SEISMOLOGICAL BULLETIN FOR JAN

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.
Jan. 2	NE	eL	0	48					Confused by microseisms.
	Z	eL	0	50					
	E	M		49	55	29	-6		
		F	1	20					
2	NE	eL	18	27					
	Z	eL		35					
		F		55					
2/3	NE	i	22	59	6				No "Z" record.
	NE	i	23	0	52				
	NE	eL		16					
	N	M		21	15	36	+20		
	E	M		39	31	19	+14		
		F	1	15					
13	-	-	10	12	to				No records.
			12	36					
14	N	e	6	5	37				Confused by microseisms.
	NE	i		11	55				
	E	i		15	58				
	NE	L		22					
	E	M		26	20	44	-62		
	N	M		26	42	33	-15		
	Z	L		29					
	E	M		30	17	23	-21		
	N	M		34	18	24	-20		
	Z	M		39	6	19	+23		
		F	8	0					
14	-	-	10	31	to				No records.
			16	36					

H635 W8089 100 2/36 G.P. 923.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	
Jan. 14	Z	i	18	0	46				
	NE	eL		50					
	Z	eL		58					
	N	M	19	11	49	18	+6		
		F	20	20					
15	-	-	10	16	to				No records.
			12	34					
15	-	-	13	40	to				No records.
			15	48					
15	NE	eL	16	1					
	Z	eL		6					
		F	17	0					
19/20	ZE	e	23	48					Possibly not seismic.
		F	0	5					No "N-S" record.
20	ZE	e	9	13	10				No "N-S" record.
	ZE	L		15					
	E	M		16	30	17	-13		
	Z	M		18	27	11	-8		
		F		40					
20	Z	e	17	15	1				Confused by wind and microseisms.
	NE	e		21	30				
	NE	i		21	36				
	NE	L		46					
	Z	L		51					
	N	M		58	16	26	-41		
	E	M		58	48	26	-30		
	Z	M		59	7	28	-41		
		F	18	35					
22		e	16	52					
		F	17	25					
27	ZNE	eL	16	19					Confused by microseisms.
		F		45					
27	NE	eL	20	0					Confused by microseisms.
	Z	eL		6					
		F		25					

(sgd) F.J.W. Whipple,

Superintendent,
4th February, 1936.

FORM 3718.

AIR MINISTRY, METEOROLOGICAL OFFICE

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR FEBRUARY, 1936.

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.
Feb. 7	Z	i	1	7	47				
	ZNE	eL	2	0					
	N	M		8	48		+3		
		F	3	15					
7	ZNE	e	9	17	1				
	NE	e		21	31				
	E	i		24	37				
	ZNE	i		24	59				
	N	i		25	7				
	ZNE	eL		28					
	N	M		39	44	22	-51		
	Z	M		41	4	18	+37		
	E	M		43	36	18	-42		
		F	11	5					
8	NE	eL	13	14					Confused by wind and microseisms.
	Z	eL		17					
		F		40					
12	ZN	e	11	2	45				Confused by microseisms.
	N	e		11	50				
	N	e		12	29				
	ZE	e		14	9				No surface waves.
		F		55					
15	Z	e	13	5					Commencement indefinite.
	ZNE	i		7	11				
	ZE	e		9	30				
	ZNE	e		12	42				
	NE	i		13	59				
	NE	i		16	53				
	Z	i		16	56				
	E	e		19	9				

FORM 3717.

H.650.W.8089.100.3/36.G.p.923.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLI-TUDE. μ	Δ km.	
Feb.									
15	NE	e		24	1				
	NE	eL		36					
	Z	eL		41					
	E	M		55	29	21	-68		
	N	M	14	1	16	21	+83		
	Z	M		3	19	20	+56		
		eL		47					Via antipodes.
	E	M		57	17	20	+13		
	Z	M		58	4	20	+13		
	N	M		58	19	19	+11		
		F	16	20					
16		e	14	36					Very small.
		F		40					Possibly not seismic.
21	NE	eL	1	53					
	Z	eL		58					
	N	M		58	49	16	-4		
		F	2	20					
21	NE	eL	7	2					
	Z	eL		6					
		F		30					
21	Z	e	17	18	28				Possibly not seismic.
	ZNE	e		28	12				
	E	e		48	52				
	NE	L		59					
	Z	L	18	2					
	E	M		3	38	32	+23		
	Z	M		9	58	23	+16		
	N	M		10	55	24	+18		
		F	19	15					
22	Z	i	15	52	8				
	ZE	i		53	34				
	E	i	16	4	2				
	E	e		7	45				
	E	i		19	40				
	N	i		19	44				
	E	i		23	3				
	NE	i		25	15				
	NE	L		42					
	Z	L		51					
	E	M	17	14	39	19	+36		
	N	M		14	46	19	-41		
	Z	M		15	33	19	+53		
		F	18	25					
22	Z	e	19	43	12				
	Z	e		50	6				
	E	e		54	41				
	ZNE	eL	20	9					Poorly developed.
		F	-	-	-				Overlapped by next shock.

M.O. 391

KEW OBSERVATORY, RICHMOND, SURRE

SEISMOLOGICAL BULLETIN.

FEBRUARY, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Feb.									
22	NE	e	20	41					
	NE	eL		50					
	Z	eL	21	1					
	Z	M		5	2	24	+10		
		F		50					
27	NE	eL	11	6					Confused by microseisms.
	E	M		11	24	26	+9		
	Z	eL		13					
		F		35					
28		e	3	41					
		F	4	0					
28	NE	eL	17	12					
	N	M		16	37	23	+6		
	Z	eL		20					
		F		40					

(sgd)

F.J.W. Whipple,

Superintendent,
5th March, 1936.

FORM 3718.

AIR MINISTRY, METEOROLOGICAL OFF

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR MARCH, 1936.

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
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.									
1.	Z	e	11	16					
	NE	eL		35					
	Z	eL		42					
	N	M		48	36	18	+7		
	E	M		49	30	19	+8		
	Z	M		50	16	18	+6		
		F	12	55					
2.	Z	iP	3	31	25				Compression. Small on N-S component.
	Z	i		31	43				
	E	i		41	37				
	NE	i		41	45				
	Z	e		41	59				
	N	i		42	41				
	NE	e		47	15				
	N	e		50	39				
	E	e		50	59				
	E	L		55					
	ZN	L	4	0					
	E	M		5	12	24	+55		
	N	M		5	46	24	+36		
	N	M		13	36	17	+34		
	Z	M		13	40	17	-35		
		F	6	10					
6.	Z	e	14	45	25				
	ZNE	eL	15	45					
		F	16	40					
8.	NE	eL	1	12					Very small.
	Z	eL		23					
		F		30					

H.564.W.8071.100.4/36.Gp.523

M.O.

KEW OBSERVATORY, RICHMOND, SURRI

SEISMOLOGICAL BULLETIN.

MARCH, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Mars									
10.	NE	eL	8	40					Very small.
	Z	eL		45					
		F	9	10					
10.		e	12	50					Very small.
		F	13	10					
10.	Z	e	20	48	13				
	NE	eL	21	16					
	Z	eL		21					
	E	M		21	59	24	+8		
	N	M		22	32	24	+6		
	Z	M		29	46	15	+4		
		F	22	10					
11.	NE	eL	1	29					
	Z	eL		33					
		F	2	0					
14.		e	10	15					Very small.
		F		35					
17.		e	20	28					
	NE	eL		40					
	Z	eL		50					
		F	21	10					
18.		e	13	17					Very small.
		F		30					
18.		e	14	52					Very small.
		F	15	5					
20.		e	18	15					Very small.
		F		30					
20.	NE	e	19	14					
	NE	eL		20					
	Z	eL		23					
		F	20	0					
21.	Z	i	0	16	9				Emergent on horizontal components.
	ZNE	eL		59					
	N	M	1	11	13	21	+8		
	Z	M		12	29	20	+8		
	ZNE	eL2		52					Via Antipodes.
		F	-	-	-				Overlapped by next shock.
21.	NE	e	2	16	5				
	ZNE	L		29					
		F	3	15					
22.		e	5	22					Very small.
		F		35					
22.	Z	e	13	21					
	NE	eL		25					
	Z	eL		32					
		F	14	25					

FORM 3718.

KEW OBSERVATORY, RICHMOND, SURR

SEISMOLOGICAL BULLETIN.

MARCH, 19 36.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Mar. 24.		e	22	53					Very small.
		F	23	10					
25.	ZNE	eP	8	46	9			2250	
	ZN	eS		49	53				
	ZNE	L		51					
	N	M		51	57	20	+4		
	Z	M		52	12	18	+6		
	E	M		52	18	17	-6		
		F	-	-	-				Overlapped by next shock.
25.	ZNE	iP	9	3	15			2250	Amplitudes of iP as read in
	N	iS		6	59				mm :- N. E. Z.
	Z	i		7	7				-2.5 +3.0 +4.0
	ZNE	L		8					Azimuth about 307°.
	E	M		8	31	25	+27		
	N	M		8	57	19	-25		North Atlantic Ocean, south-
	E	M		9	34	18	+35		west of Iceland.
	Z	M		9	47	16	-33		
		F	10	10					
25.	ZNE	e	11	37	27				
	ZNE	L		43					
		F	12	5					
25/26.	Z	e	23	56	18				
	ZNE	L	0	2					
		F		25					
26.	ZE	eL	9	49					
		F		55					
27.		e	3	5					
		F		45					
29.		e	21	35					
		F		45					

(sgd)

F.J.W. Whipple,

Superintendent,
6th April 1936.

FORM 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR APRIL. 19 36.

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
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	ZNE	iP	2 23 49			11770	Amplitudes of iP as read in mm :- N. E. Z. -0.7 -1.0 +2.7 giving azimuth about 57°.
	ZNE	iPP	28 21				
	NE	iSKS	34 29				
	NE	iSKKS	35 18				
	N	iS	36 1				
	ZE	iSP	37 34				
	N	iPS	37 41				
	NE	iPPS	38 49				
	N	iSS	43 39				
	NE	i	43 55				
	E	i	44 42				
	N	i	45 3				
	E	iPPP	46 17				By path greater than 180°.
	NE	iSSS	47 39				
	N	iSSSS	50 47				
	E	i	53 19				
	N	i	53 57				
	NE	L	58				
	E	M	3 2 31	37	-210		
	Z	L	4				
	N	M	- - -	(20)	250		Uncertain: trace very faint.
	E	M	6 18	30	-175		
	Z	M	11 17	31	+300		
	Z	M	17 4	21	-260		
	ZNE	eL_2	4 18				Via antipodes.
	E	M	23 37	21	-34		
	Z	M	23 43	19	-27		
	ZNE	eL_3	6 22				
		F	55				

FORM 3717.

H.695.W.8071.100.5/36.G.p923.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
April									
1	ZN	ePP	20	30	2			(12500)	
	NE	eSKS		36	1				
	ZNE	iPS		39	9				
	E	eSS		46	4				
	ZNE	eL		55					
	E	M	21	13	35	23	+30		
	Z	M		18	54	20	-23		
	N	M		18	58	20	-31		
		F	22	40					
2	ZN	e	6	40					
	NE	eL	7	15					
	Z	eL		22					
	N	M		29	6	24	-13		
	Z	M		29	12	25	+11		
	E	M		31	46	23	+8		
		F	8	55					
7		e	2	53					Very small.
		F	3	10					
8	ZE	eP	4	21	35			2190	
	NE	eS		25	14				
	ZNE	eL		27					
	N	M		28	14	13	+9		
		F		50					
9		e	1	20					Very small.
		F		35					
9	ZNE	eL	8	30	±				Time marks failed.
		F	9	0					
9	Z	i	16	25	9				Dilatation.
	NE	eL	17	18					Surface waves small and indefinite.
	Z	eL		25					
		F	18	25					
10		e	17	50					Very small.
		F	18	10					
10		e	20	34					
	NE	eL		40					
	Z	L		43	28				
		F	21	5					
12		e	0	36					Very small.
		F	1	5					
12	ZNE	eP	21	5	38			(12500)	
	ZNE	iPP		10	14				
	ZE	iPPP		12	38				
	N	iPPP		12	42				
	NE	iPS		19	47				
	Z	iSPP		20	36				
	NE	iPPS		20	44				
	E	iSS		25	44				
	N	iSS		25	54				
	Z	iSS		26	2				

FORM 3718.

M.O.

KEW OBSERVATORY, RICHMOND, SU

SEISMOLOGICAL BULLETIN.

APRIL, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
April									
12	NE	eSSS	21	30	9				
(Contd	ZNE	L		43					
	E	M		46	26	32	-42		
	N	M		59	12	21	-38		
	Z	M	22	1	38	18	-40		
		F	23	45					
15	ZNE	eP	16	7	37			2150	
	E	eS		11	13				
	ZNE	eL		14					
		F		30					
15	NE	eL	19	56					
	Z	L	20	4					
		F		25					
16	NE	eL	1	55					
	Z	eL	2	2					
		F		25					
16		e	14	7					Very small.
		F		20					
16		e	21	0					Very small.
		F		20					
19	Z	eP	5	23	25			15000	Diffracted.
	Z	iPKP		26	30				
	ZNE	iPP		28	54				
	ZNE	iPKS		29	58				
	NE	i		30	44				
	NE	eSKKS		35	28				
	NE	iSKSP		38	58				
	NE	iPPS		40	47				
	NE	eSS		46	30				
	E	iSKSP		48	44				By path greater than 180°.
	NE	iSSS		53	6				
	Z	iSSS		53	10				
	N	e		57	2				
	NE	L	6	0					
	Z	L		12					
	E	M		9	22	38	+185		
	N	M		9	42	38	+120		
	N	M		19	29	26	+100		
	E	M		23	48	23	+55		
	Z	M		32	1	20	-67		
		F	-	-	-				Overlapped by next shock.

FORM 3718.

H.695. W. 8071. 100. 5/36. G.p. 923

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	
April 19	ZNE	eP	9	15	30			10400	
	NE	eS		26	46				
	NE	eSS		32	36				
	NE	eL		38					
	Z	eL		44					
	E	M		51	58	24	+17		
	N	M		52	45	24	-35		
	E	M		59	55	19	+16		
	Z	M	10	0	1	19	-12		
		F	11	45					
21	ZNE	eP	2	23	20			9090	
	N	eS		33	35				
	ZNE	eL		43					
		F		55					
22		e	10	28					Disturbed by wind and microseisms.
		F		50					
23/24	Z	iP	23	26	26			9540	
	N	eS		37	3				
	N	L		42					
	ZE	eL		48					
		F	0	30					
27	ZNE	eP	0	10	57			8520	
	NE	eS		20	43				
	NE	eSSS		29	34				
	NE	eL		34					
	Z	eL		39					
	N	M		39	53	30	-50		
	E	M		39	53	30	+46		
		F	1	45					
27	ZNE	eL	7	9					
		F		45					
28	Z	e	6	12	53				Possibly microseismic.
	NE	e		19	6				
	NE	eL		43					
	Z	eL		51					
		F	8	0					

(sgd)

F.J.W. Whipple,

Superintendent,
6th April, 1936.

FORM 3718.

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May, 28	NE	eL	13	19					
	Z	eL		23					
		F		40					
28	Z	eP	19	2	2			10070	Pacific Ocean south of Mexico. 8°N.,104°W.(U.S.C.G.S.).
	NE	eSKS		12	39				
	NE	iS		13	3				
	NE	eSS		18	57				
	ZNE	eL		26					
	E	M		32	13	40	+24		
	Z	M		34	5	30	+17		
	N	M		35	7	30	-24		
		F	21	50					

(sgd)

F.J.W. Whipple,

Superintendent,
5th June, 1936.

FORM 3718.

SEISMOLOGICAL BULLETIN FOR ... 1934

Lat. 51° 26' 3" N, Long. 0° 18' 11" W. Light clay.

LITHOLOGIC FORMATION: RIVER GRAVELS RESTING ON LONDON CLAY.

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

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

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_g.	PENDULUM FREE PERIOD T.	DAMPING CONSTANT β.	$\frac{A\lambda}{m}$
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 ... CLOCK.
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 /	Δ km	REMARKS.
May 5	ZNE	eL	10	48					
	N	M		53	42	22	-3		
		F	11	25					
7		e	2	22					Very small.
		F		35					
8	ZE	i	9	37	45				
	ZE	e		38	53				
	N	e		42	45				
	NE	i		45	6				
	NE	e	10	5	21				No surface waves.
	NE	e		8	30				
		F		30					
8		e	16	5					
		F		25					
11	ZNE	e	17	43	35				
	Z	e		43	41				
	ZNE	e		49	53				
	Z	e		53	40				
	NE	e	18	5	21				
	NE	e		14	53				
	E	eL		25					
	ZN	L		30					
	E	M		37	12	32	-9		
	N	M		37	25	27	-1.5		
	Z	M		46	42	20	+1.6		
		F	20	10					

FORM 3717.
H719 W807/100,636 GP923

M.O. 597.

KEW OBSERVATORY, RICHMOND, SUR

SEISMOLOGICAL BULLETIN.

MAY, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
May,									
16	NE	i	7	27	19				No "Z" record.
	NE	e		35	58				
	NE	L		41					
	N	M		46	12	29	+56		
	E	M		46	43	29	-55		
		F	9	30					
19	NE	e	21	17	43				No "Z" record.
	NE	eL		48					
		F	23	15					
20	NE	e	3	27	13				No "Z" record.
	NE	i		28	10				
	E	e		35	29				
	NE	i		45	6				
	E	i		50	3				
	N	i		52	3				
	NE	L		59					
	E	M	4	13	1	29	+25		
	N	M		17	43	24	+17		
		F	6	20					
21	NE	eL	3	55					No "Z" record.
		F	4	25					
22	Z	e	1	33					
	NE	eL	2	0					
	Z	eL		6					
		F	3	5					
22/23	Z	e	23	41	58				
	NE	eL	0	35					
	Z	eL		41					
		F	1	40					
25	NE	e	3	32					No "Z" record.
	NE	eL		58					
	E	M	4	14	28	23	-8		
	N	M		15	54	22	+8		
		F	5	25					
27	Z	iP	6	29	52			7130	Compression; emergent on horizontal components. Widely felt in north-eastern India. Himalayas. 29°N., 84°E. (Strasbourg).
	ZNE	iPPP		34	1				
	NE	iS		38	28				
	Z	eS		38	33				
	NE	i		39	47				
	NE	eSS		43	48				
	N	iSSS		45	35				
	NE	L		46					
	Z	L		49					
	N	M		56	28	17	-160		
	E	M		56	28	17	+82		
	E	M	7	0	26	19	-88		
	Z	M		0	44	17	-95		
		F	10	15					

FORM 3718.

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR J U N E 1936.

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.	$-\frac{1k}{n}$
		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
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	Z	i	11 40 41				Very small.
	Z	e	42 14				
		F	50			9090	
3	ZN	eP	3 7 51				
	NE	eS	18 6				
	E	ePS	18 42				
	ZNE	eL	33				
	E	M	38 6	35	+11		
	N	M	45 43	24	+7		
		F	4 20			8800	Compression.
3	ZNE	eP	9 27 8				Pacific Ocean off Northern California.
	Z	ePP	30 13				
	E	eS	37 8				40°N., 127°W.(U.S.C.G.S.).
	ZNE	eL	51				
	E	M	55 57	20	-8		
	Z	M	10 0 45	16	+9		
	N	M	0 51	16	+8		
		F	11 0				
4		e	14 0				Very small.
		F	20				
5	Z	e	13 44				Horizontal components disturbed by wind.
		F	14 0				
5	Z	e	14 50				Horizontal components disturbed by wind.
		F	16 10				
6	NE	e	16 35 25				
	NE	eL	38				
	Z	L	41				
		F	17 5				

FORM 3717.

H732 W.8071 100 1/36 Sp. 23.

KEW OBSERVATORY, RICHMOND, SURR

SEISMOLOGICAL BULLETIN.

JUNE, 1929.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
June.									
7	ZN	eP	4	3	36			2490	
	NE	eS		7	40				
	ZNE	L		9					
		F		25					
7	ZNE	eP	4	43	11			2390	
	ZNE	eS		47	7				
	ZNE	L		48					
	E	M		53	14	18	+3		
		F	5	30					
9		e	0	39					Very small.
		F		55					
9	Z	e	16	49	55				
	ZE	e		53	50				
	NE	e	17	1	7				
	N	e		6	53				
	NE	eL		28					
	Z	eL		34					
		F	18	25					
10	NE	e	3	34	41				
	N	e		46	11				
	NE	eL		50					
	Z	eL		57					
	N	M	4	4	55	19	-11		
		F		40					
10	ZE	e	8	42	7				
	Z	i		44	9				NE, e.
	ZNE	i		44	48				
	N	e		51	55				
	Z	e		55	0				
	N	e	9	2	7				
	NE	e		16	21				
	ZNE	L		21					
	N	M		23	20	40	+22		
	E	M		24	2	38	-51		
	Z	M		34	14	22	+14		
	Z	L_2	10	17					Via Antipodes.
	Z	M		17	51	24	+12		
		F	11	20					
10	ZNE	e	17	40					
	ZNE	eL		46					
	N	M		46	58	19	-5		
		F	18	10					
10	NE	e	19	5					No "Z" record.
	NE	L		7					
	N	M		8	8	19	-5		
		F		25					
11	ZNE	eL	10	18					
	N	M		18	59	20	+3		
		F		35					

FORM 3718.

SEISMOLOGICAL BULLETIN.

JUNE, 1935

DATE.	COMPT.	PHASE.	G.M.T.	PERIOD.	AMPLITUDE.	Δ	REMARKS.
			h. m. s.	sec.	μ	km.	
June.							
13	Z	eP	0 38 4			2810	
	ZNE	eS	42 33				
	ZNE	eL	47				
	N	M	48 51	22	+4		
		F	1 5				
14	Z	eP	2 39 12			8900	
	N	eS	49 17				
	ZNE	eL	3 2				
		F	45				
14	Z	eP	17 7 40			3660	
	ZNE	eS	13 7				
	ZNE	L	16				
	E	M	18 42	22	-9		
	Z	M	21 9	14	-7		
	N	M	21 32	17	+11		
		F	18 0				
16	Z	e	0 55 38				Possibly not seismic.
	NE	eL	1 46				
	Z	eL	49				
	E	M	57 30	22	+3		
		F	2 50				
18		e	15 35				
		F	55				
19	Z	e	16 46 19				
	ZNE	eL	17 15				
		F	18 0				
20	ZNE	eP	6 37 19			2410	Compression.
	NE	eS	41 17				
	ZNE	eL	43				
		F	7 25				
20	ZNE	eP	8 30 2			2670	
	NE	eS	34 20				
	ZNE	eL	36				
		F	9 5				
20	ZNE	i	14 6 0				
	ZNE	L	10 30				
		F	30				
22	N	L	7 15				
	N	M	15 53	27	-6		
		F	20				
22	ZE	eP	19 36 26			5630	Compression.
	NE	eS	43 42				
	Z	eS	43 45				
	NE	L	49				
	Z	L	51				
	E	M	51 18	28	+6		
		F	20 40				

FORM 3718.

SEISMOLOGICAL BULLETIN.

JUNE, 1920.

DATE.	COMPT.	PHASE.	G.M.T.	PERIOD.	AMPLITUDE.	Δ	REMARKS.
			h. m. s.	sec.	μ	km.	
June.							
23		e	19 1				Very small.
		F	10				
27	ZNE	eP	3 23 20			2160	Compression.
	ZNE	iS	26 57				
	ZNE	L	31				
	N	M	32 15	21	+5		
	E	M	33 8	15	+5		
	Z	M	33 43	13	+5		
		F	4 20				
27	Z	iP	21 25 44			8950	Compression. NE, e.
	NE	iS	35 52				
	ZNE	eL	55				
		F	22 40				
28	Z	eP	8 23 26			9930	
	NE	eS	34 21				
	NE	eL	48				
	Z	eL	56				
		F	10 15				
28		e	18 15				Very small.
		F	40				
29	ZE	i	14 38 52				Compression.
	ZNE	i	40 11				
	ZE	i	42 1				
	NE	e	47 32				
	ZNE	eL	50				Long waves poorly developed.
	N	M	15 1 8	19	-8		
		F	16 20				
30	Z	iP	15 18 31			8450	Compression; NE, e.
	Z	i	19 38				
	Z	iPP	21 28				
	N	iPP	21 38				South of Kamchatka.
	ZN	iPPP	23 26				51°N., 160°E. (U.S.C.G.S.)
	NE	iS	28 14				
	Z	iS	28 16				
	NE	iSS	33 2				
	NE	iSSS	36 36				
	E	L	38				
	ZN	L	42				
	E	M	52 21	23	+130		
	N	M	55 56	23	+125		
	Z	M	16 1 39	16	+92		
	ZNE	L_2	17 29				Via Antipodes.
	Z	M	29 30	23	-22		
	N	M	29 38	24	+17		
		F	- - -				Overlapped by next shock.
30	ZNE	eP	19 34 34			5110	
	NE	eS	41 22				
	E	eSS	45 41				
	ZNE	eL	49				
	N	M	57 36	17	+31		
	E	M	57 45	18	+19		
		F	21 15				

FORM 3718.

(sgd). F.J.W. Whipple,
Superintendent.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR JULY, 1936.

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.	$\frac{4k}{\pi l}$
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
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.
July 2/3		e	23 50				Very small.
		F	0 5				
3	Z	e	3 20 52				Compression.
	Z	e	21 27				
	NE	eL	59				
	Z	L	4 7				
	N	M	15 28	22	+6		
		F	5 30				
5	Z	eP	19 9 31			12000	
	ZNE	iPP	13 58				
	NE	iSKS	20 27				
	Z	iPS	23 28				Celebes.
	NE	i	23 47				2°N, 123°E. (U.S.C.G.S.)
	NE	eSS	30 28				
	E	e	39 12				
	NE	L	43				
	Z	L	49				
	E	M	53 31	26	-29		
	Z	M	57 10	27	-43		
	N	M	57 16	28	-36		
		F	21 40				
6		e	2 54				Very small.
		F	3 15				
10	ZNE	eP	3 10 25			2110	
	NE	eS	13 58				
	ZNE	eL	15				
		F	30				
12	Z	e	3 2 1				
	ZNE	eL	4 3				
		F	5 15				

SEISMOLOGICAL BULLETIN.

JULY, 1939.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
July 13	ZE	iP	11	25	46			11000	Compression.
	ZNE	ePP		29	50				
	NE	e		36	23				Pacific Ocean off Northern Chile.
	NE	iSKS		36	29				
	Z	iSKKS		36	47				24°S, 71°W. (U.S.C.G.S.).
	Z	i		38	50				
	ZNE	iPS		38	57				
	E	iSS		44	35				
	N	i		47	31				
	NE	L		51					
	N	M		57	31	31	+210		
	Z	L		59					
	E	M	12	3	38	24	+150		
	Z	M		6	55	19	+150		
		F	16	0					
14		e	23	25					Very small.
		F		35					
15		e	2	40					
		F	3	5					
16	ZNE	eL	7	45					
	Z	M		48	47	15	-4		
		F	8	10					
21	Z	e	0	19	20				
	NE	e		33					
	NE	eL		40					
	Z	eL		45					
		F	1	5					
22	Z	e	6	38	32				
	ZNE	eL	7	40					
		F	8	35					
23	ZNE	e	6	40	6				
	ZNE	eL	7	41					
		F	9	0					
26	ZE	iP	7	50	27			10780	Compression.
	ZNE	ePP		54	38				
	NE	eS	8	1	59				Pacific Ocean of Northern Chile.
	ZE	iPS		2	16				
	ZNE	iPPS		3	57				24°S, 71°W. (U.S.C.G.S.)
	NE	eSS		8	40				
	E	eSSS		12	10				
	NE	e		17	37				
	NE	L		20					
	Z	eL		23					
	E	M		31	25	20	+19		
	N	M		31	33	19	-14		
	Z	M		31	39	19	-23		
		F	10	40					

KEW OBSERVATORY, RICHMOND, SURR

SEISMOLOGICAL BULLETIN.

JULY, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
July 28	ZNE	ePKP	5	39	5			15000	
	Z	ePP		41	36				
	NE	eSKKS		48	58				
	ZNE	eL	6	22					
	N	M		26	56	22	+6		
	ZNE	eL_2	7	13					Via Antipodes.
		F		45					
28	ZNE	ePKP	8	13	17			15000	
	Z	ePP		15	52				
	NE	eSKKS		23	10				
	ZNE	eL		55					
	ZNE	eL_2	9	46					Via Antipodes.
		F	10	25					
30	NE	e	14	22	37				Very small.
	NE	eL	15	5					
	Z	eL		15					
		F	16	20					
31	NE	eL	18	19					
	Z	eL		23					
	N	M		23	7	21	+5		
		F	19	5					

(sgd) A.W. Lee,

Officer-in-Charge.
6th August, 1936.

FORM 3718.

KEW OBSERVATORY, RICHMOND, SU

SEISMOLOGICAL BULLETIN FOR AUGUST, 1936.

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.	$\frac{Ak}{TI}$
		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.	PERIOD.	AMPLITUDE.	Δ	REMARKS.
August			h. m. s.	sec.	μ	km.	
1	NE	e	6 51 12				
	NE	eL	7 1				
	Z	eL	5				
	N	M	5 40	17	-9		
		F	8 0				
1	NE	eL	8 43				
	Z	eL	47				
		F	9 30				
4	Z	e	14 30 54				
	NE	e	40 1				
	ZNE	eL	15 0				
	N	M	8 54	16	-7		
	Z	M	9 15	16	+8		
		F	50				
5		e	4 7				Very small.
		F	20				
8	ZNE	e	4 18 18				
	NE	e	22 50				
	ZNE	e	23 4				
	ZNE	eL	25				
	N	M	25 33	30	+15		
	E	M	30 16	14	+11		
	Z	M	30 21	13	+9		
		F	5 5				
9	NE	eL	16 55				
	Z	eL	17 00				
	N	M	5 47	18	+2		
		F	30				

FORM 3717.

H 765. W80/1. 100 9/36 G 923

M.O. 391

KEW OBSERVATORY, RICHMOND, SURR

SEISMOLOGICAL BULLETIN.

AUGUST, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Aug.									
10		e	6	42	6				
		F		55					
12		e	22	34	19				
		F		45					
13		e	16	57					Very small.
		F	17	5					
13	ZNE	eP	20	16	50			11050	
	NE	ePP		20	56				
	Z	ePP		21	7				
	NE	eSKS		26	58				
	NE	eS		28	33				
	NE	ePS		30	24				Mindanao.
	ZE	ePPS		31	8				8°N., 127°E. (Manila).
	ZE	eSS		35	56				
	NE	L		53					
	Z	L		58					
	N	M	21	10	54	18	-24		
	E	M		10	55	17	-28		
	Z	M		10	59	17	+34		
		F	23	0					
14/15	NE	e	23	7					No "Z" record.
	NE	eL		25					
	N	M		42	2	17	-4		
		F	0	20					
17	NE	e	14	26					No "Z" record.
	NE	eL	15	5					
	N	M		25	52	19	+5		
		F	16	30					
18	NE	eL	7	46					No "Z" record.
	E	M		57	24	17	-5		
		F	8	20					
20	NE	eL	2	29					No "Z" record.
		F		50					
20/21		e	23	57					Very small.
		F	0	15					
21		e	13	3					Very small.
		F		15					
22	Z	iP	7	4	37			9950	Dilation. e. NE.
	ZNE	iPP		8	14				
	NE	eSKS		15	4				Formosa.
	NE	eSKKS		15	11				22°N, 121°E. (U.S.C.G.S.).
	N	iS		15	33				
	Z	iSP		16	32				
	N	iSS		21	48				
	E	iSS		22	28				
	NE	eSSS		26	44				
	NE	eL		30					
	Z	eL		39					
	E	M		48	50	19	+150		

FORM 3718.

SEISMOLOGICAL BULLETIN.

AUGUST, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Aug. 22 (Contd).	N	M	7	50	8	19	-180		
	Z	M		50	10	19	+185		
		F	10	30±					
22	NE	eL	11	53					
	Z	eL	12	0					
		F		25					
23/24	ZNE	iP	21	25	6			9650	Compression.
	ZE	i		25	28				
	ZE	ePP		28	54				
	ZE	e		32	18				
	ZE	eSKS		35	28				
	ZNE	iS		35	48				
	E	ePS		36	38				
	E	ePPS		37	5				
	Z	iPPS		37	15				
	NE	iSS		41	3				
	ZE	i		41	27				
	E	e		42	27				
	N	i		48	20				
	ZNE	eL		50					
	N	M	22	2	30	27	+80		
	Z	M		10	39	9	-14		
	E	M		12	52	19	-39		
	ZNE	eL_2	23	30					Via antipodes.
		F	0	35					
24/25	Z	e	22	43	55				
	Z	e		47	2				
	ZNE	eL	23	39					
	N	M		55	36	18	+9		
	Z	M		55	38	18	+7		
		F	1	5					
25	ZNE	e	19	2	53				
	ZNE	eL	20	3					
		F	21	15					
26	Z	e	11	47	2				Very small.
	ZNE	eL	12	22					
		F		55					
26		e	21	54					
	ZNE	eL	22	7					
		F		25					
28	Z	e	6	58	6				
	Z	e	7	0	27				
	ZNE	e		1	29				
	ZNE	eL		50					
		F	8	55					
28	ZNE	e	22	20	18				Not very distant.
	N	e		21	17				
	E	e		21	22				
	ZN	e		21	32				
	Z	e		21	58				
	ZNE	L		22	2				
		F		28					

DATE.	OBSVT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	
Aug. 29	ZNE	eL	13	6					
		F		30					
29		e	22	41					Very small.
		F	23	25					
30	ZNE	eL	17	56					Very small.
		F	18	20					
30		e	21	50					Very small.
		F	22	10					

(sgd)

F.J.W. Whipple,

Superintendent.
5th September, 1936

FORM 371

KEW OBSERVATORY, RICHMOND, SUR

SEISMOLOGICAL BULLETIN FOR SEPTEMBER, 1936.

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
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.	PERIOD.	AMPLITUDE.	Δ	REMARKS.
Sept.			h. m. s.	sec.	μ	km.	
2		e	13 37				
		F	50				
3	ZNE	eL	5 48				
		F	6 10				
3	ZNE	eL	13 43				
		F	14 35				
3		e	20 51				
		F	21 5				
4	Z	e	8 23 21				
	Z	e	27 27				
	EZ	e	33 44				
	Z	e	34 51				
	ZNE	eL	56				
	Z	M	9 12 31	15	+5		
	N	M	13 2	18	-8		
		F	11 10				
5	Z	e	4 36 7				
	ZNE	eL	5 5				
		F	25				
5		e	22 47				Very small.
		F	23 15				
6	ZNE	eL	4 57				
	N	M	57 16	19	+3		
		F	5 10				

H.779.W.8071. 100. 10/36. Gp. 923

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Sept.							
6	Z	e	17 59 35				
	ZNE	eL	18 55				
	E	M	19 11 21	18	+4		
	Z	M	11 33	18	-4		
		F	20 15				
7		e	13 17				
		F	25				Very small.
8	ZNE	eL	17 5				
		F	20				
12	NE	eL	18 43				
	Z	eL	48				
	E	M	51 41	18	+5		
		F	19 20				
13		e	4 10				
		F	15				Very small.
15		e	14 10				
		F	15				Very small.
16	Z	e	9 42 17				
	NE	e	10 6 25				
	NE	e	8 3				
	ZNE	eL	40				
		F	11 35				
17		e	8 25				
		F	45				Very small.
18		e	18 38				
		F	19 15				
18	Z	e	18 52 2				
	NE	e	19 2 8				
	E	i	2 34				
	Z	i	3 48				
	NE	eL	22				
	Z	eL	25				
	N	M	41 50	16	+7		
		F	20 55				
19	Z	iP	1 14 57				
	ZNE	e	19 8			9970	Compression.
	E	e	24 54				
	E	eSKS	25 28				
	NE	iS	25 54				
	N	i	26 5				NW of Sumatra (Strasbourg).
	E	i	26 40				
	NE	iPS	27 7				
	Z	iSP	27 11				
	Z	iSPP	27 49				
	N	eSS	32 4				
	ZNE	eL	38				
	N	M	53 46	27	-76		
	E	M	2 9 38	17	+54		
	Z	M	17 13	20	-54		
		F	5 30				

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Sept. 19	NE	e	6 53 12				
	ZNE	eL	7 18				
	N	M	22 13	25	-6		
		F	8 20				
							Very small.
19		e	15 25				
		F	45				
						2890	Dilatation. e_N.
21	ZE	iP	11 46 51				
	ZE	iS	51 26				
	ZNE	L	53				
	N	M	55 38	23	-8		
		F	12 30				
						2890	Dilatation. e_{NE}.
21	Z	iP	12 32 33				
	ZE	iS	37 8				
	ZNE	L	40				
	N	M	43 8	18	+3		
		F	13 30				
21	ZNE	eL	16 19				Overlapped by next shock.
		F	- - -				
21	Z	i	16 49 1				
	ZNE	eL	17 38				Overlapped by next shock.
		F	- - -				
21	ZNE	eL	18 20				
		F	19 0				
21	ZNE	eL	20 38				
		F	21 0				
						2890	
22	Z	eP	12 2 17				
	ZE	eS	6 52				
	ZNE	eL	9				
		F	25				
							Very small.
23		e	6 57				
		F	7 10				
25	E	eL	13 23				
	ZN	eL	28				
	E	M	28 55	33	-11		
		F	14 50				

(sgd)

F.J.W. Whipple,

Superintendent.
6th October, 1936.

FORM 3718.

AIR MINISTRY, METEOROLOGICAL OFFICE

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR OCTOBER, 1936.

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.
Oct.									
3		e	15	54					Not very distant.
		F	16	5					
3	Z	i	22	9	20				Compression. E.e.
	NE	e		15	13				
	E	e		18	29				
	ZE	i		19	29				
	NE	e		24	30				
	NE	e		33	31				
	NE	e		44	11				
	NE	L		46					
	N	M		47	0	27	+13		
	Z	L		55					
	E	M		59	41	18	-13		
	Z	M		59	45	19	+15		
	N	M	23	0	50	20	+22		
		F		40					
4	ZNE	eL	7	55					
		F	8	5					
5	Z	i	0	13	30				Compression.
	ZN	e		18	37				
	Z	i		23	45				
	Z	i		26	15				
	NE	e		37	48				
	NE	e		38	46				
	N	e		42	19				
	E	e		44	19				
	N	e		46	12				
	E	i		53	1				
	ZNE	eL	1	9					
	E	M		18	45	24	+9		
	Z	M		18	50	24	+5		
	N	M		25	58	19	-9		
		F	2	25					

H.792.W.8071.100 11/36 Gp.923

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Oct.							
5	ZNE	eL	7 3				
		F	30				
5	Z	iP	9 58 54			12000	Compression.
	Z	iPP	10 3 32				
	Z	i	3 56				N,E. e.
	NE	e	8 1				
	NE	eSKKS	10 30				Molucca Islands.
	ZNE	iPS	12 51				1°N.,127°E. (U.S.C.G.S.)
	ZNE	iPPS	13 56				
	NE	eSS	19 59				
	N	eSSS	23 51				
	ZNE	eL	26				
	E	M	47 16	26	-48		
	N	M	51 34	26	+55		
	Z	M	52 57	21	+48		
		F	12 40				
10		e	4 2				
		F	30				Very small.
11		e	3 5				
		F	40				
13	NE	eL	7 30				
	Z	eL	41				
		F	55				
14/15	ZNE	e	22 35 30				
	NE	eL	23 31				
	Z	eL	36				
		F	0 15				
15	ZNE	eL	22 3				
	E	M	9 55	23	+5		Confused by microseisms.
		F	40				
16	NE	eL	12 57				
	Z	eL	13 4				
	N	M	6 20	31	+9		
		F	30				
18 +	ZNE	eP	3 12 44			1150	Destructive in Northern Italy.
	E	iP_Q	13 0				
	E	iP*(1)	13 9				46°15'N.,12°30'E. (Strasbourg).
	N	iP*(1)	13 13				
	Z	iP*(2)	13 25				
	E	iPg	13 50				
	ZNE	iPs	14 20				
	ZNE	iS	14 39				
	ZE	iS_Q	15 5				
	ZN	iS*(1)	15 19				
	NE	iS*(2)	15 41				
	NE	i	15 51				
	NE	i	15 56				
	E	iSg	16 9				

\+ The notation for the additional pulses in the records of a near shock is that of H. Jeffreys, London, Mon. Not. R. Astr. Soc. Geophys. Supp., 3, No. 3, 1933.

M.S.

KEW OBSERVATORY, RICHMOND, SURR

SEISMOLOGICAL BULLETIN.

OCTOBER, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h. m. s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Oct. 18 (Contd.)	ZNE	L	3 16 26				
	E	M	16 44	8	+40		
	Z	M	16 50	7	+47		
		F	30				
18		e	17 2				
		F	30				
19	ZNE	eL	6 51				
		F	7 5				
19		e	7 11				Very small.
		F	15				
19	Z	i	12 24 0				
	Z	i	33 35				Compression. Horizontal components disturbed by wind.
	ZNE	eL	13 2				
	N	M	16 43	24	-14		
	Z	M	16 48	23	+11		
	E	M	17 40	23	+15		
		F	14 30				
21	Z	eL	14 40				No "N-S" record.
		F	15 5				
22	ZNE	e	4 15 51				
	ZNE	eL	24				
		F	55				
22/23	Z	iP	23 53 41			2030	Dilatation. N. e.
	ZNE	eS	57 7				
	ZNE	L	58				
	N	M	59 46	14	-7		
	E	M	59 58	12	-10		
	Z	M	0 0 16	11	-5		
	ZN	i	1 1				
		F	- - -				Overlapped by next shock.
23	Z	iP	0 4 28			2030	Dilatation. N. e.
	ZNE	eS	7 54				
	ZNE	L	9				
	N	M	9 33	15	-12		
	E	M	10 56	12	-15		
	Z	M	11 3	14	-9		
	ZN	i	11 48				
		F	1 5				
23	Z	iP	6 35 6			7250	Compression. N, E. e.
	Z	i	35 18				
	Z	iPP	37 33				N, E. e.
	E	iS	43 48				
	N	iS	43 52				
	ZNE	iPS	44 5				
	Z	i	44 29				Alaska.
	NE	i(SKS)	45 11				62°N., 149°W. (U.S.C.G.S.)
	N	e	51 41				
	NE	eL	55				
	Z	eL	57				

FORM 3718.

SEISMOLOGICAL BULLETIN.

OCTOBER , 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. "	Δ km.	REMARKS.
Oct. 23 (Contd.)	E	M	7	4	14	18	-47		
	N	M		5	24	19	+89		
	Z	M		5	29	18	-96		
	ZNE	eL_2	9	1					
		F	10	30					Via antipodes.
23	ZNE	eL	17	0					
		F		15					
23	ZNE	eL	20	55					
		F	21	30					
24	ZNE	eL	14	18					
		F		30					)
26	ZNE	eL	20	31					) Confused by wind and
		F		55					) microseisms.
26	ZN	iP	23	10	18				)
	ZN	iPP		10	36			2290	Dilatation. Azimuth about
	N	e		13	56				North.
	E	eS		14	6				
	ZNE	L		15					
	E	M		17	25	15	+28		
	Z	M		20	46	13	+24		
	N	M		21	14	13	+28		
		F		55					
29	NE	e	6	15	12				
	N	eL		27					
	ZE	eL		31					
	E	M		33	13	22	+5		
		F	7	5					
30	Z	i	18	57	30				
	NE	e	19	5	26				Dilatation. N, E. e.
	ZE	e		8	17				
	NE	e		13	19				
	E	e		17	6				
	N	e		18	47				
	NE	eL		27					
	Z	eL		31					
	E	M		36	0	33	+22		
	N	M		41	50	25	-25		
	Z	M		51	4	16	+9		
		F	21	20					
31	Z	e	16	29					
		F		40					Very small.

(sgd)

F.J.W. Whipple,

Superintendent,
6th November, 1936.

FORM 3718.

KEW OBSERVATORY, RICHMOND, SU

SEISMOLOGICAL BULLETIN FOR NOVEMBER, 1936.

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
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.
Novr. 1	NE	eL	17	1					
	Z	eL		5					
		F		35					
2	ZN	iP	15	9	54			9130	Compression. E, e.
	ZN	i		9	59				
	N	ePP		12	56				
	ZN	e		19	52				
	ZNE	iS		20	11				
	N	ePS		20	46				
	E	eSS		25	6				
	E	eL		31					
	ZN	eL		36					
	N	M		49	2	20	-45		
	E	M		50	14	19	+38		
	Z	M		52	19	18	-41		
		F	18	0					
2/3	ZNE	iP	20	58	30			9250	Compression. Amplitudes of iP as read in mm :- Z. +6.5 N. -1.9 E. -1.0 Azimuth about 30° E. of N. Felt in Northern Japan. 38°N., 142°E., (U.S.C.G.S.)
	Z	i		58	52				
	Z	i	21	0	27				
	ZN	iPP		1	45				
	NE	iS		8	53				
	ZNE	i		9	11				
	NE	i		10	9				
	E	iSS		14	39				
	ZN	i		15	26				
	E	iSSS		17	41				
	Z	e		19	31				
	NE	eL		21					
	Z	eL		24					
	E	M		28	35	37	+280		
	N	M		30	30	31	+160		
	Z	M		37	59	22	-101		
		F	0	55					

H.804-W.8071.100.12/36.G.p.923

SEISMOLOGICAL BULLETIN.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Novr. 3		e	5	18					
		F	6	0					
11	ZNE	eL	17	41					
		F		55					
13	ZN	iP	12	42	54			8130	Compression. Amplitudes of iP as read in mm :- Z. +1.8 N. -0.9 E. (0.0)
	ZN	i		44	24				
	Z	iPP		45	38				
	N	iPP		45	48				
	NE	iS		52	20				
	ZN	i		52	30				Bering Sea. 56°N., 165°E.,(Strasbourg).
	NE	eSS		56	54				
	N	i		57	23				
	NE	eL	13	0					
	E	M		4	4	33	+185		
	Z	eL		5					
	N	M		15	20	20	-100		
	E	M		15	20	20	+100		
	Z	M		24	18	14	+78		
		F	16	20					
17		e	5	39					Very small.
		F		45					
18	ZNE	e	16	0	8				Confused by wind and microseisms.
	ZNE	eL		7					
	E	M		7	39	18	+7		
		F		25					
19	ZE	iP	21	22	26			8710	Compression. Amplitudes of iP as read in mm :- Z. +1.8 N. (0.0) E. -0.9 Azimuth about west. Central America. 14°N., 91°W., (U.S.C.G.S.).
	ZE	iPP		25	19				
	E	iS		32	22				
	E	i		34	18				
	NE	SS		37	39				
	NE	eSSS		41	17				
	N	L		44					
	ZE	L		48					
	E	M		57	31	21	+40		
	Z	M		57	35	21	+39		
	N	M		57	46	20	+21		
		F	23	55					
21		e	22	30					Very small.
		F		55					
22	ZE	iP	18	31	24			8700	Compression.
	N	ePS		42	11				
	E	e		43	17				
	N	e		50	20				Central America. 14°N., 90°W., (U.S.C.G.S.)
	ZNE	eL		51					
	E	M	19	4	55	20	-10		
	N	M		6	32	22	-10		
	Z	M		7	47	18	-12		
		F		45					

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.
Novr. 26	NE	e	2	33	57			
	ZNE	eL		45				
	N	M		47	39	23	+6	
		F	3	30				
28	ZNE	eL	12	2				
		F		15				
29/30	NE	eL	23	36				
	Z	eL		44				
		F	0	5				

(sgd)

F.J. Scrase.

for Superintendent.
5th December, 1936.

FORM 3713

KEW OBSERVATORY, RICHMOND, SURI

SEISMOLOGICAL BULLETIN FOR DECEMBER 1934

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
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. 1	NE	eL	0 45				Confused by microseisms.
	Z	eL	55				
		F	1 20				
8/9	-	-	- - -				No records 8d 9h 30m to 9d 10h 30m.
13	ZNE	eL	22 25				Confused by wind and microseisms.
		F	23 0				
20	ZNE	eL	3 23				Confused by wind and microseisms.
	E	M	36 11	17	+7		
		F	55				
21	N	e	19 31 38				Large microseisms. Pacific Ocean off North America. 53°N., 133°W. (U.S.C.G.S.).
	ZNE	eL	35				
	N	M	44 35	16	+9		
		F	20 25				
25	ZNE	eL	20 45				
	E	M	54 9	17	+5		
	Z	M	54 21	17	+5		
		F	21 10				
26/27	Z	i	23 12 27				Dilatation. N.E.e. Possibly more than one shock.
	Z	i	16 46				
	Z	i	22 44				
	Z	i	30 22				
	N	e	31 47				
	NE	e	37 3				
	NE	e	37 49				
	E	e	43 21				
	ZN	e	44 55				
	E	e	51 47				

H.819.W.8071.100.1/37.H&p.923

SEISMOLOGICAL BULLETIN.

DECEMBER, 1936.

DATE.	COMPT.	PHASE.	G.M.T. h.	m.	s.	PERIOD. sec.	AMPLITUDE. μ	Δ km.	REMARKS.
Dec. 26/27 Contd.	ZNE	eL	0	2					
	N	M		25	39	22	+12		
	Z	M		28	52	20	+8		
	E	M	1	5	37	25	-16		
		F		55					
28	ZNE	eL	0	38					
		F		55					
29	ZNE	e	15	6	51				
	Z	e		9	0				
	ZNE	e		10	10				
	Z	i		11	3				
	Z	i		24	16				
	N	e		26	21				
	Z	i		37	31				
	ZNE	eL		40					
	N	M		52	46	29	-27		
	E	M		53	24	26	-26		
	Z	M	16	11	53	20	-14		
		F	17	45					

(sgd)

F.J.W. Whipple.

Superintendent,
5th January, 1937.

FORM 3718.