

RIGARD OBSERVATORY
UNIVERSITY OF SANTA CLARA
SANTA CLARA, CALIF.



January 1957.

2.	GW	cPZ cSN cLNN	00:46:29 00:52:19 00:56:20	Dil.	USCGS 53N 168 $\frac{1}{2}$ W
2.	GW	iPZ cSN MTN	02:24:55 02:30:26 02:35:02	Dil.	USCGS 52 $\frac{1}{2}$ N 168W
2.	GW	cPTN cSN cLNN	10:56:39 11:02:12 11:05:02		USCGS 52 $\frac{1}{2}$ N 168W
3.	GW	ME	00:58:25		USCGS 53N 168W
3.	GW	iPZ cSTNZ ME	12:59:18 13:08:15 13:17:33	Comp.	USCGS 44N 130E 600km
9.	GW	cPZ c MEZ MEZ	08:00:06 08:08:15 08:17:37		USCGS 53N 167 $\frac{1}{2}$ W
22.	GW	ME	13:10:17		
24.	GW	ME	07:50:55		USCGS 12 $\frac{1}{2}$ S 78W
24.	GW	cLE	05:07:42		
24.	GW	ME	16:39:06		USCGS 25 $\frac{1}{2}$ N 110W
24.	GW	cPTZ cLE	17:03:40 17:08:14		USCGS 25 $\frac{1}{2}$ N 109 $\frac{1}{2}$ W
24.	GW	ME	19:59:15		USCGS 20S 176 $\frac{1}{2}$ W
25.	GW	cPTZ cSN cLE	03:44:35 03:50:45 03:56:20		USCGS 52-N 177E
28.	GW	ME	08:50:04		USCGS 15 $\frac{1}{2}$ S 173W
29.	GW, W	cPTNZ iSTNZ	21:21:22 21:20:29		USCGS 36N 122 $\frac{1}{2}$ W
30.	GW	c E MEZ	16:01:37 16:19:40		USCGS 20 $\frac{1}{2}$ S 174W

by John A. Weber, SJ

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February 1957.

2.	GW	ME	12:28:17	USCGS 37N 141 $\frac{1}{2}$ E
3.	GW	c E ME	17:42:11 17:50:23	USCGS 53 $\frac{1}{2}$ N 159E
5.	GW	ME	05:25:27	USCGS 25 $\frac{1}{2}$ N 45 $\frac{1}{2}$ W
6.	GW	ME	13:29:08	USCGS 2N 91W
6.	GW	ME	21:23:21	USCGS 50N 166E
7.	GW	ME	16:39:26	USCGS 52 $\frac{1}{2}$ N 175W
9.	GW, W	c PTNZ c NZ c E	16:39:26 16:40:28 16:40:34	USCGS 41 $\frac{1}{2}$ N 126W
10.	GW	c E c LE	23:03:29 23:23:33	USCGS 10 $\frac{1}{2}$ N 126 $\frac{1}{2}$ E
11.	GW	c E c LE	01:41:54 02:02:06	USCGS 10N 126E
11.	GW	ME	15:20:48	USCGS 10N 126E
13.	GW	ME	01:23:11	USCGS 10N 126 $\frac{1}{2}$ E
17.	GW	c PEZ c LE	14:52:59 15:02:12	USCGS 16N 96 $\frac{1}{2}$ W 60km
18.	GW	ME	15:25:30	USCGS 25 $\frac{1}{2}$ N 45 $\frac{1}{2}$ W
23.	GW	c LE	21:10:29	USCGS 24N 122E

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March 1957.					
2.	GW	cPEZ c IE o IE o IE ME	00:35:37 00:42:04 00:45:29 00:52:29 00:56:16	Comp.	USCGS 18 $\frac{1}{2}$ N 78W
2.	GW	ME	08:55:17		USCGS 6S 151E
3.	GW	ME	03:33:38		USCGS 8 $\frac{1}{2}$ N 103W
4.	GW, W	cPN iSNZ	00:07:45 00:07:50		
5.	GW	cPZ cLE	12:55:11 13:01:10	Comp	USCGS 33N 34 $\frac{1}{2}$ W
8.	GW	cLE	13:05:14		
9.	GW	cPZ oSEEN	14:30:15 14:35:42		USCGS 51N 175"
9.	GW	cPZ iSE MZ	09:46:19 09:52:16 09:56:07	Comp.	
10.	GW	cPZ cSE MZ	03:13:44 03:19:46 03:26:51	Comp	USCGS 52N 176W
10.	GW	cSE ME	12:33:52 12:39:04		USCGS 52N 171W
10.	GW	cPZ iSE	15:33:50 15:39:49	Comp.	USCGS 52N 173W
10.	GW	ME	20:02:09		USCGS 52N 173W
12.	GW	cPEZ cSEEN cLE	03:20:36 03:26:50 03:30:15	Comp	USCGS 51N 177W
11.	GW	ME	00:26:22		USCGS 52N 174W
11.	GW	cPEENZ iSEENZ cLE	10:05:59 10:11:31 10:14:03	Comp.	USCGS 53N 164 $\frac{1}{2}$ W
11.	GW	cPEENZ iSEEN	15:03:16 15:09:31	D11	USCGS 51 $\frac{1}{2}$ N 176 $\frac{1}{2}$ W
12.	GW	cPZ cSE cLE	07:36:24 07:46:16 07:51:16	D11	USCGS 51 $\frac{1}{2}$ N 173 $\frac{1}{2}$ W

RECORDED OBSERVATORY
 UNIVERSITY OF SANTA CLARA
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March 1957, contd.

12.	GW	cPZ cSE ME	11:22:45 Dil. 11:29:12 11:32:36	USCGS 51N 177W
13.	GW	ME	00:06:04	USCGS 52N 174W
13.	GW	ME	03:06:12	USCGS 52N 171 $\frac{1}{2}$ W
13.	GW	ME	09:27:14	USCGS 52N 171 $\frac{1}{2}$ W
13.	GW	cPZ cSE MEZ	15:50:01 Comp 15:56:19 16:06:02	USCGS 51 $\frac{1}{2}$ N 179W
14.	GW	cPZ cSE MEZ	14:55:27 Dil. 15:01:32 15:07:09	USCGS 51 $\frac{1}{2}$ N 177W
15.	GW	cPZ cSE cLE	02:59:06 Comp 03:04:37 03:07:07	USCGS 53N 167W
16.	GW	cPEN cSE cME	02:12:19 02:18:35 02:21:38	USCGS 52N 179W
17.	GW	cPZ cSE cLE	08:01:52 08:08:11 08:14:22	USCGS 51N 179W
17.	GW	ME	16:33:09	USCGS 52 $\frac{1}{2}$ N 166W
17.	GW	cSE cLE	22:56:58 23:00:24	USCGS 54N 166W
18.	GW	ME	02:41:55	USCGS 52 $\frac{1}{2}$ N 171W
18.	GW	ME	05:28:05	USCGS 51 $\frac{1}{2}$ N 179W
18.	GW, W	cPENZ cSENZ	19:57:43 19:58:33	USCGS 34N 119 $\frac{1}{2}$ W
19.	GW	ME	11:49:20	USCGS 51 $\frac{1}{2}$ N 176 $\frac{1}{2}$ W
19.	GW	cPZ cSE cLE	12:58:32 Dil. 13:04:47 13:07:52	USCGS 51 $\frac{1}{2}$ N 175W
19.	GW	ME	15:42:30	USCGS 52N 172 $\frac{1}{2}$ W
20.	GW	ME	00:40:18	USCGS 53N 169W
20.	GW	ME	11:21:57	USCGS 52N 172W
21.	GW	cLE	09:04:13	USCGS 14 $\frac{1}{2}$ N 93W
21.	GW	ME	17:19:43	USCGS 51 $\frac{1}{2}$ N 177W

March 1957, contd.					
22.	GW	ME	09:54:39		USCGS
22.	GW	cPZ iSE cLE	14:27:58 15:03:20 15:05:40	D11	USCGS 54N 166W
22.	GW, W	iSENZ	18:48:46		Forshock San Francisco.
22.	GW, W	iPENZ	19:44:36		USCGS 37.9N 122.6W
22.	GW	cPENZ	20:14:48		aftershock, San Francisco.
23.	GW	cPENZ	00:27:12		aftershock, San Francisco.
23.	GW	cPZ cSE cLE	05:31:07 05:37:15 05:40:22	Comp.	
23.	GW	iSENZ	08:14:09		aftershock San Francisco.
23.	GW	iSENZ	12:24:52		aftershock San Francisco.
24.	GW	iPZ cSENZ ME	08:25:56 08:29:05 08:30:15	D11	USCGS 51N 130W
24.	GW	cPE cLE	11:14:25 11:23:05		USCGS 52 $\frac{1}{2}$ N 169 $\frac{1}{2}$ W
25.	GW	ME	01:01:25		USCGS 53N 168W
25.	GW	ME	14:29:27		USCGS 54N 165 $\frac{1}{2}$ W
25.	GW	cPE cSE ME	18:31:00 18:34:34 18:38:22		
26.	GW	ME	02:26:33		USCGS 54N 165 $\frac{1}{2}$ W
26.	GW	ME	03:22:48		USCGS 51N 177 $\frac{1}{2}$ W
26.	GW	ME	20:24:39		USCGS 51N 171 $\frac{1}{2}$ W
29.	GW	cPZ cSENZ cLE	05:17:26 05:22:54 05:25:19	Com	USCGS 53 $\frac{1}{2}$ N 167W
29.	GW	cLE	23:02:36 23:05:26		USCGS 53N 169W
30.	GW	ME	09:34:50		USCGS 52N 175W
31.	GW	ME	02:28:20		USCGS 43 $\frac{1}{2}$ N 127 $\frac{1}{2}$ W
31.	GW	ME	16:28:32		USCGS 51 $\frac{1}{2}$ N 178W

April
March 1957.

1.	GW	cLE	11:52:20	USCGS 51N 173W
2.	GW	ME	00:56:34	USCGS 51N 173W
2.	GW	cLE	20:33:14	USCGS 51 $\frac{1}{2}$ N 173W
2.	GW	cLE	21:44:47	USCGS 51N 173W
5.	GW	cPZ cSE cLE	02:57:01 Com 03:02:57 03:07:26	USCGS 52N 172 $\frac{1}{2}$ W
5.	GW	cPEZ ME	07:43:03 Di1 07:57:12	USCGS 26 $\frac{1}{2}$ S 177W
7.	GW	cLE	11:00:59	USCGS 1S 137 $\frac{1}{2}$ E
8.	GW	ME	20:42:56	USCGS 8 $\frac{1}{2}$ N 83W
9.	GW	ME	11:20:45	USCGS 51 $\frac{1}{2}$ N 178 $\frac{1}{2}$ W
9.	GW	cPEZ cLE	20:31:12 20:39:40	USCGS 52 $\frac{1}{2}$ N 169W
10.	GW	ME	03:39:57	USCGS 53N 168W
10.	GW	cPENZ cSE cLE	05:18:23 Di1 05:23:27 05:28:17	USCGS 15 $\frac{1}{2}$ N 98W
10.	GW	cPEZ ME	09:17:03 Di1. 09:28:05	USCGS 51N 177W
10.	GW	cPENZ ISE cLZ	11:35:54 Di1. 11:40:52 11:43:13	USCGS 56N 154W
11.	GW	ME	01:40:47	
11.	GW	ME	17:58:01	USCGS 52N 168 $\frac{1}{2}$ W
13.	GW	cPEN cSE ME	03:47:04 03:49:18 03:50:39	USCGS 48 $\frac{1}{2}$ N 128W
14.	GW	ME	01:11:17	
14.	GW	ME	07:12:14	
14.	GW	iPENZ cSENZ ME	19:29:23 Di1. 19:38:42 19:48:23	USCGS 15 $\frac{1}{2}$ S 173W
15.	GW	ME	10:57:32	USCGS 51 $\frac{1}{2}$ N 179W
15.	GW	c LE ME	20:48:07 20:50:04	

April 1957, contd.

16.	GW	iPZ i Z i E o E ME	04:22:02 D11 04:24:19 04:29:55 04:32:50 04:35:27	USCGS 4 $\frac{1}{2}$ S 107 $\frac{1}{2}$ E 600km
17.	GW	ME	09:45:45	USCGS 52 $\frac{1}{2}$ N 171W
17.	GW	ME	13:37:44	USCGS 52 $\frac{1}{2}$ N 169W
17.	GW	ME	15:26:22	USCGS 14 $\frac{1}{2}$ N 92W
19.	GW	oPZ oSE MEN	15:51:02 D11 15:57:37 16:00:50	USCGS 51 $\frac{1}{2}$ N 168 $\frac{1}{2}$ W
19.	GW	iPENZ oSE oLE	22:26:18 D11 22:31:40 22:34:01	USCGS 52N 166 $\frac{1}{2}$ W
20.	GW	oSE oLE	07:35:08 07:38:00	
20.	GW	oLE	13:14:22	
21.	GW	oPEZ oSE oLE	21:21:58 21:31:12 21:37:16	USCGS 7N 72W
24.	GW	oPZ o Z o E oLE	19:28:18 Comp 19:28:50 Com 19:43:02 19:56:44	USCGS 36N 28 $\frac{1}{2}$ E
25.	GW	oPZ o E oLE	02:43:42 Comp 02:57:42 03:13:46	USCGS 36 $\frac{1}{2}$ N 29E
25.	GW	ME	07:33:50	USCGS 52N 173 $\frac{1}{2}$ W
25.	GW	oPEZ iSE	21:59:40 22:01:29	USCGS 33N 115 $\frac{1}{2}$ W
25.	GW	oPE i E iSE	22:25:54 22:27:40 22:28:08	USCGS 33 $\frac{1}{2}$ N 115 $\frac{1}{2}$ W
28.	GW	oLE	02:11:02	USCGS 7N 127E
28.	GW	oLE	15:06:20	USCGS 52 $\frac{1}{2}$ N 168 $\frac{1}{2}$ W
28.	GW	iPENZ iSE	23:05:15 23:05:18	Com Felt San Jose, Calif.
29.	GW	ME	04:47:52	USCGS 52 $\frac{1}{2}$ N 168 $\frac{1}{2}$ W by John A. Weber, SJ

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May 1957.

1.	GW	ME	23:45:54	USCGS 52 $\frac{1}{2}$ N 171W
2.	GW	cPZ o E ME	06:03:43 Comp 06:10:37 06:18:33	
2.	GW	cPZ ME	11:46:00 Com 11:56:16	USCGS 52 $\frac{1}{2}$ N 169W
4.	GW	ME	10:54:10	
7.	GW	ME	05:58:32	USCGS 51 $\frac{1}{2}$ N 179 $\frac{1}{2}$ E
11.	GW	ME	07:51:01	USCGS 51 $\frac{1}{2}$ N 178 $\frac{1}{2}$ W
12.	GW	ME	12:04:12	USCGS 8 $\frac{1}{2}$ S 107 $\frac{1}{2}$ E
17.	GW	ME	20:52:31	
18.	GW	cPEZ cLE	05:31:18 05:40:12	USCGS 51N 171W
20.	GW	ME	02:11:45	USCGS 51N 180W
21.	GW	iPEZ cSEZ cLE	01:24:05 Di1 01:33:57 01:48:08	USCGS 21 $\frac{1}{2}$ N 144E 100km
22.	GW	cPENZ cSEEN cLE	13:37:34 Com 13:43:50 13:47:27	USCGS 50N 177W
24.	GW	cPZ cSE cME	02:47:05 Di1 02:54:43 03:05:32	USCGS 3N 76 $\frac{1}{2}$ W
24.	GW	cLE	03:52:37	USCGS 53N 167 $\frac{1}{2}$ W
26.	GW	cPZ o E cLE	06:51:20 Di1 07:05:37 07:18:08	USCGS 41N 31E
26.	GW	cPE cSEEN	16:01:41 16:02:51	USCGS 33N 115 $\frac{1}{2}$ W
29.	GW	ME	07:53:15	
30.	GW	cPZ ME	00:30:47 Di1 00:51:30	USCGS 20S 175W
31.	GW	ME	02:27:02	USCGS 50N 163W
31.	GW	cLE	22:38:00	USCGS 3 $\frac{1}{2}$ N 77W 100km

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Date	Station	Code	Time	Location
June 1957.				
3.	GW	cLE	00:02:19	
5.	GW	ME	07:47:51	USCGS 52 $\frac{1}{2}$ N 35W
10.	GW	cPEZ o E ME	01:20:10 01:25:34 01:36:35	
11.	GW	ME	04:20:45	USCGS 54N 165W
11.	GW	cPZ cSE cLE	15:02:20 Com 15:12:45 15:26:09	USCGS 30S 178W 100km
11.	GW	ME	19:31:23	USCGS 18N 120 $\frac{1}{2}$ E
12.	GW	cPZ cSE cLE	00:01:41 Com? 00:07:49 00:13:06	USCGS 52N 176W
13.	GW	cPZ cSE cLE	10:48:28 10:54:20 10:57:25	USCGS 52N 176W
14.	GW	cSE cLE	06:38:07 06:43:21	USCGS 52N 176W
15.	GW	cLE	18:34:14	USCGS 52N 171W
18.	GW	ME	15:52:40	
18.	GW	o E cSE cLE	18:09:16 18:21:20 18:38:10	USCGS 25S 170E
19.	GW	ME	02:06:22	USCGS 24S 175 $\frac{1}{2}$ W
19.	GW	cPZ cSE cLE	08:13:38 Dil 08:23:35 08:37:42	USCGS 16 $\frac{1}{2}$ S 176 $\frac{1}{2}$ E
21.	GW, W	cPE cSENZ	00:42:27 00:42:32	
22.	GW	cPZ cSE cLE	06:25:44 Dil. 06:31:01 06:35:42	USCGS 16N 94W
23.	GW	o Z o Z MEZ	00:04:07 00:14:59 00:35:52	USCGS 1 $\frac{1}{2}$ S 137E
24.	GW	ME	10:05:58	
27.	GW	iPENZ iSEN cLE	00:21:11 Dil 00:30:50 00:41:10	USCGS 56 $\frac{1}{2}$ N 116E
29.	GW	cLE	08:03:31	USCGS 51 $\frac{1}{2}$ N 166W

July 1957.

2.	GW	cPZ oS E cLE	01:01:09 Dil. USCGS 36N 63E 01:11:42 01:23:31
3.	GW	cPZ cSE ME	12:32:35 Comp USCGS 50 $\frac{1}{2}$ N 179W 12:39:12 12:45:03
4.	GW	cLE	22:30:30 USCGS 32N 113W
4.	GW	cLE	23:34:06 USCGS 31N 114W
5.	GW	cLE	01:02:43 USCGS 32N 114W
5.	GW	cPE cSE	12:42:27 USCGS 28 $\frac{1}{2}$ N 179W 12:52:51
7.	GW	ME	16:56:43 USCGS 6 $\frac{1}{2}$ S 156E
10.	GW	iPENZ cSE cLE	09:12:42 Comp USCGS 8N 82 $\frac{1}{2}$ W 09:19:33 09:28:07
10.	GW	ME	05:02:29 USCGS 52 $\frac{1}{2}$ N 170W
13.	GW	cLE	01:15:50 USCGS 52N 169 $\frac{1}{2}$ W
14.	GW	iPZ cSE ME	06:36:04 Dil USCGS 27 $\frac{1}{2}$ S 177W 200km 06:46:08 06:58:20
14.	GW	iPZ cSE cLE	08:23:24 Com USCGS 30S 177W 08:34:12 08:49:22
15.	GW	ME	23:27:33 USCGS 29N 70E
17.	GW	cPZ c E ME	11:22:37 USCGS 11S 167E 11:33:42 11:48:06
21.	GW	MZ	06:26:09 USCGS 14 $\frac{1}{2}$ N 82W 100km
21.	GW	ME	20:25:53 USCGS 28S 175W 150km
22.	GW	ME	06: 57:29 USCGS 34S 177 $\frac{1}{2}$ W
23.	GW	cPZ cSE cLE	00:52:38 Dil. USCGS 52 $\frac{1}{2}$ W 177W 00:59:12 01:04:20
24.	GW	ME	02:39:20 USCGS 30S 70 $\frac{1}{2}$ W

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July 1957, contd.				
24.	GW	cPZ	11:15:21 Comp	USCGS 20S 159E
		c E	11:26:36	
		cLE	11:41:44	
25.	GW	cSE	07:56:36	USCGS 52N 177W
		cLE	08:01:42	
26.	GW	ME	04:54:48	
28.	GW, W	iPENZ	08:46:18 D11. SE	USCGS 17N 99W
		iSEN	08:51:08	
29.	GW	ME	00:26:50	USCGS 17N 99W
29.	GW	iPZ	07:27:26 Comp.	USCGS 23½S 99W
		c E	17:37:05	
		c E	17:42:19	
		cLE	17:53:28	
August 1957.				
2.	GW	ME	22:31:29	USCGS 16N 97W
3.	GW	ME	09:01:52	USCGS 28S 176½W
4.	GW	cLE	01:23:19	USCGS 3½S 145E
4.	GW	c E	06:17:30	USCGS 17N 100W
		cLE	06:21:11	
4.	GW	cLE	11:42:52	USCGS 17N 99½W
4.	GW	cPZ	14:22:18 D11.	USCGS 17N 99½W
		cSE	14:27:16	
		cLE	14:30:53	
5.	GW	ME	17:55:27	USCGS Oaxaca, Mex.
8.	GW	cPE	04:49:45	USCGS Revilla Gigedo Isl.
		cSE	04:53:20	
		cLE	04:55:21	
9.	GW	cLE	03:25:24	
11.	GW	c E	22:02:15	USCGS 17½S 169E
		cLE	22:18:12	
13.	GW	ME	14:39:23	
13.	GW	cSENZ	23:14:27	

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August 1957, contd.

15.	GW, W	iSEN	09:03:19	Felt Coyote Dam, Calif.
17.	GW	cPENZ cSE cLE	00:38:22 D11 00:43:38 00:46:40	USCGS 10 $\frac{1}{2}$ N 104W
18.	GW	ME	07:19:06	
18.	GW	c E ME	09:07:57 09:24:54	USCGS 12N 124E
18.	GW	ME	10:56:35	USCGS 21 $\frac{1}{2}$ N 156W
18.	GW	c E cLE	21:25:31 21:33:06	USCGS 16 $\frac{1}{2}$ N 99W
18.	GW	cPZ cSE cLE	21:53:22 Com 22:00:40 22:09:23	USCGS 50N 157E
19.	GW	ME	12:24:27	USCGS 10S 161E
19.	GW	ME	21:49:25	USCGS 51 $\frac{1}{2}$ N 171W
20.	GW	ME	07:06:21	USCGS 10S 161E
20.	GW	c E ME	12:35:13 12:41:03	USCGS 10S 161E
21.	GW	cSEN	07:39:05	
21.	GW	ME	19:17:59	
23.	GW	c E c E cLE	02:11:33 02:23:20 02:40:36	USCGS 6S 154 $\frac{1}{2}$ E
23.	GW	ME	15:24:58	
26.	GW	iPZ c E cLE	11:40:55 Com 11:50:56 12:06:28	USCGS 19S 63W
26.	GW	cPZ c E cLE	14:08:26 14:15:58 14:28:08	USCGS 12S 81W
28.	GW	ME	09:00:58	USCGS 28 $\frac{1}{2}$ S 175W
28.	GW	ME	23:58:42	

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September 1957.

2 ₉	GW	ME	00:35:54	USCGS 18N 147 $\frac{1}{2}$ E
2 ₉	GW	ME	06:17:40	
2 ₉	GW	ME	10:16:15	USCGS 15S 173 $\frac{1}{2}$ W
2 ₉	GW	ME	14:35:38	USCGS 51 $\frac{1}{2}$ N 168W
3 ₀	GW, W	cPENZ iSENZ	05:19:28 05:19:36	
3 ₀	GW	c Z cLE	16:41:18 16:42:32	
4 ₀	GW	cSEW	05:01:38	
6 ₀	GW	ME	05:43:31	USCGS 51N 177W
7 ₀	GW	cPZ cSE cLE	09:14:47 Dil. 09:20:56 09:24:40	
9 ₀	GW	ME	01:24:11	USCGS 48S 100E
9 ₀	GW	ME	09:32:10	
12 ₀	GW	iPEZ ipPEZ cSE cLE	00:35:22 Com 00:35:45 Dil. 00:41:16 00:49:36	USCGS 17 $\frac{1}{2}$ N 85W
20 ₉	GW	ME	23:28:13	USCGS 52N 170 $\frac{1}{2}$ W
24 ₀	GW	cPZ c Z c E cSE ME	08:35:09 Comp 08:39:03 Comp. 08:46:22 08:48:50 09:07:46	USCGS 5 $\frac{1}{2}$ N 127 $\frac{1}{2}$ E
25 ₉	GW	ME	06:23:05	USCGS 34N 38 $\frac{1}{2}$ W
25 ₉	GW	ME	17:38:46	
25 ₉	GW	ME	23:16:48	USCGS 6N 127 $\frac{1}{2}$ E
26 ₉	GW	ME	08:21:57	
27 ₀	GW	ME	14:06:07:14	USCGS 53N 168W

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September 1957, Contd.

28.	GW	iPENZ	14:31:05 D11	USCGS 20 $\frac{1}{2}$ S 178W 650km
.		i EZ	14:31:26	
.		i EZ	14:33:08	
.		i EZ	14:34:13	
.		c E	14:34:48	
28.	GW	cPEN	15:17:20	
.		cSEN	15:17:32	
28.	GW	cPENZ	21:04:58 D11	USCGS 36 $\frac{1}{2}$ N 122W
.		iSENZ	21:05:11	
29.	GW	ME	08:34:37	USCGS 25S 178 $\frac{1}{2}$ E 600km

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October 1958.				
1.	GW	iSEN	12:56:29	
2.	GW	cPEZ c E ME	12:37:59 Comp 12:46:05 13:01:13	USCGS 11N 63W
4.	GW	cPEZ cSE cLE	05:36:06 Dil. 05:44:15 05:55:31	USCGS 11N 63W 60km
7.	GW	ME	05:26:42	USCGS 53½N 165W
7.	GW	ME	13:48:28	USCGS 51N 159E
10.	GW	ME	02:01:12	USCGS 52½N 169½W
10.	GW	ME	19:10:09	USCGS 54N 166W
13.	GW	c E ME	04:36:33 04:46:08	USCGS 52½N 160E
17.	GW	iSEnz	15:16:00	
17.	GW	c Z cLE	18:54:08 19:14:36	USCGS 23½N 122E
20.	GW	ME	12:43:41	USCGS 11½N 42W
23.	GW	cPE cSE cLE	06:04:10 06:09:38 06:13:42	USCGS 52½N 169½W
24.	GW	ME	00:56:12	USCGS 14½S 167½E
24.	GW	cPEZ cSE cLE	21:48:25 Dil. 21:51:35 21:52:39	USCGS 25N 109½W
25.	GW	ME	04:54:52	USCGS 52½N 169½W
25.	GW	cPEZ cSEN cLE	10:13:23 Comp. 10:21:18 10:30:13	
27.	GW	ME	22:49:30	USCGS 56N 161E
30.	GW	ME	02:29:59	USCGS 53N 167W
31.	GW, W	cPEnz iSEnz	02:48:34 Comp 02:49:03	USCGS 39N 123½W

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October 1957, contd.				
31.	GW	cPEZ cSE cLE	10:16:32 Comp 10:25:36 10:31:50	USCGS 6 $\frac{1}{2}$ N 83W
31.	GW	iPENZ iSENZ	19:47:14 Dil. 19:47:17	USCGS 37 $\frac{1}{2}$ N 122 $\frac{1}{2}$ W
November 1957.				
16.	GW	cLEH	23:51:16	
17.	GW	cLEZ	04:51:48	
17.	GW	cLEHZ	06:48:52	
18.	GW	ME	10:33:44	USCGS 51 $\frac{1}{2}$ N 179 $\frac{1}{2}$ W
20.	GW	cPZ cSEN cLEHZ	12:47:16 Comp 12:52:23 12:55:59	USCGS 54N 165W
22.	GW	ME	16:48:20	USCGS 22 $\frac{1}{2}$ S 172E
23.	GW	ME	01:14:57	USCGS 52N 172E
25.	GW	MENZ	18:59:17	USCGS 44N 130W
25.	GW	MENZ	20:36:01	USCGS 44 $\frac{1}{2}$ N 129 $\frac{1}{2}$ W
25.	GW	MENZ	22:21:25	USCGS 45N 130W
26.	GW	MENZ	11:54:33	USCGS 51 $\frac{1}{2}$ N 176W
28.	GW	ME	21:30:02	USCGS 15S 168 $\frac{1}{2}$ E
29.	GW	iPEZ iSE cLE	22:31:35 Dil 22:41:00 22:51:23	USCGS 21S 66W

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December 1957.				
1.	GW	ME	01:58:22	USCGS 47 $\frac{1}{2}$ N 153 $\frac{1}{2}$ W
9.	GW	cLE	22:24:43	USCGS 65 $\frac{1}{2}$ N 133W
10.	GW	cPEZ cSE cLE	15:01:59 15:01:54 15:17:52	USCGS 6S 154 $\frac{1}{2}$ E
11.	GW	MEZ	18:51:11	USCGS 30 $\frac{1}{2}$ N 142E
12.	GW	MEZ	19:17:29	USCGS 13 $\frac{1}{2}$ S 167E
13.	GW	cPEZ c E cLE	02:40:55 02:53:02 03:01:03	USCGS 34 $\frac{1}{2}$ N 48E
13.	GW	c E MEZ	20:41:02 20:46:15	USCGS 52 $\frac{1}{2}$ N 170W
16.	GW	cPEZ cSE ME	17:31:10 Comp 17:34:30 17:36:36	USCGS 50N 127W
17.	GW	cSE ME	05:27:29 05:37:40	USCGS 43 $\frac{1}{2}$ N 162E
17.	GW, W	iSEN	06:23:06	
17.	GW, W	iSEN	08:24:33	
17.	GW	cPEZ cSE ME	14:02:33 Dil. 14:07:08 14:13:30	USCGS 12S 167E
17.	GW, W	iPE iSE ME	15:02:33 15:13:31 15:28:03	
25.	GW	ME	17:00:42	USCGS 10 $\frac{1}{2}$ N 62 $\frac{1}{2}$ W
26.	GW	cBE cSE ME	12:22:30 12:23:40 12:25:47	USCGS 41 $\frac{1}{2}$ N 127W
31.	GW	ME	15:27:09	

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