

21 AUG 1967

METEOROLOGICAL DEPARTMENT
OFFICE OF THE PRIME MINISTER
SEISMOLOGICAL BULLETIN
STANDARD SEISMOLOGICAL STATION (CHG)
CHIANGMAI, THAILAND

Latitude: 18° 47' 24" N. Longitude: 98° 58' 37" E.

Geocentric direction cosines: a. - 0.147714
b. 0.935112
c. 0.322104

Elevation: 416.43 Meters

Station Foundation: Granite bedrock

Instruments: World-wide standard seismograph system

Benioff short period seismometers

To = 1.0 sec. Tg = 0.75 sec.

Sprengnether long period seismometers

To = 15 sec. Tg = 100 sec.

Magnification: SP. 200,000

LP. 3000

JANUARY 1967

No.	DATE	PHASE	Time G.M.T.	Az	Tz	▲ Deg.	REMARKS
1	1	eP Z	14:30:20			72.8	USCGS: H 14:18:51.4 Lat 12.4S; Long 165.8E. h = 33 km. Mag. 5.0
2	1	eP ZN iS Z	15:41:09 41:54				
3	1	eP ZE eS E	03:01:58 03:49			10.0	USCGS: H 02:59:33.8 Lat 10.7N; Long 92.8E. h = 60 km. Mag. 5.2
4	1	eP Z	03:38:35			12.0	USCGS: H 03:35:42.9 Lat 7.6N; Long 94.4E. h = 38 km. Mag. 4.2
5	2	eP ZE	12:58:22.5				
6	2	eP Z eS Z	14:52:06.5 56:17			22.1	USCGS: H 14:47:11.6 Lat 20.1N; Long 122.4E. h = 33 km. Mag. 4.9
7	2	iP ZE e Z	20:11:30.0 14:19	15.2	1.6		Compression
8	3	eP Z	15:22:44			77.9	USCGS: H 15:11:16.1 Lat 12.2S; Long 165.9E. h = 45 km. Mag. 4.5
9	3	eP Z	20:24:51			79.2	USCGS: H 20:12:48.4 Lat 20.5S; Long 169.3E. h = 46 km. Mag. 4.4
10	3	eP Z e Z	21:34:53.4 43:43				
11	4	iP ZNE eS Z e E	11:28:22.0 30:03 31:50	30.6	1.2	6.6	USCGS: H 11:26:45 Lat 23.4N; Long 93.9E. h = 58 km. Mag. 5.4
12	4	iP Z eS Z	20:35:27.0 38:38	29.8	1.1		Compression

34 cm \equiv 340 mm

No.	DATE	PHASE	Time G.M.T.	Az	Tz	Δ Deg.	REMARKS
13	5	iP ZNE iS N	06:18:08.0 21:58	34.0	2.0	23.1	Dilatation USCGS:H 06:13:31.6 Lat 13.8N; Long 120.7E. h = 166 km. Mag. 5.4
14	5	eP Z eS E e Z	18:20:41 21:30 23:05	$\frac{34}{2} = 17$			5.4 -6.2 (9M) -0.8
15	5	eP Z eS Z	19:30:42.6 31:56	$\log 17 = 1.2$ +6.2			
16	6	eP Z iPcP Z	10:09:45 12:24	7.4 -3 4.4		33.5	USCGS:H 10:03:05.8 Lat 1.5S; Long 126.6E. h = 57 km. Mag. 5.4
17	6	eP Z iS NE	13:47:57 48:35				
18	6	eP Z	17:41:33.2	33 NOT IN mm		31.1	USCGS:H 17:35:17.0 Lat 30.6N; Long 130.8E. h = 33 km. Mag. 4.5
19	7	e E	11:44:33	if it will be in cm			
20	7	eP ZE	13:09:46			28.9	USCGS:H 13:03:44.9 Lat 48.2N; Long 102.8E. h = 33 km. Mag. 5.0
21	7	eP Z	16:52:32.8	340			
22	8	eP Z	05:12:59	$\frac{340}{2} = 170$		60.1	USCGS:H 05:02:52.1 Lat 56.0N; Long 162.9E. h = 33 km. Mag. 5.1
23	8	eP Z	15:38:47.3	2.2 6.2 8.4		73.3	USCGS:H 15:27:16.9 Lat 12.2S; Long 166.5E. h = 40 km. Mag. 5.1
24	9	eP z	21:29:06.5	-3 5.4		79.0	USCGS:H 21:17:23.1 Lat 19.8S; Long 169.5E. h = 204 km. Mag. 4.3
25	10	eP Z	18:18:25			72.3	USCGS:H 18:06:56.9 Lat 11.5S; Long 165.7E. h = 24 km. Mag. 4.7
26	10	eP Z eS N	22:17:36 18:23				
27	11	iP ZNE iS E	05:59:52.0 06:04:59	12.0	0.9	27.9	USCGS:H 05:54:00 Lat 0.1S; Long 120.1E. h = 23 km. Mag. 5.6
28	12	eP Z	22:23:12	120 mm/0.9 $\frac{120}{0.9} = 2.1$ 6.5		68.2	USCGS:H 22:12:11.5 Lat 2.1N; Long 31.3E. h = 29 km. Mag. 4.4
29	13	iP ZE	13:59:09.1	8.6			Dilatation.
30	13	eP Z	14:06:05.2	-3 5.6		6.5	USCGS:H 14:04:30.8 Lat 23.8N; Long 94.6E. h = 91 km. Mag. 4.4
31	13	iP ZNE e Z eS NE	17:19:18.5 19:34 22:43	23.0	0.6		

No.	DATE	PHASE	Time G.M.T.	Az	Tz	Δ Deg.	REMARKS
32	14	eP Z	12:46:22			23.0	USCGS:H 12:41:17.4 Lat4.1S;Long 102.4E. h= 33 km. Mag. 5.2
33	14	iP ZE e Z	13:29:42.0 31:37			21.4	Compression USCGS:H 13:24:53.2 Lat13.6N;Long 120.6E. h= 38 km. Mag 4.7
34	14	eP Z	13:42:02			44.4	USCGS:H 13:34:00.3 Lat18.4N;Long 120.6E h= 125 km. Mag. 4.9
35	14	eP Z eS E	14:25:07 27:43				
36	15	eP Z e N	11:07:25.6 10:07				
37	15	eP ZN eS N	14:57:52.5 15:01:03				
38	15	eP Z	17:11:36				
39	16	eP Z	03:09:33			38.6	USCGS:H 03:32:12.3 Lat 36.2N;Long138.2E. h= 38 km. Mag. 4.6
40	17	iP ZE e E iS E	01:26:50.0 29:08 31:24				Dilatation.
41	17	eP Z	03:08:21.2			52.3	USCGS:H 02:59:11.2 Lat5.9S;Long145.9E. h= 47 km. Mag. 4.9
42	17	iP ZNE iS N	09:25:20.3 26:30	11.0	1.0		Dilatation.
43	17	eP Z	11:04:10.4			93.8	USCGS:H 10:50:46.5 Lat30.7S;Long177.8E. h= 33 km. Mag. 4.6
44	17	iP ZNE e Z	12:07:21.0 09:15			41.9	Compression USCGS:H 11:59:31.5 Lat38.3N;Long142.1E. h= 44 km. Mag. 5.9
45	18	iP ZE	04:30:14.0				Compression.
46	18	iP ZNE e E	05:42:19.8 43:48			41.3	Dilatation. USCGS:H 05:34:32.6 Lat56.6N;Long120.8E. h= 11 km. Mag. 6.5
47	19	iP ZNE e Z	12:49:48.0 50:21	45.0	1.2		Compression
48	19	eP Z iPP Z	12:53:03 56:35			87.6	USCGS:H 12:40:12.6 Lat14.8S;Long 178.8E. h= 18 km. Mag. 6.6

No.	DATE	PHASE	Time G.M.T.	Az	Tz	Δ Deg.	REMARKS
49	20	eP N e Z	00:29:01 32:40			56.7	USCGS:H 00:19:160 Lat3.7S;Long151.9E. h= 33 km. Mag. 5.2
50	20	iP ZNE ePcP Z eS NE e E	02:03:24.6 06:53 08:49 13:17	12.0	1.6	28.9	Compression USCGS:H 01:57:23.1 Lat48.0N;Long102.9E. h= 33 km. Mag. 6.1
51	20	eP Z e Z	05:22:41 23:05			29.4	USCGS:H 05:16:39.8 Lat32.3N;Long69.8E. h= 70 km. Mag. 5.1
52	20	eP Z eS E	16:17:42.9 21:14				
53	20	eP Z iS ZE	20:08:38 10:02				
54	20	eP Z	21:56:16				
55	21	eP E eS Z	03:13:17 16:29				
56	21	eP NE	13:35:06			15.5	USCGS:H 13:31:30.4 Lat3.3N;Long97.3E. h= 102 km. Mag.5.3
57	22	eP E	00:22:35				
58	22	eP Z iS NE e E	12:07:49 12:38 16:32			28.8	USCGS:H 12:01:49.0 Lat48.1N;Long102.9E. h= 33 km. Mag. 5.1
59	23	eP Z	00:57:48				
60	23	iP ZNE e E iS N	09:25:27 28:31 30.16			28.8	Compression USCGS:H 09:19:38.4 Lat0.7N;Long122.5E. h= 166 km. Mag. 5.2
61	23	eP Z	18:43:18			52.3	USCGS:H 18:34:06.0 Lat7.1S;Long144.8E. h= 17 km. Mag. ?
62	23	eP Z	22:37:05.5			44.2	USCGS:H 22:29:10.6 Lat17.9N;Long145.6E. h= 171 km. Mag. 4.6
63	24	iP ZE iS NE eL Z	03:23:33.8 20:07 27:20			42.7	USCGS:H 03:05:39.0 Lat14.4N;Long141.9E. h= 69 km. Mag. 5.7
64	24	iP ZNE iS E e Z e Z	14:48:14.5 51:53 52:53 56:54			12.2	USCGS:H 14:45:16.0 Lat30.1N;Long104.1E. h= 33 km. Mag. 5.4

No.	DATE	PHASE	Time G.M.T.	Az	Tz	Δ Deg.	REMARKS
65	25	iP ZNE e NE iS NE eScS Z	01:56:02.9 57:01 02:02:02 07:52			29.5	Dilatation USCGS:H 01:50:19.4 Lat 36.6N; Long 71.6E. h = 281 km. Mag. 5.7
66	25	eP Z	03:13:43			44.6	USCGS:H 03:05:38.7 Lat 14.5N; Long 145.4E. h = 106 km. Mag. 4.8
67	25	eP Z	23:26:22				
68	26	ePpp Z	02:30:15			123.7	USCGS:H 02:11:20.7 Lat 58.4S; Long 25.6W. h = 33 km. Mag. 5.0
69	26	iP Z e Z	10:09:44.1 16:58		2	20.7	Dilatation USCGS:H 10:05:04.0 Lat 24.2N; Long 121.7E. h = 46 km. Mag. 4.9
70	26	eP Z	11:08:58.0			29.7	USCGS:H 11:02:53.6 Lat 30.0N; Long 68.7E. h = 33 km. Mag. 4.9
71	26	eP Z iS ZE	16:30:03.7 34.17				
72	27	eP Z	02:24:43			20.5	USCGS:H 02:19:57.5 Lat 22.4N; Long 120.6E. h = 33 km. Mag. ?
73	27	eP Z	19:02:31			24.3	USCGS:H 18:57:15.1 Lat 5.3S; Long 102.9E. h = 33 km. Mag. 5.4
74	28	iP ZE	01:45:17.0			21.9	Dilatation USCGS:H 01:40:26.9 Lat 24.8N; Long 121.8E. h = 90 km. Mag. 5.2
75	28	eP Z	03:04:33.2			29.0	USCGS:H 02:58:34 Lat 30.2N; Long 69.5E. h = 39 km. Mag. 4.5
76	28	e(P) Z e NE eS Z	14:02:34.4 04:43 09:16				
77	28	eP Z	17:53:47				
78	29	eP Z	04:01:41				
79	29	eP Z	07:07:36			29.0	USCGS:H 07:01:34.7 Lat 48.0N; Long 103.1E. h = 33 km. Mag. 4.8
80	29	eP Z eS E e Z	07:13:40 19:47 20:52			40.8	USCGS:H 07:06:00 Lat 26.7N; Long 55.3E. h = 58 km. Mag. 4.9

No.	DATE	PHASE	Time G.M.T.	Az	Tz	Δ Deg.	REMARKS
81	29	eP Z e Z	08:04:21 06:16				
82	29	eP Z eS E	09:52:53 53:37				
83	29	e(P) Z	12:21:18.5			68.2	USCGS:H 12:10:27.4 Lat 51.9N; Long 177.2E. h = 99 km. Mag. 4.2
84	29	eP Z	13:28:11			40.8	USCGS:H 13:20:30.8 Lat 26.7N; Long 55.4E. h = 33 km. Mag. 4.8
85	29	eP Z	15:11:27.2			21.3	USCGS:H 15:06:40.2 Lat 22.8N; Long 121.4E. h = 31 km. Mag. 5.2
86	30	eP Z eS ZE	07:11:54.5 13:47			9.8	USCGS:H 07:09:30 Lat 25.7N; Long 90.4E. h = 33 km. Mag. ?
87	30	eP Z	11:58:32				
88	30	eP ZN	14:25:35			30.1	USCGS:H 14:19:23.8 Lat 4.4N; Long 126.1E. h = 33 km. Mag. 5.2
89	30	eP Z	20:16:50			24.7	USCGS:H 20:11:38.5 Lat 25.3N; Long 124.8E. h = 127 km. Mag. 4.8
90	30	iP ZN e Z	21:07:24.0 09:32			7.7	Compression USCGS:H 21:05:30.4 Lat 26.2N; Long 96.3E. h = 44 km. Mag. 5.5
91	31	eP Z	10:04:26.1			33.4	USCGS:H 09:57:47.0 Lat 2.0S; Long 125.6E. h = 33 km. Mag. 5.0
92	31	iP ZE eS E	13:29:02.3 32:57			21.5	Dilatation USCGS:H 13:24:26.0 Lat 13.8N; Long 120.8E. h = 197 km. Mag. 4.8
93	31	eP Z	15:25:08.5			23.8	USCGS:H 15:19:56.8 Lat 4.8S; Long 103.2E. h = 33 km. Mag. 5.3
94	31	iP ZE	17:52:17.9	16.0	0.9	45.6	Compression USCGS:H 17:43:56.2 Lat 42.8N; Long 145.4E. h = 44 km. Mag. 5.1
95	31	iP ZE	19:07:16.0				
96	31	eP Z	21:03:07			21.8	USCGS:H 20:58:13.9 Lat 24.0N; Long 121.6E. h = 22 km. Mag. 4.9

NOTE Trace amplitudes are given in millimeteres and the period in seconds.