

The Chiufeng Seismic Station acknowledge with thanks the receipt of the following publications, from March to May, 1933.

- U.S. Survey, Hawaii The Volcano Letter Jan.-March 1933.
 Zi-Ka-Wei Bulletin: Feb.-March 1933.
 Nota Su una onda Lunga. By E. Gherzi S. C.
 Note Sur Les ondes Longues Z. By E. Gherzi S. J.
 Uccle Bulletin: July-Dec. 1932.
 Wien " : May-Dec. 1932, Jan. 1933.
 Graz " : April-June 1932.
 Stuttgart " : July-Dec. 1932.
 Zürich Jahresbericht 1931.
 Göttingen Bulletin. Aug.-Dec. 1932.
 Scoresby Sund " : Jan.-Dec. 1929, Jan.-June, 1930.
 Tananarive " : July-Sept. 1932.
 Apia " : Feb.-Mar., Oct., 1931, Jan.-Mar. 1933.
 Ivigtut " : Aug.-Dec., 1929, Jan.-Dec. 1930.
 Riverview " : Feb.-March 1933.
 Batavia " : Jan.-March 1933.
 Wellington " : Jan.-March 1933.
 Osaka " : Jan. 1933.
 Kobe " : July-Sept. 1932.
 Nanking " : Oct.-Dec. 1932.
 Hongkong " : Feb.-April 1933.
 Meteorological report of March 1933.
 Lamberg Bulletin: May-Sept. 1932.
 Pasadena " : Jan.-Feb. 1933.
 Preliminary notice earthquake of March 10, 1933.
 Kew Bulletin. March 1933.
 Jena Seis. Registrirungen 1931-1932.
 Beziehungen Zwischen Erdbebenforschung und
 Geologie. Von A. Sieberg
 Zur Mechanik tektonischer Vorgänge. Von
 A. Sieberg
 Manila Bulletin: Jan.-June 1932.
 Corrections to wireless times signals cavite
 P.I. Jan.-April 1932.
 Georgetown Bulletin: March 1933.
 Buffalo " : Sept.-Dec. 1932.
 La Paz " : Jan.-Aug. 1932.
 Little rock " : Oct.-Dec. 1932.
 Florissant " : Dec. 1932, Jan. 1933.
 St. Louis " : Jan.-Feb. 1933.
 J.S.A. " : March-April 1933.
 Ottawa " : March- 1933.
 Oxford Seismological Summary Jan. March 1929.
 Parc St. Maur Bulletin: Feb. 1933.
 Strasbourg " Feb. 1933.
 Hamburg Einige Korrelationen Zwischen seismischer Boden-
 denwerte in Hamburg und der Brandung in West
 und Nordenropa. Von E. Tams
 Uni. Tokyo The S. Atlantic Earthquake of June 27, 1929, as
 Registered at Tokyo-An Observation of Rigid
 waves transmitted Across the Earth's Inner core.
 By A. Imamura
 Japanese Journal of Astronomy and geophysics.
 Vol. X No. 2 & 3.
 A portable Horizontal Pendulum Seismometer. By
 Faykino Kishimoto.
 On the Tsunamis of N-E. Japan, of March 2, 1933.
 By A. Imamura, M.I.A.
 On coastal deformation in West-central Kii
 Peninsula. By A. Imamura, M.I.A.
 On the Incidence of the Initial Motion observed
 angle at Fongo and Mitaka. By Tekeo Suzuki
 On crustal deformations Preceding Earthquakes.
 By A. Imamura (2 copies)

Pei-An-Ho, W. of Peiping,
China

THE CHIUFENG SEISMIC STATION
of the
GEOLOGICAL SURVEY OF CHINA

 Instruments: 200 kg. horiz.,
80 kg. vert.
Weichert;
Galitzin-Wilip.

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$
h: 115m; Foundation: Granite

Weichert	V	T ₀	ξ	γ/T_0^2
due Z	00.7	5.38	2.3	.0066
N	96.1	5.40	3.7	.0110
May 2 E				

Galitzin-Wilip	T ₁	T	μ^2	$\pi l/kA$
due Z	1.05	10.88	-0.04	207 ⁻⁵
N	May - Dec 1933			
May 15 1933 E	Ref 3223			

May, 1933.

No.	Date	Char. Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
419	1, V		e F	10 34 39 53 --				Trace
420		Ir	iP eS eL? M ₁ M ₂ F, overlapped by next quake.	18 35 31 39 56 42 51 45 35 46 56	15 12	+4 -3	2790	Condensation
421		Iu	iP eS? eL? M F, overlapped by next quake.	18 58 39 19 05 41 14 01 19 36	20	-9	5278	Dilatation
422		Ir	iP S eL M ₁ M ₂ M ₃ F	19 56 30 20 00 56 04 36 06 10 55 07 53 21 37 --	18 17 14	-13 +11 -10	2803	Condensation
423		Ir	P eS M F	23 17 49 21 42 28 00 0 00 --			2370	Condensation
424	2		e F	16 38 13 17 05 --				Very small
425	3	Iv	e? M F	13 02 37 08 25 26 --	10	-2		
426		Iv	iP eS i i(M) F	23 34 51 38 08 40 20 41 58 0 06 --	12	-4	1934	Condensation
427	5		e? F	4 52 21 5 15 --				Trace Masked by micro.
428			e? F	11 59 39 12 05 --				Trace
429	6		e? F	5 55 05 6 04 --				Trace Masked by micro.
430	7		e F	16 19 53 57 --				Trace

The Chiufong Seismological Bulletin (Cont.)

May, 1933

18

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
431	8, V	Iu	eP i(M) F	10 53 14 11 48 17 12 36 --	18	±6		
432	12	Ir	eP S eL? M1 M2 M3 F	16 15 28 19 23 21 44 24 05 25 05 27 14 58 --	9 10 8	-3 +3 +2	2395	
433	16	IIu	eP iPP? S PS M1? M2 M3 M4 F	1 19 47 21 33 23 01 25 35 25 38 37 11 38 00 6 00? --	12 13 12 14	-30 +36 -13 +21	6649	
434			eP F	16 49 18 17 ? --				Trace
435	18	Iu	eP i eS? L M1 M2 M3 F	0 01 59 03 24 09 46 14 26 17 08 18 56 20 23 1 33 --	16 13 15	±11 -7 -7	6095	
436		Iv	eP F	10 41 08 56 --				
437	19		e F	17 28 51 49 --				Trace
438		Iu	P i eL? M1 M2 M3 F	13 18 30 30 12 59 30 19 14 03 16 38 21 07 20 21 --	19 17 17	-13 +13 -10		Condensation
439	20	Iu	iP F	4 51 15 6 21 --				Condensation
440			e F	19 21 21 43 --				Trace
441	21	Ir	e eS F	12 00 09 04 24 49 --			2633	
442			e F	22 01 15 23 --				Trace

The Chiufeng Seismological Bulletin (Cont.)

May, 1933 to June, 4

19

No.	Date	Char.	Phase	G.M.T.	T _p	Amu	km.	Remark
443	23,V	Iv	eP e(S)? eL M F, overlapped by next quake.	16 40 07 43 14 44 58 47 55	14	+12	1879	Initials, very small.
444		Iv	eP eL? M F	16 55 25 17 00 12 02 24 23 --	14	+9		
445	24		e F	4 40 18 57 --				Trace
446	27		e F	4 46 44 5 53 --				Trace
447			eP? M F	22 46 53 57 41 23 34 --	17			Initials uncertain.
448	30		e(L) F	12 56 02 13 28 --				Trace of surface waves.
449		Iv	eP eS? M F	13 57 46 14 01 06 05 21 22 --	12	+3	1978	
450	1,VI		e? F	17 40 36 18 11 --				Trace
451	2	IIIV	iP iS L M ₁ M ₂ F	7 42 23 45 31 47 09 49 25 52 14 8 25 --	5 15 13	+3 -115 +13	1849	Condensation Out of paper on side.
452		Iu	e F	12 29 08 13 14 --				Trace
453	4	IIv	iP i ₁ i ₂ iS iL M ₁ M ₂ M ₃ F	17 12 50 13 16 59 15 42 17 21 19 26 21 26 24 22 19 03 --	8 5 7 7 14 9 10	+4 +4 +4 +2 -25 +19 +11	1687	Condensation

F.S. The above data are taken from Cali., if not specially mentioned.

June 7, 1933.

S. P. Lee, Superintendent.

Pei-An-Ho, W. of Peiping,
China

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$
h: 115m; Foundation: Granite

THE CHIUFENG SEISMIC STATION
of the
GEOLOGICAL SURVEY OF CHINA

 Instruments: 200 kg. horiz.,
80 kg. vert.
Weichert;
Galitzin-Wilip.

Weichert	V	T ₀	ξ	γ/T_0^2
due Z	--	--	--	--
N	101.7	5.36	3.8	.0070
June 1 E	100.1	5.29	3.7	.0104

Galitzin-Wilip	T ₁	T	μ^2	$\pi l/kA$
due -Z	11.05	10.88	-0.04	207 ⁻⁵
N				
May 15 1933 E				

June, 1933

20

No.	Date	Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
454	4, VI		e F	13 49 27 14 35 --				Very small
455	6	IIr	iP S L ₁ L ₂ M ₁ M ₂ F	2 34 03 38 54 41 27 42 19 46 08 48 16 4 10 --	18 12	+25 -8	3131	Condensation Felt in Manila.
456			e? M F	6 50 17 7 02 17 30 --	17			Masked by micro.
457	7		e F	6 00 09 7 00 --				Very small
458		IIIr	iP PP i iS iL M ₁ M ₂ M ₃ F	11 50 22 39 51 01 53 52 55 54 57 47 58 36? 59 45 13 34 --	6 6 7 8? 6? 6?	-3 -6 -3 -45 +41 +27	2100	Dilatation Azimuth: W 47°S. Epi.: 25.2°N, 101.9°E.
459	8	Ir	iP S L M ₁ M ₂ M ₃ F	18 15 33 19 29 22 11 24 25 25 25 26 23 20 10 --	16 13 14	-19 -11 -9	2407	Condensation.
460	11		e F	13 21 59 46 --				Trace
461			eL F	13 54 50 14 30 --				Train of surface waves.
462	12	Iv	e? M F	15 55 24 59 13 16 27 --	10	+2		Initial uncertain
463		Ir	P eS eL M F	21 12 48 16 25 18 21 21 03 58 --	14	+6	2173	Condensation

The Chiufeng Seismological Bulletin (Cont.)

June, 1933

21

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
464	13, VI	Iir	iP S L M ₁ M ₂ F	20 38 07 42 01 44 34 46 13 47 49 22 18 --	17 12	+30 +12	2382	Condensation No time mark.
465		Iu	P e eL? M ₁ M ₂ M ₃ M ₄ F	22 29 31 37 38 46 58 52 22 55 10 56 30 58 32 0 05 --	8 11 15 14	-3 -5 -8 +7		Condensation No time mark. Probably two shocks superposed each other. Main phase showing the same type of the above one.
	14							
466			e? M F	20 48 08 55 55 21 20 --	13	+2		Very small
467	18		e F	1 51 35 2 15 --				Very small
468			P i e(L) F	4 06 34 17 19 35 47 5 50 --				Condensation Followed by train of sinusoid waves.
469		Ir	eP eS? eL? M F	13 16 16 20 14 23 54 26 36 14 18 --	16	+9	2432	
470		IIIr	iP i iS i L M F	21 42 08 30 45 50 46 18 47 45 50 39 1 32 --	8 17 15	+10 +170	2233	Condensation Main phase out of paper on both sides.
	19							
471			P e? M ₁ M ₂ F	18 57 32 19 15 31 23 25 24 28 20 10 --	10 13	+4 +4		P small but sharp perhaps not belong- ing to the same quake of the phase followed.
472	21	Iu	eP eL? M F	13 49 30 14 04 07 11 42 36 --	15	+4		
473	24		e? e F	14 02 22 18 58 ? ? --				Initial phase uncertain.
474	25		Initials lost M F	0 35 33 2 13 --	14	+7		West coast of U.S.A.

The Chiufeng Seismological Bulletin (Cont.)

June to July 3, 1933

22

No.	Date	Char.	Phase	G.M.T.	T _p	Amu	km.	Remark
475	25, VI	Iu	e? eS M F	5 51 45 6 02 18 14 41 46 --	14		9488	
476			e F	10 07 50 34 --				A train of surface waves.
477			e e F	20 58 14 21 29 49 22 40 --				Initial phase uncertain.
478	29		e? M F	1 34 06 58 18 2 22? --	20			Initial uncertain.
479			eL F	3 00 01 34 --				A train of surface waves.
480	1, VIII		e F	20 41 23 21 06 --				Initial uncertain.
481	2		e F	16 59 31 17 13 --				A train of surface waves.
482			e F	17 18 10 18 07 --				Trace
483	3		e l F	12 43 59 49 56 13 00 --				
484		IV	P eS? L M F	15 19 56 22 13 24 13 26 59 16 20 --			1351	Dilatation

P.S. The above data are taken from Gali., if not specially mentioned.

July 7, 1933.

S. P. Lee, Superintendent.

Pei-An-Ho, W. of Peiping,
China

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$

h: 115m; Foundation: Granite

THE CHIUFENG SEISMIC STATION

of the

GEOLOGICAL SURVEY OF CHINA

Instruments: 200 kg. horiz.,

80 kg. vert.

Weichert;

Galitzin-Wilip.

Weichert	V	T ₀	ξ	γ/T_0^2
due Z	--	7.60	--	--
N	101.0	5.36	3.6	.0070
July 1 E	102.4	5.24	3.3	.0102

Galitzin-Wilip	T ₁	T	μ^2	$\pi l/kA$
due Z	11.05	10.88	-0.04	207-5
May 15 N				
1933 E				

July, 1933

23

No.	Date	Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
485	4, VII		e F	7 20 15 40 --				Trace
486	5		e(L) F	15 57 57 16 14 --				Very small.
487	7		e e F	7 39 17 58 56 8 29 --				A train of surface waves.
488	9	IIr	iPE,N PP? iSE,N i eL M ₁ M ₂ M ₃ F	1 35 31 36 10 40 01 21 10? 42 34 45 48 47 47 49 30 4 00?--	7 8 10?	+7 +5 -17	2821	Condensation Az: N 63°E. Kurile Is.
489		Ir	e eS? M F	9 04 18? 08 47 14 25 19			2811	No time mark. Overlapped by next quake.
490		Ir	P S eL M F	9 33 25? 37 58 40 24 43 46 19			2863	Condensation No time mark. Overlapped by next quake.
491		Ir	P eS? S M F	11 27 02? 31 12 35 37 19 20			2555	Condensation Overlapped by next quake.
492		IIIr	iPE,N iSE,N L M ₁ M ₂ M ₃ F	12 36 07 40 38 43 36 45 43 51 27 53 12 14	8 11	+9 +10	2834	Condensation Az: N 63°E. Kurile Is.
493		Ir	iP S eL? M ₁ M ₂ M ₃ F	16 12 33 17 07 19 47 22 50 27 36 30 06 13	7	+2	2867	Condensation Overlapped by next quake.

The Chiufeng Seismological Bulletin (Cont.)

July, 1933

24

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
494	9, VII	Ir	P	17 57 01			2890	
			eS	18 01 37				
			eL	04 01				
			M	07 10	19	+6		
			F	Overlapped by next quake.				
495		Ir	e	19 24 17			2945	Initial, very small.
			eS?	23 56				
			M	34 27	20			
			F	20 00 --				
496		Ir	P	22 20 19			2849	Condensation
			eS	24 51				
			eL	27 33				
			M ₁	33 16	12	-4		
			M ₂	37 39	16	+6		
			F	23 58 --				
497	10	Ir	iP	0 26 27			2372	Condensation
			eS	30 22				
			iS	26				
			SS?	56				
			i	31 26				
			eL	32 26				
			M ₁	35 08	15	+10		
			M ₂	36 04	14	+8		
			F	1 55 --				
498		Iu	e	3 36 38				A very small initial.
			ePP?	41 09				
			eL?	4 18 36				
			M ₁	35 58	18	+8		
			M ₂	41 58	16	+6		
			F	5 49 --				
499		Ir	e	6 27 10			2890	
			eS?	31 45				
			M	37 32	18			
			F	7 01 --				
500		Iu	iP	10 41 59	6	-3	5222	Dilatation Amplitudes of preliminary greater than those of main phase.
			i	42 13				
			PP	43 32				
			iS	48 58	8	-2		
			i	49 13				
			e	53 06				
			eL?	57 04				
			F	12 10 --				
501		Ir	eP	13 34 52			2903	At minute eclipse.
			eS?	39 28				
			M	45 12				
			F	14 15 --				
502	11	Ir	e?	6 04 31			2246	Initial uncertain.
			eS?	08 16				
			M	13 32	14	+2		
			F	40 --				

The Chiufeng Seismological Bulletin (Cont.)

July, 1933

25

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
503	11, VII	Ir	eP eS? eL M ₁ M ₂ F	6 54 37 58 30 7 01 16 04 16 05 41 58 --			2347	
504			F	8 19 02 28 --	14 12	+5 +3		A few sinusoid waves.
505	12		e F	14 56 20 15 10 --				A train of surface waves.
506	13	Ir	iP ₁ iP ₂ iS ₁ eS ₂ eL ₁ eL ₂ ? i M ₁ M ₂ F	8 01 41 02 38 05 06 06 02 07 33 08 35 56 11 12 12 08 9 00 --	7 11 9 11	+4 +5 +6 +5	2000	Condensation Perhaps two earthquakes.
507			e e(L) M F	14 32 03 48 27 55 59 15 32 --	17			Very small.
508			e ₁ e ₂ F	23 13 58 18 04 33 --				Very small.
509	14		P F	1 50 03 2 44 --				Condensation
510			e F	5 09 04 25 --				A train of surface waves.
511		Iv	iP iS i F	16 03 13 08 20 10 08 40 --	7 7	-6 -3	1150	Dilatation Surface waves badly developed while P and S phase prominent.
512			e? F	21 37 58 56 --				
513	15		e? e(L)? F	19 22 56 31 28 52 --				Very small.
514	18		e? i(M) F	4 14 43 17 11 50 --				Very small.
515			e M F	9 57 03 10 08 26 14 --				Very small.

The Chiufeng Seismological Bulletin (Cont.)

July, 1933

26

No.	Date	Char.	Phase	G.M.T.	Tp	Amu	km.	Remark
516	18, VII	Iv	iP S F	10 28 26 31 20 50 --			1645	Dilatation Preliminary, prominent; surface waves not developed
517		Ir	iP S L ₁ L ₂ M F	18 12 18 16 50 20 32 23 28 29 51 19 40 --	4 16	+2 +7	2931	Condensation
518			e F	21 35 46 22 08 --				Very small.
519	19	Iu	iP i PP eS? L ₁ L ₂ M F	13 41 03 17 43 00 49 02 51 45 55 14 14 01 16	6 6 21	+2 +3 -19	5258	Condensation Overlapped by next quake.
520		Iu	iP PP eS eL ₁ ? eL ₂ M F	15 08 35 10 30 15 30 19 48 22 51 29 10 16 25 --	4 20	+3 +18	5183	Condensation
521		Iu	P e F	20 17 40 48 08				Very distance quake. Overlapped by next quake.
522		Iv	P i(M) F	20 52 59 21 01 04 40 --				
523	20	Ir	P iS eL M F	23 18 53 22 53 25 24 23 30 0 28 --			2433	Dilatation
	21				14	+10		
524		Iu	P i i eL? L ₂ F	20 26 32 30 02 35 18 21 19 24 23 16 23 21 --			>120°	Condensation Followed by sinusoid waves of nearly same amplitude.
525	22	I	e F	6 40 18 7 02 --				A train of surface waves.

The Chiufeng Seismological Bulletin (Cont.)

July, 1933

27

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
526	22, VII	IIIu	iP	21 04 15	10	+8	5353	Condensation Az: N 30° E. Diving sea.
			i	31	9	-10		
			iPP	06 15	11	-11		
			i	07 27	11	-7		
			iS	11 19	11	-3		
			i	18 35				
			M1	22 55	24?	+105		
			M2	27 13	19	-106		
			M3	29 05	18	+171		
			M4	30 56	16	-70		
23			F	1 08 --				
527	24	IV	iP	8 40 31			1268	Dilatation
			iS	42 38				
			F	9 00 --				
528		Iu	P	19 08 17			9111	Condensation
			eS?	18 31				
			PS	55				
			eL?	32 46				
			M	38 05	25	-11		
			F	22 08 --				
529	26	I	e?	4 27 19				Initial uncer-
			e(L)	30 03				tain.
			i	33 01				
			F	5 09 --				
530	27	I	e1	21 38 01				Initial uncer-
			e2	39 17				tain.
			eL	51 05				
			F	22 29 --				
531	28	IV	e1?	16 47 17				Initial uncer-
			e2	50 30				tain.
			i(M)	54 17				
			F	17 09 --				
532	30	Iu	P	17 26 45			7704	Condensation
			i	27 22				
			e(S)	35 58				
			F	18 20 -				

P.S. The above data are taken from Gali., if not specially mentioned.

Aug. 8 1933
 S P Lee
 Superintendent

Pei-An-Ho, W. of Peiping,
China

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$
h: 115m; Foundation: Granite

THE CHIUFENG SEISMIC STATION
of the
GEOLOGICAL SURVEY OF CHINA

 Instruments: 200 kg. horiz.,
80 kg. vert.
Weichert;
Galitzin-Wilip.

Weichert	V	T ₀	ξ	γ/T_0^2
due Z	--	7.53	--	--
N	103.0	5.38	3.6	.0055
Aug. 1 E	103.8	5.36	3.4	.0104

Galitzin-Wilip	T ₁	T	μ^2	$\pi l/kA$
due Z	11.05	10.38	-0.04	207
May 15 N				
1933 E				

August, 1933.

26

No.	Date	Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
533	7, VIII	Ir	e e(S)? M F	0 46 39 50 34 55 20 1 12 --	16		2395	
534			e? F	3 17 07 29 --				A very small near shock.
535			e? e F	12 41 03 45 54 13 49 --				Trace
536	8		e F	0 38 48 56 --				Trace
537	9		e(M) F	1 17 17 37 --				
538			eL F	12 23 03 38				A train of surface waves.
539	10		e e(L) F	4 50 57 5 16 36 43 --				Trace
540	11	IIr	iP i iS LN, E. M ₁ M ₂ M ₃ F	8 53 43 59 26 9 02 41 04 04 06 11 07 17 10 49 10 56 --	7 12 12 9	-5 -18 -31 -44 +24	2432	Dilatation Az: W 45°S
541		Ir	e? e(S)? i eL? M F	11 17 38 21 33 23 56 24 32 26 42 58 --	10	+2	2395	
542	12	Ir	e? e i F	7 33 43 37 43 40 57 8 15 --				
543			e? F	17 19 49 41 --				Trace
544	13	Iu	iP PP PPP?	9 41 07 44 46 46 39	6		>90°	Dilatation

The Chiufeng Seismological Bulletin (Cont.)

August, 1933

29

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
544	13	Iu	PS? eL M ₁ M ₂ F	9 53 17 10 10 30 17 15 24 37 12 05 --		+6 +4		
545	14		e F	20 08 46 22 --				Trace
546		Iv	P S L M ₁ M ₂ F	22 19 32 22 21 23 40 25 12 26 02 23 02 --	9 7	+8 +5	1658	Dilatation
547	15	Ir	iP PP? eS i eL M F	3 03 19 04 03 07 43 58 11 06 15 42 4 48 --	6 7 16	-2 +2 -6	2778	Dilatation
548		Ir	e e(S)? F	10 42 26 46 28 11 13 --			2481	Initial, very small.
549	18	Iv	eP eS? L M F	9 23 28 26 32 28 40 31 13 10 54 --	13	+5	1808	
550	19		e F	6 13 23 20 --				Trace
551	20	Iv	P i i eL M F	11 50 56 54 09 56 18 59 56 12 03 05 14 00 --	19	+12		Condensation Probably more than one shock superposed each other.
552	22		e(L) F	11 57 57 12 58 --				A train of surface waves.
553		Ir	P i F	13 18 46 23 37 14 38 --				Condensation
554	23		e(L) F	13 37 06 50 --				A train of surface waves.
555	25	IIIv	P iP S? iS _E L _E Main phase over scale on three components. W ₂ ? Over lapped by next quake.	7 53 32 37 56 15 26 57 00 11 08 00			1535	Condensation Dilatation AZ: W 40°S. Epi.: 30.5°N, 103.5°E. Destructive near Chengtu, Szechwan.

The Chiufeng Seismological Bulletin (Cont.)

August, 1933

30

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
556	25, VIII	Ir	P M	11 13 36 21 22 13		-4		Over lapped by next quake.
557		Ir	e e L M F	11 42 03 45 05 36 46 47 12 20 --	10	+13		
558			e F	15 31 13 39 --				Very small.
559			e i F	18 06 42 08 44 25 --	9	+5		Initial, very small.
560			e F	18 43 49 55 --				Very small.
561		Ir	e e i M F	23 22 20 25 33 29 25 30 13 40 --	12			Initial, very small.
562	26	Iv	eP eS? eL M F	1 34 29 37 46 40 29 42 23 2 02 --	12	+4	1945	
563		Iu	e e M F	5 17 46 24 31 34 33 53 --				
564			e F	21 07 44 34 --				Trace
565	27		e(L)? F	0 30 27 46 --				A train of surface waves.
566	28		ePE SZ?	22 39 27 43 02			2148	
	29		FE	0 44 --				
567		Ir	e i F	12 36 08 40 04 13 00 --				
568		Iv	iP S iS F	15 11 14 13 36 43 16 38 --			1407	Dilatation

P.S. The above data are taken from Gali., if not specially mentioned.

September 5, 1933

S. P. Lee Superintendent

The Chiufeng Seismic Station of the Geological Survey of China begs to acknowledge with thanks the receipt of the following bulletins and publications, from June to Aug. 1933:

U. S. C. G. S.	July to Dec. 1932
Pasadena	April, 1933
St. Louis	March to May, 1933
Florissant	Feb. and March, 1933
J. S. A.	Pre. Bulletin, April to June, 1933
	Ereliminary note on new travel time tables & The tables, by J. B. Macelwane S. J.
Ottawa	Aug. 1932; April and May 1933
Kow	April to June, 1933
Bacelona	May to Dec., 1932
Cartuja	Aug. to Sept., 1932
Tananarive	Oct. to Dec., 1932
Riverview	June, 1932; April to June, 1933
Wellington	April to June, 1933
Osaka	July to Sept., 1932; Jan. to April, 1933
Ei-Ka-Wei	March to June, 1933
Taihoku	Feb. to May, 1933
	Pre. Report, May 3 to May 30, 1933
Hongkong	Pre. Report, May to July, 1933
	Meteorological Report, May to July, 1933
Batavia	April to July, 1933
Nanking	Jan. to March, 1933
Göttingen	Jan. to March, 1933
La Paz	Aug. to Dec., 1932
Georgetown	May & June, 1933 (with despatch)
Yobe	April to June, Oct. to Dec., 1932
Uccle	Jan. to March 15, 1933
Strasbourg)	
Paris)	April and May, 1933
Bureau Central)	
Zagreb	July to Dec., 1932
Karlsruhe	Jan. to Dec., 1932
Manila	Time signal corrections to May and June 1933
Melbourne	April to June, 1933
Apia	April to June, 1933
Denver	Feb. 23 to May 8, 1933
Hawaii	Volcano Letter, Jan. to June, 1933
Madrid	May and June, 1932
Uni. Chile	No. XXIII, 1931
Hukuoka	Jan. to Dec., 1932
Ebro	Boletin Mensual, Oct. to Dec., 1932
Parc St. Maur	April and May, 1933

September 5, 1933

Pei-An-Ho, W. of Peiping,
China
 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$
 ht: 115m; Foundation: Granite

THE CHIUFENG SEISMIC STATION
 of the
GEOLOGICAL SURVEY OF CHINA

Instruments: 200 kg. horiz.,
 80 kg. vert.
 Weichert;
 Galitzin-Wilip.

Weichert					Galitzin-Wilip					
	V	T ₀	ξ	γ/T_0^2		T ₁	T	μ^2	$\pi l/kA$	
due Z	--	7.24	--	--	Sept. 28, '33	Z	11.05	11.02	.005	.00196
N	106.7	5.22	3.6	.0138	Oct. 13, '33	N	11.28	11.01	.029	.00151
Sept. 1 E	106.3	5.31	4.0	.0099	Oct. 17, '33	E	11.10	10.60	.038	.00118

Sept., & Oct., 1933.

31

No.	Date	Char.	Phase	G. M. T.			T _p s	A μ	Δ km	Remark
				h	m	s				
569	2, IX	IIv	PEN SEN eLN iLE M F	16	45	30		ca. 1000		
							10	45mm.		
570		Ir	PE eS?E eLE ME F	21	19	58		2271		
							16			
571	3	Or	PE S _A F	3	59	12		2681		
572	6	Iu	PEN i(S)EN F	22	20	12		7962	From Wiechert record.	
573	9	IIv	eP iS F	5	05	02		122E	From Wiechert record	
							3.5			
574	15	Iv	eP eS eLN MZ MN F	16	23	56		1189		
							14			
							14			
575	17	Or	e(P)Z eZ MZ F	4	04	08			After the first small impulse the trace quite flat until e.	
							16			
576	20	O	e e F	0	14	06			Masked by micro.	
577		Ir	iPNZ eS?N (L ₁)N L ₂ M ₁ Z M ₂ Z F	23	39	13		2835	Dilatation	
							14			
							14			
	21			0	52	--				
578		Iv	ePZ iPZ iS _N	3	13	22		196E		
							10			

The Chiufeng Seismological Bulletin (Cont.)

Sept., & Oct., 1933.

32

No.	Date	Char.	Phase	G.M.T.	Tp	Amm.	km.	Remark
578	21, IX	Iv	LN MN MZ F	3 23 14 25 29 59 4 36 --	11 12	12 29		
579		IIr	iPZ SZN LN MN M1Z M2Z F	9 52 39 56 33 58 35 10 00 52 01 27 02 36 11 46 --	6 14 14 12	13 40 40	2355	Condensation
580		Ir	PZ eSZN eLZN MZ F	13 47 01 50 51 53 07 56 24 14 32 --	12	10	2333	do
581		Ir	PZ eS?Z MZ F	19 43 20 52 16 57 43 20 28 --	13	8	2384	do
582	22	Ou	PZN i F	11 49 36 59 44 12 41 --				
583	23		e e F	0 37 20 33 48 1 15 --				Trace
584	24	IIr	iP i(PP)Z iSEN (SS)E (SS)Z LE M1E M1Z M2E M2Z F	15 23 05 29 54 34 49 37 50 38 41 40 32 45 10 46(17) 47 21 36 17 39 --	7 8 7 24 21 21 21	20 24 30 30	5000	Condensation No minute ec- lipse.
585	25	IIr	eP eS eL F	18 56 24 19 00 40 03 11 20 10 --			2667	From Wiechert record.
586	27	Iu	PZ e(S)Z MZ F	21 51 40 59 44 22 14 32 23 58 --	18		6412	Condensation
587	28		e F	19 02 54 33 --				Trace
588	30, IX	Iu	iP iSEN	14 29 35 36 26			5063	Condensation

The Chiufeng Seismological Bulletin (Cont.)

Sept., & Oct., 1933

83

No.	Date	Char.	Phase	G.M.T.	T _p	Amm.	km.	Remark
533	30, IX	Iu	eL?EN EN MZ ME F	14 42 48 01 15 41 16 10 --	19 20 17	9 9 18		
589		IV	P̄NZ (P)NZ SNZ iz F	22 59 14 26 39 23 00 45 08 --			ca.100	Local
590	1, X	IV	eP̄Z (P)N̄Z SNE F	9 35 32 41 52 44 --				do
591		Ir	eZN eZ MZ ME F	14 39 37 43 50 48 45 49 15 08 --	15 13			
592		IV	eP̄?E (P) SE i(M)Z i(M)N F	17 18 27 38 49 19 47 51 24 --				Local
593	2	Iu	e(P) eS M ₁ E M ₂ M ₂ E F	14 10 11 19 11 27 33 35 51 36 53 15 21 --	16 22 20		7482	
594		IIu	PZ (m iz iPPZ iPPEN ScPcSEN ScPcPcSN eLZE eLN M ₁ N M ₁ Z M ₁ E F	15 48 45 56 51 39 52 30 31 58 37 16 00 17 34 18 35 30 55 21 25 56 33 19 08 --	6 7 7 10 20 20 20		ca.120°	Condensation
595	3		iP̄ iS F	10 27 23 30 32 --			ca. 20	Condensation Felt at Chiufeng. R.F.II.
596			(e)Z eZ MZ F	10 44 02 23 11 47 00 12 51 --	19			Trace Very distant earthquake.

The Chiufeng Seismological Bulletin (Cont.)

Sept., & Oct., 1933

34

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mm}	km.	Remark
587	3, X	Iv	iPEN SEN eLEN M ₁ N M ₁ E M ₂ N M ₂ E F	18 43 03 46 32 48 53 50 02 43 51 25 52 10 20 14 --	13 13 13 11	9.4 20 13 27	1385	Gz missed.
598	5	Iu	eP (PP)Z SN (SS)N eL M ₁ N M ₁ Z M ₂ N M ₂ Z F	13 38 12 40 03 45 01 48 06 55 17 57 20 58 55 59 15 14 01 06 15 24 --	14 11 12 12	25 14 31 18	5079	
599	9	Iv	e(P)E (P)E SE i(M)N i(M)Z F	20 53 55 54 05 35 55 44 46 58 --	9 10			Local
600	14	Iu	P SN eLN MN MZ F	22 28 21 36 09 43.6 50 59 52 16 0 08 --	19 19		6128	Condensation
601	15							
601	16		eL MN MZ F	3 13 32 16 18 18 48 40 --	18 19			A group of shallow waves.
602		Or	ePNZ eSZ F	4 42 20 48 42 5 30 --			4592	
603		Ov	e i(S)N F	11 19 09 21 44 32 --			1445	
604		O	(e) eL?N F	18 05 42 14 25 35 --				Masked by micro.
605	17	Ou	iP SE eSN iN F	12 32 22 39 12 24 40 01 13 08 --	5 10		5094	Condensation
606	19	Ov	(P) F	5 32 45 44 --				Confused by strong microseism.

The Chiufeng Seismological Bulletin (Cont.)

Sept., & Oct., 1933

35

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mm}	km.	Remark
607	20		M _N F	7 05 10 09 --	13			A group of shallow waves.
608			M _N F	7 58 58 8 02 --	14			A group of shallow waves.
609			M _N F	8 11 39 15 --	14			A group of shallow waves.
610	21	Ir	P1ZE (P2)ZE S1ZE (S2)ZE (oL) M1E M1Z M2Z M2E F	2 49 03 27 53 03 33 56 25 58 28 33 59 34 36 4 25 --			2258 2434	Condensation Probably two earthquakes.
611	22	Ir	eP S eL ME MN MZ F	12 00 16 05 02 08 41 13 41 (42) 14 03 13 19 --			3047	No time eclipse.
612	23		e(P) e MN MZ ME F	0 46 36 50 08 53 39 55 26 30 1 28 --				Trace
613			eEN F	4 19 30 5 19 --				Trace
614		0	eP F	13 00 53 15 --				Local
615			e ME MZ MN F	13 53 04 14 22 53 23 13 42 58 --				
616	24	Ov	ePEN e(S) MZ F	5 36 54 39 31 42 03 56 --			1467	
617			MZ MN ME F	22 02 43 51 58 15 --	14 12 12			A train of shallow waves.

The Chiufeng Seismological Bulletin (Cont.)

Sept., & Oct., 1933

36

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mm}	km.	Remark	
618	25, X	Iu	iP	23 47 54				Dilatation	
			iNZ	48 46					
	iZ		49 34						
	i		52 30						
	iNZ		53 30						
	iNZ		56 16						
	iN		59 01						
	26		iEN	0 02 54					
	iE		12 36	16	23				Corresponding of N and Z are small.
	iN		40	12	8				
F	2 04 --								
619		Iv	eN	8 19 16					
			ME	25 56	14				
			MN	58	14				
			MZ	26 02	14				
			F	45 --					
620		Iu	P	12 27 07				As No. 618.	
			iN	28 32					
			iNZ	29 32	8				
			iE	42 32					
			F	14 56 --					
621	30	Ou	P	7 11 29			8044		
			(S)	20 57					
			F	8 36 --					

P.S. In September, owing to installation of the horizontal components of Galitzin, GZ was frequently put off, and its constants were disturbed. In this report, phases are taken from Galitzin records, and the numbers given in the amplitude column are mms. directly measured from the seismogram.

Nov. 7, 1933

Superintendent S. P. Lee

Pei-An-Ho, W. of Peiping,
 China

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$
 h: 115m; Foundation: Granite

THE CHIUFENG SEISMIC STATION
 of the
GEOLOGICAL SURVEY OF CHINA

 Instruments: 200 kg. horiz.,
 80 kg. vert.
 Weichert;
 Galitzin-Wilip.

Weichert					Galitzin-Wilip					
	V	T ₀	ξ	r/T_0^2		T ₁	T	μ^2	$\pi l/kA$	
due Z	--	7.40	--	--	Sept. 28, '33	Z	11.05	11.02	.005	.00190
N	98.9	5.44	3.7	.0105	Oct. 13, '33	N	11.28	11.01	.029	.00137
Nov. 1 E	99.2	5.42	3.4	.0092	Oct. 17, '33	E	11.10	10.60	.038	.00118

November, 1933.

37

No.	Date	Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
622	1, XI	O	O e(P)N e(S)N SN i(M)Z i(M)E i(M)N F	20 58 49 59 44 21 00 20 28 01 32 37 02 23 17 --				Small local shock. E, Z comp. no min., eclipse.
623	2	IIu	O iP pP (PP)E iPPPE iS SSN (L1)E L2 M1E M1N MZ M2E M2N F	12 27 13 35 30 47 37 09 51 42 17 45 11 22 49 26 52 24 54 04 36 47 55 58 14 34 --	7 28E 24 21 21 21 19	-22 +23 -38 -24 +21	5047	Condensation Epi: 52°N, 176°W (USS) E, Z comp. no time mark.
624	5	IIr	O P S iLEN M1E MN M1Z M2E M2Z F	20 27 14 31 57 35 49 38 13 39 13 29 30 40 13 33 21 25 --	10 10 13 8 12	-6 +8 -6	2338	
625	14	Or	O iP i(pP) i i eS F	14 18 (44) 25 05 37 26 29 27 09 30 17 18 21 --			3665	Dilatation Deep focus type.
626	16	O	(e)N MZ MN F	22 10 59 17 40 53 35 --	12 12			
627	17	ev	O e(P) S F	9 43 22 46 13 48 35 10 10 --			1312	

The Chiufeng Seismological Bulletin (Cont.)

November, 1933

39

No.	Date	Char.	Phase	C.M.T.	T_p	A_{max}	km.	Remark
632	21, XI	IIIU	M ₄ Z M ₃ N M ₅ Z M ₄ E M ₆ Z M ₄ N M ₅ N F	0 06 53 07 14 08 14 30 11 26 38 16 50 3 43 --	15 12 15 14 13 13 14	-113 +49 +67 -100 +59 +50		Out of limit.
633	22	0	eLz Mz F	0 57 45 1 09 20 44 --	18			
634		0	eEN Over lapped by next quake.	12 27 40				
635		IIu	0 iPEN i iSEN LE M ₁ E M ₁ Z M ₁ N M ₂ N M ₂ Z M ₂ E F	12 42 35 52 01 27 59 46 13 6.5 12 39 46 49 17 55 18 09 37 15 00 --	20 20 20 18 18 17	-15 +38 +18 +19 +38 +11	6079	Initial phases, of Z missed.
636		Iv	0 P eSEN eLEN M ₁ E Mz M ₁ N F	18 59 27 19 03 01 05 58 07 43 11 21 24 30 37 --	10 10 10	+2 -3 -1	1677	Dilatation
637		Iv	0 P iP S iS LE F	22 31 48 35 27 36 38 28 41 40.3 23 36 --			1723	Condensation May be two shocks.
638	23		e(L)z Mz F	20 08 49 19.9 46 --				
639	24	0	eP (S)EN iEN F	12 29 23 42 30 23 40 --			1307	Local
640	25	0	e(P)EN iN F	1 18 35 53 28 --				Local

The Chiufeng Seismological Bulletin (Cont.)

November, 1933

40

No.	Date	Char.	Phase	G.M.T.	T _p	Amu	km.	Remark
641	26, XI	0	eNZ iN F	22 56 29 23 00 59 33 --				
642	27	0	e(P)N i iN iEZ F	6 54 12 30 55 18 28 7 08 --				Local
643		Or	0 eEZ eSEZ MZ F	19 14 15 19 04 23 01 27.5 46 --			2396	Masked by micro.
644	28	IIu	0 ePEZ iPPEZ PPN SEN SS?N SS?E eLEN MZ MN ME F	11 09 37 18 09 20 11 14 25 09 28 53 56 33 42 40 08 28 33 12 53 --			5264	
645	29	0	e(L)E ME F	6 11 48 21 09 40 --				
646		0	eLE ME F	20 20 47 23 04 52 --				

November 11, 1933

S. P. Lee, Superintendent.

The Chinese Seismological Bureau of China beg to acknowledge with thanks the receipt of the following bulletins and publications, from September to November 1933:

Riverview	July-Sept. 1933
Taihoku	June-Aug., 1933, Prel. Aug.-Oct. 1933.
Manila	Cavite time signal corr., July-Oct. 1933 Seis. Bulletin July-Dec. 1932 Prel. Bulletin Jan.-Sept. 1933
Innsbruck	Jan.-April 1931
Strasbourg)	
Paris)	June to Sept. 1933
Bureau Central)	
Ottawa	June-Sept. 1933 Bibliography of Seismology Vol. X No. 18 April-June 1933. Smoothed time-Dist. Table, by S. Gold. No. 22-35 1933
J. S. A.	Jan.-May 1933
Little Rock	July-Sept. 1933
Kew	Jan.-March 1933
Athènes	Jan.-March 1933
Zagreb	Jan.-March 1933
Institut Seis. URSS	Bulletin stns. 1 ^e Classe Nov.-Dec. 1931, Jan.-Dec. 1932. Bulletin, Crimee July-Dec. 1931 Bulletin Resumen Vol. XXIII 1932. Prólogo al Vol., XXIII 1932.
Ebro	Carta Sismica de Mexico. Por Manuel Munoz Lumbier. El Temblor del 14 de Enero de 1931. Por El ing. D. Tomas Barrera
Instituto Geologico de Mexico	Catalogo de Los Temblores. From 1920 to 1930. Vol. I No 4, Vol II No. 1. Jan.-March, Oct.-Dec. 1932
Nanking	Jan.-May 1933
Cartuja	Jan.-March, '32; Prel. May-Oct. 1933
Karlsruhe	Meteo. report: Aug.-Oct. 1933 Sept. Oct. 1933
Osaka	July-Dec. 1930, 1931, July-Sept. 1931
Hongkong	1930-1931 July-Sept. 1933 Bulletin Aérologique: Juillet-Décembre, '32 Bulletin Aérologique: Janvier-Juillet, '33 Bulletin Aérologique Supplément Pour 1932 Bulletin Aérologique Température 1932 Revue Mensuelle: No. 318-333. Seis. Summary April to September, 1929 Jan.-March 1932
Copenhagen	Seismological Report July-Dec. 1931 Extract from Annual Report 1930-31, '31-32. Prel. July-Sept. 1933
Upsala	Annales, (Section Seis.) 1932
Zi-Ka-Wei	June 1933
Oxford	July-Sept. 1933
Pananarive	July-Sept. 1933
Wellington	July-Sept. 1933 The Volcano letter: July-Aug. 1933
Zsara	July-Sept. 1933
St. Louis	July-Sept. 1933
Pasadena	July-Sept. 1933
Georgetown	July-Sept. 1933
Hawaii	May-Sept. 1933
Apia	Resumen de Las Observaciones Meteorológicas Correspondientes al año 1932. Jan.-March 1933
Hamburg	Contributo allo studio delle onde P. II terremoto Istriano del 29 Agosto 1931.
Barcelona	July Aug. 1932
Kobe	
Trieste	
Toledo	

Dec. 10 1933

Pei-An-Ho, W. of Peiping,
 China

THE CHIUFENG SEISMIC STATION

Instruments: 200 kg. horiz.,

80 kg. vert.

 $\lambda: 116^{\circ} 5' 45''$; $\phi: 40^{\circ} 3' 55''$

of the

Weichert;

h: 115m; Foundation: Granite

GEOLOGICAL SURVEY OF CHINA

Galitzin-Wilip.

Weichert		V	T ₀	ξ	γ/T_0^2	Galitzin-Wilip		T ₁	T	μ^2	$\pi l/kA$
due	Z					Sept. 28, '33	Z	11.05	11.02	.005	.00196
	N					Oct. 13, '33	N	11.28	11.01	.029	.00131
	E					Oct. 17, '33	E	11.10	10.60	.038	.00118

December, 1933

41

No.	Date	Char.	Phase	G. M. T. h m s	T _p s	A μ	Δ km	Remark
647	1, XII		e(\bar{P})EZ S F	10 38 05 33 44 --			200ca	Local
648	2	Ov	(e)EZ eS? eLEZ F	2 33 33 35 38 38 21 54 --			1131	
649		Ou	PZ e(S) F	5 27 42 35 08 7 02 --			5742	Condensation
650		Ir	O eP SE iS eLE F	8 42 56 47 43 51 38 50 53.7 9 41 --			2366	
651		Ou	eP'Z i i(PP) SKKS? iE iE iE eLE eL M1Z? M2Z F	20 25 15 26 10 29 54 37 50 51 07 30 46 21 13 ca 26 ca 44.5 20 52 ca 20 22 57 --			1600ca	Very distant quake.
652	3		e(L)EN MZ F	12 55 32 13 03 09 25 --				Trace of surface waves.
653	4	IIr	O iP PPZ iS iL? F	19 35 51 38 18 39 24 41 54 43 35 20 25 --			220ca	Dilatation Azi. 65.5° Epi. La Perouse str. Very deep focus (about 600 km.)
654	5	O	(e)N M1 M2 F	23 39 10 46 ca 48 ca 0 08 --				
655			e(M)E e(M)NZ	15 43 07 44.7				Small successive shocks of short dist

The Chiufeng Seismological Bulletin (Cont.)

December, 1933

42

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
655	6, XII		e(M) _{NZ} e(M) F	15 58.5 16 09.5 19 --	11			
656	7		(e) _{EN} e(M) F	18 43 19 48 ca 19 03 --				Very small
657	8		e i e _{SEN} F	3 29 41 30 01 17 37 --				Local
658			P S F	13 27 22.5 26.5 ? --			8ca	Felt at Chiufeng, R.F.II. coming from NW.
659	9	0	e(P) e M F	8 04 50 11 40 15.9 58 --				
660	12		e F	5 49 26 6 03 --				
661		Iu	0 iP PPN iS SS _{EN} L M _{NZ} F	14 11 28 20 50 22 57 28 31 32 16 37 ca 45 23 16 08 --	5 18		6015	Condensation Azi. 132.8°
662	13	Ov	e(P) _E i _N (S) F	1 53 42 53 59 58 --			100ca	Local
663		Iu	eP iPP PS eL M F	21 38 17 42 51 52 26 22 29 ca 36.8 23 44 --	18		113°	Epi. 18°N, 104°W. (USS)
664	14	0	(e) M F	8 14.3 30.4 9 17 --	18			
665			(e) _{EN} F	12 51 17 13 07 --				Very small
666		Iu	PEZ iEZ iE iE (L) ME F	19 00 29 02 26 07 41 11 12 19 11 23.3 20 11 --	15			Dilatation

The Chiuteng Seismological Bulletin (Cont.)

December, 1933

47

No.	Date	Char.	Phase	G.M.T.	T _p	A _{mu}	km.	Remark
667	15, XII	Ou	(e)NZ e(L)N (M)N F	7 54 20 8 28 00 38.2 9 19 --	15			
668	17		(e)EN iN iE iN iZ F	23 19 12 20 32 20 32 21 43 32 --				Masked by micro. Local
669	19	Ou	ePNZ i(S)EN F	5 48 51 56 01 6 48 --			5456	At minute eclipse.
670			eLNZ F	18 28 40 52 --				Irregular surface waves of very small amplitude.
671	21	Ir	e(P)EZ eEZ e(S)E eLE MEZ F	23 14 02 57 17 58 22 ca 24 27 48 --			2401	
672	24	Iu	C eP eSNZ SEZ eLNZ MZ MN F	10 46 05 55 02 11 02 22 28 10 54 17 44 46 12 05 --	18 16		5742	
673	26	Ov	e(P)EN i(S)EN iN F	22 39 38 40 56 41 06 46 --			600ca	
674	27	Ou	e iN F	11 44 31 52 12 12 23 --				
675	30	O	eEN i(M)N F	8 50 00 57 39 9 08 --				

Jan. 8, 1934

S. P. Lee Superintendent.