

SEISMOLOGICAL BULLETIN 1925.

BATAVIA OBSERVATORY, JAVA

Foundation: River Quartair.

Greenwich Mean Time. S. Latitude $6^{\circ} 11' 0''$. Height above sealevel 8 m.

E. Longitude $7^{\text{h}} 7^{\text{m}} 20.3^{\text{s}}$. (1)

WIECHERT Horizontal Pendulum, 1000 kilograms.

PREFACE.

The astatic seismograph of WIECHERT of 1000 kg. is registering regularly since December 6th 1908.

The instrument is mounted on a heavy brick pillar in a room with thick walls (about 70 centimeters), that is protected against the sun's heat by open galleries around it. The components are placed in E-W and N-S direction respectively.

The pins are lifted electrically every hour for a period of 10 seconds by the Javanese observer on duty. A lifting of two seconds every minute is given by an electrical clock of PEYER FAVARGER by means of the second-dial passing through a drop of mercury.

For each month the mean constants for that month are applied. T_0 and ϵ , the oscillation period and the coefficient of damping, are determined every week. V , the magnification for very short waves, is determined occasionally only. It is found by direct measurement, giving the pendulum a displacement by means of the horizontal adjusting screws, the value of which can be determined easily from the pitch (a), the angle of displacement of the screws and the height of the screws (b) and of the centre of gravity (c) above the Cardanic suspension apparatus.

It was found

(a) = 1.407 mm; (b) = 1225 mm; (c) = 895 mm.

The constants used from January, February and March 1925 are given below

1925.	E-W component.			N-S component.		
	V.	T_0 .	ϵ .	V.	T_0 .	ϵ .
January	190	7.8	4.1	188	7.6	4.2
February	"	7.6	4.3	"	7.2	4.7
March.	"	7.6	4.2	"	7.3	4.6

(1) For the E. Longitude of the Observatory, see: J. BOEREMA, A New Determination of the Eastern Longitude of Batavia; K. Magn. Met. Observ. Batavia, Verhandelingen No. 12, 1924.

The notation used is that of the Göttingen Geophysical Institute.
The following abbreviations are employed:

CHARACTER OF THE EARTHQUAKE.

I = perceptible; II = moderately strong; III = strong.
d (terrae motus domesticus) = local.
v (" " vicinus) = near (less than 1000 km).
r (" " remotus) = distant (1000 to 5000 km).
u (" " ultimus) = very distant (over 5000 km).

PHASES.

P (undae primae) = 1st preliminary tremors.
S (" secundae) = 2nd " "
L (" longae) = principal phase, long waves.
M (" maximae) = maximum amplitude.
C (coda) = prominent waves among the after tremors.
F (finis) = end of perceptible movement.
PR₁, PR₂, SR₁, SR₂, = 1st, 2nd reflected waves of P and S.
PS = waves changed by reflection from longitudinal to transversal oscillation.

WAVE-ELEMENTS, UNITS.

T = complete period in seconds.
A = amplitude, measured from median position in microns.
A_E = E.-W. component of A.
A_N = N.-S. " " "
i (impetus) = abrupt commencement, clearly defined.
e (emersio) = gradual " , not clearly defined.

MALABAR.

July 1911 an astatic WIECHERT pendulum of 100 kg. which is the possession of Mr. K. A. R. BOSSCHA, chief manager of the tea estate Malabar (Preanger, Java; E. Long. 107° 37'; S. Lat. 7° 13') has been erected. Time is controlled since August 12, 1923, by means of the daily time signal of Malabar Radio.

Particulars about the registrations will be found in the tables.

MARON.

February 1924 an OMORI tromometer has been established on the western slopes of the volcano Merapi (Central Java) at Maron (Kedoe, 110° 25' E; 7 34' S). Particulars about the registrations will be found in the tables.

AMBOINA.

October 1924 an astatic WIECHERT Pendulum of 1000 kg. has been established at Amboina (Moluccas; 128° 10' E; 3° 42' S). The time signals not yet working satisfactorily time is given in 1/10 minutes.

The distances given in the Bulletin Batavia are calculated with the time tables of Dr. S. W. Visser. See Verhandelingen Batavia No. 7, 1921. The postponed table is an extract of these tables.

Distance.	S—P	P—O	S—O	Distance.	S—P	P—O	S—O
	m s	m s	m s		m s	m s	m s
1°	0 13	0 16	0 29	56°	7 46	9 54	17 40
2	25	31	56	57	52	10 1	53
3	38	46	1 24	58	58	8	18 6
4	50	1 1	51	59	8 4	15	19
5	1 1	17	2 18	60	10	22	32
6	12	32	44	61	15	29	44
7	24	47	3 11	62	21	36	57
8	35	2 2	37	63	26	43	19 9
9	47	16	4 3	64	32	49	21
10	57	31	28	65	38	55	33
11	2 8	45	53	66	43	11 2	45
12	19	59	5 18	67	49	8	57
13	30	3 12	42	68	55	14	20 9
14	40	26	6 6	69	9 1	20	21
15	50	39	29	70	6	26	32
16	3 0	52	52	71	11	33	44
17	10	4 4	7 14	72	16	39	55
18	19	17	36	73	21	45	21 6
19	28	29	57	74	26	51	17
20	37	41	8 18	75	32	57	29
21	46	53	39	76	37	12 3	40
22	55	5 4	59	77	42	9	51
23	4 3	16	9 19	78	47	15	22 2
24	11	27	38	79	53	20	13
25	19	38	57	80	58	26	24
26	27	48	10 15	81	10 4	31	35
27	35	58	33	82	9	37	46
28	41	6 9	50	83	14	42	56
29	48	19	11 7	84	19	47	23 6
30	56	28	24	85	24	52	16
31	5 3	37	40	86	28	58	26
32	10	46	56	87	32	13 4	36
33	17	55	12 11	88	37	9	46
34	24	7 4	28	89	41	15	56
35	30	15	45	90	46	20	24 6
36	36	22	58	91	50	25	15
37	43	30	13 13	92	55	30	25
38	50	38	28	93	59	35	34
39	57	46	43	94	11 3	40	43
40	6 5	55	58	95	7	45	52
41	11	8 1	14 12	96	11	50	25 1
42	18	9	27	97	15	55	10
43	25	17	42	98	18	14 0	18
44	32	24	56	99	22	5	27
45	40	31	15 11	100	25	10	35
46	47	39	26	101	27	15	42
47	55	47	40	102	30	20	50
48	7 0	54	54	103	32	25	57
49	6	9 2	16 8	104	34	30	26 4
50	13	9	22	105	37	34	11
51	18	17	35	106	40	39	19
52	24	24	48	107	42	44	26
53	29	32	17 1	108	45	48	33
54	35	39	14	109	47	53	40
55	40	47	27	110	50	58	48

JANUARY 1925.

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centrum.	Remarks.
								A _E	A _N		
				h	m	s	seconds.	μ	μ	km.	
Jan. 1	Bat.	I _v	P iP _N iS F	13	41	41				150	Lengkong (W. Preanger).
	Mal.		P _E	13	41	37					
" 2	Bat.	I _v	i F	18	49	3					
	Mal.		i	18	49	52					
" 2	Bat.	I _v	P S? i F	18	50	52					
	Mal.		iP iS	18	51	56				120	
" 5	Amb.		iP iS	2	56,6					85	
" 5	Amb.		iP iS	5	56,4					80	
" 5	Amb.		iP iS	7	57,1					90	
" 5	Amb.		iP _N iS	11	50,9					(50)	
" 11	Amb.		iP S	15	5,5					190	
" 12	Amb.		iP iS	15	51,0					190	
" 15	Amb.		P S	21	14,5					130	
" 18	Bat.	II _u	iP i _N iS eL i F	12	16	52				7510	Azimuth SW. Azimuth NNW. New shock?
	Mal.		P i eL i	12	16	58					MARON: i — iP = 10 ^s . iS — i = 8 ^m 12 ^s .
	Amb.		P S _{NS} L	12	58,4					7800	
" 18	Bat.	II _r	P _E iP i S? F	20	18	39					Moluccas.

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude half.		Distance of epi- centrum.	Remarks.
								A _E	A _N		
				h	m	s	sec.	μ	μ	km.	
Jan 18	Mal.		P S	20	19	7				2500	
	Amb.		iP iS	19	57,7					340	
" 20	Amb.		P	12	41,6						
" 20	Amb.		P	12	46,7						
" 21	Mal.		eP i ₁ i ₂	16	58	28					
			P S	17	1	56				370	
" 21	Bat.	I _v	P F	17	5,2						lost in micros. Central Java. MARON: i — iP = 4 ^s . S' — iP = 19 ^s . Δ? = 160.
" 22	Amb.		iP	4	17,4						pens swept off immediately.
" 22	Bat.	I _v	P _E iS F	5	16	2				200	
" 25	Bat.	I _r	P F	23	47	37					other phases lost by changing of sheets. Bali and Lombok. MARON: S? — P = 57 ^s . Δ = 520?
	Mal.		P S _N	23	47	55				750	
" 25	Amb.		iP _N iS _E	8	5,8					85	
" 25	Amb.		iP iS	8	14,4					480	
" 26	Amb.		iP iS	7	40,5					140	
" 28	Bat.	I _u	P iS L F	4	15	55				6810	AMBOINA: S — P = 7 ^m 34 ^s . Δ = 5990.
" 30	Bat.	I _v	eP S F	15	17	18				370	Central Java.
	Mal.		P S	15	16	49				270	MARON: iS? — iP = 15 ^s . Δ = 150.
" 31	Bat.	III _v	iP _E i S? F	10	12	24					
	Mal.		P _E iS _N	10	12	57				460	

FEBRUARY.

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centrum.	Remarks.
								A _E	A _N		
Febr. 1	Bat.	I _u	i eL _N F	h 5 5 6	m 34 54 30	s 20	sec.	μ	μ	km.	Azimuth SW.
	Amb.		i ₁ i ₂	5 5	26.8 33.9						
• 1	Bat.	I _r	e _E i _E S _N F	18 18 18 18	4 4 8 19	43 47 44				2530	Minahasa.
	Amb.		iP iS?	17 17	46.4 47.5					490?	
• 2	Bat.	I _u	e _E L _E F	14 14 14	46 12 25	44 14					
• 2	Bat.	I _u	i ₁ i ₂ eL M F	19 20 20 20 20	57 5 17 32 50	7 27					
• 3	Bat.	I _r	P _N i iS _E L _N F	17 17 17 17 17	23 24 26 31 45	15 18 56 11				2500	
	Mal.		i	17	23	19					
• 5	Bat.	I _v	e _E i _N F	22 22 22	11 12 15	49 35					
• 7	Bat.	I	iP F	18 18	14 55	56					Azimuth SW. Tamako, Great Sangi I.
	Amb.		i ₁ i ₂	18 18	22.9 24.9						
• 7	Bat.	I	i F	20 20	51 40	54					
	Amb.		iP iS	20 20	27.1 27.9					410	
• 9	Bat.	I _u	e i _E i L M F	14 14 14 14 14 15	20 24 28 38 45 10	4 23 58 4 34					Azimuth NNW.
• 11	Amb.		iP iS	0 0	27.4 27.6					100	

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centrum.	Remarks.
								A _E	A _N		
Febr. 13	Bat.	I _u	i L F	h 14 14 14	m 1 28 38	s 11 29	sec.	μ	μ	km.	
• 16	Bat.	I _v	iP _N iS _E F	20 20 20	29 30 34	49 8				160	Tjiletoeh (Pr. Reg. W. Java).
	Mal.		iP iS	20 20	29 29	41 55				120	
• 20	Bat.	I _u	i ₁ i ₂ eL F	1 1 1 2	13 21 36	2 33					
	Amb.		i ₁ i ₂ L _E eL _N	1 1 1 1	11.4 18.8 24.5 29.5						
• 23	Amb.		iP S?	0 0	18.3 18.5					100	
• 23	Amb.		iP iS	1 1	9.0 9.8					440	
• 24	Bat.	I _u	i _E L F	0 0 1	11 55 11	20					
• 25	Bat.	I	e F	22 22	16 32	32					
	Amb.		i ₁ i ₂	22 22	4.9 8.1						
• 26	Amb.		i ₁	22	28.3						Boela (Ceram, Moluccas).
• 26	Amb.		e i	23 23	37.9 38.9						
• 26	Amb.		P S	7 7	4.8 5.3					260	Boela.

MARCH.

March 6	Bat.	I	i _E i _N F	2 2 2	42 44 55	56 14					
• 6	Bat.	I	e _E F	12 12	46 57	56					
• 12	Bat.	I _v	iP iS F	5 5 5	5 3 8	9 27				140	

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude (half)		Distance of epi- centrum.	Remarks.
								A _E	A _N		
March 12	Amb.		iP iS	h m s	sec.	μ	μ			km.	
				15 20.4						160	
				15 20.7							
" 13	Amb.		i ₁ i ₂	3 55.6 3 56.8							
" 15	Bat.	I	i _E i _N eL F	15 49 57 13 52 41 13 57 14 6							Waingapoe, Timor (?).
	Mal.		e i	13 49 44 13 51 49							
	Amb.		i ₁	13 50.8							
" 15	Bat.	I	i _E i F	15 44 35 15 47 0 16 18							
	Mal.		P S	15 44 26 15 46 27							
	Amb.		i ₁ L	15 44.9 15 47.4	15.5						
" 16	Bat.	I	i F	8 34 29 8 41							Waingapoe (Timor).
	Amb.		iP iS	8 25.5 8 26.9						780	
" 16	Bat.	III	P i _E M F	14 48 46 14 56 46 15 2 16 15 46	6.4	122	56.6				
	Mal.		eP i ₁ i ₂	14 48 55 14 50 15 14 50 25							
	Amb.		e i	14 52.0 14 41.4							
" 16	Amb.		iP iS	17 20.5 17 20.7							
" 16	Bat.	I	e i F	23 31 6 23 41 10 23 51							
	Amb.		i ₂	23 51.5							
" 16	Bat.	I	e	23 57 6							other phases disturbed by street traffic.
" 17	Bat.	I	F	0 26							
" 17	Bat.	I	i F	21 16 36 21 18							
	Mal.		i	21 16 50							
" 18	Bat.	I	i _E F	14 10 37 14 27							

Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude (half)		Distance of epi- centrum.	Remarks.
								A _E	A _N		
March 18	Amb.		i ₁ i ₂ L	h m s	sec.	μ	μ			km.	
				14 0.1							
				14 4.1							
				14 8.8	17.9						
" 19	Bat.	I	e F	15 42 1 16 5							Atjeh.
" 19	Amb.		iP iS	21 46.4 21 46.9							
" 20	Bat.	II _v	iP i iS F	5 45 24 5 45 33 5 45 56 6 10						280	Goenoeng Kentjana (Bantam, W. Java).
	Mal.		i _E iP iS	5 45 30 5 45 31 5 44 2						270	
" 20	Mal.		P S	7 11 54 7 12 2						160	
" 20	Bat.	I _v	P S F	7 30 5 7 30 22 7 35						150	Banjoemas (C. Java).
" 20	Bat.	I	P S F	11 5 11 11 5 28 11 9						140	
	Mal.		P S	11 5 14 11 5 55						180	
" 20	Bat.	I _v	P S F	14 28 16 14 28 58 14 54						180	
	Mal.		P S	14 28 14 14 28 30						140	
" 22	Bat.	I _u	i ₁ i ₂ L _E M F	8 52 15 9 0 24 9 4 27 9 17 7 9 50	21	10.0	5.0				
	Mal.		i ₁ i ₂ L	8 52 8 9 0 21 9 5 50							
	Amb.		iP iS	8 50.0 8 56.1						5100	
" 22	Bat.	I	i F	9 50 45 10 26							
" 22	Amb.		i L	14 8.5 14 12.8	25						
" 24	Bat.	I _v	iP iS F	19 47 12 19 47 52 19 56						170	

Date 1925.	Sta- tion.	Char- acter.	Phase	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centrum	Remarks.
								A _E	A _N		
				h	m	s	sec.	μ	μ	km.	
March 24	Mal.		P	19	47	29				290	
			S	19	47	42					
" 24	Bat.	II	iP	19	59	37				180	
			iS	19	59	58					
			F	20	17						
	Mal.		P	19	59	54				230	
			iS _N	20	0	20					
" 25	Bat.	I	P	5	42	24					
			F	5	47						
	Mal.		eP	5	42	5				200	
			S	5	42	28					
" 26	Bat.	I _r	iP	10	29	53				2420	
			S	10	33	46					
			F	10	52						
	Mal.		iP	10	29	44					
			i	10	30	34					
			i _E	10	34	42					
	Amb.		iP	10	27.4					890	
			iS	10	29.0						
" 27	Bat.	I	P	4	24	8					
			i	4	30	48					
			F	4	36						
" 27	Amb.		iP	10	30.1						
			iS	10	30.7						
" 27	Amb.		iP	12	30.3						
" 27	Amb.		iP	15	24.3						
" 29	Bat.	I	e	21	33	49					
			F	21	56						

SEISMOLOGICAL BULLETIN.

BATAVIA OBSERVATORY.

APRIL - DECEMBER 1925.

1925.	E-W component.			N-S component.		
	V.	To.	ϵ .	V.	To.	ϵ .
April	190	7.8	4.0	188	7.4	4.2
May	"	7.8	3.6	"	7.3	4.2
June	"	7.8	3.0	"	8.0	3.3
July	"	7.4	3.0	"	8.1	3.3
August	"	7.8	3.0	"	8.2	3.3
September	"	7.7	3.1	"	7.9	3.4
October	"	7.9	3.1	"	8.1	3.4
November	"	7.9	3.9	"	8.2	3.7
December	"	8.2	3.7	"	8.4	3.5

APRIL.

Nº.	Date 1925.	Sta- tions.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
50	April	2	Bat.	I	P	12	56	53				Amboina seismograms lacking till April 7th. Time correc- tions not known.
					F	12	59					
51	"	7	Bat.	II,	i P	18	10	58			2620	MARON: S - P = 5m. 0 s. Δ = 3400.
					i	18	11	15				
					S	18	15	5				
					F	18	48					
		Mal			P	18	10	57				
		Amb.			i P	18	8.0				1120	
					i S	18	10.0					
					i	18	11.2					
					L	18	48					
—	"	8	Amb.		i P	6	54	4				
52	"	8	Bat.	I	P?	15	13	15				
					F	15	16					
		Mal.			P	15	12	41				
					i	15	12	46				
53	"	9	Bat.	I,	P	4	55	14			170	Tjiratjap (Preanger, W. Java).
					i S	4	55	54				
					F	4	1					
		Mal.			P	4	55	13			110	
					i S	4	55	26				
—	"	10	Amb.	—	P	1	4					

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude half.		Distance of epi- centre.	Remarks.	
					h	m	s		A _E	A _N			
54	April 11	Bat.	II _u	P	10	51	24	sec.	μ	μ	km. 5860	MARON: S — P = 7 ^m . 7 ^s .; Δ = 5470.	
				i	10	52	10						
				i	10	52	54						
				S	10	58	51						
		Mal.		F	12	21							
				P	10	1	22				6050		
				S	10	58	59						
		Amb.		P	10	55	24						
—	" 15	Amb.		iP	25	56.2					150		
				iS	25	56.4							
—	" 15	Amb.		P	2	12.2					160		
				S	2	12.5							
—	" 15	Amb.		P	6	50.6							
55	" 15	Bat.	I	eP	10	28	21						
				F	10	31							
56	" 16	Bat.	I	eP	5	50	16						
				F	5	56							
57	" 16	Bat.	I _v	iP	15	9	9				180	Azimuth ± NS	
				iS	15	9	50						
				F	15	15							
		Mal.		iP	15	9	2				150		
				iS	15	9	18						
58	" 16	Bat.	II _r	P	19	59	0				5580	MARON: i ₂ — i ₁ = 18 ^s i ₃ — i ₁ = 5 ^m 7 ^s i ₄ — i ₁ = 4 ^m 55 ^s i ₅ — i ₁ = 8 ^m 52 ^s	
				i	20	0	21						
				eS	20	4	11						
				L	20	9		14					
				F	20	55							
		Mal.		P	19	59	7				3590		
				eS	20	4	6						
		Amb.		iP	19	56.8					4040		
				S	20	2.4							
—	" 16	Amb.		P	22	57	15				490		
				S	22	58	9						
59	" 16	Bat.	I	eP	25	54	12						
				F	25	40							
		Mal.		P	25	55	0						
		Amb.		P	25	50.2					1550		
				S	25	52.6							
60	" 17	Bat.	I	eP	11	9	58						
				F	11	26							
		Mal.		P	11	9	59						
		Amb.		P	11	7.7							
61	" 18	Bat.	I	iP	22	24	14						
				F	22	28							
	" 19	Amb.		P	0	18.5							
62	" 19	Bat.	I _u	P	15	54	55				4940		
				iS	16	1	28						
				F	16	9							
		Mal.		P	15	55	5				(4940)		
				e	16	1	40						

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude half.		Distance of epi- centre	Remarks.
					h	m	s		A _E	A _N		
63	April 20	Bat.	I	P	10	26	4	sec.	μ	μ	km.	
				F	10	40						
		Mal.		P	10	25	32					
		Amb.		i	10	35	24					
				P	10	22.5						
64	" 21	Bat	I	eP	11	40						
				F	11	44						
65	" 22	Bat.	I _r	P	23	15	41				2650	Halmabeira. MARON: S — P = 5 ^m 29 ^s Δ + 2150.
				S	23	19	49					
		Mal.	F	23	46						2520	
			P	23	15	51						
		Amb.	S	23	19	51					260	
			P	23	11.5							
			S	23	12.0							
		Amb.	P	5	59.0							
66	" 23	Bat.	I _r	iP	19	57	50				2450	Taroena (Sangi I).
				i	19	58	18					
		Mal.	S	19	41	25					2520	
			P	19	56							
		Amb.	S	19	57	28					860	
			P	19	41	28						
			P	19	55.6							
		iS	19	55.1								
67	" 24	Bat.	I	P	25	42	19					
				F	25	50						
		Mal.		P	25	41	45					
—	" 25	Amb.		P	5	28.5				150?		
				S?	5	28.7						
68	" 25	Bat.	I _r	P	15	27	58				2450	
				S	15	51	55					
		Mal.	F	15	46	19						
			P	15	27	51						
69	" 26	Bat.	I _u	eP	8	55	8				6510	
				S	8	42	58					
		Mal.	L	8	55		± 24					
			P	9	11							
70	" 27	Bat.	I _v	iP	5	5	9				150	
				iS	5	5	26					
		Mal.	F	5	8							
			eP	5	4.5					(460)		
		iS	5	5	27							
—	" 27	Amb.		P	6	7.6						
—	" 27	Amb.		P	7	0.6						
—	" 27	Amb.		P	25	7.5						
MAY.												
71	May 1	Bat.	I	i	3	57	42					
				F	4	9						
				Mal.	e	5	56.1					

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
		Amb.		iP iS	5 5	55,4 56,0					2160	
72	May 2	Bat.	I _v	P iS F	5 5 5	51 52 54	51 5 5				120	Azimuth about EW.
		Mal.		P	5	52	0					
73	" 2	Bat.	I _v	eP _N eP _E i F	7 7 7	53 55 54	5 10 4					
		Mal.		P S T	7 7 7	52 53 56	52 9 5				160	
74	" 2	Bat.	I	P F	8 8	57 40	27 5					
		Mal.		P S F	8 8 8	56 57 40	46 5 5				150	
75	" 3	Bat.	III _v	eP iP i ₁ i _{2N} S L F	17 17 17 17 17 18	26 26 27 30 30 54	53 57 45 9 54 5				2530	Minahasa and Halmaheira. MARON: S — P = 5 ^m 57 ^s ; Δ = 2250.
		Mal.		eP S L F	17 17 17 17	26 30 52 55	55 24 24 5	20			2580	
		Amb.		P S _E	17 17	21,0 22,0					520	
76	" 3	Bat.	I _r	eP F	23 0	8 11	24 5					
—	" 3	Mal.		P F	23 23	8 40	24 5					
		Amb.		P	23	17,0						
77	" 4	Bat.	I _r	eP S _N L F P	4 4 4 4 4	5 10 15 24 5	45 2 5 10 10				2760	Minahasa and Halmaheira.
		Mal.		P	4	5	10	20				
		Amb.		P S	4 4	1,6 5,8					650	
78	" 4	Bat.	I	eP F	9 9	47,4 59						
		Mal.		P	9	47,5						
		Amb.		P	9	44,0						
79	" 4	Bat.	I	P F	11 11	55 54	51 5					
		Mal.		P	11	55	44					
		Amb.		P	11	52,7						
—	" 4	Amb.		P S	15 15	29,7 29,8					44	

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
80	May 5	Bat.	III _r	P S M _E L P S F P S L P	10 10 10 10 10 10 10 10 10 10 10	11 15 17 19 45 49 11 15 19 44 8,5 11,6	15 21 9 2 16 16 50 54 54 54 54				2650	Azimuth N E. MARON: S — P = 4 ^m 1 ^s ; Δ = 2530.
		Mal.		P S L P	10 10 10 10	11 15 19 44	16 16 50 54				2710	Aftershock.
		Amb.		P S?	10 10	8,5 11,6					2000?	Aftershock.
81	" 5	Bat.	I _r	P S F P S	12 12 12 12 12	5 7 41 5 7	55 58 59 59 54				2820	MARON: S — P = 4 ^m 1 ^s ; Δ = 2530.
		Mal.		P S	12 12	5 7	59 54				2730	
82	" 5	Bat.	I _r	P S F P	12 12 15 12	49 54 9 49	49 7 49 49				2770	
		Mal.		P	12	49	49					
83	" 5	Bat.	I	P F	15 15	51 54	55 54					
84	" 5	Bat.	I	P F P	16 16 16	28 39 28	30 52 52					
		Mal.		P	16	28	52					
85	" 5	Bat.	I	P F P	18 18 18	21 36 21	12 2 2					
		Mal.		P	18	21	2					
86	" 5	Bat.	II _r	P S L _E F eP S L P F P iS	23 23 23 0 23 23 23 23 23 23 23	25 29 34 16 25 29 33 37 56 20,7 22,8	49 54 56 47 47 47 57 56 20,7 22,8				2530	Minahasa and Halmaheira. MARON: S — P = 5 ^m 54 ^s ; Δ = 2440.
		Mal.		P S L P F P iS	23 23 23 23 23 23 23	25 29 33 37 56 20,7 22,8		20	1700		2520	
		Amb.		P iS	23 23	20,7 22,8					1210	
87	" 6	Bat.	I _r	P	1	58						
		Amb.		P S	1 1	50,5 50,7					200	Traces. Banda and Waiga- ma (Misool, Western New Guinea) Azimuth E S E.
88	" 6	Bat.	I _r	P L F P P S	5 5 5 5 4 5	5 11 18 5 59,7 0,9	25 8 8 8 8 8				680	Minahasa and Tidore (Ter- nate).
		Mal.		P P S	5 5 5	5 5 0,9						
89	" 6	Bat.	I	P	8	52						Traces.

N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
90	May 6	Bat. Amb.	I _r	P P S	9 9 9	57 53.0 54.0					360	Traces. Menado.
91	" 7	Bat. Mal.	II _v	i ₁ i ₂ i ₃ i ₄ F iP iS _E ?	6 6 6 6 6 6 6	4 4 5 5 18 4 9 26					150?	Azimuth N 34.2 E. Central Java. MARON: S — P = 35°; Δ = 310. Needles thrown off.
92	" 7	Bat. Mal.	I _v	iS F iP iS	10 10 10 10	25 28 25 25	45 2 15				90	Troubled by street traffic. Central Java.
93	" 7	Bat.	I	eP F	12 12	17 34	21					
94	" 7	Bat. Mal. Amb.	I _r	P L F P i	14 14 15 15 14	39 50 8 39 51.7	49					
—	" 7	Amb.		i	15	17.8						
95	" 7	Bat. Amb.	I _r	P F i	15 15 15	47 56 44.7	42					
—	" 7	Amb.		P S	18 18	21.1 21.7					320	
96	" 7	Bat. Mal.	I _v	P i ₁ i ₂ S F P S? i _N	18 18 18 18 19 18 18 18	52 55 52 54 2 53 53 54	59 20 52 12 11 11 59 18				680 620	
97	" 8	Bat.	I	P	11 11	45 47	12					
98	" 9	Bat. Mal. Amb.	I _r	eP S F P iP iS	5 5 5 5 5 5	42.5 46 56 42 58.9 40.2	18 0				2550 720	Laboeha (Batjan).
99	" 9	Bat.	I	P F	21 21	46 50	48					
100	" 10	Bat. Mal. Amb.	I _r	e F P P S	5 5 5 5 5	5.9 17 5 2.1 2.9					410	Minahasa and Ternate.

N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
101	May 13	Bat.	I	e	8	17						Traces troubled by micros.
102	" 13	Bat.	I	P	25	59	48					
—	" 14	Mal.		F P	0 25	27 59	59					
105	" 14	Bat. Mal.	I	P F eP	15 15 15	24 36 24	34 30					
104	" 15	Bat.	I _v	P i _E iS i F iP iS	2 4 2 2 2 2 2	42 42 42 45 30 42 42	16 29 35 26 14 32				150 160	Western Preanger.
103	" 15	Bat. Mal. Amb.	I	P F P i	12 12 12 12	16 35 16 16.9	48					Azimuth E S E.
106	" 16	Bat. Mal.	I	e P	2 2	51 29	30					
107	" 16	Bat. Mal.	I	e P	10 10	37 35	42					
—	" 16	Amb.		iP iS	12 12	20.0 20.2					80	
108	" 17	Bat. Mal.	I _v	P S F iP iS F	15 15 15 15 15 15	51 52 56 51 51 55	55 15 47 57				170 85	Ijibinong (W. Preanger)
109	" 18	Bat. Mal.	I	P F eP	8 8 8	19.2 26 19.0						
110	" 19	Bat. Mal. Amb.	I _u	P S L F P i iS L	5 5 5 6 5 5 5 5	55 40 48.6 9 55 56.5 45.2 50.5	7 50 6				5770 7550	MARON: S — P = 7° 35°; Δ = 6010.
—	" 19	Amb.		iP iS	9 9	20.1 20.7					550	
111	" 25	Bat. Mal. Amb.	I _u	P S L F P i _N i _E iS _N iS _E L	2 2 2 3 2 2 2 2 2	18 25 42 5 18 17.6 17.7 25.5 23.4 27	45 45				5580 4100	

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Periode.	Amplitude (half).		Distance of epi- centre.	Remarks.
					h	m	s		A _E	A _N		
112	May 23	Bat.	I _v	iP	6	35	37	sec.	μ	μ	km.	W. Preanger.
				iS	6	35	34					
				F	6	42						
				P	6	35	44					
				S	6	34	1					
113	" 24	Bat.	I _v	iP	23	51	49				200	Vlakke Hoek (Benkoelen) MARON: S — P = 1 ^m ? △ = 350?
				iS	23	52	12					
				F	23	41						
				P	23	52	1					
				S	23	52	37					
114	" 25	Bat.	II _r	P	3	48	22				2890	Azimuth N E. MARON: S — P = 3 ^m 58 ^s △ = 2490.
				S	3	52	49					
				L	3	55						
				F	4	21						
				P	3	48	30					
115	" 26	Bat.	I	i	3	48,7						Mal. Amb.
				L	3	54,1						
				P	15	55	46					
				F	15	58						
				S	2	58	27					
116	" 27	Bat.	I _u	P	2	58	16				5100	Mal.
				S	2	45	2					
				F	2	55						
				P	2	58	27					
				S	2	45	11					
117	" 28	Bat.	I _v	iP	2	58,2					3800	Mal. Amb.
				iS	2	45,6						
				P	4	15						
				P	6	4	44					
				iS?	6	12	25					
118	" 28	Bat.	I	F	6	55					6140?	Mal.
				P	6	4	42					
				S?	6	12	30					
				P	9	44	46					
				F	9	47						
119	" 29	Bat.	I	P	9	44	57					Mal. Amb.
				P	9	44						
				P	22	21	22					
				F	22	25						
				P	22	21	1					
JUNE.												
121	June 2	Bat.	I _v	iP	1	47	9				270	Southern Sumatra. Azimuth E S E.
				iS	1	47	40					
				F	1	56						
				P	1	47	25					
				F	1	52						
122	" 2	Bat.	I _r	e	5	28,2					4300?	Mal. Amb.
				S	5	56	5					
				F	5	45						
				i	4	2,8						
—	" 3	Amb.										



No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
123	June 3	Bat.	III _r	P	4	38	39				2570	Minahasa and Ternate. MARON: S? — iP = 3,8 ^m $\Delta = 2540?$
				i	4	39	32					
				S	4	42	43					
				L	4	47	41					
		Mal.		F	5	47						
				P	4	38	35				2450	
				S	4	42	30					
				i	4	50	8					
				F	5	20						
		Amb.		iP	4	37.4					480	Azimuth S 28.4 E.
				i	4	37.5						
				S	4	38.5						
124	" 4	Bat.	I	i	7	5	45					Minahasa.
				F	7	15						
		Amb.		i	6	58.9						
—	" 5	Mal.		P	15	45	34				120	
				iS	15	45	48					
				F	15	46						
125	" 8	Bat.	I	P	0	3						Preliminary phases lost by street traffic.
				M	0	17						
				F	0	37						
—	" 8	Mal		P	15	29	23				120	
				S	15	29	37					
126	" 9	Bat.	II _r	P _E	15	47	12				4380?	N E New Guinea. MARON: iS — P = 5 ^m 38 ^s $\Delta = 4040.$
				i ₁	15	48	37					
				i ₂	15	49	50					
				S?	15	53	12					
				L	14	2						
				F	15	16						
		Mal.		P	15	47	21					
				i	15	49	8					
				eL	15	53						
				F	14	20						
		Amb.		P	13	45.3					3620	Azimuth ENE.
				S	13	50.6		17				
—	" 9	Mal.		P	21	23	25				40	
				S	21	23	29					
127	" 11	Bat.	I	P	16	4	58					
				F	16	19						
128	" 12	Bat.	I _v	P	11	5	32				700	
				S	11	6	48					
				F	11	47						
		Amb.		P _E	11	4.1					2340	
				i _N	11	4.8						
				S	11	7.9						
				i	11	8.1						
129	" 13	Bat.	I _v	P _N	12	30	0				260	
				iS	12	30	30					
				F	12	33						
130	" 14	Bat.	I	P	16	55	33				250?	
				S?	16	56	1					
				F	17	3						

No.	Date 1923.	Sta- tion	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
—	June 16	Mal.		iP?	h	m	s	sec.	μ	μ	km.	
—	17	Mal.		P	6	6	52				50	
				iS	6	6	57					
131	17	Bat.	I _v	iP	21	57	42				150	West Preanger (Java).
				iS	21	57	57					
		Mal.		F	12	41					170	
				iP	21	57	52					
				iS	21	38	12					
—	19	Mal.		P	22	19	15				90	
				iS	22	19	24					
132	20	Bat.	I	P	15	20	31					
—	25	Mal.		eP	17	24	40				200	
				iS	17	45	5					
—	24	Amb.		iP	16	56,7					250	
				S	16	57,1						
—	25	Amb.		P	16	2.2					60	
				S	16	2.5						
—	26	Amb.		P	20	55.6					540	Minahasa.
				S	20	56.6						
133	27	Bat.	I	P	2	20						
134	28	Bat.	I _u	eP	1	45	28					
				L	2	36						
				F	5	7						
135	28	Bat.	I	i	6	28	6					
				F	6	57						
136	28	Bat.	I	i	15	47						i in hour mark
				F	14	15						
—	30	Mal.		P	21	51	55					

JULY.

—	July 1	Mal.		P	1	10	16				150	
				iS	1	10	34					
137	4	Bat.	I _u	P	9	18	15				5190	P in minute mark.
				S	9	25	30					
				L	9	34						
		Mal.		F	9	47					5160	
				P	9	18	34					
				S	9	25	24					
		Amb.		F	9	51						
				P _E	9	16.6						
				i	9	17.2						
				i	9	21.2						
				i _N	9	21.9						
				L	9	28.0						
138	4	Bat.	I _r	e	22	21	54					
				F	22	37						Tomohon (Menado).

No.	Date 1923.	Sta- tion.	Char- acter	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
		Mal.		eP	h	m	s	sec.	μ	μ	km.	
				S	22	21	37				2500	
		Amb.		iP	22	25	36				690	
				i	22	18,6						
				S	22	19,5						
				S	22	19,9						
139	July 6	Bat	I	iP	7	15	44					
				i	7	24	27					
140	6	Bat	I	eP	12	27	23					
				i	12	39	26					
141	6	Bat.	II _v	iP	21	59	28				260	
				iS	21	59	57					
		Mal.		F	21	52					200	
				P	21	59	28					
				S	21	59	51					
142	7	Bat.	I _v	iP	5	50	46				510	
				S	5	51	42					In minute mark.
				F	5	55						
143	7	Bat.	I	P	8	23	52					
				F	8	37						
144	7	Bat	I	P	14	51						
				F	14	41						
—	9	Mal.		P	12	25	59				80	Tjikentjreng (E. Preanger).
				iS	12	25	48					
				F	12	25						
—	12	Amb.		P	4	57,8						
145	12	Bat.	I _v	P	18	56	44				550	Central Java.
				S	18	57	42					MARON: iS — iP = 19°
				F	18	39						Δ = 160.
		Mal.		eP	18	56	54				250	
				iS	18	57	2					
				F	18	39						
—	12	Mal.		eP	20	51,6					380	
				S	20	52	18					
—	15	Mal.		iP	17	59	9				90	
				iS	17	59	20					
—	14	Amb		iP	10	29,7					160	
				iS	10	30,0						
—	15	Mal.		iP	8	2	4				40	
				iS	8	2	9					
—	16	Mal.		P	11	57	25					
				F	11	39						
146	17	Bat.	I	P	5	21,4						
				F	5	41						
		Amb.		P	5	19,1					2160	
				S	5	22,6						
147	17	Bat.	III _v	iP	16	59	59				550	Vlakte Hoek (S. Sumatra).
				i	17	0	12					

Nº.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
148	July 17	Bat.	I	iS	17	0	37					
				i	17	0	52					
				F	17	28						
				P	17	0	10					
				i	17	0	51					
149	" 17	Bat.	I	i	7	1						
				e	21	14						
				L	21	38						
				F	21	47						
				iP _E	21	10,1						
150	" 18	Bat.	I	L	21	13,0		36				
				i	21	15,0		16.7				
				eP	22	38,9						
				F	22	37						
151	" 25	Bat.	I	eP	1	0,5					(250)	
				iS	1	1	2					
				P	10	9	8					
				F	10	12						
152	" 26	Bat.	I	P	0	50	30				700	
				i	0	50	53					
				S	0	51	46					
				F	0	57						
				eP	0	50	46					
153	" 26	Bat.	I	i	0	51	11					
				F	0	55						
				P	5	50,1					40	
				iS	5	50,2						
154	" 26	Bat.	I	iP	15	24,6					120	Azimuth S S E.
				iS	15	24,8						
				P	4	42	29					
				F	4	58						
155	" 28	Bat.	I	iP	4	38,6					490	Minahasa.
				iS	4	39,5						
				P	4	42	29					
				F	4	58						

AUGUST.

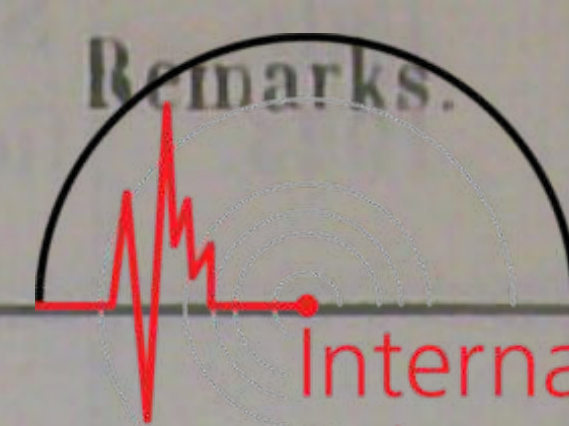
153	Aug. 1	Bat.	I	P	0	9	54				500	Benkoelen (S. Sumatra).
				S	0	10	49					
				F	0	15						
		Mal.		e	0	9	59					
	" 1	Amb.		P	4	34,6						
				i	4	56,9						
154	" 3	Bat.	I	P	21	26	41					
				F	21	32						
	" 8	Amb.		i ₁	3	41,9						
				i ₂	3	42,2						
155	" 8	Bat.	I	P	12	20	27					S W Salak (Preanger Java).
				i ₁	12	20	37					
				i ₂	12	21	19					
				F	12	23						
		Mal.		P	12	20	42				110	
				S	12	20	58					

Nº.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
156	Aug. 5	Bat.	I	eP	20	25	0					S W Salak.
				F	20	26						
157	" 5	Bat.	II	i	21	31	25				140?	S W Salak.
				P	21	31	31					
				iS?	21	31	41					
				i	21	32	21					
				M	21	32	58	6.2	624	360		
		Mal.		F	21	40					110	
				P	21	31	35					
				iS	21	31	48					
				i	21	32	4					
				F	21	36						
158	" 6	Bat.	I	i ₁	3	12	2					S W Salak.
				P	3	12	7					
				i ₂	3	12	58					
		Mal.		F	3	14					140	
				P	3	12	10					
				S	3	12	26					
159	" 6	Bat.	I	P	6	38	44					S W Salak.
				F	6	40						
160	" 6	Bat.	I	P	12	0	34					S W Salak.
				F	12	3						
161	" 6	Bat.	I	P	14	29	54					
				F	16	36						
	" 6	Amb.		iP	19	49.6					380	Azimuth W N W.
				iS	19	50.3						
162	" 7	Bat.	I	P	8	8	4				3560	
				iS	8	15	14					
				F	8	42						
		Mal.		P	8	7	39				2740	
				S	8	13	13					
				F	8	28						
		Amb.		iP	8	9.3					500	Azimuth N 52.8 W.
				iS	8	9.9						
163	" 8	Bat.	I	eP	3	20	20					Felt Tapanoeli N. Sumatra.
				F	3	27						
164	" 8	Bat.	I	eP	8	45	25					
				F	8	50						
165	" 8	Bat.	I	eP	14	44						
				F	14	46						
	" 9	Amb.		iP	11	10,6						
				F	11	15						
	" 9	Amb.		iP	11	26.0					320	
				iS	11	26.6						
	" 9	Mal.		iP	11	32	33					
166	" 9	Bat.	I	P	12	42	22				2410	Felt Obi Islands, Moluccas.
				eS	12	46	14					
				F	12	54						
		Mal.		P	12	42	19					

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
—	Aug. 12	Amb.		P	12	32.9						
				i ₁	12	33.0						
				i ₂	12	33.4						
—	Aug. 12	Amb.		i	12	13.9						Azimuth N 38.8 W.
167	" 12	Bat.	I	P	14	16	34					Sumatras West Coast.
				F	14	23						
168	" 12	Bat.	I _r	P	16	59	53					
				F	17	5						
169	" 12	Bat.	I _v	e _E	17	48.4						Traces.
				F	17	51						Felt in mountain ranges
		Mal.		P	17	46	39				80?	of Batavia (Segalaherang
				S?	17	46	48					and Soekawana, Prean-
—	" 12	Mal.		P	17	58	36				120	ger). Aftershock of 169, felt at
				i	17	58	41					Serang-Sari.
				iS	17	58	50					
170	" 13	Bat.	I _v	P	16	19	30					
				F	16	22						
		Mal.		P	16	19	20					
171	" 13	Bat.	I _v	eP	23	55	43				430	Central Java.
				S	23	56	31					MARON. S? — iP = 13 ^s
				F	23	59						Δ = 110?
		Mal.		P	23	55	44				200	
				S	23	55	7					
				F	23	57						
172	" 13	Bat.	I _v	P	4	19	1				7080	
				S	4	27	31					
				L	4	38	11					
				F	4	48						
		Mal.		P	4	18	49					
				F	4	28						
173	" 14	Bat.	I	P	6	27	34					
				F	6	45						
				P	6	27	26					
174	" 14	Bat.	I _r	P	9	22	24				190	Minahasa, N. Celebes.
				eS	9	25	35					
				F	9	36						
		Amb.		P	9	19.3					440	
				i	9	19.9						
				iS	9	20.0						
175	" 14	Bat.	I _v	e	11	5						Central Java.
				F	11	9						MARON. iS — iP = 18 ^s
		Mal.		P	11	5	29				320	Δ = 160.
				S	11	6	6					
				F	11	9						
176	" 16	Bat.	I	i	10	1	23					
				F	10	8						
177	" 16	Bat.	I	P	20	38	46					Ardjosari (S E Batavia).
				F	20	40						
178	" 16	Bat.		P	21	22	25					
				F	21	26						
—	" 17	Amb.		P	8	26.7					1000	
				iS	8	28.5						

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
—	Aug. 17	Amb.		P	8	26.7					1000	
				iS	8	28.5						
179	" 17	Bat.	I	i	9	29	9					
				F	9	34						
—	" 19	Mal.		P	11	57	36					
				F	12	0						
180	" 19	Bat.	I _v	P	12	20	40				7570	
				S	12	29	35					
				L	12	43						
				F	13	34						
		Mal.		L	12	54						
		Amb.		e	12	11.2					7100	
				iS	12	19.7						
				L	12	28						
—	" 20	Amb.		iP	16	33.2					920	
				S	16	34.9						
—	" 24	Mal.		iP	7	41	32					
181	" 28	Bat.	I _v	P	5	14	1				420	
				S	5	14	48					
				F	5	17						
		Mal.		iP	5	14	21				110	
				iS	5	14	34					
				F	5	15						
182	" 31	Bat.	I	L	10	21						
SEPTEMBER.												
—	Sept. 1	Amb.		P	17	4.1					90	
				iS	17	4.3						
183	" 1	Bat.	I _v	P	15	41	34				160	
				iS	15	44	52					
				F	15	44						
184	" 1	Bat.	I _v	P	15	57	22				400	Benkoelen (S. Sumatra).
				S	15	58	7					
				F	16	5						
185	" 2	Bat.	I _v	P	14	17	59				150	Preanger and Banjoemas
				S	14	18	16					(W. Java).
				F	14	21						
		Mal.		iP	14	17	31				110	
				iS	14	17	44					
				F	14	32						
—	" 3	Amb.		P	7	56.4					250	
				iS	7	56.9						
—	" 9	Amb.		iP	21	26.7						
				iS	21	26.8					15?	Amboina.
186	" 10	Bat.	I	e	13	6.4						
				F	13	25						

N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	(half).		of epi- centre	Remarks.
					h	m	s		A _E	A _N		
—	Sept. 10	Mal		P	17	55	24	sec.	μ	μ	km.	
				i s	17	55	58				120	
				F	17	57						
—	" 10	Mal.	I _r	P	17	55	24				120	
				i S	17	55	58					
				F	17	57						
187	" 11	Bat.		P	5	15	15				5250	
				S _N	5	19	5					
				F	5	28						
—	" 12	Mal		i	0	5	10					
—	" 12	Amb.		i P	22	44					70	Pens thrown off.
				i S	22	44.1						Amahei (Ceram).
—	" 13	Amb.		i P	1	5.2					70	Amahei.
				i S	1	5.4						
—	" 13	Amb.		i P	4	55.6					70	Amahei.
				i S	4	55.8						
188	" 15	Bat.	I _v	i P	19	4	50				220	
				i S	19	4	55					
				F	19	8						
		Mal		P	19	4	48					
				F	19	7						
—	" 14	Amb.		P	6	44.2					70	
				i S	6	44.3						
—	" 17	Amb.		P	17	50.6					80	
				i S	17	50.8						
—	" 17	Amb.		P	19	8.4					80	
				i S	19	8.6						
—	" 19	Mal.		P	1	27	20					
189	" 20	Bat.	II _r	P	7	14	0				1570	MARON: S? — e P = 2 ^m 44 ^s
				i ₁	7	14	54					Δ = 1600.
				S	7	16	41					Sumatras West Coast and
				i ₂	7	18	0					Tapanoeli.
				F	7	41						
		Mal.		P	7	14	18					
				F	7	27						
—	" 21	Amb.		P	8	16.5					50	
				i S	8	16.6						
190	" 22	Bat.	I	P	6	18	41					
				F	6	21						
191	" 25	Bat.	III _r	i P	8	46	19					Azimuth ENE.
				i ₁	8	47	3					MARON: i — P = 1 ^m 44 ^s
				i ₂	8	47	54					
				i ₃	8	48	59					
				i _N	8	51	19					
				i _N	8	53	1					
				i _E	8	56	17					
				i	8	59	52					
				F	9	59						
		Mal.		i P	8	46	31					
				F	9	20						



International
Seismological
Centre

No.	Date 1923	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
—	Sept. 26	Amb.		c P	11	0.7					1110	
				i S	11	2.7						
192	" 26	Bat	I	i P	11	44	54					
				F	11	48						
195	" 29	Bat.	I _v	P	12	17	6				180	
				S	12	17	27					
				F	12	21						
OCTOBER.												
194	Oct. 1	Bat.	I	P	6	50	0					
				F	6	54						
		Mal.		P	6	29	24					
				F	6	50	0					
195	" 2	Bat.	I _r	P	4	40	41				2140	Ternate, Minahasa.
				S	4	44	11					
				F	4	54						
		Mal		P	4	40	51					
				F	4	48					680	
		Amb.		P	4	57.5						
				i	4	57.6						
				i S	4	58.5					640	
—	" 2	Amb.		P	10	2.5						
				S	10	5.6						
196	" 5	Bat.	I	P	11	21	14					
				F	11	25						
197	" 5	Bat.	I	P	4	28	57					
				i ₁	4	29	12					
				i ₂	4	50	15					
				i ₃	4	40	57					
				F	5	7						
		Mal.		e P	4	29	4					
				i	4	40	20					
				F	4	46						
		Amb.		P	4	25.1					200	
				S	4	25.5						
—	" 6	Mal.		P	17	55	47					
				F	17	55						
198	" 7	Bat.	I _v	i P	20	6	46				200	Java's 1ste Punt and Vlakke
				i S	20	7	9					Iloek (S. Sumatra).
				F	20	15						
		Mal.		i P	20	7	0				510	
				i S	20	7	55					
—	" 8	Amb.		P	11	41.5						
				i	11	41.9						
—	" 9	Amb.		e	6	41.6						
				i ₁	6	45.0						
				i ₂	6	55.6						
—	" 9	Mal.		P	14	51	54					
				F	14	52						

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude half.		Distance of epi- centre.	Remarks.
									A _E	A _N		
199	Oct. 12	Bat.	I _v	iP	h	m	s	sec.	μ	μ	km.	Benkoelen (S. Sumatra).
				i ₁	1	21	27					
				i ₂	1	21	59					
				i ₃	1	22	25					
				F	1	23	2					
		Mal.		eP	1	28						
				F	1	21	46					
				F	1	26						
200	" 12	Bat.	I _u	P	5	54	0				3790	Disturbed by street traffic.
				S _E	6	1	24					
				S _N	6	1	32					
				F	6	53						
		Mal.		P	5	54	0				4950	
				S	6	0	36					
				F	6	50						
201	" 15	Bat.	I _u	P	18	0	28					
				L	18	51	53					
				M _E	18	55	41	28	5540	—		
				M _E	19	2	51	20	474	—		
				M _N	19	7	16	19	—	618		
				F	19	40						
		Mal.		P	18	0	54					
				F	19	50						
		Amb.		i ₁	18	0.1						
				i ₂	18	5.5						
				L	18	26						
202	" 14	Bat.	I	P	8	47	57					
				F	8	50						
205	" 14	Bat.	I	iP	11	59	11					
				F	11	42						
204	" 14	Bat.	I	e	17	25	58					Traces.
				F	17	52						
—	" 14	Amb.		P	21	47.2					500	
				iS	21	47.8						
—	" 15	Amb.		iP	7	16.5					260	
				iS	7	16.8						
205	" 15	Bat.	I _u	P	12	45	6					
				i _E	12	55	6					
				i _N	12	55	25					
		Mal.		F	13	16						
				P	12	45	58					
				eL	12	56						
				F	15	5						
206	" 15	Bat.	I _v	iP	14	42	22				180	Bantam (W. Java).
				iS	14	42	45					Azimuth iS: about NS.
				F	14	49						
		Mal.		P	14	42	26				190	
				S	14	42	48					
				F	14	47						
207	" 17	Bat.	I _v	eP	9	41	19					Benkoelen (S. Sumatra).
				i ₁	9	42	6					
				i ₂	9	42	45					
				i _E	9	42	48					
				F	9	51						

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude half.		Distance of epi- centre.	Remarks.
									A _E	A _N		
208	Oct. 18	Bat.	II _r	iP	h	m	s	sec.	μ	μ	km.	Azimuth W N W.
				i _N	8	51	0				2500	Moluccas.
				iS	8	51	45					
				F	8	54	59					
		Mal.		P	8	56					2500	
				S	8	50	55					
				F	8	54	54					
		Amb.		P	8	46					750	
				S	8	0.5						
				S	8	1.8						
209	" 20	Bat.	I _v	e ₁	9	49	55					
				e ₂	9	53	42					
				F	10	4						
210	" 20	Bat.	I	e	17	56						Dobo (Aroe I, Moluccas).
211	" 22	Bat.	III _v	iP	17	2	45				400	Benkoelen.
				iS	17	5	50					Pens thrown off. 17 ^h 4 ^m 4 ^s .
			Bosch.	iP	17	2	47				560	MARON: S? — iP = 2 ^m 5 ^s
				iS	17	5	28					△ = 1190?.
		Mal.		iP	17	5	1				500	
				iS	17	5	56					
		Amb.		P _E	17	6.1						
				i ₁	17	6.6						
				i ₂	17	7.2						
				i _N	17	10.1						
				L	17	11		21				
212	" 25	Bat.	I _v	P	1	49	42				880	Eastern Java, Bali, Lombok.
				S	1	51	16					MARON: iS — iP = 59 ^s
				F	5	0						△ = 540.
		Mal.		P	1	49	22				760	
				S	1	50	44					
		Amb.		F	2	40						
				iP	1	51.5					1650	
				iS	1	54.5						
215	" 24	Bat.	I _v	P	19	24	53				500	Central and East Java.
				S	19	25	48					MARON: iS — iP = 20 ^s
				F	19	33						△ = 170.
		Mal.		P	19	24	51				290	
				S	19	25	4					
				F	19	51						
214	" 25	Bat.	II _r	P	0	26	17				2480	Sangi and Taland I, Hal-
				S	0	50	14					maheira.
				i	0	51	4					
				F	0	51						
		Mal.		eP	0	26	50					
				i ₁	0	50	50					
				i ₂	0	57	27					
				F	0	42						
		Amb.		iP	0	22.9					580?	
				i _E	0	25.0						
				iS?	0	23.9						
				i	0	24.2						
215	" 26	Bat.	I	e	6	58						
				F	6	43						
216	" 29	Bat.	I _v	P	1	27	55				170	Bantam.
				S	1	27	55					
				F	1	50						

N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
					h	m	s		A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
217	Oct. 50	Bat.	I _o	P	1	27	47				150	
				S	1	28	2					
				F	1	31						
		Mal.		eP	11	7	10				2570	
				S	11	11	14					
				F	11	21						
218	" 50	Bat.	I	P	11	7	24				2590	
				S	11	11	29					
				F	11	14						
		Amb.		i	11	5.9						
				eP	14	51	10				5950	
				S	14	58	42					
219	" 50	Bat.	I	F	15	7						
				P	14	51	5				5710?	
				S?	14	58	25					
		Mal.		F	15	5						
				i	14	50.5						
				P	15	16	51				550	
220	" 50	Bat.	I _v	iS	15	17	9					
				F	15	21					510	
				P	15	16	48					
		Mal.		S	15	17	25					
				F	15	20						
				P _E	19	8	24				580	
221	Nov. 1	Bat.	I _v	iS	19	9	7					
				F	19	25						
				P	19	8	42				500	
		Mal.		S	19	9	57					
				F	19	17						
				NOVEMBER.								
222	" 2	Bat.	I	P	0	26	44				490	F lost in changing sheets.
				S	0	27	58					
		Mal.		P	0	26	28					
				F	0	32						
223	" 2	Bat.	I	P	15	25	54					
				F	15	27					140	
				P	15	25	55					
		Mal.		iS	15	25	51					
				F	15	27						
224	" 3	Bat.	I _v	P	16	58	15				200	Azimuth E S E. Preanger.
				iS	16	58	58					
				F	17	21						
		Mal.		P	16	58	50				420?	
				iS?	16	59	17					
				F	17	5						
225	" 5	Bat.	I _v	P	18	1	56				150	Preanger.
				S	18	1	55					
				F	18	6						
		Mal.		iP	18	1	40				90	MARON: S -- P = 42 ^s Δ = 370.
				iS	18	1	50					
				F	18	4						
226	" 5	Mal.		P	20	2	27				80	
				iS	20	2	58					
				F	20	4						

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
225	Nov. 6	Bat.	I	P	5	57	44					
		F		5	47							
		Mal.		P	5	57	16					
—	» 7	Amb.		P	16	25.4						
		i		16	24.5							
226	» 8	Mal.	I	eP	5	45	25					
				F	6	9						
227	» 8	Bat.	I _v	P	25	27	18	20.5			170	
				iS	25	27	58					
				i ₁	25	28	19					
		Mal.		i ₂	25	28	58				210	
				F	25	58						
				P	25	27	26					
228	» 10	Bat.	III _r	iS	25	29	49				2890	Azimuth iP: N 81° E. Moluccas. MARON: iS — P = 5 ^m 5 ^s Δ = 2240.
				F	25	52						
				e _E	15	55	45					
		Mal.		iP	15	55	51				2740	
				S	14	0	18					
				L ₁	14	8	56					
229	» 15	Bat.	I _r	L ₂	16	49	18				300?	Azimuth iP: S 55.8° W. Pens thrown off. E 15 ^h 55.0 ^m N 15 ^h 55.4 ^m
				F	17	7						
				P	15	55	46					
		Amb.		S	14	0	2				1120	
				L	14	5						
				F	15	22						
230	» 15	Bat.	III _r	iP	15	55.8					300?	Azimuth iP: S 55.8° W. Pens thrown off. E 15 ^h 55.0 ^m N 15 ^h 55.4 ^m
				S?	15	54.4						
				P	0	27	18					
		Mal.		iS	0	29	17				1070	
				F	0	39						
				P	0	27	8					
231	» 15	Bat.	III _r	S	0	29	1				5250	Azimuth iP: N 49° E. MARON: S? — iP = 5 ^m 41 ^s Δ = 2270?
				F	0	52						
				iP	12	20	25					
				S	12	25	11					
				i _E	12	28	6					
				i _N	12	28	51					
		Mal.		L	12	50	48				3200	
				M _E	12	51	46					
				e	14	6	31					
				L	15	14	6					
				F	15	29						
				P	12	20	25					
232	» 14	Bat.	I _r	S	12	25	11					Azimuth SW MARON: eS — P = 4 ^m 41 ^s
				i ₁	12	25	59					
				i ₂	12	26	58					
				L	12	50						
				F	15	40						
				iP	12	20.8						
233	» 14	Bat.	I _r	i _E	12	25.5						
				i	12	25.8						
				P	8	16	51					
				i _E	8	19	52					
				F	8	59						

No	Date 1923	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
252	Nov. 14	Bat.	I _r	P	h	m	s	sec.	μ	μ	km.	MARON: S — P = 5 ^m 18 ^s Δ = 1990.
				i _E	10	9	9					
				i _V	10	11	55					
				F	10	14	47					
		Mal.		e	10	9	5					
255	" 14	Bat.	I _r	eP	14	42	29					
				i	14	47	10					
				F	15	25						
254	" 15	Bat.	I _v	i ₁	19	56	42					In minute mark. Fore shock of No. 258.
				i ₂	19	56	55	7.4				
				i ₃	19	57	55	5.0				
				F	19	59						
253	" 15	Bat.	I _v	i ₁	19	44	22					Fore shock of No. 258.
				i ₂	19	44	54	7.4				
				i ₃	19	45	17	5.0				
				F	19	46						
256	" 15	Bat.	I _v	P _E	21	50	11					
				F	21	52						
257	" 16	Bat.	I _v	i ₁	9	10	14					Fore shock of No. 258.
				i ₂	9	10	26	7.4				
				i ₃	9	11	8	5.0				
				F	in next.							
258	" 16	Bat.	I _v	i ₁	9	12	41					Buitenzorg and Tjitjoeroeg (W. Java).
				i	9	12	45					
				i ₂	9	12	55	7.4				
				F	9	16						
		Mal.		P?	9	12	48					
				F	9	14						
259	" 16	Bat.	I _v	i ₁	9	41	18					Aftershock of No. 258.
				i ₂	9	41	50	7.4				
				i ₃	9	42	15	5.0				
				F	9	45						
240	" 16	Bat.	I _v	i ₁	9	50	16					Aftershock of No. 258.
				i ₂	9	50	28	7.4				
				F	9	52						
241	" 16	Bat.	I _v	i ₃	10	8	47					Aftershock of No. 258.
				F	10	10						
242	" 16	Bat.	I _v	i ₁	10	22	29					Aftershock of No. 258.
				i ₂	10	22	41	7.4				
				i ₃	10	25	24	5.0				
				F	10	26						
245	" 16	Bat.	I _v	i ₁	10	59	50					Aftershock of No. 258.
				F	10	42						
244	" 16	Bat.	I	iP	12	14	57					
				i _N	12	15	59					
				i _N	12	19	12					
				F	12	47						
		Mal.		P	12	14	55					
				F	12	20						

No.	Date 1923.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
243	Nov. 16	Bat.	I _u	L	h	m	s	sec.	μ	μ	km.	
					15	29						
246	" 16	Bat.	I _v	i ₁	18	15	4					Tjitjoeroeg (W. Preanger). Aftershock of No. 258.
				i ₂	18	15	16	7.4				
				F	18	18						
247	" 17	Bat.	I _v	i	6	6	57					Aftershock of No. 258.
				F	6	8						
248	" 17	Bat.	I _v	eP	6	20	48					
				F	6	23						
249	" 17	Bat.	I	iP	21	29	51					Azimuth S W.
				F	21	55						
		Mal.		P	21	59	59					
				i	21	50	11					
				F	21	52						
250	" 19	Bat.	I _r	P	14	11	17				2050?	Minahasa.
				S?	14	14	41					
				F	14	26						
		Mal.		P	14	11	7				2520?	
				S?	14	14	59					
				F	14	18						
		Amb.		iP	14	15.5					550	
				iS	14	15.5						
251	" 20	Bat.	I _v	eP	10	56	50				720	Sumatra's West Coast.
				S	10	57	48					
				F	11	11						
		Mal.		P	10	56	45					
				F	11	5						
252	" 22	Bat.	I	e	0	11						
				F	0	24						
—	" 22	Amb.		iP	2	41.9					550	
				iS	2	42.6						
—	" 23	Mal.		P	6	8	10				100	
				iS	6	8	22					
253	" 14	Bat.	I	P	6	9	14					
				F	6	19						
—	" 24	Amb.		P	5	57.9					560	
				S	5	58.9						
—	" 24	Amb.		P	11	26.4					650?	
				i ₁	11	26.4						
				i ₂	11	27.4						
				i ₃	11	27.5						
				S?	11	27.5						
—	" 25	Amb.		iP	9	5.8					4120	
				iS	9	9.6						
—	" 25	Amb.		iP	14	4.8						
				iS	14	4.9						
—	" 26	Mal.		P	4	37	5				80	
				S	4	37	15					

No.	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Periode.	Amplitude (hali).		Distance of epi- centre	Remarks.
					h	m	s		μ	μ		
254	Nov. 28	Bat.	I	e i _N F	14 14 14	0 11 14	26 22					Benkoelen?
255	" 28	Bat.	I _r	P i _N i _E L F i L	16 16 16 16 17 16 16	25 35 45 46 28 21,5 56	40 14 34					
		Amb.						28				

DECEMBER.

256	Dec. 2	Bat.	I	e P F	11 11	57 42	51					
—	" 2	Amb.		i P i S	12 12	25,7 25,8						
—	" 5	Amb.		i	14	45,7						
—	" 4	Amb.		i P i S	4 4	25,4 25,8				220		Azimuth SSW.
—	" 5	Amb.		i P i S i	7 7 7	20,4 20,8 20,9				220		
257	" 5	Bat.	I	e i F	7 7 7	55,5 56 42	57					
—	" 6	Amb.		i P S _E ?	0 0	56,5 57,0				580		
258	" 6	Bat.	I	P F	1 1	1 9	4					
		Mal.		P S F	1 1 1	0 1 2	58 9			90		
259	" 7	Bat.	I _r	e L F	8 9 9	47,4 3 20	56					
260	" 8	Bat.	II _r	e P S? F	0 0 1	57 58 7	18 55			910?		
		Mal.		P? i F	0 0 1	57 58 0	52 11					
261	" 9	Bat. Mal.	I	e P F	1 1 2	59 59 0	15					Phases lost by street traf- fic.
262	" 9	Bat.	I _r	e P S _N F P F i P i S	2 2 2 2 2 2 2	40 45 55 58 41 54,2 54,8	27 58 50			2150		
		Mal.										
		Amb.								520		Azimuth W N W.



N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half)		Distance of epi- centre.	Remarks.
									A _E	A _N		
—	Dec. 9	Amb.		P	h	m	s	sec.	μ	μ	km.	
263	" 10	Bat.	I _v	P	14	51.7					90	Tjitjoeroeg (W. Preanger, Java).
				iS	14	53	24					
				F	14	57						
		Mal.		eP	14	53	53				140	
				S	14	53	49					
				F	14	55						
264	" 10	Bat.	I	eL	15	8						
				L	15	51	36	26				
				F	16	32						
265	" 18	Bat.	I _v	eP	8	42	12				220	In minute mark. Azimuth of iS: N.W.
				iS	8	42	57					
				F	8	46						
		Mal.		iP	8	42	8				110	
				iS	8	42	21					
				F	8	45						
266	" 19	Bat.	I _v	P	5	24	29				4950	
				S	5	31	5					
				F	5	50						
		Mal.		P	5	24	5				5190	
				S	5	50	57					
				i	5	53	50					
				F	5	56						
		Amb.		iP	5	11.5					5040	
				iS	5	15.9						
—	" 19	Mal.		iP	6	40	11				110	
				iS	6	40	24					
				F	6	41						
267	" 19	Bat.	I _a	P _N	16	29	22					
				i	16	32	2					
				L _N	17	10	15	32				
				M _N	17	12						
				F	17	59						
		Mal.		i	16	29	37					
				L	17	10	55					
				F	17	25						
268	" 20	Bat.	I _v	P	21	52	14				100	Azimuth about N.S.
				iS	21	52	56					
				F	21	56						
		Mal.		iP	21	52	5				120	
				iS	21	52	17					
				F	21	55						
269	" 20	Bat.	I	i	22	24	44					MARON: i — eP = 15°.
				F	22	50						
		Mal.		i	22	25	52					
				F	22	28						
270	" 21	Bat.	I _v	iP	5	55	58				260	Vlakke Hoek (Benkoelen).
				iS	5	56	28					
				F	4	5						
		Mal.		P	5	56	6				560	
				iS	5	56	47					
				F	4	1						

N ^o .	Date 1925.	Sta- tion.	Char- acter.	Phase.	Time (Greenwich).			Period.	Amplitude (half).		Distance of epi- centre	Remarks.
									A _E	A _N		
271	Dec. 22	Bat.	III _r	iP	h	m	s	sec.	μ	μ	km.	Azimuth SSE. Azimuth NE. In minute eclipse.
				S	5	11	20				5100	
				i _N	5	16	0					
				i	5	16	21					
				i _N	5	20	42					In minute eclipse.
				i _N	5	25	21					
				F	6	22						
				P	5	11	32					
		Mal.		S	5	16	48				5660	MARON: i — P = 8 ^m 19 ^s .
				i	5	20	56					
				i _N	5	21	25					
				L _E	5	21	25					
				L _N	5	25	19					
				F	5	41						
272	" 25	Bat.	I _v	P	9	20	56				210	
				S	9	21	0					Azimuth about EW.
				F	9	50						
		Mal		P	9	20	52					
				F	9	25						
273	" 24	Bat.	I	e	9	20.0						
				P	9	50						
274	" 26	Bat.	I _r	P	18	29	2					
				i ₁	18	51	21					
				i ₂	18	55	55					
				i ₃	18	55	5					
				L	18	46.5						
				F	18	38						
		Mal		P	18	29	5				2920?	
				S?	18	55	52					
				F	18	50						
		Amb.		i	18	25.0						
275	" 27	Bat.	II _r	P	10	55	0				2570?	Minahasa.
				S?	10	57	4					
				i _N	10	57	55					
				i _E	10	58	40					
				L	10	41						
				F	11	14						
		Mal.		eP	10	55	1					
				L	10	41						
				F	11	0						
		Amb.		iP	10	51.6					690:	
				S	10	52.8						
—	" 27	Amb.		iP	11	6.4					640	
				S	11	7.5						
—	" 28	Amb.		iP	4	15.5					210	
				S	4	15.7						
276	" 28	Bat.	I	P	19	8	10					
				i _N	19	12	45					
				F	19	25						
277	" 29	Bat.	I	iP	11	8	55					
				i	11	9	55					
				i _E	11	10	8					
				i _E	11	11	18					
				i _E	11	11	59					
				i _E	11	12	59					
				F	12	25						

N ^o .	Date 1925.	Sta- tions.	Char- acter.	Phase.	Time (Greenwich).			Period	Amplitude (half).		Distance of epi- centre.	Remarks.
									A _E	A _N		
					h	m	s	sec.	μ	μ	km.	
				P	11	8	45					
				S	11	9	12					
				F	11	15						
278	Dec. 29	Bat.	III _r	P	16	7	58					MARON: iS — iP = 5 ^m 42 ^s Δ = 2290.
				i ₁	16	11	28					
				i ₂	16	12	21					
				i _N	16	13	59					
				i _E	16	14	11					Central and N. Celebes.
				L?	16	16	12					
				F	16	57						
				P	16	7	56					
		Mal.		i ₁	16	10	50					1970
				i ₂	16	11	56					
				F	16	27						
				P	16	4.2						
		Amb.		i _E	16	4.8						
				i _N	16	6.5						
				i _E	16	6.6						
				iS	16	7.4						
				i	16	7.6						
279	" 29	Bat.	I	iP	19	45	26					
				i	19	44	25					
				i _E	19	44	59					
				i _E	19	45	49					
				i _E	19	46	55					
				i _E	19	47	51					
				F	19	55						
				P	19	45	9					
		Mal.		F	19	46						
280	" 30	Bat.	I	e	7	18						
				F	7	50						
281	" 31	Bat.	I _v	P	9	55	34				250	
				iS	9	56	0					
				F	10	4						
		Mal		P	9	5	45				520	
				S	9	56	22					
				F	9	59						
282	" 31	Bat.	I	e	15	52.2						
				i	15	56	21					
				F	14	1						