CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA, CALIFORNIA

SEISMOLOGICAL LABORATORY

BULLETIN

1956

(Pasadena and Auxiliary Stations)

STATIONS, 1956

Station	Lat. N	Long. W.	h	Symbol	Ground
Pasadena	34° 08.9'	118° 10.3'	295m	P,PX	Granitic rock
Mt. Wilson	34 13.4	118 03.5	1730	MW	Granitic rock
Riverside	33 59.6	117 22.5	260	R	Granitic rock
Palomar	33 21.2	116 51.7	1690	Pr	Granitic rock
Barrett	32 40.8	116 40.3	520	Bt	Granitic rock
Santa Barbara	34 26.5	119 42.8	90	SB	Alluvial with boulders
Woody	35 42.0	118 50.8	490	W	Granitic rock
Isabella	35 38.6	118 28.6	760	Is	Granitic rock
China Lake	35 49.0	117 35.8	766	CL	Granitic with intrusions
Haiwee	36 08.2	117 56.8	1150	H	Tuff
Tinemaha	37 03.3	118 13.7	1195	T	Basalt
Big Bear	34 14.3	116 54.8	2060	BB	
Dalton	34 10.2	117 48.6	523	D	Granitic rock
Fort Tejon	34 52.4	118 53.6	990	FT	
King Ranch	35 19.6	119 44.7	680	Kg	
Palos Verdes	33 45.5	118 21.4	340	PV	Miocene shales
Hayfield	33 42.4	115 38.2	440	Hf	
El Centro	32 47.9	115 32.9	-15	EC	Alluvium

PV installed March 21, Hf June 20, EC November 28.

All measurement and interpretation of seismograms is done at the central station, to which all communications should be addressed, as follows: Seismological Laboratory, 220 North San Rafael Avenue, Pasadena 2, California.

Components are indicated as N, E, Z; where no such letter appears the reading is for Z alone.

Instruments for 1956 were as follows:

Short-period Benioff Z	All stations except Hf and EC
Short-period Wood-Anderson N, E	P, R, SB, H, T
Short-period Wood-Anderson, one component	Bt, W, Is
Short-period Benioff N, E	P, Pr, Bt; Hf N only
Long-period Benioff N, E, Z	P, R, Bt, T; PV Z only
Strong-motion (low magnification) N, E, Z	P, R, SB, Is, H, EC
Other special and experimental instruments	P, Pr

PX = long-period instruments, Pasadena. c = compression, d = dilatation. When surface waves are not reported for Pasadena they are not found or are small. A and T are maximum amplitude (microns) and period (seconds) for the indicated phases and components, where H = combined N and E.

All times are G.C.T. Times are not reported for SB, H, BB, FT, PV or EC unless of special interest, or when other readings are defective. Times are normally given for only one of P, MW, D.

Earthquakes in Southern California are reported only if of magnitude 5 or over, unless of special interest.

Magnitudes for local earthquakes, and magnitudes given for teleseisms without designation or lettered M, are on the previous system; magnitudes lettered m are on Professor Gutenberg's scale. For large magnitudes approximately M-m = 0.37 (M - 6.76).

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
1	Pr	eP	07	21	48
		e			55
	W	iP			49
	Is	eP			50
1	P	eP"	23	26	56
		e		27	38
		ePPNZ			43
		e		28	43
		iSKP		30	13
			A		T
		PPZ	0.2		2
	R	eP	23	23	09
		eP"		26	56
		iPP		27	48
	Pr	eP"		26	58
		ePP		27	50
	Bt	iP"		26	58
		iPP		27	52
		i		28	00
	W	iP"		26	53
		iPP		27	37
		iSKP		30	12
	T	e		27	32
	Magnitude 6-6¼, USCGS: 7S 129E, 23:08:28, 150 km				
2	P	iP	09	39	13d
	R	eP			16
	Pr	iP			16d
	W	iP			15d
	Is	iP			17
	USCGS: 19S 180, 09:28:06, 600 km				
2	R	e	11	35	00
	Is	e		34	58
2	MW	eP	13	03	10
	Is	eP			11
2	MW	eP	17	16	40
	W	iP			52
	Is	eP			49
2	W	iP	17	19	25
	Is	eP			24
2	W	iP	22	41	50
	Is	eP			51
	T	eP			46
3	P	iP!	00	26	01.9d
		iSNE			11.2
	R	iP!NEZ		25	54.4d
		iS!NE			58.0
	Pr	iP!NE		26	01.2
		iS			10.8
	Bt	iP!			10.7d
		iSN			26.1
	BB	iP!			02.2d
	W	iP			25.2c
		iSN			52.6
	Is	iP!NZ			23.3c
		iSN			53.6
	Magnitude 4.7, 33° 45'N 117° 30'W, 00:25:49 Maximum reported intensity VI (rock slides) near epicenter. Felt south to San Diego, west to Los Angeles, north into the San Bernardino mountains.				

Date	Sta.	Phase	h	m	s
January					
3	MW	eP	02	42	32
	W	iP			33
	Is	iP			36
	T	eP			42
3	W	e	03	04	30
	Is	e			27
3	MW	eP	04	38	15
	W	iP			15
	Is	eP			17
3	W	e	05	50	45
	Is	e			49
		e			55
3	MW	iP	10	52	26
	R	eP			30
	W	iP			18
		i			23
		i			34
		i		53	14
	Is	eP		52	19
	T	eP			16
	USCGS: 43½N 147E, 10:41:08				
3	MW	eP	13	12	20
	R	eP			25
	W	iP			09
		i			13
		i			25
	Is	eP			10
	T	e			10
	USCGS: 51N 180, 13:03:41				
3	P	eP	14	24	42.4
		iSNZ		25	18.3
	R	eP		24	33.4
		iS		25	04.2
	Pr	iP		24	22.9c
		i(S)			37.9
	Bt	iP!NZ			12.6d
		iSN			20.9
	BB	iP			35.0
		iS		25	05.1
	Magnitude 4.7 32° 23'N 116° 00'W, 14:24:01. Felt at El Centro and in San Diego County.				
3	P	iPEZ	15	51	29d
		ipP			42
	R	iP			32d
		ipP			46
	Pr	eP			38
		ipP			52
	Bt	iP			41d
		ipP			54
	W	iP			18d
		ipP			32
	Is	iP			20
		ipP			34
	T	iP			17
		ipP			30
		e		53	31
	USCGS: 48½N 155E, 15:40:55				
3	MW	eP	21	43	41
	R	eP			44
	W	iP			30
		i			41

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
3	Is	iP	21	43	32
	T	eP			27
		e			38
	BCIS: 53½N 161E, 21:33:49				
3	P	iP	23	32	03
		iNZ			17
	R	eP			08
		e			20
		eScP		38	19
	Bt	eP		32	19
		i			33
	W	iP		31	50
		i		32	04
		eScP		38	02
	Is	iP		31	52
		i		32	05
	T	eP		31	46
		e		32	27
	USCGS: 54½N 163W, 23:24:52				
4	MW	eP	05	19	30
	W	iP			21
		ipP			40
	JMA: 42.1N 143.1E, 05:07:57, 40-50 km				
4	MW	iP	06	30	29
	R	eP			43
		e		31	12
	Bt	e			04
	W	iP			05
		e			23
	Is	iP		30	55
		e		31	23
4	MW	eP	06	50	29
		eScP		57	39
	R	eP		50	34
	Pr	eP			40
	Bt	iP			45
	W	iP			15
		i			22
		iScP		57	27
	Is	iP		50	19
		eScP		57	29
	T	eP		50	14
		eScP		57	24
	USCGS: 52½N 171W, 06:42:37				
4	P	e	14	28	55
	R	e			57
	W	e			52
	USCGS: 6½S 153E, 14:15:39				
5	P	e	01	07	16
	PX	eLZ		36.1	
	MW	eP		06	59
		i		07	04
	R	eP			02
	Bt	iP		06	53
	W	iP		07	15
		i		08	11
	Is	eP		07	06
		e			10
		(continued)			

Date	Sta.	Phase	h	m	s
January		(continued)			
5	T	eP	01	07	16
	BCIS: 41S 71½W, 00:54:18				
5	P	e	12	46	44
	D	e			58
	Bt	e			51
	Is	e			50
6	Bt	e	05	56	22
	Is	e		55	58
	BCIS: 36.0N 11.0W, 05:43:37				
6	MW	eP	07	07	47
		e		08	04
	Pr	eP		07	57
	Bt	eP		08	02
	W	iP		07	36
		i			42
	Is	eP			37
		i			53
	T	eP			33
	USCGS: 51½N 179½W, 06:59:17				
6	MW	eP	07	34	09
	D	eP			09
	W	iP			11
	Is	eP			12
	T	eP			18
	Felt at Apia				
6	P	eP	12	29	24
		e			29
	MW	eP			24
		e			29
		ePP		33	22
	D	eP		29	22
		e			28
		ePP		33	28
	Is	eP		29	19
		i			24
		e		33	08
		ePP			24
	T	eP		29	16
	BCIS: 40½N 26.0E, 12:15:42				
6	P	e	18	00	10
	R	e			12
	Pr	e			14
	Bt	e			18
	Is	e	17	59	54
		e	18	00	10
		i			20
	T	e	17	59	54
	USCGS: 51N 179½W, 17:51:32				
6	P	eP	22	37	06
		epP			23
	R	e			01
		i			07
	Pr	e			04
		e			12
	Bt	e			15
	Is	e		36	46
		e			59
	T	e			55
	JMA: 38.4N 142.5E, 22:25:02, 60 km				

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
6	P	eP	22	41	58
	R	eP			53
	Pr	eP			43
	Bt	eP			38
	W	iP		42	15
	Is	iP			13
		i			16
	T	eP			23
	Mexico				
6	P	eP	23	38	15
		e			35
	PX	eLNEZ		47.4	
	R	eP		38	09
		i			16
	Pr	iP			03
		i			19
	Bt	iP		37	58
		i		38	15
	Is	eP			27
	T	eP			34
	Tacubaya 16° 04'N 99°33'W, 23:32:46				
7	P	e(P)	09	27	37
	W	e		28	39
	Is	e(P)		27	39
		e			55
	T	e(P)		28	01
	USCGS: 52½N 160½E, 09:16:53				
7	P	eP	10	24	31
	R	eP			36
	Pr	eP			41
	Bt	eP			46
	W	i		25	22
	Is	eP		24	22
	T	eP			17
		i			37
	USCGS: 51N 179½W, 10:15:59				
7	P	iP	10	38	40
	R	iP			44
	Pr	eP			47
	Bt	eP			47
	Is	iP			40
	T	eP			41
	USCGS: 5S 148E, 10:25:08				
7	MW	e	10	40	49
	Pr	e		41	01
	Bt	e			05
	W	iP		40	36
	Is	iP			38
	T	eP			52
	USCGS: 51½N 179½W, 10:32:15				
7	MW	e	10	48	05
		e			16
	R	e		47	55
		e		48	07
	Pr	e			02
	W	iP		47	35
		i			49
	Is	eP			39
		e			52
7	MW	eP	11	00	13
	W	iP			00d
		i			06
		(continued)			

Date	Sta.	Phase	h	m	s
January		(continued)			
7	Is	eP	11	00	03
	T	eP	10	59	58
	USCGS: 51½N 179½W, 10:51:40				
7	MW	e	11	20	02
	Pr	e			11
	Is	eP		19	42
	T	e		20	13
	USCGS: Andreanof Islands, 11:11:30				
7	P	iP	16	47	38
	PX	eLE		57.5	
				A	T
		PZ		0.1	1
		MH		12	20
	R	iP	16	47	41
	Pr	iP			48
	Bt	iP			54
		i		48	01
	Is	iP		47	26
		i			41
		e		50	43
	T	eP		47	15
		e			37
	USCGS: 65½N 133½W, 16:41:04				
7	D	e(P)	18	44	37
	R	e(P)			39
	W	iP			12
		i			23
	Is	eP			15
7	MW	e	23	52	39
	W	iP			25
		e		53	01
	T	e		52	21
8	P	eP	03	38	56
	R	iP			59d
	Pr	iP		39	00d
	Bt	eP		38	59
	W	iP			57d
	T	e		39	03
	USCGS: New Hebrides region, 03:26:12				
8	P	iPNEZ	07	16	44c
	PX	iSNE		21	06
		eGNE		22.2	
		iLg		24	49
				A	T
		PZ		4	4
		PH		3½	4
		SH		12	8
		MH		70	16
	R	iPNEZ	07	16	39c
		iSN		20	58
		iLg		24	30
	Pr	iP		16	32
		eLg		24	10
	Bt	iPEZ		16	26c
		iSE		20	35
		iLg		23	43
	W	iP		16	58c
	T	iPNEZ		17	04c
		iS		21	56
		i		25	30
	Magnitude 6½, USCGS: 17N 99½W, 07:11:26. Some damage at Acapulco, exaggerated in press accounts.				

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
8	P	iP	07	25	07
	R	iP			01
	Pr	iP		24	55
	Bt	eP			49
	W	iP		25	20
	T	iP			27
	Aftershock. Tacubaya 16° 47'N 99° 53'W, 07:19:55				
8	P	e	18	59	37
	R	e	19	00	04
	W	e	18	59	38
		i			58
	USCGS: 4½S 153E, 18:46:29				
8	R	e	20	50	32
	W	iP			14
		i			41
		i			58
	Mexico				
8	P	iPNEZ!	21	05	27c
		iNEZ			37
		iSNE!		14	37
		iNE		15	23
		eSSNE		18	.8
		e		22	.8
		eLN		25	.2
		iRNZ		28	.6
		iP'P'		33	33
			A		T
		PZ	3¼		4
		PZ	12		6
		PH	3		4
		SH	30		12
		MH	40		20
		MZ	20		26
	R	iPNEZ	21	05	24c
		i			37
		iSN		14	26
		iP'P'		33	36
	Bt	iPNEZ		05	16c
		i			27
		iSEZ		14	12
		iP'P'!		33	39
	W	iP		05	36c
		iP'P'		33	28
	T	iPNEZ		05	41c
		i			50
		iSNE		15	00
		iP'P'		33	30
	USCGS: 19S 70W, 20:54:13				
	Pasadena 19S 70½W, 20:54:16,				
	Magnitude m=7.0, M=7.1				
8	P	eP	23	09	35
		e			48
	R	eP			32
		e			45
	Pr	eP			30
		e			41
	Bt	eP			22
		i			37
	T	iP		10	02
	USCGS: Northern Chile, 22:58:22				

Date	Sta.	Phase	h	m	s
January					
9	MW	e	00	42	25
		e		43	13
	D	eP		42	20
	R	eP			17
	T	eP			42
	Mexico				
9	MW	eP	00	53	10
	D	eP			14
	R	eP			04
	T	eP			29
	Mexico				
9	MW	eP	01	16	19
	R	eP			22
		e			37
	Pr	iP			28
		e			42
	Bt	iP			32
		i			48
	T	iP			03
		e			19
	BCIS: Andreanof Islands, Aleutian Islands, 01:08.3				
9	P	eP	03	27	04
	D	iP			01
	R	iP		26	59
	Pr	eP			55
	Bt	iP			51
	T	eP		27	16
	USCGS: Northern Chile, 03:15:40				
9	MW	e	08	04	13
		e			18
	D	eP			02
		e			10
	R	eP		03	58
		e		04	08
	Pr	e			14
	Bt	e			01
	USCGS: Northern Chile, 07:52:48				
9	P	iP	08	08	43d
	D	eP			46d
		epP		09	00
	R	iP		08	46d
		epP		09	01
	Pr	iP		08	46d
		epP		09	01
	Bt	eP		08	45
		epP			59
	T	eP			54
	BCIS: 16¾S 176¼E, 07:56:27				
9	P	e	08	12	46
	R	e(P)			49
	Pr	e(P)			55
	Bt	e(P)			58
	JMA: 43.6N 145.4 E, 08:01:42, 130 km				
9	P	iPNEZ	12	17	15c
		ipPNEZ		19	25
		esP		20	27
	PX	iSNE		26	37
		iSPNE		27	45
		esSNE		30	.4
		eNE		31	.2

(continued)

Pasadena and auxiliary stations, 1956 No.1

Date	Sta.	Phase	h	m	s
January (continued)					
9	P	eP'P'	12	43	41
		eSKPP'		46	15
			A		T
		PZ	½		1
		PH	0.2		1
		SH	14		15
		SH	3½		6
	R	iPZ	12	17	17c
		ipP		19	50
		esP		20	35
		iSNEZ		26	43
		iSPE		27	52
		isSNE		30	41
		eP'P'		43	42
		eSKPP'		46	15
	Pr	iP		17	18
		ipP		19	31
	Bt	iPEZ		17	17c
		ipPEZ		19	30
		esP		20	33
		iSEZ		26	44
		iSPEZ		27	47
		eP'P'		43	40
		eSKPP'		46	15
	T	iPNEZ		17	24c
		ipP		19	34
		e		20	39
		i			50
		iSNE		26	52
		iP'P'		43	44
		iSKPP'		46	09
	Magnitude 6½				
	USCGS: 23S 179E, 12:05:53, 650 km				
9	P	e	12	35	12
		e			37
	Pr	e			34
	Bt	e			40
	PKKP of preceding?				
9	P	e(P)	13	17	34
		e			49
		e			55
		e		18	23
	R	e(P)		17	35
	Pr	i(P)			29
	Bt	e(P)			23
	T	e(P)			59
	Tacubaya 14° 32'N 92° 19'W, 13:11:38, 100 km				
9	P	iPNEZ	17	07	15d
		ipP			55
	R	iP			09d
		ipP			49
	Pr	iP			03
		ipP			44
	Bt	iP		06	58d
		ipP		07	39
	T	iP			30d
		ipP		08	15
	USCGS: 16N 92W, 17:01:23 200 km				
9	P	iP	20	37	28
	R	eP			31
	Pr	iP			31
	T	eP			37

Date	Sta.	Phase	h	m	s
January					
9	MW	eP	20	56	58
	D	eP			57
		e		57	05
	R	eP		56	50
	Pr	eP			45
10	P	eP	09	04	52
	PX	ePPNE		08	11
		iSNZ		15	.0
		i(PS)E		16	.0
		eSSN		20	.0
		eSSSN		23	.7
		eGNE		25	.3
		eR		29	
		eG2NE	10	50	.2
			A		T
		PZ	3½		5
		PH	2		5
		PPZ	4		7
		PPH	3½		8
		SH	120		30
		MH	80		40
		MH	120		16
		MZ	100		17
	R	eP	09	04	53
		e		05	10
		iSNZ		15	10
		iE		16	16
	Pr	eP		04	54
	Bt	eP			59
		iSN		15	11
	T	ePEZ		05	01
		e			22
		eSEZ		15	23
	Magnitude m=7.1, M=7.3				
	USCGS: 25S 176 W, 08:52:36				
	Pasadena:25½S 175½W, 08:52:38				
10	P	eP	09	38	56
		e		41	31
	R	eP		38	59
		e		41	41
	Pr	eP		38	58
		e		39	05
		e		41	38
	T	eP		39	07
		e		41	49
	BCIS: Tonga region, 09:26:40				
10	P	eP	10	30	41
		e			51
	R	eP			43
		e			53
	Pr	eP			44
	T	eP			51
	USCGS: 25S, 176W, 10:18:25				
10	P	iPNEZ	12	35	04d
		ipP			12
		i			19
	R	iP			10d
		ipP			19
	Pr	iP			21
		ipP			34
		i			46
	Bt	iP			31
		ipP			42

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
10	T	eP	12	34	35
		ipP			45
	USCGS: 43½N 127W, 12:32:15				
10	P	e	15	27	27
	R	e			35
	T	e			06
10	P	e	15	35	38
	MW	e			34
	D	eP			31
	Pr	eP			22
		e		36	19
	Bt	e		35	35
	T	e			51
	Tacubaya 16° 51'N 93°47'W, 15:30:23, 100 km				
10	P	iP	18	29	36
	R	eP			39
	W	iP			38d
10	P	e	21	30	48
	W	iP			24
	CL	iP			28
	BCIS: Tonga region, 21:18.1				
10	P	eP	21	44	53
	Pr	eP		45	04
	W	iP		44	42
	CL	iP			45
	T	eP			40
10	MW	e	22	06	31
	R	e			23
	Pr	e			22
	W	i(P)			23
		e			31
	CL	i(P)			28
		i			51
		i			58
	USCGS: 25S 175½W, 21:54:05				
10	MW	eP	23	09	23
	Pr	eP			21
		e			56
	W	eP			27
11	P	eP"	06	29	07
		eEZ			24
		ePP		31	16
		eSKKP		42	10
	PX	eL	07	05.1	
	R	eP"	06	29	18
		eSKKP		41	55
	Pr	eP"		29	23
	Bt	eP"			26
		ePP		31	46
	W	eP"		29	11
		i			18
		ePP		31	17
		ePKKP		38	42
		eSKKP		42	45
	CL	iP"		29	18
		iPP		31	21
		eSKKP		42	45
	T	eP"		29	21
	USCGS: 7½N 94E, 06:10:03				
	BCIS: 8N 94½E, 06:10:06				

Date	Sta.	Phase	h	m	s
January					
11	P	iP	06	51	04
	R	iP			07
	Pr	iP			12
	Bt	iP			13
	W	iP		50	57c
	CL	iP		51	02c
	T	iP		50	57
		e		51	15
	JMA: 32.6N 139.3E, 06:39:05, 280 km				
11	D	e	07	30	10
	Pr	eP"		29	16
	Bt	eP"			18
	W	eP"			59
		e		30	05
	CL	eP"			03
	USCGS: Nicobar Islands, 07:10:49				
11	P	eP	10	57	48
		e			59
	PX	eLZ	11	28.5	
	R	e	10	57	52
	Pr	e			52
	Bt	e			50
	W	iP			52
		i		58	03
	CL	iP		57	58
		i		58	07
	T	e			00
	BCIS: 26¼S 176W, 10:45:30				
11	P	iPEZ	12	08	22c
		e			33
	R	iP			26c
		e			36
		e			43
	Pr	eP			28
	Bt	iP			29c
	W	iP			21c
	CL	iP			27c
	T	e			25
	USCGS: Solomon Islands, 11:54:59, 100 km				
11	P	eP	12	55	33
	R	iP			31
	Pr	eP			26
	Bt	iP			23d
	W	iP			42d
	CL	iP			39d
	T	eP			46
	USCGS: Chile-Argentina 12:43:10				
11	W	eP	13	13	56
	CL	eP			59
11	P	iP	15	59	04
	R	iP			06
	W	iP			05
	CL	iP			10d
	T	iP			10
	South Pacific				
11	MW	e	20	44	01
	Pr	e			03
	W	eP			00

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
11	Is	eP	20	44	02
	CL	iP			03
	USCGS: 16½S 168E, 20:31:16				
11	P	eP	21	24	08
	R	eP			12
	Pr	eP			13
	Bt	eP			15
	W	iP			08
	Is	iP			10
	CL	e			36
	T	eP			10
		e			18
	USCGS: 8½S 157½E, 21:11:04				
11	W	eP	22	25	35
		e			40
	CL	eP			43
11	W	eP	22	31	54
	Quetta: 31N 69½E, 22:16:17				
11	MW	eP	23	53	17
		epP			30
	D	eP			13
		epP			27
	R	eP			10
		epP			23
	Pr	eP			05
		epP			18
	W	iP			27
		ipP			40
	Is	eP			26
		epP			39
	CL	eP			20
		epP			33
	T	e			44
	Tacubaya 13° 48'N 91° 47'W, 23:47:08, 100 km				
12	P	iPNEZ	00	45	30
	R	eP			23
	Pr	eP			14
		e			21
	Bt	iP			06
		i			19
	W	iP			44
	Is	eP			42
		e			47
	CL	eP			38
		e			42
	T	eP			55
	Tacubaya: 20° 42'N 108° 23'W, 00:40:25				
12	MW	e	01	12	07
	Pr	e			02
	W	iP			03
	Is	eP			04
		e			16
	CL	iP			07
12	W	e	02	26	57
	CL	e		27	05
	Part of next?				

Date	Sta.	Phase	h	m	s
January					
12	R	e	02	28	46
	Pr	e			37
	W	eP			37
		e			46
	Is	eP			39
		e			52
	CL	iP			43
		i			53
12	D	e	02	32	26
	Pr	e			22
	W	iP			19
		ipP			32
	Is	eP			24
		epP			35
	CL	iP			26
		ipP			37
	T	e			30
	BCIS: Tonga region, 02:20.2				
12	MW	e	04	38	38
	R	e			39
	Pr	e			39
	W	iP			39d
	Is	iP			41
	CL	iP			44
	T	eP			46
12	P	iPNZ	04	49	15
		e			28
		e			36
	R	iP			12c
		e			22
		e			33
	Pr	iP			07
		e			27
	Bt	iP			03c
		e			24
	W	iP			23c
		i			32
		i			47
	Is	iP			22c
		e			40
	CL	iP			19c
		i			41
	T	iP			27
		e			50
	USCGS: 19S 70W, 04:38:00				
12	P	e	05	59	15
	MW	e			14
		e	06	02	50
	W	eP	05	59	10
		e	06	02	36
	Is	e(P)	05	59	10
	CL	iP			08
		i	06	00	29
		e		02	34
	T	e	05	59	05
	BCIS: 47.4N 19.1E, 05:46:08				
12	MW	e	06	13	59
	R	e			45
	W	iP			35
		i			40
		ipP			46
	Is	eP			36
		epP			46

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January (continued)					
12	CL	iP	06	13	41
		i			55
		BCIS: Tonga region, 06:01:30			
12	PX	eLZ	06	41.8	
	MW	e		22	45
	R	e			38
	Pr	e			45
	W	eP			35
		i			47
	Is	eP			36
		e			47
	CL	iP			41
	T	e			53
		USCGS: 22½S 177½W, 06:10:25			
12	MW	eP	07	54	08
		epP			46
	R	eP		53	52
	Pr	eP			47
		e		54	13
		epP			25
	W	iP			06
		e(pP)			45
	Is	iP			04
		i(pP)			42
	CL	iP		53	59
		i(pP)		54	38
	T	e			08
		USCGS: 5N 75½W, 07:45:27, 200 km			
12	P	eP	09	05	51
	W	iP			32
	Is	eP			34
	CL	iP			37
12	P	iP	12	22	00
	R	iP			03d
	Pr	iP			03d
	W	iP			03d
	Is	iP			05d
	CL	iP			08d
		Wellington: Kermadec region, 12:09.9			
12	MW	e	12	58	17
	R	e			17
	Pr	e			19
	W	e			08
	Is	e			10
	CL	i			14
		BCIS: New Hebrides, 12:45.0			
12	MW	e	22	35	15
	D	eP			20
		e			36
	R	eP			18
	Pr	iP			18
	W	iP			18
	Is	iP			19
	CL	iP			22
		i			38
		BCIS: Tonga region, 22:23.1			
12	D	e	22	59	47
	Pr	e			41
	W	iP			36
		ipP			49

(continued)

Date	Sta.	Phase	h	m	s
January (continued)					
12	Is	iP	22	59	42
		ipP			55
	T	e			56
13	MW	eP	00	10	16
	W	eP			06
	Is	eP			18
	CL	eP			11
13	MW	eP	00	57	12
	Pr	eP			13
	Bt	e			33
	W	iP			15
	Is	eP			17
	CL	iP			20
	T	eP			22
		BCIS: Kermadec Island region, 00:44.9			
13	P	iP	02	17	43
	R	eP			48
	Pr	iP			47
		ipP		18	49
	Bt	eP		17	46
	W	iP			46
		ipP		18	49
		e		19	22
	Is	iP		17	48
		epP		18	51
	CL	iP		17	52
		epP		18	55
	T	iP		17	53
		epP		18	55
		Depth 260 km±			
		BCIS: Tonga region, 02:05.9			
13	MW	eP	02.	35	29
		e			48
	R	e			55
	Pr	e			59
	W	eP			26
	CL	iP			33
13	W	iP	02	46	52
		ipP		47	05
	Is	eP		46	53
	CL	iP			57
13	MW	eP	03	14	55
	R	eP			56
	Pr	eP			58
	W	eP			56
		e		16	41
	Is	eP		14	58
	CL	iP		15	02
		i			17
		i			26
		USCGS: Tonga reg. 03:02:50			
13	MW	eP	03	17	06
	R	eP			06
	Pr	eP			05
		e			20
	W	iP			06
	Is	eP			08
	CL	iP			10
		USCGS: Tonga region, 03:04:50 (rejecting a previous interpretation of this and the preceding as a single deep shock).			

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
13	P	iPEZ	03	36	53d
		e		39	58
	PX	eL		51.7	
	R	eP		36	56d
	Pr	iP		37	03d
	Bt	iP			07d
	W	iP		36	41c
		i			51
	Is	iP			44d
	CL	iP			47c
		i			57
	T	iP			39c
		USCGS: 57½N 163E, 03:27:13			
13	P	iPNEZ	03	37	23
	R	iP			26
	Pr	iP			34
	Bt	iP			39
	W	iP			11
	Is	iP			13
	CL	iP			16
	T	iP			07
		Immediately follows preceding			
		USCGS: 57½N 163E, 03:27:43 (rejecting interpretation as a single deep shock).			
13	MW	eP	04	27	26
	W	iP			36
	Is	eP			35
	CL	eP			41
13	MW	eP	04	41	49
	W	iP			38
	Is	eP			40
	CL	iP			44
13	P	eP	06	29	39
		ePP		33	26
	PX	eL		59.5	
		A		T	
		PPZ	¾	2	
		MH	1	20	
		MZ	¾	20	
	R	eP	06	29	38
		e		32	04
	Pr	eP		29	39
		e		32	09
	Bt	eP		29	41
		e		31	49
	W	eP		29	38
		i			44
		i		30	00
		ePP		33	29
	Is	eP		29	39
		ePP		33	36
	CL	iP		29	44
		i			50
		i		32	40
		iPP		33	44
	T	ePP			41
		Pasadena: Magnitude 6-6¼ 28S 167E, 06:16:15			

Date	Sta.	Phase	h	m	s
January					
13	P	ePEZ	12	24	56
	R	eP			59
	Pr	iP			58c
	W	iP		25	00c
		i			15
	Is	iP			01c
		e			11
	CL	iP			04c
		i			14
		i			18
		i			30
	T	iP			07
		USCGS: 24S 177W, 12:12:41			
13	P	iPNZ	15	16	08d
		epP		17	08
	R	iP		16	06d
		epP		17	07
	Pr	iP		16	01d
		epP		17	00
	Bt	iP		15	58d
	W	iP		16	16d
		i			22
		ipP		17	20
	Is	iP		16	16d
		epP		17	26
	CL	iP		16	13d
		i			20
		ipP		17	14
	T	iP		16	21
		BCIS: Chile, 15:04.8, 250 km			
13	W	iP	19	56	14
	Is	eP			15
	CL	iP			19
	T	e			12
13	P	eP	23	34	41
		epP		35	11
	R	eP		34	37
		ipP		35	05
	Pr	eP		34	34
		epP		35	01
	Bt	eP		34	30
		ipP			57
	W	iP			49d
		ipP		35	17
	CL	iP		34	45d
		ipP		35	12
	T	eP		34	53
		epP		35	21
		BCIS: Northern Chile, 23:23:12, 100 km			
14	Pr	e	03	54	18
		e			24
	W	iP			09
		i			23
	Is	eP			10
		e			25
	CL	eP			16
		i			29
	T	eP			17
		BCIS: Tonga region, 03:42.6			

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s	
January						
14	P	iP	07	59	13c	
	R	eP			17	
	Pr	iP			17c	
	W	iP			15c	
	Is	iP			17	
	CL	iP			21c	
	T	eP			23	
	BCIS: Tonga region, 07:47.3					
14	W	iP	11	38	06	
	Is	e(P)			06	
	CL	eP			14	
	T	e			28	
14	P	eP	14	16	42	
		i			52	
		i			58	
		i		17	26	
	PX	iSNE		23	08	
		eLNE		26.6		
	R	iP		16	48	
		eSNEZ		23	18	
	Pr	iP		16	55c	
	Bt	iP		17	00c	
		eSNZ		23	37	
	W	iP!		16	32c	
		i			41	
		i			52	
		i		17	28	
	CL	iP		16	39c	
		i		17	22	
	T	eP		16	30c	
		i			43	
		i			54	
		iSN		22	49	
	Magnitude 6 USCGS: 51½N 173W, 14:08:41					
14	P	eP	14	36	11	
		i			17	
	R	eP			12	
		i			21	
	Pr	eP			18	
		i			26	
		i			31	
	Bt	eP			20	
		i			29	
	W	iP			00	
		i			09	
		i			14	
	Is	iP			01	
		i			11	
		i			16	
	CL	iP			05	
		i			14	
		i			20	
	T	eP			00	
		i			08	
		i			13	
	JMA: 42.3N 145.1E, 14:24:43, 60 km					
14	D	eP	18	44	50	
	R	eP			48	
		i			51	
	Pr	eP			46	
		i			49	
	Bt	iP			48	
		e			51	
	W	eP			54	
		i			57	
		i		45	01	

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s	
January (continued)						
14	Is	iP	18	44	55	
		i		45	01	
		i			07	
	CL	iP		44	51	
		i			56	
		i		45	08	
	T	e		44	55	
		e		45	11	
	BCIS: 7½N 38¼W, 18:33:00					
14	P	iP	21	08	01	
	W	eP		07	35	
		i			50	
	CL	eP			46	
		e			55	
	T	eP			34	
		e			46	
14	P	ePNEZ	22	22	00	
	R	eP			02	
	Pr	iP			03	
		i			17	
	Bt	eP			00	
		e			20	
	W	iP			04	
		i			12	
		i			36	
	Is	iP			05	
		i			19	
		e			36	
	CL	iP			08	
		i			28	
		i			40	
	T	eP			11	
		e			17	
	USCGS: 18S 173W, 22:10:42, 200 km					
14	W	iP	23	12	47	
		i			57	
	Is	eP			47	
	CL	iP			51	
		i		13	01	
	T	eP		12	53	
15	Pr	e	01	36	17	
	Bt	e			21	
	W	e			06	
	Is	e		35	54	
	CL	e		36	09	
	T	e			09	
	USCGS: about 50 miles south of Guam, 01:23:10					
15	R	e	01	42	30	
	W	e			21	
	CL	e			24	
	T	e			23	
	Marianas?					
15	D	e(P)	02	14	13	
	Pr	e(P)			02	
	W	e(P)			03	
	Is	e			12	
	CL	e			16	
	T	e		13	52	
15	W	eP	08	40	51	
	CL	eP			56	
	T	eP			59	
15	Pr	eP	09	14	24	
	W	iP			24	
	Is	iP			24	
	CL	iP			28	
15	P	eP	10	28	59	
		e		29	18	

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s	
January (continued)						
15	R	eP	10	29	06	
	Pr	eP			04	
	W	iP			04	
	Is	eP			04	
	CL	iP			08	
	T	eP			11	
	USCGS: 25S 176W, 10:16:45					
15	W	iP	12	38	19	
		i			29	
		i			40	
	Is	eP			18	
	CL	iP			23	
		i			33	
	T	eP			14	
		e			24	
15	W	iP	13	54	05	
		i(pP)			13	
	Is	eP			05	
	CL	iP			10	
	T	eP			02	
	USCGS: Queen Charlotte Is. region 13:49:39					
15	W	iP	18	22	26	
	Is	e			27	
	CL	e			32	
		e			44	
15	Pr	e	18	54	29	
	W	iP			00	
		ipP			09	
	Is	eP		53	59	
	CL	iP		54	04	
	T	e			53	
		e		55	06	
	USCGS: Tonga region 18:42:03					
15	W	iP	21	15	26	
		ipP			44	
	CL	iP			31	
	JMA: 44N 147E, 21:04:33					
15	R	eP	23	33	50	
	Pr	eP			42	
	W	iP		34	09	
	Is	eP			06	
	CL	iP			03	
	T	eP			13	
	Tacubaya: 16° 47'N 99° 53'W, 23:28:41					
16	W	iP	00	37	43d	
		i			50	
	Is	eP			43	
	CL	iP			47d	
16	P	e	02	12	43	
		e		13	47	
	R	e		12	22	
		e		13	53	
	W	iP		12	22	
		i		13	48	
	Is	e(P)		12	24	
	CL	iP			26	
		e		13	18	
		i			53	
	T	e			51	
	USCGS: 5S 153E, 02:00:17, 150 km					

Date	Sta.	Phase	h	m	s	
January						
16	P	eP	08	15	53	
	Pr	i		16	17	
	W	iP			17	
		i			51	
	Is	iP			22	
		i			57	
16	W	iP	10	01	30	
	Is	e			47	
	CL	iP			35	
	T	e			26	
16	P	iP	11	59	35	
	R	eP			39	
		e			57	
	W	iP			25	
	Is	i(P)			23	
		i			27	
	CL	iP			31	
	T	eP			22	
	BCIS: Unimak Island, 11:52:22					
16	W	iP	12	47	00c	
		i			11	
	CL	iP			07	
	USCGS: 54N 163W, 12:40:00					
16	P	iP	19	19	48	
	R	eP			50	
	Pr	iP			50c	
	W	iP			51c	
	Is	iP			52c	
	CL	iP			55c	
16	P	iP	23	46	34	
		i!			38	
		iPcP		48	03	
	PX	ePP			31	
		iScP		51	49	
		iSNEZ!		53	43	
		eScSNE		56.2		
		eSSNEZ		57.2		
		i		57.7		
		iGNE		59.1		
			A		T	
		PZ	18		5	
		PH	10		5	
		PPZ	6		5	
		PPH	6		5	
		SH	70		20	
		MH	100		20	
		MZ	100		20	
	R	eP	23	46	29	
		iNEZ			36	
		i		47	07	
		iPcP		48	01	
		iPPNEZ			33	
		iSNEZ!		53	36	
	Pr	iP		46	24	
		i			31	
		i		47	11	
	Bt	iP		46	18	
		iNEZ			24	
		i		47	49	
		iPcP			59	
		iScP		51	42	
		iSN		53	17	
	W	iP		46	45	

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January (continued)					
16	W	i	23	46	49
		i		47	16
		iPcP		48	01
		i		52	01
	Is	iP	23	46	44
		i		47	09
		iPcP		48	09
		i		49	03
	CL	iP		46	38
		i!			42
		i		47	23
	T	iP		46	50
		iNEZ			54
		i		48	31
		iSNEZ		54	06
	Magnitude m=7.1, M=7.3				
	USCGS: ½S 80½W, 23:37:37				
17	P	e(P)	08	08	25
	PX	e(S)N		14.8	
		eLNZ		19.8	
	R	i		08	33
	Pr	e(P)			22
		i			44
	W	eP			45
		i			59
		i		11	43
		i			51
	Is	eP		08	45
	BCIS: 5½S 104$\frac{3}{4}$W, 08:00:47				
17	W	iP	18	18	59.2
		eS		19	55.6
	Is	eP			00.9
		eSE			57.3
	CL	eP			06.2
		eS			53.7
	T	eP		18	38.9
		iSNZ		19	14.4
	Magnitude 4¼ Nevada				
17	W	e	19	12	44
		e		13	11
	CL	e		12	57
		e		13	01
	T	e			00
	USCGS: Solomon Islands region, 19:00:08				
17	Is	eP	22	36	39
		e			49
	CL	iP			44
	T	eP			45
18	P	iP	05	57	23
	R	iP			21
	Pr	e			24
	W	iP			31
		i		58	03
	Is	iP		57	30d
		e		58	01
	CL	iP		57	29
	T	eP			35
		e		58	06
	BCIS: 33S 69½W, 05:45:08				

Date	Sta.	Phase	h	m	s
January					
18	P	iPNZ	08	18	54c
		i		19	03
		iNEZ			13
	PX	eLZ		43.3	
	R	iP		18	52c
		i		19	00
		i			04
		i			48
	Pr	iP		18	47c
		i			56
		i		19	09
		i			43
	Bt	iP		18	43c
		i			52
		i		19	41
	Is	iP			02c
		i			10
		i			14
	CL	iP			00c
		i			09
		i			56
	T	iPNEZ			07c
		i			16
		i		20	04
	USCGS: 24S 70W, 08:07:17				
18	Is	eP	09	47	37
		e			40
	CL	eP			40
		i			43
	USCGS: 14½S 167E, 09:34:52				
18	W	iP	11	56	30
	Is	iP			33
	CL	iP			37
	T	eP			28
	BCIS: Kamchatka, 11:46.5				
19	Pr	eP	08	50	39
		epP		52	44
	W	iP		50	26
		e		52	18
		ipP			20
	Is	eP		50	25
		epP		52	17
	CL	iP		50	30
		epP		52	24
	T	eP		50	26
		epP		52	20
	JMA: 28N 140E, 08:38.--- 500 km				
19	P	iP	18	20	13
		e			40
		i			45
		i		21	13
	R	iP		20	16d
		i			47
	Pr	iP			18d
		i			45
	Bt	eP			25
		e		21	05
		e			31
	Is	eP		20	13
	CL	iP			16
		i			34
		i			48

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January (continued)					
19	CL	i	18	20	55
	T	e			33
		e		21	30
	USCGS: 6S 155E, 18:07:07				
19	D	i(P)	19	21	58
	R	i(P)		22	08
	Pr	i			32
	Is	e(P)			49
	CL	i(P)			51
20	P	eP	04	44	09
	PX	eLN	05	20.8	
	R	eP	04	44	11
	Pr	eP			18
	Bt	eP			21
	W	iP		43	58d
		i		44	04
		i			53
	Is	eP			01
		e			06
		e			32
	CL	iP			04d
		i			09
		i			23
		i			33
	T	eP		43	57
	USCGS: 47N 154E, 04:33:30				
20	P	e(P)	05	10	46
		e		11	06
	R	e(P)			02
	Pr	i(P)			11
	Bt	e			14
	W	eP		10	41
		i			46
	Is	e(P)			49
	CL	iP			54
	T	eP			46
		e		11	04
	USCGS: 52½N 170W, 05:03:10				
20	Pr	e(P)	11	18	25
	Is	eP			18
	CL	iP			21
	T	iP			12
	BCIS: Kamchatka 11:08.5				
20	D	e	20	24	10
	R	e			29
	Is	e		23	54
		e		24	05
	CL	e			09
20	P	iP	23	36	34
	R	iP			37
		epP		37	17
	W	iP		36	32c
		ipP		37	12
	CL	iP		36	36c
		ipP		37	16
	T	eP		36	36
	USCGS: 5S 155E, 23:23:40, 150 km				
21	R	eP	07	15	54
		e		16	04
	Pr	iP		15	51
	W	e(P)			50
	Is	e(P)			52

(continued)

Date	Sta.	Phase	h	m	s
January (continued)					
21		e	07	16	36
	CL	iP			03
		i			09
21	P	eP	08	15	26
		e			43
		e		16	27
		ePcP		18	26
	R	eP		15	22
		e			39
		ePcP		18	24
	Pr	iP		15	17
		i			34
		i		16	26
	W	iP		15	40d
		i			57
		iPcP		18	30
		i			50
		e		22	12
	Is	eP		15	38
		e			55
		ePcP		18	29
	CL	iP		15	34
		i			51
		iPcP		18	28
		i			38
	T	eP		15	44
		e		16	01
		ePcP		18	32
	USCGS: 15N 93W, 08:09:33, 150 km				
21	P	e(P)	12	34	55
		i		35	01
	R	eP		34	53
		i		35	03
	Pr	eP		34	56
		i		35	03
	W	iP		34	54
		i		35	04
	Is	eP		34	56
		i		35	06
	CL	iP		34	59
		i		35	09
		i			39
	T	eP			12
		i			17
		i			26
	USCGS: 23S 176W, 12:22:42				
21	W	e(P)	13	59	10
	CL	i(P)			15
21	P	iPNEZ	18	05	39d
		i			56
		ipPNZ		06	09
	R	iP		05	35d
		i			54
		ipP		06	04
	Pr	iP		05	31d
		i			46
		ipP		06	00
	Bt	iP		05	27d
		i			48
		ipP			56
	W	iP		05	48d
		i		06	03
		ipP			17
	Is	iP		05	46d
		i		06	06
		ipP			15

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
21	CL	iP	18	05	47d
		ipP		06	16
		i			28
		USCGS: 21S 67½W, 17:54:15, 100 km			
21	P	eP	18	50	36
	W	iP			40c
		i			51
	Is	iP			41c
		i			51
	CL	iP			46c
		i			56
21	D	eP	18	56	26
		e			53
	R	e			25
	Pr	eP			16
	W	iP			37
	Is	eP			35
	CL	iP			31
		USCGS: Ecuador aftershock, 18:47:33			
22	W	eP	00	17	11
	Is	eP			14
	CL	eP			18
		BCIS: 15S 171¾W, 00:05:53			
22	R	e	00	57	35
	W	iP			16d
	Is	iP			20
	CL	iP			22
		USCGS: Kodiak Island 00:50:46			
22	D	e	01	04	54
	R	eP			38
	W	iP			21
		i			32
	Is	iP			24
	CL	iP			26
	T	eP			16
		USCGS: Kodiak Island region, 00:57:50			
22	Pr	e	14	28	25
	W	i(P)			25
		i			36
	Is	e(P)			28
		e			38
	CL	e(P)			29
		i			41
		i		29	09
22	P	eP	16	59	57
	W	iP			55
	Is	eP			58
	CL	iP	17	00	02
22	W	iP	20	00	21
		e			30
	Is	eP			22
	CL	iP			17
		BCIS: Northern Chile, 19:49.2, 100 km			
23	P	iP	00	53	19
	D	eP			20
		epP			34
		e		54	43

(continued)

Date	Sta.	Phase	h	m	s
January		(continued)			
23	R	eP	00	53	21
		epP			34
		e		54	36
	Pr	iP		53	29
		ipP			45
		e		54	59
	Bt	i		53	51
	W	iP			02c
		ipP			19
		i		55	50
	Is	eP		53	06
		epP			23
	CL	iP			08c
		ipP			24
		i		54	25
		i		55	53
	T	eP		52	59
		epP		53	14
		USCGS: 58N 154½W, 00:46:35			
23	P	iPNEZ	03	57	10d
		iNEZ			15
		i			24
	PX	iSE	04	05	03
		iE			25
		e(G)NE			11.5
		eREZ			14.3
			A		T
		PZ	½		1¼
		PH	0.2		1¼
		SH	1		6
		MH	1½		20
	R	iP	03	57	12
		eSE	04	05	10
	Pr	iP	03	57	19d
		i			21
		i			39
	W	iP		56	58
	Is	iP		57	01d
	CL	iP!			03d
		i			09
		i			27
	T	iPEZ		56	55d
		eSE	04	04	39
		iS			47
		Magnitude 6½			
		USCGS: 55½N 162E, 03:47:27, 60 km			
23	P	eP	04	07	18
	W	iP			05c
	Is	eP			08
	CL	iP			11c
		i			27
	T	eP			03
23	P	eP	06	50	13
	W	iP			12
		i			45
	Is	i			37
	CL	iP			18
23	D	ePKKP	08	04	59
	Pr	epPP	07	56	16
		ePKKP	08	04	51
	W	iPP	07	54	07

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
23	W	ipPP	07	56	13
		iPKKP	08	04	48
		i		05	04
		iSKKP		07	34
		USCGS: 7N 123½E, 07:36:14, 650 km			
23	P	eP	12	01	54
	R	eP			50
		e			57
	Pr	eP			48
		e			56
	W	iP			54
		i		02	03
	Is	eP		01	56
		e		02	03
	CL	iP		01	54
		i		02	01
23	R	eP	22	25	59
	Pr	eP		26	04
	W	eP			18
	Is	eP			17
	CL	iP			14
		Tacubaya: 18°36'N 100° 05'W, 22:21:19, 100 km			
24	Pr	i	00	47	31
	W	iP			09c
	Is	eP			13
	CL	iP			17
	T	eP			09
24	D	e	00	58	20
	W	e			31
	Is	e			27
	CL	i			26
24	D	e	03	49	43
	Pr	eP			18
	W	eP			46
		i			53
	Is	eP			45
	CL	iP			49
		i		50	01
24	P	iP	08	18	30
	R	iP			32
	Pr	eP			31
	W	iP			32d
		i			54
	Is	iP			34d
		e			59
	CL	iP			38d
		i			50
		i		19	03
		BCIS: Kermadec Is. region, 08:06.2			
24	P	e	08	59	40
		e	09	00	39
	W	i			43
	Is	e			49
	CL	e		02	17
		i			27
		USCGS: 16½S 167E, 08:49:07			
24	R	e	12	26	33
	Is	e			17

(continued)

Date	Sta.	Phase	h	m	s
January		(continued)			
24	CL	iP	12	26	01
		USCGS: 45N 150E, 12:15:04			
24	P	eP	13	35	39
	D	eP			40
	Is	eP			30
	CL	iP			29d
	T	eP			21
25	Pr	eP	04	20	35
	W	iP			53
		i		21	10
	Is	i			14
	CL	iP			00
		i			18
25	P	iPNEZ	06	38	20
	R	iP			15d
		i			19
		e		39	55
		ePcP		41	21
	Pr	iP		38	10d
		iPcP		41	18
	Bt	iP		38	04d
		ePcP		41	06
	W	iP		38	28d
		i			31
		i		40	00
		ePcP		41	35
		e		43	08
	Is	iP		38	30d
		i			33
		i		40	02
		ePcP		41	37
	CL	iP		38	26d
		i			29
		iPcP		41	34
		i			38
	T	eP		38	37
		e		40	06
		ePcP		41	44
		BCIS: ½N 85W, 06:30:00			
25	D	e	07	43	36
	R	e			37
	Pr	e			37
	W	iP			35d
		i			44
	Is	iP			39d
	CL	iP			44d
25	P	eP	11	00	09
	PX	eLZ		29.5	
	R	eP		00	10
	Bt	eP			09
	W	iP			08
		i			17
	Is	iP			12
		i			21
	CL	iP			16
		i			25
	T	eP			18
		USCGS: Tonga region, 10:47:53			
26	R	e	08	31	01
	Pr	e		30	52
	Is	e		31	49
	CL	i			45
		Mexico			

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
26	MW	e	08	42	33
	R	e			29
	W	i			46
	Is	eP		41	29
		e		42	46
	CL	i			47
26	W	iP	10	40	20d
	Is	eP			24
	CL	iP			29
		i			58
26	MW	iP	10	50	14d
	R	eP			15
	W	iP			10d
		i		51	14
	Is	iP		50	16d
		e		51	18
	CL	iP		50	20d
27	P	eP	13	51	07
		e			29
	PX	eL	14	16.5	
	R	eP	13	51	07
		i			27
		e		56	12
	Pr	e		51	07
	Bt	e			07
	Is	eP			09
		i			29
	CL	iP			11
		i			29
	T	eP			15
		e			34
	USCGS: 26S 176W, 13:38:45				
27	R	eP	17	51	24
	W	iP			28
		i			42
	Is	eP			26
	T	eP			29
28	MW	eP	04	53	27
	R	eP			29
	Pr	eP			29
	W	iP			35
	Is	iP			31
	CL	iP			33
28	P	eP	05	05	40
	R	eP			30
		ipP			38
	Pr	eP			31
		e			36
	Bt	eP			29
	W	eP			46
	Is	eP			36
		ipP			43
	CL	i(P)			31
		i			39
	BCIS: 0.9N 27.2W, 04:52:30				
28	P	iP	07	55	59
		i		56	13
		i			20
	PX	eGN	08	21.0	
		eREZ		25.3	

(continued)

Date	Sta.	Phase	h	m	s
January	(continued)				
28			A		T
		PZ	0.2		1½
		MH	3½		20
	R	iP	07	56	03
	Pr	iP			07
		i			26
	Bt	eP			06
		i			12
		e			26
	W	iP			04
	Is	eP			00
	CL	iP			03
		i			23
		i		57	10
	T	e		56	22
	Magnitude 6½ USCGS: 4½S 151½E, 07:42:53, 100 km				
28	R	eP	21	28	22
	Pr	eP			16
		i			24
	W	iP			25
	Is	eP			22
28	P	ePEZ	22	56	57
		eSEZ		58	01
	Is	eP		56	21
		iS		57	12
	CL	iP		56	18
		iS		57	10
	H	iP		56	22
		iS			58
	T	eP			01
		iS			29
	Magnitude 4.2 USCGS: 39N 118W, 22:55:30				
29	P	e(P)	03	41	19
	Is	e(P)			09
	CL	i(P)			11
29	P	i	04	48	45
	Pr	i			47
	Is	i			49
	USCGS: 36N 90W, 04:44:14				
29	Pr	e	09	27	57
		e		28	27
	Is	eP		27	58
	CL	iP		28	01
29	MW	eP	10	58	50
	R	eP			51
	Pr	eP			52
	Is	iP			51
	CL	iP			55
29	Pr	eP	12	02	43
	Is	iP			45
	CL	iP			47
29	P	ePEZ	16	43	07
	R	eP			11
	Pr	iP			17
	Is	iP			00
	CL	iP			02d
		i			16
	USCGS: Kamchatka, 16:32:53				

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January					
29	P	ePP	22	38	54
	R	e			33
	Pr	e		39	05
		e			18
	Bt	e			09
	Is	e		38	25
		e			45
	CL	e			32
		i			50
	T	e			44
	BCIS: 21N 121E, 22:20:56				
30	MW	eP	02	04	34
	Pr	iP			35
	Is	iP			37
	CL	iP			39
30	MW	eP	08	45	42
	R	eP			43
	Pr	eP			45
	Is	iP			45
	CL	iP			48
	Apia: 22S 178W, 08:34:35, 600 km				
30	P	iPNEZ	08	56	18
		e			50
	PX	eSN	09	07	49
		eGN		20.6	
			A		T
		PZ	0.1		1
		MH	9		20
		MZ	7		20
	R	iP	08	56	20
		i			53
		e	09	00	00
		iSNE		07	33
	Pr	eP	08	56	18
		i			20
		i			23
	Bt	iP			18
	Is	iP			23
	CL	iP			25
		i	09	00	10
	Magnitude 6¼ BCIS: 37¼S 177E, 08:43:05 Wellington: 36.9S 177.1E, 08:43:00				
30	MW	e	10	00	41
	R	e			42
	Pr	e			44
	Is	e			44
		e			54
	CL	e			48
	Wellington: 36.9S 177.1E, 09:47:25				
30	P	eNZ	10	15	07
	MW	e(P)		14	55
		e		15	09

(continued)

Date	Sta.	Phase	h	m	s
January	(continued)				
30	R	e(P)	10	15	09
	Pr	i(P)			09
		i			24
		i			47
	Bt	e(P)			07
	Is	e(P)			12
	CL	i(P)			14
	Wellington: 36.9S 177.1E, 10:01:51				
30	MW	eP	15	04	11
	R	e			25
	Pr	eP			19
	CL	eP			04
	Is	iP			01
	BCIS: 51¾N 176W, 14:55:55				
30	P	iPNEZ	19	20	52
		e			59
	R	iP			55c
		epP		22	45
	Pr	iP		20	55c
		epP		22	48
	Bt	iP		20	54
	Is	iP			57c
	CL	iP			59c
		i		21	48
	T	eP			02
	USCGS: Fiji Islands, 19:09:12, 500 km				
31	MW	eP	00	51	33
	R	eP			35
		e		52	08
	Pr	iP		51	38
		e		52	09
	Is	eP		51	35
	CL	iP			39
		i		52	12
	USCGS: 14½S 167E, 00:39:05, 150 km				
31	P	eP	05	36	45
		i			51
	R	eP			41
	Pr	eP			45
	Bt	eP			54
	Is	eP			41
	CL	iP			38
		i			44
	BCIS: 25N 143½E, 05:24.5				
31	P	iPNEZ!	09	29	41d
		i			49
		iEZ		30	39
		i			55
		ipP		31	06

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
January		(continued)			
31	P	iPPEZ	09	33	22
		ePˈPˈ		55	00
			A		T
		PZ	1½		1
		PH	¾		1
	R	iPNEZ!	09	29	43d
		i		30	11
		ipP		31	01
		ePP		33	25
		iSKSE		39	43
		ePˈPˈ		54	56
	Pr	iP!		29	45d
		i			57
		ipP		31	07
	Bt	iP!		29	46d
		i			53
		ipP		31	06
		iPP		33	31
	Is	iP		29	39
		ePˈPˈ		54	58
	CL	iP!		29	44d
	T	iPNE			43
		Magnitude 6½±			
		USCGS: 4S 152E,			
		09:17:11, 400 km			
February					
1	P	iPNEZ	01	45	48
	PX	eLZ	02	13.4	
	R	eP	01	45	48
		i			52
		e		49	17
	Pr	iP		45	50
		i			53
		i		46	23
		e		48	33
	Bt	iP		45	49
		e		48	40
	Is	eP		45	49
		i			52
		e		49	33
	CL	iP		45	53
		i		46	17
		i		49	39
	T	iPN		45	56
		USCGS: 20 S 169 E,			
		01:32:55			
1	Is	e(P)	05	33	15
	CL	i(P)			13
		BCIS: Kamchatka			
1	P	ePNEZ	08	38	57
	Pr	iP			59
	Is	iP		39	00
	CL	iP			03
		USCGS: 21 S 179½ W,			
		08:27:41, 600 km			
1	P	iPNEZ	13	53	47d
		ipP		55	13
	PX	iSKSNE	14	03	31
		iSE			42
		iSP		04	37
		iNE		05	34
			A		T
		PZ	1		1¼
		PH	1		2
		SH	15		7

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
1	R	iPNEZ!	13	53	50d
		ipP		55	17
		i		56	38
		e		58	26
		iSKSNE	14	03	36
		iSNEZ			50
		iE		04	49
		iE		05	42
		eP'P'		20	00
	Pr	iP!	13	53	53
		ipP		55	20
		i		58	36
		iS	14	03	53
		iP'P'		19	58
	Bt	iP	13	53	55d
		ipP		55	20
		i		56	11
		i		58	34
		i(S)NEZ	14	03	46
	Is	iP	13	53	43d
		i			55
		ipP		55	10
		i		57	04
		i		58	34
		iS	14	03	38
		ePKKP		13	25
		eP'P'		19	54
		epP'P'		21	38
		eSKPP'		22	42
		eP'P'P'		40	22
	CL	iP!	13	53	46d
		ipP		55	09
		i		56	40
		iSKS	14	03	30
	T	iPN	13	53	44
		ipPN		55	10
		iSKSN	14	03	21
		Pasadena: 18¾ N 145½ E,			
		13:41:46, 370 km,			
		m=6.9, M=7.0			
1	P	eP	15	23	51
	R	iP			50d
	Bt	iP			53d
	Is	iP			46d
		e		26	57
	CL	iP			44d
		i			27 18
		BCIS: 39.2 N 15°45' E,			
		05:10:49, 215 km			
1	P	iP	16	36	49
	R	iP			45d
	Bt	iP			38d
	Is	iP			57d
		i		37	22
	CL	iP		36	54d
		USCGS: Northern Chile,			
		16:25:28			
2	P	eP	03	32	32
		i			37
	PX	eLEZ			54.4
	R	eP		32	26
		i			33
	Pr	iP			26
		i			32
	Bt	iP			24
		i			31

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
2	Is	iP	03	32	34
		i		40	
	T	ePN		30	
		USCGS: 17½ N 46½ W,			
		03:21:45			
2	P	e?	14	59	51
		i(P)		59	
		e	15	00	40
	PX	eSE		04	44
		eLE		08.6	
	R	iP	14	59	48
	Pr	iP		39	
		i		49	
	Bt	iPEZ		34	
		i	15	01	07
		eSE		03	57
	Is	eP	15	00	03
		i		08	
		i		01	34
	T	ePNE		00	14
		USCGS: 16 N 98½ W,			
		14:54:18			
2	P	eP	17	00	07
		i		15	
	R	eP	16	59	58
		eSE	17	04	35
	Pr	iP	16	59	54
	Bt	iPEZ		46	
		iSE	17	04	08
	Is	iP		00	17
	T	ePE		29	
		USCGS: 16 N 98½ W,			
		16:54:32			
2	MW	eP	17	17	45
		i		18	00
	D	eP		17	26
		i		41	
	R	eP		18	
		e		31	
	Pr	iP		17	
		i		24	
	Bt	i		23	
	Is	eP		49	
		i		18	00
		Tacubaya: 16°07' N 98°45' W,			
		17:12:14			
2	P	eP	17	47	00
	D	eP		01	
		i		10	
	R	eP		46	54
	Is	eP		47	13
		i		20	
		Tacubaya: 16°07' N 98°47' W,			
		17:41:41			
3	D	eP	11	35	42
	R	eP		39	
	Pr	eP		33	
	Is	eP		51	
3	R	e	14	22	20
	Pr	e		17	
	Is	e(P)		16	
3	D	e	14	53	02
	R	e		00	
	Pr	eP		52	49
		e		53	03
	Is	eP		52	51
		e		55	

Date	Sta.	Phase	h	m	s
February					
3	P	iP	18	52	42d
	R	iP			39d
	Pr	iP			36d
		e			46
	Bt	iP			32d
	Is	iP			50d
3	D	eP"	21	57	32
	Pr	eP"			24
		e			33
	Bt	eP"			16
	Is	eP"			21
		e			31
		e	22	00	08
		BCIS: 5 S 30 E,			
		21:38.0			
4	P	eP	03	03	51
	D	eP			50
		e		04	14
	R	eP		03	48
	Pr	eP			40
	Bt	eP			38
	W	eP		04	05
	Is	eP			01
		e		05	24
		USCGS: 0 81 W,			
		02:55:02			
4	W	iP	20	31	37
	Is	iP			39
5	R	eP	09	40	05
	Pr	eP			08
	W	iP		39	51
		i			59
	Is	eP			54
		Aleutians			
5	P	eP	10	26	18
	R	eP			18
	Pr	e			29
	W	iP			13d
		i			22
		i			30
6	Pr	iP	14	00	58
	W	iP			59d
	Is	iP		01	01d
6	D	eP	22	31	17
	R	eP			14
	W	iP			06
	Is	eP			08
		BCIS: Fiji Island region			
		22:20:10, 600 km			
7	P	iP!NEZ	02	17	06.9d
		iSN			14.8
	MW	iP!			07.4d
	R	iP!NEZ			17.2d
		iSNE			33.0
	W	iP!			16.6d
		iSE			32.1
	Is	iPNZ			16.4d
		iSN			32.1
	FT	iP!			03.7
		Magnitude 4.2 02:17:56.5			
		foreshock of next			
7	P	iP!NEZ	03	16	48.8d
		iSNE			56.8
	D	iP!			52.8d
	R	iP!NEZ			58.9d
		iS!NE	17		14.8

(continued)

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Date	Sta.	Phase	h	m	s
February		(continued)			
7	BB	iP	03	17	04.3
		i!			04.8
		iS!			24.5
	FT	iP!		16	45.7
	W	iP!			58.8d
		iSE		17	13.9
	Is	iPNZ		16	58.5d
		iSN		17	12.6
	H	iPNEZ			07.5
	T	iPNEZ			24.9
	Magnitude 4.6 34°35'N 118°36'W, 03:16:38.6				
	Slight damage at Newhall (near the epicenter)				
7	P	eP	06	54	09
	D	eP			03
	R	eP			05
	Is	eP		53	46
7	Pr	iP	07	12	00
	Is	eP			14
	USCGS: Northwestern Colombia, 07:03:29				
7	Is	iP	14	50	29
	Near Apia				
7	D	eP	17	03	56
	R	eP		04	02
	Is	eP		03	38
	USCGS: Queen Charlotte Islands, 16:59:25				
7	W	iP	23	32	59
	Mexico				
8	R	eP	03	41	46
	Pr	iP			45
	W	iP			23
8	Is	e	10	46	21
8	Pr	eP	20	55	47
	W	iP			46
	Is	iP			47
8	W	iP	22	02	02
	Is	eP			03
9	D	e	01	00	51
	Pr	i		01	00
	Bt	i			11
	W	e		00	26
	Seattle: 48°21'N 122°39'W, 00:57:12				
9	R	iP	02	21	26
	W	eP			43
		i			46
9	D	e	06	52	51
	R	e			31
	W	iP			28
		e			36
		(continued)			

Date	Sta.	Phase	h	m	s
February		(continued)			
9	Is	eP	06	52	29
		e			37
		e		53	01
	BCIS: Santa Cruz Is.		06	39	7
9	P	iPEZ	07	40	27
		e		41	35
	R	eP		40	20
	Pr	iP			15
	Bt	eP			11
	W	iP			37
	Is	iP			34
	USCGS: 5½N 83W, 07:32:18				
9	P	iPEZ	08	35	52
		e		36	42
	R	iP		35	55
		i			59
	Pr	eP		36	03
	Bt	eP			11
	W	iP		35	33
		i			35
	Is	iP			35
		i			38
	T	eP			26
	USCGS: Queen Charlotte Is. region, 08:31:20				
9	P	iPNZ	14	17	13.3d
		iSEZ			48.2
	D	iP			11.2d
	R	iPEZ			06.7
		iSEZ			41.6
	Pr	iP!		16	55.9d
	Bt	iPNZ			44.8d
		iSN			59.9
	BB	iP		17	08.2d
	Magnitude 4.7 31° 45'N 115° 55'W, 14:16:24				
	foreshock of next				
9	P	iP!EZ	14	33	27.4d
		iSN		34	13.6
	D	iP!		33	25.0d
	R	iP!			20.7d
	Pr	iP!			09.9d
	Bt	iP!		32	58.7d
	BB	iP!		33	22.2
	SB	eP			43.3
	CL	iP			45.6
	W	iP			50.1d
	Is	iP			47.2d
		iS		34	55.9
	FT	iP!		33	41.2d
	H	iP			51.8
	T	iP!		34	05.6
	Magnitude 6.8 31° 45'N 115° 55'W, 14:32:38				

Remarks, Baja California earthquakes

Magnitude of main shock, 6.8. 31°45'N 115°55'W, 14:32:38. Epicenter near El Alamo, Baja California. Fault traces observed in the field; either a single trace with change of direction near El Alamo, or two traces, trending west of north and south of east from that vicinity. Right-hand strike-slip of about 2 feet was seen at two or more points. Heaviest damage was at the village of San Miguel, unoccupied at the time. A new spring, hot at first, appeared near El Alamo. Maximum intensity in the United States, VI (including points in the Imperial Valley and in the vicinity of San Diego). Intensity IV in the Los Angeles area. Felt to distances of about 370 km in California, Nevada and Arizona. Faulting probably extended eastward to near 31°30'N 115°30'W, where the large aftershocks on Feb. 15 originated.

Pasadena and auxiliary stations, 1956

Except where noted, following shocks on February 9 are aftershocks. In this bulletin only those of magnitude 4.9 or over are reported, unless of special interest.

Date	Sta.	Phase	h	m	s
February					
9	Pr	iPN	14	34	45.5
		iSN		35	09.5
	Obscured by main shock				
	Magnitude 5.6				
9	R	iSE	14	49	46.1
	Magnitude 4.9. Confused by a smaller preceding shock.				
9	P	i!(P)	15	02	31.5
	Pr	eP			12.0
		iS			37.9
	Bt	iPN			00.0
		iS!N			18.7
	Magnitude 5.3				
9	P	iP!E	15	25	15.1
		iSN		26	00.3
	R	iPE		25	08.8
		iSE			43.3
	Pr	iP		24	58.8
		iS!		25	22.4
	Bt	iPN		24	45.7
	BB	iP!		25	09.6d
	Magnitude 6.1 31°45'N 115° 55'W, 15:24:26				
9	P	iPNEZ	16	30	47.4d
	D	iP			45.1
	R	iP			39.6d
		iS		31	14.9
	Pr	eP		30	31.8
		iS			59.8
	Bt	iPN			20.2
	BB	iP!			41.4
	Magnitude 5.8 31.6 N 115.7 W, 16:29:53				
9	P	iP!EZ	17	00	42.6
		iS		01	24.4
	D	iP!		00	40.8d
	R	iP!			36.0d
		iSE		01	08.1
	Pr	eP		00	25.2
		iS			48.2
	Bt	iPN			13.9
	BB	iP!			37.3d
	Magnitude 5.7 31° 45' N 115° 55' W, 16:59:53				
9	D	i(P)	17	08	35.9
	R	iP!			29.5
		iS		09	05.3
	Bt	iPN		08	06.3
		iSN			24.6
	Magnitude 4.9				
9	P	iPEZ	18	49	34.1d
		i(S)E			17.9
	D	iP!			32.1
	R	iP!NZ			27.4d
		iS!E		50	02.8
	Bt	iPN		49	05.8
		iSN			21.7
	BB	iP!			27.2d
	Magnitude 5.7 31° 45' N 115° 55' W, 18:48:45				

Date	Sta.	Phase	h	m	s
February					
9	P	iP	23	56	54
	Is	iP		57	09
		i			17
	Tacubaya 16° 47' N 99° 53' W, 23:51:42				
10	P	iP	00	06	16.9
		iS		07	01.6
	D	iP!		06	20.3
	R	iP!NZ			13.4
		eSE			43.8
	Pr	iP!			00.5
	Bt	iPN		05	50.2
		iSN		06	04.4
	BB	iP			13.1
		i!			14.0
	Magnitude 4.6				
	USCGS: 31½ N 116 W, 00:05:27				
10	P	iP	04	19	10.3
		iSNE			57.1
	D	iP			11.5
	R	iP			01.2
		iSE			41.3
	Pr	i(P)		18	49.7
	Bt	iPNZ			41.9d
		iSN		19	00.7
	BB	iP			03.4d
		i(S)			45.0
	Magnitude 5.0 31° 35' N 115° 40' W, 04:18:15				
10	P	e	12	49	39
		e		50	23
	D	e		49	02
		e			30
	R	e			39
	Is	e		48	46
		e		49	38
	USCGS: 11½ S 79 W, 12:38:35				
10	P	eP	13	53	24
	D	eP			21
	Is	eP			30
	USCGS: off Peru, 13:43:20				
10	P	iPNEZ	14	31	01.0d
		iSNE			44.6
	D	iP		30	58.8d
	R	iP!			53.6d
		iSNE		31	30.0
	Pr	iP		30	43.4d
	Bt	iP			32.4d
		iSN			47.5
	BB	iP!			55.6d
	Magnitude 4.9 31° 45' N 115° 55' W, 14:30:12				
10	P	iP	15	10	19.1
		iSN		11	02.8
	D	eP		10	16.9d
	R	iP			12.2d
		iS			46.3
	Pr	iP!			01.5d
		(continued)			

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
10	Bt	iPNZ	15	09	50.2d
		iSN		10	04.8
	BB	iP			15.1
		Magnitude 5.0			
		31° 45'N 115°55'W, 15:09:29			
10	P	iP!NZ	18	13	43.4d
		iSN		14	28.3
	D	iP!		13	41.9d
	R	iP!			36.6d
		iSE		14	08.4
	Pr	iP!		13	25.7c
	Bt	iP!			14.5c
		iSN			30.1
	BB	iP			38.1d
		Compressions at Pr and Bt followed immediately by larger dilatations.			
		Magnitude 5.5 31°45'N 115°55'W, 18:12:54			
11	P	iP!NZ	02	58	35.1d
		iSN		59	19.7
	D	iP!		58	33.7d
	R	iP			28.8d
		iS		59	03.3
	Pr	iP!		58	18.1d
	Bt	iP!			07.0d
		iSN			22.4
	BB	iP			30.2d
		Magnitude 5.1 31°45'N 115°45'W, 02:57:46			
11	P	iP	05	19	58.3
		iSE		20	44.9
	D	eP		19	56.8d
	R	iP			51.2d
		iSNEZ		20	29.5
	Pr	iP		19	41.2d
	Bt	iP!NZ			30.9d
		iSN			49.0
	BB	iP			52.8d
		iS		20	34.3
		Magnitude 5.0 31°45'N 115° 55'W			
11	P	eP"	05	58	10
	R	eP"			14
	Is	eP"			10
		USCGS: 5N 94½E, 05:38:38			
11	P	iP	06	12	13.5c
		iSNE			55.7
	D	eP			11.9d
	R	iP			07.0d
		iSE			39.5
	Pr	iP		11	56.0c
	Bt	iP			44.5c
		iSN			59.3
	BB	iP		12	08.3d
		Compressions at P,Pr and Bt followed immediately by larger dilatations			
		Magnitude 5.0 31°45'N 115° 55'W, 06:11:24			
11	P	iPNZ	06	25	20.3d
		iSNE		26	07.3
	D	iP		25	18.2d
	R	iP			13.4d
		iSE		52	3

(continued)

Date	Sta.	Phase	h	m	s
February		(continued)			
11	Pr	iP!	06	25	03.0d
	Bt	iP!NZ		24	52.8d
		iSN		25	11.1
	BB	iP			14.8
		Magnitude 5.4 31°35'N 115°40'W, 06:24:25			
11	P	eP	10	54	00
	Bt	eP			18
	W	iP			52
	Is	eP			54
	T	eP			49
12	P	ePEZ	12	03	26
		iEZ			38
		ePP		07	03
	PX	eSKSN		13	35
		eSPE		14	23
		ePPS		17	23
	P	ePKKP		19	44
		eL indefinite			
				A	T
		PZ		0.1	1½
		MH		3	20
	R	ePP	12	03	26
		e(PP)		07	44
		ePKKP		19	23
	Pr	eP		03	34
		i		04	01
		e		06	58
		iPP		07	48
	Bt	eP		03	34
		i			47
		i		06	57
		e		07	58
		e(SKS)E		14	18
	W	iP		03	20
		e		06	23
		i			50
		iPKKP		19	41
		i			50
	Is	eP		03	21
		ePKKP		19	13
		e			49
	T	eP		03	20
		ePP		07	24
		Magnitude 6½± USCGS: 19N 119½E, 11:49:20			
13	P	iPNEZ	01	16	45
	R	iP			42d
	Pr	iP			38d
	Bt	iP			34d
	W	iP			53d
		i		17	10
	Is	iP		16	53d
	T	iP			58
		South Atlantic			
13	W	iP	12	01	21
	Is	eP			21
	T	eP			18
13	R	e	14	39	37
	W	iP			30d
	Is	e			31
		USCGS: 51N 150E, 14:29:44, 500 km			

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February					
13	P	eP	15	41	56
		ipP		42	12
	R	eP		41	50
		ipP		42	07
	Pr	ipP			05
	Bt	eP		41	44
		ipP		42	02
	W	iP			01
		ipP			19
	Is	eP		41	58
		ipP		42	16
	T	eP		41	59
		ipP		42	17
		USCGS: 19N 66½W, 15:33:14, 60 km			
13	P	eP	15	53	00
	R	eP		52	54
		i			57
		e		53	30
	Pr	iP		52	49
		e		53	06
	Bt	eP		52	44
	W	iP		53	13
	Is	eP			09
	T	eP			17
	Mexico				
14	P	iPNEZ	01	04	56
		i(pP)		05	08
		i(sP)			14
		e		06	14
		e		07	55
			A		T
		PZ	0.2		1½
	R	iP	01	05	00d
		i(pP)			14
	Pr	iP			05d
		i			22
	Bt	iP			07d
		i			24
	W	iP		04	51d
		i		05	08
	Is	e(P)		04	54
		i		05	09
	T	iP		04	48
		i		05	07
		e		06	56
		JMA: 35.7N 139.9E, 00:52:54, 50 km			
		USCGS: 35½N 139½E, 00:52:50, 60 km			
14	P	iP	10	06	23
		e			44
	R	eP			21
	Pr	eP			24
	Bt	eP			24
	W	eP			22
	Is	iP			18
	T	eP			15
		BCIS: 36½N 1½E, 09:53:20			
14	P	e	12	53	09
	R	e			14
		e			36
	Pr	e			16

(continued)

Date	Sta.	Phase	h	m	s
February		(continued)			
14	W	e	12	47	51
		e		49	08
		e		52	10
		e		53	26
	Is	e		47	34
		e		49	32
		e		52	35
		e		53	38
		USCGS: 18½N 119½E, 12:33:48			
14	P	iP	14	46	27.3
		iSNE		47	16.8
	R	iP		46	19.5
		i!			23.3
		iS		47	01.4
	Pr	eP		46	08.5
		i!			09.5
	Bt	iP		45	58.9d
		iSN		46	19.9
	BB	eP			19.6
		iS		47	03.9
	W	iP		46	49.4
	T	eP		47	05.8
		iSN		48	41.6
		Magnitude 5.0 31°30'N 115°30'W, 14:45:32			
		This and most of the other shocks in Baja California immediately following originated at or near the same epicenter, which probably marks the terminal point of faulting on Feb. 9.			
14	P	iP	18	34	28.2
		iNZ			29.3
		iSN		35	17.9
	R	eP		34	21.0d
		iNZ!			25.4
		eSE		35	02.3
	Pr	iP		34	10.6d
		i!			11.4
	Bt	iPNEZ!			01.3d
	BB	iP			22.6
	W	iP			50.5
	T	eP		35	05.6
		Magnitude 6.3, 31°30'N 115°30'W, 18:33:34 V at San Diego. Felt as far as Los Angeles.			
14	P	iSN	18	40	47.7
	R	iPN		39	54.4
		iSE		40	33.4
	Bt	iPN		39	31.1
		iSN			50.0
		Magnitude 4.9			
14	P	iSE	18	42	12.0
	R	ePN		41	21.4
		iS			56.6
	Bt	iPN		40	58.7
		iSN		41	16.0
		Magnitude 4.9			
14	R	iSE	18	42	40.1
	Bt	iSN		41	58.1
		Magnitude 4.9			

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Date	Sta.	Phase	h	m	s	
February						
14	R	eP	21	58	43	
	W	iP			25	
		i			34	
		i			40	
		e	22	05	01	
	T	eP	21	58	23	
	USCGS: 52N 180,					
	21:50:08, 60 km					
15	P	iPNEZ!	01	21	34.2	d
		iSNE		22	25.6	
	R	iP		21	27.0	
		i!			30.1	
		iSE		22	06.7	
	Pr	iP		21	14.8	d
		i!			16.5	
	Bt	iPN			08.2	
		iSN			29.2	
	BB	iP!			28.1	d
	Magnitude 6.4					
	31°30'N 115°30'W,					
	01:20:38					
	Felt as far as Los Angeles, V at San Diego. Followed at about 01:25:11 by a shock of magnitude 4.9					
15	P	iPNZ	02	29	32.7	
		iSN		30	23.0	
	D	iP		29	32.0	
	R	iP			24.9	
		iSNE		30	08.6	
	Pr	eP		29	18.8	
		eS			47.0	
	Bt	iPN			06.9	
		iSN			27.6	
	BB	iP			26.4	
	Magnitude 5.3					
	31°30'N 115°30'W					
	02:28:39					
15	P	iP	07	08	42.6	
		iSN		09	31.4	
	D	eP		08	40.3	
	R	ePNZ			33.0	
		iSE		09	15.3	
	Pr	iP		08	20.0	
		iS			53.8	
	Bt	iP			14.3	
		iSN			34.3	
	BB	iP			34.1	d
	Magnitude 5.2					
	31°30'N 115°30'W					
	07:07:47					
15	P	iPN	08	36	51.8	
		iSN		37	39.6	
	D	eP		36	50.2	
	R	eP			41.0	
		iS		37	24.1	
	Pr	iP!		36	30.9	
		iS		37	02.8	
	Bt	iP		36	22.2	d
		iSN			42.8	
	BB	iP			42.3	d
		iS		37	27.4	
	Magnitude 5.0					
	31°30'N 115°30'W, 08:35:54					

Date	Sta.	Phase	h	m	s	
February						
15	W	iP	12	07	03	
		ipP			16	
	BCIS: 48N 155E, 11:57:40					
15	P	iPNZ	13	00	02	
		e			49	
	R	iP	12	59	58	d
	Pr	iP			53	d
	Bt	iP			50	d
	W	iP!	13	00	12	d
	Is	iP			10	d
	T	iP			15	d
	USCGS: 8½S 74½W, 12:50:12, 150 km					
15	P	eP	18	55	40.6	
		eSN		56	29.6	
	D	i(P)		55	39.9	
	R	i(P)NZ			34.4	
		iSE		56	15.3	
	Pr	iP		55	21.2	d
	Bt	iP!			12.5	d
		iSE			33.5	
	BB	eP			32.8	
	Magnitude 4.9 31°30'N 115°30'W, 18:54:44					
15	P	e	19	05	45	
	D	e			48	
	W	iP			39	
		e			46	
	Is	eP			40	
15	P	eP	20	44	46	
	PX	eLN		58.4		
	R	eP		44	44	
	Pr	eP			38	
	Bt	eP			33	
	W	eP			58	
	Is	eP			58	
	T	eP		45	20	
	USCGS: 13½S 111½W, 20:36:03					
16	P	eP	00	30	19	
		e			43	
	R	iP			21	
	Pr	iP			31	
	W	iP			12	d
		i			45	
	Is	iP			15	
	T	eP			14	
		e			39	
	USCGS: 22½N 143E, 00:17:53, 100 km					
16	P	iP	01	31	04.0	
	Pr	eP		30	45.4	
		i			46.9	
	Bt	eP			35.4	
		iSN			55.4	
	Magnitude 4.6 31.5N 115.5W O=01:30.1					
16	P	eP	03	10	58	
	R	eP			51	
		e			55	
	Pr	iP			51	
	Bt	e(P)			39	
	W	iP		11	12	

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s	
February		(continued)				
16	Is	iP	03	11	08	
	T	eP			22	
	USCGS: Guerrero, Mexico 03:05:40					
16	P	eP	04	20	46	
	D	e		21	12	
	W	iP		20	47	
	JMA: 33.7N 134.3E, 04:08:25, 10-20 km					
16	P	iP	05	53	58.6	
		iSE		54	46.5	
	D	iP		53	55.8	
		i!		54	00.3	
	R	iP		53	50.1	d
		i!			54.4	
		iSN		54	30.6	
	Pr	iP		53	39.6	
		i!			41.4	
		iS		54	09.2	
	Bt	iP		53	30.1	d
		iSN			49.7	
	BB	iP			50.9	
	Magnitude 4.9					
	31°30'N 115°30'W, 05:53:02					
16	P	iPNEZ	08	13	24.1	
		iSE		14	10.1	
	D	eP		13	21.7	
	R	eP			14.2	
		iSE			54.5	
	Pr	iP			03.8	d
		iS			32.8	
	Bt	iP!NZ		12	55.1	d
		iSN		13	13.8	
	BB	eP			16.8	
		iS			59.3	
	Magnitude 5.0					
	31°30'N 115°30'W,					
	08:12:28					
16	W	iP	18	48	02	
	T	eP			08	
17	P	iPNE	09	25	58.9	
		iSE		26	46.6	
	D	eP		25	57.2	
	R	eP			51.6	
		iSNE		26	32.6	
	Pr	iP		25	39.8	
		i!			41.7	
		e(S)		26	10.0	
	Bt	iPNZ		25	30.3	c
		iSN			50.5	
	BB	eP			51.1	
		i(S)		26	35.4	
	Magnitude 4.9					
	31°30'N 115°30'W, 09:25:00					
17	P	eP'NZ	10	12	54	
	PX	eLZ		54.5		
	R	eP'		12	51	
	W	eP'			56	
	Is	eP'			56	
	T	eP'			56	
		e		14	39	
	USCGS: 47S 15W, 09:53:55					
17	P	iPNZ	10	40	57.1	
		iSE		41	45.1	
	D	eP		40	55.1	
	R	eP			49.9	
		iSE		41	30.0	

(continued)

Date	Sta.	Phase	h	m	s	
February		(continued)				
17	Pr	iP!	10	40	39.2	
		iS		41	09.4	
	Bt	iPNZ		40	29.8	d
		iSN			49.0	
	BB	iP			50.6	
		iS		41	33.8	
	Magnitude 4.7					
	Baja California	10:40:00				
17	W	iP	14	25	55	
	Is	eP			57	
	T	eP			51	
18	P	iP	07	46	02	c
		iEZ!			04	d
		i			17	
		ipP		47	45	
		esP		48.6		
		ePP		49.3		
	PX	iSNEZ!		55	36	
		iEZ		56	43	
		iE		57	47	
		e(L)NZ	08	08.0		
	P	eP'P'		12	13	
		iP'P'			23	
		iSKPP'		14	58	
		e(SKPP'P')		34	43	
			A		T	
		PZ	2½		1½	
		PH	1½		1	
		PPZ	4		8	
		SH	50		8	
	R	iP	07	46	05	c
		iNEZ!			07	d
		ipP		47	51	
		iS		55	39	
		iPKKP	08	04	16	
		eP'P'		12	13	
		iSKPP'		14	54	
		e		34	45	
	Pr	iP	07	46	10	
		ipP		47	58	
		isP		48	43	
		eS		55	56	
		eP'P'	08	12	22	
		iSKPP'		14	54	
	Bt	iP	07	46	12	c
		ipPNEZ		47	54	
		i		55	48	
		iSNEZ!			52	
		iE		57	05	
		iE		58	09	
		iSKPP'	08	14	53	
	W	iPEZ!	07	45	56	c
		i		46	16	
		i			44	
		ipP		47	41	
		i		48	45	
		i		49	15	
		iSEZ!		55	29	
		iPKKP	08	04	19	
		iP'P'		12	27	
		iSKPP'		14	54	
	Is	iP	07	45	57	c
		ipP		47	42	
		iSNZ		55	33	
		iPKKP	08	04	21	
		eP'P'		12	18	
		eSKPP'		14	49	

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Date	Sta.	Phase	h	m	s
February		(continued)			
18	Is	i	08	15	00
	T	iPNEZ	07	45	55c
		ipP		47	35
		i		48	43
		i		50	44
		iSNEZ		55	30
		eP'P'	08	12	27
		eSKPP'		14	56
	Pasadena: 30 N 137½ E, 07:34:22, 480 km. Magnitude m=7.1 (M=7.3)				
	USCGS: 30 N 137½ E, 07:34:16, 450 km.				
	JMA: 29.9 N 138.5 E, 07:34:19, 480 km.				
18	D	e	10	33	48
	Pr	iP			34
	W	iP			58
	Is	eP			55
		e		34	00
	USCGS: 5 S 79½ W, 10:24:20				
18	D	eP	17	58	29
	W	iP			40
		ipP			55
	Is	eP			38
	T	e			47
	USCGS: 8½ N 79½ W, 17:48:40				
18	P	ePNEZ	23	59	26
	W	iP			06.1
		i(S)			37.3
	Is	iP			11.6
		iS			42.8
	H	iP			17.3
		iS			57.2
	T	eP			11.6
		i(S)			54.9
	Felt at Hollister, etc. Magnitude 4				
	USCGS: 36½ N 121.2 W, 23:58:25				
19	P	ePNZ	00	07	38
	W	iP			18.6
	Is	iP			23.7
		eSN			54.8
	H	iP			29.9
		iS		08	07.2
	T	eP		07	24.9
		i(S)			57.6
	Felt at Hollister, etc. Magnitude 4 Epicenter nearly same as preceding.				
19	P	iPNEZ	02	22	35c
	PX	iSNE		26	24
		eGE		27.1	
		eR		28.0	
			A		T
		PZ	12		6
		PH	5		3

(continued)

Date	Sta.	Phase	h	m	s
February		(continued)			
19			A		T
		SH	35		7
		MH	100		20
		MH	50		10
		MZ	70		20
	R	iPNEZ	02	22	40c
		iSE		26	36
		iSNEZ			47
	Pr	eP		22	49
	Bt	iP!			55c
		iS!N		27	02
	W	iP		22	16c
		eSE		25	54
	Is	iP		22	19c
		iS		26	04
	T	iPNEZ		22	05
		iSE		25	33
		i!		27	09
	Magnitude 6¾ USCGS: 52 N 131½ W, 02:18:00				
19	P	iPNZ	02	44	09d
	R	iP			13d
	Pr	iP			21d
		i			26
	Bt	iP			29d
	W	iP		43	51d
		i			56
	Is	iP			52d
		i			58
	T	iP		44	29d
	USCGS: 52 N 131½ W, 02:39:35				
19	P	iPEZ	04	20	01c
		i			12
		i		21	24
		eScPEZ		26	21
		e			37
	PX	iScSEZ		29	42
	R	iP		20	05
		i			16
		e		21	26
		i			37
		eScP		26	23
	Pr	iP		20	12
		i!			23
	Bt	iPNEZ			18
		i		21	42
		iScP		26	28
	W	iP		19	46c
		i			57
		iPcP		22	28
		iScP		26	15
		e		27	00
	Is	iP		19	48c
	T	ePNZ			41
		i			54
	USCGS: 58½ N 154 W, 04:13:16				
19	P	eP	04	46	35
	W	iP			23

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Date	Sta.	Phase	h	m	s
February		(continued)			
19	Is	eP	04	46	27
	T	eP			22
	BCIS: Kamchatka, 04:36.5				
19	W	eP	05	27	33
	Is	eP			34
	USCGS: New Hebrides 05:15:12, 200 km.				
19	D	e	05	52	50
		e			59
	Bt	eP			09
	W	iP			33
	Is	iP			36
	T	eP			40
	USCGS: 23 S 176 W, 05:40:22				
19	Pr	eP	12	19	57
		e		20	04
	W	iP			24
	Is	eP			18
	Mexico				
19	D	eP	15	00	06
		epP		02	15
	R	eP		00	08
		epP		02	16
	Pr	iP		00	08d
		ipP		02	15
	Bt	eP		00	07
		epP		02	14
	W	iP		00	08d
		ipP		02	14
	Is	iP		00	08d
		e		01	11
		epP		02	12
		i			16
	T	eP		00	14
	USCGS: 22½ S 180 14:48:45, 600 km.				
20	P	e	07	10	31
	D	e			36
	R	e			28
	W	iP			21
		ipP			35
	T	eP			19
	USCGS: Off south coast of Kamchatka, 07:00:10				
20	W	iP	08	11	10c
	T	eP			09
	USCGS: 24 N 124 E, 07:57:38				
20	P	eP	13	12	42
	R	eP			38
	Pr	iP			29c
		i			38
		i			53
	Bt	eP			25
		e			45
	T	eP			58
		e		13	10
	USCGS: Near coast of Oaxaca, 13:06:40				
20	P	eP	20	45	32
		ePP		49	36

(continued)

Date	Sta.	Phase	h	m	s
February		(continued)			
20	PX	eL	21	20.6	
	R	eP	20	45	32
		ePP		49	36
	Pr	eP		45	30
		e			34
		iPP		49	41
	Bt	eP		45	36
		ePP		49	46
	W	eP		45	24
		e		48	45
		ePP		49	26
	Is	eP		45	27
		ePP		49	28
		i			32
	T	e		45	42
		e			55
		ePP		50	10
	BCIS: 39¾ N 30½ E, 20:31:37				
20	P	i	21	02	06
	D	e		01	32
		e			43
		e		02	07
	P	e		00	02
	W	i		01	44
		e		02	10
	Is	e			07
	PKKP of preceding?				
21	P	iPNZ	03	12	44
	R	eP			47
	Pr	iP			47c
	Bt	eP			46
	W	iP			46c
	Is	iP			47c
	T	eP			53
	USCGS: Fiji region, 03:00:54				
21	P	iP	05	21	07
	R	eP			10
	Pr	iP			10
		e			41
	USCGS: Fiji Islands, 05:09:13				
21	W	iP	06	17	16
		i			24
	Is	eP			19
	T	eP			15
	Kamchatka				
21	W	iP	12	08	42
		i			59
	Is	e			59
	T	eP			40
21	P	iP	20	44	08
	R	iP			10
	Pr	iP			11
	Bt	eP			10
	W	iP			09c
		i			21
		e		45	19
		e		46	17
	Is	iP		44	11c
		i			16
		e		46	18

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
21	T	iP	20	44	16
	USCGS: 22 S 179 W,				
	20:32:55, 650 km.				
21	W	e	23	10	08
	Is	e			08
	USCGS: 73½ N 8 E,				
	22:59:24				
22	PX	eL	00	48.2	
	D	eP		18	31
	R	eP			32
	Pr	i			33
	W	iP			23
	Is	iP			24
	T	eP			15
		e			28
	USCGS: 73½ N 8 E,				
	00:07:37				
22	P	iPEZ	05	28	31
	R	iP			36
	Pr	iP			44d
	Bt	iP			47
	W	iP!			18d
		i			40
	Is	iP			20d
		i			34
	CL	iP			24
	T	iP			15
	USCGS: 54 N 163 W,				
	05:21:18				
22	W	eP	10	08	50
		i		10	07
	CL	eP		08	52
	T	eP			49
22	P	iP'	10	19	21
		ePP		22	50
	R	eP'		19	22
	Bt	iP'			25
		i		20	06
		iPP		23	05
	Pr	iP'		19	23
		i			31
		i		20	56
		ePP		23	07
	W	iP'		19	15
		i			24
		i			59
		i		20	56
	Is	eP'		19	15
		i			51
	CL	iP'			16
		i		20	56
		i		21	48
	T	iP'		19	13
		i			20
		i			26
		e		20	53
	USCGS: 5 S 67 E,				
	09:59:24				
22	P	eP	21	28	11
	Pr	eP			22
	CL	eP			07
	T	eP		27	57

Date	Sta.	Phase	h	m	s
February					
22	P	eP	22	54	37
	R	eP			40
	Pr	eP			44
	Bt	eP			51
	CL	eP			38
	T	eP			33
22	P	eP	23	58	43
		i			50
	R	eP			44
		e			50
	Pr	eP			47
	Bt	iP			46
		i			54
	Is	eP			37
	CL	eP			40
	T	eP			35
		i			42
23	P	iPNZ	01	31	31d
		ePP		33	47
	PX	eL			52.8
	R	iP		31	27d
		ePP		33	35
	Pr	iP		31	26d
		iPP		33	45
	Bt	iP		31	26d
		ePP		33	40
	Is	iP		31	29d
		i		32	09
		iPP		33	45
	CL	iP		31	24d
		ePP		33	40
		e		35	12
	T	iP		31	25d
		i			58
		iPP		33	40
	BCIS: 31½ N 42½ W,				
	01:21:05				
23	D	eP	22	14	29
		e			42
	R	eP			23
		e			39
	Pr	iP			20
		i			31
	Is	e			57
	CL	eP			51
	T	e		15	02
	Mexico				
24	P	iP	09	31	55
		i		32	06
	PX	iSNE		42	51
		eLZ		59.5	
	R	iP		31	56
		i		32	10
	Pr	iP		31	56
		i		32	07
	Bt	iP		31	53
		i		32	07
	Is	iP		31	58
		i		32	13
	CL	iP			02
		i			11
		i			15

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
24	CL	i	09	32	22
	T	e			26
	USCGS: 30 S 179½ E,				
	09:19:01				
24	P	iP	14	05	36.1
		iS		06	21.1
	R	iP		05	30.2
		iS		06	08.1
	Pr	eP		05	17.5
		iS			48.4
	Bt	iPNZ			08.5d
		iSN			28.0
	Magnitude 4.7				
	Baja California				
25	R	e	06	01	32
	Is	e			33
	CL	e			38
	T	e			39
	BCIS: Tonga region,				
	05:49.7				
25	P	iP	08	09	44.6
		iSE		10	30.7
	R	iP		09	36.7
		iSN		10	14.6
	Pr	iP		09	24.9
		iS			53.8
	Bt	iPNZ			15.6
		iSN			34.0
	Magnitude 5.1				
	31° 30'N 115° 30'W,				
	08:08:51				
26	P	eP	11	46	19
	R	eP			21
	Is	eP			20
		e			29
	CL	iP			25
	USCGS: Santa Cruz Islands				
	region, 11:33:44				
27	Is	eP	03	33	11
	CL	eP			15
	T	eP			07
	USCGS: Kamchatka,				
	03:23:20				
27	P	eP	05	41	26
		iSE		42	34
	R	eP		41	07
		iS		42	24
	Pr	i(P)		41	10
	Bt	i(P)		40	50
	Is	eP		41	36
	T	eP			54
	BCIS: Gulf of California,				
	05:39.9				
27	P	e(P)NEZ	08	46	09
	R	eP		45	58
	Pr	eP		46	03
		i			14
	Bt	e			12
	Is	eP		45	41
		e			53
	CL	e			47

(continued)

Date	Sta.	Phase	h	m	s
February		(continued)			
27	T	eP	08	45	38
		e			43
	USCGS: 52 N 174 W,				
	08:37:58, 100 km.				
27	P	iP	14	23	03
		e		25	00
	R	eP		23	07
		e		25	03
	Pr	iP		23	07
		e		25	03
	Is	iP		23	06
		e		25	05
	T	eP		23	02
	South Pacific?				
28	P	iPNZ	00	51	58
	R	iP			56
	Pr	iP			55
		i		52	01
	W	iP			01
	CL	iP			02
	T	iP			05
28	D	eP	03	58	44
	R	eP			38
28	P	ePNEZ	11	24	54
		ipP		25	03
	R	eP		24	50
		ipP		25	01
	Pr	iP		24	46
		ipP			56
	Bt	iP			42
		ipP			52
		e		25	25
	W	iP			03
	CL	eP			00
		ipP			09
	T	eP			06
		epP			16
	USCGS: 23 S 70 W,				
	11:13:20				
29	P	iPNEZ	07	10	10
		i			19
	R	eP			14
		e			22
	Pr	iP			17
	Bt	iP			20
		i			39
	CL	iP			10
	USCGS: 29½ N 141 E,				
	06:57:52				
29	P	iPNZ	09	02	05.4d
		iS			47.6
	R	iP		01	58.9d
		iSE		02	32.1
	Pr	iP		01	48.2d
		eS		02	11.3
	Bt	iP!		01	36.9d
		iSN			51.5
	Magnitude 4.7				
	Baja California				
29	P	eP"	21	09	57
	PX	eL		51.7	

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
February		(continued)			
29	R	eP"	21	09	57
	Pr	eP"			59
	Bt	iP"		10	01
	W	eP"		09	52
	CL	iP"			55
	T	e		10	08
	USCGS: 23½ N 94½ E, 20:51:18, 60 km.				
29	R	e	21	44	38
	Pr	e			41
	Bt	e			42
	W	e			35
	CL	e			35
	USCGS: 23½ N 94½ E, 21:25:58, 60 km.				
29	D	e	23	56	52
	R	e			40
	W	e			11
	CL	e			24
	e				38
	USCGS: 52 N 159 E, 23:46:18				
March					
1	P	iPNZ	02	53	45.9
		iSNEZ		54	28.8
	R	iP		53	38.3
		iSE		54	13.2
	Pr	iP!		53	28.4
		iS			52.3
	Bt	iP!			17.0d
		iSN			31.6
	Magnitude 4.8, 02:52:54, Baja California				
1	P	eP	06	37	16
	R	e			21
	Pr	e			14
	CL	eP		36	58
		epP		37	11
	BCIS: 51 N 155 E, 06:26:41				
1	P	iP	09	18	01
	R	iP			00
	Pr	eP			00
	Bt	e			05
	CL	iP		17	57
	T	iP			52
1	P	e	14	12	04
	R	e			04
	Pr	e			15
	Bt	e			19
	CL	e			00
	T	e		11	47
	e			12	20
	USCGS: 52 N 159 E, 14:01:56				
1	P	e	14	37	06
	CL	eP		36	46
		epP			58
	USCGS: 52 N 159 E, 14:26:44				
1	D	eP	23	19	14
		epP			22

(continued)

Date	Sta.	Phase	h	m	s
March		(continued)			
1	R	iP	23	19	18
	Pr	eP			06
		ipP			14
	CL	eP			20
		epP			29
	USCGS: 9½ N 85½ W, 23:11:50				
2	P	iPEZ	12	03	16
		ipP			35
	PX	iSE		08	50
		i(ScS)NEZ		14	00
	R	iP		03	20
		ipP			38
	Pr	iP			27
		ipP			46
		i		04	57
	Bt	iP		03	31
		ipP			51
		i		05	06
	CL	iP		03	05
		ipP			24
		e		05	43
	T	iP		02	53
		ipP		03	14
		i		04	00
	USCGS: 63½ N 149½ W, 11:56:20				
2	P	iPEZ	15	00	10
		ipP			35
	R	iP			13
		ipP			39
	Pr	iP			18
		ipP			45
	Bt	iP			20
		ipP			48
	CL	iP			05
		ipP			31
	T	iP	14	59	59
		epP	15	00	22
	JMA: 44¾ N 149¾ E, 14:49:26, 60 km.				
2	P	iP	19	51	46
	R	eP			47
	Pr	iP			48
	CL	iP			52
	T	eP			54
3	P	ePNZ	00	16	53
		iNZ			56d
		ePP		19	30
	PX	iSNE		26	16
		eREZ		37	.6
			A		T
		PZ	½		1
		PH	¼		1
		PPZ	1¼		1½
		SH	4		10
		MH	24		20
		MZ	20		20
	R	eP	00	16	56
		iNEZ			59d
		iSE		26	24
	Bt	eP		16	54
		i			57d

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
3	Bt	ePP	00	19	43
		iSNE		26	37
	Is	iP		16	58
		i		17	01d
	CL	iP			02d
		i			04d
		i			18
		ePP		19	37
		e		20	22
	T	iP		17	03
		i			06d
		ePP		19	36
		e(S)		27	09
	Magnitude 6¾ USCGS: 15 S 173½ W, 00:05:25				
3	P	iP!NEZ	06	24	34.7
		iSE			49.3
	Is	iP!NZ			28.2d
		iSN			37.8
	FT	iP!			18.5
	Magnitude 4.2 35° 05'N 119° 14'W, 06:24:12.0				
3	P	iP	06	34	56.5
		iSEZ		35	40.6
	R	iP		34	49.5
		iSNEZ		35	28.4
	Pr	iP		34	39.0
		iS		35	06.6
	Bt	iP!		34	28.9d
		iSN			46.3
	Magnitude 4.9 Baja California, 06:34:03				
3	P	iP	18	24	07.8
		iSE			54.3
	R	iP			00.6d
		iSNE			42.9
	Pr	iP		23	50.2
		iS		24	18.1
	Bt	iPNZ		23	40.2
		iSN			58.3
	Magnitude 5.1 Baja California, 18:23:11				
3	D	e	22	16	39
	R	e			33
	Pr	e			17
	CL	e			51
	T	e			33
4	D	eP	03	28	19
	CL	eP			09
	USCGS: 83½ N 112 E, 03:18:10				
4	P	iP	16	27	03
		e			19
	R	iP			07
		e			23
	Pr	eP			12
		e			28
	CL	iP		26	57
		i		27	24
	T	eP		26	50

(continued)

Date	Sta.	Phase	h	m	s
March		(continued)			
4	T	e	16	27	10
	USCGS: 52½ N 138½ E, 16:16:54				
5	R	e	03	52	49
	Pr	e			58
	CL	eP			30
	T	e		53	13
	USCGS: 52 N 159½ E, 03:43:25				
5	P	iPNEZ	23	41	09
		e		43	54
			A		T
		PZ	0.6		2
		PH	¼		1
	R	iP	23	41	14c
		i			27
	Pr	iP			18c
		i			35
	Bt	iP			21c
		i			38
	W	iP!			01c
	Is	iP			01c
	T	iP		40	59
	Magnitude 6½ - 6¾ JMA: 44.3 N 144.1 E, 23:29:43				
7	P	iP	15	30	22.2
		i(S)N		31	08.3
	R	iP!		30	16.2
		iSE			53.4
	Pr	iP			00.4
	Bt	iP		29	52.1d
		iSN		30	12.9
	Magnitude 4.8 Baja California				
7	R	e	21	59	07
	Pr	i			14
	W	i			35
	Is	i			33
	USCGS: 9½ N 85 W, 21:51:48				
8	P	eP	07	27	38
		iS		28	57
	R	iP		27	40
		iS		29	05
	Is	iP		27	16
		iSNZ		28	08
	H	ePN		27	14
		iSE			54
	T	iP		26	57d
		i!			59
		iSNE		27	26
	Magnitude 4.7± USCGS: Northern Nevada, 07:26:28				
8	P	e	08	19	15
	R	e			18
	Is	e			15
	BCIS: 17 S 168 E, 08:06:32				
8	P	eP	11	13	01
		iNEZ			13

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
8	PX	eL	11	23	4
	R	eP		13	10
		i			19
	Bt	eP			22
		i			31
	Is	eP		12	49
		i		13	03
	T	eP		12	46
		e			58
	USCGS: 53½ N 168½ W, 11:05:26				
9	P	iPNZ	00	33	29.2d
		iSE		34	12.8
	R	iP		33	22.6d
		iNEZ			24.5
		iSNE			57.4
	Pr	iP!			12.1d
		iS			35.3
	Bt	iP!NZ			01.0d
		iSN			15.9
	Magnitude 5.0				
	USCGS: Lower California, 00:32:32				
9	P	iP	04	25	57.4
		iSE		26	45.4
	R	iP		25	51.2
		iSN		26	30.6
	Pr	iP		25	37.9d
	Bt	iP!NZ			29.0d
		iSN			48.9
	Magnitude 4.9				
	USCGS: 31½ N 115½ W, 04:25:00				
9	P	eP	17	40	02
	R	e		39	52
	Pr	eP			49
		e		40	00
	Bt	eP		39	42
		e			54
	Is	eP		40	07
		e			48
	T	e			23
	USCGS: 1 N 80 W, 17:31:07				
10	P	e	03	53	46
	R	e		54	02
	Is	e		53	51
		e		54	02
	T	e		53	57
	USCGS: 17½ S 173 W, 03:42:10				
10	P	ePZ	05	58	08
		i!NEZ			09
		iSEZ		59	40
	R	iP		58	16
	Pr	iP			27
	Is	iP		57	53
	H	e(P)			55
		i(S)		59	36
	T	iP		57	44
	Magnitude 4 - 4½				
	USCGS: 40½ N 125 W, 05:56:06, V at points in Humboldt County.				

Date	Sta.	Phase	h	m	s
March					
10	P	iEZ	14	09	32
		iSNEZ		10	40
	D	iP		09	29
		i			33
	Is	iP			03
		iS			49
	T	iP		08	38
		iSEZ		09	08
	Nevada				
10	P	eP	14	13	48.1
		iS		14	36.5
	R	iP		13	41.1
		iSE		14	25.1
	Pr	iP		13	30.8d
	Bt	iP!			21.7d
		iSN			40.8
	Magnitude 5.0				
	USCGS: Lower California, 14:12:51				
10	P	eP	15	08	21
		eS		09	25
	R	eP		08	04
		iS		09	14
	Pr	eP		07	53
		iS		08	51
	Bt	eP		07	40
		i(S)		08	27
	BCIS: Gulf of California, 15:07.0				
10	P	iP	19	45	24d
	PX	eLN	20	10	0
	R	iP	19	45	26d
	Pr	iP			26d
	Bt	iP			24
	T	iPNEZ			35d
	USCGS: 22½ S 176 W, 19:33:40, 200 km.				
10	P	eP"	21	55	45
		i		56	06
	R	eP"		55	48
		e		56	05
		e			28
	Pr	eP"		55	48
		e		56	06
		e			35
	Bt	eP"		55	48
		e		56	09
		e		57	00
	T	e		56	19
	USCGS: ½ N 125½ E, 21:37:01				
12	D	eP	02	26	08
	R	eP			05
	Is	eP		25	57
		epP		26	17
		e			46
	USCGS: 11 S 76½ W, 02:15:57				
12	P	iPNEZ	20	02	09
		i			15
	PX	eL		23	3
	R	eP		02	11
		e			18

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
12	Pr	iP	20	02	13
		i			19
	Bt	e			10
	Is	iP			13
		i			25
	T	iP			26
	BCIS: 15 S 175 W, 19:50:39				
13	D	eP	01	48	50
	R	eP			47
	Pr	eP			44
	W	iP		49	01
	Is	eP		48	56
		e		49	07
	USCGS: Dominican Republic, 01:40:29				
13	W	eP	09	38	07
	Is	eP			07
	JMA: 36.2 N 142.3 E, 09:26:16, 50 km.				
13	P	eP	13	21	10
		i!			17
		iScP		27	00
	PX	iSNZ			40
		eGNE		32	3
		eR		33	7
			A		T
		PZ	4		2
		PH	2½		2
		PPH	2½		4
		SH	15		10
		MH	25		17
	D	eP	13	21	07
		i!			13
		iPcP		23	04
		i			16
	R	eP		21	04
		i!			11c
		eScP		26	56
		iSNEZ		27	32
	Pr	eP		21	00
		i!			07
	Bt	eP		20	54
		i!		21	02c
		i			15
	Is	eP			18
		iNZ!			24
		eScP		27	04
		eS			54
	T	eP		21	25
		iNZ!			31c
		iSNZ		28	06
	Magnitude 6¾				
	USCGS: 7 N 82 W, 13:13:10				
13	W	iP	16	47	17
		i			27
	Is	eP			20
		e			30
	T	e			09
13	Pr	eP	19	31	42
	Bt	eP			48

(continued)

Date	Sta.	Phase	h	m	s
March		(continued)			
13	W	iP	19	31	21
		ipP			29
	T	eP			18
		epP			30
	USCGS: 54 N 169 E, 19:22:15				
13	D	e	23	45	35
	R	eP			02
		e			19
	Bt	eP			29
		e			37
	W	eP		44	59
		i		45	27
	USCGS: 4 S 153 E, 23:31:50				
14	P	iP	05	30	28.9
		iSNE		31	15.8
	R	iP		30	21.1
		iS			59.2
	Pr	iP			10.6
	Bt	iPNZ			00.0d
		i!N			04.0
		iSN			19.0
	BB	iP			21.5
	Magnitude 4.9				
	USCGS: 31½ N 116 W, 05:29:33				
14	Pr	i	07	49	09
	W	iP			03
	Is	eP			05
14	Pr	eP	08	03	23
	Bt	e			43
	W	iP			28
	Is	eP			30
15	R	eP	12	01	59
	Pr	iP		02	06
	W	iP		01	41
15	D	eP	15	36	32
	Pr	eP			23
	Bt	eP			19
	W	iP			44
	Is	eP			42
	T	eP			54
	USCGS: 7½ N 82½ W, 15:28:33				
15	D	eP	15	52	54
	Pr	iP			45
	W	iP		53	06
	Is	iP			04
	T	eP			13
	USCGS: 7½ N 82½ W, 15:44:55				
15	D	eP	17	23	58
	Pr	eP		24	00
	Bt	eP			05
	W	eP			01
	Is	eP			02
	T	eP			08
		e			22
15	P	iP	20	27	51
		e		28	05
		i			10
	R	iP		27	49c

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase (continued)	h	m	s
March					
15	R	e	20	28	02
		e			07
	Pr	eP		27	43
		e		28	02
	Bt	iP		27	40c
		e			54
		i			59
	W	iP			59c
		i		28	12
		i			19
	Is	iP		27	58c
		i		28	11
		i			18
	T	eP			04
	BCIS: 20 S 69.5 W, 20:16:33				
15	Bt	e	20	54	59
	W	iP		55	27
	Is	eP			29
	T	eP			35
16	P	iP	01	39	21
	R	eP			24
	Pr	iP			24
	Bt	eP			23
	W	iP			24c
	Is	iP			25
	T	eP			30
16	R	eP	07	06	29
	Pr	eP			32
	W	eP			23
	T	eP			21
16	R	eP	08	12	07
	W	eP		11	52
	Is	eP			54
	T	eP			51
16	R	eP	08	54	10
	Pr	eP			08
	Bt	eP			07
	W	eP			11
	Is	eP			12
	Wellington: 36.7 S 177.7 E, 08:40:53				
16	P	eP	13	53	41
	R	eP			42
	W	eP			39
	Is	eP			40
16	P	eP	14	24	20
		e			30
	R	eP			24
		e			36
	Pr	eP			22
		e			36
	W	iP			23
	Is	iP			25
		e			38
	T	eP			31
		e			37
	USCGS: 23 S 176 W, 14:12:11				
16	P	eP	19	14	48
		i		15	03

(continued)

Date	Sta.	Phase (continued)	h	m	s
March					
16	R	eP	19	14	49
		e		15	06
	Pr	eP		14	34
		e			50
	W	iP			51
		i		15	07
	Is	iP		14	52
		e		15	07
	T	eP		14	59
	USCGS: Tonga region, 19:02:40				
16	W	iP	19	53	15
	Is	e			16
	BCIS: 33.3 N 35.7 E, 19:43:24				
16	P	iP!EZ	20	29	54.9c
		iSN		30	10.5
	R	iP!		29	44.7c
		iSE			52.5
	Pr	iP!			50.7
	Bt	iP!NZ		30	02.1d
		iSN			23.0
	BB	iP!		29	36.2
	Magnitude 4.8 34° 15'N 116° 45'W, 20:29:34.3				
16	W	iP	23	28	23
	Is	eP			24
		i			58
	T	eP			20
16	P	iP!EZ	23	35	18.4c
		iSNE			23.7
	D	iP!			13.2c
	R	iP!NEZ			07.7c
		iSNE			16.1
	Pr	iP!			14.0
	Bt	iP			25.1
		iSN			46.4
	BB	iP!		34	59.5
	Felt, Big Bear area Magnitude 4.4° 34° 15'N 116° 45'W, 23:34:57				
17	P	iP	11	54	07
		i			42
	R	iP			10
		e			46
	Pr	eP			23
		e			44
	Bt	iP			19
	Is	iP			00
	T	iP		53	57
		i		54	21
	JMA: 39.9 N 141.05 E, 11:42:29, 90 km.				
17	R	eP	15	52	46
	Bt	eP			54
	Is	eP			34
		e			47
	T	eP			31
	JMA: 42.7 N 145.2 E, 15:41:20, 40 km.				

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase (continued)	h	m	s
March					
17	Pr	eP	16	51	30
	Bt	eP			33
	Is	eP			12
	T	eP			09
	BCIS: 50¾ N 154¾ E, 16:40:57				
17	P	eP	20	08	24
	R	eP			24
	Pr	e			32
	Bt	e			30
	Is	eP			22
	T	eP			26
	USCGS: 10 S 154 E, 19:54:56				
17	P	e	23	55	09
	D	e			12
	R	e			11
	Is	e			02
	USCGS: 10 S 154 E, 23:41:42				
18	P	eP"	08	37	20
	Pr	eP"			12
	Bt	eP"			17
	Is	eP"			09
	T	eP"			08
	USCGS: 6 N 93 E, 08:17:57				
18	P	i(P')EZ	17	18	10
	R	i(P')			13
	Is	i(P')			11
	T	i(P')			15
	BCIS: "Data insufficient"				
19	D	eP	13	37	32
	R	eP			30
		e			44
	Pr	eP			24
		e			39
	Bt	eP			18
	Is	eP			45
	T	eP			55
		e		38	10
19	Is	iP	15	10	45.0
		i			47.5
		iS		11	45.2
	T	eP		10	18.2
		i			22.6
		iS		11	09.7
	USCGS: 40 N 120 W, 15:09:24				
19	P	iP	17	49	25
		i			40
		i		50	10
	PX	eLE	18	18.6	
	R	eP	17	49	26
		i			43
		i		50	14
	Pr	eP		49	31
	Bt	eP			31
		e			48
		e		50	49
	T	eP		49	23

(continued)

Date	Sta.	Phase (continued)	h	m	s
March					
19	T	e	17	49	36
		e		50	10
	USCGS: 6 S 150 E, 17:35:57				
20	R	e		05	36 45
	T	e			49
20	P	iP		04	25 07
		e			26
	R	eP			10
	Pr	iP			16
	Bt	eP			17
	T	iP		24	54
		e		25	10
		i			47
	USCGS: 51½ N 159½ E, 04:15:00				
20	P	iPEZ		09	54 50
		ipP			55 02
	R	eP			54 52
		epP			55 04
	Pr	eP			54 56
		e			55 14
	Bt	eP			54 55
		e			55 14
	T	eP			54 51
		epP			55 04
	USCGS: 5 S 152½ E, 09:41:36, 60 km.				
20	P	iP		12	42 34d
	R	iP			29d
	Pr	iP			23d
	Bt	iP			17d
	T	iP			52d
	BCIS: Galapagos Islands region, 12:34.3				
20	D	e(P)		13	12 27
	R	e(P)			17
	Pr	e(P)			15
	Bt	e(P)			03
	T	e(P)			55
	Mexico				
20	P	iP		17	23 25
	R	eP			27
	Pr	iP			27
	Bt	e			20
	T	eP			33
	USCGS: 19 S 178½ W, 17:12:15, 500 km.				
20	R	eP		20	30 09
	Is	eP			11
		e			24
	T	eP			16
	BCIS: Kermadec Islands region, 20:17.7				
21	D	eP		07	52 41
	R	e			53 00
	Pr	eP			52 39
	T	eP			46
	USCGS: 20 N 64½ W, 07:43:50				
21	P	iP		15	59 29
	R	eP			32

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
21	Pr	iP	15	59	33
	Bt	iP			32
	Is	iP			33
	T	iP			39
22	P	iPNEZ	06	43	03d
		iNEZ			20
		i			37
		i		44	14
	PX	ePP		45	06
		i(sPP)			39
		iSNE		50	28
		iSPNE		51.0	
		eGN		56.6	
		eR		59.8	
	P	eP'P'	07	13	48
		i		14	13
			A		T
		PZ	4		4
		PH	3		4
		PPZ	1		4
		PPH	1		4
		SH	4		6
		MH	10		40
	R	iPNEZ	06	43	00d
		e			21
		i			33
		i		44	11
		ePP		45	33
		iSNEZ		50	22
		iE			58
		e	07	13	28
	Pr	eP	06	42	54d
		i		43	17
		i	07	13	27
		e			32
	Bt	eP	06	42	49d
		i		43	02
		i			20
		eS		50	00
		e	07	13	19
	Is	iP	06	43	12d
		i			32
		i			46
	T	eP			17d
		i			39
		iSNEZ		50	52
		eP'P'	07	13	16
	Depth 70 - 80 km.?				
	Magnitude 6½				
	USCGS: 3½ S 79 W,				
	06:33:55, 100 km.				
22	P	eP	15	58	31
	PX	eL	16	26.9	
	R	eP	15	58	33
	Pr	e			32
	Bt	eP			25
23	Is	eP	04	40	32
	T	eP			27
23	P	iP	05	24	05
		i			11
	PX	eL		53.5	
	R	iP		24	07

(continued)

Date	Sta.	Phase	h	m	s
March		(continued)			
23	Pr	iP	05	24	11
		i			17
	Bt	iP			12
		e			42
	Is	iP			04
	T	iP			07
	USCGS: 5 S 151 E,				
	05:10:48				
23	P	eP	15	08	29
	R	eP			30
	Pr	eP			32
	Bt	eP			32
	Is	eP			29
	T	eP			38
	USCGS: Tonga Islands,				
	14:56:52				
23	D	eP	18	33	58
	R	eP			54
	Pr	eP			43
	Bt	eP			35
	Is	eP		34	15
	T	eP			20
	Mexico				
23	Pr	iP	19	20	42
		ipP			54
23	P	iPNEZ	20	13	52c
		ipP		14	06
		i			19
	R	iP		13	54
		ipP		14	09
		e			21
	Pr	iP		13	57c
		epP		14	11
	Bt	iP		13	57c
		epP		14	10
	Is	iP		13	50
		epP		14	05
	T	iP		13	54
	USCGS: 6 S 155 E,				
	20:00:44				
23	P	iP!NZ	21	23	47.3c
		iSNE		24	03.6
	R	iPNEZ		23	55.3c
		iSNE		24	20.9
	SB	iP		23	41.5c
		iSE			53.1
	Is	iPNZ			39.1d
		iSN			49.7
	FT	iP!			30.9d
	H	iPNEZ			52.0d
		iSE		24	10.4
	T	eP			02.3
		iSNE			31.2
	Magnitude 4.3				
	35° 05'N 119° 03'W, 21:23:26				
	Felt at Taft and Bakersfield.				
23	D	e	22	26	16
	R	eP		25	59
		epP		26	12
	Pr	eP			00
		ipP			17
	Is	iP			02

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
23	Is	ipP	22	26	19
	T	eP			06
		epP			24
	BCIS: Kermadec Islands,				
	22:13:24				
24	Pr	e	11	42	59
	Is	eP			59
		epP		43	19
	T	eP			06
	BCIS: Tonga Islands				
	region, 11:31.5				
24	P	iP	21	19	59d
	R	iP		20	01d
		e			12
		e			27
	Pr	iP			02d
		e			14
	Bt	eP		19	58
	Is	iP		20	03d
		i			13
	T	iP			09d
	USCGS: Tonga region,				
	21:08:25				
25	P	iPNEZ	05	50	54c
	R	iP			47
	Pr	iP			42c
		e		51	04
	Bt	eP		50	36
		e			46
	Is	iP		51	02
	T	iP			09
		i			16
	USCGS: Near coast of				
	Guatemala and El Salvador,				
	05:44:20				
25	P	iPNEZ	23	37	45
		ipP			55
		i		38	05
		i			19
		i			41
	R	iP		37	50
		ipP			59
	Pr	eP			48
		ipP			56
		i		38	14
	Bt	iP		37	59
		ipP		38	09
	Is	i		37	38
	T	eP			25
		ipP			33
	BCIS: 52 N 159 E,				
	23:27:32				
26	P	iPNEZ	00	13	16
	R	iP			19
		e			47
	Bt	eP			18
	Is	eP			13
		i			21
	T	iP			25
		e			42
	USCGS: 18 S 178½ W,				
	00:01:55, 350 km.				

Date	Sta.	Phase	h	m	s
March					
26	P	e	03	31	04
		e			12
	R	e			09
	Pr	e			03
	T	e		30	46
	USCGS: 52 N 159 E,				
	03:20:45				
26	P	eP	04	09	42
		e			55
	R	iP			46
	Pr	eP			53
	Is	eP			31
	T	iP			29
	USCGS: 52 N 159 E,				
	03:59:25				
26	P	iP	05	32	52
		ipP		33	25
	R	iP		32	48
		i		33	08
		ipP			20
		e			36
	Pr	iP		32	45
		epP		33	15
	Bt	iP		32	41
		i			51
		epP		33	14
	Is	iP		32	59
		ipP		33	31
	T	iP			04
		ipP			36
	USCGS: 24½ S 68 W,				
	05:21:20, 150 km.				
26	D	e	08	24	28
	R	eP			17
		e			31
	Is	eP			02
		e			05
		e			14
	T	eP		23	53
		e		24	02
	USCGS: 61½ N 151 W,				
	08:17:24				
26	P	e(P)	23	08	36
	BCIS: 39.2 N 21.9 E,				
	22:51:00				
27	P	iP	12	23	06
	R	iP			01
	Pr	iP		22	55
	Bt	iP			49
	Is	iP		23	18
	Mexico				
28	D	eP	03	30	11
	R	eP			15
	Pr	iP			21
	Bt	iP			26
	Is	iP			01
		i			04
	T	iP		29	59
	USCGS: Andreanof Islands,				
	03:21:24				
28	P	eP	08	26	02
		epP			14
		e			30

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Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
28	R	eP	08	26	05
		epP			16
	Pr	eP			04
		epP			15
	Is	iP			04
		ipP			17
	USCGS: 22 S 175 W,				
	08:14:05, 60 km.				
28	R	iP	22	17	05
	Is	iP		16	57
		epP		18	48
	T	iP		16	55
		epP		18	49
	JMA: 29.6 N 137.9 E,				
	22:05:20, 500 km.				
29	P	eP	11	22	14
	R	eP			09
	Pr	eP			11
	Bt	eP			02
	Is	eP			20
	T	eP			26
	BCIS: Northern Chile,				
	11:10.6				
30	D	eP	06	07	10
	Pr	eP			06
	Is	eP			31
	T	eP			29
	Tacubaya: 14° 09'N				
	92° 14'W, 06:01:09, 100 km.				
30	R	eP	06	21	06
	Pr	eP			04
		e			12
	Bt	e			15
	Is	eP		20	52
	T	eP			47
	BCIS: 54½ N 159 E,				
	06:11:01				
30	P	eP	07	18	50
		e		19	05
		e			14
	PX	eLNZ		45.5	
	R	eP		18	49
		e		19	07
	Pr	eP		18	47
		e			55
	Bt	eP			53
	Is	eP			57
		e		19	08
		e		22	16
	T	eP		18	38
		e		19	08
		e		21	22
	USCGS: Near Yellowstone				
	National Park, 07:16:10				
30	P	eP	08	08	36
	R	eP			35
	Pr	eP			36
	Is	eP			31
	T	e			43
	Wellington: 34¼ S 179½ W,				
	07:55:38				

Date	Sta.	Phase	h	m	s
March					
30	P	eP	12	25	48
		e			57
	Pr	eP			44
		e		26	05
	Bt	eP		25	44
	Is	eP			39
	BCIS: Kamchatka, 12:15:36				
30	P	eP	17	58	03
	R	iP			08
	Pr	iP			15
	Is	eP		57	52
	T	eP			42
	USCGS: Central Alaska,				
	17:50:45				
30	R	eP	18	55	19
	Pr	eP			27
	Bt	eP			30
	T	eP			11
	JMA: 39 N 145 E,				
	18:43:36, 80 km.				
30	P	iP	22	27	32
	R	iP			35c
		e			46
	Pr	iP			34c
		i			46
	Bt	iP			33
		e			45
	Is	iP			36c
		i			49
	T	iP			42
	USCGS: 22 S 176 W,				
	22:15:31				
31	D	e	01	42	57
	Pr	e			49
	Bt	e		43	03
		e			21
	T	e			08
	USCGS: 20 N 64 W, 01:34:00				
31	P	iP	07	42	41
	R	iP			37
		i			47
	Pr	eP			32
	Bt	iP			29
	Is	iP			48
		i			59
	T	iP			54
	USCGS: Near coast of				
	Northern Chile, 07:31:12				
31	P	iP	08	28	03c
		ipP			24
	R	iP		27	58
		ipP		28	20
	Pr	eP		27	51
		i			54
		ipP		28	15
	Bt	iP		27	49
		ipP		28	11
	Is	iP			11
		ipP			34
		i		29	30

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
March		(continued)			
31	T	iP	08	28	16
		ipP			38
		i		29	32
	USCGS: 3½ N 78½ W,				
	08:19:30, 100 km.				
31	P	eP	11	08	33
	R	eP			37
	Pr	iP			34
		i			44
	Bt	eP			40
		i			50
	Is	iP			09
	T	iP			13
April					
1	PX	eLNZ	11	35.3	
	R	eP		07	09
	Is	eP			18
	BCIS: Chile, 10:54.0				
1	Is	eP	12	48	09
	USCGS: 48½ N 153½ E,				
	12:37:52, 150 km.				
2	P	iP"	11	09	17
		i			25
		iPP		12	34
	PX	eE		12.8	
	P	i			51
	PX	eE		21.7	
		eE		55.3	
		eZ		55.7	
			A		T
		MH	4		20
	R	eP"	11	09	11
		e		10	07
		ePP		12	32
		e			48
		e			55
	Pr	e		09	26
	Bt	eP"			11
	W	iP"			07
		i			16
		i		11	19
		iPP		12	27
	Is	eP"		09	09
		e			22
		e		10	21
		e		11	13
	T	e		09	11
		e		11	23
	USCGS: 2 N 97 E,				
	10:49:56				
	Uppsala: Magnitude 6½				
2	W	iP	16	56	43
		ipP			58
	Is	iP			45
		epP			59
	Wellington: 31 S 179 W,				
	16:44:20, 200 km.				
3	D	iP	12	08	21
		i			38
	Is	iP			29
		i			45
	T	eP			32
		e			52

Date	Sta.	Phase	h	m	s
April					
4	D	e(P)	08	47	57
	Pr	e(P)			43
	W	i(P)		48	11
	Is	e(P)			08
	T	e(P)			15
		e			22
5	P	iP	04	12	03
		ipP			18
	R	eP			06
		epP			20
	Pr	iP			09
		ipP			29
	Bt	iP			16
	W	iP		11	53c
	Is	iP			55
	T	iP			50c
		ipP		12	07
		e			42
	USCGS: 53 N 158 E,				
	04:02:00				
5	P	iP	04	30	37
		iSE			53
	W	iP			15d
	Is	eP			19
		iS		31	24
	Kg	eP		30	16
	H	eP			24
		iSEZ		31	26
	T	eP		30	12
		iSNE		31	04
	Berkeley: 38° 32'N 122° 31'W,				
	04:29:13, magnitude 4.4 and				
	04:29:32, magnitude 4.2				
	Felt in Napa Valley and				
	vicinity; maximum VI.				
5	Pr	iP	17	29	20
	Bt	e			29
	W	iP		28	58
		i		29	14
	Is	eP		28	59
	USCGS: 51 N 179 E,				
	17:20:27				
6	P	eP"	07	28	58
		i		29	57
		iPP		30	21
		e		32	40
	PX	eE		38	02
	P	iPKKP		40	48
	PX	eN		40.9	
		eE		45.4	
		eE		46.7	
			A		T
		PPH	½		4
		PPZ	½		4
	D	eP		25	41
		eP"		28	57
	R	e		25	49
		iPP		30	21
		ePKKP		40	48
	Pr	eP		25	43
		e		29	45
		iPP		30	20
		iPKKP		40	46

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
April		(continued)			
6	Bt	e	07	29	47
		e		30	05
		iPP			30
		iPKKP		40	43
	Is	eP		25	25
		i		29	46
		iPP		30	09
		ePKKP		40	52
	T	eP		25	31
		e		29	31
		iPP			52
		eNE		32	01
		iN		35	52
		iPKKP		40	50
	Hindu Kush.				
	BCIS: 36½ N 70½ E,				
	07:11:40, 220 km.				
	Moscow: Magnitude 6¾				
6	D	epP	16	41	02
	R	epP			04
	Pr	iP		40	14
		epP		41	04
	Is	eP		40	11
		epP		41	02
	USCGS: 13 S 167 E,				
	16:27:51, 200 km.				
7	P	iPNEZ	00	02	37d
		iNEZ			40
		i			54
	PX	eLE		05.9	
			A		T
		PZ	½		1½
	R	eP		02	30d
		i			34
		i			44
		e		03	11
	Pr	iP		02	20d
		i			23
		i			36
		i		03	05
	Bt	iP		02	12d
		i			19
	W	iP			58d
		i		03	01
	Is	iP		02	55d
		i			59
		i		03	13
	T	iP			09d
	USCGS: 19½ N 109½ W,				
	23:58:40				
7	R	eP	02	02	20
	Pr	iP			21
	W	iP			22
	Is	iP			24
	CL	iP			27
	T	eP			18
7	P	iPNEZ	18	13	12d
		i			18
		esP		15	15
		ePP		17	56
	PX	eL		50.2	

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
7			A		T
		PZ	0.2		1¼
		PH	0.1		1¼
	R	iP	18	13	15d
		ePP		17	58
	Pr	iP		13	14d
		epP		14	35
		esP		15	04
		e		17	57
	Bt	iP		13	12d
		epP		14	32
		ePP		17	55
	W	iP!		13	15d
		ipP		14	36
		isP		15	16
		ePP		17	58
	Is	iP		13	16d
		ipP		14	37
		esP		15	17
		ePP		17	59
	T	iP		13	21d
		esP		15	17
		ePP		17	17
	USCGS: 32 S 180,				
	18:00:57, 350 km.				
7	P	eP	19	27	49
	R	eP			41
	Pr	eP			43
	Bt	eP			36
	W	iP			58
	Is	eP			59
8	R	eP	08	01	06
	Pr	eP			07
	W	eP			02
	Is	eP		00	56
	USCGS: Tonga region,				
	07:48:40				
8	P	eP	10	45	01
		epP			42
	R	eP			04
		e			12
	Pr	eP			03
	W	iP			04
		i			14
		ipP			44
	Is	eP			05
	T	eP			11
	USCGS: 23 S 178 W,				
	10:32:47				
9	P	e(P)	04	43	49
		iSE		45	13
	W	iP		43	25
		iSEZ		44	23
	Is	iP		43	26
		iSNZ		44	24
	FT	e(P)		43	47
		i(S)		44	50
	H	eP		43	28
		eSE		44	10
	T	iPEZ		43	06
		iS			42

(continued)

Pasadena and auxiliary stations, 1956 No. 1

Date	Sta.	Phase	h	m	s
April		(continued)			
9	Magnitude 4.4				
	USCGS: 39½ N 118 W,				
	04:42:26				
9	D	eP	15	34	51
		e		35	04
	Bt	eP			10
	W	iP		34	26
		i			42
	Is	eP			29
	T	e			41
	BCIS: Aleutians.				
9	D	eP	16	21	49
		e		22	03
	Pr	eP		21	37
		i			54
	W	iP		22	01
		i			16
	T	eP			07
		e			21
	Mexico				
9	Pr	eP	17	09	29
	Bt	iP			28
	W	iP			24
	Is	iP			25
	JMA: 44¾ N 143 E,				
	16:58:33, 320 km.				
9	P	eP	17	24	42
		e			59
		e		25	08
	R	e			10
	Pr	e			04
	Bt	e		24	56
	W	eP			36
		i			48
		i		25	04
	Is	eP		24	40
		e			48
		i		25	05
	T	eP		24	41
		e		25	05
9	P	iP	18	18	15d
	R	eP			18
	Pr	iP			18d
	Bt	e			24
	W	iP			17
	Is	iP			19d
	T	iP			23d
	USCGS: 16 S 179 W,				
	18:06:25				
9	P	iPNEZ	22	29	16c
		epP			40
	R	iP			18c
		e			34
	Pr	iP			21c
		i			37
		e			51
	Bt	iP			20c
		e			35
		e			43
	W	iP			15
	Is	iP			17

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
9	T	iP	22	29	20c
	USCGS: 10 S 162 E,				
	22:16:23				
10	P	eP"?	13	34	40
		iP"NEZ		35	07
		ipP"NEZ			42
		iPP		37	24
		iSKPNEZ		38	17
	PX	iNE			37
		iE			57
		i		39	17
		eSKSP		48	28
			A		T
		PPZ	0.1		1½
	R	eP"	13	35	01
		i			09
		ePP		37	28
		iSKP		38	21
		i		39	23
		i		45	59
		eSKKP		47	35
	Pr	eP"		35	01
		i			11
		ipP"			47
		iPP		37	34
		iSKP		38	22
		eSKKP		47	42
	Bt	iP"		35	10
		epP"			47
		iSKP		38	24
	W	eP"		34	50
		iP"		35	02
		ipP"			39
		iPP		37	15
		iSKP		38	10
		iSKKP		47	46
	Is	eP"		35	02
		iSKP		38	17
		eSKKP		47	37
	T	eP"		34	55
		iP"NEZ		35	05
		i			40
		i		37	16
		iSKP		38	12
		iSKKP		47	51
	Magnitude 6½?				
	USCGS: 3 S 102 E,				
	13:16:04, 150 km.				
11	R	e?	17	54	38
	Pr	e		55	28
		i		56	06
	Bt	e		54	25
		i		55	45
	Is	e		54	48
	CL	e			35
	USCGS: 35½ S 54½ E,				
	17:34:15				
12	P	iP	05	16	48
		ipP		17	05
		isP			11

(continued)

Pasadena and auxiliary stations, 1956. No. 1

Date	Sta.	Phase	h	m	s
April		(continued)			
12	R	iP	05	16	46
		ipP		17	02
		isP			08
	Pr	iP		16	42
		ipP			59
		isP		17	05
		e		19	45
	Bt	iP		16	38d
		ipP			55
		isP		17	00
	Is	iP		16	56d
		ipP		17	13
		isP			18
	CL	iP		16	54
		ipP		17	11
		isP			16
	T	iP			03
		ipP			20
		isP			28
	USCGS: 26 S 70 W, 05:05:05, 60 km.				
13	P	iP	04	50	10d
		e			24
	R	iP			07d
	Pr	iP			03d
	Bt	iP		49	59
	Is	iP		50	17d
	CL	iP			14d
	T	iP			22d
	USCGS: 23 S 67 W, 04:38:53, 250 km.				
13	P	iP	08	05	22
		ipP			36
	R	eP			27
		epP			43
	Bt	iP			35
	Is	iP			14
	CL	iP			18
		epP			34
	BCIS: 51½ N 155¾ E, 07:55:04				
14	W	e	03	45	15
	Is	e			15
16	P	iP	01	52	19c
	R	iP			23c
		epP			35
	Pr	iP			28c
		ipP			44
	Bt	iP			32c
		epP			47
	W	iP!			07c
		ipP			17
		i		53	31
	Is	iP		51	58c
		ipP		52	09
	T	iP			05
	USCGS: 55 N 162 E, 01:42:29				
16	P	eP"	11	05	59
		ePP		08	45
		iSKPNZ		09	44

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
16	R	eP"	11	06	00
		eSKP		09	21
		e			45
	Pr	e		05	39
		e		09	27
		i			51
	Bt	eP"		06	04
		iSKP		09	53
	W	iP"		05	55
		ipP"		06	10
		iSKP		09	14
		i			37
	Is	eP"		05	56
		eSKP		09	14
		i			38
	CL	eP"		05	57
		ePP		08	15
		eSKP		09	17
		e			41
	T	e			37
	USCGS: 3½ S 102 E, 10:46:42				
16	D	eP	14	28	09
	Pr	iP			10
	Bt	eP			14
	W	iP		27	48
		i			57
	Is	iP			51
	CL	eP			55
16	D	e	19	15	23
	R	e			18
	Pr	e			11
	W	e			26
	Is	e			25
	CL	e			40
16	P	iPNEZ	20	45	58
	R	eP		46	00
		e			06
	Pr	iP			01
		i			08
	Bt	iP			01
	W	iP		45	55
		i		46	02
	Is	iP		45	57
		e		46	03
	CL	iP			01
		e			08
	T	eP			02
	USCGS: Solomon Islands, 20:32:57				

C. F. Richter
Violet M. Taylor
March 11, 1958

Pasadena and auxiliary stations, 1956 April 16 - August 1 No. 2

Date	Sta.	Phase	h	m	s
April					
16		iPNZ	20	56	31
	R	eP			28
	Pr	iP			21
	Bt	iP			15
	W	eP			43
	Is	iP			43
	CL	eP			42
	T	eP			54
	USCGS: 500 miles west of Galapagos Islands 20:49:00				
17	P	iPNZ	02	53	34
	W	iP			29d
	Is	eP			30
	CL	eP			34
17	P	iP	12	27	57
		ePP		32	50
	R	iP		28	00
		ePP		32	47
	Pr	iP		28	04
		ePP		32	39
	Bt	eP		28	06
	W	iP		27	50c
		iPP		33	08
	Is	iP		27	51
		ePP		33	07
	CL	eP		27	55
		ePP		33	05
	JMA: 30 N 139 E, 12:16:15, 320 km.				
	BCIS: 30½ N 138½ E, 12:16:16, 450 km.				
18	P	iP	11	08	39d
		i!			43
		ePcP		10	19
	PX	iSNE		15	23
		eLNE		18	39
			A		T
		PZ	1		3
		PH	1		2½
		MH	5		10
	R	eP	11	08	43d
		i			47
		iPcP		10	36
		eSE		15	38
	Pr	eP		08	49d
		i!			54
		ePcP		10	25
	Bt	eP		08	53
		i			57
		ePcP		10	26
	W	iP		08	27d
		i!			33
		iPcP		10	15
		i		11	02
		e		14	06
	Is	iP		08	28d
		i!			33
		iPcP		10	15
		i			30
	CL	eP		08	32
		i!			38
		ePcP		10	12

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
18	T	eP	11	08	25
		i			30
	Magnitude 6½ USCGS: 52 N 178 W, 11:00:13				
18	D	eP	12	22	19
	R	eP			16
	Pr	eP			11
	Is	eP			30
18	P	iP	16	10	52
		epP		11	06
	R	iP		10	49
		ipP		11	04
	Pr	iP		10	44c
		epP			59
	Bt	iP			41c
		ipP			55
		i		11	00
	W	iP			00c
		ipP			12
	Is	iP		10	58c
		ipP		11	12
	CL	iP		10	57
		epP		11	11
	T	eP			05
	USCGS: Northern Chile, 15:59:00, 60 km.				
18	P	iP	18	03	36
	R	eP			36
	Pr	eP			42
	Bt	iP			47
	W	iP			20
	Is	iP			22
	CL	eP			27
		i			30
	USCGS: 52 N 178 W, 17:55:11				
19	R	e(P)	18	50	38
	Is	e(P)			33
	CL	e(P)			31
	BCIS: 37.2 N 3.7 W, 18:38:53				
20	R	e(P)	04	52	31
	Pr	e(P)			37
	W	iP			20
	Is	eP			22
	CL	e(P)			23
20	D	eP	12	15	23
	R	eP			24
	Pr	eP			25
	W	iP			26
		e			36
	Is	iP			27
		e			38
	CL	eP			30
20	P	iP	14	23	19
	R	eP			21
	Pr	iP			21c
		e			55
	Bt	eP			20
	W	iP			22c
		i			55

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
April		(continued)			
20	Is	iP	14	23	23c
		e			57
	CL	iP			27
	T	eP			29
	BCIS: Tonga region				
	14:11.6, 150 km.				
20	P	iP"	15	34	25d
		i			36
		iPPP		37	46
		iPKKP		45	20
	Bt	iP"		34	27d
		ePKKP		45	08
	W	eP		30	27
		iP"		34	22
		iPP		35	06
		isPP			39
		iPPP		37	43
		ePKKP		45	13
		i			25
		eSKKP		48	23
	Is	eP		30	33
		iP"		34	22
		ePP		35	07
		ePPP		37	44
		ePKKP		45	12
		i			23
	CL	eP		30	32
		iP"		34	25
		ePP		35	13
		ePPP		37	46
		ePKKP		45	13
	T	eP"		34	24
	USCGS: 7½ S 129 E,				
	15:15:56, 150 km.				
	Readings listed for PPP may represent another shock.				
20	P	eP'	16	57	18
		ePP	17	01	09
	R	eP'	16	57	00
		ePP	17	01	14
	Pr	ePP			13
	Bt	eP'	16	57	37
		ePP	17	01	19
	W	eP'	16	56	56
		e		57	21
		ePP	17	00	57
	Is	eP'	16	57	00
		e			22
		ePP	17	00	59
	CL	eP'	16	56	59
		e		57	24
		ePP	17	01	00
	BCIS: 12 S 67 E,				
	16:37:01				
21	P	iP	00	16	29d
	R	iP			32
	Pr	iP			35d
	Bt	eP			36
	W	iP			28
	Is	eP			30
	CL	eP			34

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
21	T	eP	00	16	31
	USCGS: 6 S 155 E,				
	00:03:23				
21	W	iP	07	46	52c
	Is	eP			54
	CL	eP			57
21	P	eP	07	59	34
	R	eP			38
		e			45
	Pr	iP			45
		i			52
	Bt	iP			50
		i			56
	W	iP			22
		i			28
	Is	iP			24
		i			32
	CL	eP			29
	T	eP			20
		e			26
	USCGS: Andreanof Islands,				
	07:51:09				
21	R	e	12	38	43
	Bt	e		39	02
	W	iP			14
	Is	eP			18
21	P	eP	14	00	47
		e		01	12
	PX	eLZ		06	.0
	D	eP		00	46
		eScP		07	01
	R	eP		00	43
		ePcP		03	20
		eScP		06	59
	Pr	eP		00	37
		e		01	31
		ePcP		03	18
		eScP		06	58
	Bt	eP		00	24
		eScP		06	57
	W	iP		00	59
		i		01	17
		iPcP!		03	24
		iScP		07	05
	Is	eP		00	59
		e		01	27
		e			52
		ePcP		03	25
		eScP		07	06
	CL	eP		00	52
		iPcP		03	22
		eScP		07	02
	USCGS: Off El Salvador,				
	13:53:49				
21	P	iP	17	23	28c
	R	iP			31c
	Pr	iP			31c
		e			51
	Bt	iP			30c
	W	iP!			29c
		epP		25	32
	Is	iP		23	31c
		i			39
		epP		25	32

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
April		(continued)			
21	CL	iP	17	23	34c
		i			43
	T	iP			37c
	USCGS: 17½ S 179 E,				
	17:12:30, 600 km.				
22	P	iP	04	00	30c
	R	iP			32c
	Pr	iP			32c
	Bt	eP			30
	W	iP			32
	Is	iP			35
	CL	iP			37c
	T	eP			40
	USCGS: Kermadec Islands region, 03:47:50				
	Wellington: 30.2 S 177 W,				
	03:48:17, 475 km.				
22	R	eP	04	19	19
	Pr	eP			18
	Bt	eP			11
	W	eP			49
	Is	eP			48
	CL	eP			45
22	P	iPNEZ	04	54	15c
		i			53
		i		55	10
	PX	e(SKS)E	05	05	.4
		iSE		06	35
		eLN		20	.0
			A		T
		PZ	¼		1½
		PH	0.2		1½
		MH	10		20
		MZ	7		20
	R	iP	04	54	18c
		i			27
	Pr	eP			00
		i			21
		e		58	03
	Bt	iP		54	20
		e		56	04
		e		58	08
	W	iP		54	12c
		i			49
		i		56	38
		e		57	53
	Is	iP		54	14
		i			51
		e		56	39
	CL	iP		54	17c
		e		56	08
	T	iP		54	17
	Magnitude 6¼ - 6½				
	BCIS: 5¾ S 151 E,				
	04:40:56				
22	P	eP	17	28	57
		i(PP)E		30	44
		iN		31	34
	PX	iSE		34	.5
		eLE		36	.8
		eRE		38	.0

(continued)

Date	Sta.	Phase	h	m	s
April		(continued)			
22			A		T
		PZ	0.4		3
		PH	0.4		4
		SH	3		12
		MH	20		15
		MZ	20		17
	Pr	eP	17	29	08
		i			21
	Bt	eP			13
		i			26
		eS		35	16
	W	iP		28	43d
		i			55
	Is	iP			46
		i			58
		e(PP)		30	25
	CL	eP		28	49
		i		29	01
		e(PP)		30	13
	T	eP		28	44
		eNEZ			52
		iSN		34	11
	Magnitude 6				
	BCIS: 54 N 161 W,				
	17:21:55				
23	P	eP	03	43	06
		i			13
		i			18
	PX	iSNE		52	27
		iE			44
		eGE	04	02	.0
		eRN		04	.5
			A		T
		PZ	0.5		1½
		PH	0.6		2
		SH	2		5
		MH	10		20
		MZ	5		20
	Pr	eP	03	43	15
		i			22
		i			27
	Bt	eP			16
		e			25
		i			30
	W	iP		42	56c
		i		43	05
		i			09
		i			46
	Is	eP		42	59
		i		43	10
	CL	iP			01c
		i			09
		i			15
	T	ePEZ		42	57
		iNEZ		43	08
		iSN		52	13
		iNZ			31
	Magnitude 6½ - 6¾				
	JMA: 42.4 N 145 E,				
	03:31:39, 60 km.				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
April					
23	Pr	eP"	08	46	58
	Bt	eP"		47	01
		e			09
	W	eP"			00
		e			07
	Is	eP"			02
		e			08
	CL	eP"			00
		e			06
	T	eP"			03
	BCIS: 47 S 11 W,				
	08:28.0				
24	Pr	eP	00	31	20
	W	iP			22
	Is	eP			07
	USCGS: 3½ N 79 W,				
	00:22:30				
24	P	eP	12	33	45
		epP			57
	Pr	eP			39
	Bt	eP			35
		epP			48
	W	eP			53
		ipP		34	06
	Is	eP		33	53
		ipP		34	06
	CL	eP		33	53
		epP		34	06
	T	eP			04
	Southeast Pacific?				
	BCIS: 12:22:45				
24	P	i(P)	18	39	38
	PX	eLZ		44.6	
	D	eP		39	32
		e			35
	R	eP			27
		i			32
	Pr	eP			19
	Bt	eP			09
		i			12
	W	iP			54
	Is	eP			52
		e			57
	CL	eP			50
		e		40	08
	T	e(P)			06
	BCIS: Gulf of California				
24	P	iP	23	34	37
	R	eP			40
	Pr	iP			46
	Bt	iP			51
	W	iP			28d
		i			37
		i			40
		i			46
	CL	iP			32d
	T	eP			24
	BCIS: 51.5 N 160 E,				
	23:24:34				
25	P	iPNEZ	08	42	19
	PX	i(S)E		53	24
		eLZ	09	07.0	

(continued)

Date	Sta.	Phase (continued)	h	m	s
April					
25				A	T
		PZ		0.15	1
		PH		0.05	1
		MH		5	20
		MZ		5	20
	R	iP		08 42	22
	Pr	iP			23
		i			41
		i			51
	Bt	eP			23
		e			36
	W	iP			20
		i			28
		i			33
		i			38
	Is	iP			22
		i			34
	CL	iP			25
		i			33
	T	iP			26
	Magnitude 6 - 6¼				
	USCGS: 17 S 175 E,				
	08:29:58				
25	P	eP		08 51	19
		i			21
		i			34
		i			50
	R	eP			21
		i			24
		e			35
	Pr	eP			21
		i			25
		i			35
	Bt	eP			20
		e			23
	W	iP			19
		i			23
		i			37
	Is	iP			20
		i			32
	CL	eP			24
		i			28
		i			42
	T	eP			25
	USCGS: 17 S 175 E,				
	08:38:56				
25	P	iPNZ		09 09	26.4
		iS		10	10.6
	R	eP		09	15.7
		iNZ			20.3
		iSEZ			59.6
	Pr	iP			05.2d
		i!			07.2
	Bt	iP!NZ		08	56.8d
		iSN		09	17.8
	BB	eP			16.7
		i			22.9
		iS		10	03.1
	31.5 N 115.5 W, 09:08:29				
	Magnitude 4.7				
25	Pr	iP		11 34	46
	W	iP			45
	Is	iP			46
	CL	eP			50

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
April					
25	Pr	iP	16	24	00
	W	iP		23	38
		i			54
	Is	eP			39
25	P	iP	17	07	40
	PX	iSNE		11	50
		eLE		13.0	
	R	iP		07	33
		e			52
	Pr	iP			26
		e			41
	Bt	iP			20
		i			32
	W	iP			52
	Is	iP			51
	T	eP		08	02
	Off Mexico				
25	D	eP	18	59	00
	R	eP			02
		e			30
	Pr	iP			02
	W	iP			02
		i			25
	Is	iP			04
	CL	eP			08
		e			23
	BCIS: Tonga Islands				
	region, 18:47:35				
26	P	iP	02	33	59
	PX	eLE		38.4	
	R	eP		33	51
	Pr	eP			43
		i			46
	Bt	eP			38
		i			41
	W	iP		34	12
		i			18
	Is	iP			11
	CL	iP			07
	T	iP			19
	Tacubaya 16°48'N				
	102°31'W, 02:28:48				
26	D	iP	05	54	32
		e		55	02
	R	iP		54	30
	Bt	iP			21
	W	iP			40
		e		55	10
	Is	iP		54	40
		e		55	11
	USCGS: 21½ S 71 W,				
	05:43:17, 100 km.				
26	P	iP	07	54	12
	PX	eSE	08	04	20
		eLZ		18.8	
			A		T
		PZ	0.1		1
		MH	7		20
	R	iP	07	54	13
		i			20
		i		55	58

(continued)

Date	Sta.	Phase (continued)	h	m	s
April					
26	Pr	iP	07	54	15
		i			21
		i		55	58
	Bt	eP		54	15
	W	iP			12
		i			20
		i		55	56
		i		59	34
	Is	iP		54	17
		e		55	59
	CL	iP		54	18
		e		56	01
	T	eP		54	19
		e			50
	Magnitude 6				
	USCGS: 16½ S 174 E,				
	07:41:52				
26	R	eP	08	05	28
	Pr	eP			32
	Bt	eP			30
	W	iP			28
	Is	eP			33
	CL	eP			35
26	P	eP		11 50	35
		e		51	02
	D	eP		50	44
		e			56
		e		51	24
	R	eP		50	38
		e		51	36
	Pr	iP		50	38
		i			42
		e		51	18
	Bt	iP		50	42
	W	iP			22
		i		51	01
	Is	eP		50	24
		e		51	02
	CL	e		50	29
	JMA: 35 N 140 E, 11:38:29				
	USCGS: 37 N 140 E,				
	11:38:42, 100 km.				
26	D	e		12 15	23
	R	e			19
	Pr	iP			02
		i			14
	Bt	eP			05
		e			20
	W	e			38
	Is	e			37
	CL	e			39
	T	e			49
26	R	eP		15 03	30
	Pr	e			36
	Bt	eP			41
	W	iP			18
		i			25
	CL	eP			22
	T	eP			15
	USCGS: 51 N 143 E,				
	14:52:19				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
April					
26	W	iP	17	09	20
		ipP			28
	Is	iP			24
	CL	eP			26
		epP			34
	T	eP			26
	USCGS: Northern Kurile Islands, 16:59:05				
27	R	e	06	53	08
	Pr	e			16
	Bt	e			09
	W	e			32
	Is	e			29
	CL	e			26
	T	e			41
	Mexico				
28	R	eP	05	49	26
	Pr	iP			27
	Bt	eP			25
	W	iP			26
	Is	iP			28
	CL	eP			32
28	P	iP	06	48	22
	PX	eSE		59	03
	R	eP		48	25
	Pr	eP			27
		i			47
	Bt	eP			29
	W	iP			17
		i			36
	Is	iP			19
		e			30
	CL	eP			23
		e			42
		e		49	10
	T	eP		48	18
		e			38
	BCIS: 13½ N 145 E, 06:35:36, 60 km.				
28	P	eP	07	00	36
	R	eP			33
	Bt	eP			27
	W	eP			43
	Is	eP			44
	CL	eP			44
28	P	iP	07	04	08
		i			41
	R	eP			01
		e			40
	Pr	iP		03	55
		i		04	02
		i			29
	Bt	eP		03	50
		e		04	23
	W	iP			20
		i			53
	Is	iP			17
		e			39
		e			55
	CL	eP			12
		e			48
	T	e		05	08

(continued)

Date	Sta.	Phase (continued)	h	m	s
April					
28	Tacubaya: 16°51'N 93°47'W, 06:58:34, 100 km.				
28	R	eP	07	10	42
	W	iP			48
	Is	eP			48
	CL	eP			47
28	P	iP	15	07	16c
		i			31
		ePP		11	12
	PX	eLE		30.4	
			A		T
		PZ	0.1		1
	R	iP	15	07	18c
		i			30
		i			49
		ePP		11	07
	Pr	iP		07	18c
		i			27
		i			50
	Bt	iP			15c
		e			27
		i			49
	W	iP!			19c
		i			38
		ePP		11	44
	Is	iP		07	21c
		i			33
		i			47
	CL	iP			24c
		i			43
		e		08	07
	T	eP		07	26
		e			49
	Magnitude 6				
	USCGS: Kermadec Islands region, 14:54:30				
	Wellington: 32.7 S 178.3 W 14:54:30				
29	W	iP	00	15	41
		i			52
	USCGS: Fox Islands, Aleutian Islands, 00:08:26				
29	P	iP'	22	12	28
		iNEZ			36
	R	iP'			27
	Pr	iP'			29
		i			38
	Bt	iP'			31
	W	iP'			24
	Is	eP'			23
	CL	eP'			26
		e			39
	USCGS: 6½ S 51½ E, 21:52:31				
May					
1	P	iP"NEZ	03	01	20
		iNZ			37
		iSKPNEZ		04	41
		i		05	04
	PX	eLE		44.3	
	R	eP"		01	12
		i			22

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase (continued)	h	m	s
May					
1	R	i	03	01	39
		iSKP		04	43
		i		05	06
	Pr	eP"		01	16
		i			25
		i			42
		iSKP		04	46
		i		05	09
	Bt	iP"		01	24
		ePP		03	46
		iSKP		04	48
		i		05	17
	W	eP"		00	58
		i		01	17
		i			36
		ePP		03	29
		iSKP		04	36
		i			59
	Is	eP"		01	15
		i			20
		i			36
		iSKP		04	37
		i			41
		i		05	00
	CL	eP"		01	18
		i			21
		i			39
		iSKP		04	41
		i		05	03
	T	eP"		01	17
		e			35
		iSKP		04	35
		e			59
	USCGS: 4½ S 103 E, 02:42:03				
1	P	iP	07	08	33
	R	eP			37
	Pr	iP			43
	Bt	iP			48
	W	iP			21
	Is	iP			22
	CL	iP			28
1	W	e	11	24	58
	Is	e			58
	BCIS: North of Macquarie Islands, 11:06.0				
1	P	eP	13	09	31
	PX	eLE		34.4	
	R	eP		09	33
	Pr	eP			33
	Bt	eP			32
		e			53
	W	iP			34
		i			48
	Is	eP			35
		i			49
	CL	eP			39
	T	eP			40
	USCGS: Tonga Islands, 12:57:48				
1	D	eP	21	51	23
		e			32
	R	eP			27

(continued)

Date	Sta.	Phase (continued)	h	m	s
May					
1	Bt	eP	21	51	37
	W	iP			14c
		ipP			32
	CL	iP			19
	T	eP			12
2	P	iPNEZ	06	45	59c
		i		46	08
		e			17
		epP		47	48
	R	iP		46	02c
		epP		47	52
	Pr	iP		46	06c
		i			45
		epP		47	54
	Bt	iP		46	09c
		epP		48	01
	W	iP!		45	53c
		i		46	03
		ipP		47	43
		i		49	09
	Is	iP		45	54c
		ipP		47	44
	CL	iP		45	58c
		i		46	04
		epP		47	48
		e		49	17
	T	iP		45	52c
		epP		47	42
	JMA: 28 N 140.5 E, 06:34:17, 500 km.				
2	Pr	iP	17	00	51
	W	iP			50
	Is	eP			52
	CL	eP			56
	BCIS: Kermadec Islands region, 16:48:08				
2	R	eP	18	20	18
	Pr	iP			19
	Bt	eP			16
	W	iP			19c
	Is	iP			20
	CL	eP			25
	T	eP			25
	BCIS: Kermadec Islands region, 18:07.5				
3	W	iP	00	15	42
		ipP			56
	Is	eP			47
		epP		16	02
	T	eP		15	50
		epP		16	04
3	P	eP	02	21	48
		e		22	03
	R	eP		21	43
		i			59
		e		22	08
	Pr	iP		21	42
		i			54
	Bt	i		22	00
	W	iP		21	56
		i		22	12
	CL	eP		21	57
		i		22	07

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
3	T	i	02	22	16
	USCGS: 16 S 74 W,				
	02:11:17				
4	R	eP	02	50	46
	Pr	iP			52
	W	iP			44
	Is	eP			46
	CL	eP			49
	T	eP			51
4	D	eP	13	48	50
	R	eP			46
	Pr	eP			34
		e			39
	Bt	eP			34
	W	eP			59
		e		49	04
	Is	eP		48	59
		i		49	03
	CL	eP		48	54
	Tacubaya 16°47'N				
	99°53'W, 13:43:35				
4	P	ePNEZ	13	55	25
	PX	eSE		58	45
		eLN	14	03	.8
	R	iP	13	55	19
		i			26
	Pr	iP			15
		i			19
	Bt	iP			07
		i			23
	W	iP			38c
		i			44
	Is	iP			37
		i			43
	CL	iP			33
	T	eP			45
		i			48
	USCGS: Near coast of				
	Guerrero, 13:50:00				
4	P	iP	14	04	09
	R	eP			11
	Pr	iP			14
	Bt	eP			21
	W	iP		03	54
	Is	iP			57
	CL	eP			59
	T	eP			52
4	P	eP	14	26	09
	R	eP			09
		i			12
	Pr	iP			09
	Bt	eP			10
	W	iP			09
	Is	eP			11
	CL	eP			14
	T	eP			17
	USCGS: 19 S 175 W,				
	14:14:20				
4	W	iP	20	14	48c
	Is	iP			50
	CL	eP			54

Date	Sta.	Phase	h	m	s
May					
5	P	iPNEZ	03	33	47d
		i			55
		i			59
	PX	eSE		43	10
		eREZ		54	.7
			A		T
		PZ	½		1¼
		MH	3½		20
		MZ	3½		20
	R	iP	03	33	50d
		i		34	02
		i			11
	Pr	iP		33	50d
		i		34	11
		i			53
	Bt	iP		33	48d
		e		34	11
	W	iP!		33	50d
		i		34	02
		i			10
	Is	iP		33	51d
		i		34	04
		i			11
	CL	iP		33	54d
	T	iP			57d
		i		34	03
		i			16
	Magnitude 6				
	USCGS: 15½ S 173 W,				
	03:22:27, 100 km.				
5	P	iP	10	03	15
	R	iP			18
	Pr	iP			19
	Bt	eP			18
	W	iP			15d
	Is	iP			17
	CL	iP			19
5	P	iPNEZ	12	51	01d
		i			25
		i			36
	PX	iSE	13	00	45
	R	iP	12	50	58d
		i		51	21
		i			33
	Pr	iP		50	53d
		i		51	06
	Bt	iP		50	50d
	W	iP!		51	09d
		i			26
		i			36
	Is	iP			09d
		i			36
	CL	iP			05d
		e			22
		e			32
		e			45
	T	iP			14d
		i			39
		i			50
	USCGS: 28½ S 69 W,				
	12:39:15, 150 km.				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May					
5	D	eP	14	48	00
	R	eP			01
		e			14
	Pr	e			09
		i			16
	W	iP			01d
		i			15
	Is	iP			03
	CL	eP			07
	T	eP			11
5	D	e	18	36	45
	W	iP			28
	CL	iP			32
	T	eP			25
6	P	eP	21	04	26
		i			58
	PX	eSN		10	07
	P	iScP			36
	PX	eLN		12	.8
		eREZ		14	.5
			A		T
		PZ	0.15		1½
		MH	10		20
	R	eP	21	04	34
		e			38
		e			44
		eSN		10	19
	Pr	iP		04	40d
		i			52
	Bt	eP			46
		i			57
	W	iP!			16d
		i			32
		i			50
		i		05	36
		eS		09	52
	CL	iP		04	22
		i			33
		eS		10	30
	T	eP		04	07
		e			13
		i			24
		eS		09	48
	Magnitude 5¾				
	USCGS: 54½ N 162½ W,				
	20:57:16				
6	P	eP	22	13	40
	R	eP			41
	Bt	eP			50
	W	iP			16
		i			24
		i			29
	CL	eP			28
		i			33
	T	eP			28
	USCGS: 45½ N 150½ E,				
	22:02:27				
7	P	iP	01	34	41
	R	iP			40
	Bt	iP			32
	W	iP			50
	CL	eP			47

Date	Sta.	Phase	h	m	s
May					
7	P	iPNEZ	08	23	15d
		ipP			58
	PX	iPPE		24	38
	P	iPcPNEZ		26	02
	PX	eSN		28	09
	P	eScP		29	39
	PX	eScSNEZ		33	27
	R	eP		23	09
		epP			48
		iPcP		26	00
		eScP		29	36
	Pr	iP		23	02d
		ipP			46
		iPcP		25	57
		iScP		29	34
	Bt	eP		22	59
		epP		23	39
		e		24	12
		iPcP		25	57
	W	iP		23	25
		i		24	05
		iPcP		26	05
		iScP		29	43
	Is	iP		23	23
		iPcP		26	04
		eScP		29	42
	CL	iP		23	19
		e			35
		epP			58
		iPcP		26	03
		eScP		29	41
	T	iP		23	30
		e		24	10
		iPcP		26	08
		iScP		29	46
		iScS		33	50
	USCGS: 14½ N 90½ W,				
	08:17:03, 200 km.				
7	P	eP'	11	18	11
		i			17
		iNZ			22
		iP2'			56
	PX	ePP		22	.1
		eE		22	36
		eE		23	12
		i		24	25
		e		28	16
		eSKPE		32	.0
		eSSE		41	.3
		iE		43	01
		iLE	12	00	.8
		eRNEZ		08	.6
		eRZ		58	
			A		T
		MH	8		20
	R	eP'	11	18	08
		e			15
		i			21
		e		24	27
		e		29	52
	Pr	eP'		18	12
		i			26

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
7	Pr	eP2'	11	18	57
		ePP		22	28
		e		24	26
		e		25	31
		e			57
		e		31	29
	Bt	eP'		18	18
		e		24	19
	W	eP'		18	09
		i			17
		e		20	31
		i		24	24
		i			38
		i			56
	Is	eP'		18	11
		i			18
		i			34
		i		24	26
		i			39
	CL	eP		18	12
		e			19
		i			35
		e		24	13
	T	eP'		18	19
		e		20	21
		ePP		22	06
		e		24	37
		e		25	27
		e		31	03
	Phases in 24m all show short periods.				
	Magnitude 6¼				
	USCGS: 46½ S 96 E, 10:58:12				
7	P	iP	18	52	05
		e			52
	R	eP			08
	W	iP		51	59
	CL	iP		52	06
	T	eP			02
		e			11
	USCGS: 10 N 141½ E, 18:38:47				
8	P	iP	07	26	07d?
		e			17
	R	eP			09c
	Pr	iP			10c
	Bt	eP			08
	W	iP			08c
	Is	iP			10
	CL	iP			14
	T	eP			15
	BCIS: Fiji Islands region, 07:14.1				
8	P	e	10	57	13
		e			34
	R	eP			06
	Pr	eP			05
	Bt	e			21
	W	eP		56	52
		i			57
	Is	eP			53
		i			56

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
8	CL	eP	10	56	53
		e		57	01
	T	eP		56	46
	USCGS: 75 N 1½ E, 10:46:22				
8	P	e	13	00	16
	PX	eLE			18.5
	R	eP	12	58	48
		e	13	00	20
	Pr	e			17
	W	iP	12	58	46
		e		59	55
		e	13	00	11
		i			19
	Is	eP	12	58	48
		e	13	00	20
	CL	eP	12	58	53
		e	13	00	22
	T	eP	12	58	54
		e	13	00	26
	USCGS: Fiji region, 12:47:18, 400 km.				
8	P	e	19	49	32
	D	eP			29
	R	eP			25
		e			36
	Bt	eP			09
	W	iP			45
	CL	iP			41
	T	eP			54
10	P	iP	05	57	45
	R	eP			48
	Bt	iP			55
	W	iP			40d
	Is	iP			42
	CL	iP			45
	T	iP			42
		e		58	01
	USCGS: 12 N 143 E, 05:44:48, 100 km.				
10	P	iPNEZ!	11	49	41.0c
		iSNE		50	22.2
	R	iP		49	34.9d
		iSE		50	06.4
	Pr	iP!		49	23.0c
	Bt	iP!			11.7c
		iSN			24.5
	BB	iP		49	35.9d
		iS		50	06.3
	Magnitude 5.0, 31°50'N 116°00'W, 11:48:54				
	USCGS: 31½ N 116 W, 11:48:50				
10	R	eP	12	27	44
	W	iP			31c
	Is	eP			32
	CL	eP			36
	T	eP			30
10	D	e	16	43	58
	R	eP			53
	Pr	iP		44	00
		ipP			18
	Bt	eP			06

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
10	W	iP	16	43	36
		ipP			54
	Is	eP			40
		epP			56
	CL	eP			42
		epP			59
	T	eP			50
	USCGS: 53½ N 164 W, 16:36:32				
10	P	iP	18	22	24
	R	eP			23
	Pr	eP			27
	Bt	eP			33
	W	iP			12
	Is	iP			14
	CL	eP			12
	T	eP			05
	BCIS: 80 N 0, 18:12:01				
11	P	iP"	15	55	17
		e		56	37
	R	eP"		55	14
	Pr	iP"			13
	Bt	eP"			13
	W	iP"			18
		i			27
	Is	iP"			17
	CL	eP"			19
	T	eP"			21
	BCIS: 57 S 25 W, 15:36:30				
11	P	iPNEZ!	16	31	11.0c
		iSN			26.7
	D	iP!			05.9
	R	iPNEZ!			00.4c
		iSN			07.8
	Pr	iP!			06.8d
	Bt	iP!			17.5d
		iSN			36.0
	PV	iP!			14.6
	BB	iP!		30	53.3
	W	iPEZ!		31	25.9d
		iSE			59.0
	Is	iP			21.7d
		iSN			51.6
	FT	iP			21.3
		i(S)			47.4
	SB	ePE			29.9
		i(S)		32	00.8
	CL	iP!		31	19.5
	H	iPNZ			25.8
		iSN			57.0
	T	iPEZ			39.4
		iSNE		32	25.4
	Magnitude 4.7				
	Near Big Bear, 34°16'N 116°45'W, 16:30:50.0				
	V at points in and near the San Bernardino Mts. Felt as far as Los Angeles.				
12	D	eP	09	56	42
		e			49
	R	iP			40
	Bt	iP			47

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
12	W	iP	09	56	29c
	Is	iP			30
		i			56
	CL	iP			35
	T	iP			28
	JMA: 33.4 N 138.9 E, 09:44:42, 240 km.				
12	W	iP	21	51	32
	CL	eP			39
	USCGS: 43½ N 146½ E, 21:40:23				
13	W	iP	04	11	08.8
		iS			57.6
	Is	eP			12.9
		iS		12	01.7
	CL	iP		11	12.3
		iS		12	01.8
	H	iP		11	04.3
		eSE			47.6
	T	iP		10	56.1
		iS		11	17.6
	Magnitude 4½				
	USCGS: Western Nevada, 04:10:07				
	Felt at Austin and Fallon				
13	PX	eLE	08	44	0
	W	eP		08	43
	CL	eP			45
	USCGS: 30 N 70 E, 07:50:33				
	Uppsala: Magnitude 6.1				
13	D	eP	09	06	46
	W	iP			40
	Is	eP			34
	CL	eP			35
	BCIS: North Pole region, 08:56:38				
13	P	eP	14	44	10
	Pr	iP			16
	Bt	eP			20
	W	iP		43	58
	Is	eP			59
	CL	eP		44	00
	USCGS: 85½ N 82 E, 14:34:00				
14	P	eP	05	38	50
	R	iP			53
	Pr	eP			53
	W	iP			50
	Is	eP			51
		e		39	10
	CL	eP		38	55
	BCIS: Solomon Islands, 05:25:57				
14	P	e	15	08	22
	W	e			16
	Is	e			09
	CL	e			09
15	P	iPNEZ	08	23	17
		ipP			37
	PX	iSE		31	40
		iSSE		36	24
		eLE		39	5
	R	iP		23	12
		ipP			32
		e			51

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
15	Pr	iP	08	23	07
		ipP			26
	Bt	iP			02d
	W	iP			26d
		i			31
	Is	iP			24d
		ipP			43
	CL	iP			23d
		epP			42
	T	iP			30
		epP			48
	USCGS: 13½ S 77 W,				
	08:13:02, 100 km.				
15	P	iPNEZ	12	42	35d
		e(pP)			51
	PX	iSE		50	22
		eLE		55.8	
	R	iP		42	30d
	Pr	iP			24d
	Bt	iP			19d
	W	iP			45d
		i		43	50
	Is	iP		42	43d
		e		43	03
		i		49	
	CL	iP		42	41d
	T	eP			50
		e		43	53
	BCIS: 6S 82 W, 12:33:20				
16	P	iP	22	21	20
	R	iP			23
	Pr	iP			22
		epP?		23	23
	Bt	eP		21	21
	W	iP			22
		ipP		23	22
	Is	iP		21	23
	CL	eP			27
	T	eP			28
	BCIS: 24 S 178½ E,				
	22:09:52, 550 km.				
16	Bt	eP	07	02	50
	W	iP		03	09
	Is	iP			09
16	W	iP	11	37	11
		i			34
	CL	eP			17
	T	eP			09
17	P	iPNEZ	06	10	45c
		ipP		11	02
	PX	eSE		19	12
	P	eP'P'		39	20
		e			35
	R	iP		10	40c
		ipP		11	00
		eP'P'		39	32
	Pr	iP		10	36c
		ipP			56
		i		11	19
		eP'P'		39	34
	Bt	iP		10	31c
		ipP			49
		eP'P'		39	27

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
17	W	iP!	06	10	53c
		ipP		11	12
		e		14	38
		eP'P'		39	25
		e			31
	Is	iP		10	52c
		i		11	05
		ipP			11
		i			24
		eP'P'		39	30
	CL	iP		10	50c
		ipP		11	07
		i			43
	T	iP		10	57c
		ipP		11	17
		eP'P'		39	16
		e			31
	USCGS: 16½ S 72 W,				
	05:59:57, 60 km.				
17	P	i	14	21	19
	R	e			23
	Pr	iP			14
	Bt	eP			11
	W	iP			14
		i			24
		i			31
	Is	iP			16
		i			25
		i			32
	CL	e			28
	T	eP			21
		e			38
	BCIS: 15 S 172½ W,				
	14:09:56				
17	R	e	19	29	30
	Pr	e			35
	Bt	e			22
		e			35
	W	iP			13
		e			42
	Is	iP			13
		e			42
	CL	e			52
17	W	i?	21	17	36
		i			57
	Is	i		18	01
	CL	e			05
	T	e		17	58
	USCGS: 52½ N 174 E,				
	21:08:46				
18	P	iP	08	30	33d
	R	eP			34
	Pr	iP			36d
		e			55
	Bt	eP			35
	W	iP!			35d
		epP		32	36
	Is	iP		30	36d
	CL	eP			40
	T	iP			41
	USCGS: 17 S 179 W,				
	08:19:35, 600 km.				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
18	P	esP	10	01	54
		i			57
		i		02	15
	R	eP		01	39
		epP			53
		isP		02	00
	Pr	eP		01	43
		isP		02	07
	Bt	esP			13
	W	iP		01	19
		ipP			35
		isP			42
	Is	iP			22
		epP			36
		isP			43
	CL	eP			23
		isP			45
	T	esP			34
	USCGS: 62 N 145½ W,				
	09:55:09, 100 km.				
18	W	e	12	28	05
	Is	e			06
	CL	e			00
18	P	eP	14	09	38
	R	eP			41
	Pr	eP			41
	W	iP			39
		i			50
	Is	eP			40
		e			51
	CL	eP			43
	T	eP			46
19	P	i(P)	00	33	59
		i		34	08
		i			20
	PX	eLE	01	00.9	
	R	e(P)	00	33	57
		e		34	06
	Pr	e(P)		33	50
		i		34	07
	W	eP		33	50
	Is	eP			51
		e		34	21
	CL	eP		33	56
		e		34	06
	T	e			10
	BCIS: 11½ S 166½ E,				
	00:21:17				
19	P	iP	01	43	45
		e			56
		ePP		47	25
	PX	eSKSE		54	22
		eREZ	02	11.9	
			A		T
		MH	10		20
	R	eP	01	43	47
		e			57
		e	02	02	03
	Pr	eP	01	44	01
		i			12
		i		45	00
		iPP		47	40

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
19	Bt	eP	01	44	09
		e		46	44
		ePP		47	38
	W	eP		43	41
		i			44
		e		47	04
		ePP			33
	Is	eP		43	44
		i		44	22
		ePP		47	29
		ePPP		49	30
		e	02	00	34
		ePKKP			48
		e		01	07
		eP'P'		09	23
	CL	eP	01	43	46
		i			59
		i		44	08
		e		46	50
		ePP		47	35
		ePPP		49	49
		e		53	01
		e		56	09
		eP'P'	02	09	21
	T	eP	01	43	45
		i			56
		e		44	35
		iN		45	23
		iPP		47	34
	Magnitude 6¼				
	USCGS: 7S 156 E, 01:30:36				
19	P	iP	06	34	05
	Pr	iP		33	54
	W	e(P)		34	18
	Is	eP			14
	CL	eP			09
	T	eP			22
	USCGS: About 150 miles off				
	coast of Guatemala, 06:27:50				
19	P	eP	08	23	27
	Pr	iP			38
	Bt	iP			42
	W	iP			12
	Is	iP			16
	CL	eP			18
	T	eP			09
	BCIS: Alaska, 08:16.5				
19	P	eP'	20	22	15
		e			38
		e			57
		iP2'		23	13
		i			51
		ePP		26	54
	PX	eE		28.0	
		iSSE		47	24
		iE		53	08
		iLE	21	02.0	
		iNE		10.4	
		eR		19.5	
			A		T
		MH	15		20
		MZ	11		20

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
19	R	eP'	20	22	18
		e			38
		eP2'		23	10
		ePP		26	56
	Pr	e		22	25
		iP2'		23	06
		ePP		26	44
	Bt	eP'		22	36
		i			49
		iP2'		23	05
		iPP		26	51
	W	eP'		22	15
		i			39
		iP2'		23	17
		i			22
		e		25	03
		iPP		27	05
	Is	eP'		22	16
		i			30
		i			54
		iP2'		23	17
		iPP		27	16
	CL	eP'		22	15
		e			29
		ePP		27	03
	T	eP'		22	15
		e			55
		i		23	19
		i		24	07
		iPP		27	29
		i		28	41
	Magnitude $6\frac{1}{4}$				
	Distance 165°±				
	USCGS: 40 S 43 E, 20:02:15				
	BCIS: 41 S 42 E, 20:02:13				
19	R	e	21	54	34
	Pr	i(P)			24
		i			40
		i		55	14
	W	e			08
		e			18
	CL	e			00
	T	e			18
	Tacubaya: 16°08'N 96°58'W, 21:49:02				
20	R	e	00	55	08
	Pr	e			00
	Bt	e		54	57
	W	e		55	27
	Is	e			54
	CL	e			30
	T	e			41
	Tacubaya: 16°21'N 101°55'W, 00:49:59				
20	W	iP	06	07	21
		i			24
	Is	eP			26
	T	iP			19
		i			24
20	R	iP	18	02	13
	Pr	iP			15

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
20	Bt	eP	18	02	18
	W	iP			04
	Is	eP			06
	CL	eP			10
	T	eP			08
	USCGS: Marshall Islands, 17:50:37				
21	P	iPNEZ	00	40	59d
		isPNEZ		41	26
	R	iP		40	56d
		isP		41	22
	Pr	iP		40	50d
		ipP		41	10
		isP			18
	Bt	iP		40	47d
		epP		41	07
		isP			14
	W	iP			06d
		iPcP			23
		isP			34
		isPcP			48
	Is	iP			05d
		isP			34
	CL	iP			02d
		isP			29
	T	iP			10d
		isP			38
	Depth 75 km.				
	BCIS: $20\frac{3}{4}$ S 68 W, 00:29:42, 100 km.				
21	P	iPNEZ	09	22	12
		ipP			29
	R	iP			16
		ipP			34
	Pr	iP			22
		ipP			40
	Bt	iP			28
		ipP			46
	W	iP		21	58d
		ipP		22	15
	Is	iP		21	59d
		ipP		22	16
	CL	iP			02d
		ipP			19
	T	eP		21	52
		epP		22	09
	USCGS: 60 N 150½ W, 09:15:47, 150 km.				
21	MW	iP	10	23	12
	Pr	e			05
	W	iP			04
	Is	iP			06
	CL	eP			08
21	Pr	iP	13	35	27
	W	iP			26
	Is	iP			28
21	R	eP	23	03	43
		e			55
	Pr	eP			43
	W	iP			42
	Is	eP			46
	CL	eP			46
		e		04	33

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
21	T	eP	23	03	51
	BCIS: New Zealand, 22:50.9				
22	P	iPEZ	03	12	31
		ipP			46
		i		13	01
		i			31
	PX	iSE		21	56
		iRNEZ		33.3	
			A		T
		PZ	1½		5
		MH	22		20
		MZ	17		20
	R	eP	03	12	33
		ipP			50
		i		13	04
		i			38
	Pr	iP		12	34
		ipP			52
		i		13	05
	Bt	iP		12	35
		i			40
		ipP			54
		i		13	04
		i			21
	W	iP		12	35
		ipP			48
		i		13	05
	Is	iP		12	37
		ipP			52
		i		13	05
	CL	eP		12	38
		i		13	09
		i			38
	T	eP		12	42
		ipP		13	01
		e			49
	Depth 60 km.				
	Magnitude $6\frac{1}{2}$				
	USCGS: $15\frac{1}{2}$ S 173 W, 03:01:03				
22	W	iP"	05	27	55
		i			58
		iPP		29	21
	USCGS: Near coast of Celebes, 05:10:40				
22	Pr	e	11	08	17
	Bt	e			13
	W	i			43
	Is	e			41
	CL	e			36
22	P	iPNEZ	13	48	29
		i			59
		e		49	46
		ipP		50	32
		isP		51	31
		i			42
		iPP		52	05
	PX	iSKSE		58	14
		iE	14	00	05
			A		T
		PZ	0.2		1
		PH	0.2		1

(continued)

Date	Sta.	Phase	h	m	s
May		(continued)			
22	R	iP	13	48	31
		e		50	22
		ipP			35
		epPP		53	56
		e		54	14
		eSKSE		58	19
	Pr	iP		48	34
		ipP		50	29
	Bt	iP		48	37
		isP		50	31
	W	iP		48	25d
		ipP		50	25
		e		54	35
		e?	14	04	20
		ePKKP		05	49
	Is	iP	13	48	28
		i			41
		epP		50	28
		i?	14	04	23
	CL	eP	13	48	30
		epP		50	29
		ePP		52	05
		e		53	41
	T	iPNZ		48	29
		i			50
		epP		50	21
		ePP		52	13
		eSKSZ		58	15
	Magnitude $6\frac{1}{4}$				
	Depth 530 km.				
	USCGS: 4 S 152½ E, 13:36:12, 550 km.				
23	Pr	iP	06	28	32
		i			50
	Bt	iP			35
	W	iP			08
		i			26
23	P	iP	06	42	30
	R	eP			33
	Pr	iP			34
	Bt	iP			32
	W	iP			32c
	Is	iP			34c
	T	eP			38
23	R	e	10	36	01
	W	eP'		35	32
		i			44
	Is	e			51
	T	eP'			32
	USCGS: 9S 67 E, 10:15:33				
23	P	iPNEZ	16	53	06c
	R	eP			08
	Pr	iP			09c
	Bt	eP			07
		e		54	05
	W	iP		53	07c
		i			50
	Is	e(P)			14
	T	iP			13
	USCGS: Fiji Islands, 16:41:15				
23	P	iPNEZ!	20	59	34c
		ipP	21	01	00

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
May		(continued)				
23	P	isP	21	01	50	
		iPP		02	36	
	PX	iSNE		08	42	
		isSE		10	43	
		isScSNE		11	28	
		eSSE		13	38	
		eGN		19.3		
	P	eP'P'		26	59	
		iSKPP'		29	53	
		eP'P'P'		46	38	
			A		T	
		PZ	30		6	
		PH	8		4	
		PPZ	13		6	
		SH	20		6	
	R	iPNEZ!	20	59	36c	
		i	21	01	12	
		i			22	
		iPP		02	33	
		i			51	
		iSNE		08	48	
		isSN		10	37	
		iP'P'		26	59	
		eSKPP'		29	47	
		eP'P'P'		46	34	
	BB	iP	20	59	38c	
	Pr	iP!			37c	
		i	21	00	21	
		i		01	20	
		iS		08	48	
		iSKPP'		29	52	
	Bt	iPNEZ!	20	59	35c	
		i	21	01	16	
		isP			51	
		iSNEZ		08	49	
		iEZ		09	32	
		isScSN		11	37	
		ePKKP		20	05	
		eP'P'		26	55	
		iSKPP'		29	46	
		eP'P'P'		46	42	
	W	iPEZ!!	20	59	35c	
		ipP	21	01	08	
		iPP		02	29	
		i		04	01	
		i		07	36	
		iSEZ		08	46	
		ePKKP		20	17	
		iP'P'		26	56	
		iSKPP'		29	43	
		e		32	11	
		eP'P'P'		46	31	
	Is	ePN	20	59	38	
	T	iPNEZ!			41c	
		ipP	21	01	15	
		isP!		02	06	
		iSNEZ!		08	59	
		eNE		11	35	
		eP'P'		26	52	
		iSKPP'		29	45	

Magnitude 7½, 15 S 179 W, 20:48:30, 430 km.

Date	Sta.	Phase	h	m	s	
May						
23	P	iP	21	28	33c	
	R	iP			35	
	Pr	iP			36c	
	Bt	eP			33	
	W	iP!			34c	
	T	iP			40	
		Sharp, short-period. An aftershock; not pP'P' of preceding.				
23	P	iPNEZ	22	03	28	
	R	iP			30	
	Pr	iP			31c	
	Bt	eP			29	
	W	iP			29c	
		Aftershock?				
		USCGS: Fiji Islands, 21:52:26, 550 km.				
24	P	eP	02	30	05	
		iNEZ			11	
	PX	eLE			32.4	
	R	eP			29	58
	Pr	iP			48	
		i			32	53
	Bt	eP			29	36
		e			43	
		e			32	21
	W	eP			30	23
		i			31	23
		e			34	11
	T	eP			30	38
		e			34	59
		Tacubaya: 26 N 110 W, 02:27:28				
24	P	eP	04	57	56	
	R	eP			58	
	Pr	iP			59	
	W	iP			57c	
	T	eP		58	03	
24	PX	eLE	20	49.9		
	D	ePP		19	52	
	R	iPP		20	00	
	W	ePP		18	47	
	CL	ePP		19	27	
		USCGS: 5 S 131 E, 19:59:42				
25	R	e(SKP)	01	13	14	
	W	i(SKP)			05	
	CL	e(SKP)			07	
		USCGS: 1 N 97½ E, 00:50:33				
25	D	eP	12	26	01	
	R	eP			08	
	W	iP			09	
	Is	eP			11	
	CL	eP			14	
		Wellington: 33 S 177 W, 12:13:20				
26	PX	e(S)E	08	59.4		
		eLE	09	21.9		
	R	e	08	49	58	
	Bt	e		50	07	
		e			14	

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
May		(continued)				
26	W	e	08	49	46	
	Is	e			52	
	CL	e			56	
		e		50	09	
	T	e			02	
		BCIS: 4 S 125¾ E, 08:30:23				
26	W	i(P)	12	54	27	
	CL	e			33	
	T	e(P)			24	
		BCIS: Data insufficient.				
26	P	iP	17	58	01	
	R	iP		57	57	
	Pr	iP			55	
	Bt	iP			50	
	W	iP		58	08	
	CL	eP			05	
	T	iP			13	
		USCGS: 24 S 67 W, 17:46:34, 200 km.				
26	P	iPNEZ	20	32	21	
		i!			26	
		i			46	
		epP		34	28	
		i			33	
		isPEZ		35	25	
		iNEZ			29	
		iPP			38	
	PX	iSNE		41	27	
		iNE			57	
		iN		42	25	
		isSNE		45	22	
		iN		46	45	
		isSSE		49	52	
		iRNE		53	10	
		eE		58	52	
		iSKPP'	21	01	55	
			A		T	
		PZ	1		1	
		PH	½		1	
		SH	10		15	
	R	eP	20	32	23	
		ipPEZ		34	36	
		isPEZ		35	24	
		iSNE		41	32	
		e		42	00	
		isSN		45	21	
		eP'P'		59	00	
		eSKPP'	21	01	47	
	Pr	iP	20	32	24	
		i		34	18	
		ipP			36	
		isP		35	35	
		eSKPP'	21	01	51	
	Bt	iP	20	32	23	
		epP		34	35	
		iSE		41	32	
		eP'P'		59	24	
		eSKPP'	21	01	45	
	W	iP	20	32	22c	
		ipP		34	35	
		isP		35	33	

(continued)

Date	Sta.	Phase	h	m	s	
May		(continued)				
26	W	eP'P'	20	59	25	
		iSKPP'	21	01	58	
	Is	iP	20	32	23	
		ipP		34	38	
		isP		35	33	
		iP'P'		59	28	
	CL	iP		32	29	
		ipP		34	42	
		esP		35	02	
		iP'P'		59	27	
		eSKPP'	21	01	44	
	T	eP	20	32	29	
		i			59	
		ipP		34	41	
		iSNEZ		41	44	
		eP'P'		59	21	
		eSKPP'	21	01	46	
		Magnitude 6½				
		USCGS: 19 S 178½ W, 20:21:14, 550 km.				
27	D	eP	16	55	11	
		epP			24	
	R	eP		54	52	
		e		55	16	
	Pr	eP		54	49	
		e		55	12	
	Bt	eP		54	43	
	W	iP		55	15	
		i			39	
	CL	eP			07	
		e			19	
		Tacubaya: 18°38'N 101°58'W, 16:50:15				
27	PX	eLE	17	26.2		
	R	eP'		16	01	
		e			09	
	Pr	eP'			06	
	Bt	eP'			06	
	W	e		15	50	
		e		16	46	
	CL	e		15	58	
		e		18	28	
		USCGS: 6½ S 129½ E, 16:56:49, 200 km.				
27	P	iP	18	07	29c	
	PX	eLE		29.3		
	R	iP		07	33c	
	Pr	iP			37c	
	Bt	iP			37c	
	W	iP			25c	
	CL	iP			32c	
		USCGS: Marshall Islands, 17:55:56				
28	PX	eLE	02	14.5		
	R	eP	01	54	56	
	W	eP			55	
	Is	eP			53	
	T	eP			55	
		BCIS: 26½ N 44 W, 01:44:23				
28	D	iP	03	50	04	
	R	iP			02	
	Bt	eP		49	53	

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
28	W	iP	03	50	12
	Is	i(P)			02
		i			13
	CL	e(P)		49	56
		e		50	10
	USCGS: Near coast of Northern Chile, 04:38:37				
28	P	iP	06	23	49
	R	eP			51
	Pr	iP			52
	Bt	iP			51
	W	iP			51c
	Is	iP			53c
	CL	eP			57
28	P	iP"	13	41	51
	R	eP"			54
	Bt	eP"			57
		e		42	39
	W	iP"		41	50
	Is	eP"		42	01
	CL	eP"		41	53
		e		42	47
	USCGS: 1 N 122 E, 13:23:17, 100 km.				
29	P	iP"	06	48	05
		i			29
		i			46
		iSKP		51	50
		ePKS		52	08
		i			13
	R	iP"		48	05
		i			30
		iSKP		51	50
		iPKS		52	08
	Pr	iP"		48	07
		i			32
		iSKP		51	54
		ePSK		52	08
	Bt	iP"		48	04
		i			33
		i			51
		eSKP		51	56
		ePKS		52	19
	Is	iP"		48	07
		i			25
		iSKP		51	45
		iPKS		52	07
	CL	iP"		48	11
		i			29
		e			45
		iSKP		51	49
		iPKS		52	12
	T	iP"		48	13
		iSKP		51	43
	USCGS: 4½ S 103 E, 06:29:21, 100 km.				
29	D	iP	14	56	31
	R	iP			30
	Bt	iP			22
	Is	iP			39
	T	eP			44
	USCGS: 22½ S 71 W, 14:45:09				

Date	Sta.	Phase	h	m	s
May					
29	P	eP	17	59	03
		epP			33
	R	eP		58	58
	Pr	eP			55
		epP		59	26
	Bt	iP		58	51
	Is	iP		59	11
		ipP			41
	CL	eP			07
	T	eP			17
	USCGS: 14½ S 72½ W, 17:48:26, 100 km.				
30	D	e(P)	01	48	27
	Pr	i(P)			22
	Is	e(P)			38
	CL	e(P)			35
	T	e			51
	BCIS: Galapagos Islands, 01:40.3				
30	P	iPNEZ!	15	53	37d
		iEZ			42
		ipP		54	59
		i		55	31
		ePP		56	44
	R	iPNEZ		53	39d
		i			43
		ipP		55	00
		i			04
		iPP		56	48
		eSKS	16	03	24
	Pr	iP	15	53	39d
		i			49
		ipP		55	01
		i			05
		ePP		56	48
	Bt	iP		53	37d
		epP		54	59
		e		56	13
	Is	iP		53	40d
		ipP		55	02
		i			05
		i			36
		iPP		56	48
		eSKS	16	03	26
		eP'P'		20	20
	CL	iP	15	53	44d
		ipP		55	06
		i			09
		iPP		56	55
		eP'P'	16	20	23
	T	iP	15	53	45d
		e			52
		ipP		55	12
	USCGS: 23 S 178½ W, 15:41:57, 350 km.				
31	W	eP	09	07	46
	Is	eP			47
	USCGS: Salta Province, Argentina, 08:55:45				
31	P	iP	15	01	07
	R	eP			09
	Pr	eP			10
		e			16

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
May		(continued)			
31	Bt	eP	15	01	18
	W	iP		00	56c
		i		01	07
	Is	iP		00	58
	CL	eP		01	02
	T	eP		00	55
	USCGS: 45½ N 151 E, 14:50:13				
31	P	iPNEZ	21	12	56
		i		13	38
	R	iP		12	58
	Pr	iP			59c
		i		13	09
	Bt	iP		12	56
	W	iP			56
	Is	iP			59
	CL	iP		13	03
	T	iP			04
	USCGS: Fiji Islands, 21:00:50, 60 km.				
June					
1	D	eP	02	44	19
	R	iP			18
	W	iP		43	56
	Is	eP			58
	CL	eP			56
1	W	eP	10	56	36
	Is	iP			38
	BCIS: 63.9 N 22.1 W, 10:46:17				
1	PX	eLE	16	17.8	
	Pr	eP	15	56	46
	W	iP			45
	Is	eP			46
	CL	eP			49
	BCIS: 15 S 173¾ W, 15:45:18				
2	P	eP	23	02	33
		epP		03	01
	R	eP		02	37
		epP		03	04
	Pr	iP		02	43
		ipP		03	10
		i			28
	Bt	iP		02	48
	W	iP			21c
		ipP			48
	Is	eP			24
		epP			52
	CL	eP			28
		epP			54
	T	iP			20
		ipP			46
	USCGS: 52½ N 178 E, 22:53:59, 100 km.				
3	P	iPNEZ	05	27	49c
		i			59
		iPPEZ		29	42
	PX	i(ScS)E		37	55
		iLE		41.7	
			A		T
		PZ	0.3		1
		MH	5		18

(continued)

Date	Sta.	Phase	h	m	s
June		(continued)			
3	R	iP	05	27	50c
		i		28	13
		i			24
		iPP		29	35
	Pr	iP		27	56c
		i		28	08
		i			38
		iPP		29	29
	Bt	iP		28	01c
		i			11
		i			35
		iPP		29	32
	W	iP		27	36c
		i			54
		iPP		29	25
		e		31	54
	Is	iP		27	37c
		i			46
		iPP		29	29
	CL	iP		27	37c
		i			51
		iPP		29	29
	T	iP		27	28c
		i			41
		iPP		29	22
	BCIS: 80 N 118 W, 05:19:22				
3	P	iP	09	48	12
	PX	eLE	10	11.3	
	R	eP	09	48	14
	Pr	eP			16
	W	iP			12
	Is	eP			15
	CL	eP			18
	T	eP			21
	BCIS: Tonga Islands, 09:36:36				
3	P	eP	19	05	06
	PX	eSE		17.2	
		eLE		35.2	
	R	eP		05	07
	Pr	iP			06
		i			25
	Bt	eP			04
	W	iP			06
		i			12
		i			19
	Is	iP			09
	CL	eP			12
		e			33
	T	eP			15
	USCGS: 31 S 178½ W, 18:52:20				
	Wellington: 32½ S 176 W, 18:52:09				
4	P	iP	02	14	30
	R	eP			34
	Bt	eP			43
	W	iP			19c
		i			36
	Is	iP			21
	CL	iP			25
	USCGS: 52½ N 159½ E, 02:07:09				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
June					
4	MW	e(P)	07	15	14
	R	e(P)			13
	Pr	e(P)			20
	Bt	e(P)			30
	W	iP		14	49
		i			53
	CL	e(P)		15	07
		e			13
	T	eP		14	52
		e			59
	USCGS: Aleutian fore- shock, 07:07:13				
4	P	eP	07	17	04
		iNEZ			08
		i			32
		iEZ		19	11
		iSE		23	18
		iScSE		26	47
			A		T
		PZ	0.3		1½
		MH	28		20
	R	eP	07	17	13
		i			18
		i			27
		i			34
		eSE		23	34
	Pr	iP		17	20
		i			26
		i			41
	Bt	eP			23
		i			29
		e		19	16
		iSE		23	50
	W	iP		16	55
		i		18	01
	Is	iP		16	59
		i		17	04
		i			12
	CL	eP			02
		i			23
	T	eP		16	53
		i			59
	Magnitude 6¼				
	USCGS: 52 N 170½ W, 07:09:18				
4	P	eP	12	18	39
	PX	e(S)E		30	09
		eLZ		49.5	
	R	eP		18	41
		e			56
		e		22	15
	Pr	iP		18	41
		i			55
	Bt	eP			42
		e			51
	W	iP			40
		i			51
	Is	iP			43
		i			52
	CL	iP			46
	T	eP			49
	BCIS: 32½ S 178 W, 12:05:53				

Date	Sta.	Phase	h	m	s
June					
4	MW	e	18	59	34
	R	e			34
		e			56
	Pr	eP			40
		e			45
	Bt	eP			38
		e			51
	W	iP			15
		i			24
	CL	eP			21
		e			28
	T	eP			13
		e			19
5	Pr	eP	05	39	43
	W	iP		40	04
		iPcP		42	04
		i			11
	Is	eP		39	43
		ePcP		42	03
	CL	eP		40	06
	USCGS: 10 N 84 W, 05:32:23				
5	P	eP"	05	48	53
		e		49	10
		iPP		50	52
	R	eP"		48	55
	Pr	iP"			57
	W	iP"			51
	Is	eP"			53
	CL	eP"			54
		ePP		50	52
	USCGS: 8 S 112 E, 05:29:47				
5	P	eP	06	12	17
	PX	iSE		22	45
		iSSE		28	22
		iSSSE		31	55
		iGE		35.3	
		iRNZ		39.4	
			A		T
		PZ	1¼		6
		MH	12		20
		MZ	6½		20
	R	eP	06	12	17
		e			49
	Pr	eP			10
	Bt	eP			11
	W	eP			25
	Is	eP			24
	CL	eP			25
	T	eP			32
	Magnitude 6¼				
	USCGS: 51S 112½ W, 05:59:41				
5	Pr	iP	16	21	39
		i			50
		i			55
	W	iP			15
	Is	eP			18
	CL	eP			22
	T	eP			15
	BCIS: 53½ N 167½ E, 16:13:55				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
June					
5	W	iP	19	10	55
		ipP		11	09
	CL	e		10	58
	USCGS: 52 N 159 E, 19:01:02				
5	R	eP	20	25	05
	Pr	iP			12
	Bt	eP			14
	CL	eP		24	47
	T	eP			39
		e			49
	USCGS: 52 N 171 W, 20:17:04, 60 km.				
6	P	iP	10	24	57
	R	eP			49
	Pr	iP			40
		i			47
	Bt	eP			30
	W	iP		25	09c
		i			32
	Is	eP			07
		e			11
	CL	eP			07
	T	eP			22
8	P	iPNZ	02	06	37c
		i			40
		i			53
	R	iP			40c
		epP		07	48
	Pr	iP!		06	43c
		ipP		07	51
	Bt	iP		06	41c
	Kg	iP			35c
	W	iP!			38c
		ipP		07	45
	Is	iP		06	40c
		ipP		07	50
	CL	iP		06	43c
		i			48
		ipP		07	52
	T	iP		06	43c
	USCGS: 12 S 167 E, 01:54:35, 300 km.				
	From this date, readings at King Ranch, Kg, (previously only reported exceptionally) are included regularly.				
8	P	iP	12	42	54c
		ipP		43	09
		i			19
	R	iP		42	57c
		ipP		43	12
	Pr	iP			00c
		ipP			14
	Bt	iP		42	59c
		epP		43	14
	Kg	eP		42	51
		epP		43	06
	W	iP		42	52c
		ipP		43	07
		i			23

(continued)

Date	Sta.	Phase	h	m	s
June		(continued)			
8	Is	iP	12	42	55c
		i		43	09
		i			23
	CL	iP		42	58
		i		43	04
		ipP			13
	T	iP		42	57
		e		43	23
	USCGS: 6 S 154½ E, 12:29:47				
8	P	iP	14	04	58
		ipPNEZ		05	17
		i		06	03
		i			28
	PX	eLNZ		30.4	
	R	iP		04	54
		i		05	00
		ipP		05	14
	Pr	iP		04	51
		ipP		05	10
		i			26
		i			39
	Bt	iP		04	47
		ipP		05	06
		e			36
	Kg	iP			09
		ipP			27
	W	eP			04
		iP			06
		i			11
		i			21
		ipP!			27
	Is	iP		05	05
		i			10
		ipP			25
	CL	iP			03
		ipP			22
	T	iP			12
		i			17
		ipP			30
	USCGS: 30 S 70 W, 13:53:09, 150 km.				
8	R	e	16	30	03
	Pr	e		29	56
	Bt	e			58
	Is	e		30	19
	CL	e			14
	Tacubaya: 15°54'N 98°05'W, 16:24:38				
8	PX	eLE	21	52.3	
	R	eP		11	18
	W	iP			18
	Is	iP			20
	CL	eP			23
	Wellington: 33.3 S 179 W, 20:59:12, 350 km.				
	USCGS: Kermadec Islands, 20:58:30				
9	PX	iLE	02	47.2	
	R	eP		33	51
	Pr	eP		34	02
	Bt	eP			13
		e			42

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
June		(continued)			
9	W	iP	02	33	37
	Is	iP			39
		i			46
	CL	eP			40
	USCGS: 64 N 148 W,				
	02:26:57				
9	P	iP	03	17	23
	R	iP			22
	Pr	iP			31
	Bt	iP			35
	Kg	iP			12
	W	iP			12d
	Is	iP			15
	CL	iP			19
	T	iP			11
	JMA: 49 N 149 E,				
	03:07:				
9	P	iP	05	50	23
	PX	eLE	06	19.0	
	Pr	eP	05	50	23
		e			38
	Bt	eP			28
		e		51	01
	W	iP		50	07
		i			21
	Is	eP			20
	CL	eP			13
		e			26
	T	e			22
		e			30
	BCIS: 5 S 152 E,				
	05:36:58				
9	P	eP	10	20	23
		i			27
		iPcPNEZ			34
		ePPE		23.0	
	PX	iPPE		23.4	
		iSNE		30	18
		eSSNE		35.6	
		iGE		41.5	
		iR		45.7	
		iG2E	11	31	
			A		T
		PZ	1½		4
		PH	1½		4
		SH	4		7
		MH	20		20
		MZ	15		20
	Pr	eP	10	20	17
		i			20
		ipP			28
	Bt	eP			12
		iNEZ			16
		ipP			24
		i			45
		iSNE!		29	55
		e		30	44
		eSSNE		35.0	
	Kg	eP		20	33
		i			37
		ipP			45
		i			54
		i		21	04

(continued)

Date	Sta.	Phase	h	m	s
June		(continued)			
9	W	iP	10	20	31c
		ipP!			43
	Is	eP			31c
		i			35
		ipP			43
		i		21	39
	CL	eP		20	28
		i			32
		ipP			39
	T	eP			37
		ipP			48
		i		21	52
		iSNE		30	49
	Magnitude 6¾				
	Depth 40 km.				
	USCGS: 30½ S 70½ W,				
	10:08:32, 150 km.				
9	Pr	eP	21	50	55
	Bt	eP			58
	W	iP			32
	CL	eP			31
9	PX	eP	23	28	26
		eP"		31	37
	P	e		32	39
		i			48
	PX	iPPNEZ		33	01
		iPPPEZ		34	56
		eSKSN		38	47
		iSNE		40	48
		iSP		42	28
	P	ePKKP		43	26
	PX	iPPSN		43	41
		iE		46	29
	P	iSKKP		47	27
	PX	iSSE!		48	39
		iSSSE		52.4	
		iGE	24	01.2	
		iE!		07.0	
		eRNZ		16.6	
			A		T
		PPZ	4		8
		PPH	2		8
		SH	7		15
		MH	100		20
		MZ	85		20
	D	eP"	23	31	41
		ePP		33	01
		ePKKP		43	23
		iSKKP		47	29
	Pr	eP		28	20
		eP"		31	43
		iPP		33	09
		ePKKP		43	19
		eSKKP		47	26
	Bt	eP		28	35
		eP"		31	46
		i		32	26
		iPP		33	13
	Kg	eP		28	20
		e		32	23
		e			47
	W	eP		28	18
		i		32	43

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
June		(continued)			
9	W	iPP	23	32	57
		iPKKP		43	27
		iSKKP		47	35
	Is	e		32	16
		i			44
		iPP			58
		ePKKP		43	39
		eSKKP		47	42
	CL	eP		28	21
		eP"		31	26
		e		32	44
		iPP			52
		ePKKP		43	29
		eSKKP		47	35
	T	iP		28	17
		e		32	22
		ePP			35
		eSE		40	33
		ePKKP		43	51
		eSKKP		47	47
		e(P'P')		51	31
	Magnitudes: m=7.3, M=7.6				
	USCGS: 35½ N 67½ E,				
	23:13:51				
10	P	eP	15	30	35
	Pr	eP			28
	Bt	eP			23
	W	iP			43
		i		31	04
	Is	iP		30	43
	CL	eP			42
	T	eP			49
	USCGS: 18 S 74½ W,				
	15:19:40				
11	P	eP	08	32	28
		i			37
	PX	iLE		47.2	
	Pr	iP		32	28
		i			37
		i			51
	Bt	iP			30
		i			39
	W	iP			23
		i			32
	CL	eP			18
		i			27
	T	eP			15
		i			24
	BCIS: 52¼ N 31½ W,				
	08:22:06				
11	P	iP	10	08	04
		eNZ			15
	PX	iSE		18	03
		iSSE		22	51
		e(SSS)E		24	56
		iGE		28	39
			A		T
		PZ	1		1½
		MH	2		20
	Pr	iP	10	07	58
		i		08	09
	Bt	iP		07	53
		i		08	04

(continued)

Date	Sta.	Phase	h	m	s
June		(continued)			
11	Kg	iP	10	08	15
	W	iP			13
		i			24
	CL	eP			09
		e			20
	T	eP			17
	Magnitude 5¾ - 6				
	USCGS: 27½ S 69 W,				
	09:56:10				
11	MW	i(P)	16	55	25
	Pr	iP			04
		i			12
	Bt	eP		54	57
	W	eP		55	31
	Is	iP			29
	CL	eP			23
	T	e			34
	Tacubaya: 18°08'N 98°19'W,				
	16:49:54				
11	Pr	eP	22	43	28
	Kg	iP			40
		i		44	32
	W	iP		43	48
		i		44	37
	USCGS: Near coast of				
	Northern Peru, 22:33:51				
12	PX	eLE	02	46.1	
	Pr	eP		20	41
	W	iP			41d
	Is	iP			41
	CL	eP			46
	T	eP			48
	BCIS: Samoa, 02:09.4				
12	PX	eLE	04	02.2	
	W	eP	03	22	36
		i			48
12	Pr	e	05	07	09
		e			33
	W	e			36
	Is	e			38
		e		08	36
	CL	e		07	43
	T	e		08	00
12	P	iP	06	51	48
	Pr	iP			44
		i			58
	Bt	iP			40
	W	iP			58
	Is	iP			58c
	CL	eP			58
	T	iP		52	05
12	P	ePNZ	09	02	09
		iNEZ			14
		ePPZ		03	57
		iPcSN		07	11
	PX	iSNEZ!		08	47
		iGE		12	08
		iRNZ		14	30
			A		T
		PZ	0.4		3
		PH	0.3		3
		PPZ	0.3		3
		SH	1½		5

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
June					
18	Bt	eP	07	29	00
	W	iP		28	57
		i		29	02
	Is	eP		28	59
	CL	eP		29	02
	T	eP			04
		e			08
19	P	eP"	00	41	58
	R	eP"		42	00
		i			13
	W	iP"		41	32
		i			53
	Is	eP"			34
		e			53
	CL	eP"			35
		e			56
	T	eP"			32
	BCIS: 5 S 103 E, 00:19.0				
19	D	eP	05	35	53
	Pr	iP			43
	Bt	eP			39
	BCIS: Coast of Guatemala, 05:29.5				
19	Pr	iP	20	22	58
	W	iP			38
	CL	iP			43
20	P	eP	02	13	52
	R	eP			51
	Pr	eP			47
	Bt	iP			41
	W	eP		14	03
	Is	eP			03
	CL	eP			03
	T	eP			12
	USCGS: About 650 miles northeast of Easter Island, 02:03:58				
20	P	eP	16	41	22
		e		42	17
	PX	eE		51.6	
	R	eP		41	22
	Pr	eP			23
	W	iP			23
		i			33
		i			46
	Is	eP			23
		e			48
	CL	eP			27
	T	eP			31
		e		42	11
	BCIS: 18 S 174 W, 16:29:44				
21	D	iP	00	02	53
		e		03	02
	R	eP		02	55
		e		03	09
	Pr	eP		02	57
	BCIS: Solomon Islands region, 23:49.0				
21	P	iP	00	53	15
	R	eP			17
	Pr	eP			18

(continued)

Date	Sta.	Phase (continued)	h	m	s
June					
21	W	iP	00	53	18
		epP			28
	CL	eP			23
	T	eP			26
	BCIS: Tonga Islands, 00:41.5				
21	PX	eL	04	24.3	
	W	eP		15	07
	Is	eP			06
	CL	eP			11
	T	eP			09
21	P	eP	10	38	51
	R	eP			53
		epP		39	11
	Pr	eP		38	52
		epP		39	10
	Kg	eP		38	51
	W	iP			55
		ipP		39	13
	Is	iP		38	55
		epP		39	12
	CL	iP		38	58
		epP		39	16
	BCIS: Fiji Islands, 10:26.6				
21	PX	eLE	11	40.7	
	USCGS: Western New Guinea, 11:06:36				
21	W	e	20	00	13
	USCGS: 5 S 120 E, 19:40:12				
21	W	iP"	20	50	58
		e		51	11
	BCIS: 8 S 118¾ E, 20:32:05				
22	P	iP	23	46	50
		ipP		47	21
	R	iP		46	47
		epP		47	18
	Pr	e			05
	Bt	eP		46	38
		epP		47	11
	Kg	eP?		46	52
		e		47	02
	W	iP		46	59
		ipP		47	30
	Is	iP		46	58
		epP		47	28
	CL	eP		46	55
		epP		47	24
	T	eP			03
		epP			34
	USCGS: Southern Peru, 23:35:56, 100 km.				
23	P	iPNEZ	02	27	45
	PX	iSNE		35	32
		iSSNE		39	27
		iGNE		41	52
	P	eP'P'		57	46
			A		T
		PZ	1		4
		PH	¾		4
		SH	3		8
		MH	19		20

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase (continued)	h	m	s
June					
23	R	eP	02	27	50
		iPP		28	35
		eSE		35	41
		eP'P'		57	45
	Hf	ePN		27	59
	Pr	eP			53
		i		28	05
		eP'P'		57	30
	Bt	eP		28	00
		i			10
		i			58
		iSE		36	01
		eP'P'		57	26
	Kg	eP		27	33
	W	iP			33
		eP'P'		57	28
	Is	iP		27	35
		eP'P'		57	32
	CL	eP		27	39
		eP'P'		57	40
	T	iP		27	30
		i			39
		iSNZ		35	13
		eP'P'		57	51
	Magnitude 6½				
	USCGS: 56½ N 163½ E, 02:18:02				
23	P	iP	04	09	40
	Pr	iP			43
	W	iP			43
	Is	iP			44
23	R	eP	13	57	34
	Pr	eP			36
	W	eP			29
	USCGS: 7 S 155 E, 13:44:19				
23	Pr	eP	16	11	44
	W	iP			43
	Is	eP			44
	T	eP			52
23	P	iP	18	07	32
	PX	eLE		21.4	
	R	eP		07	26
	Pr	iP			20
		i			26
	Bt	eP			17
	Kg	eP			45
	W	iP			42
	Is	iP			40
	CL	eP			36
	T	eP			45
	BCIS: 6 N 83 W, 17:59:33				
23	Pr	iP	19	44	11
	W	iP!			10
23	P	iP	23	31	39d
		i			45
		i			55
	R	eP			40
	Pr	iP			41
	Is	iP			42d
	CL	eP			44

(continued)

Date	Sta.	Phase (continued)	h	m	s
June					
23	T	eP	23	31	46
	USCGS: 21 S 174 E, 23:18:57				
24	P	iP	10	56	02
	R	iP			04
	Pr	iP			06
	Bt	eP			04
	Is	iP			06
	CL	eP			10
24	P	iP'	13	15	00d
		i			38
		i			48
		ePPEZ		19	21
	PX	eSSE		39.6	
		eSSSE		45.8	
	R	iP'		14	57d
		i		15	06
		i			35
		ePP		19	17
	Hf	eP'N		14	58
	Bt	eP'		14	57d
		i		15	31
		i			41
		ePP		19	11
	Kg	eP'		15	03d
		e			11
		e			44
	Is	iP'			00d
		i			08
		i			42
		i			52
	CL	eP'		14	59
		e		15	39
		ePP		19	23
	T	eP'		15	01
		ePP		19	29
	Magnitude 6				
	BCIS: 40 S 36 E, 12:55.0				
24	P	eP	17	19	49
	R	eP			52
	Pr	eP			52
	W	iP			52
	CL	eP			57
24	P	iPNEZ	21	11	48
		i		12	06
		e		16	51
	PX	iSKSE		22	18
		iSE			47
		eREZ		40.5	
			A		T
		PZ	0.2		1½
		PH	0.15		1½
		SH	½		7
		MH	¼		20
	R	iP	21	11	48
		i			57
		ePP		15	37
		e		16	52
	Hf	ePN		11	57
		iN		13	07
	Pr	iP		11	53
	Bt	eP			52

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Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
June		(continued)				
24	Kg	eP	21	11	42	
	W	iP			55	
		i		12	05	
		i		16	49	
	Is	iP		11	47	
		iPP		15	24	
	CL	iP		11	50	
		ePP		15	33	
		e		16	38	
	T	eP		11	49	
	Magnitude 6					
	BCIS: 7 S 155 E,					
	20:58:42					
25	P	eP'	01	22	46	
	Is	eP'			51	
	CL	eP'			52	
	T	e		23	06	
	USCGS: 21½ S 67 E,					
	01:02:30					
25	P	iP	03	12	31	
		i		16	19	
	R	iP		12	33	
		e		16	21	
	Hf	ePN		12	39	
		eN		16	31	
	Pr	iP		12	34	
		e		16	22	
	Bt	eP		12	31	
	Kg	e		16	25	
	Is	iP		12	34	
		e		16	24	
	CL	iP		12	38	
		e		16	28	
	T	eP		12	40	
		e		16	36	
	BCIS: Tonga Islands,					
	03:00.8					
25	D	eP	17	10	20	
	Bt	eP			16	
	W	iP			36	
	Is	eP			32	
	CL	eP			32	
25	R	iP	18	17	33	
	Pr	iP			36	
	W	iP			25	
	Is	eP			27	
	CL	eP			32	
26	P	iPNEZ!	00	12	54c	
		ePP		16	19	
	R	iPEZ!		12	57c	
		ePP		16	23	
	Pr	iP!		12	58c	
	Kg	iP			52c	
	Is	iP!			58c	
	CL	iP!		13	01c	
		ePP		16	29	
	T	iP		12	59c	
	USCGS: 17 S 169½ E,					
	00:00:13					
26	P	iPNEZ	11	34	18c	
	R	eP			21	
	Hf	ePN			27	
	Pr	iP			21c	

(continued)

Date	Sta.	Phase	h	m	s	
June		(continued)				
26	Kg	eP	11	34	16	
	W	iP			21c	
		i			46	
		i		35	27	
	Is	iP		34	22c	
	CL	iP			26c	
	Unusual epicenter.					
	USCGS: 10 S 173½ W,					
	11:23:09					
26	R	eP	14	00	08	
	Pr	eP			07	
	W	iP			08	
	Is	iP			10	
	CL	eP			12	
	Wellington: 34 S 179.7 W,					
	13:47:31, 150 km.					
27	PX	eLE	03	30.0		
	R	eP		22	05	
		e			37	
	Pr	eP		21	58	
	Is	eP		22	22	
	CL	eP			19	
	Tacubaya: 15°52'N 95°38'W,					
	03:15:04					
27	D	eP	04	46	11	
	R	eP			08	
	Pr	eP		45	57	
27	W	iP	13	12	14	
	Is	eP			16	
	CL	eP			20	
27	D	iP	15	12	55	
	R	iP			42	
	Pr	iP			37	
	Bt	iP			34	
	Is	iP			58	
	CL	iP			50	
28	PX	iSE	04	15	52	
		iLE		25	.6	
	R	eP		06	10	
		e			15	
	Pr	eP			10	
		e			16	
		e			48	
	Kg	eP			10	
	Is	eP			10	
		e			23	
	CL	eP			14	
	USCGS: 15½ S 178 W,					
	03:54:20					
28	Pr	iP	23	43	04	
	CL	eP			07	
	USCGS: 49½ N 158 E,					
	22:28:50					
28	P	eP	23	02	50	
		iNEZ			52	
		iNZ			58	
		i!		03	02	
	PX	iSE!		06	02	
				A	T	
		PZ		1¼	1	
		PH		2½	3	
		SH		20	10	
		SH		50	20	

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
June		(continued)				
28	R	eP	23	02	56	
		iNEZ		03	02	
		iSEZ		06	15	
	Hf	ePN		03	08	
	Pr	iP			06	
		i			14	
	Bt	eP			11	
		i			21	
		iSNEZ		06	49	
	Kg	eP		02	28	
		i			35	
		eS		05	28	
	Is	eP		02	32	
		iNZ			42	
		i			49	
	CL	eP			36	
	Magnitude 6¼ - 6½					
	USCGS: 48¾ N 129¼ W,					
	22:58:50					
28	P	iP	23	20	52	
		i		21	01	
	R	iP		20	57	
		i		21	03	
	Hf	ePN		20	58	
	Pr	iP		21	05	
	Bt	eP			14	
		e			21	
	Kg	iP		20	28	
		i			35	
	Is	iP			34	
		i			39	
		i			52	
		i		21	10	
	CL	iP		20	34	
		i			40	
		i			49	
	T	ePE			18	
	Aftershock					
	USCGS: 49 N 129½ W,					
	23:16:50					
29	Kg	e(P)	02	35	26	
	CL	e(P)			31	
	BCIS: 24 N 122½ E,					
	02:21:52					
29	P	iP	04	22	00	
	R	eP			01	
	Hf	iPN			08	
	Pr	iP			06c	
	Bt	iP			08c	
	Kg	iP		21	51c	
	Is	iP			51	
	CL	iP			56c	
	JMA: 37.3 N 139.3 E,					
	04:09:53					
29	Hf	eN	09	16	24	
	Pr	e			37	
	Is	e			03	
29	Pr	eP	09	48	52	
	Is	eP			25	
	CL	eP			25	
29	D	e	22	42	12	
	R	e			08	

(continued)

Date	Sta.	Phase	h	m	s	
June		(continued)				
29	Pr	iP	22	42	01	
		i			23	
	Bt	eP			41	57
		e			42	23
	BCIS: 15 N 97½ W,					
	22:36:32					
30	P	iP	13	21	07	
	PX	iSE			30.3	
	R	eP			21	04
	Pr	eP			20	51
		e			21	00
	Bt	eP			20	49
		e				54
	Is	e		21	11	
	CL	eP			04	
		e			15	
	USCGS: 33½ S 103 W,					
	13:09:47					
30	P	iP	14	28	24	
	PX	eSE			37.0	
	R	iP			28	21
	Hf	eP				15
	Pr	iP				17
		i(PcP)				39
		e(pP)			29	02
	Bt	iP				12
		e(pP)				57
	Is	iP				31
	CL	iP				29
		i(PcP)				52
	USCGS: 22½ S 69 W,					
	14:17:09, 200 km.					
July						
2	P	eP	17	36	43	
	R	eP				46
	Pr	iP				46
	CL	eP				51
	Wellington: 33½ S 179 W,					
	17:24.0					
3	R	eP"	00	17	04	
		e				14
	CL	eP"				17
		e				27
	BCIS: South Atlantic,					
	23:57.9					
3	P	iP	15	53	12	
		e				38
	PX	eLE	16	02	.1	
	R	eP	15	53	07	
		e				28
	Hf	ePN		52	55	
	Pr	iP		53	00	
		i				07
		i				12
	Kg	eP				28
	W	iP				24
		iPcP		56	03	
	Is	iP		53	21	
		ePcP		56	03	
	CL	iP		53	17	
		ePcP		56	04	
	USCGS: 13½ N 91 W,					
	15:46:11					

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
July					
4	P	iPNEZ!	00	51	07d
	R	iP			09d
		epP		52	47
		ePP		54	08
	Hf	iPN		51	09
	Pr	iP!			10d
		i			29
		ipP		52	54
	Bt	iP		51	16d
	Kg	iP			05d
		epP		52	44
	W	eP		51	09
	Is	iP!			10d
		ipP		52	47
	CL	iP		51	15d
		epP		52	53
	USCGS: 18 S 178½ W, 00:39:55, 450 km.				
4	P	eP	03	17	22
		e			44
	PX	iGE		46.6	
		eRZ		49.8	
	R	eP		17	23
		e			43
	Pr	e			30
	CL	eP			24
		e			43
	USCGS: 7 S 155½ E, 03:04:14				
4	P	iP	03	55	54
	PX	iGE	04	24.0	
	R	iP	03	55	57
	Kg	eP			52
	Is	eP			55
	CL	eP			57
	USCGS: 7 S 155½ E, 03:42:50				
4	P	iP	07	32	16
	R	eP			18
	Is	eP			15
	CL	eP			19
	USCGS: 7 S 155½ E, 07:19:09				
4	P	iPNEZ	11	20	34
		ipP			51
	R	iP			30
		epP			47
	Hf	ePN			25
	Pr	iP			27
		ipP			43
		i		21	07
	Bt	iP		20	15
		ipP			32
	Kg	iP			45
	Is	iP			40
		ipP			57
	CL	iP			39
		ipP			55
	BCIS: 31 S 70½ W, 11:08:29				
4	P	eP	16	22	27
	Hf	ePN			36
	Pr	iP			30

(continued)

Date	Sta.	Phase (continued)	h	m	s
July					
4	Bt	eP	16	22	29
	W	iP			29
	Is	iP			31
	USCGS: 23½ S 180, 16:10:48, 450 km.				
4	D	eP	17	32	43
	Hf	ePN			16
	Pr	eP			33
	Is	eP			54
5	Is	eP	06	04	13
	BCIS: 56¾ N 161½ E, 05:54:36				
5	P	iP	08	28	23
	R	eP			25
		e			42
	Pr	eP			30
	Kg	eP			13
	Is	iP			15
	CL	iP			19
	USCGS: 43½ N 140 E, 08:16:47, 100 km.				
	JMA: 43¼ N 139¾ E, 08:16.7				
5	P	eP	09	29	00
	R	eP			02
	Pr	iP			03
	Is	iP			04
5	Pr	iP	13	08	18
	Is	iP		07	54
	USCGS: 63½ N 151½ W, 13:01:05				
6	P	iP	02	24	32
		i			46
		i		25	09
	PX	iLE		26	22
	R	eP		24	38
	Hf	ePN			58
	Pr	eP			50
		i		25	20
		e			38
	Kg	eP		24	11
	Is	iP			14
	CL	eP			22
	USCGS: 42½ N 126 W, 02:22:00				
6	P	iP	03	32	48
		iNZ			57
		iS		33	53
	W	eP		32	27
		iSE		33	04
	Is	iP		32	23
		iS		33	04
	CL	eP		32	21
		iS		33	09
	H	iP		32	18
		i!			22
		iS			52
	T	iPNEZ			04
		iSNE			21
	Magnitude 4.6± Berkeley: 38.5 N 118.7 W, 03:31:35 Felt in Nevada				

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
July					
6	P	iP	13	43	51
	R	iP			47
		ipP		44	07
	Hf	ePN		43	41
	Pr	eP			43
	Kg	e			59
	Is	iP			58
		ipP		44	18
	CL	eP		43	56
		epP		44	13
	USCGS: 23 S 70 W, 13:32:25, 60 km.				
7	PX	eL	11	18.0	
	BCIS: 37½ N 56¼ E, 10:30:34				
8	D	e	02	04	03
	Is	iP		03	45
	USCGS: About 100 miles off Oregon coast, 02:01:30				
8	MW	eP	12	06	57
	D	eP			55
	Pr	eP			46
	Is	eP		07	04
	CL	eP			02
	BCIS: Central Peru, 11:57.0, 100 km.				
8	P	iP	18	17	44
	PX	eLE		40.5	
	R	iP		17	48
	Pr	iP			51
	Kg	eP			38
	Is	iP			41
	CL	eP			46
	Marshall Islands, 18:06:00				
8	P	iP	20	42	33
	Pr	iP			38
	Kg	eP			31
	Is	iP			35
	USCGS: New Hebrides region, 20:29:52				
9	P	eP	03	25	33
		iPP		29	57
	PX	iSKSNE		36	21
		eSNE		37.7	
		iSPNEZ		38.9	
	P	ePKKP		41	44
		i		42	10
		eP'P'		49	55
	PX	iRNEZ	04	00.3	
			A		T
		PZ	2		3
		PH	5		10
		PPZ	11		10
		PPH	5		10
		MH	1000±		50
		MH	300		20
		MZ	220		18
	Hf	ePN	03	25	45
		ePPN		29	50
		ePKKPN		42	09

(continued)

Date	Sta.	Phase (continued)	h	m	s
July					
9	Pr	eP	03	25	43
		e		28	53
		ePP		29	49
		i		30	00
		eSP		38	59
		ePKKP		41	42
		i		42	10
	Kg	eP		25	33
		i			43
		ePP		29	03
		e			43
	Is	iP		25	31
		i			36
		e		28	58
		iPP		29	48
		eSP		38	45
		ePKKP		41	43
		i		42	05
		eP'P'		49	57
	CL	eP		25	29
		i			36
		e		28	58
		iPP		29	44
		eSP		38	41
		iPKKP		41	58
		eP'P'		50	01
	T	ePNEZ		25	29
		iPP		29	38
		iSKSNE		36	10
		iSP		38	33
		i		39	23
		ePKKP		41	56
	Magnitude: m=7.4, M=7.8				
	USCGS: 37 N 26 E, 03:11:39				
9	Is	eP	03	37	53
		ePKKP		54	08
	Aftershock. Magnitude 6¾				
	USCGS: 37 N 26 E, 03:24:05				
9	P	iP	10	04	03d
		i			42
	PX	iSE		10	45
		iScSNE		13	56
		eLE		16.3	
			A		T
		PZ	2½		3½
		PH	2½		4
		SH	4		6
		MH	25		20
	Hf	iPN	10	03	47
	Pr	iP			54d
	Kg	iP		04	17d
	Is	iP			08d
	CL	iP			02d
		i		05	36
		i			52
		i		07	44
	T	iPNEZ		04	09d
		iNZ			28
		iSN		10	36
		eScSNE		14	04
	Magnitude 6½				
	USCGS: 20 N 73 W, 09:56:13, 100 km.				

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Date	Sta.	Phase	h	m	s
July		(continued)			
17	PX	iSN	08	00	12
		iSPEZ!		01.7	
	P	iPKKP		02	46
		e		05	07
		i			42
		i		06	40
	PX	eSSN		08.4	
		iE		11.0	
		eGE		23.0	
			A		T
		P"Z	1		1½
		SKSZ	1		2
		SKSH	1		2
		MH	10		20
		MZ	10		20
	R	eP	07	48	22
		e		50	04
		iP"		52	04
		e			54
		iPP		53	10
		i			21
		iSKPEZ		54	41
		i			57
		i		55	49
		iSKSE		58	10
		iS	08	00	23
		iSP!		02	06
		ePKKP			38
		e		04	38
		e		05	37
	Hf	iP"N	07	52	06
		iSKPN		55	03
		eSKSN		58	21
	Pr	eP"		52	02
		i			05
		iSKP		54	59
		iPKKP	08	02	42
		i		03	11
		e		06	13
	Kg	iP"	07	52	01
		ePP			59
		e		54	28
		i			54
		ePKKP	08	02	47
		i			58
		i		06	13
	W	eP	07	48	17
		iP"!		52	00
		iPP		53	04
		i		54	04
		i			31
		iSKP!			54
		iPKKP	08	02	42
		i			52
		e		06	24
		eP"P"		10	27
	Is	eP	07	48	22
		iP"		52	02
		iPP		53	05
		iSKP		54	55
		iPKKP	08	02	43
		i!			51
		e		04	59

(continued)

Date	Sta.	Phase	h	m	s
July		(continued)			
17	Is	i	08	06	43
		eP"P"		10	29
	CL	eP	07	48	26
		iP"		52	03
		i		53	10
		e		54	39
		i			57
		iPKKP	08	02	40
		i			47
	T	eP	07	48	13
		e		49	55
		iP"NEZ		52	00
		iPPNEZ		53	05
		iSKPNE		54	38
		i			55
		iSN!	08	00	08
		iSP!		01	54
		ePKKP		02	41
		e			50

Pasadena: 7 S 126¼ E,
07:34:08, 440 km.
Magnitude 6¾

17	W	iP	08	56	46
		i		57	05
	Is	iP		56	46
	CL	iP			51
17	W	eP	15	30	43
	Is	eP			47
	CL	eP			43
	T	eP			41

USCGS: 41 N 27 W,
15:19:38

17	P	iPNZ	17	17	50
		ipP		18	03
	PX	eLE		47.2	
	R	iP		17	51
		ipP		18	06
		i			17
	Pr	eP		17	50
		epP		18	06
		e			10
	W	iP		17	45d
		ipP			59
	Is	iP			46d
		ipP		18	00
	CL	eP		17	50
		epP		18	03
	T	eP		17	47

USCGS: Mariana Islands,
17:05:07

17	P	iP	22	38	28
	PX	eLE		43.0	
	R	eP		38	19
	Pr	eP			12
		i			16
	Kg	iP			45
	Is	iP			39
		i			46
	CL	eP			37
		e			43
	T	iP			47

USCGS: About 300 miles off
the coast of Guerrero,
Mexico, 22:32:40

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
July					
18	P	iPNEZ	00	40	46d
		iNEZ		41	02
		iNZ			20
	PX	eLEZ	01	10.4	
	R	iPEZ	00	40	48
		iEZ		41	04
		e		44	16
	Hf	ePN		40	57
	Pr	iP			51d
		i		41	07
		e		44	43
	Kg	eP		40	42d
		e			57
	Is	iP			44d
		i		41	01
		i		44	25
	CL	iP		40	49d
		i		41	05
		e		44	33
	T	iP		40	46d
		i		41	02

USCGS: 5 S 151 E,
00:27:27

18	R	e	05	31	23
	Hf	e			25
	Is	e			22
	CL	e			27

USCGS: 21½ S 170 E,
05:18:23

18	P	iP	06	33	56
		iP"		37	58
		e		38	32
	PX	iPPEZ			55
	P	i(sPP)		39	50
		iPPP		41	20
	PX	iSKSE		44	20
		iE		45	16
		iSN			58
		e		47	20
		iSPEZ			43
	P	ePKKP		49	05
		eSKKP		53	01
	PX	iSSE		53.7	
		eGN	07	04.0	
		iR		10.0	
		eG2N	08	04.0	
		eR2EZ		18.0	
			A		T
		PZ	¾		6
		PPZ	10		20
		PPH	6		10
		SKSH	6		6
		MH	65		20
		MZ	45		18
	R	eP	06	33	59
		iP"		38	00
		i			40
		iPP			57
		i		41	16
		iSKSE		44	24
		iEZ		45	14
		iSP		47	42
		iPKKP		49	06

(continued)

Date	Sta.	Phase	h	m	s
July		(continued)			
18	Hf	ePN	06	34	11
		iN		38	02
		iSKSN		44	39
	Pr	eP		34	03
		iP"		38	11
		i			42
		iPKKP		48	59
	Kg	eP		33	55
		e		37	11
		eP"			59
		iPP		39	10
		iPKKP		49	17
		eSKKP		53	10
	Is	eP		33	53
		eP"		37	57
		i		38	31
		iPKKP		49	10
		eSKKP		53	03
	CL	eP		33	59
		iP"		38	00
	T	eP		33	56
		e		37	53
		iP"NEZ			58
		i		38	32
		iPP!			55
		e		40	43
		iSKSN		44	27
		eNE		45	18
		iN		46	53
		iSP		47	32

Pasadena: 5½ S 130 E,
06:19:35, 190 km.
Magnitudes: m=7.2, M=7.5

18	Is	e(P)	11	08	12

USCGS: Kamchatka,
10:58:18

19	P	iP	21	29	25
	R	eP			27
	Pr	iP			27
	CL	iP			32
19	P	iPNZ	23	34	02c
		i			09
		i		35	03
		iPcP		36	08
	PX	iSE		40	06
		eLNEZ		48.0	
	R	iP		33	56c
		i		34	03
		i			34
		iPcP		36	06
	Hf	ePN		33	44
	Pr	iP			50c
		i			59
		i		34	12
		i		35	33
		iPcP		36	03
	Kg	iP		34	16c
		i			25
		e		35	11
		ePcP		36	16
	Is	iP		34	09
		iPcP		36	09

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
July		(continued)				
19	CL	iP	23	34	05	
		iPcP		36	09	
	T	iPNEZ		34	15	
		i			27	
		iPcP		36	12	
		i			20	
	USCGS: 9½ N 84½ W,					
	23:26:25					
19	P	iP	23	45	41	
		i			46	
	R	eP			34	
	Hf	ePN			25	
	Pr	iP			27	
		i			36	
	Kg	eP			54	
		e		46	02	
	CL	eP		45	44	
	T	eP			53	
		e		46	02	
	USCGS: 9½ N 85 W,					
	23:38:04					
20	P	eP	07	50	30	
	R	eP			26	
	Pr	eP			22	
	CL	eP			34	
	T	eP			41	
	USCGS: 20 S 70 W,					
	07:39:10					
20	PX	eLE	14	06.0		
	BCIS: Halmahera region,					
	13:16:50					
20	P	iPEZ	17	57	28c	
	PX	eLE	18	40.0		
	R	iP	17	57	32c	
	Hf	iPN			41	
	Pr	iP			36c	
	Kg	eP			23	
	Is	iP			27	
	CL	iP			33	
	T	iP			28	
	Marshall Islands,					
	17:46:00					
20	Hf	eN	23	12	45	
	Pr	i			51	
	Is	e		13	11	
	CL	e			08	
	Mexico					
20	Pr	eP	23	31	54	
	Is	eP		32	18	
	CL	eP			21	
	USCGS: Mariana Islands					
	foreshock, 23:19:40					
21	R	e	00	21	40	
	Is	e			45	
	CL	e			43	
	BCIS: ½ N 25¾ W,					
	00:08:30					
21	P	iP	01	53	57	
	D	iP			59	
	R	iP		54	04	
	Is	iP		53	39	
	CL	e			52	

Date	Sta.	Phase	h	m	s	
July						
21	P	iPNEZ!	15	01	04c	
		ipP		03	11	
	PX	iSN		09	12	
			A		T	
		PZ	0.3		1	
	R	iP!	15	01	07c	
		epP		03	14	
	Hf	iPN		01	14	
	Pr	iP!			11c	
		ipP		03	16	
	Kg	iP		00	54c	
		epP		02	57	
	Is	iP!		00	55c	
		i		01	30	
		ipP		03	00	
	CL	iP		00	59c	
		i		01	23	
		epP		03	03	
	T	iPNEZ		00	52c	
		i		01	18	
		epP		02	54	
		iSN!		08	49	
	USCGS: 50½ N 147½ E,					
	14:51:06, 600 km.					
21	P	iP	15	34	10	
	PX	eLE	16	01.5		
	R	eP	15	34	09	
		e		37	34	
	Hf	eN		34	23	
	Pr	eP			09	
		i			22	
	Kg	eP			06	
	Is	eP			08	
		i			29	
	CL	eP			13	
	T	eP			18	
	USCGS: 22½ S 172½ E,					
	15:21:20					
21	P	iP"	15	51	26	
	PX	ePP		53	03	
	P	iPKKP	16	01	23	
	PX	eE		17.5		
		eGE		26.2		
			A		T	
		PPZ	0.3		4	
	R	iP"	15	51	26	
	Hf	iP"N			29	
	Pr	iP"			28	
		ePP		53	01	
		iPKKP	16	01	18	
	Kg	iP"	15	51	24	
	Is	iP"			21	
		ePP		52	48	
		ePPP		55	22	
		iPKKP	16	01	25	
	CL	iP"	15	51	23	
		iPP		52	56	
	T	iP"		51	21	
		iPPNZ		52	44	
		ePPPN		55	14	
	Magnitude 6¼ - 6½					
	Destructive in Cutch, India					
	Shillong gives: 23.6 N 70 E,					
	15:32:27					

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s	
July						
22	Is	eP	03	42	49	
	BCIS: 37 N 26.3 E,					
	03:28:59					
22	P	iPNEZ	09	36	18c	
		ipP			46	
		isP			54	
	PX	iSNE		45	27	
		iNE		46	10	
		iE		54	22	
			A		T	
		PZ	0.2		1	
		PH	0.15		1	
		SH	½		5	
	R	iP	09	36	13c	
		ipP			40	
		isP			50	
	Hf	iPN			07	
		ipPN			35	
		isPN			46	
	Pr	iP			10	
		ipP			34	
		isP			46	
	Kg	eP			29	
		epP			54	
		esP			08	
	Is	iP			25	
		ipP			50	
		isP		37	02	
	CL	iP		36	23	
		ipP			47	
		isP			57	
	T	iPNZ			30	
		ipP			56	
		iSN		45	49	
	Magnitude 6 - 6¼					
	USCGS: 19 S 69 W,					
	09:25:08, 100 km.					
22	P	eP	13	18	34	
	R	eP			39	
	Pr	eP			37	
	Is	iP			37	
	CL	eP			41	
23	P	iP	08	04	49.7c	
		iSE		05	39.5	
	Kg	iP!		04	25.9	
	FT	iP			37.2	
		iS		05	14.2	
	Is	iP		04	33.0d	
		iSN		05	06.9	
	SB	iP		04	35.0d	
		iSE		05	20.6	
	CL	iP		04	44.2	
		iS		05	33.9	
	H	iP		04	39.8	
	T	iP			34.5d	
		iS		05	09.1	
	Magnitude 4.7					
	Berkeley: 36.3 N 121.3 W,					
	08:03:48					
	Felt especially in Monterey					
	and San Benito Counties;					
	reported maximum V.					

Date	Sta.	Phase	h	m	s	
July						
23	P	eP	10	25	53	
		e		26	05	
	R	iP		25	53	
	Hf	eN		26	04	
	Pr	eP		25	53	
	Is	eP			53	
	CL	eP			56	
23	P	eP	14	39	16	
		i			21	
		i			32	
	R	eP			23	
		e			44	
	Hf	eN			32	
	Pr	eP			19	
		e			35	
	Is	eP			18	
		e		42	56	
	CL	eP		39	23	
	T	e			37	
	USCGS: 4½ S 154 E,					
	14:25:46					
23	P	iPNZ	19	35	57	
	PX	iPPN		38	29	
		iSNE		44	02	
		iSSEZ		47.9		
		iGE		50.6		
		iRNZ		53.5		
			A		T	
		PZ	1¼		4	
		PH	1		4	
		PPH	1¼		4	
		SH	18		25	
		MH	30		15	
		MH	8		8	
	R	eP	19	35	55	
		i		36	02	
		eSEZ		44	02	
	Hf	ePN		35	53	
		eSN		43	59	
	Pr	eP		35	49	
		i			57	
	Bt	iPNZ			45	
		iSNEZ		43	43	
	Kg	eP		36	06	
		i			13	
	Is	eP			06	
		i			14	
	CL	eP			07	
		i			16	
	T	eP			17	
		i			24	
	Magnitude 6¾					
	USCGS: 24 S 112 W,					
	19:25:58					
24	P	e	07	15	27	
	Pr	e			29	
	Is	i			31	
	CL	e			33	
	USCGS: Tonga Islands					
	foreshock, 07:03:44					
24	P	iP	07	16	19	
	R	eP			20	

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
July		(continued)			
24	Hf	ePN	07	16	28
	Pr	iP			20
	Bt	eP			18
	Kg	eP			19
	Is	iP			19
	CL	eP			26
	USCGS: Tonga Islands, 07:04:35				
24	P	iPNEZ	13	11	57
		epP		13	39
	R	iP		12	01
		ipP		13	43
	Hf	iPN		12	07
		epPN		13	49
	Pr	iP		12	05
		i			13
		ipP		13	46
	Bt	iP		12	06
		ipP		13	49
	Kg	iP		11	56
		epP		13	36
	Is	iP		11	51
		ipP		13	34
	CL	iP		11	56
		ipP		13	39
	T	iP		11	49
		epP		13	31
	JMA: 30½ N 138½ E, 13:00:16, 450 - 500 km.				
24	Hf	eN	14	13	24
	Pr	e			18
	Bt	e			11
	Kg	e		12	57
	Is	e			59
	JMA: 34.4 N 140.8 E, 14:00:53				
24	R	eP	15	30	02
	Hf	e			16
	Pr	eP			01
		e			06
	Bt	eP			04
		e			36
	CL	eP			06
24	PX	eLE	19	47.0	
	R	ePP		15	46
	Hf	eN?			23
		ePPN		16	00
	Pr	ePP		15	51
	Bt	eP"			12
		ePP			54
	Is	eP"			19
		e			33
		ePP			53
	CL	ePP			54
		e		16	15
	USCGS: 1 N 126½ E, 18:56:32				
25	R	eP	06	36	34
	Pr	eP			32
		e		37	16
	Is	iP		36	31
		i		37	37
	CL	eP		36	35
	T	eP			35

Date	Sta.	Phase	h	m	s
July					
26	Is	e	06	25	27
	JMA: 40.1 N 142.5 E, 06:13:18				
26	P	e(P)	08	42	03
	D	iP		41	57
		e		42	17
	R	iP		41	55
		e		42	16
	Is	iP			05
		e			25
	CL	eP			03
	USCGS: 23 S 69 W, 08:30:24				
26	P	eP	09	54	40.9
		iSE		55	05.6
	Kg	eP		54	27.1
	Is	eP			17.8
		iSN		55	17.0
	CL	eP		54	16.8
		iS		55	19.8
	H	iPEZ!		54	19.4d
		i(S)E		55	07.8
	T	iPNZ		53	57.4
		iSN		54	35.4
	Magnitude 4.9 USCGS: 39½ N 118½ W, 09:53:18 Felt at Fallon, Nevada.				
26	P	iP	14	34	29
	Hf	iPN			26
	Pr	eP			21
	Is	iP			39
	CL	iP			40
	T	eP			50
26	P	iPNEZ	18	00	49c
	R	iP			51
	Pr	iP			52c
	Bt	iP			52c
	Kg	eP			49
	Is	iP			53c
		i		01	04
		epP		03	03
	CL	iP		00	56c
		epP		03	07
	USCGS: 27 S 178 E, 17:49:12, 650 km.				
26	P	iPNZ	18	15	48
	R	iP			51
	Hf	ePN			52
	Pr	iP			53c
	Bt	iP			49c
	Kg	eP			48
	Is	iP			52c
	CL	iP			55c
	T	iP			57
	BCIS: 27 S 178 E, 18:04:12, 650 km.				
27	Is	eP	14	00	43
	CL	eP			49
	USCGS: 54 N 161 E, 13:50:43				
27	R	eP	16	24	56
	Pr	eP			58

(continued)

Pasadena and auxiliary stations, 1956 No. 2

Date	Sta.	Phase	h	m	s
July		(continued)			
27	Is	eP	16	24	59
		e		25	27
	CL	eP			03
		e			31
27	P	iP	21	49	31
		ipP			46
	R	iP			35
		epP			48
	Hf	eN			44
	Pr	eP			36
	Bt	eP			39
	Kg	eP			26
		epP			40
	Is	eP			29
		epP			44
	CL	eP			34
		epP			48
	BCIS: 15 N 147.5 E, 21:36:54				
27	D	e	23	38	39
	Is	e		37	25
	Kg	e		36	39
	USCGS: 15½ N 147½ E, 23:23:54				
27	PX	eLE	24	05.5	
	R	e	23	59	42
		e			53
	Hf	eN			15
	Pr	i			19
	Bt	e		58	59
	Is	e		59	40
	CL	e			36
	T	e			48
	Mexico				
28	PX	eLE	01	29.2	
	R	eP		22	00
		e			10
	Pr	eP		21	49
	Bt	e		22	02
	Is	e			10
	CL	e			06
	Mexico				
28	P	iP	02	14	55
		ipP		15	18
		i			47
		i		16	24
	PX	iSE		25	22
		iLEZ		43.2	
	R	iP		14	59
		ipP		15	21
		i			36
		i			50
		e		16	21
	Hf	ePN		15	05
	Pr	iP			00
		ipP			24
	Bt	eP		14	59
		epP		15	23
	Kg	eP		14	53
		epP		15	15
	Is	eP		14	52
		epP		15	18

(continued)

Date	Sta.	Phase	h	m	s
July		(continued)			
28	CL	eP	02	14	59
		epP		15	23
	USCGS: 6 S 154 E, 02:01:58, 150 km.				
28	P	iP	11	21	44
		ipP			58
		e		22	07
	R	iP		21	48
		ipP		22	02
		i			13
	Hf	ePN		21	56
	Pr	eP			52
		ipP		22	04
	Bt	iP		21	52
		ipP		22	05
	Kg	iP		21	41
		ipP			54
	Is	iP			42
		ipP			54
	CL	eP			46
		ipP			59
	T	iP			43
		ipP			55
	USCGS: 15½ N 147½ E, 11:09:05				
28	P	iP	11	30	30
	R	iP			26d
	Hf	iPN			17
	Pr	iP			21
	Bt	iP			15
	Kg	e			46
	Is	iP			39
	CL	iP			36
	T	eP			45
	USCGS: 0 80½ W, 11:21:43				
29	P	iP'NEZ	07	33	29
		i			33
		i			41
		i			48
	PX	eLE	08	14.8	
	R	iP'	07	33	30
		e		34	53
	Hf	eP'N		33	37
	Pr	iP'			33
		e		35	31
	Bt	iP'		33	33
		i			47
		i			59
	Kg	eP'			24
	Is	iP'			24
		i			35
	CL	iP'			27
		i			31
		i			38
		i			53
	T	iP'			22
		i			40
	BCIS: 8½ S 85½ E, 07:13:44				
29	P	iP	08	42	27
	R	iP			30
	Pr	eP			37

(continued)

Pasadena and auxiliary stations, 1956 August 2 - October 3 No. 3

Date	Sta.	Phase	h	m	s
August					
2	P	iP	07	19	53
	PX	eLE		27.	0
	R	iP		19	46
		e		20	01
	Pr	iP		19	42
		e		20	07
	Bt	eP		19	36
	Kg	eP		20	06
	W	iP			00
		i			26
	Is	eP		19	58
		e		20	26
	CL	eP		19	55
	BCIS: 5 N 75½ W,				
	07:11:18, 100 km.				
2	P	iP	07	29	29c
	R	iP			32c
		epP			50
	Hf	ePN			43
	Pr	iP			39c
		epP			54
	Bt	iP			40c
		epP			57
	Kg	eP			21
		epP			38
	W	iP			20c
		ipP			38
	Is	iP			23c
		ipP			38
	CL	iP			27c
		ipP			44
	T	iP			20
		epP			37
	JMA: 43.3 N 146.4 E,				
	07:18:15, 60 km.				
2	P	eP	20	14	30
	PX	eE		24	30
		eLE		38.	4
	R	eP		14	30
	Pr	eP			33
	Bt	e			32
	Kg	eP			29
	W	iP			29
		i			59
	CL	eP			36
	T	eP			40
	BCIS: Tonga Islands,				
	20:02.6				
3	P	iP	07	43	27
	R	eP			29
	Hf	ePN			41
	Pr	iP			37
	Bt	iP			40
	Kg	eP			14
	W	iP			16c
		i			43
	Is	iP			16
	CL	iP			20
	T	iP			07
	BCIS: 51¾ N 177½ E,				
	07:34:40				

Date	Sta.	Phase	h	m	s
August					
3	D	e	16	39	23
	Pr	e			40
	Bt	e			43
	Kg	i		38	43
	W	i		39	09
		i			19
	Is	e			19
4	P	iP	06	21	27
	R	iP			23
	Hf	ePN			16
	Pr	eP			20
	Bt	iP			15
	Kg	eP			39
	W	iP			34
	Is	iP			34
	CL	eP			30
	T	eP			39
	USCGS: 21 S 71 W,				
	06:10:05				
4	P	iPNEZ	10	01	58c
	PX	ePPN		05	28
		iSKSE		11	58
		iSE		12	48
		iPSE		14	26
		iPPSE		15	14
		iSSE		18	48
		eGN		26.	9
		eREZ		30.	0
			A		T
		PZ	0.2		1
		SH	1		6
		MH	9		20
		MZ	9		20
	R	iP	10	02	01c
		eSE		12	51
	Hf	ePN		02	07
	Pr	iP			03c
	Bt	eP			03
		eSE		12	54
	Kg	eP		01	54
	W	iP			55
	Is	iP			57
	CL	iP			59c
	T	iP		02	02
	Magnitude 6¼ - 6½				
	USCGS: 5 S 153 E,				
	09:48:45, 60 km.				
4	P	eP	10	13	40
	R	iP			43
	Pr	eP			36
		e			46
	Bt	eP			36
		e			45
	W	iP			38
	Is	eP			40
	USCGS: 5 S 152 E,				
	10:00:25				
4	P	eP	11	31	11
	R	eP			04
	Pr	eP			01
	Bt	eP		30	58

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
4	Kg	eP	11	31	22
	W	eP			18
	Is	eP			25
	USCGS: North of Puerto Rico, 11:22:30				
4	P	iP	13	38	29c
		ipP		39	00
	R	iP		38	33c
		e			53
		e		39	30
	Hf	ePN		38	41
	Pr	iP			39c
		ipP		39	10
	Bt	iP		38	42c
	W	iP!			19
		ipP			49
		i		39	05
	Is	iP		38	21
		ipP			52
	CL	iP			24c
		ipP			54
	T	iP			17c
		ipP			48
	Depth 130 km.				
	BCIS: 55 N 159 E, 13:28:26				
5	P	eP	09	20	51
		e		21	03
	R	eP		20	58
	Bt	eP		21	05
	W	iP		20	37
		i			47
	Is	eP			38
	CL	e			47
	JMA: 40.6 N 144.2 E, 09:09:07, 60 km.				
6	D	eP	13	22	30
	R	iPcP		25	23
	Pr	eP		22	21
		i			43
		ePcP		25	22
	Bt	e			20
	W	iP		22	44
		iPcP		25	27
	Is	eP		22	43
	CL	eP			38
	BCIS: Coast of Guatemala, 13:16.0				
6	D	eP	16	48	01
	Bt	eP		47	51
	W	iP		48	10
	Is	iP			09
6	P	eP	17	36	07
		e			19
	R	iP			06
		i			21
	Pr	iP			11
		i			26
	Bt	iP			12
		i			28
	W	iP		35	56c
		i		36	11

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
6	Is	iP	17	35	58
		i		36	14
	CL	iP			02
		i			18
	BCIS: 27 N 126½ E, 17:22:46				
7	PX	eLE	04	11.5	
	R	e		11	32
	W	eP		08	24
		i			47
		e		10	33
	Is	i		08	28
	CL	e			34
		e		10	31
	T	iP		08	14
		i		09	55
	USCGS: 44½ N 115 W, 04:05:52				
8	R	eP	02	38	31
	Pr	iP			32
	Bt	eP			31
	W	iP			30
	Is	iP			33
	CL	iP			36
9	P	iPNEZ	03	15	33c
		iNEZ			38
	R	iP			36
		i			41
		e		16	06
	Hf	iPN		15	42
		iN			48
	Pr	iP			37c
		i			42
	Bt	iP			36c
		i			40
	Kg	eP			33
	W	iP!			36c
		i			41
		i			53
	Is	iP			38c
		i			43
	CL	iP			40c
		i			46
	T	iP			43
		i			48
	USCGS: 18½ S 179 E, 03:04:16, 500 km.				
9	D	eP	07	31	22
	R	eP			21
	Hf	ePN			15
	Pr	eP			17
	Bt	eP			09
	W	iP			22
		i			33
	Is	eP			22
		e			32
	CL	iP			30
	T	eP			27
	USCGS: Central Chile, 07:19:15				
9	P	iP	09	48	33
		i			48

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
9	R	iP	09	48	36
	Hf	ePN			41
	Pr	iP			37
		i			53
	Bt	iP			36
		e			49
	Kg	eP			30
	W	iP			34
		i			48
	Is	iP			37
		i			50
	CL	iP			38
		e			53
	T	e			54
	BCIS: 20 S 168 E, 09:35:40				
9	P	iPNEZ	17	08	08
		iNEZ			15
	PX	eLE		23.0	
	R	iP		08	03c
		ePcP		10	22
	Hf	ePN		07	49
	Pr	iP			56c
		i		08	04
	Bt	eP		07	52
	Kg	eP		08	23
	W	iP			19
		iPcP		10	29
	Is	iP		08	17c
		iPcP		10	29
		e			37
	CL	iP		08	12c
		ePcP		10	28
		e			36
	T	iP		08	23
		i			30
	USCGS: 12 N 86 W, 17:00:57				
9	P	iP	21	16	11
	R	iP			14
	Bt	iP			19
	Kg	eP			05
	Is	eP			08
	CL	eP			11
	T	eP			08
9	P	eP	21	58	30
		e			48
	PX	eSN	22	08	34
		eLE		23.0	
	R	eP	21	58	27
		e			45
		e			53
	Hf	ePN			35
		iN	22	00	05
	Pr	eP	21	58	29
		e		59	01
		e			32
	Bt	eP		58	28
		e			44
	Kg	eP			28
	Is	eP			31
	CL	eP			33

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
9	T	e	21	58	54
	USCGS: 31½ S 178 W, 21:45:42				
	Wellington: 32.2 S 178.1 W, 21:45:42				
9	P	iPNEZ	23	11	52c
		ipPNEZ		12	54
	PX	isPNZ		13	29
		ePPN		14	38
		iSNEZ		21	01
		iScSE			35
		eSSNE		25.9	
			A		T
		PZ	2¼		3
		PH	2¾		3
		PPH	1¾		5
		SH	12		10
		MH	10		18
	R	iP	23	11	53
		ipP		12	28
		isP		13	32
		iSEZ		21	06
		i			38
		eP'P'		39	15
	Hf	iPN		12	01
		eSN		21	21
	Pr	iP		11	53
		ipP		13	03
		eS		21	08
		eP'P'		38	59
	Bt	iP		11	53c
		ipP		12	55
		isP		13	33
		iSNEZ		21	04
		iN			36
		eSSN		25	55
	Kg	iP		11	51c
		ipP		13	00
	Is	iP		11	55c
		ipP		13	03
		eS		21	08
	CL	iP		11	58c
		ipP		13	07
		iPP		14	42
		eS		21	10
		eP'P'		39	20
		e		42	38
	T	iPNEZ		12	02
		ipP		13	11
		iSNEZ		21	19
	USCGS: 15 S 176 W, 23:00:42, 250 km.				
	Pasadena: 16 S 175 W, 23:00:46, 270 km.				
	Magnitude: 6¾				
10	D	eP	02	24	44
		e			52
	R	eP			39
		e			50
	Pr	iP			33
		i			45
	Bt	e			48

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
10	Is	iP	02	24	38
		i			53
	CL	e			48
	USCGS: 10 N 84½ W,				
	02:17:11				
10	P	iP	04	23	06
	R	iP			09
	Hf	ePN			16
	Kg	eP			03
	Is	eP			03
	CL	eP			06
	T	eP			05
10	D	e	09	30	18
	Is	e		29	51
10	P	eP	13	46	57
		iS		48	15
	Is	iP		46	32
		iS		47	21
	T	iPNEZ		46	07
		iSEZ			37
	Magnitude 4				
	Nevada				
10	P	eP	15	36	29
	R	eP			28
	Hf	eN			38
	Pr	eP			32
	Bt	eP			31
	Kg	eP			27
	Is	eP			33
	CL	eP			36
	BCIS: 18 S 176 W,				
	15:24.6				
10	P	eP	19	38	57
	D	eP			55
	R	eP			51
	Hf	ePN			38
	Pr	iP			46
	Bt	e			53
	W	iP		39	06
	Is	eP			04
		e			24
	CL	eP			00
11	D	e	13	24	44
	Pr	eP			34
		e			47
	Bt	e			45
	W	e			57
	BCIS: 12½ N 89 W,				
	13:17:58				
12	D	iP	00	00	59
	R	iP			54
	Pr	iP			51
	Bt	eP			47
	W	iP		01	10c
		i			26
	Is	iP			08c
	Mexico				
12	P	iP	00	03	03c
		i			32
		i			42
	R	iP			08
		i			28

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
12	Hf	ePN	00	03	16
		iN			52
	Pr	iP			14c
		i			32
	Bt	iP			18c
		i			36
	W	iP		02	50c
		i		03	07
	Is	iP		02	53
	CL	iP			58
	T	iP			50
	USCGS: 51½ N 175½ E,				
	23:54:16, 100 km.				
12	P	iPNEZ	00	37	13d
		ipPNEZ		38	06
	R	iP		37	16d
		ipP		38	09
	Hf	ePN		37	04
		epPN		38	13
	Pr	iP		37	17d
		ipP		38	10
	Bt	eP		37	16
		epP		38	09
	Kg	eP		37	13
		epP		38	06
	W	iP!		37	15d
		ipP!		38	08
	Is	iP		37	17d
		ipP		38	11
	CL	iP		37	21d
		ipP		38	14
	T	iP		37	23
		ipP		38	16
	USCGS: 19 S 176 W,				
	00:25:42, 200 km.				
12	P	iPEZ	05	53	07c
	R	iP			10
	Pr	eP			13
	Bt	eP			14
	W	iP			05c
	CL	eP			09
	USCGS: Northern New Britain,				
	05:40:07, 150 km.				
12	P	ePNZ	17	11	49
		i			56
		ePP		14	43
	PX	iSNE		21	58
		iGE		33	06
		eRZ		36.5	
			A		T
		PZ	¾		2
		SH	1¼		4
		MH	10		30
		MZ	10		30
	R	eP	17	11	57
		ePP		15	06
	Hf	ePN		12	01
		eN		14	08
		ePPN		15	15
	Pr	eP		11	55
		i		12	01
		ePP		15	11

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
12	Bt	eP	17	12	01
		i			03
		i			24
		ePP		15	14
		eSNE		22	24
	Kg	eP		11	38
		i			46
		ePP		14	46
	W	iP		11	41
		i			46
		ePP		14	51
	Is	eP		11	42
		i			48
		i		12	18
		ePP		14	47
	CL	eP		11	46
		i			51
		i		12	34
		ePP		14	52
	T	iP		11	44
		e			47
		ePP		14	55
	Magnitude 6½ - 6¾				
	JMA: 33.8 N 138.8 E,				
	16:59:31, 40 - 60 km.				
12	D	eP	21	26	07
	R	eP			12
	Pr	eP			16
	Bt	eP			27
	Is	eP		25	43
	CL	eP			47
13	P	iPNEZ	07	14	55
	PX	eLE		18.3	
	R	eP		14	49
		i		15	00
	Hf	ePN		14	37
		eN		15	02
	Pr	eP		14	40
	Bt	eP			29
	Kg	eP		15	18
	W	iP			15
	Is	eP			12
	CL	eP			09
	T	eP			26
13	P	eP	09	20	12
		e			22
	PX	iSE		30	36
		eLE		45.9	
	R	e		20	06
		e			15
	Hf	ePN			21
	Pr	eP			11
		i			14
	Bt	eP			14
		e			22
	Kg	eP			13
	W	eP			11
		i			17
		i			24
	Is	eP			13
		i			18
		i			27

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
13	Is	e	09	20	42
		e		21	06
	CL	eP		20	16
		e			21
		e			32
	T	eP			24
	USCGS: 28½ S 176 W,				
	09:07:38				
14	P	eP'	03	09	56
		iP'NZ			58
		i		10	05
		i			24
		i			31
	PX	eSSE		32.0	
		iSSSE		38.2	
		eGE		52.5	
		eR	04	01.0	
			A		T
		P'Z	¾		2
		P'H	1¼		2
		MH	4		20
		MZ	4		20
	Hf	eP'N	03	09	53
	R	eP'			52
		i		10	03
	Pr	eP'		09	52
		i			58
	Bt	eP'			50
	Kg	eP'		10	01
	W	eP		09	56
		i		10	01
		i			08
		i			33
	Is	eP'		09	47
		i		10	02
	CL	eP'		09	57
	T	eP'		10	04
		iNE			21
		iN		11	27
	Magnitude 6¼±				
	BCIS: 53 S 22 E,				
	02:50.2				
14	P	iP	12	00	43
		epP			58
	PX	eLE		28.0	
	R	eP		00	46
		e			56
		e		01	03
	Hf	ePN		00	50
	Pr	iP			45
		epP			57
	Bt	eP			43
	W	iP			45
		ipP		01	01
	Is	iP		00	48
		ipP		01	03
	CL	iP		00	50
		ipP		01	06
	BCIS: 32½ S 179¼ W,				
	11:48:57				
14	P	ePP	13	05	38
	R	ePP			39
		e			56

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
14	Hf	ePPN	13	05	46
	Pr	ePP			41
	Bt	ePP			40
	Kg	ePP			35
	W	iPP			31
	Is	ePP			33
	CL	ePP			35
	T	ePP			32
	SKP unaccountably missing at these stations.				
	BCIS: 5 S 102¾ E, 12:42:56				
14	P	iP	23	45	43
	R	iP			44
	Hf	ePN			51
		eN		46	20
	Pr	iP		45	44
	Bt	iP			45
	W	iP			45
		i			58
		epP		47	47
		esP		48	53
	Is	iP		45	46
	CL	eP			48
	T	iP			52
	USCGS: 19½ S 179 W, 23:34:33, 550 km.				
15	P	iP"	05	39	18
		epP"		40	35
		ePP		41	23
		iSKP		42	09
		iPKS			24
		ipPP			32
		esPP			48
	PX	eSKKSE		46	56
		e(S)N		49	12
		iSSNE		58.5	
			A		T
		P"Z	0.2		1½
		SKPZ	¼		1
	R	iP"	05	39	20
		epP"		40	36
		ePP		41	33
		e			44
		iSKP!		42	11
		ePKS			22
	Hf	eP"N		39	23
		ipP"		40	33
		iSKPN		42	17
		eN		45	33
	Pr	eP"		39	20
		iSKP!		42	13
		iPKS			29
	Bt	iP"		39	22
		epP"		40	31
		iSKPNEZ		42	16
		i			33
		eE			54
	W	eP"		39	14
		iP"			15
		iPP		41	20
		iSKP!		42	04

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
15	W	iPKS	05	42	19
		iSKKP		51	57
	Is	iP"		39	15
		ePP		41	22
		eSKP		42	04
		iPKS			21
		eSKKP		51	55
	CL	eP"		39	16
		epP"		40	33
		e(PP)		41	33
		iSKP		42	07
		iPKS			20
	T	eP"		39	15
		iSKP		42	01
		iPKS			20
	Magnitude 6 - 6¼				
	Depth 280 km.				
	USCGS: 0 101½ E, 05:20:37, 300 km.				
15	P	eP	11	06	08
		e			16
		iP"NEZ		09	48
		ipP"		10	16
		i			23
		i			31
		iPPEZ			38
		ePPP		13	15
	PX	eN		14	23
		iSKSNE		16	30
		iN		17	33
		ePSNE		20	09
		eSSNE		26.5	
		eLNE		36.1	
			A		T
		P"Z	¼		1
		PPZ	0.4		5
		PPH	0.4		5
		SKSH	¾		3
		MH	3½		20
	D	iP"	11	09	19
		ePKKP		20	32
	R	eP		06	07
		eP"		09	50
		i		10	13
		i			28
		ePPEZ			47
		i			55
		iSKSE		16	31
		eE		17	37
		ePKKP		20	28
	Hf	ePN		06	05
		iP"N		09	53
		iN		10	18
		iN			46
		iN			57
		eSKSN		16	36
		eN		17	47
	Pr	eP		06	02
		eP"		09	51
		i		11	15
		ePKKP		20	31

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
15	Bt	iP"	11	09	52
		ipP"		10	19
		ePP			46
		iNEZ			53
		iSKSNEZ!		16	35
		iN		17	44
		eNZ		20	20
	W	eP		05	50
		iP"		09	44
		e		10	22
		iPKKP		20	40
		i		24	35
	Is	eP		05	53
		iP"		09	47
		i		10	38
		e		16	24
		eSP		20	03
		iPKKP			42
		e		24	28
	CL	eP		05	55
		iP"		09	47
		i		10	40
		e		16	20
	T	eP"		09	48
		e		10	15
		iPPNEZ			35
		iSN		16	30
	Magnitude 6¾				
	BCIS: 0 123 E, 10:51:16, 100 km.				
15	R	eP	12	16	05
	Pr	eP			08
		e			42
	Bt	eP			13
	W	e		17	11
	Is	iP		16	03
		e		17	20
		e		19	35
	CL	eP		16	00
	T	eP		15	57
	BCIS: 43.1 N 15.9 E, 12:02:54				
15	W	e(P)	13	22	28
	CL	e(P)			33
	Foreshock of next.				
	USCGS: 45 N 151 E, 13:11:45				
15	PX	eP	13	23	07
		iEZ			18
		ePP		26	08
		iSNE		32	01
		iSSE		36.2	
		iE		37.5	
		eGN		39.2	
		eR		42.7	
			A		T
		PZ	0.3		2
		SH	¾		3
		MH	9		20
	R	eP	13	23	11
		i			24
		iSE		32	04

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
15	R	eP'P'	13	51	28
	Hf	ePN		23	18
		eN			31
		eSN		32	21
		eP'P'N		51	31
		eN			44
	Pr	eP		23	12
		e			22
		i			43
		eP P		51	31
		e			44
	Bt	eP		23	16
		iNZ			32
		iSEZ		32	22
		eP'P'		51	29
		e			45
	W	iP		22	54
		i!			58
		i!		23	07
	Is	eP		22	59
		eP'P'		51	30
		e			39
		e			53
	T	ePNEZ		22	56
		iNZ		23	05
		eSNEZ		31	38
	Magnitude 6½				
	Depth 50 - 60 km.				
	USCGS: 46 N 151 E, 13:12:10				
	JMA: 46 N 151 E, 60 km.				
15	W	iP	15	12	44
15	R	iP	15	36	29
	Pr	iP			32
	W	iP			27
	Is	iP			29
	CL	iP			32
	T	iP			33
15	R	eP	21	39	53
	Pr	eP		40	00
	W	iP		39	35
		i			51
	Is	eP			45
		e			56
	USCGS: 45½ N 151 E, 21:28:50				
16	Bt	iP	02	22	08
		e			18
	W	eP			05
	Is	iP			04
	CL	eP			01
	BCIS: 36¾ N 8¾ W, 02:09:39				
16	P	iP	08	18	53
	PX	iSE		25	14
		iScSE		28.7	
		iLE		31.0	
	R	iP		18	58
	Pr	eP			51
		i		19	04
		e			16
		e		20	33

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
16	Bt	eP	08	19	08
	W	iP		18	28
		i			42
	Is	eP			37
		i			44
		e		19	06
	CL	eP		18	37
		e			48
		e		20	34
	T	eP		18	39
		e			49
	USCGS: 51 N 176 W,				
	08:10:25				
17	PX	eLNEZ	01	54.3	
	D	eP		33	11
		e		35	33
		ePP		36	18
	R	eP		33	14
		e			25
		ePP		36	13
	Pr	eP		33	13
		i			40
		iPP		36	15
	Bt	eP		33	14
		e			22
		ePP		36	17
	W	eP		33	06
		e			34
		ePP		36	10
	Is	eP		33	07
		ePP		36	10
	CL	eP		33	03
		ePP		36	04
	T	eP		32	58
	BCIS: 54½ N 36 W,				
	01:23:07				
17	PX	eLNEZ	02	30.8	
	R	eP		09	36
	Pr	eP			37
	Bt	eP			36
	W	eP			29
	Is	eP			31
	USCGS: 54½ N 36 W,				
	01:59:37				
17	D	eP	06	03	10
	R	eP			08
	Pr	eP			03
	Bt	eP			01
	W	iP			22
	Is	eP			21
	CL	eP			15
	USCGS: 7 S 80 W,				
	05:53:25				
17	PX	eLE	09	21.8	
	D	iP		18	35
	R	eP			34
		e			44
	Hf	iN		19	08
	Pr	eP		18	38
		e			47
	Bt	eP			47
		e		19	02

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
17	W	iP	09	18	01
	Is	eP			05
	CL	eP			07
		e			22
	T	eP		17	56
	USCGS: About 300 miles off Oregon coast, 09:15:06				
17	PX	eLE	12	29.0	
	BCIS: 3¼ S 135¾ E,				
	11:41:31				
17	P	i	14	29	09
	PX	eLE		58.0	
	R	e		29	03
	Pr	eP		28	29
		e		29	01
	W	e			13
	Is	eP		28	40
		e		29	08
	USCGS: 4 S 151½ E,				
	14:15:53				
18	R	eP	00	22	05
	Pr	iP			13
	Bt	eP			16
	W	iP		21	54c
		i		22	07
	Is	eP		21	54
	T	eP			51
18	W	i(P)	00	55	08
		iS		56	59
	Is	e		57	02
	T	eP		55	01
		eS		56	17
	USCGS: 44 N 115½ W,				
	00:52:16				
19	P	iPNEZ	05	29	41
		isP		30	20
	PX	ePPPN		35	14
		eSE		39.9	
		e(SSS)NE		50.7	
		eGNE		52.7	
			A		T
		PZ	0.15		1
		PH	0.05		1
	R	eP	05	29	42
		epP		30	11
	Hf	ePN		29	51
		epPN		30	15
	Pr	iP		29	44
		epP		30	10
	Bt	eP		29	41
		epP		30	04
		esP			22
	Kg	eP		29	33
		epP			56
	Is	eP			42
		ipP		30	09
		e		31	01
		ePP		33	23
	T	eP		29	54
		epP		30	27
	Depth 100 km.				
	USCGS: 21½ S 179 W,				
	05:17:43, 150 km.				

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August					
19	P	iPEZ	09	00	43
		e		01	31
		e		02	11
	R	eP		00	45
		e		01	12
		e			26
	Hf	ePN		00	52
	Pr	iP			46
		e		01	10
		i			39
	Bt	eP		00	44
	Is	iP			47
		e		01	12
	T	eP		00	53
		e		01	41
	USCGS: 20 S 176 W,				
	08:48:57, 100 km.				
19	P	eP	11	33	34
	R	e			41
	Pr	eP			32
	Bt	eP			39
		e			52
	Is	eP			35
19	W	iP	20	41	14
	BCIS: 12 N 60 W,				
	20:30:18				
20	P	iP	01	06	38
	R	eP			43
	Pr	iP			48
	Bt	eP			51
	W	iP!			29
		i		07	28
	Is	iP		06	31
	T	iP			27
20	P	iPNEZ	05	41	59c
		i		42	23
		e		43	15
	PX	iSNE		48	41
		eLE		52.3	
			A		T
		PZ	0.04		1
		MH	4		20
	R	iP	05	41	54
		i		42	23
	Hf	ePN		41	42
		eN		42	16
		eN		43	30
	Pr	iP		41	50
		i			58
		i		43	17
		e		44	35
	Bt	eP		41	45
		e		42	40
	W	iP			09
		i		43	49
	Is	iP		42	07
		i			39
		e		43	44
	T	eP		42	11
		iSN		49	00
	USCGS: 7½ N 80 W,				
	05:33:47				

Date	Sta.	Phase	h	m	s
August					
20	D	iP	06	36	18
	R	eP			15
	Bt	eP			08
	W	eP			27
	Is	eP			26
20	P	eP	07	14	30
	PX	eLE		26.4	
	R	iP		14	27
	Pr	iP			22
	Bt	eP			17
	W	iP			32
	Is	iP			41
	T	eP			46
	USCGS: 7½ N 80 W,				
	07:06:20				
20	P	iPNEZ	07	28	12c
	PX	eLZ		42.0	
	R	iP		28	06
	Hf	ePN		27	56
	Pr	eP		28	00
		i			14
	Bt	iP		27	57
	W	iP		28	20
	Is	iP			20c
		e			39
	T	eP			24
	USCGS: 7½ N 80 W,				
	07:19:59				
20	P	ePcP	09	53	10
	D	eP		50	11
		e			32
		ePcP		53	09
	R	eP		50	06
		ePcP		53	08
	Hf	ePN		49	57
		eN		50	20
		eN			37
		eN			44
		ePcPN		53	09
	Pr	eP		49	59
		i		50	23
		i			45
		ePcP		53	06
		e			46
	Bt	e(P)		50	16
		ePcP		53	04
	W	iP		50	24
		iPcP		53	12
	Is	eP		50	22
		iPcP		53	13
	T	iP		50	28
		iPcP		53	14
	USCGS: 13½ N 91½ W,				
	09:43:50, 100 km.				
20	D	e	12	22	18
		e			23
	R	e			25
	Pr	e			25
		e			35
	Bt	e			13
	Is	e		21	49

Date	Sta.	Phase	h	m	s
August					
21	P	iP	11	36	27
		i		37	14
	PX	eLE		54	.5
	R	eP		36	32
	Hf	ePN			37
	Pr	iP			36
		i		37	06
	Bt	eP		36	40
	Kg	eP			15
	W	iP			18
		i			29
	Is	eP			18
		e			31
	CL	iP			24
		i			39
	T	eP			12
	BCIS: 50 N 155½ E,				
	11:26:02				
21	D	e(P)	23	13	48
	R	e(P)			45
	Pr	eP			36
	Bt	eP			33
		e			58
	Is	eP		14	00
	CL	eP			01
	Mexico				
22	Pr	iP	09	17	35
	W	iP			36
	Is	iP			36
	CL	eP			40
22	P	iPNEZ	11	38	48c
		ipP		39	01
	R	iP		38	51c
	Hf	iPN			56
	Pr	iP!			52c
		ipP		39	04
	Bt	iP		38	51c
		ipP		39	04
		i			22
	Kg	iP		38	48c
	W	iP!			50
		i		39	56
	Is	iP!		38	51c
		ePP		42	16
	CL	iP		38	54c
		i		39	14
	T	iP		38	52c
	BCIS: 18 S 169 E,				
	11:26.2				
22	W	iP	18	59	16
	Is	iP			17
	CL	iP			21
	T	iP			17
23	PX	eLE	13	21	.3
	D	e		11	29
	R	e			38
	Pr	iP			28
	Bt	iP			33
	W	iP			04
		i			13
	Is	eP			05

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
23	CL	iP	13	11	10
	USCGS: 54 N 162½ W,				
	13:04:06				
23	P	iPNZ	13	59	25
		ipP			55
		isPE	14	00	02
		esPPN		02	36
		iPPP		03	37
	PX	eSEZ		08	18
		iSSE		12	.8
		eGEZ		16	.7
			A		T
		PZ	¼		1½
		SH	1		6
	R	eP	13	59	21
		ipP			51
		e	14	01	26
		e		02	24
		e		03	56
		eRZ		24	.2
	Hf	ePN	13	59	16
	Pr	eP			17
		e			43
	Bt	iP			14
		ipP			43
		i	14	01	03
	Kg	eP	13	59	39
		e	14	00	31
	W	iP	13	59	34
		i			55
	Is	iP			32
		e			54
		ipP	14	00	01
		i			29
	CL	iP	13	59	29
	T	eP			38
		e			54
		iSNZ	14	08	47
		iN		09	36
		iN		10	01
		eRZ		25	.4
	Magnitude 6¼				
	USCGS: 15 S 68 W,				
	13:48:30, 100 km.				
23	D	eP	15	00	52
		e		01	20
	Pr	iP		00	52
		i		01	21
	Hf	ePN		00	59
		eN		01	28
	Bt	eP		00	59
	W	iP			53
		i		01	21
	Is	iP		00	52
		i		01	21
	CL	eP		00	55
		e		01	26
	T	eP		00	58
		e		01	27
	BCIS: Samoa Islands,				
	14:49.5				

Date	Sta.	Phase	h	m	s
August					
23	W	eP	22	17	04
		e			10
		e			15
	JMA: 35.8 N 141.6 E				
	22:05:11, 60 km.				
24	P	iPEZ	00	12	52
		ipP		13	01
	R	iP		12	55
	Bt	e		13	06
	Kg	eP		12	40
		epP			53
	W	iP			30
		ipP			40
	Is	ipP			42
	CL	iP			35
		ipP			46
	USCGS: 57 N 163 E,				
	00:03:10				
24	W	iP"	00	18	23
		i			27
		i			38
	USCGS: 10 S 124 E,				
	23:59:31				
24	R	eP	04	01	53
		e			59
	Pr	e		02	12
	Bt	eP			02
	Kg	eP		01	54
	W	iP			40
		i			54
	Is	iP			42
		i			53
	CL	iP			45
		i			57
	T	eP			45
		e			52
	USCGS: 45½ N 152 E,				
	03:50:54				
24	P	iP	04	36	39
		i			41
		i			47
		i(pP)			51
	PX	eSNE		43	.7
		eScSNE		46	.6
		eGNE		49	.6
		eR		51	.2
			A		T
		PZ	¼		1
		PH	0.2		1
		SH	2		5
		MH	60		20
		MZ	25		20
	R	eP	04	36	43
		i			45
		i(pP)			59
		eSE		44	04
	Hf	ePN		36	54
	Pr	eP			49
		i			51
		i(pP)		37	00
		i			31

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
24	Bt	eP	04	36	54
		i		37	29
		iSE		44	24
		eSSN		46	.7
	Kg	eP		36	31
	W	iP			28c
	Is	eP			30
		i(pP)			40
	CL	iP			33
		i(pP)			42
		i			48
	T	eP			26
		i(pP)			37
		eSNE		43	30
		iScSN		46	29
	Magnitude 6½				
	USCGS: 53 N 172½ E,				
	04:27:33				
24	P	iP	04	59	03
		i(pP)			13
	R	e			19
	Hf	eN			47
	Pr	iP			14
		epP			25
	Bt	iP			19
		epP			30
	Kg	eP		58	57
	W	iP			53
		i			59
		i(pP)		59	04
	Is	eP		58	54
		e(pP)		59	04
	CL	iP		58	59
		e(pP)		59	08
	T	eP		58	59
		e		59	30
	USCGS: 53½ N 172½ E,				
	04:50:00				
24	P	iP	05	09	38
	R	eP			42
	Pr	iP			48
	Bt	eP			51
	Kg	eP			33
	W	iP			29
	Is	iP			31
	CL	iP			34
	T	iP			27
	USCGS: 48½ N 157 E,				
	04:59:16				
24	P	iP	08	40	39
		i			50
	R	iP			42
		i			54
		i		41	01
	Hf	ePN		40	49
		eN			57
		eN		41	12
	Pr	iP		40	43
		i			54
	Bt	iP			43
		i			54
		i		41	02

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
24	Kg	eP	08	40	45
		e			55
	W	iP			40
		i			52
	Is	iP			41
		i			54
	CL	iP			46
		i			58
		i		41	06
	T	iP		40	46
		i			58
	USCGS: 21 S 169 E,				
	08:27:42				
24	P	iP	08	51	22
	R	eP			25
	Kg	eP			10
	W	iP			10d
		i			21
	Is	iP			12
		i			33
	CL	iP			16
	T	iP			09
		e			19
	USCGS: 54 N 162 E,				
	08:41:30				
24	P	eP	15	37	46
	R	e			46
	Pr	eP		38	00
		e			09
	W	iP		37	55
		i		38	06
	Is	iP		37	56
		i		38	07
	CL	iP			00
	T	eP		37	59
24	D	eP	19	22	50
	R	e			57
	Pr	iP			52
		i		23	19
	Bt	iP		22	55
		ipP		23	10
	W	iP		22	28
		ipP			42
	Is	iP			30
		ipP			44
	CL	eP			35
		epP			51
	USCGS: 52 N 170½ W,				
	19:14:55				
25	D	e	04	31	10
	Pr	e(P)		30	58
	W	e(P)			57
		i		31	07
	Is	e(P)			00
		e			17
	CL	e(P)			01
		e			11
25	Pr	iP	05	15	21
	W	iP			21
	Is	iP			22
25	P	iP	13	40	43
	Pr	iP			46

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
25	W	iP	13	40	46
	Is	iP			47
	CL	eP			50
25	P	eP	15	58	35.6
		iSN		59	28.9
	R	eP		58	28.7
		iSNE		59	10.1
	Pr	iP		58	16.4
		iS!			47.3
	Bt	iP!			07.3d
		iSN			28.2
	Magnitude 5.0				
	USCGS: 31½ N 115½ W,				
	15:57:43				
25	P	iPNEZ	19	42	50
	R	eP			55
	Pr	eP		43	01
		e			48
	Bt	e			12
		e			32
	Kg	e		42	40
	W	iP			40
		i			55
	CL	iP			45
	T	eP			38
		e			51
		e		43	07
	USCGS: 52½ N 172½ E,				
	19:33:45				
25	P	iPEZ	22	15	44c
		iEZ		16	04
		ipP			39
	R	iP		15	48c
		ipP		16	41
	Pr	iP		15	49c
		ipP		16	42
	Bt	iP		15	49c
		ipP		16	44
	Kg	eP		15	42c
	W	iP!			41c
		i			44
		i!			51
	CL	iP			48c
		i			51
		epP		16	45
	T	iP		15	51c
	USCGS: 12 S 166½ E, 200 km.				
26	P	iP	07	58	33
	R	eP			29
	Bt	iP			22
	W	iP			41
		epP		59	30
	CL	eP		58	36
	BCIS: Northern Chile,				
	07:47.3, 200 km.				
26	P	iP	08	59	28
	R	eP			31
	Pr	iP			31
	W	iP			31
		i			39
	CL	iP			35
26	P	iP	16	57	34

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
26	R	eP	16	57	39
	Pr	eP			36
	Bt	eP			41
	W	iP			14
		i			18
	CL	eP			20
	USCGS: 52½ N 172½ E,				
	16:48:20				
27	D	eP	18	07	57
	R	iP		08	00
	Pr	iP			06
		i			13
		i			41
	Bt	iP			12
	Kg	eP		07	42
	W	iP			41
		iPcP		10	17
	CL	iP		07	46
		iPcP		10	20
	USCGS: 64 N 150 W,				
	18:01:01, 60 km.				
28	P	iPNEZ	10	00	37c
	R	iP			39c
	Hf	ePN			48
	Pr	iP			41c
	Bt	iP			39c
	Kg	eP			42
	W	iP!			42c
	CL	iP			45c
	T	iP			47
	USCGS: 23½ S 180,				
	09:49:13, 600 km.				
28	P	i(P)	19	09	17
		i			34
	R	i(P)			17
		i			32
	Pr	i(P)			18
		i			32
	Bt	i(P)			24
	W	e			47
29	P	iP	03	14	29
		i		15	01
	PX	eSE		22	.5
	R	eP		14	33
		e		15	04
	Hf	eN			16
	Pr	iP		14	39
		i			53
		i		15	10
	Bt	eP		14	43
		e		15	08
	Kg	eP		14	22
		e			51
	W	iP			18c
		i			28
		i			36
		i			45
		i			54
		i		15	02
	CL	eP		14	23
		e			39

(continued)

Date	Sta.	Phase	h	m	s
August		(continued)			
29	T	eP	03	14	19
		e			47
	USCGS: 54 N 160 E,				
	03:04:32				
30	P	ePNEZ	04	31	37
		i			54
		iPcP		33	11
	PX	iSNEZ		37	28
	P	eScP			35
	PX	eGEZ		40	.3
		e(R)NEZ		43	.4
			A		T
		PZ	0	.3	3
		SH	4		18
		MH	8		16
	R	eP	04	31	43
		eSEZ		37	30
	Pr	iP		31	49
		i		32	01
		eS		37	48
	Bt	eP		31	54
		e		36	48
		iSN		38	00
	Kg	eP		31	29
		e		32	12
		eS		36	59
	W	iP		31	25d
		i			44
		iPcP		33	05
		iS		37	06
	CL	eP		31	32
		eS		37	17
	T	eP		31	23
		iPcPNZ		32	45
		iSNEZ		37	01
	Magnitude 6				
	BCIS: 54½ N 164½ W,				
	04:24:23				
30	P	iPEZ	05	27	10
		iSNEZ		28	54
	PX	eLNEZ		29	.2
	R	iP		27	18
		iS		29	09
	Pr	iP		27	31
		iS		29	30
	Bt	iP		27	37
		iS		29	41
	Kg	eP		26	49
		eS		28	18
	W	iPNZ		26	50
		iS		28	18
	Is	ePN		26	56
		eSN		28	26
	CL	i		27	01
	T	eP		26	47
		iNEZ			49
		iS		28	20
	Berkeley: Magnitude 5.4±				
	USCGS: 41 N 126½ W,				
	05:24:52				
30	D	eP	18	21	46

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
August		(continued)			
30	R	eP	18	21	44
	Pr	eP			48
	Bt	eP			50
	W	eP			42
	CL	eP			37
	BCIS: 54½ N 35¼ W, 18:11:40				
31	R	eP	00	24	50
	W	eP			41
		i			45
	CL	eP			47
	USCGS: Solomon Islands, 00:11:46, 100 km.				
31	D	eP	02	59	05
	W	iP			13
		ipP			25
	CL	eP			18
	BCIS: Antilles, 02:50.5				
31	P	iP	09	41	51
	R	iP			47
	Pr	iP			42
	Bt	iP			38
	W	iP		42	01
	BCIS: Central Peru, 09:31.7, 150 km.				
31	D	iP	14	01	35
	Pr	iP			18
	W	iP			43
	CL	iP			41
31	P	iP	18	33	02
		ipP			16
		i			46
	R	iP		32	57
		ipP		33	14
	Hf	e(P)N			11
		eN			39
	Pr	iP		32	53
		ipP		33	09
	Bt	iP		32	48
		ipP		33	04
	Kg	eP			14
		epP			30
	CL	eP			07
		epP			23
	T	eP			16
		epP			32
	USCGS: 13 S 77 W, 18:22:53, 60 km.				
31	P	iP	22	16	01
	R	iP			05
		e			15
	Hf	ePN			13
	Pr	eP			08
		e		17	13
	Bt	eP		16	10
	Kg	eP		15	54
	CL	iP		16	02
		e			29
	T	iP		15	59
	USCGS: 15½ N 147½ E, 22:03:23				

Date	Sta.	Phase	h	m	s
August					
31	P	iPNEZ	23	19	15d
		i			48
	R	iP			19d
	Hf	ePN			27
	Pr	iP			22d
	Bt	iP			24d
	Kg	iP			09d
	CL	iP			17d
	T	iP			12d
	USCGS: 15½ N 147½ E, 23:06:38				
September					
1	P	iPEZ	00	34	13
		i		36	09
	R	iP		34	18
	Hf	ePN			26
	Pr	eP			21
		e			36
		e			45
	Bt	iP			22
	Kg	eP			07
	CL	iP			14
	T	eP			12
	USCGS: 15½ N 147½ E, 00:21:36				
1	P	e(P)	11	13	59
	R	e(P)		14	04
	Hf	e(P)N		13	33
	Kg	e(P)			55
	CL	e(P)			58
	USCGS: 15½ N 147½ E, 11:01:22				
1	D	e	18	04	07
	R	e			00
	Pr	e(P)		03	40
		e		04	01
	Bt	e			11
		e			31
	CL	e		03	44
	T	e			49
	USCGS: 54 N 163½ W, 17:56:36				
2	P	iPNEZ	02	47	08.6
		iSNEZ			31.6
	R	iPEZ!		46	57.1d
		iSE		47	11.3
	Hf	iPN!		46	43.7
	Pr	iP!			51.2
	Bt	iP!			57.8d
		iSN		47	14.0
	BB	iP		46	52.4c
		iS		47	03.0
	Magnitude 4.2 33°45' N 116°00' W, 02:46:37				
2	P	eP	14	36	29
	R	eP			32
	Pr	iP			32
	W	iP			32
		epP		37	48
	CL	eP		36	37
	USCGS: 22½ S 178½ W, 14:24:47, 300 km.				

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September					
3	P	eP	18	17	57
	R	eP		18	02
	Pr	eP			00
	CL	eP			05
	BCIS: 17¾ S 168 E, 18:05:13				
3	D	eP	21	55	40
		epP			50
	R	eP			28
		epP			38
	Pr	eP			26
		epP			36
	Bt	eP			24
		epP			33
	W	iP			46
		ipP			56
	CL	eP			42
		e		56	05
	T	eP		55	42
4	R	eP	05	52	39
	Pr	iP			39
	W	iP			38d
	CL	iP			43
	T	eP			44
	BCIS: Fiji Islands region, 05:40.3				
4	P	iP	07	38	00
	R	iP		37	56
	Pr	iP			50
	Bt	eP			45
	Kg	e		38	22
		e			36
	W	iP			13
		epP			43
	CL	eP			05
	USCGS: Guatemala-El Salvador border, 07:31:30, 100 km.				
4	W	e	08	37	20
	CL	e			15
	T	e		36	52
		e		37	06
	USCGS: Central Idaho, 08:34:32				
4	P	eP	10	54	15
	D	eP			16
	W	eP		53	44
4	P	iP	12	07	14c
	R	iP			18c
	Hf	iPN			24
	Pr	iP			17c
	Bt	iP			16c
	W	iP!			17c
	CL	iP			22c
	T	iP			23c
	BCIS: 17S 178 W, 11:55:30, 100 km.				
4	P	eP	14	23	37
	R	eP			40
	Hf	eP			48
	Pr	eP			41
	W	iP			40

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
4	CL	eP	14	23	45
	T	eP			46
	USCGS: Fiji Islands region, 14:11:57				
6	R	e	00	10	02
	Pr	e			09
	W	e			04
	T	e			17
6	W	e	01	39	21
	BCIS: 7½ N 77 W, 01:30:43				
6	P	e	08	59	11
		e			25
	D	eP		58	51
		epP		59	24
	R	eP		58	52
	Pr	eP			51
		e		59	31
	W	iP		58	50
		ipP		59	25
	T	eP		58	58
		epP		59	33
	USCGS: Tonga region, 08:47:10				
6	P	eP	10	49	09
	R	e			56
	Pr	eP			19
	Bt	iP			25
	W	iP		48	57
		i		49	09
	T	eP		48	55
	USCGS: 52 N 174 E, 10:40:06				
6	PX	eLE	12	31.0	
	BCIS: 35¾ N 25½ E, 11:46:37				
7	P	iPEZ	04	05	38d
		epP		06	43
	R	iP		05	41d
		epP		06	43
	Hf	iPN		05	48
	Pr	iP			42
		ipP		06	43
	Bt	eP		05	40
	Kg	eP			42
		epP		06	42
	W	iP!		05	42d
		ipP		06	41
	T	iP		05	49d
		epP		06	50
	USCGS: 18 S 176½ W, 03:54:18, 250 km.				
8	W	iP	16	13	49
		ipP		14	06
	Is	e			23
	BCIS: Kamchatka, 16:03.6				
8	P	iP	18	18	48
		i		19	01
	PX	eLE		39.1	
	R	eP		18	48
		e			57

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
8	Pr	eP	18	18	52
		e		19	02
	Bt	eP		18	56
		e		19	05
	Kg	eP		18	42
		e			53
	W	eP			39
		e			46
	Is	eP			39
		e			46
	T	eP			31
		e			39
	USCGS: 76½ N 7 E,				
	18:08:10				
9	R	eP	01	46	08
	Pr	eP			10
	W	iP			10
		i			25
	Is	eP			11
		e			26
	Wellington: 33 ¾ S 178 W,				
	01:33:18				
9	P	iPNEZ	15	31	10c
	R	iP			13c
	Hf	iPN			14
	Pr	iP			13c
	Bt	iP			12c
	Kg	iP			10c
	W	iP!			13c
	Is	iP			13c
	T	eP			18
	USCGS: Fiji Islands region,				
	15:19:44, 550 km.				
	Apia: 24 S 180,				
	15:19.7, 550 km.				
9	PX	eLE	18	28.5	
	USCGS: 3 N 129 E,				
	17:35:13, 150 km.				
10	P	eP	02	19	43
		i		20	01
	PX	iLE		43.5	
	R	eP		19	45
	Hf	ePN			49
	Pr	eP			41
	Bt	e			43
	W	eP			51
	Is	eP			51
	T	eP		20	00
10	W	iP	04	32	14
		iS		33	42
	Is	iP		32	18
		iS		33	51
	T	iP		32	21
		iS		33	22
	Magnitude 4 Berkeley				
	USCGS: Near coast of				
	Northern California,				
	04:30:46				
10	P	eP	07	13	14
	PX	eGE		22.5	
		eRNZ		24.5	
	R	eP		13	07
		e			12

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
10	Pr	eP	07	13	03
	Bt	eP			00
	W	eP			22
		e			34
	Is	eP			24
		e			27
		e			41
	Mexico				
10	D	e	11	34	49
	R	eP			35
	Pr	eP			35
	Bt	eP			33
	W	iP			42d
		i		35	00
	Is	iP		34	42
		i		35	00
	USCGS: 14½ N 89½ W,				
	11:25:28				
10	P	iPP	12	53	35
		i(SKP)			50
	R	iPP			37
		i(SKP)			48
	Hf	iPPN			43
	Pr	iPP			41
		i			50
		i			56
	Bt	iPP			43
		i			51
	W	iPP			28
		i			35
		i(SKP)			43
	Is	ePP			31
		e			41
	USCGS: 0 101½ E,				
	12:31:54, 250 km.				
10	P	iPNEZ	14	10	24
		i			36
		ePcP		13	44
	PX	eLNE		17.0	
	R	eP		10	20
		ePcP		13	43
	Hf	ePN		10	11
	Pr	eP			12
		ePcP		13	42
	Bt	eP		10	07
	W	iP			39
		i			51
		ePcP		13	48
	Is	iP		10	37
		i			55
		ePcP		13	47
	T	eP		10	48
	USCGS: 11½ N 103½ W,				
	14:04:45				
11	P	eP	00	04	01
	PX	eLZ		29.2	
	R	eP		04	05
	Hf	ePN			17
	Pr	eP			16
		e			35
	Bt	eP			14
	W	iP			06
		i			16
		i			37

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
11	Is	eP	00	04	06
	T	eP			13
	BCIS: 25½ S 175½ W,				
	23:51:46				
11	P	iP	00	07	18
	R	eP			13
	Hf	ePN			00
	Pr	eP			07
	Bt	eP			04
	Kg	e(P)			33
	W	iP			28
		iPcP		09	18
	Is	eP		07	32
	BCIS: 7¾ N 82½ W,				
	23:59:26				
11	P	iPNEZ	02	44	34
		i			39
		i		45	27
		iPP		47	41
	PX	eSE		54	41
		eGE	03	05.0	
		eRZ		07.3	
			A		T
		PZ	½		3
		PH	½		3
		PPZ	0.4		3
		SH	0.4		4
		MH	3		20
	R	iP	02	44	37
		i			43
		ePP		47	23
	Hf	ePN		44	44
	Pr	iP			38
		i			43
		i		45	00
		i			20
	Bt	eP		44	38
		i			43
		i			57
	Kg	iP			33
		i			38
		ePP		47	31
	W	iP		44	35
		i			41
		iPP		47	38
	Is	iP		44	37
		i			43
	T	eP			43
		i			48
	Magnitude 6¼				
	BCIS: 16¼ S 178¼ E,				
	02:32:30				
11	Pr	eP	03	49	57
	W	iP			59
	Is	e			57
	T	e		50	10
11	Pr	eP	05	00	09
	W	eP			23
	Is	eP			25
	T	e			39
11	PX	eSE	08	59.7	
		eLE	09	12.2	
	R	eP	08	49	05

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
11	Pr	eP	08	49	06
	W	iP			03
	Is	eP			01
		e			05
	T	iP			11
	USCGS: Fiji region,				
	08:36:57				
11	P	ePEZ	10	00	58
		ePP		02	10
	PX	eE		03	20
		iSE		06	12
		eGN		08.7	
		eRZ		10.1	
		iME		12.7	
			A		T
		PZ	0.4		3
		PH	¾		4
		SH	1.8		9
		MH	3		30
		MH	20		14
	R	eP	10	00	53c
		e		01	28
		ePcP		03	47
	Hf	ePN		00	50
	Pr	eP			47
	Bt	eP			46
		eSNE		05	43
	Kg	eP		01	12
		e			39
	W	eP			10
		ePP		02	12
		iPcP		03	49
	Is	eP		01	06c
		ePcP		03	49
	T	eP		01	15
		e			41
		ePcP		03	56
		iSNZ		06	41
		i(ScS)N		11	42
	Magnitude 6 - 6¼				
	USCGS: 14 N 91 W,				
	09:54:40, 100 km.				
11	P	eP	15	56	48
		i			55
		i		57	02
	PX	i(S)E	16	07	21
		iPSE		08	26
		eGE		19.6	
		eREZ		22.9	
			A		T
		PZ	0.2		1½
		MH	3½		20
	R	eP	15	56	52
		i			58
	Hf	ePN		57	02
	Pr	eP		56	52
		i			59
	Bt	eP			52
		i			58
	Kg	iP			50
	W	iP			50
		i		57	04

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
11	Is	iP	15	56	50
		i			55
		i			58
	T	eP			55
		i		57	02
		Magnitude 6			
		BCIS: 17½ S 169½ E,			
		15:44:06			
11	P	iP	20	53	18
	R	e			28
	Pr	eP			20
		epP			29
	Kg	eP			19
		epP			28
	Is	iP			21
		ipP			31
		BCIS: 22¼ S 175¾ W,			
		20:41:18			
11	P	eP	21	14	23
		i			38
	PX	eSE		22	49
		iNE		23	16
		iSSE		26	51
		iGE		29.9	
		eRE		32.6	
			A		T
		PZ	0.3		2
		SH	1½		8
		MH	6		20
		MZ	6		20
	R	eP	21	14	29
		iSE		22	59
	Pr	iP		14	34
	Bt	iP			38
		iSEZ		23	16
	Kg	iP		14	14
	Is	eP			15
		e		43	34
		eP'P'			56
	T	iP		14	14
		eSZ		22	33
		Magnitude 6½			
		JMA: 48 N 156 E,			
		21:04:12, 100 km.			
12	D	eP	10	30	24
	Pr	iP			28
	Bt	iP			33
	Is	iP			05
		i			16
	T	iP			00
		BCIS: Unimak Island region,			
		Aleutians,			
12	Pr	iP	13	38	13
	Bt	eP			15
	Is	iP			03
	T	iP			01
		USCGS: 23 N 146 E,			
		13:25:45			
12	P	e	19	54	32
		e			44
	PX	e(L)EZ		57.0	

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
12	R	e	19	54	35
		e			41
	Pr	eP			19
		e			25
	Bt	eP			10
	W	eP			54
		e		55	02
	Is	eP		54	50
		e		55	04
	T	eP			08
		e			12
12	P	iPNEZ	20	10	20d
		ipP			48
	R	iP			25d
		ipP			42
		e			53
	Pr	iP			30d
		ipP			58
	Bt	iP			34d
		epP		11	01
	Kg	eP		10	10
	W	iP			09c
		i!			10
		ipP			38
		i			51
	Is	iP			13
	T	iP			08
		epP			37
		USCGS: 49½ N 156 E,			
		19:59:54			
13	P	eP	18	56	37
	PX	eLE	19	23.1	
	R	eP	18	56	34
		i			42
	Hf	ePN			41
		eN			48
	Pr	eP			35
		i			42
	Bt	eP			35
	Kg	eP			36
	W	iP			31
		i			39
	Is	iP			33
		i			38
	T	eP			38
		e			43
		BCIS: 17½ S 169 E,			
		18:43:46			
14	P	iP	02	12	07
	R	iP			01
	Hf	iPN		11	51
	Pr	iP			49
		iS		12	16
	Bt	iPNZ		11	37
		iS			51
		Baja California			
		Magnitude 4.3			
14	D	iP	03	47	54
	R	eP			51
	W	eP		48	04
		e			41
	Is	iP			06

(continued)

Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
14	T	e	03	48	45
		BCIS: South coast of Peru,			
		03:37.1			
14	P	eP	06	22	56
	PX	eSE		28	02
		eLE		30.6	
	R	eP		22	51
	Hf	e(P)N			49
	Pr	iP			45
	Bt	e(P)			50
	Kg	e		23	22
	W	eP			07
	Is	iP			06
		e			17
	T	eP			14
		USCGS: 15 N 94 W,			
		06:16:54			
14	PX	eLNEZ	09	26.6	
	W	iP		24	04
		iS		25	28
	Is	eP		24	07
		i			09
		eS		25	37
	T	eP		24	02
		USCGS: Near coast of			
		Northern California,			
		09:22:17			
14	P	iPNEZ	12	18	48c
	R	eP			50c
	Pr	iP			52c
	Bt	iP			50c
	W	iP			51c
	Is	iP			52c
	T	iP			57c
		Apia: 20½ S 177 W,			
		12:07:44, 550 km.			
15	P	iPNEZ!	07	50	20d
		ipP			45
		isP			56
		i		52	07
		i		53	01
	PX	iSNEZ		59	36
		epS	08	00	02
		isSNE			14
		iSSE		07.2	
			A		T
		PZ	2		2
		PH	1		1½
		SH	1¼		3
	R	iPEZ!	07	50	17d
		ipP			42
		isP			51
		i		52	02
		e		53	28
		iSEZ		59	29
	Hf	iPN		50	08
		ipP			38
	Pr	iP!			13d
		ipP			38
		isP			48
		i		52	18
		i		53	22

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
15	Bt	iP!	07	50	08d
		ipP			34
		isP			44
		i		52	15
		iSNE		59	13
		isSNE			53
	Kg	iP!		50	33d
		ipP			57
		isP		51	09
	W	iP!		50	29d
		ipP			53
		isP		51	04
	Is	iP!		50	27d
		ipP			54
		isP		51	03
		i		52	57
		e		53	43
	T	iP		50	33d
		ipP			59
		isP		51	10
		iSN		59	59
		Magnitude 6¾			
		USCGS: 20 S 69 W,			
		07:39:04, 100 km.			
15	P	iP	10	45	42d
		e			53
	R	iP			46d
	Hf	ePN			53
	Pr	iP			49d
		i			55
	Bt	iP			49d
		e			55
	Kg	eP			38
	W	iP			40d
	Is	iP			41
	T	eP			45
		USCGS: 4 S 151 E,			
		10:33:09, 400 km.			
15	Pr	eP	16	39	03
	W	iP			11
	Is	eP			10
		BCIS: 17¼ S 169½ E,			
		16:26:30			
16	D	eP'	03	10	41
	R	eP'			54
	W	iP'			45
		i			54
	Is	iP'			45
		i			59
	T	eP'			47
		BCIS: South Atlantic			
		02:51.3			
16	P	eP"	08	56	02
		ePP			38
		i			48
	PX	eSKSN	09	02	44
		e(S)E		04.5	
		iPSE		06.2	
		eSSE		12.1	
		eLNE		20.5	
			A		T
		PPZ	0.1		1½
		MH	10		20

(continued)

Date	Sta.	Phase	h	m	s	
September		(continued)				
16	R	eP"	08	56	10	
		e			48	
		e	09	01	36	
		eSP		06	14	
	Hf	eN	08	56	44	
	Pr	e			52	
	Bt	eP"		55	57	
		e		56	58	
		eSKSN	09	02	55	
	Kg	e	08	56	25	
		e			03	
	W	e			23	
		iPP			35	
	Is	eP"			06	
		iPP			34	
	T	e			16	
		iSKSN	09	02	36	
	Magnitude 6½±					
	USCGS: 34 N 69½ E,					
	08:37:22					
16	P	iP	13	38	02	
		e			56	
	R	eP			05	
		e			57	
	Hf	ePN			15	
		e			56	
	Pr	eP			05	
		e			59	
	Bt	eP			05	
		e			57	
	Kg	eP			01	
		e			55	
	W	iP			06	
		i			19	
		i		39	00	
	Is	iP		38	06	
		i		39	00	
	T	eP		38	11	
		e		39	08	
	USCGS: 19 S 174½ W,					
	13:26:30, 200 km.					
16	P	iP	20	35	59	
		ipP		36	15	
	R	eP			03	
		ipP			20	
	Hf	ePN			14	
		epPN			28	
	Pr	eP			09	
		ipP			25	
	Bt	eP			13	
		epP			29	
	W	iP		35	49c	
		i		36	02	
		ipP			06	
	Is	iP		35	50	
		ipP		36	07	
	T	eP		35	46	
		epP		36	02	
	USCGS: 51 N 157 E,					
	20:25:47, 60 km.					
16	Pr	iP	21	34	16	
	W	iP			16	

(continued)

Date	Sta.	Phase	h	m	s	
September		(continued)				
16	T	eP	21	34	22	
16	P	iPNEZ	23	44	23c	
	R	iP			27c	
	Hf	ePN			34	
	Pr	iP			27c	
	Bt	iP			26c	
	Kg	eP			23	
	W	iP			28c	
	Is	iP			26	
	BCIS: New Hebrides region,					
	23:31.5					
17	P	eP	02	02	03	
	R	eP		01	41	
	Bt	eP			40	
	W	eP		02	22	
	Is	eP			20	
	T	eP			27	
17	PX	eLE	04	43.5		
	D	e		36	03	
	R	e		35	50	
	Hf	eN			54	
	Pr	e			55	
	W	e		36	20	
	BCIS: 16 N 93 W,					
	04:30:11					
17	P	eP	08	40	46	
	R	iP			49	
	Pr	iP			56	
	Bt	eP		41	03	
	W	iP		40	32	
	Is	iP			34	
	T	eP			24	
17	P	iP	20	41	18c	
	R	iP			21c	
	Hf	ePN			16	
	Pr	iP			25c	
	Bt	iP			26	
	W	iP			12c	
	Is	eP			13	
	USCGS: 5½ N 95 E,					
	20:19:07, 150 km.					
18	Pr	eP	05	24	52	
	W	iP			52	
	Is	iP			52	
	T	eP			57	
18	Kg	eP	08	49	12	
	W	iP			13d	
		ipP			21	
	Is	eP			14	
	T	eP			10	
18	D	eP	10	00	28	
	W	eP			28	
		e			40	
	Is	eP			27	
		e			38	
	USCGS: 37 N 24 W,					
	09:48:56					
18	P	iP	15	11	42	
	Pr	eP			51	
	W	iP!			34c	
	Is	iP			36	
	T	eP			30	

Date	Sta.	Phase	h	m	s	
September						
18	W	iP	16	14	16c	
	USCGS: 30½ N 142 E,					
	16:02:14					
19	W	eP	15	07	08	
	Is	eP			10	
	T	eP			09	
20	W	eP	00	01	02	
	USCGS: 23½ N 94½ E,					
	23:47:44, 150 km.					
20	PX	eLN	03	28.6		
	D	eP		14	03	
		e			15	
	R	eP			01	
		e			13	
	Bt	eP		13	52	
		e		14	04	
		e			10	
	W	eP			13	
		e			24	
	Is	eP			11	
		e			25	
	CL	eP			17	
	T	eP			25	
	BCIS: 23¼ S 69¾ W,					
	03:02:32					
20	D	eP	14	01	44	
	R	eP			48	
		e			57	
	Kg	eP			21	
	W	iP			15	
	Is	iP			22	
	CL	eP			24	
	USCGS: 57½ N 152 W,					
	13:55:00					
20	P	ePEZ	22	02	05	
		i			18	
	PX	iSEZ		10	15	
		eGN		17.0		
		eRZ		20.0		
			A		T	
		PZ	½		2	
		SH	1		4	
		MH	3		20	
	R	eP	22	02	08	
		e		05	03	
		eSE		10	24	
	Hf	ePN		02	23	
	Pr	eP			14	
		i			28	
		i			43	
	Bt	eP			19	
		iS		10	41	
	Kg	eP		01	55	
	W	iP			55	
		i		02	02	
		i			07	
		e		04	05	
	Is	eP		01	58	
		e		02	28	
	CL	eP			00	
	T	eP		01	51	
		iSNEZ		09	51	
	Magnitude 6½					
	USCGS: 51½ N 159½ E,					
	21:52:01					

Date	Sta.	Phase	h	m	s	
September						
20	PX	eLE	23	36.3		
	BCIS: 1 S 24 W,					
	23:03:05					
21	W	eP	03	44	39	
		i			56	
	USCGS: Kamchatka aftershock,					
	03:34:46					
21	P	ePEZ	09	21	05	
	PX	iSN		25	18	
		iLNZ		28.3		
	R	eP		20	59	
		eSE		25	16	
	Pr	iP		20	56	
		i		21	15	
		i			40	
	Bt	eP		20	47	
		eSNE		24	56	
	Kg	eP		21	25	
	W	eP			21	
		i			25	
	Is	iP			19	
	CL	iP			15	
	T	iP			29	
	USCGS: 20 N 100½ W,					
	09:16:20					
21	P	iP	12	17	42	
	Pr	iP			36	
	Bt	iP			33	
	Kg	e			54	
	W	iP			49	
	Is	eP			47	
	CL	eP			41	
21	Pr	iP	17	05	15	
		i			23	
	W	iP			19	
	Is	iP			20	
	CL	iP			23	
21	W	iP	18	19	37	
	Is	iP			38	
	CL	eP			42	
21	P	iP	19	23	11	
		ipP		25	16	
	PX	eSN		32	31	
	R	iP		23	08	
		ipP		25	13	
		eSEZ		32	23	
	Hf	ePN		23	09	
		epPN		25	07	
	Pr	iP		23	05	
		i			13	
		ipP		25	10	
	Bt	iP		23	01	
		ipP		25	08	
		iSNE		32	14	
	Kg	eP		23	22	
		epP		25	26	
	W	iP		23	20	
		ipP		25	25	
		e(S)		32	58	
	Is	iP		23	18	
		e		24	18	
		ipP		25	23	
		eS		32	44	

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
21	CL	iP	19	23	16
		ipP		25	20
		eS		32	38
	T	iPNZ		23	22
		ipP		25	28
		iSN		32	55
	USCGS: 26½ S 63 W,				
	19:11:59, 600 km.				
21	P	iP	21	56	26
	R	eP			28
	Pr	eP			30
	W	iP			29
	Is	iP			31
	CL	eP			34
	BCIS: 15½ S 173½ W,				
	21:45.2, 100 km.				
21	P	iP	23	06	35
	R	iP			39
	Pr	iP			44
	Bt	eP			44
		e		07	02
	Kg	eP		06	28
	W	iP!			27c
		i!			41
		i			53
	CL	iP			33
		i			46
	T	iP			24
	USCGS: 46 N 151½ E,				
	22:55:46				
22	P	iP	07	04	34c
	R	iP			37c
		ipP		06	48
	Pr	iP		04	38c
		ipP		06	48
	Bt	iP		04	36c
	Kg	epP		06	43
	W	iP		04	37c
		ipP		06	48
	Is	iP		04	39c
		epP		06	47
		i			51
	CL	iP		04	41c
		ipP		06	51
		i			55
	T	iP		04	43c
	USCGS: 22½ S 179½ W,				
	06:53:20, 650 km.				
22	P	eP	17	03	34
	Bt	eP			25
	W	iP			44
	Is	iP			43
	CL	eP			40
22	R	eP	18	29	24
		e			38
	Bt	eP			26
		e			43
	W	eP			03
		i			16
		i			19
		i			27
	Is	eP		28	57
		e		29	21

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
22	CL	eP	18	29	08
		e			23
	BCIS: 46¼ N 150¾ E,				
	18:18:22				
23	D	eP	00	08	30
	R	eP			27
	Bt	eP			20
	W	iP			39
	Is	iP			39
23	R	eP	03	13	18
	Bt	eP			15
		e			27
	W	iP		12	52
		i		13	05
	Is	eP		12	55
		e		13	09
	CL	eP		12	59
		e		13	11
	T	eP		12	55
		e		13	04
	USCGS: 45½ N 151 E,				
	03:02:10				
23	P	eP	05	47	14
	Pr	eP			16
	W	iP			17
	Is	eP			19
	T	eP			24
23	P	eP	08	52	54.5
		iSE		53	43.1
	R	eP		52	47.4
		iSN		53	27.4
	Pr	iP		52	37.3
		i!			49.9
	Bt	iPNZ!			27.7d
		iSN			46.9
	BB	iP			49.0
		iS		53	31.1
	Magnitude 4.9				
	31° 35'N 115° 40' W,				
	08:51:55				
24	P	iP	06	16	04
	PX	eSN		25	30
		e(G)N		34	.7
		iRNZ		37	.3
			A		T
		PZ	0.2		1½
		MH	2½		20
	R	eP	06	16	06
		e			30
	Hf	ePN			16
	Pr	iP			09
	Bt	eP			09
	Kg	eP			04
	Is	eP			09
		i			18
	CL	eP			11
	T	eP			14
	Magnitude 6				
	USCGS: 15½ S 173½ W,				
	06:04:37				
24	P	iPNZ	07	14	51
	PX	iLN		37	.5
	R	eP		14	54
		i		15	35

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Pasadena and auxiliary stations, 1956 No. 3

Date	Sta.	Phase	h	m	s
September		(continued)			
24	Hf	ePN	07	15	02
	Pr	eP		14	55
	Bt	eP			55
	Kg	eP			51
	Is	iP			55
		i		15	03
		i			15
	CL	iP		14	57
	T	eP		15	00
		e			08
	USCGS: 22 S 175 E,				
	07:02:13				
24	PX	eLN	11	14	.0
	D	e	10	39	57
	R	e			47
	Is	e			45
		e			51
	CL	e			54
	BCIS: 34¼ N 69¾ E,				
	10:20:38				
24	D	eP	10	47	35
	Is	iP			44
	CL	eP			42
	T	eP			46
24	P	iP	11	36	02c
		e			40
	R	iP		35	59c
		e		36	40
	Pr	iP		35	56
	Bt	iP			53c
		e		36	32
	Is	iP			09c
		e			48
	CL	iP			06c
		e			47
	T	eP			14c
	USCGS: Chile,				
	11:23:54				
24	P	i	15	46	12
	D	eP		45	56
		e		46	12
	Pr	i		45	50
	W	eP		46	09
	Is	eP			07
	CL	eP			02
	USCGS: Costa Rica-Panama				
	foreshock,				
	15:38:08				
25	W	e(P)	07	04	51
	Is	e(P)			52
	CL	e(P)			49
	USCGS: 06:56:55				
	Costa Rica foreshock				
25	P	ePNZ	18	35	16
		eNZ			20
		ePcP		37	06
	R	eP		35	09
		e		36	27
	Hf	ePN		34	59
	Pr	iP		35	05
		i			32
		i		36	17
	Bt	eP		35	00

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
25	Kg	eP	18	35	26
	Is	iP			24
		i			27
	CL	iP			18
		e			23
	T	iP			29
	BCIS: 8¾ N 82¾ W,				
	18:27:27				
25	D	eP	21	39	06
	R	e			39
	Pr	eP		38	57
	Kg	eP		39	21
	Is	eP			17
	CL	eP			11
	T	eP			21
	USCGS: 8 N 83 W,				
	21:31:15				
26	P	eP	05	16	16
	PX	eLZ		46	.5
	R	eP		16	19
	Hf	ePN			29
	Pr	eP			24
	Is	eP			11
	CL	eP			15
	USCGS: 30½ N 142 E,				
	05:04:01				
	JMA: 31 N 141½ E,				
	05:04:10, 280 km.				
26	D	eP	06	34	07
	R	eP			04
	Pr	iP		33	57
	Is	eP		34	16
	CL	eP			14
	T	eP			22
26	P	iPNEZ	13	55	33
		iPcP		56	55
	R	iP		55	36
		iPcP		56	56
	Hf	ePN		55	47
		ePcPN		57	05
	Pr	iP		55	43
		iPcP		57	00
	Bt	iP		55	48
		iPcP		57	03
	Kg	eP		55	22
	Is	iP			23
		ePcP		56	45
	CL	iP		55	27
		iPcP		56	52
	T	iP		55	19
		i			50
		iPcP		56	49
	USCGS: 52 N 176 E,				
	13:46:52, 100 km.				
27	R	eP	00	45	34
	Is	eP			11
		e			18
	CL	e			23
	T	eP			10
		e			15
27	D	iP	14	11	52
	R	iP			50
	Hf	ePN			43

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
27	Pr	iP	14	11	46
	Bt	iP			43
	Is	iP		12	00
	CL	iP		11	58
	T	iP		12	04
28	R	iP	05	01	52
	Pr	iP		02	00
	Bt	eP			06
	W	iP		01	35
	Is	iP			37
	CL	eP			39
	BCIS: Kurile Islands, 04:48.4				
28	P	iP	15	12	11
	R	eP			11
	Pr	eP			15
	Bt	eP			20
	W	iP			01
	Is	iP			01
	CL	eP			01
	T	iP		11	53
	BCIS: 78½ N 7 E, 15:01:34				
28	D	eP	20	43	20
	R	eP			12
	Hf	ePN			06
	Pr	eP			06
		e		44	44
	Kg	e		43	32
	W	eP			28
	CL	eP			22
	T	eP			32
	BCIS: Coast of El Salvador, 20:36.7				
29	P	eP"	04	13	39
	D	eP"			41
	Bt	eP"			43
	W	iP"			36
	CL	eP"			40
	USCGS: 0 123 E, 03:55:27, 300 km.				
29	P	eP"	09	22	44
		i			55
	PX	eSSN		42.5	
		eGN		58.0	
	R	eP"		22	49
	Pr	eP"			53
	Bt	eP"			56
		e		23	00
	Kg	eP"		22	52
	W	eP"			43
		e		25	21
	Is	eP"		22	47
	CL	eP"			47
	T	eP"			46
	BCIS: 7 N 94½ E, 09:03:39				
29	P	eP	11	41	54
	R	eP			47
	Pr	eP			43
	Bt	eP			38
	Is	eP			59
	CL	eP		42	03
	USCGS: 12 S 78 W, 11:31:40				

Date	Sta.	Phase	h	m	s
September					
29	P	eP	12	05	56
		epP		06	15
	R	eP		05	57
	Pr	eP		06	01
	Bt	eP			05
	W	e		05	55
	Is	e			51
	CL	e		06	00
29	P	iPNEZ	21	32	48c
		i		33	25
		ePP		35	45
	PX	eLZ		56.5	
	R	eP		32	52
	Hf	iPN			59
	Pr	iP			55
		i		33	09
		iPP		35	53
	Bt	iP		33	00c
	Kg	iP		32	41c
		e		33	11
	W	iP		32	40c
		i			51
		iPP		35	33
	Is	iP		32	42c
		ePP		35	35
	CL	iP		32	46c
		iPP		35	37
	T	iP		32	29c
		e		34	07
		e		35	01
		ePP			28
	USCGS: 37½ N 141 E, 21:20:52				
	JMA: 37.95 N 140.55 E, 21:20:51				
29	P	eP	22	37	23
		eP"		41	08
		e			48
	R	eP		37	38
		eP"		41	19
		e			55
	W	eP		37	02
		e			18
		e		40	20
		eP"		41	36
	Is	eP"			31
	CL	eP"			48
	T	eP		37	19
		eP"		41	43
	BCIS: 3 N 128¼ E, 22:22:46, 60 km.				
29	P	eP	23	12	09
		e			18
	PX	eLN		43.2	
	R	eP		12	10
	W	iP			01
	Is	iP			01
	CL	iP			00
	T	eP		11	52
	BCIS: 71½ N 9 E, 23:00:59				
29	P	iPNEZ	23	32	53c
		iPcP		33	01
		isP			09

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
29	P	i	23	33	37
		i			53
	PX	iSN		42	58
		iGN		53.8	
		eREZ		57.3	
			A		T
		PZ	0.8		1½
		PH	½		i½
		SH	1½		6
		MH	2½		20
	R	iP	23	32	58c
		iPcP		33	07
		isP			13
		i			22
		iSE		42	56
	Hf	iPN		33	06
		i			19
	Pr	iP			01c
		iPcP			08
		isP			17
		i			34
		i		34	49
		i		35	12
		iPP		36	11
	Bt	iP		33	05c
		isP			22
		i			30
		i			40
		ePP		36	10
		i			49
		iSE		43	10
	Kg	iP		32	45c
		isP		33	02
		i			12
	W	iP		32	46c
		isP		33	04
		i			13
		iPP		35	44
	Is	iP		32	48c
		iPcP			58
		isP		33	05
		ePP		35	48
	CL	iP		32	52c
		isP		33	08
	T	iPNEZ		32	45c
		iPcP			50
		isP		33	06
		e		36	07
		eSZ		42	42
	Magnitude 6¾ - 7				
	JMA: 35.5 N 140.2 E, 23:20:53, 70 km.				
29	P	eP	24	00	10
	R	eP			07
	Bt	i			25
	W	eP	23	59	52
	Is	eP			51
	CL	eP			52
		e	24	00	12
30	P	eP	02	46	17
	PX	eGN		51.7	
	R	eP		46	13

(continued)

Date	Sta.	Phase	h	m	s
September		(continued)			
30	Hf	ePN	02	46	00
	Pr	eP			09
	Bt	eP			02
		e			10
	W	eP			33
	Is	eP			30
	CL	eP			29
	Mexico				
30	P	iP	14	54	30c
		ipP		55	05
		i			39
		e		56	23
	R	iP		54	35c
		ipP		55	09
	Hf	iPN		54	41
		ipPN		55	15
	Pr	iP		54	36c
		ipP		55	11
	Bt	iP		54	38
		ipP		55	13
	Kg	eP		54	24
		epP			58
	W	iP			24
		ipP			57
	Is	eP			26
		ipP		55	00
		i			16
		e		57	52
	CL	iP		54	31c
		ipP		55	05
	T	eP		54	27
		epP		55	02
		e		57	54
	USCGS: 14 N 144 E, 14:41:44, 100 km.				
October					
1	P	iP	07	07	10
	R	eP			13
	Pr	eP			16
	Bt	eP			12
	Kg	eP			11
	W	iP			13c
	Is	iP			14c
	CL	eP			17
	T	eP			18
	South Pacific				
1	P	iP	15	25	22
	R	eP			26
	Pr	iP			26
	Bt	eP			24
	W	iP			25
	Is	iP			26
	CL	iP			30
	USCGS: 15½ S 179½ W, 15:14:20, 500 km.				
1	R	eP	18	12	13
	Pr	eP			08
	Kg	eP			32
	W	iP			26
		i		14	26
	Is	eP		12	22
		e		14	25

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
1	T	eP	18	12	26
		USCGS: 18½ N 77 W,			
		18:04:40			
2	P	eP	07	55	18
	R	eP			13
	Hf	eP			03
	Pr	eP			11
	Bt	eP		54	54
	W	eP		55	37
	Is	eP			37
	T	eP			49
		USCGS: 21 N 108 W,			
		07:51:30			
2	D	eP	13	18	45
	R	eP			43
	Bt	eP			35
	Is	iP			52
2	P	iP	15	06	24
		iNZ			26
		i			36
		i			48
	PX	iSNEZ		14	30
		iGN		21.8	
		eRE		23.5	
	P	eP'P'		36	00
			A		T
		PZ	0.4		1½
		PH	0.2		1½
		SH	1		5
		MH	3½		20
		MZ	3½		20
	R	iP	15	06	29
		i			32
		i			43
		iSE		14	37
		eP'P'		36	03
	Hf	iPN		06	37
		iN			40
		iN			51
		eP'P'N		36	02
	Pr	iP		06	33
		i			36
		i		07	17
		eS		14	51
		eP'P'		35	33
		e		36	02
	Bt	iP		06	38
		i			40
		i			52
		iSNE		14	56
		eP'P'		35	50
	Kg	eP		06	16
		i			18
	W	iP			14
		i			29
		eP'P'		35	48
		e		36	00
	Is	iP		06	15
		i			30
		e		08	45
		eS		13	47
		e		14	14
		eP'P'		35	49
		e		36	06

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
2	T	iP	15	06	10
		i			13
		e		08	40
		iSNEZ		14	07
		eP'P'Z		36	00
		Magnitude 6¼ - 6⅝			
		USCGS: 53 N 159 E,			
		14:56:26, 60 km.			
2	P	eP	15	56	42
	PX	iLNE		59.4	
		iLgNE	16	02	14
	R	eP	15	56	38
		e			46
		e	16	00	24
	Hf	ePN	15	56	25
		eN	16	00	34
	Pr	eP	15	56	23
		i			37
		e	16	00	13
	Bt	eP	15	56	14
		e			27
	Kg	eP		57	19
	W	iP			08
		i			16
	Is	iP			00
		i			07
	T	iP			19
		i			26
		USCGS: 24 N 109½ W,			
		15:53:30			
3	D	eP	01	14	55
	R	eP			43
	Hf	ePN			30
	Pr	eP			36
	Bt	eP			31
	W	eP		15	03
	Is	e			06
	T	e			15
		USCGS: Off coast of Oaxaca,			
		Mexico,			
		01:09:03			
3	Pr	e	03	36	45
	Bt	e			45
	W	iP			11
		i			23
	T	eP			07
		e			19
3	P	iPNEZ	08	29	58d
		i		30	08
		iPcP			17
		ipP			23
		isP			34
	PX	iSNE		39	11
		eScSN			41
		esSNE			49
		eSSSZ		47	36
	P	eP'P'		58	15
		e			38
			A		T
		PZ	¾		1
		PH	½		1
		SH	1		3
	R	iPEZ	08	29	55d
		iPcP		30	15

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
3	R	ipP	08	30	21
		isP			32
		iSE		39	04
		eScSE			35
	Hf	iPN		29	47
		iN			56
		iN		30	25
	Pr	iP		29	50d
		iPcP		30	09
		ipP			17
		isP			27
	Bt	iP		29	48d
		i		30	00
		iPcP			10
		ipP			13
		isP			23
		iSNE		38	50
		esSNE		39	34
		eP'P'		58	05
		e			30
	Kg	iP		30	07d
		i			18
		iPcP			33
		i			46
		i		31	04
	W	iP!		30	07d
		i			12
		iPcP			23
		ipP			33
		isP			41
	Is	iP!			05d
		i			14
		iPcP			22
		ipP			31
		isP			42
	T	iPNEZ			11d
		i			17
		iPcP			20
		ipP			36
		isP			47
		eSNE		39	34
		isSN		40	18
		Magnitude 6½			
		USCGS: 20 S 69½ W,			
		08:18:49, 150 km.			

Date	Sta.	Phase	h	m	s
October					
3	P	iP	16	38	06
	R	eP			09
	Pr	iP			09c
	Bt	eP			08
	W	iP			08c
	Is	iP			10c
	T	eP			14
3	Pr	e	20	23	53
	W	e			55
	CL	e		24	15
	T	e		23	46
		USCGS: 41½ N 110 W,			
		20:21:40			
3	P	eP	21	32	03
	R	eP			06
	Pr	eP			05
	W	iP			07
		i			15
	Is	iP			07
		i			15
	CL	iP			12
		i			18
		BCIS: Fiji Islands region,			
		21:19.5			

C. F. Richter
Violet M. Taylor
March 17, 1959

Pasadena and auxiliary stations, 1956 October 4 - December 31 No. 4

Date	Sta.	Phase	h	m	s
October					
4	D	eP	04	53	10
		e			21
		e(S)		55	33
	R	eP		53	12
		e(S)		55	39
	Hf	eP		53	03
		e(S)		55	29
	Pr	eP		52	59
		e(S)		55	04
	Bt	eP		52	44
		e		53	15
		e(S)		54	39
	W	eP		53	32
		e(S)		56	44
	Is	eP		53	30
		e(S)		56	34
	CL	e		53	28
	T	e			50
4	P	iP	17	21	23
	R	eP			16
		e			31
		e			50
	Hf	iPN			07
		iN			38
	Pr	iP			11
		e			41
		i			57
		i		22	03
	Bt	eP		21	07
	Kg	eP			34
	W	iP			34
		i		22	11
		i		24	42
		i		28	10
	Is	iP		21	32
		e		22	07
		i		24	44
	CL	eP		21	28
	T	eP			38
	USCGS: About 200 miles off Chiapas, 17:15:14				
5	R	eP	06	40	03
	Pr	iP			02
	W	iP			01
	Is	iP			01
	CL	iP			07
5	P	eP	08	28	29
	W	iP			19
	Is	eP			19
	CL	eP			23
	USCGS: Kamchatka, 08:14:44				
5	P	eP	21	55	48
	R	eP			50
		epP		56	23
	Hf	ePN		55	58
	Pr	iP			52
		epP		56	24
	Bt	eP		55	51
		epP		56	23

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
5	W	iP	21	55	47
		ipP		56	20
	Is	iP		55	49
		epP		56	13
	CL	iP		55	53
		epP		56	26
	USCGS: 14 S 167½ E, 21:43:16, 100 km.				
6	Kg	eP	07	40	03
	Is	eP		39	54
	CL	eP			54
	T	eP			51
	USCGS: 73 N 4½ E, 07:29:11				
6	P	iP	17	11	57c
	R	iP		12	00c
	Hf	iPN			07
	Pr	iP			00c
	Bt	iP		11	59c
	Is	iP		12	00c
	CL	iP			05c
	USCGS: 16 S 179 W, 17:00:14, 100 km.				
7	P	iP	01	46	24
	R	iP			26
	Pr	iP			31
	Bt	eP			33
	W	iP			17
	Is	eP			18
	CL	iP			21
	BCIS: Japan, 01:34.7				
7	P	iPNZ	04	55	35c
	R	eP			37
	Pr	iP			37c
	Bt	eP			36
	W	iP!			37c
	Is	iP			38c
	CL	iP			42c
	T	eP			42
7	P	iP	07	00	13
	R	iP			05
	Hf	iPN	06	59	57
	Pr	eP			58
		i	07	00	01
	Bt	eP	06	59	58
	Kg	eP	07	00	26
	Is	iP			21
	CL	iP			17
	T	eP			26
	USCGS: 5 N 82 W, 06:52:00				
7	P	eP	08	37	07
	R	eP			09
	Pr	eP			09
	Is	eP			11
	CL	eP			14
	T	eP			12
7	D	eP	11	54	36
	R	eP			35
	Bt	eP			27
	Is	eP			45

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October					
7	P	eP	19	46	07
		epP			58
	R	eP			09
		epP			59
	Pr	iP			09
		ipP			58
	Bt	eP			08
	Is	iP			11
		epP		47	00
	CL	iP		46	15
		ipP		47	05
	T	eP		46	16
		epP		47	08
	USCGS: 19 S 177 W,				
	19:34:34, 200 km.				
7	P	eP	21	40	23
		ePP		44	02
	R	eP		40	26
		e		41	49
		e		43	34
	Hf	ePN		40	36
	Pr	eP			26
		i			51
		i		41	24
	Bt	eP		40	26
		e			54
	Kg	eP			37
		e		41	14
	Is	eP		40	24
		e		41	01
	CL	eP		40	28
	T	eP			28
		e		41	08
	USCGS: 13 S 167 E,				
	21:27:50, 100 km.				
8	P	iP	00	33	20
		e			28
		epP			52
		ePP		37	27
	R	iP		33	23
		epP			53
		e		36	45
		ePP		37	19
		e			33
	Pr	iP		33	24
	Kg	eP			14
		ePP		37	15
	Is	iP		33	18
		epP			48
		ePP		37	10
		e			20
	CL	iP		33	22
		epP			51
		ePP		37	24
	T	ePP			28
	USCGS: 4 S 144½ E,				
	00:19:47, 100 km.				
8	D	eP	01	53	14
	R	eP			22
	Pr	eP			32
	Kg	eP		52	55
	Is	eP			58

(continued)

Date	Sta.	Phase (continued)	h	m	s
October					
8	CL	eP	01	53	00
	T	eP		52	48
	USCGS: Off Vancouver Island,				
	01:49:09				
8	P	iPNEZ	04	42	17
		i			29
		ePP		46	28
	R	iP		42	19
	Hf	ePN			27
	Pr	iP			21
		i			35
	Bt	eP			24
	Kg	iP			10
	Is	iP			12
	CL	iP			16
	T	iP			13
	BCIS: 11¾ N 142 E,				
	04:29:06				
8	P	iP	15	07	39
		ePP		10	45
	PX	iSN		17	22
		eLE		29.5	
	R	iP		07	40
		eS		17	31
	Hf	eN		07	51
	Pr	iP			39
		i		08	04
	Bt	iP		07	39
		i		08	05
	Kg	eP		07	38
		e		08	17
	Is	iP		07	41
		ePP		11	08
	CL	iP		07	45
	T	iPNEZ			48
		iSNZ		17	42
	USCGS: 20 S 174 W,				
	14:55:49				
9	P	eP	03	45	36
	Is	eP			17
		e			28
	CL	eP			21
9	P	eP	06	31	26
	PX	eLZ		55.7	
	R	eP		31	29
	Hf	eN			48
	Pr	iP			29
		i			42
	Bt	eP			30
	Kg	eP			26
	Is	eP			30
	CL	eP			33
	USCGS: 19½ S 174 W,				
	06:19:37				
9	P	iP	11	04	08
		i			15
	R	iP			04
		i			11
		e			44
	Hf	ePN			01
	Pr	iP			02
	Bt	iP			02

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase (continued)	h	m	s
October					
9	Kg	eP	11	04	06
		e			15
	Is	iP			08d
		i			15
	CL	iP			03
	T	eP			05
	BCIS: 24½ N 45¼ W,				
	10:53:37				
9	P	iP	13	58	31
	PX	eE	14	06	19
	R	eP	13	58	27
	Pr	eP			19
	Bt	eP			12
	Is	eP			44
	CL	eP			42
	BCIS: Southwest of Mexico,				
	13:54.7				
9	P	eP	14	56	48
		e			55
	R	eP			44
		e			50
	Pr	iP			42
		i			49
	Bt	eP			42
		i			48
	Kg	eP			53
	Is	iP			48d
		i			55
		i			59
	CL	eP			42
	T	eP			44
	BCIS: 24½ N 45¼ W,				
	14:46:16				
9	P	iP	17	03	34
	PX	eLN		27.0	
	R	eP		03	36
	Hf	ePN			50
	Pr	e		04	00
	Bt	eP		03	41
	Kg	eP			27
	Is	iP			31
	CL	iP			35
	T	iP			24
	BCIS: 15½ N 148 E,				
	16:50:56				
10	D	eP	22	52	02
		eS		53	47
	R	e		52	47
		eS		53	38
	Hf	ePN		51	57
		eSN		53	18
	Pr	eP		51	41
		iS		53	23
	Bt	eP		51	16
		e(S)		53	45
	Is	e			58
		e		54	41
	CL	e			36
	T	e		55	36
	BCIS: Gulf of California,				
	22:50.0				
11	P	iPNEZ	02	35	21d
		ipP			48
		isP			56

(continued)

Date	Sta.	Phase (continued)	h	m	s
October					
11	PX	iSNE	02	44	06
		isSNE			52
		iSSNE		48	29
		iGN		51.6	
		iP'P'	03	03	49
		ipP'P'		04	16
		iG_2	04	26	
			A		T
		PZ	9		4
		PH	3		4
		SH	40		8
		GH	250		30
		MH?	80		16
	R	iPNEZ	02	35	25d
		i			33
		i			58
		iSNZ		44	12
		i(sS)Z			48
		eP'P'	03	03	43
	Hf	iPN	02	35	33
		iN		36	06
		iSN		44	27
		iN		45	27
		eP'P'N	03	03	45
	Pr	iP	02	35	30d
		i			46
		i		36	23
		i		37	22
		eS		44	26
		eP'P'	03	03	45
		epP'P'		04	15
	Bt	iP	02	35	33d
		i			59
		i		36	43
		iSNEZ		44	32
		isS		45	14
		iG		52.2	
		eP'P'	03	03	43
		epP'P'		04	13
	Kg	iP	02	35	11d
		ipP			41
		eS		43	46
		eP'P'	03	03	49
	Is	iP	02	35	14d
		ipP			38
		i			56
		eSN		43	54
		eP'P'	03	03	40
	CL	iP	02	35	17d
		ipP			47
		i		36	04
		eS		44	05
		eP'P'	03	03	43
	T	iP	02	35	10d
		ipP			40
		iSNEZ		43	45
		iSSNE		48.1	
		iGNEZ		51.5	
		eP'P'	03	03	49
		epP'P'		04	24

Initial dilatations small, followed by slightly larger compressions and slowly increasing amplitudes.

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
11		Pasadena: 46 N 151 E,			
		02:24:35, 110 km.			
		Magnitude m = 7.3 (M = 7.6)			
		USCGS: 46 N 150½ E,			
		02:24:33, 100 km.			
11	D	e	02	56	18
	R	eP			00
	Bt	e			26
	Kg	eP		55	47
	Is	e			49
	CL	iP			52
	JMA:	44.5 N 150.5 E,			
		02:45:21, 100 km.			
11	R	eP	05	16	32
	Pr	eP			34
	CL	eP			34
11	P	iP	16	50	59
		iNEZ		51	03
		eLg		52	41
		M		54.6	
	Kg	iP		50	35
	SB	iP			45
	Is	iP!			44
	CL	iP			50
	T	eP			36
		i(S)E		52	16
		Magnitude 6			
		USCGS: 40½ N 126½ W,			
		16:48:46			
11	P	iPEZ	17	20	34
		i			45
		iNZ		22	13
	Kg	eP		20	08
	Is	iP			15
	CL	iP			19
	H	iP			14
	T	iP			05
		Magnitude 5±			
		USCGS: 41 N 126 W,			
		17:18:17			
11	P	i	17	24	44
	Kg	e			18
	Is	iP			24
	CL	iP			29
	H	iP			25
	T	iP			16
		USCGS: 41 N 125½ W,			
		17:22:32			
11	Pr	iP	19	54	05
	Is	iP			05
	CL	iP			08
11	D	iP	22	44	43
	R	iP			40
	Is	eP			50
	CL	eP			47
12	P	iPNEZ	02	48	20
		ipPNZ			35
		iPcP			54
	PX	iSNE		56	58
		esSE		57	24
		eScSE		58	09
		iSSN	03	01	19
		eGE		04.7	

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
12	P	eP'P'	03	17	16
			A		T
		PZ	¼		2
		PH	0.3		2
		SH	1½		4
		MH	5		20
		MZ	4		20
	R	iP	02	48	14
		ipP			30
		eSE		56	47
		esS		57	28
		eP'P'	03	17	16
	Hf	ePN	02	48	07
		iN			18
	Pr	iP			11
		ipP			25
		eP'P'	03	17	20
	Bt	eP	02	48	07
		ipP			23
		i			47
		eSNE		56	34
		eP'P'	03	17	15
	Kg	eP	02	48	32
	Is	iP			27
		ipP			43
		eP'P'	03	17	19
	CL	iP	02	48	24
		epP			40
		e		58	24
		eP'P'		17	18
	T	iP	02	48	32
		iSNZ		57	23
		Magnitude 6½			
		USCGS: 15½ S 75 W,			
		02:37:45, 60 km.			
12	D	eP	03	25	09
	R	eP			15
	Bt	eP			16
	Kg	eP			24
	Is	eP			18
	CL	eP			16
	T	eP			24
12	P	eP	12	33	18
	D	eP			27
	R	eP			23
	Pr	eP			31
	Bt	eP			35
	CL	iP			13
		Smaller than the next;			
		probably not from the same			
		region.			
12	P	eP	12	34	16
	PX	eSN		43	29
		eLN		52.2	
			A		T
		PZ	0.2		1½
	R	iP	12	34	18
	Hf	ePN			34
	Pr	iP			25
		i			30
		i			37
	Bt	iP			27
		i			39

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
12	Kg	eP	12	34	06
		e		13	
	CL	iP		12	
		i		19	
	T	eP		04	
		e		14	
		Magnitude 6¼ - 6½			
		JMA: 42.2 N 144.8 E,			
		12:22:49, 40 km.			
12	P	iP	18	52	55
	R	iP		58	
	Pr	iP		59	
	Bt	eP		59	
	Kg	eP		52	
	Is	iP		58	
	CL	iP	53	02	
	T	iP		01	
		BCIS: 17¼ S 170 E,			
		18:40:34, 200 km.			
13	P	iP	04	57	38c
	PX	eLN	05	24.1	
	R	iP	04	57	34c
	Pr	iP			32c
	Bt	iP			30c
	Kg	iP			50c
	Is	iP			44c
	CL	eP			37
		USCGS: 13 N 56½ W,			
		04:47:32			
13	P	eP	05	13	43
		e			49
	R	eP			37
		e			43
	Hf	ePN			32
	Pr	iP			32
		i			39
	Bt	eP			30
	Kg	eP			55
	Is	eP			48
		e		15	04
		e			53
	CL	eP		13	43
		e		14	15
	T	eP		13	50
		BCIS: 9¾ N 69¾ W,			
		05:04:40			
13	D	eP	07	44	01
	Bt	eP			04
		e			10
	Is	iP		43	58
		i		44	03
	CL	eP		43	52
		e			58
13	D	eP	10	10	11
		e			42
	R	eP			09
	Is	eP			21
	CL	eP			17
13	P	iP	12	44	32
	R	eP			35
	Pr	eP			42
	Bt	eP			46
	Is	eP			24

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
13	CL	eP	12	44	28
	T	eP			18
13	P	eP	15	22	52
		ipP		23	07
		ePcP			23
	PX	eSNZ		31	18
		eSSN		35.4	
		iGN		38.7	
		iRN		41.3	
	P	eP'P'		52	19
	R	eP		22	56
		ipP		23	12
	Hf	ePN			06
		epPN			20
	Pr	iP			17
		ipP			32
		i			47
	Bt	eP			06
		ipP			20
	Kg	eP		22	44
		epP			58
	Is	eP			45
		epP			58
		ePcP		23	14
		eP'P'		52	17
	CL	iP		22	49
		ipP		23	03
	T	eP		22	41
		ipP			56
		BCIS: 51 N 154¾ E,			
		15:12:30			
13	P	iP	19	07	28
		ipP			54
	PX	eLZ		37	.8
	R	iP		07	30
		e			44
		epP			56
	Pr	eP			33
	Bt	eP			32
	Kg	eP			24
		epP			51
	Is	eP			22
		e			27
		epP			47
	CL	eP			30
		epP			52
		USCGS: 5 S 149½ E,			
		18:54:06, 150 km.			
13	P	e	22	57	35
	PX	eLZ	23	00	.3
	R	e	22	57	43
	Pr	e			56
	Bt	e		58	02
	Kg	e		57	18
	Is	e			17
	CL	e			23
	T	iP			11d
		USCGS: Northern California,			
		22:55:20			
14	R	eP	00	42	56
	Pr	iP		43	01
	Bt	iP			04
	Is	iP		42	47

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
14	CL	eP	00	42	50
	JMA: 36.8 N 140.9 E,				
	00:31:02, 90 km.				
14	P	eP	09	44	08
		e			27
	Pr	eP			18
	Is	eP		43	59
		e		44	36
	CL	eP			02
	USCGS: Near east coast				
	of Kamchatka,				
	09:34:17				
14	P	eP	10	55	24
	Hf	ePN			34
	Pr	eP			30
	Bt	eP			33
	Is	eP			19
	CL	eP			24
	T	iP			20
	USCGS: 18$\frac{3}{2}$ N 145 E,				
	10:43:28, 400 km.				
14	P	e(P')	11	20	13
	R	i(P')			13
	Pr	e(P')			11
	Bt	e(P')			11
	Is	e(P')			17
	CL	e(P')			16
14	P	e	21	17	39
	PX	eL		40.3	
	R	eP		17	29
		e			39
		e		18	47
	Hf	eN		17	52
	Pr	eP			35
		e			48
		e		18	48
		i			54
	Bt	eP		17	36
		i(pP)			48
	Kg	eP			29
		e			43
	Is	iP			19
		i(pP)			31
		i		18	49
		i			56
	CL	eP		17	24
		e(pP)			34
	T	e			28
	JMA: 37.25 N 141.75 E,				
	21:05:32, 40 km.				
15	D	eP	04	01	58
	R	eP			59
	Pr	eP			59
	Bt	eP			57
	Is	eP		02	02
	CL	eP			04
	Wellington: 38.4 S 178.7 E,				
	03:48:50				
15	PX	eZ	04	31.8	
	R	eP		28	09
	Pr	iP			09
	Bt	eP			07
	Is	iP			09
	CL	iP			12

Date	Sta.	Phase	h	m	s
October					
15	D	eP	06	03	22
	Pr	iP			13
	Bt	eP			08
	Is	eP			34
	CL	iP			29
15	PX	eLZ	08	33.3	
	USCGS: 11$\frac{1}{2}$ N 126$\frac{1}{2}$ E,				
	07:46:00, 200 km.				
16	P	eP	10	51	56
		e		52	04
	PX	eLN	11	00.0	
	R	eP	10	52	00
	Hf	ePN		52	17
		eN			27
	Pr	eP			04
		e			17
	Bt	eP			04
		e			19
	Is	eP		51	58
		i		52	08
	CL	eP			04
	T	eP			07
		e			17
	USCGS: 20 N 157 W,				
	10:44:43				
16	P	eP"	12	28	36
	Bt	eP"			39
	CL	eP"			38
	BCIS: 7 S 121$\frac{1}{2}$ E,				
	12:09:51				
18	D	eP	07	18	00
		e			06
	R	eP			06
	Is	iP		17	45
		e		19	52
	CL	eP		17	49
		e			57
	T	e		18	40
	USCGS: 150 miles off Oregon,				
	07:15:25				
18	Is	e	09	13	59
	BCIS: Off coast of Oregon,				
	09:11.7				
18	Pr	e	17	37	23
		e			27
	Is	eP			13
	CL	eP			17
		e			47
18	P	eP	18	16	58
	Is	eP			58
	CL	eP		17	03
18	P	iP	20	12	54
	R	eP			47
	Pr	iP			42
	Bt	eP			31
	Kg	e		13	07
	CL	eP		12	58
	BCIS: Galapagos Islands				
	region,				
	20:04.6				
18	P	iP	21	07	49
	R	eP			52
	Pr	iP			53

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
18	Bt	eP	21	07	51
	Is	iP			54
	CL	iP			57
	T	eP			58
19	P	iPEZ	01	38	59
	R	iP			54
	Pr	iP			49
	Bt	iP			44
	Kg	eP		39	10
	Is	iP			06
	CL	iP			02
	T	eP			11
	USCGS: 11$\frac{1}{2}$ S 76 W,				
	01:28:53, 100 km.				
19	R	eP	03	31	27
	Pr	eP			33
	Bt	eP			36
	CL	iP			20
	BCIS: 46$\frac{3}{4}$ N 152 E,				
	03:20:46, 150 km.				
19	P	ePEZ	11	03	35
	R	eP			38
	Pr	eP			41
	Bt	eP			40
	Is	eP			35
	CL	eP			39
	USCGS: 5 S 154$\frac{1}{2}$ E,				
	10:50:42, 150 km.				
19	P	iPNEZ	12	11	45d
		epP		13	57
	PX	iSN		21.0	
			A		T
		PZ	$\frac{1}{4}$		1
		PH	0.2		1
	R	iP	12	11	46d
		epP		14	00
	Hf	iPN		11	54c
		epPN		14	16
	Pr	iP		11	49d
		epP		14	01
	Bt	iP		11	47d
		epP		14	00
	Is	iP		11	50d
		epP		14	06
		eP'P'		38	36
	CL	iP		11	54d
		epP		14	08
		eP'P'		38	32
	T	iP!		11	54c
		epP		14	07
	Dilatations followed by				
	sharp compressions.				
	Magnitude 6				
	USCGS: 21 S 179 W,				
	12:00:38, 650 km.				
19	P	eP	14	18	30
		e			37
	PX	iSN		28.4	
		iPSN		30.5	
		iSSN		35.0	
		iGN		43.4	
		eRNZ		47.5	

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
19				A	T
		MZ		10	20
		MH		6	14
	R	eP	14	18	34
		e		19	22
	Hf	ePN		18	40
	Pr	eP			33
	Bt	eP			29
	Is	eP			44
	CL	eP			43
	T	iP			42
	Magnitude 6$\frac{1}{2}$				
	USCGS: 56$\frac{1}{2}$ S 122 W,				
	14:05:34				
19	P	eP	20	52	04
	Pr	eP			06
	Is	iP			08
	CL	iP			12
	T	iP			14
	BCIS: South Pacific,				
	20:39.9				
19	P	iPNZ	20	56	17d
		i			41
		i			53
	PX	eSN	21	03	09
		esSE			35
		iSSN		06.6	
		eGNE		07.3	
		eRZ		08.5	
			A		T
		PZ	$\frac{3}{4}$		2
		SH	$1\frac{1}{4}$		3
		MH	60		20
		MZ	25		20
	R	iP	20	56	22
		i			48
		i			58
		i		57	08
		eSE	21	03	32
		isS		04	05
	Hf	iPN	20	56	31
		iN			48
	Pr	iP			28
		i			52
		i		57	03
		eS	21	03	22
	Bt	iP	20	56	32d
		i		57	00
		iPP		58	32
		e	21	03	26
		iS			47
	Is	iP	20	56	07d
		i			20
		i			35
		iPP		58	02
		eS	21	03	02
	CL	iP	20	56	12d
		iPP		58	05
		e	21	01	33
		e			57
		eS		03	05
	T	iP	20	56	04d

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
19	T	i	20	56	24
		eSE	21	02	54
	Rat Islands				
	Magnitude 6¾				
	BCIS: 52¾ N 177¾ E,				
	20:47:32				
19	R	eP	21	36	35
	Pr	eP			41
	Is	iP			22
	CL	iP			27
	T	eP			22
	USCGS: 52 N 177 E,				
	21:27:47				
19	P	eP	21	46	31
	R	eP			37
	Pr	eP			42
	Is	eP			22
		e			38
	CL	eP			25
	T	eP			23
	USCGS: Rat Islands aftershock,				
	21:37:45				
20	P	eP	00	01	08
	PX	eLZ		04.3	
	R	eP		01	14
	Hf	ePN			33
	Pr	eP			25
	Bt	eP			34
	Is	iP		00	51
	CL	eP			57
	USCGS: 42½ N 127 W,				
	23:58:30				
20	P	iP	03	39	07
		ePcP		41	06
	R	iP		39	11
		ePcP		41	20
	Hf	ePN		39	22
		ePcPN		41	16
	Pr	iP		39	19d
	Bt	iP			23d
		iPcP		41	13
	Is	iP		38	57d
		iPcP		41	02
	CL	iP		39	02d
		iPcP		41	05
	T	eP		38	53
		ePcP		41	01
	USCGS: 51½ N 170 W,				
	03:31:24				
20	Pr	eP	06	44	03
	Is	eP			04
	CL	eP			08
	BCIS: 30½ S 176 W,				
	06:31:26				
21	P	eP	08	42	44
	PX	iSNE		45	16
	P	eNE			21
	PX	iL		46.4	
	R	eP		42	36
		eL		46.3	
	Hf	ePN		42	21
		eN		44	34
		eN		46	16

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
21	Pr	eP	08	42	26
		i			33
		e		45	01
	Bt	eP		42	18
		e(L)NE		44	53
	Is	eP		43	02
		i			17
		i(S)		45	41
	CL	eP		42	58
		e(S)		45	36
	T	eP		43	22
		iS		46	02
		iL		48.5	
	USCGS: 25 N 109 W,				
	08:39:45				
21	Hf	eN	09	03	01
	Pr	eP		02	32
	Bt	eP			20
	Is	eP		03	06
		e			13
	CL	eP			03
	BCIS: Southern Gulf of California,				
	08:59.8				
21	D	eP	09	46	36
		e		47	04
	Pr	eP		46	30
		e			59
	Bt	eP			27
	Is	eP			45
		e		47	04
		e			13
	CL	eP		46	44
		e		47	12
22	P	eP	07	35	02
		e			13
	R	eP			07
		e			16
	Pr	eP			14
	Bt	eP			15
	Is	eP		34	52
	CL	eP			56
	USCGS: 52 N 177 E,				
	07:26:15				
22	P	eP	07	40	18
	R	eP			22
	Pr	eP			23
	Bt	eP			27
	Is	eP			04
	CL	eP			07
22	R	eP	11	57	13
	Pr	eP			01
	Bt	eP			06
	Is	eP			29
	CL	eP			29
		e			55
	T	e			51
22	P	eP	12	48	45
	PX	iSE		59	45
		iGE	13	14.7	
		eRE		19.5	
	R	eP	12	48	48
	Pr	eP			51
		e			59

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
22	Bt	eP	12	48	55
	Is	eP			46
	CL	eP			50
	T	eP			47
		e			54
	USCGS: 9½ S 150 E,				
	12:35:10				
23	Hf	ePN	03	07	50
	Pr	e			57
	Bt	eP			49
	Mexico				
23	D	iP	04	31	49
		i(pP)		32	02
	R	eP		31	48
		i(pP)			58
	Hf	ePN			35
		eN			49
	Pr	iP			40
		i(pP)			53
	Bt	eP			35
		i(pP)			48
	Is	i		32	02
	USCGS: Off San Salvador,				
	04:24:52				
	See the next.				
23	R	e(P)	04	34	24
		e			39
	Pr	e(P)			23
		e			38
	Bt	e(P)			22
		e			37
	Is	i(P)			31
		i			46
	CL	e(P)			29
		e			43
	Possibly PcP of the preceding.				
23	P	iPNEZ	08	14	53
	PX	iSE		20	59
		iGE		23.0	
		eRZ		25.7	
			A		T
		PZ	0.15		1½
		MH	6		20
	R	iP	08	14	48
		e		17	12
	Hf	ePN		14	39
	Pr	iP			42
		i			56
		i		15	42
	Bt	iP		14	36
	Is	iP		15	05
		i			20
		e		16	01
	CL	iP		15	00
	T	iP			13
		e			59
	Magnitude 5¾				
	BCIS: 3 N 95 W,				
	08:07:32				
23	P	ePP	08	59	12
		epPP			43
		isPP			55

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
23	PX	iPPSE	09	09.3	
	P	ePKKP		11	15
		e			32
	PX	isSSE		14.8	
		iGE		25.6	
		eRZ		30.4	
	R	ePP	08	59	18
		e			58
		ePKKP	09	11	10
		i			29
	Hf	eN		00	11
	Pr	e			02
		i			24
		iPKKP		11	10
		e			27
	Bt	ePP	08	59	32
		e	09	00	09
		ePKKP		11	07
		e			24
	Is	ePP	08	59	42
		e	09	00	07
		ePKKP		11	21
		e			38
	CL	ePKKP			17
		e			37
	T	ePP	08	59	42
		e	09	00	05
		ePKKP		11	20
	BCIS: 13½ N 120½ E,				
	08:41:21, 100 km.				
23	P	eP	10	13	35
	PX	eLE		29.0	
	R	iP		13	36
	Hf	iPN			42
	Pr	iP			38
	Bt	eP			36
	Is	eP			38
	T	iP			44
	USCGS: 19 S 174 W,				
	10:01:48				
24	Is	iP	11	10	11
	CL	iP			08
	BCIS: 47½ N 27½ W,				
	10:59:22				
24	P	iPNEZ	14	49	20c
		iPP		50	51
		i		51	18
		iPcP!			54
	PX	eSNE		55.0	
		iScP		55	39
		eGNE		57.8	
	P	iScSNE!		59	34
			A		T
		PZ	10		5½
		PH	12		7
		PPZ	8		5
		PPH	7		5
		SH	30		18
		MZ	300		25
		MH	600		30
		MH	250		18
	R	iP	14	49	13c
		i			17

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
24	R	iPP	14	50	45
		iPcP!		51	50
		i		52	16
		iSE		54	.9
		i		56	21
	Pr	iP		49	09
		i			13
		iPcP!		51	49
		i		52	25
		iScP		55	35
		i		59	55
	Bt	eP		49	05c
		i			28
		iPcP		51	40
		iSN		54	39
		iScP		55	28
	W	ePE		49	34
		ePPE		51	12
		eSE		55	.4
		eScSE		59	46
	Is	iP		49	27c
		iPP		51	06
		iScP		55	58
	CL	iP		49	24
		iPP		50	49
		iPcP		51	55
		eScP		55	20
	T	iP		49	33c
		iPcP		51	59
		iScP		55	44
		iScS		59	55
	Magnitudes m=7.1, M=7.3				
	USCGS: 12 N 87 W,				
	14:42:11				
24	P	iP	17	35	50
	R	eP			51
	Pr	eP			53
	CL	eP			53
	BCIS: 6½ S 156¾ E,				
	17:22:49				
24	P	e	20	15	39
	D	e			35
	R	e			31
	Hf	i			14
	Pr	e			12
		i			24
		i			30
	Bt	e			06
	Is	e			52
	Readings may refer to S				
25	P	iPNEZ	05	28	50
		i		29	13
		iPcP		31	12
	PX	iSE		34	36
		iPcSZ		35	.0
		iGE		37	.4
		iRE		39	.0
			A		T
		PZ	1		3
		PH	1		3
		MH	15		20
		MZ	15		20

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
25	R	iP	05	28	44
		iPcP		31	08
		iSE		34	.4
	Pr	iP		28	40
		i			47
		i			56
		i		29	03
		i			14
		iPcP		31	08
		i			20
	Bt	iP		28	36
		i		29	09
		iPcP		31	07
		i			19
	Is	iP		28	59
		iPcP		31	14
		i			37
	CL	iP		28	52
		i		29	05
		iPcP		31	13
		i			26
	T	ePNEZ		29	04
		e			46
		iPcP		31	18
		i			31
	Magnitude 6¼ - 6½				
	USCGS: 12 N 87 W,				
	05:21:40				
25	P	eP	19	15	45
	R	eP			47
	Pr	eP			50
	Is	eP			49
	CL	eP			53
	T	eP			56
	USCGS: 17½ N 175 W,				
	19:04:04				
26	P	iPNEZ	02	59	17
	PX	eSE	03	09	40
		iGE		20	.5
		iRZ		24	.3
	R	iP	02	59	21
		e			40
	Hf	iPN			28
	Pr	eP			22
		i			23
		i			54
	Bt	iP			22
	W	iP			19
		i			23
		i			39
	Is	iP			22
	CL	iP			26
	T	iP			26
		i			32
	BCIS: 17½ S 176 E,				
	02:47:01				
26	P	iPNEZ	09	08	01d
		ipP		09	28
	R	iP		08	04
		ipP		09	30
	Hf	iPN		08	10
		ipPN		09	37

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October		(continued)			
26	Pr	iP	09	08	04d
		ipP		09	34
	Bt	iP		08	03d
	Kg	iP		07	58
		epP		09	27
	W	iP		08	03d
		ipP		09	30
	Is	iP		08	07d
		epP		09	30
		i			34
	CL	iP		08	10
		ipP		09	34
	T	iP		08	10
	USCGS: 21 S 178 W,				
	08:56:30, 350 km.				
26	P	e	09	13	07
		e		14	16
	R	e			26
	Hf	eN			44
	Pr	e			34
	Bt	e?			01
		e			49
	Kg	e			28
	Is	e			25
	CL	e?			18
	T	e			24
	USCGS: 6½ S 130 E,				
	08:54:46, 200 km.				
26	P	iP	23	03	04
		iPP		06	30
	PX	iSNZ		13	39
		iPSNE		14	.9
		eSSNZ		18	.9
		eSSSZ		22	.3
		eGN		25	.7
		iREZ		29	.0
		eG$_2$N	24	46	
		eR$_2$EZ	25	09	
			A		T
		PZ	1		5
		SH	5		20
		MH	12		20
	R	iP	23	03	09d
		i			28
		ePP		06	42
		eS		13	33
	Hf	iPN		03	17
		iN		05	15
		ePPN		07	01
	Pr	eP		03	08
		iP			12
		i			29
	Bt	eP		03	09
		iP			11
		i			28
		i		04	05
		ePP		06	35
		eSE		13	32
	Kg	eP		03	04
		e			22
		ePP		06	38
	Is	iP		03	09
	CL	iP			12

(continued)

Date	Sta.	Phase	h	m	s
October		(continued)			
26	T	iP	23	03	11
		e		04	19
		ePP		06	44
		i		08	35
		eN		13	33
		iSNE			52
	Magnitude 6½				
	USCGS: 14 S 167 E,				
	22:50:24				
27	R	e	00	42	45
	Hf	eN		43	02
	Pr	e		42	45
	Bt	e			43
	Kg	e			41
	Is	eP		41	52
		e		42	46
	CL	e			51
	T	e			53
	BCIS: Tonga Island region,				
	00:31.0				
27	D	eP	13	42	13
	R	eP			14
	Hf	ePN			22
	Pr	iP			16d
	Bt	eP			09
		e			16
	CL	eP			19
	BCIS: New Hebrides,				
	13:29.5				
27	P	iP	15	39	54
	PX	iSE		45	.8
		iGE		48	.5
		e		53	.2
			A		T
		PZ	0	.15	1½
		MH	3½		15
	R	eP	15	39	56
		ePcP		42	20
	Hf	ePN		39	45
		eN		42	21
	Pr	iP		39	49
		i			54
		i		40	01
		iPcP		42	19
	Bt	e		39	53
		ePcP		42	17
	Kg	eP		40	14
		iPcP		42	31
	Is	eP		40	10
		iPcP		42	25
	CL	iP		40	05
		ePcP		42	24
	T	e(P)		40	15
		ePcP		42	27
	Magnitude 5¾ - 6				
	USCGS: 12 N 86 W,				
	15:33:08, 200 km.				
27	R	eP	17	31	33
	Hf	eN			47
	Pr	e			46
	W	iP			27
	CL	iP			32
	BCIS: Marianas region,				
	17:18.6				

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October					
27	R	e	17	39	55
	Hf	eN			49
	Pr	e			48
	Bt	e			33
28	P	iPNEZ	03	07	17c
	R	iP			20c
	Hf	iPN			25
	Pr	iP			21c
	Bt	iP			19c
	W	iP!			20c
		i			34
	Is	iP!			22c
	CL	iP			25c
	BCIS: 25 S 179½ W, 02:55:34, 400 km.				
28	W	iP	03	20	25
	Is	eP			28
	CL	eP			30
28	P	iPNEZ	03	41	31c
		iNE			52
	PX	ePPZ		44	42
		eZ		45	05
		iSNE		51	54
		iScSE		52	30
		iSPZ		53	16
		eSSSZ	04	01.6	
		eGN		04.5	
	P	eP'P'		07	30
	PX	iRZ		08.3	
			A		T
		PZ	2¼		4
		PH	1¼		4
		PPZ	¾		4
		SH	3		5
		MH	20		22
		MZ	15		20
	R	iPEZ	03	41	31c
		i			54
		iPP		44	55
		iS		51	55
		iScSE		52	34
		iSPZ		53	15
		eGNE	04	05.2	
		eP'P'		07	25
	Hf	iPN	03	41	38
		iN		42	01
		iN		43	44
		eSN		52	06
		eScSN			48
	Pr	iP		41	32c
		i			54
		i		45	27
		e(ScS)		52	46
		eP'P'	04	07	28
	Bt	iPNEZ	03	41	34c
		i			53
		ePP		45	00
		iS		51	59
		eScSE		52	37
		iSP		53	17
		eGNE	04	05.2	
		eP'P'		07	25

(continued)

Date	Sta.	Phase (continued)	h	m	s
October					
28	W	iP	03	41	33c
		i			48
		i			54
		i		43	50
		iPP		44	41
		e(ScS)		52	31
		eP'P'	04	07	27
	Is	iP	03	41	36c
		i			51
		i			57
		iPP		45	05
		eS		52	02
		eP'P'	04	07	21
	CL	iP	03	41	38c
		i			59
		eS		52	03
		eP'P'	04	07	25
	T	iPNEZ	03	41	40c
		i		42	02
		iPP		45	16
		iNE			25
		iSE		52	07
		iScSNE!			39
		iSPEZ!		53	41
		iP'P'	04	07	25
	Magnitude 6¾ BCIS: 33½ S 178¼ W, 03:28:37				
28	P	iP	03	59	18
	R	iP			17
	Hf	iPN			17
	Pr	iP			17
	Bt	eP			18
	W	iP			16
	Is	iP			17
28	R	e	05	35	59
	Pr	iP			47
	W	iP			53
	Is	eP			52
		i		36	10
	CL	eP		35	59
		e		36	12
	BCIS: Kermadec region, 05:22.9				
28	P	iP	06	54	25
		i			45
	R	eP			28
		e			50
	Pr	eP			27
		e			49
	Bt	e			44
		e		55	00
	Kg	eP		54	25
	W	iP			27
		i			37
		i			46
	Is	iP			29
		i			51
	CL	eP			33
	T	eP			37
		e		55	01
	USCGS: 17 S 173 W, 06:42:52				

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
October					
28	PX	eLEZ	11	32.0	
	Hf	ePN?	10	59	18
	W	i	11	03	39
	Is	e			01
		e			40
	CL	e			19
	BCIS: 14 N 123¼ E, 10:45:06				
28	P	iP	11	43	55
		i		44	10
	R	eP		43	57
	Pr	iP			58
	W	iP			58
	Is	iP		44	00
	CL	eP			04
29	D	eP	00	06	36
		e			47
	R	eP			34
	Pr	iP			30
	W	eP			51
		e			57
	Is	eP			49
	CL	eP			44
	T	eP			55
	Mexico				
29	P	i(P)	03	11	22
		e(S)		12	28
	R	eP		11	00
		iSEZ		12	14
	Pr	eP		10	50
		iS		11	49
	Bt	eP		10	34
		iS		11	30
	Gulf of California?				
29	W	iP	12	18	47
	Is	eP			45
	CL	eP			53
29	P	iP	12	28	59d
	W	iP		29	02d
	Is	iP			04d
	CL	iP			07d
	T	eP			06
	Apia: 22 S 179 W, 14:17.8, 600 km.				
29	P	iPNEZ!	15	51	57c
		i		52	12
		i			25
		i			30
		i		53	08
	R	iP		51	52c
		i		52	13
		i			45
	Hf	iPN		51	44
	Pr	iP			47c
		i		52	27
		i			53
	Bt	i			01
		i			13
	Kg	iP			10c
		i			31
	W	iP!			07c
		i			20
		i			38

(continued)

Date	Sta.	Phase (continued)	h	m	s
October					
29	W	i	15	52	55
		i		53	16
	Is	iP!		52	06c
		i			34
		i			54
	CL	iP			03c
	T	iP			10c
		i			32
	USCGS: 8½ S 77 W, 15:42:08, 60 km.				
29	P	iPNEZ	22	45	36d
	R	iP			38d
	Hf	iPN			44
	Pr	iP			39d
	Bt	iP			37d
	Kg	iP			35d
	W	iP!			39d
	Is	iP			42d
	CL	iP			44d
	T	iP			45d
	USCGS: 22 S 177 W, 22:33:49, 200 km.				
30	D	eP	00	21	33
	W	iP			28
	Is	e			36
	CL	eP			26
	BCIS: 66¾ N 18 W, 00:11:01				
30	P	eP	23	01	05
	R	eP		00	59
	Pr	eP			53
		i			56
		i		01	02
	Bt	eP		00	51
	W	iP		01	15
	Is	eP			16
	CL	eP			14
	USCGS: 5 N 79 W, 22:52:27				
31	D	eP	00	11	36
	R	eP			39
	Pr	eP			39
	W	iP			47
		i		13	14
	Is	iP		11	47
	USCGS: 5 N 79 W, 00:03:04				
31	P	iP	02	45	55
	R	iP			59d
	Hf	ePN		46	05
	Pr	iP		45	58d
	Bt	eP			56
	W	iP			57d
	Is	iP			59d
	CL	iP		46	03d
	USCGS: Fiji Islands, 02:34:40, 500 km.				
31	P	eP	08	19	25
	R	eP			11
		e			19
	Hf	ePN		18	53
	Pr	eP			52
		e		20	24

(continued)

Date	Sta.	Phase	h	m	s	
October		(continued)				
31	Bt	eP	08	18	49	
	W	eP		19	35	
		i			41	
	Is	eP			28	
		e		21	22	
	CL	eP		19	29	
		i			36	
	Mexico					
31	W	iP	12	06	39	
	Is	eP			41	
	BCIS: North of Tonga Islands, 11:55:12					
31	P	eP"	14	22	41	
	PX	iPP		23	48	
		iSKKSN		30.9		
	P	ePKKP		32	52	
	PX	iPSNZ!		33	36	
		eSSN		41.4		
		eSSSN		44.5		
		eLN		59.5		
			A		T	
		P"Z	0.05		1	
		MH	15		20	
		MZ	15		20	
	R	eP"	14	22	31	
		e		23	25	
		ePKKP		33	00	
		iPS!			29	
	Hf	eP"N		22	41	
	Pr	eP"			39	
		e		23	28	
		ePKKP		32	41	
	Bt	eP"		22	36	
	Kg	eP"			30	
		ePP		23	30	
		i		24	30	
		ePKKP		33	01	
	W	eP"		22	36	
		i		24	25	
		ePKKP		32	57	
	Is	eP"		22	44	
		ePP		23	34	
		e		32	26	
		ePKKP			58	
	CL	eP"		22	32	
	Magnitude 6¾ BCIS: 27¼ N 54½ E, 14:03:44					
November						
1	W	iP	17	40	41c	
		ipP			51	
	USCGS: Kamchatka, 17:31:05					
2	P	iP	02	43	06d	
	R	iP			03d	
	Hf	ePN			05	
	Kg	eP			12	
	W	iP			14d	
	Is	iP			14d	
	T	iP			23d	
	BCIS: South Pacific					

Date	Sta.	Phase	h	m	s	
November						
2	P	i(P)	10	40	45	
		iSNEZ		42	05	
	R	eP		40	10	
		iS		41	37	
	Hf	iPN		39	51	
		iN			57	
		iSN		40	50	
	Pr	eP			04	
		i			24	
		i(S)		41	32	
	Bt	eP		40	03	
		i			24	
		iS		41	30	
	USCGS: 32 N 112 W, 10:38:55					
3	D	eP	05	32	13	
	R	eP			15	
	Bt	e			27	
	W	iP		31	58	
	Is	iP			58	
	CL	eP		32	00	
	USCGS: 61 N 139 W, 05:26:02					
3	R	eP	10	14	29	
	W	iP			05	
	Is	e			16	
	CL	e			11	
	USCGS: 52 N 159 E, 10:04:02					
3	Pr	iP	17	03	58	
	W	iP			57	
	Is	iP			59	
	BCIS: Fiji Island region					
3	P	iP	18	13	40	
	Hf	iPN			49	
	Pr	iP			41c	
	Bt	eP			41	
	W	iP			41c	
		ipP		15	32	
	Is	iP		13	42c	
		ipP		15	33	
	CL	iP		13	45c	
		epP		15	34	
	USCGS: 24 S 180, 18:02:04, 500 km.					
3	P	iP	19	05	27d	
	R	eP			28	
	Pr	iP			29	
	Bt	iP			28	
	W	iP			29d	
	Is	iP			30d	
	CL	iP			34d	
	BCIS: South Pacific					
4	P	iPNEZ	05	49	16d	
		ipP			36	
	R	iP			19d	
		epP			38	
	Hf	iPN			27	
	Pr	iP			24d	
		i			34	
		i			39	
		i			52	

(continued)

Date	Sta.	Phase	h	m	s	
November		(continued)				
4	Bt	iP	05	49	26d	
		ipP			44	
	Kg	iP			08d	
	W	iP!			08d	
	Is	iP			10d	
	CL	iP			14d	
		ipP			33	
	JMA: 35.6 N 140.2 E, 05:37:15, 80 km.					
4	P	iPNEZ	07	17	43c	
		i		18	08	
	PX	iSNZ		27	40	
		ePSE		28	50	
		iSSN		32.9		
		eSSSN		36.2		
		iGNE		37.6		
		eRZ		40		
		eG2N	09	03		
			A		T	
		PZ	1		2	
		PH	½		2	
		SH	3		8	
		MH	10		20	
		MZ	6		20	
	R	iP	07	17	46c	
		i		18	07	
		eSE		27	47	
	Hf	iPN		17	52	
		eSN		28	18	
	Pr	iP		17	45	
		i			47	
		i			59	
		i		18	13	
	Bt	iP		17	44c	
		i		18	01	
		i			09	
		iSN		27	54	
	Kg	iP		17	44c	
		i			59	
		e		18	12	
	W	iP		17	45c	
		i			54	
		i		18	09	
		i!			29	
	Is	iP		17	46	
		i!			48c	
		i			55	
		i		18	07	
		eP'P'		44	44	
	CL	iP		17	49	
		i			51c	
		i		18	04	
		eP'P'		44	49	
	Magnitude 6½ - 6¾ USCGS: 22 S 175 W, 07:05:43, 60 km.					
4	P	iP	08	47	45	
	R	i			41	
		e			59	
	Hf	ePN			40	
	Pr	i			38	
	Bt	i			34c	
	Kg	i			55	
	W	iP			53c	

(continued)

Date	Sta.	Phase	h	m	s	
November		(continued)				
4	Is	iP	08	47	42	
		i			51	
	CL	e			45	
		i			50	
	USCGS: 34 S 68 W, 08:35:20					
4	D	e		21	46	53
		e			47	06
	W	e			46	51
	Is	i				53
	CL	e				54
	USCGS: 61 N 139 W, 21:40:55					
5	D	eP		06	08	06
		epP				28
	R	epP				25
	Pr	eP				05
		epP				22
	Bt	eP			07	54
		epP			08	16
	W	i				40
	Is	eP				14
		epP				36
	CL	eP				12
		epP				34
	BCIS: Chile, 05:57.6, 100 km.					
6	P	eP		00	15	14
		ipP				25
	PX	eSN			25	16
		eLN			35.5	
	R	eP			15	17
		epP				28
	Pr	eP				16
		epP				27
	Bt	epP				26
	Kg	eP				13
		epP				24
	W	iP				16
		ipP				29
	USCGS: Tonga Islands, 00:03:15					
6	P	e		14	31	12
	R	e				29
	Pr	e				50
	BCIS: 5½ S 134½ E, 14:12:37					
6	P	eP		23	22	35
		epP				50
	R	eP				39
		epP				54
	Pr	eP				46
		ipP			23	01
	Bt	eP			22	51
		epP			23	05
	Kg	eP			22	24
		epP				38
	W	iP				24
		ipP				39
	Is	iP				26
		ipP				41
	USCGS: 52 N 176 W, 23:14:20					
7	P	eP		03	17	48

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
November		(continued)			
7	Pr	iP	03	17	51
	W	iP			50
	Is	iP			51
	USCGS: 17½ S 178½ W, 03:06:51, 600 km.				
7	D	eP	09	16	53
		e		17	05
	R	e			07
	Pr	e			03
		i			13
	Bt	e			06
		e			19
	W	eP		16	33
		i			44
		i			50
	Is	eP			35
		e			52
	BCIS: Aleutians				
8	P	iP	03	57	24d
	D	eP			26d
		epP		59	25
	R	iP		57	27d
		epP		59	27
	Pr	iP		57	27d
		epP		59	27
	Bt	iP		57	26d
		epP		59	25
	Kg	eP		57	24
	W	iP			27d
		ipP		59	26
	USCGS: 24 S 179 E, 03:45:51, 550 km.				
8	P	iPNEZ	07	01	30d
		ipP		03	17
		i		04	30
	PX	iSN		10	36
			A		T
		PZ	0.2		1
		PH	0.2		1
	R	iP	07	01	33d
		epP		03	16
		i		04	33
		iSE		10	46
	Pr	iP		01	33d
		ipP		03	20
		e		04	30
	Bt	iP		01	32d
		epP		03	19
	Kg	eP		01	29
		epP		03	16
	W	iP!		01	33d
		ipP		03	18
	USCGS: 18 S 178 W, 06:50:24, 500 km.				
9	P	eP	06	12	44
	PX	eSN		21.5	
		eGN		33.5	
	R	eP		12	46
	Pr	eP			40
		i			46
		e		15	08
	Bt	eP		12	42
		i			48
		e		15	11

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
9	W	iP	06	12	42
		e		15	13
	Is	iP			41
		e		15	10
	BCIS: 36¼ N 34½ W, 06:01:50				
9	P	eP'	12	14	28
	R	eP'			29
	W	e			46
	Is	eP'			27
	BCIS: 8½ S 111 E, 11:55:18				
9	P	eP	13	11	48
		i			54
		ipP		12	18
		isP			29
		i		15	36
	PX	iSNE		16	19
		iLN		17.1	
			A		T
		PZ	1		2
		PH	1		2
		SH	6		10
		MH	35		16
	R	iP	13	11	42
		ipP		12	13
		isP			25
		iPcP		15	03
	Pr	iP		11	36
		i			43
		ipP		12	07
		isP			19
	Bt	ePNEZ		11	31
		ipP		12	02
		isP			14
		iPcP		15	01
		eSN		15	49
		e		44	30
	Kg	eP		12	05
		i			09
		ipP			34
	W	iP		11	59
		i		12	05
		ipP			35
		iPcP		15	08
		i		16	20
		i		18	38
		e		44	15
	Is	iP		11	57
		i		12	02
		ipP			28
		iPcP		15	05
		e		44	18
	Magnitude 6½± USCGS: 17 N 94 W, 13:06:10, 150 km. Small short period motion, recorded in 44 m, may be a later earthquake or a reflected wave.				
9	P	eP	18	08	24
		e		10	11
	R	eP		08	26
		e		09	53

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
November		(continued)			
9	Hf	ePN	18	08	34
	Pr	iP			27
	W	iP			27
		i		09	53
	Is	iP		08	27d
		i		09	58
	BCIS: 27¾ S 178¼ W, 17:56:30, 400 km.				
10	P	iPNEZ	00	15	39c
		i			46
		ePcP		18	02
	PX	iSN		21	38
		eGN		24.3	
		eRN		25.6	
			A		T
		PZ	0.4		1½
		PH	0.2		1½
	R	iP	00	15	34
		iPcP		18	04
	Hf	iPN		15	22
	Pr	iP			28c
		i			41
		e(PcP)		17	56
	Bt	eP		15	24
		e(PcP)		17	52
		e		18	00
	Kg	eP		15	54
	W	iP			50c
		i		16	00
		i			13
		iPcP		18	01
		i			09
		iScP		20	47
	Is	iP		15	46
		iPcP		18	01
		i			08
		iScP		20	48
	Magnitude: 6				
	USCGS: 10½ N 86 W, 00:08:27, 100 km.				
10	P	iP	09	08	26d
		i			34
		i			50
	PX	eLN		10.2	
	R	iP		08	34d
		e		10	47
	Hf	ePN		08	52
	Pr	iP			44
	Bt	eP			52
	Kg	eP			02
		e		10	21
	W	iP		08	05d
		i			15
		i			19
		i		09	41
		i			49
	Is	iP		08	08d
		i			12
		i		09	52
	USCGS: 40½ N 124 W, 09:06:34				
10	P	iP	12	00	12
		i(sP)			29

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
10	R	iP	12	00	16
		e(sP)			35
	P	e			35
	Bt	eP			28
		epP			47
	W	iP	11	59	58d
		ipP	12	00	11
		i(sP)			16
	Is	iP			00d
		ipP			13
		i(sP)			19
	USCGS: Kodiak Island, 11:53:30				
10	P	e	14	58	44
	PX	eN	15	01	50
		iN		08	52
		iN		13.3	
		eGN		23.3	
	R	e	14	58	35
	Pr	e			39
	Bt	e			41
	W	e			18
	Is	e			27
	BCIS: 15¾ N 120½ E, 14:39:56				
10	P	eP	18	34	52
	R	iP			48
	Pr	eP			45
	Bt	iP			41
	W	iP		35	00
	Is	eP		34	59
	BCIS: Chile, 18:23.4				
10	P	ePNZ	20	28	42
		iSNEZ		29	59
	Kg	eP		28	23
		i(S)		30	07
	W	i(P)		28	02
		iSEZ		29	04
	Is	iP		28	11
		i(S)		29	04
	BCIS: Nevada, 20:26.9				
10	Pr	eP	23	12	25
	Bt	eP			24
	W	iP			25
	Is	iP			26
11	P	iP	03	24	42d
		epP		26	53
	R	iP		24	44d
		epP		26	56
	Pr	iP		24	45d
		epP		26	57
	Bt	iP		24	43d
	Kg	epP		26	55
	W	iP		24	42d
		ipP		26	56
	Is	iP		24	46d
		ipP		26	57
	USCGS: 6½ S 179 W, 03:13:48, 650 km.				
11	P	e	08	40	56
	Pr	e			49
	Bt	e			38

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
11	W	e	08	41	01
	Is	e		40	59
11	P	eP	13	27	52
	R	eP			57
	Pr	eP		28	02
	Bt	eP		28	06
	W	iP		27	44
	Is	eP			44
11	P	eP	16	08	43
	R	eP			47
	Pr	iP			53
	Bt	eP			57
	W	iP			31
	Is	eP			32
	BCIS: Rat Islands,				
	Aleutian Islands,				
	16:00.0				
11	P	iPNEZ	19	26	30d
		ipPNEZ			44
	PX	eRZ		47	.7
	R	iP		26	33
		ipP			47
	Hf	iPN			42
		iN			51
	Pr	iP			40d
		ipP			54
	Bt	iP			41d
		ipP			55
	W	iP			21
		ipP			35
		i		27	15
	Is	iP		26	23d
		ipP			36
	JMA: 43.7 N 148.5 E,				
	19:15:32, 60 km.				
12	R	eP	05	16	32
	Hf	iPN			49
	Bt	eP			31
	W	iP			32
	Is	eP			34
12	P	iPEZ	07	25	29d
		ePcP		27	05
	R	iP		25	33d
		iPcP		27	07
	Hf	ePN		25	43
	Pr	iP			40d
		iPcP		27	11
	Bt	iP		25	43d
		iPcP		27	13
	Kg	iP		25	16d
	W	iP			17d
		i			38
		i			43
		i			48
		iPcP		27	00
		i			24
	Is	iP		25	19d
		i			40
		i			51
		iPcP		27	02
	BCIS: 52 N 178 W,				
	07:17:12, 100 km.				

Date	Sta.	Phase	h	m	s
November					
12	R	e	10	03	01
	Pr	eP		02	49
	W	eP		02	50
		i		03	03
	Is	eP		02	50
		i		03	05
	BCIS: Kermadec region,				
	09:50.5				
12	PX	eLN	11	10	.4
	D	e	10	50	45
		e		51	12
	R	e		50	34
	W	e			32
	Is	e			29
		e			37
		e		51	18
12	P	e(P)	11	05	51
	D	e(P)			47
	R	e(P)			43
	Pr	e(P)			42
	Bt	e(P)			43
	Kg	e(P)			51
	W	i(P)			47
	Is	i(P)			44
12	D	eP	11	27	25
	Pr	e			36
	Bt	eP			29
	W	iP			27
		i			35
	Is	eP			27
		e			32
	BCIS: Atlantic				
12	Pr	eP	12	48	04
	W	iP			05
	Is	eP			06
12	P	e	15	15	28
	R	e			31
	Pr	iP			21
		e			37
	W	iP			01
		i			18
	Is	eP			04
		e			19
13	P	iPKS	03	42	14
		i			47
	PX	eGN	04	14	.0
	R	ePKS	03	42	17
		e			51
	Hf	ePKS			22
	Pr	iPKS			21
		e			52
	Bt	ePKS			20
	Kg	ePKS			11
	W	iPKS			09
		e			43
	BCIS: Java				
	03:19.8				
13	P	eP	07	53	37
	PX	eSN	08	04	16
		iGN		16	.3
	R	eP	07	53	40
	Hf	ePN			47

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
13	Pr	eP	07	53	40
	Bt	eP			39
	Kg	eP			34
	W	iP			38
		i		54	02
	USCGS: 21½ S 174 E				
	07:40:58				
13	P	iP	08	48	58
	PX	eSN		58	10
		eGN	09	12	.0
	R	iP	08	48	58
	Pr	eP			56
	Bt	eP			58
	W	eP			54
	USCGS: Loyalty Islands				
	region,				
	08:36:17				
13	P	eP"NZ	10	14	45c
		ePP		17	10
	PX	ePPSN		29	.5
		eSSN		35	.0
	R	iP"		14	47c
		e		17	33
		e		18	19
	Hf	eP"N		14	53
	Pr	iP"			46c
		i			57
		e		16	58
	Bt	eP"		14	46c
		e		18	46
	Kg	eP"		14	45
		e		16	55
	W	iP"		14	45c
	Magnitude: m = 6¼				
	Pasadena: 48½ S 123½ E				
	09:55:30				
13	P	e	13	29	23
	R	e			23
	Pr	eP			06
		e			24
	Bt	e			20
	Kg	e			19
	W	iP			08
	BCIS: Fiji region,				
	13:17.0				
14	P	eP"NEZ	01	09	50
		i		10	23
		i		11	27
	PX	iN		16	19
		eZ		18	18
		iNZ		19	32
		eN		25	.5
		eN		42	.3
	R	eP"		09	51
		e		10	36
		e		11	02
	Hf	eN		10	36
	Pr	eP"		09	53
		e		10	18
		e			53
	Bt	eP"		09	55
	Kg	e		10	13
		e			28
	W	eP"		09	49
		i		10	12

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
14	Is	eP"	01	09	52
		e		10	17
	USCGS: 36½ N 71 E,				
	01:51:27, 150 km.				
14	P	iPNEZ	05	23	29d
		i		24	06
	R	iP		23	32
	Hf	ePN			38
	Pr	iP			34d
		i		24	11
	Bt	eP		23	34
	Kg	eP			25
	W	iP			27d
	Is	iP			29
	USCGS: 6 S 153½ E,				
	05:10:24, 100 km.				
14	P	iP	14	35	13c
	R	eP			11
	Pr	iP			08c
	Bt	iP			03c
		e			26
	Kg	eP			25
	W	iP			22c
	Is	iP			22c
14	P	iP	22	06	57
		i		07	15
	Bt	eP		06	46
	Kg	eP		07	08
	W	iP			05
		i			24
		i			34
	BCIS: 20¾ S 69½ W,				
	21:55:31				
15	P	iPNEZ	14	24	57
	PX	iSN		31	13
		iLN		36	.4
	R	eP		24	55
	Hf	ePN			49
	Pr	iP			50
	Bt	eP			42
	Kg	eP		25	12
		e			28
	USCGS: 5 S 104½ W,				
	14:17:09				
15	P	iPNZ	17	35	30
		i			45
	PX	eLZ		46	.9
	R	iP		35	25
		e		36	08
	Hf	ePN		35	22
	Pr	iP			21
	Bt	iP			14
	Kg	eP			43
	USCGS: 3 S 103½ W,				
	17:27:55				
16	P	iPNEZ!	03	23	50.6c
		iSN		24	25.5
	MW	iP!		23	51.7c
	D	iP!			53.9c
	SB	iPNEZ!			37.4
		iS		24	02.9
	FT	iP!		23	37.6
		iS!			57.5
	Kg	iP!			26.4c
	W	iPEZ!			32.5c
		iE			36.8
		iSE			51.8

(continued)

Pasadena and auxiliary stations, 1956 — No. 4

Date	Sta.	Phase	h	m	s
November		(continued)			
16	CL	iP!	03	23	47.5c
	H	iP			44.4c
		iS		24	14.8
	T	iP!		23	44.7c
		iSE		24	11.5
	Magnitude 5.0				
	36.0 N 120.5 W,				
	03:23:09				
	East of King City, USCGS				
	reports VI at King City, San				
	Lucas, and near Lonoak, V at				
	points in Monterey and San				
	Luis Obispo counties.				
16	P	eP	06	32	02
	R	eP			10
	Pr	iP			11
	Bt	eP			12
	Kg	eP		31	50
	USCGS: Rat Islands,				
	Aleutian Islands,				
	06:23:10				
16	P	eP	08	27	58
		iNZ		28	24
		iSN		29	53
	MW	eP		27	57
		i		28	22
		iS		29	53
	BB	eP		27	45
		e		28	19
		iS		29	49
	SB	e(P)		28	21
		i			33
		iS		29	57
	Kg	eP		28	01
		i			11
		iS		29	34
	CL	iP		27	32
		i			51
		iS		28	56
	T	iPEZ		27	20
		i			33
		iSE		28	29
	Magnitude 5				
	USCGS: 41 N 116 W,				
	08:26:11				
16	P	eP	09	02	01
		epP			33
		ePP		06	12
	R	eP		02	03
		epP			34
		e		03	08
		ePP		06	21
	Hf	eN		07	12
	Pr	eP		02	06
		e			13
		e			52
		ePP		06	31
	Bt	eP		02	06
		epP			40
		e		03	05
		ePP		06	24
	Kg	ePP			35
	Magnitude 6±				
	Pasadena: 4 S 139 E,				
	08:48:13, 130 km.				
16	P	iPNEZ	12	02	58
		i		03	18
		e		04	15
	PX	i(L)N			15.3
	R	eP		02	46
	Hf	ePN			41
	Pr	iP			45
		i		03	06
		i			36
	Bt	eP		02	43
		e		03	07
	Kg	eP			05
	USCGS: 8½ N 71 W,				
	11:53:54				
16	P	eP	16	29	07
	R	eP			08
	Pr	eP			08
	Is	iP			13
	USCGS: 20 S 170½ E,				
	16:16:19				
16	P	iP	22	13	18
		ipP			48
	R	iP			14c
		ipP			45
	Pr	iP			11
		ipP			41
	Bt	iP			07c
		ipP			38
	Kg	eP			29
		epP		14	00
	W	iP		13	25c
		ipP			55
	Is	iP			25c
		ipP			56
	USCGS: 18 S 69 W,				
	22:02:19, 150 km.				
17	P	e	09	29	01
	R	e		28	54
	Hf	eN			42
	Pr	iP			39
		i			48
	Bt	eP			33
		e			41
	Kg	e		29	02
	Is	e			04
		e			12
	Mexico				
17	P	e	12	24	47
	R	eP			43
		e		25	05
	Pr	eP		24	42
	Bt	eP			40
	Is	eP			56
	BCIS: Argentina				
17	D	eP	13	40	24
	R	eP			21
	Hf	ePN			06
		e			22
	Pr	eP			14
	Bt	eP			08
	Is	iP			40
		i			50
	BCIS: Mexico				
	13:35.5				

Pasadena and auxiliary stations, 1956 — No. 4

Date	Sta.	Phase	h	m	s
November					
17	P	eP	20	32	25d
		iPNEZ			30c
	PX	iSNEZ		36	39
		iLNE		37	8
			A		T
		PZ	4		3
		PH	4		3
		SH	8		8
		MH	70		18
	R	eP	20	32	28d
		i			34c
		iS		36	58
	Hf	ePN		32	40
		iN			53
		eSN		37	23
	Pr	eP		32	36
		i			41
		i			56
	Bt	eP			43d
		i			48c
		iS		37	23
	Kg	eP		32	09
		i			29
		i			54
		iS		36	32
	Is	iP		32	10d
		i			15c
		i			31
		iS		36	26
	Magnitude 6½				
	USCGS: 54½ N 134 W,				
	20:27:15				
18	P	eP	09	59	17
	R	eP			15
	Hf	eN			31
	Pr	eP			16
		e			29
	Bt	e			28
	Kg	eP			15
	Is	eP			17
		i			29
	USCGS: 27 S 176 W,				
	09:46:49				
18	D	iP	10	40	42
	R	iP			39
	Pr	iP			37
	Bt	iP			33
	Is	iP			49
18	P	eP	18	28	49
	PX	iScSN		39.0	
		iPPSN		40.2	
		iSSN		44.0	
		e(G)N		49.8	
		eRZ		54.3	
			A		T
		PZ	½		3
		MH	8		18
	R	eP	18	28	51
	Hf	eN		29	03
	Pr	eP		28	49
		i		29	25
	Bt	eP		28	45
	Is	iP			49

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
18	Magnitude 6¼				
	USCGS: 27 S 176 W,				
	18:16:25				
18	P	e	21	35	44
	R	e			57
	Hf	eN		36	04
	Pr	eP		35	12
		e			47
	Bt	e			35
		e			47
	Kg	e			37
	BCIS: 28½ N 129½ E,				
	21:22:40				
19	D	eP	07	26	49
		e(S)		28	37
	R	eP		26	38
		eS		28	52
	Hf	ePN		26	33
		iSN		28	25
	Pr	eP		26	25
		eS		28	35
	Bt	eP		26	19
		i			27
		iS		28	11
	Is	i		27	12
		e		29	57
	BCIS: Baja California,				
	07:24.0				
19	P	iPNEZ	12	15	09
		i			30
		iNZ			37
		i		16	03
		i			20
	PX	iGN			38.5
	R	iP		15	12
		i			40
		e		17	48
	Pr	iP		15	16
		i			42
	Is	iP			06
		e		18	32
	USCGS: 14 N 144 E,				
	12:02:26, 150 km.				
21	P	iP	07	45	15c
		i			27
	PX	iSN		55	32
		iSSN	08	05.2	
		iGEZ		08.5	
			A		T
		PZ	½		1½
	R	iP	07	45	18c
		i			29
	Pr	iP			22
		i			34
	JMA: 38.3 N 142.1 E,				
	07:33:30, 70 km.				
21	D	eP	08	10	54
	R	eP			53
21	P	i(P)	08	40	33
	D	i(P)			32
	R	e(P)			27
	Pr	i(P)			16

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Date	Sta.	Phase	h	m	s
November					
22	P	iP	08	40	39
	PX	iSN		47	11
		eLN		51.9	
	R	iP		40	33
	Pr	iP			28
	Bt	iP			24
	Kg	eP			53
	USCGS: 8½ N 82½ W, 08:32:45				
22	P	eP	15	49	48
	PX	eLN	16	08.9	
	R	e	15	49	41
	Pr	iP			45
	Bt	eP			40
	Kg	e			37
	Apia: 15½ S 178 W, 15:37:50				
22	P	iP	16	44	53
		i		45	03
		iSNEZ			35
	Kg	eP		44	29
		i(S)			56
	W	ePE		44	33
		eSE		45	02
	H	iP		44	42
		iSN		45	19
	SB	iP		44	39
		iSE		45	23
	Magnitude 4.2 37 N 122 W, 16:43:50 Felt at Hollister and Salinas.				
22	PX	e(R)	24	22	
	USCGS: 3 S 132 E, 23:29:09				
23	P	iP	02	54	08
	R	eP			16
	Pr	eP			16
		e			25
	Is	iP		53	51
	USCGS: Off Oregon, 02:51:40				
23	P	iP	10	08	27
	R	eP			31
	Pr	iP			38c
		i			54
	Bt	iP			45
	Kg	iP			14
	Is	iP			16c
	USCGS: 52½ N 169½ W, 10:00:50				
24	P	iPNEZ	02	07	34d
		ipPNZ		08	04
		isP			19
	R	iP		07	31d
		ipP		08	01
		isP			15
	Hf	ePN		07	24d
	Pr	iP			27d
		ipP			57
		isP		08	11
	Bt	iP		07	24d
		ipP			54
		isP		08	06

(continued)

Date	Sta.	Phase (continued)	h	m	s
November					
24	Kg	iP	02	07	46d
		ipP		08	10
		isP			31
	Is	iP		07	42d
		ipP		08	12
		isP			26
	USCGS: 22½ S 67 W, 01:56:06, 150 km.				
24	P	iP	08	32	12
	R	eP			13
	Pr	iP			13
	Bt	eP			11
	Is	iP			14
24	P	eP	15	39	05
	R	eP			09
	Pr	iP			09
	Is	iP			12
24	P	eP	17	48	53
	D	eP			55
	Is	iP			57
24	P	eP	19	36	56
	D	eP			58
	Is	iP		37	01
24	P	iPNEZ	20	54	24
		i			33
	PX	eLZ	21	20.6	
	R	eP	20	54	24
		i			27
		i			55
	Hf	eN			45
	Pr	eP			26
		i			28
		i			55
	Bt	eP			26
	Kg	eP			26
	Is	iP			28c
	USCGS: 27 S 175 W, 20:42:06				
24	D	e	23	13	24
	Pr	e			22
	Is	e			16
	BCIS: Atlantic, 23:02.0				
25	P	eP	07	33	12
	Pr	iP			14
	Is	iP			17
	USCGS: Tonga region, 07:21:36				
25	P	iP	11	32	20
		e			37
	R	e			34
	Pr	eP			26
		i			40
	Bt	e			43
	Is	eP			04
	USCGS: 54 N 164 W, 11:24:59				
25	P	eP'	12	08	36
	R	eP'			35
		e		09	36
	Is	eP'		08	35
	BCIS: Indian Ocean, 11:49.4				

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase (continued)	h	m	s
November					
25	P	eP	12	14	13
	R	eP			20
	Kg	eP			17
	Is	eP			20
25	P	eP	14	26	04
		iNEZ			17d
		e		28	34
	R	eP		25	59
		i		26	13d
	Hf	eN			06
	Pr	eP		25	54
		i		26	09d
	Bt	eP		25	51
		i		26	05d
	Kg	eP			16
		i			29d
	Is	iP			11
		i			25d
	USCGS: 17 S 71½ W, 14:15:10, 100 km.				
25	P	ePNZ	14	57	45
	R	eP			46
	Pr	eP			47
	Kg	eP			45
	Is	iP			46
	BCIS: Tonga region, 14:46.2				
25	D	eP	15	29	15
	R	eP			17
	Bt	eP			26
	Is	eP			09
		e			14
	BCIS: 60 N 30 W, 15:19:03				
25	P	iPEZ	18	20	13c
		iNEZ			19
		e		21	20
		e		23	24
	PX	eLEZ		46.2	
			A		T
		PZ	1		3
		MH	4		20
		MZ	4		20
	R	iP	18	20	16c
		i			21
		i		21	05
		e			49
		e		23	34
	Hf	ePN		20	24
	Pr	iP			17c
		i			23
		i		21	01
	Bt	iP		20	16
		i			24
	Kg	eP			11
	USCGS: 15 S 168 E, 18:07:40, 100 km.				
26	P	iP	03	12	07c
		e(pP)			35
	R	iP			09c
		i(pP)			33
	Hf	iPN			18

(continued)

Date	Sta.	Phase (continued)	h	m	s
November					
26	Pr	iP	03	12	14c
		i(pP)			40
	Bt	iP			15c
		e(pP)			44
	Kg	iP			00c
		i(pP)			29
	USCGS: Bonin Islands, 02:59:34				
26	P	eP'	05	26	37
		e		27	02
	Pr	eP'		26	41
		e		27	15
	USCGS: ½ N 122½ E, 05:07:55				
26	P	e	05	38	23
	D	e			30
	MW	e			31
	Bt	e			41
	BCIS: Arctic Ocean?				
26	P	iPNEZ	12	25	57c
	R	iP			59c
	Hf	ePN		26	06
	Pr	iP			00c
	Bt	eP		25	59
	Kg	eP			57
	BCIS: South Pacific				
26	P	iPNEZ	13	02	38c
	R	iP			39c
	Hf	ePN			46
	Pr	iP			40c
	Bt	iP			39c
	Kg	eP			33
	BCIS: South Pacific				
26	P	iP	19	01	31c
		ipP			47
	PX	eSN		11	03
		eRNEZ		26.0	
			A		T
		PZ	0.2		1¼
		PH	0.1		1¼
		pPZ	0.4		1¼
	R	iP	19	01	27c
		ipP			43
	Hf	ePN			22
	Pr	iP			24c
		ipP			39
		i		02	09
	Bt	iP		01	21c
		ipP			36
	Kg	iP			43
		ipP			58
	USCGS: 26 S 70½ W, 18:49:56, 100 km.				
26	P	iP	23	42	37d
		i			50
		ePP		46	12
	PX	iSEZ		53	10
		ePPSNE		54.5	
		eSSZ		59	48
		eSSSZ	24	03	16
		eREZ		10.6	

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
November		(continued)			
26			A		T
		PZ	1¼		3
		PH	½		2
		MH	12		18
		MZ	10		17
	R	iP	23	42	39d
		i		43	07
		ePP		46	08
		e(S)		53	08
	Hf	iPN		42	46
		eSN		53	24
	Pr	iP		42	40d
		i		43	09
	Bt	iP		42	39d
		iSNE		53	11
	Kg	iP		42	36
		eS		53	16
	W	ePE		42	38
	Magnitude 6½ - 6¾				
	BCIS: 21¼ S 169¼ E, 23:29:41				
27	P	iPNEZ	01	04	42d
		i			50
		e		08	18
	R	iP		04	43d
		i			53
	Hf	ePN			51
	Pr	iP			45d
		i			54
	Bt	iP			44d
		i			54
	Kg	eP			40
		i			50
	USCGS: 21 S 168½ E, 00:51:46				
27	R	iP	01	11	20
		i			29
	Pr	iP			22
		i			31
	Bt	iP			21
		i			30
27	P	iPNEZ	02	32	30
		i			39
	R	iP			32
		i			42
	Hf	ePN			40
	Pr	iP			33
		i			43
	Bt	eP			32
		e			43
	Kg	eP			28
		e			37
		e			50
	USCGS: Loyalty Islands, 02:19:34				
27	P	eP	03	35	17
	R	eP			20
	Pr	eP			21
27	P	ePNEZ	06	30	25
		e			32
	R	iP			27
		e			35
	Hf	ePN			34

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
27	Pr	iP	06	30	28
		i			35
	Bt	eP			28
		e			35
	Kg	eP			25
	USCGS: Loyalty Islands, 06:17:29				
27	P	e	07	13	24
	R	e			12
	Pr	e			20
	Bt	e			20
	USCGS: 5 S 154 E, 06:59:34				
27	P	iP	07	36	07
	PX	eLZ			53.7
	R	iP		36	09
	Hf	ePN			16
	Pr	iP			09
	Bt	eP			09
27	P	eP	08	11	18
	R	eP			21
	Pr	eP			26
	Bt	eP			30
	USCGS: Off north coast of Hokkaido, Japan 08:00:06				
27	P	eP	09	56	59
		e		57	05
	R	eP			00
		e			08
	Hf	ePN			08
	Pr	eP			01
	USCGS: Loyalty Islands, 09:44:06				
27	P	iPNEZ	13	32	03
		e		35	37
	PX	eLE		59	.6
	R	iP		32	05
		i			14
		e		34	51
	Hf	iPN		32	13
	Pr	iP			06
		e		34	52
	Bt	iP		32	05
	Kg	eP			01
	USCGS: 21 S 169 E, 13:19:05				
27	P	eP	16	05	14
		e			19
	R	iP			16
		i			21
	Hf	eN			30
	Pr	iP			15
	Bt	eP			17
	Kg	eP			14
	USCGS: Loyalty Islands, 15:52:20				
27	P	iP	19	39	01
	R	eP			04
	Hf	ePN			11
	Pr	iP			03
	Bt	eP			01
	Kg	eP			00

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
November					
27	D	eP	19	48	18
		e			34
	Pr	iP			27
	Bt	iP			31
28	P	eP	03	56	10
		i			16
	R	iP			11
		i			18
	Hf	eN			25
	Pr	eP			12
		i			19
	Bt	eP			11
		e			18
	Kg	eP			15
	BCIS: Loyalty Islands, 03:43:14				
28	P	iP	07	12	11
		e			17
	R	iP			13
		e			19
	Hf	ePN			20
	Pr	eP			15
	Bt	eP			13
	Kg	eP			16
	USCGS: Loyalty Islands, 06:59:18				
28	P	eP	09	24	10
	R	eP			15
	Hf	ePN			27
	Pr	eP			23
	Bt	eP			30
	Kg	eP		23	53
28	P	iPNEZ	15	24	08c
		i			19
		i			27
	PX	eLN		50	.8
	R	iP		24	10c
		i			21
		e		27	24
	Hf	ePN		24	16
	Pr	iP			09c
		i			20
		i			28
	Bt	iP			07c
		i			18
		i			27
	Kg	eP			09
		e			20
	USCGS: 30 S 176 W, 15:11:33				
28	P	eP	16	43	39
	Pr	eP			42
	Bt	eP			45
	BCIS: Honshu, Japan 16:31.5				
28	P	iPNEZ	19	37	41c
		iPP		40	00
	PX	iSNE		46	08
		eSSZ		50	.0
		iGN		53	.7
		eR		56	.5
	P	eP'P'	20	06	32
		i			45

(continued)

Date	Sta.	Phase	h	m	s
November		(continued)			
28			A		T
		PZ	1¾		4
		PH	1½		5
		SH	5		7
		MH	12		20
		MZ	10		20
	R	iP	19	37	43c
		i			59
		eSZ		46	12
		eP'P'	20	06	24
		i			41
	HF	iPN	19	37	42
	Pr	iP			49c
		i		38	26
		i			51
		eP'P'	20	06	25
		i			40
	Bt	iP	19	37	52c
		i		38	33
		iSE		46	33
		eP'P'	20	06	37
	Kg	iP	19	37	30d
		i			51
		eP'P'	20	06	39
	Magnitude 6¾				
	JMA: 49½ N 157 E, 19:27:01, 60 km.				
29	P	eP"NEZ		04	32 28
		e		33	13
	R	iP"		32	24
		e		34	15
	Pr	iP"		32	19
	Bt	iP"			14
	Kg	eP"			42
	USCGS: 58 S 46½ W, 04:13:35				
29	P	eP	07	28	35
	R	eP			37
	Pr	iP			41
	Bt	eP			46
		e			57
	Kg	eP			33
	USCGS: 27 N 141 E, 07:16:07				
29	P	iP	09	27	52d
		ePP		31	34
	PX	eE		38	00
		iSN			12
		eGE		50	.0
		iREZ		53	.2
			A		T
		PZ	2		3
		PH	1¼		6
		PPZ	2		6
		MH	15		20
	R	iP	09	27	54d
		ePP		31	17
		iS		38	28
	Hf	iPN		27	58
	Pr	iP			59d
		i		28	07
		ePP		31	17

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s	
November		(continued)				
29	Bt	iP	09	28	01	d
		i			09	
		ePP		31	25	
		iSE		38	15	
	Kg	iP		27	44	d
		i			52	
	Magnitude 6¾					
	JMA: 27 N 142 E,					
	09:15:22, 60 - 80 km.					
29	R	eP	10	04	04	
	BCIS: Bonin Islands,					
	09:51.5					
29	P	iP	14	48	57	
	R	eP			55	
	Hf	ePN		49	11	
	Bt	eP			10	
	Kg	eP		48	49	
		e		49	03	
	USCGS: 27½ N 141½ E,					
	14:36:20					
30	P	iPEZ	11	41	38	
	R	iP			39	
	Pr	iP			39	
	Bt	eP			38	
	Kg	eP			38	
	BCIS: Tonga region,					
	11:29.5					
30	P	eP	13	29	25	
	D	eP			22	
	Pr	eP			13	
30	P	iP	16	46	14	
	R	iP			17	
	Hf	ePN			30	
	Pr	eP			28	
	Bt	eP			35	
	Kg	eP		45	56	
		e		46	19	
	USCGS: Near north coast					
	of Vancouver Island,					
	16:42:03					
30	P	iP	17	03	18	
	R	eP			19	
		e			32	
	Hf	ePN			28	
	Pr	iP			20	
		i			29	
	Bt	eP			17	
	Kg	eP			15	
	USCGS: 20½ S 174½ W,					
	16:51:28					
30	P	eP	17	29	28	
	R	eP			32	
	Bt	eP			45	
		e			51	
	Kg	eP			11	
30	MW	eP	17	46	10	
	D	e			20	
	R	eP			08	
		e			20	
	Hf	ePN			27	
	Pr	eP			13	
		i			21	

Date	Sta.	Phase	h	m	s	
November						
30	P	iP	19	42	31	d
		ipP		43	04	
	R	iP		42	28	d
		ipP		43	01	
	Hf	iPN		42	22	
	Pr	iP			24	d
		ipP			57	
	Bt	iP			21	d
		ipP			54	
	Kg	iP			40	d
		ipP		43	12	
	USCGS: 31½ S 70 W,					
	19:30:34, 150 km.					
30	W	e	22	52	51	
	BCIS: Mid-Atlantic					
December						
1	P	iP	07	56	46	d
		ipP		57	00	
	R	iP		56	48	d
	Hf	iPN			56	
	Pr	iP			49	d
		ipP		57	03	
	Bt	iP		56	48	d
	Kg	eP			45	
		epP			57	
	W	iP			46	d
		ipP			58	
	USCGS: 22 S 169 E,					
	07:43:51					
1	P	eP	14	12	29	
		i(S)		13	52	
	Kg	eP		12	04	
	SB	eP			10	
		iSNE		13	03	
	H	eP		12	19	
		i(S)		13	07	
	W	iP		12	06	
		i(S)			44	
	Magnitude 4.1					
	37 N 122 W, 14:11:25					
	Felt at Santa Cruz, etc.					
1	P	eP	16	45	19	
	Hf	eP			08	
	Pr	eP			05	
	Bt	eP		44	57	
	W	eP		45	34	
1	P	iPNEZ	21	35	53	c
		e		36	09	
		e			16	
	R	iP		35	48	c
		e		36	06	
	Hf	ePN		35	41	
	Pr	iP			45	c
		i		36	01	
	Bt	iP		35	41	c
		i			57	
	Kg	iP		36	05	c
		i			22	
	W	iP			02	c
		i			09	
	USCGS: 17½ S 72½ W,					
	21:24:54					

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s	
December						
2	P	eP	00	04	25	
	R	eP			27	
	Hf	ePN			33	
	Pr	eP			23	
		i			28	
	Bt	eP			27	
	W	eP			19	
		i			25	
2	P	iP	01	54	20	c
	R	iP			15	
	Hf	iPN			03	
	Pr	iP			11	
	Bt	eP			12	
	Kg	iP			32	c
	W	iP			26	c
		i			57	
	USCGS: 18½ N 69 W,					
	01:45:48					
2	MW	e	02	31	58	
	D	e		32	16	
	Pr	eP			05	
	Bt	eP			14	
	W	iP		31	40	
		i			48	
		i			54	
		i		32	10	
	BCIS: Fox Islands,					
	02:24.3					
2	P	eP	03	07	35	
		e			42	
		i			52	
	PX	eL		17.1		
	R	eP		07	39	
		i			46	
		i			53	
	Hf	ePN		08	07	
	Pr	iP		07	47	
		i			54	
		i		08	01	
	Bt	eP		07	51	
		i			58	
		i		08	05	
	Kg	eP		07	22	
		e			29	
		i			36	
	W	iP			22	
		i			30	
		i!			37	
	USCGS: 52½ N 169 W,					
	02:59:56					
2	R	e	06	06	05	
	Hf	eN			05	
	Pr	e			03	
	Bt	e			04	
	W	iP		05	46	
	USCGS: 27½ N 137½ E,					
	05:53:45, 300 km.					
2	P	ePNZ	16	24	51	
	PX	iL		31.4		
	R	eP		24	46	
		e		26	27	
	Hf	ePN		24	46	
	Pr	eP			40	

(continued)

Date	Sta.	Phase	h	m	s	
December		(continued)				
2	Bt	eP	16	24	34	
	Kg	eP		25	05	
	W	eP			03	
	Mexico?					
2	R	e	16	45	28	
	Pr	eP			11	
	Bt	eP			12	
	W	iP			08	
	USCGS: 17 S 173½ W,					
	16:33:36					
3	P	eP'	04	05	32	
		e			50	
	R	eP'			16	
		e			29	
	Hf	eN			32	
	Pr	eP'			16	
	Bt	eP'			18	
	Kg	eP'			33	
	W	eP'			34	
	BCIS: Indian Ocean, Prince					
	Edward Island region,					
	03:45.5					
3	P	eP	07	20	27	
	R	eP			31	
	Hf	eN		21	02	
	Pr	eP		20	33	
	Bt	eP			36	
	Kg	eP			14	
	W	iP			08	
		i			12	
	USCGS: 53 N 169 W,					
	07:12:44					
3	P	eP	07	27	45	
		iNEZ			51	
	PX	iSE		33	51	
		eGN		36.9		
			A		T	
		PZ	0.3		2	
		PH	0.3		2	
		SH	¾		4	
		MH	10		20	
	R	eP	07	27	49	
		i			55	
		eS		34	09	
	Hf	ePN		28	01	
	Pr	eP		27	56	
		i		28	03	
		i			10	
	Bt	eP			01	
		i			07	
		iSE		34	21	
	Kg	eP		27	32	
		i			38	
	Magnitude 6½ - 6¾					
	USCGS: 53½ N 169 W,					
	07:20:08					
3	P	ePNEZ	07	52	32	
		e		55	12	
	R	eP		52	36	
		e		55	16	
	Hf	eN		52	57	
	Pr	eP			44	
		e		55	07	

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
3	Bt	eP	07	52	49
		e			55
		e		55	12
	Kg	eP		52	19
		e		54	42
	W	iP		52	19
		i			26
	USCGS: 52½ N 169 W, 07:44:55				
3	P	eP	08	00	19
	R	eP			31
		e			38
	Pr	eP			31
	Bt	eP			42
	W	iP			07
	BCIS: Fox Islands, 07:52:44				
3	D	eP	10	40	23
	Pr	eP			28
		e			49
	Bt	eP			29
	Kg	eP			10
	BCIS: Aleutians				
3	Pr	e(P)	21	04	38
	Bt	e(P)			47
	W	iP			03
	USCGS: Fox Islands aftershock, 20:56:40				
4	P	iP	08	54	52
		ipP		55	05
	R	eP		54	56
		epP		55	09
	Hf	ePN			03
	Pr	eP			01
	Bt	eP			04
	Kg	iP		54	43
		i			55
	W	iP			40
		i			57
	USCGS: 50 N 156 E, 08:44:28				
4	Pr	e	09	00	47
	Bt	e		01	03
	W	iP		00	40
		i		01	06
	USCGS: Kurile Islands aftershock, 08:50:25				
4	P	iPNEZ	10	20	07d
		iPP		23	11
	PX	iSN		30	16
		iSSN		35	.0
		eRNZ		45	.8
			A		T
		PZ	1¼		4
		PH	1½		3
		SH	¾		5
		MH	3½		20
		MZ	2½		20
	R	iP	10	20	04d
	Hf	ePN			03
	Pr	iP			02d
	Bt	iP		19	57d

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
4	Kg	iP	10	20	14d
	W	iP			14d
	CL	iP			14d
	T	iP			22d
	Magnitude 6¼ - 6½ USCGS: 45½ S 106 W, 10:07:54				
4	P	eP	10	49	48
		i		50	10
	PX	iLN		59	.1
			A		T
		PZ	0.1		2
	R	eP	10	49	52
		i		50	15
	Pr	eP		49	58
		i		50	21
	Bt	eP			03
		e			22
	Kg	i		49	57
	W	iP			33
		i			50
	CL	eP			43
		e		50	01
	T	eP		49	33
	USCGS: 53 N 169 W, 10:42:10				
4	P	iP	13	32	34d
	R	iP			35
	Hf	ePN			43
	Pr	iP			37d
	Bt	eP			35
	Kg	eP			34
	W	iP			36d
		e			49
	CL	eP			44
	USCGS: Samoa Islands, 13:21:07				
4	P	iP	21	13	03
	R	eP			05
	Pr	eP			09
	Bt	eP			11
	W	iP		12	55
		i		13	03
	USCGS: 26 N 127 E, 20:59:52, 100 km.				
4	D	e	22	32	16
	R	eP		31	09
		e		32	15
	Pr	eP		31	11
		e		32	16
	Bt	e			16
	W	iP		31	06
		e		32	11
4	P	iPNZ	23	07	38d
		i			55
		epPNZ		08	07
		iPP			41
		ePcP		10	35
	PX	iSNE		12	38
		esSNZ		13	12
	P	eScP		14	12
	PX	i(G)N		14	.8
		eSSN		15	.5
		e(R)Z		17	.6

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
4	P	iScSNEZ	23	18	14
			A		T
		PZ	0.4		2
		PH	0.1		1½
		SH	1¼		4
		MH	5		20
		MZ	2½		20
	R	iP	23	07	33
		i			50
		ipP			55
		eE		08	48
		iPcP		10	36
		eSE		12	23
		eScP		14	10
		eScSEZ		18	05
	Hf	iPN		07	21
		epPN			52
	Pr	iP			25
		i			44
		ipP		08	02
		iPP			21
		iPcP		10	35
	Bt	iP		07	22
		i			39
		iNE		08	53
		iPcP		10	33
		iSNE		12	08
		esSNE			42
	Kg	eP		07	54
		e		08	10
		iPcP		10	44
	W	iP		07	49
		i		08	07
		iPcP		10	41
		eS		12	59
		iScP		14	19
		eScS		18	25
		e			45
	T	iP		07	55
		i		08	13
		i			21
		iPcP		10	44
		iSNE		13	07
		iScSNE		18	22
	Magnitude 6 BCIS: 15 N 92½ W, 23:01:32, 100 km.				
5	P	eP	01	58	51
	R	eP			45
	Pr	eP			42
	Bt	eP			38
	W	iP			59
	USCGS: Near coast of southern Peru 01:47:56				
5	P	ePNZ	05	28	54
		e		29	29
	R	eP		28	48
		e		29	14
	Pr	eP		28	40
	Bt	eP			33
	Kg	eP		29	12
	W	iP			10
	BCIS: 18¾ N 104½ W, 05:24:25				

Date	Sta.	Phase	h	m	s
December					
5	P	iP	18	06	48
		iSEZ		07	55
	Kg	iP		06	30
		i			42
		iS		07	24
	W	iP		06	11
		i			19
		iS		07	05
	H	iP		06	12
		iSEZ			54
	T	iP		05	50
		iSEZ		06	23
	Magnitude 4.4 Nevada				
6	W	iP	01	58	39
		i			52
	CL	eP			44
	BCIS: South Pacific				
7	D	eP"	14	49	37
	R	eP"			34
	Hf	eP"N			45
	Bt	eP"			41
	Kg	eP"			34
	W	iP"			34
	CL	eP"			38
	USCGS: Southeastern Sumatra, 14:30:33, 100 km.				
8	P	eP	03	40	55
	R	iP			46
	Pr	eP			47
	Bt	iP			43
	Kg	eP		41	03
	W	iP			02
	BCIS: Argentine-Chile region, 03:29.9, 150 km.				
8	P	iP	16	18	57
		i		19	03
	PX	iSN		25	44
		iSSN		27	09
		iGN		28	.8
		iRZ		31	.8
			A		T
		PZ	0.3		1
		PH	½		2½
		SH	1½		5
		MH	20		20
		MZ	15		18
	R	eP	16	19	01
		iSE		25	52
		eGE		29	.1
	Hf	iPN		19	03
		eSN		26	10
	Pr	iP		19	08
		i			16
		i			30
		i			54
	Bt	iP		19	12
		i			18
		iSE		26	12
	Kg	eP		18	43
		e		23	39
	W	iP		18	44
	CL	iP			53
		i		19	19

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Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
8	T	iP	16	18	42
		i			58
		iS		25	45
		Magnitude 6½			
		BCIS: 51¾ N 179 W,			
		16:10:26			
8	D	e	16	25	05
	Pr	i			23
	Bt	iP		24	35
		i			47
		i		25	21
	Kg	eP		24	14
	W	iP			14
		i			48
	CL	e			25
	T	e			18
		BCIS: 51¾ N 179 W,			
		16:16:30			
9	D	e	05	26	49
	Bt	e		27	08
	Kg	eP		26	34
	W	iP			32
	T	eP			32
		USCGS: 53 N 169 W,			
		05:19:06			
9	P	iP	17	10	54c
	Pr	iP		11	03c
	Bt	iP			07c
	Kg	iP		10	43c
	W	iP!			43c
	CL	iP			48c
		e		11	14
	T	iP		10	40c
		BCIS: 52¾ N 160 E,			
		17:00:49			
10	P	eP	17	01	43
	PX	eLN		30.5	
	Hf	ePN		01	41
		eN			57
	Pr	eP			53
	Bt	eP			52
	W	iP			24
		i			42
	CL	e			46
	T	e			28
		USCGS: 5 S 152 E,			
		16:48:21, 60 km.			
10	P	eP	18	06	17
	Pr	eP			02
	Bt	e			36
	Kg	eP			03
	W	iP		05	59
10	P	iP	23	26	50d
		i		27	05
	Hf	iPN		26	39
		iN			50
	Pr	iP			42d
		i			57
	Bt	iP			38d
		i			52
	Kg	iP		27	00d
	W	iP!		26	58d
		i		27	08
	CL	iP		26	54d

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
10	T	iP	23	27	01d
		BCIS: 23½ S 67¾ W,			
		23:15:05			
11	P	eP	06	41	22
		epP			36
	Hf	eN			52
	Pr	eP			32
		epP			45
	Bt	eP			36
		epP			48
	Kg	eP			19
		epP			34
	W	iP			12
		ipP			27
	CL	e			18
	T	e			36
		USCGS: 50 N 156 E,			
		06:30:58			
12	P	eP	10	33	03
	Bt	iP			10
	W	iP		32	58
		USCGS: 13½ N 144½ E,			
		10:20:26, 200 km.			
12	W	eP	21	06	41
		USCGS: Formosa			
		20:53:15, 150 km.			
13	P	iPNZ	13	16	43d
		iSN		17	49
	R	ePNEZ		16	45
		iSE		17	34
	Hf	iPN		16	24
	Pr	iP			25d
	Bt	iPNZ!			17d
		iSN			52
	BB	iP			37
		iS		17	37
		Magnitude 5.9			
		USCGS: 31 N 115 W,			
		13:15:37			
13	P	iPNEZ	19	47	31
		ipP			46
	R	iP			33
		ipP			48
	Hf	ePN			41
	Pr	iP			36
		ipP			51
	Bt	eP			37
		e			49
	Kg	iP			24
		ipP			39
	W	iP			25
		ipP			40
	CL	iP			31
		ipP			45
	T	eP			36
		epP			50
		USCGS: 12 N 143 E,			
		19:34:24			
13	D	eP	22	05	30
	R	eP			33
	Pr	eP			34
	Bt	e			50
	Kg	eP			12
	W	iP			11
	T	eP			01

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Date	Sta.	Phase	h	m	s
December					
14	D	e	15	24	57
		e		25	47
	Pr	e			48
	Bt	e		24	57
		e		25	33
	W	e			54
	CL	e			48
14	R	eP	19	37	18
	Pr	eP			24
		epP			44
	Bt	e			26
	W	iP			23
		ipP			44
	CL	eP			29
		epP			49
	T	e		38	00
		Apia: 22 S 176 W,			
		19:25.5, 100 km.			
14	D	eP	19	59	59
	R	iP			59
	Pr	iP	20	00	01
	Bt	eP			01
	Kg	eP	19	59	53
	W	iP			56d
	CL	iP	20	00	01
	T	e			16
		BCIS: Solomon Islands region,			
		19:47.7, 100 km.			
15	P	eP	09	10	40
	PX	eSN		16	20
		eN		19.2	
	R	eP		10	36
	Hf	ePN			26
	Pr	iP			30
	Bt	eP			25
	Kg	eP			47
	CL	eP			49
	T	e		11	03
		USCGS: About 300 miles north of Galapagos Islands,			
		09:03:30			
15	P	iP	17	36	49c
		ipP		37	28
		isP			44
		iE		40	08
		ePP			46
		e			55
	PX	iSN		47	10
		isSN		48	16
		iSSN		53.7	
		eGN		59.5	
		eRZ	18	03.6	
			A		T
		PZ	½		1½
		PH	0.1		1½
		pPZ	¾		2
	R	iPEZ	17	36	52c
		ipPEZ		37	30
		ePP		40	53
	Hf	ePN		36	56
		ipPN		37	37
	Pr	iP		36	53c
		ipP		37	32

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
15	Bt	iP	17	36	53c
		ipP		37	32
	Kg	eP		36	45
		ipP		37	25
	W	iP		36	49c
		ipP		37	27
		iPP		40	49
	CL	iP		36	55c
		i		37	02
		ipP			33
		ePP		40	44
	T	iPNEZ		36	55c
		ipP		37	33
		iSN		48	27
		Magnitude 6-6¼			
		USCGS: 13 S 167½ E,			
		17:24:24, 150 km.			
15	P	iP	20	18	03
	R	eP			06
	Pr	iP			06
	Bt	eP			05
	W	iP			05
	CL	iP			09
	T	eP			12
		BCIS: Tonga region,			
		20:05.5			
15	D	eP	23	21	24
	Pr	eP			16
	Kg	e(P)			40
	W	iP			35
		USCGS: 6½ N 78 W,			
		23:12:55			
16	P	iP	00	03	50d
	R	iP			54d
	Pr	iP		04	01d
	Bt	iP			05d
	Kg	eP		03	37
	W	iP			38d
	CL	iP			44d
	T	eP			35
		BCIS: Aleutians?			
16	P	iPNEZ	01	50	25c
		ipP			45
		iNZ		51	15
		iPPNEZ		52	16
	PX	iSE		57	17
		iScSN	02	00	06
		iLNE		03.8	
			A		T
		PZ	2		3
		PH	1		3
		PPH	¾		5
		SH	2		4
		MH	8		30
	R	iPEZ	01	50	19c
		ipP			43
		ePP		52	01
		iSE		57	03
		iScS	02	00	13
	Hf	iP	01	50	07
	Pr	iP			14c
		ipP			39
	Bt	iP			10c
		ipP			33

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
16	Bt	iSNE	01	56	52
		eScS	02	00	07
	Kg	iP	01	50	37c
	W	iP			32c
		ipP			54
		iPP		52	01
	CL	iP		50	26c
		i			33
		ipP			46
		ePP		52	23
	T	iP		50	36
		ePP		52	31
		iSN		57	39
		iScSN	02	00	20
	Magnitude 6½				
	BCIS: 6¾ N 77½ W,				
	01:41:51				
16	P	eP	06	41	38
	R	eP			39
	Hf	eN		44	43
	Pr	e			40
	Bt	eP		41	38
		e		44	41
	W	i			29
16	P	eP	18	54	50
	Pr	eP		55	01
	Bt	eP			04
	W	iP		54	36
16	P	eP	22	19	16
	R	eP			17
	Hf	eN			24
	Pr	iP			18
		i			34
	Bt	eP			16
	W	iP			19c
		i			35
	USCGS: Kermadec Islands,				
	22:06:45				
18	P	eP	02	26	27
		e			36
	Hf	eN			50
	Bt	eP			25
		e			48
	Kg	eP			32
	CL	e(P)			37
	T	eP			34
	USCGS: Bonin Islands,				
	02:14:12				
18	P	iPNEZ	02	42	49c
		ipPNEZ		43	02
	PX	iSNEZ		52	24
		iSSNEZ		57	16
		iSSSN	03	00	04
		eGNE		02.7	
		e(R)Z		03.5	
	P	eP'P'		09	32
		e		10	18

		A	T
	PZ	1	1
	PH	¾	1
	SH	15	7
	MH	50	20
	MZ	50	20

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
18	R	iP	02	42	44c
		ipP			57
		iSE		52	17
		eP'P'	03	09	37
	Hf	iPN	02	42	38
		iN			49
	Pr	iP			39c
		ipP			52
		eS		52	10
		eP'P'	03	09	25
		e			53
	Bt	iP	02	42	36c
		ipP			50
		iS		52	05
		eP'P'	03	09	43
		e		10	07
	Kg	iP	02	42	58c
		ipP		43	13
		eS		52	41
		eP'P'	03	10	18
	CL	iP	02	42	51c
		ipP!		43	07
		eS		52	37
		eP'P'	03	10	17
	T	iP	02	43	00c
		ipP			15
		iSN		52	45
		eP'P'	03	10	16
	Pasadena: 25½ S 71 W,				
	02:31:03				
	Magnitude m = 6.9 (M = 7.0)				
	USCGS: 25½ S 68½ W,				
	02:31:00				
18	P	eP'	19	40	17
		ePP		45	14
	PX	eSKSZ		48	13
		iPPPZ		49	52
		iSSN	20	06	17
		iSSSZ		12.9	
		eRZ		38.4	
	R	eP'	19	40	16
		e		41	24
		ePP		45	14
		ePPP		49	51
	Hf	eP'N		40	21
		eN		41	36
	Pr	eP'		40	18
		e		41	25
		ePP		45	21
	Bt	eP'		40	17
		e		41	25
		ePP		45	19
	Kg	eP'		40	22
	CL	eP'			16
		e		41	22
		ePP		45	11
	T	e		40	49
	USCGS: 36 S 77 E,				
	19:20:06				
18	P	iP	21	24	57c
		i		25	27
	R	iP			00c
		e			10

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
18	Hf	iPN	21	25	08
	Pr	iP			04c
		e			24
	Bt	i			06c
		e			24
	Kg	iP		24	48
		e		25	20
	CL	iP		24	53c
		e		25	21
	T	iP		24	48
	JMA: 35.6 N 139.2 E,				
	21:12:57, 120 km.				
19	P	iPNEZ	01	28	27c
		ipPNEZ			40
	PX	eLN		43.4	
	R	iP		28	29c
		ipP			43
		i		29	00
	Hf	iPN		28	38
		ipPN			52
	Pr	iP			35c
		ipP			50
		i		29	05
	Bt	iP		28	38c
		ipP			53
		i		29	03
	Kg	iP		28	14c
		ipP			29
		i			43
	CL	iP			21c
		ipP			35
	T	iP			13c
		ipP			27
	USCGS: 51½ N 157 E,				
	01:18:10				
19	P	iPNEZ	04	48	02d
		ipP		49	44
	R	iP		48	03d
	Hf	iPN			12
	Pr	iP			08d
	Bt	iP			11d
		epP		50	02
	Kg	iP		47	53d
		epP		49	31
	CL	iP		48	00
	T	iP		47	54d
	JMA: 28 2/3 N 140 E,				
	04:36:13, 450 km.				
20	P	eNEZ	04	01	06
	R	e			03
	Hf	eN			10
	Pr	e			23
	Bt	e			38
	W	iP	03	59	06
		iS	04	00	17
	CL	eP	03	59	00
		eS	04	00	06
	BCIS: Nevada,				
	03:57.5				
20	P	iPNEZ	11	12	20
	PX	iSN		22	44
		iGN		33.8	
		eRZ		37.4	

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
20			A		T
		PZ	0.1		1
		PH	0.1		1
		MH	15		20
	R	iP	11	12	21
	Hf	ePN			31
	Pr	iP			21
	Bt	iP			19
	Kg	eP			19
	W	iP			22
		i			44
		i		13	10
	CL	iP		12	27
		i			59
	T	eP			30
	Magnitude 6½				
	USCGS: 27 S 176 W,				
	10:59:56				
20	P	iPNEZ	19	58	47d
	R	iP			51d
	Hf	iPN			58
	Pr	iP			55d
	Bt	iP			59d
	W	iP!			47d
	CL	iP			42d
	T	iP			39d
	USCGS: 46 N 150 E,				
	19:47:51				
	JMA: 45½ N 151½ E,				
	19:48:05, 120 km.				
20	P	eP"	21	33	02
		eSKP		36	22
		e			44
	R	eP"		33	00
		eSKP		36	24
	Hf	eP"N		33	03
		eSKPN		36	28
	Pr	eP"		32	59
		eSKP		36	25
		e			42
	Bt	eP"		33	02
		eSKP		36	29
	Kg	eP"		32	53
		eSKP		36	16
		e			33
	W	iP"		32	55
		iSKP		36	17
		e			33
	CL	eP"		32	57
		iSKP		36	21
		e			39
	T	eSKP			17
	BCIS: 4.5 S 101.5 E,				
	21:13:39				
21	P	e(P)	00	07	42
		e		08	07
	R	e(P)		07	39
	Hf	eN		08	01
	Pr	e(P)		07	36
		e			56
	Bt	e(P)			43
		e		08	00

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
21	W	iP	00	07	18
		i			22
		i			28
	CL	e			30
	T	e			27
	USCGS: 54 N 161½ E,				
	23:57:36				
21	R	eP	07	34	30
	Pr	eP			30
	Bt	eP			27
	W	iP			41d
	CL	eP			36
21	P	iPNEZ!	09	03	26c
	PX	iSNEZ		07	10
		eGE		07.8	
		eRZ		08.1	
			A		T
		PZ	8		3
		PH	10		5
		SH	30		8
		MH	180		16
		MH	70		12
		MZ	170		20
	R	iPNEZ!	09	03	28c
		i		04	07
		eSE		07	19
	Hf	iPN!		03	38c
		iN		05	54
		iN		08	00
	Pr	iP!		03	37c
	Bt	iP!			44c
		i		05	36
		iSNE!		07	19
	Kg	iP		03	06c
		i		05	23
		i		07	30
	W	iP!		03	05c
		i			32
		iS		06	35
	CL	iP!		03	11c
	T	iPNEZ			08c
		iSNZ		06	34
		i		07	58
	Magnitude 6¾				
	USCGS: 51 N 131 W,				
	08:58:53				
21	Bt	eP	10	44	05
		e			19
	W	iP		43	52
	JMA: 33.7 N 139.5 E,				
	10:31:31				
21	R	eP	18	23	29
		epP			42
	Hf	ePN			21
		eN			50
	Bt	eP			29
		epP			45
	Kg	e			25
	W	iP			11
		i			19
	CL	eP			15
		epP			26
	JMA: 33.8 N 139.5 E,				
	18:11:04				
21	P	iP	20	22	24
		ipP			32

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
21	PX	eRNZ	20	47.0	
	R	eP		22	25
	Bt	e			46
	Kg	eP			18
	W	iP			10
		i			24
	CL	eP			15
	T	e			19
	JMA: 33.8 N 140 E,				
	20:10:05				
21	D	e	20	55	57
	R	e			59
		i		56	04
	Bt	e			15
	W	iP		55	36
22	P	iP	22	50	49c
		i		51	00
		i			07
	PX	iSN	23	01	22
		iGN		13.0	
		eRNZ		16.8	
	Hf	ePN	22	50	56
		iN		51	15
	Pr	iP		50	51c
		i		51	03
		i			08
	Bt	iP		50	49c
		i		51	00
		i			07
	Kg	eP		50	48
		e		51	06
	W	iP		50	53c
		i		51	06
		i			10
	CL	iP		50	57c
		i		51	09
	USCGS: 29½ S 177 W,				
	22:38:12				
22	P	iP	23	24	52
	PX	iGN		46.2	
		iRNZ		49.3	
	Hf	eN		24	53
	Pr	eP			57
	Bt	eP		25	01
	Kg	eP		24	42
		e			51
	W	iP			43
		i			55
	CL	eP			46
	JMA: 33.7 N 139.5 E,				
	23:12:36				
23	W	iP	02	25	37
	Mexico				
23	P	iPNEZ	08	49	52d
		i			57
		ipP		50	18
	PX	iSNEZ	09	00	03
		eGN		11.7	
		eRZ		15.2	
			A		T
		PZ	0.4		1.2
		PH	0.2		1
		SH	1		4
	Hf	iPN	08	50	02
		ePPN		53	23

(continued)

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December		(continued)			
23	Pr	iP	08	49	57d
		ipP		50	25
		ePP		53	13
		e			34
	Bt	iP		50	00d
		ipP			23
		ePP		53	17
	Kg	iP		49	44d
		ePP		52	53
	W	iP!		49	45d
		ipP		50	10
		iPP		52	55
		i		53	26
	CL	iP		49	51d
		i		50	03
		ipP			18
		ePP		53	04
	Magnitude 6½				
	USCGS: 22 N 144½ E,				
	08:37:26, 100 km.				
23	P	iP	19	00	20
	R	eP			21
	Pr	eP			29
	Bt	eP			33
	W	iP!			09c
	CL	eP			13
24	P	iP	04	41	42
	R	eP			37
	Hf	ePN			33
	Pr	iP			31
	Bt	eP			27
	Kg	eP			57
	W	iP			54d
		iPcP		43	57
	CL	eP		41	44
	USCGS: Costa Rica - Nicaragua border region,				
	04:34:20				
24	W	eP	18	52	42
		e		56	56
	USCGS: 10 N 127 E,				
	18:38:53				
25	D	eP	03	09	31
		e			48
	W	iP			30
	CL	eP			24
	USCGS: 48½ N 28 W,				
	02:58:48				
25	P	e(P)	04	41	25
		e		42	18
	R	e(P)		41	34
		e		42	20
	Pr	i(P)		41	30
	Bt	e(P)			31
		e		42	19
	Kg	e(P)		41	36
	W	iP			29
		i		42	20
	CL	eP		41	35
		e		42	28
	USCGS: 20 S 176 W,				
	04:29:49, 200 km.				
25	D	eP	06	38	24
	R	eP			22
	Hf	iN			54

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
25	Bt	eP	06	38	14
	Kg	e			40
	W	iP			34
	CL	eP			35
25	P	iPNEZ	09	44	20c
		iPP		46	42
		iPPP		48	19
	PX	iSE		53	02
		iSSN		57	16
		iGN	10	00.1	
		iRNZ		03.1	
			A		T
		PZ	0.3		1.8
		PH	0.4		3
		SH	1		6
		MH	12		20
		MZ	12		20
	R	eP	09	44	18
		ePP		46	42
	Hf	ePN		44	19
	Pr	iP			21
	Bt	iP			21
		e		46	23
		ePPP		48	21
		e			46
		eSNE		53	10
	Kg	eP		44	19
	W	iP			16
		i		45	17
		i			58
	CL	iP		44	12c
		i			18
		e		45	54
		ePP		46	39
	Magnitude 6½				
	BCIS: 48¾ N 27¾ W,				
	09:33:36				
25	P	eP	13	49	07
	D	e			25
		e			50
	Hf	eN			32
	W	iP			11
		i			23
	CL	eP			16
		e			29
	BCIS: Tonga region,				
	13:36.6				
26	P	eP	05	36	44
	R	eP			46
	Bt	e			59
	W	iP			28
	CL	eP			31
26	P	eP"	07	53	29
	Bt	eP"			32
	W	eP"			27
	BCIS: 9 S 112¼ E,				
	07:34:22				
26	P	iPNEZ	07	58	58
		i		59	09
	PX	iSNZ	08	09	29
		iPSZ		10	31
		iPPSN			39
		iGN		21.5	
		eRZ		24.2	

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
26			A		T
		PZ	0.1		1½
		MH	3½		20
		MZ	2½		20
	R	iP	07	59	01
		i			10
	Hf	iPN			09
	Pr	iP			03
		i			11
	Bt	eP			02
		eSE	08	10	44
	Kg	eP	07	58	55
		e		59	04
	W	iP		58	56
		i		59	05
		i			18
	CL	iP			02
		e			12
	Magnitude 6				
	BCIS: 10 S 166 E,				
	07:46:25				
26	P	e	19	12	50
		e			59
	Hf	eN		15	54
	Pr	iP		12	07
		i			19
	Bt	e		15	43
	W	iP		12	59
		i		15	47
	CL	eP		12	53
	Mexico				
27	P	iP	00	25	58d
		i		26	17
		ipP			54
		isPNZ!		27	17
		i		28	34
	PX	iPPZ		29	11
		iSNE!		35	51
		iSPN		36.8	
		isSE		37	10
		iNE		38.0	
		e(SS)E		41.0	
		esSSN		42.5	
	P	iPKKP		44	53
	PX	iG		47	
		e		52	
	P	e(P'P')		52	53
		e(SKPP')		56	27
	PX	eG2	02	11	
		eG3	03	14	
			A		T
		PZ	2		1
		PH	1		1
		sPZ	7		6
		sPH	4		5
		SH	40		15
	R	iPNEZ	00	26	02
		i			23
		iPP		29	13
		iSE		35	57
		eP'P'		52	54
		e(SKPP')		56	05
	Hf	iPN		26	09
		iN			28

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
27	Hf	iN	00	28	48
		iPPN		29	34
		iSN		36	10
		eP'P'N		52	52
		e(SKPP')N		56	15
	Pr	iP		26	02d
		i			47
	Bt	iP		25	59d
		i		26	21
		ipP		27	02
		isP			16
		iSNEZ		36	00
		eSP			52
		eP'P'		52	55
		e		53	25
		e(SKPP')		56	02
	Kg	iP		25	58
		i		26	20
		eS		36	01
		eP'P'		52	50
	W	iP!		26	01d
		iPP		29	29
		iSEZ		35	59
		i		36	27
		eP'P'		52	45
		e(SKPP')		56	46
	CL	iP		26	06d
		i		28	10
		iPP		29	25
		eS		36	02
		eP'P'		53	53
		e(SKPP')		56	36
	T	iPNEZ		26	09d
		ipP		27	08
		iPP		29	35
		eS		36	04
		eP'P'		52	54
		e(SKPP')		56	16
	Pasadena: 23¼ S 176¾ W,				
	00:14:11, 240 km.				
	Magnitude m = 7.0 (M = 7.1)				
27	P	iPNEZ	14	20	30
	R	eP			32
	Pr	iP			33
	Bt	eP			31
	W	iP			31
	CL	eP			36
	T	eP			37
	Apia: Tonga region,				
	14:09.3				
27	PX	eLZ	22	19.6	
	Bt	e	21	50	05
	W	eP		45	44
		e		49	04
		e		50	01
	USCGS: 7½ N 126 E,				
	21:31:28				
28	R	eP	13	44	54
	Pr	iP			56
	Bt	eP			54
	W	iP			52
	Is	iP			53

Date	Sta.	Phase	h	m	s
December					
28	P	eP	14	37	47c
		ipP		38	25
		isP			49
		ePP		41	33
		epPP		42	10
		ePPP		43	36
	PX	iSN		48	27
		iGNE	15	02	59
		iRZ		04.8	
			A		T
		PZ	0.1		1
		SH	2		6
		MH	15		20
	R	iP	14	37	48c
		ipP		38	27
		ePP		41	38
		epPP		42	12
		i(S)E		49	06
		i			39
	Hf	ePN		37	58
		epPN		38	35
		eSN		49	12
	Pr	iP		37	50c
		ipP		38	28
		ipPP		42	19
	Bt	iP		37	47c
		ipP		38	26
		epPP		42	15
		iSNE		49	03
	Kg	eP		37	48c
		ipP		38	26
		epPP		42	10
	W	iP		37	50c
		ipP		38	28
		iPP		41	38
		ipPP		42	15
	Is	iP		37	49c
		ipP		38	29
		ePP		41	30
		epPP		42	17
	CL	iP		37	54c
		ipP		38	32
		iPP		41	43
		ipPP		42	23
	Pasadena: 38 S 177½ E,				
	14:24:40, 150 km.				
	Magnitude m = 6½				
28	P	eP	16	38	39
	R	eP			41
	Pr	eP			41
	Bt	eP			39
	W	iP			43
	CL	eP			37
28	P	iP	19	25	11c
		e			27
	PX	iGE		28.2	
		iSNE		28	24
		iLgZ		29	07
		eRZ		29.3	
	R	eP		25	06c
		i			12
		eLgE		29.0	

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
28	Hf	ePN	19	24	54
		iN		25	02
		eLgN		29.3	
	Pr	iP		24	56
		i		25	01
		eLg		39.3	
	Bt	iP		24	47c
		i		25	06
		e(Lg)		28	04
	Kg	iP		25	35
		i			59
	W	iP			32
		i			41
		e(Lg)		30	04
	Is	iP		25	30
		i			47
		e(Lg)		29	45
	CL	iP		25	28
		i			49
		e(Lg)		29	43
		e		30	38
	T	iPNEZ		25	44
		i		26	11
		e(Lg)		29	17
		e		30	56
	USCGS: 21 N 109 W,				
	19:21:30				
28	P	eP	21	23	42
	PX	eGN		42.5	
		eRZ		46.0	
	R	eP		23	45
	Pr	eP			46
	Bt	eP			45
	Kg	eP			41
	W	iP			44
		i			54
	Is	iP			46
	CL	eP			51
	T	eP			51
	USCGS: 15½ S 176 W,				
	21:12:02				
29	P	eP	03	53	34
		epP			55
	R	eP			38
		epP			58
	Pr	eP			41
		epP		54	01
	Bt	epP			02
	W	eP		53	32
		epP			53
	Is	eP			35
		epP			56
	CL	epP			59
	USCGS: 5½ S 151½ E,				
	03:40:21, 60 km.				
29	R	e	05	22	19
	Pr	eP			01
		e			18
	W	iP			01
		e			20
		e		23	22
	Is	eP		22	03
	BCIS: Tonga region,				
	05:10:34				

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December					
29	P	eP	07	04	30
	R	eP			34
	Pr	eP			37
	Bt	eP			37
	W	iP			28
	Is	eP			30
	CL	eP			35
	T	eP			37
	USCGS: 5½ S 151½ E, 06:51:08				
29	P	iP	09	47	22
	R	eP			25
	Hf	ePN			34
	Pr	iP			31
	Bt	eP			34
	Kg	iP			11
	W	iP			12d
		ipP			26
	Is	iP			12
	CL	eP			17
	T	eP			09
	BCIS: 51¼ N 158½ E, 09:37:14				
29	P	iPNEZ	19	38	31c
		ipP		40	40
	R	iP		38	34c
		epP		40	43
	Hf	iPN		38	40
		epPN		40	50
	Pr	iP		38	34c
		ipP		40	44
		e		41	49
	Bt	iP		38	32c
		epP		40	41
	Kg	eP		38	41
	W	iP!			38c
		ipP		40	47
	Is	iP		38	35c
		ipP		40	43
	CL	iP		38	39c
		epP		40	49
	T	iP		38	40c
		epP		40	50
	USCGS: 21 S 180, 19:27:16, 600 km.				
29	P	eP'	20	10	47
	W	eP'		10	48
	USCGS: Near south coast of Java, 19:51:49, 150 km.				
29	P	ePEZ	20	34	12
		ePP		37	33
	PX	iSNE		44	04
		iPPSNEZ		45	03
		iSSNE		49	04
		iSSSN		52.5	
		iGN		54.2	
		iRZ		59.3	
			A		T
		PZ	0.1		1
		PH	0.1		1
		PPZ	½		3
		SH	1		4½
		MH	7		20

(continued)

Date	Sta.	Phase	h	m	s
December		(continued)			
29	R	eP	20	34	14
		eSE		44	32
	Hf	ePN		34	23
		eN		35	28
	Pr	iP		34	14
		i			56
	Bt	eP			12
	Kg	eP			10
	W	iP			15
	Is	iP			16
	CL	eP			21
	T	eP			21
		iSNE		44	25
	Magnitude 6¼ - 6⅝				
	USCGS: 21 S 175½ W, 20:22:12				
30	P	eP	09	50	45
	R	iP			48c
	Hf	ePN			55
	Pr	iP			53c
	Bt	eP			55
	Kg	eP			37
	W	iP			38c
		i			56
	Is	iP			40
	CL	eP			43
	T	eP			39
	BCIS: 31 N 140½ E, 09:38:28				
30	P	eP'	22	17	52
	Pr	iP'			54
	Bt	eP'			55
	W	iP'			47
	Is	eP'			49
	USCGS: 24 N 94½ E, 21:59:06				
31	PX	eL	01	02.5	
	Pr	e	00	48	53
	W	iP			26
	Is	eP			27
31	P	eP	01	39	52
	R	eP			54
	Pr	iP			55c
	W	iP			54c
	Is	iP			55c
	CL	eP			59
31	P	e(P)	03	09	10
	R	e(P)			10
	Pr	e(P)			01
	Bt	e			21
	W	i(P)			00
	Is	e(P)			03
31	P	e	03	31	34
	R	e			45
	Pr	e			44
	Bt	e			38
	W	e			44
	Is	e			46
	CL	e			50
31	R	e	04	32	59
	Pr	e			55
	Bt	e			57
	W	e			50
	Is	e			52
	CL	e		33	02

Pasadena and auxiliary stations, 1956 No. 4

Date	Sta.	Phase	h	m	s
December					
31	R	eP	04	50	35
	Pr	eP			36
	W	iP			34
	Is	eP			35
31	P	eP	04	53	41
	Pr	eP			45
	Bt	eP			48
		e			56
	W	iP			31
	Is	iP			33
	USCGS: 72 N 16½ E, 04:42:29				
31	P	eP	09	05	01
		eNZ			15
		iSN		06	17
	R	eP		04	49
		i		05	08
		iS		06	02
	Hf	ePN		04	34
		iN			59
	Pr	eP			37
		i			52
		iS		05	38
	Bt	iPNZ		04	28
		iNZ			41
		iSNZ		05	18
	USCGS: 31 N 114 W, 09:03:40				
31	P	eP	17	37	33
		iSN		38	28
	Kg	eP		37	13
	W	eSE			35
	Is	eP			01
		iS			39
	CL	iP			06
		eS			45
	T	iP		36	41
		iSNEZ		37	01
	USCGS: Nevada foreshock, 17:36:15				

Date	Sta.	Phase	h	m	s
December					
31	P	iPNZ	17	38	59
		iSE		39	56
	SB	iP		38	54
		iSNEZ		39	51
	Kg	iP		38	41
		iS		39	20
	FT	iP		38	48
		iS		39	32
	W	iPE		38	32
		iSE		39	04
	Is	iP		38	32
		iS		39	06
	CL	iP		38	34
		iS		39	07
	T	iPEZ!		38	10
		iSE			28
	Nevada USCGS: 38½ N 119 W, 17:37:46				
31	P	iP	17	40	41
		iSNE		41	34
	Kg	i(P)		40	18
		i(S)			50
	Is	iPNZ			11
		iSN			44
	CL	i(P)			10
		i(S)			59
	T	iPNE		39	50
		iSN		40	05
	USCGS: 39 N 119 W, 17:39:38				

C. F. Richter
Violet M. Taylor
June 22, 1959

Revised determinations for 1956

The following epicenters, origin times, focal depths h in km. and magnitudes m were determined from all available data by Professor B. Gutenberg. Values of m were based on both body and surface waves. Tabulated values of M are derived from these by the formula

$$M = 1.59\ m - 4.0$$

Date	Time	Lat.	Long.	Depth	M	m
1956 Jan. 8	20:54:16	19 S	70½ W	40±	7.1	7.0
Jan. 10	08:52:38	25½ S	175½ W	Normal	7.3	7.1
Jan. 16	23:37:40	½ S	80½ W	Normal	7.3	7.1
Feb. 1	13:41:46	18¾ N	145½ E	370	7.0	6.9
Feb. 18	07:34:22	30 N	137½ E	480	7.3±	7.1±
May 23	20:48:28	15 S	179 W	430	7½	7¼
June 9	23:13:52	35 N	67½ E	Normal	7.6	7.3
July 9	03:11:40	37 N	26 E	Normal	7.8	7.4
July 16	15:07:07	22¼ N	96 E	Normal	7.0	6.9
July 18	06:19:35	5½ S	130 E	190	7.5	7.2
Oct. 11	02:24:35	46 N	151 E	110	7.6	7.3
Oct. 24	14:42:11	11½ N	86½ W	Normal	7.3	7.1
Dec. 18	02:31:03	25½ S	71 W	Normal	7.0	6.9
Dec. 27	00:14:11	23¼ S	176¾ W	240	7.1	7.0