33 km.
26	June 9	3.4	03-57-44.4	40.4	125:3	0	10	Off Cape Mendocino. Fixed depth.
27	June 9	3.1	22-49-17.8	37° 46.'1	118° 44.8	С	6	SE of Mono Lake.
28	June 10	2.6	02-58-00.0	38° 00.17	121° 49.'7	ъ	9	Near Antioch.
29	June 10	3.2	14-33-17.9	37° 15!1	119° 11.'5	a	9	NE of Fresno.
30	June 10	3.3	17-36-29.0	38° 10.'9	119° 32.'7	a	10	W of Bridgeport.
* -	June 14	5.2	09-40-09.5	44.6 Data from	129°5 USCGS. F	33 Lxed	9 depth.	Off coast of Oregon.
* -	June 14	5.0	13-05-54.0	44°5 Data from	129°4 USCGS. Fi	33 Lxed	3 depth.	Off coast of Oregon.
* -	June 17	4.5	11-22-52.3	43:1	126:1	20	3	Off coast of Oregon. Data from USCGS.
31	June 20	2.7	02-56-43.5	36° 19.'5	120° 21.'9	С	11	N of Coalinga.
* -	June 20	4.6	17-23-55.4	42.8 Data from	126°4 USCGS. F	33 ixed	ll depth.	Off coast of Oregon.
* -	June 20	4.7	18-04-30.3	42°8	126:6	0	17	Off coast of Oregon. Fixed depth.
*32	June 25	4.4	00-18-56.1	39°1	118:1	16	14	Dixie Valley, Nev. Data from USCGS.
33	June 25	3.4	01-01-01.1	37° 38.6	121° 38.'4	a	14	E of Livermore.

Map No.	Date 1965		Origin Time (G.C.T.)			No. of Stas.	Remarks
34	June 28	3.6	11-15-11.4	37° 33.5	121° 40!1 b	14	Felt at Livermore.
*35	June 29	3.6	13-53-30	40 1/4°	124 1/4° c	6	Near Petrolia.
36	June 30	2.5	15-21-27.7	36° 21.2	120° 42.14 a	9	N of Priest.



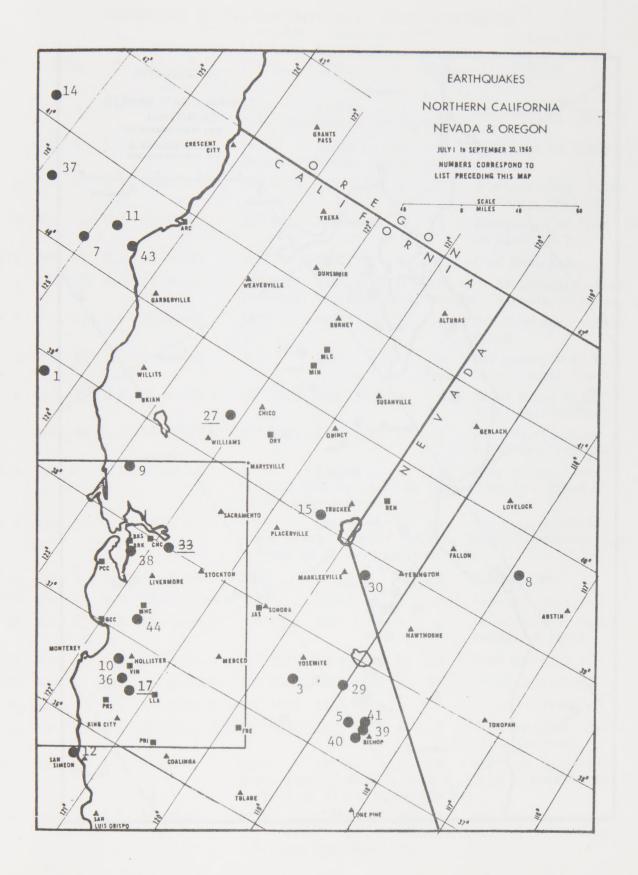


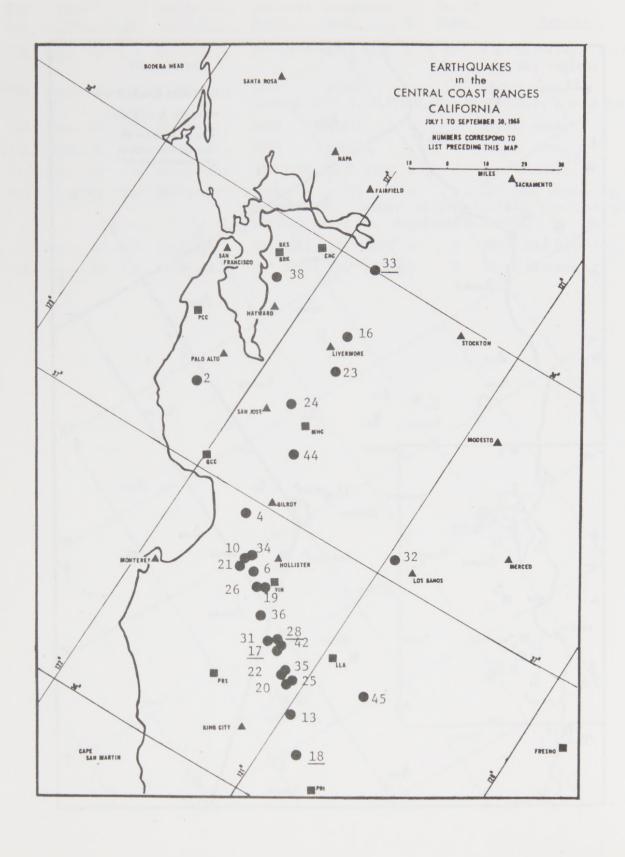
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON July - September 1965

Мар	Date	Origin Time	Latitude	Longitude		No. of	
	1965 M		North	West	<u>h</u>	Stas.	Remarks
* 1	July 5 3.3	06-37-03	38°8	124°4	0	13	Off Pt. Arena. Depth fixed at surface.
2	July 9 2.5	08-51-08.5	37° 17:6	122° 13!5	a	8	S of Palo Alto.
* 3	July 9 3.2	13-16-43	37:5	119°6	a	5	Yosemite.
4	July 11 2.9	02-41-28.6	36° 56!7	121° 40!7	a	12	W of Gilroy.
* 5	July 12 3.1	16-49-42	37:4	118:7	a	7	Bishop area.
6	July 13 2.8	15-35-31.4	36° 45!5	121° 30!0	a	7	W of Hollister; felt Hollister.
* 7	July 13 4.0	21-57-07			W;	0 = 21 -	Off Cape Mendocino. 57-07.9; h = 16 km.).
* 8	July 14 4.3	08-26-43			Ν,	117°7 W	40 miles W of Austin, ; 0 = 08-26-45.1; (CGS).
* 9	July 15 2.8	02-57-08	38°5	122.8	0	8	SW of Rumsey. Depth fixed.
10	July 18 3.6	19-03-43.4	36° 47!4	121° 33!9	а	15	W of Hollister. Felt: Harris Ranch.
*11	July 19 3.2	21-45-10	40°5 Depth fix h fixed a	124°.7 ked. USCGS: at 33 km. Ma	400	4 N, 12	Off Cape Mendocino. 4°3 W; 0 = 21-45-14.4; (CGS).
12	July 23 3.4	05-31-52.7	35° 42!9	121° 14:2	a	13	N of San Simeon.
13	July 24 2.5	15-25-57.4	36° 21!5	120° 59!0	Ъ	7	SW of Llanada.
*14	July 25 4.5	08-44-25	41°2 Californi 0 = 08-44	126°.4 La. Depth fi 4-22.5; h fix	0 Exed a	USCGS	Off coast of Northern: 41°7 N, 126°9 W; Magnitude 5.3 (CGS).
*15	July 25 2.9	21-55-29	39°1	120°4	а	9	W of Truckee.
16	July 30 2.9	18-13-30.0	37° 43!8	121° 45!5	d	8	N of Livermore.
17	July 31 3.5	06-54-27.5	36° 33!1	121° 12!0	Ъ	14	S of Vineyard.
17	July 31 3.1	18-33-45.4	36° 34:7	121° 13!0	a	7	Aftershock of 17.
18	Aug. 1 2.5	06-47-27.3	36° 13!5	120° 51!4	a	7	NW of Priest.
18	Aug. 1 2.5	13-26-32.9	36° 13!9	120° 50!7	a	6	Aftershock of pre- ceding earthquake.
19	Aug. 8 2.5	16-29-09.4	36° 43!7	121° 25:3	a	9	W of Vineyard.
20	Aug. 13 2.6	07-36-08.4	36° 27!7	121° 04!5	a	9	SW of Llanada.
21	Aug. 13 2.8	16-19-27.5	36° 45!2	121° 34!3	b	5	S of San Juan Bautista. Felt: Hollister area.
22	Aug. 13 2.4	21-28-51.8	36° 28!7	121° 07:8	a	8	W of Llanada.

Map No.	Date 1965	M	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. of		Remarks
<u>17</u>	Aug. 15	3.2	23-06-53.8	Hollister	121° 12!6 area. USC 5; h = 16 kg	GS:		N, 121	Vineyard. Felt: 2 W; 0 = 2 (CGS).
17	Aug. 16	2.6	01-13-46.2	36° 34!0	121° 12!2	a	6		shock of Aug. 15 06-53.8.
17	Aug. 16	2.7	15-35-12.1	36° 34!2	121° 11!8	a	8		shock of Aug. 15 -53.8.
*23	Aug. 19	2.5	11-04-05	37.6	121:7	a	7	SE of	Livermore.
*24	Aug. 21	2.7	12-32-26	37:4	121:8	a	12	NW of	Mt. Hamilton.
25	Aug. 21	2.5	20-09-35.4	36° 27!7	121° 04:2	a	8	SW of	Llanada.
26	Aug. 23	2.6	03-50-12.8	36° 43!1	121° 26:4	a	11		Vineyard. Felt: s Ranch.
*27	Aug. 29	3.6	18-25-17	39°5 USCGS: 3	122°1 9°7 N, 122°	d 0 W;	13 ; 0 = 1		Orland. 5; h = 16 km.
*27	Aug. 29	3.2	21-28-50	39°5	122°1	d	5		shock of preced- arthquake.
28	Aug. 30	2.8	14-01-08.1	36° 34!6	121° 13!1	a	13	S of	Vineyard.
*29	Aug. 30	3.2	20-15-38	37:8	119:0	a	8	Mono	Lake area.
*30	Aug. 31	3.0	04-39-47	38:8	119:5	a	13	W of	Yerington, Nevada.
31	Sept. 2	2.8	08-02-37.8	36° 34!0	121° 14!8	b	14	S of	Vineyard.
28	Sept. 2	2.9	08-16-21.0	36° 33!8	121° 13:1	b	14	W of	Llanada.
32	Sept. 3	2.6	18-39-38.6	37° 04:7	120° 58!1	b.	5	NW of	Los Banos.
33	Sept. 6	2.6	08-38-44.7	38° 00!4	121° 49!7	С	8		Antioch. Foreshock.
CIT	Sept. 6	3.4	18-00-57.8	35° 57!8	120° 03!3				Coalinga.
34	Sept. 7	2.8	01-29-31.2	36° 48!6	121° 33!2	С	9		Hollister.
33	Sept. 10	4.9	21-28-34.3	Fremont, USCGS: 3	Concord, Sa	an R	afael,	ancis	Antioch. Felt: co, Sacramento, nore, Pittsburg. 33.5; h = 16 km.
33	Sept. 10	2.6	21-38-11.3	38° 00!3	121° 49!9	С			rshock of Sept. 10 1-28-34.3.
33	Sept. 11	2.8	00-08-33.4	37° 59!8	121° 50!3	Ъ			rshock of Sept. 10 1-28-34.3.
35	Sept. 12	2.5	08-50-05.5	36° 29!8	121° 07:3	a	7	W of	Llanada.
36			09-09-24.2	Hollister	121° 21!6 r area. USG . Magnitude	CGS:	36°6	N, 12	Vineyard. Felt: 1°5 W; 0 =
37	Sept. 16	5.0	04-10-08	40°5 Depth fired	125°8 xed. USCGS at 33 km. 1	: 4	0.4 N,	125°7	Cape Mendocino. W; 0 = 04-10-22.6; GS).
CI	T Sept. 19	4.8	15-42-07.8		120° 02!3				Cholame.

Map No.	Date 1965	<u>M</u>	Origin Time (G.C.T.)			<u>h</u>	No. of Stas. Remarks
38	Sept. 20	3.5	01-15-47.5	37° 47!6	122° 11!1	a	15 S of Berkeley. Felt: East Bay region.
*39	Sept. 22	4.3	21-49-26	37:4 USCGS: 3			15 Bishop area.; 0 = 21-49-25.8; h = 16 km.
*40	Sept. 22	3.5	23-56-45	37:3	118:5	a	5 Bishop area.
*41	Sept. 23	3.0	08-57-15	37.5	118:5	a	4 Bishop area.
42	Sept. 25	2.8	09-51-13.4	36° 34!1	121° 12:0	a	6 W of Llanada.
*43	Sept. 26	3.7	15-47-41		ed. USCGS:	40	8 Off Cape Mendocino. 0°5 N, 124°6 W; 0 = 15-47-42; itude 4.3 (CGS).
44	Sept. 27	3.1	13-32-59.6		121° 38!8		8 SW of Mt. Hamilton.
45	Sept. 30	2.6	19-09-41.2	36° 33!4	120° 43!9	Ъ	9 SE of Llanada.

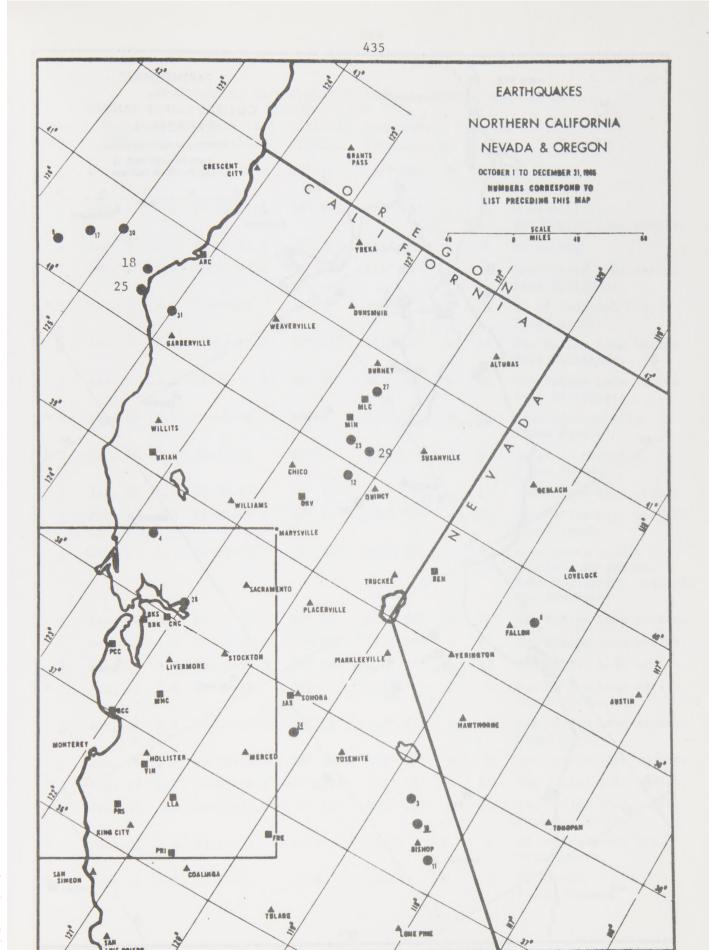


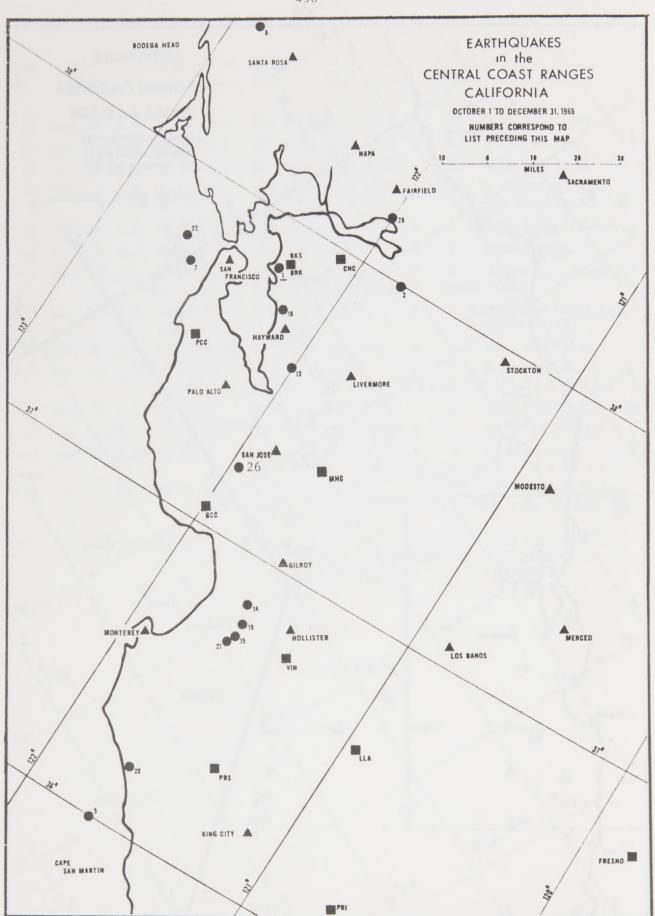


EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

Map	Date			Latitude		I	No. of	Devende
No.	1965	M	(G.C.T.)	North	West	<u>n</u>	Stas.	Remarks
-	Oct. 4	4.8	01-44-41.8	44.2 Data from			7 fixed.	Off coast of Oregon.
-	Oct. 4	5.1	04-12-49.1	44.0 Data from	128:3 USCGS. De	33 pth f	9 fixed.	Off coast of Oregon.
1	Oct. 8	2.4	07-08-49.4	37° 51.5	122° 17:0	Ъ	7	W of Berkeley. Felt: Berkeley, Oakland.
2	Oct. 12	2.6	23-51-56	38° 00'	121° 49'	Ъ	10	Aftershock of Sept. 10 at 21-28-34.3.
* 3	Oct. 13	3.2	00-43-00	37°7	118:7	a	5	S of Mono Lake.
1	Oct. 18	2.9	12-20-00.4		122° 17:0 San Franci		12 Oakla	SW of Berkeley. Felt: nd, Alameda, Orinda.
* 4	Oct. 18	3.0	23-19-00	38:6	122.7	0	9	SW of Rumsey. Depth fixed.
* 5	Oct. 22	2.7	02-29-22	36:0	121.7	0	6	Off coast, W of King City. Depth fixed.
6	Oct. 25	2.6	04-50-30.1	38° 29!3	122° 52!6	a	9	NW of Santa Rosa. Felt: Healdsburg.
7	Oct. 25	2.9	16-50-07.6	37° 42!9	122° 36.'0	a	7	W of Ft. Funston. Felt: San Francisco.
* 8	Nov. 1	4.3	17-10-15	USCGS: 3	118°5 9°3 N, 118° gnitude 4.4	5 W;	11 0=17-	E of Fallon, Nev. 10-16.3; h fixed at
* 9	Nov. 3	4.0	00-46-35	40°3 Depth fix h fixed a	125°5 ed. USCGS: t 33 km; ma	: 40	°4 N,	Off Cape Mendocino. 125°9 W; 0=00-46-33.9; 4.
*10	Nov. 3	3.5	23-06-24	37:5	118:5	a	5	Bishop area.
*11			23-28-13	37°3	118:2	a	6	Bishop area.
12	Nov. 8	3.4	03-29-59.1	39° 57:6	121° 15!7	a	6	NW of Quincy. Felt: Beldon, Storrie.
13	Nov. 9	2.5	07-21-43.9	37° 35:7	122° 00!2	ъ	10	Near Hayward.
14	Nov. 9	2.5	12-57-20.0	36° 50:8	121° 37.'9	a	14	NW of Hollister.
15	Nov. 9	2.5	22-58-55.5	36° 44:2	121° 36!2	a	8	NW of Hollister.
	Nov. 15		02-02-13.8	37° 44.0	122° 10:4	а	7	S of Berkeley. Felt: South Oakland.
*17	Nov. 15	4.3	06-50-02	40°5 Depth fix h fixed a	125°3 med. USCGS at 33 km; ma	: 40	0°4 N,	Off Cape Mendocino. 125°8 W; 0=06-49-59; 8.
*18	Nov. 26	4.2	00-58-42	40°5 Depth fix h = 7 km;	124°5 magnitude	: 40	°3 N,	Off Cape Mendocino. 124°3 W; 0=00-58-43;

Map No.	Date 1967	M	Origin Time (G.C.T.)	Latitude North	Longitude West 1		No. of Stas.	Remarks
19	Nov. 28	2.8	15-05-13.0	36° 46:5	121° 35:4	a	12	W of Hollister.
20	Dec. 2	2.8	22-29-13.0	36° 12!1	121° 40!9	8.	9	W of Paraiso.
21	Dec. 3	2.5	23-28-58.1	36° 43:6	121° 37:4	a.	8	W of Hollister.
22	Dec. 12	2.5	02-15-46.0	37° 46!8	155, 70;7	a	4	W of Golden Gate, San Francisco.
23	Dec. 12	4.0	12-57-49.8	40° 12:1	121° 27!9	a	8	Near Lake Almanor.
*10	Dec. 13	3.0	21-01-02	37°5	118:5	a	5	Bishop area.
*24	Dec. 15	2.5	00-26-46	37°7 of Dec. 2	120:2 2 at 00-19-3	0	6 Depth	Yosemite. Foreshock fixed.
*25	Dec. 15	3.0	03-43-52	40:4	124:4	0	5	Off Cape Mendocino. Depth fixed.
26	Dec. 20	2.5	17-10-48.3	37° 14:2	121° 59:0	8.	10	Near Los Gatos.
*27	Dec. 20	3.6	18-31-00	40:7 USCGS: 4	121:5 0:7 N, 121:1	a 4 W;	18 0=18-	N of Mineral. 31-01.5; h fixed 33 km.
*24	Dec. 22	3.1	00-19-17	37:7	120:2	0	8	Yosemite. Depth fixed.
28	Dec. 25	3.1	13-54-34.8	38° 09:0	122° 00!9	8.	10	SW of Fairfield.
*29	Dec. 26	2.5	03-29-36	40:2 USCGS: 4		a. 5 W;		Lake Almanor. $29-36$; $h = 16$ km.
*30	Dec. 29	4.0	02-02-38	40°7 Depth fix h fixed a	ed. USCGS:	40	12 :6 N,	Off Cape Mendocino. 125°2 W; 0=02-02-39;
*31	Dec. 30	3.3	09-11-51	40°3 Depth fix h = 16 km		40	°3 N,	N of Garberville. 123:8 W; 0=09-11-54;



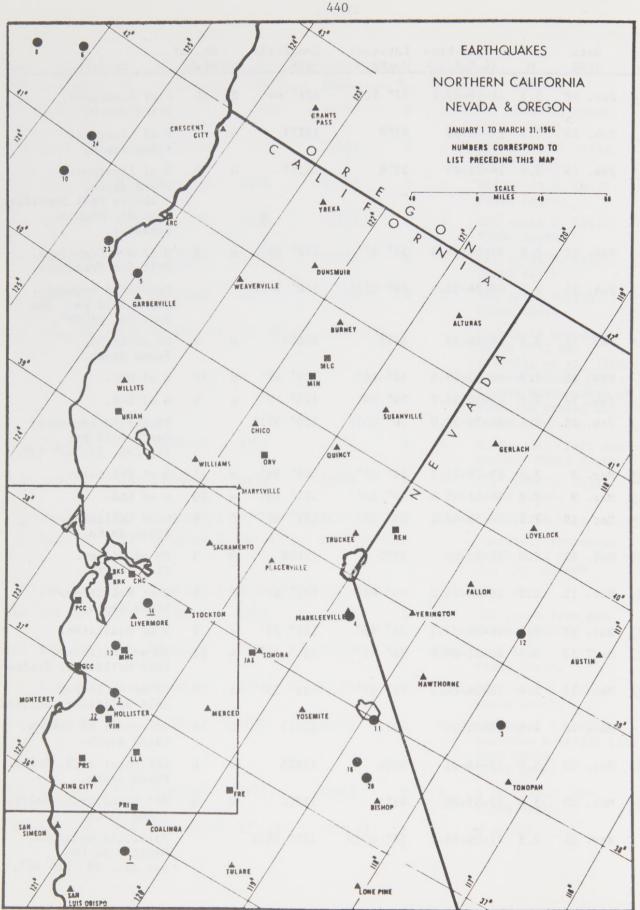


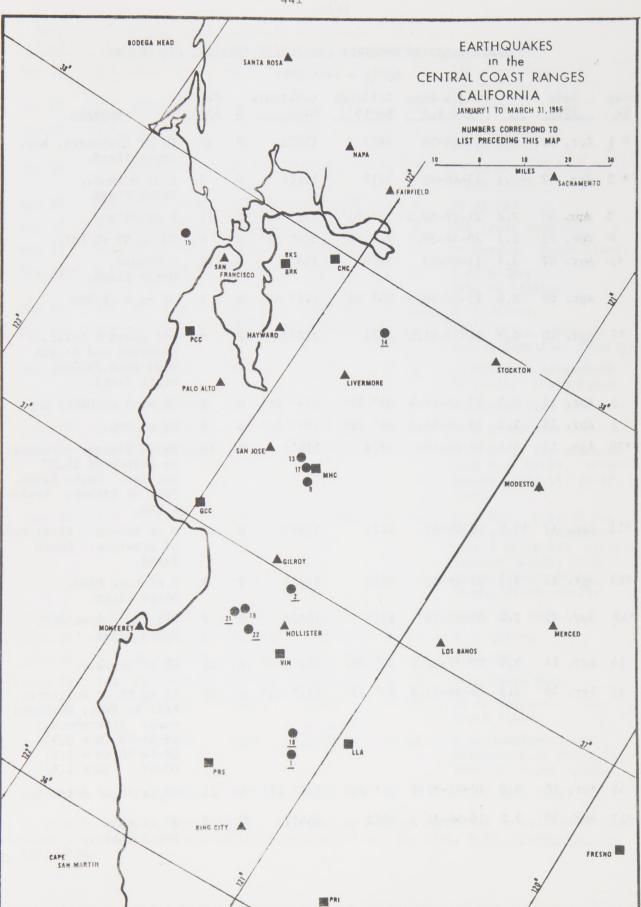
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - March 1966

			Jai	nuary - Mai	ch 1966			
Map No.	Date 1966	<u>M</u>	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. o	
1	Jan. 2	2.5	07-59-27.2	36° 31'	121° 08'	0	9	SW of LLA. Fixed depth.
2	Jan. 3	2.2	15-38-38.6	36° 58'	121° 28'	a	8	N of Hollister. San Felipe Lake series.
1	Jan. 3	2.6	23-49-52.6	36° 31'	121° 10'	Ъ	8	SW of LLA.
2	Jan. 5	2.9	05-55-06.4	36° 59'	121° 28'	a	9	San Felipe Lake series. Felt Hollister.
* 3	Jan. 8	3.5	11-04-02	38°5	117:7	0	5	NW of Tonopah, Nev. Fixed depth.
2	Jan. 9	2.5	00-03-20.6	36° 58'	121° 28'	a	13	San Felipe Lake series. Felt Hollister.
2	Jan. 9	3.3	00-08-00.9	36° 58'	121° 28'	a	14	San Felipe Lake series. Felt Hollister.
* 4	Jan. 10	3.1	02-48-38	38.7	119:8	0	13	Near Markleeville. Fixed depth.
* 5	Jan. 10	3.4	21-10-01	40°3	124°0	0	10	NW of Garberville. Fixed depth.
2	Jan. 14	2.6	00-30-12.0	36° 58'	121° 29'	b	10	San Felipe Lake series.
2	Jan. 17	3.3	01-48-08.1	36° 59'	121° 29'	0	13	San Felipe Lake series. Fixed depth.
2	Jan. 17	4.1	02-03-20.0	36° 59'	121° 29'	а	16	Main shock of San Felipe Lake series. Felt Hollister, Oakland, San Francisco.
2	Jan. 17	3.1	02-23-37.3	36° 59'	121° 29'	Ъ	12	San Felipe Lake series.
2	Jan. 17	3.0	02-48-37.6	37° 00'	121° 28'	a	13	San Felipe Lake series.
2	Jan. 17	2.8	06-22-56.5	37° 00'	121° 30'	Ъ	13	San Felipe Lake series.
* 2	Jan. 17	2.6	10-36-17	37:0	121°5	0	9	San Felipe Lake series. Fixed depth.
2	Jan. 19	2.4	15-04-48.8	36° 58'	121° 27'	0	9	San Felipe Lake series. Fixed depth.
2	Jan. 19	2.4	19-51-15.7	36° 58'	121° 29'	Ъ	9	San Felipe Lake series.
2	Jan. 19	2.7	20-02-34.3	36° 58'	121° 29'	Ъ	11	San Felipe Lake series.
<u>2</u> <u>2</u>	Jan. 21	3.5	04-10-36.0	36° 59'	121° 28'	a	14	San Felipe Lake series. Felt Hollister.
* -	Jan. 22	3.6	13-50-29	41.6	117:3	0	4	NE of Lovelock, Nev. Fixed depth.
* -	Jan. 22	4.1	15-17-04	36°5	114.7	0	4	SE Nevada. Fixed depth.

Map No.	Date 1966	M	Origin Time	Latitude North	Longitude West	<u>h</u>	No. of Stas.	Remarks
* -	Jan. 22	3.6	17-18-37	41.5	127°3	0	5	Off coast N. Calif. Fixed depth.
* 6	Jan. 22	3.3	17-23-49	41.7	126:1	0	6	Off coast N. Calif. Fixed depth.
* -	Jan. 23	3.9	07-41-13	41.2	126°.7	0	5	Off coast N. Calif. Fixed depth.
* -	Jan. 24	3.8	02-21-32	41:2	127°2	0	5	Off coast N. Calif. Fixed depth.
* -	Jan. 24	3.8	02-32-24	41.7	126.7	0	5	Off coast N. Calif. Fixed depth.
* -	Jan. 24	3.3	08-26-37	42°5	127°3	0	5	Off coast Oregon. Fixed depth.
7	Jan. 28	3.0	01-49-47.4	35° 50!3	120° 27 ! 5			Parkfield sequence. Depth 0-12 km. McEvilly et al. (1967). The Parkfield, California Earthquakes of 1966, (in press) Bull. Seism. Soc. Am.
* -	Jan. 28	4.8	18-00-07	41.7	118:2	0	10	N. Nevada. Felt Wine-mucca. Fixed depth.
* 8	Jan. 29	3.8	16-09-04	41°5	126.6	0	5	Off coast N. Calif. Fixed depth.
2	Jan. 29	2.3	18-43-52.4	37° 00'	121° 30'	Ь	10	San Felipe Lake series.
7	Feb. 01	2.9	00-20-44.3	36° 02!0	120° 34!6			Parkfield sequence. Depth 0-12 km. See Jan. 28, 01 ^h 49 ^m .
9	Feb. 02	2.8	13-07-56.1	37° 18'	121° 40'	а	11	S of MHC.
*10	Feb. 04	3.9	02-43-16	40°7	125°4	0	5	Off coast from ARC. Fixed depth.
*11	Feb. 06	3.8	05-03-25	38°0	118.9	0	12	Mono Lake. Fixed depth.
* -	Feb. 06	4.8	10-16-14	40°3	127°1	0	5	Off coast N. Calif. Fixed depth.
* _	Feb. 06	3.7	20-21-12.3	40°4	126°1	33	9	Off coast N. Calif. Location & origin time from USCGS. Fixed depth.
*12	Feb. 07	3.2	16-20-22	39°3	118:0	0	. 5	E of Fallon, Nev. Fixed depth.
13	Feb. 08	3.0	06-57-02.0	37° 21'	121° 45'	a	11	W of MHC.

Map No.	Date 1966	M	Origin Time (G.C.T.)	Latitude North	Longitude West	h	No. o	Remarks
14	Feb. 10	3.3	14-19-47.1	37° 51'	121° 44'	0	10	N of Livermore. Fixed depth.
*14	Feb. 10	3.3	14-20-09	37.8	121:7	0	2	N of Livermore. Fixed depth.
*14	Feb. 10	3.9	14-21-08	37°8	121°7	0	8	N of Livermore. Fixed depth. 3 shocks felt Danville. Felt Mt. Diablo, Berkeley.
15	Feb. 13	2.6	17-10-28.4	37° 47'	122° 39'	a	5	W of San Francisco. Felt San Francisco.
7	Feb. 14	2.4	00-24-03.9	36° 01!4	120° 34!1			Parkfield sequence. Depth 0-12 km. See Jan. 28, 01 ^h 49 ^m .
*16	Feb. 14	3.3	20-58-59	37°6	118:8	0	8	NW of Bishop. Fixed depth.
17	Feb. 16	2.7	04-53-43.6	37° 18'	121° 42'	a	10	W of MHC.
18	Feb. 22	2.5	03-50-34.2	36° 35'	121° 10'	a	9	W of LLA.
7	Feb. 25	2.4	01-34-38.0	36° 03!6	120° 37!9			Parkfield sequence. Depth 0-12 km. See Jan. 28, 01 ^h 49 ^m .
19	Mar. 7	2.8	18-29-27.3	36° 50'	121° 36'	a	13	W of Hollister.
18	Mar. 9	2.8	04-11-45.4	36° 36'	121° 10'	a	10	W of LLA.
19	Mar. 10	2.6	20-52-47.1	36° 49'	121° 36'	0	8	W of Hollister. Fixed depth.
*20	Mar. 12	3.0	11-03-04	37°5	118.6	0	5	NW of Bishop. Fixed depth.
21	Mar. 12	2.5	16-59-23.0	36° 48'	121° 37'	0	9	W of Hollister. Fixed depth.
21	Mar. 12	2.5	16-59-57.1	36° 48'	121° 39'	С	. 7	W of Hollister.
22	Mar. 16	3.4	18-21-09.9	36° 47'	121° 33'	a	13	SW of Hollister. Felt Hollister, Salinas.
22	Mar. 16	3.6	18-24-04.1	36° 47'	121° 33'	a	8	SW of Hollister. Felt Hollister, Salinas.
* _	Mar. 18	4.3	18-05-24	43°7	127:3	0	6	Off coast of Oregon. Fixed depth.
*23	Mar. 23	4.0	22-48-01	40°4	124.5	0	6	Off coast of N. Calif. Fixed depth.
*24	Mar. 29	3.6	12-55-08	41°1	125:4	0	6	Off coast of N. Calif. Fixed depth.
7	Mar. 31	2.5	21-28-45.2	36° 02!9	120° 36!2			Parkfield sequence. Depth 0-12 km. See Jan. 28, 01 ^h 49 ^m .





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON April - June 1966

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Map No.	Date 1966	<u>M</u>	Origin Time (G.C.T.)	Latitude North	Longitude West	<u>h</u>	No. o	
* 1	Apr. 02	4.8	12-48-38	38:7	118:1	0	14	NE of Hawthorne, Nev. Depth fixed.
* 2	Apr. 02	+3.3	15-40-40	37°7	118:4	0	7	N of Bishop. Depth fixed.
3	Apr. 03	2.6	21-17-58.5	37° 00'	121° 46'	a	11	W of Gilroy.
4	Apr. 05	2.7	20-44-58.7	36° 14'	120° 51'	a	9	10 km NW of PRI.
*5	Apr. 07	3.7	11-00-50	38°8	119:4	0	12	W Nevada. Depth fixed.
6	Apr. 09	2.6	15-32-40.5	36° 48¹	121° 37'	Ъ	7	30 km W of HRC.
*7	Apr. 10	4.5	22-27-01.8	41.4	125°5	33	6	Off coast N Calif. Location and origin time from USCGS. Depth fixed.
8	Apr. 15	2.5	17-19-18.4	36° 57'	121° 26'	a	9	30 km N of HRC.
9	Apr. 15	2.8	19-50-56.5	36° 35'	121° 14'	a	9	NE of PRS.
*10	Apr. 17	4.1	07-04-19	37°.4	118.5	0	12	NW of Bishop. Preceded by foreshock 15.5 ^s earlier. Depth fixed. Felt at Bishop. Awakened a few.
*11	Apr. 17	+3.0	07-20-17	37.7	118:3	0	12	N of Bishop. Aftershock of previous. Depth fixed.
*12	Apr. 18	3.3	06-49-30	36°5	118°3	0	9	W of Lone Pine. Depth fixed.
*13	Apr. 21	3.2	09-43-28	40°5	125°0	0	7	Off coast from ARC. Depth fixed.
14	Apr. 24	3.6	00-47-01.5	39° 39'	120° 20'	a	11	NE of Truckee.
15	Apr. 29	3.8	08-09-27.2	36° 37'	121° 15'	а	10	15 km SE of Hollister. Felt by many; awakened some. Aftershocks: 08-14-10 (M = 0.9) 08-14-50 (M = 1.8) 08-17 (M = 1.6)
16	Apr. 29	3.0	10-01-52.3	37° 25'	119° 25'	Ъ	11	25 km SW of Yosemite.
*17	Apr. 29	3.2	10-58-22	40°3	124°7	0	5	SW of ARC. Depth fixed.

Map No.	Date 1966	M	Origin Time (G.C.T.)	Latitude North	Longitude West		No. of Stas.	Remarks_
*18	May 01	3.5	09-13-14	41.2	125°1	0	3	Off coast from ARC. Depth fixed.
9	May 02	2.5	12-18-27.5	36° 36'	121° 13'	a	10	NE of PRS.
*19	May 03	+3.3	18-25-27	37:3	118:4	0	5	S of Bishop. Depth fixed.
*20	May 04	3	00-17-59	39°6	120°5	0	5	15 km NW of Truckee. Depth fixed.
9	May 04	2.5	06-32-44.8	36° 34'	121° 15'	Ъ	8	NE of PRS.
21	May 05	2.5	15-07-10.5	36° 56'	122° 13'	a	7	Off coast from GCC.
*22	May 11	3.4	14-04-00	41.4	119:4	0	4	NW Nevada. Depth fixed.
23	May 13	4.5	17-25-55.9	36° 55'	121° 34'	b	12	S of Gilroy. Felt at Salinas.
23	May 13	3.2	19-46-09.7	36° 56'	121° 33'	Ъ	10	S of Gilroy.
24	May 24	4.6	03-49-55.1	39° 47!0	121° 46!2	20	8	NE of Chico. Felt at Chico, Oroville, Paradise.#
*25	May 30	+3.5	09-39-02	38°4	118:1	0	12	SW Nevada. Aftershock at 15-11. Depth fixed.
21	June 02	2.9	13-12-20.4	36° 58'	122° 12'	a	7	Off coast from GCC.
26	June 03	2.5	14-22-58.4	37° 53'	122° 17'	a	5	Felt at Albany.
27	June 05	+2.5	20-49-51.8	37° 19'	121° 40'	а	7	W of MHC. Foreshock of June 6 at 07-23. Aftershocks at 20-15; 20-52; 20-53.
27	June 06	3.7	07-23-13.9	37° 19'	121° 44'	b	14	W of MHC. Felt at San Jose (UPI). Foreshock June 5 at 20-49. After- shocks: 07-25; 07-27; 07-28; 07-29; 07-35; 08-04; 08-14; 08-29.
28	June 11	2.8	10-08-59.4	37° 42'	122° 34'	a	8	SW of San Francisco.
29	June 14		12-45-14.0	39° 59'	120° 28'	a	8	E of Quincy.
30	June 18	3.5	06-03-53.5	40° 17'	121° 12'	a	14	E of MIN.
31	June 19	2.8	16-05-31.4	38° 19'	122° 40'	a	8	S of Santa Rosa.
* 1	June 20	3.4	18-45-42	38°6	118:1	0	11	NE of Hawthorne, Nev. Depth fixed.
*32	June 20	3.4	19-58-57	38.5	118°4	0	11	E of Hawthorne, Nev. Aftershock at 20-08-55 (M=2.9). Depth fixed.
33	June 20	2.8	23-19-18.6	36° 20'	120° 58'	a	9	NE of King City.

[#]cf. C. Lomnitz and B.A. Bolt (1967). Evidence on Crustal Structure in California from the Chase V Explosion and the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

57, 1093-1114.

| Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

100 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

101 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

102 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

103 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

104 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

Bull. Seism. Soc. Am.

105 | Mathematical Structure of California from the Chico Earthquake of May 24, 1966,

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Map No.	Date 1966	M	Origin Time (G.C.T.)	Latitude North.	Longitude West	<u>h</u>	No. of Stas.	Remarks
* 1	June 21	3.1	05-55-00	38°6	118°2	0	8	NE of Hawthorne, Nev. Depth fixed.
34	June 24	3.1	21-42-50.4	36° 30'	120° 51'	a	10	SE of LLA.
35	June 27	3.1	06-04-28.7	38° 29'	122° 50'	b	9	NE of Santa Rosa.
*36	June 27	3.6	07-40-17	38°9	119:3	0	15	Near Woodfords, Calif. Aftershocks: 07-51; 07-53; 08-07; 08-20; Magnitudes 1.7 to 2.4. Also 08-42; 09-07 (M about 1.8). Depth fixed.
*37	June 29	3.1	07-23-40	40°9	125°2	0	6	Off coast from ARC. Depth fixed.

PARKFIELD SEQUENCE

April 1, 1966 to June 30, 1966.

McEvilly et al. (1967). The Parkfield, California Earthquakes of 1966,

Bull. Seism. Soc. Am., 57, 1221-1244.

	ate 966	Magnitude	Time (GMT) h m s		itude (N)	-	gitude (W	1)	Depth
A	pr. 12	2.3	15-31-39.8	36	06.4	120	42.2		
M	ay 11	2.3	17-37-01.1	35	59.5	120	34.0		
M	ay 23	2.5	08-07-37.6	36	01.0	120	34.0		
M	ay 23	2.2	08-11-07.0	36	01.0	120	34.0		
M	ay 27	2.7	15-36-03.7	35	58.9	120	30.7		
J	une 18	2.0	16-32-17.6	35	57.6	120	31.6		
J	une 28	3.1	01-00-31.5	35	56.9	120	30.7		
*J	une 28	1.8	01-14-55	-	-	-	-		
J	une 28	5.1	04-08-56.2	35	57.6	120	30.3		
***J	une 28	-	04-09-53	-	-	-	-		
J	une 28	2.6	04-18-34.0	35	56.6	120	31.5		
J	une 28	5.5	04-26-13.4	35	57.3	120	29.9		
***J	une 28	-	04-26-28		-	-	-		
***J	une 28	-	04-26-34	-	-	-	-		
***J	une 28	-	04-27-37	-	-	-	-		
***J	une 28	-	04-27-58	-	-	-	-		
***J	une 28	-	04-28-19	-	-	-	-		
***J	une 28	-	04-28-36	-	-	_	_		
*J	une 28	4.5	04-28-38	-	-	-	-		
***J	une 28	-	04-28-46	-	-	_	-		

Date 1966		Magnitude	Time (GMT) h m s		tude (N) Min.	Long:	itude (W) Min.	Depth
***June	28	-	04-29-13	_	-	-	_	
*June	28	3.0	04-31-55	-	_	_	-	
*June	28	3.5	04-32-50	-	-	-	-	
June	28	3.0	04-34-59.1	35	49.3	120	23.5	
*June	28	3.0	04-39-08	-	-	-	-	
June	28	2.4	04-42-33.6	35	50.0	120	22.8	
June	28	2.7	04-43-54.8	35	56.6	120	33.5	
*June	28	3.0	04-46-22	-	-	-	-	
*June	28	2.4	04-51-43	-		-	-	
June	28	3.1	05-00-59.5	35	50.6	120	23.5	
June	28	2.4	05-03-44.7	35	53.4	120	27.4	
June	28	2.5	05-09-48.3	35	38.5	120	07.5	
June	28	2.9	05-12-42.5	35	55.0	120	28.2	
*June	28	2.1	05-17-05	-	-	-	-	
*June	28	2.0	05-21-05	-	-	-	-	
June	28	2.1	05-29-14.9	35	55.2	120	28.5	
June	28	2.5	05-37-04.6	35	52.4	120	26.1	-
June	28	2.7	05-40-19.4	35	55.9	120	29.4	000 One
June	28	3.2	05-45-59.1	35	44.7	120	19.5	1.6
*June	28	2.2	05-48-26	-	-	-	-	
June	28	2.1	05-51-34.0	35	52.1	120	25.7	
*June	28	2.3	05-52-06		-	-	-	
*June	28	2.4	05-52-58	-	-	-	-	00.00
*June	28	2.1	05-56-00	-	-	-	-	
June	28	2.6	06-11-03.5	35	48.6	120	21.2	
June	28	3.4	06-32-17.9	35	56.2	120	31.0	
June	28	3.0	06-35-11.4	35	47.6	120	22.9	gas 6-4
June	28	2.2	06-39-31.2	35	53.7	120	27.8	
June	28	2.2	07-01-03.8	35	54.5	120	28.9	per 000
June	28	2.7	07-33-52.7	35	54.2	120	27.1	align sent
*June	28	2.3	07-41-43	-	-	-	-	
June	28	3.0	07-45-48.3	35	53.5	120	27.6	
June	28	2.4	08-14-48.6	35	50.4	120	24.8	
June	28	2.0	08-47-52.4	35	51.4	120	24.7	

Date 1966	Magnitude	Time (GMT)		tude (N)	Longi Deg.	tude (W)	Depth
June 28	2.3	08-54-49.5	35	54.8	120	30.4	
June 28	2.5	08-59-52.3	35	50.8	120	25.4	
June 28	2.4	09-31-26.6	35	46.1	120	20.9	
June 28	2.2	09-33-54.3	35	46.2	120	21.6	
June 28	2.5	09-56-00.7	35	49.5	120	23.8	
June 28	2.1	10-16-53.3	35	55.4	120	32.2	
June 28	2.3	10-20-16.4	35	50.8	120	25.4	
June 28	2.5	10-23-22.8	35	55.6	120	29.0	
June 28	2.0	10-46-22.9	35	55.5	120	30.2	
June 28	2.0	11-15-13.9	35	50.7	120	25.2	
June 28	2.0	11-28-41.4	35	51.1	120	22.8	
June 28	2.2	11-30-14.0	35	53.8	120	27.9	
June 28	2.5	12-31-52.1	35	55.3	120	28.5	
June 28	2.3	12-52-22.0	35	58.4	120	31.5	
June 28	2.1	12-54-28.2	35	57.7	120	31.7	
*June 28	2.7	13-48-22	-	-	-	-	
June 28	2.6	14-13-09.3	35	55.5	120	28.8	
June 28	2.2	14-21-36.3	35	55.4	120	28.7	
June 28	2.3	14-51-53.6	35	53.9	120	28.0	
June 28	2.3	18-12-19.4	35	55.3	120	29.9	
*June 28	2.0	18-22-32	-	-	-	-	
June 28	2.5	18-54-55.3	35	52.8	120	26.5	
June 28	2.8	19-59-37.8	35	55.7	120	27.6	
June 28	2.5	20-00-36.7	35	54.8	120	29.2	
June 28	3.1	20-46-56.4	35	46.0	120	23.9	
June 28	2.0	22-01-18.9	35	51.1	120	25.7	
June 28	2.0	22-37-56.7	35	52.5	120	24.7	
June 28	2.5	23-57-22.3	35	46.2	120	21.5	
June 29	2.3	00-17-32.6	35	51.1	120	25.7	
June 29	3.6	02-19-39.9	35	54.6	120	31.3	
June 29	2.8	04-06-40.3	35	55.6	120	32.4	
June 29	2.3	07-28-59.4	35	55.6	120	28.9	
June 29	2.9	08-55-52.4	35	53.0	120	26.6	
June 29	2.5	09-20-50.1	35	47.2	120	22.3	
June 29	2.3	10-13-44.0	35	58.4	120	30.1	

Date 1966	<u>M</u>	agnitude	Time (GMT) h m s	Lati	ude (N) Min.	Long:	itude (W)	Depth
June	29	3.0	10-56-58.8	35	45.1	120	20.1	
June	29	2.4	12-30-09.0	35	56.1	120	29.6	
June	29	3.1	13-11-59.7	35	48.7	120	22.9	
June	29	2.0	15-18-38.9	35	57.1	120	20.3	
June	29	2.3	15-34-22.2	35	55.7	120	29.1	
June	29	2.1	16-03-30.1	35	51.9	120	26.9	-
June	29	2.0	17-10-28.3	35	48.9	120	21.6	
June	29	5.0	19-53-25.9	35	56.6	120	31.5	
June	29	2.5	20-44-40.0	35	43.8	120	17.0	
*June	29	2.3	23-48-12	-	-	-	-	
June	30	4.1	01-17-36.1	35	51.9	120	26.9	
June	30	2.6	03-36-16.8	35	54.7	120	27.7	
June	30	2.0	05-04-12.9	35	53.2	120	27.2	
June	30	2.4	06-07-21.5	35	56.4	120	28.6	
June	30	2.1	06-23-32.4	35	53.8	120	27.9	
June	30	2.0	07-37-12.1	35	54.0	120	28.2	
June	30	2.9	08-01-38.4	35	53.8	120	27.9	
June	30	2.8	11-07-55.1	35	46.9	120	19.8	12.2
June	30	2.3	13-26-05.7	35	46.8	120	20.8	4.0
June	30	2.0	13-29-56.6	35	51.5	120	24.4	7.7
June	30	2.1	13-40-50.9	35	49.9	120	22.6	3.5
June	30	2.3	16-05-02.7	35	57.8	120	30.5	10.3
June	30	2.1	19-06-17.5	35	51.9	120	25.1	4.8

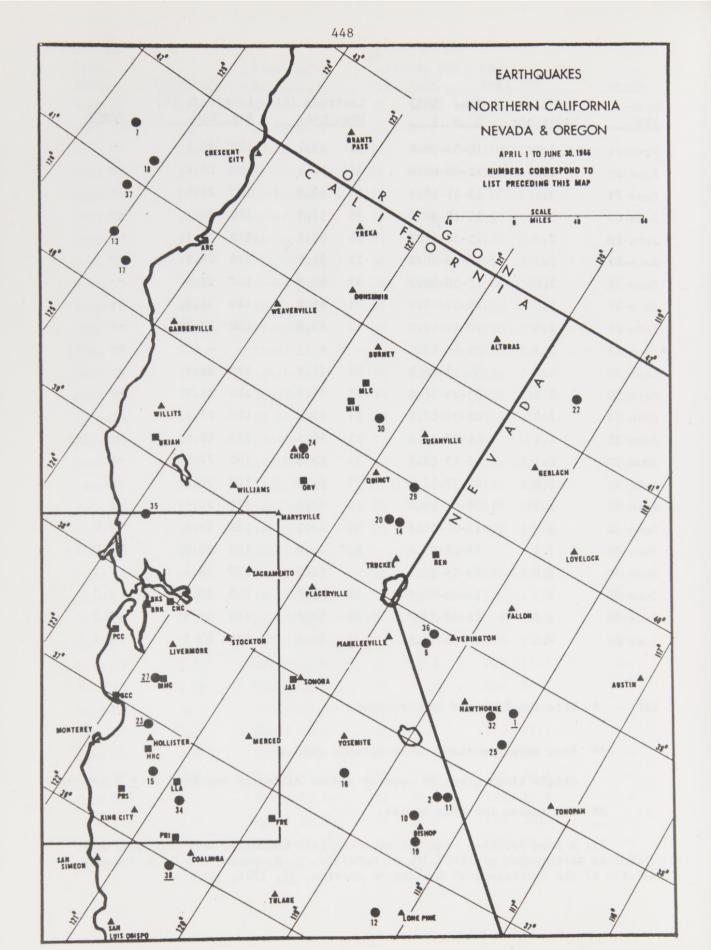
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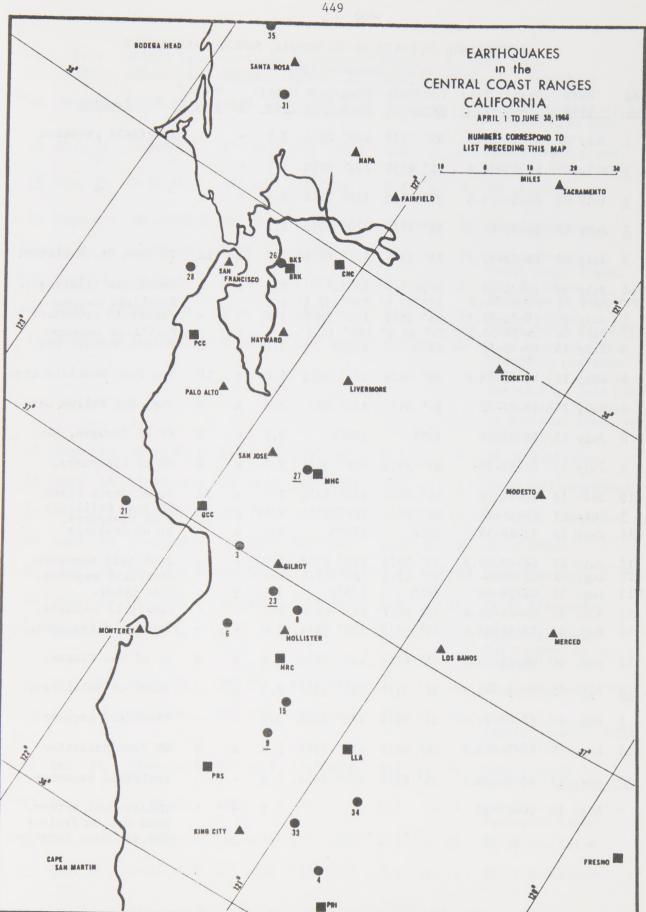
*** From strong motion accelerographs (USCGS).

Origin times given to nearest second estimated accurate to \pm 3 seconds.

38 Map number for this series.

For a more detailed study of the Parkfield sequence, see "The Parkfield, California Earthquakes of 1966", T. V. McEvilly, W. H. Bakum, and K. B. Casaday, Bulletin of the Seismological Society of America, <u>57</u>, 1221, 1967.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON July - December 1966

Map No.	Date 1966	Origin Time (G.C.T.)	Latitude North	Longitude M	-		as.	
1	July 01	09-41-21.9	35° 55!8	120° 30!5	3.2	-	-	Parkfield sequence.
2	July 02	12-08-34.8	35° 47!0	120° 20!0	3.7	-	-	" "
2	July 02	12-16-15.8	35° 48!5	120° 21!0	3.4	-	_	11 11
2	July 02	12-25-06.8	35° 47!5	120° 20!5	3.1	-	-	" "
3	July 03	08-22-57.7	37° 16'	121° 40!3	3.2	a :	12	SE from Mt. Hamilton.
* 4	July 03	18-21-48	40°4	125°1	3.6	a	5	Mendocino Escarpment.
CIT		20-22-24.2	35° 57.5'			_	-	Parkfield sequence.
1	July 05	18-54-54.5	35° 54!9	120° 28!9		-	-	Parkfield sequence.
CIT	July 04	05-28-50.3		120° 14.5'	2.9	-	-	Parkfield sequence.
* 5	July 10	09-41-10	37:3	118:3	3.2	-	5	S from Bishop, Nev.
6	July 11	16-22-23.4	36° 46!4	121° 36!5	3.0	a :	10	San Juan Bautista area.
7	July 14	19-27-22	37° 01'	121° 05'	2.6	a	9	Near San Felipe Lake.
* 8	July 15	09-05-25	37:7	116:4	3.4	-	4	SE of Tonopah, Nev.
9	July 17	02-33-26	37° 39!6	121° 36!1	3.2	Ъ	9	SE of Livermore.
10	July 19	10-44-18	36° 48!7	121° 18!6	2.7	-	11	Focal depth fixed.
9	July 19	12-57-41	37° 39'	121° 37'	3.3	a	10	SE from Hollister. E of Livermore.
*11	July 25	22-49-39	36°4	120°3	2.5	a	4	NE of Coalinga.
	041, 25							A
12	July 27	08-12-00.2	35° 53!7	120° 27!8	3.0	-	-	Parkfield sequence.
CIT	Aug. 01	12-05-34.5		120° 14.4 123°2	3.3	_	_	Parkfield sequence. N of Ukiah.
*13	Aug. 03	02-26-20	39°5			_	_	Parkfield sequence.
CIT	Aug. 03	09-41-36.4		120° 22:6'	3.3			
14	Aug. 03	12-39-05.8	35° 47!9	120° 23!4	3.4	-	-	Parkfield sequence.
15	Aug. 04	00-54-24.5	35° 43!5	121° 21!0	3.0	а	8	NW of San Simeon.
16	Aug. 05	05-54-43.3	36° 34!8	121° 13:4	2.5	b	7	South of Hollister.
1	Aug. 07	17-03-24.9	35° 56!2	120° 33!0	3.0	-	-	Parkfield sequence.
17	Aug. 18	11-36-55.8	36° 49!5	121° 33!3	2.5	а	9	NW from Hollister.
12	Aug. 19	22-51-20.1	35° 53!8	120° 26!6	3.3	-	-	Parkfield sequence.
-	Aug. 20	00-29-40	-	-	3.2	-	-	CalifNev. border. Data not sufficient for accurate location.

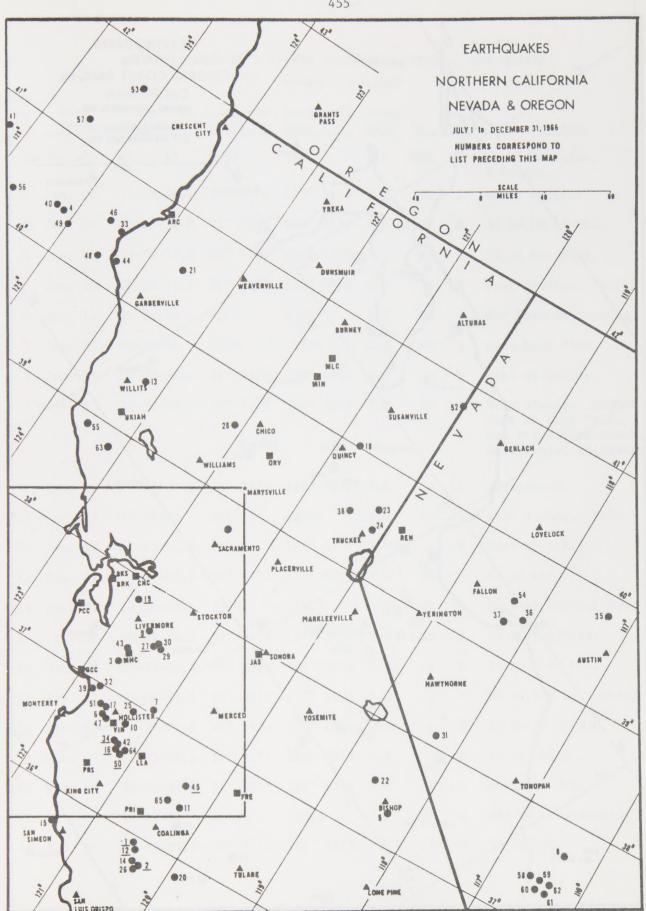
Map No.	Date 1966	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No. o:	
*18	Aug. 21	20-45-02	40°0	119:8	3.1	а	4	Focal depth fixed. Pyramid Lake area.
19	Aug. 29	17-30-10.8	37° 48!7	121° 55 ! 5	3.0	a	5	Focal depth fixed. NW from Livermore.
19	Aug. 29	17-32-42	37° 47'	121° 54'	2.6	a	5	NW of Livermore.
20	Sept. 07	00-20-50.5	35° 50'	119° 56'	3.2	С	9	SE of Coalinga.
*21	Sept. 10	15-39-07.5	40°5	123:6	3.0	a	5	SE of Arcata. Focal depth fixed.
*22	Sept. 11	19-25-24	37:5	118:6	3.5	a	9	NW of Bishop. Focal depth fixed.
*23	Sept. 11	20-36-18	39:6	120°2	3.4	a	8	N of Truckee. Focal depth fixed.
24	Sept. 12	16-41-01.9	39° 25'	120° 09'	6.0	a	10	N of Truckee. Felt widely in northern Calif., Nev. and as far east as Salt Lake City, Utah. Damage at Truckee, Boco, Verdi and Reno.
25	Sept. 13	06-31-45.5	36° 55'	121° 16'	2.7		8	NE of Hollister.
26	Sept. 18	3 15-09-55.7	35° 44!4	120° 20!9	3.1	-	-	Parkfield sequence.
27	Sept. 20	04-14-54.8	37° 32!0	121° 29!3	3.3	a	12	NE of Mt. Hamilton.
28	Sept. 25	13-05-39.9	39° 36!7	122° 06!7	3.0	a	6	SW of Chico.
29	Sept. 28	3 08-51-36.8	37° 32!0	121° 24!4	2.7	a	9	SE of Livermore.
30	Sept. 28	8 08-56-01.2	37° 32!7	121° 26!8	2.8	a	11	SE of Livermore.
*31	Oct. 01	02-57-58	38°1	118°3	3.7	-	-	USCGS location. CalifNev. border region.
27	Oct. 02	21-46-30	37° 33'	121° 27'	2.5	a	10	NE of Mt. Hamilton.
16	Oct. 10	06-53-46	36° 35!4	121° 13!2	4.1	b	12	Bear Valley, San Benito County. Felt in Hollister.
32	Oct. 14	20-34-28.9	36° 59!5	121° 44!6	4.2	b	12	Near Corralitos. Felt in Hollister.
*33	Oct. 15	22-59-14	40°5	124:4	4.2		6	Focal depth fixed. Mendocino coast.
34	Oct. 20	08-00-10.4	36° 37!0	121° 16:2	2.7	a	10	SE of Hollister.
34	Oct. 20	14-58-31.4	36° 37!9	121° 18:7	2.6	a	9	SE of Hollister.

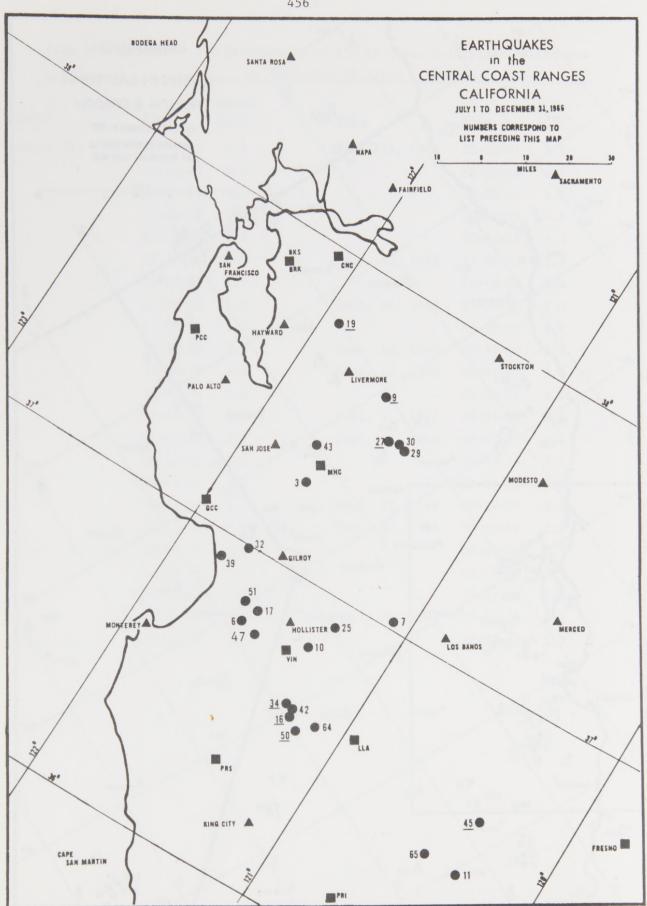
Map No.	Date 1966	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No. o: Stas	
34	Oct. 20	15-10-31.9	36° 38!0	121° 17 ! 9	2.7	a	9	SE of Hollister.
*35	Oct. 22	08-19-29	39.8	117°3	3.4	-	-	Focal depth fixed. NW of Austin, Nev.
*36	Oct. 22	15-20-43	39°4	118:1	3.9	-	-	USCGS location, Nev.
*37	Oct. 22	15-35-36	39:3	118:3	3.8	С	5	Nevada.
38	Oct. 24	06-03-20.0	39° 28!5	120° 38!6	3.3	Ъ	6	NW of Truckee.
39	Oct. 25	20-54-42.5	36° 55!8	121° 48!2	2.9	ь	7	Near Watsonville.
1	Oct. 27	12-06-03.9	35° 55!8	120° 30!4	3.8	-	-	Parkfield sequence.
34	Oct. 31	18-47-50.9	36° 36!3	121° 16:3	2.9	a	10	SE of Hollister.
*40	Nov. 01	19-50-16	40°4	125°2	3.6	-	11	Focal depth fixed. Mendocino Escarpment.
*41	Nov. 02	11-02-41.7	40°7	126°2	3.7	Ъ	7	Mendocino Escarpment.
42	Nov. 04	04-53-36.7	36° 36!4	121° 14:5	3.3	b	11	Bear Valley.
43	Nov. 04	16-53-36.4	37° 24!4	121° 43!7	2.6	b	9	NW of Mt. Hamilton.
1	Nov. 05	13-31-31.2	35° 55!6	120° 30!3	3.3	-	-	Parkfield sequence.
44	Nov. 07	11-47-13	40° 16'	124° 29'	3.6	b	7	SW of Ferndale.
45	Nov. 15	05-36-27.7	36° 35!7	120° 21!0	3.2	a	9	SW of Fresno.
45	Nov. 15	05-44-41.2	36° 34!7	120° 20!2	3.4	а	10	SW of Fresno.
26	Nov. 18	23-39-42.3	35° 45!1	120° 20!0	3.3	-	-	Parkfield sequence.
*46	Nov. 21	23-13-23	40°5	124°6	3.9	-	4	Focal depth fixed. W of Ferndale.
47	Nov. 22	20-34-08.7	36° 45!4	121° 31!4	2.6	a	10	SW of Hollister.
*48	Nov. 24	19-17-33	40°2	124°5	3.2	-	-	Focal depth fixed. Off coast of Mendocino.
* -	Nov. 26	04-30-50.6	40°5	126°0	4.8	-	9	Focal depth fixed. Off coast of Mendocino. (Not on the map.)
* -	Nov. 26	05-56-29	40°5	126°1	4.7	-	9	Focal depth fixed. Off coast of Mendocino. (Not on the map.)
*49	Nov. 27	10-05-32	40°3	125°0	3.4	-	-	Focal depth fixed. Mendocino Escarpment.
50	Nov. 29	13-08-18.8	36° 32!8	121° 09!9	2.6	a	9	N of King City.

Map No.	Date 1966	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	h	No. of Stas.	Remarks
51	Dec. 06	10-34-30.1	36° 50!0	121° 37!5	3.3	a	9	Near San Juan Bautista. Felt in Salinas and Hollister.
*52	Dec. 07	20-43-59.8	40°8	120°0	4.3	-	-	USCGS location, Calif Nev. border.
*53	Dec. 08	17-17-45	41.7	125°2	3.7	-	5	Focal depth fixed. West of Crescent City.
54	Dec. 10	11-50-32.3	39° 30!9	120° 18!8	3.2	a	7	NW of Carson City, Nev.
* 55	Dec. 16	07-32-36	38:9	123°5	3.1	-	-	SW of Ukiah.
*56	Dec. 17	15-16-31	40°3	125:7	4.5	-	-	USCGS location. Off coast of Mendocino.
50	Dec. 18	03-52-25.4	36° 33!2	121° 09!3	2.5	a	8	N of King City.
*57	Dec. 18	14-39-24	41.2	125°5	3.9	b	6	Off coast of Mendocino.
* 58	Dec. 20	18-04-04	37°4	116.6	3.7	-	_	USCGS location, southern Nevada.
* 59	Dec. 21	02-14-27	37°4	116:5	3.5	-	-	USCGS location, southern Nevada.
*60	Dec. 21	06-02-06	37°3	116°5	4.1	-	-	USCGS location, southern Nevada.
*61	Dec. 21	14-37-29.6	37°3	116:4	3.8	-	-	USCGS location, southern Nevada.
*62	Dec. 22	12-59-15	37°4	116°4	3.6	-	-	USCGS location, southern Nevada.
63	Dec. 23	02-23-37	38° 51!1	123° 09!9	3.5	a	8	SW of Clear Lake.
64	Dec. 24	20-57-06.1	36° 36!1	121° 07!4	2.6	a	8	NE of Soledad.
65	Dec. 30	10-23-48	36° 28'	120° 24'	2.5	a	4	N of Coalinga.

List of Magnitude > 3.0 Aftershocks of the Truckee, California Earthquake of September 12, 1966

Date	Time	Magni- tude	Date	0108 -91	Time	Magni- tude
Sept. 12, 1966	16-47-31	4.1	Sept.	14, 1966	21-20-37	3.1
	16-51-12	4.4			22-00-28	4.6
	16-53-29	4.3			22-15-57	3.5
	17-02-22	3.4			22-40-28	4.6
	17-14-56	3.2			23-48-14	3.3
	17-15-30	3.0	Sept.	15, 1966	12-04-20	3.2
	17-16-57	4.3			14-18-03	3.4
	17-19-23	4.2	Sept.	16, 1966	07-23-46	3.0
	17-20-11	5.3			19-59-37	3.4
	17-30-02	3.2	Sept.	18, 1966	07-39-50	3.3
	17-39-36	3.3	Sept.	19, 1966	01-01-00	3.3
	17-43-01	3.3			02-45-23	3.2
	17-44-39	4.1	Sept.	21, 1966	08-31-27	3.1
	18-02-29	3.5	Sept.	22, 1966	07-01-27	4.4
	18-35-11	3.1			08-44-14	3.5
	18-42-47	3.5			22-45-08	3.8
	19-04-29	3.5	Sept.	27, 1966	18-12-35	3.3
	22-08-59	3.2	Sept.	28, 1966	04-55-47	3.6
Sept. 13, 1966	08-42-55	3.6			06-38-34	3.7
	20-16-22	4.1			07-39-33	3.3
	21-00-04	3.2			16-37-49	3.5
	22-24-03	3.4	Sept.	29, 1966	17-11-24	3.1
Sept. 14, 1966	20-43-02	3.1			20-11-45	3.3





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

January-June 1967

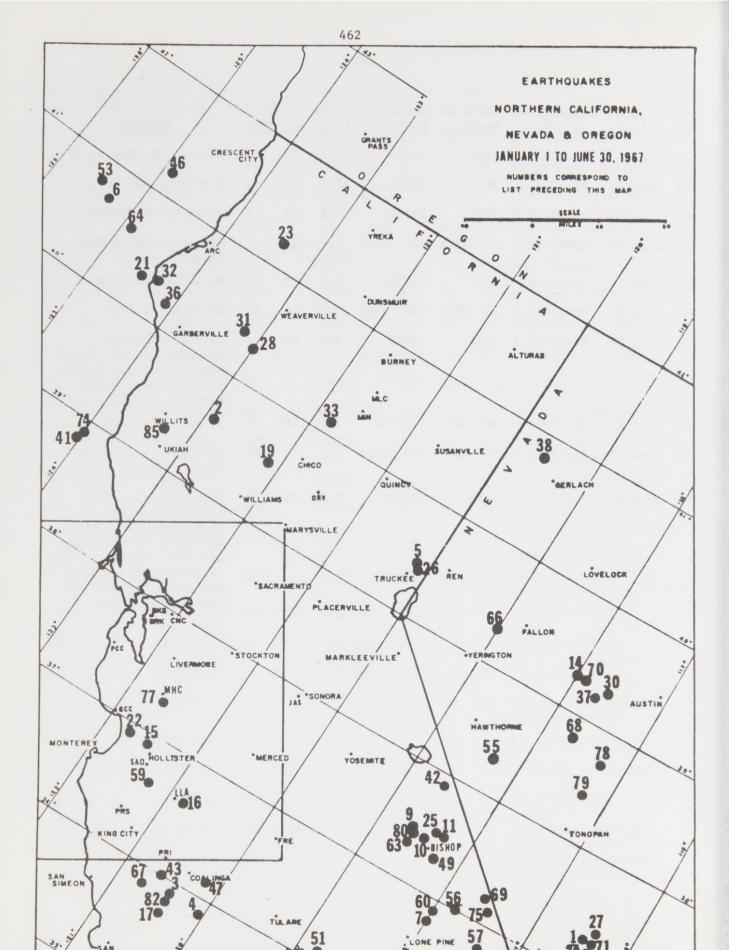
Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West			No. of	
* <u>1</u>	Jan. 05	12-15-23	37:3	116.5	4.0	33R		USCGS location. S Nevada.
2	Jan. 08	12-14-56.3	39° 35!8	122° 54!7	2.9	OR	5	NE of Willits.
3	Jan. 08	23-03-50.9	35° 53!8	120° 24!9	2.8	OR	8	35 km SE of PRI.
4	Jan. 09	23-18-59.5	35° 52!0	120° 03!8	3.1	d	9	SE of Coalinga.
5	Jan. 10	10-28-23.4	39° 28!2	120° 09!9	4.0	a	12	Near Truckee. Felt.
* 6	Jan. 11	20-01-03	40.7	125°3	3.3	OR	9	Off Cape Mendocino.
* 7	Jan. 12	06-10-36	36°8	118:0	3.1	OR	7	Near Lone Pine.
8	Jan. 14	09-42-37.4	36° 59!9	121° 43!5	2.7	С	9	West of Gilroy.
9	Jan. 15	23-26-24.5	37° 27!2	118° 38!3	3.8	OR	11	Near Bishop. USCGS: Felt at Long Valley Dam and Independence, California. Intensity
								IV.
10	Jan. 16	01-54-52.3	37° 24!0	118° 28!9	3.5	a	10	Aftershock.
*11	Jan. 16	19-37-49	37.5	118:3	4.0	OR	11	Near Bishop. Felt.
12	Jan. 17	11-13-54.6	36° 36!3	121° 15:0	2.5	а	8	West of LLA.
13	Jan. 21	01-20-01.2	36° 47!0	120° 49!0	2.5	2R	. 7	NE of LLA.
*14	Jan. 25	18-15-45	39:3	118:0	3.7	OR	9	East of Fallon, Nev.
15	Jan. 28	00-01-22.4	36° 54:7	121° 30!5	3.0	. 8	8	NW of Hollister.
16	Jan. 28	09-27-38.3	36° 38!8	120° 49!4	3.4	t	8	10 km E of LLA.
17	Feb. 01	13-55-54.1	35° 42!2	120° 24!3	3.0	é	8	NE of San Luis Obispo.
18	Feb. 01	23-21-29.9	36° 37!9	121° 17:6	2.5	á	8	20 km SE of SAO.
19	Feb. 03	15-35-08.1	39° 31!6	122° 08:6	3.4	á	a 9	SW of Chico.
20	Feb. 05	07-36-23.3	36° 47!5	122° 07:4	2.6	ě	a 8	Monterey Bay.
*21	Feb. 06	14-24-32	40°3	124.5	3.8	01	R 6	Off Cape Mendocino.
22	Feb. 07	7 21-59-58.6	36° 54!2	121° 43!3	3.1	1	b 8	SE of GCC.

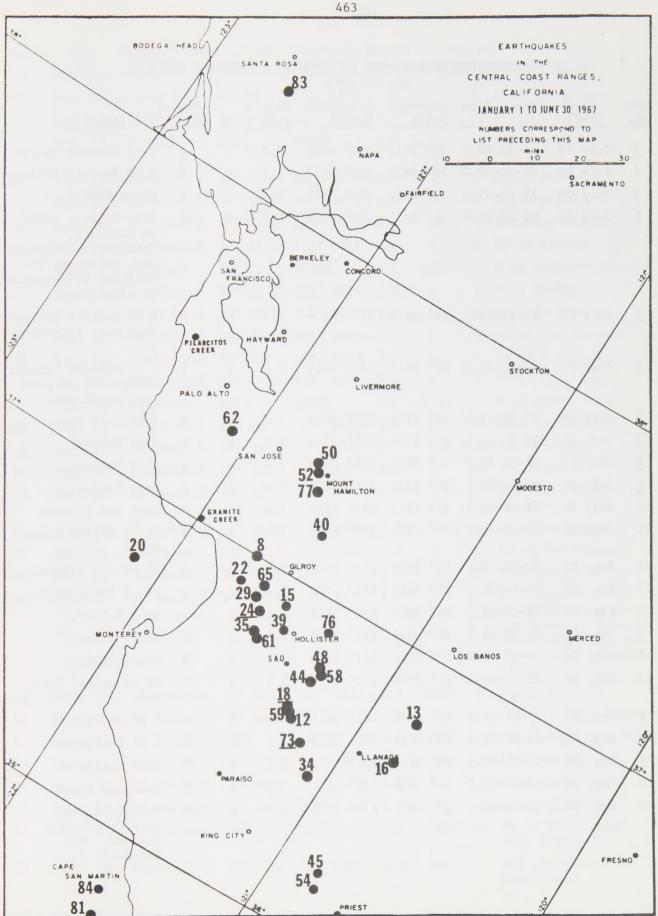
				150				
Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		o. of	Remarks
*23	Feb. 08	09-37-53	41.2	123°4	4.0	OR	11	70 km NE of Arcata.
24	Feb. 09	15-29-13.0	36° 50!9	121° 35!4	2.5	a	9	S of Gilroy.
*25	Feb. 11	15-15-21	37.5	118°4	3.5	OR	8	15 km N of Bishop.
26	Feb. 12	23-41-18	39:4	120°1	3.0	OR	9	Near Truckee.
*27	Feb. 14	01-08-27	37:4	116:4	3.9	33R		USCGS location.
24	Feb. 18	01-33-24.3	36° 50!0	121° 35!5	2.5	а	9	W of Hollister.
*28	Feb. 23	20-30-23	40°3	123:0	3.4	OR	5	S of Weaverville.
*	Feb. 24	02-26-31.5	40°5	126°3	3.1	OR	7	Off Cape Mendocino.
*	Feb. 24	10-17-13	36°5	116:0	3.2	OR	4	CalifNev. border.
29	Feb. 25	02-00-32.8	36° 53!0	121° 38 ! 3	2.8	а	9	S of Gilroy. Felt in Aromas (IV) and in the vicinity of San Juan Bautista.
*30	Feb. 25	07-20-15	39°3	117°6	3.5	OR	5	W of Austin, Nev.
*31	Feb. 25	15-52-07.5	40°4	123°2	4.1	OR	7	SW of Weaverville. Felt in Arcata and Salyer. Intensity IV.
32	Feb. 25	21-33-47	40° 20'	124° 18'	3.3	С	7	65 km SW of Arcata. Felt at Petrolia.
*33	Feb. 26	13-51-57	40°1	121°8	3.1	OR	5	30 km SW of Mineral.
34	Feb. 26	15-17-53.9	36° 28!1	121° 03!7	2.5	а	9	SW of LLA.
35	Mar. 01	14-07-35.0	36° 47!1	121° 33!6	2.6	а	9	Near Hollister.
*36	Mar. 02	07-11-02	40°2	124:1	4.0	OR	13	30 km NW of Garber- ville. Felt in Petrolia, Eureka and Scotia. Maximum intensity V.
	Mar. 02	2 14-12-50.7	36° 25 ! 5	117° 36 . 6	4.5	10R	13	SE of Lone Pine. Felt in southern Inyo County. Maximum in- tensity V. After- shock (M=3.2) at about 14-20.
*37	Mar. 05	5 21-30-44	39°2	117:7	3.7	OR	5	SW of Austin, Nev.
*38	Mar. 06	6 05-28-33	40.8	119°6	3.5	OR	8	NW of Gerlach, Nev.

Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	_		No. o Stas.	
39	Mar. 07	02-40-59.3	36° 50!4	121° 27!7	2.2	a	7	Near Hollister. Felt.
40	Mar. 10	06-28-48.9	37° 09!8	121° 32!8	2.7	a	9	20 km SE of MHC.
41	Mar. 10	12-45-36.5	38° 48!7	124° 01!6	3.0	b	8	Off coast, Pt. Arena.
*42	Mar. 11	15-53-58	37°9	118:6	3.2	OR	5	60 km S of Hawthorne.
43	Mar. 13	21-59-48.4	36° 00!6	120° 36!6	3.1	С	8	15 km S of PRI. Felt in San Miguel, Indian Valley and Ranchito Canyon. Intensity IV.
44	Mar. 14	09-23-55.4	36° 45!0	121° 15!7	2.7	ь	9	15 km E of SAO.
18	Mar. 14	13-56-03.4	36° 37!5	121° 17!8	2.5	a	8	20 km SE of SAO.
24	Mar. 15	16-48-17.4	36° 49!8	121° 35!7	2.7	а	9	20 km W of Hollister.
45	Mar. 21	02-24-28.3	36° 12!7	120° 50!3	2.8	Ъ	8	17 km NW of PRI.
*46	Mar. 22	14-59-26	41.2	124°9	4.2	OR	12	75 km NW of Arcata.
47	Mar. 23	11-39-56.4	36° 09!6	120° 10!5	3.0	d	5	20 km E of Coalinga.
48	Mar. 26	05-36-39.0	36° 46!4	121° 16!9	2.5	Ъ	8	Near SAO.
*49	Mar. 28	12-23-56.5	37°3	118:3	3.9	OR	11	Near Bishop.
50	Apr. 05	15-44-53.7	37° 22!3	121° 43!2	2.5	a	9	Near MHC.
*51	Apr. 06	01-05-47	36.1	118:8	3.5	OR	10	100 km ESE of Tulare. Felt at Lindsay and Springfield. Max. intensity IV.
52	Apr. 08	00-30-27.5	37° 19!8	121° 41!7	2.9	Ъ	17	SW of MHC.
*53	Apr. 10	03-21-37	40°8	125°5	3.7	OR	8	Off Cape Mendocino.
54	Apr. 13	09-06-42.5	36° 09!5	120° 48!6	2.7	Ъ	8	13 km W of PRI.
*55	Apr. 13	18-11-40	38°3	118°3	3.8	OR	9	40 km SE of Hawthorne, Nev.
* <u>56</u>	Apr. 19	19-56-30	37°0	117.8	3.0	OR	7	50 km NE of Lone Pine.
*57	Apr. 20	22-27-43	36°8	117:4	3.6	OR	8	ENE of Lone Pine.
58	Apr. 21	17-04-21.6	36° 46!3	121° 14:4	2.7	а	8	17 km SE of Hollister.
59	Apr. 22	16-39-45.1	36° 36!9	121° 16:2	3.4	Ъ	11	18 km SE of SAO. Felt at Paicines. Intensity IV.

Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No. o	
*60	Apr. 26	09-27-56	36:9	118:0	3.0	OR	6	N of Lone Pine.
61	Apr. 27	07-23-07.6	36° 45!8	121° 32!4	2.7	a	9	15 km SW of Hollister.
62	Apr. 28	02-36-15.0	37° 18!1	122° 04!9	2.8	a	9	15 km W of San Jose. Felt at Cupertino, Holy City and San Jose. Intensity IV.
*63	Apr. 28	12-57-41	37°3	118:6	4.0	OR	12	Near Bishop.
*64	May 03	02-46-37	40.6	124:9	3.4	OR	7	Off Cape Mendocino.
*	May 05	09-32-04	40.5	127.5	4.2	OR	8	Mendocino Escarpment.
65	May 15	23-19-09.4	36° 55!6	121° 38!1	2.6	а	9	10 km S of Gilroy.
*66	May 17	18-11-52	39:3	119:0	3.0	OR	6	Near Fallon, Nev.
67	May 17	14-16-52.2	35° 51!2	120° 44!2	3.0	а	6	30 km S of PRI.
*68	May 18	22-41-37	38°8	117:7	3.3	OR	5	About 85 km NE of Hawthorne, Nev.
*69	May 22	13-48-13.5	37°2	117:6	3.6	OR	6	80 km SE of Bishop.
*70	May 23	17-19-06	39°3	117:9	3.3	OR	6	E of Fallon, Nev.
*71	May 23	17-52-04	37°3	116°4	3.6	33R		USCGS location. Southern Nev.
*72	May 23	20-14-07	37°2	116°4	4.1	33R		USCGS location. Southern Nev.
73	May 24	08-36-47.2	36° 32!6	121° 09!7	2.5	а	9	20 km W of LLA.
73	May 24	12-51-30.7	36° 32!7	121° 10!4	2.6	a	6	20 km W of LLA.
73	May 25	05-21-42.6	36° 32:0	121° 09!1	2.8	а	9	20 km W of LLA.
*74	May 25	08-19-58	38:9	124°0	3.5	OR	14	Off coast of northern California.
*75	May 25	22-06-30	37:1	117:5	3.7	OR	6	NE of Lone Pine.
76	May 26	20-51-38.6	36° 53!5	121° 18!3	2.5	Ъ	9	10 km NE of Hollister.
* <u>56</u>	May 29	13-20-18.3	37°0	117°8	3.2	10R	. 4	SE of Bishop.
77	May 30	03-47-28.4	37° 16°.4	121° 39!8	3.9	b	13	Near MHC. Felt in Santa Clara and Santa Cruz counties. Maximum intensity IV.

Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	_		No. of Stas.	Remarks
* 78	May 30	18-28-12	38:7	117:3	3.5	OR	4	80 km S of Austin, Nev.
* 79	June 03	03-30-46	38:4	117:3	3.3	OR	5	N of Tonopah, Nev.
*80	June 03	18-53-53	37:4	118:6	3.2	OR	7	20 km NW of Bishop.
81	June 03	20-10-53.0	35° 43!5	121° 29!4	2.6	10R	7	Off coast NW of San Simeon.
*	June 05	18-12-42	40°2	127:0	4.0	OR	10	Mendocino escarpment.
82	June 06	06-11-38.5	35° 48!9	120° 25:5	3.0	a	10	40 km SE of PRI.
* 1	June 07	07-31-18.7	37:3	116.5	3.5	OR		Felt in southern Monterey County, Vine- yard Canyon and Indian Valley. Max. inten- sity IV. USCGS location.
83	June 11	12-55-48	38° 20'	122° 40'	2.6	OR	9	SE of Santa Rosa.
84	June 13	12-54-10.7	35° 48!9	121° 30!6	3.3	a	10	Off coast, 35 km NW of San Simeon.
*85	June 26	15-15-35	39°3	123°3	3.5	2R	9	Near Willits. Felt over an area of approximately 1,500 sq. miles of Mendocino and Lake counties. Max. intensity VI. Slight damage in the Redwood Valley-Ukiah area.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA AND OREGON
July-December 1967

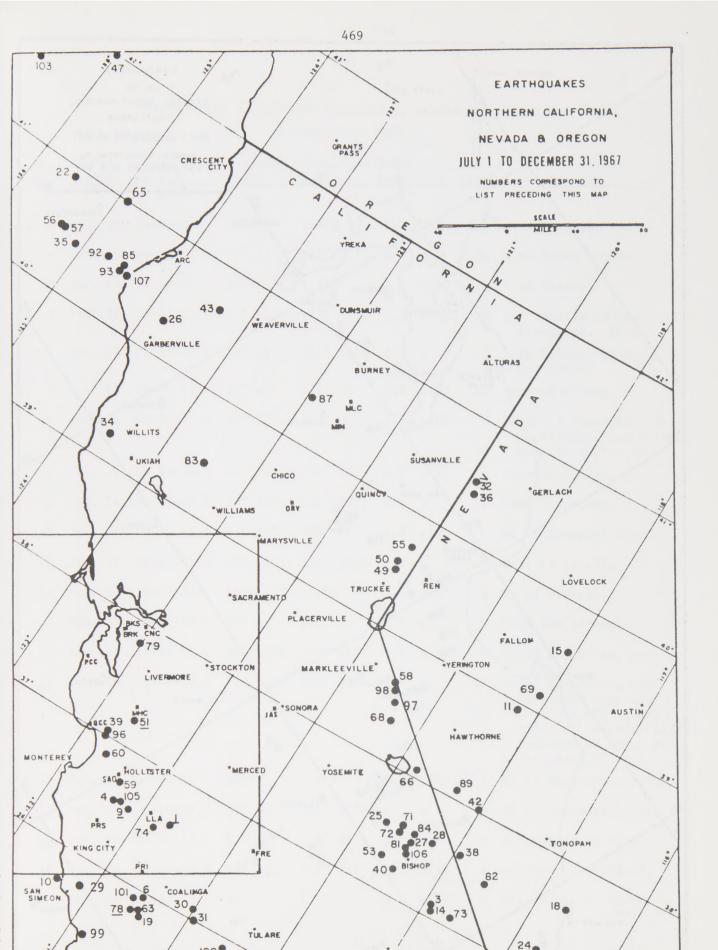
			3					
Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	<u>h</u>	No. o	
1	July 05	10-43-00.6	36° 37!4	120° 40!8	2.5	a	6	E of Panoche Valley.
2	July 06	01-01-08.7	36° 36!5	120° 38!8	2.5	a	5	E of Panoche Valley.
3	July 09	15-41-42.3	37° 06:4	117° 54!7	3.5	С	5	Owens Valley.
4	July 22	09-23-26.6	36° 32!1	121° 09!8	3.8	а	16	Bear Valley. Felt at Coalinga, Paicines, San Benito. Max. intensity VI. Followed by sequence of aftershocks.
1	July 23	15-16-43.6	36° 36!8	120° 41!4	3.3	Ъ	5	E of Panoche Valley. Felt max. intensity V.
5	July 23	22-26-23.7	36° 36!5	120° 43!4	2.5	Ъ	7	E of Panoche Valley. Aftershock of pre- ious earthquake.
6	July 24	07-08-52.9	35° 58!4	120° 29!8	3.7	Ъ	9	Parkfield area.
7	July 24	08-37-12.8	36° 33!8	121° 10!4	2.6	Ъ	8	Bear Valley.
8	July 24	10-19-55.0	36° 32!3	121° 08!3	2.7	b	9	Bear Valley.
9	July 26	07-29-16.1	36° 33!1	121° 08!9	2.5	Ъ	7	Bear Valley.
10	July 28	14-44-40.1	35° 45!3	121° 22!7	3.0	а	6	Near San Simeon.
11	July 30	15-45-08.0	38° 57 : 2	118° 11!8	3.1	С	6	NE of Walker Lake, Nev.
12	Aug. 01	22-14-18.0	35° 44!9	121° 24!4	2.7	a	6	NW of San Simeon.
13	Aug. 02	00-10-35.0	38° 30!4	122° 45!6	2.8	С	6	NW of Santa Rosa.
7	Aug. 02	01-10-52.5	36° 33!5	121° 09!9	2.5	а	7	Bear Valley.
7	Aug. 03	05-33-40.6	36° 33!7	121° 10!0	2.5	а	6	Bear Valley.
14	Aug. 06	07-27-52.2	37° 04!2	117° 52!8	3.1	С	5	Owens Valley.
15	Aug. 06	11-15-00.9	39° 35!8	118° 04!6	3.3	а	6	NE of Walker Lake, Nev.
16	Aug. 07	21-07-36.4	36° 44!8	121° 28!6	2.5	b	9	S of Hollister
17	Aug. 08	16-11-28.3	36° 24!7	120° 25!0	2.5	а	7	N of Coalinga.
9	Aug. 08	20-01-44.5	36° 32!8	121° 08!7	2.6	a	7	Bear Valley
18	Aug. 09	06-45-13.5	37° 36!6	116° 41!8	3.8	С	7	Southern Nevada.
19	Aug. 12	18-57-40.4	35° 48!1	120° 26!8	4.1	b	18	Parkfield area. Felt Parkfield, Cholame. Max. intensity V.

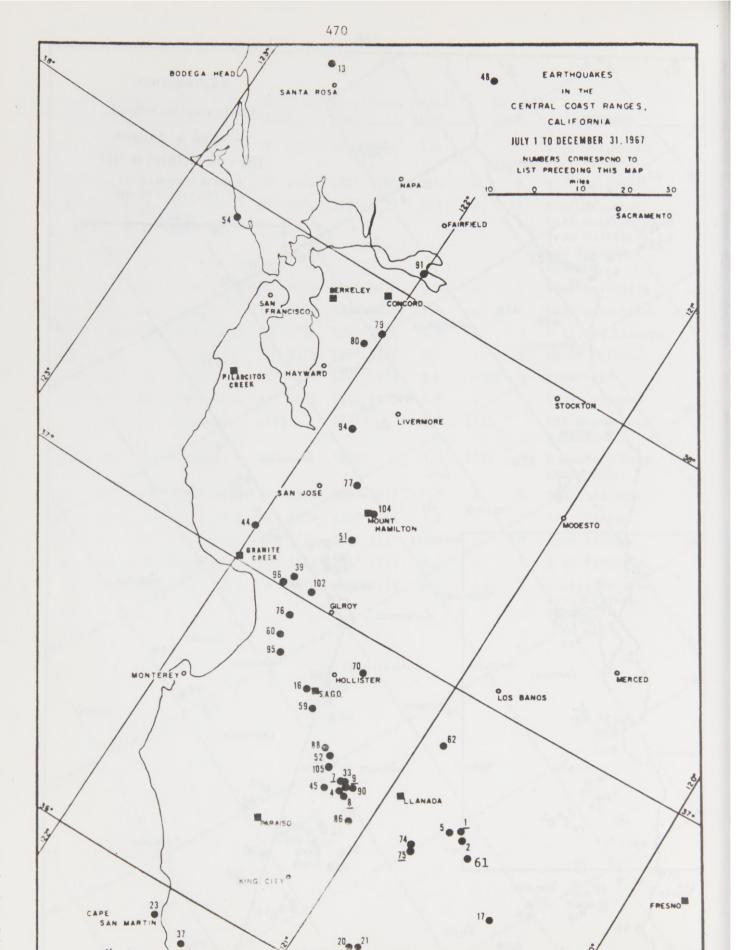
Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni tude		o. o	
20	Aug. 12	23-21-07.8	36° 06!7	120° 47!8	2.8	a	6	SE of King City.
21	Aug. 12	23-22-05.3	36° 08!3	120° 46!5	2.5	a	7	SE of King City.
22	Aug. 13	11-52-42	40°9	125°5	3.4	a(R)		Off shore Cape Mendocino.
23	Aug. 17	23-12-02.7	35° 54!4	121° 29!6	2.6	а	5	NW of San Simeon.
9	Aug. 18	18-48-10.9	36° 33!4	121° 09!3	2.7	a	8	Bear Valley.
24	Aug. 18	20-12-40.2	37° 11!4	116° 46!3	4.4	a(R)	9	Southern Nevada.
25	Aug. 20	06-14-06.4	37° 31!6	118° 47!5	3.1	a	6	NW of Bishop.
26	Aug. 22	08-03-54	40°3	123°8	3.1	a(R)		N of Garberville.
27	Aug. 22	08-19-27.3	37° 29!1	118° 23!8	3.0	a	6	N of Bishop.
28	Aug. 23	23-10-27.4	37° 36!8	118° 16!7	3.4	a	9	N of Bishop.
29	Aug. 25	02-28-14.4	35° 48!6	121° 16!4	2.7	а	6	NW of San Simeon.
30	Aug. 25	16-35-27.8	36° 03!4	120° 00!3	3.2	С	7	SE of Coalinga.
31	Aug. 25	16-46-50.2	36° 01!4	119° 57!3	3.0	ь	7	SE of Coalinga.
32	Aug. 26	03-57-13	40°5	119°9	3.0	a(R)		N of Reno.
33	Aug. 26	10-35-06.4	36° 33!5	121° 09!0	2.6	а	6	Bear Valley.
8	Aug. 27	18-09-11.0	36° 32!3	121° 08!1	2.7	a	6	Bear Valley.
34	Aug. 27	23-02-35.9	39° 13!8	123° 33!5	3.4	ь	6	NW of Ukiah.
35	Aug. 29	17-14-17.6	40° 26!7	125° 03!9	4.1	а	6	Off shore Cape Mendocino.
36	Aug. 29	19-40-05.3	40° 22!5	119° 48!5	3.5	b(R)	6	N of Reno, Nev.
37	Aug. 31	18-10-40.4	35° 52!3	121° 21!3	2.8	a	7	NW of San Simeon.
38	Sept. 02	20-25-43.3	37° 34!7	117° 57!7	3.8	a	12	Near Oasis.
39	Sept. 07	12-39-17.2	37° 02!1	121° 46!6	4.7	Ъ	18	W of Gilroy. Felt over wide area from Hollister to Berkeley. Minor damage in San Jose. Max. intensity VI.
40	Sept. 08	05-39-52.4	37° 11!7	118° 28!1	2.9	a(R)	9	Owens Valley.
41	Sept. 09	21-35-05.6	35° 41!1	121° 38!6	2.4	a(R)	3	Off shore San Simeon.
42	Sept. 11	05-05-33	38°0	118°0	3.0	a(R)		Mt. Montgomery, Nevada.
43	Sept. 11	18-57-28.5	40° 38!7	123° 20!5	3.5	a	6	E of Ferndale.
44	Sept. 12	18-33-32.8	37° 06!9	121° 59!8	2.6	ь	9	N of Santa Cruz.
45	Sept. 14	16-38-29.1	36° 31!2	121° 12!8	2.6	Ъ	7	Bear Valley.
46	Sept. 21	17-00-09.0	36° 13!8	118° 16!3	3.3	a(R)	12	SW of Owens Lake. Felt Fresno.
47	Sept. 26	05-51-14.5	41° 59!2	125° 59!2	4.3	c(R)		Off shore Cape Mendocino.

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude			
48	Sept. 27	02-41-23.9	38° 44!3	122° 10!7	2.6	a (R)	5	W of Woodland.
49	Sept. 27	05-32-25.1	39° 29!7	120° 09!6	3.5	ь	8	Near Truckee. Felt. Max. intensity IV.
50	Sept. 28	02-51-54.7	39° 32!9	120° 11!7	3.7	a	9	Near Truckee. Felt in Truckee and Reno. Max. intensity V.
51	Sept. 28	15-38-36.1	37° 13!8	121° 37!2	4.9	Ъ	15	SE of San Jose. Felt over wide area. Damage at San Jose. Max. intensity VI.
52	Sept. 28	18-33-27.0	36° 36!7	121° 14:6	2.5	a	7	Bear Valley.
<u>51</u>		21-08-11.6	37° 13!6	121° 37!2	3.5	Ъ	12	SE of San Jose. Felt. Max. intensity IV. Aftershock of Sept. 28, 15-38-36.
53	Oct. 02	09-44-33.7	37° 16:4	118° 37!6	3.1	a	7	W of Bishop.
54	Oct. 02	16-16-11.0	37° 54!6	122° 45:4	2.8	a(R)	8	W of Mill Valley.
55	Oct. 05	15-30-52.0	39° 44!9	120° 07!9	3.0	b	6	NW of Reno.
56	Oct. 08	07-00-14	40°5	125°3	3.7	a(R)		Off shore Cape Mendocino.
57	Oct. 09	08-13-34	40°5	125°3	3.6	a(R)		Off shore Cape Mendocino.
58	Oct. 09	17-01-12.5	38° 38!7	119° 27:7	3.3.	b(R)	6	Near Coleville.
59	Oct. 10	02-37-38.7	36° 43!2	121° 25!0	3.2	а	9	S of Hollister. Felt Hollister.
60	Oct. 11	18-35-47.1	36° 52!1	121° 40!9	3.0	а	11	Near Watsonville.
61	Oct. 14	12-02-43.6	36° 30!1	120° 36!9	2.7	Ъ	5	Near Mt. Ciervo.
62	Oct. 18	22-52-56.8	36° 49!1	120° 54!7	2.5	а	6	E of Hollister.
63	Oct. 21	12-05-21.8	35° 49!7	120° 28!4	3.1	Ъ	7	Parkfield area.
64	Oct. 25	23-05-39.5	35° 43!8	121° 26!9	2.6	а	4	Near San Simeon.
65	Oct. 31	04-11-40	41:0	124°9	3.7	a(R)		Off shore Cape Mendocino.
66	Nov. 02	17-56-30.9	38° 04!0	118° 47!8	3.0	a	6	Near Mono Lake
68	Nov. 06	07-22-46.2	38° 20!2	119° 19!9	3.4	а	11	NW of Mono Lake. Felt in Coleville and near Bridgeport.
69	Nov. 07	03-44-34.5	39° 08!1	118° 05!6	3.1	a	5	Near Walker Lake, Nev.
70	Nov. 09	07-41-35.1	36° 53!3	121° 18!9	2.5	a	9	NE of Hollister.
71	Nov. 11	05-44-22.1	37° 35!9	118° 36!2	3.1	a	7	NW of Bishop.

Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		o. of	Remarks
72	Nov. 11	05-51-51.7	37° 32!5	118° 35!8	3.4	a	9	NW of Bishop.
73	Nov. 11	14-24-26.4	37° 04!4	117° 41!9	3.3	b	6	N of Lone Pine.
74	Nov. 11	22-10-06.8	36° 29!9	120° 49!1	3.3	a	9	S of Panoche Valley.
75	Nov. 11	22-33-47.5	36° 29!0	120° 47!5	2.8	b	6	S of Panoche Valley.
76	Nov. 12	06-27-34.8	36° 55!7	121° 42!3	2.7	b	10	Near Watsonville.
75	Nov. 12	07-11-20.4	36° 29!4	120° 48!3	2.6	ь	7	S of Panoche Valley.
77	Nov. 12	17-02-24.0	37° 24!2	121° 44!6	2.6	a	10	NE of San Jose.
78	Nov. 14	00-00-51.7	35° 47!2	120° 32!4	3.1	b (R)	3	Parkfield.
79	Nov. 18	18-00-58.1	37° 50!6	122° 00!4	3.2	а	9	Near Danville. Felt Oakland and Palo Alto. Slight damage Alamo.
80	Nov. 18	18-13-02.6	37° 48!5	122° 01!7	2.5	а	10	Near Danville. Aftershock.
81	Nov. 21	05-30-22.6	37° 25!7	118° 26!9	4.2	а	10	Near Bishop. Felt near Bishop.
82	Nov. 21	17-25-12.9	37° 28!9	117° 33:5	3.3	а	6	SW of Tonopah, Nev.
83	Nov. 24	15-12-13.6	39° 26!7	122° 30!7	3.6	а	6	NW of Lodoga.
84.	Nov. 24	19-13-09.7	37° 34!7	118° 27!4	3.2	а	4	N of Bishop.
85	Nov. 25	02-46-56	40°5	124°5	3.4	a(R)		Off shore Cape Mendocino.
7	Nov. 25	13-09-56.9	36° 34!0	121° 10!4	2.6	a	8	Bear Valley.
86	Nov. 25	15-27-43.4	36° 28!3	121° 04!4	2.5	a	6	Bear Valley.
87	Nov. 29	02-55-02.9	40° 24:4	121° 57!5	3.1	a	5	SW of Lassen.
7	Nov. 29	05-44-08.1	36° 34!0	121° 10!3	2.7	b	8	Bear Valley.
9	Dec. 03	20-54-27.1	36° 33!0	121° 09!3	3.0	a	8	Bear Valley.
7	Dec. 04	22-10-37.2	36° 33!6	121° 10!9	2.5	a	5	Bear Valley.
88	Dec. 05	04-11-33.9	36° 37!8	121° 17:2	2.5	a	5	Bear Valley.
89	Dec. 05	18-28-54.5	38° 04!2	118° 20!1	3.5	а	9	Near Mt. Montgomery, Nev.
90	Dec. 06	10-05-56.2	36° 33!9	121° 07.3	2.8	Ъ	8	Bear Valley.
91	Dec. 08	12-42-09.6	38° 04:6	122° 00!1	2.5	a	5	N of Concord.
92	Dec. 10	12-06-52.2	40° 29!5	124° 41 : 6	5.6	b	6	Off shore Cape Mendocino. Felt Eureka, Ferndale, Willow Creek.
93	Dec. 10	12-33-59.9	40° 26!0	124° 29!5	4.0	С	4	Off shore Cape Mendocino.

Map No.	Date 1967	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		o. of	Remarks
94	Dec. 14	18-54-35.3	37° 33!0	121° 54:4	2.6	a	7	N of San Jose. Felt Fremont.
95	Dec. 17	10-04-28.2	36° 49!2	121° 38!8	2.5	ь	8	W of Hollister.
96	Dec. 18	17-24-32.0	37° 00!6	121° 47!3	5.3	С	17	N of Watsonville. Felt over an area from Hollister to San Francisco. Damage.
97	Dec. 20	01-49-13.9	38° 30!0	119° 30!6	2.8	a	9	Near Coleville.
98	Dec. 20	02-27-27.1	38° 35!0	119° 28!5	3.4	a	9	Near Coleville.
99	Dec. 21	05-13-11.3	35° 22!1	120° 50!6	2.6	a	3	S of San Simeon.
100	Dec. 21	19-08-53.3	35° 55!1	119° 31!7	3.1	С	5	NW of Delano.
101	Dec. 21	23-58-30.2	35° 55!8	120° 34!1	3.0	b (R)	3	Parkfield.
102	Dec. 25	00-27-01.1	37° 02:2	121° 39!5	2.5	С	7	Near Gilroy.
	Dec. 26	10-11-28	41°5	127:5	3.4	a(R)		Off shore Cape Mendocino.
103	Dec. 27	14-04-03	41°6	126°.7	3.6	a(R)	7	Off shore Cape Mendocino.
104	Dec. 27	16-00-38.2	37° 20!1	121° 38!1	2.5	а	5	E of San Jose.
105	Dec. 28	20-25-36.5	36° 34!9	121° 13:5	3.2	а	7	Bear Valley.
106	Dec. 29	22-17-09.4	37° 22!4	118° 25!7	3.3	a	6	Near Bishop.
107	Dec. 30	08-04-41.1	40° 26:4	124° 22!4	4.5	a	4	S of Ferndale.
78	Dec. 31	23-48-13.5	35° 45!3	120° 26!8	4.3	b(R)	3	Parkfield area. Felt at Paso Robles.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA AND OREGON January-June 1968

Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West	Magni tude		No. o	
1	Jan. 01	09-28-05	38°0	118°0	3.2	a(R)	6	W of Tonopah, Nev.
-	Jan. 04	09-45-43.1	36° 27'	117° 07'	4.0	a	10	W of Death Valley.
2	Jan. 05	08-40-32	37°7	118°6	3.4	2(R)	8	N of Bishop
3	Jan. 10	07-51-22.3	37° 46!9	122° 35!3	2.5	а	5	Off coast W of San Francisco. Felt.
4	Jan. 12	22-19-10.8	36° 38!0	121° 16:6	3.0	а	7	Bear Valley, SE of Hollister.
5	Jan. 19	13-29-17.9	37° 06'	121° 15'	2.8	a(R)	11	East of Gilroy.
6	Jan. 20	03-50-57.8	40° 23'	124° 09'	3.8	b(R)	5	South of Ferndale. Felt at Ferndale and Scotia. Max. intensity IV.
7	Jan. 22	14-53-34.5	40° 24'	124° 16'	3.5	b(R)	5	Cape Mendocino.
8	Jan. 24	20-47-28.1	37° 45!3	121° 53!2	2.5	b	7	Near Livermore.
9	Jan. 25	21-50-13.3	41° 25'	124° 47'	4.0	a(R)	6	SW of Crescent City.
10	Jan. 26	16-15-06.2	36° 59!3	121° 25!0	2.5	b	6	East of Gilroy.
11	Feb. 03	12-53-30	40°5	121°2	3.0	a(R)	5	NE of Mineral.
	Feb. 03	19-07-26.4	35° 44'	121° 15'	2.8	а	5	Near San Simeon.
12	Feb. 04	19-52-18.4	38° 13!8	118° 16!1	3.5	ь	6	SE of Hawthorne, Nev.
<u>13</u>	Feb. 06	00-41-38.0	38° 01'	118° 21'	4.9	С	10	SE of Hawthorne, Nev. Felt over approxi- mately 8,000 square miles of eastern Calif. and western Nev. Max. intensity VI.
14	Feb. 06	01-19-16	38:1	118:4	3.7	b(R)	7	SE of Hawthorne, Nev.
13	Feb. 06	03-48-10.8	38° 00!2	118° 22!0	4.5	b	8	SE of Hawthorne, Nev.
<u>15</u>	Feb. 06	04-00-10.0	37° 59'	118° 09'	3.1	а	8	Aftershock of 03-48.
16	Feb. 06	04-32-50.6	37° 58'	118° 21'	3.5	a(R)	8	Aftershock of 03-48.
17	Feb. 06	06-25-35	38°1	118°3	3.1	a(R)	8	Aftershock of 03-48.

Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West			No. of Stas.	Remarks
18	Feb. 06		40°5	124:0	3.5	a(R)	4	SE of Ferndale. Felt.
16	Feb. 06	22-26-29.0	37° 59'	118° 18'	3.0	a(R)	8	Aftershock of 03-48.
15	Feb. 08	09-22-51	38°0	118:2	3.2	С	7	Aftershock of 03-48, Feb. 06.
19	Feb. 09	13-42-36.8	37° 10!0	121° 33!0	3.0	b	7	North of Gilroy.
20	Feb. 11	10-26-13.6	37° 00!8	121° 28!5	2.8	b	7	East of Gilroy.
	Feb. 12	08-53-26	41°1	117:4	4.0	c (R)	7	East of Winnemucca, Nev.
21	Feb. 14	03-31-09.4	36° 36!3	121° 14!7	2.5	a	7	Bear Valley.
22	Feb. 15	11-04-44.7	36° 31!5	121° 11!2	2.8	a	5	Bear Valley.
23	Feb. 15	13-34-29.5	38° 05'	118° 20'	3.1	ь	7	SE of Hawthorne, Nev.
24	Feb. 16	06-15-34.7	36° 33!5	121° 11:9	2.5	a(R	8	Bear Valley.
25	Feb. 16	16-35-23.2	36° 43!4	120° 56:3	2.8	Ъ	7	North of Llanada.
26	Feb. 19	20-14-49	41:0	123°3	4.1	a	5	East of Arcata.
* 27	Feb. 21	14-39-48.0	37° 11!0	121° 33!7	3.8	b	10	Near Morgan Hill. Felt at Corralitos, Morgan Hill, San Martin, Gilroy, Hollister and Mountain View. Max. intensity V.
28	Feb. 23	3 20-20-59.8	36° 51!5	121° 18:6	2.5	Ъ	7	East of Hollister.
29	Feb. 25	12-39-16	40:1	121:0	3.1	a	6	Near Quincy. Felt.
30	Feb. 26	02-51-27	40°0	121:1	3.7	a(R) 6	Near Quincy. Felt.
31	Mar. 0]	08-33-14.9	39° 39'	118° 26°	3.4	a(R) 7	NE of Fallon, Nev.
32	Mar. 03	3 21-10-27	38°6	116°1	3.8	a(R	.) 6	South of Eureka, Nev.
33	Mar. 06	6 08-33-01	37°1	117°9	3.2	a(R	.) 7	SE of Bishop.
34	Mar. 06	6 08-43-08.9	37° 00'	117° 50'	3.3	a(F	6)	SE of Bishop.
35	Mar. 06	6 09-14-06.0	36° 58'	122° 10'	2.5	b	7	Offshore, near Santa Cruz. Felt in Santa Cruz.
36	Mar. 09	9 01-31-53.0	37° 37'	118° 41'	3.0	a(H	5	NW of Bishop.
37	Mar. 1	23-18-36.2	37° 28'	121° 33'	3.2	a(I	2) 9	SE of Livermore.
.*81	Feb. 21	08-16-18.1	38°6	116:3	4.1	33 (R) -	Central Nev. USCGS location.

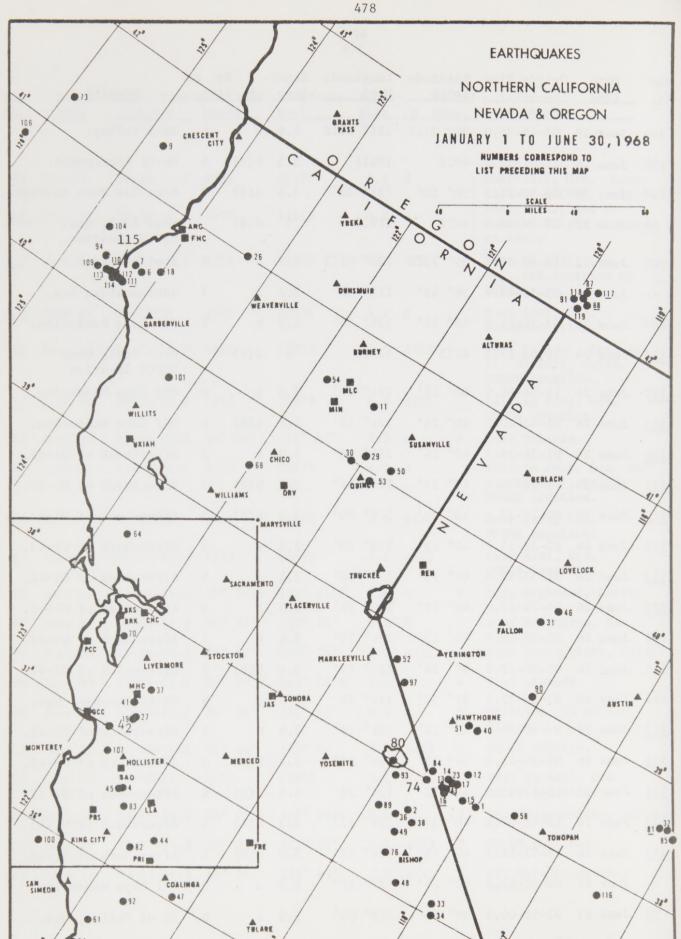
Map No.	Date 1968	Origin Time (G.C.T.)	Latitude North	Longitude West			No. of Stas.	Remarks
38	Mar. 14	h m s	37°6	118°5	3.1	a(R)	5	N of Bishop.
39	Mar. 16		36° 53!0	121° 38!2	2.6		6	W of Hollister.
40	Mar. 17	04-19-51	38!6	118:4	3.0	a(R)	7	E of Hawthorne, Nev.
41	Mar. 17	15-07-02.7	37° 19'	121° 38'	3.0	a(R)	8	Near Mt. Hamilton.
42	Mar. 21	21-55-00.3	37° 01!4	121° 44!7	4.3	С	7	Near Watsonville. Felt over approximately 3,500 square miles, from Salinas to San Francisco. Maximum intensity V. No reported damage.
	Mar. 24	08-45-45.1	41° 10°	117° 23'	4.1	b	7	Northern Nevada.
43	Mar. 24	11-56-04	38:0	118:4	3.6	b(R)	7	SE of Hawthorne, Nev.
44	Mar. 25	11-32-07.4	3 6° 22 ! 1	120° 41 : 8	3.6	С	8	SE of Llanada. Felt. Max. intensity V.
45	Mar. 25	16-25-55.4	36° 37 ! 6	121° 17 ! 1	3.5	а	11	Bear Valley. Max. intensity IV.
46	Mar. 27	19-47-27	39°8	118°3	3.3	a(R)	5	NE of Fallon, Nev.
47	Mar. 28	04-53-26.5	36° 03!4	120° 11!4	3.1	d	5	SE of Coalinga. Felt at Avenal. Intensity IV.
48	Mar. 29	01-59-48	37°1	118°3	3.0	a(R)	6	S of Bishop.
49	Apr. 01	09-13-05.4	37:5	118°6	3.0	Ъ	6	NW of Bishop.
50	Apr. 02	16-15-15	40°1	120:7	3.2	a(R)	6	NE of Quincy. Felt in Crescent Mills. Max. intensity II.
51	Apr. 03	20-04-13	38°6	118.5	3.1	b	7	E of Hawthorne, Nev.
52	Apr. 04	06-24-50.6	38° 47'	119° 33'	3.4	a(R)	9	SE of Lake Tahoe.
53	Apr. 04	21-08-57.3	39° 57'	120° 49¹	3.2	a(R)	7	E of Quincy. Felt in Quincy. Intensity II.
54	Apr. 07	02-40-40	40.5	121:8	3.5	a(R)	5	NW of Mineral.
55	Apr. 10	04-18-59.8	37° 23!0	121° 44:5	2.6	b	7	NW of Mt. Hamilton.
56	Apr. 10	04-22-24.9	37° 41!0	122° 36!8	2.6	а	10	Offshore San Francisco Peninsula. Felt in Daly City.
56	Apr. 10	07-37-17.1	37° 41!3	122° 36:5	2.5	a	6	Aftershock of 04-22.

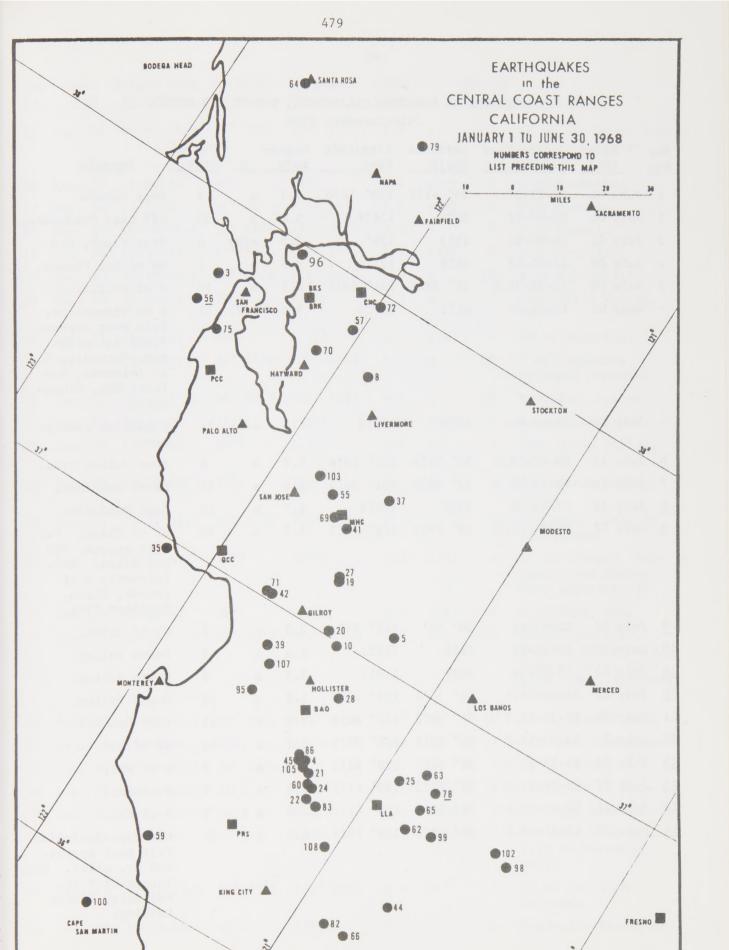
Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West	Magni- tude		lo. o Stas	
57	Apr. 12	22-18-31.6	37° 51!4	122° 01:2	2.5	a	6	NE of Hayward.
58	Apr. 13	18-10-50	38:1	117:6	3.7	a(R)	9	W of Tonopah, Nev.
59	Apr. 14	06-20-54.6	36° 10!9	121° 39!2	2.5	ь	6	SE of Monterey.
60	Apr. 19	13-44-33.9	36° 34!7	121° 12:9	2.8	a	7	Bear Valley.
61	Apr. 23	15-09-14.9	35° 31!4	120° 49!4	3.4	a	7	SE of San Simeon.
62	Apr. 23	23-10-27.9	36° 36'	120° 49'	2.7	a(R)	6	E of Llanada.
63	Apr. 25	03-28-06.9	36° 47'	120° 51'	2.5	a(R)	5	NE of Llanada.
64	Apr. 25	19-49-45.2	38° 28!6	122° 43!5	4.6	b	10	Near Santa Rosa. Felt over approximately 5,000 square miles. Max. intensity VII at Santa Rosa - minor damage. (Fault plane solution in BSSA, Dec. 1968.)
65	Apr. 26	01-00-00.1	36° 41'	120° 48'	2.9	Ь	5	E of Llanada.
66	Apr. 27	14-32-37.4	36° 13'	120° 50'	2.7	c(R)	7	NW of Priest.
67	Apr. 28	06-31-52.9	35° 27!3	120° 49:7	3.5	Ъ	7	NW of San Luis Obispo.
68	Apr. 29	00-21-38.6	39° 32 ! 4	122° 01!4	4.7	d	9	SW of Chico. Felt over approximately 10,500 square miles. Max. intensity VI at Chico, Butte City, Willows. Minor damage.
69	Apr. 29	23-47-20.0	37° 20!4	121° 41 : 9	2.5	a	6	Near Mt. Hamilton.
70	May 03	21-39-57.2	37° 44!4	122° 07!8	3.2	Ъ	18	NE of Hayward. Intensity IV at Castro Valley, II at Hayward. (Fault plane solution in BSSA, Dec. 1968.)
71	May 06	11-21-30.8	37° 01!1	121° 45!9	2.5	a	8	Near Corralitos.
72	May 09	14-28-50.4	37° 57!9	121° 59!6	2.7	b	7	E of Concord.
73	May 09	23-27-43	41°3	125°9	4.4	a(R)	8	Gorda Basin.
74	May 11	18-26-39	38°0	118°6	3.2	ь	7	S of Hawthorne, Nev.
75	May 12	04-11-48.3	37° 37!8	122° 28!8	2.5	Ъ	14	Near San Bruno. Felt in northern San Francisco Peninsula. (Fault plane solution in BSSA, Dec.

Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West	_		No. o Stas.	
76	May 14	05-30-03.6	37° 17'	118° 34'	3.4	a(R)	5	Near Bishop.
77	May 15	16-01-12	37:2	116°5	3.9	a(R)	5	SE of Tonopah, Nev.
	May 16	12-26-52	40.5	126°8	3.5	a(R)	5	Mendocino escarpment.
78	May 16	14-16-49.9	36° 45'	120° 46 t	2.7	a(R)	7	NE of Llanada.
79	May 17	00-47-32.0	38° 27'	122° 11'	2.9	a(R)	10	NE of Napa.
78	May 19	14-02-49.5	36° 45'	120° 47'	2.6	a(R)	6	NE of Llanada.
80	May 22	08-55-15	38:0	119°0	3.4	a(R)	6	Mono Lake.
81	May 22	13-21-55.7	38°6	116°2	5.1	С		USCGS Hypocenter. Berkeley magnitude 4.9.
82\$	May 22	22-18-37.5	36° 13!6	120° 52 : 6	3.1	Ъ	. 7	NW of Priest.
83	May 24	16-03-13.1	36° 31!5	121° 08:5	3.0	а	6	Bear Valley.
84	May 25	02-11-55.0	38 ° 1	118°6	3.6	c(R)	7	S of Hawthorne, Nev.
85	May 25	08-01-22	38°6	116°0	3.8	c(R)	6	S of Eureka, Nev.
86	May 25	17-16-49.1	36° 38!4	121° 18:8	2.6	а	7	Bear Valley.
87	May 28	00-08-49.5	42° 16'	119° 55'	3.7	d	7	Near Adel, Oregon.
87	May 28	00-51-03.5	42° 14'	119° 54'	3.4	c(R)	7	Near Adel, Oregon.
88	May 28	12-55-44.4	42° 10°	119° 50'	3.9	c(R)	7	Near Adel, Oregon.
	May 28	13-14-17.5	38° 30'	123° 14'	2.5	С	6	Near Fort Ross.
89	May 29	06-16-07	37.6	118.9	3.0	a(R)	5	NW of Bishop.
90	May 29	11-41-07.1	39° 04¹	118° 03'	4.9	a(R)	5	SE of Fallon, Nev.
91	May 30	00-36-01.0	42° 10°	120° 00'	5.1	c(R)	5	Near Adel, Oregon. Felt.
	May 30	08-02-10	40°3	126°9	4.2	a(R)	6	250 km W of Ferndale.
92	May 31	07-07-37.9	35° 48'	120° 36'	3.0	a(R)	5	S of Coalinga.
	June 01	22-10-58	40.5	127°5	3.8	a(R)	5	300 km W of Ferndale.
93	June 02	03-37-00	37.9	118°9	3.0	a(R)	5	NW of Bishop.
94	June 03	07-05-57.2	40° 21'	124° 36'	3.6	c(R)	7	Off Cape Mendocino. Felt.
88	June 03	13-27-39.7	42°2	119:8	4.9	d		Near Adel, Oregon. Location by USCGS. Felt in

Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West		h St	. of	Remarks
		и ш ѕ						
87	June 04	02-34-15.7	42°3	119°9	5.1	d)	Near Adel, Ore. Location by USCGS. Felt in Adel, Ore., and N.
117	June 04	02-38-19	42°3	119°8	4.0	d)	Calif. Slight damage at Adel.
117	June 04	03-35-49.8	42°3	119:8	4.1	d(R)		Felt in Adel, Ore. Mag. and location by USCGS.
117	June 04	05-52-32	42°3	119:8	4.0	d		Near Adel, Ore. USCGS location.
88	June 04	06-22-19.0	42°2	119:8	4.5	d(R)		Felt in Adel, Ore. and Ft. Bidwell, Calif. USCGS location.
87	June 04	10-58-22.8	42°3	119:9	4.3	d(R)		Felt in Adel, Ore. USCGS location.
95	June 04	21-58-42.9	36° 44'	121° 36'	2.5	а	6	Near Salinas.
87	June 05	04-51-56.8	42°3	119°9	4.7	d		Felt in Adel, Ore. and Ft. Bidwell, Calif. USCGS location.
118	June 05	05-12-36	42°2	119:9	3.3	d(R)		Near Adel, Ore. USCGS location.
87	June 05	07-37-45	42°3	119°9	3.8	d(R)		Near Adel, Ore. USCGS location.
96	June 05	21-54-24.2	37° 58!4	122° 21!8	2.8	Ъ	7	Near Richmond, Calif.
97	June 06	00-25-49.5	38° 37'	119° 20'	3.2	Ъ	5	W of Hawthorne, Nev.
98	June 08	12-36-20.2	36° 40'	120° 24 °	2.5	a(R)	6	Near Tranquility, Calif.
99	June 08	18-57-18.6	36° 37!5	120° 42!8	2.6	а	6	E of Llanada.
100	June 11	11-43-28.1	35° 54'	121° 42°	3.3	a	9	Offshore, NW of San Simeon.
101	June 11	11-45-57.8	39° 46'	123° 17'	3.1	a(R)	5	NE of Willits.
119	June 12	01-46-22	42°1	119°9	4.1	d(R)		Felt in Adel, Ore. USCGS location.
102	June 13	03-19-39.1	36° 40!4	120° 28!0	2.9	a	7	Near Tranquility, Calif.
103	June 15	13-53-24.5	37° 25'	121° 50°	2.6	a(R)	7	NE of San Jose.
104	June 17	03-05-44.5	40° 35'	124° 45'	3.8	a(R)	6	Off Cape Mendocino. Felt.

Map No.	Date 1968	Origin Time (G.C.T.) h m s	Latitude North	Longitude West	Magni- tude	h Sta	of	Remarks
105	June 18	07-46-25.0	36° 37!1	121° 16:6	2.6	b	6	Bear Valley.
106	June 18	11-01-37.7	40°8	126°1	3.5	b(R)	6	Gorda Escarpment.
107	June 20	07-50-27.5	36° 50'	121° 36'	3.5	a(R)	7	Near San Juan Bautista.
88	June 22	09-39-53.5	42°2	119:8	4	d(R)		Near Adel, Ore. USCGS location.
108	June 22	12-50-50.1	36° 25!8	121° 02!5	2.9	b	9	S of Llanada.
	June 24	05-36-43.9	36° 42°	115° 57'	3.7	а	7	Southeastern Nev.
109	June 24	07-14-26.5	40° 14'	124° 36'	3.7	Ъ	7	Off Cape Mendocino.
117	June 24	11-03-17.3	42°3	119:8	4	d(R)		Near Adel, Ore. USCGS location.
110	June 24	11-14-26.9	40° 15'	124° 27'	3.0	Ь	6	Off Cape Mendocino.
111	June 26	01-42-20.8	40° 14'	124° 16'	5.9	b(R)	6	Off Cape Mendocino.
110	June 26	01-54-18.7	40° 14'	124° 28'	3.0	Ь	5	Aftershock of 01-42.
111	June 26	02-16-36.8	40° 15'	124° 18'	3.7	b(R)	5	Aftershock of 01-42.
110	June 26	02-29-10.1	40° 15'	124° 26'	3.7	b(R)	5	Aftershock of 01-42.
112	June 26	02-32-13.7	40° 15'	124° 20°	3.8	а	5	Aftershock of 01-42.
113	June 26	02-53-40.0	40° 15'	124° 30'	3.1	С	5	Aftershock of 01-42.
113	June 26	04-19-17.0	40° 15'	124° 29°	3.0	Ъ	5	Aftershock of 01-42.
114	June 26	05-38-50.5	40° 13'	124° 25°	3.6	Ъ	5	Aftershock of 01-42.
115	June 26	05-50-28.9	40° 16'	124° 25'	3.6	b(R)	5	Aftershock of 01-42.
116	June 26	07-34-22.7	37° 50'	116° 25'	3.0	b	5	SE of Tonopah, Nev.
113	June 26	07-50-56.0	40° 14°	124° 29 °	3.9	b	5	Aftershock of 01-42.
110	June 26	09-10-15.0	40° 15!	124° 28°	3.8	b(R)	5	Aftershock of 01-42.
111	June 26	10-47-45.0	40° 12'	124° 18'	4.8	b(R)	6	Aftershock of 01-42.
113	June 26	12-46-07.1	40° 14'	124° 27°	3.3	b(R)	5	Aftershock of 01-42.
113	June 26	14-52-16.7	40° 15'	124° 27°	3.0	b(R)	5	Aftershock of 01-42.
	June 27	02-26-30.5	40° 25'	127° 10°	3.5	а	5	Off Cape Mendocino.
90	June 27	02-51-00.5	39° 05'	118° 05'	3.3	а	6	SE of Fallon, Nev.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA AND OREGON
July-December 1968

Map No.		Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	<u>h</u>	No. of Stas.	
1	July 01	03-13-09.9	39° 47 : 1	123° 18!8	3.2	a	9	Near Covelo.
2	July 01	22-07-17	40°2	124.8	3.4	a	10	Off Cape Mendocino.
3	July 03	10-00-05	42°3	120°	3.3	a(R)	8	Near Plush, Ore.
4	July 03	17-52-52	35.8	121°5	2.5	a	7	NW of San Simeon.
5	July 03	21-32-35.7	36° 38!1	121° 19:7	2.9	ь	10	S of Hollister.
-	July 06	14-02-40	41°1	117:4	5.5	a(R)	11	S of Winnemucca. Felt over approx. 9,000 sq. miles. Max. Intensity V at Golconda, Rye Patch Dam, Winne- mucca.
-	July 08	09-47-05	40°3	127°3	4.0	a(R)	11	Mendocino escarp- ment.
6	July 13	08-41-12.0	36° 32 : 4	121° 10:6	2.7	Ъ	8	Bear Valley area.
7	July 14	15-23-20.3	37° 25!6	121° 50 : 9	2.6	а	10	NE of San Jose.
8	July 15	07-43-39	40°3	124°8	3.7	Ъ	10	Cape Mendocino.
9	July 22	01-05-02.5	39° 49!9	121° 53 ! 3	3.3	a	10	NW of Chico. Felt over approx. 900 sq. miles. Max. Intensity V at Artois, Chico, Hamilton City.
9	July 22	01-07-12	39° 50'	121° 53'	3.3	а	8	NW of Chico.
10	July 22	15-10-52	36°9 .	118:2	3.4	а	7	Owens Valley.
10	July 22	15-17-35	36°9	118°2	3.5	a	6	Owens Valley.
10	July 22	18-43-48.4	36° 55!8	118° 11!7	3.8	a	15	Owens Valley.
11	July 26	18-52-25.7	37° 58!6	122° 00!1	2.9	b	11	E of Concord.
12	July 27	23-57-17.2	40° 12:8	122° 02:4	3.3	a	11	SE of Red Bluff.
13	July 29	04-27-51.9	36° 22:7	120° 41!6	2.7	a	9	N of PRI.
13	July 29	05-29-19.9	36° 22!3	120° 41:7	2.8	a	9	N of PRI.
13	July 31	00-49-25.4	36° 22:4	120° 42:0	2.9	a	9	N of PRI.
14	Aug. 08	05-31-09.2	40° 28 ! 5	124° 29!6	4.0	а	14	Off Cape Mendocino. Felt over approx. 800 sq. miles. Max. Intensity V at Ferndale, Fields

Landing.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No. of Stas.	
15	Aug. 08	19-41-31.6	37° 24 : 1	121° 45 : 4	3.2	a	12	NE of San Jose. Felt (Intensity II) at San Jose.
16	Aug. 10	16-06-16	40°	123°	3.4	a(R)	5	W of Paskenta.
17	Aug. 18		40° 14°	123° 54°	3.2	c(R)	8	Near Miranda.
18	Aug. 19	16-30-18.2	36° 24:2	121° 54!3	3.3	a	9	S of Carmel.
19	Aug. 20		37° 50°	121° 56'	2.5	c(R)	5	E of Danville.
20	Aug. 20	18-18-41.0	36° 59!8	121° 44!9	2.6	a	10	N of Watsonville.
21	Aug. 29	11-26-43	39°7	118:1	3.3	a	7	Near Dixie Valley, Nev.
22	Aug. 31	11-10-40	40°4	124.4	3.7	a(R)	6	NW of Petrolia.
23	Sep. 01	21-56-24.4	36° 27:0	121° 01:4	2.7	а	8	E of Pinnacles National Monument.
6	Sep. 03	01-31-07.1	36° 33:5	121° 11:3	3.1	a	10	Near Bear Valley.
24	Sep. 03	08-34-00	37°5	116°5	4.0	a(R)	5	N of Beatty, Nev.
25	Sep. 03	3 17-37-54	39°5`	118:1	3.6	а	5	Near Dixie Valley, Nev.
25	Sep. 03	8 18-32-10	39:5	118:1	3.9	Ъ	6	Near Dixie Valley, Nev.
26	Sep. 05	5 05-11-31.7	37° 57:0	122° 21 : 0	2.1	а	5	Richmond. Felt in El Cerrito.
27	Sep. 12	2 08-44-47	37:8	118:3	3.3	a(R)	4	NE of Bishop. Felt in Benton and Bishop. Max. Intensity IV.
28	Sep. 20	20-50-43	39°	118°	3.3	a(R)	3	N of Mina, Nev.
29	Sep. 21	L 03-18-13.4	37° 25!7	122° 13 . 6	2.8	а	13	SW of Palo Alto. Felt in Menlo Park, Redwood City, Palo Alto. Max. Intensity IV.
30	Sep. 26	5 20-01-14.4	36° 59!5	121° 42!7	2.9	а	10	NE of Watsonville.
31	Oct. 0:	3 15-56-06	40°6	124°6	3.5	а	12	Off Cape Mendocino.
32	Oct. 0	6 07-57-05.5	36° 57 : 1	121° 25!0	2.7	а	8	SE of Gilroy.
33	Oct. 0	7 06-24-38.0	41°5	126°3	4.1	a(R)	6	200 km NW of Arcata.
8	Oct. 1	1 10-56-35	40°3	124.8	3.4	c(R)	6	Off Cape Mendocino.
8	Oct. 1	1 11-07-14	40°3	124°8	3.5	c(R)	11	Off Cape Mendocino. Felt in Ferndale (III)
34	Oct. 1	3 07-28-23.0	36° 53!6	121° 36!3	2.8	Ъ	9	NW of San Juan Bautista.
35	Oct. 1	6 17-37-55	40°4	125°8	4.1	а	14	Mendocino Escarpment.

Map No.	Date 1968	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	h S	o. of	
36	Oct. 17	09-12-05.3	36° 49!5	121° 37:2	2.7	а	10	W of San Juan Bautista.
37	Oct. 20	10-26-08	40°3	125°0	3.7	a	12	Off Cape Mendocino.
38	Oct. 21	09-46-30	40°5	117:8	3.4	a(R)	4	S of Winnemucca.
39	Oct. 21	14-30-25.5	37° 56 : 9	122° 18 : 4	3.4	a	9	E of Richmond. Felt. Max. Intensity V at Albany, Berkeley, El Cerrito.
40	Oct. 29	16-35-55.0	37:3	116:3	3.5	a(R)	3	Near Nevada Test Site.
	Oct. 31	11-36-47	36°3	117°5	3.5	a(R)	3	Near Darwin.
14	Oct. 31	13-47-29	40°5	124°5	3.3	a(R)	3	Cape Mendocino. Felt at Ferndale and Petrolia. Max. Intensity IV.
41	Nov. 02	04-12-08	41°3	126°3	3.5	a(R)	5	NW of Arcata.
42	Nov. 05	07-52-26.6	37° 57!0	121° 47:3	2.8	b	13	Near Mt. Diablo.
43	Nov. 05	11-00-41.0	36° 40!5	121° 16!2	3.1	Ъ	10	SE of Hollister.
43	Nov. 05	11-08-26.2	36° 39!0	121° 16:8	3.2	а	9	SE of Hollister.
44	Nov. 06	08-58-22.2	35° 52!6	120° 26 ! 9	2.8	b	10	Near Parkfield. Felt near San Miguel.
45	Nov. 09	12-53-31.1	38° 05:0	121° 50!7	2.5	b	7	Near Antioch.
46	Nov. 10	04-03-03.9	35° 41!9	121° 10!5	3.2	a	9	Near San Simeon.
47	Nov. 17	01-03-57.0	36° 17:1	120° 56!5	3.0	b	6	Near King City.
48	Nov. 21	06-26-40.7	37° 02'	121° 44'	2.6	a(R)	8	Near Watsonville.
44	Dec. 11	12-19-52.4	35° 48!5	120° 28:6	3.0	а	10	Near Parkfield.
49	Dec. 11	12-51-07	40°9	124°1	3.7	d	10	Near Arcata. Felt. Max. Intensity V at Arcata, Eureka, Korbel.
<u>50</u>	Dec. 11	21-37-37.4	37° 09!7	121° 33!6	3.9	b	7	Near Morgan Hill. Felt over approx. 1200 sq. miles. Max. Intensity IV at Milpitas, Morgan Hill, New Almaden. Felt in San Jose, Oakland, San Francisco.
50	Dec. 11	21-45-38.6	37° 09:3	121° 32!3	3.0	а	7	Near Morgan Hill. Felt in San Jose.
51	Dec. 16	01-14-10.9	36° 10!1	120° 50!7	2.7	C	7	W of Priest.
14	Dec. 16	08-31-23.0	40°5	124°5	3.6	a(R)	7	Near Cape Mendocino. Felt in Ferndale and Eel River valley. Max. Intensity IV.

Map No.	Date 1968	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. of Stas.	Remarks
52	Dec. 19	16-30-00.0	37° 13 ! 9	116° 28 : 4	6.2 a		Nuclear explosion "Benham". This explosion and its larger aftershocks are listed in a separate tabulation following this list.
53	Dec. 23	14-12-23	38°6	119:9	3.0 a(R) 9	Near Markleeville.

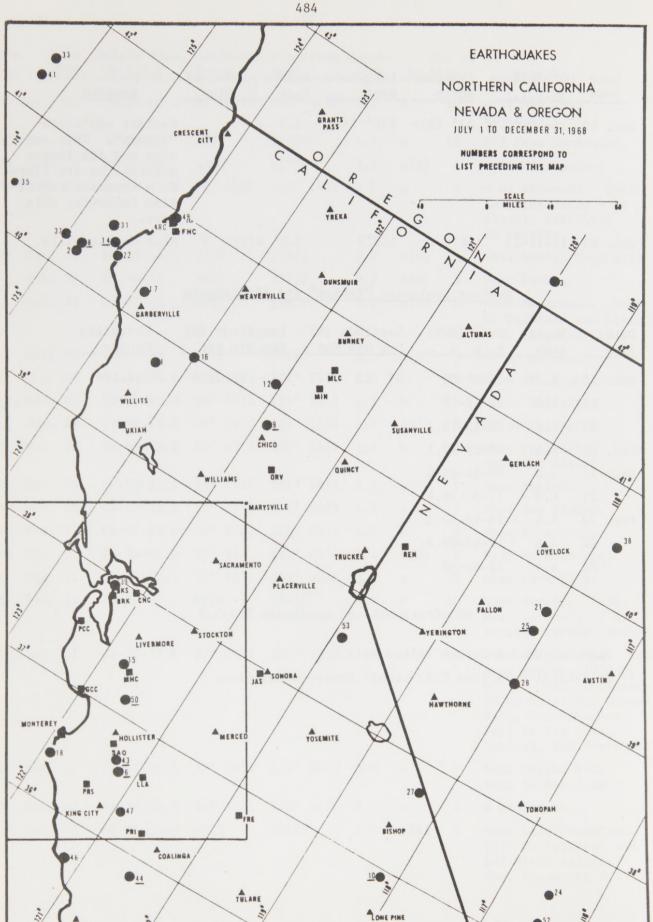
Nuclear Explosion "Benham" and Aftershocks

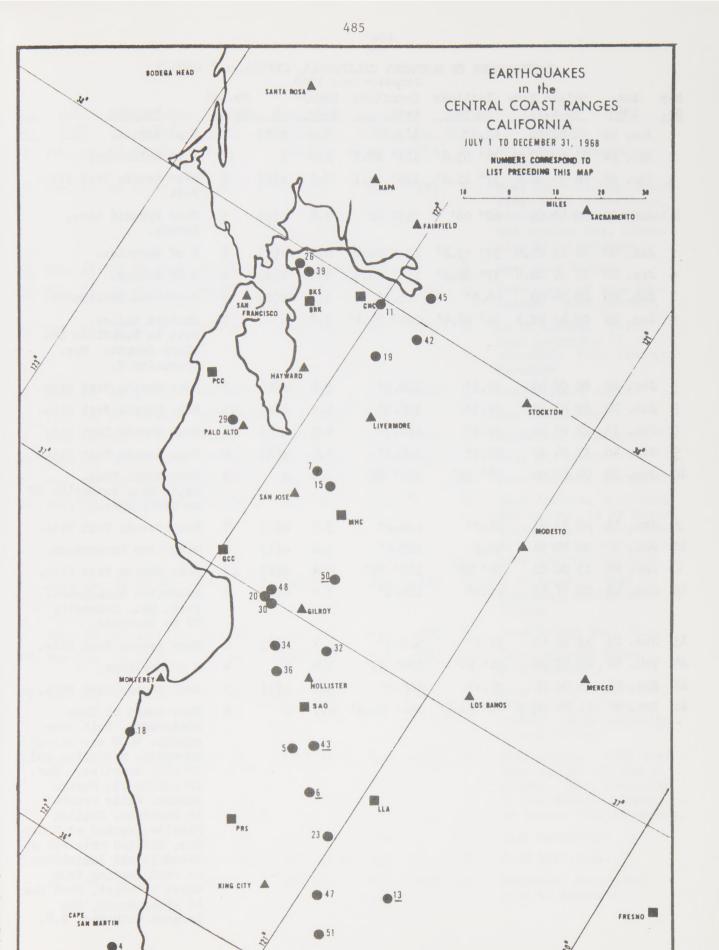
Date 1968	Magni- tude	Time (GMT) h m s			e (N) Sec	_	itude (W) Min Sec	Elevation meters
Dec. 1	9 . 6.2*	16-30-00	37	13	53.3	116	28 24.9	512.1**
1	.9 4.0	19-18-18						
1	.9 4.5	22-23-19.2						
Dec. 2	0 4.4	20-08-19.1						
Dec. 2	1 5.0	00-14-25.0						
2	4.2	17-32-56.4						
Dec. 2	22 4.4	18-10-52.3						
2	22 4.0	22-45-09.6						
2	22 4.4	22-45-50						

66 aftershocks of magnitude 3.0-3.9

^{*} From BKS Wood-Anderson instruments.

^{**} Epicentral data from U.S. Atomic Energy Commission.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

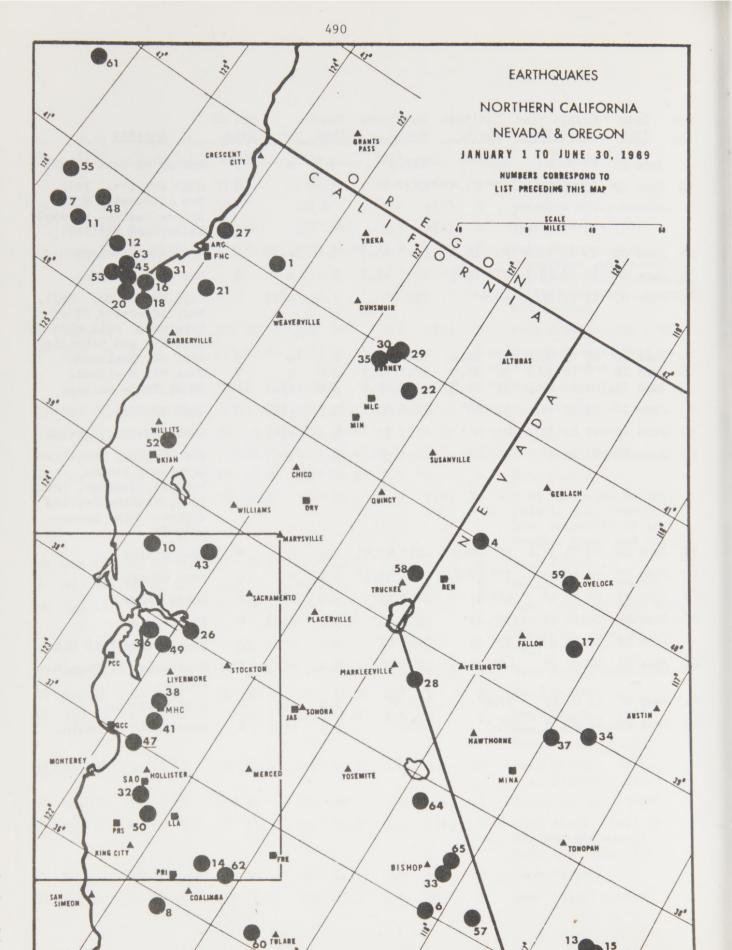
Map No.	Date	Origin Time		January-Jun				
	1969	(G.C.T.)	Latitude North	Longitude West	Magni- tude	h	No. of Stas.	Remarks
1	Jan. Ol	21 01 10	41.1°	123.3°	3.3	a(R)	5	E of Arcata.
2	Jan. 04	15 28 42.0	36° 53.6'	121° 18.7'	2.9	b	10	E of Hollister.
3	Jan. 06	06 34 16.6	37° 15.2'	116° 30.1'	4.5	a(R)	8	Near Nevada Test Site. Felt.
4	Jan. 07	3 40 59	40° 00'	119° 42'	3.8	a(R)	5	Near Pyramid Lake, Nevada.
5	Jan. 08	21 13 25.6	37° 53.8'	122° 09.8'	2.5	a(R)	6	E of Berkeley.
6	Jan. 08	21 47 18.4	37° 02.2'	118° 09.3'	3.5	b(R)	8	S of Bishop.
7	Jan. 09	09 34 09	40.5°	125.7°	3.3	a(R)	4	Mendocino Escarpment.
8	Jan. 09	09 42 47.2	35° 56.4'	120° 34.1'	3.8	Ъ	7	Cholame Valley. Felt in Parkfield and Slack Canyon. Max. intensity V.
2	Jan. 10	08 08 48	37.3°	116.3°	3.6	a(R)	5	Near Nevada Test Site.
2	Jan. 10	09 41 22	37.3°	116.3°	4.6	a(R)	11	Near Nevada Test Site.
2	Jan. 10	17 01 44	37.3°	116.3°	4.5	a(R)	8	Near Nevada Test Site.
9	Jan. 10	17 14 17	37.3°	116.3°	4.6	a(R)	6	Near Nevada Test Site.
10	Jan. 15	04 28 09	38° 31'	122° 42'	3.0	а	5	Near Santa Rosa. Felt. Max. intensity IV in Santa Rosa.
	Jan. 15	20 13 41	37.2°	116.2°	3.5	a(R)	7	Near Nevada Test Site.
11	Jan. 17	02 49 51	40.5	125.4°	3.6	a(R)	6	Mendocino Escarpment.
-	Jan. 22	15 00 02	36° 58'	115° 59'	4.4	a(R)	11	Near Nevada Test Site.
12	Jan. 28	20 57 19	40.5°	124.9°	3.4	a(R)	8	Mendocino Escarpment. Felt. Max. intensity IV in Ferndale.
13	Jan. 29	13 32 49	37.4°	116.5°	3.5	a(R)	6	Near Nevada Test Site.
14	Feb. 04	00 45 26	36° 24'	120° 23'	3.0	Ъ	4	N of Coalinga.
15	Feb. 04	15 00 06	37.4°	116.4°	3.7	a(R)	5	Near Nevada Test Site.
16	Feb. 07	21 25 48.9	40° 20.6'	124° 21.9'	4.7	С	9	Near coast of Cape Mendocino. Felt over approx. 4000 sq. mi. of Humboldt, Mendocino and Trinity counties. Max. intensity VI. Damage slight. Walls cracked in Ferndale. Ceiling plaster cracked at Honey dew. Twisted chimneys at

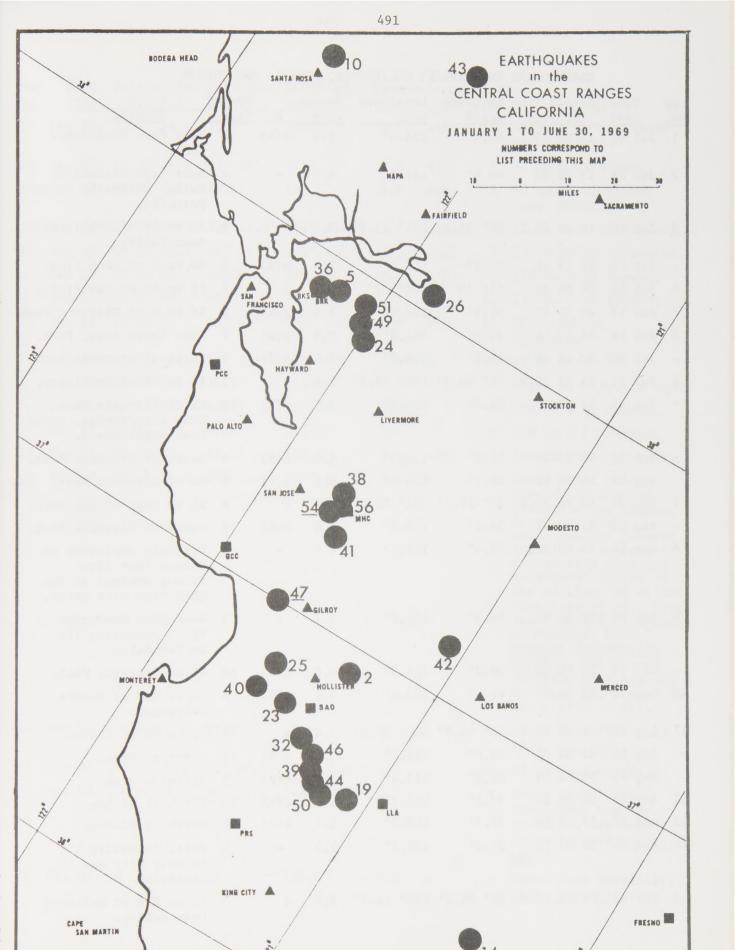
Ferndale and landslides on road leading from there to coast. More than 40 aftershocks, the largest with Mag. 2.8.

Map No.	Date 1969	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	h	No. of Stas.	Remarks
17	Feb. 14	03 24 55	39.6°	118.2°	3.2	a(R)	4	Stillwater Mountains, Nevada.
18	Feb. 14	21 17 13	40.2°	124.3°	3.5	a(R)	14	Near coast of Cape Mendo- cino. Felt in Petrolia, Ferndale, Alton, Rio Dell and Scotia. Max. inten- sity IV in Petrolia.
19	Feb. 15	15 44 22.9	36° 34.9'	121° 04.6'	2.8	Ъ	8	Near Bear Valley.
20	Feb. 22	02 05 31	40.2°	124.5°	4.0	a(R)	5	Near coast of Cape Mendocino. Felt (Press).
21	Feb. 22	18 37 32	40° 34'	123° 48'	3.1	c(R)	5	SE of Eureka. Felt. Max. intensity IV at Rio Dell. Felt also at Ferndale.
22	Feb. 23	22 35 18	40° 47'	121° 18'	3.2	a(R)	5	Near Burney, Calif.
23	Feb. 26	23 44 42.4	36° 44.3'	121° 28.0'	2.6	р	7	Near Hollister.
-	Mar. 02	22 00 08	40.2°	126.3°	3.5	a(R)	5	Mendocino Escarpment.
24	Mar. 03	16 15 44.8	37° 49.2'	121° 58.7'	2.7	a(R)	3	Near Mt. Diablo
25	Mar. 09	13 31 47.4	36° 50.0'	121° 34.8'	2.6	a	8	Near San Juan Bautista.
26	Mar. 13	03 23 23.8	38° 03.1'	121° 51.4'	3.5	b	8	Near Antioch. Felt over 800 sq. mi. in NE Contra Costa County. Max. inten- sity V at Antioch, Pitts- burg and Port Chicago.
27	Mar. 14	09 16 05	41.1°	124.0°	3.4	a(R)	5	N of Arcata. Felt in Ferndale, Eureka and Arcata.
_	Mar. 18	14 40 02.0	37° 10'	115° 58'	4.0	a(R)	6	Near Nevada Test Site.
28	Mar. 19	11 19 22	38° 41'	119° 33'	3.2	a(R)	11	CalifNevada border N of Coleville.
29	Mar. 28	04 53 37	41° 02'	121° 37'	3.8	a(R)	9	Near Burney. Felt over 600 sq. mi. of Shasta County. Max. intensity V near Burney.
30	Mar. 28	18 12 59	40° 59'	121° 38'	4.2	a(R)	9	Near Burney. Felt over 1200 sq. mi. of Shasta County. Max. intensity V near Burney. Stack of lumber fell at Burney.
31	Apr. 02	10 44 20	40° 30'	124° 18'	3.5	a	5	Cape Mendocino.
32		18 17 09.5	36° 40.3'	121° 21.2	3.0	Ъ	8	S of Hollister.
-	Apr. 06	14 11 33	40.6°	126.2°	4.3	a(R)	11	Mendocino Escarpment. Felt in Ferndale.

Map No.	Date 1969	Origin Time (G.C.T.)	Latitude North	Iongitude West	Magni- tude	h	No. of Stas.	Remarks
33	Apr. 11	15 44 33	37.4°	118.2°	3.0	a(R)	3	Near Bishop.
34	Apr. 12	10 51 30	39.0°	117.6°	3.2	a(R)	3	Shoshone Mts., Nevada.
35	Apr. 12	17 13 03	40° 52'	121° 44'	3.3	a(R)	4	Near Burney.
36	Apr. 14	04 22 36.4	37° 52.9'	122° 14.3'	3.0	b	6	Near Berkeley. Felt throughout San Francisco Bay area. Max. intensity IV in El Cerrito, Berkeley and Oakland.
37	Apr. 15	10 30 00.5	38° 51'	117° 57'	3.2	a(R)	7	Near Shoshone Mts., Nevada.
38	Apr. 23	23 47 26.1	37° 22.8'	121° 43.3'	3.3	a	9	Near San Jose. Felt in San Jose area.
	Apr. 24	13 04 02	37.2°	116.0°	4.0	a(R)	6	Near Nevada Test Site.
39	May 02	05 03 17.6	36° 35.8'	121° 15.2'	2.8	b	8	Bear Valley.
40\$	May 02	22 00 56.8	36° 44.3'	121° 36.4'				Natividad Quarry Blast.
41	May 07	01 59 10.0	37° 16.0'	121° 39.4'	3.0	b	8	S of Mount Hamilton.
42	May 07	09 25 24.7	37° 09.6'	121° 04.0'	2.7	b	6	Near Gustine.
43	May 08	22 10 53.1	38° 42.2'	122° 10.3'	4.0	a(R)	10	E of Berryessa Valley. Felt in Yolo County. Max. intensity IV in Brooks, Capay and Guinda.
44	May 10	13 01 57.5	36° 34.9'	121° 12.8'	2.7	a	9	Bear Valley.
-	May 10	22 03 02	40.5°	127.3°	4.0	a(R)	5	Mendocino Escarpment.
45	May 15	07 40 57	40° 18'	124° 37'	3.3	đ	7	Near Coast of Cape Mendo- cino. Felt in Petrolia, Ferndale. Max. inten- sity IV.
-	May 15	18 00 02	37° 02'	115° 58'	4.0	a(R)	7	Near Nevada Test Site.
46	May 16	12 17 02.0	36° 38.4'	121° 17.3'	2.8	b	9	Bear Valley.
47	May 23	17 38 48.2	37° 00.4'	121° 42.6'	3.2	Ъ	9	Near Gilroy. Felt. Max. intensity V at Corralitos, Calif.
47	May 24	12 41 45.0	36° 59.1'	121° 41.5'	3.0	Ъ	10	Near Gilroy. Felt. Max. intensity III.
48	May 24	20 16 25	40° 45'	125° 20'	4.0	a(R)	8	Mendocino Escarpment.
49	May 25	22 31 28.4	37° 51.9'	122° 01.8'	3.1	b(R)	7	Near Alamo. Felt in Oakland and Alamo. Max. intensity IV.
50	May 27	13 37 39.6	36° 33.1'	121° 11.7'	3.0	а	10	Bear Valley.
51	May 30	09 26 28.8	37° 56.5'	122° 03.1'	2.6	Ъ	5	Near Walnut Creek.

Map No.	Date 1969	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	h	No. of Stas.	Remarks
	June Ol	23 56 04	40.7°	127.3°	3.9	a	7	Mendocino Escarpment.
52	June 02	05 38 55.2	39° 21.4'	123° 14.7'	3.1	С	8	Near Willits. Felt. Max. intensity V at Potter Valley, Redwood Valley and Willits.
53	June 02	19 11 31.8	40° 16.1'	124° 44.7'	3.4	a(R)	9	Mendocino Escarpment.
54	June 04	12 10 18.7	37° 19.3'	121° 43.2'	2.7	a	9	Near Mt. Hamilton.
55	June 07	11 27 12	40.8°	125.8°	4.0	a(R)	5	Cape Mendocino. Felt. Max. intensity VI at Capetown. Felt also in Ferndale and Petrolia.
54 56 57	June 10 June 10 June 13	07 02 46.7 08 24 30.2 01 20 19.2	37° 19.9' 37° 21.0 37° 08.8'	121° 41.7' 121° 42.3' 117° 42.1'	2.7 2.6 3.8	b b a(R)	8 7 11	Near Mt. Hamilton. Near Mt. Hamilton. NW of Death Valley.
58	June 16	07 31 45	39° 28'	120° 08'	3.5	a(R)	8	Near Truckee.
59	June 19	07 02 33	40° 04' N	118° 37'	3.3	a(R)	5	Near Lovelock, Nevada.
60	June 19	07 05 08	36° 07'	119° 35'	3.5	a(R)	8	Near Tulare. Felt in Corcoran, Dinuba, Hanford, Ivanhoe, Lemon Cove, Strathmore, and Tipton. Max. inten- sity IV.
47	June 22	02 01 37.6	37° 00.9'	121° 42.9'	2.6	b	8	Near Gilroy.
47	June 22	02 18 23.2	37° 00.6'	121° 43.1'	3.0	b	.9	Near Gilroy
61	June 23	01 21 12	41° 43'	126° 19'	4.0	b(R)		Gorda Ridge.
62	June 24	14 25 57	36° 25'	120° 08'	3.0	a(R)		SW of Fresno.
-	June 26	16 00 03	37° 09'	116° 01'	4.2	a(R)		Near Nevada Test Site.
63	June 28	04 07 25	40° 22'	124° 40'	3.9	c(R)		Near coast of Cape Men- docino.
64	June 28	11 05 12	37.8°	118.8°	3.0	c(R)	8	E of Mammoth.
65	June 29	12 27 12	37.5°	118.2°	3.0	a(R)	8	Near White Mountain.





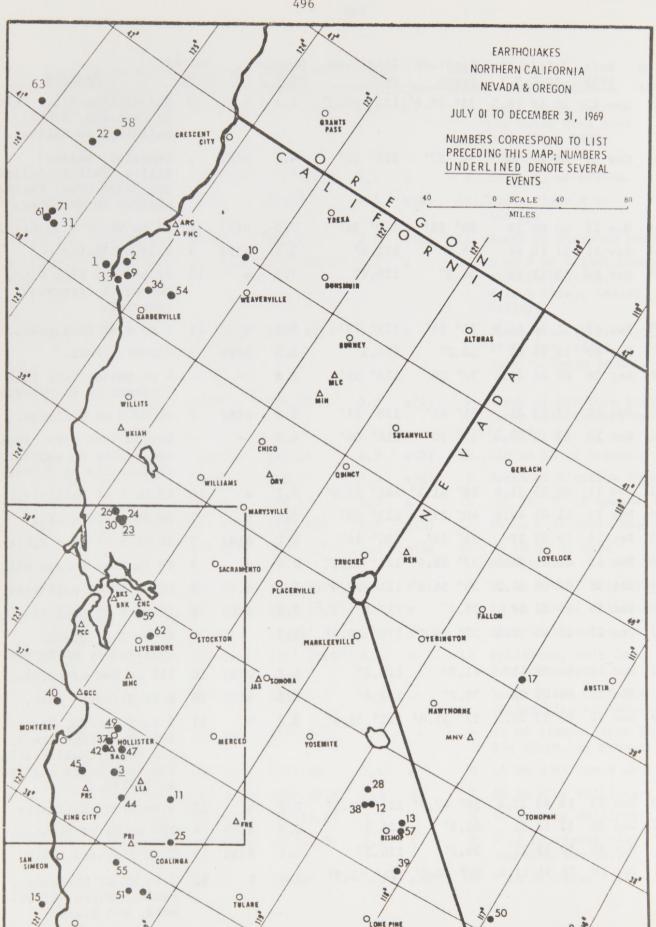
EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON

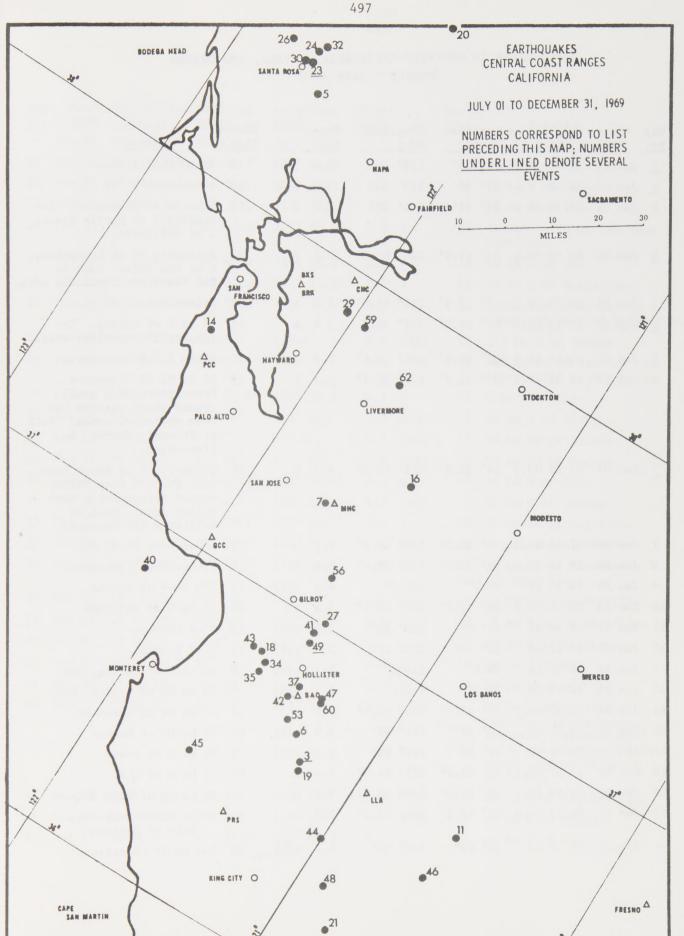
			EAI	RTH	QUAKES		RN CALIFORN		ADA,	AND OR	EGON
Мар		ate				Latitude	December 19 Longitude	Magni-		No. o:	
No.	-	01	-		T.)	North	West	tude	h (n)	Stas.	
1	Jul	OI	12	00	45	40.3°	124.4°	3.9	a(R)	8	Near Cape Mendocino. Felt.
2	Jul	08	13	20	23	40.4°	124.3°	3.0	-	2	Near Cape Mendocino. Felt. Intensity IV in Petrolia.
3	Jul	10	10	39	40.1	36° 35.2°	121° 13.9'	3.2	Ъ	9	35 km SE of Hollister; Bear Valley.
-	Ju1	13	09	17	29	36.0°	118.0°	3.4	a(R)	7	60 km S of Lone Pine.
4	Jul	16	04	06	35	35° 50'	120° 17'	3.2	C -	7	15 km SE of Parkfield.
-	Jul	17	20	31	11	36.1°	118.4°	3.4	b (R)	9	10 km N of Sirretta Pe
5	Jul	18	01	35	28	38.4°	122.6°	2.5	a(R)	7	Near Santa Rosa, Felt.
-	Jul	20	00	15	49	36.1°	118.3°	3.0	a(R)	6	North of Sirretta Peak
6	Jul	23	23	22	56.9	36° 40.5'	121° 18.5'	2.6	a	7	15 km SE of Hollister.
-	Jul	24	18	43	57	36.2°	118.3°	3.7	a(R)	10	NE of Sirretta Peak. Nine aftershocks, three over magnitude 3.
-	Jul	26	05	32	39	36.2°	118.3°	4.0	a(R)	9	North of Sirretta Peak
-	Aug	01	15	56	13	36.1°	118.2°	3.0	a(R)	6	NE of Sirretta Peak.
7	Aug	09	10	20	20.4	37° 19.9'	121° 42.2'	2.7	Ъ	8	15 km East of San Jose
-	Aug	12	03	24	16	36.2°	118.3°	3.0	a(R)	8	North of Sirretta Peak
8	Aug	14	14	30	00.0	37.4°	116.1°	4.1		3	Possible explosion at Nevada Test Site. Strong arrival at the USGS test site array.
9	Aug	14	19	04	07	40.3°	124.2°	3.1	-	3	Near Cape Mendocino. Felt. Intensity III in Ferndale.
-	Aug	15	11	05	14	36.2°	118.3°	4.0	a(R)	10	NE of Sirretta Peak.
10	Aug	20	03	55	09	41.0°	123.2°	3.4	a(R)	6	70 km ENE of Eureka, California.
11	Aug	20	08	36	35.3	36° 38.9'	120° 34.0'	3.4	а	9	75 km SW of Fresno.
-	Aug	21	02	00	01	36.0°	118.3°	3.0	a(R)	8	Sirretta Peak.
-	Aug	22	00	24	03	36.0°	118.4°	3.0	a(R)	5	Sirretta Peak.
12	Aug	25	08	03	33	37.5°	118.7°	3.7	a(R)	10	North of Bishop.
13	Aug	25	17	11	18	37.5°	118.3°	3.7	a(R)	11	North of Bishop.
14	Aug	30	20	04	55	37.6°	122.4°	1.3	-	3	Felt. Intensity III in Daly City and Pacifica.
3	Sep	03	08	35	13.6	36° 35.2'	121° 14.1'	3.2	d	9	40 km ESE of Salinas; Bear Valley.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	<u>h</u>	No. of	
15	Sep 06	13 44 45	35.3°	121.1°	3.6	a(R)	10	50 km W of San Louis Obispo. Felt.
16	Sep 07	16 32 24.4	37° 31'	121° 27'	2.8	a(R)	6	10 km S of Tracy.
17	Sep 08	12 28 24	39.1°	118.0°	3.4	a(R)	6	40 km NE of Walker Lake, Nevada.
18	Sep 09	19 23 43.5	36° 49.9'	121° 35.6'	2.8	a(R)	9	10 km W of Hollister.
19	Sep 10	00 00 58.4	36° 34'	121° 13'	2.5	a(R)	8	30 km SE of Hollister.
	Sep 10	22 31 29	40.5°	126.3°	3.7	a(R)	6	170 km W of Eureka.
_	Sep 11	05 28 08	40.3°	127.3°	4.7	Ъ	12	275 km W of Eureka.
20	Sep 12	13 48 55	38° 48'	122° 18'	2.9	a(R)	14	30 km WNW of Woodland.
21	Sep 16	03 32 24	36° 11'	120° 48'	2.5	Ъ	8	13 km W of PRI.
_	Sep 20	18 37 58	36.2°	118.4°	3.0	a(R)	12	North of Sirretta Peak.
	Sep 21	02 23 36	40.2°	127.2°	3.0	_	8	200 km W of Eureka.
-	Sep 21	02 47 59	40.2°	127.2°	3.4	_	8	200 km W of Eureka.
22	Sep 29	12 42 23	41.1°	125.4°	3.4	a(R)	7	100 km WNW of Eureka.
23	Oct 02	04 56 46.5		122° 41.5'	5.6	b		Santa Rosa. Felt throughout the San Francisco Bay region. Power out, water mains broken. Several injuries. Property damage from this and subsequent shocks in the millions of dollars (McEvilly et al., "The Santa Rosa Earthquakes of October, 1969," Mineral Information Service, California Division of Mines and Geology, 23, Number 3, March 1970, p.44).
24	Oct 02	05 14 21	38.5°	122.7°	3.5	-	-	Santa Rosa (McEvilly, 1970, <u>loc</u> . <u>cit</u> .).
25	Oct 02	06 00 58.9	36° 19.1'	120° 19.4'	3.3	a	10	10 km N of Coalinga.
23	Oct 02	06 19 57.1	38° 27.3'	122° 41.5'	5.7	С		Santa Rosa. Felt throughout the San Francisco Bay area (McEvilly, 1970, <u>loc</u> . cit.).
26	Oct 02	07 10 09	38.5°	122.8°	3.4	-	-	Santa Rosa (McEvilly, 1970, <u>loc</u> . <u>cit</u> .).

Map	Da 19				Time	Lati		Longi West	tude	Magni- tude	h	No. o	
23	Oct	02	12	27	05.5	38°	29.4'	122°	41.0'	4.3	b	-	Santa Rosa. Felt in the Santa Rosa area (McEvilly, 1970, loc. cit.).
27	Oct	02	20	56	31.3	37°	00.0	121°	26.3	2.9	Ъ	8	10 km E. of Gilroy.
28	Oct	03	13	10	11	37.6	0	118.8	3°	4.6	a(R)	12	Tom's Place N of Bishop.
-	Oct	03	23	32	28	36.2	0	118.3	°	3.3	a(R)	11	North of Sirretta Peak.
29	Oct	05	06	54	54.4	37°	52.8'	122°	02.2	2.7	С	10	3 km S of Walnut Creek. Felt in Oakland, Walnut Creek, Castro Valley.
30	Oct	06	14	28	07	38°	27.7	122°	42.8'	3.9	С	-	Santa Rosa (McEvilly, 1970, loc. cit.). Felt in Santa Rosa.
-	Oct	06	14	42	31	36.2	0	118.3	3°	3.0	a(R)	9	North of Sirretta Peak. Three aftershocks, one of M=3.
31	Oct	07	08	38	35	40.4	0	125.2	20	4.3	a(R)	12	120 km SW of Eureka.
-	Oct	09	22	14	00	36.2	0	118.3	3°	3.0	a(R)	8	North of Sirretta Peak.
63\$	Oct	12	09	32	55	41.2	0	126.1	L°	4.5	a	11	180 km W of Eureka.
32	Oct	16	18	15	19.1	38°	32'	122°	40 *	2.8	a(R)	11	10 km N of Santa Rosa.
33	Oct	17	22	55	15	40°	14'	124°	15'	3.5	a(R)	11	20 km SE of Cape Mendocino.
34	Oct	18	19	46	12.7	36°	48.31	121°	33.4'	2.6	a	9	10 km WSW of Hollister.
35	Oct	18	22	05	40.5	36°	46.1'	121°	33.3'	2.6	a	9	10 km WSW of Hollister.
36	Oct	22	22	02	43	40.3	3°	123.9	9°	3.8	a(R)	12	Near Garberville.
37	Oct	27	10	59	42.8	36°	47.4	121°	23.61	4.6	С	18	Hollister. Felt in San Francisco.
38	Oct	27	11	17	11.6	37°	29'	118°	45'	3.0	-	-	Tom's Place N of Bishop (University of Nevada).
39	Oct	28	02	32	10.2	37°	06'	118°	04"	3.0	-	-	SE of Bishop, near Big Pin (Univ. of Nevada).
40	Nov	06	19	40	26.5	36°	51'	122°	091	3.0	a	8	15 km S of Santa Cruz.
41	Nov	11	07	57	49.8	36°	57.8	121°	27.8	2.6	a	7	10 km N of Hollister.
42	Nov	15	20	58	03.6	36°	44.7	121°	24.4	4.2	С	9	10 km S of Hollister.
43	Nov	16	10	17	20.2	36°	49.6	121°	37.8'	2.9	a	9	W of Hollister near San Juan Bautista.
-	Nov	16	19	29	24	36.	1°	118.	4°	3.5	a(R)	10	N of Sirretta Peak.

Map No.	Date 1969			Time	Latitude North	Long	itude	Magni- tude	<u>h</u>	No. o	
44	Nov 1	7 20	49	19.5	36° 25.6'	121°	00.3	4.4	b	10	NEN of King City. Felt in Monterey. Swayed buildings in Salinas.
45	Nov 1	9 06	28	50	36° 27'	121°	31'	4.2	a(R)	8	Gonzales, Salinas Valley. Felt in Salinas and Santa Cruz. Rattled windows in Monterey.
46	Nov 2	6 00	06	59	36° 29'	120°	36'	2.5	b(R)	6	50 km NE of King City.
47	Nov 2	6 11	10	46	36.8°	121.	3°	3.1	a(R)	4	Near Hollister.
48	Nov 3	0 15	11	54	36.3°	120.	9°	2.5	a	10	20 km E of King City. Two small foreshocks recorded.
49	Dec 0	7 11	54	41.9	36° 55'	121°	27	3.5	С	11	5 km N of Hollister.
	Dec 0	7 13	24	22	36.2°	118.	3°	3.3	b(R)	9	Sirretta Peak.
50	Dec 0	8 02	26	23.1	37° 08'	116°	58'	3.6	-	-	W of Nevada Test Site (University of Nevada).
51	Dec 1	0 13	25	31	35° 46'	120°	24 *	3.5	a(R)	7	40 km S of Coalinga.
52	Dec 1	0 15	30	00.4	37° 20'	116°	04 *	4.6	-	-	Nevada Test Site. Event looks like an explosion (University of Nevada).
53	Dec 1	2 08	05	31.6	36° 41.1'	121°	22.0	2.7	а	10	15 km S of Hollister.
54	Dec 1	4 11	01	45.6	40° 23'	123°	39'	3.2	Ъ	7	50 km S of Eureka.
55	Dec 1	.4 19	07	57	35° 55'	120°	41'	3.2	a(R)	9	20 km N of Paso Robles.
56	Dec 1	5 00	31	34.0	37° 08.4	121°	31.1'	2.9	С	9	10 km E of Morgan Hill.
49	Dec 1	.6 09	09	42.3	36° 56.6'	121°	27.0	3.1	a	9	10 km NW of Hollister.
-	Dec 1	6 17	37	57	36.4°	117.	9°	3.0	a(R)	6	20 km S of Lone Pine.
57	Dec 1	.7 22	2 44	07.5	37° 24.7'	118°	15.9'	3.3	-	-	45 km E of Bishop (University of Nevada).
58	Dec 1	8 07	59	41	41.3°	125.	2°	4.2	b(R)	10	110 km WNW of Eureka.
-	Dec 1	9 09	03	38	36.2°	118.	40	3.5	a(R)	10	N or Sirretta Peak.
59	Dec 2	.2 03	3 03	26.5	37° 51.6'	121°	56.6	3.3	Ъ	11	5 km SW of Mt. Diablo. Felt in Walnut Creek, San Ramon. Well cracked 200 feet below surface in Dublin.
60	Dec 2) 5 1 (1.3	52.6	36° 47.2'	1219	17 31	2.9	а	12	
	Dec 2		2 12		40.4°	125.		3.6	a(R)		100 km SW of Eureka.
-	Dec 2				36.2°		3°	3.1		9	N of Sirretta Peak.
				11.4				3.8	c	15	5 km NE of Livermore. Felt in Byron, Livermore, and Tracy.





EARTHQUAKES IN NORTHERN CALIFORNIA, NEVADA, AND OREGON January - June 1970

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No. of Stas.	
1	Jan 01	19 49 24	37° 36'	118° 40'	3.8	b(R)	13	35 km N of Bishop
1	Jan 01	19 50	37° 36'	118° 40'	3.2	b (R)	10	Aftershock of 19 49.
2	Jan 01	20 57 48	36° 441	121° 25'	3.2	С	10	8 km SW of Hollister. Intensity V at Harris Ranch, S of Hollister.
3	Jan 03	02 51 58.4	37° 17.9'	122° 05.3'	3.7	Ъ	25	Intensity VI at Cupertino, W of San Jose. Felt in San Francisco Peninsula area.
3	Jan 03	02 53 17.3	37° 17.9'	122° 05.3'	2.7	b	7	Aftershock of 02 51.
4	Jan 04	23 13 00.6	37° 07.5'	121° 31.2	3.4	b	16	15 km N of Gilroy. Intensity IV in Gilroy area.
5	Jan 05	03 46 52.0	37° 50.9'	121° 57.6'	2.5	Ъ	10	25 km E. of Berkeley.
6	Jan 05	17 31 12.2	37° 31.3'	121° 50.1'	3.3	b .	12	15 km S. of Livermore. Press reported a small tremor shook eastern San Jose and Sunol areas. Felt at Fremont, Newark, & Pleasanton.
7	Jan 06	02 29 07.5	36° 31.8'	121° 06.9'	4.0	Ъ	19	Intensity V at Bacon Ranch, near the old Bear Valley School (Pinnacles - Bear Valley area). Felt in Hollister and Salinas.
7	Jan 06	02 56 06.5	36° 31.8'	121° 06.9'	2.8	Ъ	12	Aftershock of 02 29.
8	Jan 06	08 34 55.0	37° 32.5'	121° 52.0'	2.8	c	12	15 km SW of Livermore.
9	Jan 06	10 55 16	40.9°	125.7°	4.0	b (R)	13	150 km W of Arcata.
10	Jan 14	15 42 20.5	38° 41.7'	122° 15.1'	3.1	b	10	50 km S of Williams.
11	Jan 14	18 44 21	37° 25¹	118° 23'	3.3	a(R)	13	N of Bishop.
12	Jan 15	18 11 18	37° 32'	118° 22'	3.2	b (R)	11	N of Bishop.
13	Jan 17	08 39 16	39.4°	118.1°	3.7	a(R)	10	60 km E of Fallon, Nev.
14	Jan 21	17 13 30	39.1°	118.1°	3.2	b (R)	8	70 km SE of Fallon, Nev.
15	Jan 22	13 58 06.3	37° 59.51	121° 59.1'	2.6	Ъ	12	25 km NE of Berkeley.
16	Jan 25	20 21 24	37° 30'	118° 42°	3.6	a(R)	14	30 km NW of Bishop
17	Jan 25	20 39 59	39° 50'	120° 00'	3.0	a(R)	4	35 km N of Reno.
18	Jan 26	13 57 58.3	36° 32.7'	121° 11.3'	2.5	а	11	25 km W of LLA.
19	Jan 29	02 49 12.9	36° 06.5'	120° 59.6'	2.5	а	6	20 km SE of King City.
20	Jan 31	00 23 06.4	37° 48.1'	122° 06.4°	2.3	С	14	15 km SE of Berkeley. Felt at Oakland.
-	Jan 31	11 31 25	42° 08'	126° 36'	4.7	b(R)	10	260 km NW of Arcata.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	h	No. of Stas.	
-	Feb 01	19 33 31	40.5°	126.5°	3.5	c(R)	9	220 km W of Arcata.
21	Feb 01	21 19 45.7	36° 24.5°	121° 01.8'	2.6	b	12	30 km E of PRS.
22	Feb 04	16 22 32.3	36° 59.7'	121° 43.5'	2.5	Ъ	14	10 km W of Gilroy.
23	Feb 08	00 14 13.3	36° 24.1	120° 57.9'	2.7	Ъ	13	25 km S of LLA.
24	Feb 09	05 23 47.9	36° 47.6'	121° 33.3'	2.9	Ь	14	Intensity II at San Juan Bautista.
25	Feb 09	16 00 46.1	35° 46.0'	120° 20.8'	3.1	Ъ	16	60 km S of PRI.
26	Feb 11	02 06 05.8	36° 37.8'	121° 18.2'	2.7	ь	11	25 km S of Hollister.
27	Feb 14	00 31 59.1	36° 53.3'	121° 38.7'	3.0	b	14	Intensity IV at Harris Ranch, 20 km W of Hollister.
28	Feb 14	03 20 20	41.1°	125.4°	3.6	c(R)	12	120 km W of Arcata.
29	Feb 14	04 49 58	40.3°	125.0°	3.8	c(R)	13	100 km SW of Arcata. Intensity III at Ferndale.
30	Feb 14	15 44 58.0	36° 05.4'	120° 38.1'	2.8	ь	14	5 km S of PRI.
31	Feb 14	19 49 19	38° 01'	118° 40'	3.0	a(R)	9	50 km N of Bishop.
38	Feb 15	07 32 10	40.2°	124.6°	3.5	d(R)	13	90 km SW of Arcata.
32	Feb 15	09 54 42	40° 22°	124° 52'	3.6	d(R)	13	90 km SW of Arcata.
33	Feb 19	17 46 32.4	37° 29.2'	121° 42.2°	2.4	Ъ	10	15 km N of MHC.
34	Feb 26	08 36 50	37° 28'	118° 29†	3.2	a(R)	7	10 km N of Bishop.
35	Feb 27	04 01 32.1	36° 33.9'	121° 12.7°	3.0	a	14	35 km SE of Hollister.
35	Feb 27	04 02 41.5	36° 34.2'	121° 12.9'	2.6	Ъ	11	Aftershock of 04 01.
36	Feb 28	02 05 00.1	37° 48.7'	121° 55.7°	2.9	а	14 Fel	20 km NW of Livermore. t in Danville.
37	Mar 01	07 16 38	40° 12°	124° 40°	3.2	b(R)	13	40 km W of Garberville.
38	Mar 01	16 40 13	40° 10°	124° 36'	3.9	b(R)	13	45 km W of Garberville.
39	Mar 06	11 55 52	39.0°	118.1°	3.1	b(R)	8	90 km E of Yerington.
40	Mar 07	14 12 16.5	37° 13.7'	121° 36.8°	2.8	a	15	25 km S of MHC.
41	Mar 12	11 45 14	37° 21'	118° 34°	3.0	b(R)	7	20 km W of Bishop.
42	Mar 12	13 12 34	40° 28'	123° 58'	3.8	c(R)	10	50 km S of Arcata. Intensity V at Carlotta, Ferndale, Miranda, Rio Dell, and Scotia. Slight shock felt in Ferndale at 12 17.
43	Mar 13	19 33 28	40° 07°	123° 08'	3.3	ь(R)	9	60 km E of Garberville.
44	Mar 14	20 59 34	37° 25°	117° 51'	3.0	a(R)	7	50 km E of Bishop.
45	Mar 15	06 14 44.3	36° 32.0'	121° 08.5'	2.5	a	14	20 km W of LLA.

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	_h_	No. of	
46	Mar 18	16 38 48	36° 17'	118° 19'	3.7	a(R)	12	50 km SW of Lone Pine.
46	Mar 18	16 40 24	36° 18'	118° 18'	3.4	b (R)	10	50 km SW of Lone Pine.
47	Mar 18	17 00 44	36° 17'	118° 24'	3.5	a(R)	12	55 km SW of Lone Pine.
48	Mar 20	10 18 46	37° 01'	118° 10'	3.2	b (R)	6	45 km S of Bishop.
49	Mar 20	11 22 13	36° 56'	117° 59'	3.1	b (R)	4	35 km NE of Lone Pine.
-	Mar 20	19 30 10	43.6°	127.3°	4.7	b(R)		USCGS location off Oregon Coast.
51	Mar 23	19 52 12	37° 45'	115° 59'	4.2	b(R)	18	220 km E of Bishop.
52	Mar 23	21 55 41	39° 36'	118° 09'	3.8	b (R)	11	55 km E of Fallon, Nev.
53	Mar 24	03 52 33	36° 16'	118° 20'	4.0	b(R)	19	50 km SW of Lone Pine. Intensity IV at Onyx. Intensity III at Olancha.
54	Mar 24	05 14 43	39° 35'	118° 04'	4.3	c(R)	14	60 km E of Fallon, Nev.
55	Mar 26	16 18 33	38° 37'	119° 18'	3.4	b (R)	13	45 km S of Yerington, Nev.
56	Mar 27	06 56 53.5	36° 48.6'	121° 35.9'	3.2	Ъ	12	15 km W of Hollister.
56	Mar 27	16 08 12.4	36° 49.2'	121° 33.9'	3.1	а	11	Aftershock of 06 56.
56	Mar 27	17 27 25.0	36° 49.0'	121° 33.9'	2.7	a	. 11	Aftershock of 06 56.
57	Mar 28	06 48 58	37° 21'	118° 03'	3.0	a(R)	11	20 km E of Bishop.
58	Mar 28	09 38 44	38° 57'	116° 24'	4.5	a(R)	16	250 km E of Yerington, Nev.
59	Mar 29	17 35 11.8	36° 59.7'	121° 27.9'	2.5	Ъ	11	15 km N of Hollister.
60	Mar 30	13 28 45.5	37° 18.7'	121° 40.9'	2.7	b	12	5 km S of MHC.
61	Mar 31	05 01 35.2	36° 52.1'	121° 38.0'	2.5	a	12	20 km W of Hollister.
62\$	Mar 31	07 02 28.6	36° 51.5'	121° 25.1'	4.7	Ъ	18	5 km E of Hollister. Intensity V at Boulder Creek, Daly City, Cienega Rd. to 13 miles south of Hollister, Coyote, Fre- mont, Gilroy (plaster cracked, damage slight), Hollister (plaster cracked; few jars fell from grocery store shelves), Morgan Hill, Paicines, Salinas, San Juan Bautista, and Watsonville.
63	Mar 31	08 23 36.5	36° 52.2'	121° 24.6'	2.1	Ъ	13	Aftershock of 07 02.
64	Apr 01	13 48 41	40° 16°	124° 34°	3.3	c(R)	7	80 km SW of ARC.
65	Apr 05	03 18 01.3	36° 48.7°	121° 22.7°	2.4	Ъ	12	5 km S of Hollister.

Map No.	Date 1970	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	<u>h</u>	No. of Stas.	Remarks
-	Apr 13	11 37 21	40° 17'	126° 36'	4.3	b (R)	12	220 km W of Arcata.
66	Apr 18	09 26 15.5	40° 36.7'	124° 32.0'	3.7	a	7	50 km SW of Arcata.
67	Apr 18	13 16 53.4	36° 29.5'	120° 00.7'	3.0	a	15	35 km SW of Fresno.
68	Apr 19	23 43 33.5	36° 34.5'	121° 12.7°	2.7	a	12	25 km W of LLA.
69	Apr 20	00 31 08.3	38° 30.2°	122° 46.7'	2.8	С	6	10 km NW of Santa Rosa.
70	Apr 21	22 29 25.9	35° 39.41	120° 25.7°	3.0	a	8	65 km S of PRI.
32	Apr 22	22 32 22	40° 22'	124° 52'	4.0	a(R)	12	90 km SW of Arcata.
71	Apr 23	03 25 18.9	35° 58.4'	121° 27.1'	2.5	a	10	25 km SW of King City.
72	Apr 23	05 26 14	40° 14'	121° 23'	3.7	a(R)	12	15 km SE of MIN. Intensity IV at Mineral, III at Mill Creek. Felt at Chester and Mineral.
73	Apr 23	12 45 35.6	37° 55.6'	122° 19.2'	2.0	a.	9	5 km N of Berkeley. Felt in San Pablo.
74	Apr 26	21 34 29	41.1°	121.9°	3.2	a(R)	5	30 km NW of Burney.
75	May 04	08 13 10	40.3°	125.2°	3.2	a(R)	4	120 km SW of Arcata.
76	May 05	02 18 27	36.2°	118.3°	3.4	a(R)	9	50 km SW of Lone Pine.
77	May 06	11 50 08	40° 10'	124° 35'	3.4	b(R)	6	90 km SW of Arcata. Intensity III at Ferndale and vicinity.
78	May 08	10 59 57.7	36° 35.4'	120° 24.5'	3.3	c(R)	12	30 km E of LLA.
79	May 13	04 24 22.6	36° 35.7'	121° 10.3'	2.6	b	14	15 km W of LLA.
80	May 14	07 57 02	37° 06'	121° 08'	2.5	a(R)	10	40 km NE of Hollister.
-	May 16	19 18 02	40° 23°	126° 48'	3.5	c(R)	8	240 km W of Arcata.
81	May 18	15 08 25	41° 27'	122° 49°	4.0	С	13	50 km NW of Dunsmuir. Intensity V at Callahan (rocks rolled off cliff; sounded like many booms) Edgewood, Fort Jones (small objects shifted, overturned, and fell; damage slight), Gazelle, Greenview, Sawyers
								Bar, Scott Bar. Felt in Eureka, Redding, and Yreka.
82	May 19	03 58 33	36° 33'	120° 20'	2.5	Ъ	10	35 km E of LLA.
83	May 20	05 18 49.2	36° 35.2'	120° 21.7'	3.4	a	17	35 km E of LLA.
84	May 20	07 12 43	40° 14°	124° 11'	3.6	b (R)	12	70 km S of Arcata. Intensity V at Fortuna, Petrolia, Rio Dell, and Scotia—where many were awakened.

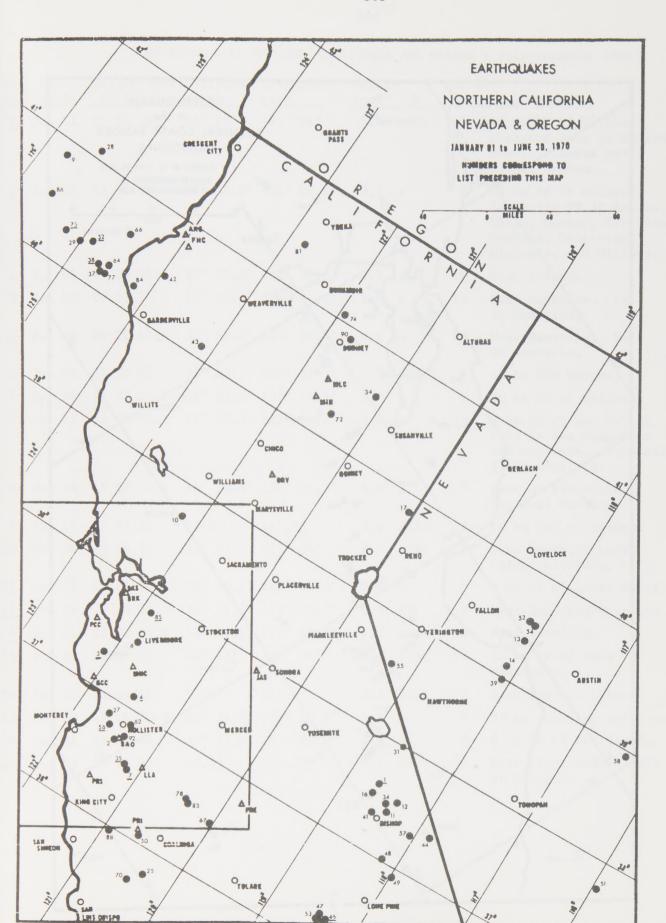
Map No.		ate 970			Time	Lati		Longi	Ltude	Magni- tude	_h_	No. of	
85\$	May	22	10	39	58.0	37°	50.1'	121°	55.7'	2.7	a	12	20 km E of Berkeley. Felt in Danville.
86	May	24	19	04	53	40.5	0	125.6	5°	3.1	a(R)	4	140 km W of Arcata.
87	May	24	23	09	03.6	38°	27.4	122°	09.6	2.6	Ъ	8	20 km NE of Napa.
87	May	24	23.	10	41.5	38°	27.4	122°	09.61	2.6	b	8	Aftershock of 23 09.
88	May	27	10	42	19.3	35°	59.6'	120°	54.8'	3.4	a	8	40 km SW of Priest.
61	May	27	19	43	29.8	36°	51.2	121°	38.0	3.0	ь	9	20 km W of Hollister.
75	May	30	18	42	29.0	40.3	3°	125.4	, 0	3.5	c(R)		USCGS location 120 km SW of Arcata.
-	Jun	04	05	03	15	40.4	°	128.0)°	3.5	c(R)	9	350 km W of Arcata.
-	Jun	07	04	12	10	40°	20'	126°	27'	4.7	c(R)	10	210 km W of Arcata. Intensity IV at Ferndale.
89	Jun	08	08	01	32.8	36°	52.3'	122°	34.8'	2.7	a	10	55 km W of GCC.
-	Jun	10	07	58	09	40°	22'	126°	27'	3.7	c(R)	7	210 km W of Arcata.
85	Jun	12	03	30	04.0	37°	48.1'	121°	56.0'	4.3	b	8	Intensity VI at Danville where slight damage occurred. Press reported
		,											damage occurred to several windows, a fence, a chimney, several outside brick facades, and to hundreds of items shaken from store shelves. cf separate list of Danville earthquakes over magnitude 2.5.
4	Jun	12	10	37	19.2	37°	07.6	121°	31.3'	3.0	b	11	15 km N of Gilroy.
90	Jun	13	08	55	01	40°	55†	121°	38'	4.0	a(R)	9	Intensity V at the McArthur- Burney State Park (north of Burney), Pit River Power- house No. 3 (near Burney), and Fall River Mills. No
													damage reported.
91	Jun				01.8		06.6		31.7'	2.4	Ь	11	10 km N of Gilroy.
4	Jun	20			08.3		07.1'		32.01	2.9	Ъ	10	15 km N of Gilroy.
92	Jun	27	07	03	59.5	36°	45.7'	121°	22.7	3.2	С	14	8 km S of Hollister.

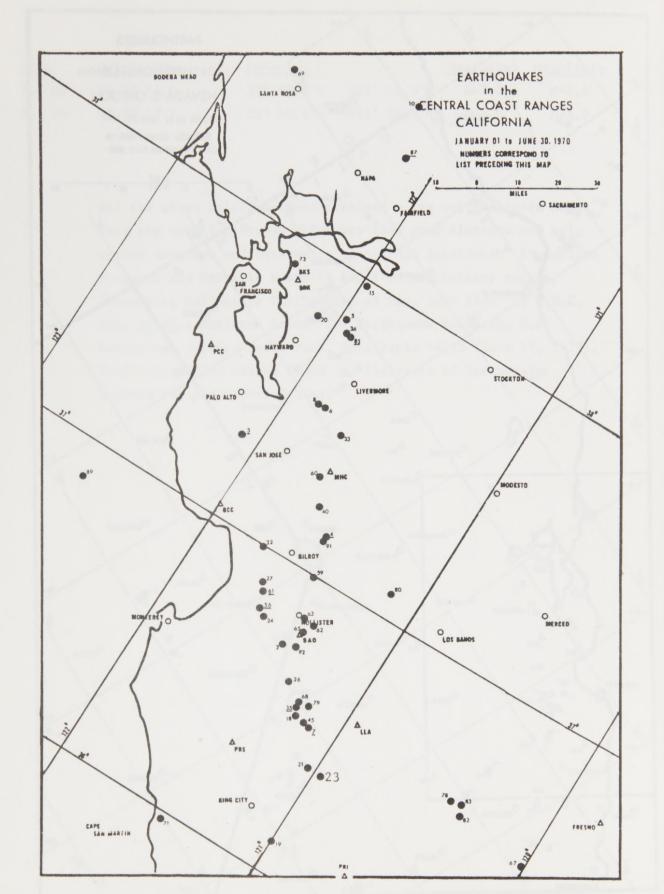
List of Magnitude > 2.5 Earthquakes in the Area of Danville, California, May - June 1970

Date	Origin Time	Location		Depth(km)	Magnitude
May 22	10 39 58.0	37° 50.1'N	121° 55.7'W	h=3.9	M=2.7
May 25	00 42 41.7	37° 48.8'N	121° 56,8'W	h=7.8	M=2.8
May 25	08 13 33.2	37° 48.0'N	121° 56.9'W	h=5.3	M=2.7
May 25	18 42 29.6	37° 48.7'N	121° 56.6'W	h=7.6	M=2.7
May 25	18 43 00.7	37° 48.3'N	121° 56.8'W	h=6.4	M=2.9
May 26	22 10 24.2	37° 48.0'N	121° 56.4'W	h=4.1	M=3.0
May 26	22 10 35.2	37° 48.0'N	121° 56.4'W	h=4.1	M=3.5
May 26	22 19 55.6	37° 47.9'N	121° 56.6'W	h=4.3	M=2.5
May 26	23 06 44.1	37° 49.3'N	121° 55.8'W	h=9.1	M=2.8
May 26	23 33 39.9	37° 47.9'N	121° 56.9'W	h=3.9	M=3.8
May 28	02 47 05.6	37° 48.8'N	121° 56.7°W	h=6.6	M=2.6
May 29	02 53 08.3	37° 49.2'N	121° 56.7'W	h=8.7	M=3.4
May 29	02 55 49.5	37° 48.1'N	121° 56.5'W	h=6.7	M=3.5
May 29	03 13 15.8	37° 49.2'N	121° 55.8'W	h=8.7	M=3.1
Jun 11	23 32 56.2	37° 47.5'N	121° 56.5'W	h=7.2	M=3.4
Jun 11	23 39 49.7	37° 47.9'N	121° 56.5'W	h=8.8	M=3.0
Jun 11	23 48 35.7	37° 46.6'N	121° 56.6'W	h=8.5	M=2.6
Jun 12	00 39 25.0	37° 48.9'N	121° 56.6'W	h=8.6	M=3.3
Jun 12	03 30 04.0	37° 48.1'N	121° 56.0'W	h=9.1	M=4.3
Jun 12	03 30 55.0	37° 48.1'N	121° 56.0'W	h=9.1	M=3.9
Jun 12	03 33 48.8	37° 46.9'N	121° 56.3'W	h=5.4	M=2.6
Jun 12	03 57 49.6	37° 47.6°N	121° 55.8'W	h=9.1	M=2.7
Jun 12	04 06 00.2	37° 48.5°N	121° 55.3'W	h=3.6	M=2.8
Jun 12	06 34 01.4	37° 47.7'N	121° 55.9'W	h=9.6	M=3.1
Jun 12	16 03 32.1	37° 48.3'N	121° 56.3'W	h=8.7	M=4.2
Jun 12	16 10 51.4	37° 48.0'N	121° 55.7'W	h=9.6	M=3.2
Jun 12	17 10 50.7	37° 48.6'N	121° 56.9'W	h=8.4	M=2.6
Jun 12	18 00 49.6	37° 47.8'N	121° 55.9'W	h=9.0	M=2.6
Jun 12	22 54 39.3	37° 51.0'N	121° 56.8'W	h=14.1	M=3.1
Jun 14	09 11 09.8	37° 48.6'N	121° 57.0'W	h=10.9	M=2.7
Jun 14	09 18 10.2	37° 48.7'N	121° 56.1'W	h=9.0	M=3.0
Jun 28	21 19 21.3	37° 48.4'N	121° 56.7'W	h=2.0R	M=2.5

Date	Origin Time	Location	Depth (km)	Magnitude
Jul 05	05 27 54.0	37° 48.3'N 121° 56.0'N	h=7.0	M=2.6
Jul 05	05 28 47.1	37° 48.5'N 121° 56.3'N	h=7.6	M=2.9

All the above solutions were obtained using well-recorded data from the same 8 stations which provided good distance and azimuthal coverage and internally consistant locations. A complete study of the Danville swarm is found in preliminary report, "Danville, California Earthquakes of May, June 1970" by W.H.K. Lee, et al., National Center for Earthquake Research, U.S. Geological Survey, Menlo Park, California 94025 (June 19, 1970). Felt information may be found in "Abstracts of Earthquake Reports for the United States."





EARTHQUAKES IN NORTHERN CALIFORNIA AND OREGON - July-December 1970

Map No.	Date 1970	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. of Stas. Remarks
1	Jul 01	07 55 26	39° 29'	122° 04'	3.6 c(R)	7 15 km SE of Willows. Reported felt in Willows area. Plaster and dishes broken.
1	Jul 01	18 56 59.4	39° 28.6'	122° 05.1'	3.5 a	8 20 km SE of Willows. Intensity IV at Artois, Glenn, Durham, Elk Creek, Ordland, Princeton, Richvale, and Willows.
2	Jul 04	11 31 55.0	36° 58.2'	121° 37.8'	2.7 a	10 Near Gilroy.
3	Jul 05	05 27 54.1	37° 49.8'	121° 56.2'	2.6 Ъ	14 Near Danville. Felt in Danville.
4	Jul 05	05 28 47.4	37° 48.6'	121° 55.6'	2.9 a	14 Near Danville. Felt in Danville.
5	Jul 06	10 10 02	37° 22'	120° 02'	2.7 a(R)	7 45 km ENE Merced.
6	Jul 06	11 52 29.2	39° 22.6'	122° 01.9'	3.0 a	6 20 km SE of Willows.
7	Jul 11	19 01 04.2	37° 07.7'	122° 01.8'	3.4 b	10 8 km SW of Los Gatos. Felt in San Francisco and Capitola. Intensity II at Capitola.
8	Jul 14	18 08 42.4	36° 30.9'	120° 24.5'	3.0 a	7 East of Pinnacles National Monument.
9	Jul 17	12 47 41	37.5°	117.7°	3.9 a(R)	6 50 km ENE of Bishop.
10	Jul 20	23 24 55	35° 57'	121° 34'	2.5 a(R)	5 8 km south of Lopez Point, offshore.
11	Jul 21	05 24 16.1	35° 59.1'	121° 34.3'	2.5 Ъ	5 5 km SE of Lopez Point.
12	Jul 22	19 28 59.2	36° 51.2'	121° 36.7'	2.8 a	9 Near San Juan Bautista.
4	Jul 24	18 50 29.9	37° 49.3'	121° 55.7'	2.7 a	10 Near Danville.
13	Jul 25	14 37 15	40° 12'	124° 39'	3.1 b(R)	10 30 km SE of Cape Mendocino.
14	Jul 30	09 57 14	37.6°	118.9°	3.3 a(R)	7 Near Mammoth Lakes.
15\$	Jul 30	14 13 20.9	36° 34.6'	121° 20.1'	3.1 b	9 25 km south of Hollister
16	Jul 31	15 04 04.5	38° 17.4'	122° 07.3'	2.8 Ъ	9 8 km NW of Fairfield.
17	Aug 03	10 04 47	38.9°	122.5°	2.7 c(R)	6 Near Clear Lake. Felt at Lakeport.

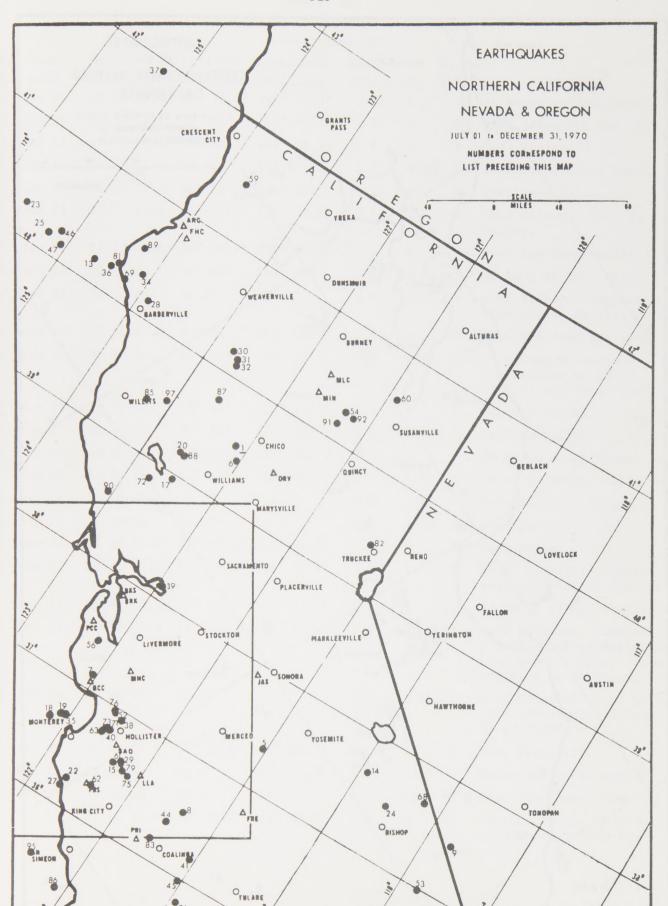
Map No.	Date 1970				Time		tude h	Longi West	tude	Magni- tude		No. of Stas.	
18	Aug (04	04	14	21.4	36°	38.8	122°	11.1'	4.7	b	11	Monterey Bay. Intensity VI. Felt strongly in Fort Ord. Felt in the San Francisco Bay Area. Water mains broken. Some telephone lines knocked down. At Carmel Valley, swimming pool cracked, redwood beams in build- ings twisted.
19	Aug	04	04	44	06.7	36°	42.5	122°	04.3'	3.2	a	10	Monterey Bay.
20	Aug	05	04	10	18	39°	12'	122°	37'	3.3	a(R)	9	East of Clear Lake.
21	Aug	05	06	47	36.4	35°	49.1	119°	56.1'	2.9	Ъ	8	Kettleman Hills.
22	Aug	05	16	51	45.7	36°	13.7'	121°	41.4	3.0	ь	11	25 km SW of Paraiso.
23	Aug	05	19	09	04	40.3	3°	125.	8°	3.4	a(R)	8	Mendocino escarpment.
24	Aug	08	01	01	50.1	37°	28.7	118°	33.8'	3.1	a	6	NW of Bishop.
25	Aug	09	02	53	45	40.2	0	125.	2°	3.6	a(R)	5	Mendocino escarpment.
26	Aug	11	09	56	30.5	37°	54.3'	122°	14.5'	2.4	Ъ	10	Berkeley. Felt at Berkeley.
27	Aug	13	05	06	19.8	36°	10.4	121°	42.2'	3.7	Ъ	11	20 km W of Lopez Point.
28	Aug	14	06	28	47.5	40°	09.3	123°	53.7'	4.0	a	7	Near Garberville. Intensity V at Bridge- ville, Carlotta, Eureka, Ferndale, Fields Land- ing, Fort Seward, Loleta, Redway, and Rio Dell. No damage.
29	Aug	16	16	29	05.2	36°	38.0'	121°	18.1'	3.5	Ъ	9	16 km SE of Hollister. Intensity IV at Carmel and Spreckels.
30	Aug	19	06	54	25	40°	12'	122°	45'	4.1	b(R)	10	15 km SW of Redding. Intensity IV at Igo, Ono, Platina, and Redding.
31	Aug	19	09	41	41	40.	1°	122.	7°	3.3	a(R)	4	SW of Redding.
32	Aug				39	40.		122.			a(R)		SW of Redding.
33	Aug				38.6				15.4	2.5		14	Berkeley. Felt in Berkeley.
34	Aug	22	20	45	04	40.	3°	124.	1°	3.9	a(R)) 6	Near Petrolia. Intensity IV at Ferndale.

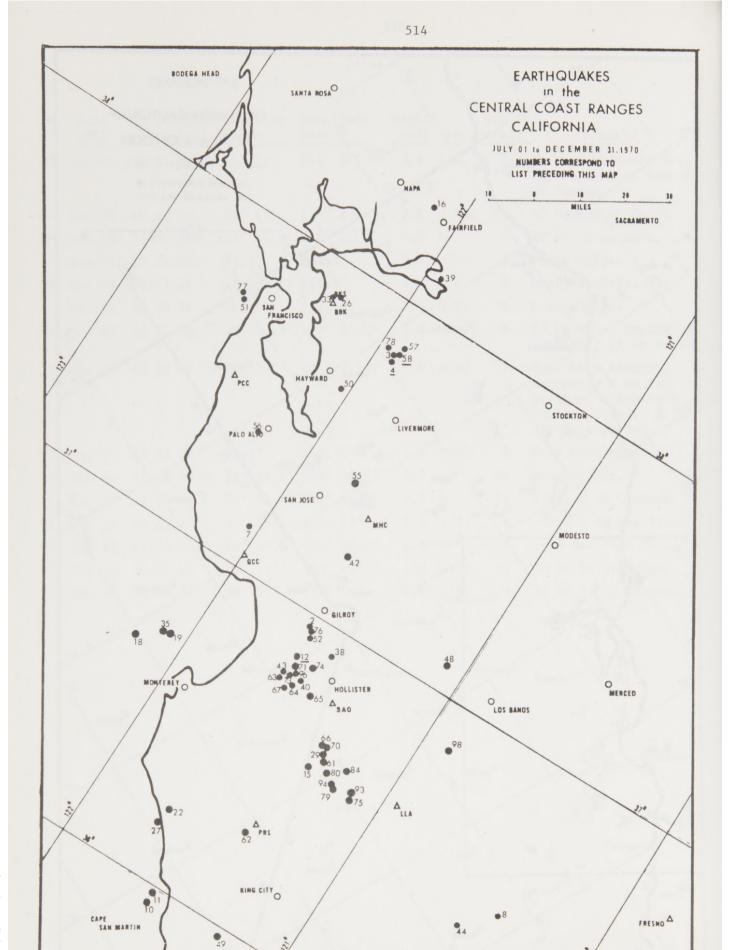
Map No.	Dat 197			-	Time	Lati	itude :h	Long	itude	Magni- tude	_ <u>h</u>	No. o	
35	Aug	23	17	53	47.4	36°	42.3'	122°	06.21	3.4	а	9	Monterey Bay. Intensity IV at Capitola and Monterey.
36	Aug	24	19	40	49	40.2	2 0	124.	5°	3.1	a(R)	3	Near Petrolia.
37	Aug		10	37	54	41.9)°	125.4	4°	3.7	a(R)	5	90 km W of Crescent City.
38	Aug	30	13	16	50.9	36°	54.6	121°	29.4	3.6	b	11	8 km NW of Hollister. Intensity V at Hollister and San Juan Bautista. No damage.
39	Aug	31	12	12	58.7	38°	06.4	121°	56.8'	3.6	b	9	4 km N of Pittsburg. Intensity IV at Martinez and Port Costa. Felt in Pittsburg and Concord.
40	Sep	02	02	25	35.6	36°	48.0'	121°	33.4	3.3	а	11	6 km S of San Juan Bautista.
41	Sep	05	11	29	11	36.2	20	120.	1°	3.1	b(R)	4	ENE of Coalinga.
42	Sep	05	22	15	56.1	37°	13.4	121°	39.01	2.5	Ъ	9	5 km E of Coyote.
43	Sep	08	08	09	06.8	36°	48.5	121°	37.2	2.7	а	12	5 km SW of San Juan Bautista.
44	Sep	10	23	45	59	36°	24 *	120°	30'	3.2	a(R)	11	30 km NW of Coalinga.
45	Sep	11	15	20	08	35°	591	120°	03'	3.3	a(R)	9	8 km E of Avenal.
46	Sep	12	02	53	18	40.2	20	125.	1°	3.3	c(R)	5	Mendocino escarpment.
47	Sep	13	21	10	21	40°	08'	125°	05'	5.4	a(R)	9	Mendocino escarpment. Intensity V at Fern-
													dale, Fort Seward, Rio Dell area, and Scotia.
48									05.3	2.5	а	11	20 km W of Los Banos.
49\$	Sep	16	18	22	10.7	35°	57.8	121°	16.1	2.6	а	7	SW of King City.
50	Sep	18	00	36	56.3	37°	38.8'	122°	02.4	2.7	Ъ	12	5 km SE of Hayward. Intensity IV. Felt in Hayward and San Leandro.
51	Sep	18	02	29	49.9	37°	42.9	122°	32.1'	2.5	а	8	3 km W of San Francisco. Intensity IV at Mt. Davidson. Felt through- out San Francisco.
52	Sep	18	09	34	12.9	36°	56.3	121°	35.9'	3.1	Ъ	13	15 km E of Watsonville.
53	Sep	19	16	27	27	37.0)°	117.	8°	3.8	a(R)	6	40 km SE of Tinemaha.

Map No.	Date	Origin (G.C		Latitude North	Longitude West	Magni- tude		of	Remarks
54	Sep 20	08 37	21.4	40° 16.0'	121° 17.9'	3.5	a	12	Near Lake Alamanor.
55	Sep 22	23 59	47.6	37° 26.0'	121° 47.5'	2.7	а	10	7 km S of Calaveras Reservoir.
56	Sep 23	04 51	27.9	37° 23.9'	122° 13.1'	3.5	a	9	6 km S of Palo Alto. Felt from San Francisco to Palo Alto (Inten- sity IV?)
57	Sep 23	08 38	04.1	37° 52.3'	121° 54.4'	2.7	Ъ	9	Near Mt. Diablo. Felt in Danville.
4	Sep 25	19 58	30.2	37° 48.5'	121° 55.3'	2.9	a	9	Danville.
58	Sep 26	00 44	26.6	37° 50.4'	121° 54.7'	2.8	Ъ	8	Near Danville.
59\$	Sep 27	03 37	04	41.5°	123.7°	3.7	a(R)	5	50 km SE of Crescent City.
60	Sep 27	18 24	32	40° 37'	120° 55'	3.7	a(R)	7	NW of Susanville.
61	Oct 01	07 37	44.1	36° 37.7'	121° 17.3'	3.2	Ъ	11	16 km SE of Hollister.
62	Oct 07	17 57	06.3	36° 18.0'	121° 24.0'	2.5	а	9	30 km NW of King City.
63	Oct 08	17 29	18.5	36° 46.6'	121° 36.6'	3.0	а	8	8 km N of Salinas. Felt at Harris Ranch, 7 miles S of Hollister.
64	Oct 10	10 31	41.6	36° 46.5'	121° 33.2'	2.5	a	11	10 km NE of Salinas.
65	Oct 12	02 15	46.8	36° 46.8'	121° 28.5'	2.4	b	10	17 km NE of Salinas. Felt at Harris Ranch, 7 miles S of Hollister.
66	Oct 17	08 17	01.6	36° 39.1'	121° 20.0'	2.8	Ъ	11	20 km S of Hollister.
67	Oct 17	11 41	25	36° 48'	121° 35'	2.8	a(R)	9	6 km SW of San Juan Bautista.
68	Oct 25	09 20	55	37.7°	118.2°	3.1	a(R)	3	Near White Mountains.
69	Oct 26	14 46	15	40.2°	124.2°	3.4	c(R)	5	Near Petrolia. Intensity IV at Eureka, Ferndale, Fortuna, Mattole Valley and Rio Dell.
_	Oct 27	00 33	42	36° 08'	118° 29'	3.1	a(R)	8	Near Sirretta Peak.
-	Oct 27	00 34		36° 07'	118° 30'	3.4	b(R)	8	Near Sirretta Peak.
-	Oct 27			40.4°	127.0°	5.1	d	-	Gorda Ridge (National Ocean Survey)
-	Oct 27	04 23	38	40.3°	127.2°	4.2	d	-	Gorda Ridge (National Ocean Survey)

Map No.	Dat				Time	Lati		Longi	Ltude	Magni tude		No. of Stas.	Remarks
-	Oct	27	06	08	51	40.4	0	127.2	2 0	3.3	a(R)	3	Gorda Ridge.
-	Oct	27	10	14	27	40.3	}°	126.7	7°	4.6	d .	10.700	Near Gorda Ridge (National Ocean Survey)
-	Oct	27	13	39	57	40.2	0	127.0)°	3.8	a(R)	4	Gorda Ridge.
70	Nov	02	23	21	13.1	36°	39.8'	121°	18.7'	2.5	a	7	North of Pinnacles National Monument.
71	Nov	03	05	25	50.4	36°	49.4	121°	34.8	3.2	a	9	Near San Juan Bautista.
72	Nov	04	06	40	42	38°	50'	122°	45	2.9	c(R)	9	15 km SW of Clear Lake.
58	Nov	07	13	45	08.5	37°	50.1'	121°	55.5'	2.7	С	9	Near Danville.
73	Nov	09	00	52	06.0	36°	48.0	121°	35.2	3.1	а	12	8 km SW of San Juan Bautista. Intensity IV at Harris Ranch, 7 miles S of Hollister.
74	Nov	09	01	18	12.6	36°	51.0	121°	31.6	2.6	а	9	Near San Juan Bautista.
75	Nov	09	11	37	22.1	36°	34.1	121°	07.3	3.0	Ъ	9	10 km SW of Llanada.
76	Nov	09	13	35	52.1	36°	57.5'	121°	36.6'	3.5	Ъ	9	8 km SW of Gilroy. Intensity V at Gilroy and LaSilva Beach. Felt in Watsonville. No damage.
77	Nov	10	11	19	39.3	37°	44.3	122°	34.7'	2.6	а	7	West of San Francisco. Reported felt. No damage.
78	Nov	12	21	10	22.9	37°	50.5'	121°	58.01	2.7	а	7	Near Danville.
79	Nov	14	18	03	58.6	36°	33.91	121°	12.3'	3.3	a	7	24 km NW of Llanada.
12	Nov	15	00	36	20.3	36°	51.0'	121°	36.21	2.6	а	10	Near San Juan Bautista.
80	Nov	15	18	19	32.4	36°	35.5'	121°	13.8'	3.4	Ъ	10	25 km NW of Llanada.
52	Nov	16	14	52	08.6	36°	56.2'	121°	35.2'	2.7	а	9	15 km E of Watsonville.
81	Nov	17	00	46	08	40.	3°	124.	4°	3.1	a(R)	4	Near Petrolia. Felt in Ferndale.
82\$	Nov	21	09	29	17	39°	24 *	120°	16'	3.1	a(R)	7	Near Truckee. Intensity IV at Floriston.
83\$	Nov	25	11	41	52.0	36°	10.5	120°	33.41	2.5	а	5	10 km SE of Priest.
84	Nov	26	06	37	16.1	36°	38.4	121°	12.0	2.7	а	8	25 km W of Llanada.
85	Nov	26	15	35	20	39.	5°	123.	2°	3.1	a(R)	4	Near Willits. Intensity V at Willits. No damage reported.

Map No.	Dat 197				Time	Lati		Longi	itude	Magni- tude		No. of Stas.	Remarks
86\$	Dec	01	06	05	59	35°	23'	121°	08†	3.3	c(R)	7	25 km W of Morro Bay. Intensity V at Bryson. No damage.
87	Dec	02	10	53	08	39°	471	122°	36'	3.1	a(R)	4	50 km WNW of Chico.
88	Dec	03	14	58	32.5	39°	11.9'	122°	31.3'	2.8	b	5	NE of Clear Lake.
-	Dec	05	13	59	48	40.3	3°	126.4	4 1	3.6	a(R)	4	Gorda Ridge.
89	Dec	06	01	57	28	40.5	5°	124.3	3°	3.2	b(R)	3	Near Ferndale.
-	Dec	06	20	36	34	40.3	3°	127.	5°	3.5	a(R)	4	Gorda Ridge.
90	Dec	07	23	26	50.7	38°	39.9'	123°	04.01	3.2	а	8	15 km NW of Healdsburg. Intensity II at Windsor.
91	Dec	09	09	35	48	40°	09'	121°	21'	3.6	a(R)	7	Near Lake Almanor. Intensity V at Camp Caribou, North Fork of Feather River. No damage reported.
92	Dec	10	15	07	24	40.2	2°	121.2	2°	2.8	c(R)	5	Near Lake Almanor.
93	Dec	11	03	56	48.6	36°	34.5'	121°	08.4	2.5	а	10	Bear Valley.
94	Dec	11	11	33	00.4	36°	34.7'	121°	13.5'	2.7	Ъ	11	25 km W of Llanada.
95	Dec	12	22	29	20	35°	39'	121°	33'	2.5	a(R)	6	30 km W of San Simeon.
96	Dec	18	17	00	14.0	36°	48.6	121°	33.81	2.8	a	9	Near San Juan Bautista.
97	Dec	20	05	47	28	39°	31'	123°	031	3.0	a(R)	6	50 km NE of Ukiah.
98	Dec	31	14	56	35	36°	52'	120°	541	2.9	a(R)	9	28 km NE of Llanada.





EARTHQUAKES IN NORTHERN CALIFORNIA January-June 1971

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Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		lo. o	
1	Jan 02	06 27 37.5	35° 55.1'	120° 32.3'	3.0	b	8	10 km NW of Parkfield.
2	Jan 08	05 31 37.6	36° 31'	121° 09'	2.7	a	6	Near Pinnacles Nat. Mon.
3	Jan 13	17 36 44.4	36° 26.41	121° 01.7'	2.8	C	7	Bear Valley.
4	Jan 14	14 43 01	39.8°	122.8°	3.0	a(R)	6	65 km N of Clear Lake.
5	Jan 16	05 33 27.8	36° 00'	120° 12'	3.1	С	8	Kettleman Hills.
6	Jan 18	23 31 19.4	36° 57.4'	121° 37.2'	2.7	а	9	Near Gilroy. Felt at Gilroy.
7	Jan 21	13 11 43.6	36° 50.7'	121° 37.8'	3.1	Ъ	9	Near San Juan Bautista.
8	Jan 23	00 53 12	36° 19'	118° 10'	3.3	a(R)	5	30 km S of Lone Pine.
9	Jan 23	21 52 06	37.3°	118.7°	3.0	a(R)	4	W of Bishop. Beginning obscured by smaller quake.
10	Jan 24	01 41 03.9	36° 51.1'	121° 36.5'	2.6	Ъ	10	Near San Juan Bautista.
11	Jan 25	01 34 38	40° 15'	124° 38'	3.2	c(R)	6	W of Cape Mendocino. Aftershocks at 13 03 $(M=2.7)$ and 17 17 $(M=3.0)$.
12	Jan 25	13 32 28	36° 38'	120° 49'	2.5	b	7	Panoche Valley.
12	Jan 25	14 22 38	36° 38'	120° 50'	2.5	Ъ	7	Panoche Valley.
13	Jan 25	15 49 21.3	37° 09.7'	121° 29.7'	2.5	а	9	24 km SE of Mt. Hamilton
14	Jan 25	17 16 54	40° 17'	124° 49'	3.2	c(R)	5	50 km W of Cape Mendocino.
15	Jan 26	21 53 53	35.2°	120.7°	3.0	a(R)	7	Near San Luis Obispo
16	Jan 29	11 11 53	40.3°	124.4°	3.0	a(R)	3	Near Petrolia.
17	Jan 31	01 33 59.9	36° 27.8'	121° 04.9'	2.5	а	8	Bear Valley.
1	Jan 31	12 22 49.5	35° 55.6°	120° 30.6°	3.8	b	8	NW of Parkfield. Sharp, rapid jolting at Shandon.
18	Jan 31	21 42 35.5	37° 09.7'	121° 32.7'	2.9	а	11	22 km SE of Mt. Hamilton.
19	Feb 01	22 16 05.9	37° 22'	120° 01'	3.2	b	12	Near Mariposa. Intensity V 2-1/2 mi N of Mariposa. Loud earth noises. Some cracking in ceilings, walks.
20	Feb 04	08 45 16	41.4°	123.5°	3.6	a(R)	5	SE of Crescent City. Location uncertain. Intensity II at Crescent City.
21	Feb 05	20 50 34.6	38° 19.6'	122° 02.3'	2.8	a .	8	Near Vacaville.
22	Feb 06	21 13 37	40.5°	125.6°	4.0	a(R)	8	Mendocino Escarpment.
23	Feb 07	17 46 28	40.6	124.5°	3.0	c(R)	5	Near Cape Mendocino.
24	Feb 09	02 07 01.4	36° 37.2'	121° 18.0'	2.8	а	10	Gabilan Range, 15 km NE of Pinnacles Nat. Mon.

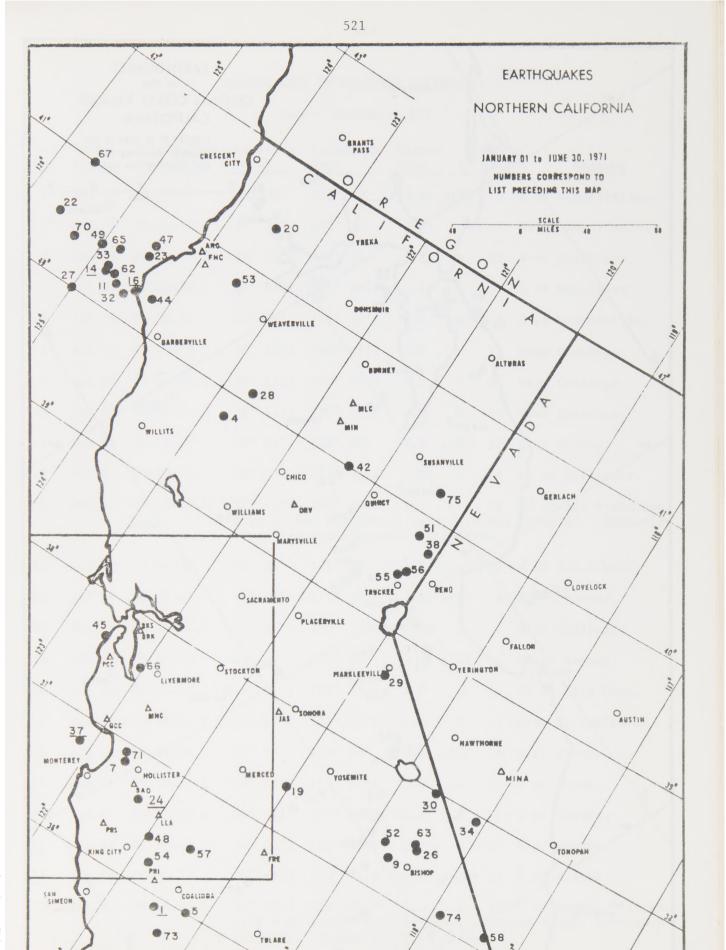
Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	No. o	Remarks
14	Feb 13	07 28 55	40.3°	124.8°	3.3	c(R) 5	Mendocino Escarpment.
25	Feb 13	18 18 11.3	36° 38.5'	121° 19.5'	2.7	ь 7	Gabilan Range, E of Salinas.
25	Feb 15	23 39 44.0	36° 38.4'	121° 19.5'	2.8	a 8	Gabilan Range, E of Salinas.
26	Feb 18	12 16 32	37° 29'	118° 29'	3.3	a(R) 7	Near Bishop. Intensity V. Awakened many at Control Gorge Power Plant, 15 mi. NW of Bishop.
27	Feb 18	22 54 34	40.0°	125.0°	3.3	a(R) 3	W of Cape Mendocino.
28	Feb 19	17 51 24	40.1°	122.7°	3.0	a(R) 3	W of Red Bluff.
29	Feb 19	23 01 41.5	38° 38'	119° 48'	3.1	a(R) 5	40 km SE of Lake Tahoe.
30	Feb 20	12 57 43.5	37° 59'	118° 37'	3.9	a(R) 11	30 km E of Mono Lake. Rolling shock at Control Gorge Power Plant 15 mi NW of Bishop. Awakened
							few, Intensity IV.
31	Feb 22	20 39 13.2	37° 05.6'	121° 58.5'	2.8	c 13	North of Santa Cruz. Intensity II at Capitola. Reported felt in Boulder Creek.
32	Feb 23	18 04 17	40.2°	124.5°	3.3	a(R) 4	Near Cape Mendocino. Intensity IV at Eureka and Ferndale.
30	Feb 26	03 56 06.4	38° 00'	118° 34'	3.8	a(R) 13	30 km E of Mono Lake.
14	Feb 27	00 31 37.7	40° 16'	124° 50'	5.2	a(R) 9	Mendocino Escarpment. Felt from N of Eureka to Fort Bragg area. Max Intensity V. No damage reported. Felt by many at Eureka. At Ferndale vehicles rocked and util- ity poles swayed, three windows cracked. Felt by all at Shelter Cove; small objects shifted. Near Scotia man had dif- ficulty keeping balance. Small objects shifted at

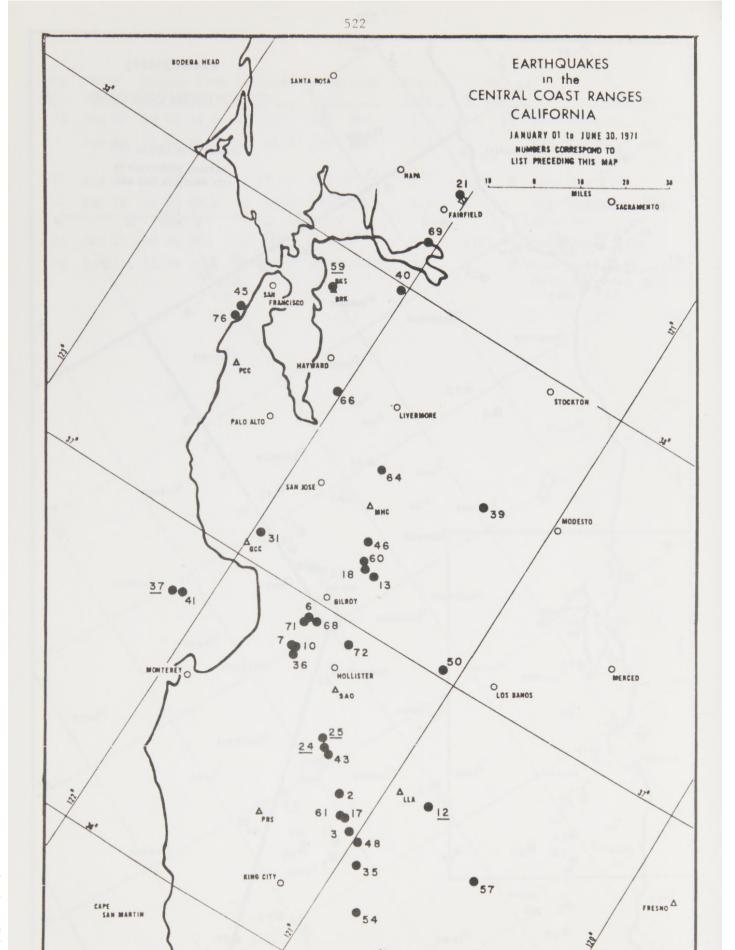
Map No.	Da 19			-	n Time	Lat		Long	itude	Magni- tude		No. of Stas.	Remarks
33	Feb	27	01	56	38	40°	19'	124°	491	3.8	c(R)	8	Mendocino Escarpment.
34	Mar	01	08	28	04	37°	57 '	118°	05'	3.8	c(R)	9	CalNev. border region, NE of White Mountain. Main shock of a series in Fish Lake Valley area. Felt at Dyer (Intensity IV). A few persons were awakened and a bed shift- ed. Preceded by 3 shocks and followed by 3 shocks (all of Mag >3) on the morning of Mar Ol. Sev- eral of these were felt.
35	Mar	02	14	16	20.7	36°	21.1'	120°	57.2'	2.6	a	7	20 km NE of King City.
36	Mar	07	03	20	18.8	36°	49.5	121°	35.7'	2.9	a	9	San Juan Bautista.
<u>37</u>	Mar	08	18	31	46.5	36°	47.6	122°	08.6	4.1	Ъ	13	Monterey Bay. Press reported shock felt strongly in Monterey and Salinas, also in downtown San Francisco and Oakland. Also felt in Capitola and Brookdale.
37	Mar	09	15	35	16.2	36°	48*	122°	08.7	4.6	b	13	Monterey Bay. Felt from San Francisco to King City. Intensity V (no damage) at Aptos, Boulder Creek, Carmel Valley, Corralitos, Felton, Monterey, Redwood Estates and Scotts Valley.
37	Mar	10	09	15	42.7	36°	46.9	122°	07.9	2.8	a	13	Monterey Bay.
38 CIT 39	Mar Mar Mar	18	11	58	41.1 58.6 53.2	39° 35° 37°	43' 54.0' 32'	120° 120° 121°	06' 33.2' 17'	3.5 3.5 2.5	a(R)	9	Near Portola. Parkfield(Brk M=2.9) NE of Mount Hamilton.
40	Mar	25	06	01	42.6	37°	59.3'	122°	01.1'	2.7	С	7	Near Concord.
41	Mar	26	01	02	40.1	36°	48.4	122°	06.3'	2.7	a	10	Monterey Bay.
42	Mar	26	80	09	37.3	40°	00'	121°	21'	3.0	a(R)	4	SW of Lake Almanor.
43	Mar	28	02	04	58.4	36°	36.6'	121°	16.4'	2.8	a	8	NW of Pinnacles Nat. Mon.
44	Mar	31	14	43	52	40.3	3°	124.2	00	4.1	a(R)	4	Cape Mendocino. Maximum Intensity IV. Awakened observer in Eureka. Felt by several in Ferndale; windows, doors, small objects rattled. Also felt in Rio Dell and McKinleyville.

Map No.					Time	Nort		Long: West	itude	Magni- tude		No. o	
45	Mar	31	17	03	36.1	37°	40'	122°	32'	3.2	ь	13	Near Daly City. Widely felt in San Francisco, Pacifica, Westlake and San Bruno. At Pacifica a man reported an explo- sion-like noise.
46	Apr	01	02	53	24.7	37°	14.8	121°	36.01	2.8	a	9	SE of San Jose.
47 CIT 48	Apr Apr Apr	04	02 10 01	22 42 40	40 31.8 34.2	40.7 35° 36°	08:5; 24:8;	124.1 121° 120°	09.7' 59.0'	3.6 3.2 3.0	a(F	8) 5	Near Cape Mendocino. S of San Simeon. 20 km SE of Pinnacles Nat. Mon.
49	Apr	05	11	05	44	40.6	0	125.0	o°	3.3	a(F	2) 4	Mendocino Escarpment.
50	Apr	06	05	29	30.7	37°	01.3'	121°	04.2	2.9	a	8	W. of Los Banos.
25	Apr	12	01	08	01.7	36°	38.5'	121°	18.8'	2.6	Ъ	9	SE of Hollister.
51	Apr	16	09	07	47.0	39°	491	120°	17'	3.0	a(F	8 (8	E of Portola.
37	Apr	16	12	58	31.7	36°	48'	122°	11'	4.5	b	10	Monterey Bay Intensity V. Cracks in ceiling widened at Big Basin State Park. Many awakened in Monterey Bay area and at Big Sur.
52	Apr	18	00	23	28	37.4	+	118.	8°	3.3	a(H	R) 6	W. of Bishop.
53	Apr	19	06	30	09.8	40°	49*	123°	31'	3.8	a(H	R) 7	50 km E of Eureka. Sharp shake at Bridgeville, awakened and frightened few. Near Eureka (Humboldt Hill), felt by many or all, windows and doors rattled, house creaked, motion NS. Rapid strong jerk at Rio Dell. Felt by many at Ferndale.
54	Apr	19	09	35	58.8	36°	13.7'	120°	50.3'	3.0	Ъ	10	25 km E of King City.
55 56	Apr				47.7				15.6' 12.2'	4.4 3.8	aaa	10 9	Near Truckee. Frightened all near Boca Dam 7 mi NE of Truckee; small objects fell, loud boom, rocking, lesser boom then more rocking; at 05 32 moderat rocking from NS lasting 45 sec. At Foresthill first shock seemed lighter than second. Felt extensively from Quincy in the north to Tahoe City in the south and from Grass Valley to Reno. See Bull. Seism. Soc. Am. 61,

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	No. of h Stas.	Remarks
57	Apr 29	02 13 15.7	36° 30.3'	120° 32.5'	3.0	a(R) 9	40 km NW of Coalinga.
24	May 07	16 48 09.7	36° 36.9'	121° 16.8'	3.1	ь 6	30 km SE of Salinas.
58	May 09	08 29 29.9	37° 07'	117° 23'	3.0	a(R) 8	Calif-Nevada border, SE of Bishop.
59	May 10	00 52 01.8	37° 52.7'	122° 15.9'	2.8	ь 10	Near Berkeley. Felt in Richmond, El Cerrito and Oakland.
59	May 13	01 39 13.5	37° 51.5'	122° 15.4'	2.8	c 11	Near Berkeley. Felt by many in Berkeley as a sharp bump.
60	May 13	23 04 08.5	37° 11.1'	121° 34.6'	2.9	a 8	Near Morgan Hill.
61	May 15	17 54 09.6	36° 28.1	121° 06.0'	2.5	ь 7	E of Pinnacles Nat. Mon.
62	May 20	08 52 37	40.3°	124.7°	3.2	a(R) 5	Mendocino Escarpment.
63	May 20	11 27 03.7	37° 31'	118° 31'	3.2	a(R) 8	Near Bishop. Intensity IV at Control Gorge Power Plant (15 mi NW of Bishop).
64	Jun 01	17 12 53.9	37° 27.9'	121° 42.3'	2.7	a 10	NE of San Jose.
65	Jun 08	02 42 11	40.5°	124.8°	3.2	a(R) 3	Mendocino Escarpment.
66	Jun 08	21 43 17.5	37° 36.1'	122° 01.2'	3.2	ь 10	Near Union City. Intensity V in the Alvarado-Union City-Decoto region, where a few windows were cracked; minor cracks in building at Decoto. Int. V effects also in Hayward.
-	Jun 09	12 26 16	40.5°	126.5°	3.6	a(R) 6	Mendocino Escarpment. Location uncertain.
67	Jun 13	08 53 01	41.0°	125.6°	3.3	a(R) 3	West of Eureka. Location uncertain.
68	Jun 15	03 32 14.9	36° 57.1'	121° 36.1'	2.7	a 16	Near Gilroy.
69	Jun 15	12 22 21.3	38° 08.8'	122° 02.4'	2.9	ъ 8	N of Suisun Bay.
70	Jun 15	18 22 37	40° 22'	125° 19'	4.2	c(R) 8	Mendocino Escarpment.
	Jun 16	14 50 00.0	37° 02.0'	116° 00.8'	4.2	a -	NTS "EMBUDD." AEC location.
16	Jun 17	15 21 15	40° 17'	124° 23'	3.5	c(R) 6	Cape Mendocino. Intensity III at Ferndale.
71	Jun 19	08 17 58.5	36° 56.3'	121° 38.5'	3.7	b 15	E of Watsonville. Int. V at Corralitos and Gilroy. No damage reported.
72	Jun 19	10 51 57.3	36° 56.5'	121° 26.5'	2.9	ь 10	SE of Gilroy.

Map No.	Date 1971	Origin Time Latitude (G.C.T.) North	Longitude West		of Remarks
73	Jun 20	12 41 39.8 35° 43'	120° 20'	3.4 b	11 Near Cholame.
-	Jun 23	15 30 00.0 37° 01.3	' 116° 01.4'	4.5 a	- NTS "LAGUNA." AEC location.
74	Jun 24	10 30 13 37.1°	117.9°	3.2 a(R)	8 Near Big Pine.
-	Jun 24	14 00 00.2 37° 08.8	116° 04.0	4.9 a	- NTS "HAREBELL." AEC location.
75	Jun 25	08 44 20 40° 14'	120° 21'	3.2 a(R)	6 Near Honey Lake.
76	Jun 26	13 58 12.4 37° 37.8	' 122° 30.7'	2.7 b	9 Near Daly City. Felt Daly City and Pacifica.





EARTHQUAKES IN NORTHERN CALIFORNIA

July - December 1971

Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Lon gi tude West	Magni- tude h	No. Stas	
1	Jul 03	09-42-07	40° 35'	123° 30'	(3.6) a(R)	3	W of Weaverville.
2\$	Jul 05	19-24-35	35° 34'	121° 35'	(3,0) a	7	SW of San Simeon.
3	Jul 08	05-34-00.9	36° 52!1	121° 37.7	(3,2) b	13	W of Hollister.
4	Jul 08	07-04-12.4	36° 51:8	121° 35!4	2.9 b	14	W of Hollister.
5	Jul 11	12-36-34	40° 04°	122° 40'	3.6 b(R)	7	S of Weaverville.
6 ^{\$}	Jul 21	07-56-39.2	36° 14:1	120° 49!0	2,6 b	12	Near Coalinga.
7	Jul 21	09-14-26.2	36° 13!7	120° 50!8	3,2 b	13	Near Coalinga.
8	Jul 21	09-33-21.3	36° 14:3	120° 50!5	2,9 b	14	Near Coalinga.
9	Jul 24	02-14-39	38° 00'	118° 50'	3.5 a(R)	17	N of Bishop.
10	Jul 25	01-28-49.7	36° 47:2	121° 33 : 4	2.6 a	14	SW of Hollister.
11	Jul 25	09-13-28.9	Felt in S				SW of San Francisco. Berkeley. Intensity
12	Jul 25	12-01-35	35° 40'	121° 40'	2.8 a	10	W of San Simeon.
13	Jul 26	08-27-47	40° 40'	121° 35'	(3,2) a(R)	6	SE of Burney.
14	Jul 26	22-36-54.8	36° 36:0	120° 34¦0	2,6 b	7	N of Coalinga.
15	Jul 27	05-46-52	40° 40°	121° 40'	(3.2) a(R)	5	SE of Burney.
16	Jul 28	08-25-18.3	36° 01:1	120° 53¦6	2.8 a	16	SE of King City.
17	Jul 30	23-36-05.8	37° 17!1	121° 39!2	2.8 a	13	Near Mt Hamilton.
18	Aug 01	05-36-26	36° 50'	120° 00'	2,6 a(R)	14	W of Fresno.
19	Aug 01	06-08-21.1	36° 49!5	120° 02!4	2.8 a	13	W of Fresno.
20	Aug 01	06-11-13.6	36° 52 ! 1	120° 00!9	(2,6) a	11	W of Fresno.
21	Aug 01	06-37-48.5	36° 48!2	120° 01!9	2.5 a	12	W of Fresno.
21	Aug 01	08-36-27.7	36° 47¦8	120° 01 : 5	2.7 a	13	W of Fresno.
22	Aug 02	04-44-44.0	sity V a	t Biola (fe		pictu	W of Fresno. Inten- ires moved, furniture

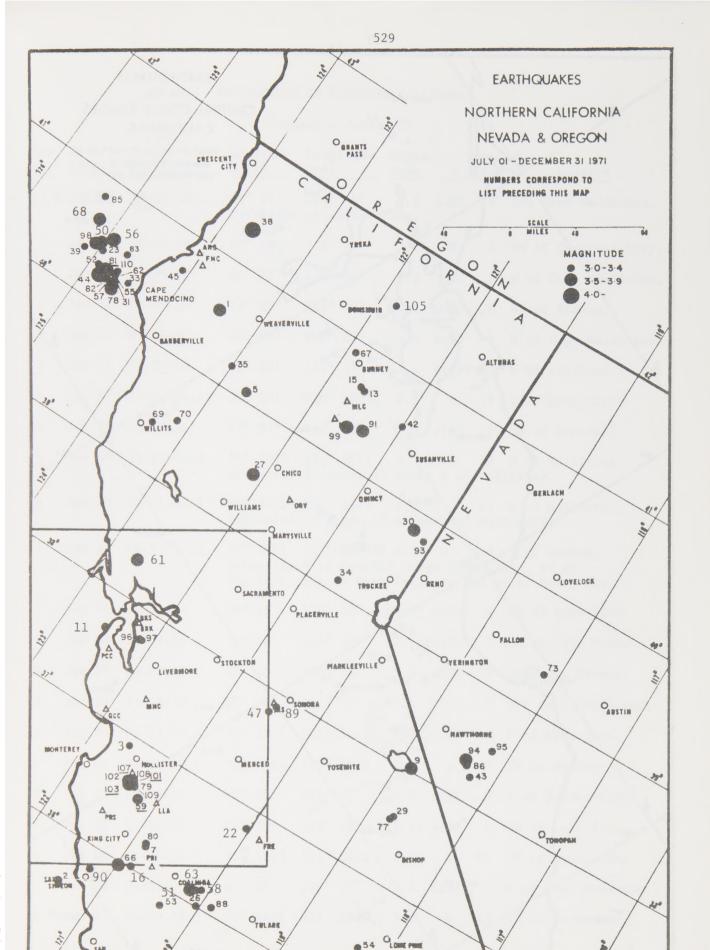
Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. o	
23	Aug 02	12-02-54	40° 25'	124° 55'	(3,0) a(R)	5	W of Cape Mendocino.
24	Aug 02	14-40-05.6	38° 22!3	122° 37:7	2.6 c	14	Santa Rosa.
25	Aug 06	09-38-40.5	37° 43!8	121° 47!3	2.7 в	10	NE of Livermore.
26	Aug 06	20-03-16,3	36° 00!8	120° 02!2	(3.0) b	9	Near Coalinga.
27	Aug 06	22-29-48,3	areas of sity IV a	t Berry Cre	ek, Chico, I-III at Bi	and Su Colusa Lggs,	SW of Chico. Felt in atter counties. Inten- a, Cleen, Gridley, and Durham, Forest Ranch,
28	Aug 08	09-17-36,4	37° 15¦3	121° 37!8	2.8 a	13	N of Hollister.
29	Aug 08	19-27-58,1	37° 35¦3	118° 44!8	(3.1) b	9	NW of Bishop.
30	Aug 12	16-58-10.2	39° 49!6	120° 15!7	3.6 a	11	NW of Reno.
31	Aug 14	03-15-33	40° 15'	124° 40'	(3.1) c(R)) 5	W of Cape Mendocino.
32	Aug 18	04-01-36,5		121° 57!8 lle and Berk			E of Berkeley. Felt IV at Danville.
33	Aug 26	04-18-11	40° 20'	124° 30'	(3,3) d	7	W of Cape Mendocino.
34	Aug 29	02-00-59	39° 05'	120° 40'	(3,4) a(R) 4	SW of Truckee.
35	Aug 30	07-56-21	40° 10'	123° 00'	(3.0) a(R) 5	S of Weaverville,
36	Sep 02	03-40-17.6	36° 56!6	120° 42!6	(2.5) b(R) 9	SE of Los Banos.
37	Sep 04	13-28-40.3	36° 56!7	121° 37!0	2.8 b	14	NW of Hollister.
38	Sep 12	19-32-38.0	41° 17!9	123° 40!4	4.6 d	13	SE of Crescent City.
39	Sep 16	03-13-01	40° 20°	125° 05'	(3.1) c	8	Off Cape Mendocino.
40	Sep 17	18-43-34.1		122° 15!7 , Oakland,			Berkeley. Felt in
81\$	Sep 17	20-11-30.6	40°2 Intensit	124°8 y IV at Fer	3.8 c	17 Jarberv	Off Cape Mendocino.
41	Sep 17	21-34-35.6	37° 51¦3	122° 15!0	2.7 c	10	Berkeley. Felt in Berkeley.
42	Sep 18	00-29-57	40° 35'	121° 00'	(3.0) c(F	1) 5	NW of Susanville.
43	Sep 18	13-53-38.4	38° 13:5	118° 14!9	(3.3)	1 10	SW of Mina.
44	Sep 20	15-48-21		124° 50' y IV at Fer		1 15	Off Cape Mendocino.

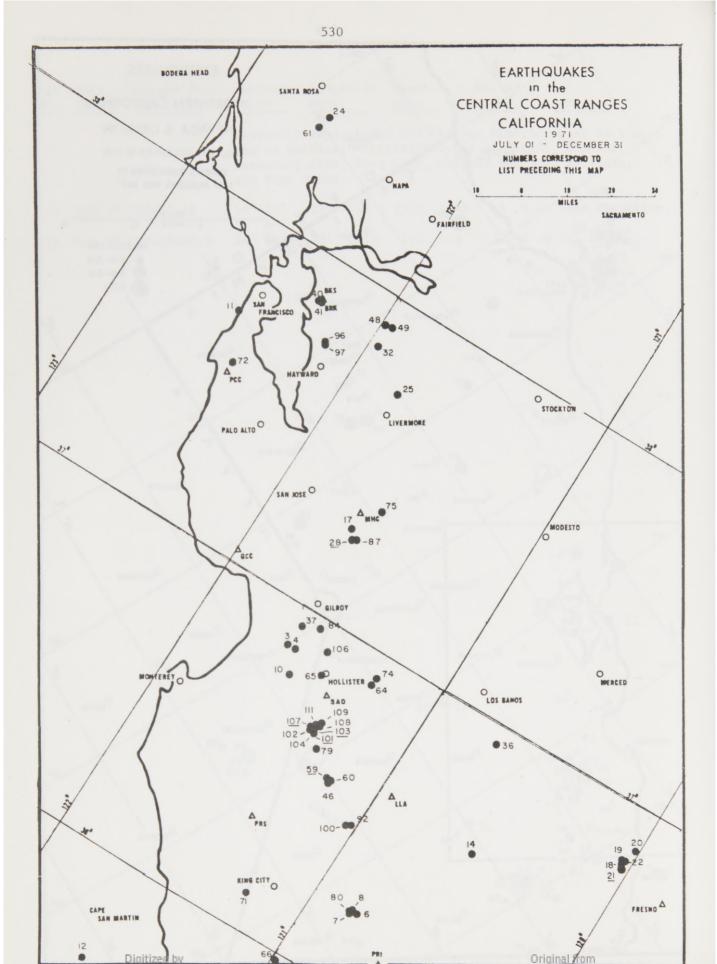
46 Sep 20 23-24-33	Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. of	Remarks
Sep 28 23-18-42 37° 50' 120° 30' (2.6) a(R) 6 SW of Sonora. 48 Sep 29 21-01-42.3 37° 54!1 121° 59!1 2.5 a 9 E of Berkeley. 49 Sep 30 01-58-48.7 37° 54!7 121° 57!4 2.9 c 15 E of Berkeley. 50 Oct 01 13-37-55 40° 30' 125° 00' (3.7) c(R) 5 Off Cape Mendocino. 51 Oct 02 19-38-55.8 36° 06!0 120° 11!3 3.8 b 15 SE of Coalinga. 52 Oct 03 07-26-38 40° 20' 124° 55' (3.0) d 6 Off Cape Mendocino. 53 Oct 06 14-43-30.6 35° 51!3 120° 22!5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 67 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 68 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 69 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 60 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 60 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 61 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 62 Oct 21 03-50-10.7 36° 50!8 120° 59!2 3.7 c 19 SE of King City. 63 Oct 21 03-50-10.7 36° 50!8 120° 59!2 3.7 c 19 SE of King City. 64 Oct 20 21 03-60-10.7 36° 50!8 120° 59!2 3.7 c 19 SE of King City.	45\$	Sep 20	23-24-33	40° 40'	124° 05'	(3.0) c	4 5	of Arcata.
Sep 29 21-01-42.3 37° 54:1 121° 59:1 2.5 a 9 E of Berkeley. Sep 30 01-58-48.7 37° 54:7 121° 57:4 2.9 c 15 E of Berkeley. 50 0ct 01 13-37-55 40° 30' 125° 00' (3.7) c(R) 5 0ff Cape Mendocino. 51 0ct 02 19-38-55.8 36° 06:0 120° 11:3 3.8 b 15 SE of Coalinga. 52 0ct 03 07-26-38 40° 20' 124° 55' (3.0) d 6 0ff Cape Mendocino. 53 0ct 06 14-43-30.6 35° 51:3 120° 22:5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 0ct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 0ct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 0ff Cape Mendocino. 56 0ct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 0ff Cape Mendocino. 57 0ct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 0ff Cape Mendocino. 58 0ct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 0ct 12 08-08-33.0 36° 34:1 121° 12:5 2.5 a 14 N of King City. 60 0ct 13 03-22-58.3 36° 34:2 121° 11:3 (2.6) a 14 N of King City. 61 0ct 13 17-41-05.8 38° 19:6 122° 38:7 3.5 b 16 S of Santa Rosa. 62 0ct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 0ff Cape Mendocino. 63 0ct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 0ct 20 23-11-24.4 36° 54:0 121° 15:6 2.7 b 14 NE of Hollister. 65 0ct 21 03-50-10.7 36° 50:8 121° 26:8 2.5 a 14 Near Hollister. 66 0ct 21 22-09-45.4 35° 58:8 120° 59!2 3.7 c 19 SE of King City. 67 11 11 11 11 11 11 11 11 11 11 11 11 11	46	Sep 23	19-20-09.9	36° 33!2	121° 11.6	2.6 b	15	N of King City.
Sep 30 01-58-48.7 37° 54!7 121° 57!4 2.9 c 15 E of Berkeley. 50 Oct 01 13-37-55 40° 30' 125° 00' (3.7) c(R) 5 Off Cape Mendocino. 51 Oct 02 19-38-55.8 36° 06!0 120° 11!3 3.8 b 15 SE of Coalinga. 52 Oct 03 07-26-38 40° 20' 124° 55' (3.0) d 6 Off Cape Mendocino. 53 Oct 06 14-43-30.6 35° 51!3 120° 22!5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. Intensity IV-III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Intensity V at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	47	Sep 28	23-18-42	37° 50'	120° 30'	(2.6) a(R)) 6 5	SW of Sonora.
Oct 01 13-37-55	48	Sep 29	21-01-42.3	37° 54!1	121° 59!1	2.5 a	9 1	E of Berkeley.
51 Oct 02 19-38-55.8 36° 06!0 120° 11!3 3.8 b 15 SE of Coalinga. 52 Oct 03 07-26-38 40° 20' 124° 55' (3.0) d 6 Off Cape Mendocino. 53 Oct 06 14-43-30.6 35° 51!3 120° 22!5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5	49	Sep 30	01-58-48.7	37° 54!7	121° 57:4	2.9 c	15	E of Berkeley.
52 Oct 03 07-26-38 40° 20' 124° 55' (3.0) d 6 Off Cape Mendocino. 53 Oct 06 14-43-30.6 35° 51!3 120° 22!5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5	50	Oct 01	13-37-55	40° 30'	125° 00'	(3.7) c(R) 5 (Off Cape Mendocino.
35° 51!3 120° 22!5 3.4 b 13 S of Coalinga. Intensity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. Intensity III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Intensity at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	51	Oct 02	19-38-55.8	36° 06!0	120° 11 : 3	3.8 b	15	SE of Coalinga.
sity IV at Cholame, Parkfield and Shandon. 54 Oct 06 22-34-39 36° 25' 118° 20' (3.2) b(R) 11 SW of Lone Pine. 55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Intensity V at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	52	Oct 03	07-26-38	40° 20'	124° 55'	(3,0) d	6	Off Cape Mendocino.
55 Oct 08 05-52-49 40° 15' 124° 40' (3.2) c(R) 4 Off Cape Mendocino. 56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Inten- IV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	53	Oct 06	14-43-30.6					
56 Oct 10 03-39-12 40° 30' 124° 55' 3.8 d 7 Off Cape Mendocino. 57 Oct 10 14-51-27 40° 20' 124° 40' (3.3) c(R) 5 Off Cape Mendocino. Intensity IV at Petrolia. Intensity III at Ferndale. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. Intensity IV at Cotati, Glen Ellen, and Penngrove. Intensity III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64	54	Oct 06	22-34-39	36° 25'	118° 20'	(3.2) b(R) 11	SW of Lone Pine.
57 Oct 10 14-51-27	55	Oct 08	05-52-49	40° 15'	124° 40'	(3.2) c(R) 4	Off Cape Mendocino.
Intensity IV at Petrolia. Intensity III at Ferndale. 58 Oct 12 08-03-24 36° 05' 120° 05' (2.6) a(R) 9 SE of Coalinga. 59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. Intensity IV at Cotati, Glen Ellen, and Penngrove. Intensity I-III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). IntenIV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	56	Oct 10	03-39-12	40° 30'	124° 55'	3.8 d	7	Off Cape Mendocino.
59 Oct 12 08-08-33.0 36° 34!1 121° 12!5 2.5 a 14 N of King City. 60 Oct 13 03-22-58.3 36° 34!2 121° 11!3 (2.6) a 14 N of King City. 61 Oct 13 17-41-05.8 38° 19!6 122° 38!7 3.5 b 16 S of Santa Rosa. Intensity I-III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. Intensity V at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	57	Oct 10	14-51-27					
00	58	Oct 12	08-03-24	36° 05'	120° 05'	(2.6) a(R) 9	SE of Coalinga.
17-41-05.8 38° 19'6 122° 38'.7 3.5 b 16 S of Santa Rosa. Intensity IV at Cotati, Glen Ellen, and Penngrove. Intensity I-III at Petaluma. Felt in Santa Rosa and San Francisco. 10 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 10 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 10 Oct 20 23-11-24.4 36° 54'.0 121° 15'.6 2.7 b 14 NE of Hollister. 10 Oct 21 03-50-10.7 36° 50'.8 121° 26'.8 2.5 a 14 Near Hollister. 10 Oct 21 22-09-45.4 35° 58'.8 120° 59'.2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Intentiv at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	59	Oct 12	08-08-33.0	36° 34!1	121° 12:5	2.5 a	14	N of King City.
Intensity IV at Cotati, Glen Ellen, and Penngrove. Intensity I-III at Petaluma. Felt in Santa Rosa and San Francisco. 62 Oct 14 07-10-17.1 40° 20' 124° 40' (3.1) d 7 Off Cape Mendocino. 63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54'.0 121° 15'.6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50'.8 121° 26'.8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58'.8 120° 59'.2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Inten- IV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	60	Oct 13	03-22-58.3	36° 34:2	121° 11:3	(2.6) a	14	N of King City.
63 Oct 16 11-20-28 36° 05' 120° 10' (2.8) b(R) 15 E of Coalinga. 64 Oct 20 23-11-24.4 36° 54!0 121° 15!6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50!8 121° 26!8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58!8 120° 59!2 3.7 c 19 SE of King City. 67 Intensity V at San Ardo (small objects shifted). Intensity V at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	61	Oct 13	17-41-05.8	Intensity Intensity	V IV at Cota V I-III at 1	ati, Glen E	llen, a	nd Penngrove.
64 Oct 20 23-11-24.4 36° 54:0 121° 15:6 2.7 b 14 NE of Hollister. 65 Oct 21 03-50-10.7 36° 50:8 121° 26:8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58:8 120° 59:2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Intensity V at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	62	Oct 14	07-10-17.1	40° 20°	124° 40'	(3.1) d	7	Off Cape Mendocino.
65 Oct 21 03-50-10.7 36° 50:8 121° 26:8 2.5 a 14 Near Hollister. 66 Oct 21 22-09-45.4 35° 58:8 120° 59:2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Inten- IV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	63	Oct 16	11-20-28	36° 05'	120° 10'	(2,8) b(R	.) 15	E of Coalinga.
66 Oct 21 22-09-45.4 35° 58:8 120° 59:2 3.7 c 19 SE of King City. Intensity V at San Ardo (small objects shifted). Inten- IV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	64	Oct 20	23-11-24.4	36° 54 ! 0	121° 15¦6	2.7 b	14	NE of Hollister.
Intensity V at San Ardo (small objects shifted). Inten- IV at Jolon, King City, Lockwood, Pine Canyon and San Lucas.	65	Oct 21	03-50-10.7	36° 50!8	121° 26¦8	2.5 a	14	Near Hollister.
	66	Oct 21	22-09-45.4	Intensity IV at Jo	V at San	Ardo (small	object	s shifted). Inten-
	67	Oct 26	16-12-50		121° 55'	(3.2) b(F	R) 5	NW of Burney.

Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. Stas	
68 ^{\$}	Oct 27	20-53-10	40° 40°	125° 10'	(3,6) c	11	Off Cape Mendocino.
69	Oct 28	11-24-06.3	39° 24¦6	123° 23!1	3.1 c	9	NE of Willits.
70	Oct 30	00-53-59.4	39° 31!7	123° 09!0	3.1 c	8	NE of Willits.
71	Oct 30	13-45-23.0	36° 06:8	121° 14:0	2.8 a	14	S of King City.
72	Oct 31	10-13-12.6	37° 32!7	122° 25 : 2	2.5 c	11	S of San Francisco.
59	Nov 01	14-22-03.0	36° 34!1	121° 12:0	3.2 b	14	SE of Hollister.
73	Nov 04	18-04-19	39° 20'	118° 10'	(3.4) c(R)	5	E of Fallon.
74	Nov 06	11-04-18	36° 55'	121° 15'	2.6 a(R)	14	E of Hollister.
75	Nov 07	00-14-40.9	37° 23!2	121° 35:8	2.7 a	15	E of San Jose.
76	Nov 07	14-03-30,4	35° 31!2	119° 50!2	(4.0) d	10	SE of Coalinga.
77	Nov 07	15-44-30,3	37° 33!4	118° 45!6	(3.2) b	8	NW of Bishop.
78	Nov 12	07-32-50	40° 15'	124° 40'	(3.8) d	11	W of Cape Mendocino.
79	Nov 15	14-16-21.6	36° 37:8	121° 18¦4	3.0 a	14	SE of Hollister.
80	Nov 18	04-03-52.4	36° 14:5	120° 50 : 6	3,4 b	16	E of King City.
81	Nov 20	13-59-03	40° 15'	124° 45'	(4,9) d	17	W of Cape Mendocino.
82	Nov 20	14-26-03	40° 20'	124° 45'	(3,3) a	4	W of Cape Mendocino.
83	Nov 20	20-59-39	40° 30'	124° 45'	3.3 c	4	W of Cape Mendocino.
84	Nov 24	14-27-56.5	36° 57!9	121° 27¦0	2.5 a	16	N of Hollister.
85	Nov 26	04-51-03	40° 50'	125° 20'	(3.0) a	4	NW of Cape Mendocino.
86	Nov 28	10-49-46	38° 20'	118° 20'	(3.1) b(R) 8	SE of Hawthorne.
87	Nov 29	14-12-44.2	37° 16:4	121° 37!1	2.2 a	10	N of Gilroy.
88	Nov 30	09-45-42.8	36° 03¦6	119° 53!4	(3.0) b	. 10	SE of Coalinga.
89	Dec 02	01-12-20,4	37° 52!0	120° 29!4	(2.5) a	5	S of Sonora.
90	Dec 02	09-07-28.4	35° 49!1	121° 10!2	2.8 a	12	Near San Simeon.
91	Dec 03	21-37-10	40° 20°	121° 20'	(3.5) c(R	5	NW of Quincy.
92	Dec 06	14-31-49.3	36° 28!5	121° 01¦6	2.7 b	13	NE of King City.

Map No.	Date 1971	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. o	
93	Dec 07	03-44-38	39° 50'	120° 05'	(3.3) b(R)	7	N of Reno.
94	Dec 07	19-52-08	38° 20'	118° 25'	(3.9) a(R)	12	SE of Hawthorne.
95	Dec 08	16-07-29	38° 30'	118° 10'	(3.2) d	6	E of Hawthorne.
96	Dec 11	21-35-12.4	37° 45 : 4	122° 09!0	3.4 b		N of Hayward. Both shocks felt. Inten-
97	Dec 12	05-53-36,9	Valley (a College		Oakland (a San Leandre	19) 1so 05	sity IV at Castro -53), St. Mary's so felt in Berkeley,
98	Dec 13	00-58-26	40° 25'	125° 05'	(3.5) d	12	W of Cape Mendocino.
99	Dec 13	13-07-38	40° 20°	121° 30'	(3.6) a(R)	11	NW of Quincy.
100	Dec 17	04-00-04.7	36° 28 : 1	121° 02:7	(2.6) b	13	NE of King City.
101	Dec 19	10-45-44.8	36° 40!0	121° 20!9	2.6 a	18	S of Hollister.
101	Dec 19	14-12-53.7	36° 40¦1	121° 20!9	3.2 a	19	S of Hollister.
102	Dec 20	08-34-40.0	36° 40!3	121° 22:0	3.6 a	20	S of Hollister.
103	Dec 20	11-25-29.9	36° 40!4	121° 21:7	2.9 b	15	S of Hollister.
28	Dec 20	18-00-09.4	37° 15:5	121° 37 : 6	2.8 a	13	N of Hollister.
101	Dec 20	18-05-02.6	36° 40!3	121° 21¦1	2.8 a	15	S of Hollister.
104	Dec 20	21-26-41.1	36° 40!3	121° 21:2	2.6 a	15	S of Hollister.
105	Dec 25	07-14-31	41° 25'	121° 45'	(2.8) c	3	N of Burney.
106 ^{\$}	Dec 25	18-25-44.6	36° 54¦8	121° 28:5	2.7 a	10	N of Hollister.
107	Dec 28	22-33-52.9	36° 41!0	121° 22:2	3.7 ь		S of Hollister. In
108	Dec 28	22-35-16.8	36° 41!8	121° 20¦5	3.4 a	7)	the following sequence felt reports were
107	Dec 28	22-38-55.4	36° 40:8	121° 22:4	3.1 b	12)	received for the (22-33), (22-38),
103	Dec 28	22-57-04.0	36° 41!1	121° 21!4	2.8 a	14)	(22-57), (00-25), (01-35), (01-37) shocks.
103	Dec 29	00-25-35.6	36° 40!3	121° 21:5	3.9 a	16)	Reported intensities refer to the main
109	Dec 29	00-26-45.3	36° 42!3	121° 20 : 5	3.2 a	7)	Intensity V at Almaden
103	Dec 29	01-06-30.7	36° 40!8	121° 21 : 5	2.6 a	15)	Winery (about 14.5 km S of Hollister), Hollister,
107	Dec 29	01-35-36.3	36° 41!0	121° 21!9	2.7 a	15)	Paicines, and about 9.7 km S of Paicines, where
107	Dec 29	01-37-13.6	36° 40¦8	121° 22 : 2	3.7 b		plasterboard was cracked slightly. Intensity IV

Map No.	Date 1971	Origin Time (G.C.T.)	Latitude Longitude Magni- No. of North West tude h Stas. Remarks
			generally reported in the Cienega District S of Hollister and at Salinas. Intensity I-III at Carmel, Chualar, Jamesburg area, King City, Marina, San Juan Bautista, and Tres Pinos.
110	Dec 29	05-20-46	40° 20' 124° 40' (3.3) c(R) 9 W of Cape Mendocino.
111	Dec 30	07-35-27.8	36° 41'.8 121° 21'.6 2.8 a 15 S of Hollister.





EARTHQUAKES IN NORTHERN CALIFORNIA

January - June 1972

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. Stas	
26	Jan 02	15-25-47	40° 15' Intensity	124° 40' II at Fern	2.6 b(R) dale.	4	Off Cape Mendocino.
-	Jan 03	04-14-58	42° 13'	126° 10'	3.6 b(R)	8	NW of Crescent City.
-	Jan 03	06-39-08	40° 15'	126° 05'	3.3 b(R)	5	W of Cape Mendocino.
1	Jan 11	07-38-34	37° 25'	118° 24'	3.3 a(R)	6	NE of Bishop.
2	Jan 12	01-52-05	40° 05'	125° 05'	3.4 b(R)	3	W of Cape Mendocino.
3	Jan 12	02-20-00	39° 10'	122° 34°	3.1 b(R)	13	W of Williams.
4	Jan 12	15-33-26,2	36° 10:7	120° 48¦3	2.9 b	15	E of King City.
5	Jan 16	11-58-56	37° 37'	118° 43'	3.8 a(R)	11	NW of Bishop.
6	Jan 18	13-22-06.0		121° 26!7 IV about 1	3.3 b 0 miles N c		N of Hollister. lister.
6	Jan 18	13-31-07.8		121° 25!9 IV about 1	2.8 b 0 miles N o		N of Hollister. lister.
7	Jan 22	02-57-19.9	Intensity	V at Contr		werho	N of Bishop. ouse, IV at IV at Dyer, Nev.
8	Jan 29	08-20-07	36° 15'	118° 28'	(3.0) a(R)	4	SW of Lone Pine.
8	Jan 29	16-07-14	36° 12'	118° 23'	(2.9) a(R)	3	SW of Lone Pine.
9	Jan 29	19-07-48	35° 45'	121° 14'	3.3 a(R)	18	Near San Simeon.
10	Jan 29	21-43-58	40° 14°	124° 22'	3.1 b(R)	2	Off Cape Mendocino.
11	Feb 03	02-17-55.8	36° 13:2	120° 51!1	2.9 b	19	E of King City.
12	Feb 04	11-04-32.6	36° 26¦4	120° 40!9	2.5 a	12	SW of Fresno.
13	Feb 05	19-22-36	40° 25'	122° 55'	3.0 a(R)	3	S of Weaverville,
14	Feb 06	00-42-02	36° 20'	118° 21'	(3.1) a(R)	5	SW of Lone Pine.
15	Feb 06	17-52-13.6	36° 48!3	121° 34¦3	3,2 c	15	SW of Hollister.
-	Feb 07	09-05-36	40° 26°	126° 56'	3,6 b(R)	7	W of Cape Mendocino.
16	Feb 07	20-49-28.0	37° 15¦2	121° 38!4	3,3 b	18	NW of Hollister.

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	No. o	
17\$	Feb 08	00-30-13	37° 20'	120° 02'	2.9	a(R) 9	E of Merced.
18	Feb 09	01-40-52.6	37° 02!8	121° 28¦3	3.0	ъ 20	N of Hollister.
19	Feb 10	13-11-50	41° 05'	123° 05'	3.5	a(R) 3	N of Weaverville,
20	Feb 11	21-44-40	40° 07'	120° 01'	3.4	a(R) 6	NW of Reno.
67	Feb 12	06-11-22	39° 08'	118° 03'	(3,3)	a(R) 9	SE of Fallon.
21	Feb 13	03-09-17	41° 30°	125° 55'	(3,1)	b(R) 4	NW of Eureka.
22	Feb 13	15-18-45,6		122° 09!0 Valley.			SE of Berkeley. Felt ake Chabot area.
-	Feb 13	21-55-30	40° 30°	127° 20'	(3,2)	b(R) 6	W of Cape Mendocino.
81	Feb 15	08-56-33,1	36° 05¦6	120° 07!5	(2.8)	a 12	E of Coalinga.
23	Feb 17	07-55-33	37° 10' in Indepe	117° 29' endence and			SE of Bishop. Felt as.
24	Feb 17	11-09-59	in Indepe		Crowley	Lake are	N of Bishop. Felt as. Intensity IV
25	Feb 18	05-55-03.4		121° 31 ! 3 y IV at Sal			SW of Hollister. armel.
26	Feb 19	03-01-43	40° 20°	124° 42'	3.4	b(R) 9	Off Cape Mendocino.
27	Feb 22	05-27-12.7	36° 33!1	121° 07!6	3.4	ь 6	SE of Hollister.
27	Feb 22	05-41-58.3	36° 32!9	121° 07:2	3,5	ь 6	SE of Hollister.
27	Feb 22	15-44-09.7	36° 32:1	121° 07:4	3,2	a 6	SE of Hollister.
28	Feb 24	15-56-16.6	36° 36!0	121° 12!0	3,2	ь 6	SE of Hollister.
28	Feb 24	15-56-51.3	Slight d areas. counties	amage in th Felt in San	e Bear \\ Luis Ol	Valley and	SE of Hollister. Melendy Ranch esno, and Madera acisco Bay area.
28	Feb 24	16-08-39.0	36° 36!1	121° 12:3	2.7	ъ 6	SE of Hollister.
28	Feb 24	16-49-25.6	36° 35!4	121° 11:5	3.0	ь 6	SE of Hollister.
28	Feb 24	17-40-06.8	36° 37!8	121° 14:6	2.9	ь (SE of Hollister.
27	Feb 24	17-50-51.9	36° 32!5	121° 06¦7	(2.6)	ъ	SE of Hollister.

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h		Remarks
28	Feb 24	18-02-48.2	36° 37!9	121° 14:4	3.4 b	6 SE o	f Hollister.
28	Feb 24	18-21-50.6	36° 37!9	121° 14:7	2.9 b	6 SE o	f Hollister.
28	Feb 24	18-27-18.6	36° 36!0	121° 12:4	(2.5) b	6 SE o	f Hollister.
28	Feb 24	18-33-56.7	36° 37¦8	121° 14:6	2.6 ь	6 SE o	f Hollister.
28	Feb 24	19-43-40.6	36° 36!9	121° 13¦3	2.8 ь	6 SE o	f Hollister.
28	Feb 24	20-21-48.7		121° 13:6 ear Valley	3.6 b area.	6 SE o	f Hollister.
28	Feb 24	22-39-02.7	36° 36¦8	121° 13:5	2.7 b	6 SE o	f Hollister.
28	Feb 24	23-12-44,5	36° 35!3	121° 11!7	2.9 b	6 SE o	f Hollister.
28	Feb 25	03-00-42.8	36° 37!6	121° 14:2	2.5 в	6 SE of	Hollister.
28	Feb 25	03-04-45.2	36° 37¦5	121° 14¦1	2.9 b	6 SE o	f Hollister.
28	Feb 25	11-48-30,2	36° 37!8	121° 14:7	3.0 b	6 SE 0:	f Hollister.
28	Feb 26	19-36-36.0	36° 38¦2	121° 14¦6	2.9 b	6 SE o	f Hollister.
29	Feb 27	04-43-08	40° 32'	124° 45'	3.8 b(R)	8 Off	Cape Mendocino.
28	Feb 27	16-15-26.9	36° 38¦0	121° 15:1	2.9 b	6 SE o:	f Hollister.
28	Feb 27	16-56-29.0	36° 36¦7	121° 12!9	(2.6) b	6 SE o	f Hollister.
28	Feb 27	19-52-44.9	36° 38!2 Felt in J		3.4 b of Carmel		f Hollister.
30	Feb 27	21-00-18,4	36° 33!2	121° 06!0	2.9 b	6 SE o	f Hollister.
30	Feb 27	22-13-08,6	Max. inte area. In Chitterde	nsity V at tensity IV	Hernandez, at Ford Ord tensity I-		
30	Feb 29	21-32-23.4	36° 32!7	121° 06:4	2,5 b	6 SE o	f Hollister,
28	Feb 29	22-31-58.2	36° 35!9	121° 12:2	2.5 b	6 SE o	f Hollister.
31	Mar 01	05-47-54	38° 45'	120° 04°	3.3 a(R)) 6 W of	Markleeville.
32	Mar 01	09-28-42	Mendocino Rio Dell. I-III at	. Intensity Blue Lake,	y V at Fer V IV at Arca Fort Bragg	, and Trini	

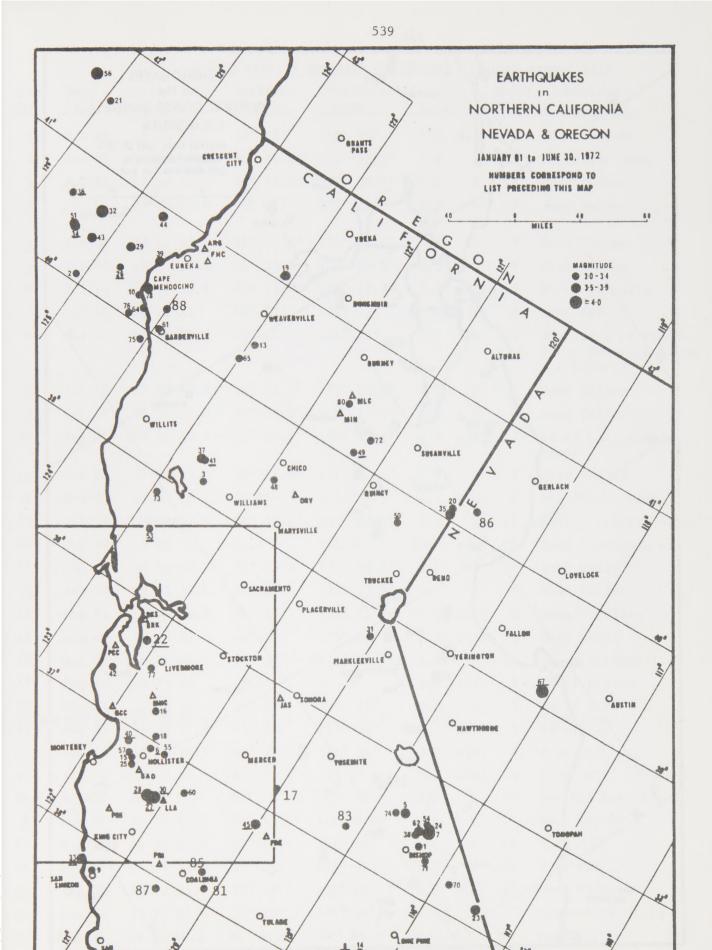
Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. of Stas. Remarks
30	Mar 01	11-39-58.7	36° 33!2	121° 07:2	3.8 в	6 SE of Hollister.
33	Mar 01	12-44-42	35° 48'	121° 23'	3.8 a(R)	9 NW of San Simeon.
34	Mar 01	12-55-41	40° 25'	125° 25'	3.5 b(R)	4 W of Cape Mendocino.
28	Mar 01	16-12-23.9	36° 36!3	121° 13¦1	3,6 ъ	6 SE of Hollister.
33	Mar 01	16-19-51	35° 50'	121° 23'	(2.7) a(R)	16 SW of King City.
33	Mar 01	19-01-10	35° 49'	121° 23'	(2,6) a(R)	16 SW of King City.
30	Mar 01	19-53-01.5	36° 32 : 6	121° 06!7	(2.5) b	6 SE of Hollister.
30	Mar 02	10-30-38.9	36° 33!1	121° 07:5	2,2 b	6 SE of Hollister.
82	Mar 02	18-28-13	37° 45'	122° 34'	2.1 a(R)	13 W of San Francisco.
35	Mar 02	21-44-15	40° 03'	120° 00'	3.5 a(R)	9 SE of Susanville.
36	Mar 02	23-18-01	40° 40°	125° 40'	3.4 b(R)	3 W of Eureka.
22	Mar 03	10-33-20.1	37° 45¦3 in the Sa	122° 10¦3 an Leandro	2.0 b	15 S of Berkeley. Felt
28	Mar 03	12-55-20.0	36° 37 ! 1	121° 13!7	2.6 в	6 SE of Hollister.
34	Mar 03	23-50-01	40° 25'	125° 30'	3.6 b(R)	6 W of Cape Mendocino.
30	Mar 04	05-57-26.6	36° 32!9 Intensity	121° 06:1 y II at Car		6 SE of Hollister.
36	Mar 04	13-18-27	40° 40'	125° 40'	3.7 b(R)	4 W of Eureka.
36	Mar 04	18-09-28	40° 40°	125° 35'	3.8 b(R)	5 W of Eureka.
36	Mar 04	22-00-07	40° 40'	125° 35'	3.8 b(R)	4 W of Eureka.
36	Mar 04	22-38-20	40° 40'	125° 35'	4.1 b(R)	5 W of Eureka.
36	Mar 04	23-48-44	40° 40°	125° 35'	3.6 b(R)	4 W of Eureka.
36	Mar 05	03-44-42	40° 40°	125° 35'	3.6 b(R)	4 W of Eureka.
37	Mar 05	15-10-02	39° 19' Intensit	122° 43' y I-III at	3.5 b Comptche and	10 E of Willits. Upper Lake.
36	Mar 07	12-17-54	40° 30'	125° 40'	4.0 b(R)	5 W of Eureka.
36	Mar 07	14-18-58	40° 25'	125° 50'	4.0 b(R)	3 SW of Eureka.
38	Mar 09	17-28-47	37° 28'	118° 28'	3.0 a(R)	7 Near Bishop.

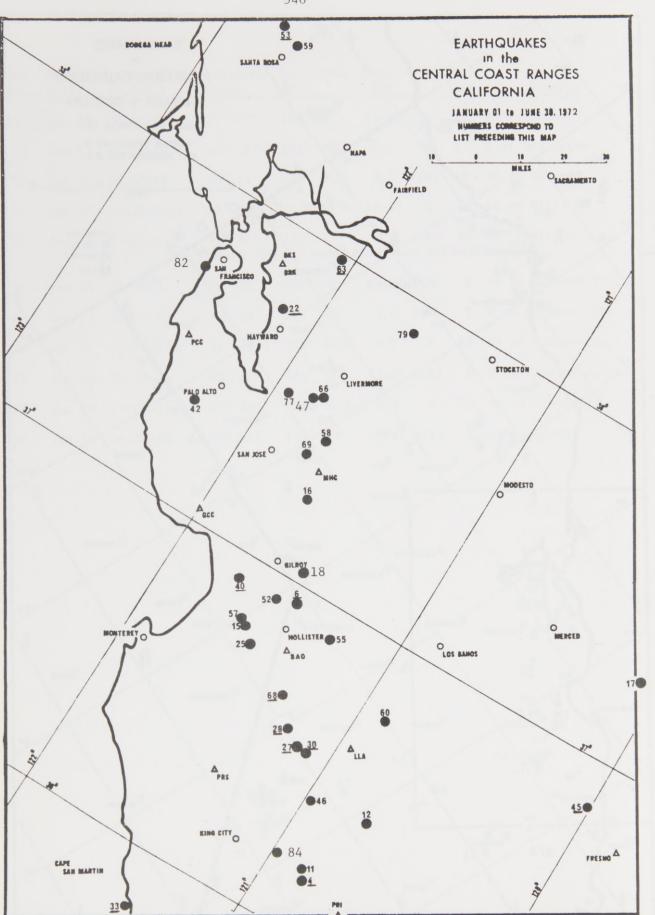
Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West		No. h Stas	
39	Mar 10	07-14-51		124° 21' t Eureka, II			Near Eureka. Inten-
28	Mar 13	05-36-13.0	36° 40!6	121° 18¦8	3.3	b 6	SE of Hollister.
83	Mar 13	22-25-01	37° 14'	119° 07'	2.6 a	(R) 4	NE of Fresno.
36	Mar 14	07-41-42	40° 28°	125° 46'	4.1 b	(R) 6	W of Cape Mendocino.
40	Mar 14	20-34-31.3		121° 42¦1 alinas and M			W of Hollister.
40	Mar 14	22-28-07.5					W of Hollister. at Moss Landing.
36	Mar 17	01-43-58	40° 25'	125° 25'	3.9 b	(R) 4	W of Eureka.
41	Mar 21	06-43-12	39° 18'	122° 41'	3.0 a	a(R) 10	E of Willits.
30	Mar 21	15-41-36,1	36° 33!3	121° 06:1	2.9	b 6	SE of Hollister.
28	Mar 22	06-24-43.8	36° 35!7	121° 12!3	3.1	ь 6	SE of Hollister.
42	Mar 23	03-45-29.6	Intensity	122° 15:6 III near Po o Alto, Athe	ortola V	Valley.	NW of San Jose. Felt at Menlo Altos.
-	Mar 23	13-19-58	35° 06'	125° 18'	3.9 t	2(R) 10	W of San Luis Obispo, well offshore.
_	Mar 23	21-25-40	42° 42°	126° 12'	4.9 h	(R) 4	Off Oregon coast.
-	Mar 25	02-45-49	40° 36'	117° 12'	3,5	a(R) 4	NE of Lovelock.
28	Mar 25	07-03-07.3	36° 35!8	121° 11!8	2.6	b 6	SE of Hollister.
30	Mar 26	06-12-36.8	36° 32!5	121° 05!9	2.0	b 6	SE of Hollister.
43	Mar 29	20-14-47	40° 25†	125° 10'	3.6	o(R) 4	W of Cape Mendocino.
44	Mar 30	21-45-18	sity IV a		II at Fe		NW of Eureka. Inten- and felt at
45	Mar 31	17-44-17.7	36° 50!9	119° 58:5	2.0	a 15	NW of Fresno.
45	Mar 31	21-14-05.6		120° 00!4 and Madera		a 18	NW of Fresno. Felt
45	Apr 01	06-09-16	36° 50'	120° 01'	(2.6)	a(R) 13	NW of Fresno.
28	Apr 02	05-32-57.6	36° 36!7	121° 13!2	2.7	ь 6	SE of Hollister.

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. o	
46	Apr 06	19-20-03		120° 58' IV in Port	2.7 a(R) tola Valley.	17	NE of King City.
30	Apr 07	08-07-24.6	36° 34!2	121° 10:5	3.0 a	6	SE of Hollister.
30	Apr 07	08-47-45.4	36° 34:3	121° 10:5	2.7 b	6	SE of Hollister.
47	Apr 07	17-26-02.8	37° 34:0	121° 49!6	2.9 c	21	SE of Berkeley. Felt in Fremont.
-	Apr 08	06-24-09	42° 37'	127° 06'	4.9 b(R)	9	Off Oregon coast.
4\$	Apr 08	11-57-57.1	36° 12!8	120° 50!4	(2.5) c	16	W of Coalinga.
-	Apr 09	01-10-07	42° 40°	126° 20'	3.7 b(R)	3	Off Oregon coast.
48	Apr 11	16-09-22	39° 30'	121° 55'	(3.1) a(R)	3	S of Chico.
49	Apr 11	22-27-59			3.4 a(R) len, Caribou		NW of Quincy. Storrie. Felt
49	Apr 11	23-03-43	40° 02'	121° 24°	3.1 a(R)	7	NW of Quincy.
85	Apr 13	22-44-13	36° 21'	120° 23'	(2.5) a(R)	4	NE of Coalinga.
50	Apr 15	10-58-05	39° 46'	120° 30'	3.0 a(R)	7	SE of Quincy.
51	Apr 16	07-44-02	40° 25'	125° 25'	3.6 b(R)	3	W of Cape Mendocino.
86	Apr 22	13-20-59	40° 11'	119° 40'	2.7 a(R)	8	N of Reno.
52	Apr 23	02-37-23.7	36° 55:4	121° 31!7	(2.5) a	20	NW of Hollister.
87	Apr 24	23-54-30	35° 57'	120° 38'	(2.6) a(R)	6	SW of Coalinga.
-	Apr 25	21-16-36	40° 30°	126° 30'	(3.1) b(R)	5	W of Cape Mendocino.
-	Apr 27	20-46-18	40° 55'	126° 20'	3,6 b(R)	3	W of Crescent City.
53	Apr 28	06-02-45	38° 34'	122° 47'	3.1 a(R)	10	NW of Santa Rosa.
54	Apr 30	02-46-22	37° 36'	118° 25'	(3.0) a(R)	13	N of Bishop.
55	Apr 30	19-29-11.4	36° 54 ! 2	121° 15:1	3.2 b	24	NE of Hollister.
30	May 01	21-51-06.6	35° 32!9	121° 06:2	3.0 b	6	SE of Hollister.
28	May 02	12-27-10.0	36° 35:2	121° 11:4	2.6 a	6	SE of Hollister.
56	May 03	00-29-45	41° 37'	126° 13'	4.4 b(R)	10	NW of Eureka.

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	0	No. Stas	
28	May 05	20-39-31.6	36° 36!0	121° 12:4	2.6 b	6	SE of Hollister.
4	May 06	12-15-46.5	36° 13¦0	120° 50 ! 1	(2,6) b	16	W of Coalinga.
-	May 07	11-51-36	40° 40°	126° 30'	3.7 b(R)	3	W of Eureka.
57	May 09	22-31-51.0	36° 48!6	121° 36¦2	3.1 b	21	SW of Hollister.
58	May 10	00-06-34.9	37° 27¦1	121° 42¦0	2.8 в	17	NE of San Jose.
59	May 10	19-49-36.5	38° 30!2	122° 42!7	2,6 a	10	N of Santa Rosa. Felt in Santa Rosa.
60	May 10	20-31-06	36° 47°	120° 51'	3.3 a(R)	16	SE of Hollister.
61	May 12	06-28-28	40° 05°	123° 55'	3.3 a(R)	3	Near Garberville.
62	May 13	02-54-13.3	37° 29:0	118° 28¦2	3,8 a	12	NW of Bishop.
53	May 13	14-42-27.6	38° 35!4	122° 47:3	2.9 a	13	N of Santa Rosa.
27	May 13	21-08-27.5	36° 33¦0	121° 04¦4	2.7 b	6	SE of Hollister.
63	May 16	17-00-32.7	37° 58¦7	122° 04¦0	2.3 C	14	NE of Berkeley.
63	May 18	23-54-11,2	37° 58¦5	122° 04¦4	2.4 C	14	NE of Berkeley.
64	May 24	05-27-26	40° 10°	124° 15'	3,2 a(R)	3	S of Cape Mendocino.
65	May 25	03-00-52	40° 15'	123° 00'	3.1 a(R)	3	E of Garberville.
41	May 27	22-04-16	39° 24°	122° 36†	2.7 a(R)	5	NW of Williams.
66	May 30	02-54-46.3	37° 33¦7	121° 48!6	2.6 b	9	S of Livermore.
67	Jun 02	11-46-14.6	39° 08¦1	118° 04!9	4.1 b	10	SE of Fallon.
88	Jun 03	00-38-27	40° 19'	124° 01°	2.9 b(R)	7	NW of Garberville.
68	Jun 03	08-19-53.3	36° 40!3	121° 16:7	2.8 в	6	SE of Hollister.
68	Jun 04	01-03-35,9	36° 40!1	121° 16¦6	2.8 в	6	SE of Hollister.
84	Jun 04	01-53-40.5	36° 21!9	120° 59:5	(2.3) C	16	E of King City.
69	Jun 05	23-18-36.0	37° 23¦1	121° 45:0	2.5 a	20	NE of San Jose.
70	Jun 05	23-59-55	37° 14'	117° 52'	(3,0) a(R)	6	SE of Bishop.
49	Jun 06	18-38-17	40° 07°	121° 26'	2.8 a(R)	5	NE of Chico.

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude h	No. o	
71	Jun 09	08-14-52	37° 22'	118° 15'	(3,3) a(R)	7	E of Bishop.
6	Jun 12	17-56-12.4	36° 55!0	121° 31!5	2.1 b	21	N of Hollister.
72	Jun 14	06-57-44	40° 14'	121° 15'	3.3 a(R)	6	NW of Quincy.
73	Jun 17	15-32-26,5	38° 53 ! 1	122° 56:0	(3.2) b	16	SE of Willits.
74	Jun 18	03-43-14	37° 34' Swarm wi	118° 47' th 19 events			NW of Bishop.
75	Jun 23	05-30-37	39° 55'	124° 05'	(3.0) b(R)) 2	SW of Garberville,
76	Jun 23	07-16-20	40° 05'	124° 20'	3.0 b(R)) 5	W of Garberville.
77	Jun 24	00-52-17.9	37° 32!3	121° 56¦8	3.0 b	13	SW of Livermore.
78	Jun 25	00-15-15	40° 20'	124° 15'	(3.5) b(R) 5	W of Cape Mendocino.
79	Jun 29	05-05-53.9	37° 54!2	121° 39!0	2.5 a	15	NE of Livermore.
80	Jun 30	06-18-49	40° 25'	121° 40'	(3.4) a(R) 3	S of Burney.





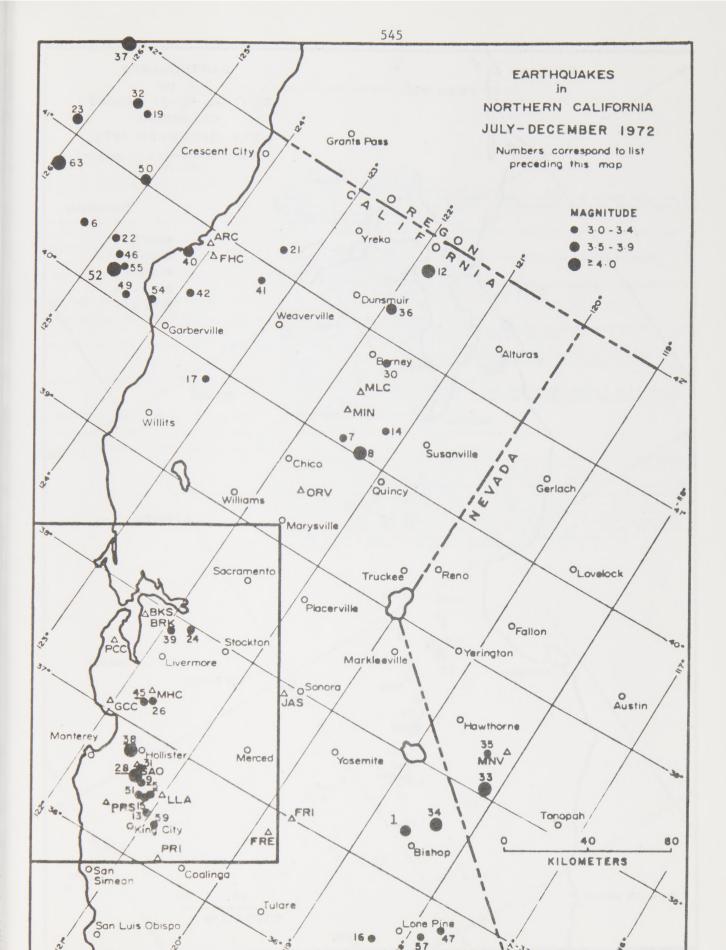
EARTHQUAKES IN NORTHERN CALIFORNIA - July-December 1972

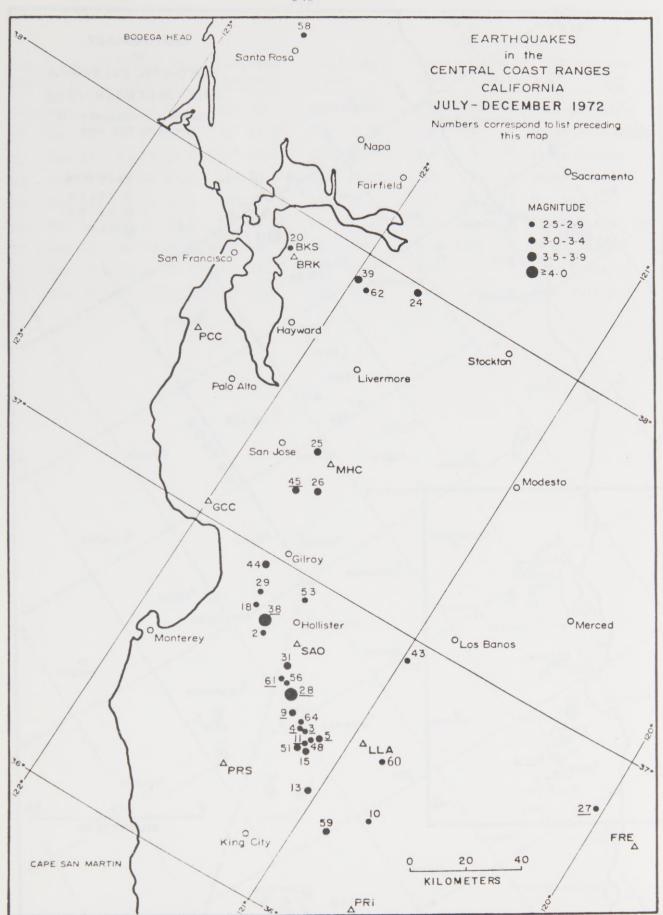
Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	- h	No.of Stas.	Remarks
1\$	Jul 01	06 45 16.0	37° 23'	118° 35'	3.5	d(R)	6	NW of Bishop
2	Jul 03	12 15 36.7	36° 47.3'	121° 31.5'	2.6	a	13	Hollister area
3	Jul 03	12 38 54.2	36° 33.6	121° 09.0'	2.8	9	*	Bear Valley
4	Jul 07	09 38 55.0	36° 341	121° 10'	2.5	b	7	Bear Valley
5	Jul 07	10 52 43.5	36° 33.6'	121° 05.4'	3.1	10	*	Bear Valley
5	Jul 07	15 27 13.2	36° 33.8'	121° 04.5'	2.5	9	*	Bear Valley
6	Jul 10	16 56 05.9	40° 23.8'	125° 17.7'	3.4	d(R)	6	SW of Ferndale
7	Jul 12	15 53 31	40° 03'	121° 33'	3.2	a(R)	8	N of ORV
8	Jul 16	14 42 09.2	40° 02°	121° 18'	4.1	a(R)	14	Max Int V at Belden, Berry Creek, Caribou and Storrie
9	Jul 19	23 03 41.3	36° 36.3'	121° 13.5'	3.0	8	*	Bear Valley
9	Jul 19	23 20 12.2	36° 36.5'	121° 13.5'	2.8	8	*	Bear Valley
10	Jul 21	02 52 35.0	36° 24.2'	120° 45.9'	2.6	a(R)	- 5	SE of LLA, double shock
11	Jul 23	09 27 51.2	36° 31.6'	121° 07.1'	2.8	7	*	Bear Valley
12	Jul 23	15 36 18.7	41.8°	121.7°	4.1	d (R)	4	Mt. Shasta area
13	Jul 24	06 53 03.6	36° 24.1'	121° 00.7°	3.1	Ъ	14	Little Rabbit Valley
14	Jul 30	19 02 33	40.3°	121.2°	(3.3)	a(R)	2	Lake Almanor area
15	Jul 30	20 21 50.1	36° 32.2'	121° 06.2'	3.1	9	*	Bear Valley
9	Jul 31	01 03 47.8	36° 36.4	121° 13.4'	3.1	9	*	Bear Valley
16	Aug 01	03 14 39.8	36° 27'	118° 15'	(3.1)	d(R)	4	Owen's Valley
17	Aug 09	15 58 59.4	39° 51'	123° 12'	3.1	d(R)	6	N of Ukiah
18	Aug 10	04 30 57.2	36° 51'	121° 36'	2.6	b	14	SE of Watsonville
19	Aug 13	02 38 10	41.5°	125.5°	3.0	a(R)	4	NW of Eureka
20 CIT 21\$	Aug 14 Aug 15 Aug 19	10 54 50.4 06 26 24.4 02 10 57.6	37° 53' 35° 55,1'	122° 18' 120° 26,3' 123° 20'3'	2.5 3.0 3.3	:a d(R)	7 5	NW of BRK Parkfield NE of FHC
22	Aug 20	13 35 16.7	40° 27'	124° 55'	3.1	d(R)	4	W of FHC
23	Aug 22	19 30 29	41.1°	126.1°	3.5	a(R)	4	W of ARC
24	Aug 23	22 03 35.4	37° 58'	121° 45'	3.0	Ъ	10	Int III near Antioch
5	Aug 24	14 26 13.7	36° 33.61	121° 03.5'	2.5	9	*	Bear Valley
25	Aug 25	14 26 21.0	37° 22'	121° 44°	2.6	Ъ	14	W of MHC
26	Aug 27	04 54 43.9	37° 15'	121° 39'	3.0	a	15	S of MHC
27	Aug 30	10 22 15.4	36° 48'	120° 02'	2.8	a(R)	11	Near Madera
27	Aug 30	12 16 07.9	36° 50'	120° 02'	(2.5)	a	7	Aftershock of 10 22
11	Aug 30	20 26 40.2	36° 31.9'	121° 06.8'	(2.5)	9	*	Bear Valley

Map No.	Date Origin Time 1972 (G.C.T.)	Latitude North	Longitude West	Magni- h No.of tude Stas.	Remarks
28	Sep 01 06 18 54.0	36° 39.4'	121° 17.1'	2.8 4 *	Stone Canyon
29	Sep 02 22 40 14.0	36° 53'	121° 37'	2.6 a 14	San Juan Bautista
30	Sep 04 15 35 45.1	40° 49'	121° 39'	3.3 d(R) 3	N of MIN
28	Sep 04 18 04 40.9	36° 38.5'	121° 15.8'	4.7 5 *	Stone Canyon. Max Int VI. Slight damage of Bear Valley Fire Control Station. Principal affect numerous rockfalls along San Benito River.
28	Sep 04 18 19 16.1	36° 38.9'	121° 16.1'	2.8 6 *	Aftershock of 18 04
28	Sep 04 18 38 20.1	36° 38.6'	121° 15.9'	3.0 6 *	11 11
28	Sep 04 19 58 33.0	36° 38.8'	121° 16.2	2.9 6 *	11 11
28	Sep 05 00 37 02.5	36° 38.3'	121° 14.0'	2.6 7 *	Stone Canyon
28	Sep 05 01 52 54.3	36° 31.0'	121° 16.3'	2.6 5 *	11 11
28	Sep 06 02 29 47.7	36° 37.9°	121° 14.7'	2.8 7 *	11 11
31	Sep 06 15 05 59.5	36° 42.5'	121° 21.2'	3.1 5 *	S of SAO
28	Sep 07 20 50 28.3	36° 38.3'	121° 15.4	2.8 8 *	Stone Canyon
32	Sep 11 05 49 06.7	41° 31'	125° 40'	3.6 d(R) 6	W of Eureka
9	Sep 14 19 33 10.4	36° 36.7'	121° 13.2'	3.0 7 *	Bear Valley (North)
33	Sep 18 07 14 28.3	38° 02.0'	118° 06.1'	4.0 a 5	S of MNV
34	Sep 18 21 50 51.9	37° 34'	118° 21'	4.0 a(R) 7	N of Bishop. Max Int III.
35	Sep 22 08 48 18.5	38° 18'	118° 15'	3.3 a(R) 5	SW of MNV
36	Sep 22 15 31 28.6	41° 14'	121° 55'	3.6 d(R) 4	Shasta area
37	Sep 23 02 43 57.8	41° 59'	126° 16'	4.9 d(R) 6	NW of FHC
38	Sep 23 10 35 09.2	36° 48'	121° 32'	2.9 a(R) 8	San Juan Bautista
38	Sep 23 10 45 04.8	36° 49'	121° 32'	3.5 b 14	San Juan Bautista Felt
38	Sep 23 10 48 12.3	36° 49'	121° 32'	3.5 b 15	San Juan Bautista Felt
38	Sep 23 10 56 25.5	36° 48'	121° 32'	4.0 a 15	San Juan Bautista Felt
38	Sep 23 15 07 48.2	36° 48'	121° 32'	4.1 5 18	Near San Juan Bau- tista. Int V at Salinas
28	Sep 25 07 08 19.6	36° 38.7	121° 16.8'	2.5 4 *	Stone Canyon
28	Sep 27 04 18 51.5	36° 38.7	' 121° 16.7'	3.0 6 *	Stone Canyon
28	Sep 27 10 51 38.9	36° 38.8	121° 16.6'	(2.7) 8 *	Stone Canyon

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude		No.o	
39	Sep 29	09 46 09.1	37° 55'	121° 59'	3.2	11	6	Mt. Diablo area (Felt)
38	Oct 03	05 59 38.5	36° 48'	121° 32'	2.9	a	14	San Juan Bautista Felt
38	Oct 03	06 30 02.2	36° 48'	121° 32'	4.8	Ъ	24	Near San Juan Bau- tista. Int V at Salinas
38	Oct 03	11 10 13.4	36° 48'	121° 35'	4.1	a	14	San Juan Bautista Felt
38	Oct 04	08 41 05.8	36° 49'	121° 34'	3.0	a	15	San Juan Bautista
40	Oct 06	16 39 41.8	40° 42'	124° 11'	3.7	d(R)	7	Near Ferndale
38	Oct 12	22 57 34.8	36° 48'	121° 34'	2.9	a	14	San Juan Bautista
41	Oct 17	19 13 55.9	40° 50'	123° 20'	3.3	d(R)	4	N of Garberville
42	Oct 26	05 21 41.1	40° 25'	123° 53'	3.4	d(R)	6	Scotia area
43	Oct 26	19 34 53.5	36° 56'	120° 59'	2.5	a(R)	9	N of LLA
44	Oct 30	16 51 55.9	36° 57.6'	121° 39.7'	2.7	a	14	E of Watsonville
45	Oct 31	15 54 17.3	37° 13.4'	121° 43.1'	3.4	b	13	SE of San Jose. Int IV at Coyote & Morgan Hill
46	Nov 04	03.30 45.3	40° 21'	124° 47'	3.4	d(R)	6	SW of FHC
47	Nov 08	10 15 10	36.8*	117.8°	(3.1)	a(R)	3	Lone Pine area
48	Nov 09	17 13 42.3	36° 32.9'	121° 06.5'	2.7	9	wk.	Bear Valley
9	Nov 09	23 33 43.3	36° 37.4'	121° 14.0'	2.5	7	*	Stone Canyon
49	Nov 11	14 25 54.3	40° 05'	124° 29'	3.4	d(R)	5	S of FHC
50	Nov 13	10 57 22.6	41° 01'	125° 04'	3.7	b(R)	5	W of Eureka
51	Nov 13	23 10 00.0	36° 31'	121° 08'	3.2	a	11	Bear Valley
52	Nov 14	02 10 13.8	40° 18'	124° 40'	4.7	d (R)	5	Cape Mendocino. Max Int V at Harris
53	Nov 14	12 46 33.9	36° 56'	121° 26'	2.6	a(R)	14	San Felipe
54	Nov 16	23 45 54.7	40° 11'	124° 11'	3.2 1	b(R)	5	Near Petrolia. Int IV at Ferndale
55	Nov 22	10 45 25.4	40° 17'	124° 40'	3.3 1	b(R)	6	Cape Mendocino
45	Nov 23	10 19 32.4	37° 13'	121° 44'	2.5	a(R)	17	SE of San Jose
56	Nov 25	11 40 12.1	36° 40.6'	121° 18.5'	2.6	2	*	Stone Canyon
57	Nov 25	19 31 38.0	36° 40'	117° 53'	(3.2)	d(R)	6	Lone Pine area
58	Nov 26	19 17 54.6	38° 29.8'	122° 44.4°	2.9	a(R)	5	Santa Rosa. Felt
3	Dec 01	07 02 53.2	36° 33.2'	121° 08.6'	2.6	8	*	Bear Valley
59	Dec 02	19 30 26.7	36° 18'	120° 53'	3.0	С	10	NW of PRI

Map No.	Date 1972	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- h No.o tude Stas	
60	Dec 10	07 33 34.0	36° 36'	120° 51'	2.6 b(R) 6	Panoche Valley
61	Dec 12	03 51 15.2	36° 41.3'	121° 19.9'	2.7 3 *	Stone Canyon
61	Dec 12	03 55 52.1	36° 41.1'	121° 19.7'	2.6 3 *	Stone Canyon
61	Dec 13	10 52 33.0	36° 40.5'	121° 18.1'	2.8 5 *	Stone Canyon
62	Dec 13	20 32 36.7	37° 54'	121° 57'	2.7 9 13	Mt. Diablo
28	Dec 14	01 31 57.9	36° 39.6'	121° 17.2'	3.0 6 *	Stone Canyon
63	Dec 15	09 25 00.7	40° 42'	125° 59'	4.1 d(R) 5	SW of Eureka
64	Dec 18	10 14 24.7	36° 34.9'	121° 10.7'	2.5 7 *	Bear Valley
4	Dec 24	09 54 57.1	36° 34.3	121° 10.2'	2.8 8 *	Bear Valley





VII. LISTING OF EARTHQUAKES WITH MAGNITUDES EQUAL TO OR GREATER THAN 5.0

					R	
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T A A	UTN		T		NN L	
HYR	RED	LAT LONG	Y	MAG		MAXIMUM INTENSITY, COMMENTS
8/ 5/1912	1-31-36.	42.00 127.0	0 C	6.8		OFF COAST, WEST OF CRESCENT CITY.
		37.25 121.7				NEAR COYOTE. CONSIDERABLE DAMAGE AT LICK
// 1/1911						OBSERVATORY. VI-VIII AT SAN JOSE, SANTA CLARA, GILROY, AND MORGAN HILL. VI AT SAN FRANCISCO, DAKLAND, AND RID VIISTA. V AT BERKELEY AND SANTA CRUZ. FELT OVER AN AREA OF 60,000 SQUARE MILES.
	12- 00-	39.50 126.5	0 0	6.8	F	V MENDOCINO COUNTY COAST. ORIGIN OFF
						SHORE. STRONGEST AT FORT BRAGG. BRANSCOMB. II AT SHEVELY AND EUREKA. ALSO AT WILLITS.
12/31/1915	12-200.	41.00 126.0	0 C	6.5	F	X AT SEA, OFF HUMBOLDT COUNTY COAST. OF
						DESTRUCTIVE ENERGY, BUT EPICENTER SO FAR FROM LAND THAT HIGHEST INTENSITY REPORTED WAS III AT EUREKA AND SHIVELY.
7/15/1918	0-23- 0.	41.00 125.0	0 0	6.5	F	IX OFF HUMBOLDT COUNTY COAST. RECORDED
						OVER CONSIDERABLE PART OF THE EARTH: HIGHEST REPORTED INTENSITY AT EUREKA - VI. FELT ALSO AT FORT BRAGG AND BIG BAR:
1 406 41000	0-31-20	41.00 126.0	0 0	6.0		AT SEA, NW OF CAPE MENDOCINO. NOT
1/20/1922	,					REPORTED FELT.
		41 00 125 5	0 0	7.3	99 6	AT SEA, NW OF CAPE MENDOCINO. RECORDED
						EUREKA. FELT FROM SAN JOSE NORTH TO ROSEBURG, OREGON.
3/10/1922	11-21-20.	35.75 120.2	5 C	6.5	43 1	FIX CHOLAME VALLEY, REGION OF SAN ANDREAS FAULT. FELT OVER AN AREA OF 100,000 SQUARE MILES. CRACKS IN THE GROUND AND NEW SPRINGS. VII-VIII AT PARKFIELD AND SHANDON. VI-VII AT SIMMLER AND SAN LUIS OBISPO. V AT LOS ANGELES.
				7 0		TAY COMMANDE CAPE MENDOCINO. VIII-IX
1/22/1923	9- 4-18.	40.50 124.5	0 C	7.2	71	F IX SUBMARINE, OFF CAPE MENDOCINO. VIII-IX AT UPPER MATTOLE, PETROLIA, DYERVILLE, AND PEPPERWOOD. VI-VIII AT FERNDALE, SCOTIA, LOLETA, FORTUNA, AND ALTON. VI-VII AT EUREKA. V-VI AT WILLOWS, RED BLUFF, AND ORLAND.
	2 21 20	41.00 125.0	0 0	5.0		AT SEA, WEST OF CAPE MENDOCING. NOT
4/29/1923	2-31-29.	41.00 125.0		3.00		REPORTED FELT.
			0 0			REPORTED TELL TELL TELL TELL TELL TELL TELL T
6/ 4/1925	12- 2-52.	41.50 125.0	0 6	0.0		
						FELT.
10/22/1926	12-35- 7.	36.61 122.	35 A	6.1	4	F VIII MONTEREY RAY REGION. FELT OVER AN AREA OF 100,000 SQUARE MILES. VIII AT SANTA CRUZ. VI-VII AT POINT AND NUEVO, CADLYOLS SALINAS SQUEEL POINT PINOS, LAKESIDE, MONTEREY, SAN FRANCISCO,
						CAPITOLA, SALINAS, SOUUEL, POINT PINOS, LAKESIDE, MONTEREY, SAN FRANCISCO, APTOS, BOULDER CREEK, CARMEL, CASTROVILLE, DAVENPORT, AND PIGEON POINT. V-VI AT ALVARADO, KING CITY, PESCADERO, SAN GREGORIO, AND WATSONVILLE. V AT IRVINGTON, MORGAN HILL, BERKELEY, COLMA, CRYSTAL SPRINGS, GONZALES, HALFMOON BAY, HAYWARD, LOS GATOS, MARTINEZ, MILPITAS, MÓDESTO, NOVATO, NILES, OAKLAND, PALO ALTO, PARKFIELD, PETALUMA, PINOLE, POINT REYES STATION, RICHMOND, SAN FRANCISCO, SAN JOSE, SAN LEANDRO, SAN LORENZO, SAN LUCAS, SANTA CLARA, SARATOGA, SAUSALITO, SUISUN, AND WALNUT CREEK. THIS AND QUAKES ON OCTOBER 22, AT 13-35, 14-41, 16-3, OCTOBER 24 AT 22-51, AND FEBRUARY 15, 1927, AT 23-54 WERE ESPECIALLY
						INVESTIGATED BY GEORGE D. MITCHELL JR. SEE BSSA, V. 18, P. 153.

				VIII MONTEREY BAY. SIMILAR IN ALMOST EVERY WAY TO THE SHOCK I HOUR EARLIER. SHAKEN AREA SLIGHTLY LESS. SLIGHTLY HIGHER INTENSITY AT SAN FRANCISCO, SANTA ROSA, SANTA CRUZ, AND A FEW PLACES TOWARD THE NORTH.
12/10/1926	8-38-53.	40.75 126.00 C 6		OFF COAST, WEST OF CAPE MENDOCING.
		37.50 118.75 C 6		VII SIERRA NEVADA, W OR NW OF BISHOP. FELT OVER AN AREA OF 75,000 SQUARE MILES. VII+ AT BISHOP. VI AT BASS LAKE. IV-V AT BIG PINE, ABERDEEN, DEEP SPRING, FRESNO, BENTON, MONO LAKE, MARIPOSA, YOSEMITE, HANFORD, TULARE, PORTERVILLE, AND VISALIA, AND AT MINA, TONOPAH, CANDELIA, AND GOLDFIELD, NEVADA.
8/ 5/1930	0-11- 6.	39.75 127.42 C 5	5.3 1	OFF COAST, WEST OF CAPE MENDOCINO.
				OFF CAPE MENDOCINO. FELT OVER A LAND AREA OF 4,500 SOUARE MILES. VI AT PUNTA GORDA AND HYDESVILLE. V AT ALTON, BRICELAND, FERNBRIDGE, GARBERVILLE, HUMBOLDT BAY, EUREKA, LOLETA, METROPOLITAN, AND PEPPERWOOD.
9/ 9/1931	13-40-30.	40.80 125.00 D 5	5.8 1 F	OFF COAST NEAR EUREKA. FELT OVER AN AREA OF 15,000 SQUARE MILES. VI AT BLOCKSBURG, DYERVILLE, FERNBRIDGE, FERNDALE, HOLMES, AND WEDTT. V AT ALDERPOINT, BRICELAND, BELL SPRINGS, BRANSCOMB, COVELO, CHICO, DOS RIOS, EEL ROCK, EUREKA, FORT SEWARD, FRUITLAND, FORTUNA, GARHERVILLE, LSLAND MOUNTAIN, KNEELAND, MIRANDA, PEPPERWOOD, PUNDA GORDA, SCOTIA, SKELLY,
				UPPER MATTOLE, WHITLOW, AND ZENIA.
				IV APTOS, ASILOMAR, GONZALES, METZ,
515611035	16-580.	36.00 121.00 5	5.0 F	CARMEL, PEBBLE BEACH, MONTEREY, PACIFIC GROVE, DELMONTE.
				WEST OF CAPE MEMDOCINO.
3/ 2/1932	17-14-36.	40.20 127.00 D 5	0.6 1	WEST OF CAPE MENDOCTIONS BEATDICE . ON HE
6/ 6/1932	9-44-22.	40.75 124.50	5.4 1 F	VIII AT ARCATA, BAYSIDE, BEATRICE, BLUE LAKE, BLUNTS REEF, BRIDGEVILLE, EEL RIVER, CRESCENT CITY, EUREKA, FIELDS LANDING, FORT DICK, FORTUNA, HUMBOLDT BAY, KORBEL, LOLITA, SOUTH BAY, TABLE BLUFF.
0.100.110.70	11 62-AE	40.00 126.20 D 5	5.0 1	WEST OF CAPE MENDOCINO.
4/24/1445	11-52-45.	70.75 119.00	7.2 1 F	VI AT NEWMAN. V AT BIG PINE, COALINGA, .
13/21/14/2	6-10- 3*	35.73 110.00		CORCORAN, FRESNO, FREEPORT, GRASS VALLEY, GUSTINE, HERALD, REELER, LAWS, LIOT, LONE PINE, LOS BANOS, MODESTO, NEVADA CITY, OWENYO, PITTSBURG, SACRAMENTO, SATTLEY, SANGER, SELMA, STOCKTON, THREE RIVERS, TULARE, WATERFORD, WOODLAND, YOLO. EPICENTER IN NEVADA.
17 5/1013	6-50-20.	38.75 118.00	5.7 F	RATTLED WINDOWS IN SONORA. BERKELEY S-P =
				45 SECONDS. EPICENTER IN NEVADA.
6/25/1233	23-45-27.	39.08 119.33	6.1 1 F	FELT OVER AN AREA OF 40,000 SQUARE MILES CENTERED IN WESTERN NEVADA. VII AT WABUSKA, VIRGINIA CITY, AND VERINGTON, NEVADA. VI AT CARSON CITY, DAYTON, FALLON, FORT CHURCHILL, LAHDNTON, MANHATTAN, MASON, MINDEN, SCHURZ, STEWART, NEVADA, AND AT LODI, MARKLEEVILLE, AND TAHOE CITY, CALIFORNIA. V AT GOLD HILL, HAWTHORNE, HAZEN, RAWHIDE, RENO, RODERICK, AND VERDI, NEVADA, AND AT GRASS VALLEY, LOCKFORD, LOG CABIN, MT.
				GREGORY, NEVADA CITY, DMO RANCH, SANTA ROSA, VARNER, AND VOLCANOVILLE, CALIFORNIA.
1/30/1934	20-16-31.	38.28 118.36 A	6.3 F	EXCELSIOR MOUNTAINS, NEVADA, NEAR CALIF. BORDER. FELT OVER AN AREA OF 110,000 SQ. MI. VII AT SILVER DYKE, MINA, AND SDDAVILLE, NEVADA. IV AT HAWTHORNE, NEVADA. V AT DIXIE VALLEY, FALLON, GOLDFIELD, HAZEN, LUNING, IONE, SCHURZ, AND YERINGTON, NEVADA. (BSSA V.25, P. 161.)
3/13/1034	16-200-	38.00 118.00 D	5.0 F	HAWTHORNE, NEVADA.
6/ 5/1934	21-480.	35.80 120.33 B	5.0 F	V AT ADELAIDA, PARKFIELD, AND PRIEST. IV AT ATASCADERO, AVENAL, BIG SUR, BRYSON, CARMEL, HANFORD, KING CITY, LEMOORE,

					LONDAK, PARAISO, SAN MIGUEL, SANTA CRUZ, SHANDON, AND TEMPLETON. III AT APTOS, BOULDER CREEK, CAMBRIA, CHUALAR, COALINGA, GONZALES, HOLLISTER, MONTEREY, MORRO BAY, PASO ROBLES, SALINAS, SAN FRANCISCO, SAN JOAQUIN VALLEY, SAN LUIS OBISPO, SOLEDAD, SPRECKELS, ETC. NOT FELT AT ANTIOCH, BAKERSFIELD, FRESNO, GILROY, LIVERMORE, LOS GATOS, MARICOPA, MERCED, MODESTO, MORGAN HILL, REDWOOD CITY, SAN JOSE, SANTA MARIA, TULARE, OR WATSONVILLE.
6/ 8/1934	4-300.	35.80	120.33	B 5.0	F VI TO VII AT CHOLAME RANCH, PARKFIELD, AND STONE CANYON, DURATION 30 SECONDS. DAMAGE SLIGHT. V AT ATASCADERO, COALINGA, HOLLISTER, KING CITY, LEMODRE, AND SAN MIGUEL. IV AT ANTELOPE, BIG SUR, CAMBRIA, CASTROVILLE, DELAND, MONTEREY, PASO ROBLES, SAN LUIS OBISPO, SANTA BARBARA, SANTA MARGARITA, SANTA MARIA, SOLEDAD, TAFT, VENTURA, VISALIA, ETC. III OR LESS AT ARVIN, BAKERSFIELD, DELAND, FRESNO, KERNVILLE, LOMPOC, LOS ANGELES, MENDOTA, PORTERVILLE, SALINAS, SAN BENITO, SANTA ANA, SANTA BARBARA, TULARE, MAYSONVILLE, ETC. NOT FELT AT BIG BASIN, CAJON, COYOTE, GILROY,
					HUNTINGTON BEACH, INDEPENDENCE, INYOKERN, LANCASTER, MERCED, POMONA, OR SAN JOSE.
6/ 8/1934	4-470.	35.80	120.33	B 6.0	F FELT WITHIN A RADIUS OF 250 KM FROM THE EPICENTER NEAR THE SOUTHEASTERN ANGLE OF MONTEREY COUNTY. VII TO VIII AT PARKFIELD. VI AT COALINGA, KETTLEMAN CITY, LEMOGRE, AND STONE CANYON. V AT
					ATASCADERO, DUDLEY, HOLLISTER, KING CITY, DIFFIELDS, SAN MIGUEL, SEASIDE, SHALE PUMP STATION, AND SHANDON». IV AT ANTELOPE, AVILA, CONOGA PARK, HANFORD, LOS ALAMOS, MARICOPA, MORRO BAY, NIPOMO, PASO ROBLES, PRIEST, SAN LUIS OBISPO, SANI CRUZ, SANTA MARIA, SOLEDAD, VISALIA, ETC. III OR LESS AT APTOS, FRESNO, KERNVILLE, LONE PINE, LOS BANDS, MENDOTA, MONTEREY, DAKLAND HARBOR, SALINAS, SAN BENITO, SANTA ANA, TEHACHAPI, TULARE, ETC.
12/24/1934	16-260.	35.93	120.48	B 5.0	F IV AT LOS ALAMOS AND SHANDON. ALSO FELT AT KING CITY AND TEMPLETON.
1/ 2/1935	22-43-58.	40.25	125.25	5.8	F OFF CAPE MENDOCING. V AT ALDERPOINT, FORT BRAGG, HOLMES, KORBEL, ORLEANS, SHELLY. IV AT ALBION, ARCATA, BAYSIDE, BENBOW, ELK RIVER, EUREKA, FERNDALE, HONEYDEW, RIO DELL, ROHNERVILLE, SCOTIA, SOUTH FORK, UPPER MATTOLE, WADDINGTON, WEDTT, AND WHITLOW.
6/ 3/1935	17- 80.	41.00	124.00	D 5.0	WEST OF EUREKA.
5/10/1936	17-400.	37.50	118.53	C 5.0	F NORTH OF BISHOP. FELT OVER AN AREA OF 6,000 SQUARE MILES. V AT BISHOP. IV AT BENTON, BIGPINE, BURGYN'S ROAD CAMP, DEFP SPRINGS, DELPIEDRA, INDEPENDENCE, JUNE LAKE, KEELER, LITTLE ROUND VALLEY, MCGEE CREEK, MAMMOTH LAKES, MIRAMONTE, MOCALNO, MONO LODGE, ONYX, OWENS RIVER GORGE, PORTERVILLE, AND STRATFORD.
6/ 3/1936	9-15- 0.0	40.16	126.45	D 5.8	F OFF CAPE MENDOCINO. V AT FERNDALE, PUNTA GORDA, UPPER MATTOLE, AND WEDTT. IV AT ALDERPOINT, ALTON, ARCATA, BAYSIDE, BEATRICE, BENDOW, BRICELAND, BRIDGEVILLE, CAPETOWN, EUREKA, FERNBRIDGE, FIELDS
					LANDING, FORT BRAGG, FORTUNA, GARBERVILLE, HARRIS, HOLMES, KORBEL, LOLETA, RIO DELL, ROHNERVILLE, SOMOA, SCOTIA, SOUTH FORK, TRINIDAD, WADDINGTON, AND WESTPORT.
7/ 2/1936	16-290.	39.20	117.50	D 5.0	F NEVADA.
	1-250.				OFF COAST OF NORTHERN CALIFORNIA.
	4-41-34.				F FELT OVER AN AREA OF 10,000 SQUARE MILES OF NORTHWESTERN CALIFORNIA. V AT ALDER POINT, ARCATA, CAPE MENDOCINO, CAPETOWN, EUREKA, FERNDALE, FIELDS LANDING, ORLEANS, SCOTIA, SHIVELEY, TRINIDAD, AND UPPER MATTOLE.
2/19/1937	9- 90.	38.30	118.30	C 5.0	F FELT OVER AN AREA OF 5,000 SQUARE MILES OF WEST-CENTRAL NEVADA. V AT HAWTHORNE AND YERINGTON, NEVADA. IV AT BRIDGEPORT AND LUNING, MINA, AND TONOPAH, NEVADA.

7/ 1/1938 18-13--0. 41.00 124.00 D 5.0

COAST OF NORTHERN CALIFORNIA.

- F FELT OVER AN AREA OF 20,000 SQUARE MILES IN NORTHERN CALIFORNIA. VI AT ALDER POINT, BRIDGEVILLE, EEL ROCK, FERNDALE, IN NORTHERN CALIFORNIA. VI AT ALDER POINT, BRIDGEVILLE, EEL ROCK, FERNDALE, FORTUNA, GARRERVILLE, GRIZZLY CREEK, HARRIS, HOLMES, OCEAN HOUSE, PEPPERWOOD, SCOTIA, SHIVELY, UPPER MATTOLE, AND WEDIT. V AT ALTON, ARCATA, BAYSIDE, BEATRICE, BELL SPRINGS, BENBOW, BRANSCOMB, CAPETOWN, CAPE MENDOCINO, CARLOTTA, COMPTCHE, COVELO, CUMMINGS, CUTTEN, DEL LOMA, ETTERSBURG, EUREKA, FERNBRIDGE, FIELDS LANDING, FORT BRAGG, FORT SEWARD, HONEYDEW, ISLAND MOUNTAIN, LAKE MOUNTAIN, LOLETA, LOW GAP, MIRANDA, PEYROLIA, PUNTA GORDA, RIO DELL, SOUTH FORK, SPY ROCK, AND ZENIA.
 FELT OVER AN AREA OF 9,000 SQUARE MILES
- PELL UVEN AN AREA OF 4,000 SOUARC MILES OF WEST CENTRAL CALIFORNIA, ALONG THE COAST AS FAR AS PESCADERO AND TO THE SOUTH TO SAN LUIS OBISPO. INLAND IT WAS FELT AT STEVENSON, MENDOTA, AND COALINGA. V AT BIG SUR, BRYSON, CHUALAR, GONZALES, GREENFIELD, HARMONY,

COALINGA. V AT BIG SUR, BRYSON, CHUALAR, GONZALES, GREEMFIELD, HARMONY, HOLLISTER, JOLON, LOCKWOOD, PAICINES, PARAISO, PINNACLES, SAN ARDO, SAN BENITO, SAN LUCAS, SOLEDAD, AND SPRECKELS. IV AT BEN LOMOND, CAMBRIA, CASTROVILLE, CAPMEL, DOS PALOS, GILROY, KING CITY, LOS BANOS, MENDOTA, MONTEREY, PASO ROBLES, PRIEST, SALINAS, SAN LUIS OBISPO, TRES PINOS, WATSONVILLE, ETC. FELT OVER AN AREA OF 24,000 SQUARE MILES

- FELT OVER AN AREA OF 24,000 SQUARE MILES
 OF SOUTH-CENTRAL CALIFORNIA. VI AT DELPIEDRA, INDEPENDENCE, TERRA BELLA, AND
 VISALIA. V AT CEDAR GROVE, DUNLAP, FRESNO, SEQUOIA NATIONAL PARK, HETCH HETCHY,
 LAWS, MADBOOTH LAKES, MATHER, PINEHURST, PINERIDGE, AND STANISLAUS.
- F NEAR COSO HOT SPRINGS. TWENTY-TWO SMALL NEAR COSO HOT SPRINGS. TWENTY-THU SMALL
 AFTERSHOCKS RECORDED AT HAIWEE. FELT AT HODFISH, DARWIN, HOSPITAL ROCK, KERN
 CANYON, ISABELLA, KERNVILLE, AND TRONA.
- FELT OVER AN AREA OF 8,000 SQUARE MILES IN
 EAST-CENTRAL CALIFORNIA AND WEST-CENTRAL NEVADA. VI AT COLEVILLE. V AT ALTAVILLE AND TUDLUMNE, AND GARDNERVILLE AND HUDSON, NEVADA.
- NEAR MINA, NEVADA. FELT OVER AN AREA OF 38,000 SQUARE MILES. VI AT RAWHIDE, NEVADA. V AT BUDIE AND CARSON CITY. 38,000 SQUARE MILES. VI AL MARKIDE, NEVADA. VALOUDE AND SERVADA. IV AT BENTON AND GILBERT, MINA, MT. MONTGOMERY, SCHURZ, AND YERINGTON, NEVADA. IV AT BENTON AND BRIDGEPORT, AND DYER, EUREKA, FALLON, GOLDFIELD, HAWTHORNE, HAZEN, HUDSON, IONE, LOYELOCK, LUNING, MASON, ROUND MOUNTAIN, SILVER PEAK, AND TONOPAH, NEVADA.

FELT AT DARWIN, DEATH VALLEY, AND

- TINEMAHA, AND AT BEATTY, NEVADA.
 FELT OVER AN AREA OF 10,000 SQUARE MILES IN WEST CENTRAL CALIFORNIA, ALONG THE COAST AS FAR NORTH AS HALF MOON BAY AND IN WEST CENTRAL CALIFORNIA, ALONG THE COAST AS FAR NORTH AS HALF MOON BAY AND TO THE SOUTH TO ESTERO BAY. INLAND IT WAS FELT AT VOLTA, TRANQUILITY, AND COALINGA. VII AT HOLLISTER. VI AT KING CITY AND PAICINES. V AT CAYUCOS, SOLEDAD, AND SPRECKELS. IV AT APTOS, BEN LOMOND, BIG BASIN, BIG SUR, BOULDER CREEK, CAMBRIA, CARMEL, CASTROVILLE, CHUALAR, GILROY, GONZALES, LOCKWOOD, MILPITAS, MONTEREY, NIPOMO, PASO ROBLES, PINNACLES, SALINAS, SAN ARDO, SAN BENITO, SAN JUAN, SAN MIGUEL, SAN SIMEON, SANTA CRUZ, TRES PINOS, AND WATSONVILLE.
- FELT OVER AN AREA OF 15,000 SQUARE MILES IN WEST-CENTRAL CALIFORNIA, ON THE COAST FROM SANTA CRUZ SOUTH TO POINT ARGUELLO AND INLAND TO LOST HILLS AND FRESNO. V AT COALINGA, FRESNO, GREENFIELD, PRIEST, AND INLAND TO LOST HILLS AND FRESNO. V AT CHALINGA, FRESNO, GREENFIELD, PRIESSAN ARDO, AND SAN LUCAS. IV AT APTOS, ATASCADERO, BIG SUR, CAMBRIA, CARMEL, CASTROVILLE, CAYUCOS, CHUALAR, CHALINGA, GONZALES, HOLLISTER, KING CITY, MENODTA, MONTEREY, MORRO BAY, PARKFIELD, PASO ROBLES, PINNACLES, SALINAS, SAN JUAN BAUTISTA, SAN LUIS OBISPO, SANTA CRUZ, SOLEDAD, TAFT, ETC.

F FELT OVER AN AREA OF 28,000 SQUARE MI.

12/ 3/1938 17-42--0. 37.50 118.77 8 5.5

9/27/1938 12-23- 0.0 36.45 121.25 C 5.0

1/ 7/1939 20-21--0. 36.00 117.73 8 5.0

1/11/1939 22- 0--0. 39.00 119.20 D 5.5

5/11/1939 18- 4--0. 38.58 117.83 C 5.5

6/13/1939 17-15--0. 37.02 117.25 8 5.0

6/24/1939 13- 2- 0.0 36.80 121.45 C 5.5

12/28/1939 12-15-38. 35.80 120.33 B 5.0

2/ 8/1940 8- 5-59.0 40.00 121.60 5.7

					OF NORTH CENTRAL CALIFORNIA. VI AT ALMANDR, BANGOR, BUTTE CITY, CHICO, GRIDLEY LA PORTE, NEVADA CITY, PARADISE, TEHAMA, AND VINTON. V AT BAXTER, BECKWOARTH, BELDEN, BLAIRSDEN, CARIBOU, CHESTER, CORNING, CRESCENT MILLS, DE SABLA, DUTCH FLAT, FEATHER RIVER, CAJON, FOREST RANCH, GRANITEVILLE, GREENVILLE, GRIMES, MEADOW VALLEY, MILFORD, MILLVILLE, MINERAL, ORDVILLE, PORTOLA, OUINCY, SENECA, WOODLAND, AND VOLO. NEW BERKELEY SOLUTION 1973.
7/ 8/1940	10-57-40.	37.45	119.00	C 5.0	F SIERRA NEVADA, SOUTH OF MAMMOTH. FELT AT BENTON, BISHOP, HOT CREEK, HUNTINGTON LAKE, LAKESHORE, AND YOSEMITE VALLEY.
12/20/1940	23-40-42.	40.00	124.00	D 5.5	F FELT OVER AN AREA OF 9,000 SQUARE MILES OF NORTHERN CALIFORNIA. VI AT BENBOW, BRICELAND, ETTERSBURG, FERNDALE, FORT BRAGG, GARBERVILLE, AND ROCKPORT. V AT FIELDS LANDING, FOREST GLEN, HARRIS, PETROLIA, PUNTA GORDA, UPPER LAKE, UPPER MATTOLE, WEDTT, AND WILLITS.
2/ 9/1941	9-44-42.0	40.70	125.40	6.4	F FELT OVER AN AREA OF 17,000 SQUARE MILES OF NORTHWESTERN CALIFORNIA AND SQUTHWESTERN OREGON» VI AT ARCATA, EUREKA, FERNDALE, PUNTA GORDA, AND SHELTER COVE. V AT BRIDGEVILLE, CARLOTTA, CRESCENT CITY, FIELDS LANDING, FOREST GLEN, FORT SEWARD, FORTUNA, GABBERVILLE, KLAMATH, LOLETA, DRICK, ORLEANS, SCOTIA, SOUTH FORK, TRINIDAD, UPPER MATTOLE, WEOTT, AND WILLOWS CREEK, AND GRANTS PASS AND PORT ORFORD, OREGON.
5/13/1941	16- 1-54.0	40.30	126.40	6.0	F FELT AT ARCATA, BEN LOMOND, BLUE LAKE, BOLINAS, CARLOTTA, ETTERSBURG, EUREKA, FERNDALE, FORT BRAGG, LOLETA, PETROLIA, REDWOOD CITY, RIO DELL, ROCKPORT, SAN FRANCISCO, SANTA CRUZ, SCOTIA, SHIVELEY, TRINIDAD, UKIAH, UPPER MATTOLE, WILDWOOD, AND WILLITS. ALSO FELT AT DEPOE BAY AND KNAPPA, OREGON.
7/18/1941	3-53-42.	40.00	119.00	D 5.0	F WADSWORTH, NEVADA.
9/14/1941	16-43-32.	37.57	118.73	8 6.0	F OWENS VALLEY. FELT OVER AN AREA OF 30,000 SQUARE MILES. VI AT BENTON, COLUMBIA, COULTERVILLE, GROVELAND, INCLINE, QAKHURST, AND TUQLUMNE. V AT AUBERRY, BIG CREEK, CATHAY VALLEY, DELPIEDRA, DUNLAP, FRESNO, FRIANT, JAMESTOWN, KINGS CANYON NATIONAL PARK, LAKESHORE, LAWS, LONE PINF, MAMMOTH LAKES, PINE CREEK CANYON, PORTERVILLE, RAISEN, REDS MEADOW, SHAVER LAKE, AND SONORA, AND OVER AND NT. MONTGOMERY, NEVADA.
9/14/1941	18-21-19.0	37.57	118.73	8 5.5	F AFTERSHOCK OF 16-43-32. FELT OVER AN AREA OF 27,000 SOUARE MI. VI AT PINEDALE AND PINERIDGE. V AT ASH PEAK, BIG CREEK, BRECKENRIDGE, EL PORTAL KINGS CANYON NATIONAL PARK, PORTERVILLE, PAISIN, REEDLEY, AND RIVERDALE, AND MT. MONTGOMERY, NEVADA.
9/14/1941	18-39-12.	37.57	118.73	B 6.0	F OWENS VALLEY. FELT OVER AN AREA OF 36,000 SQUARE MILES. VI AT NORTH FORK AND YOSEMITE VALLEY. V AT DIG CPEEK, BRECKENRIDGE, DUNLAP, EL PORTAL, KAWEAH, KINGS CANYON NATIONAL PARK, MADERA, MAMMOTH LAKES, NEWMAN, OAKHURST, O ⁵ NEALS, PINERIDGE, PORTERVILLE, AND RAISIN, AND DYER AND MT. MONTGOMERY, NEVADA.
9/14/1941	21-16- 1.	37.57	118.73	B 5.0	F AFTERSHOCK OF 18-39-12. FELT AT BIG CREEK
	16-13- 8.				F FELT OVER AN AREA OF 12,000 SOUARE MILES OF NORTHWESTERN CALIFORNIA AND SOUTHWESTERN OREGON. VII AT EUREKA. VI AT FERNDALE, FIELDS LANDING, KORBEL, PEPPERWOOD, PUNTA GORDA, RIO DELL, ROCKPORT, AND UPPER MATTOLE. V AT ARCATA, BENBOW, BRICELAND, CAPE MENDOCINO, CARLOTTA, DYERVILLE, GARBERVILLE, HOLMES, HYAMPOM, KNEELAND, LOLETA, PETROLIA, AND WILDWOOD. EUREKA AFTERSHOCK.
	6-590.				F OWENS VALLEY. FELT OVER AN AREA OF 28,000
12/31/1941	6-48-44.	37.57	118.73	8 2.5	SQUARE MILES. VI AT OWENS RIVER GORGE. V AT BENTON, FRESNO, KINGS CANYON NATIONAL PARK, LAWS, MIRAMONTE, TINEMAHA, AND YOSEMITE, AND DYER, NEVADA.
8/18/1942	21-55-24.	38.60	118.50	D 5.0	F FELT OVER AN AREA OF 7,000 SQUARE MILES NEAR HAWTHORNE, NEVADA. VI AT MASON AND MT. MONTGOMERY, NEVADA. IV AT BENTON,
					MERK HARITURAL, HEADAS AL SI MASON MID HER HOLLOWING THE AL DELIGHT

	70 70 110 70 0 5 5	RUDIE, AND BRIDGEPORT, AND FALLON, HAWTHORNE, AND YERINGTON, NEVADA. F NEAR WADSWORTH, NEVADA. FELT OVER AN AREA
12/ 3/1942 9-44-42	. 39.70 119.30 D 5.5	OF 24,000 SQUARE MILES. VI AT FALLON, FERNLEY, AND RENO, NEVADA. V AT FMIGRANT GAP, MARYSVILLE, AND NEVADA CITY, AND AT LOVELOCK, MIDDEN, AND STEAMBAT, NEVADA. IV AT ALLEGHANY, BRIDGEPORT, CHILCOAT, COLOMA, DOWNIEVILLE, FORESTHILL, GRASS VALLEY, GRIZZLY FLATS, JACKSON, PLACERVILLE, QUINCY, AND SERAMENTO, AND AT CARSON CITY, MASON, NIXON, SMITH, STILLWATER, SULPHUM, AND WINNEWLCCA, NEVADA
12/17/1942 15- 7-43	. 39.87 119.90 C 5.1	F V AT BRIDGEPORT, MARKLEEVILLE AND TOPAZ. IV AT GRIZZLY FLATS, JACKSON AND SONORA.
3/30/1943 21- 7-28	39.43, 120.40 C 5.3	F FELT WIDELY IN THE NORTHERN SIERRA NEVADA. V AT BLUE CANYON, TRUCKTE AND STEWART, NEVADA. IV AT EMIGRANT GAP, MARKLEEVILLE, NEVADA CITY AND CARSON CITY, MINDEN AND RENG, NEVADA. III AT BIJOU, COLUSA, LAS PLUMAS, SACRAMENTO, SODA SPRINGS AND STEAMBOAT, NEVADA. II AT MARYSVILLE AND SIERRA CITY.
8/ 9/1943 5-30- 4	. 38.20 118.20 C 5.5	F NEAR FILBEN, NEVADA. FELT OVER AN AREA OF 34,000 SOUARE MILES. VI AT BASALT, DYER, AND FALLON, NEVADA. V AT KEFLER AND MIPAMONTE, CALIF., AND GOLDFIELD AND SCHURZ, NEV. IV WIDELY IN CALIF. AND NEV.
1/12/1944 15- 2-43	. 40.30 124.90 0 5.1	F V AT CAPE MENDOCINO, FUREKA AND FERNDALE. IV AT CUMMINGS, SCOTIA, UPPER MATTOLF, AND WESTPORT.
1/16/1944 2-20-29	. 40.30 125.10 D 5.1	F V AT UPPER MATTOLE, IV AT FERNDALE.
	. 41.20 123.50 D 5.0	F NEAR SCOTT MT. FELT OVER AREA OF 3,500 SQUARE MILES IN NW CALIFORNIA. VI ETNA AND BURNT RANCH. V CALLAHAN, CLEAR CREEK, EUREKA, HYAMPOM, SALYER, WEAVERVILLE, AND WEITCHPEC.
5/19/1943 15- 7- 0	. 40.40 126.90 D 6.0	F OFF COAST OF NO. CALIFORNIA. FELT OVER 1,530 SQUARE MILES FROM CRESCENT CITY TO WILLITS. V UPPER MATTOLE. IV ARCATA, BLUE LAKE, CARLOTTA, EUREKA, FERNDALE, FIELDS LANDING, KLAMATH, ORICK, PIERCY, AND SCOTIA.
6/14/1945 3-30-13	1. 37.08 117.50 € 5.0	NORTH END OF DEATH VALLEY.
9/28/1945 22-24- 5	. 41.90 126.70 D 6.0	USCGS GIVES 41.7 N. 126.9 W.
3/17/1946 14-45-53	34.30 117.90 D 5.0	F SW OF HAWTHORNE, NEVADA. V AT LUNING, NEVADA. IV AT BRIDGEPORT, COLEVILLE, EL PORTAL, LAWS, AND YOSEMITE, AND CARSON CITY, FALLON, HAWTHORNE, MINA, SCHURZ, SMITH, SMOKEY VALLEY, TONOPAH, AND YERINGTON, NEVADA.
	6. 40.50 121.50 R 5.0	F FELT OVER ABOUT 7,000 SQ. MI. IN NO. CALIF VI MILL CREEK AND MINERAL. V CARIBOU AND GRASS VALLEY. IV CHESTER, CHICO, DUTCH FLAT, GRIDLEY, QUINCY, REDDING, AND SUSANVILLE. III MARYSVILLE.
2/ 5/1047 6-14). 36.23 120.65 B 5.0	F VI AT LONDAK, V AT COALINGA, IDRIA, KING CITY. IV AT BIG SUR, HURON, PARKFIELD, SAN ARDD, AND WESTHAVEN.
5/27/1947 20-590	. 40.40 124.70 B 5.2	F FELT OVER ABOUT 2,400 SQ. MI. FROM HODPA TO FORT BRAGG TO TRINIDAD. VI HONEYDEW AND UPPER MATTOLE. V CAPE MENDOCINO LT. STA., EUREKA, FERNDALE, FORT BRAGG, GARBERVILLE, PETROLIA, AND SCOTIA. IV ALDERPOINT, ARCATA, 7 MI. N OF BRIDGEVILLE, CARLOTTA, FORTUNA, AND TRINIDAD.
	5. 40.40 125.20 C 5.3	F FELT OVER LAND APEA OF 4,000 SO. MI. FROM ORICK TO PEDDING TO ELK. HEAVY VIBRATIONS FELT AT SEA AT 40 51 N, 124 45 W. VII AT PUNTA GORDA LT. STA. VI AT BRIDGEVILLE, EUREKA, FERNDALE, KNEELAND, FIELDS LANDING, AND UPPER MATTOLE. V AT 18 TOWNS.
1/10/1948 0-45-50	. 42.00 127.00 D 5.3	OFF CHAST, WEST OF CRESCENT CITY.
8/18/1949 19-11-5	7. 40.50 124.70 D 5.0	F V IN EUREKA, FERNDALE, FIELDS LANDING AND LOLETA. FELT ALONG THE COAST FROM ORICK TO PUNTA GORDA.
12/29/1948 12-53-2	8. 39.55 120.08 P 6.0	F VERDI FAULT, W OF VERDI, NEV. FELT OVER 40,000 SQ. MI. 5 FORESHOCKS WERF FELT AT RENO ON DEC. 27, AND MURE THAN 750 AFTERSHOCKS, MANY FELT IN RENO, WERE RECORDED AT THE UNIV. OF NEVADA REFORE NOON

2/11/1949	21- 5-24.	37.08	117.75 C	5.6 F	OF JAN. 1, 1949. INTENSITY VII AT FLORISTON AND CHILCOOT, CALIF., AND RENO AND VERDI, NEV. VI AT BAXTER, BIJOU, ISLETON, KINGS BEACH, LOYALTON, MEEKS BAY, STERRAVILLE, SLOUGHHOUSE, TAHOE, TRUCKEE, AND VINTON, CALIF., AND CARSON CITY, CAMP RICHARDSON, DOBBINS, GARDEN VALLEY, LONG VALLEY, NORDEN, AND SPARKS, NEV. FE OF TINEMAHA. FELT OVER 18,000 SQ. MI. IN S CENTRAL CALIF. AND SW NEV. VI AT ASH MTN., BAKERSFIELD, BIG PINE, FRESNO, CORCORAN, INDEPENDENCE, HAMFORD, LONE PINE, AND OLANCHA. V AT DEATH VALLEY, LAWS, MINERALKING, OWENYO, PINEHURST, AND PORTERVILLE. I TO IV FROM MODESTO TO
					MOJAVE TO GOLDFIELD, NEVADA.
3/ 9/1949	12-28-39.	37.02	121.48 B	5.2 F	FELT OVER AN AREA OF 20,000 SQUARE MILES ALONG THE PACIFIC COAST OF CENTRAL CALIFORNIA FROM SANTA ROSA SOUTH TO SANTA MARGARITA. DAMAGE WAS CONFINED MOSTLY TO THE CITY OF HOLLISTER, WHERE THE INTENSITY WAS RATED AS VII (FALL OF SOME CHIMNEYS, 90ME DAMAGE TO BUILDINGS). VI AT ALAMEDA, ALVISO, APTOS, BEN LOMOND, BERKELEY, CARUTHERS, CASTROVILLE, CHUALAR, COYOTE, FAIRFAX, FELTON, FOREST KNOLLS, GILROY, HALF MOON BAY, HAYWARD, LA HONDA, LOMA MAR, LOS BANDS, MADRONE, MORGAN HILL, MT. HERMON, MOSS
					LANDING, NEWARK, NILES, DAKLAND, PALO ALTO, PESCADERO, PINOLE, REDWOOD CITY, SALINAS, SAN ANSELMO, SAN FRANCISCO, SAN GREGORIO, SAN JOSE, SAN MARTIN, SAN RAMON, SANTA CRUZ, SAUSALITO, SEASIDE, SHARP PEAK, SOLEDAD, SOQUEL, SPRECKELS, SUNNYVALE, TRES PINOS, WALNUT CREEK, AND WATSONVILLE.
3/24/1949	20-56-56.	41.30	126.00 0	5.9 F	USCGS EPICENTER 42 N, 126.5 W. FELT AT
3/25/1949	4-56-48.	42.00	126.50	6.2 F	SEVERAL LOCATIONS ALONG THE OREGON AND CALIFORNIA COAST. OFF COAST, WEST OF CRESCENT CITY. FELT AT GRANTS PASS, OREGON.
9/14/1949	5-27-42.	40.40	126.20 D	5.0	OFF CAPE MENDOCING.
3/20/1950	15-22-17.	40.45	121.47 8	5.5 F	MAIN SHOCK IN SWARM OF MT. LASSEN QUAKES. FELT THROUGHOUT 4,000 SQ. MI. AREA IN NE CALIF. FROM HAT CREEK TO SUSANVILLE, SACRAMENTO, AND SHASTA DAM. V AT MINERAL, MANZANITA LAKE, CHESTER, CHICO, LAKE ALMANDR, GRIDLEY, MAGALIA, MILL CREEK, AND SUSANVILLE. ALSO REPORTED FELT AT RENO AND YERRINGTON, NEVADA. 29 SMALL FORESHOCKS RECORDED AT MINERAL BETWEEN
					3/20/50, 13-52-0 AND 15-22-17. ABOUT 7,000 IDENTIFIABLE AFTERSHOCKS RECORDED AT MINERAL THROUGH 4/9/50. SEE UNIV. OF CALIF., BERKELEY, BULLETIN OF SEIS. STA.
12/14/1950					MAIN SHOCK IN SERIES CENTERED NEAR HERLONG FELT OVER ABOUT 20,000 SQ. MI. OF NE CALIF. AND W NEV. VII AT HERLONG. VI AT BECKWOURTH, DOYLE, LITCHFIELD, PORTOLA, AND WENDEL, CALIF., AND FLANIGAN, NEV. V FROM TERMO TO NEVADA CITY TO LOVELOCK. OVER 50 FORESHOCKS OF MAG. 2 OR GREATER RECORDED BETWEEN 11/22/50, 6-32-42 AND MAIN SHOCK. OVER 200 AFTERSHOCKS OF MAG. 2 OR GREATER RECORDED BY THE END OF DECEMBER.
	19-21- 8.				OFF CAPE MENDOCINO. III AT FERNDALE.
772471451	10-53-45.	36.58	121.18 8	5.0 F	FELT OVER 10,000 SQ. MI. IN W CENTRAL CALIF. FROM SAN JOSE TO FRESNO TO SAN LUIS OBISPO. VI AT BITTERWATER, PINNACLES, SAN BENITO, AND SOLEDAD. V AT APTOS, ATASCADERO, AVENAL, BEN LOMONO, BRADLEY, GONZALES, GREENFIELD, HELM, HOLLISTER, IDRIA, KING CITY, LOCKWOOD, PAICINES, ROBLES DEL RIO, SAN ARDO, SAN LUCAS, SAN MIGUEL, SANTA CRUZ, AND SHANDON.
10/8/1951	4-10-35.	40.28	124.80 C	5.8 F	OFF CAPE MENDOCING. FELT OVER 9,000 SQ. MI. IN NW CALIF. VII AT ALTON, GRIZZLY BLUFF, METROPOLITAN, RIO DELL, SCOTIA, WEOTT, FERNDALE, AND BRIDGEVILLE. VI AT UPPER MATTOLE, PETROLIA, GARBERVILLE, FORTUNA, ETTERSBURG, BENBOW, CARLOTTA, KNEELAND, BLOCKSBURG, ALDERPOINT. AND
12/28/1951	2-49-27.	37.57	118.58 B	5.2 F	RELL SPRINGS. I TO V FROM ORICK TO S OF CHICO TO PT. ARENA. NEAR OWENS RIVER GORGE. FELT OVER AN AREA OF 10,000 SQUARE MILES. VI AT LONG VALLEY RESERVOIR. V AT BISHOP, LAWS, ROADS END, SEQUOIA NAT'L. PK. (LODGEPOLE), AND YOSEMITE NAT'L. PK. (CENTRAL AREA).

				I TO IV FROM N OF LEEVINING TO RIVERDADE TO WALKER PASS AREA.
5/ 9/1952	15-31-32.	39.42	119.78 C 5.1	F 12 MI. S OF RENO, NEV. FELT OVER 3,000
0.422.41.052				SQ. MI. IN NE CALIF. AND W NEV. VI AT CARSON CITY AND VIRGINIA CITY, NEV. F 12 MILES SOUTHWEST OF PETROLIA. FELT
			124.42 C 5.?	WIDELY IN HUMBOLDT COUNTY. VII AT PETROLIA. VI AT ALTON, BRICELAND, CARLOTTA, ETTERSBURG, FERNDALE, FIELDS LANDING, FORTUNA, GARBERVILLE, HARRIS, HOLMES, HONEYDEW, LOLETA, AND RID DELL. V AT ALDERPOINT, ARCATA, BEATRICE, BENROW, BLOCKSBURG, BLUE LAKE, BRIDGEVILLE, CRANNEL, EUREKA, FORT BRAGG, HARTSOOK, KNEELAND, KORBEL, LAYTONVILLE, MCCANN, MIRANDA, PEPPERWOOD, PIEREY SCOTIA, SOUTH FORK, SPYROCK, WEOTT, WESTPORT, AND ZENIA.
11/22/1952	7-46-37.	35.73	121.20 B 6.0	F 6 MILES NORTH OF SAN SIMEON, NEAR BRYSON, FELT OVER AN AREA OF 20,000 SOUARE MILES. VII AT BRADLEY AND BRYSON. VI AT ARROYO GRANDE, ATASCADERO, CAMBRIA, CAMP COOKE, CARMEL VALLEY, CAYUCOS, CHUALLAR, CRESTON, GORDA STATION, GUADALUPE, HARMONY, HEARST RANCH, KING CITY, LOCKWOOD, LONDAK, MORRO BAY, OCEANO, PARKFIELD, PASO ROBLES, PISMO BEACH, SALINAS, SAN ARDO, SAN LUIS OBISPO, SAN SIMEON, SANTA MARGARITA, AND TEMPLETON. V AT AVENAL, BEN LOMOND, BIG SUR, BUFLLTON, BUTTONWILLOW, CAPUTHERS, CASWALIA, CHOLAME, COALINGA, CORCORAN, DOS PALOS, HOLLISTER, HUASNA, KETTLEMAN CITY, LOMPOC, LOST HILLS, LUCIA, MARICOPA, MONTEREY, MOSS LANDING, NIPOMO, ORCUTT, PAICINES, RIVERDALE, SAN MIGUEL, SANTA CRUZ, SANTA MARIA, SHAFTER, STRATFORD,
3/22/1953	5-19- 0-	38.82	119.98 A 5.0	SUDDEN, AND SURF. F 13 MILES NW OF MARKLEEVILLE. V AT
377-71431	3-14- 01	30.02	119.90 × 3.0	MEYERS. IV AT EMIGRANT GAP, MARKLEEVILLE, TAHOE CITY, YOSEMITE. III AT CARSON CITY AND GARNERVILLE, NEVADA.
9/26/1953	3-34-29.	39.53	119.98 8 5.3	F 8 MI. W OF RENO, NEV. FELT SHARPLY OVER
				12,000 SQ. MI. OF W NEV. AND N CALIF. MINDR DAMAGE AT REND. VI AT OLINGHOUSE CANYON, REND, AND VISTA, NEV., AND FLORISTON, CALIF. V AT CINNABAR HILL RANCH, FERNLEY, SPARKS, AND VIRGINIA CITY, NEV., AND BAXTER, CHILCOUT, AND LA PORTE, CALIF.
4/25/1954	20-33-28.	36.93	121.68 B 5.3	F 16 MI. WNW OF HOLLISTER. FELT OVER 12,000 SO. MI. VIII IN VERY SMALL AREA ABOUT 10 MI. E DF WATSONVILLE ALONG CHITTENDEN ROAD ON S BANK OF PAJARO RIVER. VII AT AROMAS, FREEDOM, GILRDY, HOLLISTER, WATSONVILLE. VI AT APTOS, BOULDER CK., CAPITOLA, CASTROVILLE, CORRALITOS (ENDS RANCH), CUPERTINO, GLENWOOD, LOS GATOS, MADRONE, HOLY CITY, MORGAN HILL, MOSS LANDING, MT. HERMON, NILES, PAICINES, SAN JUAN BAUTISTA, SAN MARTIN, SANTA CRUZ, SOQUEL. IV TO V FROM TOMALES BAY TO ANTIOCH, LIVERMORE, CHOWCHILLA, AND BIG SUR
7/ 6/1954	11-13-20.	39.42	118.53 A 6.8	F NEAR FALLON, NEV. FELT OVER ABOUT 130,000
100				\$0. MI. OF NEV., CALIF., ORE., AND UTAH. IX ASSIGNED TO GROUND FRACTURE AREA ON E EDGE OF RAINBOW MT. IN STILLWATER RANGE ABOUT 15 MI. SE OF FALLON. VIII AT FALLON, STILLWATER, AND SALT WELLS, NEV. VII AT DIXIE VALLEV. VI TO V ROUGHLY FROM 38.00N, 121.50W TO 36.50N, 118.00W TO 39.50N, 115.50W TO 4 VI TO V ROUGHLY 42.00N, 120.00W TO 38.00N, 121.50W. THE FOLLOWING LIST OF AFTERSHOCKS IS PARTIAL. EPICENTERS ARE ASSIGNED TO BE SAME AS THOSE OF MAIN SHOCKS. FELT REPORTS ARE INCOMPLETE.
7/ 6/1954	11-49- 0.	39.42	118.53 D 5.7	F FALLON AFTERSHOCK. FELT AT BAXTER AND JACKSON AND AT CARSON CITY, FALLON, FERNLEY, DYER, MASON, MINDEN, NIXON, SCHURZ, YERINGTON, HAWTHORNE, AND WINNEMUCCA, NEV.
7/ 6/1954	13-15-11.	39.42	118.53 D 5.2	FALLON AFTERSHOCK.
7/ 6/1954	22- 7-41.	39.30	118.50 A 6.0	F FALLON AFTERSHOCK. VIII 5 MI. SE OF SALT WELLS, NEV. VI AT FALLON,NFV. V AT DYER, FERNLEY, LOVELOCK, AND MASON, NEV. FELT AS FAR AS DAKLAND, CALIF.
7/ 8/1954	19-31-57.	39.30	118.50 D 5.3	F FALLON AFTERSHOCK. V AT AUSTIN, NEVADA.

	16- 5-25.				The state of the s
	0-11-38.				to determine the following the
	2- 0-10.				
	10-18-53.				
8/24/1954	5-51-32.	39.58	118.45	A 0 . 8	The state of the s
					SO. MI. OF NEV., CALIF., ORE., IDAMO, AND UTAH. IX ASSIGNED TO GROUND FRACTURE AREA ABOUT 15 MI. E OF FALLON. VIII AT FALLON, LOVELOCK, STILLWATER, AND UPSAL HOGBACK. VII AT DIXIE VALLEY, GERLACH, AND IMLAY, NEV. VI FROM HAWTHORNE TO BATTLE MT., TO N OF WINNEMUCCA TO GERLACH (ALL NEV.) TO LAKE TAHDE. VI ALSO AT YOSEMITE NAT ³ L. PK. AND SONORA, AND SILVERPEAK, NEV. V FELT IN ALL 5 STATES. THE FOLLOWING LISTS OF AFTERSHOCKS IS PARTIAL. EPICENTERS ARE ASSIGNED TO BE SAME AS THOSE OF MAIN SHOCKS. FELT REPORTS ARE INCOMPLETE.
	5-57-46.				FALLON AFTERSHOCK.
8/31/1954	22-20-32.	39.60	118.20	D 5.8	F FALLON AFTERSHOCK. DIXIE VALLEY. VII IN THE STILLWATER RANGE, NEVADA. VI AT FALLON, FERNLEY, AND MASON, NEVADA. V AT EUREKA, NEVADA.
9/ 1/1954	5-18-46.	39.60	118.20	D 5.5	
					MASON, EUREKA, CARSON CITY, FLANIGAN, AND HAWTHORNE, NEV., AND BAXTER AND YOSEMITE NAT'L. PARK, CALIF.
11/25/1954	11-16-35.	40.27	125.63	8 6.1	
					SQ. MI. OF MENDOCINO AND HUMBOLDT COS. V AT BRIDGEVILLE, BURNT RANCH, EUREKA, CARLOTTA, FERNDALE, FIELDS LANDING, HOOPA, HYAMPOM, KORBEL, LOLETA, OPICK, PEPPERWOOD, SCOTIA, AND SOUTH FORK.
12/16/1954	11- 7-13.	39.32	118.20	A 7.2	
					FRENCHMAN ³ S STATION, ABOUT 30 MI. ESE OF FALLON. FELT OVER ABOUT 200,000 SQ. MI. FRON LOS ANGELES TO S TIP OF NEVADA TO SALT LKE CITY, UTAH, TO PAYETTE, IDAHO, TO FORT KLAMATH, DREGON, TO SAN FRANCISCO. MAX. INTENSITY X ASSIGNED TO SURFACE RUPTURE IN DIXIE VALLEY-FAIRVIEW PEAK AREA. VII FROM RAWHIDE TO MINA TO
					W OF EUREKA TO 40.25N, 117.00W (ALL IN NEVADA). THE FOLLOWING AFTERSHOCK LIST AND FELT REPORTS ARE PARTIAL. MOST EPICENTERS ARE ASSIGNED TO BE SAME AS THAT OF MAIN SHOCK.
12/16/1954	11-11-29.	39.50	118.00	D 7.1	
					INCLUDING SACRAMENTO AND BATTLE MIN., NEVADA.
12/16/1954	11-50-36.	39.50	118.00	D 5.0	NEVADA AFTERSHOCK.
12/16/1954	11-57-30.	39.50	118.00	0 5.0	NEVADA AFTERSHOCK.
12/16/1954	13-15- 3.	39.32	118.20	B 5.0	NEVADA AFTERSHOCK.
	14-16-57.				
	14-24-10.				
	15- 9-42.				
	20-27- 6.				NEVADA AFTERSHOCK.
	17-36-47.				. Herman in terrations the transfer to have the
12/21/1954	19-56-29.0	40.78	123.87	R 6.5	F BETWEEN EUREKA AND ARCATA» FELT OVER 5,000 SQ. MI. OF NO. CALIF. AND ORE. VII AT ARCATA, EUREKA, FERNDALE, BAYSIDE, BEATRICE, BLUE LAKE, BRAINARD, CRANNELL, FIELDBROOK, FIELDS LANDING, FORTUNA, KORBEL, MCKINLEYVILLE, RIO DELL, ROHNERVILLE, SAMOA, V TO VI IN MANY TOWNS FROM
					BROOKINGS, ORE., TO KLAMATH FALLS, ORE., MCARTHUR, ORLAND, AND WILLITS.
	12-13-54.				FAIRVIEW PEAK, NEVADA.
	9-10-50.				FAIRVIEW PEAK, NEVADA.
	19-20- 0.				FAIRVIEW PEAK, NEVADA.
	19-25-16.				FAIRVIEW PEAK, NEVADA.
0/ 0/1955	10-35-35.	38.33	118.07	0 2.5	F S OF HAWTHORNE, NEV. FELT OVER 9000 SQ.
					MI. OF NEV. AND CALIF. V GABBS, HAWTHORNE, AND YERINGTON, NEV. AND BRIDGEPORT

AND BENTON. CALIF. AND HENTON, CALIF.

F 6 MI. W OF MT. HAMILTON. FELT OVER 12,000

SO. WI. DF W CENTRAL CALIF. VII AT SAN JOSE AND E OF SAN JOSE. V AT MANY COMMU-9/ 5/1955 2- 1-18.0 37.37 121.78 B 5.5 NITIES IN CENTRAL CALIF. INCLUDING SAN FRANCISCO. NITIES IN CENTRAL CALIF. INCLUDING SAN FRANCISCO.

F BETWEEN WALNUT CREEK AND CONCORD. (MAG. BY
PASADEMA). FELT OVER 12,000 SO. MI. OF W CENTRAL CALIF. VII AT BERKELEY,
CANYON, CONCORD, COWELL, MORAGA, PACHECO, AND WALNUT CREEK. VI THROUGHOUT MUCH
OF THE SAN FRANCISCO BAY AREA.

5 5 NI. NNW OF SAN LUIS OBISPO. FELT OVER
7000 SO. MI. OF COASTAL W CENTRAL CALIF. VI AT ADELAIDA RD. (14 MI. W OF PASO
ROBLES), BRYSON, KING CITY, PASO ROBLES, SAN ARDO, SAN LUCAS, SAN MIGUEL. 10/24/1955 4-10-44. 37.97 122-05 4 5.4 114 341055 19-40- 6- 36-00 120-92 A 5-2 NEVADA AFTERSHOCK (1954). 11/21/1955 20-25-33. 39.42 118.08 C 5.5 F EAST OF FALLON, NEVADA. FELT AT KENT 39.55 118.45 R 5.1 7/26/1056 9-53-17-RANCH. STILLWATER, NEVADA. OFF CAPE MENDOCINO. 8/30/1956 5-24-52. 40.70 126.40 D 5.3 F 100 MI. W OF FERNDALE. FELT OVER 3500 SQ. 10/11/1956 16-48-50. 40-67 125-77 B 6.0 IND MI. OF HUMBOLDT CO. ALSO FELT AT BUCKS CK. PWHSE. (PLUMAS CO.) AND IN S. OREG. (AT MEDFORD AND SHADY COVE). V AT BAYSIDE, BLUE LAKE, CRANNELL, EUGEKA, FERNDALE, FIELDS LANDING, FORTUNA, KORBEL, PETROLIA, AND RIO DELL. F SW DF COALINGA. FELT OVER 8000 SQ. MI. 11/16/1955 3-23- 9. 35.95 120.47 B 5.0 FROM HOLY CITY TO BETTERVIA TO FIREBAUGH. VI AT MEE RANCH (LONDAK), KING CITY. AND SAN LUCAS. FORESHOCK OF QUAKE AT 1739. 12/31/1956 17-37-45. 38.25 118.93 8 5.0 F SW OF HAWTHORNE, NEV. FELT OVER 6000 SQ.

MI. OF W. NEV. AND E. CALIF. VI S OF HAWTHORNE WHERE U.S. HWY. 95 CRACKED.

V AT HAWTHORNE AND THORNE, NEV. 12/31/1956 17-39-24. 38.28 118.97 C 5.1 115 MILES WNW OF ARCATA. 2/ 9/1957 16-38- 7. 41.17 126.30 B 5.4 3/22/1957 19-44-21. 37.67 122.48 A 5.3 MAIN SHOCK. MAG. BY PASADENA. EPICENTER ON SAN ANDREAS FAULT NEAR MUSSEL ROCK (SAN MATEO CO.). FOCAL DEPTH 7 TO 10 KM. ON SAN ANDREAS FAULT NEAR MUSSEL MORE (SAN MATEC CAPT). FOLKE REPORTEDLY STRONGEST SHOCK FELT IN SAN FRANCISCO SINCE 1906. 50. MI. OF W CENTRAL CALIF. 40 MINDR INJURIES, NO DEATHS. D FELT OVER 13,000 DAMAGE (EST. ENGINEERS) ABOUT ONE MILLION DOLLARS, PRINCIPALLY IN THE WESTLAKE PALISADES THACT TO DALY CITY. STATE HWY. I CLOSED BY LANDSLIDES BETWEEN MUSSEL ROCK AND THARNTON. VII AT COLMA, DALY CITY, MUSSEL ROCK, SAN BRUND, SHARP PARK, EDGEMAR, VI AT AGNEW, ALAMEDA, ALBANY, ASSOCIATED, BELMONT, BERKELEY, AND PACIFIC MANOR. AND FACTOR BODEGA BAY, BOLINAS, BOYES HOT SPGS., BRISBANE, BURLINGAME, CANYON, CONCORD, CORTE MADERA, CROCKETT, DANVILLE, EL SOBRANTE, FAIRFAX, FARALLON IS., FREMONT, HALF MOON BAY, HILLSBORDUGH, KENTFIELD, MARIN CITY, MENLO PARK, MILL VALLEY, MILLBRAE, NAPA, NOVATO, DAKLAND, PALO ALTO, PEDRO VALLEY, PESCADERO, PINOLE, PITTSBURG, PT. REYES, PORT CHICAGO, PORT COSTA, REDWOOD CITY, RICHMOND, ROCKAWAY BEACH, RODEO, ROSS, ST. MARY'S COLL., SAN ANSELMO, SAN CARLOS, SAN FRANCISCO, SAN GERONIMO, SAN JOSE, SAN LEANDRO, SAN LORENZO, SAN MATEO, SAN FRANCISCO, SAN GERONIMO, SAN JOSE, SAN LEANDRO, SAN LURENCO, SAN MATED, SAN RAFAEL, SANTA ROSA, SAUSALITO, SONOMA, SOUTH SAN FRANCISCO, SUNNYVALE, TIBURON, VALLEJO, VINEBURG, AND WARM SPRINGS.

NEAR GILROY. FELT OVER 8000 SO. MI. FROM

NOF SANTA ROSA TO MANTECA TO SAN LUCAS. MINOR SLIDES ON CHITTENDEN PASS RD. F NEAR GILROY. 3/ 2/1959 23-27-17. 36.98 121.60 B 5.3 AND HECKER PASS HWY. VI AT AROMAS, BEN LOMOND, BOULDER CREEK, FELTON, FREEDOM, GILROY, HOLLISTER, HOLY CITY, MADRONE, MORGAN HILL, NEW ALMADEN, SAN FRANCISCO,

3/23/1959 7-10-20. 39.60 118.02 C 6.3

SAN JOSE, SAN JUAN BAUTISTA, SAN MARTIN, SANTA CRUZ, AND WATSONVILLE. V FELT THROUGHOUT MOST OF SO. SAN FRANCISCO RAY AREA. BELOW ARE LISTED AFTERSHOCKS.

FELT OR OF MAG. 3.0 OR GREATER. SEE U.C. SEISMO. STA. BULL. JAN.-MAR. 1959.

F DIXIE VALLEY, NEVADA. FELT OVER 50,000

			SQ. MI. OF NEV. AND CALIF. VI FRENCHMAN'S STA. AND CARSON CITY, NEV. V AUSTIN, EUREKA, FALLON, FERNLEY, FLANIGAN, GENDA, GERLACH, GOLCODDA, HAWTHORNE, HAZEN, IMLAY, LOVELOCK, LUNING, MINDEN, PALISADE, SCHURZ, SILVER SPRINGS, SMITH, STEAMBOAT, STEWART, TUNGSTEN, VIRGINIA CITY, WABUSKA, WELLINGTON, AND YERINGTON, NEV., AND AT COLEVILLE, CALIF. AFTERSHOCKS FELT OR OF MAG. 3.0 OR GREATER ARE LISTED BELOW. SEE U.C. SEISMO. STA. BULL. JAN.—MAR. 1959.
4/ 1/1959	18-18-30.	39.72 120.20 B 5.	F FELT OVER AN AREA OF APPROXIMATELY 25,000 SQUARE MILES OF NORTHEASTERN CALIFORNIA AND WESTERN NEVADA. MAXIMUM INTENSITY VII AT LOYALTON, WHERE SEVERAL CHIMNEYS FELL, WALLS, PLASTER AND WINDOWS CRACKED, CONSIDERABLE GLASSWARE AND MERCHANDISE FELL AND BROKE IN HOMES
6/23/1959	14-35- 0.	39.08 118.82 B 6.	AND STORES. VI AT BAXTER, BECKWOURTH, BLUE CANYON, CHILCOOT, CRESCENT MILLS, DOYLE, HALLELUJAH JUNCTION, KINGS BEACH, PORTOLA AND VINTON. FORESHOCKS AT 17-05-49 AND 18-02-12 OF MAGNITUDES 2.0 AND 2.2, RESPECTIVELY. 1 F NORTHEAST OF YERINGTON, NEVADA. MAIN
			SHOCK FELT OVER AN AREA OF APPROXIMATELY 35,000 SQUARE MILES OF CALIFORNIA AND EASTERN NEVADA» MAXIMUM INTENSITY VI. MINOR DAMAGE AT SCHURZ, NEVADA» MINOR ROCKSLIDES IN THE MOUNTAINS NEAR SCHURZ» VI AT GENDA, MASON, SCHURZ, AND
			WABUSKA, NEVADA. V AT A NUMBER OF COMMUNITIES IN WEST-CENTRAL NEVADA AND EAST- CENTRAL CALIFORNIA.
6/23/1959	15- 4-34.	39.10 118.80 D 5.	5 F AFTERSHOCK OF QUAKE AT 1435, FELT CARSON CITY, DYER, EUREKA, GENDA, HAWTHORNE, LUNING, THORNE, AND TONOPAH, NEV., AND EL PORTAL, SALT SPRINGS PWHSE., AND TOPAZ, CALIF.
7/24/1959	1-23- 9.	41.13 125.30 8 5.	
8/ 4/1959	7-36-59.	37.35 118.55 C 5.	
			PINE, BURREL, COALINGA, DINKELY CREEK, DUNLAP, EL PORTAL, EXETER, FRESNO, IVANHOE, JOHNSONDALE, JUNE LAKE, KINGS CANYON, LAKESHORE, LATON, LAWS, LONG VALLEY DAM, MIRAMONTE, PRATHER, SEQUOIA NATIONAL PARK, SHAVER LAKE, TOLLHOUSE, WISHON, AND WOODLAKE.
12/ 5/1959	8-13-42.	40.30 125.42 C 5.	F OFF CAPE MENDOCINO. FELT OVER 2000 SQ. MI. OF HUMBOLDT CO. V AT ALTON, BAYSIDE, BRICELAND, FERNDALE, FIELDS LANDING,
1/20/1960	3-25-53.	36.78 121.43 B 5.	COASTAL CENTRAL CALIF. VI AT W.A. TAYLOR WINERY (7 MI. S OF HOLLISTER). HARRIS RANCH (7.5 MI. S OF HOLLISTER). HOLLISTER, AND PAICINES. V FROM MORGAN HILL TO
6/ 5/1960	7-47- 7.	37.52 118.73 C 5.	LOS BANOS TO SAN ARDO TO PACIFIC GROVE. SEE BSSA JULY 1960. F FELT OVER AN AREA OF APPROXIMATELY
			4,800 SQUARE MILES OF EAST-CENTRAL CALIFORNIA, EXTENDING ON THE NORTH FROM YOSEMITE VILLAGE FAST TO BENTON, SOUTH TO BISHOP AND LAWS, SOUTHWEST TO THREE RIVERS AND WOODLAKE, NORTHWEST THROUGH FRIANT TO SNELLING, THENCE NORTHEAST
			THROUGH EL PORTAL TO YOSEMITE. MAXIMUM INTENSITY VI AT CROWLEY LAKE (LONG VALLEY DAM). NO DAMAGE REPORTED. EPICENTER IN UNSETTLED AREA. V AT BASS
6/ 6/1960	1-17-48.	40.82 124.88 C 5.	
			8,000 SQUARE MILES, PRINCIPALLY IN HUMBOLDT AND TRINITY COUNTIES. MAXIMUM Intensity VI at Crannell, Eureka, and Ferndale. V at alton, Bayside, Bluelake, Cutten, Denny, Ettersburg, Fields Landing, Fortuna, Freshwater, Garberville,
			HOLMES, HOOPA, KNEELAND, KORBEL, LOLETA, MCKINLEYVILLE, RIO DELL, SAMOA, AND WEITCHPEC.
8/ 9/1960	7-39-18.	40.32 127.07 C 6.2	F OFF CAPE MENDOCINO. FELT OVER 6500 SQ. MI.
			OF NW CALIF. V COMPTCHE, CUMMINGS, FERNDALE, FT. BRAGG, AND FORTUNA.

12/27/1960	10-35-26.	41.52	125.05	8 5	. 4	F	NW OF ARCATA. DEPTH ABOUT 61 KM. FELT IN DEL NORTE AND HUMBOLDT COS. V AT FERNDALE, KLAMATH, AND RIO DELL. IV AT
							DEL NUMBEL CRESCENT CITY, AND TRINIDAD.
1/29/1061	8-12-46.	75 77	119 05	A 5	- 7		NEAR WALKER PASS. FELT OVER AN AREA OF
176971401	9-17-40.	,3.11	110.05		• 5	,	13,000 SQUARE MILES. VI AT HODFISH, JOHANNESBURG, KERNVILLE, LAKE ISABELLA.
							ONYX, AND WELDON. V AT ARVIN, BAKERSFIELD, BALANCE ROCK, BASS LAKE, BIG CREEK.
							CALIFORNIA HOT SPRINGS, CANTIL, GLENNVILLE, HINKLEY, INYOKERN, JOHNSONDALE.
							KAWEAH, KEENE, LINDSAY, MIRACLE HOT SPRINGS, OLANCHA, PORTERVILLE, POSEY,
							RANDSBURG, RIDGECREST, SPRINGVILLE, STRATHMORE, TEHACHAPI, THREE RIVERS, TRONA,
							TULARE, AND WESTEND.
2/ 2/1961	0- 4-15.	37.45	118.63	B 5	. 3	F	NW OF BISHOP. FELT IN SO. MONO COUNTY,
							TAFT, HANFORD, AND FRESNO, AND DYER, NEVADA.
	0- 7-42.						AFTERSHOCK OF QUAKE AT 0004.
4/ 6/1961	4- 4-45.	40.18	124.75	C 5	• 1	F	OFF CAPE MENDOCING. FELT IN HUMBOLDT
						_	COUNTY.
4/ 9/1961	7-23-16.	36.6 R	121.30	A D	. 6	,	SOUTHEAST OF VINEYARD. FELT OVER AN AREA OF APPROXIMATELY 13,500 SQUARE MILES OF WEST-CENTRAL CALIFORNIA (FROM SAN
							FRANCISCO SOUTH TO KING CITY AND EAST TO MODESTO). MAXIMUM INTENSITY VII.
							DESIGNATED AS STRONGEST SHOCK IN THIS REGION SINCE 1906 BY MANY OLD-TIME
							RESIDENTS. AFTERSHOCKS OF MAGNITUDE 3.0 OR ABOVE ARE INCLUDED IN THIS LIST. A
							SEPARATE, MORE COMPLETE TABULATION OF AFTERSHOCKS APPEARS IN THE BULLETIN OF
							APRIL-JUNE 1961.
4/ 9/1961	7-25-41.	36.70	121.30	D 5	. 5	F	AFTERSHOCK OF QUAKE AT 0723. FELT OVER
							MUCH THE SAME AREA AS MAIN SHOCK.
4/29/1961	9-19-30.	40.42	127.45	t 5	.5		OFF CAPE MENDOCINO.
7/ 4/1961	4-56- 0.	40.90	118.40	D 5	. 4	F	NORTH OF LOVELOCK, NEVADA. PROBABLE
							FELT AREA ON THE ORDER OF 10,000 SQUARE MILES. REPORTED FELT FROM PARADISE
							VALLEY IN THE NORTH TO LOVELOCK, NEVADA, TO THE SOUTHWEST. MAXIMUM REPORTED
							INTENSITY V. NO DAMAGE REPORTED.
	11- 9-11.						WEST OF LOVELOCK, NEVADA.
10/19/1961	5- 9-44.	35.83	117.77	A 5	• 5	F	FAST OF BROWN. FELT OVER AN AREA OF
							12,000 SQUARE MILES. V AT BODFISH, CHINA LAKE, CALIENTE, CALIFORNIA HOT SPRINGS, INYOKERN, JOHNSONDALE, KERN CANYON, KERNVILLE, LITTLE LAKE, MOJAVE,
							ONYX, RIDGECREST, SAND CANYON, SPRINGVILLE, TEHACHAPI, TRONA, TWIN OAKS, AND
							WESTEND.
4/17/1062	15-79-61-0	39.22	110.45	0 6	- 1	21 F	NORTHEAST OF YOSEMITE. V IN BRIDGEPORT.
							OFF CAPE MENDOCINO.
							SOUTH OF UKIAH. VII AT LAKEPORT.
							OFF CAPE MENDOCINO. V IN HUMBOLDT COUNTY.
							NORTH OF CRESCENT CITY. FELT OVER AN AREA
							OF 15,000 SQUARE MILES. VI AT CRESCENT CITY AND SMITH RIVER, AND BROOKINGS AND
							CAVE JUNCTION, OREGON. V AT BAYSIDE, CECILVILLE, EDGEWOOD, FERNDALE, FIELDS
							LANDING, FORT DICK, FRESHWATER, GASQUET, HAPPY CAMP, HOLMES, KLAMATH, KORBEL,
							ORLEANS, REQUA, AND SALYER, AND AT GRANTS PASS, HARBOR, MERLINS, PISTOL RIVER,
							AND SELMA, OREGON.
	9- 4-26.						OFF COAST, WEST OF FERNDALE.
9/14/1963	19-46-17.0	36.87	121.63	5	. 4	19 F	EAST OF WATSONVILLE. FELT OVER 5000 SQ.
							MI. OF WEST-CENTRAL CALIFORNIA. VII AT CHITTENDEN. VI AT AROMAS, CAPITOLA,
							SALINAS, SAN JOSE, AND WATSONVILLE. V AT HOLLISTER, SAN FRANCISCO, AND SANTA CRUZ. IV AT APTOS. GILROY, BIG SUR. AND LIVERMORE.
7,00,000	16-30-55.9	79 70	119.80	-	- 5		(USCGS). FELT OVER 7500 SQ. MI. OF E.
3/72/1964	10-30-55.9	38.70	110.00	5	. 5		CALIF. AND W. NEV. V AT HAWTHORNE, NEV. IV AT RENO, NEV.
							the state of the s

	22-18-20.			5.5		OFF CAPE MENDOCINO.
	13-57- 5.			5.3	-	E OF HAWTHORNE, NEVADA.
11/16/1964	2-46-41.7	37.06	121.69	5.0	17 F	NEAR CORRALITOS. FELT OVER CENTRAL CALIF.
041641065	4-10- 8.	40 50	125.00	5.0	7	AFTERSHOCKS OF MAG. 2.5 OR MORE LISTED BELOW. SEE BSSA NO. 56. OFF CAPE MENDOCINO. USCGS MAG. 5.64
.,	4- 8-56.2			5.1		PARKFIELD SEQUENCE: FIRST MAIN SHOCK:
07247[700	4- 3-30-2	33.47	120030	3*1		(FELT REPORTS FOR THE 2 MAIN SHOCKS ARE NOT SEPARATED.) FELT OVER 20,000 SQ. NI MINOR SURFACE FAULTING ALONG SAN ANDREAS FAULT FROM PARKFIELD TO CHOLAME (20 MILES), MAXIMUM DISPLACEMENT 4 IN. VII CHOLAME AND PARKFIELD. VI ANNETTE, BITTERWATER VALLEY, COALINGA, HIDDEN VALLEY RANCH, PASO ROBLES, SAN LUIS OBISPO, SAN MIGUEL, SHAFTER, SHANDON, SLACK CANYON, VALLETON, WAITI RANCH, WORK RANCH. V ADELAIDA, ALPAUGH, ARROYO GRANDE, ATASCADERG, AVILA BEACH, BAKERSFIELD.
6/28/1966	4-26-13.4	35.05	120-50	5.5	F	BAYWOOD PARK, BRYSON, BURREL, BUTTONWILLOW, EARLIMART, FELLOWS, FRAZIER PARK, GREENFIELD, HARMONY, INDIAN VALLEY, KETTLEMAN CITY, KING CITY, LA PANZA, LOST HILLS, MARICOPA, MEE RANCH, MORRO BAY, MOSS LANDING, MUSICK, NIPOMG, OCEANO, OLD RIVER, PANOCHE, PINE CANYON, PISMO BEACH, POZO, PRIEST VALLEY, SAN ARDO, SAN JOAQUIN, SAN LUCAS, SAN SIMEON, SIMMLER, STRATFORD, TEMPLETON, VANDENBURG A.F.B. PARKFIELD SEQUENCE. SECOND MAIN SHOCK.
	19-53-25.9			5.0		PARKFIELD SEQUENCE. FELT ADELATOA,
						BITTERWATER, CHOLAME, COALINGA, FRESNO, MEE RANCH, MORRO BAY, SAN LUIS OBISPO, SAN MIGUEL, SANTA MARGARITA, SHANDON, WORK RANCH.
	16-41- 1.9					N OF TRUCKEE, FELT WIDELY IN NORTHERN CALIF., NEV. AND AS FAR EAST AS SALT LAKE CITY, UTAH. DAMAGE AT TRUCKEE, BDCO, VERDI, AND RENO. VII BOCA DAM, FARAD POWERHOUSE, FLORISTOM, HIRSCHDALE, HOBART MILLS, KINGS BEACH, LOYALTON, PROSSER DAM, SIERRAVILLE, TRUCKEE, VINTON, AND LEMON VALLEY AND VERDI, NEV. VI ALTA, BAXTER, BLAIRSDEN, CALPINE, CAMINO, CAMPTONVILLE, CARNELIAN BAY, CEDAR RIDGE, CHILCOOT, DARDANELLE, DELLEKER, DOBBINS, DOYLE, EL DORADO, ENIGRANT GAP, GEORGETOWN, GLENCOE, GRAEAGLE, IOWA HILL, LITCHFIELD, LOTUS, MATHER A.F.B., MEEKS BAY, NEVADA CITY, NORDEN, NORTH BLOOMFIELD, PLACERVILLE, PORTOLA, SACRAMENTO, SATTLEY, SHINGLE SPRINGS, SODA SPRINGS, TAHDE CITY, TAHDE VISTA, TAHDMA, WALNUT GROVE, WASHINGTON, WILSEYVILLE, AND CARSON CITY, CRYSTAL BAY, FERNLEY, MINDEN, PANTHER VALLEY, RENO, SPARKS, STATELINE, AND STEWART, NEV.
	17-20-11			5.3		TRUCKEE SEQUENCE. V TAHOE CITY.
	12- 6-52.2			5.6	6 F	OFF SHORE CAPE MENDOCINO. MAIN SHOCK FELT OVER AN AREA OF APPROX. 6,000 SQ. MILES, PRINCIPALLY IN HUMBOLDT COUNTY. CHIMNEY TWISTED AT CRANNELL. CHIMNEY CRACKED AT DENNY. VI AT FERNDALE. V AT ARCATA, BAYSIDE, BIG BAR, BLUE LAKE, BRIDGEVILLE, BURNT RANCH, CRANNELL, CUTTEN, DENNY, DOUGLAS CITY, EUREKA, FIELDS LANDING, FORTUNA, FRESHWATER, HONEYDEW, HOOPA, ISLAND MOUNTAIN, KNEELAND, KORBEL, LOLETA, ORICK, PETROLIA, RIO DELL, SALYER, SCOTIA, SHELTER COVE, WHITEHORN.
12/18/1967	17-24-32.0	37.00	121.78	5.3	17 F	N OF WATSONVILLE. MINOR DAMAGE. VI AT APTOS, CASTROVILLE CORRALITOS, COYOTE, FREEDOM, GILROY, LA SELVA BEACH, MORGAN
						HILL, SAN MARTIN, SANTA CRUZ, WATSONVILLE. V AT ALVISO, BEN LOMOND, BURLINGAME, CAPITOLA, CARMEL, CHITTENDEN, CUPERTINO, DALY CITY, COLMA, FELTON, HARRIS RANCH,
						HOLLISTER, HOLY CITY, LOS GATOS, MILLBRAE, MONTEREY, MOSS LANDING, NEW ALMADEN NOVATO, PACIFICA, PACIFIC GROVE, PALD ALTO, RICHMOND, SALINA, SAN BRUND, SAN FRANCISCO, SAN GREGORIO, SAN JOSE, SANTA CLARA, SARATOGA, SOQUEL AND
						SUNNYVALE.
6/26/1968	1-42-20.8	40.23	124.27	5.9	6	OFF CAPE MENDOCINO.
10/ 2/1969	4-56-46.5	38.47	122.69	5.6	F	SANTA ROSA. FELT THROUGHOUT THE SAN
						FRANCISCO BAY REGION. POWER OUT, WATER MAINS BROKEN. SEVERAL INJURIES. PROPERTY.

			DAMAGE FROM THIS AND SUBSEQUENT SHOCKS IN THE MILLIONS OF DOLLARS (MCEVIL ET AL., "THE SANTA ROSA EARTHQUAKES OF OCTOBER, 1969," MINERAL INFORMATION SERVICE, CALIFORNIA DIVISION OF MINES AND GEOLOGY, 23, NUMBER 3, MARCH 19			
10/ 2/1969 6-19-57.1	38.46 122.69	5.7 F	SANTA ROSA. FELT THROUGHOUT THE SAN FRANCISCO BAY AREA (MCEVILLY, 1970, LOC. CIT.).			
9/13/1970 21-10-21.	40.13 125.08	5.4 9 F	MENDOCINO ESCAPRMENT. INTENSITY V AT FERNDALE, FORT SEWARD, RID DELL AREA, AND SCOTIA.			
			TOTAL DESCRIPTION OF THE CHOICE			

FERNOALE, FORT SEWARD, RIO DELL AREA, AND SCOTIA.

GORDA RIDGE (NATIONAL OCFAN SURVEY).

5.2 9 F MENDOCINO ESCARPMENT. FELT FROM N OF EUREKA

TO FORT BRAGG AREA. MAX. INTENSITY V. NO DAMAGE REPORTED. FELT BY MANY AT EUREKA.

AT FERNOALE VEHICLES ROCKED AND UTILITY POLES SWAYED, THREE WINDOWS CRACKED.

FELT BY ALL AT SHELTER COVE, SMALL OBJECTS SHIFTED. NEAR SCOTIA MAN HAD DIFFICULTY

KEEPING BALANCE. SMALL OBJECTS SHIFTED AT RIO DELL

5.1 6 SE DE HOLLISTER. SLIGHT DAMAGE IN THE BEAR

VALLEY AND MELENDY RANCH AREAS. FELT IN SAN LUIS OBISPO, FRESNO AND MADERA

COUNTIES. ALSO FELT IN THE SAN FRANCISCO BAY AREA. MAXIMUM INTENSITY IV.

5.2 5 NW DE CAPE MENDOCINO. INTENSITY V AT

FERNOALE, HONEYDEW, AND RIO DELL. INTENSITY IV AT ARCATA, EUREKA, AND PETROLIA,

I-III AT BLUE LAKE, FORT BRAGG, AND TRINIDAD. AFTERSHOCKS AT (09:40), (10:01),

AND (10:56) WITH M= 3.0. 10/27/1970 2-37-58. 40.40 127.00 2/27/1971 -0-31-37.7 40.27 124.83

2/24/1972 15-56-51.3 36.59 121.20

3/ 1/1972 9-28-42.0 40.67 125.25 5.2 5

VIII. LIST OF EARTHQUAKES M \geq 6.0, NORTHERN CALIFORNIA 1910 - 1972

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	Location
-	08/05/1910	01-31-36	42°00	127°00	6.8	West of Crescent City
1	07/01/1911	22-00-00	37:25	121:75	6.6	San Jose area
-	05/06/1915	12-09-00	39.50	126°50	6.8	SW of Eureka
2	12/31/1915	12-20-00	41:00	126°00	6.5	W of Eureka
3	07/15/1918	00-23-00	41.00	125:00	6.5	SW of Eureka
2	01/26/1922	09-31-30	41:00	126°00	6.0	W of Eureka
4	01/31/1922	13-17-22	41:00	125°50	7.3	W of Eureka
5	03/10/1922	11-21-20	35°75	120°25	6.5	Cholame Valley
6	01/22/1923	09-04-18	40°50	124°50	7.2	NW of Eureka
7	06/04/1925	12-02-52	41.50	125°00	6.0	NW of Eureka
8	10/22/1926	12-35-07	36.61	122:35	6.1	Monterey Bay area
9	10/22/1926	13-35-22	36°57	122°18	6.1	Monterey Bay area
10	12/10/1926	08-38-53	40.75	126:00	6.0	W of Eureka
11	09/18/1927	02-07-07	37°50	118:75	6.0	NW of Bishop
12	06/06/1932	08-44-22	40.75	124.50	6.4	W of Eureka
13	12/21/1932	06-10-05	38°75	118.00	7.2	S of Austin, Nevada
14	06/25/1933	20-45-27	39°08	119°33	6.1	Yerington, Nevada
15	01/30/1934	20-16-31	38°28	118°36	6.3	SE of Hawthorne, Nevada
16	06/08/1934	04-47-00	35°80	120°33	6.0	Cholame Valley
17	02/09/1941	09-44-42	40.70	125:40	6.4	W of Eureka
-	05/13/1941	16-01-54	40°30	126:40	6.0	W of Eureka
18	09/14/1941	16-43-32	37.57	118:73	6.0	Owens Valley
18	09/14/1941	18-39-12	37.57	118:73	6.0	Owens Valley
19	10/03/1941	16-13-08	40°40	124.80	6.4	SW of Eureka
-	05/19/1945	15-17-00	40°40	126:90	6.0	W of Eureka
-	09/28/1945	22-24-05	41.90	126.70	6.0	W of Eureka
20	12/29/1948	12-53-28	39°55	120:08	6.0	Near Verdi, Nevada
-	03/25/1949	04-56-48	42.00	126°50	6.2	West of Crescent City

Map No.	Date	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni- tude	Location
21	11/22/1952	07-46-37	35°73	121:20	6.0	San Simeon area
22	07/06/1954	11-13-20	39°42	118:53	6.8	Fallon, Nevada
23	07/06/1954	22-07-41	39°30	118°50	6.0	Fallon, Nevada
24	08/24/1954	05-51-32	39°58	118:45	6.8	Fallon, Nevada
25	11/25/1954	11-16-35	40°27	125°.63	6.1	W of Ferndale
26	12/16/1954	11-07-13	39°32	118°20	7.2	SE of Fallon, Nevada
27	12/16/1954	11-11-29	39°50	118:00	7.1	E of Fallon, Nevada
28	12/21/1954	19-56-49	40°78	123°87	6.5	Eureka area
29	10/11/1956	16-48-50	40°67	125°77	6.0	W of Ferndale
30	03/23/1959	07-10-20	39.60	118:02	6.3	Dixie Valley Nevada
31	06/23/1959	14-35-00	39°08	118.82	6.1	E of Yerington, Nevada
-	08/09/1960	07-39-18	40°32	127°07	6.2	W of Eureka
32	09/12/1966	16-41-02	39°42	120°15	6.0	Truckee area

IX. MODIFIED MERCALLI INTENSITY SCALE OF 1931 (Abridged)

- I. Not felt except by a very few under especially favorable circumstances.
- II. Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
- III. Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
- IV. During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls made cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
- V. Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles and other tall objects sometimes noticed. Pendulum clocks may stop.
- VI. Felt by all; many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
- VII. Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
- VIII. Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Disturbed persons driving motor cars.
 - IX. Damage considerable in specially designed structures; well designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
 - X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
 - XI. Few, if any (masonry), structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
- XII. Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

X. ACKNOWLEDGMENTS AND REFERENCES

The preparation of this catalogue is a small contribution compared with those of the many seismologists, a majority of whom were graduate students at the time, who made the original readings of phases from seismograms, calculated the earthquake locations and magnitudes, and wrote the original Bulletins.

In the compilation we have been helped particularly by a number of persons at the Seismographic Stations. Sections II and III on instrumentation were largely the work of Professor T. V. McEvilly, Mr. Walter Marion and Mr. Marvin Hilger. The computer listings of earthquakes in Sections V, VII and VIII were produced by Mr. Robert Uhrhammer. The computer plotted seismicity maps in Section IV were produced by Mr. Kirk Thege, using an adaptation of a program originally written by Dr. John Derr.

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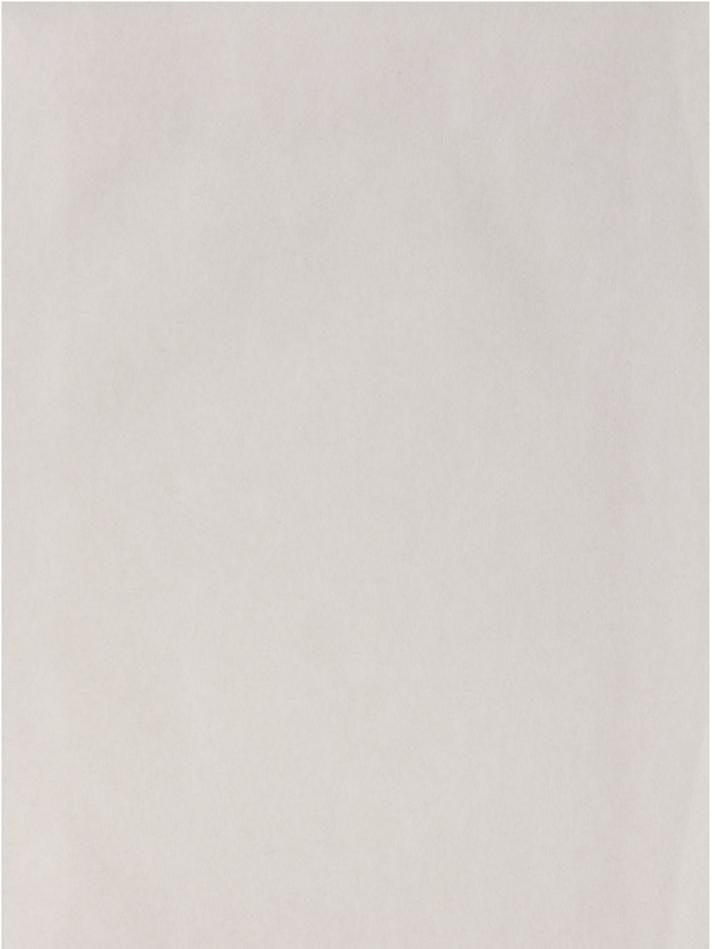
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