GEOLOGICAL SURVEY CIRCULAR 766–B

Earthquakes in the United States, April–June 1976

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By W. J. Person, R. B. Simon, C. W. Stover, and J. H. Minsch

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CECIL D. ANDRUS, *Secretary*

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W. A. Radlinski, *Acting Director*

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INTRODUCTION

The earthquake information in this publication supplements that published in the NEIS (National Earthquake Information Service) publications, PDE ("Preliminary Determination of Epicenters") and "Preliminary Determination of Epicenters, Monthly Listing," to the extent of providing detailed felt and intensity data, as well as intensity and isoseismal maps for U.S. earthquakes. The purpose is to provide a complete listing of macroseismic effects of earthquakes, which can be used in risk studies, nuclear power plant site evaluations, seismicity studies, and answering inquiries by the public.

This publication contains two major sections. The first (table 1) is a tabular listing of earthquakes in chronological order by State, consisting of the following basic information: date, origin time, hypocenter, magnitude, maximum intensity, and computational source of the hypocenter. The second section consists of four maps and table 2, which lists detailed intensity information. The list of earthquakes in table 1 was compiled from those located in the United States or off the coasts that were published in the PDE; from hypocenters in California above magnitude 3.0, supplied by California Institute of Technology, Pasadena, the University of California, Berkeley, and other offices of the U.S. Geological Survey; from hypocenters in Hawaii supplied by the Hawaiian Volcano Observatory; and from any others that were felt or that caused damage, regardless of magnitude or availability of a hypocenter. Known or suspected explosions are also listed.

The intensities and macroseismic data were compiled from information obtained through questionnaires, from newspaper articles, and with the cooperation of other government agencies, State institutions, local organizations, and individuals. (See "Acknowledgments" for a list of collaborators.) The questionnaire (fig. 1A, B) is the latest revision of this form; it was not in use for earthquake-intensity evaluations for the years 1975-76. An interim version of the form and an earlier version that had been in use since the 1930's were the basis for intensity evaluations throughout 1976. Anyone wishing to submit felt or damage information on earthquakes for inclusion in future reports should send it to the National Earthquake Information Service, Stop 967, Box 25046, Denver Federal Center, Denver, CO 80225. Copies of the current "Earthquake Report" questionnaire can be obtained at this address.

The primary method used by the NEIS to collect macroseismic information is a questionnaire canvass using the "Earthquake Report" forms, which are mailed to postmasters in the area affected by the earthquake. The postmasters complete the forms and return them to the NEIS, where they are evaluated and an intensity value is assigned. The intensity observations are mapped and contoured by isoseismals. Isoseismal contours present a generalization of intensity data and an extrapolation of these data to regions from which there are no observations; they do not necessarily account for every individual observation.

The data in table 2 will be included in the "Earthquake Description" section of "United States Earthquakes," an annual publication, to which later data from other sources may be added for the purpose of updating and completeness. "United States Earthquakes" is published jointly by the U.S. Geological Survey, Department of the Interior, and the Environmental Data Service, NOAA, Department of Commerce.

DISCUSSION OF TABLES

The parameters for the earthquakes in table 1 and table 2 include the date, origin time, hypocenter (epicenter and focal depth), magnitude, intensity, and hypocenter source. The origin time and date are listed in Universal Coordinated Time (UTC) and local standard time based on the time-zone maps in figures 2 and 3. The epicenters, which were taken from those published in the PDE, or from other sources as noted, are listed here to two decimals. The accuracy of the epicenters is that claimed by the institution supplying the hypocenter and is not necessarily the accuracy indicated by the number of decimals listed. The epicenters located by the NEIS have a varying degree of accuracy, usually two-tenths of a degree or less, depending on their continental

U.S. DEPARTMENT OF THE INTERIOR
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EARTHQUAKE REPORT

Form Approved
OMB No. 42-R1700

Please answer this questionnaire carefully and return as soon as possible.

1. Was an earthquake felt by anyone in your town or zip code area recently?
   - ☐ Not felt: Please refold and tape for return mail.
   - ☐ Felt: Date_____ Time_____ ☐ AM ☐ PM ☐ Standard time ☐ Daylight time

Name of person filling out form _____

Address_____

City_____ County_____

State_____ Zip code_____

If you felt the earthquake, complete the following section. If others felt the earthquake but you did not, skip the personal report and complete the community report.

PERSONAL REPORT

2a. Did you personally feel the earthquake? 1☐ Yes ☐ No
b. Were you awakened by the earthquake? 2☐ Yes ☐ No
c. Were you frightened by the earthquake? 3☐ Yes ☐ No
d. Were you at 4☐ Home 5☐ Work 6☐ Other?
e. Town and zip code of your location at time of earthquake _____

f. Check your activity when the earthquake occurred:
7☐ Walking 8☐ Sleeping 9☐ Lying down 10☐ Standing
11☐ Driving (car in motion) 12☐ Sitting 13☐ Other
g. Were you 14☐ Inside or 15☐ Outside?
h. If inside, on what floor were you? 16☐☐

Continue on to next section which should include personal as well as reported observations.

COMMUNITY REPORT

Check one box for each question that is applicable.

3a. The earthquake was felt by	☐ No one	17☐ Few	18☐ Several	19☐ Many	20☐ All?
b. This earthquake awakened	☐ No one	21☐ Few	22☐ Several	23☐ Many	24☐ All?
c. This earthquake frightened	☐ No one	25☐ Few	26☐ Several	27☐ Many	28☐ All?

4. What outdoor physical effects were noted in your community?

Parapets or cornices fallen	29☐ Yes	☐ No	
Trees and bushes shaken	30☐ Slightly	31☐ Moderately	32☐ Strongly
Standing vehicles rocked	33☐ Slightly	34☐ Moderately	35☐ Strongly
Moving vehicles rocked	36☐ Slightly	37☐ Moderately	38☐ Strongly
Ground cracks	39☐ Wet ground	40☐ Steep slopes	41☐ Dry and level ground
Landslides	42☐ Small	43☐ Large	
Underground pipes	44☐ Broken	45☐ Out of service	
Water splashed onto sides of lakes, ponds, swimming pools	46☐ Yes	☐ No	
Elevated water tanks	47☐ Cracked	48☐ Twisted	49☐ Fallen (thrown down)
Air coolers	50☐ Displaced	51☐ Rotated	52☐ Fallen
Railroad tracks bent	53☐ Slightly	54☐ Greatly	
Stone or brick fences	55☐ Cracked	56☐ Fallen	57☐ Destroyed
Tombstones	58☐ Displaced 61☐ Fallen	59☐ Cracked	60☐ Rotated
Chimneys	62☐ Cracked	63☐ Twisted	64☐ Fallen
	65☐ Broken at roof line		66☐ Bricks fallen
Highways or streets	67☐ Cracked slightly	68☐ Large cracks	69☐ Displaced
Sidewalks	70☐ Cracked slightly	71☐ Large cracks	72☐ Displaced

Continued on the reverse side

FIGURE 1.--Example of the "Earthquake Report" form used for evaluating the intensities of earthquakes. A, front side.

5. What indoor physical effects were noted in your community?

Windows, doors, dishes rattled	73 ☐ Yes	☐ No		
Buildings creaked	74 ☐ Yes	☐ No		
Building trembled (shook)	75 ☐ Yes	☐ No		
Hanging pictures	76 ☐ Swung	77 ☐ Out of place	78 ☐ Fallen	
Water in small containers	79 ☐ Spilled	80 ☐ Slightly disturbed		
Windows	81 ☐ Few cracked	82 ☐ Some broken	83 ☐ Many broken	

6a. Did hanging objects, doors swing? ☐ No 84 ☐ Slightly 85 ☐ Moderately 86 ☐ Violently

b. Can you estimate direction? ☐ No 87 ☐ North/South 88 ☐ East/West 89 ☐ Other

7a. Were small objects (dishes, knick-knacks, pictures) ☐ Unmoved 90 ☐ Shifted 91 ☐ Overturned 92 ☐ Fallen, not broken 93 ☐ Broken?

b. Was light furniture ☐ Unmoved 94 ☐ Shifted 95 ☐ Overturned 96 ☐ Fallen, not broken 97 ☐ Broken?

c. Were heavy furniture or appliances ☐ Unmoved 98 ☐ Overturned 99 ☐ Shifted 100 ☐ Broken?

8. Indicate effects of the following types to interior walls if any:

Plaster	101 ☐ Cracked	102 ☐ Fell
Dry wall	103 ☐ Cracked	104 ☐ Fell
Ceiling tiles	105 ☐ Cracked	106 ☐ Fell

9a. Check below any damage to buildings or structures.

Foundation	107 ☐ Cracked		108 ☐ Destroyed	
Interior walls	109 ☐ Split	110 ☐ Fallen	111 ☐ Separated from ceiling or floor	
Exterior walls	112 ☐ Hairline cracks		113 ☐ Large cracks	114 ☐ Bulged outward
	115 ☐ Partial collapse		116 ☐ Total collapse	
Building	117 ☐ Moved on foundation		118 ☐ Shifted off foundation	

b. What type of construction was the building that showed this damage?

119 ☐ Wood 120 ☐ Stone 121 ☐ Brick veneer 122 ☐ Other
123 ☐ Brick 124 ☐ Cinderblock 125 ☐ Reinforced concrete

c. What was the type of ground under the building?

126 ☐ Don't know 127 ☐ Sandy soil 128 ☐ Marshy 129 ☐ Fill
130 ☐ Hard rock 131 ☐ Clay soil 132 ☐ Sandstone, limestone, shale

d. Was the ground: 133 ☐ Level 134 ☐ Sloping 135 ☐ Steep?

e. Check the approximate age of the building:

136 ☐ Built before 1935 137 ☐ Built 1935-65 138 ☐ Built after 1965

10a. What percentage of buildings were damaged?

Within 2 city blocks of your location ☐ None 139 ☐ Few (about 5%) 140 ☐ Many(about 50%) 141 ☐ Most (about 75%)

b. In area covered by your zip code ☐ None 142 ☐ Few (about 5%) 143 ☐ Many (about 50%) 144 ☐ Most (about 75%)

11a. Were springs or well water disturbed? 145 ☐ Level changed 146 ☐ Flow disturbed 147 ☐ Muddied ☐ Don't know

b. Were rivers or lakes changed? 148 ☐ Yes ☐ No ☐ Don't know

12a. Was there earth noise? ☐ No 149 ☐ Faint 150 ☐ Moderate 151 ☐ Loud

b. Direction of noise 152 ☐ North 153 ☐ South 154 ☐ East 155 ☐ West

c. Estimated duration of shaking 156 ☐ Sudden, sharp (less than 10 secs) 157 ☐ Long (30-60 secs) 158 ☐ Short (10-30 secs) 159 ☐ Other

13. What is the approximate population of your city/town? Or are you in a

160 ☐ Less than 1,000 161 ☐ 10,000 to 100,000 164 ☐ Rural area?
162 ☐ 1,000 to 10,000 163 ☐ Over 100,000

This community report is associated with what town or zip code? _____

Thank you for your time and information. Refold this card and tape for return mail.

FIGURE 1.--Example of the "Earthquake Report" form used for evaluating the intensities of earthquakes. B, reverse side.

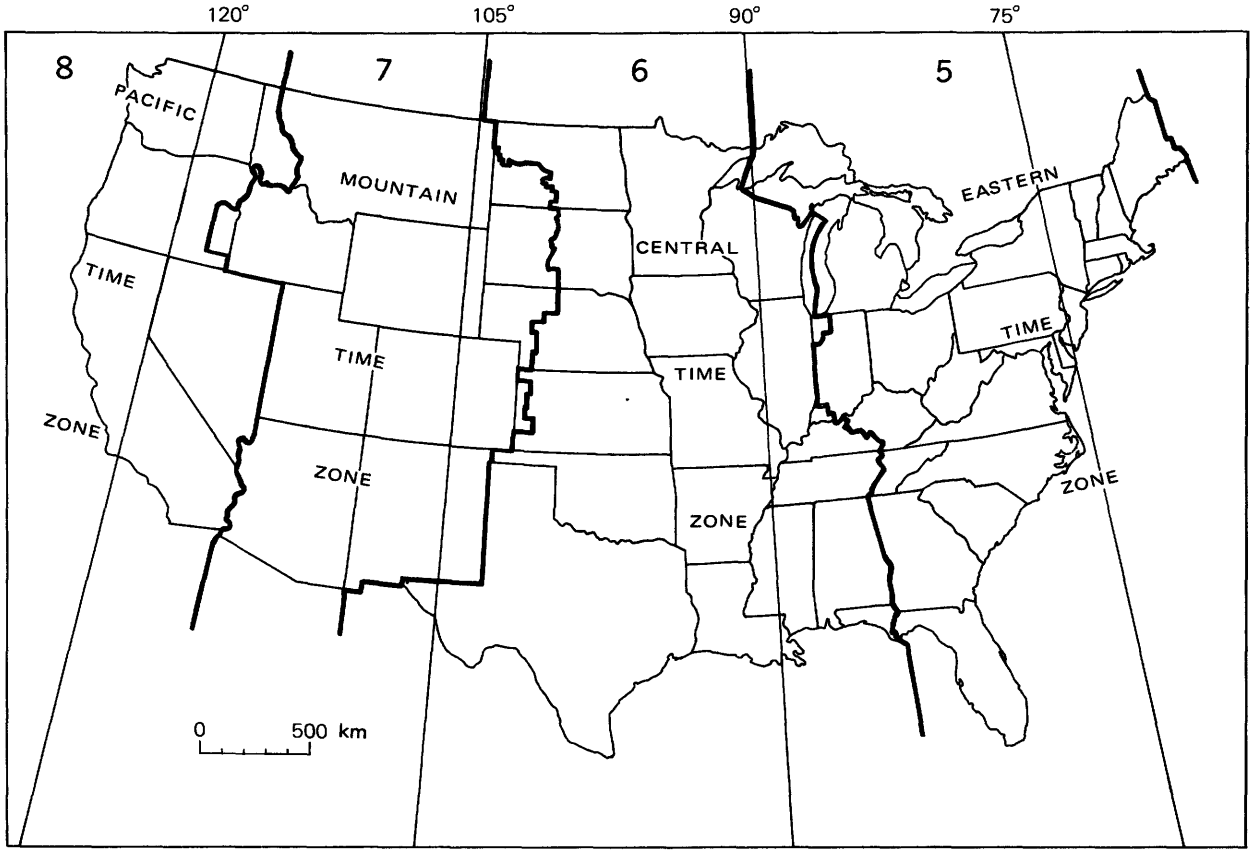

FIGURE 2.--Standard time zones of the conterminous United States. The number in each zone shows the number of hours to be subtracted from Universal Coordinated Time to convert to local standard time. (Subtract 1 hour less for local daylight-saving time.)

or oceanic location. The oceanic hypocenters are less accurate than those on the continent, even though both are listed to two decimals. Depths are listed to the nearest whole kilometer.

Figures 4-6 are maps summarizing the earthquake activity for the conterminous United States, Alaska, and Hawaii for the period April-June 1976. The magnitudes plotted in these figures are based on ML or mbLg; if neither was computed, then on MS; and finally on mb, when it was the only magnitude computed.

The magnitude values listed in tables 1 and 2 were furnished by cooperating institutions or determined by the NEIS. The computational sources are labeled according to the assigned letter codes shown in headnotes to tables 1 and 2; the letter follows the value listed under the column heading "Magnitude." In table 1 the absence of a letter code indicates that the NEIS is the source. In table 2 the magnitude source is the same as the location source unless indicated otherwise, by an alphabetic character to the right of the magnitude value. The magnitude values calculated by the NEIS are based on the following formulas:

$$MS=\log(A/T)+1.66\log D+3.3, \quad (1)$$

as adopted by the International Association of Seismology and Physics of the Earth's Interior (IASPEI; Bath, 1966, p. 153), where A is the maximum horizontal surface-wave ground amplitude, in micrometers; T is the period, in seconds, and $18 \leq T \leq 22$; and D is the distance, in geocentric degrees (station to epicenter), and $20^\circ \leq D \leq 160^\circ$. No depth correction is made for depths less than 50 km.

$$mb=\log(A/T)+Q(D,h), \quad (2)$$

as defined by Gutenberg and Richter (1956), except that T, the period in seconds, is restricted to $0.1 \leq T \leq 3.0$, and A, the ground amplitude in micrometers, is not necessarily the maximum of the P-wave group. Q is a function of distance D and depth h, where $D \geq 5^\circ$.

$$ML=\log A-\log A_o, \quad (3)$$

as defined by Richter (1958, p. 340), where A is the maximum trace amplitude in millimeters, written by a Wood-Anderson torsion seismometer, and log A_o is a standard value as a function of distance, where the distance is ≤ 600 km. ML values are also calculated from other seismometers

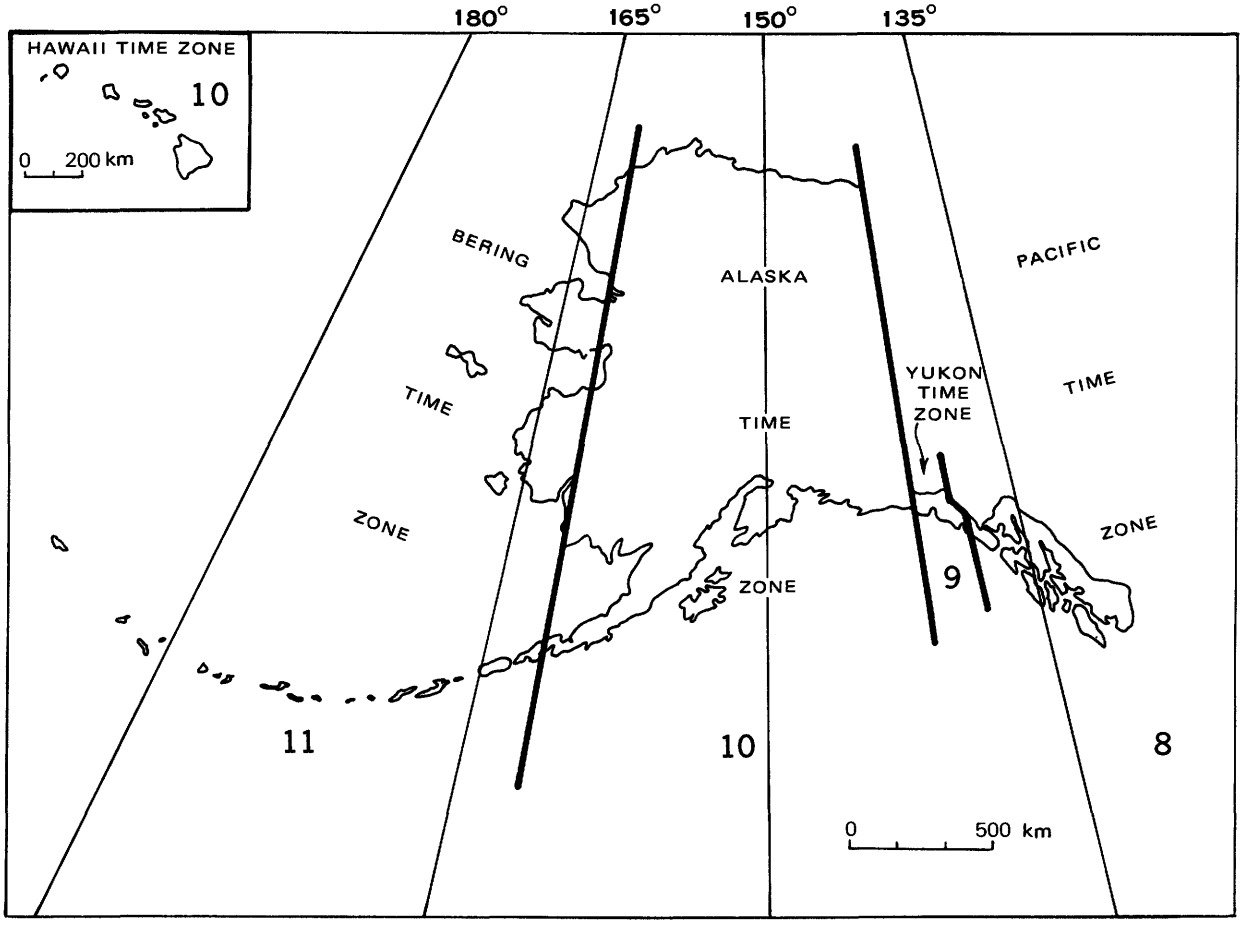

FIGURE 3.--Standard time zones of Alaska and Hawaii. The number in each zone shows the number of hours to be subtracted from Universal Coordinated Time to convert to local standard time. (Subtract 1 hour less for local daylight-saving time.

by conversion of recorded ground motion to the expected response of the torsion seismometer.

$$mbLg=3.75+0.90(\log D)+\log(A/T) \quad (4)$$
$$0.5^\circ \leq D \leq 4^\circ,$$

$$mbLg=3.30+1.66(\log D)+\log(A/T)$$
$$4^\circ \leq D \leq 30^\circ,$$

as proposed by Nuttli (1973), where A/T is expressed in micrometers per second, calculated from the vertical-component 1-second Lg waves, and D is the distance in geocentric degrees.

All of the intensity values (indicated by Roman numerals) listed in this summary were derived, using the Modified Mercalli Intensity Scale of 1931 (Wood and Neumann, 1931) shown below, from the evaluation of "Earthquake Report" forms; from field reports by U.S. Geological Survey personnel, engineering firms, or universities; and from detailed macroseismic data communicated to the NEIS by people in the area affected by the earthquake. All earthquake reports received which contain minimal information are assigned an Intensity II. These reports are filed in the offices of the NEIS or in government archives and are available for detailed study.

MODIFIED MERCALLI INTENSITY SCALE OF 1931

Adapted from Sieberg's Mercalli-Cancani scale, modified and condensed.

I. Not felt - or, except rarely under especially favorable circumstances. Under certain conditions, at and outside the boundary of the area in which a great shock is felt: sometimes birds, animals, reported uneasy or disturbed; sometimes dizziness or nausea experienced; sometimes trees, structures, liquids, bodies of water, may sway--doors may swing, very slowly.

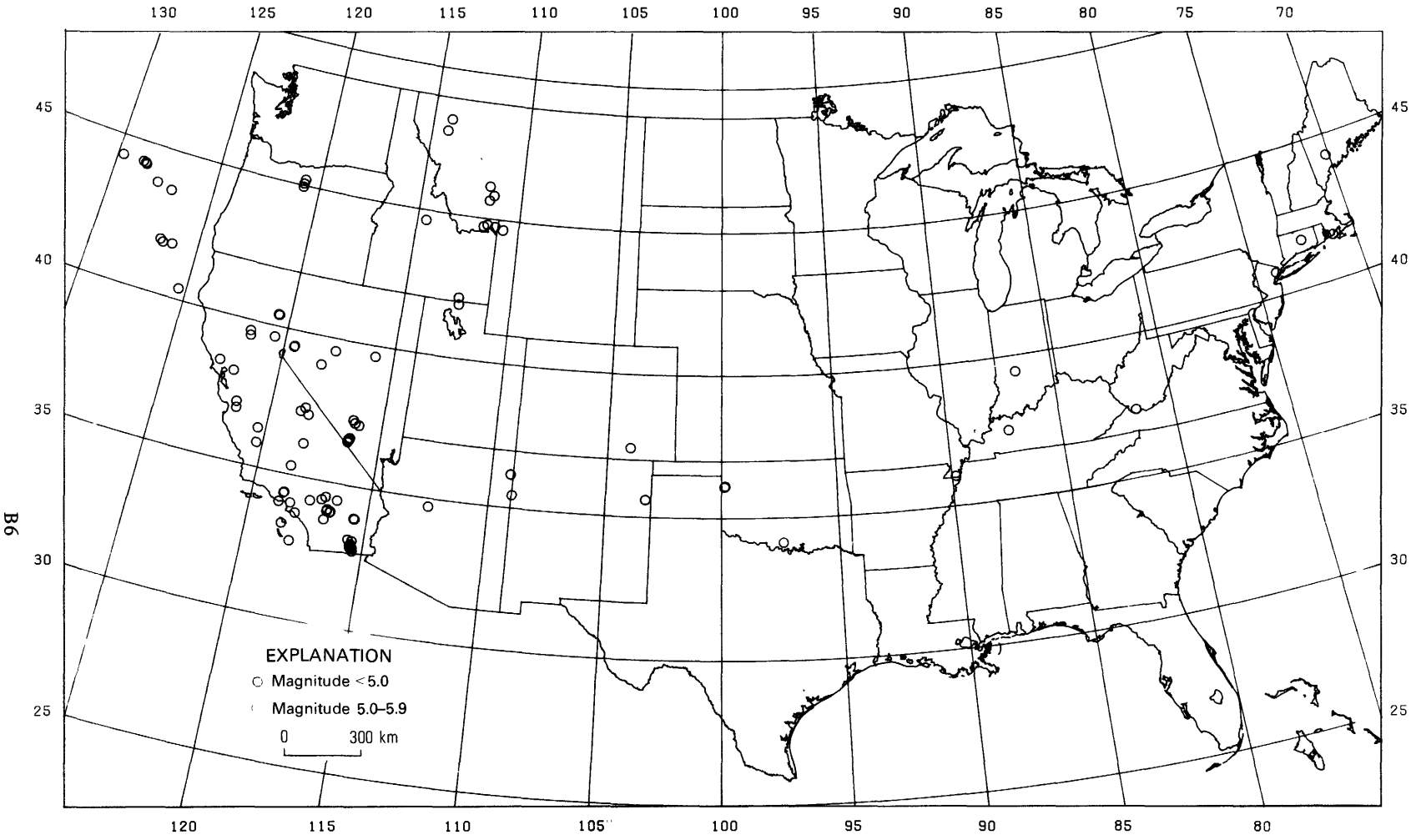

FIGURE 4.--Earthquake epicenters in the conterminous United States for April-June 1976, plotted from table 1.

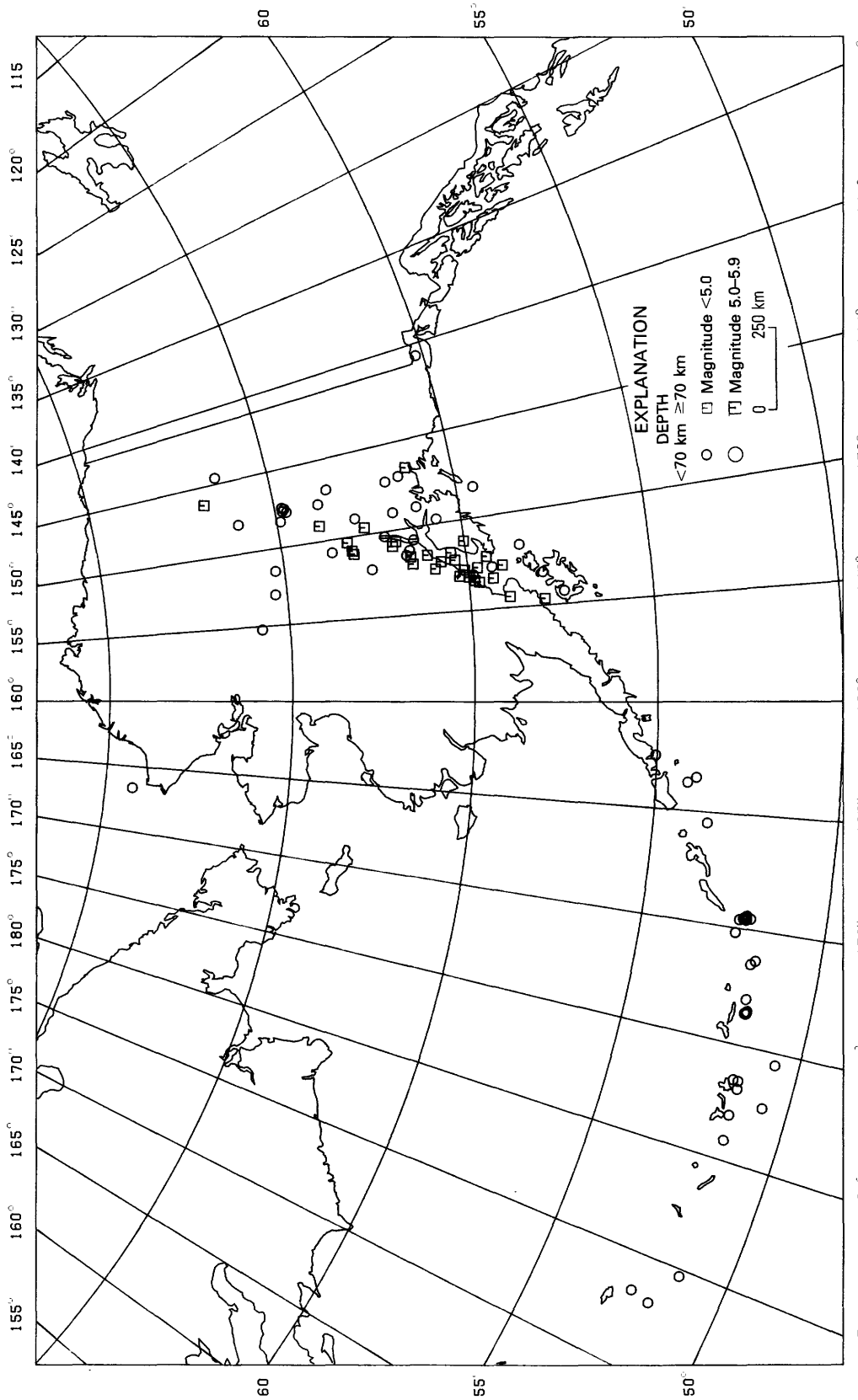

FIGURE 5.--Earthquake epicenters in Alaska for April-June 1976, plotted from table 1.

II. Felt indoors by few, especially on upper floors, or by sensitive, or nervous persons. Also, as in grade I, but often more noticeably: sometimes hanging objects may swing, especially when delicately suspended; sometimes trees, structures, liquids, bodies of water, may sway, doors may swing, very slowly; sometimes birds, animals, reported uneasy or disturbed; sometimes dizziness or nausea experienced.

III. Felt indoors by several, motion usually rapid vibration. Sometimes not recognized to be an earthquake at first. Duration estimated in some cases. Vibration like that due to passing of light, or lightly loaded trucks, or heavy trucks some distance away. Hanging objects may swing slightly. Movements may be appreciable on upper levels of tall structures. Rocked standing motor cars slightly.

IV. Felt indoors by many, outdoors by few. Awakened few, especially light sleepers. Frightened no one, unless apprehensive from previous experience. Vibration like that due to passing of heavy or heavily loaded trucks. Sensation like heavy body striking building or falling of heavy objects inside. Rattling of dishes, windows, doors; glassware and crockery clink and clash. Creaking of walls, frame, especially in the upper range of this grade. Hanging objects swung, in numerous instances. Disturbed liquids in open vessels slightly. Rocked standing motor cars noticeably.

V. Felt indoors by practically all, outdoors by many or most: outdoors direction estimated. Awakened many, or most. Frightened few--slight excitement, a few ran outdoors. Buildings trembled throughout. Broke dishes, glassware, to some extent. Cracked windows--in some cases, but not generally. Overturned vases, small or unstable objects, in many instances, with occasional fall. Hanging objects, doors, swing generally or considerably. Knocked pictures against walls, or swung them out of place. Opened, or closed, doors, shutters, abruptly. Pendulum clocks stopped, started or ran fast, or slow. Moved small objects, furnishings, the latter to slight extent. Spilled liquids in small amounts from well-filled open containers. Trees, bushes, shaken slightly.

VI. Felt by all, indoors and outdoors. Frightened many, excitement general, some alarm, many ran outdoors. Awakened all. Persons made to move unsteadily. Trees, bushes, shaken slightly to moderately. Liquid set in strong motion. Small bells rang--church, chapel, school, etc. Damage slight in poorly built buildings. Fall of plaster in small amount. Cracked plaster somewhat, especially fine cracks chimneys in some instances. Broke dishes, glassware, in considerable quantity, also some windows. Fall of knick-knacks, books, pictures. Overturned furniture in many instances. Moved furnishings of moderately heavy kind.

VII. Frightened all--general alarm, all ran outdoors. Some, or many, found it difficult to stand. Noticed by persons driving motor cars. Trees and bushes shaken moderately to strongly. Waves on ponds, lakes, and running water. Water turbid from mud stirred up. Incaving to some extent of sand or gravel stream banks. Rang large church bells, etc. Suspended objects made to quiver. Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary buildings, considerable in poorly built or badly designed buildings, adobe houses, old walls (especially where laid up without mortar), spires, etc. Cracked chimneys to considerable extent, walls to some extent. Fall of plaster in considerable to large amount, also some stucco. Broke numerous windows, furniture to some extent. Shook down loosened brickwork and tiles. Broke weak chimneys at the roof-line (sometimes damaging roofs). Fall of cornices from towers and high buildings. Dislodged bricks and stones. Overturned heavy furniture, with damage from breaking. Damage considerable to concrete irrigation ditches.

VIII. Fright general--alarm approaches panic. Disturbed persons driving motor cars. Trees shaken strongly--branches, trunks, broken off, especially palm trees. Ejected sand and mud in small amounts. Changes: temporary, permanent; in flow of springs and wells; dry wells renewed flow; in temperature of spring and well waters. Damage slight in structures (brick) built especially to withstand earthquakes. Considerable in ordinary substantial buildings, partial collapse: racked, tumbled down, wooden houses in some cases; threw out panel walls in frame structures,

broke off decayed piling. Fall of walls. Cracked, broke, solid stone walls seriously. Wet ground to some extent, also ground on steep slopes. Twisting, fall, of chimneys, columns, monuments, also factory stacks, towers. Moved conspicuously, overturned, very heavy furniture.

IX. Panic general. Cracked ground conspicuously. Damage considerable in (masonry) structures built especially to withstand earthquakes: Threw out of plumb some wood-frame houses built especially to withstand earthquakes; great in substantial (masonry) buildings, some collapse in large part; or wholly shifted frame buildings off foundations, racked frames; serious to reservoirs; underground pipes sometimes broken.

X. Cracked ground, especially when loose and wet, up to widths of several inches; fissures up to a yard in width ran parallel to canal and stream banks. Landslides considerable from river banks and steep coasts. Shifted sand and mud horizontally on beaches and flat land. Changed level of water in wells. Threw water on banks of canals, lakes, rivers, etc. Damage serious to dams, dikes, embankments. Severe to well-built wooden structures and bridges, some destroyed. Developed dangerous cracks in excellent brick walls. Destroyed most masonry and frame structures, also their foundations. Bent railroad rails slightly. Tore apart, or crushed endwise, pipe lines buried in earth. Open cracks and broad wavy folds in cement pavements and asphalt road surfaces.

XI. Disturbances in ground many and widespread, varying with ground material. Broad fissures, earth slumps, and land slips in soft, wet ground. Ejected water in large amounts charged with sand and mud. Caused sea-waves ("tidal" waves) of significant magnitude. Damage severe to wood-frame structures, especially near shock centers. Great to dams, dikes, embankments often for long distances. Few, if any (masonry) structures remained standing. Destroyed large well-built bridges by the wrecking of supporting piers, or pillars. Affected yielding wooden bridges less. Bent railroad rails greatly, and thrust them endwise. Put pipe lines buried in earth completely out of service.

XII. Damage total--practically all works of construction damaged greatly or destroyed. Disturbances in ground great and varied, numerous shearing cracks. Landslides, falls of rock of significant character, slumping of river banks, etc., numerous and extensive. Wrenched loose, tore off, large rock masses. Fault slips in firm rock, with notable horizontal and vertical offset displacements. Water channels, surface and underground, disturbed and modified greatly. Dammed lakes, produced waterfalls, deflected rivers, etc. Waves seen on ground surfaces (actually seen, probably, in some cases). Distorted lines of sight and level. Threw objects upward into the air.

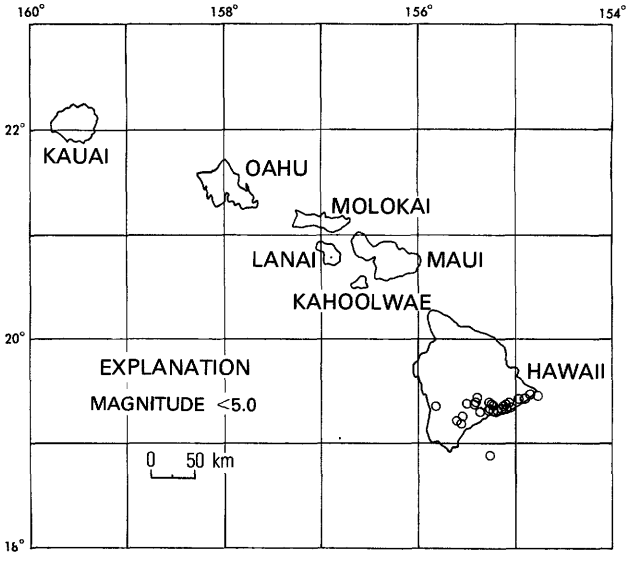

FIGURE 6.--Earthquake epicenters in Hawaii for April-June 1976, plotted from table 1.

Table 1.—*Summary of U.S. earthquakes for April-June 1976*

[Sources of the hypocenter and magnitudes: (A) U.S. Energy Research and Development Administration; (B) University of California, Berkeley; (C) University of Connecticut, Groton; (D) University of Montana, Missoula; (F) U.S. Geological Survey Open-File Report 77-181 (Fuis and others, 1977); (G) U.S. Geological Survey, National Earthquake Information Service; (H) U.S. Geological Survey, Hawaiian Volcano Observatory; (J) Weston Observatory, Weston, Massachusetts; (L) Lamont-Doherty Geological Observatory, Palisades, New York; (M) NOAA, Alaska Tsunami Warning Center, Palmer; (P) California Institute of Technology, Pasadena; (S) St. Louis University, St. Louis, Missouri; (T) University of Oklahoma, Leonard; (U) University of Utah, Salt Lake City; (V) Virginia Polytechnic Institute and State University, Blacksburg. N, Normal depth; UTC, Universal Coordinated Time. For names of local time zones, see figures 2 and 3. Leaders (...) indicate no information available]

Date (1976)	Origin time (UTC) hr	min	s	Lat	Long	Depth (km)	Magnitude mb	MS	ML or mbLg	Maximum intensity	Hypocenter source	Local time Date	Hour
ALASKA													
APR. 2	22	52	24.9	52.18 N.	169.57 W.	34	4.8	...	...	...	G	APR. 2	11 A.M. BST
APR. 3	00	18	02.0	52.18 N.	169.43 W.	33N	4.0	...	...	...	G	APR. 2	01 P.M. BST
APR. 3	00	20	31.6	52.35 N.	169.61 W.	33N	4.9	...	...	...	G	APR. 2	01 P.M. BST
APR. 3	00	26	54.0	52.15 N.	169.61 W.	22	5.0	5.0	...	...	G	APR. 2	01 P.M. BST
APR. 3	00	56	10.7	52.23 N.	169.53 W.	33N	4.6	...	...	...	G	APR. 2	01 P.M. BST
APR. 4	01	30	00.8	52.18 N.	169.49 W.	37	4.5	...	...	...	G	APR. 3	02 P.M. BST
APR. 4	02	31	48.2	52.05 N.	169.55 W.	24	4.5	4.4	...	...	G	APR. 3	03 P.M. BST
APR. 4	02	36	12.2	52.26 N.	169.54 W.	15	4.8	...	...	...	G	APR. 3	03 P.M. BST
APR. 4	10	08	16.5	60.41 N.	151.74 W.	83	3.7	...	...	...	G	APR. 4	12 A.M. AST
APR. 6	14	33	11.4	51.44 N.	179.13 W.	64	4.7	...	...	...	G	APR. 6	03 A.M. BST
APR. 7	22	52	54.7	65.76 N.	155.22 W.	33N	...	...	4.3M	...	G	APR. 7	12 P.M. AST
APR. 9	05	23	47.6	57.98 N.	154.66 W.	122	...	...	...	...	G	APR. 8	07 P.M. AST
APR. 9	06	17	36.0	60.88 N.	152.49 W.	128	4.1	...	...	...	G	APR. 8	08 P.M. AST
APR. 10	10	39	55.1	61.04 N.	151.68 W.	98	...	...	...	...	G	APR. 10	12 A.M. AST
APR. 10	19	36	30.4	59.05 N.	152.70 W.	152	...	...	...	...	G	APR. 10	09 A.M. AST
APR. 11	07	36		NEAR COLLEGE		..	...	...	...	IV	.	APR. 10	09 P.M. AST
APR. 11	09	35	48.6	61.37 N.	150.73 W.	60	...	...	...	...	G	APR. 10	11 P.M. AST
APR. 12	03	01	08.5	65.23 N.	151.47 W.	22	...	...	3.5M	...	G	APR. 11	05 P.M. AST
APR. 12	04	41	51.4	52.41 N.	170.19 W.	38	5.2	4.9	...	...	G	APR. 11	05 P.M. BST
APR. 12	08	36	06.1	50.70 N.	177.37 W.	44	4.3	...	...	...	G	APR. 11	09 P.M. BST
APR. 12	15	42	29.9	65.31 N.	152.97 W.	46	...	...	...	...	G	APR. 12	05 A.M. AST
APR. 14	04	16	16.3	62.15 N.	150.26 W.	33N	...	...	3.1M	IV	G	APR. 13	06 P.M. AST
APR. 15	10	36	36.0	59.97 N.	153.18 W.	144	...	...	...	...	G	APR. 15	12 A.M. AST
APR. 15	13	38	05.4	60.01 N.	151.15 W.	88	...	...	...	...	G	APR. 15	03 A.M. AST
APR. 15	19	09	31.7	63.80 N.	147.69 W.	39	...	...	3.0M	...	G	APR. 15	09 A.M. AST
APR. 16	00	42	20.6	63.50 N.	146.87 W.	33N	...	...	3.0M	...	G	APR. 15	02 P.M. AST
APR. 17	04	19	16.7	59.33 N.	152.75 W.	33N	...	...	...	...	G	APR. 16	06 P.M. AST
APR. 17	06	08	44.5	64.90 N.	148.31 W.	33N	...	...	4.0M	...	G	APR. 16	08 P.M. AST
APR. 18	07	22	08.2	60.09 N.	152.74 W.	100	4.3	...	...	...	G	APR. 17	09 P.M. AST
APR. 18	10	32	46.1	59.84 N.	153.38 W.	142	...	...	...	...	G	APR. 18	12 A.M. AST
APR. 19	10	53	17.8	55.04 N.	162.50 W.	54	4.3	...	...	...	G	APR. 18	11 P.M. BST
APR. 20	07	59	53.8	53.53 N.	165.47 W.	46	4.8	5.5	...	...	G	APR. 19	08 P.M. BST
APR. 20	14	38	38.8	60.19 N.	140.68 W.	33N	...	...	...	...	G	APR. 20	05 A.M. YST
APR. 21	11	53	58.2	59.73 N.	152.69 W.	113	...	...	...	...	G	APR. 21	01 A.M. AST
APR. 23	05	13	28.9	51.33 N.	174.71 E.	33N	4.6	...	...	...	G	APR. 22	06 P.M. BST
APR. 23	21	22	53.0	62.60 N.	152.12 W.	33N	4.2	...	4.0M	...	G	APR. 23	11 A.M. AST
APR. 24	14	18	13.1	63.04 N.	151.05 W.	129	...	...	...	...	G	APR. 24	04 A.M. AST
APR. 24	22	26	24.7	62.64 N.	149.56 W.	80	...	...	...	...	G	APR. 24	12 P.M. AST
APR. 25	10	12	09.4	64.79 N.	147.67 W.	34	...	...	3.3M	V	G	APR. 25	12 A.M. AST
APR. 27	11	26	57.5	64.81 N.	147.49 W.	33N	...	...	3.8M	V	G	APR. 27	01 A.M. AST
APR. 27	11	34	20.0	64.73 N.	147.58 W.	29	...	...	3.0M	V	G	APR. 27	01 A.M. AST
APR. 27	19	32	33.1	52.35 N.	173.36 E.	45	4.2	...	...	...	G	APR. 27	08 A.M. BST
APR. 29	04	29	46.3	69.26 N.	166.64 W.	33N	...	...	...	...	G	APR. 28	05 P.M. BST
APR. 29	20	29	28.0	66.41 N.	144.60 W.	23	...	...	...	...	G	APR. 29	10 A.M. AST
MAY 3	17	47	29.5	58.91 N.	154.40 W.	142	4.7	...	...	...	G	MAY 3	07 A.M. AST
MAY 7	04	11	22.6	51.81 N.	173.00 W.	55	4.3	...	...	...	G	MAY 6	05 P.M. BST
MAY 8	11	25	36.3	61.62 N.	151.52 W.	16	4.4	...	4.4M	IV	G	MAY 8	01 A.M. AST
MAY 9	00	09	50.7	59.86 N.	153.07 W.	38	4.7	...	3.9M	IV	G	MAY 8	02 P.M. AST
MAY 9	15	39	12.6	61.52 N.	151.29 W.	33N	...	...	3.1M	...	G	MAY 9	05 A.M. AST
MAY 11	16	46	15.8	61.49 N.	146.97 W.	67	4.2	...	...	III	G	MAY 11	06 A.M. AST
MAY 12	05	56	35.2	63.87 N.	149.01 W.	137	...	...	...	...	G	MAY 11	07 P.M. AST
MAY 14	16	58	13.9	61.48 N.	152.10 W.	115	3.9	...	...	...	G	MAY 14	06 A.M. AST
MAY 15	05	15	54.7	63.64 N.	150.77 W.	33N	...	...	3.7M	...	G	MAY 14	07 P.M. AST
MAY 16	15	23	50.0	59.54 N.	148.28 W.	33N	...	...	4.0M	...	G	MAY 16	05 A.M. AST
MAY 20	06	07	38.3	61.88 N.	147.15 W.	33N	...	...	3.2M	...	G	MAY 19	08 P.M. AST
MAY 21	06	10	59.0	51.73 N.	173.64 W.	46	4.2	...	...	...	G	MAY 20	07 P.M. BST
MAY 21	06	26	47.6	51.78 N.	173.59 W.	30	4.0	...	...	...	G	MAY 20	07 P.M. BST
MAY 21	11	08	58.4	51.72 N.	173.53 W.	39	4.2	...	...	...	G	MAY 21	12 A.M. BST
MAY 21	11	15	24.5	51.72 N.	173.54 W.	45	4.9	4.4	...	...	G	MAY 21	12 A.M. BST
MAY 21	23	15	48.7	63.17 N.	150.33 W.	86	...	...	...	...	G	MAY 21	01 P.M. AST
MAY 23	17	30	06.5	61.24 N.	146.54 W.	101	...	...	...	...	G	MAY 23	07 A.M. AST
MAY 26	17	38	22.2	57.97 N.	153.30 W.	33N	4.5	...	...	III	G	MAY 26	07 A.M. AST
MAY 27	05	55	52.5	54.13 N.	163.72 W.	15	4.8	...	...	...	G	MAY 26	06 P.M. BST
MAY 27	18	05	20.3	50.64 N.	175.49 W.	43	4.4	...	...	...	G	MAY 27	07 A.M. BST
MAY 30	07	55	19.6	60.23 N.	153.05 W.	138	...	...	...	...	G	MAY 29	09 P.M. AST

Table 1.—*Summary of U.S. earthquakes for April-June 1976*—Continued

Date (1976)	Origin time (UTC) hr	min	s	Lat	Long	Depth (km)	Magnitude mb	MS	ML or mbLg	Maximum intensity	Hypocenter source	Local time Date	Hour
ALASKA--Continued													
MAY 31	08	48	55.3	58.51 N.	151.73 W.	40	...	...	3.8M	...	G	MAY 30	10 P.M. AST
JUNE 1	06	57	20.9	61.86 N.	150.64 W.	73	...	...	...	...	G	MAY 31	08 P.M. AST
JUNE 1	16	30	55.5	64.70 N.	147.80 W.	9	...	...	2.9M	II	G	JUNE 1	06 A.M. AST
JUNE 5	02	30	49.7	61.16 N.	148.90 W.	24	...	...	3.0M	...	G	JUNE 4	04 P.M. AST
JUNE 6	17	44	09.1	51.50 N.	178.03 W.	54	5.2	4.9	...	...	G	JUNE 6	06 A.M. BST
JUNE 8	11	31	35.9	53.91 N.	163.46 W.	49	4.5	...	...	...	G	JUNE 8	12 A.M. BST
JUNE 9	08	57	29.4	59.32 N.	153.35 W.	103	4.4	...	...	...	G	JUNE 8	10 P.M. AST
JUNE 9	10	20	54.8	51.65 N.	176.50 W.	64	4.5	...	...	...	G	JUNE 8	11 P.M. BST
JUNE 10	08	57	59.6	51.52 N.	176.54 W.	58	4.5	...	...	II	G	JUNE 9	09 P.M. BST
JUNE 11	14	06	43.6	62.88 N.	148.95 W.	69	...	...	...	...	G	JUNE 11	04 A.M. AST
JUNE 14	01	17	47.4	61.82 N.	148.97 W.	31	...	...	...	...	G	JUNE 13	03 P.M. AST
JUNE 14	12	39	39.0	51.47 N.	176.85 W.	50	4.1	...	...	III	G	JUNE 14	01 A.M. BST
JUNE 14	17	11	56.5	51.85 N.	171.48 W.	48	4.5	...	...	...	G	JUNE 14	06 A.M. BST
JUNE 14	18	01	34.1	51.75 N.	171.31 W.	10	5.1	...	...	...	G	JUNE 14	07 A.M. BST
JUNE 15	07	09	27.5	51.80 N.	173.14 E.	44	4.8	...	...	...	G	JUNE 14	08 P.M. BST
JUNE 17	02	44	58.9	57.43 N.	154.33 W.	50	5.2	...	...	...	G	JUNE 16	04 P.M. AST
JUNE 17	08	47	28.1	60.33 N.	152.15 W.	122	...	...	...	...	G	JUNE 16	10 P.M. AST
JUNE 18	07	02	44.3	59.71 N.	153.48 W.	141	...	...	...	...	G	JUNE 17	09 P.M. AST
JUNE 18	13	08	04.5	63.08 N.	150.83 W.	153	...	...	...	...	G	JUNE 18	03 A.M. AST
JUNE 21	18	01	40.8	59.45 N.	152.13 W.	97	...	...	...	...	G	JUNE 21	08 A.M. AST
JUNE 23	07	53	51.7	60.70 N.	152.14 W.	106	...	...	...	...	G	JUNE 22	09 P.M. AST
JUNE 24	12	43	37.8	66.87 N.	146.27 W.	98	...	...	...	...	G	JUNE 24	02 A.M. AST
JUNE 24	13	36	59.2	61.97 N.	150.90 W.	73	4.8	...	...	III	G	JUNE 24	03 A.M. AST
JUNE 28	02	12	43.1	66.03 N.	148.01 W.	33N	...	...	3.3M	...	G	JUNE 27	04 P.M. AST
JUNE 30	01	44	21.6	60.66 N.	149.73 W.	21	...	...	3.1M	...	G	JUNE 29	03 P.M. AST
JUNE 30	02	12	54.3	61.51 N.	151.64 W.	102	3.7	...	...	...	G	JUNE 29	04 P.M. AST
ARIZONA													
APR. 19	23	35	45.5	35.39 N.	109.10 W.	5	...	...	3.5G	V	G	APR. 19	04 P.M. MST
MAY 4	10	06	34.8	34.70 N.	112.53 W.	10	...	...	3.0G	II	G	MAY 4	03 A.M. MST
CALIFORNIA													
APR. 3	16	12	21.5	39.52 N.	120.73 W.	5	...	...	3.3B	...	B	APR. 3	08 A.M. PST
APR. 8	15	21	38.1	34.35 N.	118.67 W.	15	4.7	3.9	4.6P	VI	P	APR. 8	07 A.M. PST
APR. 14	03	53	02.5	32.87 N.	115.50 W.	14	...	...	3.4P	...	P	APR. 13	07 P.M. PST
APR. 14	04	24	32.6	33.00 N.	115.52 W.	8	...	...	3.0P	...	P	APR. 13	08 P.M. PST
APR. 14	06	56	03.9	32.87 N.	115.48 W.	14	4.2	...	3.8P	III	P	APR. 13	10 P.M. PST
APR. 14	07	59	27.8	32.88 N.	115.55 W.	8	...	...	3.6P	III	P	APR. 13	11 P.M. PST
APR. 14	10	31	00.8	32.88 N.	115.48 W.	8	4.0	...	3.9P	III	P	APR. 14	02 A.M. PST
APR. 14	10	47	53.6	32.93 N.	115.55 W.	8	...	...	3.7P	III	P	APR. 14	02 A.M. PST
APR. 14	13	23	59.4	33.12 N.	115.50 W.	19	...	...	3.3P	III	P	APR. 14	05 A.M. PST
APR. 14	22	57	02.5	33.90 N.	115.54 W.	3	...	...	3.1F	...	F	APR. 14	02 P.M. PST
APR. 15	04	59	32.8	34.37 N.	118.67 W.	15	...	...	3.1P	II	P	APR. 14	08 P.M. PST
APR. 16	17	07	34.3	36.39 N.	120.36 W.	8	...	...	3.2P	...	P	APR. 16	09 A.M. PST
APR. 16	17	11	50.6	39.56 N.	121.61 W.	5	...	...	2.9B	II	B	APR. 16	09 A.M. PST
APR. 16	19	46	28.3	33.29 N.	118.53 W.	12	...	...	3.1P	...	P	APR. 16	11 A.M. PST
APR. 17	04	16	20.4	34.00 N.	116.72 W.	14	...	...	3.0P	...	P	APR. 16	08 P.M. PST
APR. 17	18	08	48.9	32.75 N.	115.41 W.	15	...	...	3.1F	...	F	APR. 17	10 A.M. PST
APR. 18	05	12	51.1	37.27 N.	118.65 W.	5	...	...	3.1B	...	G	APR. 17	09 P.M. PST
APR. 23	03	07	02.1	37.41 N.	118.49 W.	5	...	...	3.3B	...	G	APR. 22	07 P.M. PST
APR. 25	17	51	08.4	33.74 N.	118.02 W.	11	...	...	3.0P	III	P	APR. 25	09 A.M. PST
APR. 26	06	46	36.5	33.13 N.	115.67 W.	2	...	...	3.8P	III	P	APR. 25	10 P.M. PST
MAY 2	07	21	01.6	34.36 N.	118.67 W.	15	...	...	3.1P	...	P	MAY 1	11 P.M. PST
MAY 2	08	23	03.9	34.36 N.	117.02 W.	7	3.0	...	3.0P	...	P	MAY 2	12 A.M. PST
MAY 2	13	56	59.3	34.37 N.	117.02 W.	6	...	...	2.9P	...	P	MAY 2	05 A.M. PST
MAY 3	05	42	38.9	38.14 N.	121.95 W.	26	...	...	3.4B	VI	B	MAY 2	09 P.M. PST
MAY 7	14	49	30.7	34.05 N.	116.70 W.	8	...	...	3.0P	...	P	MAY 7	06 A.M. PST
MAY 9	04	14	35.6	37.20 N.	118.28 W.	5	...	...	3.0B	...	G	MAY 8	08 P.M. PST
MAY 10	10	24	24.0	34.46 N.	116.88 W.	8	3.8	...	3.6P	IV	P	MAY 10	02 A.M. PST
MAY 12	01	54	39.0	34.36 N.	118.67 W.	14	...	...	3.2P	III	P	MAY 11	05 P.M. PST
MAY 12	03	32	06.7	34.36 N.	118.66 W.	15	...	...	3.1P	III	P	MAY 11	07 P.M. PST
MAY 19	23	06	36.1	33.90 N.	115.55 W.	3	...	...	3.0F	...	F	MAY 19	03 P.M. PST
MAY 20	04	32	38.6	36.89 N.	121.49 W.	2	...	...	3.0B	V	B	MAY 19	08 P.M. PST
MAY 23	13	30	20.4	33.67 N.	116.80 W.	17	...	...	3.3P	...	P	MAY 23	05 A.M. PST
MAY 27	09	37	40.8	32.88 N.	115.43 W.	13	3.6	...	3.4P	...	P	MAY 27	01 A.M. PST
MAY 27	17	01	07.4	38.39 N.	122.68 W.	2	...	...	3.4B	IV	B	MAY 27	09 A.M. PST
MAY 28	21	52	34.8	33.89 N.	115.54 W.	4	...	...	3.0F	...	F	MAY 28	01 P.M. PST
MAY 29	20	38	05.9	34.27 N.	117.50 W.	10	...	...	3.0P	...	P	MAY 29	12 P.M. PST
JUNE 3	14	50	24.2	35.86 N.	120.29 W.	5	...	...	3.2P	...	G	JUNE 3	06 A.M. PST

Table 1.—*Summary of U.S. earthquakes for April-June 1976*—Continued

Date (1976)	Origin time (UTC) hr min s	Lat	Long	Depth (km)	Magnitude mb	Magnitude MS	Magnitude ML or mbLg	Maximum intensity	Hypocenter source	Local time Date	Local time Hour
CALIFORNIA--Continued											
JUNE 10	21 53 33.6	33.90 N.	115.54 W.	2	...	...	3.1F	...	F	JUNE 10	01 P.M. PST
JUNE 13	06 12 12.9	37.12 N.	121.57 W.	6	...	...	3.2B	...	B	JUNE 12	10 P.M. PST
JUNE 14	23 30 26.5	39.47 N.	121.54 W.	7	3.9	...	3.8B	V	B	JUNE 14	03 P.M. PST
JUNE 17	11 04 55.3	35.33 N.	118.60 W.	4	...	...	3.0P	...	P	JUNE 17	03 A.M. PST
JUNE 17	21 35 45.3	34.40 N.	116.37 W.	8	...	...	3.0P	...	P	JUNE 17	01 P.M. PST
JUNE 19	10 26 55.7	36.62 N.	116.35 W.	5	...	...	3.8P	...	G	JUNE 19	02 A.M. PST
JUNE 20	00 51 29.5	34.00 N.	118.80 W.	15	...	...	3.1P	...	P	JUNE 19	04 P.M. PST
JUNE 20	10 15 24.8	40.43 N.	120.57 W.	5	4.4	...	4.5B	V	B	JUNE 20	02 A.M. PST
JUNE 23	22 30 21.6	33.88 N.	115.51 W.	0	...	...	3.3F	...	F	JUNE 23	02 P.M. PST
JUNE 24	04 15 17.0	36.17 N.	118.27 W.	8	...	...	3.0G	...	G	JUNE 23	08 P.M. PST
JUNE 24	15 44 45.4	40.39 N.	120.59 W.	5	4.7	...	4.2B	V	B	JUNE 24	07 A.M. PST
JUNE 27	22 11 36.7	34.05 N.	118.30 W.	8	...	...	2.9P	III	P	JUNE 27	02 P.M. PST
JUNE 28	11 45 05.4	34.00 N.	116.58 W.	8	...	...	3.0F	...	F	JUNE 28	03 A.M. PST
JUNE 29	06 44 54.8	33.96 N.	116.58 W.	8	...	...	3.0P	II	P	JUNE 28	10 P.M. PST
CALIFORNIA--OFF THE COAST											
APR. 7	06 54 37.0	41.80 N.	126.67 W.	33N	4.5	...	3.6B	...	G	APR. 6	10 P.M. PST
APR. 9	03 49 49.0	41.88 N.	126.81 W.	27	4.9	4.1	3.8B	...	G	APR. 8	07 P.M. PST
APR. 11	08 56 25.6	32.73 N.	118.07 W.	1	...	...	3.0P	...	P	APR. 11	12 A.M. PST
MAY 4	20 37 19.1	41.85 N.	126.22 W.	33N	4.8	4.3	4.3B	...	G	MAY 4	12 P.M. PST
MAY 22	00 51 41.4	40.40 N.	125.35 W.	33N	3.9	...	3.4B	V	G	MAY 21	04 P.M. PST
COLORADO											
MAY 30	01 43 37.3	37.41 N.	104.02 W.	5	...	...	3.0G	...	G	MAY 29	06 P.M. MST
CONNECTICUT											
APR. 24	10 22 22.1	41.68 N.	72.49 W.	0	...	...	2.2C	IV	C	APR. 24	05 A.M. EST
HAWAII											
APR. 2	18 14 06.4	19.35 N.	155.11 W.	9	4.5	...	4.6H	V	H	APR. 2	08 A.M. HST
APR. 2	19 14 11.9	19.62 N.	155.99 W.	10	...	...	3.4H	III	H	APR. 2	09 A.M. HST
APR. 2	19 55 03.3	19.34 N.	155.22 W.	8	...	...	3.6H	III	H	APR. 2	09 A.M. HST
APR. 3	11 43 42.2	19.40 N.	155.28 W.	4	...	...	3.0H	III	H	APR. 3	01 A.M. HST
APR. 6	13 12 52.0	19.35 N.	155.21 W.	9	...	...	3.4H	...	H	APR. 6	03 A.M. HST
APR. 8	20 54 21.0	19.16 N.	155.19 W.	35	...	...	3.2H	...	H	APR. 8	10 A.M. HST
APR. 11	15 48 21.4	19.41 N.	155.21 W.	2	...	...	2.3H	III	H	APR. 11	05 A.M. HST
APR. 12	01 35 49.2	19.35 N.	155.06 W.	6	...	...	3.4H	II	H	APR. 11	03 P.M. HST
APR. 15	08 01 36.0	19.46 N.	154.89 W.	9	...	...	3.3H	III	H	APR. 14	10 P.M. HST
APR. 20	17 11 03.0	19.36 N.	155.25 W.	9	...	...	3.5H	II	H	APR. 20	07 A.M. HST
APR. 22	04 13 34.5	18.80 N.	155.00 W.	49	...	...	4.6H	III	H	APR. 21	06 P.M. HST
APR. 22	15 54 04.8	19.53 N.	155.31 W.	12	...	...	3.4H	II	H	APR. 22	05 A.M. HST
APR. 22	18 33 00.9	19.31 N.	155.34 W.	10	...	...	3.4H	...	H	APR. 22	08 A.M. HST
APR. 23	22 29 53.7	19.37 N.	155.09 W.	9	...	...	4.2H	III	H	APR. 23	12 P.M. HST
APR. 27	07 44 41.6	19.39 N.	155.28 W.	6	...	...	3.2H	III	H	APR. 26	09 P.M. HST
APR. 27	23 40 12.1	19.41 N.	155.26 W.	2	...	...	2.6H	II	H	APR. 27	01 P.M. HST
MAY 2	04 52 04.8	19.31 N.	155.39 W.	8	...	...	3.2H	...	H	MAY 1	06 P.M. HST
MAY 6	04 32 20.3	19.40 N.	155.27 W.	2	...	...	2.2H	II	H	MAY 5	06 P.M. HST
MAY 9	16 14 43.3	19.36 N.	155.13 W.	10	...	...	3.4H	II	H	MAY 9	06 A.M. HST
MAY 10	18 27 04.4	19.39 N.	155.08 W.	8	...	...	3.5H	...	H	MAY 10	08 A.M. HST
MAY 12	15 55 11.4	19.34 N.	155.19 W.	10	...	...	3.7H	III	H	MAY 12	05 A.M. HST
MAY 14	19 12 42.0	19.29 N.	155.51 W.	9	...	...	3.1H	...	H	MAY 14	09 A.M. HST
MAY 16	07 39 58.5	19.43 N.	155.28 W.	5	...	...	2.7H	III	H	MAY 15	09 P.M. HST
MAY 17	11 45 06.0	19.33 N.	155.27 W.	10	...	...	3.6H	III	H	MAY 17	01 A.M. HST
MAY 18	06 54 49.1	19.33 N.	155.14 W.	9	...	...	3.0H	II	H	MAY 17	08 P.M. HST
MAY 18	07 36 18.5	19.34 N.	155.08 W.	8	...	...	3.1H	...	H	MAY 17	09 P.M. HST
MAY 18	16 16 41.2	19.33 N.	155.13 W.	9	...	...	3.5H	III	H	MAY 18	06 A.M. HST
MAY 20	03 12 05.4	19.33 N.	155.13 W.	9	...	...	3.8H	III	H	MAY 19	05 P.M. HST
MAY 22	05 53 09.7	19.35 N.	155.10 W.	9	...	...	3.2H	II	H	MAY 21	07 P.M. HST
MAY 23	04 52 08.3	19.36 N.	155.25 W.	11	...	...	3.7H	III	H	MAY 22	06 P.M. HST
MAY 24	03 31 20.1	19.34 N.	155.12 W.	9	...	...	4.0H	III	H	MAY 23	05 P.M. HST
MAY 24	09 24 08.2	20.80 N.	156.24 W.	0	...	...	4.1H	V	H	MAY 23	11 P.M. HST
MAY 24	09 24 20.5	20.06 N.	155.80 W.	6	...	...	3.6H	III	H	MAY 23	11 P.M. HST
MAY 27	08 33 07.4	19.43 N.	155.40 W.	9	...	...	3.1H	...	H	MAY 26	10 P.M. HST
MAY 28	22 08 45.4	19.38 N.	155.08 W.	9	...	...	3.3H	...	H	MAY 28	12 P.M. HST

Table 1.—*Summary of U.S. earthquakes for April-June 1976*—Continued

Date (1976)	Origin time (UTC) hr	min	s	Lat	Long	Depth (km)	Magnitude mb	MS	ML or mbLg	Maximum intensity	Hypocenter source	Local time Date	Hour
HAWAII--Continued													
MAY 31	16	27	23.3	20.12 N.	155.76 W.	29	...	...	3.5H	III	H	MAY 31	06 A.M. HST
MAY 31	18	32	18.8	19.52 N.	156.24 W.	17	...	...	4.5H	IV	H	MAY 31	08 A.M. HST
MAY 31	18	32	24.9	19.55 N.	155.59 W.	2	...	...	3.7H	III	H	MAY 31	08 A.M. HST
JUNE 1	20	02	22.0	19.36 N.	155.20 W.	1	...	...	2.7H	II	H	JUNE 1	10 A.M. HST
JUNE 2	02	16	16.3	19.70 N.	155.05 W.	2	...	...	3.0H	...	H	JUNE 1	04 A.M. HST
JUNE 5	08	50	51.2	19.36 N.	155.12 W.	9	...	...	4.1H	III	H	JUNE 4	10 P.M. HST
JUNE 6	13	43	14.8	19.32 N.	155.27 W.	9	...	...	3.1H	...	H	JUNE 6	03 A.M. HST
JUNE 7	20	39	37.5	19.32 N.	155.26 W.	31	...	...	3.5H	...	H	JUNE 7	10 A.M. HST
JUNE 9	21	03	42.6	19.22 N.	155.46 W.	10	...	...	2.7H	II	H	JUNE 9	11 A.M. HST
JUNE 10	10	15	03.8	19.34 N.	155.12 W.	9	...	...	3.3H	...	H	JUNE 10	12 A.M. HST
JUNE 11	08	05	05.1	19.33 N.	155.14 W.	9	...	...	3.2H	...	H	JUNE 10	10 P.M. HST
JUNE 12	22	42	15.4	19.34 N.	155.13 W.	9	...	...	3.1H	...	H	JUNE 12	12 P.M. HST
JUNE 14	00	21	40.9	19.34 N.	155.14 W.	9	...	...	3.0H	...	H	JUNE 13	02 P.M. HST
JUNE 15	00	17	15.2	19.41 N.	155.26 W.	4	...	...	3.2H	II	H	JUNE 14	02 P.M. HST
JUNE 15	15	00	32.4	19.46 N.	155.48 W.	10	...	...	3.4H	II	H	JUNE 15	05 A.M. HST
JUNE 16	19	17	15.8	19.36 N.	155.08 W.	8	...	...	3.4H	II	H	JUNE 16	09 A.M. HST
JUNE 18	22	01	11.6	19.38 N.	155.10 W.	8	...	...	3.4H	II	H	JUNE 18	12 P.M. HST
JUNE 20	10	25	11.3	19.39 N.	155.25 W.	5	...	...	3.1H	III	H	JUNE 20	12 A.M. HST
JUNE 20	13	06	23.7	19.19 N.	155.55 W.	10	...	...	3.1H	III	H	JUNE 20	03 A.M. HST
JUNE 22	00	27	49.5	19.37 N.	155.22 W.	9	...	...	2.6H	II	H	JUNE 21	02 P.M. HST
JUNE 22	01	39	05.6	19.37 N.	155.22 W.	8	...	...	3.0H	...	H	JUNE 21	03 P.M. HST
JUNE 22	04	16	27.2	19.37 N.	155.22 W.	6	...	...	3.1H	III	H	JUNE 21	06 P.M. HST
JUNE 22	05	03	34.1	19.37 N.	155.22 W.	7	...	...	3.4H	...	H	JUNE 21	07 P.M. HST
JUNE 22	05	36	29.8	19.37 N.	155.22 W.	7	...	...	3.1H	...	H	JUNE 21	07 P.M. HST
JUNE 22	06	00	34.7	19.37 N.	155.22 W.	6	...	...	3.3H	III	H	JUNE 21	08 P.M. HST
JUNE 22	06	15	12.0	19.38 N.	155.09 W.	9	...	...	3.2H	...	H	JUNE 21	08 P.M. HST
JUNE 22	07	27	28.9	19.39 N.	155.25 W.	2	...	...	3.0H	II	H	JUNE 21	09 P.M. HST
JUNE 22	13	04	39.6	19.38 N.	155.24 W.	3	...	...	3.2H	III	H	JUNE 22	03 A.M. HST
JUNE 22	13	41	09.9	19.39 N.	155.24 W.	6	...	...	3.0H	...	H	JUNE 22	03 A.M. HST
JUNE 25	05	47	53.7	19.34 N.	155.02 W.	9	...	...	3.6H	III	H	JUNE 24	07 P.M. HST
JUNE 25	11	29	52.5	19.39 N.	155.28 W.	4	...	...	2.5H	II	H	JUNE 25	01 A.M. HST
IDAHO													
JUNE 14	09	37	57.8	42.12 N.	112.48 W.	7	...	...	3.6U	IV	U	JUNE 14	02 A.M. MST
JUNE 15	14	57	31.8	44.64 N.	114.57 W.	5	...	...	3.7G	...	G	JUNE 15	07 A.M. MST
INDIANA													
APR. 8	07	38	53.0	39.35 N.	86.68 W.	20	...	...	3.0G	V	G	APR. 8	02 A.M. EST
KENTUCKY													
APR. 15	07	03	34.9	37.41 N.	87.31 W.	15	...	...	3.3V	V	G	APR. 15	01 A.M. CST
MAINE													
APR. 15	10	36	04.8	44.24 N.	70.14 W.	0	...	...	2.4J	III	J	APR. 15	05 A.M. EST
MASSACHUSETTS													
MAY 10	01	34	20.5	41.54 N.	71.01 W.	0	...	...	2.7C	V	C	MAY 9	08 P.M. EST
MISSOURI													
MAY 22	07	40	46.0	36.04 N.	89.84 W.	10	...	...	3.2S	V	S	MAY 22	01 A.M. CST
MONTANA													
APR. 5	02	40	07.4	46.13 N.	111.68 W.	5	...	...	3.8D	IV	G	APR. 4	07 P.M. MST
APR. 16	15	08	28.3	45.63 N.	111.62 W.	5	...	...	3.2D	...	G	APR. 16	08 A.M. MST
APR. 18	08	27	14.0	47.87 N.	114.22 W.	5	...	...	...	...	G	APR. 18	01 A.M. MST
APR. 18	23	05	55.5	44.72 N.	111.77 W.	11	...	...	3.2A	...	G	APR. 18	04 P.M. MST
APR. 19	22	05	52.0	44.76 N.	111.17 W.	5	...	...	3.3A	...	G	APR. 19	03 P.M. MST

Table 1.—*Summary of U.S. earthquakes for April–June 1976*—Continued

Date (1976)	Origin time (UTC) hr min s	Lat	Long	Depth (km)	Magnitude mb	MS	ML or mbLg	Maximum intensity	Hypocenter source	Local time Date	Hour
				MONTANA--Continued							
APR. 19	22 50 29.0	44.79 N.	111.56 W.	5	...	...	2.9A	...	G	APR. 19	03 P.M. MST
APR. 24	08 49 12.0	48.26 N.	114.09 W.	5	...	...	2.9G	II	G	APR. 24	01 A.M. MST
JUNE 11	06 43 39.3	45.82 N.	111.40 W.	5	...	...	3.1A	...	G	JUNE 10	11 P.M. MST
				NEVADA							
APR. 2	12 56 35.5	39.57 N.	117.67 W.	5	...	...	4.1B	...	G	APR. 2	04 A.M. PST
MAY 8	13 16 38.1	37.30 N.	116.31 W.	5	...	...	3.0G	...	G	MAY 8	05 A.M. PST
MAY 12	19 50 00.2	37.21 N.	116.21 W.	0	4.9	...	4.6B	...	A	MAY 12	11 A.M. PST
MAY 20	17 30 00.2	37.14 N.	116.02 W.	5	...	...	...	...	G	MAY 20	09 A.M. PST
JUNE 1	10 24 42.5	36.58 N.	116.37 W.	5	...	...	3.5B	...	G	JUNE 1	02 A.M. PST
JUNE 6	12 45 03.2	36.66 N.	116.34 W.	5	...	...	3.5B	...	G	JUNE 6	04 A.M. PST
JUNE 7	00 32 38.6	36.58 N.	116.37 W.	5	...	...	4.1B	...	G	JUNE 6	04 P.M. PST
JUNE 7	00 37 13.1	36.60 N.	116.33 W.	5	4.0	...	4.1B	...	G	JUNE 6	04 P.M. PST
JUNE 10	10 39 35.9	39.63 N.	115.85 W.	2	...	...	...	V	G	JUNE 10	02 A.M. PST
JUNE 14	19 57 10.9	39.01 N.	118.18 W.	5	...	...	...	...	G	JUNE 14	11 A.M. PST
JUNE 20	18 31 02.1	36.50 N.	116.38 W.	1	...	...	3.0P	...	P	JUNE 20	10 A.M. PST
JUNE 24	00 24 45.1	39.45 N.	119.53 W.	2	...	...	3.5B	V	G	JUNE 23	04 P.M. PST
JUNE 29	13 10 48.8	39.45 N.	119.54 W.	6	...	...	3.5B	IV	G	JUNE 29	05 A.M. PST
JUNE 29	17 12 11.8	39.43 N.	119.55 W.	7	...	...	3.0G	...	G	JUNE 29	09 A.M. PST
				NEW JERSEY							
APR. 13	15 39 13.2	40.84 N.	74.05 W.	2	...	...	3.1L	VI	L	APR. 13	10 A.M. EST
				NEW MEXICO							
MAY 20	19 43 21.9	35.47 N.	109.04 W.	5	...	...	2.5G	II	G	MAY 20	12 P.M. MST
JUNE 24	15 27 32.0	35.62 N.	103.28 W.	5	...	...	3.5G	V	G	JUNE 24	08 A.M. MST
				OKLAHOMA							
APR. 16	18 59 44.2	36.11 N.	99.88 W.	5	...	...	3.4T	IV	G	APR. 16	12 P.M. CST
APR. 17	02 48	34.10 N.	94.79 W.	..	...	...	2.4T	II	T	APR. 16	08 P.M. CST
APR. 19	04 42 42.2	36.13 N.	99.84 W.	5	...	...	3.5T	IV	G	APR. 18	10 P.M. CST
				OREGON							
APR. 8	10 14 50.2	44.97 N.	120.80 W.	15	...	...	...	...	G	APR. 8	02 A.M. PST
APR. 13	00 47 17.1	45.22 N.	120.77 W.	15	4.5	3.3	4.8G	VI	G	APR. 12	04 P.M. PST
APR. 17	02 11 44.4	45.08 N.	120.80 W.	15	...	...	4.2G	II	G	APR. 16	06 P.M. PST
				OREGON--OFF THE COAST							
APR. 20	02 59 36.2	44.32 N.	129.73 W.	33N	4.5	...	...	...	G	APR. 19	06 P.M. PST
APR. 22	04 21 39.1	43.64 N.	127.01 W.	33N	4.2	3.4	...	...	G	APR. 21	08 P.M. PST
APR. 26	13 58 20.2	44.30 N.	128.72 W.	33N	4.7	3.4	...	...	G	APR. 26	05 A.M. PST
APR. 26	14 39 09.6	44.27 N.	128.56 W.	33N	4.5	...	...	...	G	APR. 26	06 A.M. PST
APR. 26	17 18 28.1	44.23 N.	128.51 W.	33N	4.7	...	...	...	G	APR. 26	09 A.M. PST
JUNE 26	11 12 55.3	43.76 N.	127.75 W.	33N	4.6	...	...	...	G	JUNE 26	03 A.M. PST
				UTAH							
JUNE 15	02 08 10.4	41.89 N.	112.44 W.	1	...	...	3.1U	III	U	JUNE 14	07 P.M. MST
				WEST VIRGINIA							
JUNE 19	05 54 13.9	37.36 N.	81.62 W.	5	...	...	3.0V	V	G	JUNE 19	12 A.M. EST
				WYOMING							
JUNE 7	04 48	NEAR MADISON JUNCTION		..	...	...	...	V	.	JUNE 6	09 P.M. MST
JUNE 7	12 07	NEAR MADISON JUNCTION		..	...	...	...	V	.	JUNE 7	05 A.M. MST

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*

[Sources of the hypocenter and magnitudes: (A) U.S. Energy Research and Development Administration; (B) University of California, Berkeley; (C) University of Connecticut, Groton; (D) University of Montana, Missoula; (E) California Department of Water Resources; (G) U.S. Geological Survey, National Earthquake Information Service; (H) U.S. Geological Survey, Hawaiian Volcano Observatory; (J) Weston Observatory, Weston, Massachusetts; (L) Lamont-Doherty Geological Obseryatory, Palisades, New York; (M) NOAA, Alaska Tsunami Warning Center, Palmer; (P) California Institute of Technology, Pasadena; (S) St. Louis University, St. Louis, Missouri; (T) University of Oklahoma, Leonard; (U) University of Utah, Salt Lake City; (V) Virginia Polytechnic Institute and State University, Blacksburg; (W) University of Washington, Seattle; (Z) Oregon State University Tech. Report GTR 760915 (Couch and Farooqui, 1976). Dates and origin times are listed in Universal Coordinated Time (UTC), giving the hour, minute, and second. Epicenters are shown in decimal degrees. Only earthquakes with intensity data and explosions are listed]

Alaska

11 April Central Alaska
- Origin time: 07 36
- Epicenter: Not located.
- Depth: None computed.
- Magnitude: None computed.
- Intensity IV: College.

14 April (G) Central Alaska
- Origin time: 04 16 16.3
- Epicenter: 62.15 N., 150.26 W.
- Depth: Normal
- Magnitude: 3.1 ML(M)
- Intensity IV: Talkeetna.

17 April (G) Central Alaska
- Origin time: 06 08 44.5
- Epicenter: 64.90 N., 148.31 W.
- Depth: Normal
- Magnitude: 4.0 ML(M)
- Intensity V: Fairbanks.
- Intensity II: North Pole.

25 April (G) Central Alaska
- Origin time: 10 12 09.4
- Epicenter: 64.79 N., 147.67 W.
- Depth: 34 km
- Magnitude: 3.3 ML(M)
- Intensity V: Fairbanks.

27 April (G) Central Alaska
- Origin time: 11 26 57.5
- Epicenter: 64.81 N., 147.49 W.
- Depth: Normal
- Magnitude: 3.8 ML(M)
- Intensity V: Fairbanks.

27 April (G) Central Alaska
- Origin time: 11 34 20.0
- Epicenter: 64.73 N., 147.58 W.
- Depth: 29 km
- Magnitude: 3.0 ML(M)
- Intensity V: Fairbanks.

8 May (G) Southern Alaska
- Origin time: 11 25 36.3
- Epicenter: 61.62 N., 151.52 W.
- Depth: 16 km
- Magnitude: 4.4 mb, 4.4 ML(M)

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*—Continued

Alaska-Continued

- Intensity IV: Kenai.
- Intensity II: Talkeetna.

9 May (G) Southern Alaska
- Origin time: 00 09 50.7
- Epicenter: 59.86 N., 153.07 W.
- Depth: 38 km
- Magnitude: 4.7 mb, 3.9 ML(M)
- Intensity IV: Homer, Iliamna.

11 May (G) Southern Alaska
- Origin time: 16 46 15.8
- Epicenter: 61.49 N., 146.97 W.
- Depth: 67 km
- Magnitude: 4.2 mb
- Intensity III: Valdez.

26 May (G) Kodiak Island Region
- Origin time: 17 38 22.2
- Epicenter: 57.97 N., 153.30 W.
- Depth: Normal
- Magnitude: 4.5 mb
- Intensity III: Kodiak Island.

1 June (G) Central Alaska
- Origin time: 16 30 55.5
- Epicenter: 64.70 N., 147.80 W.
- Depth: 9 km
- Magnitude: 2.9 ML(M)
- Intensity II: Epicentral region.

10 June (G) Andreanof Islands, Aleutian Islands
- Origin time: 08 57 59.6
- Epicenter: 51.52 N., 176.54 W.
- Depth: 58 km
- Magnitude: 4.5 mb
- Intensity II: Adak.

14 June (G) Andreanof Islands, Aleutian Islands
- Origin time: 12 39 39.0
- Epicenter: 51.47 N., 176.85 W.
- Depth: 50 km
- Magnitude: 4.1 mb
- Intensity III: Adak.

24 June (G) Central Alaska
- Origin time: 13 36 59.2
- Epicenter: 61.97 N., 150.90 W.
- Depth: 73 km
- Magnitude: 4.8 mb
- Intensity III: Talkeetna.

Arizona

19 April (G) Northeastern Arizona
- Origin time: 23 35 45.5
- Epicenter: 35.39 N., 109.10 W.
- Depth: 5 km
- Magnitude: 3.5 ML

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

Arizona--Continued

This may have been an explosion in the Four Corners area.

Intensity V: St. Michaels.
Intensity IV: Window Rock.

4 May (G) Western Arizona
Origin time: 10 06 34.8
Epicenter: 34.70 N., 112.54 W.
Depth: 10 km
Magnitude: 3.0 ML
Intensity II: Prescott.

California

8 April (P) Southern California
Origin time: 15 21 38.1
Epicenter: 34.35 N., 118.67 W.
Depth: 15 km
Magnitude: 4.7 mb(G), 3.9 MS(G), 4.8 ML(B), 4.6 ML

An area around the epicenter having a radius of 250 km was canvassed, and 842 questionnaires were mailed. The quake was felt from Bakersfield to San Diego, as shown in figure 7.

Intensity VI: Granada Hills, Inglewood, Palmdale, Sylmar.
Intensity V: Agoura, Arcadia, Calabasas, Chatsworth, Compton, Culver City, Encino, Frazier Park, Julian, Llano, Los Angeles, Manhattan Beach, Newbury Park, Pacoima, Palos Verdes Peninsula, Piru, Reseda, San Fernando, Santa Paula, Saugus, Sepulveda, Sierra Madre, Simi Valley, South Pasadena, Surfside, Sunset Beach, Tarzana.
Intensity IV: Altadena, Bakersfield, Burbank, Camarillo, Canoga Park, Carpinteria, Fillmore, Hawthorne, Hermosa Beach, Lake Arrowhead, Lake Hughes, Lebec, Lomita, Long Beach, Lynwood, Malibu, Maricopa, Midway City, Mojave, Montebello, Moorpark, North Hollywood, Northridge, Pacific Palisades, Pearblossom, San Diego, San Gabriel, Santa Monica, Seal Beach, Sun Valley, Thousand Oaks, Topanga, Valyermo, Ventura.
Intensity III: Juniper Hills, Lakewood, Monrovia, Montrose, New Cuyama, Oxnard, San Bernardino, Venice, Woodland Hills.
Intensity II: Balboa Beach area (press report), Hollywood (press report), Newhall (press report), San Pedro, Santa Barbara (press report).

14 April (P) Southern California
Origin time: 06 56 03.9
Epicenter: 32.87 N., 115.48 W.
Depth: 14 km
Magnitude: 4.2 mb(G), 3.8 ML

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

California--Continued

Intensity III: El Centro.
Intensity II: Brawley.

The press reported that a swarm of 100 small earthquakes occurred in Imperial Valley following this earthquake.

14 April (P) Southern California
Origin time: 07 59 27.8
Epicenter: 32.88 N., 115.55 W.
Depth: 8 km
Magnitude: 3.6 ML
Intensity III: El Centro.
Intensity II: Brawley.

14 April (P) Southern California
Origin time: 10 31 00.8
Epicenter: 32.88 N., 115.48 W.
Depth: 8 km
Magnitude: 4.0 mb(G), 3.9 ML
Intensity III: El Centro.
Intensity II: Brawley.

14 April (P) Southern California
Origin time: 10 47 53.6
Epicenter: 32.93 N., 115.55 W.
Depth: 8 km
Magnitude: 3.7 ML
Intensity III: El Centro.
Intensity II: Brawley.

14 April (P) Southern California
Origin time: 13 23 59.4
Epicenter: 33.12 N., 115.50 W.
Depth: 19 km
Magnitude: 3.3 ML
Intensity III: El Centro.
Intensity II: Brawley.

15 April (P) Southern California
Origin time: 04 59 32.8
Epicenter: 34.37 N., 118.67 W.
Depth: 15 km
Magnitude: 3.1 ML
Intensity II: Woodland Hills.

16 April (B) Northern California
Origin time: 17 11 50.6
Epicenter: 39.56 N, 121.61 W
Depth: 5 km
Magnitude: 3.0 ML(E), 2.7 ML
Intensity II: Oroville area (press report).

25 April (P) Southern California
Origin time: 17 51 08.4
Epicenter: 33.74 N., 118.02 W.
Depth: 11 km
Magnitude: 3.0 ML
Intensity III: Huntington Harbor, Long Beach, Seal Beach, parts of Orange County (press report).
Intensity II: Cypress (press report).

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

California--Continued

26 April (P) Southern California
Origin time: 06 46 36.5
Epicenter: 33.13 N., 115.67 W.
Depth: 2 km
Magnitude: 3.8 ML
Intensity III: Brawley.

3 May (B) Northern California
Origin time: 05 42 38.9
Epicenter: 38.14 N., 121.95 W.
Depth: 26 km
Magnitude: 3.4 ML

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

California--Continued

Intensity VI: Fairfield.
Intensity V: Birds Landing, Clayton, Crockett, Orinda, Pittsburg, Port Costa, Suisun City, Vallejo, Yountville.
Intensity IV: Elmira, Rio Vista, Walnut Creek.
Intensity III: Martinez.
Intensity II: Concord, San Francisco, Vacaville.

10 May (P) Southern California
Origin time: 10 24 24.0

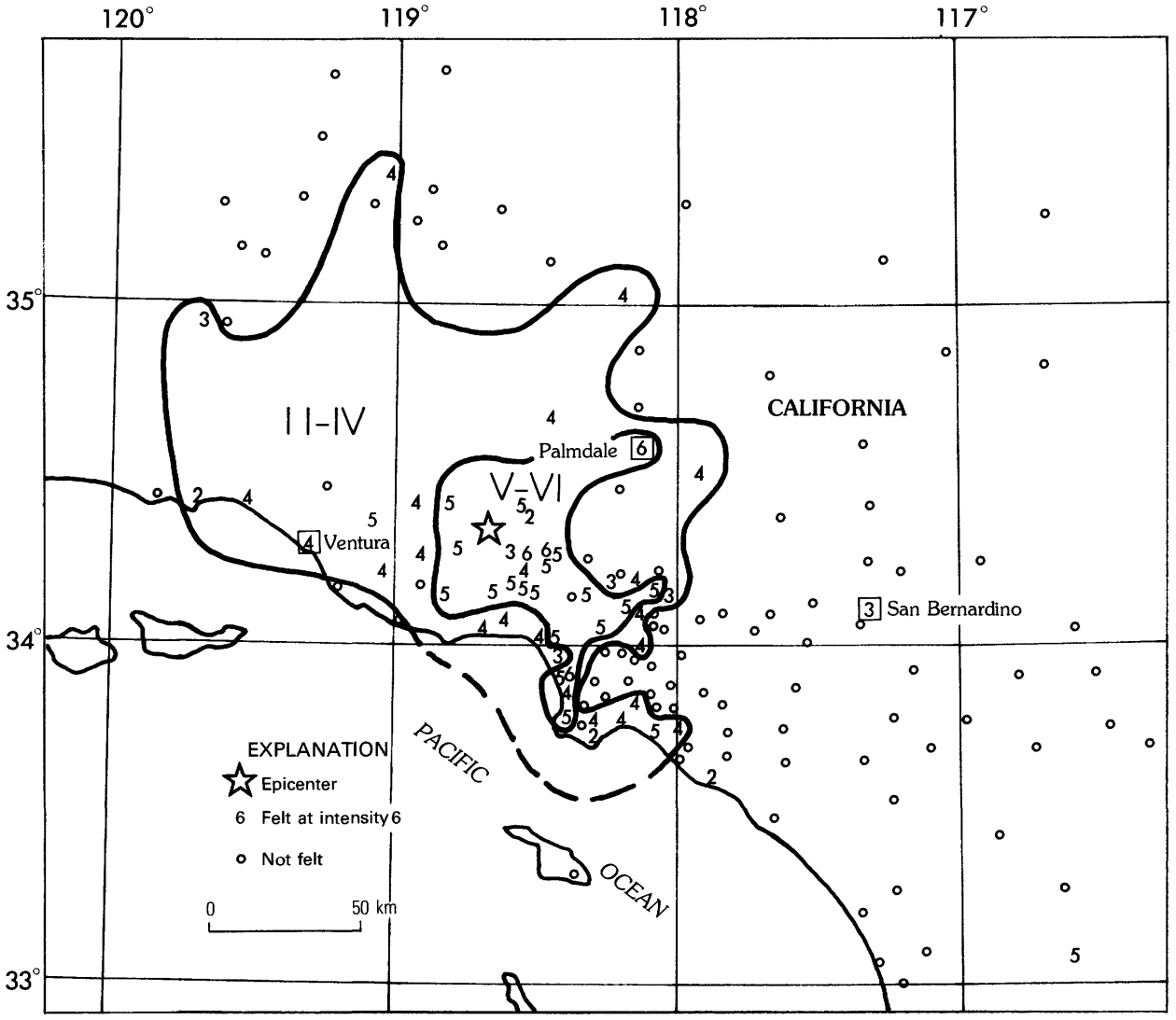

FIGURE 7.--Isoseismal map for the southern California earthquake of 8 April 1976, 15 21 38.1 UTC. Roman numerals represent Modified Mercalli intensities between isoseismals; Arabic numbers are used to represent these intensities at specific sites.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

California--Continued

Epicenter: 34.46 N., 116.88 W.
Depth: 8 km
Magnitude: 3.8 mb(G), 3.6 ML
Intensity IV: Victor Valley.
Intensity III: Lucerne Valley, Victorville.

12 May (P) Southern California
Origin time: 01 54 39.0
Epicenter: 34.36 N., 118.67 W.
Depth: 14 km
Magnitude: 3.2 ML
Intensity III: Canoga Park, Newhall.

12 May (P) Southern California
Origin time: 03 32 06.7
Epicenter: 34.36 N., 118.66 W.
Depth: 15 km
Magnitude: 3.1 ML
Intensity III: Canoga Park, Newhall, Simi Valley.

20 May (B) Central California
Origin time: 04 32 38.6
Epicenter: 36.89 N., 121.49 W.
Depth: 2 km
Magnitude: 3.0 ML
Intensity V: Hollister.
Intensity IV: Tres Pinos.
Intensity II: Mount Hermon.

27 May (B) Northern California
Origin time: 17 01 07.4
Epicenter: 38.39 N., 122.68 W.
Depth: 2 km
Magnitude: 3.4 ML
Intensity IV: Santa Rosa (10 km southeast).
Intensity III: Cotati (press report), Petaluma, Rohnert Park (press report).

14 June (B) Northern California
Origin time: 23 30 26.5
Epicenter: 39.47 N., 121.54 W.
Depth: 7 km
Magnitude: 3.9 mb(G), 3.8 ML

Intensity V: Biggs, Brownsville, Dobbins, Gold Run, Meadow Vista, Nelson, Palermo, Rackerby, Richardson Springs, Sheridan, Storrie, Wendel.
Intensity IV: Alta, Browns Valley, Challenge, Clipper Mills, College City, Durham, Forbestown, Gridley, Magalia, Milford, Nevada City, North San Juan, Oroville, Penn Valley, Pulga, Richvale, Smartville, Strawberry Valley (sudden loss of water flow from spring--unconfirmed), Taylorsville, Wheatland.
Intensity III: Twain.
Intensity II: Dutch Flat, Forest Ranch, Herlong.

20 June (B) Northern California
Origin time: 10 15 24.8

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

California--Continued

Epicenter: 40.43 N., 120.57 W.
Depth: 5 km
Magnitude: 4.4 mb(G), 4.5 ML

The quake appeared to be centered in the Honey Lake Valley area, about 150 km northwest of Reno, in Lassen County, Calif. (press report).
Intensity V: Objects knocked from walls and many awakened in the following communities (press report): Chilcoot, Eagle Lake, Janesville, Susanville, Washington, Westwood, Willow Creek.

24 June (B) Northern California
Origin time: 15 44 45.4
Epicenter: 40.39 N., 120.59 W.
Depth: 5 km
Magnitude: 4.7 mb(G), 4.2 ML
Intensity V: Litchfield, Standish, Susanville, Wendel.
Intensity IV: Janesville, Keddie.

27 June (P) Southern California
Origin time: 22 11 36.7
Epicenter: 34.05 N., 118.30 W.
Depth: 8 km
Magnitude: 2.9 ML

Intensity III: Beverly Hills, Culver City, Glendale, Griffith Park, Hollywood, Los Angeles (airport and downtown), Pasadena, Santa Monica, Venice, Wilshire-Crenshaw area (all press reports).

29 June (P) Southern California
Origin time: 06 44 54.6
Epicenter: 33.96 N., 116.58 W.
Depth: 8 km
Magnitude: 3.0 ML
Intensity II: Palm Springs.

California--Off the coast

22 May (G) Northern California
Origin time: 00 51 41.4
Epicenter: 40.40 N., 125.35 W.
Depth: Normal
Magnitude: 3.9 mb, 3.4 ML(B)
Intensity V: Fortuna.
Intensity IV: Miranda, Salmon Creek.

Connecticut

24 April (C) Central Connecticut
Origin time: 10 22 22.1
Epicenter: 41.68 N., 72.49 W.
Depth: 0 km
Magnitude: 2.2 mbLg

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

Connecticut--Continued

Smaller foreshock reported 6 April and an aftershock on 30 April (press report).

Intensity IV: Haddam, Shailerville (awakened a few people--press report).

Hawaii

The locations shown below that are followed by (H) designate intensity values assigned by the Hawaiian Volcano Observatory.

2 April (H) Island of Hawaii
Origin time: 18 14 06.4
Epicenter: 19.35 N., 155.11 W.
Depth: 9 km
Magnitude: 4.5 mb(G), 4.6 ML

Figure 8 shows the intensity distribution on Hawaii Island.

Intensity V: Holualoa, Honomu, Mountainview, Ookala, Papaaloa, Wheeler AFB.
Intensity IV: Captain Cook, Hawaii National Park, Hilo, Keaau, Kurtistown, Pahoa, Papaikou, Puna District (H), Volcano.
Intensity III: Kau District (H).
Intensity II: Hakalau, islandwide on Hawaii (H), Kamuela (H), Kona District (H).

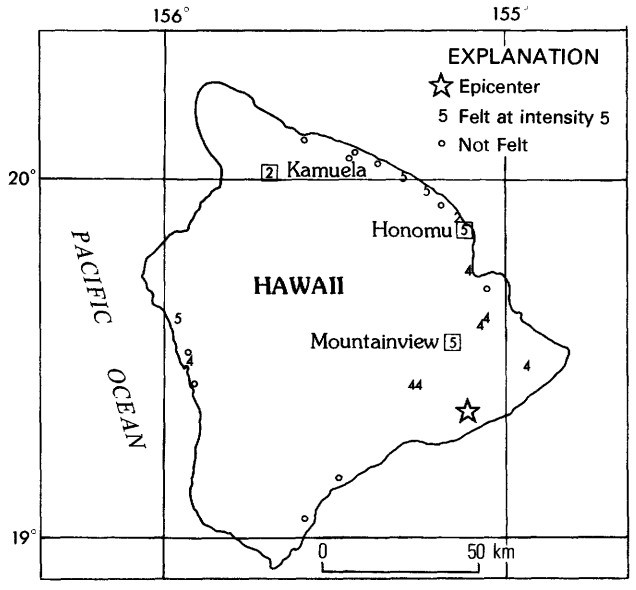

FIGURE 8.--Intensity map for the Island of Hawaii earthquake of 2 April 1976, 18 14 06.4 UTC. Arabic numbers are used to represent Modified Mercalli intensities at specific sites.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976*--Continued

Hawaii--Continued

2 April (H) Island of Hawaii
Origin time: 19 14 11.9
Epicenter: 19.62 N., 155.99 W.
Depth: 10 km
Magnitude: 3.4 ML
Intensity III: Captain Cook (H), Kealakekua (H).

2 April (H) Island of Hawaii
Origin time: 19 55 03.3
Epicenter: 19.34 N., 155.22 W.
Depth: 8 km
Magnitude: 3.6 ML
Intensity III: Hilo (H).
Intensity II: Volcano (H).

3 April (H) Island of Hawaii
Origin time: 11 43 42.2
Epicenter: 19.40 N., 155.28 W.
Depth: 4 km
Magnitude: 3.0 ML
Intensity III: Hawaii National Park (H).
Intensity II: Volcano (H).

11 April (H) Island of Hawaii
Origin time: 15 48 21.4
Epicenter: 19.41 N., 155.21 W.
Depth: 2 km
Magnitude: 2.3 ML
Intensity III: Hawaii National Park (H).
Intensity II: Volcano (H).

12 April (H) Island of Hawaii
Origin time: 01 35 49.2
Epicenter: 19.35 N., 155.06 W.
Depth: 6 km
Magnitude: 3.4 ML
Intensity II: Mountainview (H), Volcano (H).

15 April (H) Island of Hawaii
Origin time: 08 01 36.0
Epicenter: 19.46 N., 154.89 W.
Depth: 9 km
Magnitude: 3.3 ML
Intensity III: Pahoa (H).
Intensity II: Kapoho (H).

20 April (H) Island of Hawaii
Origin time: 17 11 03.0
Epicenter: 19.36 N., 155.25 W.
Depth: 9 km
Magnitude: 3.5 ML
Intensity II: Hilo (H).

22 April (H) Island of Hawaii
Origin time: 04 13 34.5
Epicenter: 18.80 N., 155.00 W.
Depth: 49 km
Magnitude: 4.6 ML
Intensity III: Hainakea, Hilo (H), Papaikou (H), Puna and South Kona areas (press report).
Intensity II: Glenwood (H), Oceanview Estate (H), Volcano (H).

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Hawaii--Continued

22 April (H) Island of Hawaii
Origin time: 15 54 04.8
Epicenter: 19.53 N., 155.31 W.
Depth: 12 km
Magnitude: 3.4 ML
Intensity II: Glenwood (H), Volcano (H).

23 April (H) Island of Hawaii
Origin time: 22 29 53.7
Epicenter: 19.37 N., 155.09 W.
Depth: 9 km
Magnitude: 4.2 ML
Intensity III: Hilo (H), Kalapana (H).
Intensity II: Hawaiian Volcano Observatory (H), Keaau (H), Mountainview (H).

27 April (H) Island of Hawaii
Origin time: 07 44 41.6
Epicenter: 19.39 N., 155.28 W.
Depth: 6 km
Magnitude: 3.2 ML
Intensity III: Hawaii National Park (H).
Intensity II: Volcano (H).

27 April (H) Island of Hawaii
Origin time: 23 40 12.1
Epicenter: 19.41 N., 155.26 W.
Depth: 2 km
Magnitude: 2.6 ML
Intensity II: Hawaii National Park (H).

6 May (H) Island of Hawaii
Origin time: 04 32 20.3
Epicenter: 19.40 N., 155.27 W.
Depth: 2 km
Magnitude: 2.2 ML
Intensity II: Hawaii National Park (H).

9 May (H) Island of Hawaii
Origin time: 16 14 43.3
Epicenter: 19.36 N., 155.13 W.
Depth: 10 km
Magnitude: 3.4 ML
Intensity II: Glenwood (H), Volcano (H).

12 May (H) Island of Hawaii
Origin time: 15 55 11.4
Epicenter: 19.34 N., 155.19 W.
Depth: 10 km
Magnitude: 3.7 ML(H)
Intensity III: Hilo.
Intensity II: Captain Cook (H), Glenwood (H), Papaikou (H), Volcano (H).

16 May (H) Island of Hawaii
Origin time: 07 39 58.5
Epicenter: 19.43 N., 155.28 W.
Depth: 5 km
Magnitude: 2.7 ML
Intensity III: Hawaii National Park (H).
Intensity II: Volcano (H).

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Hawaii--Continued

17 May (H) Island of Hawaii
Origin time: 11 45 06.0
Epicenter: 19.33 N., 155.27 W.
Depth: 10 km
Magnitude: 3.6 ML
Intensity III: Hilo (H).

18 May (H) Island of Hawaii
Origin time: 06 54 49.1
Epicenter: 19.33 N., 155.14 W
Depth: 9 km
Magnitude: 3.0 ML
Intensity II: Volcano (H).

18 May (H) Island of Hawaii
Origin time: 16 16 41.2
Epicenter: 19.33 N., 155.13 W.
Depth: 9 km
Magnitude: 3.5 ML
Intensity III: Hilo (H).
Intensity II: Mountainview (H), Volcano (H).

20 May (H) Island of Hawaii
Origin time: 03 12 05.4
Epicenter: 19.33 N., 155.13 W.
Depth: 9 km
Magnitude: 3.8 ML
Intensity III: Volcano (H).
Intensity II: Kahuku Ranch (H).

22 May (H) Island of Hawaii
Origin time: 05 53 09.7
Epicenter: 19.35 N., 155.10 W.
Depth: 9 km
Magnitude: 3.2 ML
Intensity II: Hilo (H).

23 May (H) Island of Hawaii
Origin time: 04 52 08.3
Epicenter: 19.36 N., 155.25 W.
Depth: 11 km
Magnitude: 3.7 ML
Intensity III: Hilo (H).
Intensity II: Volcano (H).

24 May (H) Island of Hawaii
Origin time: 03 31 20.1
Epicenter: 19.34 N., 155.12 W.
Depth: 9 km
Magnitude: 4.0 ML
Intensity III: Hilo (H).
Intensity II: Captain Cook (H), Volcano (H).

24 May (H) Island of Maui
Origin time: 09 24 08.2
Epicenter: 20.80 N., 156.24 W.
Depth: 0 km
Magnitude: 4.1 ML
Intensity V: Wailuku, Maui.
Intensity IV: Kualapuu, Molokai; Lanai City, Lanai; Makawao, Maui.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Hawaii--Continued

Intensity III: Honolulu, Oahu; Kohala, Hawaii (press report); Kula, Maui (press report); Lahaina, Maui (press report); Pukalani, Maui (press report).
Intensity II: Kona, Hawaii (H).

24 May (H) Island of Hawaii
Origin time: 09 24 20.5
Epicenter: 20.06 N., 155.80 W.
Depth: 6 km
Magnitude: 3.6 ML
Intensity III: Maui (H).

31 May (H) Island of Hawaii
Origin time: 16 27 23.3
Epicenter: 20.12 N., 155.76 W.
Depth: 29 km
Magnitude: 3.5 ML
Intensity III: Honokaa (H), Kohala (H), Waimea (H).
Intensity II: Hilo (H).

31 May (H) Island of Hawaii
Origin time: 18 32 18.8
Epicenter: 19.52 N., 156.24 W.
Depth: 17 km
Magnitude: 4.5 ML
Intensity IV: Kona.
Intensity III: Honokaa (H), Kamuela (H), Kohala (H).
Intensity II: Pepeekeo (H).

31 May (H) Island of Hawaii
Origin time: 18 32 24.9
Epicenter: 19.55 N., 155.59 W.
Depth: 2 km
Magnitude: 3.7 ML
Intensity III: Honokaa (H), Kamuela (H), Kohala (H).
Intensity II: Pepeekeo (H).

1 June (H) Island of Hawaii
Origin time: 20 02 22.0
Epicenter: 19.36 N., 155.20 W.
Depth: 1 km
Magnitude: 2.7 ML
Intensity II: Hilo (H).

5 June (H) Island of Hawaii
Origin time: 08 50 51.2
Epicenter: 19.36 N., 155.12 W.
Depth: 9 km
Magnitude: 4.1 ML
Intensity III: Hilo (H), Kalapana (H), Volcano (H).
Intensity II: Glenwood (H), Keaau (H), Papaikou (H).

9 June (H) Island of Hawaii
Origin time: 21 03 42.6
Epicenter: 19.22 N., 155.46 W.
Depth: 10 km
Magnitude: 2.7 ML
Intensity II: Pahala.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Hawaii--Continued

15 June (H) Island of Hawaii
Origin time: 00 17 15.2
Epicenter: 19.41 N., 155.26 W.
Depth: 4 km
Magnitude: 3.2 ML
Intensity II: Hawaiian Volcano Observatory (H).

15 June (H) Island of Hawaii
Origin time: 15 00 32.4
Epicenter: 19.46 N., 155.48 W.
Depth: 10 km
Magnitude: 3.4 ML
Intensity II: Volcano (H).

16 June (H) Island of Hawaii
Origin time: 19 17 15.8
Epicenter: 19.36 N., 155.08 W.
Depth: 8 km
Magnitude: 3.4 ML
Intensity II: Hilo (H), Papaikou (H).

18 June (H) Island of Hawaii
Origin time: 22 01 11.6
Epicenter: 19.38 N., 155.10 W.
Depth: 8 km
Magnitude: 3.4 ML
Intensity II: Hilo (H).

20 June (H) Island of Hawaii
Origin time: 10 25 11.3
Epicenter: 19.39 N., 155.25 W.
Depth: 5 km
Magnitude: 3.1 ML
Intensity III: Hawaii National Park (H).
Intensity II: Volcano (H).

20 June (H) Island of Hawaii
Origin time: 13 06 23.7
Epicenter: 19.19 N., 155.55 W.
Depth: 10 km
Magnitude: 3.1 ML
Intensity III: Pahala (H).
Intensity II: Captain Cook (H).

22 June (H) Island of Hawaii
Origin time: 00 27 49.5
Epicenter: 19.37 N., 155.22 W.
Depth: 9 km
Magnitude: 2.6 ML
Intensity II: Volcano (H).

22 June (H) Island of Hawaii
Origin time: 04 16 27.2
Epicenter: 19.37 N., 155.22 W.
Depth: 6 km
Magnitude: 3.1 ML
Intensity III: Volcano (H).

22 June (H) Island of Hawaii
Origin time: 06 00 34.7
Epicenter: 19.37 N., 155.22 W.
Depth: 6 km
Magnitude: 3.3 ML
Intensity III: Volcano (H).

Table 2—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Hawaii--Continued

22 June (H) Island of Hawaii
Origin time: 07 27 28.9
Epicenter: 19.39 N., 155.25 W.
Depth: 2 km
Magnitude: 3.0 ML
Intensity II: Volcano (H).

22 June (H) Island of Hawaii
Origin time: 13 04 39.6
Epicenter: 19.38 N., 155.24 W.
Depth: 3 km
Magnitude: 3.2 ML
Intensity III: Volcano (H).

25 June (H) Island of Hawaii
Origin time: 05 47 53.7
Epicenter: 119.34 N., 155.20 W.
Depth: 9 km
Magnitude: 3.6 ML
Intensity III: Hilo (H).
Intensity II: Volcano (H).

25 June (H) Island of Hawaii
Origin time: 11 29 52.5
Epicenter: 19.39 N., 155.28 W.
Depth: 4 km
Magnitude: 2.5 ML
Intensity II: Volcano (H).

Idaho

14 June (U) Eastern Idaho
Origin time: 09 37 57.8
Epicenter: 42.12 N., 112.48 W.
Depth: 7 km
Magnitude: 3.6 ML
Intensity IV: Malad City, St. John (dishes rattled, few people awakened--press report).

Indiana

8 April (G) Central Indiana
Origin time: 07 38 53.0
Epicenter: 39.35 N., 86.68 W.
Depth: 20 km
Magnitude: 3.0 mbLg

Felt in Monroe and Owen Counties (press report).

Intensity V: Stinesville.
Intensity IV: Bloomington, Ellettsville (telephone report), Solsberry, Spencer, Stanford.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976—Continued*

Kentucky

15 April (G) Western Kentucky
Origin time: 07 03 34.9
Epicenter: 37.41 N., 87.31 W.
Depth: 15 km
Magnitude: 3.3 mbLg(V)
Intensity V: Allegre, Calhoun, Crofton, Curdsville, Manitou, Philpot.
Intensity IV: Elkton, Fairview, Steff.
Intensity III: Hopkinsville (telephone report), Island (telephone report), Livermore (telephone report), Rochester.
Intensity II: Waverly.

Maine

15 April (J) Southwestern Maine
Origin time: 10 36 04.8
Epicenter: 44.24 N., 70.14 W.
Depth: 0 km
Magnitude: 2.4 mbLg
Intensity III: Auburn, Green.
Intensity II: Turner.

Massachusetts

10 May (C) Southeastern Massachusetts
Origin time: 01 34 20.5
Epicenter: 41.54 N., 71.01 W.
Depth: 0 km
Magnitude: 2.7 mbLg
Intensity V:
Massachusetts--Mattapoisett, South Dartmouth, Westport.
Intensity IV:
Massachusetts--Fairhaven, North Dartmouth, Westport Point.
Rhode Island--Providence.
Intensity III:
Massachusetts--Dartmouth, New Bedford.
Rhode Island--Little Compton.
Intensity II:
Massachusetts--Fall River.

Missouri

22 May (S) New Madrid Region
Origin time: 07 40 46.0
Epicenter: 36.04 N., 89.84 W.
Depth: 10 km
Magnitude: 3.2 mbLg
Intensity V:
Missouri--Cooter, Steele.
Tennessee--Ellendale, Maury.
Intensity III:
Missouri--Grayridge.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976—Continued*

Montana

5 April (G) Western Montana
Origin time: 02 40 07.4
Epicenter: 46.13 N., 111.68 W.
Depth: 5 km
Magnitude: 3.6 ML(D)
Intensity IV: Trident.

24 April (G) Western Montana
Origin time: 08 49 12.0
Epicenter: 48.26 N., 114.09 W.
Depth: 5 km
Magnitude: 2.9 ML
Intensity II: Kalispell area.

Nevada

12 May (A) Southern Nevada
Origin time: 19 50 00.2
Epicenter: 37.21 N., 116.21 W.
Depth: 0 km
Magnitude: 4.9 mb, 4.6 ML(B)
Nevada Test Site explosion at 37°12'32.614" N., 116°12'44.845" W, elevation 2,251 m.

10 June (G) Central Nevada
Origin time: 10 39 35.9
Epicenter: 39.63 N., 115.85 W.
Depth: 2 km
Magnitude: None computed.
Intensity V: Eureka.

24 June (G) Western Nevada
Origin time: 00 24 45.1
Epicenter: 39.45 N., 119.53 W.
Depth: 2 km
Magnitude: 3.5 ML(B)
Intensity V: Reno.
Intensity IV: Silver City, Stateline.

29 June (G) Western Nevada
Origin time: 13 10 48.8
Epicenter: 39.45 N., 119.54 W.
Depth: 6 km
Magnitude: 3.5 ML(B)
Intensity V: Reno.
Intensity IV: Frazier Park, California.

New Jersey

13 April (L) Northeastern New Jersey
Origin time: 15 39 13.2
Epicenter: 40.84 N., 74.05 W.
Depth: 2 km
Magnitude: 3.1 mbLg

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976—Continued*

New Jersey—Continued

Canvass made by Lamont-Doherty Geological Observatory at Palisades, N.Y. by means of a questionnaire in local northern New Jersey papers. Results of the canvass, consisting of letters and questionnaires, were reevaluated by the USGS according to the unabridged Modified Mercalli Scale of 1931.

200,000 people live in the 50 sq km area affected by this earthquake (press report).

Intensity VI: Ridgefield.

Intensity V: All of the following communities reported that small objects shifted and many people were frightened: Belleville, Bogota, Cliffside Park, Cresskill, East Rutherford, Englewood, Englewood Cliffs, Fairview, Fort Lee, Garfield, Hackensack, Leonia, Lindhurst, Moonachie, New Milford, North Bergen, Nutley, Palisades Park, Ridgefield Park, River Edge, Rutherford, Teaneck (press report), Wallington.

Intensity IV: Alpine, Clifton (press report), Demarest, Dumont, Edgewater, Hasbrouck Heights, Little Ferry, Lodi, Maywood, North Arlington, Paramus, Rochelle Park, Secaucus, Tenafly, Union City, Weehawken, West New York, Wood-Ridge.

Intensity III: Bergenfield, Elmwood Park, Glen Ridge, Guttenberg, Haworth, Jersey City, Kearny, South Orange, Upper Montclair, Upper Saddle River, Westwood.

New Mexico

20 May (G) Northwestern Mexico
Origin time: 19 43 21.9
Epicenter: 35.47 N., 109.04 W.
Depth: 5 km
Magnitude: 2.5 ML
Intensity II: Window Rock area.

24 June (G) Eastern New Mexico
Origin time: 15 27 32.0
Epicenter: 35.62 N., 103.28 W.
Depth: 5 km
Magnitude: 3.5 ML
Intensity V: Amistad. Postmaster at Tucumcari, 200 km north of epicenter, reported everyone frightened in Irene and Rosebud.
Intensity IV: Nara Visa.
Intensity III: Capulin.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Oklahoma

16 April (G) Western Oklahoma
Origin time: 18 59 44.2
Epicenter: 36.11 N., 99.88 W.
Depth: 5 km
Magnitude: 3.4 mbLg(T)
Intensity IV:
Oklahoma--Durham.
Texas--Higgins.
Intensity III:
Oklahoma--Arnett.

17 April (T) Southern Oklahoma
Origin time: 02 48
Epicenter: 34.1 N., 97.4 W.
Depth: None computed.
Magnitude: 2.4 mbLg
Intensity II: Wilson.

19 April (G) Western Oklahoma
Origin time: 04 42 42.2
Epicenter: 36.13 N., 99.84 W.
Depth: 5 km
Magnitude: 3.5 mbLg(T)
Intensity IV:
Oklahoma--Arnett, Cheyenne, Custer, Durham.
Texas--Higgins.
Intensity II:
Oklahoma--Reydon.

Oregon

13 April (G) Northern Oregon
Origin time: 00 47 17.1
Epicenter: 45.22 N., 120.77 W.
Depth: 15 km
Magnitude: 4.5 mb, 3.3 MS, 4.8 ML

An area around the epicenter having a radius of 250 km was canvassed, and 355 questionnaires were mailed. The quake was felt over an area of approximately 35,000 sq km, as shown in figure 9. A field investigation was made by Couch and Farooqui (1976), Oregon State University. The intensity data from this report are designated by (Z) in the listings below.

Intensity VI:
Oregon--Wamic.
Intensity V:
Oregon--Antelope, Ashwood, Dufur, Fossil, Gales Creek, Hood River (Z), Kahneeta (Z), Maupin, Parkdale, Post, Prineville, Rhododendron, South Junction Depot (Z), Spray, The Dalles (cracked windows--press report), Tygh Valley, Warm Springs.
Washington--Cook.
Intensity IV:
Oregon--Arlington, Bakeoven Road--22 km northwest of Shaniko (Z), Bend, Condon, Dayville, Friend, Grass Valley, Idanha, Kent, Kimberly, Mitchell, Monument, Moro,

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Oregon--Continued

Mosier, Oak Springs Fish Hatchery (Z), Paulina, Pinegrove (Z), Portland (press report), Rufus, Shaniko, Simnasho (Z), Terrebonne, Timberline Lodge, Wapunitia (Z), Wasco.
Washington--Brownstown, Carson, Centerville, Dallesport, Harrah, North Bonneville, Wishram.
Intensity III:
Oregon--Bonneville, Corvallis (Z), Redmond (Z), Rowena (Z), Tygh Ridge (Z).
Intensity II:
Oregon--Alsea, Bates, Ione, Pendleton.
Washington--Centralia.

17 April (G) Northern Oregon
Origin time: 02 11 44.4
Epicenter: 45.08 N., 120.80 W.
Depth: 2 km
Magnitude: 4.2 ML

This is an aftershock of earthquake of 13 April at 00 47 17.1 UTC.

Intensity II: Wasco County, Oregon.

Utah

15 June (U) Northern Utah
Origin time: 02 08 10.4
Epicenter: 41.89 N., 112.44 W.
Depth: 1 km
Magnitude: 3.1 ML
Intensity III: Blue Creek Valley (press report).

Washington

16 May (W) Vancouver Island region
Origin time: 08 35 14.8
Epicenter: 48.80 N., 123.36 W.
Magnitude: 5.1 mb (G)
Depth: 62 km

An area around the epicenter having a radius of 250 km was canvassed, and 296 questionnaires were mailed. The quake was felt over an area of approximately 77,000 sq km, as shown in figure 10. The Canadian data were supplied by Gary Rogers, Victoria Geophysical Observatory, British Columbia, and reevaluated by the USGS.

Intensity VI:
British Columbia--Abbotsford, Duncan, Essondale, Gold River, Ladysmith, Lake Cowichan (waterline broken), Langley, Mill Bay, Mount Lehman, Nanaimo, Richmond, Steveston, Surrey, Victoria (one chimney damaged, one brick fell),

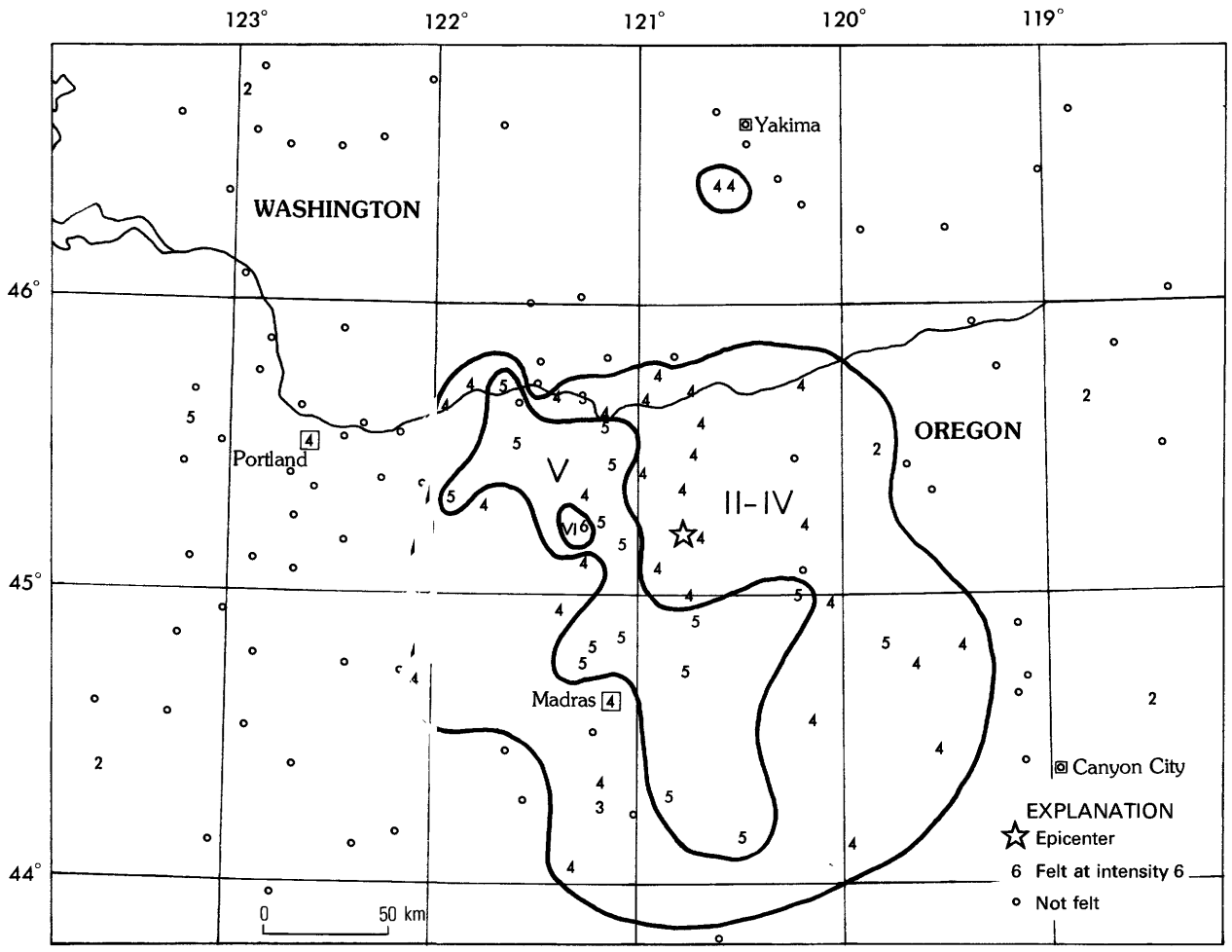

FIGURE 9.--Isoseismal map for the northern Oregon earthquake of 13 April 1976, 00 47 17.1 UTC. Roman numerals represent Modified Mercalli intensities between isoseismals; Arabic numbers are used to represent these intensities at specific sites.

Table 2.--*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Washington--Continued
West Vancouver, White Rock.
Washington--Deming, Maple Falls.
Intensity V:
British Columbia--Aggassiz, Aldergrove, Bamfield, Boston Bar, Bradner, Brentwood Bay, Burnaby, Chemainus, Chilliwack, Cobblehill, Coquitlam, Cowichan, Crofton, Delta, Dewdney, Fulford Harbor, Gabriola, Galiano, Gambier, Ganges, Garden Bay, Half Moon Bay, Harrison Hot Springs, Harrison Mills, Honeymoon Bay, Hopkins Landing, Huntington, Lindell Beach, Madeira Park, Maple Ridge, Matsqui, Mayne, Mesachie Lake, Mission City, Nanoose Bay, New Westminster, North Surrey, North Vancouver, Parksville, Port Alberni, Port Coquitlam, Port Mellon, Port Renfrew, Port Washington, Roberts Creek, Rosedale, Saanichton, Saturna,

Table 2.--*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Washington--Continued
Sechelt, Shawnigan Lake, Sidney, Sooke, South Wellington, Squamish, Thetis Island, Vancouver (power outage), Vedder Crossing, Whonnock, Woodfibre.
Washington--Acme, Alderwood Manor, Anacortes, Arlington, Bellingham, Blakely Island, Blanchard, Bothell, Bow, Burlington, Carlsborg, Chimacum, Clallam Bay, Clinton, Concrete, Custer, Darrington, Eastsound, Edison, Enumclaw, Everett, Everson, Ferndale, Freeland, Friday Harbor, Gardiner, Glacier, Gold Bar, Hamilton, Index, Joyce, Lake Stevens, Lopez, Lyman, Lynden, Marblemount, Marietta, Monroe, Mount Vernon, Nooksack, Nordland, Oak Harbor, Olga, Orcas, Point Roberts, Preston, Quilcene, Roche Harbor, Rockport, Sedro Woolley, Sekiu, Shaw Island, Silvana,

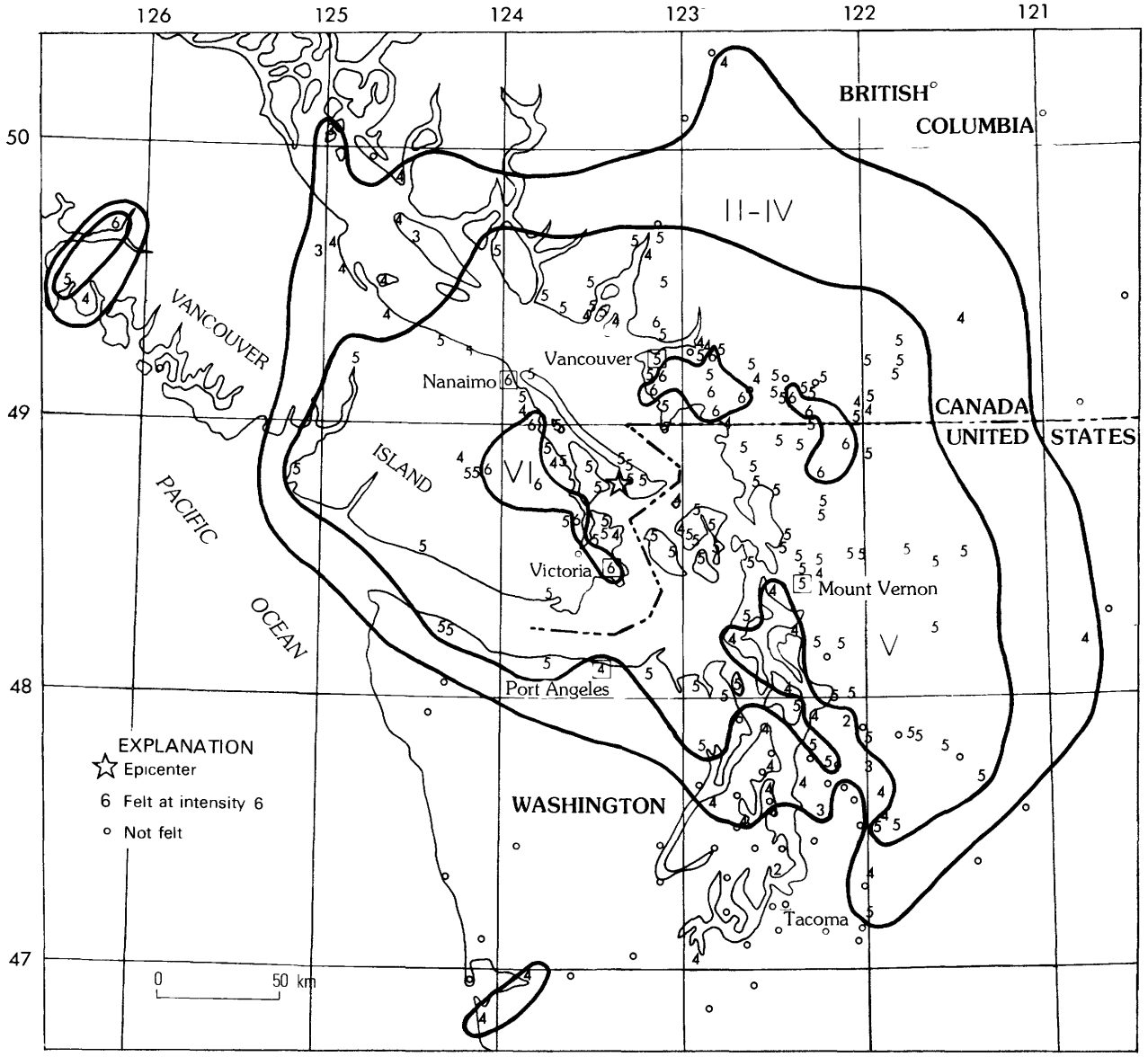

FIGURE 10.--Isoseismal map for the Vancouver Island region earthquake of 16 May 1976, 08 35 14.8 UTC. Roman numerals represent Modified Mercalli intensities between isoseismals; Arabic numbers are used to represent these intensities at specific sites.

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976—Continued*

Washington--Continued

Skykomish, Snoqualmie, Startup, Sumas, Wickersham.

Intensity IV:

British Columbia--Blubber Bay, Bowen Island, Britannia Beach, Cassidy, Cultus Lake, Fort Langley, Gibsons, Hope, Hornby Island, Icco, James Island, Mount Currie, North Burnaby, Pender Island, Pitt Meadows, Port Moody, Powell River, Qualicum Beach, Royston, Stewardson

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Washington--Continued

Inlet, Union Bay, Westholme, Yarrow, Youbou.

Washington--Aberdeen, Birch Bay (press report), Blaine (press report), Bremerton, Carnation, Clearlake, Coupeville, Deer Harbor, Fall City, Grayland, Greenbank, Hansville, Holden Village, Indianola, La Conner, Langley, Mukilteo, Olympia (press report), Port Angeles, Ravensdale, Rollingbay, San Juan

Table 2.—*Summary of macroseismic data for U.S. earthquakes, April-June 1976--Continued*

Washington--Continued

Island (press report), Seabeck, Seattle, Stanwood, Waldron.
Intensity III:
British Columbia--Cumberland, Gillies Bay, Mansons Landing.
Washington--8 km northeast of Duvall, Mercer Island.
Intensity II:
British Columbia--Barnet.
Washington--Dockton, Snohomish.

West Virginia

19 June (G) Southern West Virginia
Origin time: 05 54 13.9
Epicenter: 37.36 N., 81.62 W.
Depth: 5 km
Magnitude: 4.7 mb, 3.0 mbLg(V)
Intensity V: Berwind, Wilcoe (press report).
Intensity IV: Welch area (press report).

Wyoming

7 June Yellowstone National Park
Origin time: 04 48
Epicenter: Not located.
Depth: None computed.
Magnitude: None computed.
Intensity V: Madison Junction, Old Faithful. (Residents awakened and frightened.)

7 June Yellowstone National Park
Origin time: 12 07
Epicenter: Not located.
Depth: None computed.
Magnitude: None computed.
Intensity V: Canyon Village Cabins, Madison Junction, Old Faithful. (Residents awakened and frightened, most living in old wood cabins or trailers.)

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CANADA: Gary Rogers, Victoria Geophysical Observatory.
CALIFORNIA: Clarence R. Allen, Seismological Laboratory, California Institute of Technology, Pasadena.
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CONNECTICUT: Edward F. Chiburis, Marine Science Institute, University of Connecticut, Groton.
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MISSOURI: Otto Nuttli, Dept. of Geology and Geophysics, St. Louis University, St. Louis.
NEW MEXICO: Allan R. Sanford, New Mexico Institute of Mining and Technology, Socorro.
NEW YORK: Lynn R. Sykes and Yash P. Aggarwal, Lamont-Doherty Geological Observatory, Columbia University, Palisades.
OKLAHOMA: James E. Lawson, Jr., University of Oklahoma, Earth Sciences Observatory, Leonard.
UTAH: Department of Geological and Geophysical Sciences, University of Utah, Salt Lake City.
VIRGINIA: G. A. Bollinger, Department of Geological Sciences, Virginia Polytechnic Institute and State University, Blacksburg.
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