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JUN 30 1958



SEISMOLOGICAL LABORATORY

California Institute of Technology  
Pasadena, California

BULLETIN ON LOCAL SHOCKS

January - March, 1958

This bulletin catalogues earthquakes in the general Southern California area for which seismograph data are sufficient for good epicenter determinations. In general this includes shocks of magnitude 3.0 within the boundaries indicated on the index map circulated with earlier issues. (A limited number of copies of this index map are still in stock, available on request until exhausted). Shocks in adjacent parts of Mexico, Nevada, and central California are included when of magnitude 4.5 or over.

Shocks of magnitude less than 3.0 in the Southern California area, or less than 4.5 in the adjacent areas, are included when reported as felt, when unusually well located, or when there is some other reason for special interest.

Artificial earthquakes due to explosions, etc., are not listed.

Dates and times are in terms of Greenwich Civil Time (G.C.T.). For Pacific Standard Time subtract 8 hours, for Pacific Daylight-saving Time subtract 7 hours; this will sometimes change the date. Time reported is that of origination of the shock, generally to the nearest second; when determination is less precise, time is given to the nearest tenth of a minute.

Latitudes North and longitudes West are in degrees and minutes, or degrees and tenths. Quality of location is indicated in the column headed Q, as follows: A, specially investigated; B, probably within 5 kilometers (3 miles); C, probably within 15 kilometers (or 10 miles); D, very rough.

Magnitudes are given in the column headed M. Index letters and figures, such as K7, refer to the index map.

USCGS, or CGS: United States Coast and Geodetic Survey. Reports of felt earthquakes as collected by the San Francisco office, Seismological Field Survey; epicenters and origin times as determined at the office of the Director, Washington, D. C.

Roman numerals I, II, III ... are intensities on the Modified Mercalli scale of 1931.

Charles F. Richter  
June 18, 1958



SEISMOLOGICAL LABORATORY

California Institute of Technology  
Pasadena, California

BULLETIN ON LOCAL SHOCKS

January - March, 1958

Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958									
January									
1	07:38:52	33	38	118	02	B	3.0	J4	Off Huntington Beach.
1	09:56:37	33	28	118	10	C	2.6	J3	San Pedro Channel.
1	19:38:22	33	12	115	55	C	3.6	P3	Northwest of Kane Springs.
2	08:32:10	34	01	116	51	B	2.9	M5	Northeast of Beaumont.
2	21:43:27	34	00	118	22	C	1.6	J5	Near Inglewood. Felt there (telephone report).
4	12:18:44	35	23	118	34	B	3.1	H7	North of Caliente.
4	17:27						4.8		Northern Nevada?
9	09:07:01	35	04	118	48	B	3.1	H7	Near Tejon Ranch.
10	17:44:23	34	52	119	11	B	3.3	G6	Near Mt. Pinos.
11	23:09:15	34	54	119	16	B	4.0	G6	Northwest of Mt. Pinos.
13	02:45:01	34	57	119	03	B	3.9	G6	Wheeler Ridge. Felt generally at and near Taft, intensity IV (telephone report from KTTI).
13	04:27.5	38.1		119.0		D	4.2	G13	Near Mono Lake.
14	14:05:40	32	34	117	09	B	3.7	L2	Near Imperial Beach. Felt by many at San Diego; rattled dishes (press).
15	16:33:40						4.6	J15	Western Nevada. Origin time by USCGS.
19	09:40:22	37	32	118	25	C	3.1	J12	Northern Owens Valley.
23	07:06:46	34	23	119	35	B	2.6	F5	East of Santa Barbara. IV at Santa Barbara (CGS).
1958									
February									
6	11:15:30	32	03	116	10	C	4.5	N1	Sierra Juarez, Baja California. Reported as felt in San Diego (questionable).
9	06:19:07	34	02	117	33	B	2.3	K5	Near Mira Loma.



Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958									
February									
12	00:01:48	34	44	117	06	C	2.7	L6	Southwest of Barstow.
21	05:08:05	35	21	118	33	C	2.8	H7	Northeast of Caliente.
21	13:31:28	33	42	115	35	B	3.0	P4	Near Hayfield. IV at Hayfield (CGS).
21	15:08:45	33	42	115	35	B	2.4	P4	Near Hayfield. Felt there (CGS).
21	16:34:16	33	42	115	35	B	3.2	P4	Near Hayfield. Felt there (CGS).
23	23:22:24	35	01	119	07	B	3.1	G7	Wheeler Ridge.
24	03:04:21	35	05	118	46	B	2.8	H7	Tejon Ranch.
24	11:45:04	37	20	118	15	C	3.3	J11	Near Bishop.
25	21:12:27	34	00	117	15	B	2.7	L5	East of Riverside.
1958									
March									
1	07:21:05	34	09	118	10	B	1.7	J5	Near Pasadena.
1	09:07:33	34	10	116	14	B	3.1	N7	West of 29 Palms.
1	19:55:36	34	24	119	09	B	2.7	G5	East of Ojai. Peculiar.
2	18:31:57	34	10	117	04	B	2.8	L5	Near Patton.
5	22:07:16	34	23	116	47	B	3.3	M5	Near Old Woman Springs.
6	16:59:36	35	22	118	35	B	2.7	H7	Northeast of Caliente.
9	19:14:13	33	21	116	16	C	3.5	N3	Near Clark Dry Lake.
9	19:22:45	34	17	117	31	B	2.2	K5	Near Glenn Ranch.
10	13:39:40	33	17	116	12	B	3.8	N3	Southeast of Clark Dry Lake.
12	12:09:19	42		119 $\frac{1}{2}$			4.5	F15	Epicenter and origin time by USCGS.
13	23:15.0	31.5		115.5		D	4.3	P0	Baja California. Reported felt at San Diego (questionable).
15	08:34:04	32 $\frac{1}{2}$		113 $\frac{1}{2}$			4.9	T1	Epicenter and origin time by USCGS.
15	09:42:30	35	23	118	53		3.3	H7	North of Edison.
18	17:09:38	33	59	118	19	B	1.7	J4	Near Inglewood.
19	21:07:04	34	11	116	47	B	3.0	M5	Southeast of Big Bear.
24	20:46:17	34	05	117	12	B	2.7	L5	Near Redlands.
25	16:17:58	34	02	118	10	B	2.2	J5	Near Bell.
26	05:30:19	35	28	118	43	B	2.9	H7	Kern River Gorge.
26	08:45:19	35	19	118	39	B	3.0	H7	East of Bena.



Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958 March									
27	04:55:39	35	22	118	37	B	3.4	H7	North of Caliente. IV at Kern Canyon powerhouse (USCGS).
30	06:53:17	34	00	116	44	B	3.0	M4	North of Cabazon.
31	14:33:43	34	05	117	11	B	3.4	L5	Near Redlands. Felt at San Bernar- dino, Riverside, Fontana (press). IV at Hemet and San Bernardino (USCGS).

June 18, 1958

C. F. Richter  
C. S. Benson



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AUG 20 1958



SEISMOLOGICAL LABORATORY  
California Institute of Technology  
Pasadena, California

BULLETIN ON LOCAL SHOCKS  
April - June, 1958

Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958									
April									
2	21:54:37	37	49	118	35	C	4.2	H12	Near Benton.
4	14:28:41	34	27	116	47	B	3.1	M5	East of Lucerne Valley.
4	17:05.8	36.7		121.3		D	3.9	C10	San Benito County. Felt (IV) 7 miles south of Hollister (CGS).
7	12:01:15	34	08	117	18	B	2.5	L5	Near San Bernardino.
9	11:13:17	35	28	118	35	B	3.5	H7	North of Caliente.
13	13:15:47	34	52	117	23	B	2.6	L6	Northwest of Helen-dale.
15	21:51:52	34	06	117	10	B	3.2	L5	East of Redlands.
17	13:03:27	34	57	118	49	B	3.1	H6	East of Fort Tejon.
17	20:55:04	34	12	118	02	B	2.2	J5	Near Mount Wilson.
18	15:51:00	34	00	118	17	B	2.5	J5	North of Inglewood.
20	21:06:59	38½		122			4.6	A13	Felt at Napa etc. Epicenter and origin time by USCGS.
23	02:34:13	34	32	116	02	B	3.5	N6	Bullion Mts.
27	01:35:25	35	38	118	08	B	3.4	J8	Near Walker Pass.
29	23:03:00	34	40	116	55	C	2.8	M6	South of Barstow.
30	02:36:18	32	47	118	06	C	3.6	J2	Southeast of San Clemente Island. Felt by several at San Diego (CGS).
1958									
May									
3	17:36.0	38.0		118.0		D	4.1	J13	Western Nevada.
9	01:38:45	35	02	116	47	B	3.5	M7	Northeast of Barstow.
9	23:33:45	32	12	115	47	C	3.7	P1	West of Laguna Salada
10	11:04:03	32	12	115	47	C	3.6	P1	West of Laguna Salada
13	09:08:28	34	52	118	53	B	2.9	H6	Near Fort Tejon.
19	13:25:33	34	03	119	00	C	3.1	G5	Off Point Mugu.
20	03:59:33	35	03	119	02	B	3.1	G7	Near Wheeler Ridge.
24	23:04:42	40½		125			4.7	A15	Epicenter and origin time by USCGS. Felt chiefly in Humboldt County; maximum intensity VI.





Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958									
May									
26	20:23:34	35	06	119	07	B	3.5	G7	North of Wheeler Ridge.
26	22:25:05	35	07	119	02	B	3.2	G7	North of Wheeler Ridge.
27	11:43:36	34	26	119	17	C	3.4	G5	Near Ojai.
28	07:48:18	32.0		115.0		D	4.5	Q1	Baja California. Said to have been felt by a few at San Diego (CGS).
31	10:56:38	34	00	118	10	B	2.3	J5	Southeast Los Angeles. Felt by many in Southgate area (telephone to Laboratory).
31	17:39:43	34	20	117	53	C	2.0	K5	Northeast of Mt. Wilson.
31	21:17:40	37	33	118	45	C	3.7	H12	Long Valley, northwest of Bishop.
31	22:07:	38.0		122.3		D	4.6	A12	Felt, San Francisco and vicinity, especially in Contra Costa County. Maximum intensity V (CGS).
1958									
June									
1	15:16:22	33	07	116	25	B	3.2	N3	Northeast of Julian.
2	03:03:32	33	10	116	30	B	3.8	N3	Northeast of Julian.
2	17:56:27	34	52	118	53	B	2.8	H6	Near Fort Tejon.
7	06:51:18	35	01	118	58	B	2.9	H7	Near Wheeler Ridge.
12	20:40:03	35	20	118	32	B	3.5	H7	East of Caliente.
12	22:00:02	34	58	115	55	C	3.4	P6	Devil's Playground, Mojave Desert.
14	12:17:54	33	48	118	30	C	2.7	J4	Off Point Vicente. Felt at Hermosa Beach.
18	19:41:14	32	36	115	51	C	3.5	P2	West of Signal Mountain.
22	02:19:19	33	50	119	25	C	3.1	G4	South of Anacapa Island.
23	01:16:14	33	35	118	30	C	2.6	J4	San Pedro Channel.
23	19:27:14	35	38	118	28	B	2.9	J8	Near Isabella.
23	00:02:46	35	14	118	36	B	2.9	H7	South of Caliente.
25	01:56:40	35	00	119	07	B	3.2	G7	West of Wheeler Ridge.
27	12:32:41	35	12	117	00	B	2.8	L7	North of Barstow.
27	15:07:29	33	10	116	20	C	3.6	N3	Borego Valley.
27	18:45:11	35	27	118	22	C	3.0	J7	Northeast of Caliente.

August 7, 1958

C. F. Richter  
C. S. Benson



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 JAN 13 1960  
 CODETIC  
 SURVEY

SEISMOLOGICAL LABORATORY

California Institute of Technology  
 Pasadena, California



1959 JAN 13 PM 12.44

BULLETIN ON LOCAL SHOCKS

July - September, 1958

Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958									
July									
4	08:02:00	34	17	117	22	B	3.3	L5	Cajon Pass.
6	07:02:01	34	58	119	02	B	3.0	G6	Northwest of Fort Tejon.
✓ 9	05:23:						4.5✓		Felt at San Francisco, San Jose, Hollister, and at other points especially in Santa Cruz and Santa Clara Counties. Maximum reported intensity V (USCGS).
9	11:26:40	33	31	116	30	B	2.7	M4	Southeast of Anza.
9	12:48:43	33	44	116	44	B	2.8	M4	East of Hemet.
10	20:57:20	34	05	116	53	B	2.9	M5	Near Forest Home.
ok 14	05:25:55	34	21	119	29	B	4.7	G5	Off Carpinteria. Minor damage at Carpinteria. USCGS reports V at most points from Ventura to Santa Barbara. Felt in a few instances to distances of about 80 miles. Only after-shocks of magnitude 3. and over are listed here.
14	05:29:28	34	21	119	29	B	3.4	G5	Aftershock of preceding
14	05:32:33						3.3		"
14	05:33:55						3.5		"
14	05:34:30						3.5		"
14	05:41:28						3.0		"
14	05:51:26						3.2		"
14	06:02:59						3.1		"
14	06:09:20						3.4		"
14	06:41:12						3.1		"
14	06:48:16						3.2		"
14	07:05:44						3.6		"
14	07:08:25						3.1		"
14	07:26:55						3.4		"
15	18:07:53	34	14	117	08	B	2.9	L5	Near Lake Arrowhead.



Date	G.C.T.	Lat	N.	Long. W.	Q.	M.	Index	Remarks
1958								
July								
20	13:21:11	35	07	118	41	C	3.1	H7 Southeast of Arvin.
22	02:50:38	33	54	118	27	B	2.8	J4 Santa Monica Bay.
25	14:02:13	36	02	117	41	C	3.3	K9 Southeast of Haiwee.
25	16:56:04	34	56	118	57	B	3.1	H6 Near Fort Tejon.
25	22:59:26	33	30	116	31	B	3.7	M3 Southeast of Anza.
28	08:47:04	33	00	119	25	C	3.3	G3 South of San Nicolas Island.
28	20:25:18	33	50	118	15	C	1.9	J4 Near Wilmington.
1958								
August								
1	01:29:24	35	20	118	36	B	3.4	H7 Near Caliente.
2	21:48:05	32	48	115	38	C	3.3	P2 Near El Centro
3	09:07:17	35	33	118	22	B	2.6	J8 East of Bodfish.
4	07:50:18	33	42	118	07	B	2.5	J4 San Pedro Bay.
5	06:54:22	34	16	117	20	B	3.0	L5 Cajon Pass.
6	23:46:35	34	02	116	40	B	2.9	M5 West of Morongo Valley.
7	00:01:39	34	10	117	29	B	2.3	L5 North of Etiwanda.
10	20:32:03	34	18	118	31	B	2.0	H5 West of San Fernando.
11	02:06:03	34	59	119	27	B	3.2	G6 South of Maricopa
11	09:31:09	34	14	117	02	B	2.7	L5 West of Big Bear.
12	01:23:34	34	31	119	25	B	3.3	G6 Northwest of Ojai.
15	11:38:27	34	10	117	50	B	2.2	K5 Near Dalton.
15	13:52:11	35	22	118	37	C	2.8	H7 North of Caliente.
15	18:00:24	36	02	117	58	C	3.1	K9 South of Haiwee.
16	04:27:56	33	15	116	00	C	3.2	N3 West of the Salton Sea
16	10:50:32	34	30	117	47	B	3.5	H6 Near Valyermo.
16	14:57:22	35	23	118	45	C	2.9	H7 East of Bakersfield.
17	02:57:15	34	05	118	30	C	2±	H5 Near Santa Monica.
18	01:20:32	34	00	117	17	B	2.9	L5 East of Riverside.
18	05:54:							Gulf of California; foreshock of next.
18	06:00:52						4.8±	Upper Gulf of California (USCGS).
18	06:44:15	30½		114			5.3	S0 Gulf of California. Epicenter and origin time by USCGS.
18	15:04:22	33	45	118	00	C	2.2	J4 East of Long Beach.
18	12:28:29	33	10	115	56	C	3.8	P3 West shore of Salton Sea.
X 22	23:42:02	37	35	118	28	C	4.0	J12 Northern Owens Valley.
24	07:00:50	35	04	118	57	B	3.6	H7 Near Wheeler Ridge.
24	23:21:42	34	23	119	28	B	3.0	G5 Near Carpinteria.
28	00:21:38	34	03	117	13	B	2.8	L5 Near Redlands.



Date	G.C.T.	Lat. N.	Long. W.	Q.	M.	Index	Remarks
1958							
September							
6	08:14:04	35	22	118	40	C 3.1	H7 Near Bena.
8	10:25:09	34	58	118	40	C 2.8	H6 Near Fort Tejon.
8	14:01:13	34	27	116	49	B 2.8	M5 Near Lucerne Valley.
14	18:11.4	34.0		119.7		D 2.6	F5 Vicinity of Santa Cruz Island.
21	07:25:00	36 $\frac{1}{2}$		121		4.6	C9 Monterey County. Epicenter and origin time by USCGS.
22	06:06:25	37	35	118	28	C 3.3	J12 Northern Owens Valley.
23	03:50:06	40 $\frac{1}{2}$		125 $\frac{1}{2}$		4.5	A15 Felt in Humboldt County. Epicenter and origin time by USCGS.
23	09:01:44	35	00	116	55	B 2.8	M7 Northeast of Barstow.

December 30, 1958

C. F. Richter  
D. J. Krotser





SEISMOLOGICAL LABORATORY

California Institute of Technology  
Pasadena, California

BULLETIN ON LOCAL SHOCKS

October - December, 1958

Correction to times in previous issue:

1958 June 2 For 02:03:32  
Read 02:02:32

Date	G.C.T.	Lat.	N.	Long.	W.	Q.	M.	Index	Remarks
1958 October									
1	05:05:19	35	05	118	56	B	3.0	H7	Near Wheeler Ridge. Northern California. Epicenter and origin time by USCGS. Felt in northeastern California and western Nevada; chimneys cracked at Hallelujah Junction (Calif.), 20 mi. northwest of Reno (CGS).
1	21:42:10	40		120 $\frac{1}{2}$			5.0	E15	
2	11:10:35	35	15	118	38	B	3.1	H7	West of Tehachapi.
3	04:25:51	34	22	119	30	B	3.7	F5	Off Carpinteria. Felt there and at Santa Barbara and Goleta (BSSA Baja California.
7	00:08:						3.9		Epicenter and origin time by USCGS. Felt at Paso Robles (press). V there and at Coalinga; V+ at Parkfield. Felt as far as San Luis Obispo (CGS).
10	13:05:20	36		120 $\frac{1}{2}$			4.7	D9	
14	03:41:07	33	26	116	26	B	3.6	N3	Northwest of Borego Valley.
14	16:42:39	33	39	116	47	B	3.2	M4	Northwest of Anza.
15	03:43:39	33	04	115	35	C	2.7	P3	West of Calipatria. Felt there (CGS).
15	10:36:58	33	54	118	08	C	3.2	J4	West of Norwalk. Felt at Norwalk and Long Beach (press). Maximum reported intensity V; felt to distances of 10-15 kilometers (CGS).



Date	G.C.T.	Lat.	N.	Long	W.	Q.	M.	Index	Remarks
<u>1958</u>									
<u>October</u>									
15	13:14:40	34	08	117	38	B	2.5	K5	Near Upland.
16	17:59:22	33	02	115	38	B	3.9	P3	Near Brawley. Felt over a limited area in Imperial Valley. V at Brawley, Calipatria, Westmorland; IV at Imperial and Niland reported not felt at Calexico and Holtville (CGS).
16	18:02:30	33	02	115	38	B	3.5	P3	Near Brawley. Also felt there (press).
16	19:11:15	33	02	115	38	B	3.9	P3	Near Brawley; felt there (press).
31	00:26:16	37 $\frac{1}{2}$		122			4.4	A12	Felt, San Francisco Bay area; intensity V at points in Alameda County (CGS). Epicenter and origin time by CGS.
<u>1958</u>									
<u>November</u>									
2	16:08:26	33	43	116	48	B	3.5	M4	East of Hemet.
3	12:49:08	35	04	118	45	B	3.1	H7	Tejon Ranch.
4	00:28:58	34	55	119	29	B	2.9	G6	South of Maricopa (near Pattiway).
6	03:07:49	34	06	116	37	C	3.5	M5	Near Morongo Valley.
7	17:38:04	34	58	116	58	B	4.1	M6	Near Barstow.
7	17:59:23	35	21	118	37	B	3.0	H7	Near Caliente.
7	21:33:24	37		122			4.6	A12	Epicenter and origin time by USCGS. Felt at San Francisco (press); according to BSSA, felt from San Rafael to Hollister.
8	13:20:42	32	57	116	14	C	4.1	N2	Near Vallecito.
10	17:17:25	33	31	119	16	C	3.1	G4	West of Santa Barbara Island.
10	17:55:43	33	31	119	16	C	3.1	G4	West of Santa Barbara Island.
13	09:09:03	32	44	117	23	B	3.4	L2	Off San Diego. Felt there (press). IV at San Diego and La Jolla (USCGS).



Date	G.C.T.	Lat.	N.	Long	W.	Q.	M.	Index	Remarks
1958									
November									
13	12:27:40	33	49	118	19	B	2.3	J4	Northwest of San Pedro.
15	09:30:						3.9		Baja California.
16	00:15:						4.0		Baja California.
16	09:34:04	34	30	119	50	C	4.0	F5	Northwest of Santa Barbara. Felt sharply there. V at Goleta, Santa Barbara, Carpinteria (CGS).
20	19:21:09	34	25	117	52	B	2.1	K5	Near Valyermo.
23	21:04:02	32	44	117	23	B	3.4	L2	Off San Diego. IV at San Diego (USCGS).
24	22:24:16	34	42	119	16	B	2.9	G6	Southwest of Mount Pinos.
27	06:04.5	36.8		121.0		D	4.3	C10	East of Hollister.
1958									
December									
1	01:39:05	35	25	118	34	C	2.9	H7	North of Caliente.
1	03:21:18	32	15	115	45	B	5.8	P0	Sierra Juarez, west of southern part of Laguna Salada, Baja California. Felt widely in southern California, including the Los Angeles metropolitan area. Minor damage to a weak structure at Calexico. Intensity V over most of Imperial and San Diego Counties; perceptible in westernmost Arizona. Recorded aftershocks very numerous; the larger during December are listed separately at the end of this issue.
7	02:31:56	34	33	116	44	B	3.0	M6	Northeast of Lucerne Valley.
10	13:37:43	34	21	117	03	C	3.6	L5	Northwest of Big Bear. Felt at San Bernardino (press). Redlands, IV; Fawnskin, V (USCGS).



Date	G.C.T.	Lat.	N.	Long	W.	Q.	M.	Index	Remarks	
1958 December										
11	09:52:16	37 $\frac{1}{2}$		123				4.9	A12	Near San Francisco. VI at Daly City and Colma; IV-VI in San Francisco. Felt as far as Santa Cruz and Hollister (CGS).
12	21:42:40	35	32	118	25	C	2.7	J8	South of Isabella.	
14	18:27:34	33	54	118	28	C	2.6	J4	Santa Monica Bay.	
15	14:58:47	36	18	120	18	C	2.9	E9	Northeast of Coalinga. Intensity IV reported for Coalinga at 15:15 (USCGS) may refer to either of these shocks.	
15	15:23:59	36	18	120	18	C	2.9	E9		
15	15:44:22	33	55	118	40	C	2.6	H4	Santa Monica Bay.	
16	07:39:50	33	22	116	24	B	3.3	N3	Northwest of Clark Dry Lake.	
19	14:37:	32.6		115.7		D	4.1	P2	Baja California.	
21	01:05:02	33	53	118	29	B	3.1	J4	Santa Monica Bay. Felt at El Segundo, Hermosa Beach, etc. (press). IV at Manhattan Beach (CGS).	
21	09:46:21	32	50	118	14	C	2.8	J2	Southeast of San Clemente Island. Seismograms appear peculiar.	
23	11:16:17	34	05	117	30	A	3.3	L5	East of Ontario. Felt in the Riverside area, especially at Arlington, and by many at Corona (press). V at Etiwanda, IV in Coldwater Canyon, San Gabriel Mts. (CGS).	
26	08:34:00	34	12	116	10	B	2.9	N5	East of 29 Palms.	
28	02:24:15	32	58	115	51	B	3.7	P2	Superstition Mts., west of El Centro.	
30	01:34:15	35	55	119	48	C	3.2	F8	Southeast of Kettleman Hills.	



List of shocks originating near  $32^{\circ} 15' N$ ,  $115^{\circ} 45' W$ , of magnitude 4.0 or over

<u>1958</u> <u>December</u>	<u>G.C.T.</u>	<u>Magnitude</u>
1	03:21:18	5.8
1	03:31	4.1
1	03:40	4.0
1	03:50	5.0
1	04:26	4.8
1	06:02	5.5
1	06:03	4.6
1	08:43	4.1
2	00:54	4.7
2	09:57	4.3
2	11:56	4.1
2	13:58	4.2
3	19:06	4.1
4	01:42	4.2
6	03:24	4.4
6	03:31	4.5
8	00:51	4.4
8	00:52	4.5
9	19:22	4.1
14	00:07	4.2
15	06:21	4.6
17	13:30	4.3
19	15:33	4.0
20	00:06	4.3
20	00:07	4.7
20	03:05	4.5
23	06:53	4.0
24	20:27	4.0
25	01:27	4.6

May 27, 1959

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