STARTS IN APR

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA, CALIFORNIA

WILKES STATION, ANTARCTICA

BULLETIN

1957–1958

WILKES STATION, ANTARCTICA

1957 - 1958

Lat. S	Long. E	h	Ground
66° 20'	110° 31'	10m	Gneiss with pegmatite intrusions

Wilkes Station was established as part of the International Geophysical Year Antarctic Program. It is situated about 100 m from the sea on a peninsula of complex metamorphic and intrusive rocks extending from beneath the continental ice cap. The station is about 3 km from the ice cap, which is virtually stagnant in this area.

Instrumentation consists of a Press-Ewing 3-component seismograph, which is described in Press, Ewing, Lehner, A Long Period Seismograph System, Trans. Amer. Geophys. Union, 39, 106-108, 1958. Pendulum period is 15 seconds and galvanometer period 90 seconds. Drum rate is 15 mm/min. The horizontal seismometers are aligned to measure N-S and E-W motion.

Timing is provided by a radio-chronometer relay system that is corrected once or twice daily by time signals from WWV (Washington) or JJY (Tokyo).

The station was installed April 17, 1957 and readings are reported through January 25, 1958. During this period times of prominent phases were radioed to the USCGS, Washington, D. C. Communications should be addressed to the Seismological Laboratory, 220 North San Rafael Avenue, Pasadena 2, California.

Components are indicated as N, E, Z.
c = compression, d = dilatation.
All times are G. C. T.

Wilkes Station 1957

Date	Phase	h	m	s
April				
19	iPKSNEZ	22	42	23
	iSSNEZ		59	23
	eLZ		20.0	
	USCGS: 52 N 166½ W			
	22:19:26			
	Pasadena: Magnitude 7 - 7¼			
20	iPEZ	06	52	45
	eSNEZ		57	00
	eLNEZ		59.0	
	USCGS: 54½ S 148½ E			
	06:48:04			
20	iSNEZ	12	50	10
	eSSNEZ		54.0	
	eGNE		57.0	
	USCGS: 6 S 147½ E			
	12:30:37			
	Uppsala: Magnitude 6.6			
	Moscow: Magnitude 6			
May				
29	eLNEZ	08	14.0	
	USCGS: 4½ S 121 E			
	07:51:22			
30	iSNE	00	38	20
	eLNE		49.3	
	USCGS: 20 S 175 W			
	00:18:52			
June				
4	iSN	20	37	13
	eRNEZ		47.0	
	USCGS: 2½ S 101½ E			
	20:18:05			
	Matsushiro: Magnitude 5¼			
5	eLNE	22	44.5	
	eLZ		47.5	
	USCGS: 36 S 16 W			
	22:12:55			
10	iSNE	01	17	41
	iNE		18	25
	iNE		19	26
	iNE		20	23
	iSSSNE		23	55
	USCGS: 9 S 117 E			
	00:59:54			
	Pasadena: Magnitude 6¾			
11	iPE	14	59	10
	iSNE	15	06	46
	eLNE		13.3	
	USCGS: 30 S 178 W			
	14:49:47			
	Pasadena: Magnitude 6¾-7			
11	iPNZ	19	01	56
	iSNEZ		12	14
	USCGS: 18 N 120½ E			
	18:49:24			
	Uppsala: Magnitude 6.8			
13	ePPNZ	11	02	14
	iPKSNEZ		03	17
	iPPPNE		05	10
	eSKKSNEZ		09	14
	ePSNEZ		12	23
	ePPSNZ		14	00
	i		19	27

(continued)

Date	Phase	h	m	s
June	(continued)			
13	eLNE	11	34.5	
	eRNEZ		40.0	
	USCGS: 51½ N 175 W			
	10:40:38			
	Pasadena: Magnitude 7			
15	iPNEZ	00	52	38
	iSNZ		59	23
	eLNE	01	02.7	
	eRNEZ	01	05.1	
	USCGS: 34 S 56 E			
	00:44:15			
	Pasadena: Magnitude 6-6¼			
	Lwiro: Magnitude 6¼			
15	eLNZ	19	22.0	
	USCGS: 52 N 171 W			
	18:18:20			
17	eLNZ	06	51.0	
	USCGS: 15 S 173½ W			
	06:16:44			
18	iPNZ	02	24	31d
	iSN		34	38
	eLNZ		50.0	
	USCGS: 14½ N 96 E			
	02:12:12			
	Matsushiro: Magnitude 6½			
20	iSKSNE	01	29	54
	USCGS: 20 N 145½ E			
	01:06:25			
23	iPNEZ	00	01	24
	iSNE		10	12
	iSSSE		17	38
	eLNEZ		21.4	
	USCGS: 1½ S 137 E			
	23:50:23			
26	eSNEZ	02	06	20
	eGNE		13.5	
	eRNEZ		16.5	
	USCGS: 7½ S 85½ E			
	02:47:26			
27	iP'Z	00	28	27
	iPPNEZ		30	10
	iE		37	59
	iPSNZ		39	59
	eSSPNZ		47	08
	eSSSNZ		50.3	
	eGE	01	01.0	
	eRNEZ		06	
	USCGS: 56½ N 116 E			
	00:09:28			
	Pasadena: Magnitude 7½			
28	eLNEZ	01	02.5	
	BCIS: 22 S 171 E			
	00:34:07			
28	eLE	19	20	
	BCIS: 22 S 171 E			
	18:52:45			
July				
1	iSKSN	19	53	43
	iSNE		54	10
	iSSNE	20	00	15
	iSSSN		04	14
	eLE		07	13

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Wilkes Station 1957

Date	Phase	h	m	s	
July	(continued)				
1	eLNE	20	09.0		
	eLNE		12.5		
	USCGS: 25 N 94 E				
	19:30:16				
	Matsushiro: Magnitude 7¼				
2	iPPNE	01	01	31	
	iPPPE		03	59	
	i(S)NE		09	23	
	iPSNE		11	13	
	iSSN		17	07	
	iSSPE		17	23	
	eSSSE		21	36	
	eGNE		28.3		
	USCGS: 36 N 53 E				
	00:42:23				
	Pasadena: Magnitude 7¼-7½				
5	eLNE	16	08.3		
	eLNE		11.8		
	BCIS: 1½ S 26½ E				
	15:32:07				
	Matsushiro: Magnitude 6¼				
	Lwiro: Magnitude 5½				
7	iSNE	16	31	23	
	eLNE		40	12	
	USCGS: 6½ S 156 E				
	16:11:15				
12	eSNE	21	16	27	
	eLNE		24	14	
	USCGS: 3 S 148½ E				
	20:56:18				
12	eSE	22	18	55	
	eSSSE		26	32	
	iGNE		27	12	
	USCGS: 3 S 148½ E				
	21:58:45				
13	eSNE	09	52	36	
	eLNE	10	00.9		
	eLE		03	21	
	USCGS: 15 S 173 W				
	09:32:05				
14	ePcPNE	06	34	11	
	USCGS: 27½ S 177 W				
	06:23:50, 200 km.				
17	iPNE	11	20	56	
	iSNE		29	41	
	iPSNE		30	10	
	eSSE		34	02	
	eSSSN		37	04	
	eGNE		38.2		
	USCGS: 11 S 167 E				
	11:10:10				
	Pasadena: Magnitude 6¼-6½				
	Berkeley: Magnitude 6½				
17	eLNEZ	12	56.5		
	USCGS: 2 S 137 E				
	12:26:05				
21	iPEZ	06	03	43	
	iSNEZ		07	23	
	eLNE		07.4		
	eLNEZ		08.3		
	USCGS: 62½ S 154 E				
	05:59:13				
23	ePPZ	01	06	40	

(continued)

Date	Phase	h	m	s	
July	(continued)				
23	ePKSE	01	07	47	
	eSKSPNEZ		16	49	
	eSSNE		23	59	
	eSSSNEZ		29	36	
	eLNE		38.7		
	eLNEZ		44.2		
	USCGS: 52 N 177 W				
	00:45:12				
	Pasadena: Magnitude 6½				
23	eSNE	06	38	53	
	eLNE		45.6		
	eLNEZ		48.4		
	USCGS: 20½ S 170 E				
	06:20:43				
24	iPNZ	02	10	08c	
	eSNEZ		20	26	
	eSSN		26	01	
	eGE		32.8		
	eRNZ		36.1		
	USCGS: 30 S 70½ W				
	01:57:25				
	Pasadena: Magnitude 6½				
24	eSN	10	15	35	
	eLNE		22.8		
	eLNEZ		25.5		
	USCGS: 18 S 169½ E				
	09:56:58				
24	ePEZ	11	12	38	small
	iEZ		13	01	large
	eSNE		20	50	small
	iNE		21	10	large
	eLNE		27		
	eLZ		29		
	USCGS: 20 S 169 E				
	11:02:30				
	Pasadena, Matsushiro: Magnitude 6½				
24	eLNE	15	12		
	eLNEZ		14		
	USCGS: 3 S 134½ E				
	14:40:45				
26	eSN	07	05	40	
	USCGS: 35 S 180				
	06:49:42				
27	eLNE	19	11.0		
	eLNEZ		15.3		
	USCGS: 6½ S 151½ E				
	18:43:01				
28	eLNEZ	02	01		
	USCGS: 15 S 167½ E				
	01:30:52				
28	ePNZ	08	55	56d	
	ePKPZ		59	21	
	iPPNEZ	09	01	21	
	iPKSNEZ		02	42	
	iPPPNZ		04	03	
	eSKSNE		06	20	
	iSKKSN		08	12	
	ePSN		11	23	
	ePPSN		12	55	
	eSSN		18	33	
	eSSPE			52	
	eSSSNEZ		23	24	

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Wilkes Station 1957

Date	Phase	h	m	s
July	(continued)			
28	eLNEZ	09	40	
	Dilatation followed immediately by larger compression			
	USCGS: 17 N 99 W 08:40:04			
	Pasadena: Magnitude 7¼			
29	ePNZ	17	28	23
	iSNEZ		38	53
	ePSE		40	08
	iN		45	26
	iGE		52	25
	eRNZ			56.3
	USCGS: 23½ S 71½ W 17:15:14			
	Pasadena: Magnitude 7-7¼			
31	eSN	07	51	06
	eLNZ	08	00	0
	USCGS: 6½ S 105 E 07:32:39			
August				
2	eLNE	02	32	2
	eNEZ			34.4
	USCGS: 38 S 178 E 02:12:30			
3	eLNE	08	43	0
	eLNEZ			47.0
	USCGS: 28 S 176½ W 08:15:45			
4	eSE	00	59	09
	eLNE	01	07	6
	eNEZ			11.5
	USCGS: 3½ S 145 E 00:39:12			
4	ePZ	21	17	08
	iSNEZ		23	39
	eN			26.0
	eLNE			27.2
	iNEZ		28	56
	USCGS: 45 S 35 E 21:08:51			
	Quetta: Magnitude 7.1			
	Moscow: Magnitude 6			
7	eLNEZ	05	01	5
	BCIS: 19 S 170 E 04:36:22			
7	eSEZ	19	58	36
	eSSE	20	02	17
	USCGS: 17½ S 179 W 19:40:52, 550 km.			
8	eSNE	22	57	47
	eGNE	23	12	0
	eRNEZ			18.1
	USCGS: 7 S 13 W 22:33:05			
9	iPNZ	02	40	16d
	iSNEZ		49	08
	eGNE			57.1
	eRNEZ	03	00	0
	USCGS: 2 S 137 E 02:29:20			
	Matsushiro: Magnitude 7			

Date	Phase	h	m	s
August				
9	eLEZ	22	25	6
	BCIS: "Data Insufficient"			
10	iSNE	04	16	03
	eLNE			26.6
	USCGS: 17 S 172 W 03:55:46			
11	eLNEZ	05	34	3
	USCGS: 38½ S 177 E 05:12:40			
11	iSN	13	57	31
	iN		59	43
	eLNE			06.0
	eNEZ			09.0
	USCGS: 31½ S 177½ W 13:40:18			
11	ePEZ	21	48	31
	iSNEZ		56	42
	iGNE	22	03	31
	eRNEZ			07.0
	USCGS: 17½ S 169 E 21:38:05			
13	eN	12	35	5
	eLNE			39.0
	eLNEZ			43.1
15	iSNE	21	04	00
	eSSNE		08	00
	USCGS: 4½ S 155 E 20:45:20, 500 km.			
16	eSNE	03	46	01
	eSSN		50	35
	eLNEZ			58.4
	USCGS: 5 S 154 E 03:26:05			
16	eLNEZ	19	05	0
	BCIS: 2000 km. SE Easter Island 18:29.6			
16	ePPNZ	23	52	15
	eSKSN		57	45
	ePSNEZ	24	02	01
	ePPSNEZ		03	27
	eSSN		08	40
	eSSPNEZ		08	54
	eSSN		13	16
	eGNE			22.7
	eRNEZ			29.0
	USCGS: 10½ N 104 W 23:31:55			
	Pasadena, Berkeley: Magnitude 6½-6¾			
17	iSN	04	34	32
	eLE			38.0
	eRNZ			38.7
	BCIS: "Data discordant"			
18	ePNEZ	06	42	33
	iSNE		49	26
	eGNE			53.1
	eRNEZ			56.7
	USCGS: 57 S 142½ W 06:34:16			
18	ePNZ	08	49	05
	iSNE		59	00

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Wilkes Station 1957

Date	Phase	h	m	s
August (continued)				
18	eLNE	09	10.1	
	eLNEZ		14.0	
	USCGS: 12 N 124 E			
	08:36:57			
	Matsushiro: Magnitude 6¼			
23	iPN	02	11	05
	eSN		20	00
	eLN		28.5	
	eRNZ		31.8	
	USCGS: 6 S 154 E			
	02:00:05			
23	eSN	23	09	14
	eLNZ		18.7	
	USCGS: 7 S 112 E			
	22:51:10			
24	eLNEZ	15	14.4	
	BCIS: "Data insufficient"			
26	eSE	11	53	30
	ePSZ		54	54
	eSSNE	12	00	05
	USCGS: 19 S 63 W			
	11:28:50			
	Pasadena: Magnitude 6¼-6½			
26	eSKSN	14	24	04
	eE		25	53
	eSSNE		33	42
	eSSSNE		37	47
	eGE		44.5	
	eRNZ		49	
	BCIS: 2 S 81 W, 13:58:48			
	Pasadena: Magnitude 6			
26	eSNEZ	20	13	22
	eLNE		21.5	
	eRNEZ		25.8	
	USCGS: 5½ S 154 E			
	19:53:33, 100 km.			
28	iSNZ	08	36	11
	eLNEZ		45.0	
	USCGS: 28½ S 175 W			
	08:19:10			
28	eSN	23	46	20
	ePSNEZ		47	34
	eSSNEZ		52	25
	eGE	24	00.5	
	eRNEZ		04.5	
	USCGS: 21 N 145 E			
	23:22:21			
September				
2	iSNE	00	23	34
	eN		29	17
	eSSNE		29	40
	eE		36	19
	eLNEZ		47.5	
	USCGS: 18 N 147½ E			
	23:59:54			
2	eSN	05	56	50
	iLNE	06	03	50
	eLZ		04.7	
	BCIS: 19 S 174 E			
	05:38.3			
2	iSNE	10	07	04
	eLN		17.0	

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Date	Phase	h	m	s
September (continued)				
2	eLEZ	10	19.2	
	USCGS: 15 S 173½ W			
	09:46:30			
	Berkeley: Magnitude 6-6¼			
3	eLNEZ	06	37.8	
	USCGS: 12 S 167 E			
	06:06:42			
4	eSEZ	04	44	11
	iGE		45	32
	eRZ		46.5	
	BCIS: 42½ S 88½ E			
	04:33:51			
4	eSNE	22	28	01
	eLNE		31.4	
	eLNEZ		34.5	
	BCIS: "Data insufficient"			
5	iN	07	16	34
	eLNEZ		16.7	
5	eLNEZ	07	30.8	
	eLNEZ		55	
	BCIS: 21 S 33 E			
	07:17:04			
7	eSSNE	10	45	44
	eNE		50	04
	eSSSNE		50	34
	eLNE	11	00.3	
	eLNEZ		05.2	
	USCGS: 51½ N 178½ W			
	10:06:47			
9	iPEZ	00	17	59c
	eSEZ		21	36
	iREZ		22	16
	USCGS: 48 S 100 E			
	00:13:30			
10	eLEZ	09	34.0	
	USCGS: 15 S 176½ W			
	09:00:33			
11	eLEZ	15	01.0	
	USCGS: New Zealand			
	14:26:45			
11	eSSSZ	23	50	14
	eLZ		55.5	
	USCGS: 16 S 172 W			
	23:22:09			
12	eSSE	01	06	58
	eLE		21.8	
	eREZ		28.5	
	USCGS: 17½ N 85 W			
	00:28:02			
12	iZ	08	50	18
	eE		54	23
	eLEZ		54	58
14	eLN	06	44.7	
	USCGS: 4 S 130 E			
	06:13:20			
14	eLNEZ	12	47	
	BCIS: 500 km., NE Mac-			
	quarie Island			
	12:36.8			
15	iSNEZ	04	40	04
	esSNE		42	05
	eSSSE		47	21

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Wilkes Station 1957

Date	Phase	h	m	s
September (continued)				
15	USCGS: 5½ S 108 E			
	04:22:34, 300 km.			
17	eLEZ	14	46.8	
	USCGS: 36 S 55 E			
	14:24:05			
23	eLNEZ	09	52.9	
	USCGS: 6 S 131 E			
	09:22:36			
24	eP$_1$NEZ	08	32	38
	iP$_2$NEZ			51d
	iSNEZ		41	56
	eSSE		46	46
	eEZ		50.8	
	eLNEZ		55.6	
	eG$_2$E	10	19.5	
	USCGS: 5½ N 127½ E			
	08:21:05			
	Pasadena: Magnitude 7¾			
25	ePNZ	16	48	07
	iSNEZ		57	32
	eSSN	17	02	16
	eSSSNEZ		05	31
	eLNE		06.4	
	eNEZ		11.0	
	USCGS: 5½ N 127½ E			
	16:36:37			
	Uppsala: Magnitude 6			
25	iSNE	22	37	58
	eSSN		42	45
	eSSSNE		46.1	
	eLNEZ		53.2	
	USCGS: 6 N 127½ E			
	22:17:00			
25	eSNE	23	54	27
	eLNE	24	03.3	
	USCGS: 5½ N 127½ E			
	23:33:30			
26	eSNZ	19	07	47
	eLNZ		19.5	
	USCGS: 6 N 126½ E			
	18:46:41			
27	iPNZ	04	19	28
	iSNEZ		28	01
	eLNE		36	
	eLZ		39.5	
	USCGS: 1 S 127 E			
	04:08:23			
	Uppsala: Magnitude 6.2			
28	iSKSN	00	50	15
	eSSN		58	17
	USCGS: 30½ N 137½ E			
	00:27:31, 500 km.			
	Pasadena: Magnitude 6¾			
28	eNEZ	04	40.6	
	USCGS: 3 S 135½ E			
	04:11:23			
28	iPNZ	14	29	38d
	ipPZ		31	40
	isPZ		32	45
	isPPZ		35	03
	iSNEZ		37	26
	iScSNE		38	27
	(continued)			

Date	Phase	h	m	s
September (continued)				
28	isSNEZ	14	40	58
	isScSN		42	29
	iSSSNEZ		45	00
	iGNE		46	26
	USCGS: 20½ S 178 W			
	14:20:00, 650 km.			
	Pasadena: Magnitude 7½			
	Berkeley: Magnitude 7-7¼			
28	e(S)E	23	43	30
	eLNE		45.6	
	eNEZ		47.0	
	BCIS: "Data insufficient"			
29	eSNEZ	02	20	47
	eGNE		21.7	
	eRNEZ		23.5	
	USCGS: 64½ S 172½ W			
	02:08:55			
29	iSNE	08	29	44
	iScSNE		31	16
	isSN		33	12
	isScSN		35	05
	esSSN		36	46
	eGN		37	37
	USCGS: 25 S 178½ E			
	08:13:22, 600 km.			
	Berkeley: Magnitude 6¼			
October				
2	ePSNE	12	58	49
	eSSNE	13	05	33
	eSSSNE		10	25
	eLNE		21.3	
	eLNEZ		25.0	
	USCGS: 11 N 63 W			
	12:27:55			
	Pasadena: Magnitude 6½-6¾			
2	ePE	20	51	33
	iSNE		58	22
	iSSNEZ	21	01	41
	eGNE		03.1	
	eRNEZ		04.5	
	BCIS: 54½ S 5 E			
	20:42:52			
2	eSN	21	18	33
	USCGS: 6½ S 69½ E			
	20:58:39			
3	eSNEZ	06	17	27
	eLNE		25.5	
	eLNEZ		29.0	
	USCGS: 4 S 134 E			
	05:58:12			
4	ePPZ	05	46	54
	eSKKSNEZ		56	57
	iSSNE	06	03	48
	eSSSN		08.7	
	eGE		17.3	
	eRNZ		26	
	USCGS: 11 N 63 W			
	05:26:09, 60 km.			
	Pasadena: Magnitude 6¾			
	Berkeley: Magnitude 7			
6	eLNEZ	01	55	
	USCGS: 11 N 62½ W			
	00:54:05			

Wilkes Station 1957

Date	Phase	h	m	s
October				
15	eLNEZ	13	07	5
	eLNEZ		26	5
18	eLNEZ	19	36	3
	USCGS: 22 S 172 E			
	19:08:53			
19	iPNEZ	18	41	54c
	iPPNEZ		45	34
	iSNE		52	34
	eSSNE		58	40
	iG_1E	19	06	02
	eRNZ		10	4
	eG_2E	20	26	
	USCGS: 23½ N 122 E			
	18:28:50			
	Pasadena: Magnitude 6½-6¾			
20	ePSN	12	34	40
	ePPSNE		36	04
	eSSNE		41	30
	eSSSNE		45	53
	eGNE		55	02
	eRZ		59	6
	USCGS: 11½ N 42 W			
	12:04:22			
20	e(S)E	16	14	08
	eLNE		21	8
	BCIS: "Data discordant"			
21	iSN	00	37	11
	eLNE		48	2
	USCGS: 11 S 167 E			
	00:17:25			
23	ePKSNE	06	19	34
	eSSNEZ		36	11
	eSSSNEZ		41	04
	eGN		51	45
	eRNEZ		57	8
	USCGS: 52½ N 169½ W			
	06:56:52			
	Pasadena: Magnitude 6¼			
24	iPNEZ	00	28	12c
	iSNE		36	48
	Compression followed immediately by larger dilatation			
	USCGS: 14½ S 167½ E			
	00:17:37			
	Pasadena: Magnitude 6½			
24	epPZ	09	19	02
	esPZ		20	01
	iSNZ		25	06
	esSN		28	22
	eSSN		29	37
	esSSN		32	20
	USCGS: 20½ S 179 W			
	09:07:30, 550 km.			
25	ePPNZ	10	23	57
	ePSNZ		33	43
	eSSNEZ		40	40
	eSSSN		44	47
	eGN		53	22
	eRNEZ		58	2
	USCGS: 50½ N 156½ E			
	10:03:32			
	Pasadena: Magnitude 6¾			
	Berkeley: Magnitude 6½			

1957

Date	Phase	h	m	s
October				
25	eN	20	58	01
26	eSE	08	43	42
	esSE		47	08
	eSSSNE		51	21
	USCGS: 20½ S 178 W			
	08:26:12, 600 km.			
	Pasadena: Magnitude 6-6¼			
26	iSNEZ	14	36	13
	iLE		43	40
	eLEZ		47	2
	USCGS: 2 S 116 E			
	14:16:57			
	Uppsala: Magnitude 6.3			
26	eLE	17	47	17
	eLEZ		48	12
	BCIS: 2200 km., SW of Australia			
	17:39.7			
27	ePPEZ	22	53	27
	ePPSEZ	23	05	11
	eSSE		10	24
	eSSSE		15	20
	eLE		25	1
	USCGS: 56 N 161 E			
	22:32:25			
	Pasadena: Magnitude 6½-6¾			
30	eLNZ	08	32	2
	USCGS: 36 N 27½ E			
	07:30:20			
31	eLNZ	04	59	5
	USCGS: 8 S 161 E			
	04:24:04			
31	eSKSNZ	10	33	44
	ePSNZ		38	05
	eSKKPNZ		40	36
	eNZ			50
	eZ		44	26
	eSSNZ			43
	eN			57
	eN		48	43
	eSSSN		49	18
	eGN		57	58
	eLNZ	11	01	57
	USCGS: 6½ N 83 W			
	10:07:54			
	Berkeley: Magnitude 6¾			
31	iPNZ	15	33	54c
	iSN		37	42
	eRNZ		38	51
	USCGS: 55 S 148 E			
	15:29:10			
31	ePSNZ	16	53	32
	eSSN		59	54
	eSSSN	17	04	10
	eGN			11.9
	eRNZ			17.5
	USCGS: 1½ N 86 W			
	16:24:17			
	Tacubaya: Magnitude 5.8			
November				
2	iP_1NEZ	18	41	04c
	iP_2NE			17
	iPPE		43	25

(continued)

Wilkes Station 1957

Date	Phase	h	m	s
November	(continued)			
2	iSNEZ	18	49	36
	iSSNEZ		53	45
	eSSSN		56	53
	eGNE		57.3	
	eRNEZ		59.5	
	USCGS: 13 S 166½ E			
	18:30:24			
	Matsushiro: Magnitude 6¼			
3	iSN	10	44	16
	iSSN		48	26
	eLNE		51.8	
	eRZ		54	
	USCGS: 6 S 147 E			
	10:24:51			
	Matsushiro: Magnitude 5¾			
3	iSN	11	33	53
	eLNE		41.3	
	USCGS: 6½ S 147 E			
	11:14:30			
	Matsushiro: Magnitude 5¼-5½			
3	eLNE	23	12.2	
	eLZ		15.5	
7	eLNE	03	36.0	
	eLZ		38	
	USCGS: 24 S 112½ W			
	02:58:23			
7	iSNE	06	36	56
	eSSE		40	12
	iGNE		40	40
	USCGS: 57½ S 143½ W			
	06:21:58			
	Matsushiro: Magnitude 6			
8	eLNEZ	03	19	
	USCGS: 5½ S 155 E			
	02:46:22			
8	eLEZ	18	32	
9	eLNE	08	11.4	
	eLZ		13.1	
10	iPNEZ	02	47	17d
	iSNEZ		56	03
	iSSNEZ	03	00	20
	iGNE		03	58
	eLZ		06.6	
	USCGS: 7 S 155½ E			
	02:36:21			
	Matsushiro: Magnitude 6¼-6½			
10	eSNE	04	03	16
	eLNE		11.3	
	eLZ		15	
	USCGS: 7½ S 155½ E			
	03:43:39			
	Quetta: Magnitude 6.2			
10	ePNZ	05	59	40
	iSNE	06	08	19
	eLNE		16.2	
	eLZ		20	
	USCGS: 6½ S 147 E			
	05:48:57			
	Quetta: Magnitude 6.5			
10	iSSNEZ	19	53	01
	eGNE	20	02.5	
	eLZ		08.2	

(continued)

Date	Phase	h	m	s
November	(continued)			
10	USCGS: 34 N 139½ E			
	19:20:05			
	Matsushiro: Magnitude 6.6			
12	iSNEZ	01	51	12
	eLNEZ	02	00.9	
	eLZ		04.2	
	USCGS: 6 S 149½ E			
	01:31:40			
	Matsushiro: Magnitude 5¾			
12	iN	09	52	43
	eLNEZ	10	02.3	
	USCGS: 7½ S 128½ E			
	09:33:51			
13	eLNEZ	01	40	12
13	iPNE	17	31	58
	iPPE		34	01
	iSNE		39	25
	iScSN		41	39
	iSSN		43	12
	eG$_1$N		44	50
	eLE		46.8	
	eG$_2$NE	19	35	
	USCGS: 33 S 179 W			
	17:22:41			
	Pasadena: Magnitude 6½-6¾			
	Berkeley: Magnitude 6¾			
14	eSE	23	02	24
	BCIS: Prince Edward Island			
	22:47.4			
15	ePNZ	08	04	11
	iSNE		13	44
	iSSE		18	33
	iSSSNE		21	57
	eLNE		23.7	
	USCGS: 8½ N 124 E			
	07:52:25			
	Quetta: Magnitude 6.3			
15	ePSN	17	00	36
	eSSNE		07	47
	eLNE		21.2	
	eLNEZ		27	
	USCGS: 51½ N 158 E			
	16:30:29			
	Matsushiro: Magnitude 6¼			
16	eLNE	02	50.6	
	USCGS: 51½ N 177 W			
	01:48:48			
17	iSNE	16	01	41
	iSSNEZ		06	18
	iSSSE		09	27
	eRNZ		12.7	
	USCGS: 45 S 72 W			
	15:41:22			
17	eLNE	09	24.9	
18	eSSSE	10	51.2	
	eLN	11	11	
	USCGS: 51½ N 179½ W			
	10:12:00			
	Matsushiro: Magnitude 5¾-6			
19	iPNEZ	02	38	51c
	eSNEZ		42	26
	eLNEZ		43.3	

(continued)

Wilkes Station 1957

Date	Phase	h	m	s
November (continued)				
19	BCIS: 500 km., NW of Balleny Islands			
	02:34:15			
20	ePPEZ	13	02	27
	iPKSN		03	18
	iSKKSN		09	16
	iPPSNE		14	32
	eSSNE		20	31
	eSSSNE		25	35
	eGNE		37	.2
	eLZ		43	
	USCGS: 54 N 165 W			
	12:40:23			
	Berkeley: Magnitude 6¼-6½			
21	eSNE	05	31	17
	eLNE		39	
	eLZ		42	
	USCGS: ½ S 127½ E			
	05:11:33			
	Matsushiro: Magnitude 5¾			
21	eLNE	18	24	.3
	eLZ		31	
	USCGS: 3 S 130 E			
	17:57:21			
22	ePNE	16	16	31
	eLE		27	21
	USCGS: 22½ S 172½ E			
	16:05:35			
	Wellington: Magnitude 5.7			
22	eSNE	16	14	45
	BCIS: SW of South Island, New Zealand			
	16:03:02			
23	eLNEZ	02	03	
	USCGS: 53 N 167½ W			
	00:58:36			
23	eLNEZ	22	30	.5
	USCGS: 23 S 173 E			
	22:04:13			
24	eLNEZ	05	20	
	USCGS: East coast, New Guinea			
	04:44:52			
25	iPNZ	22	45	40c
	iPPZ		48	00
	iSNEZ		54	18
	iGE	23	01	46
	eRNZ		05	.0
	USCGS: 1½ S 116 E			
	22:35:00			
	Matsushiro: Magnitude 6½-6¾			
26	iPNEZ	05	20	40c
	iSNEZ		29	20
	iSSZ		33	26
	iGE		36	40
	eLZ		39	
	USCGS: 2 S 116 E			
	05:10:00			
	Matsushiro: Magnitude 6½			
26	eSSE	12	14	.6
	eLEZ		36	.5

(continued)

1957

Date	Phase	h	m	s
November (continued)				
26	USCGS: 51½ N 176 W			
	11:35:44			
	Quetta: Magnitude 6.5			
28	iPNEZ	21	00	44c
	iPPEZ		03	04
	iSNEZ		09	17
	iSSNEZ		13	21
	eGNE		16	.6
	eLZ		18	.7
	USCGS: 15 S 168½ E			
	20:50:10			
	Matsushiro: Magnitude 6¼			
29	iPNEZ	17	47	58c
	iSNE		51	33
	iRNEZ		52	23
	USCGS: 48½ S 124½ E			
	17:43:38			
29	iPNEZ	22	32	36d
	isPNEZ		33	35
	iPPNEZ		36	25
	isPPNEZ		37	19
	iSKSNEZ		42	37
	iSNEZ		43	10
	isSNEZ		44	41
	iSSNZ		50	05
	USCGS: 21 S 66 W			
	22:19:38, 200 km.			
	Pasadena: Magnitude 7¾-8			
	Berkeley: Magnitude 7½			
30	eLZE	22	57	
	USCGS: 47 N 154 E			
	21:54:10			
December				
4	eLNE	00	54	51
	eLZ		58	
	USCGS: 47 N 154 E			
	21:54:10			
4	iPNEZ	03	52	39c
	iPPNEZ		57	18
	iPPPZ		59	37
	iSKSN	04	03	14
	iPSZ		06	43
	iPPSZ		08	04
	iSSNE		12	51
	iSSSNEZ		17	00
	USCGS: 45½ N 99½ E			
	03:37:45			
	Pasadena: Magnitude 7.9			
	Berkeley: Magnitude 7¾-8			
6	eLNEZ	09	58	
	USCGS: 44½ N 150½ E			
	08:36:21			
9	eLNE	16	20	
	BCIS: New Hebrides			
	15:49:34			
10	iPNE	14	46	51
	iNE		49	36
	iSNE		55	42
	iSSNE		59	06
	eSSSN	15	03	02
	eLNE		04	

(continued)

Wilkes Station 1957

Date	Phase	h	m	s
December (continued)				
10	eLZ		15	06
	USCGS: 6 S 154½ E			
	14:35:57			
	Pasadena: Magnitude 6¾			
	Berkeley: Magnitude 6½-6¾			
10	eLNE		16	52
12	eLNEZ		10	16
	USCGS: 14½ S 167½ E			
	09:47:02			
12	iPEZ	18	48	57c
	iSNEZ		57	33
	iScSE		58	47
	iSSN	19	01	44
	eLNE			05.1
	eLZ			07.6
	USCGS: 13½ S 167 E			
	18:38:19			
	Matsushiro: Magnitude 6			
13	iSKSN	01	57	38
	eSPN	02	02	01
	eSSN			08.5
	eSSSN			13.0
	USCGS: 7 N 76 W			
	01:31:57, 100 km.			
	Pasadena: Magnitude 6¾			
13	eSKSN	02	10	13
	eSKKSN		11	12
	iN		12	04
	iPSN		13	48
	eSSN		19	46
	USCGS: 34½ N 48 E			
	01:44:59			
	Pasadena: Magnitude 7½			
17	iSSNE	05	48	11
	eSSSNE		52	47
	eGNE	06	02	07
	USCGS: 53½ N 162 E			
	05:10:11			
	Pasadena: Magnitude 6¾			
17	iPNE	14	00	56
	iSNE		09	30
	iSSE		13	59
	iSSSE		16	58
	USCGS: 12 S 167 E			
	13:50:05			
	Pasadena: Magnitude 7¾			
18	eLNE	21	10.4	
	USCGS: 60 S 28 W			
	20:44:53			
20	iPN	11	31	12
	iSNE		41	32
	iSSE		46	48
	eLE			53.1
	eLN	12	00	
	USCGS: 30½ S 71 W			
	11:18:42			
23	eSKSPE	13	07	07
	ePPSE		09	28
	eSSNE			16.3
	eLNE			38
	eLNE			42

(continued)

1957

Date	Phase	h	m	s
December (continued)				
23	USCGS: 35 N 36½ W			
	12:34:03			
	Uppsala: Magnitude 5.9			
25	ePSZ	16	56	39
	eSSNEZ	17	03	36
	eSSSNE		08	00
	eGE			17.6
	eRNZ			21.5
	BCIS: 10½ N 62½ W			
	16:26:01			
	Tacubaya: Magnitude 5.6			
26	eLZ		12	34
	USCGS: 32½ S 178 W			
	12:09:11			
28	eLN		15	25.3
	USCGS: 18 S 64½ W			
	14:36:40			
28	eN		19	31.5
	USCGS: 16 S 172 W			
	19:01:22			
31	iSNEZ	20	55	00
	iRNEZ		56	27
	South Indian Ocean			
31	iPNZ	21	21	08
	eSNEZ		25	08
	USCGS: 45 S 96½ E			
	21:16:03			

1958

January				
1	eLNEZ		03	06.5
4	eLNEZ		07	44.9
	USCGS: 31½ N 40½ W			
	06:39:45			
5	eLNEZ		12	31
	USCGS: 56½ N 121 E			
	11:30:44			
9	eLNE		18	40
	USCGS: 44½ N 85 E			
	17:39:24			
11	iPEZ	13	29	06d
	i(S)NEZ		37	07
	USCGS: 23½ S 177 W			
	13:18:47			
12	eLNEZ		16	01.5
	USCGS: 31½ N 41 W			
	14:55:09			
13	iSN	20	36	27
	eLNE			47.5
	eRNEZ			50
	USCGS: 11½ N 92½ E			
	20:14:27			
	Quetta: Magnitude 6.3			
	Matsushiro: Magnitude 6			
14	iPZ	06	05	26d
	iSNEZ		13	58
	eLNE			22
	eLZ			23.5
	USCGS: 22 S 175 W			
	05:54:48			
	Matsushiro: Magnitude 5¾-6			
15	iPNE	19	27	57
	iPPNE		31	49

(continued)

Wilkes Station 1958

Date	Phase	h	m	s
January (continued)				
15	iSKSNE	19	38	25
	eSSNE		45	40
	eGNE		54.5	
	USCGS: 16½ S 71½ W			
	19:14:29, 100 km.			
	Pasadena: Magnitude 7			
	Berkeley: Magnitude 6¾			
15	iPNE	22	26	29
	iE		28	29
	iSNE		35	03
	eSSNE		39.2	
	eGN		42.6	
	USCGS: 13½ S 167 E			
	22:15:44			
	Matsushiro: Magnitude 6¼-6½			
16	ePNEZ	11	14	09
	iSNEZ		22	45
	eLNE		30.2	
	eLNEZ		33	
	USCGS: 14 S 167 E			
	11:03:32			
17	iSNE	04	33	41
	eLNE		40.6	
	USCGS: 1 S 127 E			
	04:14:02			
	Matsushiro: Magnitude 6-6¼			
17	iPNEZ	07	20	17c
	iNEZ		21	30
	iSNEZ		24	05
	iRNEZ		25	18
	USCGS: 52 S 139½ E			
	07:15:38			
	Matsushiro: Magnitude 6½-6¾			
17	eLNEZ	17	22.0	
18	eSE	15	36	01
	eSSE		41	00
	eSSSE		44.2	
	eLE		45.8	
	USCGS: 29 S 13 W			
	15:14:26			
19	iPN	14	22	23
	iPPN		27	01
	iSN		34	46
	iPSN		36	37
	eSSN		42	45
	eScSScSN		46	44
	USCGS: 1½ N 79½ W			
	14:07:23			
	Pasadena, Berkeley: Magnitude 7½			
January				
24	ePPZ	05	15	14
	ePKSNEZ		16	23
	eSSNEZ		32	31
	eSSSNEZ		37	25
	eLNEZ		53	
	USCGS: 56½ N 163 E			
	05:53:58			
	Pasadena: Magnitude 6½			

Gilbert Dewart
Seismologist

Pasadena, California
March 1, 1959