AIR MINISTRY, METEOROLOGICAL OF

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR JANUARY 1935.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
N.	5 Sept., 1934	24.7 sec.	24.5 sec.	+.01	46.7 sec^{-1}
E.	6 Sept.,1934	24.8	24.8	-.01	42.6
Z.	11 Sept.,1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Jan.									
1	Z	iPKP	13	40	2			(16000)	Dilatation. Emergent on horizontal components. Oceania. 17°S., 174°W. (U.S.C.G.S.)
	Z	i		41	15				
	ZNE	ePP		43	21				
	E	i	14	1	38				
	N	eSS		2	22				
	NE	e		3	10				
	E	i		3	54				
	E	eSSS		7	13				No surface waves.
		F	15	30					
2		e	23	17					
		F		35					
3	Z	iP	2	0	58			7310	Compression. Emergent on horizontal components.
	NE	iS		9	43				
	ZNE	eSSS		16	52				
	ZNE	i		17	10				
	NE	L		20					Tibet. 31.5°N., 88°E. (Strasbourg.)
	Z	L		23					
	E	M		28	33	21	+27		
	N	M		28	42	21	+64		
	Z	M		32	42	15	+19		
		F	3	45					
4	ZNE	iP	14	46	25				
	ZNE	i		46	32			2390	Amplitudes of iP as read in mm: N E Z (-0.3) +1.3 -2.0
	NE	eS		50	21				
	ZNE	iS		50	25				
	ZN	i		50	32				
	E	i		50	36				
	ZNE	L		52					Sea of Marmora. 40.8°N., 28.3°E. (Strasbourg)
	N	M		54	15	14	+105		
	E	M		55	13	21	-76		

FORM 3717.
H456 W8086/1002 2-35 GP928

KEW OBSERVATORY, RICHMOND, SURI

SEISMOLOGICAL BULLETIN.

January 1935.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Jan							
4	N	M	14 56 22	10	-100		
	E	M	56 25	15	+69		
	Z	M	57 0	10	+37		
		F	16 15				
4	ZNE	eP	16 24 59			2500	Repetition of previous shock.
	Z	i	25 2				Sea of Marmora.
	ZNE	iS	29 4				40.8°N., 29.0°E. (Strasbourg)
	ZNE	L	31				
	E	M	33 54	17	-55		
	N	M	34 11	17	-76		
	Z	M	35 42	11	-34		
		F	17 40				
11		e	0 57				
		F	1 15				
17	ZNE	i	2 27 57				
	N	e	44 43				
	E	e	50 28				
	N	e	56 33				
	NE	eL	3 10				
	Z	eL	20				
	N	M	35 41	25	-10		
		F	4 20				
18		e	12 38				Very small
		F	13 15				
18	Z	e	18 2 23				
	NE	e	6 4				Possibly microseismic.
	ZNE	eL	8				
	N	M	12 44	16	+8		
	Z	M	12 55	16	+7		
		F	30				
19	ZNE	e	12 54 59				
	NE	eL	13 1				
	Z	eL	3				
	N	M	3 59	26	+7		
		F	14 15				
23	ZN	iP	7 35 52			8420	Amplitudes of iP as read in mm: N -1.5, E 0.0, Z +2.3
	NE	iS	45 33				
	E	i	45 41				Azimuth about north.
	N	i	45 53				
	Z	i	46 27				
	NE	iSS	51 11				Aleutian Islands.
	Z	e	53 50				55°N., 171°W. (Strasbourg)
	N	iSSS	54 52				
	E	eLQ	56				
	ZN	eLR	8 0				
	E	M	3 56	26	+41		
	N	M	13 18	19	+43		
	N	M	15 28	19	-66		
	Z	M	15 32	19	+77		
	E	M	15 37	19	-54		
		F	10 55				

FORM 3718.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE, μ	Δ km.	REMARKS.
Jan. 26			-	-					No records. 5h.-11h. 20m.
29			-	-					No records during adjustments. 14h. 10m.-14h. 50m.
30		e	1	7					
		F		20					

F.J.W. Whipple,
Superintendent.

7th. Feb., 1935.

FORM 3718.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Feb.									
22	N	M	17	59	19	18	-39		
(contd)	E	M	18	6	1	17	-41		
	Z	M		9	43	16	+35		
		F	20	0					
25	ZNE	iP	2	56	34			2540	Dilatation. Azimuth about south-east. Destructive in Crete. 35.5°N., 24°E. (Strasbourg).
	ZN	i		56	58				
	E	e	3	0	42				
	NE	iS		0	49				
	NE	i		1	10				
	NE	L		3	26				
	N	M		5	3	19	+63		
	Z	M		5	14	9	+18		
		F		30					
26			10	4	to				No records.
			12	48					

F.J.W. Whipple,
Superintendent.

6th. March, 1935.

FORM 3718.

KEW OBSERVATORY, RICHMOND, SUR

SEISMOLOGICAL BULLETIN FOR February 1935.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{ml}$
		sec.	sec.		sec^{-1}
N.	5 Sept., 1934	24.7	24.5	+.01	46.7
E.	6 Sept., 1934	24.8	24.8	-.01	42.6
Z.	11 Sept., 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Feb.									
3		e	2	25					
		F		55					
4	Z	e	17	44	20				Possibly not seismic.
	NE	eL	18	40					
	Z	eL		44					
		F	19	45					
6		eL	2	10					
		F		35					
7	NE	eL	18	19					
	N	M		24	43	19	+3		
	Z	eL		27					
		F		40					
9	NE	eL	20	4					
	Z	eL		12					
	E	M		12	45	20	-8		
		F		35					
13		e	9	58					
		F	10	10					
22	E	i	17	27	37				Confused by microseisms.
	N	i		27	51				
	ZN	i		28	30				
	NE	i		38	24				
	E	i		39	58				
	N	i		41	9				
	N	i		42	7				
	E	i		42	22				
	ZNE	eL		51					
	N	i		53	30				large movement.

FORM 8717.
H.473.8036.100.3.35.Gp.923

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

March (contd) 1935

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Mar. 18	ZNE	e	8	46	0				
	E	i		50	29				
	ZN	i		50	37				
	NE	i		51	1				
	NE	i		51	27				
	N	i		56	52				
		F	9	5					
19	N	e	7	30	33				Felt in south-east France.
	NE	e		31	47				
	Z	M		32	41	8	+11		
		F		35					
20/21	NE	e	23	43					
	NE	eL		55					
	Z	eL	0	5					
	N	M		43	17	25	+11		
		F	1	30					
29	ZN	eL	13	45					Confused by microseisms.
	N	M		53	14	20	+7		No "E-W" record.
	Z	M		53	47	19	+11		
		F	14	55					
30	Z	e	21	32	10				
	ZNE	e		42	36				
	NE	eL		59					
	Z	eL	22	3					
	E	M		10	23	22	-14		
	N	M		11	59	21	+23		
	Z	M		14	28	19	-18		
		F	23	0					
31	Z	iP	3	25	34			2000	Emergent on horizontal components.
	NE	eS		28	57				
	ZNE	eL		30					
	N	M		31	33	15	-22		
	E	M		34	29	15	-13		
	Z	M		35	33	10	+15		
		F	4	5					

F.J.W. Whipple,
Superintendent.

6th. April, 1935.

FORM 3718.
H492.6089/100.4-35 Gp.923.

M.O. 383

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR MARCH 1935.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
N.	5 Sept., 1934	sec. 24.7	sec. 24.5	+.01	sec^{-1} 46.7
E.	6 Sept., 1934	24.8	24.8	-.01	42.6
Z.	11 Sept., 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Mar.							
5	NE	eL	10 44				
	Z	eL	48				
	N	M	53 59	22	+10		
		F	11 30				
5	NE	eL	22 49				
	Z	eL	55				
	N	M	55 42	15	+9		
	E	M	55 52	15	-8		
	Z	M	55 54	15	+12		
		F	23 15				
8			- - -				No records, 5h 15m to 10h 10m
11			- - -				No records, 10h 6m to 11h 46m
12	NE	eL	14 5				Horizontal components disturbed by wind.
	Z	eL	10				
		F	25				
14	ZNE	eL	16 55				
		F	17 55				
14	ZN	e	17 5 43				Not very distant. Clearly recorded by Wood-Anderson seismograph (N-S component)
	NE	e	8 19				
	N	e	8 32				
	N	e	8 56				
	ZNE	L	10				
		F	- - -				masked by coda of preceding shock.
15	ZNE	eL	12 43				
		F	13 10				

FORM 3717.
H492.6089.1004-35.G.923.

SEISMOLOGICAL BULLETIN FOR ..... A P R.

Lat. 51° 28' 6" N, Long. 0° 18' 47" W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
		sec.	sec.		sec^{-1}
Z	5 Sept., 1934	24.7	24.5	+.01	46.7
E	6 Sept., 1934	24.8	24.8	-.01	42.6
N	11 Sept., 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON). TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
April									
1		e	3	40					
		F	4	30					
3	Z	i	11	20	44				Compression. Emergent on horizontal components. Practically no surface waves.
	NE	i		27	45				
	NE	i		30	10				
	N	i		36	28				
		F	12	5					
3		e	12	25					Very small.
		F	13	10					
3		e	22	7					
		F		30					
5	ZNE	eL	4	14					
		F		40					
5	Z	eL	9	40					horizontal components disturbed by wind.
		F		45					
11	ZNE	eL	2	10					confused by wind and micro-seisms.
	E	M		12	10	21	+4		
		F		20					
11/12	Z	iP	23	22	27			4380	Compression. Emergent on horizontal components. Trans-Caspia. (Felt in Persia.) 39°N., 55°E (Strasbourg).
	ZE	i		22	35				
	ZE	iPP		24	4				
	NE	iS		28	36				
	NE	e		28	50				
	N	i		31	15				
	ZNE	eL		34					
	Z	i		41	29				
	N	M		42	8	26	+51		
	Z	i		42	34				

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

April (contd.) 1935

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Apr 11/12	E	i	46 9				
	Z	i	46 13				
	E	i	49 22				
	E	i	49 56				
		F	1 50				
12		e	13 1				
		F	35				
12		e	22 55				
		F	23 5				Possibly not seismic.
15		e	21 52				
		F	22 0				Very small.
19	ZNE	iP	15 28 30				
	ZN	i	28 38			2525	Amplitudes of iP as read in mm:- N E Z
	ZNE	iPP	28 52				-10.2 +6.1 -13.8
	ZE	i	30 54				giving azimuth about 145°.
	NE	iS	32 37				Mediterranean sea near the
	ZNE	eL	34				coast of Tripoli.
	E	M	35-38				32.5°N., 16°E (Strasbourg).
	N	M	35 45	25	>+320		Maxima doubtful; traces
	Z	M	37 51	20	>+260		very faint and passing off
		F	38-40	(18)	(290)		upper edge of N and E
			- - -				records
19		iP	18 2 57				Overlapped by next shock.
		iS	7 5			2540	Times from Wood-Anderson
		eL	8				seismogram. Emergent phases
	E	M	10 16				in the Galitzin records.
		F	19 35	24	-8		Repetition of preceding shock.
19	ZNE	eP	20 36 59				32°N., 15.5°E.(Strasbourg.)
	NE	iS	40 53			2360	Further repetition
	Z	i	41 0				32°N., 15.5°E.(Strasbourg).
	ZNE	eL	42				
	N	M	44 11	24	-25		
	E	M	44 26	22	+29		
		F	21 50				
20	ZNE	iP	5 16 8				
	NE	eS	20 14			2510	Dilatation. Further
	Z	i	20 18				repetition.
	E	i	20 22				32°N., 16.5°E.
	N	i	20 25				
	ZNE	eL	21				
	N	M	23 33	25	-68		
	E	M	23 48	20	+63		
	N	M	26 29	15	+52		
	Z	M	29 3	11	-42		
		F	7 30				
20/21	Z	eP	22 14 52				
	NE	eSKS	25 24			10000	Destructive in northern
	E	iS	25 50				Formosa.
	NE	eSS	31 32				25°N., 121°E.(Strasbourg.)

KEW OBSERVATORY, RICHMOND, SURREY,

SEISMOLOGICAL BULLETIN.

April (contd.) 19 35.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
20/21	ZNE	eL	42				
	N	M	49 59	25	-95		
	N	M	51 50	18	+135		
	E	M	51 50	18	-69		
	E	M	54 38	18	+135		
	Z	M	55 44	16	-74		
		F	0 45				
21		e	8 27				
		F	9 0				
22		e	13 45				Very small.
		F	50				
23	Z	i	16 57 11				Compression.
	NE	i	17 6 37				
	NE	e	15 27				
	ZNE	eL	22				
		F	50				
24	ZE	i	16 4 36				Compression.
	Z	e	7 32				Horizontal components
	ZNE	eL	41				disturbed by wind.
	Z	M	49 17	16	+2		
		F	17 10				
24	Z	i	19 3 51				
	NE	e	13 53				
	ZNE	eL	30				
		F	55				
26	Z	e	12 25				Very small, possibly not seismic.
		F	13 15				
27	ZE	e	19 9 16				Felt in the Azores.
	E	e	13 25				
	ZNE	eL	15				
		F	50				

F.J.W. Whipple,
Superintendent.

4th. May, 1935.

FORM 3718.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May, 29		e	20	33					
		F	21	0					
30/31	Z	iP	21	42	14			6010	Dilation; emergent on E-W component. Azimuth about east.
	ZE	i		42	19				
	Z	i		45	21				
	NE	iS		49	51				
	Z	i		50	5				
	N	i		50	13				
	E	i		50	22				
	E	i		53	49				
	Z	i		54	35				
	N	i		54	46				
	Z	i		57	11				
	ZNE	L		59					
	E	M	22	6	15	(20)	>350		
	N	M		12	14	(17)	>300		
	Z	M		12	14	(17)	>450		
		F							Overlapped by next shock.
31	N	eL	2	32					
	ZE	eL		36					
	N	M		37	23	21	-8		
		F	3	0					
31		e	13	28					
		F		50					
31		e	17	44					
		F	18	0					

F.J.W. Whipple,

Superintendent.
6th June, 1935.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May,									
21	Z	e	7	12	42				
	ZNE	eL		53					
	Z	M	8	9	35	20	+7		
	N	M		9	39	21	-7		
		F	9	30					
21		e	12	55					Very small; possibly not seismic.
		F	13	5					
21		e	14	12					
		F		30					
22		e	8	57					
		F	9	10					
22		e	10	28					
		F		35					
23	Z	i	18	7	13				Horizontal components disturbed by wind.
	ZNE	eL		19					
	Z	M		21	9	20	+11		
		F	19	5					
24	Z	e	5	50	31				
	Z	e		54	42				
	N	i		55	17				
	NE	e	6	1	2				
	NE	eL		23					
	N	M		27	10	41	-63		
	E	M		27	34	40	-43		
	Z	eL		33					
	N	M		41	48	17	-31		
	Z	M		41	53	15	+34		
		F	9	30					
24		e	18	8					Very small; possibly not seismic.
		F	19	5					
25	Z	e	0	35	5				
	ZNE	eL		57					
	Z	M	1	12	6	18	+7		
		F	2	10					
26	Z	e	22	31					
	NE	eL		57					
	Z	eL	23	2					
	N	M		8	48	20	-7		
	Z	M		12	0	16	+7		
		F	0	0					
27	Z	e	3	36					
	ZNE	eL	4	32					
		F	5	35					
28		e	17	42					
		F	18	15					

FORM 3718.

M.O.

KEW OBSERVATORY, RICHMOND, SURREY.

SEISMOLOGICAL BULLETIN.

MAY 1935.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May									
13	ZE	e	20	5	58				
	NE	e		16	12				
	NE	eL		25					
	Z	eL		34					
	N	M		39	1	26	+19		
	E	M		39	26	23	-9		
		F	21	40					
14		e	1	5					Very small.
		F		45					
14/15	Z	e	23	42	41				Horizontal components disturbed by wind.
	E	e		49	59				
	Z	i		51	49				
	N	i		52	33				
	Z	i		52	56				
	E	e		57	48				
	Z	e		58	39				
	N	i		58	41				
	N	i	0	3	11				
	ZNE	eL		9					
	Z	M		22	35	21	+26		
	N	M		22	51	26	+40		
		F							Overlapped by next shock.
15	Z	e	2	11	7				Horizontal components disturbed by wind.
	N	e		19	13				
	N	e		22	8				
	ZNE	eL		33					
	N	M		35	35	20	-17		
	Z	M		42	3	15	-12		
		F	3	35					
16	ZNE	eL	17	52					
		F	18	15					
16	Z	e	21	1	10				
	NE	eL		50					
	Z	eL		55					
	N	M	22	20	40	13	+3		
		F	23	10					
18	Z	e	21	51	32				Possibly not seismic.
	NE	eL	22	50					
	Z	eL		56					
		F	23	10					
20	NE	eL	6	16					
	Z	eL		25					
	N	M		31	58	20	+3		
		F		55					
20		e	18	30					Very small.
		F		40					
21	Z	i	4	33	21				Very small.
	ZNE	eL		54					
		F	5	15					

FORM 3718.

AIR MINISTRY, METEOROLOGICAL OFFICE.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR MAY 1935.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
		sec.	sec.		sec-1
N.	5 Sept. 1934	24.7	24.5	+.01	46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May, 1	Z	eP	10	31	6			3430	Caucasus. 38°N., 43°E. (Strasbourg)
	ZE	i		32	28				
	NE	iS		36	19				
	ZNE	eL		38					
	N	M		44	33	18	-17		
		F	12	10					
2		e	8	29					Very small; possibly not seismic.
		F		35					
4/5	NE	eL	23	48					
	Z	eL		51					
	N	M		59	27	17	+5		
	F		0	25					
7	NE	eL	6	46					
	N	M		54		29	-7		
	Z	eL		55					
		F	7	30					
9		e	5	41					Very small.
		F		50					
10		e	17	50					
		F	18	5					
12		e	5	48					
		F	6	15					
		e	13	0					Very small.
		F		10					
		e	20	55					Very small.
		F	21	20					

FORM 3717.

H 533 W. 8009. 100. 6/35. Gp. 928.

KEW OBSERVATORY, RICHMOND, SUI

SEISMOLOGICAL BULLETIN FOR JUNE 1935.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
N.	5 Sept. 1934	24.7 sec.	24.5 sec.	+.01	46.7 sec^{-1}
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
June,							
1		e	4 52				
		F	5 20				
2	ZNE	i	9 25 47				
	E	e	33 17				
	NE	e	43 38				
	ZNE	eL	46				
	N	M	49 45	19	+14		
	E	M	54 26	16	-7		
	Z	M	54 38	15	-6		
		F	11 5				
5	E	e	11 53 15				Not very distant.
		F	12 0				
6		e	12 52				Very small, possibly not seismic.
		F	14 30				
8		e	1 25				Confused by wind and microseisms.
		F	35				
11		e	22 28				
		F	23 0				
16		eL	7 17				
		F	40				
18/19		e	22 53				
		eL	23 22				
		F	0 5				
19/20		eL	23 24				
		F	0 20				

FORM 3717.

H.542.8089.100.7.35.Gp923.

M.O. 383

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

J U N E 1935.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
June,							
22		e	16 33				
		F	17 55				
24/25	ZN	iPKP	23 42 30			16000	Compression.
	Z	i	43 6				
	ZN	PP	45 46				
	NE	iSS	0 4 25				
	NE	L	29				
	Z	L	36				
	N	M	40 52	28	-25		
		F	3 0				
25	Z	e	12 45 (48)				
		L	13 15				
		F	14 10				
27	-	-	-	-	-	-	No records, 09.40 to 17.52.
28	Z	e	2 19 22				
		L	58				
		F	3 40				
29	ZNE	iP	7 1 25			9560	Compression. Amplitudes of iP as read in mm. N .E Z -0.3 +1.0 +3.0 giving azimuth about 287°. Epicentre near 14°N, 101° W. Acapulco Deep.
	NE	eSKS	11 47				
	NE	iS	12 2				
	NE	eSS	17 56				
		L	29				
	E	M	38 56	16	+91		
	Z	M	39 6	16	-94		
	N	M	39 11	16	-39		
		F	9 30				

F.W.J. Whipple,

Superintendent.
5th July, 1935.

FORM 3718.

H.542.8089.100.7.35.Cp.929.

LIT[illegible] 1.

INSTRUMENTS: GALITZ[illegible] , THREE COMPONE ITS

CONSTANTS: FOR NOT[illegible] TRIE" (LEIPZIG, 1914)

COMPONENT.	W[illegible]	'ING 'ANT .	$\frac{Ak}{\pi l}$
N.	5 [illegible]	1	46.7 sec^{-1}
E.	6 [illegible]	1	42.6
Z.	11 [illegible]	1	109.

TIME SERVICE: MINU[illegible] CLOCK (MORRISON ;

TIME COMPA[illegible] SERVATORY.

SEISM[illegible] OND.

DATE.	COMPT.	PHASE.	REMARKS.
July, 5	Z	iP	n.
	Z	ePP	
	N	eS	
	E	eSS	
	N	L	
	Z	L	
	Z	M	
	N	M	
	E	M	
		F	
6		eL	
		F	
6		eL	
		F	
7	Z	e(P)	
	NE	e(S)	
	NE	L	
	E	M	
		F	
9		eL	
		F	
9	Z	e	
	NE	e	
	NE	L	
		F	
11		eL	
		F	

FORM 3717.

1.555.W.8089.100.8/35.Gp. 23.

KEW OBSERVATORY, RICHMOND, SUR

SEISMOLOGICAL BULLETIN.

JULY, 1935

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLI-TUDE. μ	Δ km.	REMARKS.
July,									
11		eL	14	23					
		F		45					
12		eL	2	12					
		F		40					
15	Z	i	14	32	21				
	Z	e		34	39				
		F		40					
15		eL	18	42					
		F		55					
16	Z	iP	16	31	52			9790	Compression.
	E	eS		42	41				Destructive in Formosa.
	NE	L	17	4					
	E	M		11	33	19	+21		
		F	18	0					
17		eL	0	12					
		F		25					
17		eL	1	4					
		F		40					
17	Z	e	4	41					
	NE	e(SS)		48	41				
	NE	L		57					
		F	5	50					
17	Z	e	11	5	30				Horizontal components
	N	e		14	50				disturbed by wind.
	NE	L		38					
	N	M		47					
		F	13	40					
19	Z	eP	1	2	28			9620	
	ZNE	iP		2	34				
	Z	ePP		5	55				
	E	eSKS		12	55				
	N	e		13	6				
	E	iS		13	9				
	N	ePS		14	8				
	N	eSS		19.3					
	NE	L		28					
	Z	L		34					
	E	M		35	4	30	+50		
	Z	M		44	38	18	+45		
	N	M		44	56	18	-44		
		F	3	40					

FORM 3718.

KEW OBSERVATORY, RICHMOND, SURREY

SEISMOLOGICAL BULLETIN.

JULY, 1935

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
July, 23		eL	4	26					
		F	5	10					
26	Z	e	4	55	33				Very small.
	NE	e	5	5	(25)				
	N	L		17					
		F		50					
26	Z	e	11	1					
	NE	L		6					
		F	12	5					
29	Z	iP	7	57	44				Long waves indefinite.
	Z	i			49				
	E	i			56				
	Z	i		59	42				
	ZNE	e	8	0	38				
	Z	i		1	29				
	N	e	8	11	0				
		F	10	44					
29	NE	L	23	45					
	Z	L		49					
		F	24	0					
30	NE	L	6	38					
	Z	L		53					
		F	7	20					

F.J.W. Whipple,

Superintendent,
5th August, 1935.

FORM 3718.

KEW OBSERVATORY, RICHMOND, SURRE

SEISMOLOGICAL BULLETIN FOR AUGUST, 1935

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
N.	5 Sept. 1934	sec. 24.7	sec. 24.5	+.01	sec^{-1} 46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
August, 1	Z	e	14 20 28.				Confused by microseisms.
	Z	e	24 40.				
	Z	e	33 37.				
	ZNE	L	15 0				
		F	45				
1	Z	eP	16 20 25.			8700	Near Pacific Coast of Costa Rica; 10°N, 86°W, (U.S.C.G.S.).
	E	eS	30 20.				
	N	L	42				
	E	M	54				
		F	17 45				
3	NE	eP	1 23 8.			9710	Near Sumatra. Bombay gives iP at 01.15.50, iS at 01.20.28.
	E	iSKS	33 37.				
	N	eS	33 53.				
	NE	i	34 3.				
	N	e	34 37.				
	N	L	52				*
	N	M	2 1 11.	25	+81		
	E	M	8 46.	20	+82		
		F	5 20				
3	NE	e	5 40 22				*
		L	44.4				
		F	6 10				
3	NE	eL	12 39				*
		F	13 25				
3	NE	eL	13 57				*
		F	14 10				

* No Z component record.

FORM 3717.
H.576.W8089 .100.9.35.923

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
August,							
4	E	e	2 47 7.				*
	NE	L	3 10				
		F	30				
6	NE	eL	0 39				*
		F	1 50				
7	NE	eL	9 43				*
		F	10 5				
10		eL	18 25				
		F	19 0				
17	Z	ePKP	2 4 23.			17000	
	ZN	ePP	8 7.				
	Z	iPPP	11 34.				
	ZN	eSKSP	18 23.				
	E	eSS	27 26.				
	E	eSSS	33 15.				
	E	L	48				
	N	L	53				
	Z	M	3 9 45.	20	-56		
	N	M	10 10.	21	-50		
	E	M	10 27.	23	+43		
		F	5 45				
17		eL	21 20				
		F	35				
20	ZNE	e	9 3 53.				Very small and not very distant.
	NE	L	7 30.				
		F	20				
21	Z	e	14 8 7.				Very distant.
	Z	L	15 4				Horizontal components disturbed by wind.
	Z	F	16 25				
22		L	20 48				)
		F	21 25				)
23		eL	14 53				) Earlier phases masked by microseisms.
		F	16 10				)
25	Z	e	5 14				
		L	20				
		F	6 15				
25		eL	21 16				
		F	22 0				
26		eL	17 18				
		F	18 5				
27		eL	6 9				
		F	25				

FORM 3718.

* No Z component record.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
August 29	Z	e	11 24				
		F	35				
31		eL	18 24				
		F	19 20				

F.J. Scrase,

Officer-in-Charge,
4th September, 1935.

FORM 3718.

SEISMOLOGICAL BULLETIN FOR SEPTEMB

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
		sec.	sec.		sec⁻¹
N.	5 Sept. 1934	24.7	24.5	+.01	46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Sept. 2		eL	8	25					
		F		40					
3		eL	11	48					
		F	12	5					
3	Z	e	17	39	52				Small.
	Z	e		43	36				
	N	e		47	0				
		F	18	0					
4	Z	e	1	38	10				
	E	e		46	42				
		F	-	-	-				Overlapped by next shock.
4	ZE	eP	1	50	42			9860	Azimuth about north. Epicentre probably under N. Pacific Ocean.
	ZE	iP		50	44				
	Z	iPP		54	22				
	NE	iSKS	2	1	9				
	NE	iS		1	34				
	Z	iPS		2	39				
	NE	L		20					
	N	M		36	14	18	+110		
	E	M		36	15	16	+100		
	Z	M		36	18	15	-125		
	NE	L	4	14					Via antipodes.
		F	5	10					

FORM 3717.
Wt. ... 59,100, 12/35, G51(23)

KEW OBSERVATORY, RICHMOND, S

SEISMOLOGICAL BULLETIN.

SEPTEMBER, 1935.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Sept. 9	Z	i	6	37	10				
	NE	e	7	4	13				
	NE	L		7					
	N	M		17	33	24	+54		
	E	M		18	18	23	-56		
	Z	M		28	4	19	-17		
		F	9	10					
11		eL	13	10					
		F	14	5					
11	ZNE	iP	14	16	16			8960	Amplitudes of iP as read in mm. N E Z -4.7 -1.8 +14.2 Azimuth 23°, giving epicentre - 43°N, 146°E; near Northern Japan.
	NE	iPP		19	22				
	N	ePPP		21	44				
	ZNE	iS		26	24				
	Z	i		27	13				
	N	eSS		32	48				
	NE	L		40.1					
	Z	L		46					
	Z	M		50	30	27	+250		
	N	M		50	39	26	+290		
	E	M		55	42	20	+175		
		F	18	30					
14		eL	21	32					
		F		40					
15		eL	4	30					
		F		40					
15		eL	12	19					
		F	13	25					
15		eL	15	8					
		F	17	0					
18	Z	i	5	9	34				
	N	e		19	45				
	E	L		36					
		F	6	10					
18		eL	9	7					
		F		30					
18		eL	20	57					)
		F	21	10					)
19		eL	3	34					) Confused by wind and microseisms.
		F	4	15					)

FORM 3718.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	
Sept. 20	Z	(e)	2	5	54			13800	Confused by microseisms. Azimuth about NE. Bombay gives iP at 01.58.02, iS at 02.07.23. Epicentre about 4°S, 144°E, near New Guinea.
	ZN	ePP		7	35				
	E	iPP		7	42				
	Z	i		8	13				
	NE	iSKKS		14	33				
	NE	ePKKP		15	29				
	ZNE	iPS		17	29				
	NE	ePKKS		19	16				
	NE	iSS		24	24				
	E	e		33	49				
	NE	e		37.1					
	NE	L		39.6					
	Z	L		52.7					
	N	M		49	51	30	+480*		* By extrapolation.
	E	M		50	6	27	+500*		
	Z	M	3	2	48	20	-200		
		F	5	40					
20	ZE	ePP	5	43	47			13800	Probably a repetition of the New Guinea shock of 20d. 2h.
	Z	ePPP		46	23				
	E	eSKKS		50	44				
	NE	iPS		53	42				
	E	e		53	47				
	Z	ePKKS		55	28				
	NE	eSS	6	0	31				
	E	eSSS		6	18				
	NE	e		14	7				
	NE	L		17.3					
	Z	L		26					
	E	M		31	2	19	-49		
	N	M		31	27	21	+64		
	Z	M		39	41	18	+52		
		F	8	20					
20	E	e	21	34	7				No N record.
	ZE	L	22	6					
		F	23	15					
23	Z	(eP)	9	33	(52)			13800	Confused by microseisms. Probably a repetition of the New Guinea shock of 20d. 2h.
	Z	ePKP		37	14				
	Z	PP		38	56				
	Z	PPP		41	32				
	NE	eSKKS		45	54				
	NE	ePS		48	52				
	Z	e		50	14				
	NE	e	10	9	26				
	NE	L		12					
	Z	L		15					
	Z	M		33	25	22	-22		
		F	12	10					
24		eL	6	10					
		F		35					

M.O. 383.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

SEPTEMBER, 1935.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Sept.									
24	Z	eP	22	23	41			7780	Dilatation.
	N	eS		32	50				Azimuth about north.
	E	L		45					Epicentre probably under
		M		55					the Bering Sea.
		F	23	55					
25	Z	e(PP)	10	40	20				May be a repetition of
	Z	e(PPP)		42	56				thenNew Guinea shock of
	NE	L	11	19					20d. 2h.
	Z	L		25					
		M		34					
		F	12	15					
26/27		eL	23	45					
		F	0	25					
28	N	iP	16	19	53			660	Readings from experimental
	N	iPg		20	24				Wood-Anderson seismogram.
	N	iS		21	0				Felt around Bordeaux.
	N	i		21	24				
		F		26					
29		eL	6	34					
		F	7	20					

(sgd) F.J.W. Whipple,

Superintendent,
7th October, 1935.

FORM 3718.

AIR MINISTRY, METEOROLOGICAL O[illegible]

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR OCTOBER 1935.

Lat. 51° 28' 6" N, Long. 0° 18' 47" W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" LEIPZIG, 1914, OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
		sec.	sec.		sec^{-1}
N.	5 Sept. 1934	24.7	24.5	+.01	46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Oct.									
1		eL	11	45					
		F	12	0					
2	ZN	iP	5	45	11			8910	Dilatation. Amplitudes of iP as read in mm. N E Z -1.3 0 +4.5 Azimuth .0°, giving epicentre near 48°N, 180°E; Aleutian Islands. *Wood-Anderson record.
	Z	iPcP		45	25				
	NE	iS		55	17				
	N*	iPS		55	51				
	N	L	6	11.4					
	Z	L		19					
	N	M		19	34	27	+34		
		F		50					
6	Z	e	4	46					
		L	6	3					
		F		25					
6		eL	15	23					
		F		35					
7		eL	5	39					
		F	6	30					
8	Z	(e)	9	39	21				
	N	L		42					S lost during change of charts.
	N	M		47	16	25	+56		
		F	10	40					
9	ZE	eP	22	12	42			1980	Dilatation. Felt in S.W. Iceland.
	ZE	iS		16	3				
	E	L		14.6					
	NE	L		17.0					
	Z	M		19	27	12	-21		
		F	23	10					

FORM 3717.
H.594.8089.100.11.35.Gp.923.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Oct. 10		eL	21	12					
		F		20					
11/12	Z	e(P)	22	36	46			(8650)	
	E	e(S)		46	39				
	NE	L	23	12					
	Z	L		18					
	Z	M		30	51	19	+21		
		F	1	0					
12	Z	eP	16	57	53			9560	
	Z	iP		57	55				
	Z	iPP	17	1	8				
	Z	i		1	30				
	E	eSKS		8	11				small.
	NE	iS		8	31				large.
	N	ePS		9	18				
	E	iSS		13	49				
	E	eSSS		17	7				
	NE	L		24					
	Z	L		27.2					
	N	M		34	40	21	+120		
	E	M		35	10	20	+130		
	Z	M		36	29	23	-120		
		L	19	0					Via antipodes.
		F		50					
13		eL	2	41					
		F	3	25					
13		eL	19	51					
		F	20	0					
14		eL	10	36					
		F		50					
14		eL	20	47					
		F	21	0					
18	Z	iP	0	24	32			9430	Compression.
	Z	iPP		27	44				Azimuth, from long waves,
	E	eSKS		34	54				about 25°. Near Northern
	E	iS		35	4				Japan.
	E	iPS		35	30				
	NE	iSS		40	22				
	E	eSS		43	41				
	NE	L		50					
	Z	L		56.5					
	N	M	1	0	8	20	-105		
	E	M		0	8	20	+140		
	Z	M		5	29	19	+67		
		F	3	10					

SEISMOLOGICAL BULLETIN.

OCTOBER 1935

DATE.	COMPT.	PHASE.	G.M.T h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Oct. 18	NEZ	iPP	11	24	15			12100	
	N	eSKS		30	38				
	Z	e(S)		32	43				
	NE	ePS		33	48				
	NE	iSS		39	30				
	E	L		55					
	Z	L	12	0					
	E	M		10	24	19	+20		
		F	13	35					
18	Z	eP	15	6	21			9430	Probably a repetition of the shock at 0h.
	NE	eSKS		16	44				
	E	iS		16	53				
	E	L		34					
	Z	L		41					
	E	M		42	21	20	+34		
		F	16	40					
22	N	e	7	42	10				Very small.
	Z	L	8	22					
		F	9	20					
23		eL	14	8					
		F		15					
25		eL	1	14					
		F	2	0					
31	Z	eL	19	12					Horizontal components disturbed by wind.
		F		30					

(sgd) F.J.W. Whipple.

Superintendent,
6th November, 1935.

FORM 3718.

Lat. 51° 28′ 6″ N, Long. 0° 18′ 47″ W, Height abo

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{d\theta}{\pi l}$
N.	5 Sept. 1934	sec. 24.7	sec. 24.5	+.01	sec^{-1} 46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMP.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Nov.									
..	Z	iP	6	12	27			5590	Dilatation.
	E	eS		19	41				Felt in Eastern Canada
	E	iSS		23	19				and U.S.A.
	N	eL		25					46°N, 80°W. (U.S.C.G.S.)
	E	iL		27	31				
	E	M		31	8	18	-37		
	Z	M		31	21	18	+39		
		F	7	15					
]	Z	e	16	36					
	N]	e		40	10				) May be due to wind
	N]	e		44	42				) disturbance.
	E	e		53	46				
	N]	L	17	2					
	Z	L		9					
	N	M		9	52	19	-39		
		F	18	5					
5		eL	21	48					
		F	22	25					
7	Z	eP	4	41	39			1990	
	E	eS		45	1				
	N	L		46.2					
	N	M		47	35	15	-9		
		F	5	0					
10		eL	18	46					
		F	19	50					
11		eL	14	20					
		F	15	0					

FORM 3717.

HARRISON & SONS, LTD., PRINTERS IN ORDINARY TO HIS MAJESTY, GA523.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Nov.									
14		eL	20	56					Confused by wind disturbance.
		F	21	30					
16		eL	0	28					)
		F		45					)
									) Not very distant.
16		eL	6	50					)
		F	7	5					)
23		eL	8	33					
		F		45					
25	Z	iP	10	15	55			9640	Dilatation.
	Z	iPP		19	26				
	E	eSKS		26	21				
	N	iS		26	35				
	NE	L		46					
	Z	L		54					
	N	M	11	3	24	18	+12		
		F	12	0					
28	Z	e	13	17					
		F		20					
30	Z	eP	3	51	36			8390	Felt at Dhubri, Assam.
	E	eS	4	1	16				Confused by microseisms.
	E	ePS		1	38				
	E	L		18.5					
	E	M		21	1	20	-16		
		F	5	10					

(sgd) F.J.W. Whipple,

Superintendent.
4th December, 1935.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR DECEMBER 1935.

Lat. 51 28 6″ N, Long. 0° 18′ 47″ W, Height above M.S.L. 5m.

LITHOLOGIC FOUNDATION: RIVER GRAVEL RESTING ON LONDON CLAY.

INSTRUMENTS: GALITZIN APERIODIC SEISMOGRAPHS, PHOTO-GALVANOMETRIC REGISTRATION, THREE COMPONENTS.

CONSTANTS: FOR NOTATION SEE FÜRST B. GALITZIN "VORLESUNGEN ÜBER SEISMOMETRIE" (LEIPZIG, 1914) OR G. W. WALKER "MODERN SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT μ^2.	$\frac{Ak}{\pi l}$
		sec.	sec.		sec^{-1}
N.	5 Sept. 1934	24.7	24.5	+.01	46.7
E.	6 Sept. 1934	24.8	24.8	-.01	42.6
Z.	11 Sept. 1934	13.0	13.1	+.01	109.

TIME SERVICE: MINUTE TIME-MARKS ARE MADE ELECTROMAGNETICALLY BY CONTACT CLOCK (MORRISON); TIME COMPARISONS ARE MADE DAILY WITH SIGNALS FROM GREENWICH OBSERVATORY. SEISMOMETRIC READINGS CAN BE DETERMINED TO THE NEAREST SECOND.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Dec. 2	NE	eL	0	31					Confused by microseisms.
	Z	eL		35					
	N	M		36	9	17	-8		
		F		50					
2	N	eL	17	33					No records of "Z" and "E-W" components. Confused by microseisms.
	N	M		40	3	17	+7		
		F		55					
5	N	e	18	53	12				
	NE	eL	19	2					
	Z	eL		8					
	N	M		16	1	20	-6		
		F	20	5					
9	ZNE	eL	9	1					
	Z	M		5	33	19	-7		
		F		35					
14	Z	i	1	42	47				)Emergent on horizontal components.
	Z	i		45	2				
	Z	e		46	8				
	NE	i		52	12				
	ZNE	i		52	33				Large on "N-S" component.
	ZNE	e		53	28				
	ZNE	e		56	31				
	E	e		57	51				Northern Peru, 6°S., 74°W. (U.S.C.G.S.)
	N	e		58	11				
	E	e	2	0	54				
	N	i		2	15				
	E	e		5	15				
	N	i		5	31				Surface waves poorly developed.
		F	3	0					

SEISMOLOGICAL BULLETIN.

DECEMBER, 1935.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Dec.									
14/15	ZE	iP	22	17	30			8890	Compression. Emergent on "N-S" component.
	Z	i		17	35				
	E	iS		27	35				
	ZNE	ePS		28	13				
	E	i		29	17				)
	E	i		29	38				)Large movements.
	E	iSS		33	12				)
	E	eSSS		36	11				
	N	i		38	53				
	ZNE	eL		41					
	N	M		51	0	20	-75		Pacific Ocean off Central America.
	Z	M		54	38	17	+185		
	E	M		54	38	17	+185		14°N., 93°W. (U.S.C.G.S.)
		F	1	15					
15	ZNE	ePKP	7	27	11			15000	Felt in Solomon Islands.
	Z	iSKP		30	33				
	N	iSS		48	22				
	E	iSSP		48	32				12°S., 161°E. (U.S.C.G.S.)
	N	i		49	51				
	NE	iSSS		53	8				
	NE	eL		57					
	Z	eL	8	9					
	E	M		13	2	36	+185		
	E	M		17	15	28	-130		
	Z	M		22	30	25	-110		
	N	M		22	40	24	-155		
		F	11	5					
16	NE	i	17	18	32				Clearly shown by Wood-Anderson seismograph.
		F		35					
17	ZN	ePP	19	31	14			13700	Very small. No "Z" record.
	NE	ePS		41	30				
	ZN	e		41	48				
	N	iSS		47	58				
	NE	L		58					
	N	M	20	3	37	39	-105		
	Z	L		4					
	E	M		5	37	31	-89		
	N	M		6	23	29	-91		
	Z	M		17	24	17	-52		
		F	22	5					
18	ZNE	e	7	41					
	NE	L		48					
	N	M		51	5	28	+13		
	E	M		51	34	30	-13		
	Z	L		53					
		F	8	35					
18		e	17	39					
		F	18	5					
20		e	0	55					Possibly not seismic.
		F	1	5					

FORM 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. DECEMBER, 1935.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Dec.							
20	ZN	e	18 59 1				No "E-W" record.
	N	L	19 41				
	Z	L	46				
	N	M	46 22	28	-10		
	N	M	59 59	20	+8		
	Z	M	20 0 4	20	-8		
		F	21 10				
21	ZNE	eL	12 32				
		F	13 0				
23	ZNE	eL	15 30				
		F	45				
24	Z	e	12 36 25				Confused by microseisms.
	NE	e	46 45				
	NE	L	58				
	Z	L	13 1				
	E	M	5 8	26	+8		
		F	14 5				
							Amplitudes as read in mm :- N. E. Z. (0.0) -1.2 +1.7 +1.3 +6.8 -12.7
28	ZE	iP	2 48 56			10020	
	ZNE	i	49 5				
	ZNE	iPP	52 55				
	ZE	iPPP	54 57				
	ZE	i	56 57				Azimuth about 80°. Near Northern Sumatra.
	Z	i	58 28				
	E	iSKS	59 39				
	NE	iS	59 55				
	N	i	3 0 3				
	ZE	i	1 35				
	N	i	3 42				
	N	iSS	5 55				
	ZE	i	6 46				
	N	i	7 36				
	ZE	i	10 35				
	N	i	10 38				
	N	i(SSSS)	12 23				
	Z	iPPP	14 37				
	N	i	15 13				By path > 180°.
	ZNE	L	18				
	N	M	19 24	52	-550		
	N	M	22 7	34	>+450*		*Not completely recorded.
	E	M	26 2	30	+170		
	N	M	30 6	28	+330		
	Z	M	35 17	25	-360		
	E	M	35 48	27	-200		
		F	7 30				
28		e	19 38				
		F	50				
29		e	4 39				Very small.
		F	55				

FORM 3718.

M.O. 383.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

DECEMBER, 1935.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Dec. 30	ZNE	e	0	7	57				Disturbed by wind and microseisms.
	NE	eL		38					
	Z	eL		45					
	E	M		48	53	24	-8		
		F	2	0					
30	N	i	3	10	46				)
	N	i		11	4				)
	N	i		11	22				)Readings from experimental
		F		13					)Wood-Anderson seismogram;
30	N	i	3	38	36				)very small on Galitzin rec-
	N	i		39	28				)ords.
	N	i		39	35				)Confused by microseisms.
	N	i		40	9				)Southern Germany.
		F		42					)
									)

(sgd) F.J.W. Whipple,

Superintendent,
3rd January, 1936.

FORM 3718.