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# 地震季報

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中華民國五十八年 一、二、三月

## SEISMOLOGICAL BULLETIN

January to March 1969

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~~PHASE DATA~~

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## General Aspect of Earthquakes

From January to March, 1969.

There are 374 earthquakes occurred on the first three months of 1969. 133 of them happened in January, 99 ones had happened in February, 143 ones had happened in March.

Among them, 30 earthquakes are felt earthquakes, this 30 earthquakes include one moderate, five Small felt area and twenty-four Locals.

The moderate earthquake happened on March 10th and it's epicenter was located at about 20km E. of Taitung, the focal depth was about 20km. The five Small felt area earthquakes except two of them, lie to the E. of Hwalien, as we can see on the map.

During this period 157 distant earthquakes had been recorded by our Seismographs, the data accompanied by those of major local earthquakes can be found on the latter part of this bulletin.

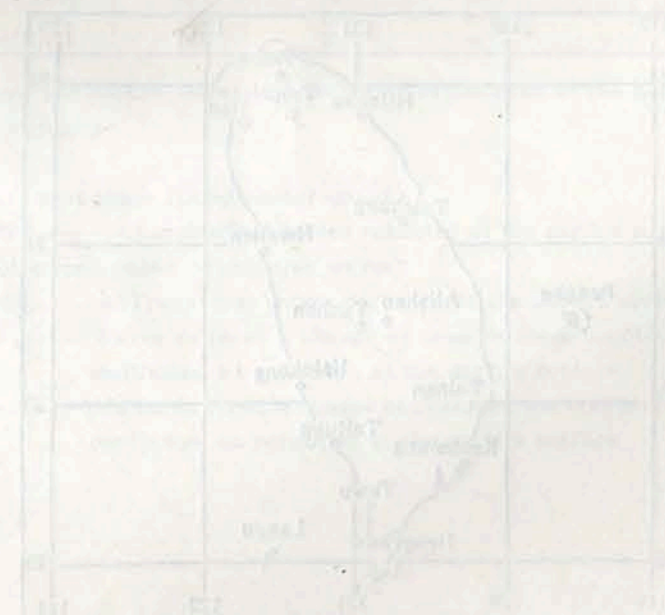




Table I. Geographical coordinates of the Seismological Station, Taiwan China.

$\lambda$ : Longitude  $\phi$ : Geographical Latitude  
 $\phi'$ : Geocentric Latitude  
 $a = \cos\phi' \cos\lambda$   $b = \cos\phi' \sin\lambda$   $c = \sin\phi'$

Station	$\phi$ ; (N)	$\lambda$ ; (E)	$\phi'$	Alitude	Subsoil	a	b	c	Seismographs
Anpu	25.11	121.31	25.20	m Andesite					
Alishan(mt.)	23.31	120.48	23.22	836.2 Mioce me Sands-					SP(H. V.)LP(H. L.)
Hengchun	22.00	120.45	21.52	2406.1 tone					W. (H. V.)O.S <sub>1</sub> .
Hsinkong	23.06	121.22	22.58	22.3 Alluvium					W. (H. V.)S <sub>2</sub> .
Hsinchu	24.48	120.48	24.39	36.5 "					P <sub>1</sub> .S <sub>2</sub> W.(H. V <sub>1</sub> )A <sub>1</sub> .
Hwalien	23.58	121.37	23.49	32.8 "					P <sub>1</sub> . S <sub>2</sub> .
Ilan	24.46	121.45	24.73	17.6 "					W. (H. V.)P <sub>1</sub> .S <sub>2</sub> .A <sub>2</sub> .
Kaohsiung	22.37	120.16	22.29	7.4 "					W. (H. V.)P <sub>1</sub> .S <sub>1</sub> .
Lanyu	22.02	121.33	21.54	33.1 "					P <sub>1</sub> . S <sub>1</sub> .
Penghu	23.32	119.33	23.23	332.2 Basalt					P <sub>2</sub> .
Taipei	25.02	121.31	24.53	9.4 "					P <sub>2</sub> .
Tawu	22.21	120.54	22.13	8.0 Alluvium					W.(H.V.)O.S <sub>1</sub> .P <sub>3</sub> .A <sub>1</sub> .
Taitung	22.45	121.09	22.37	7.6 "					W.(H.V.)S <sub>1</sub> .
Tainan	23.00	120.13	22.52	8.9 "					W.(H.V.)S <sub>2</sub> .
Taichung	24.09	120.41	24.00	12.7 "					W.(H.V.)P <sub>1</sub> .S <sub>1</sub> .A <sub>1</sub> .
Yushan(Mt.)	23.29	120.57	23.21	77.1 "					W.(H.V.)S <sub>2</sub> .P <sub>1</sub> .
Marrison				3850.0 "					P <sub>1</sub> .

W(H): Wiechert's horizontal seismograph.  
 W(V): Wiechert's vertical seismograph.  
 O : Omori's horizontal seismograph. (V:20)  
 P<sub>1</sub> : C. M. O. type horizontal portable seismograph. (V:40)  
 P<sub>2</sub> : Three component portable seismograph. (V:20)  
 P<sub>3</sub> : Higiuti-C. M. O. type short period, horizontal seismograph. (V:50)  
 S<sub>1</sub> : C. M. O. type three component strong motion seismograph. (V:2)  
 S<sub>2</sub> : Higiuti-C. M. O. type three component strong motion seismograph. (V:1)  
 A<sub>1</sub> : Isnimoto's three component acceleration seismograph.  
 A<sub>2</sub> : Higiuti's three component strong motion accelerometer.  
 S.P. : Benioff short-period seismograph.  
 L.P. : Sprengnether long-period seismograph.

Map showing the position of Seismological Station in Taiwan, China.

Figure 1

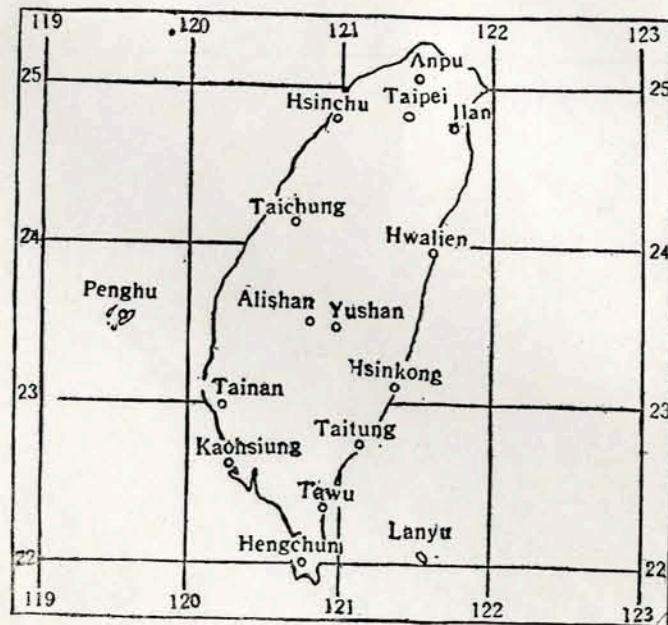


Table II. Specification of instruments:-

Mass of the pendulum M (kg) Friction r (mm.<sup>2</sup>)  
 Magnification V. Proper period of the pendulum To(sec.)  
 Damping ratio  $\nu$ . Proper period of the galvanometer Tg(sec.)  
 The Constants of Seismographs are as follows.

Seismograph	Component	M.	V.	$\nu$ .	r.	To	Tg
W(H)	E-W	200	77	9	0.10	5.1	
	N-S	200	78	9	0.13	5.1	
	U-D	80	75	8	0.08	5.1	
P <sub>1</sub>	E-W	18	40	8	0.13	5.1	
	N-S	18	40	8	0.13	5.1	
P <sub>2</sub>	E-W	10	20	2	0.24	4.0	
	N-S	10	20	2	0.41	4.0	
	U-D	7.5	20	2	0.29	4.0	
P <sub>3</sub>	E-W	20	49	10	0.08	2.2	
	N-S	20	49	10	0.08	2.3	
O	E-W	15	20	3	0.05	15.7	
	N-S	15	20	3	0.08	15.1	
S <sub>1</sub>	E-W	2	2	4	0.06	3.8	
	N-S	2	2	4	0.06	3.8	
	U-D	1.5	2	8	0.06	3.5	
S <sub>2</sub>	E-W	4	1	8	0.04	6.0	
	N-S	4	1	8	0.04	6.0	
	U-D	2	1	8	0.03	5.0	
A <sub>1</sub>	E-W	15	220	10	0.005	0.10	
	N-S	15	220	10	0.009	0.10	
	U-D	15	170	10	0.006	0.08	
A <sub>2</sub>	E-W	1	16	10	0.01	0.11	
	N-S	1	16	10	0.02	0.10	
	U-D	1	16	10	0.01	0.11	
SP	E-W	107.5	6.250	17		1.0	0.75
	N-S	107.5	6.250	17		1.0	0.75
	U-D	107.5	6.250	17		1.0	0.75
LP	E-W	10.75	750	$\infty$		30.0	100.0
	N-S	10.75	750	$\infty$		30.0	100.0
	U-D	11.2	750	$\infty$		30.0	100.0

The presnt publication inserts the following explanation of the notations only in the first number hereafter.

1. Phase.

- P: Normal first phase (Longitudinal waves)
- pP, PP, PPP,.....:Longitudinal waves reflected at the earth's surface.
- S: Normal second phsae (transverse waves)
- sS, SS, SSS,.....:Transverse waves reflected at the earth's surface.
- PS, PPS,.....:Waves suffered a change or changes from longitudinal to transvers oscillation, on reflection at the earth's surface.
- SP, SPP,.....:Waves suffered a change or changes from transeverse to longitudinal oscillation, on reflection at the earth's surface.



- L : Long waves at the beginning of the surface waves.
  - Q : Shorter and more regular waves in the surface waves.
  - M : Largest motion in the surface waves.
  - C : Tail or end portion.
  - F : End of the discernible movement
  - $\Delta$  : Epicentral distance.
  - $\Delta H$  : Focal distance.
  - H : Depth of focus.
  - $\mu$  : Micron.
  - P-S : Duration of Preliminary tremor.
2. Nature of the motion.
- i : Sudden commencement of a phase.
  - e : Gradual or indistinct commencement of a phase.
  - ? : Questionable or uncertain.
3. Period and Initial motion.
- T : Period, duration of one complete oscillation.
  - I : Amplitude of the true displacement of the ground from the position at rest
  - $I_N$  : N-S component of I.
  - $I_E$  : E-W component of I.
  - $I_z$  : Vertical component of I.
- Displacement to the north, east and upward are regarded as positive.
4. Scales of seismic intensity.
- The intensity of the shock is estimated according to the scales O-VI, as follows:
- O : No feeling: Shocks too weak to cause human feelings, registered only by seismographs.
  - I : Slight: Extremely feeble shocks only felt by persons at rest or by those who are observant to an earthquake.
  - II : Weak: Shocks felt by most persons, slight shaking of doors and latticed sliding doors.
  - III : Rather strong: Slight shaking of houses and buildings, rattling of doors and latticed sliding doors, swinging of hanging objects like the electric lamps, moving of liquids in vessels.
  - IV : Strong: Strong shaking of houses and buildings, overturning of unstable objects spilling of liquids out of vessels.
  - V : Very Strong: Cracks in the walls, overturning of gravestones, etc, lanterns etc, damaging of chimneys and mud and-plaster warehouses.
  - VI : Disastrous : Demolition of houses landslips, fissures on the roads, the ground etc.

	No Feeling	Slight	Weak	Rather Strong	Strong	Very Strong	Disastrous
Scale Acceleration (gal)	O <-0.8	I 0.8-2.5	II 2.5-8	III 8-25	IV 25-80	V 80-250	VI 250<

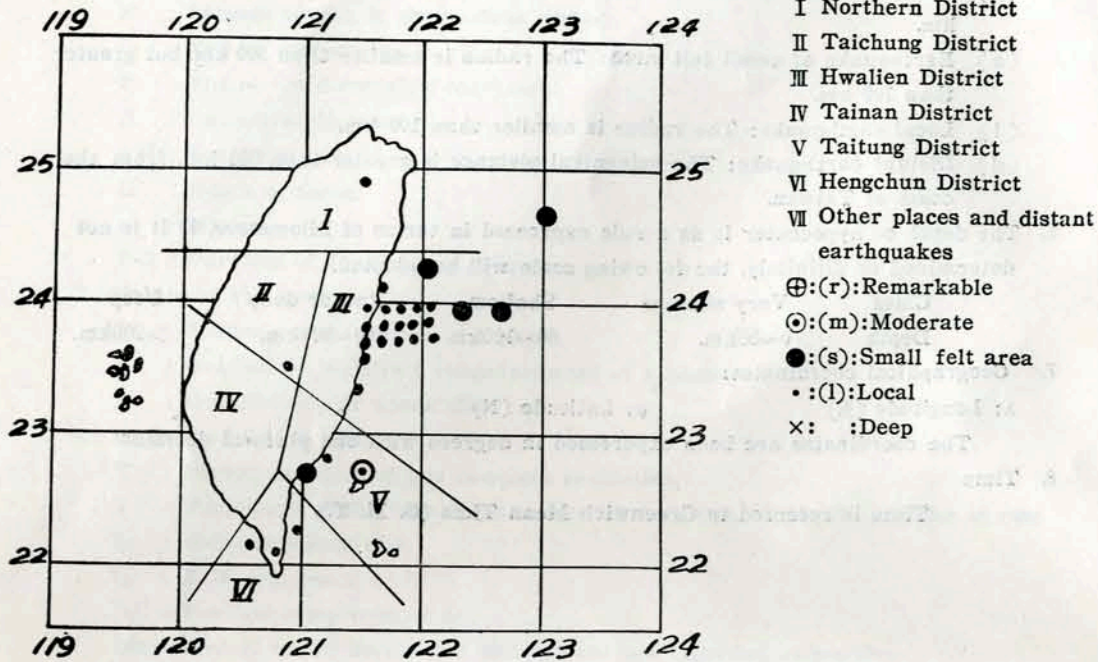
5. The magnitude of an earthquake is classified to the radius of the felt area assumed, roughly to be a circle as follows:-

- (r) Remarkable earthquake: The radius of the felt area is greater than 300 km.
  - (m) Moderate earthquake: The radius is smaller than 300 km. but greater than 200 km.
  - (s) Earthquake of small felt area: The radius is smaller than 200 km. but greater than 100 km.
  - (1) Local earthquake: The radius is smaller than 100 km.
  - (d) Distant earthquake: The epicentral distance is greater than 300 km. from the coast of Taiwan.
6. The depth of hypocenter is as a rule expressed in terms of kilometers, If it is not determined so definitely, the following scale will be adopted.
- | Class | Very shallow | Shallow   | Rather deep | Deep    |
|-------|--------------|-----------|-------------|---------|
| Depth | 0~30km.      | 30~100km. | 100~200km.  | >200km. |
7. Geographical coordinates:
- $\lambda$ : Longitude (E)                       $\phi$ : Latitude (N)
- The coordinates are been expressed in degrees with one place of decimal.
8. Time
- Time is referred to Greenwich Mean Time (G. M. T.)

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Epicenters of Felt Earthquakes From January to March 1969



Number of earthquakes classified according to its magnitude and districts January to March 1969

Classification	Number of felt earthquakes					Number of unfelt earthquakes	Total
	Maghitudes	Remarkable	Moderate	Small felt area	Local		
Districts							
Northern District	—	—	1	1	2	38	40
Taichung "	—	—	—	1	1	11	12
Hwalien "	—	—	3	18	21	53	74
Tainan "	—	—	—	—	—	11	11
Taitung "	—	1	1	1	3	59	62
Hengchun "	—	—	—	3	3	15	18
Total	0	1	5	24	30	193	223
Other places	—	—	—	—	—	157	157

Felt earthquakes in the month from January to March, 1969

No.	Month	P. (G. M. T.)			Mag-nitude	Epicenter	Latitude	Longitude	Depth
		d.	h.	m.					
1	Dec. ('68)	31	21	26	L	Near Hwalien	N.	E.	kms.
2	Jan.	12	08	37	L	Near Hengchun			
3	"	15	11	30	L	Near Hwalien			
4	"	18	00	49	L	About 50km SSW. of Hwalien			
5	"	20	14	57	L	Near Hwalien			
6	"	20	23	39	L	" "			
7	"	26	15	40	(00)S	About 132km E. of Ilan	24°6'	123°1'	60
8	"	27	19	49	L	Near Hwalien			
9	"	27	19	51	L	" "			
10	"	28	09	18	L	" "			
11	"	28	09	37	L	" "			
12	"	29	11	22	(40)S	About 41km SSE. of Ilan	24°4'	122°	40
13	Feb.	3	06	03	L	Near Yushan			
14	"	15	14	12	(40)S	About 10km SWS. of Taitung	22°7'	121°1'	10
15	"	19	08	38	(25)S	About 70km E. of Hwalien	24°	122°3'	10
16	"	27	20	07	L	About 15km S. of Tawu			
17	"	28	04	27	L	About 10km ESE. of Tawu			
18	Mar.	8	00	50	L	Near Hwalien			
19	"	10	05	35	(10)M	About 20km E. of Taitung	22°8'	121°3'	20
20	"	10	09	03	L	Near Taitung			
21	"	13	13	35	L	Near Hwalien			
22	"	14	09	46	L	" "			
23	"	14	11	33	L	About 16km N. of Hwalien			



No.	Month	P. (G. M. T.)			Mag- nitude	Epicenter	Latitude	Longitude	Depth
		d.	h.	m.					
24	Mar	14	11	35	L	Near Hwalien	N.	E.	kms.
25	"	14	11	39	L	" "			
56	"	14	11	47	L	" "			
27	"	14	11	48	L	" "			
28	"	16	06	21	L	" "			
29	"	17	13	53	L	About 38km SWS of Ilan			
30	"	23	13	54(05)	S	About 96km E. of Hwalien	24°	122°5'	60

## Unfelt Earthquakes in the Month from January to March 1969

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1	Dec.	31	17	38	Near Hwalien	25	Jan.	7	07	04	(d)
2	"	31	23	48	Near Alishan	26	"	7	18	05	(d)
3	Jan.	1	01	34	" "	27	"	8	12	12	Northern District
4	"	1	03	16	" "	28	"	8	16	20	Near Hwalien
5	"	1	06	26	Hwalien District	29	"	8	16	56	Near Ilan
6	"	1	16	45	" "	30	"	8	19	12	Hengchun District
7	"	1	16	55	Taichung District	31	"	8	22	01	(d)
8	"	2	01	50	(d)	32	"	8	23	57	About 42km ENE. of Shinkong
9	"	2	06	38	Hwalien District	33	"	9	12	43	(d)
10	"	2	11	45	Near Anpu	34	"	9	14	01	(d)
11	"	3	03	48	(d)	35	"	9	16	07	(d)
12	"	3	13	56	(d)	36	"	10	03	22	(d)
13	"	3	16	39	Northern District	37	"	11	04	38	(d)
14	"	3	21	45	Taitung District	38	"	13	07	50	(d)
15	"	4	06	04	(d)	39	"	13	10	14	(d)
16	"	5	01	46	(d)	40	"	13	12	32	Hengchun District
17	"	5	07	33	(d)	41	"	13	14	33	Near Alishan
18	"	5	13	35	(d)	42	"	14	03	06	(d)
19	"	6	00	30	Taitung District	43	"	14	23	33	(d)
20	"	6	07	00	(d)	44	"	15	13	04	Taitung District
21	"	6	15	48	(d)	45	"	15	13	09	(d)
22	"	6	21	25	(d)	46	"	15	15	16	Tainan District
23	"	7	03	46	Northern District	47	"	15	15	20	" "
24	"	7	05	09	(d)	48	"	15	18	48	" "



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
49	Jan.	15	20	13	Taitung District	73	Jan.	22	00	58	(d)
50	"	18	11	32	Near Hwalien	74	"	22	04	21	(d)
51	"	16	13	23	Northern District	75	"	22	17	27	(d)
52	"	17	12	10	Taitung District	76	"	23	04	23	Taitung District
53	"	17	21	07	(d)	77	"	23	04	34	" "
54	"	18	00	43	Near Hwalien	78	"	23	13	48	(d)
55	"	18	03	55	Taitung District	79	"	23	21	00	Near Hwalien
56	"	18	23	45	About 28Km SSF of Taichung	80	"	23	21	33	Near Taitung
57	"	19	03	23	Hengchun District	81	"	23	21	54	Taitung District
58	"	19	07	07	(d)	82	"	24	02	43	(d)
59	"	19	09	31	Northern District	83	"	24	02	52	Northern District
60	"	19	19	00	(d)	84	"	24	19	46	(d)
61	"	20	03	02	Near Hwalien	85	"	25	05	24	(d)
62	"	20	03	53	" "	86	"	25	12	34	(d)
63	"	20	04	55	(d)	87	"	25	17	37	Taitung District
64	"	20	12	34	(d)	88	"	25	23	40	(d)
65	"	20	14	28	(d)	89	"	26	05	17	Near Hwalien
66	"	21	01	54	(d)	90	"	26	06	10	(d)
67	"	21	03	20	Taitung District	91	"	26	08	28	Near Tawu
68	"	21	07	34	" "	92	"	26	16	03	Hengchun District
69	"	21	09	16	(d)	93	"	26	16	04	Taichung District
70	"	21	15	04	(d)	94	"	26	20	19	Taitung District
71	"	21	17	59	Northern District	95	"	27	02	57	(d)
72	"	21	21	10	(d)	96	"	27	06	16	Taitung District

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
97	Jan.	27	07	09	(d)	121	Feb.	1	15	24	(d)
98	"	27	11	54	Hengchun District	122	"	1	17	15	Near Anpu
99	"	27	13	20	(d)	123	"	2	01	43	(d)
100	"	27	13	42	Near Hwalien	124	"	2	05	26	(d)
101	"	27	14	13	" "	125	"	2	09	22	Taitung District
102	"	27	16	37	" Nengchun	126	"	2	10	30	(d)
103	"	27	19	50	Near Hwalien	127	"	2	11h-13h		Taitung District
104	"	28	00	26	Hengchun District	128	"	2	16	25	(d)
105	"	28	00	28	(d)	129	"	3	04	05	(d)
106	"	28	09	18	Near Hwalien	130	"	3	08	02	(d)
107	"	28	09	41	Taitung District	131	"	3	09	15	(d)
108	"	28	10	41	About 101km ESE of Ilan	132	"	3	09	46	(d)
109	"	28	23	57	Near Shankong	133	"	3	19	06	(d)
110	"	29	04	03	Near Hwalien	134	"	3	21	45	(d)
111	"	29	07	25	Near Taitung	135	"	4	01	43	(d)
112	"	29	09	37	Northern District	136	"	4	05	24	(d)
113	"	30	02	26	Near Hwalien	137	"	5	03	55	Taitung District
114	"	30	10	33	(d)	138	"	5	10	24	Near Hwalien
115	"	31	00	46	(d)	139	"	5	10	45	(d)
116	"	31	13	53	(d)	140	"	5	17	55	Northern District
117	"	31	14	01	Taitung District	141	"	6	15	10	Near Taitung
118	"	31	19	28	Near Taipei	142	"	7	00	42	About 98km E. of Tawu
119	"	31	20	43	(d)	143	"	7	05	03	(d)
120	Feb.	1	08	47	(d)	144	"	7	06	27	(d)



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
145	Feb.	7	14	40	Near Tawu	170	Feb	15	12	46	Hwalien District
146	"	7	14	50	" "	171	"	18	18	02	(d)
147	"	8	09	43	Hwalien District	172	"	15	19	33	(d)
148	"	8	16	38	Near Hwalien	173	"	15	20	37	(d)
149	"	9	04	18	(d)	174	"	15	22	19	(d)
150	"	9	10	40	Taitung District	175	"	16	07	05	(d)
151	"	9	11	30	Taitung District	176	"	16	20	34	Taitung District
152	"	9	15	42	(d)	177	"	16	22	33	" "
153	"	9	15	44	Tainan District	178	"	17	00	47	(d)
154	"	10	14	13	(d)	179	"	17	01	28	Northern District
155	"	10	23	03	(d)	180	"	17	05	17	" "
156	"	10	23	16	Hengchun District	181	"	17	09	14	(d)
157	"	11	12	36	(d)	182	"	17	09	55	Near Hwalien
158	"	11	22	16	(d)	183	"	17	10	09	" "
159	"	12	01	28	Taitung District	184	"	17	11	28	Hwalien District
160	"	12	15	28	Northern District	185	"	17	20	18	(d)
161	"	12	16	00	(d)	186	"	18	04	33	Near Hwalien
162	"	13	10	24	(d)	187	"	18	13	56	About 40km NNE. of Hwalien
163	"	13	10	32	(d)	188	"	18	18	12	Northern District
164	"	13	23	16	Near Hwalien	189	"	20	09	59	(d)
165	"	14	01	50	(d)	190	"	20	16	04	(d)
166	"	14	04	36	(d)	191	"	20	10	34	(d)
167	"	14	08	24	Hengchung District	192	"	20	11	00	Hengchun District
168	"	14	12	36	About 70km NNW. of Hwalien	193	"	20	14	14	Northern District
169	"	15	08	30	Hwalien District	194	"	20	14	24	" "

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
195	Feb.	20	16	59	(d)	220	Mar.	2	22	26	(d)
196	"	21	16	40	(d)	221	"	3	01	37	(d)
197	"	22	23	03	(d)	222	"	3	08	52	(d)
198	"	23	00	42	(d)	223	"	3	14	56	(d)
199	"	23	02	22	Taitung District	224	"	4	06	39	Near Hwalien
200	"	23	02	56	" "	225	"	4	13	42	" "
201	"	23	06	09	" "	226	"	4	19	41	(d)
202	"	24	00	15	(d)	227	"	5	03	37	Hwalien District
203	"	24	04	31	(d)	228	"	5	04	28	" "
204	"	24	16	42	(d)	229	"	5	05	35	Northern District
205	"	25	01	39	(d)	230	"	5	06	07	" "
206	"	25	13	47	Tainan District	231	"	5	11	58	Hwalien District
207	"	25	14	54	(d)	232	"	5	13	56	(d)
208	"	26	18	49	(d)	233	"	5	16	16	(d)
209	"	26	23	03	(d)	234	"	5	19	41	Taitung District
210	"	27	18	54	(d)	235	"	5	22	01	Hwalien District
211	"	28	02	54	(d)	236	"	6	01	09	(d)
212	"	28	03	30	(d)	237	"	6	07	43	(d)
213	"	28	13	23	(d)	238	"	6	17	27	Taitung District
214	Mar.	1	00	37	About 45km S. of Hwalien	239	"	6	20	45	Tainan District
215	"	1	20	21	Taitung District	240	"	7	01	13	" "
216	"	2	10	59	Near Tawu	241	"	7	06	45	Taichung District
217	"	2	14	03	(d)	242	"	7	08	10	Near Hwalien
218	"	2	14	25	Near Tawu	243	"	7	17	03	(d)
219	"	2	20	27	(d)	244	"	7	18	09	(d)



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
245	Mar.	8	10	24	(d)	270	Mar.	14	14	19	Near Hwalien
246	"	8	10	56	Taitung District	271	"	14	15	26	Taitung District
247	"	8	11	35	(d)	272	"	14	22	52	(d)
248	"	8	12	03	Taitung District	273	"	15	11	40	Northern District
249	"	9	07	32	" "	274	"	16	11	11	Hengchun District
250	"	9	13	54	(d)	275	"	16	11	50	(d)
251	"	9	14	00	Taitung District	276	"	16	13	44	(d)
252	"	9	14	30	" "	277	"	16	15	58	(d)
253	"	9	14	52	" "	278	"	16	20	20	Hengchun District
254	"	10	00	02	Tainan District	279	"	16	23	00	About 96km S. of Kaohsiung
255	"	10	07	01	(d)	280	"	17	00	40	Taitung District
256	"	10	09	04	Near Taitung	281	"	17	06	49	Near Taitung
257	"	10	09	46	" "	282	"	17	11	55	Near Hwalien
258	"	11	09	50	(d)	283	"	17	13	40	Taitung District
259	"	11	14	35	Taitung District	284	"	17	14	40	" "
260	"	11	15	34	(d)	285	"	17	17	42	Near Anpu
261	"	11	19	34	Northern District	286	"	17	22	30	Hwalien District
262	"	12	03	54	Near Yushan	287	"	18	03	36	(d)
263	"	13	00	24	(d)	288	"	18	04	22	Near Chiayi
264	"	13	20	11	Near Anpu	289	"	18	10	28	Northern District
265	"	13	20	46	(d)	290	"	18	12	36	Near Hwalien
266	"	14	07	17	Near Hwalien	291	"	18	14	36	Hwalien District
267	"	14	08	23	" "	292	"	18	16	28	(d)
268	"	14	12	02	Northern District	293	"	18	22	57	(d)
269	"	14	12	17	Near Hwalin	294	"	19	06	17	(d)

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
295	Mar.	19	14	01	(d)	320	Mar.	26	12	21	Near Taitung
296	"	19	20	52	Near Anpu	321	"	26	12	29	(d)
297	"	20	08	42	(d)	322	"	26	15	29	Taitung District
298	"	20	16	22	(d)	323	"	26	17	36	Taichung District
299	"	20	23	42	(d)	324	"	27	04	51	(d)
300	"	21	03	10	(d)	325	"	27	12	41	(d)
301	"	21	16	27	Hwalien District	326	"	28	02	00	(p)
302	"	21	17	15	Near Chiayi	327	"	28	02	42	Northern District
303	"	21	17	28	" "	328	"	28	06	03	Near Alishan
304	"	21	17	51	Near Hwalien	329	"	28	08	15	Near Anpu
305	"	22	05	18	(d)	330	"	28	10	04	Taitung District
306	"	22	06	17	(d)	331	"	28	12	24	Near Hwalien
307	"	22	13	46	Northern District	332	"	28	15	02	Hengchun District
308	"	22	15	54	(d)	333	"	28	16	05	(d)
309	"	22	17	36		334	"	29	07	11	(d)
310	"	23	17	51	Northern District	335	"	29	07	09	Hengchun District
311	"	23	21	20	(d)	336	"	29	09	27	(d)
312	"	24	06	47	Northern District	337	"	30	05	46	Hwalien District
313	"	24	15	00	About 180km ENE. of Hwalien	338	"	30	06	47	Northern District
314	"	24	17	20	Northern District	339	"	30	07	52	" "
315	"	24	20	07	" "	340	"	30	29	19	(d)
316	"	25	13	33	(d)	341	"	31	00	40	Hwalien District
317	"	25	20	30	(d)	342	"	31	04	59	Taitung District
318	"	26	09	02	Northern District	343	"	31	07	27	(d)
319	"	26	10	01	(d)	344	"	31			Taitung District



## Major Earthquakes which occurred in January 1969

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)			N	E	Z	N	E	Z	N	E	Z			
				h.	m.	s.	μ	μ	μ	μ	μ	μ	s.	s.	s.			
1	Yushan	5	p	13	35	15.6	—	—	—	—	—	—	—	—	—	—	—	d
	Shinkong			35	15.4		—	—	—	—	—	—	—	—	—	—	—	06 07.1 O
	Alishan		p	35	15.7		—	—	—	—	—	—	—	—	—	—	—	— O
	Tawu		ip	35	17.1		—	—	—	—	—	—	—	—	—	—	—	— O
	Hengchun		ep	35	17.4		—	—	—	—	—	—	—	—	—	—	—	— O
	Taitung		p	35	21.1		—	—	—	—	—	—	—	—	—	—	—	07 12.1 O
	Hwalien		"	35	21.6		—	—	—	80	—	—	11.5	—	—	—	—	06 54.7 O
	Lanyu		"	35	22.0		—	—	—	—	—	—	—	—	—	—	—	— O
	Anpu		"	35	25.0		—	—	—	—	—	—	—	—	—	—	—	06 59.0 O
	Ilan		"	35	28.4		—	—	—	—	—	—	—	—	—	—	—	05 13.4 O
	Tainan		"	35	28.7		—	—	—	—	—	—	—	—	—	—	—	01 12.2 O
	Taipei		"	35	29		—	—	—	—	—	—	—	—	—	—	—	06 58.2 O
	Kaohsiung		"	35	30		—	—	—	—	—	—	—	—	—	—	—	01 20.2 O
	Taichung		"	35	35		—	—	—	—	—	—	—	—	—	—	—	— O
2	Shinkong	6	p	15	48	10	—	—	—	—	—	—	—	—	—	—	—	7 37.0 O d
	Tawu		"	48	28.2		—	—	—	—	—	—	—	—	—	—	—	— O
	Hwalien		ep	48	29.6		—	—	—	77	—	—	17.0	—	—	—	—	7 44.4 O
	Taitung		p	48	30.3		—	—	—	—	—	—	—	—	—	—	—	6 56.4 O
	Anpu		"	48	30.8		—	—	—	—	—	—	—	—	—	—	—	7 39.2 O
	Ilan		ep	48	41.9		—	—	—	—	—	—	—	—	—	—	—	5 53.0 O
	Taichung		"	49	09.0		—	—	—	—	—	—	—	—	—	—	—	— O
	Tainan		"	54	23.0		—	—	—	—	—	—	—	—	—	—	—	— O

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)			N	E	Z	N	E	Z	N	E	Z			
				h.	m.	s.	μ	μ	μ	μ	μ	μ	s.	s.	s.			
2	Hengchung	6	ep	15	56	03.6	—	—	—	—	—	—	—	—	—	—	—	— O
	Taipei		"	56	26.7		—	—	—	—	—	—	—	—	—	—	—	— O
3	Hwalien	18	ip	00	49	14.0	+ 13.8	+ 24	- 38.2	740	410	175	1.3	0.7	1.6	01.7	II	About 50km
	Ilan		ep	49	17.4		—	—	—	—	—	—	—	—	—	—	—	17.4 O
	Shinkong		p	49	27.4		—	—	—	—	—	—	—	—	—	—	—	— O
	Yushan		ep	49	28.1		—	—	—	—	—	—	—	—	—	—	—	16.2 O
	Taichung		ep	49	32.0		—	—	—	—	—	—	—	—	—	—	—	12.9 O
	Alishan		ep	49	33.1		—	—	—	—	—	—	—	—	—	—	—	08.9 O
	Anpu		p	49	34.5		+ 0.48	—	+ 0.32	—	—	—	—	—	—	—	—	05.5 O
	Taipei		ep	49	36.8		—	—	—	—	—	—	—	—	—	—	—	06.8 O
	Taitung		ep	49	41.8		—	—	—	—	—	—	—	—	—	—	—	33.9 O
	Hengchun		ep	50	04.0		—	—	—	—	—	—	—	—	—	—	—	— O
4	Anpu	19	p	07	07	12.8	+ 26.6	+ 5.32	- 93.1	—	—	—	—	—	—	—	—	4 43.2 O d
	Taipei		p	07	25.5		—	3.0	- 5.0	—	—	—	—	—	—	—	—	4 33.7 O
	Ilan		ep	07	27.9		—	—	—	—	—	—	—	—	—	—	—	3 48.9 O
	Hsinchu		ep	07	29.0		—	—	—	—	—	—	—	—	—	—	—	4 46.0 O
	Hsinkong		p	07	29.2		—	—	—	—	—	—	—	—	—	—	—	4 37.3 O
	Hwalien		p	07	37.0		—	—	—	—	1000	—	—	22.5	—	—	—	4 29.7 O
	Yushan		ep	07	41.5		—	—	—	—	—	—	—	—	—	—	—	— O
	Taichung		ep	07	43.6		—	—	—	—	—	—	—	—	—	—	—	4 24.9 O
	Taitung		p	07	44.1		—	—	—	—	—	—	—	—	—	—	—	4 33.0 O
	Tanwu		ip	07	44.1		—	—	—	—	—	—	—	—	—	—	—	— O
	Lanyu		p	07	45.0		—	—	—	—	—	—	—	—	—	—	—	— O
	Alishan		p	07	45.5		—	—	—	—	—	—	—	—	—	—	—	— O



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			m.	s.
4	Tainan	19	ep	07	07	53.0	μ	μ	μ	μ	μ	μ	s.	s.	s.	124.0	O		
	Hengchun		ep	01		53.0	-	-	-	-	-	-	-	-	-	-	O		
	Kaohsiung		ep	07		54.5	-	-	-	-	-	-	-	-	-	101.5	O		
5	Tawu	19	p	19	00	34.8	-	-	-	-	-	-	-	-	-	-	O	d	
	Hsinkong		p	00		35.5	-	-	-	-	-	-	-	-	-	810.0	O		
	Hengchun		p	00		40.8	-	-	-	-	-	-	-	-	-	-	O		
	Taitung		p	00		41.4	-	-	-	-	-	-	-	-	-	757.2	O		
	Hwalien		p	00		43.4	-	-	-	-	-	-	-	-	-	759.9	O		
	Ilan		ep	00		44.0	-	-	-	-	-	-	-	-	-	803.9	O		
	Alishun		p	00		44.5	-	-	-	-	-	-	-	-	-	-	O		
	Tainan		ep	00		45.0	-	-	-	-	-	-	-	-	-	-	O		
	Taipei		ep	00		45.8	-	-	-	-	-	-	-	-	-	-	O		
	Anpu		p	00		47.2	-1.99	+1.33	-5.98	-	-	-	-	-	-	-	O		
	Taichung		ep	00		49.0	-	-	-	-	-	-	-	-	-	50.7	O		
	6	Hengchun	24	p	02	43	35.5	-	-	-	-	-	-	-	-	-	-	O	d
		Taitung		p	43		35.8	-	-	-	-	-	-	-	-	-	-	O	
Ilan			ep	43		37.6	-	-	-	-	-	-	-	-	8	44.1	O		
Hwalien			ep	43		37.7	-	-	-	-	-	-	-	-	8	42.4	O		
Anpu			p	43	40.0	-2.0	+20.0	+146.3	-	-	-	-	-	-	2	55.0	O		
Alishan			p	43		40.0	-	-	-	-	-	-	-	-	-	-	O		
Taichung			ep	43		40.0	-	-	-	-	-	-	-	-	-	-	O		
Taipei			p	43	42.9	-7.00	+3.0	-	-	-	-	-	-	-	-	-	O		

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			m.
7	Hengchun	25	p	05	24	12.2	μ	μ	μ	μ	μ	μ	s.	s.	s.	-	O	U. S. C. G. S.
	Tawu		p	24		13.7	-	-	-	-	-	-	-	-	-	-	O	05h19m17.1s
	Taitung		ep	24		17.9	-	-	-	-	-	-	-	-	-	-	O	0.8N 126.1E
	Alishan		p	24		22.7	-	-	-	-	-	-	-	-	-	-	O	Molucca
	Hwalien		p	24		30.7	-	-	-	-	-	-	-	-	-	438.0	O	Passage
	Anpu		p	24		36.0	+1.33	-1.33	+26.0	-	-	-	-	-	-	338.0	O	Mag 6.2
																		(PAS) S Pmax
8	Hsinchu	26	ep	15	40	14.9	-	-	-	-	-	-	-	-	-	20.0	O	About 40 35
	Anpu		p	40	23.0	+0.32	-0.24	+1.12	-	-	-	-	-	-	-	09.0	O	132km 40 32
	Ilan		p	40	23.2	-	-	-	301	461	119	1.1	1.5	1.4	15.5	II	E 123°1' 40 39	
	Taipei		p	40	23.4	-	-	+10.0	140	170	56	0.9	0.9	1.6	15.9	I	N 24°6' 40 39	
	Alishan		ep	40	26.4	-	-	-	-	-	-	-	-	-	26.8	O	H=60km 40 53	
	Hwalien		ip	40	27.2	+1.5	+1.2	-	213	243	-	2.5	1.8	-	19.2	II	40 46	
	Taichung		ep	40	34.1	-	-	-	-	-	-	-	-	-	25.1	O	40 59	
	Tawu		p	40	38.1	-	-	-	-	-	-	-	-	-	31.0	O	41 09	
	Yushan		p	40	42.0	-	-	-	-	-	-	-	-	-	26.3	O	41 08	
	Lany		p	40	42.5	-	-	-	-	-	-	-	-	-	-	O	-	
	Taitung		ep	40	46.2	-	-	-	97	112	-	1.4	3.1	-	29.2	O	41 16	
	Tainan		ep	40	48.6	-	-	-	-	-	-	-	-	-	35.8	O	41 24	
	Kaohsiung		p	40	54.7	-	-	-	-	-	-	-	-	-	34.2	O	41 29	
Hengchun		p	40	37.6	-	-	-	-	-	-	-	-	-	-	O	-		
9	Hengchun	27	ep	13	20	06.5	-	-	-	-	-	-	-	-	-	O	d	
	Taitung		p	20		17.8	-	-	-	-	-	-	-	-	406.6	O		
	Tawu		p	20		20.5	-	-	-	-	-	-	-	-	-	O		
	Hsinkong		p	20		20.7	-	-	-	-	-	-	-	-	356.4	O		







Major Earthquakes which occurred in February 1969

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				
				μ	μ	μ	μ	μ	μ	s.	s.	s.	m.	s.	m.			s.	
1	Hsinkong	2	p	01	43	00.4	-	-	-	-	-	-	-	-	-	-	3 47.1 O	d	
	Taitung		ep	43	25.5														
	Anpu		p	43	38.0		+	4-	3+	53									
	Tawu		ep	45	47.5														
	Hengchun		ep	46	58.2														
	Tainan		ep	47	53.2														
2	Tewu	3	p	09	46	31.6											42.7 O	d	
	Hsinkong		p	46	33.6														
	Hengchun		ep	46	36.2														
	Alishan		p	46	50.1														
	Taitung		ep	46	58.3														
	Hwalien		ep	47	19.4												10.8 O		
	Anpu		p	47	20.0												2 17.0 O		
3	Hengehun	3	p	21	45	57.7											3 27.7 O	d	
	Tawu		p	45	58.3												3 28.1 O		
	Taitung		p	46	07.8												3 26.1 O		
	Lanyu		p	46	08.0														
	Ailshan		ep	46	12.8												3 38.5 O		
	Hwalien		ep	46	16.7												4 13.5 O		
	Taichung		ep	46	20.7												3 42.7 O		
	Anpu		p	46	24.0		+	35-	20+	49							3 48.0 O		
	Tainan		ep	46	24.5												1 17.0 O		

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				
				μ	μ	μ	μ	μ	μ	s.	s.	s.	m.	s.	m.			s.	
3	Ilan	3	ep	21	46	31.6	-	-	-	-	-	-	-	-	-	-	3 40.7 O		
	Taipei		ep			32.0											3 45.7 O		
	Kaohsiung		ep			55.0											1 15.2 O		
	Hsinchu		p	47	44.0												1 13.8 O		
4	Hsinkong	10	p	23	08	06.5													d
	Tawu		ep	08	19.8														
	Taitung		p	08	23.3												8 28.8 O		
	Hengchun		ep	08	29.2														
	Anpu		p	08	31.0		-	4+	2-	1.4							2 13.0 O		
	Taipei		ep	08	32.0												7 36.3 O		
	Ilan		ep	08	32.7														
	Alishan		p	08	33.7														
	Hwalien		p	08	33.7												8 86.5 O		
5	Anpu	11	p	22	16	15	+	1+	1.3+	1.3							5 48.0 O	d	
	Ilan		p	16	24.4												5 38.0 O		
	Taipei		p	16	24.5												5 42.6 O		
	Taitung		p	16	33.8												5 13.4 O		
	Hsinkong		p	16	34.5												5 20.7 O		
	Lanyu		p	16	35.0														
	Hengchun		p	16	37.0												5 0.5 O		
	Tawu		p	21	40.6														
	Hwalien		ep	21	51.5												6 08.1 O		
	Tainan		ep	21	54.7												1 25.8 O		







No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks		
				(G.M.T.)			N	E	Z	N	E	Z	N	E	Z					
				h.	m.	s.	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	s.	s.	s.				m.	s.
9	Anpu	20	p	09	00	32.0	+	2	-	1	+	53	$\mu$	$\mu$	$\mu$	-	-	-	3 56.0	O
	Ilan		ep	00	46.4		-	-	-	-	-	-	-	-	-	-	-	-	3 33.6	O
	Hwalien		ep	00	46.6		-	-	-	-	-	-	-	-	-	-	-	-	3 47.7	O
	Taipei		ep	00	50.0		-	-	-	-	-	-	-	-	-	-	-	-	3 55.0	O
10	Hsinkong	20	p	10	34	51.2		-	-	-	-	-	-	-	-	-	-	-	4 33.5	O d
	Taipei		p	35	25.3		-	-	-	-	-	-	-	-	-	-	-	-	4 13.7	O
11	Taipei	20	p	16	59	59.2		-	-	-	-	-	-	-	-	-	-	-	3 31.0	O d
	Hsinkong		p	17	01	54.6		-	-	-	-	-	-	-	-	-	-	-	6 17.9	O
	Hengchun		p	02	54.1		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Taitung		p	03	04.1		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Ilan		p	03	09.9		-	-	-	-	-	-	-	-	-	-	-	-	3 16.1	O
	Anpu		p	03	16.0		-	1.8	-	-	-	4	-	-	-	-	-	-	4 10.0	O
12	Hsinkong	23	p	00	42	15.6		-	-	-	-	-	-	-	-	-	-	-	5 12.5	O d
	Tawu		p	42	30.9		-	-	-	-	-	-	-	-	-	-	-	-	4 39.1	O
	Hengchun		p	42	32.6		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Lanyu		p	42	34.0		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Taitung		p	42	34.5		-	-	-	-	-	-	-	-	-	-	-	-	4 39.5	O
	Tainun		p	42	38.3		-	-	-	-	-	-	-	-	-	-	-	-	3 48.7	O
	Yushan		p	42	41.1		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Alishan		p	42	44.7		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Hwalien		p	42	46.0		-	-	-	-	-	-	-	-	-	-	-	-	5 47.0	O
	Kaohsiung		ep	42	48.0		-	-	-	-	-	-	-	-	-	-	-	-	3 41.2	O
	Taipei		p	42	50.3		-	-	-	-	-	-	-	-	-	-	-	-	2 59.8	O

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks		
				(G.M.T.)			N	E	Z	N	E	Z	N	E	Z					
				h.	m.	s.	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	s.	s.	s.				m.	s.
12	Anpu	23	p	00	42	51.0	+	13	+	4	+	23	$\mu$	$\mu$	$\mu$	-	-	-	2 18.0	O
	Ilan		p	42	55.2		-	-	-	-	-	-	-	-	-	-	-	-	4 02.4	O
	Taichung		ep	42	56.8		-	-	-	-	-	-	-	-	-	-	-	-	4 32.5	O
13	Taipei	28	p	02	54	41.0		-	-	-	-	-	-	-	-	-	-	-	11 34.6	O d
	Hwalien		p	54	59.0		-	-	-	-	-	-	-	-	-	-	-	-	4 23.2	O
	Tainan		ep	58	32.7		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Hengchun		ep	58	41.2		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Chiayi		p	58	50.5		-	-	-	-	-	-	-	-	-	-	-	-	37 00.0	O
	Ilan		ep	58	52.1		-	-	-	-	-	-	-	-	-	-	-	-	7 15.7	O
	Taichung		ep	58	59.1		-	-	-	-	-	-	-	-	-	-	-	-	9 03.1	O
	Alishan		p	59	04.5		-	-	-	-	-	-	-	-	-	-	-	-	35 40.3	O
	Tawu		p	59	07.1		-	-	-	-	-	-	-	-	-	-	-	-	-	O
	Taitung		p	59	10.8		-	-	-	-	-	-	-	-	-	-	-	-	6 24.0	O







No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	μ	μ	μ	μ	μ	μ	s.	s.	s.			
5	Tainan	14	ep	h. 22	m. 53	s. 22.0	μ	μ	μ	μ	μ	μ	s.	s.	s.	m.	s.	O
	Anpu		p	53	24.0				.67	.67						202.0	O	
	Ilan		ep		33.0											359.5	O	
	Hsinkong		p		50.8												O	
6	Anpu	19	p	14 01	07.0		+ 3.8	+ 1.3	- 1.3							119.0	O	d
	Ilan		ep	01	08.0											116.4	O	
	Taipei		ep	01	09.0											120.3	O	
	Hwalien		ep	01	11.8												O	
	Hsinkong		p	01	24.7												O	
	Alishan		ep	01	24.7											133.4	O	
	Taichung		ep	01	34.7												O	
	Taitung		p	01	35.5												O	
	Chiayi		ep	01	37.2											316.8	O	
	Hsinchun		ep	01	38.0											204.0	O	
	Hengchun		ep	01	48.0												O	
7	Hengchun	20	ep	16 22	29.9												O	d
	Taitung		ep	22	38.8											248.0	O	
	Tawu		ep	22	39.0											248.0	O	
	Tainan		ep	22	43.0												O	
	Alishan		p	22	43.0												O	
	Hwalien		p	22	47.0											309.0	O	
	Ilan		ep	22	57.5											245.5	O	
	Anpu		p	22	58.2		+ 4.7	- 2.3	+ 6.0							326.0	O	
	Taipei		p	23	03.0											313.3	O	

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks			
				h.	m.	s.	μ	μ	μ	μ	μ	μ	s.	s.	s.				m.	s.	
	HWA	8	Hwalien	23	ep	h. 13	m. 51	s. 17.0	μ	μ	μ	μ	μ	μ	s.	s.	s.	m.	s.	O	Small fell area
	ILA		Ilan		p	51	22.1										12.0	O		51 29	About 96km
	HSI		Hsinkong		p	51	24.4													O	E. of
	TAP		Taipei		ip	51	25.6										18.4	O		51 44	H=60km
	HSN		Hsinchu		ep	51	30.0										25.8	O		51 56	
	TUS		Yushan		p	51	30.1										14.7	O		51 45	
	ALS		Alishan		p	51	31.4										18.7	O		51 50	
	TTN		Taitung		p	51	33.2										20.4	O		51 54	
	TCU		Taichung		ep	51	34.7										18.6	O		51 53	
	TAW		Tawu		p	51	39.2											O			
	?		Chiayi		ep	51	39.3										22.4	O		52 02	
	HEN		Hengchun		ep	51	45.8										09.0	O		52 55	
	TAI		Tainan		ep	52	01.2										19.7	O		52 21	
9	Anpu	27	p	12 41	20.0		+ 18.6	- 10.6	+ 23.9								350.0	O		d	
	Hengchun		p	45	59.7													O			
	Taitung		ep	46	05.0												345.6	O			
	Tainan		ep	46	06.8												130.3	O			
	Tawu		p	46	09.6													O			
	Alishan		p	46	10.5												350.9	O			
	Yushan		p	46	12.5												351.4	O			
	Hwalien		p	46	15.4												353.8	O			
	Chiayi		ep	46	15.5												445.6	O			
	Hsinchu		ep	46	20.0												402.0	O			







~~TAICHUNG  
HENCHUN~~

# 地震季報

第十六卷 第二號

中華民國五十八年 四、五、六月

## SEISMOLOGICAL BULLETIN

April to June 1969

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TAIWAN PROVINCIAL WEATHER BUREAU

64, KUNG YUAN ROAD, TAIPEI TAIWAN,

REPUBLIC OF CHINA



## General Aspect of Earthquakes

From April to June, 1969.

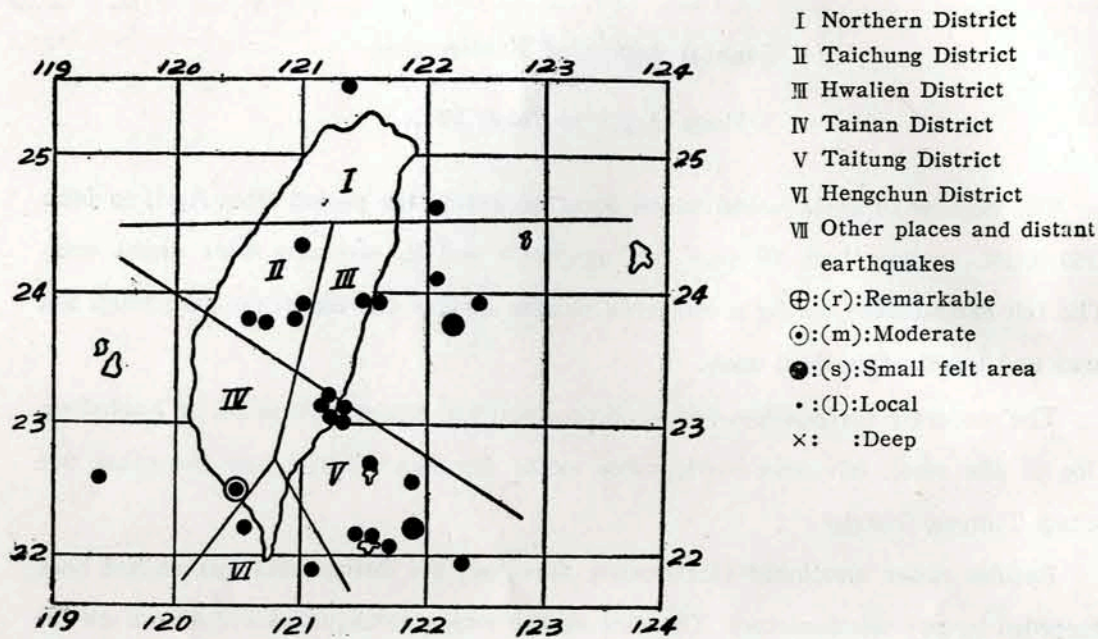
The number of earthquakes which occurred during the period from April to June, 1969 is 430. Among them, 28 were felt by people and the remains were unfelt ones. The felt earthquakes during these three months include one moderate, two small felt area and twenty-five local ones.

The moderate earthquakes happened on April 4th at about 30km SE of Kaohsiung. One of the small felt area earthquakes locate Hwalien District and the other one locate Taitung District.

Besides above mentioned earthquakes, there are 166 distant earthquakes had been recorded by our seismometers. The date of the major earthquakes are shown on the latter part of this bulletin.



Epicenters of Felt Earthquakes in April to June, 1969



- I Northern District
- II Taichung District
- III Hwalien District
- IV Tainan District
- V Taitung District
- VI Hengchun District
- VII Other places and distant earthquakes
- ⊕:(r):Remarkable
- ⊙:(m):Moderate
- :(s):Small felt area
- :(l):Local
- ×: :Deep

Number of earthquakes classified according to it's maghitude and districts April to June 1969

Classification	Number of felt earthquakes					Number of unfelt earthquakes	Total
	Maghitudes	Remark-able	Moderate	Small felt area	Local		
Districts							
Northern District		—	—	—	2	2	50
Taichung "		—	—	—	5	5	14
Hwalien "		—	—	1	4	5	67
Tainan "		—	1	—	1	2	8
Taitung "		—	—	1	11	12	70
Hengchun "		—	—	—	2	2	29
Distant		—	—	—	—	—	167

Felt earthquakes in the month from April to June, 1969

No.	Month	P. (G. M. T.)			Mag-nitude	Epicenter	Latitude	Longitude	Depth
		d.	h.	m.					
31	Apr	4	13	13	L	About 76km W of Kaohsiung	N. 22.6°	E. 119.4°	kms 20
32	"	4	13	56	M	About 30km SE of Kaohsiung	22.5	120.5	10
33	"	4	18	12	L	About 66km E of Lanyu			20
34	"	6	03	56	L	About 58km SWS of Tawu			40
35	"	6	22	18	L	Near Hsinkong			
36	"	7	04	02	L	About 61km N ot Taipei			60
37	"	8	12	59	L	About 15km SWS of Hsinkong			10
38	"	10	21	58	L	About 48km ENE of Hwalien			10
39	"	12	09	17	L	Near Hsinkong			
40	"	12	09	52	L	About 52km SWS of Lanyu			20
41	"	15	18	14	L	About 45km ENE of Taichung			20
42	"	19	10	58	L	About 38km ESE of Ilan			10
43	"	22	05	51	L	About 81km E of Hwalien			20
44	"	25	20	30	L	Near Lanyu			
45	"	29	05	34	L	About 70km ENE of Lanyu			40
46	Mny	2	03	15	S	About 102km ESE of Taitung	22.2	120.7	40
47	"	16	02	26	L	About 10km SWS of Hsinkong	23.1	121.3	10
48	"	17	10	54	L	About 2km SWS of Hwalien	23.8	121.6	5
49	"	20	07	51	L	Near Hsinkong			
50	"	29	13	04	L	Near Hwalien			
51	Jun	6	11	09	L	Near Lanyu	24.5	121.2	20
52	"	8	14	26	L	About 20km E of Lanyu	22.1	121.3	20
53	"	8	15	08	L	About 28km NE of Yushan	23.6	121.2	10
54	"	9	01	54	L	About 18km NE of Yushan	23.6	121.1	10
55	"	12	18	59	S	About 68km ESE of Hwalien	23.8	122.2	10
56	"	26	15	08	L	Near Alishan	23.7	122.1	10
57	"	28	12	27	L	" "	24.6	122.4	10
58	"	29	23	35	L	About 38km E of Taitung	22.7	120.8	5



## Unfelt Earthquakes in the Month from April to June 1969

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
345	Mar	31	16	50	Northern district	367	Apr	4	15	25	Taitung district
346	"	31	19	29	(d)	368	"	4	18	03	Tainan district
347	"	31	21	59	Northern district	369	"	4	18	56	Taitung district
348	Apr	1	04	28	" "	370	"	4	19	24	" "
349	"	1	08	02	Hwalien district	371	"	5	02	40	(d)
350	"	1	20	44	(d)	372	"	5	23	45	(d)
351	"	2	07	02	Northern district	373	"	5	21	59	Tainan district
352	"	2	07	16	Near Hwalien	374	"	6	07	46	Near Hwalien
353	"	2	23	25	Hengchun district	375	"	6	07	54	" "
354	"	3	08	45	Taitung district	376	"	6	17	07	" "
355	"	3	12	05	" "	377	"	7	00	14	Taitung district
356	"	3	15	09	(d)	378	"	7	02	21	" "
357	"	3	22	40	(d)	379	"	7	03	44	(d)
358	"	4	01	19	Hengchun district	380	"	7	03	57	Northern district
359	"	4	02	18	" "	381	"	7	05	25	Tainan district
360	"	4	09	04	(d)	382	"	7	06	18	Taitung district
361	"	4	11	41	Hengchun district	383	"	7	20	35	(d)
362	"	4	13	03	Taitung district	384	"	7	23	23	Taitung district
363	"	4	13	34	Hengchun district	385	"	8	01	29	Northern district
364	"	4	14	08	" "	386	"	8	02	13	Hwalien district
365	"	4	14	27	Taichung district	387	"	8	07	00	" "
366	"	4	15	15	Hengchun district	388	"	8	10	27	(d)

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
389	Apr	9	06	47	Near Hwalien	412	Apr	12	19	50	Northern district
390	"	9	10	43	Taitung district	413	"	13	05	43	(d)
391	"	9	06	09	Northern district	414	"	13	13	14	(d)
392	"	9	08	09	Near Hwalien	415	"	13	15	32	(d)
393	"	9	12	17	Taitung district	416	"	13	19	19	(d)
394	"	9	13	01	(d)	417	"	13	21	19	(d)
395	"	9	18	11	Taitung district	418	"	13	23	39	(d)
396	"	10	04	59	Northern district	419	"	14	03	16	Hengchun district
397	"	10	05	26	Taichung district	420	"	14	12	02	(d)
398	"	10	05	59	Hwalien district	421	"	14	18	08	Hwalien district
399	"	10	08	51	Taitung district	422	"	14	20	08	Taitung district
400	"	10	08	58	Hwalien district	423	"	15	09	04	Northern district
401	"	10	14	57	(d)	424	"	15	17	14	Tainan district
402	"	11	04	17	Hwalien district	425	"	15	17	36	(d)
403	"	11	04	24	Hwalien district	426	"	15	22	22	(d)
404	"	11	04	27	Northern district	427	"	16	01	30	(d)
405	"	11	04	38	(d)	428	"	16	12	29	(d)
406	"	11	07	01	Near Hwalien	429	"	17	05	01	(d)
407	"	11	07	06	" "	430	"	17	08	21	Taitung district
408	"	11	08	59	" "	431	"	18	07	34	Near Chiai
409	"	12	08	03	" "	432	"	18	08	07	(d)
410	"	12	08	08	Taitung district	433	"	18	09	34	Hengchun district
411	"	12	09	33	Near Hwalien	434	"	18	12	39	(d)



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
435	Apr	19	00	48	Northern district	458	Apr.	23	01	26	Noethern district
436	"	19	08	52	(d)	459	"	28	08	09	Taichung district
437	"	19	08	42	Near Hwalien	460	"	23	09	59	Near Hwalien
438	"	19	11	25	Hwalien district	461	"	23	22	57	Hengchun district
439	"	19	11	31	Hwalien district	462	"	24	02	02	Near Hwalien
440	"	19	21	04	(d)	463	"	24	02	11	" "
441	"	19	22	08	Northern district	464	"	24	03	14	" "
442	"	19	23	08	Taitung district	465	"	24	03	47	(d)
443	"	20	04	17	Near Hwalien	466	"	24	09	40	Near Hwalien
444	"	20	09	27	" "	467	"	24	11	02	(d)
445	"	20	18	01	Taitung district	468	"	24	21	14	Northern district
446	"	21	05	51	Northern district	469	"	25	03	09	Hengchuan district
447	"	21	07	21	(d)	470	"	25	04	10	" "
448	"	21	07	30	(d)	471	"	25	04	37	Taitung district
449	"	21	11	05	(d)	472	"	25	05	07	Near Lanyu
450	"	22	02	50	Near Hwalien	473	"	25	05	14	Northern district
451	"	22	03	36	" "	474	"	25	13	06	(d)
452	"	22	03	45	" "	475	"	25	20	28	Taitung district
453	"	22	05	00	(d)	476	"	25	21	26	(d)
454	"	22	08	16	(d)	477	"	26	05	28	(d)
455	"	22	08	21	Taitung district	478	"	26	06	18	(d)
456	"	22	09	18	Near Hwalien	479	"	26	14	32	Hwalien district
457	"	22	17	30	Tainan district	480	"	26	14	40	" "

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
481	Apr.	27	01	40	(d)	504	May	1	3	52	Northern district
482	"	27	01	42	Taitung district	505	"	1	11	37	(d)
483	"	27	05	11	Taitung district	506	"	1	11	59	Hengchun district
484	"	27	09	07	(d)	507	"	1	16	40	(d)
485	"	27	10	31	(d)	508	"	1	18	08	Taitung district
486	"	27	11	26	(d)	509	"	1	18	16	Taitung district
487	"	27	13	04	(d)	510	"	1	19	09	(d)
488	"	27	16	01	(d)	511	"	2	02	46	Hwalien district
489	"	28	00	51	(d)	512	"	2	05	52	" "
490	"	28	07	38	(d)	513	"	2	13	02	Near Hwalien
491	"	28	19	47	(d)	514	"	2	20	45	(d)
492	"	29	03	09	(d)	515	"	2	22	50	(d)
493	"	29	04	34	Tainan district	516	"	3	6	15	Taitung district
494	"	29	04	35	(d)	517	"	4	9	23	(d)
495	"	29	07	49	Hengchun district	518	"	4	12	47	(d)
496	"	29	17	34	(d)	519	"	4	13	36	Northern district
497	"	29	21	20	(d)	520	"	4	13	41	" "
498	"	30	06	32	Taitung district	521	"	4	17	23	Taitung district
499	"	30	06	42	Tainan district	522	"	5	02	54	(d)
500	"	30	08	32	Taitung district	523	"	5	06	33	(d)
501	"	30	16	33	(d)	524	"	5	10	17	Taitung district
502	"	30	20	32	(d)	525	"	5	15	11	(d)
503	May	1	2	55	(d)	526	"	5	22	29	Taitung district



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
527	May	5	22	33	(d)	550	May	13	14	41	Taitung district
528	"	6	12	39	Northern district	551	"	13	18	12	Near Taitung
529	"	6	16	19	" "	552	"	13	17	25	Taitung district
530	"	6	21	48	" "	553	"	13	18	48	(d)
531	"	6	22	16	" "	554	"	13	19	40	Taitung district
532	"	7	8	55	(d)	555	"	13	20	31	Northern district
533	"	7	11	14	Northern district	556	"	14	01	18	Hengchun district
534	"	7	18	36	Taitung district	557	"	14	18	42	(d)
535	"	7	18	47	(d)	558	"	14	19	41	(d)
536	"	8	01	50	(d)	559	"	14	23	10	Near Taitung
537	"	8	22	21	(d)	560	"	15	02	00	(d)
538	"	9	5	32	(d)	561	"	15	07	54	(d)
539	"	9	10	42	(d)	562	"	15	09	14	Near Hwalien
540	"	9	10	45	Hengchun district	563	"	15	21	05	(d)
541	"	10	13	30	(d)	564	"	15	21	37	(d)
542	"	11	7	07	Hengchun district	565	"	15	22	45	(d)
543	"	11	14	43	(d)	566	"	16	02	27	Northern district
544	"	11	23	15	(d)	567	"	16	03	26	Taitung district
545	"	12	10	05	Taitung district	568	"	16	07	02	(d)
546	"	12	19	52	(d)	569	"	16	14	07	Taitung district
547	"	13	08	39	Hengchun district	570	"	16	20	53	" "
548	"	13	14	24	(d)	571	"	17	07	22	Hengchun district
549	"	13	14	36	(d)	572	"	17	11	36	Taitung district

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
573	May	18	00	17	Near Tawu	596	May	28	01	01	Taitung district
574	"	18	00	35	(d)	597	"	28	01	26	Hengchun district
575	"	18	04	17	Near Hwalien	598	"	28	01	30	Near Lanyu
576	"	18	09	17	(d)	599	"	28	03	44	(d)
577	"	19	11	46	Near Lanyu	600	"	28	08	01	Hwalien district
578	"	20	15	11	(d)	601	"	28	13	46	(d)
579	"	21	03	00	(d)	602	"	28	14	28	(d)
580	"	21	04	14	Near Hwalien	603	"	28	18	05	Near Hwalien
581	"	21	17	50	Hengchun district	604	"	29	07	49	(d)
582	"	21	18	33	" "	605	"	29	08	49	(d)
583	"	21	20	32	Northern district	606	"	29	13	02	(d)
584	"	21	20	46	Northern district	607	"	29	13	03	Near Taichung
585	"	22	09	51	(d)	608	"	29	13	29	(d)
586	"	23	16	21	(d)	609	"	30	00	04	Near Lanyu
587	"	23	17	27	(d)	610	"	30	06	43	Taitung district
588	"	23	17	40	Hwalien district	611	"	30	06	45	" "
589	"	24	12	38	Northern district	612	"	30	06	48	" "
590	"	24	12	47	Hwalien district	613	"	30	16	07	(d)
591	"	24	18	27	Taitung district	614	"	30	20	56	Taitung district
592	"	25	08	20	Hengchun district	615	"	30	23	19	Hwalien district
593	"	26	15	40	(d)	616	"	31	05	23	Taitung district
594	"	27	09	33	(d)	617	"	31	11	58	(d)
595	"	27	13	29	(d)	618	Jun.	1	00	09	Taitung district



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
619	Jun.	1	06	33	Northern district	641	Jun.	6	12	05	Hwalien district
620	"	1	07	27	" "	642	"	7	05	53	About 64km NE of Taichung
621	"	1	09	27	" "	643	"	7	06	03	(d)
622	"	1	11	54	(d)	644	"	7	21	46	Near Yushan
623	"	1	14	00	Taitung district	645	"	7	21	51	" "
624	"	1	17	49	(d)	646	"	7	22	02	About 30km N of Yushan
625	"	1	23	33	(d)	647	"	7	23	15	(d)
626	"	2	02	49	(d)	648	"	8	02	21	Near Taipei
627	"	2	06	04	Near Alishan	649	"	8	02	28	Northern district
628	"	2	07	08	Hengchun district	650	"	8	05	02	Taitung district
629	"	2	07	58	Northern district	651	"	8	06	01	" "
630	"	2	10	29	(d)	652	"	8	11	51	Northern district
631	"	2	21	13	Hwalien district	653	"	8	13	17	Hwalien district
632	"	3	04	50	(d)	654	"	8	15	00	Northern district
633	"	3	08	38	(d)	655	"	8	16	01	Near Yushan
634	"	3	11	32	(d)	656	"	8	19	58	Taitung district
635	"	4	14	03	(d)	657	"	9	06	59	(d)
636	"	4	14	27	(d)	658	"	9	08	36	Taitung district
637	"	4	20	22	(d)	659	"	9	22	04	(d)
638	"	5	11	00	(d)	660	"	9	22	42	Hengchun district
639	"	5	17	29	(d)	661	"	10	03	33	Northern district
640	"	6	00	10	Hengchun district	662	"	10	17	18	(d)

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
663	Jun.	10	23	01	(d)	685	Jun.	17	20	19	Taitung district
664	"	11	01	18	(d)	686	"	17	23	28	(d)
665	"	11	12	22	(d)	687	"	18	20	48	(d)
666	"	11	14	51	Northern district	688	"	18	23	54	(d)
667	"	11	15	14	(d)	689	"	19	05	18	Northern district
668	"	12	07	46	(d)	690	"	19	05	35	(d)
669	"	12	10	40	(d)	691	"	19	07	05	(d)
670	"	12	12	24	Hengchun district	692	"	20	02	48	(d)
671	"	12	15	25	(d)	693	"	20	06	46	(d)
672	"	12	19	23	About 64km ESE of Hwalien	694	"	20	12	12	Taitung district
673	"	12	21	43	(d)	695	"	20	12	47	Hwalien district
674	"	13	01	18	Northern district	696	"	20	13	16	About 75km ESE of Ilan
675	"	13	07	18	" "	697	"	20	15	-2	(d)
676	"	13	08	55	(d)	698	"	20	18	13	Northern district
677	"	14	03	31	(d)	699	"	21	06	57	Hwalien district
678	"	14	07	04	Northern district	700	"	21	07	50	(d)
679	"	14	17	09	(d)	701	"	21	15	17	(d)
680	"	15	14	44	Hwalien district	702	"	21	20	33	Northern district
681	"	16	00	38	Taitung district	703	"	22	01	40	(d)
682	"	16	15	51	(d)	704	"	22	02	41	(d)
683	"	17	19	31	(d)	705	"	22	10	54	(d)
684	"	17	19	43	Taitung district	706	"	22	11	07	Near Lanyu



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
707	Jun.	22	11	35	Near Lanyu	729	Jun.	26	03	35	(d)
708	"	22	21	00	Taichung district	730	"	26	05	42	Northern district
709	"	23	00	30	(d)	731	"	26	07	55	(d)
710	"	23	06	05	(d)	732	"	26	09	30	Near Hwalien
711	"	23	06	13	(d)	733	"	26	14	43	Near Alishan
712	"	23	06	42	About 37km NE of Hwalien	734	"	27	02	21	(d)
713	"	23	06	59	Hwalien district	735	"	27	08	01	(d)
714	"	23	10	24	Hwalien district	736	"	27	10	30	Near Hwalien
715	"	23	14	04	Taitung district	737	"	27	10	46	" "
716	"	24	03	36	(d)	738	"	27	15	45	Northern district
717	"	24	11	00	(d)	739	"	27	17	01	Taitung district
718	"	25	00	12	(d)	740	"	27	17	36	Hengchun district
719	"	25	07	05	Near Hwalien	741	"	27	21	09	Near Alishan
720	"	25	07	05	" "	742	"	27	21	49	" "
721	"	25	07	42	" "	743	"	28	17	45	(d)
722	"	25	07	43	" "	744	"	29	08	02	Near Hwalien
723	"	25	15	12	Nerthern district	745	"	29	08	50	" "
724	"	25	20	45	Hengchun district	746	"	29	10	46	(d)
725	"	25	20	55	Taitung district	747	"	29	17	22	(d)
726	"	25	22	58	(d)	748	"	29	17	43	Near Hwalien
727	"	26	01	43	Taitung district	749	"	30	09	45	" "
728	"	26	03	02	" "						

Major Earthquakes which occurred in April 1969

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
					N	E	Z	N	E	Z	N	E	Z			
1	Ilan	(Mar) 31	ep	h. m. s. 19 29 07.2	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S. 02 57.3	0	Sea of Japan H=417km
	Anpu		p	29 08.0	-	-	-	-	-	-	-	-	-	02 58.0	0	
	Taipei		p	29 10.5	-	-	-	-	-	-	-	-	-	02 57.2	0	38.3N, 134.6E
	Hsinchu		p	29 12.0	-	-	-	-	-	-	-	-	-	03 30.0	0	
	Hwalien		ep	29 17.8	-	-	-	-	-	-	-	-	-	03 9.9	0	
	Alishan		p	29 28.1	-	-	-	-	-	-	-	-	-	10.6	0	
	Taichung		ep	29 30.3	-	-	-	-	-	-	-	-	-	03 9.0	0	
	Tainan		ep	29 39.6	-	-	-	-	-	-	-	-	-	-	0	
	Hengchun		ep	29 40.0	-	-	-	-	-	-	-	-	-	-	0	
	Hsinkong		p	30 13.4	-	-	-	-	-	-	-	-	-	-	0	
	Chiayi		ep	29 14.7	-	-	-	-	-	-	-	-	-	03 17.1	0	
	Taitung		ep	29 30.9	-	-	-	-	-	-	-	-	-	03 0.7	0	
	Lanyu		ep	29 31.0	-	-	-	-	-	-	-	-	-	-	0	
	KAO Kaohsiung	4	p	13 13 19.8	-	-	-	-	-	-	-	-	-	8.6	I	[L] About 13 28 76km W of 13 32
	TAI Tainan		p	13 22.8	+	+	+	23	-	-	-	-	-	9.1	I	
	YUS Yushan		p	13 34.5	-	-	-	-	-	-	-	-	-	7.5	O	H=20 13 42
	HEN Hengchun		ep	13 34.7	-	-	-	-	-	-	-	-	-	-	0	22.6N, 119.4E.
	TAW Tawu		p	13 36.7	-	-	-	-	-	-	-	-	-	-	0	
	CHI Chiayi		ep	13 37.0	-	-	-	-	-	-	-	-	-	15.2	O	13 42
	ALS Alishan		p	13 41.3	-	-	-	-	-	-	-	-	-	15.2	O	13 57
	TTN Taitung		p	13 41.4	-	-	-	-	-	-	-	-	-	11.5	O	13 53
	HWA Hwalien		ep	13 50.8	-	-	-	-	-	-	-	-	-	34.8	O	14 27









No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
					N	E	Z	N	E	Z	N	E	Z			
6	Alishan	6	p	h. m. s. 03 56 54.5	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	$\mu$	S.	S.	S.	M. S. 19.0	O	
	Hwalien		ep	57 21.4	-	-	-	-	-	-	-	-	-	-	O	
	Taipei		ep	57 36.2	-	-	-	-	-	-	-	-	-	-	O	
	Anpu		p	58 14.0	-1.33	+2.00	+0.67	-	-	-	-	-	-	-	O	
7	Hsinchu	7	ep	04 02 39.0	-	-	-	-	-	-	-	-	-	23.1	O	[L] About
	Taitung		p	03 21.3	-	-	-	-	-	-	-	-	-	-	O	61km N of
	Hwalien		p	03 39.0	-	-	-	-	-	-	-	-	-	25.1	O	H=60km
	Taipei		p	03 43.1	-	-	+ 40	-	-	-	-	-	-	11.5	I	
	Anpu		p	03 43.3	+0.92	+0.08	+1.92	-	-	-	-	-	-	8.9	O	
	Ilan		p	03 45.0	-	-	-	-	-	-	-	-	-	10.5	I	
	Taichung		ep	03 54.0	-	-	-	-	-	-	-	-	-	16.5	O	
	Alishan		p	03 58.0	-	-	-	-	-	-	-	-	-	21.0	O	
	Yushan		p	03 58.7	-	-	-	-	-	-	-	-	-	11.1	O	
	Chiayi		ep	04 19.9	-	-	-	-	-	-	-	-	-	4.8	O	
8	Hsinkong	8	p	01 29 37.0	-	-	-	-	-	-	-	-	-	-	O	About
	Ilan		ep	29 41.5	-	-	-	-	-	-	-	-	-	12.5	O	75km NWN
	Anpu		ep	29 42.0	-0.16	-0.40	-0.32	-	-	-	-	-	-	4.3	O	H=40
	Hwalien		p	29 42.1	-	-	-	-	-	-	-	-	-	15.9	O	
	Taipei		ep	29 47.3	-	-	-	-	-	-	-	-	-	9.2	O	
	Yushan		p	29 52.0	-	-	-	-	-	-	-	-	-	0.2	O	
	Alishan		p	29 52.7	-	-	-	-	-	-	-	-	-	25.7	O	
	Chiayi		ep	29 59.6	-	-	-	-	-	-	-	-	-	26.4	O	
	Taitung		ep	30 23.3	-	-	-	-	-	-	-	-	-	-	O	
	Hengchun		ep	30 37.2	-	-	-	-	-	-	-	-	-	-	O	

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
					N	E	Z	N	E	Z	N	E	Z				
9	Hsinkong	8	p	h. m. s. 12 59 55.0	$\mu$ 3.8	$\mu$ 10.0	$\mu$ ?	$\mu$	$\mu$	$\mu$	S.	S.	S.	M. S. 0.25	II	[L] About	
	Taitung		p	59 58.9	-	+	+	-	-	-	-	-	-	5.5	I	15km	
	Yushan		p	59 59.1	-	-	-	-	-	-	-	-	-	7.5	O	SWS of	
	Lanyu		p	13 00 01.8	-	-	-	-	-	-	-	-	-	-	O	Hsinkong	
	Alishan		p	00 02.4	-	-	-	-	-	-	-	-	-	8.9	O	H=10km	
	Tawu		p	00 06.7	-	-	-	-	-	-	-	-	-	-	O		
	Chiayi		ep	00 09.3	-	-	-	-	-	-	-	-	-	11.8	O		
	Hwalien		p	00 13.3	-	-	-	-	-	-	-	-	-	11.4	O		
	Hengchun		ep	00 18.2	-	-	-	-	-	-	-	-	-	-	O		
	Taichung		p	00 18.2	-	-	-	-	-	-	-	-	-	13.0	O		
10	Taipei		ep	00 26.0	-	-	-	-	-	-	-	-	-	-	O		
	Anpu		p	00 27.5	-	-	+ 0.16	-	-	-	-	-	-	7.0	O		
	Ilan		ep	00 30.0	-	-	-	-	-	-	-	-	-	16.6	O		
	Anpu	10		14 57 50.0	0.67	-	-	-0.67	-	-	-	-	-	3 5.60	O	d	
	Taitung			58 17.2	-	-	-	-	-	-	-	-	-	3 11.8	O		
	11	Ilan	10	p	21 58 26.0	- 44	- 88	?	-	-	-	-	-	-	7.7	I	[P] About
		Taipei		p	58 30.1	- 13	- 30	+ 64	-	-	-	-	-	-	39.0	O	48km
		Anpu		p	58 31.0	+0.32	-0.32	+0.96	-	-	-	-	-	-	17.0	O	ENE of
		Hwalien		p	58 31.8	-	-	-	-	-	-	-	-	-	6.8	O	Hwalien
		Hsinchu		p	58 38.9	-	-	-	-	-	-	-	-	-	42.1	O	H=10km
Taichung			ep	58 43.2	-	-	-	-	-	-	-	-	-	15.7	O		
Yushan			p	58 43.7	-	-	-	-	-	-	-	-	-	51.4	O		
Alishan			p	58 44.5	-	-	-	-	-	-	-	-	-	48.8	O		



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.				
11	Taitung	10	p	21	58	45.2	-	-	-	-	-	-	-	-	-	51.3	O	
	Hsinkong		p	58	46.8		-	-	-	-	-	-	-	-	-	-	O	
	Chiayi		ep	58	47.0		-	-	-	-	-	-	-	-	-	47.0	O	
	Tawu		p	58	47.1		-	-	-	-	-	-	-	-	-	-	O	
	Hengchun		ep	58	49.0		-	-	-	-	-	-	-	-	-	-	O	
	Lanyu		p	59	00.0		-	-	-	-	-	-	-	-	-	-	O	
12	Lanyu	12	ep	09	51	58.4	-	-	-	-	-	-	-	-	-	06.0	II	[L] About 5km SWS of Lanyu H=10km
	Hengchun		ep	52	04.5		-	-	-	-	-	-	-	-	-	-	O	
	Tawu		p	52	04.6		-	-	-	-	-	-	-	-	-	7.0	O	
	Hsinkong		p	52	06.7		-	-	-	-	-	-	-	-	-	-	O	
	Taitung		p	52	08.4		+	+	?	-	-	-	-	-	-	12.3	O	
	Chiayi		ep	52	20.6		-	-	-	-	-	-	-	-	-	23.1	O	
	Yushan		p	52	21.9		-	-	-	-	-	-	-	-	-	24.5	O	
	Alishan		ep	52	22.7		-	-	-	-	-	-	-	-	-	22.1	O	
	Hwalien		p	52	27.2		-	-	-	-	-	-	-	-	-	23.5	O	
	Ilan		ep	52	43.3		-	-	-	-	-	-	-	-	-	30.9	O	
	Anpu		p	44	43.7		-	-	1.6	-	-	-	-	-	-	9.0	O	
13	Hengchun	13	ep	05	43	24.4	-	-	-	-	-	-	-	-	-	-	O	Philippinen Islands Region. 19.3N 120.8E.
	Anpu		p	44	03.0		-	-	-	-	-	-	-	-	-	-	O	
	Alishan		ep	47	13.0		-	-	-	-	-	-	-	-	-	-	O	
14	Anpu	13	pe	19	19	36.0	-	-	-	-	-	-	-	-	-	-	O	d
	Ilan		p	19	40.1		-	-	-	-	-	-	-	-	-	09.6	O	
	Taipei		ep	19	54.0		-	-	-	-	-	-	-	-	-	-	O	

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z					
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.						
15	Ilan	13	ep	23	39	11.1	-	-	-	-	-	-	-	-	-	-	O	Banda sea Mag, 6 (PAS)		
	Hengchun		ep	39	14.7		-	-	-	-	-	-	-	-	-	-	04	00.7	O	
	Anpu		p	39	30.0		+ 2.00	- 2.00	+ 3.33	-	-	-	-	-	-	-	-	06	18.0	O
	Taitung		ep	40	18.4		-	-	-	-	-	-	-	-	-	-	-	-	O	
16	Anpu	15	p	18	36	06.0	- 2.00	- 1.33	+ 2.33	-	-	-	-	-	-	-	-	4	34.0	O
	Taipei		ep	36	07.0		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Ilan		ep	36	21.9		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Taitung		p	36	28.0		-	-	-	-	-	-	-	-	-	-	-	4	37.1	O
	Hengchun		ep	36	47.2		-	-	-	-	-	-	-	-	-	-	-	-	O	
17	Anpu	15	p	22	22	24.0	-	-	-	-	-	-	-	-	-	-	-	-	O	
	Ilan		p	24	59.1		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Taitung		p	24	59.5		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Hsinkong		p	25	00.0		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Taipei		ep	25	19.3		-	-	-	-	-	-	-	-	-	-	-	-	O	
18	Anpu	17	p	05	01	16.0	+ 1.33	- 1.33	+ 1.33	-	-	-	-	-	-	-	-	4	34.0	O
	Taitung		ep	01	41.6		-	-	-	-	-	-	-	-	-	-	-	-	O	
19	Hwalien	19	p	10	58	13.7	-	-	-	-	-	-	-	-	-	-	-	12.1	O	
	Ilan		p	59	15.2		+ 08	- 22	+ 90	-	-	-	-	-	-	-	-	4.9	I	
	Taipei		p	59	17.1		+ 10	- 7	+ 10	-	-	-	-	-	-	-	-	9.7	O	
	Hsinchu		ep	59	20.0		-	-	-	-	-	-	-	-	-	-	-	15.6	O	
	Anpu		p	59	22.0		- 1.64	-	+ 0.80	-	-	-	-	-	-	-	-	8.0	O	
	Hsinkong		p	59	22.7		-	-	-	-	-	-	-	-	-	-	-	-	O	
	Taichung		ep	59	29.1		-	-	-	-	-	-	-	-	-	-	-	18.1	O	







Major Earthquakes which occurred in May 1969

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
					N	E	Z	N	E	Z	N	E	Z			
TAI	1 Tainan	2	ep	h. m. s. 3 15 15.0	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S. 22.0	O	24 15 37 About 102km ESE of Taitung H=40km 22.2N 120.9E
KAU	Kaohsiung		ep	15 23.0	-	-	-	-	-	-	-	-	-	21.0	O	15 44
TTN	Taitung		ip	15 27.6	+ 5.5	- 2.3	- 16.3	-	-	-	-	-	-	9.3	II	15 37
ALS	Alishan		p	15 28.0	-	-	-	-	-	-	-	-	-	9.1	O	15 37
TAW	Tawu		ip	15 28.1	-	-	-	-	-	-	-	-	-	8.6	O	15 37
HSI	Hsinkong		p	15 33.3	-	-	-	-	-	-	-	-	-	12.5	O	15 46
YUS	Yushan		p	15 34.0	-	-	-	-	-	-	-	-	-	10.0	O	15 44
HEN	Hengchun		p	15 34.6	-	-	-	-	-	-	-	-	-	13.9	O	15 48
CHI	Chiayi		ep	15 39.8	-	-	-	-	-	-	-	-	-	10.6	I	15 50
TCU	Taichung		ep	15 39.8	-	-	-	-	-	-	-	-	-	15.1	O	15 55
HWA	Hwalien		p	15 42.3	-	-	-	-	-	-	-	-	-	21.1	O	16 03
ILA	Ilan		ep	15 47.9	-	-	-	-	-	-	-	-	-	26.5	O	16 14
ANP	Anpu		p	15 54.5	+ .32	+ .24	-	-	-	-	-	-	-	16.5	O	16 11
LAY	Lanyu		ep	15 55.3	+ 微	-	-	-	-	-	-	-	-	16.9	O	16 12
HSN	Hsinchu		ep	15 56.6	-	-	-	-	-	-	-	-	-	27.0	O	16 24
TAP	Taipei		ep	16 00	-	-	-	-	-	-	-	-	-	38.3	O	16 38
	2 Ilan	2	ep	5 52 18.4	-	-	-	-	-	-	-	-	-	12.8	O	About 35km SWS of Hwalien H=20km 23.7N 121.3E
	Hwalien		p	52 23.2	-	-	-	-	-	-	-	-	-	12.5	O	52 36
	Anpu		p	52 30.0	-	+ .16	- .24	-	-	-	-	-	-	18.0	O	52 48
	Alishan		p	52 34.9	-	-	-	-	-	-	-	-	-	20.0	O	52 55
	Hsinkong		p	52 35.8	-	-	-	-	-	-	-	-	-	-	O	
	Taitung		ep	52 40.0	-	-	-	-	-	-	-	-	-	21.0	O	53 01
	Taipei		ep	52 44.5	-	-	-	-	-	-	-	-	-	5.1	O	52 50

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
					N	E	Z	N	E	Z	N	E	Z			
	2 Hsinchu	2	ep	h. m. s. 5 52 48.7	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S. 13.3	O	53 02
	Hengchun		ep	52 54.5	-	-	-	-	-	-	-	-	-	-	O	
	Lanyu		ep	53 41.0	-	-	-	-	-	-	-	-	-	-	O	
	3 Taitung	7	ep	8 55 32.6	-	-	-	-	-	-	-	-	-	137.0	O	d
	Anpu		p	56 00	+ .32	+ 1.33	-	-	-	-	-	-	-	247.0	O	
	Ilan		ep	56 7.5	-	-	-	-	-	-	-	-	-	-	O	
	Hengchun		ep	56 23.3	-	-	-	-	-	-	-	-	-	-	O	
	4 Taitung	13	p	14 36 06.3	-	-	-	-	-	-	-	-	-	349.5	O	d
	Hsinkong		p	36 57.3	-	-	-	-	-	-	-	-	-	-	O	
	5 Ilan	13	ep	20 31 27.8	-	-	-	-	-	-	-	-	-	9.2	O	About 82km ENE of Taipei H=20km 25.2N 122.2E
	Hwalien		p	31 28.2	+ .16	+ .32	+ .16	-	-	-	-	-	-	18.7	O	31 47
	Anpu		p	31 30.0	-	-	-	-	-	-	-	-	-	12.5	O	31 42
	Taipei		ep	31 33.2	-	-	-	-	-	-	-	-	-	9.6	O	31 43
	Hengchun		p	31 41.0	-	-	-	-	-	-	-	-	-	-	O	
	Alishan		p	31 43.3	-	-	-	-	-	-	-	-	-	21.4	O	32 05
	Taitung		p	32 00.4	-	-	-	-	-	-	-	-	-	-	O	
	6 Anpu	14	ep	19 41 58.9	-8.64	-9.31	+ 17.29	-	-	-	-	-	-	725.0	O	d
	Taichung		p	42 16.8	-	-	-	-	-	-	-	-	-	4 12.6	O	
	Taipei		ep	58 18.7	-	-	-	-	-	-	-	-	-	-	O	
	7 Taitung	15	ep	7 54 49.4	-	-	-	-	-	-	-	-	-	-	O	d
	Anpu		p	55 16.0	-	-	-	-	-	-	-	-	-	-	O	
	8 Hsinkong	16	ip	2 26 53.5	+ 11.3	- 21.3	-	-	-	-	-	-	-	3.1	III	(L) About 10km SWS of Hsinkong H=10km 28.1N 121.3E
	Taitung		ep	26 58.4	-	-	-	-	-	-	-	-	-	7.0	O	27 05
	Yushan		p	26 59.3	-	-	-	-	-	-	-	-	-	7.5	O	27 07



No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)	h.	m.	s.	N	E	Z	N	E	Z	N	E			
ALS	8 Alishan	16	p	27	15										12.8	O	27 14	
HWA	Hwalien		p	27	7.4										12.5	O	27 20	
TAW	Tawu		p	27	8.7										10.8	O	27 19	
CHI	Chiayi		ep	27	9.0										12.0	O	27 21	
TAI	Tainan		ep	27	14.0										10.0	O	27 24	
HEN	Hengchun		ep	27	15.7										-	O		
TCU	Taichung		ep	27	15.8										13.5	O	27 29	
ANP	Anpu		p	27	24.0	+ .16									8.5		27 33	
ILA	Ilan		ep	27	23.0										18.0	O	27 41	
HWA	9 Hwalien	17	ep	10	54	48.7									3.0	II	(L) About 52 2km	
ILA	Ilan		p	54	57.0										-	O	SWS of Hwalien	
HSI	Hsinkong		p	54	57.2										8.6	O	H=5km	
HSN	Hsinchu		ep	55	00										15.0	O	23.8N 121.6E	
TCU	Taichung		ep	55	4.0										12.1	I	55 16	
ALS	Alishan		p	55	4.5										12.7	O	55 17	
YUS	Yushan		p	55	5.0										15.0	O	55 20	
TAP	Taipei		ep	55	5.1										34.5	O	55 40	
ANP	Anpu		p	55	5.5										6.5	O	55 12	
TTN	Taitung		ep	55	16.2										16.7	O	55 33	
HEN	Hengchun		ep	55	28.3										-	O		
CHI	Chiayi		ep	56	6.5										8.3	O	56 15	
	10 Taitung	21	p	03	0	7.4									-	O	d	
	Anpu		p	0	9.0	+ 2.66									240.0	O	+ 2.00	

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)	h.	m.	s.	N	E	Z	N	E	Z	N	E			
	11 Hwalien	24	p	12	38	20.1											9.9	O
	Ilan		ep	38	26.2												11.4	O
	Anpu		p	38	31.0	+ .48											12.0	O
	Alishan		p	38	33.0												15.7	O
	Taipei		p	38	34.1												12.5	O
	Taitung		ep	38	42.5												-	O
	Taichung		ep	38	48.5												3.7	O
	Hengchun		p	38	49.4												-	O
	12 Hwalien	24	p	12	47	55.0											9.5	O
	Ilan		ep	48	01.1												12.9	O
	Taipei		ep	48	6.2												19.7	O
	Anpu		p	48	8.8	+ .96											16.2	O
	Alishan		ep	48	13.7												10.7	O
	Taitung		ep	48	19.4												-	O
	Taichung		ep	48	26.0												-	O
	13 Taitung	25	p	8	20	5.9											9.0	O
	Tawu		ep	20	15.7												5.6	O
	Alishan		p	20	16.0												-	O
	Hengchun		ep	20	24.9												-	O
	Hwalien		p	20	29.9												13.3	O
	Anpu		p	20	42.0												-	O
	Lanyu		ep	20	54.0												10.7	O
	Tajpei		ep	21	00												-	O
	14 Taitung	26	ep	15	40	31.7											-	O
	Anpu		p	40	36.8	+ 2.66											245.2	O







No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
					N	E	Z	N	E	Z	N	E	Z				
HSI	6 Hsinkong	9	p	01 54 35.1	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S.	27.6 O	(L) About 18km ENE of Yushan H=10km 23.8N 121.1E	
YUS	Yushan		p	55 00.0	-	-	-	-	-	-	-	-	-	-	02.5 II	5503	
ALS	Alishan		p	55 03.4	-	-	47.1	46.6	-	609	233	-	1.8	2.6	04.3 II	5508	
HWA	Hwalien		p	55 05.7	+	12	-	0.6	46	678	750	342	2.8	1.8	08	07.2 I	5513
TCU	Taichung		ep	55 11.8	-	-	-	-	-	-	-	-	-	-	09.6 O	5521	
CHI	Chiayi		ep	55 13.7	-	-	-	-	-	-	-	-	-	-	14.6 O	5528	
TTN	Taitung		p	55 14.3	+	-	-	-	84	115	-	1.3	2.1	-	14.6 O	5529	
HSN	Hsinchu		ep	55 15.5	-	-	-	-	-	-	-	-	-	-	17.8 O	5533	
ILA	Ilan		ip	55 19.5	+	23	-	0.8	43	222	253	180	2.5	2.3	1.9	18.2 I	5538
KAU	Kaoshiung		ep	55 20.0	-	-	-	-	-	-	-	-	-	-	16.2 O	5536	
TAW	Tawu		p	55 20.2	-	-	-	-	-	-	-	-	-	-	20.3 O	5541	
TAI	Tainan		ep	55 20.5	-	-	-	-	-	-	-	-	-	-	16.9 O	5537	
TAP	Taipei		p	55 22.0	-	-	-	-	-	-	-	-	-	-	20.0 O	5542	
ANP	Anpu		p	55 25.0	+	5.04	+	0.40	4.96	-	-	-	-	-	-	O	
HEN	Hengchun		p	55 29.2	-	-	-	-	-	-	-	-	-	-	-	O	
HSI	7 Hsinkong	12	p	18 59 22.3	-	-	-	-	-	-	-	-	-	-	-	0 (S) Abot 68km ESE of Hwalien H=10km 23.8N 122.2E	
HWA	Hwalien		p	59 28.9	-	-	-	-	1395	-	770	1.8	-	1.8	8.7 I	5938	
ILA	Ilan		ip	59 29.8	+	37	-	37	25	485	745	384	2.0	1.7	2.4	14.0 II	5944
HSN	Hsinchu		ep	59 31.0	-	-	-	-	-	-	-	-	-	-	17.8 O	5949	
TAP	Taipei		ep	59 33.5	+	-	-	-	560	700	-	1.8	2.0	-	18.0 O	5952	
ANP	Anpu		p	59 34.0	+	0.32	-	0.48	0.64	-	-	-	-	-	22.0 O	5956	
YUS	Yushan		p	59 34.8	-	-	-	-	-	-	-	-	-	-	15.6 O	5950	
ALS	Alishan		p	59 36.8	-	-	-	-	-	-	-	-	-	-	15.4 I	5952	
TCU	Taichung		ip	59 37.4	-	5.4	-	6.2	21.3	384.9	572.8	262.5	2.4	3.2	2.9	18.7 I	5956

23 18  
23 10  
23 14  
10 18  
13 12

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks					
					N	E	Z	N	E	Z	N	E	Z								
TTN	7 Taitungp	12	p	18 59 38.9	μ	μ	+	18.5	μ	114	μ	128	μ	58	S.	S.	S.	M. S.	20.1 I	59 59	
KAU	Kaoshing		ep	59 42.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
TAW	Tawu		p	59 45.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
HEN	Hengchun		p	59 51.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
TAI	Tainan		ep	59 58.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
HSI	8 Hsinkong	12	p	19 23 32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	About 64km ESE of Hwalien H=10km 23.7N 122.1E
ILA	Ilan		ep	23 34.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	23 46
HSN	Hsinchu		ep	23 34.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	23 52
YUS	Yushan		p	23 38.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	23 56
TAP	Taipei		ep	23 39.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
ANP	Anpu		p	23 39.8	+	0.24	+	0.32	0.46	-	-	-	-	-	-	-	-	-	-	O	24 02
ALS	Alishan		p	23 41.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	23 59
TCU	Taichung		ep	23 42.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	24 04
TTN	Taitung		ep	23 45.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	24 03
HEN	Hengchun		ep	23 56.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
HSI	9 Hsinkong	17	p	19 31 14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	GMT 19h 26m 28.9s Mariana Islands 19.0N 145.5E Mag 5.9 (PAS) 5.9 (BRK)
HWA	Hengchun		ep	31 19.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	
ANP	Anpu		p	31 20.0	-	6.7	+	13.3	18.3	-	-	-	-	-	-	-	-	-	-	O	3 45.0 O
TTN	Taitung		p	31 21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	500.6 O
ILA	Ilan		ep	31 22.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	3 49.6 O
ALS	Alishan		p	31 23.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	43.1 O
HWA	Hwalien		p	31 23.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	103.2 O
KAU	Kaoshiung		ep	31 24.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	40.8 O







# 地震季報

第十六卷 第三號

中華民國五十八年 七、八、九月

## SEISMOLOGICAL BULLETIN

July to September 1969

Vol. 16 No. 3

臺灣省氣象局

PUBLISHED QUARTERLY BY

TAIWAN PROVINCIAL WEATHER BUREAU

64, KUNG YUAN ROAD, TAIPEI, TAIWAN,

REPUBLIC OF CHINA



## General Aspect of Earthquakes

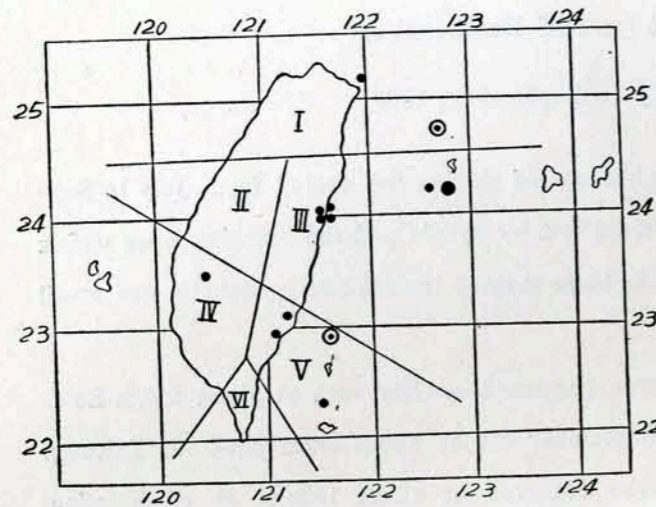
From July to September, 1969

The number of earthquakes which occurred during the period from July to September, 1969 is 477. Among them, 13 were felt by people and the remains were unfelt ones. The felt earthquakes during these three months include two moderate, one small felt area and ten local ones.

The two moderate earthquakes, one happened on July 21th at about 95km ENE, of Taipei and another happened on September 5th at about 38km ENE, of Taitung. Among one small felt area earthquake occurred at about 132km. E. of Hwalien. Besides above mentioned earthquakes some distant earthquakes had been recorded by our seismometers. The data of the major earthquakes are shown on the latter part of this bulletin.



Epicenters of Felt Earthquakes From July to September 1969



- I Northern District
- II Taichung District
- III Hwalien District
- IV Tainan District
- V Taitung District
- VI Hengchun District
- VII Other places and distant earthquakes
- ⊙(r): Remarkable
- ⊙(m): Moderate
- (s): Small felt area
- (l): Local
- ×: Deep

Number of earthquakes classified according to its magnitude and districts July to September

Districts	Classification Maghitudes	Number of felt earthquakes				Total	Number of unfelt earthquakes	Total
		Remarkable	Moderate	Small felt area	Local			
Northern District		—	1	—	1	2	58	60
Taichung "		—	—	—	—	—	5	5
Hwalien "		—	—	1	5	6	159	165
Tainan "		—	—	—	1	1	4	5
Taitung "		—	1	—	3	4	64	68
Hengchun "		—	—	—	—	—	11	11
Other places		—	—	—	—	—	163	163
<b>Total</b>		—	2	1	10	13	464	477

Felt earthquakes in the month of From July to September, 1969.

No.	Month	P. (G. M. T.)	Mag- nitude	Epicenter	Latitude		Longitude	Depth
					N.	E.		
59	July	21 14 03	L	Near Hwalien	25.3	122.1		
60	"	21 14 49	L	Near Hwalien				
61	"	27 22 26	M	About 95km. E. of Ilan	24.7	122.7	40	
62	August	01 15 57	L	About 48km. END. of Taipei			25	
63	"	03 04 19	S	About 132km. E. of Hwalien	24.1	122.8	20	
64	"	04 19 37	L	About 8km. E. of Hsinkong			5	
65	"	05 14 17	L	Near Hwalien				
66	"	13 17 57	L	About 85km. ENE. of Hwalien			20	
67	"	15 22 33	L	Near Hwalien				
68	Sep.	03 05 27	L	Near Taitung				
69	"	05 11 42	M	About 38km. ENE. of Taitung	22.7	121.5	10	
70	"	17 20 00	L	Near Chiayi	24.8	121.1	10	
71	"	18 18 00	L	About 50km. ESE of Tawu			20	
		15 10 42	05		23.5	121.8	20	
		19 18 00	05		23.1	122.2	20	
		18 22 30	40		23.1	122.2	20	
		20 18 22	15		24.4	122.6	10	
		21 04 10	55		23.2	121.6	20	
		22 19 06	15		25.0	122.2	20	



## Unfelt Earthquakes in the Month from July to September 1969

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
750	July	01	11	00	Northern district	772	July	05	7	59	43km. NW. of Taipei
751	"	01	21	15	Northern district	773	"	05	9	09	Hwalien district
752	"	02	06	12	75km. ENE. of Hwalien	774	"	05	11	18	(d)
753	"	02	12	04	(d)	775	"	05	19	03	(d)
754	"	02	12	10	Taichung district	776	"	06	01	58	Near Taipei
755	"	03	01	50	Hwalien district	777	"	06	04	05	Hwalien district
756	"	03	8	25	Hwalien district	778	"	06	9	51	Hwalien district
757	"	03	18	11	(d)	779	"	06	11	37	(d)
758	"	03	19	43	68km. SE. of Ilan	780	"	06	18	35	Near Taitung
759	"	04	02	41	Hwalien district	781	"	07	3	10	Near Taipei
760	"	04	8	39	Hwalien district	782	"	07	4	41	(d)
761	"	04	8	39	Near Hwalien	783	"	08	01	10	(d)
762	"	04	12	00	Hwalien district	784	"	08	04	12	(d)
763	"	04	12	01	Near Hwalien	785	"	08	7	33	(d)
764	"	04	16	28	Near Tawu	786	"	08	8	04	110km. ENE. of Hwalien
765	"	04	16	29	Hengchun district	787	"	08	8	21	(d)
766	"	04	23	17	(d)	788	"	09	2	04	(d)
767	"	05	01	16	Hwalien district	789	"	09	3	47	Northern district
768	"	05	01	50	(d)	790	"	09	5	56	Near Ilan
769	"	05	6	30	Hwalien district	791	"	09	8	28	Northern district
770	"	05	6	59	Hwalien district	792	"	09	15	47	100km. NNE. of Taipei
771	"	05	7	19	Hwalien district	793	"	09	17	56	Northern district

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
794	July	09	19	24	Near Anpu	817	July	16	11	58	35km. N. of Yushan
795	"	10	7	47	Hengchun district	818	"	16	12	47	(d)
796	"	10	10	07	Hengchun district	819	"	17	01	08	Hwalien district
797	"	10	19	28	(d)	820	"	17	02	09	Northern district
798	"	11	3	14	Hwalien district	821	"	18	05	27	(d)
799	"	11	5	20	Near Anpu	822	"	18	12	29	Near Taitung
800	"	11	8	20	Hwalien district	823	"	18	13	37	(d)
801	"	12	8	21	(d)	824	"	19	01	58	(d)
802	"	12	13	07	(d)	825	"	19	05	14	(d)
803	"	12	19	21	(d)	826	"	19	09	51	Northern district
804	"	13	02	03	105km. E. of Ilan	827	"	19	11	04	(d)
805	"	13	3	15	(d)	828	"	20	04	53	(d)
806	"	13	5	53	Hwalien district	829	"	20	12	01	(d)
807	"	13	5	57	Hwalien district	830	"	20	18	39	(d)
808	"	14	00	54	Northern district	831	"	20	20	01	(d)
809	"	14	08	01	Northern district	832	"	20	23	49	(d)
810	"	14	16	01	(d)	833	"	21	03	12	Northern district
811	"	14	16	14	63km. SE. of Ilan	834	"	21	03	36	Hengchun district
812	"	15	00	18	Hwalien district	835	"	21	04	37	Taitung district
813	"	15	07	20	Taitung district	836	"	21	04	58	Northern district
814	"	15	13	42	Northern district	837	"	21	07	37	(d)
815	"	16	04	51	" "	838	"	21	16	27	Northern district
816	"	16	08	24	(d)	839	"	21	19	52	(d)



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
840	July	21	21	24	Near Tawu	863	July	26	12	59	Near Hsinkong
841	"	21	21	27	Near Tawu	864	"	27	14	28	Northern district
842	"	21	22	11	Taitung district	865	"	28	13	06	(d)
843	"	21	22	14	Taitung district	866	"	29	08	07	25km. NE. of Yushan
844	"	22	04	58	Hwalien district	867	"	29	11	32	Hengchun diatrict
845	"	22	11	12	Northern district	868	"	29	16	26	Hwalien district
846	"	22	14	59	Hengchun district	869	"	29	20	55	108km ESE. of Ilan
947	"	23	06	53	Northern district	870	"	30	03	24	(d)
848	"	23	08	50	Taitung district	871	"	30	03	28	Taitung district
849	"	23	09	17	100km. ENE. of Taipei	872	"	30	04	23	(d)
850	"	23	13	19	(d)	873	"	31	02	40	(d)
851	"	23	16	39	Northern district	874	"	31	09	00	(d)
852	"	24	01	35	(d)	875	"	31	11	33	(d)
853	"	24	03	11	(d)	876	"	31	03	06	Taitung district
854	"	24	12	51	(d)	877	"	31	17	35	Taichung district
855	"	24	21	44	Taitung district	878	"	31	18	49	(d)
856	"	25	00	55	" "	879	August	01	05	07	(d)
857	"	25	01	12	Northern district	880	"	01	07	11	Hwalin district
858	"	25	06	27	(d)	881	"	01	10	58	(d)
859	"	25	13	00	Northern district	882	"	01	16	09	Near Anpu
860	"	25	13	23	(d)	883	"	01	17	21	" "
861	"	25	22	50	(d)	884	"	01	13	04	Hwalien district
862	"	25	22	53	Felt (d)	885	"	01	23	50	(d)

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
886	Aug.	02	04	07	(d)	909	Aug.	07	01	57	(d)
887	"	02	04	38	(d)	910	"	08	01	14	Near Yushan
888	"	02	10	30	(d)	911	"	08	20	49	(d)
889	"	02	14	47	Northern district	912	"	09	07	46	Near Hwalien
890	"	02	20	18	(d)	913	"	09	20	49	Taitung district
891	"	03	00	30	(d)	914	"	10	19	13	" "
892	"	03	04	38	Taitung district	915	"	11	08	01	Near Hwalien
893	"	03	04	40	" "	916	"	11	21	27	(d)
894	"	03	07	54	(d)	917	"	11	21	32	(d)
895	"	03	17	29	Tainan district	918	"	11	23	57	(d)
896	"	03	23	17	Northern district	919	"	12	03	44	(d)
897	"	04	12	39	(d)	920	"	12	04	15	Northern district
898	"	04	17	24	(d)	921	"	12	05	09	(d)
899	"	04	17	28	Hengchun district	922	"	12	05	16	Tainan district
900	"	04	17	34	Taitung district	923	"	12	05	59	Taitung district
901	"	05	02	17	(d)	924	"	12	06	10	Tainan district
902	"	05	13	08	(d)	925	"	12	09	31	(d)
903	"	05	14	19	Near Hwalien	926	"	12	11	27	(d)
904	"	05	16	40	(d)	927	"	12	12	26	(d)
905	"	05	17	02	(d)	928	"	13	02	18	(d)
906	"	06	02	02	93km. ENE. of Hwalien	929	"	13	03	40	(d)
907	"	06	02	41	Hengchun district	930	"	13	04	39	(d)
908	"	06	13	55	(d)	931	"	13	08	37	(d)



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
932	Aug.	13	11	38	Tainan district	955	Aug.	18	01	24	(d)
933	"	13	15	02	Taitung district	956	"	18	04	18	Near Hwalien
934	"	13	17	12	(d)	957	"	18	11	49	(d)
935	"	13	17	17	Northern district	958	"	18	14	03	35km. S. of Hwalien
936	"	13	22	54	(d)	958	"	19	01	51	(d)
937	"	13	23	03	Taitung district	960	"	19	08	55	(d)
938	"	14	00	34	" "	961	"	19	09	01	Northern district
939	"	14	07	46	(d)	962	"	19	11	56	Hwalien district
940	"	14	14	25	(d)	963	"	19	12	32	22km. N. of Hwalien
941	"	15	03	44	(d)	964	"	19	23	09	Taitung district
942	"	15	04	37	(d)	965	"	20	00	25	Hwalien district
943	"	15	04	52	(d)	966	"	20	07	57	Taitung district
944	"	15	08	45	(d)	967	"	20	08	01	(d)
945	"	15	18	54	Near Hsinkong	968	"	20	17	28	Taitung district
946	"	16	07	47	Near Hwalien	969	"	20	17	36	(d)
947	"	16	08	57	(d)	970	"	20	20	48	Northern district
948	"	10	15	21	(d)	971	"	21	00	39	(d)
949	"	16	17	24	(d)	972	"	21	03	43	(d)
950	"	17	04	36	Northern district	973	"	21	13	35	(d)
951	"	17	11	26	20km. SSE. of Hwalien	974	"	22	04	51	(d)
952	"	17	11	47	(d)	975	"	23	03	07	(d)
953	"	17	20	27	(d)	976	"	23	04	00	Near Hwalien
954	"	18	00	42	Near Hwalien	977	"	23	06	44	Taitung district

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
978	Aug.	23	06	49	(d)	1001	Aug.	27	02	01	Taitung district
979	"	23	07	16	Northern district	1002	"	27	03	01	Near Taitung
980	"	23	08	18	Near Anpu	1003	"	27	03	32	(d)
981	"	24	00	15	(d)	1004	"	27	06	05	Near Hwalien
982	"	24	00	50	Taitung district	1005	"	27	10	01	Hwalien district
983	"	24	03	45	(d)	1006	"	27	19	07	" "
984	"	24	18	33	Hwalien district	1007	"	27	19	27	(d)
985	"	24	22	08	(d)	1008	"	27	19	31	Taitung district
986	"	25	01	17	(d)	1009	"	28	02	05	Near Hwalien
987	"	25	19	38	(d)	1010	"	28	04	06	(d)
988	"	26	00	04	Taitung district	1011	"	28	13	07	Northern district
989	"	23	00	33	Near Hwalien	1012	"	28	14	06	(d)
990	"	26	05	44	" "	1013	"	28	21	41	(d)
991	"	26	06	48	" "	1014	"	29	01	23	Near Hwalien
992	"	26	08	30	" "	1015	"	29	01	46	" "
993	"	23	17	05	(d)	1016	"	29	03	20	(d)
994	"	26	20	54	(d)	1017	"	29	05	56	Near Hwalien
995	"	23	22	20	Taitung district	1018	"	29	07	53	" "
996	"	27	00	00	Near Hwalien	1019	"	29	12	08	(d)
997	"	27	00	26	" "	1020	"	30	00	07	Near Hwalien
998	"	27	00	54	" "	1021	"	30	01	50	" "
999	"	27	01	16	(d)	1022	"	30	03	01	Near Anpu
1000	"	27	01	39	Hwalien district	1023	"	30	03	28	Near Hwalien



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1024	Aug.	30	06	43	Near Hwalien	1047	Sep.	02	07	27	(d)
1025	"	30	07	00	" "	1048	"	02	10	16	Near Hsinkong
1026	"	30	07	03	(d)	1049	"	02	11	20	Northern district
1027	"	30	07	17	(d)	1050	"	02	11	48	Hwalien district
1028	"	30	08	10	Near Hwalien	1051	"	02	12	14	(d)
1029	"	30	08	34	(d)	1052	"	02	14	53	Taitung district
1030	"	30	08	44	Near Hwalien	1053	"	02	23	29	Near Hwalien
1031	"	31	00	21	" "	1054	"	02	23	58	" "
1032	"	31	02	11	" "	1055	"	03	01	36	(d)
1033	"	31	05	18	(d)	1056	"	03	05	45	Near Hwalien
1034	"	31	06	29	Near Hwalien	1057	"	03	07	53	" "
1035	"	31	08	59	Taitung district	1058	"	03	16	24	(d)
1036	"	31	09	23	Near Hwalien	1059	"	03	19	17	Near Ilan
1037	"	31	15	01	Taitung district	1060	"	04	00	25	Near Hwalien
1038	Sep.	01	03	20	Near Hsinkong	1061	"	04	01	28	" "
1039	"	01	06	12	Near Hwalien	1062	"	04	03	15	(d)
1040	"	01	07	37	" "	1063	"	04	06	19	Near Hwalien
1041	"	01	03	37	(d)	1064	"	04	07	02	" "
1042	"	01	09	50	(d)	1065	"	04	10	04	Northern district
1043	"	01	23	43	Near Hwalien	1066	"	04	21	18	(d)
1044	"	02	00	47	" "	1067	"	04	23	39	Near Hwalien
1045	"	02	03	37	" "	1068	"	05	00	59	" "
1046	"	02	07	03	" "	1069	"	05	01	37	" "

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1070	Sep.	05	01	41	Near Hsinkong	1094	Sep.	08	07	07	Near Hwalien
1071	"	05	02	10	Near Hwalien	1095	"	08	12	59	(d) (62.1N 149.3W)
1072	"	05	04	38	" "	1096	"	08	04	09	Near Ilan
1073	"	05	05	22	" "	1097	"	09	05	19	(d)
1074	"	05	05	33	" "	1098	"	09	15	47	60km. W of Taipei
1075	"	05	05	45	" "	1099	"	09	19	48	Taitung district
1076	"	05	14	10	Taitung district	1100	"	11	01	18	Near Hsinkong
1077	"	05	14	31	" "	1101	"	11	03	20	Ryukyu Islands (d) (26.1N 128.5E)
1078	"	05	14	19	" "	1102	"	11	04	17	Hwalien district
1079	"	05	17	10	" "	1103	"	11	04	25	Near Hsinkong
1080	"	05	22	29	Near Hwalien	1104	"	12	02	56	Near Hwalien
1081	"	06	01	19	" "	1105	"	12	06	09	Taitung district
1082	"	06	01	42	" "	1106	"	12	07	30	Near Hwalien
1083	"	06	02	25	" "	1107	"	12	09	06	(d)
1084	"	06	07	49	(d)	1108	"	12	15	25	(d)
1085	"	06	08	33	Near Hwalien	1109	"	13	12	02	(d)
1086	"	06	08	57	" "	1110	"	14	06	23	(d)
1087	"	06	14	58	(d)	1111	"	14	16	41	(d)
1088	"	06	16	04	Northern district	1112	"	14	20	16	Taitung district
1089	"	06	17	16	(d)	1113	"	14	23	42	Near Hwalien
1090	"	07	03	04	Near Taitung	1114	"	15	01	12	Near Ilan
1091	"	07	18	54	(d)	1115	"	15	02	56	Near Hwalien
1092	"	03	05	13	Taitung district	1116	"	15	04	35	Northern district
1093	"	08	06	12	Near Hwalien	1117	"	15	05	21	" "



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1118	Sep.	15	05	51	Near Hwalien	1142	Sep.	18	02	25	Northern district
1119	"	15	06	35	" "	1143	"	18	02	41	Near Hwalien
1120	"	19	09	05	" "	1144	"	18	06	50	" "
1121	"	15	09	46	" "	1145	"	18	07	52	" "
1122	"	15	10	42	45km. SSE of Hwalien	1146	"	18	09	23	" "
1123	"	15	14	42	(d)	1147	"	18	12	02	(d)
1124	"	15	19	00	(d)	1148	"	18	22	30	75km. E of Hsinkong
1125	"	16	01	25	Near Hwalien	1149	"	18	22	36	Northern district
1126	"	16	01	29	(d)	1150	"	18	23	28	Near Hwalien
1127	"	16	02	19	Near Hwalien	1151	"	19	01	33	(d)
1128	"	16	03	00	" "	1152	"	19	02	40	Near Hwalien
1129	"	16	03	46	" "	1153	"	19	03	17	" "
1130	"	16	05	11	" "	1154	"	19	09	02	" "
1131	"	16	08	01	Northern district	1155	"	19	09	43	Near Taipei
1132	"	16	15	15	(d)	1156	"	19	13	33	(d)
1133	"	17	03	26	(d)	1157	"	20	02	26	Near Hwalien
1134	"	17	03	53	Near Hwalien	1158	"	20	02	54	" "
1135	"	17	06	00	" "	1159	"	20	03	38	Taitung district
1136	"	17	07	02	Taitung district	1160	"	30	04	40	" "
1137	"	17	17	05	50km. NE of Hsinkong	1161	"	20	05	39	(d)
1138	"	17	17	43	(d)	1162	"	20	06	02	Near Hwalien
1139	"	17	18	43	(d)	1163	"	20	09	16	" "
1140	"	18	01	07	Near Hwalien	1164	"	20	10	48	Northern district
1141	"	18	01	39	" "	1165	"	20	18	22	120km. NE of Hwalien

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1166	Sep.	21	01	33	Near Hwalien	1190	Sep.	24	04	22	Near Hwalien
1167	"	21	02	34	" "	1191	"	24	09	16	" "
1168	"	21	03	06	" "	1192	"	24	11	05	Taitung district
1169	"	21	04	10	30km. NE of Hsinkong	1193	"	24	14	03	Near Anpu
1170	"	21	08	42	Near Hwalien	1194	"	24	18	25	(d)
1171	"	21	13	37	" "	1195	"	24	23	59	Near Hwalien
1172	"	22	02	05	(d)	1196	"	25	05	44	Near Hsinkong
1173	"	22	02	39	Near Hsinkong	1197	"	28	06	52	40km. NE of Lanyu
1174	"	22	03	59	(d)	1198	"	28	07	33	Taitung district
1175	"	22	05	04	Near Hwalien	1199	"	29	05	47	Near Hwalien
1176	"	22	15	19	Taichung district	1200	"	29	06	17	" "
1177	"	22	16	19	Taitung district	1201	"	29	07	54	" "
1178	"	22	18	55	Near Taitung	1202	"	29	08	05	Near Hsinkong
1179	"	22	19	06	60km. E of Taipei	1203	"	29	08	26	Near Nwalien
1180	"	23	02	46	Near Hwalien	1204	"	29	10	33	Near Hsinkong
1181	"	23	03	20	" "	1205	"	29	16	26	(d)
1182	"	23	07	06	(d)	1206	"	29	18	04	(d)
1183	"	23	07	11	Hwalien district	1207	"	29	20	31	(d)
1184	"	23	08	37	Near Hwalien	1208	"	30	01	06	Taitung district
1185	"	23	09	16	" "	1209	"	30	01	10	(d)
1186	"	23	23	04	" "	1210	"	30	03	48	Near Hwalien
1187	"	23	23	42	" "	1211	"	30	03	28	Hwalien district
1188	"	24	02	56	" "	1212	"	30	04	23	(d)
1189	"	24	04	41	(d)	1213	"	30	06	59	Near Hwalien



Major Earthquakes which occurred in July 1969

No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks			
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z						
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.							
1	Hsinkong	02	p	06	12	15	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	0	75km. ENE. of Hwalien		
	Ilan		ep		12	17	-	-	-	-	-	-	-	-	-	-	-	11.7		0	
	Hwalien		p		12	18	-	-	-	-	-	-	-	-	-	-	-	13.5		0	
	Anpu		p		12	21	-	-	-	-	-	-	-	-	-	-	-	4.0		0	
	Taipei		ep		12	21	-	-	-	-	-	-	-	-	-	-	-	13.3		0	
	Yushan		p		12	28	-	-	-	-	-	-	-	-	-	-	-	16.9		0	
	Alishan		p		12	31	-	-	-	-	-	-	-	-	-	-	-	19.7		0	
	Taitung		ep		12	31	-	-	-	-	-	-	-	-	-	-	-	24.4		0	
	Taichung		ep		12	33	-	-	-	-	-	-	-	-	-	-	-	15.0		0	
	Hengchun		ep		12	47	-	-	-	-	-	-	-	-	-	-	-	-		0	
	Lanyu		p	06			-	-	-	-	-	-	-	-	-	-	-	-	0		
2	Taitung	02	ep	10	04	31	-	-	-	-	-	-	-	-	-	-	-	-	0	U. S. C. G. S 09h59m53.4s	
	Anpu		ep		04	38	-	-	-	-	-	-	-	-	-	-	-	3 53.0	0	20.7N 99.4E Burma	
3	Taichung	02	ep	10	10	06	-	-	-	-	-	-	-	-	-	-	-	-	0	Taichung district	
	Taipei		ep		11	00	-	-	-	-	-	-	-	-	-	-	-	-	0		
4	Ilan	02	ep	19	43	58	-	-	-	-	-	-	-	-	-	-	-	-	7.8	0	
	Hwalien		p		43	59	-	-	-	-	-	-	-	-	-	-	-	-	9.6	0	
	Anpu		p		44	00	-	-	-	-	-	-	-	-	-	-	-	-	6.0	0	
	Taipei		ep		44	00	-	-	-	-	-	-	-	-	-	-	-	-	9.2	0	
	Hsinchu		ep		44	06	-	-	-	-	-	-	-	-	-	-	-	-	77.0	0	68km. SE. of Ilan
	Hsinkong		p		44	09	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Alishan		p		44	12	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Taichung		p		44	17	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Taitung		p		44	37	-	-	-	-	-	-	-	-	-	-	-	-	-	0	

No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks				
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z							
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.								
5	Hwalien	04	p	02	41	25	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	9.9	0	Hwalien district		
	Anpu		p		41	35	-	-	-	-	-	-	-	-	-	-	-	7.5	0			
	Hsinkong		p		41	37	-	-	-	-	-	-	-	-	-	-	-	-	0			
	Taipei		ep		41	37	-	-	-	-	-	-	-	-	-	-	-	-	0			
6	Tawu	04	p	16	28	39	-	-	-	-	-	-	-	-	-	-	-	-	-	0	Near Tawu	
	Hengchun		ep		28	46	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
7	Anpu	05	p	07	59	57	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5	0	43km. NW. of Taipei
	Hsinchu		ep		08	00	02	-	-	-	-	-	-	-	-	-	-	-	-	13.8	0	
	Taichung		ep		00	11	-	-	-	-	-	-	-	-	-	-	-	-	-	14.6	0	
	Taitung		ep		00	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Ilan		ep		00	29	-	-	-	-	-	-	-	-	-	-	-	-	-	10.4	0	
	Taipei		ep		00	?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
8	Hsinkong	06	p	18	35	02	-	-	-	-	-	-	-	-	-	-	-	-	-	0	Near Taitung	
	Taitung		p		35	04	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5	0	
9	Anpu	06	p	04	41	06	-	-	-	-	-	-	-	-	-	-	-	-	-	8 22.0	0	6.4S. 154.9E
	Taitung		ep		49	10	-	-	-	-	-	-	-	-	-	-	-	-	-	4 00.8	0	(d) Solomon Islands.
10	Hwalien	08	p	08	04	11	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2	0	110km. ENE. of Hwalien
	Ilan		ep		04	20	-	-	-	-	-	-	-	-	-	-	-	-	-	12.7	0	
	Anpu		p		04	23	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5	0	
	Taipei		ep		04	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
11	Taipei	09	ep	15	47	03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Anpu		p		47	08	+	+	-	-	-	-	-	-	-	-	-	-	-	-	11.7	0
	Hwalien		p		47	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.4	0















Major Earthquakes which occurred in August 1969

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
					N	E	Z	N	E	Z	N	E	Z			
					h. m. s.	μ	μ	μ	μ	μ	μ	S.	S.			S.
1	Hsinchu	01	p	15 57 01	-	-	-	-	-	-	-	-	-	12.5	O	
	Ilan		p	57 34	-10	-13	+20	-	-	-	-	-	-	06.3	I	
	Anpu		p	57 39	-6.88	-	-10.4	+15.2	-	-	-	-	-	01.5	O	
	Taipei		p	57 43	-	-	-	-	-	-	-	-	-	07.6	O	
	Hwalien		p	57 48	-	-	-	-	-	-	-	-	-	01.2	O	
	Taichung		ip	57 57	-	-	-	-	-	-	-	-	-	22.3	O	
	Hsinkong		ep	58 01	-	-	-	-	-	-	-	-	-	-	O	48km. ENE. of Taipei
	Alishan		p	58 01	-	-	-	-	-	-	-	-	-	-	O	
	Yushan		p	58 02	-	-	-	-	-	-	-	-	-	22.5	O	
	Chiayi		ep	58 07	-	-	-	-	-	-	-	-	-	03.0	O	
	Taitung		ep	58 09	-	-	-	-	-	-	-	-	-	-	O	
	Tainan		ep	58 11	-	-	-	-	-	-	-	-	-	-	O	
	Tawu		ep	58 50	-	-	-	-	-	-	-	-	-	-	O	
2	Ilan	01	p	16 09 56	-	-	-	-	-	-	-	-	-	03.3	O	
	Anpu		p	10 03	-.24	-.19	+.4	-	-	-	-	-	-	02.5	O	Near Anpu
	Taipei		ep	10 04	-	-	-	-	-	-	-	-	-	-	O	
3	Ilan	01	ep	17 21 07	-	-	-	-	-	-	-	-	-	03.5	O	Hwalien district
	Anpu		p	21 11	-.48	+.56	+.40	-	-	-	-	-	-	03.2	O	
	Taipei		ep	21 14	-	-	-	-	-	-	-	-	-	-	O	
	Hwalien		ep	21 23	-	-	-	-	-	-	-	-	-	16.9	O	
4	Anpu	01	p	23 50 02	-	-	-	-	-	-	-	-	-	5 46.0	O	U.S. C.G.S 34.3N. 45.4E Iran-Inaq Borden Region
	Taitung		ep	50 23	-	-	-	-	-	-	-	-	-	-	O	

No.	Station	Date	Phase	P. (G.M.T.)	Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks		
					N	E	Z	N	E	Z	N	E	Z				
					h. m. s.	μ	μ	μ	μ	μ	μ	S.	S.			S.	M. S.
H51	Hsinkong	03	ip	04 20 01	-	-	-	-	-	-	-	-	-	-	18.9	I	20 20
HWA	Hwalien		p	20 02	-	-	-	-	-	-	-	-	-	-	19.4	I	20 21
ICA	Ilan		p	20 03	-	-	-	-	-	-	-	-	-	-	16.3	I	20 19
H5N	Hsinchu		ep	20 06	-	-	-	-	-	-	-	-	-	-	31.1	O	20 37
ANP	Anpu		p	20 08	-.32	-.56	-.72	-	-	-	-	-	-	-	06.5	O	20 15
TAP	Taipei		ip	20 13	-	-	-	-	-	-	-	-	-	-	18.0	I	132km. E. of Hwalien
TTN	Taitung		p	20 14	-	-	-	-	-	-	-	-	-	-	26.1	I	24.1N 122.8E U.S. C.G.S
TCU	Taichung		ip	20 16	-	-	-	-	-	-	-	-	-	-	25.1	O	24.9N. 123.2E Southwest- ern Rydkya Island.
ALS	Alishan		ip	20 19	-	-	-	-	-	-	-	-	-	-	26.4	O	20 45
TAW	Tawu		p	20 20	-	-	-	-	-	-	-	-	-	-	32.7	O	20 53
CHI	Chiayi		ep	20 23	-	-	-	-	-	-	-	-	-	-	14.3	O	20 37
HEN	Hengchun		ep	20 28	-	-	-	-	-	-	-	-	-	-	25.6	O	20 54
TAI	Tainan		ep	20 28	-	-	-	-	-	-	-	-	-	-	33.0	O	21 01
KAW	Kaohsiung		ep	20 43	-	-	-	-	-	-	-	-	-	-	36.0	O	21 19
6	Hwalien	04	ep	17 24 24	-	-	-	-	-	-	-	-	-	2 25.1	-	U.S. C.G.S 5.7S 125.3E Banda Sea.	
	Hengchun		ep	24 29	-	-	-	-	-	-	-	-	-	-	-	-	
	Tawu		p	24 33	-	-	-	-	-	-	-	-	-	4 06.2	O		
	Taitung		p	24 35	-	-	-	-	-	-	-	-	-	4 06.9	O		
	Hsinkong		ep	24 37	-	-	-	-	-	-	-	-	-	4 12.2	O		
	Alishan		p	24 31	-	-	-	-	-	-	-	-	-	4 10.2	O		
	Yushan		p	24 43	-	-	-	-	-	-	-	-	-	4 02.5	O		
	Ilan		ep	24 50	-	-	-	-	-	-	-	-	-	4 20.4	O		
	Taichung		p	24 52	-	-	-	-	-	-	-	-	-	4 13.9	O		
	Anpu		p	24 54	-	-	-	-	-	-	-	-	-	7 12.0	O		







No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				(G.M.T.)			N	E	Z	N	E	Z	N	E	Z				
				h.	m.	s.													
16	Alishan	11	p	21	33	42	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	5 17.2 O	Hokkaido and on Honshu at least as far as Tokyo, 1100km. To the southwest. 1 sunami Heights Mag. 7.8 (Pas) 7.6 (B R K)
	Ilan		ep		33	42	-	-	-	-	-	-	-	-	-	-	-	4 36.3 O	
	Hwaiien		ep		33	44	-	-	-	-	-	-	-	-	-	-	-	2 53.4 O	
	Tawu		p		33	50	-	-	-	-	-	-	-	-	-	-	-	5 57.0 O	
	Yushan		p		33	54	-	-	-	-	-	-	-	-	-	-	-	5 02.7 O	
	Chiayi		ep		34	00	-	-	-	-	-	-	-	-	-	-	-	9 13.3 O	
	Tainan		ep		34	03	-	-	-	-	-	-	-	-	-	-	-	4 57.6 O	
	Hengchun		p		34	06	-	-	-	-	-	-	-	-	-	-	-	2 10.9 O	
	Kaohsiung		ep		34	10	-	-	-	-	-	-	-	-	-	-	-	5 24.0 O	
	Lanyu		ep		34	46	-	-	-	-	-	-	-	-	-	-	-	5 20.0 O	
Taipei		ep		34	48	-	-	-	-	-	-	-	-	-	-	-	5 07.4 O		
17	Tawu	11	p	23	57	41	-	-	-	-	-	-	-	-	-	-	-	5 59.7 O	U.S. C.G.S 1.7N 126.5E Molucca Passage Felt at Manado, (d) Celebes.
	Hsinkong		p		57	43	-	-	-	-	-	-	-	-	-	-	-	4 27.9 O	
	Taitung		p		57	44	-	-	-	-	-	-	-	-	-	-	-	0	
	Tainan		ep		57	47	-	-	-	-	-	-	-	-	-	-	-	4 02.0 O	
	Yushan		ep		57	48	-	-	-	-	-	-	-	-	-	-	-	0	
	Alishan		ep		57	52	-	-	-	-	-	-	-	-	-	-	-	3 55.8 O	
	Hwaiien		ep		58	02	-	-	-	-	-	-	-	-	-	-	-	1 42.2 O	
	Taichung		ep		58	09	-	-	-	-	-	-	-	-	-	-	-	5 06.6 O	
	Ilan		ep		58	12	-	-	-	-	-	-	-	-	-	-	-	4 08.4 O	
18	Taichung	12	ep	05	09	25	-	-	-	-	-	-	-	-	-	-	-	5 24.9 O	U.S. C.G.S 43.6N 148.0E Kurile Islands Region.
	Taitung		p		09	31	-	-	-	-	-	-	-	-	-	-	-	0	
	Tawu		p		09	44	-	-	-	-	-	-	-	-	-	-	-	0	

AUG

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				(G.M.T.)			N	E	Z	N	E	Z	N	E	Z				
				h.	m.	s.													
18	Ilan	12	ep	05	09	10	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	0	
	Taipei		ep				-	-	-	-	-	-	-	-	-	-	-	0	
19	Taitung	12	p	05	59	51	-	-	-	-	-	-	-	-	-	-	-	0	Taitung district
	Tawu		ep	06	00	04	-	-	-	-	-	-	-	-	-	-	-	0	
	Ilan		ep	00	09		-	-	-	-	-	-	-	-	-	-	-	0	
20	Anpu	12	ep	11	27	22	+ 2.7	+ 2.7	+ 2.7	-	-	-	-	-	-	-	-	5 17.0 O	U.S. C.G.S 43.9N 148.7E Kurile Islands Region Mag. 6 (BRK)
	Taitung		p		27	43	-	-	-	-	-	-	-	-	-	-	-	0	
	Tawu		ep		27	52	-	-	-	-	-	-	-	-	-	-	-	0	
	Ilan		ep		28	03	-	-	-	-	-	-	-	-	-	-	-	0	
	Taichung		ep		33	48	-	-	-	-	-	-	-	-	-	-	-	5 17.5 O	
	Taipei		ep		38	00	-	-	-	-	-	-	-	-	-	-	-	0	
21	Tawu	12	ep	12	26	02	-	-	-	-	-	-	-	-	-	-	-	0	U.S. C.G.S 42.9N 148.7E Off Coast of Hokkaido, Japan
	Hengchun		ep		26	04	-	-	-	-	-	-	-	-	-	-	-	0	
	Taitung		p		26	08	-	-	-	-	-	-	-	-	-	-	-	3 54.0 O	
22	Taitung	13	p	15	02	28	-	-	-	-	-	-	-	-	-	-	-	0	Taitung district
	Hsinkong		p		02	30	-	-	-	-	-	-	-	-	-	-	-	0	
23	Hwaiien	13	p	17	57	16	-	-	-	-	-	-	-	-	-	-	-	30.9 I	85km. ENE of Hwaiien. 61.0N. 152.7N.
	Taipei		ep		57	24	-	-	-	-	-	-	-	-	-	-	-	0	
	Ilan		ep		57	27	-	-	-	-	-	-	-	-	-	-	-	10.2 O	
	Hsinkong		ep		57	39	-	-	-	-	-	-	-	-	-	-	-	21.6 O	
	Alishan		ep		57	40	-	-	-	-	-	-	-	-	-	-	-	21.6 O	
	Yushan		p		57	46	-	-	-	-	-	-	-	-	-	-	-	19.9 O	
24	Taitung		p		57	48	-	-	-	-	-	-	-	-	-	-	-	24.1 O	58 16 58 12 58 10
	Chiayi		ep		58	00	-	-	-	-	-	-	-	-	-	-	-	09.9 O	

Handwritten notes and corrections in blue ink:

- Annotations for station codes: HWA, TAP, ILA, HSI, ALS, YUS, TTN, CHY.
- Intensity corrections: 57, 47, 57, 37, 58, 01, 58, 02, 58, 16, 58, 12, 58, 10.
- Location note: 85km. ENE of Hwaiien. 61.0N. 152.7N.
- Signature: MAD!







No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period				P~S Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z	S			M	S
31	Ilan	19	ep	23	09	25	-	-	-	-	-	-	-	-	-	-	-	12.3	O	Taitung district
	Anpu		p	09	27													18.5	O	
	Hsinkong		ep	09	32													10.7	O	
	Taitung		p	09	54													-	O	
32	Hwalien	20	p	00	25	44	-	-	-	-	-	-	-	-	-	-	-	6.9	O	Hwalien district
	Hsinkong		p	26	24													-	O	
33	Anpu	20	p	20	48	45	- .24	-	- .16	-	-	-	-	-	-	-	-	08.0	O	Northern district
	Hsinkong		ep	48	52													31.4	O	
	Taitung		p	48	58													-	O	
34	Anpu	24	p	22	08	18	- 2.7	-	+ 4.7	-	-	-	-	-	-	-	-	-	-	(d)
	Taitung		p	08	37															
35	Taitung	26	p	17	05	50	-	-	-	-	-	-	-	-	-	-	-	-	-	U.S. C.G.S 5.8S, 151.2E New Britain Region Felt at Rabaul and Kilengi.
	Anpu		p	05	54		+ 2.0	-	-	-	-	-	-	-	-	-	-	5 36.0	O	
36	Ilan	30	ep	07	17	47	-	-	-	-	-	-	-	-	-	-	-	-	-	U.S. C.G.S 43.6N, 147.7E Kurile Islands
	Taitung		p	17	57															

Major Earthquakes which occurred in September 1969

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period				P~S Intensity	Epicenter & Remarks					
				h.	m.	s.	N	E	Z	N	F	Z	N	E	Z	S			M	S			
1	Anpu	02	p	11	20	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	Northern district	
	Taitung		p	20	23																-		O
2	Taitung	03	ip	05	27	43	-12.1	+ 11	* 30.3	-	-	-	-	-	-	-	-	-	-	02.6	I	Near	
	Hsinkong		ep	27	49																06.0	O	Taitung
3	Hengchun	03	ep	16	24	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	31.5N 140.2E South of Houshu Japan
	Anpu		p	24	34																3 42.0	O	
	Hsinkong		ep	24	46																3 41.7	O	
	Taitung		p	24	53																3 42.2	O	
4	Ilan	03	p	19	17	48	-	-	-	-	-	-	-	-	-	-	-	-	-	02.4	O	Near Ilan	
	Anpu		p	17	51		- .40	+ .24	+ .24	-	-	-	-	-	-	-	-	-	-	-	08.5	O	
5	Anpu	04	p	03	15	28	- .67	-	+ 1.3	-	-	-	-	-	-	-	-	-	-	-	-	U.S. C.G.S 46.6N 153.5E Kurile Islands	
	Taitung		p	15	56																-	O	
6	Kaohsiung	05	p	11	41	32	-	-	-	-	-	-	-	-	-	-	-	-	-	16.3	I	41 48 42 18 42 27 42 30 42 38 42 38 42 45 42 48 42 59	
	Taipei		p	42	09					11.0	13.2	7.62	0.5	0.5	0.5	08.6	I						
	Hsinkong		ip	42	22		+ 1.0	- .5	⊖ 1.4	9.3	13.3	5.5	0.7	0.7	0.7	05.2	IV						
	Taitung		ip	42	25		+38.9	+311.	⊕ 807.	7600	4200	2205	2.0	1.5	1.3	04.8	III						
	Lanyu		p	42	28		-	-	+	-	-	-	-	-	-	10.0	II						
	Tawu		ip	42	28		+ 27.	- 25.	-	253	197	-	2.3	2.1	-	09.7	II						
Yushan		ip	42	34		- 88.	- 12.	-	500	454	-	1.6	2.1	-	11.0	II							
Hwalien		p	42	35		-	-	-	517	970	-	0.9	1.1	-	12.9	I	38km. ENE. of Taitung H=10						
Tainan		ip	42	39		- 10	+32.9	⊖ 83.9	-	-	356	-	-	-	20.1	I							



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks				
				h.	m.	s.	N	E	Z	N	E	Z	S.	S.	S.					M.	S.	
				μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ					μ	μ	
ALS	6 Alishan	05	ip	11	42	41	- 88	+ 48	- 89	μ	μ	μ	1078	78	S.	1.5	1.7	11.1	II	121.5E 22.7N	42 52	
CHY	Chiayi		ip	42	41		- + 100											24.0	II		43 05	
TCU	Taichung		ip	42	43		- 3.4	- 3.4	- 6.2	398	332	253	1.62	2.9	1.9			21.9	I		43 05	
HEN	Hengchun		ip	42	47		+ 10	+ 5	- 18	354	409	231	0.2	0.2	0.2			12.8	I		43 00	
ILA	Ilan		p	42	53					179	193	90	2.3	2.3	2.1				I			
ANP	Anpu		p	42	55		+ .32	- .06	- .40									27.5	O		43 23	
HSN	Hsinchu		ep															23.0	O			
	7 Hsinkong	05	ip	14	10	14												6.0	O	Taitung district		
	Taitung		p	10	20													6.0	O			
	8 Hsinkong	07	ep	06	04	22												4.4	O	Near Taitung		
	Taitung		p	04	44													2.6	O			
	9 Ilan	08	ep	14	09	10												1.4	O	Near Ilan		
	Anpu		p	09	10													6.0	O			
	10 Anpu	09	p	05	19	38	5.3	1.3	3.9									3 26.0	O	U.S. C.G.S Honshu, Japan		
	Tawu		ep	20	36														0		10 Injured and Minor Property Damage In Gifu Prefecture Mag. 6 (Pas).	
	Taipei		ep	23	34														2 18.0	O		
	Ilan		ep	23	51														1 53.3	O		
	Taitung		ep	23	53															0		
	Hwalien		p	23	54														1 53.4	O		
	Taichung		ep	25	18														2 03.8	O		
HWA	11 Hwalien	09	p	15	47	28													11.3	O		47 39
ILA	Ilan		ep	47	31														08.2	O		47 39
ANP	Anpu		p	47	34		+ .32	+ .40	- .48										03.7	O		47 38

13 52  
20 14

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks						
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z					S.	S.	S.	M.	S.
				μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ					μ	μ	μ	μ	μ
	11 Alishan	09	p	15	47	39													18.7	O	60km. W. of Taipei	47 58		
	Yushan		p	47	39														19.3	O	H=10 E121.1 N24.8	47 58		
	Taipei		p	48	02														07.5	O		48 09		
	Taitung		p	48	03															0				
	Chiayi		p	48	13															0				
	12 Hsinkong	11	ep	04	25	46													3.3	O	Near Hsinkong			
	Hwalien		p	25	51														7.2	O				
	Taitung		p	25	56															0				
	Chiayi		p	26	12															0				
	13 Hsinkong	12	ep	06	09	59													5.9	O	Taitung district			
	Taitung		p	10	08															0				
	14 Anpu	12	p	09	06	10	-26.6	-28.6	-66.5										7 26.0	O	U.S. C.G.S 51.2N179.2W Andreandf Islands. Aleutian is Felt on Adak and Amchitka, Mag.			
	Taitung		p	06	31															0				
HWA	Hwalien	15	p	10	42	12													7.0	O		42 19		
TCU	Taichung		ep	42	23															13.3	O	45km. SSE. of Hwalien	42 36	
ANP	Anpu		p	42	27															0		H=20 E23.5 N121.8		
HSI	Hsinkong		ep	42	28															9.5	O		42 37	
CHY	Chiayi		p	42	39															0				
TAI	Taipei		ep	43	02																			
	16 Hwalien	17	p	03	26	02														22.1	O	U.S. C.G.S 17.8S. 69.6W. Peru Bolivia Border Region		
	Taitung		p	26	35															0				
	Taipei		ep	27	51															0				



No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.			
				M. S.	N	E	Z	N	E	Z	N	E	Z	M. S.				
17	Hsinkong	17	ep	17	05	21	-	-	-	-	-	-	-	-	-	10.0	O	50km. EN. of Hsinkong H=10
	Hwalien		p	05	22	-	-	-	-	-	-	-	-	-	10.0	O		
	Yushan		p	05	24	-	-	-	-	-	-	-	-	-	10.0	O		
	Alishan		ip	05	25	-	-	-	-	-	-	-	-	-	11.0	O		
18	Hengchun	17	ep	18	43	15	-	-	-	-	-	-	-	-	-	3 28.0	O	U.S. C.G.S 31.1N, 131.3E Kysiu, Japan Mag. 5 1/2 (BRK)
	Anpu		p	43	20	-	-4.66	-4.69	+6.65	-	-	-	-	-	-	2 19.0	O	
	Hsinkong		ep	43	32	-	-	-	-	-	-	-	-	-	-	3 53.5	O	
	Hwalien		p	43	42	-	-	-	-	-	-	-	-	-	-	0 36.8	O	
	Taipei		p	43	48	-	-	-	-	-	-	-	-	-	-	2 22.9	O	
	Taichung		ep	43	48	-	-	-	-	-	-	-	-	-	-	4 01.0	O	
	Tawu		p	43	54	-	-	-	-	-	-	-	-	-	-	0	O	
	Alishan		p	43	54	-	-	-	-	-	-	-	-	-	-	0	O	
	Taitung		p	43	59	-	-	-	-	-	-	-	-	-	-	3 17.9	O	
	Tainan		ep	44	06	-	-	-	-	-	-	-	-	-	-	3 43.5	O	
	Hsinchu		ep	44	22	-	-	-	-	-	-	-	-	-	-	3 30.0	O	
	Tawu	19	p	18	00	10	-	-	-	-	-	-	-	-	-	4.2	III	50km. ESE. of Tawu H=20 E122.2 N23.1
	Taitung		p	00	16	-	-	-	-	-	-	-	-	-	-	8.0	O	
	Hsinkong		ep	00	20	-	-	-	-	-	-	-	-	-	-	11.4	O	
	Hengchun		ep	00	23	-	-	-	-	-	-	-	-	-	-	8.0	O	
	Chiayi		ep	00	24	-	-	-	-	-	-	-	-	-	-	21.6	O	
20	Alishan	19	p	18	00	29	-	-	-	-	-	-	-	-	-	16.5	O	
	Anpu		p	00	56	-	-	-	-	-	-	-	-	-	-	0	O	
	Taipei		ep	01	22	-	-	-	-	-	-	-	-	-	-	32.5	O	

**TAW** 19 Tawu  
**TTN** Taitung  
**HSI** Hsinkong  
**HEN** Hengchun  
**CHI** Chiayi

0014  
 0024  
 0031  
 0031  
 0056

No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.			
				M. S.	N	E	Z	N	E	Z	N	E	Z	M. S.				
21	Hwalien	17	p	22	30	52	-	-	-	-	-	-	-	-	-	12.2	O	75km. E. of Hsinkong H=20 E122.2 N23.1
	Ilan		ep	30	55	-	-	-	-	-	-	-	-	-	-	16.2	O	
	Hsinkong		ep	30	58	-	-	-	-	-	-	-	-	-	-	10.7	O	
	Taipei		p	31	21	-	-	-	-	-	-	-	-	-	-	27.1	O	
	Taitung		p	31	26	-	-	-	-	-	-	-	-	-	-	0	O	
22	Hengchun	17	p	01	33	29	-	-	-	-	-	-	-	-	-	1 01.0	O	U.S. C.G.S 6.1N; 125.4E Mindanas, Philippine Islands Felt Davad, General Santos, Cagayan DE ORO, and Hinatuan
	Tawu		ep	33	31	-	-	-	-	-	-	-	-	-	-	0	O	
	Kaohsiung		ep	33	32	-	-	-	-	-	-	-	-	-	-	0	O	
	Taitung		ep	33	33	-	-	-	-	-	-	-	-	-	-	0	O	
	Hsinkong		ep	33	36	-	-	-	-	-	-	-	-	-	-	0	O	
	Tainan		ep	33	41	-	-	-	-	-	-	-	-	-	-	1 14.4	O	
	Alishan		p	33	42	-	-	-	-	-	-	-	-	-	-	0	O	
	Taichung		p	33	48	-	-	-	-	-	-	-	-	-	-	0	O	
	Anpu		p	33	56	-	-5.3	+2.7	-6.7	-	-	-	-	-	-	3 37.0	O	
	Taipei		p	34	18	-	-	-	-	-	-	-	-	-	-	15.7	O	
	Hwalien		p	35	47	-	-	-	-	-	-	-	-	-	-	33.1	O	
23	Lanyu	20	ep	03	38	44	-	-	-	-	-	-	-	-	-	6.0	O	Taitung district
	Hsinkong		ep	39	16	-	-	-	-	-	-	-	-	-	-	0	O	
	Taitung		p	39	16	-	-	-	-	-	-	-	-	-	-	0	O	
24	Hsinkong	20	ep	04	40	47	-	-	-	-	-	-	-	-	-	0	O	Taitung district
	Taitung		p	40	56	-	-	-	-	-	-	-	-	-	-	0	O	
25	Anpu	20	p	12	48	11	-	.48	-.48	-.72	-	-	-	-	-	4.0	O	Northern disteict
	Hsinkong		ep	48	27	-	-	-	-	-	-	-	-	-	-	27.0	O	
	Taipei		ep	48	35	-	-	-	-	-	-	-	-	-	-	0	O	

30 (40)  
 30 04  
 31 11  
 31 19  
 31 48



No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
							N	E	Z	N	E	Z	N	E	Z				
				h.	m.	s.	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ
ILA	26 Ilan	20	ep	18	22	21	-	-	-	-	-	-	-	-	-	-	11.8 O	12 km. NE. of Hwalien	22 33
ANP	Anpu		p	22	25		+ .08	-	+ .08	-	-	-	-	-	-	-	6.0 O	H=10km	22 31
HWA	Hwalien		p	22	29		-	-	-	-	-	-	-	-	-	-	14.8 O	E122.6	22 44
HSI	Hsinkong		ep	22	39		-	-	-	-	-	-	-	-	-	-	- O	N24.4	
TAP	Taipei		ep	22	48		-	-	-	-	-	-	-	-	-	-	16.7 O		23 05
HSI	27 Hsinkong	21	ep	04	10	59	-	-	-	-	-	-	-	-	-	-	5.2 O		11 04
HWA	Hwalien		p	11	03		-	-	-	-	-	-	-	-	-	-	9.3 O		11 12
ALS	Alishan		p	11	04		-	-	-	-	-	-	-	-	-	-	9.6 O	30km. NE. of Hsinkong	11 14
YUS	Yushan		p	11	05		-	-	-	-	-	-	-	-	-	-	7.5 O	H=20	11 13
TTN	Taitung		p	11	11		-	-	-	-	-	-	-	-	-	-	- O	E121.6 N23.2	
CHI	Chiayi		ep	11	15		-	-	-	-	-	-	-	-	-	-	9.6 O		11 25
ANP	Anpu		p	11	23		-	-	-	-	-	-	-	-	-	-	6.0 O		11 34
	28 Anpu	22	p	01	52	50	-	-	+ 2.0	-	-	-	-	-	-	-	5 50.0 O	U.S. C.G.S	
	Taichung		p	02	05	00	-	-	-	-	-	-	-	-	-	-	- O	5.6S, 68.1E	
	Taipei		ep	15	29		-	-	-	-	-	-	-	-	-	-	3 18.8 O	Chagos Archipelago Region	
	29 Chiayi	22	ep	16	19	15	-	-	-	-	-	-	-	-	-	-	18.7 O	Taitung district	
	Hsinkong		ep	19	38		-	-	-	-	-	-	-	-	-	-	4.3 O		
ILA	30 Ilan	22	ep	19	06	20	-	-	-	-	-	-	-	-	-	-	7.5 O		06 28
ANP	Anpu		p	06	23		+ .48	+ .16	+ 1.28	-	-	-	-	-	-	-	7.5 O	60km. E. of Taipei	06 31
HWA	Hwalien		p	06	24		-	-	-	-	-	-	-	-	-	-	14.7 O	H=20	06 39
ALS	Alishan		ep	06	36		-	-	-	-	-	-	-	-	-	-	18.9 O	E122.2 N25.0	06 55
HSI	Hsinkong		ep	06	39		-	-	-	-	-	-	-	-	-	-	15.9 O		06 55
TAP	Taipei		p	06	42		-	-	-	-	-	-	-	-	-	-	7.5 O		06 50
TTN	Taitung		p	06	47		-	-	-	-	-	-	-	-	-	-	23.8 O		07 11

No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
							N	E	Z	N	E	Z	N	E	Z				S
				h.	m.	s.	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ	μ
31	Hsinkong	23	ep	07	11	08	-	-	-	-	-	-	-	-	-	-	8.6 O		
	Hsinkong		p	11	13		-	-	-	-	-	-	-	-	-	-	6.4 O	Hwalien district	
	Taitung		p	11	24		-	-	-	-	-	-	-	-	-	-	- O		
32	Lanyu	28	ep	06	52	24	-	-	-	-	-	-	-	-	-	-	5.5 O		
	Taitung		p	52	37		-	-	-	-	-	-	-	-	-	-	8.1 O		
	Alishan		ep	52	44		-	-	-	-	-	-	-	-	-	-	19.1 O	40km NE. of Lanyu.	
	Hengchun		ep	53	07		-	-	-	-	-	-	-	-	-	-	12.3 O		
	Hwalien		p	53	51		-	-	-	-	-	-	-	-	-	-	6.4 O		
33	Hsinkong	30	ep	01	06	02	-	-	-	-	-	-	-	-	-	-	4.3 O		Near Taitung
	Taitung		p	06	09		-	-	-	-	-	-	-	-	-	-	2.9 O		





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Centre

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# 地震季報

第十六卷 第四號

中華民國五十八年十月至十二月

## SEISMOLOGICAL BULLETIN

October to December 1969

Vol. 16 No. 4

臺灣省氣象局

PUBLISHED QUARTERLY BY

TAIWAN PROVINCIAL WEATHER BUREAU

64, KUNG YUAN ROAD, TAIPEI, TAIWAN,

REPUBLIC OF CHINA



## General Aspect of Earthquakes

from October to December, 1969

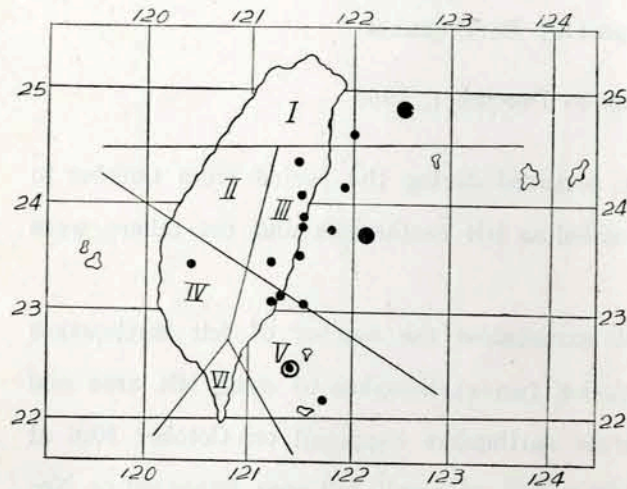
There were 374 earthquakes which occurred during the period from October to December, 1969. 17 of them were classified as felt earthquake and the others were classified as unfelt earthquake.

According to the magnitude of felt earthquake, the number of felt earthquakes were divided into one moderate earthquake, two earthquakes of small felt area and fourteen local earthquakes. The moderate earthquake happened on October 30th, at about 40km. ESE. of Taitung. One earthquake of small felt area happened on November 16th and the other one happened on December 23th. Both its epicenter and fourteen local earthquakes were listed on this bulletin.

Among the unfelt earthquakes, 113 distant earthquakes were recorded by our seismographs, and the remains happened at distinctive districts. All of the detailed data and major earthquakes were shown on this bulletin.



Epicenters of Felt Earthquakes From October to December 1969



- I Northern District
- II Taichung District
- III Hwalien District
- IV Tainan District
- V Taitung District
- VI Hengchun District
- VII Other places and distant earthquakes
- ⊙(r): Remarkable
- ⊙(m): Moderate
- (s): Small felt area
- (l): Local
- ×: Deep

Number of earthquakes classified according to its magnitude and districts from October to December

Classification	Number of felt earthquakes					Number of unfelt earthquakes	Total
	Remarkable	Moderate	Small felt area	Local	Total		
Northern District	—	—	1	1	2	30	34
Taichung "	—	—	—	—	—	9	9
Hwalien "	—	—	1	8	9	123	141
Tainan "	—	—	—	1	1	7	9
Taitung "	—	1	—	4	5	55	65
Hengchun "	—	—	—	—	—	20	20
Other places	—	—	—	—	—	113	113
<b>Total</b>	—	1	2	14	17	357	374

Felt earthquakes in the month From October to December, 1969.

No.	Month	P. (G. M. T.)	Mag- nitude	Epicenter	Latitude	Longitude	Depth
					N.	E.	kms
72	Oct	1 17 02	L	Near Hwalien			
73	"	1 20 17	L	Near Hwalien			
74	"	1 23 09	L	18km NNW of Hwalien	24°5.5'	121°28'	30
75	"	8 6 13	L	52km S of Hwalien	23°30'	121°39'	10
76	"	18 10 14	L	31km ESE of Ilan	24°37'	122°	10
77	"	22 5 02	L	40km ENE of Ianyu	22°18'	121°49'	10
78	"	30 0 49	M	45km ESE of Taitung	22°27'	121°26'	10
79	"	31 17 35	L	38km ENE of Hwalien	24°2'	121°57'	
80	Nov	1 2 38	L	25km ENE of Yushan	23°33.4'	121°10.4'	10
81	"	15 7 22	L	Near Chiayi			
82	"	16 1 56	S	58km SE of Hwalien	23°39'	122°2.3'	40
83	"	19 20 51	L	15km SE of Hsinkong	23°1.1'	121°26.6'	0
		30 18 11	L		25.3	121.7	10
84	Dec	3 13 59	L	Near Hsinkong			
85	"	5 16 38	L	48km SW of Ilan	24°26'	121°22'	30
86	"	7 5 52	L	37km SE of Hwalien	23°43'	121°49'	10
87	"	23 16 20	S	80km ENE of Ilan	24°53'	122°32'	40
88	"	25 12 39	L	Near Hsinkong			
		8 17 42	L		23.7	121.8	10
		15 03 51	L		22.5	121.4	10
		20 02 52	L		22.6	121.4	20
		20 02 19	L		22.6	121.4	20
		28 22 14	L		25.2	120.9	10
		29 19 30	L		25.1	121.1	20
		31 02 12	L		24.8	121.6	20



## Unfelt Earthquakes in the Month from October to December 1969

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1214	Sep	30	18	03	30.3N 140.9E South of Honshu Japan	1236	Oct	7	07	56	Near Taipei
1215	"	30	18	19	Tainan district	1237	"	7	13	24	Northern district
1216	"	30	21	29	Near Hsinkong	1238	"	8	01	50	Near Hwalien
1217	"	30	23	22	Near Hwalien	1239	"	8	02	23	" "
1218	Oct	1	00	03	" "	1240	"	8	02	46	" "
1219	"	1	02	43	" "	1241	"	8	05	16	Taitung district
1220	"	1	03	08	" "	1242	"	8	06	51	Near Hwalien
1221	"	1	05	34	distant	1243	"	8	07	15	" "
1222	"	1	06	47	Near Hwalien	1244	"	8	08	41	" "
1223	"	1	07	18	" "	1245	"	8	17	01	" "
1224	"	1	08	45	" "	1246	"	9	01	14	" "
1225	"	1	20	24	" "	1247	"	9	01	31	" "
1226	"	2	09	45	Near Yushan	1248	"	9	01	47	" "
1227	"	4	22	15	Near Hsinkong	1249	"	9	02	12	" "
1228	"	5	09	54	Near Hwalien	1250	"	9	02	30	" "
1229	"	5	16	44	distant	1251	"	9	05	33	" "
1230	"	6	02	3	Near Taipei	1252	"	9	06	01	" "
1231	"	6	12	47	15.0N 120.1E Luzon Philippine Islands	1253	"	9	08	29	distant
1232	"	6	18	49	Near Taipei	1254	"	9	23	35	Near Hwalien
1233	"	6	21	50	distant	1255	"	10	01	25	distant
1234	"	6	23	52	Near Hwalien	1256	"	10	02	00	Near Hwalien
1235	"	7	00	14	About 50km E of Taitung	1257	"	10	02	24	" "

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1258	Oct	10	02	48	Near Hwalien	1281	Oct	12	06	10	Near Hwalien
1259	"	10	04	12	" "	1282	"	12	06	52	" "
1260	"	10	04	27	" "	1293	"	12	07	16	" "
1261	"	10	04	46	" "	1284	"	12	07	35	" "
1262	"	10	05	14	" "	1285	"	12	19	14	Taitung district
1263	"	10	07	10	" "	1286	"	13	01	09	Near Hwalien
1264	"	10	07	13	Hengchun district	1287	"	13	01	14	distant
1265	"	10	07	37	Near Hwalien	1288	"	13	01	31	Near Hwalien
1266	"	10	17	09	distant	1289	"	13	02	11	" "
1267	"	11	00	11	Near Hwalien	1290	"	13	04	25	" "
1268	"	11	01	57	" "	1291	"	13	05	00	" "
1269	"	11	02	23	" "	1292	"	13	05	33	" "
1270	"	11	03	34	" "	1293	"	13	06	14	" "
1271	"	11	03	54	" "	1294	"	13	07	05	18.9S 169.3E New Hebrides Islands
1272	"	11	04	43	" "	1295	"	13	07	14	Hwalien district
1273	"	11	06	37	" "	1296	"	14	02	05	Near Hwalien
1274	"	11	07	05	" "	1297	"	14	02	38	" "
1275	"	11	07	36	" "	1298	"	14	02	40	distant
1276	"	11	11	44	distant	1299	"	14	04	35	" "
1277	"	12	00	16	Near Hwalien	1300	"	14	06	05	Near Hwalien
1278	"	12	01	44	" "	1301	"	14	06	37	" "
1279	"	12	03	02	" "	1302	"	14	06	57	" "
1280	"	12	03	33	" "	1303	"	14	07	07	" "



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1304	Oct	14	07	14	Near Hwalien	1327	Oct	22	03	09	distant
1305	"	14	07	36	distant	1328	"	22	08	26	"
1306	"	14	11	48	Northern district	1329	"	22	08	48	Hwalien district
1307	"	15	02	16	Taitung district	1330	"	22	10	45	" "
1308	"	15	05	41	distant	1331	"	22	12	38	distant
1309	"	16	04	42	Near Taitung	1332	"	23	00	06	"
1310	"	16	13	35	Near Hsinkong	1333	"	23	04	09	Hwalien district
1311	"	17	01	29	23.1N 94.7E Burma India Border	1334	"	24	07	13	Hengchun district
1312	"	17	20	13	distant	1335	"	24	09	22	distant
1313	"	18	01	18	"	1336	"	24	12	43	Hwalien district
1314	"	18	08	52	"	1337	"	25	10	52	42km ENE of Ilan
1315	"	18	17	31	"	1338	"	25	12	14	distant
1316	"	19	01	22	Hwalien district	1339	"	25	12	41	88km ESE of Taipei
1317	"	19	05	12	Taitung district	1340	"	25	22	45	Near Hwalien
1318	"	19	12	29	distant	1341	"	26	04	02	distant
1319	"	19	20	19	Taitung district	1342	"	26	04	30	Near Hengchun
1320	"	20	01	07	" "	1343	"	26	05	51	distant
1321	"	20	08	03	Near Taipei	1344	"	26	06	49	"
1322	"	20	14	02	distant	1345	"	26	16	11	"
1323	"	20	14	15	Taitung district	1346	"	26	19	21	"
1324	"	21	04	22	Near Anpu	1347	"	26	21	57	"
1325	"	21	05	41	Northern district	1348	"	27	04	39	Hengchun district
1326	"	21	21	02	distant	1349	"	27	08	33	distant

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1350	Oct	28	07	23	distant	1373	Nov	1	03	09	Near Yushan
1351	"	28	12	01	"	1374	"	1	04	18	About 15km ESE of Yushan
1352	"	28	15	52	Near Anpu	1375	"	1	04	21	About 18km ESE of Yushan
1353	"	29	10	17	Hwalien district	1376	"	1	05	45	About 23km E of Yushan
1354	"	29	18	23	" "	1377	"	1	05	45	Near Yushan
1355	"	29	22	20	" "	1378	"	1	08	30	70km E of Hwalien
1356	"	30	05	10	Near Hwalien	1379	"	1	11	22	Near Hsinkong
1357	"	30	05	38	" "	1380	"	1	11	27	distant
1358	"	30	05	58	Hwalien district	1381	"	1	17	59	Near Ilan
1359	"	30	19	10	Taitung district	1382	"	1	19	28	" "
1360	"	30	20	21	" "	1383	"	1	20	15	Near Hwalien
1361	"	30	23	14	Near Alishan	1384	"	2	22	28	Near Chiayi
1362	"	31	07	05	distant	1385	"	3	05	32	Near Alishan
1363	"	31	08	14	57km WNW of Hsinkong	1386	"	3	13	19	Near Hengchun
1364	"	31	11	42	distant	1387	"	4	14	22	Taitung district
1365	"	31	11	56	Taichung district	1388	"	4	22	16	distant
1366	"	31	12	21	Near Hsinkong	1389	"	5	02	42	Taitung district
1367	"	31	17	05	Near Tainan	1390	"	5	18	34	distant
1368	"	31	20	26	Near Hsinkong	1391	"	5	21	08	"
1369	"	31	20	30	" "	1392	"	5	23	06	Taitung district
1370	"	31	22	38	11.9S 75.1W Peru	1393	"	6	00	24	Hwalien distant
1371	Nov	1	01	54	Midland	1394	"	6	02	04	distant
1372	"	1	02	44	Near Yushan	1395	"	6	12	32	Taitung district



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1396	Nov	6	16	05	Near Chiayi	1419	Nov	12	01	55	Near Hsinkong
1397	"	6	16	56	Hwalien district	1420	"	12	12	39	distant
1398	"	6	20	29	distant	1421	"	12	15	47	"
1399	"	7	00	44	Taitung district	1422	"	12	19	18	"
1400	"	7	04	42	Hwalien district	1423	"	13	06	11	"
1401	"	7	13	41	26.6N 126.3E Ryukyu Islands	1424	"	13	09	01	"
1402	"	7	18	43	27.9N 60.1E Southern Iran	1425	"	14	07	49	"
1403	"	8	00	32	Near Hwalien	1426	"	15	02	14	Northern district
1404	"	8	01	51	distant	1427	"	15	03	11	70km SE of Ilan
1405	"	8	22	00	1.1S 127.0E Halmahera	1428	"	15	03	45	distant
1406	"	8	23	31	distant	1429	"	16	04	47	33km SE of Ilan
1407	"	9	00	33	Hwalien district	1430	"	16	07	22	Hwalien district
1408	"	9	01	15	distant	1431	"	17	13	02	distant
1409	"	9	09	17	"	1432	"	18	06	39	Near Hsinkong
1410	"	10	04	44	Hwalien district	1433	"	18	16	55	Near Hwalien
1411	"	10	09	44	Northern district	1434	"	18	21	22	distant
1412	"	10	09	54	" "	1435	"	19	08	51	"
1413	"	10	17	08	Hwalien district	1436	"	19	13	29	"
1414	"	10	20	58	Near Hsinkong	1437	"	20	02	43	About 52km E of Hwalien
1415	"	11	15	31	distant	1438	"	20	06	04	Taitung district
1416	"	11	16	08	"	1439	"	20	17	06	Near Hsinkong
1417	"	11	17	43	Hwalien district	1440	"	20	21	12	distant
1418	"	11	22	00	Near Hsinkong	1441	"	20	21	23	About 96km NE of Hwalien

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1442	Nov	21	02	11	2.1N 94.6E off W Coast of Northern	1465	Dec	1	23	23	distant
1443	"	21	21	54	Near Hsinkong	1466	"	2	03	02	Near Hsinkong
1444	"	21	22	58	Hwalien district	1467	"	2	05	59	" "
1445	"	22	23	17	57.8N 163.5E Near E Coast of Kamchaka	1468	"	2	18	01	distant
1446	"	23	12	05	Taitung district	1469	"	3	08	22	Near Hwalien
1447	"	23	17	06	110km ENE of Hwalien	1470	"	4	01	37	" "
1448	"	23	22	40	" "	1471	"	4	01	38	" "
1449	"	24	23	19	distan'	1472	"	4	02	03	distant
1450	"	26	13	02	"	1473	"	4	02	21	Near Hwalien
1451	"	26	14	56	"	1474	"	4	02	48	" "
1452	"	26	18	34	Near Hwalien	1475	"	4	04	54	Near Taipei
1453	"	26	19	31	distant	1476	"	4	08	56	distant
1454	"	26	20	10	"	1477	"	4	12	42	Northern district
1455	"	26	23	11	"	1478	"	4	14	46	Near Hwalien
1456	"	27	20	27	"	1479	"	4	16	32	Near Taitung
1457	"	29	04	36	Near Hsinkong	1480	"	5	01	02	Near Hengchun
1458	"	29	12	01	"	1481	"	5	02	47	Near Taipei
1459	"	29	16	50	distant	4182	"	5	17	30	distant
1460	"	29	18	12	Northern district	1483	"	6	01	06	Near Hsinkong
1461	"	30	16	12	Near Hsinkog	1484	"	6	02	24	Near Hwalien
1462	"	30	18	12	N25°3 E121°7 28km E of Taipei	1485	"	6	05	53	Near Hengchun
1463	Dec	1	19	53	Near Hsinkong	1486	"	7	21	50	distant
1464	"	1	21	15	N22°7 E121°6 42km ESE of Taitung	1487	"	8	00	42	Near Hengchun



No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1488	Dec	8	02	03	Near Hengchun	1511	Dec	13	23	39	Near Chiayi
1489	"	8	17	42	N23°7 E121°8 About 32km SSE of Hwalien	1512	"	14	02	46	Near Hengchun
1490	"	5	21	52	Near Hwalien	1513	"	14	02	46	2.0N 126.9E Molucca Passage
1491	"	9	00	33	" "	1514	"	14	18	47	distant
1492	"	9	02	25	distant	1515	"	15	00	32	"
1493	"	9	02	45	Near Hwalien	1516	"	15	03	52	37km SE of Taitung N22°5 E121°4
1494	"	9	02	51	" "	1517	"	15	16	32	Near Hsinkong
1495	"	9	03	38	distant	1518	"	16	00	37	Near Hwalien
1496	"	9	20	55	Near Hwalien	1519	"	16	04	54	Near Hengchun
1497	"	10	00	14	Hwalien district	1520	"	16	04	55	Near Tawu
1498	"	10	05	56	distant	1521	"	16	11	53	" "
1499	"	10	09	27	Near Hsinkong	1522	"	18	16	24	distant
1500	"	10	20	04	distant	1523	"	17	00	37	Near Hwalien
1501	"	11	00	37	Near Hengchun	1524	"	17	02	42	distant
1502	"	11	02	45	" "	1525	"	17	06	37	Near Taipei
1503	"	11	07	59	Near Hsinkong	1526	"	17	08	06	distant
1504	"	11	11	34	distant	1527	"	18	03	53	Near Hwalien
1505	"	12	01	18	40.1N 143.8E off E Coast of Honshu Japan	1528	"	18	06	49	distant
1506	"	12	01	24	Near Taitung	1529	"	18	13	37	46.3N 142.5E Felt Widely on Hokkaido
1507	"	12	22	59	distant	1530	"	19	00	36	Near Hwalien
1508	"	13	04	16	"	1531	"	19	04	41	distant
1509	"	13	06	27	Northern district	1532	"	19	12	19	Near Tawu
1510	"	13	21	38	23.9N 126.3E Ryukyu Islands Region	1533	"	19	18	17	Near Chiayi

No.	Month	P. (G. M. T.)			Epicenter	No.	Month	P. (G. M. T.)			Epicenter
		d.	h.	m.				d.	h.	m.	
1534	Dec	19	21	38	distant	1553	Dec	25	00	42	Near Hwalien
1535	"	19	22	40	Near Hwalien	1554	"	25	21	50	distant
1536	"	20	02	15	distant	1555	"	25	22	38	"
1537	"	20	02	33	Near Hwalien	1556	"	26	01	21	Near Tawu
1538	"	20	02	53	N22°6 E121°4 36km SE of Taitung	1557	"	26	01	22	Near Hsinkong
1539	"	20	09	13	N22°6 E121°4 29km SE of Taitung	1558	"	27	00	50	Near Taitung
1540	"	20	19	59	Near Hsinkong	1559	"	28	03	33	Near Hwalien
1541	"	20	23	10	Near Hwalien	1560	"	28	22	14	N25°2 E120°9 About 60km W of Taipei
1542	"	21	01	48	Near Hsinkong	1561	"	28	22	49	Taitung district
1543	"	21	03	48	Near Hwalien	1562	"	29	13	48	Near Ilan
1544	"	21	10	20	distant	1563	"	29	19	31	N25°1 E121°1 About 45km W of Taipei
1545	"	22	04	04	"	1564	"	29	21	31	Near Hsinkong
1546	"	22	05	12	"	1565	"	29	22	49	Near Hengchun
1547	"	22	11	37	"	1566	"	30	03	30	distant
1548	"	23	00	35	Near Hwalien	1567	"	30	22	38	Near Lanyu
1549	"	23	13	31	distant	1568	"	31	01	13	Near Taipei
1550	"	23	14	10	13.8N 120.6E Mindoro Philippine Islands	1569	"	31	02	12	N24°8 E121°6 About 20km W of Ilan
1551	"	23	18	44	Near Hsinkong	1570	"	31	12	59	Near Hsinkong



Major Earthquakes which occurred in Oct. 1969

No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				M.
1	Hwalien	1	p	17	02	24.3	μ	μ	μ	± 75	± 139	μ	S.	S.	S.	M. S.	2.3	I	Near Hwalien
2	Hwalien	1	p	20	17	28.5	-	-	-	-	-	-	-	-	-	-	1.9	I	Near Hwalien
3	Hwalien	1	p	23	09	56.1	-	-	-	± 195	± 217	-	0.6	0.6	-	-	10.1	I	Local 18km NNW of Hwalien
	Hsinkong		ep	10	03.3		-	-	-	-	-	-	-	-	-	-	7.9	O	H=30
	Alishan		ep	10	04.0		-	-	-	-	-	-	-	-	-	-	10.4	O	N24°5.5' E121°28'
	Yushan		p	10	04.9		-	-	-	-	-	-	-	-	-	-	9.6	O	
	Anpu		p	10	12.0		-	-	-	⊕ 1.6	-	-	-	-	-	-	17		
	Taichung		ep	10	17.8		-	-	-	-	-	-	-	-	-	-	14	O	
	Hsinghu		ep	10	20.5		-	-	-	-	-	-	-	-	-	-	10.6	O	
	Taipei		p	10	35.6		-	-	-	-	-	-	-	-	-	-	9.6	O	
	Hengchun		ep	10	41.0		-	-	-	-	-	-	-	-	-	-	-	O	
4	Chiayi	2	ep	09	45	42.5	-	-	-	-	-	-	-	-	-	-	10.6		
	Alishan		ep	45	53.4		-	-	-	-	-	-	-	-	-	-	5.2	O	Near Yushan
	Yushan		ep	46	04.0		-	-	-	-	-	-	-	-	-	-	3.6	O	
5	Tawu	6	p	12	47	8.7	-	-	-	-	-	-	-	-	-	-	-	O	USCGS
	Taitung		p	50	16.9		-	-	-	-	-	-	-	-	-	-	-	O	Luzon Philippine Islands
	Anpu		p	53	02	+ 0.67	-	-	-	+ 13.3	-	-	-	-	-	-	28	O	15.0N 120.1E
6	Lanyu	7	ep	00	14	09.5	-	-	-	-	-	-	-	-	-	-	9.5	O	
	Hengchun		ep	14	54.0		-	-	-	-	-	-	-	-	-	-	-	O	
	Taitung		ep	15	06.9		-	-	-	-	-	-	-	-	-	-	6.9	O	50km E of Taitung
	Hsinkong		ep	15	10.1		-	-	-	-	-	-	-	-	-	-	8.3	O	
	Chiayi		ep	15	22.2		-	-	-	-	-	-	-	-	-	-	-	-	

HWA  
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No.	Station	Date	Phase	P. (G.M.T)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks			
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				M.	S.	
7	Hwalien	7	p	13	24	39.2	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S.	13.8	O	Northern district		
	Anpu		p	24	30		-	-	-	-0.32	+ 0.48	-	-	-	-	-	-	4.2			
	Ilan		ep	24	31.8		-	-	-	-	-	-	-	-	-	-	-	4.0	O		
	Taipei		ep	24	34		-	-	-	-	-	-	-	-	-	-	-	14	O		
8	Hsinkong	8	ep	06	13	25.6	-	-	-	-	-	-	-	-	-	-	-	6.4	O	Local	
	Hwalien		ep	13	27.8		-	-	-	-	-	-	-	-	-	-	-	8.8	I	52km S of Hwalien	
	Yushan		ep	13	29.7		-	-	-	-	-	-	-	-	-	-	-	7.3	O	23°30'N 121°39'E	
	Alishan		ep	13	29.7		-	-	-	-	-	-	-	-	-	-	-	10.3	O	H=10	
	Taitung		ep	13	37.1		-	-	-	-	-	-	-	-	-	-	-	12.0	O		
	Ilan		ep	13	40		-	-	-	-	-	-	-	-	-	-	-	17.2	O		
	Anpu		ep	13	43.8		-	-	-	-	-	-	-	-	-	-	-	5.2	O		
	Chiayi		ep	13	45.1		-	-	-	-	-	-	-	-	-	-	-	-	-		
	Taipei		ep	13	46.0		-	-	-	-	-	-	-	-	-	-	-	18.1	O		
9	Hengchun	10	ep	07	13	17.3	-	-	-	-	-	-	-	-	-	-	-	7.3			
	Tawu		ip	14	20		-	-	-	-	-	-	-	-	-	-	-	5.3	O	Hengchun district	
	Taitung		p	14	31.3		-	-	-	-	-	-	-	-	-	-	-	-	O		
10	Anpu	12	p	19	14	35.7	-	-	-	-	-	-	-	-	-	-	-	5.2	O		
	Taitung		p	15	38.8		-	-	-	-	-	-	-	-	-	-	-	-	O	Taitung district	
	Lanyu		ep	15	41.4		-	-	-	-	-	-	-	-	-	-	-	-	O		
11	Tawu	13	p	07	05	58.1	-	-	-	-	-	-	-	-	-	-	-	-	O	USCGS	
	Taitung		p	06	10.4		-	-	-	-	-	-	-	-	-	-	-	8	10	O	New Hebrides Islands Felt at Port Vila
	Anpu		p	61	11.0		-	-	-	-	-	-	-	-	-	-	-	7	17	O	18.9S 169.3E
	Hwalien		p	06	16.3		-	-	-	-	-	-	-	-	-	-	-	8.6	O	Mag 6.5(Pas) 6.2(Brk)	
	Ilan		p	06	27.8		-	-	-	-	-	-	-	-	-	-	-	-	-		

HSI  
HWA  
YUS  
ALS  
TTN  
ILA  
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CHY  
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1332  
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No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				S.
12	Anpu	14	p	11	48	49	+ 1.0	- 0.24	- 0.32	μ	μ	μ	-	-	-	-	-	14.0	Northern district
	Taipei		ep	49	02		-	-	-	-	-	-	-	-	-	-	9.4		
	Hwalien		ep	49	23.7		-	-	-	-	-	-	-	-	-	-	32.3		
13	Hsinkong	16	ep	04	42	40.5	-	-	-	-	-	-	-	-	-	-	14.5	Near Taitung	
	Taitung		ep	42	46.9		-	-	-	-	-	-	-	-	-	-	2.9		
14	Hsinchu	17	ep	01	29	43.0	-	-	-	-	-	-	-	-	-	-	8 55	U.S.C.G.S Burma-India Border Region 23.1N 94.7E	
	Alishan		ep	30	20.2		-	-	-	-	-	-	-	-	-	-	7 49.5		
	Taichung		ep	30	21.5		-	-	-	-	-	-	-	-	-	-	4 3.5		
	Hsinkong		ep	30	22.4		-	-	-	-	-	-	-	-	-	-	4 13.8		
	Hwalien		ep	30	25.8		-	-	-	-	-	-	-	-	-	-	33.9		
	Anpu		p	30	24		-	-	-	-	-	-	-	-	-	-	4 22		
	Ilan		ep	30	28.8		-	-	-	-	-	-	-	-	-	-	1 14.1		
	Taitung		ep	30	29.1		-	-	-	-	-	-	-	-	-	-	4 5.4		
	Hengchun		ep	30	33.0		-	-	-	-	-	-	-	-	-	-	-		
	Taipei		ep	30	39.3		-	-	-	-	-	-	-	-	-	-	4 4.7		
	Tainan		ep	30	53.3		-	-	-	-	-	-	-	-	-	-	2 27.9		
	Kaohsiung		ep	31	13.1		-	-	-	-	-	-	-	-	-	-	7 13		
15	Anpu	18	p	01	18	44	-	-	-	-	-	-	-	-	-	-	0		U.S.C.G.S Honshu Japan 39.3N 141.4E
	Taitung		p	19	08.6		-	-	-	-	-	-	-	-	-	-	0		
16	Ilan	18	ip	10	14	51.9	-	-	-	148	142	-	1	1	-	-	7.7	Local 31km ESE of Ilan H±10 N24°37' E122	
	Anpu		ip	14	53	+ 12.8 - 0.32 + 2.7	-	-	-	-	-	-	-	-	-	-	10.0		
	Hwalien		ip	14	57.2		-	-	-	-	-	-	-	-	-	-	3.9		
	Hsinghu		ep	15	01.8		-	-	-	-	-	-	-	-	-	-	16.2		

ILA  
ANP  
HWA  
HSN

14 59  
15 03  
15 01  
15 18

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				S.
TAP 16	Taipei	18	ep	10	15	02.0	μ	μ	μ	μ	μ	μ	-	-	-	-	-	9.0	I 15 11
TCU	Taichung		ep	15	06.0		-	-	-	-	-	-	-	-	-	-	-	0	15 22 15 28 15 31
YUS	Yushan		ep	15	07.0		-	-	-	-	-	-	-	-	-	-	15.0		
HSI	Hsinkong		ep	15	09.4		-	-	-	-	-	-	-	-	-	-	18.4		
ALS	Alishan		ep	15	10.1		-	-	-	-	-	-	-	-	-	-	21.1		
TTN	Taitung		ep	15	20.4		-	-	-	-	-	-	-	-	-	-	0		
17	Hwalien	19	p	01	22	45.1	-	-	-	-	-	-	-	-	-	-	7.7	Hwalien district	
	Hsinkong		ep	22	54.8		-	-	-	-	-	-	-	-	-	-	0		
18	Hengchun	19	ep	05	12	32.0	-	-	-	-	-	-	-	-	-	-	14.8	Taitung district	
	Lanyu		ep	12	52.5		-	-	-	-	-	-	-	-	-	-	12.2		
	Taitung		p	13	05.5		-	-	-	-	-	-	-	-	-	-	-		
19	Taitung	20	p	14	15	06.5	-	-	-	-	-	-	-	-	-	-	4.8	Taitung district	
	Hsinkong		ep	05	08.4		-	-	-	-	-	-	-	-	-	-	8.0		
	Hengchun		ep	15	11.2		-	-	-	-	-	-	-	-	-	-	7.8		
20	Hwalien	21	p	05	41	17.8	-	-	-	-	-	-	-	-	-	-	8.3	Northern district	
	Iilan		ep	41	27.1		-	-	-	-	-	-	-	-	-	-	3.8		
	Hsinkong		ep	41	41.8		-	-	-	-	-	-	-	-	-	-	0		
LAY 21	Lanyu	22	p	05	02	31.0	-	-	-	-	-	-	-	-	-	-	5.5	I Local 02 37	
TTN	Taitung		p	02	45.0		-	-	-	-	-	-	-	-	-	-	16.0	O 40km ENE of Lanyu 03 01	
TAW	Tawu		ep	02	46.4		-	-	-	-	-	-	-	-	-	-	11.9	O H±10 02 58	
HEN	Hengchun		ep	03	11.7		-	-	-	-	-	-	-	-	-	-	13.8	O 22°18'N 121°49'E 03 25	
22	Hwalien	22	p	08	48	31.8	-	-	-	-	-	-	-	-	-	-	6.4	Hwalien district	
	Hsinkong		ep	49	43.5		-	-	-	-	-	-	-	-	-	-	11.0		

LAY  
TTN  
TAW  
HEN







Major Earthquakes which occurred in November, 1969

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.					
HSN 35	Hsinchu	31	ep	17	34	23.0	-	-	-	-	-	-	-	-	-	3.0	O	Local 34 53 38km ENE of Hwalien H=20	
HWA	Hwalien		p	35	28.5		-	-	-	± 310	± 235	-	0.5	0.5	-	4.9	II	35 33	
ILA	Ilan		ep	35	38.2		-	-	-	-	-	-	-	-	-	9.2	O	24°2'N 121°57'E 35 47	
YUS	Yushan		p	35	38.2		-	-	-	-	-	-	-	-	-	13.0	O	35 51	
TCU	Taichung		ip	35	40.9		-	-	-	-	-	-	-	-	-	11.1	O	35 52	
TAP	Taipei		ip	35	41.6		-	-	-	-	-	-	-	-	-	13.1	O	35 55	
ANP	Anpu		p	35	42.0		-	-	-	-	-	-	-	-	-	16.0		35 58	
HSI	Hsinkong		ep	35	42.2		-	-	-	-	-	-	-	-	-	13.8	O	35 56	
ALS	Alishan		p	35	42.2		-	-	-	-	-	-	-	-	-	12.5	O	35 55	
CHY	Chiayi		ep	35	44.8		-	-	-	-	-	-	-	-	-	17.0	O	36 02	
TIN	Taitung		p	35	54.1		-	-	-	-	-	-	-	-	-	18.7	O	36 13	
TAW	Tawu		p	35	59.2		-	-	-	-	-	-	-	-	-				
36	Hwalien	31	p	22	32	50.9	-	-	-	-	-	-	-	-	-	54.4	O		
	Taitung		p	38	55.4		-	-	-	-	-	-	-	-	-	-	O	U.S.C.G.S 11.9S 75.1W Peru	
	Hengchun		p	39	1.6		-	-	-	-	-	-	-	-	-	-	O		
	Anpu		p	40	14		-	-	-	-	-	-	-	-	-	-	-		
1	Yushan	1	ep	1	54	00	-	-	-	-	-	-	-	-	-	-	O	Midland	
	Alishan		ep	54	03.4		-	-	-	-	-	-	-	-	-	-	4.4	O	
	Hsinkong		ep	54	06.8		-	-	-	-	-	-	-	-	-	-	6.8	O	
HEN 2	Hengchun	1	ep	02	37	55.3	-	-	-	-	-	-	-	-	-	2.2	O	37 58	
HWA	Hwalien		p	38	36.8		-	-	-	± 31	± 310	-	2.6	2.5	-	13.5	I	38 50	
YUS	Yushan		ip	38	39.6		130	148	-	-	-	-	-	-	-	3.4	III	38 43	

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks			
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z						
				μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.							
ALU	Alishan	1	ip	02	38	43.7	-	35	+	30	-	54.1	49.6	μ	-	1.5	1.8	-	3.5	II	38 47
HSI	Hsinkong		ip	38	45.1		+	42	-	37	-	64	28.0	21.0	-	0.4	0.4	-	6.9	I	38 52
CHY	Chiayi		ep	38	48.0		-	-	-	-	-	650	550	-	3.9	3.7	-	11.7	I	39 00	
TIN	Taitung		ep	38	50.4		-	-	-	-	-	193	177	105	1.6	-	1.8	13.3	I	25km ENE of Yushan 39 04	
TAW	Tawu		p	38	55.7		-	-	-	-	-	-	-	-	-	-	-	18.4	O	H=10 39 14	
TAI	Tainan		ep	38	57.7		-	-	-	+	24.4	171	164	133	5.6	4.3	4.9	21.1	O	23°33.4'N 121°10.0' 39 19	
KAU	Kaohsiung		ep	38	58.0		-	-	-	-	-	-	-	-	-	-	-	16.0	O	39 14	
LAY	Lanyu		p	39	02.0		-	-	-	-	-	-	-	-	-	-	-	15.0		39 17	
HSI	Hsinchu		ep	39	08.0		-	-	-	-	-	-	-	-	-	-	-	19.8	O	39 28	
ILA	Ilan		ep	39	06.0		-	-	-	-	-	-	-	-	-	-	-	19.0	O	39 25	
ANP	Anpu		p	39	11.0		-	2.24	-	2.04	-	1.12	-	-	-	-	-	2.9		39 40	
TAP	Taipei		ip	39	11.4		-	-	-	-	-	-	-	-	-	-	-	20.7	O	39 32	
3	Yushan	1	p	04	18	2.2	-	-	-	-	-	-	-	-	-	-	-	2.0	O		
	Alishan		p	18	4.9		-	-	-	-	-	-	-	-	-	-	-	4.5	O		
	Hsinkong		p	18	6.4		-	-	-	-	-	-	-	-	-	-	-	5.6	O		
	Chiayi		p	18	11.4		-	-	-	-	-	-	-	-	-	-	-	7.9		15km ESE of Yushan	
	Anpu		p	18	12.8		-	-	-	-	-	-	-	-	-	-	-	2.0		H=10	
	Hwalien		ep	18	14.4		-	-	-	-	-	-	-	-	-	-	-	5.2	O		
	Taitung		p	18	15.1		-	-	-	-	-	-	-	-	-	-	-	13.6	O		
	Taipei		ep	18	31.1		-	-	-	-	-	-	-	-	-	-	-	11.9	O		
4	Yushan	1	p	04	21	54	-	-	-	-	-	-	-	-	-	-	-	2.7	O		
	Alishan		p	21	57.4		-	-	-	-	-	-	-	-	-	-	-	4.7	O		
	Hsinkong		ep	21	58.0		-	-	-	-	-	-	-	-	-	-	-	5.7	O		







No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z					
15	Tawu	8	-	22	00	34.2	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	0	U.S.C.G.S	
	Ilan		-		00	50.7	-	-	-	-	-	-	-	-	-	-	-	0	Halmahera 1.1S 127.0E	
	Anpu		-		00	52.0	-	-	-	-	-	-	-	-	-	-	-	4 19.0	0	
16	Hsinkong	9	ep	00	33	03.0	-	-	-	-	-	-	-	-	-	-	-	21	0	Hwalien district
	Taitung		-		33	35.7	-	-	-	-	-	-	-	-	-	-	-	-	0	
17	Hwalien	10	p	04	44	46.3	-	-	-	-	-	-	-	-	-	-	-	7.2	0	Hwalien district
	Hsinkong		ep		44	53.0	-	-	-	-	-	-	-	-	-	-	-	7.0	0	
18	Ilan	10	ep	09	44	36.2	-	-	-	-	-	-	-	-	-	-	-	4.1	0	Northern district
	Taipei		ep		44	37.5	-	-	-	-	-	-	-	-	-	-	-	17.2	0	
	Anpu		p		44	43.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	Ilan	10	ep	09	54	18.4	-	-	-	-	-	-	-	-	-	-	-	4.1	0	Northern district
	Taipei		ep		54	27.2	-	-	-	-	-	-	-	-	-	-	-	6.2	0	
20	Anpu	11	p	16	08	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	distant
	Taitung		p		09	34.3	-	-	-	-	-	-	-	-	-	-	-	-	0	
21	Anpu	12	p	19	18	44.0	-	-	-	-	-	-	-	-	-	-	-	2	26	distant
	Taitung		p		19	16.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	Ilan	15	ip	03	11	07.6	-	-	-	-	-	-	-	-	-	-	-	8.8	-	
	Hwalien		ep		11	08.9	-	-	-	-	-	-	-	-	-	-	-	10.6	0	
	Anpu		p		11	09.5	-	-	-	-	-	-	-	-	-	-	-	10.0	-	About 70km SE of Ilan H=10
	Taipei		ep		11	11.6	-	-	-	-	-	-	-	-	-	-	-	13.6	0	
	Taitung		p		11	44.2	-	-	-	-	-	-	-	-	-	-	-	-	0	
23	Chiayi	15	ep	07	22	51.2	-	-	-	-	-	-	-	-	-	-	-	5.3	I	Near Chiayi
HWA	24Hwalien	16	p	01	56	50.8	-	-	-	-	-	-	-	-	-	-	-	7.5	II	56 58
YUS	Yushan		ep		57	04.0	-	-	-	-	-	-	-	-	-	-	-	12	O	57 16
ILA	Ilan		ep		57	05.0	-	-	-	-	-	-	-	-	-	-	-	9.2	O	57 14
TCU	Taichung		ep		57	06.7	-	-	-	-	-	-	-	-	-	-	-	10.2	O	Small Felt area 57 17

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks		
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z					
ALS	24 Alishan	16	ep	01	57	07.6	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	9.6	0	58km SE of Hwalien 57 17
HSI	Hsinkong		ep		57	07.6	-	-	-	-	-	-	-	-	-	-	-	10.5	0	H=40 57 18
TAP	Taipei		ep		57	09.5	-	-	-	-	-	-	-	-	-	-	-	10.3	I	23°39'N 122°2.3'E 57 20
ANP	Anpu		p		57	1.1 + 9.6 - 0.16 - 1.2	-	-	-	-	-	-	-	-	-	-	-	4.5	-	57 05
CHY	Chiayi		ep		57	15.9	-	-	-	-	-	-	-	-	-	-	-	9.6	-	57 26
TTN	Taitung		p		57	17.2	-	-	-	-	-	-	-	-	-	-	-	-	0	
HEN	Hengchun		ep		57	40.4	-	-	-	-	-	-	-	-	-	-	-	-	0	
TAW	Tawu		p		57	42.9	-	-	-	-	-	-	-	-	-	-	-	-	0	
	25 Ilan	16	ep	04	47	09.0	-	-	-	-	-	-	-	-	-	-	-	6.0	0	
	Hwalien		p		47	12.3	-	-	-	-	-	-	-	-	-	-	-	8.6	0	
	Taipei		ep		47	17.7	-	-	-	-	-	-	-	-	-	-	-	8.3	0	
	Anpu		p		47	18.7	-	-	-	-	-	-	-	-	-	-	-	5.7	0	33km SE of Ilan
	Alishan		ep		47	25.2	-	-	-	-	-	-	-	-	-	-	-	17.3	0	H=40
	Taichung		ep		47	29.3	-	-	-	-	-	-	-	-	-	-	-	12.2	0	
	Hsinkong		ep		47	30.8	-	-	-	-	-	-	-	-	-	-	-	13.2	0	
	Taitung		p		47	52.5	-	-	-	-	-	-	-	-	-	-	-	-	0	
HSI	26 Hsinkong	19	ep	20	51	21.5	-	-	-	-	-	-	-	-	-	-	-	1.9	I	Local 15km SE of Hsinkong 51 23
TTN	Taitung		p		51	44.2	-	-	-	-	-	-	-	-	-	-	-	6.4	0	51 54
HWA	Hwalien		ep		51	48.0	-	-	-	-	-	-	-	-	-	-	-	17.9	0	H=0 23°1.1'N 121°26.6'E 52 06
ALS	Alishan		p		51	48.0	-	-	-	-	-	-	-	-	-	-	-	-	0	
YUS	Yushan		ep		51	51.0	-	-	-	-	-	-	-	-	-	-	-	8.0	0	51 59
	27 Ilan	20	ep	02	43	25.6	-	-	-	-	-	-	-	-	-	-	-	10.8	0	52km E of Hwalien
	Hsinkong		ep		43	29.8	-	-	-	-	-	-	-	-	-	-	-	14.2	0	H=40
	Taipei		ep		43	30	-	-	-	-	-	-	-	-	-	-	-	20.6	0	
	Yushan		ep		43	35.5	-	-	-	-	-	-	-	-	-	-	-	16.4	0	
	Anpu		p		43	36.2	-	-	-	-	-	-	-	-	-	-	-	2.1	0	



No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)			N	E	Z	N	E	Z	N	E	Z			
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.			
27	Taichung	20	ep	02	43	36.8	—	—	—	—	—	—	—	—	—	—	19.5	O
	Alishan		ep		43	37.1	—	—	—	—	—	—	—	—	—	—	14.7	O
	Taitung		p		43	40.2	—	—	—	—	—	—	—	—	—	—	18	O
	Chiayin		p		43	54.0	—	—	—	—	—	—	—	—	—	—	—	—
	Hengchun		ep		44	17.2	—	—	—	—	—	—	—	—	—	—	—	O
	Hwalien		p		44	22.6	—	—	—	—	—	—	—	—	—	—	7.3	O
28	Hsinkong	20	ep	06	04	11.6	—	—	—	—	—	—	—	—	—	—	5.9	O
	Taitung		p		04	39.0	—	—	—	—	—	—	—	—	—	—	—	O
29	Hwalien	20	ep	21	23	53.0	—	—	—	—	—	—	—	—	—	—	10.9	O
	Ilan		ep		23	59.6	—	—	—	—	—	—	—	—	—	—	9.1	O
	Anpu		p		24	05.0	—	—	—	—	—	—	—	—	—	—	6.5	O
	Hsinkong		ep		24	10.1	—	—	—	—	—	—	—	—	—	—	—	O
30	Hengchun	21	ep	02	11	35.0	—	—	—	—	—	—	—	—	—	—	4	13
	Tawu		p		12	09.4	—	—	—	—	—	—	—	—	—	—	—	O
	Chiayi		ep		12	13.8	—	—	—	—	—	—	—	—	—	—	13	35
	Lanyu		p		12	15.0	—	—	—	—	—	—	—	—	—	—	5	26
	Taitung		p		12	15.7	—	—	—	201	145	76	18.7	14.1	15.2	5	24.7	O
	Tainan		ep		12	16.0	—	—	—	372	193	128	16.4	14.4	13.2	5	7.8	O
	Alishan		p		12	17.7	—	—	—	—	—	—	—	—	—	—	5	15.9
	Hsinkong		p		12	19.8	—	—	—	—	—	—	—	—	—	—	5	23.5
	Yushan		ep		12	20.0	—	—	—	—	—	—	—	—	—	—	9	20.0
	Kaohsiung		ep		12	22.2	—	—	—	—	—	—	—	—	—	—	5	36
	Anpu		p		12	29	+ 5.32	- 6.65	+ 15.3	—	—	—	—	—	—	—	4	7
	Taichung		ep		12	29.2	—	—	—	170	144	—	18.1	17.5	—	—	4	49.8
	Taipei		ip		12	30.8	—	—	—	—	—	—	—	—	—	—	5	31.2
	Hwalien		ep		12	33.6	—	—	—	—	—	—	—	—	—	—	5	17.2
	Ilan		ep		12	36.0	—	—	—	—	—	—	—	—	—	—	4	15.6
	Hsinchu		ep		12	37.4	—	—	—	—	—	—	—	—	—	—	—	O

No.	Station	Date	Phase	P.			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				(G.M.T)			N	E	Z	N	E	Z	N	E	Z			
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.			
31	Tainan	22	ep	23	17	18.0	—	—	—	139	171	—	—	—	—	—	16.9	22
	Hwalien		ep		17	22.3	—	—	—	—	—	—	—	—	—	—	—	4
	Ilan		ep		17	39.8	—	—	—	—	—	—	—	—	—	—	—	—
	Taipei		ep		17	42.0	—	—	—	—	—	—	—	—	—	—	—	10
	Anpu		p		17	43.0	—	—	—	—	—	—	—	—	—	—	—	6
	Yushan		ep		17	45.5	—	—	—	—	—	—	—	—	—	—	—	14
	Alishan		ep		17	53.0	—	—	—	—	—	—	—	—	—	—	—	—
	Taichung		ep		18	01.0	—	—	—	—	—	—	—	—	—	—	—	7
	Hsinkong		p		18	03.0	—	—	—	—	—	—	—	—	—	—	—	6
	Taitung		p		18	05.6	—	—	—	111	88	—	17.6	17.3	—	—	—	12
	Kaohsiung		ep		18	10.4	—	—	—	—	—	—	—	—	—	—	—	8
	Tawu		p		18	14.4	—	—	—	—	—	—	—	—	—	—	—	12
	Hengchun		ep		18	18.6	—	—	—	—	—	—	—	—	—	—	—	—
	Hsinchu		ep		25	43.6	—	—	—	—	—	—	—	—	—	—	—	—
32	Hwalien	23	ep	17	06	29.4	—	—	—	—	—	—	—	—	—	—	—	12.1
	Ilan		ep		06	38.4	—	—	—	—	—	—	—	—	—	—	—	11.4
	Hsinkong		ep		06	40.4	—	—	—	—	—	—	—	—	—	—	—	21.5
	Anpu		p		06	41.5	—	—	+ 0.24	—	—	—	—	—	—	—	—	3.0
	Alishan		ep		06	43.9	—	—	—	—	—	—	—	—	—	—	—	23.2
	Taitung		p		06	43.9	—	—	—	—	—	—	—	—	—	—	—	22.4
	Taipei		ip		06	43	—	—	—	—	—	—	—	—	—	—	—	16.4
33	Hwalien	23	ep	22	40	23.5	—	—	—	—	—	—	—	—	—	—	—	12.0
	Taipei		ep		40	49.5	—	—	—	—	—	—	—	—	—	—	—	15.5
	Hsinkong		ep		40	52	—	—	—	—	—	—	—	—	—	—	—	08.0

U.S.C.G.S  
Near East  
Coast of  
Kamchatka  
57.8N 163.5E  
Mag  
7.1(PAS)  
7(BRK)  
7 1/4(GOL)

About  
110km ENE  
of Hwalien

About  
110km ENE  
of Hwalien  
H=40



Major Earthquakes which occurred in December 1969

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			
CH84	Chiayi	30	-	18	12	0.1	μ	μ	μ	μ	μ	μ	S.	S.	S.	M.	S.	11.50
ILA	Ilan		ep	12	03.1													12 09
HWA	Hwlien		p	12	07.8													About 28km NE of Taipei 12 25
TAP	Taipei		ep	12	12.2													H±10 12 26
ALS	Alishan		ep	12	17.9													25°3N 121°7E 12 43
1	Hsinkong	1	ep	19	53	40.4												Near Hsinkong
	Taitung		p	53	43.5													4.6 O
2	Tawu	1	ep	21	15	26.5												9.1 O
	Lanyu		ep	15	28.7													7.6 O
	Taitung		p	15	29.6													5.4 O about 42km SE of Taitung
	Hengchun		ep	15	35.1													7.1 H±10
	Hsinkong		ep	15	37													4.4 O 22°7N 121°6E
	Chiayi		p	15	01.6													
3	Taitung	2	p	03	01	59.3												5.5 O
	Tawu		p	02	03.2													0 Near Hsinkong
	Hsinkong		ep	02	06.4													4.8 O
4	Hsinkong	2	ep	05	59	53												0.2 O Near Hsinkong
	Taitung		ep	59	59.1													0
5	Taitung	2	ep	18	00	58.3												0
	Anpu		p	01	01													3 1.5 O U.S.C.G.S 8.2N 126.3E
	Ilan		ep	01	04.5													2 22.6 O Mindnao Philippine Islands
	Alishan		ep	01	05.5													2 3.9 O

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				S.
6	Hsinkong	3	ip	13	59	19.5	+ 1.3	+ 1.6	+ 4.0	μ	μ	μ	μ	μ	μ	μ	μ	μ	73 6.9 5.0 0.1 0.1 0.1 2.8 I Near Hsinkong
	Taitung		p	59	29													10.6 O	
7	Anpu	4	p	08	55	4.6												4 2.7 O U.S.C.G.S 40°7N 144.7E off East Coast of Honshu Japan Felt	
	Taitung		ep	56	15.5													0	
8	Ilan	4	ep	12	42	07.1												12.1 O	
	Anpu		p	42	14.5													6.1	
	Taipei		ep	42	21.1													0 Northern district	
	Hsinkong		ep	42	27.4													0	
	Taitung		p	43	39.6													0	
HWA9	Hwalien	5	p	16	31	57.2												167 164 0.5 0.5 7.1 I 32 04	
ILA	Ilan		ep	32	06													10.4 O 32 16	
YUS	Yushan		p	32	06.5													12.8 O Local 32 19	
ANP	Anpu		p	32	09.5													09.0 About 48km SW of Ilan 32 19	
ALS	Alishan		p	32	10.6													11.8 O H±30 32 22	
TAP	Taipei		ep	32	17.1													4.3 O 24°26'N 121°22'E 32 21	
CHI	Chiayi		p	32	31.6														
HEN	Hengchun		ep	32	51.4														
HWA10	Hwalien	7	p	05	52	49.9												214 262 224 0.5 0.5 1.8 7.7 II Local 52 58	
HSI	Hsinkong		ip	52	51.5													5.5 5.8 7.5 0.1 0.1 0.1 9.8 I About 37km SE of Hwalien 53 01	
YUS	Yushan		p	52	58.3													11 H±10 53 09	
ALS	Alishan		p	52	58.8													13.3 O 53 12	
ILA	Ilan		ep	53	00.2													12.4 O 53 13	
TTN	Taitung		p	53	01.7													15.2 O 53 17	



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.			
CHI	Chiayi	7	ep	05	53	03.4	-	-	-	-	-	-	-	-	-	18.0	23°43'N 121°49'E	5321
ANP	Anpu		p		53	05.5	-	-	-	-	-	-	-	-	-			
TAP	Taipei		ip		53	07.1	-	-	-	-	-	-	-	-	-	13.5		5321
TAI	Tainan		ep		53	14	-	-	-	-	-	-	-	-	-			
TAW	Tawu		p		53	15.7	-	-	-	-	-	-	-	-	-	21.7		5337
HEN	Hengchen		ep		53	22	-	-	-	-	-	-	-	-	-	28		5350
HWA	Hwalien	8	ep	17	42	15.5	-	-	-	-	-	-	-	-	-	10.9		4226
HSI	Hsinkong		ep		42	23.4	-	-	-	-	-	-	-	-	-	9.8		4233
ILA	Ilan		ep		42	24.4	-	-	-	-	-	-	-	-	-	13.1	About 32km SSE of Hwalien	4238
ANP	Anpu		p		42	27	-	-	-	-	-	-	-	-	-	20.5	H±10	4248
TTN	Taitung		p		42	41.2	-	-	-	-	-	-	-	-	-		23°7'N 121°8'E	
HEN	Hengchun		ep		42	42.7	-	-	-	-	-	-	-	-	-			
12	Hwalien	9	p	02	51	21.8	-	-	-	-	-	-	-	-	-	06.9	Near Hwalien	
	Hsinkong		ep		51	27.4	-	-	-	-	-	-	-	-	-	10.8		
13	Hengchun	10	ep	00	14	07.4	-	-	-	-	-	-	-	-	-			
	Hsinkong		ep		14	28.4	-	-	-	-	-	-	-	-	-		Hwalien district	
	Taitung		ep		14	33.2	-	-	-	-	-	-	-	-	-			
14	Anpu	12	p	01	18	2.6	-	-	-	-	-	-	-	-	-	4	25	U.S.C.G.S 40.1N 143.8E off East Coast of Honshu Japan
	Taitung		ep		18	46.8	-	-	-	-	-	-	-	-	-			
15	Anpu	13	p	06	27	08.5	-	-	-	-	-	-	-	-	-	06		
	Ilan		ep		27	10.2	-	-	-	-	-	-	-	-	-	4.3	O	Northern district
	Taipei		ep		27	10.7	-	-	-	-	-	-	-	-	-			
	Hwalien		ep		27	17.6	-	-	-	-	-	-	-	-	-			

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	μ	μ	μ	μ	μ	μ	S.	S.	S.				M.
16	Hwalien	13	p	21	38	13.1	-	-	-	-	-	-	-	-	-	47.7	O	U.S.C.G.S 23.9N 126.3E Ryukyu Islands Region	
	Ilan		ep		38	17.7	-	-	-	-	-	-	-	-	-				
	Alishan		ep		38	26.6	-	-	-	-	-	-	-	-	-				
	Taitung		ep		38	28.1	-	-	-	-	-	-	-	-	-				
	Taichung		ep		38	29	-	-	-	-	-	-	-	-	-				
	Hsinkong		ep		38	33.4	-	-	-	-	-	-	-	-	-				
17	Chiayi	13	ep	21	39	20.4	-	-	-	-	-	-	-	-	-	10	O	Near Chiayi	
	Tawu		p		39	21.8	-	-	-	-	-	-	-	-	-				
	Hengchun		ep		39	28.7	-	-	-	-	-	-	-	-	-				
18	Taipei	14	ep	02	46	17.1	-	-	-	-	-	-	-	-	-	4	4.3	O	
	Hsinkong		ep		46	56.1	-	-	-	-	-	-	-	-	-		3	50.1	O
	Taitung		p		46	57.3	-	-	-	-	-	-	-	-	-		3	44.3	O
	Tawu		ep		46	57.5	-	-	-	-	-	-	-	-	-		3	4.8	O
	Alishan		ep		47	04.7	-	-	-	-	-	-	-	-	-		3	51.4	O
	Ilan		ep		47	20.7	-	-	-	-	-	-	-	-	-		3	40.9	O
	Hwalien		ep		47	47.5	-	-	-	-	-	-	-	-	-				
	Hengchun		ep		49	53.0	-	-	-	-	-	-	-	-	-				
	Kaohsiung		ep		50	48.2	-	-	-	-	-	-	-	-	-				
	Tainan		ep		50	53.1	-	-	-	-	-	-	-	-	-				
	Taichung		ep		51	05.5	-	-	-	-	-	-	-	-	-				
TAW	Tawu	15	p	03	51	56.5	-	-	-	-	-	-	-	-	-	06	O	5203	
TTN	Taitung		ep		52	01.6	-	-	-	-	-	-	-	-	-			5206	
HEN	Hengchun		ep		52	03.0	-	-	-	-	-	-	-	-	-			About 37km SE of Taitung H±10 22°5'N 121°4'E	
ALS	Alishan		ep		52	10.0	-	-	-	-	-	-	-	-	-	13.9		5224	

51(53)



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			
20	Tawu	16	ep	04	55	55.1	μ	μ	μ	μ	μ	μ	S	S	S	M. S.	1.4 O	Near Tawu
	Hsinkong		ep		56	00	-	-	-	-	-	-	-	-	-	-	7.5 O	
21	Tawu	16	ip	11	53	25	-	-	-	-	-	-	-	-	-	-	2.2 O	Near Tawu
	Taitung		ep	53	33.4		-	-	-	-	-	-	-	-	-	-	0	
22	Taitung	18	ep	13	37	48	-	-	-	-	-	-	-	-	-	-	0	U.S.C.G.S Sakhalin Island 46.3N 142.5E Felt Widely on Hokkaido Max. Int. III (JMA) Mag 6.5(PAS)
	Anpu		p	38	22		-	-	-	-	-	-	-	-	-	3	48 O	
23	Hsinkong	20	p	02	52	36.6	-	-	-	-	-	-	-	-	-	-	6.9 O	52 44
	Tawu		ip	52	52.2		-	-	-	-	-	-	-	-	-	-	7.6 O	53 00
	Taitung		p	52	52.7		-	-	-	-	-	-	-	-	-	-	4.5 O	52 57
	Alishan		ep	53	03.9		-	-	-	-	-	-	-	-	-	-	15 O	About 53 19 36km SE of Taitung
	Chiayi		ep	53	07.1		-	-	-	-	-	-	-	-	-	-	16	H=20 53 23
	Anpu		p	53	25.0		-	-	-	-	-	-	-	-	-	-	16 O	22°6N 121°4E 53 41
	Hengchun		ep	53	29.3		-	-	-	-	-	-	-	-	-	-	15.7 O	53 45
	Taipei		ep	53	57.8		-	-	-	-	-	-	-	-	-	-	0	
	Tawu		p	02	19	13.4	-	-	-	-	-	-	-	-	-	-	6.3 O	19 20
	Taitung		ep	19	16.9		-	-	-	-	-	-	-	-	-	-	3.8 O	About 29km SE of Taitung H=10
	Alishan		ep	19	24.8		-	-	-	-	-	-	-	-	-	-	14 O	22°6N 121°4E 19 38
24	Hsinkong	20	ep	19	59	28.7	-	-	-	-	-	-	-	-	-	-	6.4 O	Near Hsinkong
	Taitung		ep	59	51.2		-	-	-	-	-	-	-	-	-	-	0	
25	Hengchun	23	ep	14	10	02.0	-	-	-	-	-	-	-	-	-	-	0	U.S.C.G.S 13.8N 120.6E Mindoro, Philippine Islanbs, Felt at Manila (IV) Batangas (IV) Talisay (IV) Batangas (IV)
	Tawu		p	10	08.7		-	-	-	-	-	-	-	-	-	-	0	
	Taitung		ep	10	13.4		-	-	-	-	-	-	-	-	-	-	0	
	Alishan		p	10	18.5		-	-	-	-	-	-	-	-	-	-	0	

Handwritten notes in blue ink:

- 52 44
- 53 00
- 52 57
- About 53 19 36km SE of Taitung
- H=20 53 23
- 22°6N 121°4E 53 41
- 53 45
- 19 20
- About 29km SE of Taitung H=10
- 22°6N 121°4E 19 38

No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z			
26	Ilan	23	ip	16	20	53	μ	μ	μ	μ	μ	μ	S	S	S	M. S.	1.4 I	21 02
	Anpu		p	20	56.5		-	-	-	-	-	-	-	-	-	-	8.0	21 05
	Hwalien		ip	21	00.3		-	-	-	-	-	-	-	-	-	-	15 I	21 15
	Taipei		ip	21	00		-	-	-	-	-	-	-	-	-	-	11.6 O	21 12
	Alishan		p	21	06.6		-	-	-	-	-	-	-	-	-	-	22.5 O	21 29
	Yushan		p	21	11.8		-	-	-	-	-	-	-	-	-	-	17.7 O	21 30
	Taichung		ip	21	12.3		-	-	-	-	-	-	-	-	-	-	21.3	21 34
	Hsinkong		ep	21	17.6		-	-	-	-	-	-	-	-	-	-	20.6 O	Small Felt area about 80km ENE of Ilan 21 38
	Taitung		p	21	19.7		-	-	-	-	-	-	-	-	-	-	23.6 O	H=40 21 43
	Chiayi		ep	21	19.7		-	-	-	-	-	-	-	-	-	-	27.3	21 47
	Tawu		p	21	25.8		-	-	-	-	-	-	-	-	-	-	32.3 O	24°53'N 122°32'E 21 58
	Hengchun		ep	21	34.2		-	-	-	-	-	-	-	-	-	-	34.8 O	22 09
	Kaohsiung		ep	22	29.5		-	-	-	-	-	-	-	-	-	-	0	
	Tainan		ep	22	29.5		-	-	-	-	-	-	-	-	-	-	0	
27	Anpu	25	p	21	50	55.6	+ 0.67	-	-	-	-	-	-	-	-	-	-2 54.4	distant
	Taitung		ep	52	22.4		-	-	-	-	-	-	-	-	-	-	-	
28	Taichung	25	ep	22	38	35	-	-	-	-	-	-	-	-	-	-	0	
	Hengchun		ep	50	15.0		-	-	-	-	-	-	-	-	-	-	0	distant
29	Hsinkong	26	ep	01	22	05.3	-	-	-	-	-	-	-	-	-	-	2.0	Near Hsinkong
	Taitung		ep	22	10.4		-	-	-	-	-	-	-	-	-	-	-	
30	Hsinkong	26	ep	12	39	26.4	-	-	-	-	-	-	-	-	-	-	5.6 I	Local Near Hsinkong
	Taitung		ep	39	40		-	-	-	-	-	-	-	-	-	-	0	

Handwritten notes in blue ink:

- 21 02
- 21 05
- 21 15
- 21 12
- 21 29
- 21 30
- 21 34
- Small Felt area about 80km ENE of Ilan 21 38
- H=40 21 43
- 21 47
- 21 58
- 22 09



No.	Station	Date	Phase	P. (G.M.T.)			Initial Motion			Maximum Amplitude			Period			P~S	Intensity	Epicenter & Remarks	
				h.	m.	s.	N	E	Z	N	E	Z	N	E	Z				
31	Taitung	27	p	00	50	03	μ	μ	μ	μ	μ	μ	S.	S.	S.	M. S.	5.3	O	
	Tawu		p	50	06.4		-	-	-	-	-	-	-	-	-	-	-	O	Near Taitung
	Hsinkong		ep	50	08.0		-	-	-	-	-	-	-	-	-	-	5.6	O	
HWA	32	Hwalien	28	ep	22	14	41.5	-	-	-	-	-	-	-	-	-	18.1	O	15 00
ILA		Ilan		ep	14	53.3	-	-	-	-	-	-	-	-	-	-	11.8	O	15 05
HSI		Hsinkong		ep	15	00	-	-	-	-	-	-	-	-	-	-	9.0	O	About 60km W of Taipei 15 09
TAP		Taipei		ip	15	01.0	-	-	-	-	-	-	-	-	-	-	17.3	O	H±10 15 18 25°2N
ANP		Anpu		p	15	01.5	-	-	-	-	-	-	-	-	-	-	6.7	O	120°9E 15 08
TTN		Taitung		ep	15	23.1	-	-	-	-	-	-	-	-	-	-	-	O	
33	Taitung	28	ep	22	49	12.2	-	-	-	-	-	-	-	-	-	-	-	O	
	Hsinkong		ep	49	40.2		-	-	-	-	-	-	-	-	-	-	-	O	Taitung district
34	Ilan	29	ep	13	48	19.7	-	-	-	-	-	-	-	-	-	-	8.6	O	Near Ilan
	Anpu		p	48	23.8		-	-	-	-	-	-	-	-	-	-	18.2	O	
ILA	35	Ilan	29	ep	19	31	01.7	-	-	-	-	-	-	-	-	-	9.3	O	About 45km W of Taipei 31 11
ANP		Anpu		p	31	03.5	-	-	-	-	-	-	-	-	-	-	5.5	O	H±20 31 09 25°1N
HWA		Hwalien		p	31	07.4	-	-	-	-	-	-	-	-	-	-	14.8	O	121°1E 31 22
HSI		Hsinkong		ep	31	18.7	-	-	-	-	-	-	-	-	-	-	19.6	O	31 38
HWA	36	Hwalien	31	p	02	12	55.3	-	-	-	-	-	-	-	-	-	13.6	O	About 20km W of Ilan 13 09
ILA		Ilan		ep	13	00.8	-	-	-	-	-	-	-	-	-	-	3.6	O	H±20 13 04
ANP		Anpu		p	13	06.5	-	-	-	-	-	-	-	-	-	-	5.5	O	24°8N 13 12 121°6E
37	Hsinkong	31	ep	12	59	49	-	-	-	-	-	-	-	-	-	-	4.4	O	
	Taitung		p	59	53.7		-	-	-	-	-	-	-	-	-	-	-	O	Near Hsinkong