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FORM : 3717.

19FEB 1929

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR JANUARY 1929

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L$ (SEC)$^{-1}$
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928	24·80	24·7	+0·02	43·3
Z	21st. AUG. 1928	13·04	14·2	+0·08	112

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
JAN. 2	eL	3	21							
	F		30							
JAN. 4	eE	21	10	2						Not very distant.
	eNZ		10							
	F		10·8							
JAN. 6	eL	0	10							
	F		25							
JAN. 8	eL	8	15							
	F	9	0							
JAN. 11	e	2	1							
	F		5							
JAN. 13	iP	0	14	48					8260	Dilatation.
	i		15	39						Amplitudes of iP as read in mm. —
	PR_1		17	44						N E Z
	i		18	36						+9·4 +3·0 −14
	PR_2		19	37						Azimuth = 19°±1°, giving
	$PR_{3\,NZ}$		21	33						epicentre near 51°N, 150°E:
	iS_{NE}		24	21						SEA OF OKHOTSK.
	iPS		25	25						
	iN		27	10						Bombay telegraphs:
	iSR_3		30	18						iP − 0h. 14m. 12s.
	LE		35	59	28					S−P = 540 sec.
	M_1		37	5	33		−360			Δ = 7600 km.
	L		40·6		(50)					
	M_2		41	13	47	+930				Note very prominent
	M_3		41	47	45			+680		maxima with long periods

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SEISMOLOGICAL BULLETIN.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JAN. 13	M_4	0	46	4	26		+190			
cont.	M_5		47	14	26	+195				
	M_6		49	24	24	-230				
	M_7		50	31	26		+180			
	M_8		58	28	15			-80		
	F	4	30							
JAN. 13	eL	16	34							
	F	17	0							
JAN. 13	eL	19	21							
	F		45							
JAN. 14	eL	3	3							
	F		20							
JAN. 14	eLz	5	43							Traces on N and E components.
	F		55							
JAN. 16	i	8	32	8						
	L		53							
	M		57	34	25	+24				
	F	9	45							
JAN. 17	e	0	16							
	F		25							
JAN. 17	eP_Z	11	56.6						(7500)	Destructive at CUMANA, VENEZUELA.
	eS_E	12	5.3							
	PS_E		5	47						
	e_E		8	24						
	SR_{1E}		9	30						
	SR_{2E}		12	56						
	L_N		13.4		40					
	L_{EZ}		16		30					
	M_1		17	19	28	-78				
	M_2		17	30	29		+92			
	M_3		19	5	25			+84		
	M_4		19	17	24		-77			
	F	14	(15)							
JAN. 17	eL	23	26							
	F	0	0							
JAN. 18	$e(S)_N$	21	44	40						
	L_N		53							
	L_{EZ}		56							
	F	22	25							
JAN. 19	eL	3	55							
	F	4	25							
JAN. 20	ePR_{1Z}	15	13	31					(13000)	Disturbed by micro-seisms.
	$(PS)_E$		22	59						
	$(SR_1)_N$		34	41						

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SEISMOLOGICAL BULLETIN.

..... 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JAN. 20	L_{NE}	15	58							
cont.	F	16	15							
JAN. 21	eL	6	12							
	F	7	10							
JAN. 21	P_{NZ}	10	41	18						
	iS_{NZ}		49	45					6960	
	SR_{1N}		54	18						
	e_E		56·8		(20)					
	L	11	1		33					
	F	12	0							
JAN. 22	—									9h.27m. to 10h.28m. No records.
JAN. 22	eL	15	7							
	F		40							
JAN. 23	iP_Z	11	19	40						
	iS_E		24	6					2770	N record defective. Epicentre probably in Eastern Mediterranean Sea.
	iS_Z		24	10						
	L_E		26		(35)					
	L_Z		29·8		24					
	M_{EZ}		31·0		12					
	F		35							
JAN. 24	P_{EZ}	20	48	50						
	i		49	1					8930	Compression. Kew, Harvard and Tucson data give epicentre near 13°N, 91°W: PACIFIC OCEAN near GUATEMALA.
	PR_{1E}		52	2						
	S		58	57						
	i_N	21	3	34						
	SR_{1E}		4	12						
	SR_{2NE}		7	48						
	e_N		10·8		(25)					
	L		14·0		(44)					Bombay telegraphs: P 20h. 56m. 19s. S-P = 797 sec. △ = 13800 km.
	M_1		16	56	28		-58			
	M_2		23	10	19		-75			
	M_3		24	14	19	+34				
	M_4		26	9	17		-81			
	M_5		26	13	18			+65		
	F	23	30							
JAN. 27	iS_{NE}	16	24	2						
	L_{NE}		29·8						(6700)	
	L_Z		31·8		28					
	M_1		32	47	(13)	+13				
	M_2		33	10	25		+19			
	F	17	20							
JAN 30	—									
JAN. 30	L	17	50							9h.50m. to 10h.34m. No records.
	F	18	20							
JAN. 31	eL	18	47							
	F	19	10							

F. J. W. Whipple
5. 2. 29.

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FORM : 3717.

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

EDINBURGH. 18MAR1929

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR FEBRUARY 1929

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L$ (SEC)$^{-1}$
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928	24·80	24·7	+0·02	43·3
Z	21st. AUG. 1928	13·04	14·2	+0·08	112

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
FEB. 1	iP_{EZ}	17	23	10					5350	Compression.
	i		23	16						Amplitudes of iP as read in mm. —
	i_{EZ}		24	2						N E Z
	i_{EZ}		24	25						−0·2 −1·9 +6·2
	ePR_1		25	19						Azimuth : 85° ± 5°, giving
	iPR_2		25	55						epicentre near 34°N, 63°E.
	e_E		28	27						Destructive at Kuliab,
	iS_{NE}		30	11						Turkestan.
	i_E		31	34						
	i_{NZ}		31	38						
	i_{NE}		32	36						
	SR_{1NE}		34	19						Bombay telegraphs :
	SR_{2E}		35	0						iP 17h. 18m. 21s.
	iL_N		35	24						iS-iP = 135 sec.
	M_1		36	6	14	+40				Δ = 1350 km.
	iL_Z		37	33	14					Shock felt at Delhi and
	eL_E		37	53						Lahore.
	M_2		38	19	17			−45		
	M_3		42	19	17	+47				
	M_4		42	44	14		+40			
	F	19	20							
FEB. 2	iP_Z	0	9	59					6290	Compression.
	i_Z		11	1						Tucson, Ottawa and Kew
	(eS_E)		17	47						data give epicentre
	iS_{NE}		17	51						near 1°S, 23°W.
	iL_{NE}		23	47	(30)					(Atlantic Ocean)
	M_1		24·3		(30)	+60	−65			
	M_2		34	25	14	−29				

Malby & Sons T to S

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FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, EN

FEBRUARY 1929

SEISMOLOGICAL BULLETIN.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
								+25		
FEB. 2	M_3	0	36	42	11					
Cont.	M_4		41	5	19		+32			
	F	4	0							
FEB. 3	L_{NE}	3	31·9							
	M_N		42		4 16	-8				
	F	4	0							
FEB. 4	eL	11	1							
	F		15							
FEB. 5	eL	4	27							
	F		40							
FEB. 6	eL	3	45							
	F		55							
FEB. 6	iP_Z	7	0	'55					8400	Dilatation. Azimuth about N.NE. Probably a repetition of 1929 Jan. 13d. 0h. (Sea of Okhotsk). A very small disturbance with exceptionally sharp P phase.
	i_Z		0	56						
	iP_{NE}		0	57						
	S_E		10	35						
	PS_E		11	41						
	L_{NE}		25							
	M_E		35			20				
	F	8	0							
FEB. 8	eL	2	44							
	F	3	10						(9540)	Compression. Pacific Ocean, south of Mexico. 13°·1N, 99°·2W, according to J.S.A.
FEB. 10	eP_Z	15	51	23						
	$e(S)_E$	16	2·0							
	$e(SR_1)_N$		5·8							
	$e(SR_2)_N$		10·2							
	L		16					+27		
	M_1		24	54		19			+25	
	M_2		24	58		19				
	F	17	45							
FEB. 13	eL	22	50							Disturbed by large microseisms.
	F	23	10							
FEB. 14	eL_{NE}	15	26							Traces on Z record.
	M_{NE}		30·8			18				
	F	16	10							
FEB. 15	eL_{NE}	6	22							
	F	7	0							
FEB. 15	eL	8	40							
	M_E		47			22				
	F	9	30							
FEB. 16	e_{NE}	20	37							
	F	22	0							

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KEW OBSERVATORY, RICHMOND, SURREY,

SEISMOLOGICAL BULLETIN.

FEBRUARY 1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
										Z record disturbed by microseisms.
FEB. 18	e_{NE}	19	3	24						
	L_E		4	46						
	M_E		4	53	(13)		-9			
	F		7							
										4h.30m to 7h.30m. No records
FEB. 20	-									
										Traces on N record.
FEB. 21	e_Z	21	23	3						
	i_Z		24	7						
	e_E		45·3							
	e_E		46	57						
	F	22	30							
										Compression.
FEB. 22	eP_Z	20	51	4						Amplitudes of iP as
	iP		51	9					5900	read in mm.
	iPR_2		53	57						N E Z
	i_Z		55	29						+1.15 +1.8 +3.4
	iS_E		58	35						Azimuth : 240°±2° giving
	iS_N		58	37						epicentre near 12°N, 44°W,
	iS_Z		58	40						(Atlantic Ocean)
	SR_1	21	2	3						
	L_{NE}		3	35	(35)					
	L		6	8	(28)					
	M_1		6	28	(25)	-120				
	M_2		7	11	24		+150			
	M_3		8	25	13	+87				
	M_4		9	44	18			+110		
	M_5		9	48	19		-110			
	M_6		14	48	15			-90		
	M_7		14	50	17	+61				
	M_8		15	25	16		+95			
	F	0	0							
									8160	Compression.
FEB. 26	iP_Z	9	12	20						Harvard, Tucson and
	iS_{NE}		21	48						Kew data give 53·5 N,
	SR_1		26	45						161° W, (South of
	L_{NE}		33							Alaskan Peninsula).
	M_N		43	42	25	+18				
	F	10	40							
										Disturbed by large microseisms.
FEB. 27	eL	20	2							
	F		10							

J. W. Shipple. Supt.
March 5th 1929.

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FORM : 3717.

AIR MINISTRY, METEOROLOGICAL OFFICE

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR MARCH 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L$ (SEC.)$^{-1}$
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928	24·80	24·7	+0·02	43·3
Z	21st. AUG. 1928 to 20th. MAR. 1929	13·04	14·2	+0·08	11·2

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
MAR. 1	SR_1	7	55·7							Epicentre near Vancouver Straits; 54°·1 N, 130°·7 W, according to Jesuit Seis. Assoc.
	e_E		59·4							
	L	8	4							
	M		11	56	17	+13				
	F	9	30							
MAR. 1	e	10	35	44						
	e		36	9						
	F		39							
MAR. 3	iP_{EZ}	16	56	51					2420	
	$e(S)_E$	17	0	50						
	iL_E		1	54						
	M		3	12	20		+11			
	F		30							
MAR. 3	eL	18	45·9							Probably a repetition of the preceding shock.
	M_E		47·4		20					
	F		55							
MAR. 7	iP_{NE}	1	46	36					8630	Dilatation. Amplitudes of iP as read in mm.− N +9·0, E −1·05, Z −. Azimuth = 353° ± 0°·5, giving epicentre near 50°·5 N, 169°·5 W; Aleutian Islands. Z record defective. Bombay telegraphs:− iP 1h. 47m. 48s. iS−iP = 10m. 41s. Δ = 9400 km.
	iS_{NE}		56	28						
	iSR_{1N}	2	1	54						
	iSR_{2N}		5	16						
	i_E		7	36	(35)					
	iL_N		11	50	45					
	M_1		13	16	35	−470				
	M_2		16	32	26		−230			
	M_3		19	4	24	+220				
	M_4		20	52	20	+175				
	M_5		23	12	19		+220			

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KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. MARCH 1929

DATE.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
MAR. 7 cont.	M_6	2	24	19	20	+210				Long waves via the antipodes.
	eL_2	5	15							
	M_7		30.7		23	+5	-4			
	F	6	50							
MAR. 8	—									No records from 10h. to 11h.
MAR. 9	e(S)NE	2	26	41						No Z record.
	L	3	1.6							
	M_N		8.7		22					
	F	4	10							
MAR. 9	eZ	11	13.2							
	eNZ		29							
	eNE		37.0							
	L_{NE}	12	3		55					
	L_Z		12		40					
	M_1		25	2	21	+42				
	M_2		26	50	21		-40			
	M_3		28	0	20			-60		
	M_4		34	22	19	+42				
	M_5		34	50	18		+37			
	M_6		35	18	18			-35		
	F	14	0							
MAR. 10	eL	1	9							No Z record.
	F		35							
MAR. 10	eNE	14	58.9							Very distant.
	(L)	15	25							No Z record.
	F	16	0							
MAR. 11	eL_Z	14	5							
	F		10							
MAR. 12	—									No records from 10h. 30m. to 11h. 40m.
MAR. 13	eZ	11	10	32						
	eNE		17	44						
	F		40							
MAR. 14	eL	15	0							
	F		10							
MAR. 14	eL	19	30							
	F		45							
MAR. 15	eL	2	42							
	F	3	0							
MAR. 15	eL	14	3							
	F		30							
MAR. 15	eL	18	15							
	F		40							
MAR. 18	eL	2	45							
	F	3	10							

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SEISMOLOGICAL BULLETIN.

MARCH 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
MAR. 18	eL	15	48							
	F		55							
MAR. 18/19	e(P)z	23	33	40					(9200)	
	e(S)NE		44·0							
	LNE	0	2·4		40					
	Lz		10							
	ME		10·5		21					
	F		45							
MAR. 19	eLz	10	15							
	F		20							
MAR. 19	ez	21	5·9							Z record defective before 21h. 4m.
	LNE		18							
	Lz		24·3							
	ME		36		23					
	F	23	45							
MAR. 20	e(L)	21	56							
	M	22	10·1		17					
	F	23	45							
MAR. 21	P	2	49	9					(9230)	Compression.
	e(S)E		59	31						
	SR2	3	8·1							
	LNE		14·4		40					
	Lz		18		27					
	ME		25	51	18		−14			
	F	4	30							
MAR. 22	eL	5	12							
	F		25							
MAR. 22	eL	3	45							
	F	4	10							
MAR. 23	eL	20	56							
	F	21	35							
MAR. 26	eE	5	34	33						Traces on N and Z records.
	F		45							
MAR. 27	e	21	18							
	F		30							
MAR. 27	e	22	23							
	F		35							
MAR. 28	eL	3	52							
	F	4	20							
MAR. 28	eN	20	44	5						
	LNE	21	7							
	MNz		18		18					
	F	22	10							

SEISMOLOGICAL BULLETIN.

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DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
MAR. 31	e_N	3	26	55						
	e_L		36							
	F	4	0							
MAR. 31	eL_{NE}	6	20							
	M_N		38		22					
	F	7	10							
MAR. 31	eP_Z	20	30	(5)					(9370)	
	eS_{NE}		40	34						
	L_{NE}		58							
	M_E	21	7		22					
	F		40							
Correction to Bulletin for February 1929										
FOR										
FEB. 21	e_Z	21	23	3	etc.					
READ										
FEB. 20	e_Z	21	23	3	etc.					

R.R. Walton.
for Superintendent.
5.3.29.

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3717.

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

EDINBURGH. 23 MAY 1929

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR APRIL 1929.

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 "MODERM SEISMOLOGY" (LONDON, 1913).

COMPONENT.	DATE FROM WHICH CONSTANTS APPLY.	GALVANOMETER FREE PERIOD T_1 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT $\mu 2$	$Ak/\pi L$ (SEC)$^{-1}$
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928	24·80	24·7	+0·02	43·3
Z	20th. MAR. 1929	13·04	12·5	+0·11	112

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.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az	Δ KM.	REMARKS.
APR. 2	e	4	8							
	F		15							
APR. 5	eL	9	25							
	F		30.							
APR. 5	e_E	23	47	57						
	L		51							
6	F	0	5							
APR. 7	eP_{EZ}	19	44	31					8950	
	eS_E		54	39						
	L	20	12							
	M		17		20					
	F		50							
APR. 8	e_Z	10	30	1						
	e_Z		34	32						
	e		43	33						
	L	11	(17)							
	F		45							
APR. 9	e_Z	4	6	34						
	e_Z		10	41						
	L		47							
	F	5	20							
APR. 10	e_E	5	47	13						
	L		49	7						
	M_Z		50	43	11			+8		
	F		57							

P836.3668.262/100.8/29.

Malby & Sons, T to S

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

APRIL 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
APR. 10	e_Z	16	37							
	F		45							
APR. 11	e_Z	1	2							
	F		6							
APR. 11	e_Z	1	45							N and E records disturbed by wind
	F		55							
APR. 12	e_Z	0	38							
	F		45							
APR. 12	e_Z	5	28							
	F		31							
APR. 13	e_L	7	35							
	F		55							
APR. 13	e	21	31							
	e_{LE}		51							
	e_{LNZ}	22	2							
	F		30							
APR. 16	e_{LE}	1	35							
	F	2	0							
APR. 16	e_L	15	0							
	F		20							
APR. 17	e_L	3	28							
	F		40							
APR. 17	e_L	19	27							
	F		35							
APR. 19	e	14	19·4							Not very distant.
	e_N		21	16						
	e_Z		21	46						
	e_E		22	6						
	M_{EZ}		22	56	12					
	F		30							
APR. 20	e	1	12·6							Probably a repetition of preceding shock.
	i_Z		15	33						
	i_E		15	41						
	M_{EZ}		17	15	12		-17	+15		
	F		25							
APR. 21	e	12	52							
	F	13	15							
APR. 22	e	8	30·7							
	M		33·0							
	F		35							
APR. 23	e_{LNE}	1	6							
	F		15							

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

APRIL 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
APR. 27	eL	12	22							
	F		50							
APR. 27	eL	22	0							
	F		40							
APR. 28	eZ	5	16							
	F		17							
APR. 28	e	19	45							
	F		49							
APR. 29	e	18	40							Not very distant.
	M		43		11					
	F		48							
APR. 30	eL	19	41							
	F		51							
	CORRECTIONS TO BULLETIN FOR MAR. 1929.									
FOR MAR. 9	e(S)NE	2	26	41						
READ MAR. 9	eSNE	2	36	41						
	REVISED READINGS FOR MAR. 19d. 21h.									
MAR 9	eP Z	21	5	59					(9400)	Z record defective before 21h. 4m.
	eSNE		6	(30)						
	eSR1		25·0							Pacific Ocean, near Central America; 13°N, 91°W, according to Jesuit Seis. Assoc.
	LN		27·9							
	LEZ		31·5							
	ME		36		23					
	F	23	45							

J. J. Whipple. Supt.
6. May 1929

International Seismological Centre From the ISC collection scanned by SISMOS

AIR MINISTRY, METEOROLOGICAL OFFI

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR MAY 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L$ (SEC):
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928	24·80	24·7	+0·02	43·3
Z	20th. MAR. 1928	13·04	12·5	+0·11	112

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.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
MAY 1.	eZ	7	57							
	eL	8	38							
	F	9	15							
MAY 1	iP	15	45	28					4610	Dilatation.
	PRIEZ		47	9						Amplitudes of iP as read in mm. –
	iS		51	49						N E Z
	SRINZ		54	51						+0·1 +2·0 −4·6
	LN		59.9		32					
	LE	16	1	41	(25)					Azimuth = 87°±3°, giving epicentre near 38°N, 56°E.
	M1		1	54	24	−240				
	L2		2·3							Destructive near the Persian-Turkestan frontier.
	M2		5	22	19	+210				
	M3		6	36	17		−210			
	M4		7	1	16	(−330)				Telegram from Bombay gives P 15h. 43m. 7s.
	M5		8	48	17	+195				S-P : 260 sec.
	M6		9	46	15			−140		Δ = 2700 km.
	M7		11	40	13		+185			
	M8		11	44	12			−160		
	L2	18	20		..	..	..	..	..	Long waves via the antipodes.
	F	19	45							
MAY 1	e	21	18							
	F		21							
MAY 1	eL	22	46							
	F	23	25							

P2665 6011 373 100.6/29

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International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

.....MAY.....1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
MAY 2	iP_Z	14	38	12						N and E records disturbed by wind.
	L	15	12							
	F		50							
MAY 3	eL	16	46							
	F	17	0							
MAY 6	e_Z	5	28							
	L	6	12							N and E records disturbed by wind.
	F		40							
MAY 7	e_Z	16	55·6							
	e_Z	17	5	19						
	L_E		32		35					
	L_Z		39.1							
	M_1		49	26	20		+18			
	M_2		50	37	20			+35		
	M_3		50	43	20	+32				
	F		?							F overlapped by the following disturbance.
MAY 7	eL	18	40							
	F	19	15							
MAY 10	eL	11	56							
	F	12	3							
MAY 11	e	19	25·7							Not very distant.
	e_E		27	41						
	i_Z		28	25						
	$i(L)_E$		28	33						
	M_1		29	39	16	+13				
	M_2		29	56	11		-18			
	M_3		29	58	12			+18		
	F		35							
MAY 12	eL	10	17							
	F		45							
MAY 12	eL	17	11							
	F		20							
MAY 13	e_Z	13	44	35						N record disturbed by wind.
	$e(L)_E$		52							
	F	14	25							
MAY 18	P_Z	1	11	26						
	L_{NE}		30							
	F	2	0							

International Seismological Centre From the ISC collection scanned by SISMOS

KEW OBSERVATORY, RICHMOND, SUR

SEISMOLOGICAL BULLETIN.

MAY 1929

DATE.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
MAY 18	P_{EZ}	6	43	48					3120	Compression.
	iS_N		48	40						Destructive near Siwas,
	L_N		50	16	45					Asia Minor.
	M_1		52	12	39	+110				40°5 N., 37° E., according
	L_Z		53							to Strasbourg.
	M_2		54	29	24	-54				
	M_3		56	3	22		+53			
	M_4		58	46	17			-24		
	F	8	0							
MAY 20	P_Z	5	4	49					8570	Near Aleutian Islands.
	eS_{NE}		14	38						53°N., 178°W., according
	e_N		15	34						to U.S.C. & G.S broadcast
	SR_N		20	14						message.
	L		32							
	M_E		47		18					
	F	7	45							
MAY 21	eP_Z	16	48	16					9210	
	eS_{NE}		58	37						
	SR_{NE}	17	57							
	L_{NE}		18		40					
	L_Z		23		30					
	M_1		23	36	26		-80			
	M_2		24	42	26	-62				
	M_3		33	37	18			+35		
	F	19	30							
MAY 22	eL_{EZ}	21	26							
	F	22	20							No N record.
MAY 24	eL	19	16							
	F		30							
MAY 25	iP_Z	12	12	11						
	$i(S)_E$		22	22	..	..	..	..	..	May be ScPcS.
	$i(S)_{NE}$		22	32						
	L		36							
	F	13	10							
MAY 26	—									No records from 1h. to 5h. 30 m.
MAY 26	eL	9	43							
	F	10	15							
MAY 26/27	eP_Z	22	57	19					7710	Pacific Ocean near Alaska.
	eS_{NE}	23	0	25						56°N., 137°W according
	L_{NE}		8.5		50					to U.S.C. & G.S broadcast
	M_1		11	6	(50)		(-490)			message.

International Seismological Centre From the ISC collection scanned by SISMOS

SEISMOLOGICAL BULLETIN.

MAY 1929

DATE.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. As μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
MAY 26/27	Lz	23	13	3	(39)					Telegram from Bombay
Cont.	M1		13	15	(39)	(+350)				P 22h. 54m. 23s.
	M2		20	10	16		+185			S-P : 645 sec.
	M3		21	18	18	-300				Δ : 9700 km.
	M4		21	22	18			+210		
	M5		23	53	16	-260				
	M6		23	56	16			+210		
	M7		26	13	16		(-220)			
	M8	1	18		20	7				Via antipodes.
	F	3	20							
MAY 27	eL	5	46							
	F	6	15							
MAY 28	eZ	0	8	24						
	L		38							
	F	1	35							
MAY 28	eL	5	52							
	F	6	10							
MAY 28	eZ	7	20							N and E records disturbed by wind
	F		22							
MAY 30	ePZ	9	57	31					(11500)	Destructive in province of Mendoza, Argentine.
	PR1Z	10	1	47						
	LNE		29							
	LZ		36							
	M1		41	43	20	+20				N and E records dis-
	M2		41	47	20			+25		turbed by wind.
	M3		42	2	20		+20			
	F	13	0							
MAY 30	Lz	13	3							
	F		55							
MAY 30/31	—									No records from 30d. 19h. to 31d. 11h.

SEISMOLOGICAL REPORTS IN CODE
SPECIFICATION OF EPICENTRES

It is proposed that epicentres shall be included when possible in the seismological reports broadcast from G. F. A.
In the additional five figure group, two figures give the latitude and three figures the longitude. To indicate whether latitude is north or south and longitude east or west, an addition is made to the middle digit.

If latitude is	north	and the longitude is	east	the number added is			2
,,	south	,,	,,	east	,,	,,	4
,,	south	,,	,,	west	,,	,,	6
,,	north	,,	,,	west	,,	,,	8

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3717.

19 JUL 1929

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR JUNE 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT $\mu 2$	$Ak/\pi L$ (SEC).
N	13H. JUNE 1928	24·68.	24·8	−0·01	46·9
E	18H. JUNE 1928	24·80	24·7	+0·02	43·3
Z	20H. MAR. 1929	13·04	12·5	+0·11	112

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.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
JUNE 1	eP_Z	18	11	38					(9770)	
	eS_{EN}		22	(26)						
	L_{NE}		41							
	F	19	25							
JUNE 2	$e(P)_Z$	21	50	44					(8900)	Japan. 40°N., 140°E., according to Jesuit Seis. Assoc.
	$_2Z$		52	4						
	$_1S$	22	0	49						
	L		?							
	M_E		29		20		6			? Deep focus or several shocks overlapping.
	F	23	10							
JUNE 3	P_Z	20	38	6					8690	
	S_{NE}		48	1						
	L_N		52·4		36					
	L_{EZ}		54·7		26					N and E records disturbed by wind.
	M_N		56	39	16	-48				
	F	21	30							
JUNE 4	e_Z	7	24							
	F		45							
JUNE 4	e_Z	15	33·8							
	e_E		39	28						
	L	16	(0)							
	F		55							
JUNE 5	e	9	30							
	F		45							

P962, 8272.-529, 100, 7/29.

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURI

International Seismological Centre From the ISC collection scanned by SISMOS

SEISMOLOGICAL BULLETIN.

JUNE 1929

DATE.	PHASE.	G.M.T. HR.	G.M.T. MIN.	G.M.T. SEC.	PERIOD. SEC.	AMPLITUDE. An μ	AMPLITUDE. Ae μ	AMPLITUDE. Az μ	Δ KM.	REMARKS.
JUNE 6	ePz	10	59	41					5940	
	iSN	11	7	14						
	LNE		14							
	Lz		16·5							
	MNE		22							
	F	12	30							
JUNE 6	e	14	45							
	F	15	40							
JUNE 6	eL	16	45							
	F	17	15							
JUNE 6	ez	17	37							
	F	18	40							
JUNE 9	iPz	9	20	5					8830	Compression.
	SNE		30	7						Kurile Isles.
	SRINE		35·8							47·1°N., 153·7°E according
	LE		44		50					to Jesuit Seis. Assoc.
	M1		51	40	26		-33			
	M2		57	48	19	+27				
	M3	10	4	38	14			+15		
	F	12	30							
JUNE 10	eL	0	2							
	F		30							
JUNE 10	eL	1	0							
	F		10							
JUNE 10/11	iP	23	7	51					2210	Dilatation.
	iS		11	32						Amplitudes of iP as
	L		13·0		(35)					read in mm:
	M1		15	41	17		+13			N E Z
	M2		16	40	15	-15				+2·85 +0·4 -3·0
	M3		19	17	12			+12		Azimuth = 9°±1°, giving
	F	0	35							epicentre near 71°N., 9°E.
										Arctic Ocean between
										Norway and Greenland.
JUNE 12	(ez)	12	1	55						
	ez		3	41						
	ez		6	21						
	eNE		14	18						
	L		(44)							
	M	13	(0)		19					
	F	14	10							
JUNE 13	iP	0	24	26					8830	Compression.
	iz		26	25						Kurile Isles.
	SN		34	28						47·1°N., 153·7°E, according
	eSRIN		40	16						to Jesuit. Seis. Assoc.
	L		?							Repetition of June 9d.

International Seismological Centre From the ISC collection scanned by SISMOS

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. JUNE 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JUNE 13 cont.	M_1	1.	1	33	20		-39			
	M_2		1	51	20			-27		
	M_3		2	6	21	+50				Overlapped by following disturbance.
	F		?							
JUNE 13	iP	0	38	2					8890	Compression.
	iS_{NE}		48	7						Repetition of preceding shock.
	SR_{1N}		54							
	M_1	1	9	22	24		+59			
	M_2		17	4	17	-57				
	M_3		22	35	14			+38		
	F	4	5							
JUNE 13	ePR_{1Z}	9	42·2						(11000)	P lost in changing charts.
	iN_E		49	58						Philippine Islands.
	iN_E		52	27						14° N., 133°·5 E., according to Strasbourg.
	L_{NE}	10	11							
	M_1		30	44	21		-69			Bombay telegram:
	M_2		31	13	19	(-90)				P 9h. 33m. 59s.
	M_3		31	28	18			+78		S-P 454 sec.
	F	13	0							△ 6000 km.
JUNE 13	eL	13	58							
	F	14	0							
JUNE 13	eL	20	43							
	F	21	35							
JUNE 13/14	e_Z	23	19	12						
	e_{NE}		25	31						
	L		56							
	M	0	8		19					
	F	1	40							
JUNE 15	eL	0	19							
	F		40							
JUNE 15	eL_{EZ}	10	2							N records disturbed by wind.
	F		15							
JUNE 15	eL_{EZ}	20	37							
	F	21	15							
JUNE 15	eL_{EZ}	22	7							
	F		30							
JUNE 16/17	eP'_{NZ}	23	7	38					19000	Compression.
	i_{NZ}		8	56						Destructive in New Zealand.
	iPR_{1Z}		12	38						40°·5 S., 173°·2 E according to Jesuit Seis. Assoc.
	iPR_{1N}		12	44						
	PR_{2Z}		16	46						E record defective.
	i_Z		23	8						
	iPS_N		26	36						
	SR_{1N}		34	4						
	e_N		39.5							
	iSR_{2N}		41	36						

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. JUNE 1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JUNE 16/17 cont.	e_N	23	45·5							
	e_N		53·6							Bombay telegram:
	L_N	0	(5)							
	M_1		17	15	27		+210			P 23h. 2m. 5s.
	M_2		31	38	19	+135				S-P 652 sec.
	M_3		36	24	18	+155				△ 9600km.
	M_4		39	16	18			+120		
	F	4	40							
JUNE 17	e_Z	10	34·9							
	L_N	11	12							
	M		24		18					
	F	12	25							
JUNE 19	eP_Z	7	44	55					(12500)	
	ePR_{1Z}		49	19						
	$eScPcS_{NE}$		55	35						
	e_{NE}		56	47						
	L	8	22							
	M_{NE}		38		19					
	F	10	10							
JUNE 20	eL	19	30							
	F		45							
JUNE 20	eL	21	10							
	F		35							
JUNE 21	eL	5	45							
	F	6	15							
JUNE 22	eP'_Z	15	50	14					(19000)	Probably a repetition from the New Zealand epicentre of June 16.
	e_Z		51	28						
	ePR_{1Z}		55	19						
	ePR_{2Z}		59	22						
	L_{NE}	16	48							
	L_Z		58							
	M_E	17	6		21					
	M_Z		11		19					
	F	18	5							
JUNE 22	eP'_Z	18	59	11						
	e_Z	19	0	25						Probably a further repetition from the New Zealand epicentre.
	ePR_{1Z}		4	17						
	e_Z		5	59						
	L_E	20	8							
	L_Z		11							
	F	21	0							
JUNE 23	eL	4	18							
	F		30							
JUNE 23	eL_{NE}	22	43							No Z record.
	F	23	20							

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

JUNE 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JUNE 24	eL	2	56							No Z record
	F	3	3							
JUNE 25	eLz	10	17							N and E records disturbed by wind.
	F		45							
JUNE 26	ez	6	41·3							
	L	7	6							
	F	8	0							
JUNE 26	ez	17	1·9							
	L		38							
	F	18	20							
JUNE 27	ePz	13	1	37					(12000)	Compression. No N record.
	ePR1z		6·1							
	iPR2z		8	50						
	eScPcSE		12	42						Bombay telegram: P 13h. 6m. 17s. S-P 587 sec. △ 8500 km.
	e(S)E		13	57						
	iPS		15	34						
	ePPSE		16·3							
	ez		16·9							
	iSR1E		21	58		..	..	..	..	Well marked phases
	iSR2E		25	37	..	..	..	..	..	
	iSR3E		28	43	..	...	..	..	..	
	iLE		32	16	50					
	M1		34	20	34		-330			
	M2		38	2	29		+250			
	iLz		38	16	38					
	M3		48	14	19			-200		
	M4		50	48	18		-120			
	M5		53	55	16			+140		
	M6		59	46	17			+135		
	F	19	0							
JUNE 27	Pz	22	43	36						
	eSNE		47	22					2270	
	L		49							
	M		50·1		15					
	F	23	30							
JUNE 28	Pz	1	32	27						
	L		40							
	F	2	0							
JUNE 28	eL	2	32							
	F		45							
JUNE 30	eP'z	2	59·0						(19000)	
	ez	3	3	23						
	eE		9·6							
	eN		10·8							
	(SR2)N		35	35						
	LNE		40							
	M		52		18					
	F	5	40							
JUNE 30	eL	6	19							
	F		45							

J.J.W. 5. 7. '29

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3717.

EDINBURGH. 24 AUG 1929

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR JULY 1929

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 SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\kappa L$ SEC.$^{-1}$
N	13H. JUNE 1928	24·68	24·8	-0·01	46·9
E	18H. JUNE 1928	24·80	24·7	+0·02	43·3
Z	20H. MAR. 1929	13·04	12·5	+0·11	112

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
JULY 1	—									No records from 17h.13m. to 18h.28m.
JULY 2	eL	1	35							
	F	2	0							
JULY 2	eL	2	53							
	F	3	10							
JULY 2	eL	16	8							
	F		50							
JULY 2	iN	20	27	32						Felt in Gloucestershire.
	eE		27	35						
	F		28							
JULY 3	eP_Z	1	3	33					7130	Possibly in Alaska according to Jesuit Seis. Assoc.
	eS_{NE}		12	9						
	e_E		13	14						
	L		24							
	F		50							
JULY 3	e	8	33.7							
	L		36							
	F		40							
JULY 3	eL	19	0							
	F	20	0							
JULY 4	P_{NZ}	4	38	57					6940	Central Alaska. 64°N, 149°W., according to Jesuit Seis. Assoc.
	S_N		47	23						
	SR_1		51·4							
	L		59		32					
	F	6	0							Cf. July 3d. 1h.

P972.11270-760, 100, 8/29.M&S.

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. JULY 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
JULY 4	eP_Z	7	19	15					2460	
	eS_{NE}		23	17						
	L		24·4							
	M		25·6		20					
	F		?							Overlapped by next shock.
JULY 4	eL	7	41·5							Probably a repetition of preceding shock.
	F		55							
JULY 4	eP_Z	8	1	29						
	S		5·4							Probably a further repetition.
	L		7							
	F		25							
JULY 4	e_Z	9	49							
	F	10	1							
JULY 4	eL_Z	12	44							
	F		50							
JULY 5	P_Z	11	30	59					8750	Compression.
	S_E		40	57						Aleutian Islands,
	PS_Z		41	43						50°N., 177°W., according
	L_E		52							to Jesuit Seis. Assoc.
	M_1	15	8	37	22		-77			
	M_2		12	1	18			-60		Bombay telegraphs :
	F	19	0							P 14h. 31m. 41s.,
										S-P : 628sec., Δ: 9500km
JULY 5/6	P_Z	22	48	17						
	S_{NE}		58	13					8710	Dilatation.
	L	23	19							Repetition of preceding
	M		33		18					shock.
	F	1	50							
JULY 6	P_Z	2	15	47						Compression.
	S_{NE}		259							Further repetition.
	SR_N		31	28						
	L		40							
	M_N		49		24					
	F	4	40							
JULY 6	iP_{EZ}	9	55	28					5810	Dilatation.
	iS_{NE}	10	2	24						Atlantic Ocean ; 15.°6 N.,
	L_{NE}		8	23						43·4W., according to
	L_N		8	29						Jesuit Seis. Assoc.
	M		8	27	27	+34	-28			
	F	11	45							
JULY 7/8	iP	21	35	7					8610	Compression.
	iP_CP_Z		35	35						Aleutian Islands.
	iS_N		44	58						50°N., 177°W., according
	iPS_{NZ}		45	33						to Jesuit Seis. Assoc.
	SR_{1NZ}		50·5							
	SR_{2N}		53	56						(cf. July 5d. and 6d.)
	L_E		56·1							
	L_{NZ}	22	0·5							

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN.

JULY 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JULY 7/8 Cont.	M_1	22	5	45	28		+145			Bombay telegraphs:
	M_2		10	20	22	-155				P 21h. 36m. 6s.
	M_3		11	22	22		+125			S-P 636 secs.
	M_4		16	51	19			+120		Δ 9500 km.
	M_5		21	36	18			+110		
	L_2	23	42		..	..	..	..	..	} Via antipodes.
	M_6		58		..	..	..	..	..	
	F	3	10							
JULY 8	eLNE	19	51							} No Z records.
	F	20	20							
JULY 11	eLNE	21	24							
	F	22	30							
JULY 12	eLNE	18	47							
	F	19	10							
JULY 13	eNE	7	51							
	L	8	4							
	F		35							
JULY 13	e	12	58							
	F	13	5							
JULY 13	eZ	15	11.5							
	L		52							
	F	17	5							
JULY 14	e	9	17							
	F		?							Overlapped by next shock.
JULY 14	P_{NZ}	9	48	47					8550	Possibly Aleutian Islands.
	eZ		55.0							
	S_{NE}		58	35						
	PS_Z		59	43						
	LNE	10	10							
	ME		23	3	19		-20			
	F	12	30							
JULY 15	P_{EZ}	7	51	55					4380	Compression.
	PR_{1Z}		53	31						Felt in Khorassan.
	iS_{NE}		58	4						
	eSR_{IN}	8	1	10						
	L		4							
	M		10							
	F	10	5							
JULY 15	eL	10	25							*
	F	11	25							
JULY 16	eZ	1	10	43						N and E records disturbed by wind.
	L	2	10							
	F		55							
JULY 17	iP_Z	8	50	2						
	S	9	0.1							
	L		15							
	ME		25		25					
	F	11	30							

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. ..... JULY 1929

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
JULY 17	eL	21	20							
	F	22	5							
JULY 18	eL	7	30							
	F	8	0							
JULY 18	e	21	7.8							
	F		15							
JULY 21	eZ	6	16	21						
	F		20							
JULY 21	eL	11	25							
	F		40							
JULY 21	eL	14	12							
	F		40							
JULY 23	eP_Z	18	47	2	..	..	..	..	..	Compression.
	eP_{NE}		47	6					1940	Felt at Reykjavik,
	eS_Z		50	20	..	..	..	..	..	Iceland.
	eS_E		50	28						
	eS_N		50	32						
	LIVE		51	2	36					
	LZ		51	16						
	M_1		52	36	17	-81				
	M_2		53	30	13		+73			
	M_3		53	8 / 16 57	15			±70		
	M_4		54	19	13	+74				
	M_5		54	53	11			+65		
	F	20	50							
JULY 24	eLZ	23	10							
	F		18							
JULY 25	e	0	34.8							
	L		42							
	F	1	15							
JULY 25	eLZ	12	9							
	F		20							
JULY 25	eP_Z	23	8.1							
	eS_N		17.1							
	L		29							
	F	0	0							
JULY 26	e	17	53							
	F	18	5							
JULY 26/27	eP_Z	23	0	56					9210	Felt in Japan:
	eS_{NE}		11	17						
	LNE		31							
	LZ		37							
	F	0	30							
JULY 27	eZ	13	10.1							
	L		18							
	F		45							
CORRECTION JUNE 3	eS_{NE}	20	44	53					5080	J.J. Shaw for Supt.
	SR_{INE}		48	1						6.8.29.

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3717.

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

METEOROLOGICAL OFFICE, EDINBURGH. 18 SEP 1929

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR AUGUST 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L$ (SEC).
N	13th. JUNE 1928	24·68	24·8	−0·01	46·9
E	18th. JUNE 1928.	24·80	24·7	+0·02	43·3
Z	20th. MAR. 1929.	13·04	12·5	+0·11	112

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
Aug. 1	i_Z	5	13	20						
	i_Z		13	21						
	e_{NE}		24	36						
	M_N		52·2							
	F	6	30							
Aug. 1	eL_Z	9	36							N and E records disturbed by wind.
	F	10	0							
Aug. 1	eL	18	51							
	F		54							
Aug 3	e_Z	13	9	9						N and E records disturbed by wind.
	L_Z	14	4							
	F	15	0							
Aug. 3	e_Z	15	18	9						
	L_Z	16	10							
	F	17	0							
Aug. 3	eL_{EZ}	19	28							
	F	20	10							
Aug. 3	e	9	15							
	F		25							
Aug. 4/5	eL	23	1							
	F	0	15							Aug. 5. – No records from 9h. 5m. to 10h. 18m.
Aug. 5	eL	15	17							
	F		35							
Aug. 6	$e(P)_Z$	1	34	52					(2290)	
	$e(S)_E$		38	40						
	L		41							
	F	2	10							

P2884-12973-736,100.M&S.3/23

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. ..... AUGUST 1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS
Aug. 8.	eP_Z	13	9	18					8710	Compression.
	iP_Z		9	22						
	eS_{NE}		19	14						
	L_{NE}		37							
	L_Z		40							
	M_1		42	56	24	−77				
	M_2		48	59	19		−31			
	M_3		49	3	18			+19		
	F	15	30							
Aug. 11	eL_Z	18	35							
	F	20								
Aug. 14	e(P)	2	37	31						
	L	3	40							
	F	4	35							
Aug. 14	e_Z	6	45							
	F	7	0							
Aug. 15	iP_{ZE}	20	8	42					8930	Dilatation.
	eS_{NE}		18	49						
	L_N		30							Pacific Ocean near Central America. 4°N, 82°W, according to American broadcast message.
	L_{ZE}		34·8							
	F	21	30							
Aug. 16	L	22	37							
	F	23	10							
Aug. 16	L	23	35							
	F	0	0							
Aug. 17	e	4	27							Aug. 17. — No records from 8h. 40m. to 9h. 39m.
	F		30							
Aug. 17/18	iP_{ZE}	23	53	11					9310	Compression.
	PR_{1Z}		56·4							
	iS_E	0	3	37						
	L		23							
	F	1	45							
Aug. 18	L	9	48·5							
	F	10	53							
Aug. 19	iP_Z	2	56	1					9310	Compression.
	PR_{1Z}		59	32						
	eS_{NE}	3	6	27						Probably repetition of Aug. 17d 23h.
	L_{NE}		25							
	L_Z		32							
	M_1		38	59	21	+54				
	M_2		39	54	17		−35			
	M_3		41	12	16			−38		
	F	5	25							
Aug. 19	e_{NE}	21	7	54						
	L_{NE}		27							
	L_Z		36							
	F	22	15							

International Seismological Centre From the ISC collection scanned by SISMOS

SEISMOLOGICAL BULLETIN.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
AUG. 20	eP_Z	16	51	15					9310	Compression.
	PR_{1Z}		548							
	eS_{NE}	17	1	41						Probably repetition of Aug. 17d 23h.
	L_{NE}		22							
	L_Z		27							
	F	18	50							
AUG. 21	eL	10	25·6							
	F		42							
AUG. 22	e_Z	7	54·6							
	L	9	3							
	F		30							
AUG. 22	L_Z	17	36							
	F		45							
AUG. 28	eP_Z	19	4	4					9300	Compression
	PR_{1Z}		7	21						Probably repetition
	eS_E		14	29						of Aug. 17d. 23h.
	SR_{1E}		19	51						
	SR_{2E}		23	22						
	L_E		32							
	L_N		35							
	L_Z		38							
	M_E		40	5	21		+32			
	F	21	30							
AUG. 29	L	20	35							
	F	21	5							
AUG. 31	L	19	45							
	F	20	10							

F. J. Lucas
for Supt.
6.9.29.

FORM : 3717.

International Seismological Centre From the ISC collection scanned by SISMOS

AIR MINISTRY, METEOROLOGICAL OFFICE

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR SEPTEMBER, 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT $\mu 2$	Ak/πL (SEC).
N	9th SEPT. 1929.*	24·68	25·5	0·00	46·8
E	10th SEPT. 1929.*	24·80	24·7	+0·09	43·5
Z	10th SEPT. 1929.*	13·04.	12·9	+0·10	113

* Constants applying before these dates are given in preceding bulletin.

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
SEPT. 1.	L_Z	16	14							
	F		50							
SEPT. 1	L	17	22							
	F	18	20							
SEPT 2	e_Z	11	35							
	e_E		37·5							
	e_{NE}		38·6							
	L_{NE}	12	8							
	L_Z		16							
	F	13	40							
SEPT. 3.	iP_{EZ}	12	16	49					5700	Compression.
	P_GP_{EZ}		17	3						
	iS		24	9						
	$(PS)_{NE}$		24	33						
	L_{NE}		36							
	L_Z		38							
	F	13	20							
SEPT. 4.	e	22	43·3							
	L_{NE}		51							
	L_Z		53							
	F	23	30							
SEPT. 5.	L_{NE}	14	33							
	L_Z		36							
	F	15	0							
SEPT. 8	L_Z	18	8							
	F		20							

Breaks in record from 4d. 13h. 30m to 16h. 30m. and 10d. 8h. to 16h during standardisation.

(1293) 15249-984 MAS.100. 10/29

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. SEPTEMBER, 1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
										Z record defective, 10d. 4h. 45m. to 9h. 33m.
SEPT. 10.	e_Z	20	36·5							
	e_Z		40·6							
	L	21	18							
	F	22	5							
SEPT. 11.	e_Z	22	42	5						
	L_{NE}	23	6							
	L_Z		12							
	F		45							
SEPT. 14.	L	3	19							
	F		50							
SEPT. 15.	e_E	13	21·2							
	$e_{\ }$		21·6							
	L_{NE}		23							
	L_Z		29							
	F		50							
SEPT. 17.	L	6	20							
	F		30							
SEPT. 17.	P_{EZ}	19	28	49					7780	Compression.
	eS_N		37	58						North Pacific Ocean off
	L_{NE}		47·5							British Columbia. 52°N,
	L_Z		50							133°W, according to
	M_1		57	45	18		+34			American broadcast message.
	M_2	20	1	30	16	+37				
	M_3		1	46	15			+40		
	L_2	21	41							
	F	23	30							
SEPT. 26.	L	16	24							No records - 26d. 2h. 40m. to 9h. 8m.
	F		35							
SEPT. 24/28.	eP_Z	23	28	27					(9080)	California. 24°N,
	$e(S)_{NE}$		38·7							111°W, according to
	L_{NE}		53							American broadcast message.
	L_Z		57							
	F	1	10							

F. J. W. Whipple
Supt.
2.10.29.

International Seismological Centre From the ISC collection scanned by SISMOS

AIR MINISTRY, METEOROLOGICAL OFFICE,

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR OCTOBER 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT $\mu 2$	$Ak/\pi L_1$ (SEC).
N	9th Sept. 1929.	24·68	25·5	0·00	46·8
E	10th Sept. 1929.	24·80	24·7	+0·09	43·5
Z	10th Sept. 1929.	13·04	12·9	+0·10	113

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	△ KM.	REMARKS.
										No records from 2d. 22h. 21m.
Oct. 5.	L	3	20							to 3d. 9h. 34m.
	F	4	30							
Oct. 5.	iP_Z	17	11	31						Compression. N and E
	L_E		33							records disturbed by wind.
	L_Z		44							Kamtchatka. 55°N, 160°E,
	F	19	0							according to J.S.A.
Oct. 6.	(PR)	8	10	16						North Pacific Ocean.
	(PS)		19·5							19·5°N, 156°W, according
	SR_1		25·4							to J.S.A.
	L_{NE}		36							
	L_Z		45							
	F	10	35							
Oct. 6.	L	14	20							
	F	15	45							
Oct. 7.	e_Z	15	27·6							
	L	16	24							
	F	17	30							
Oct. 8.	e_Z	17	35	53						
	PR_1		39	49						
	L_{NE}	18	32							
	L_Z		38							
	F	19	45							
Oct. 14	e_{EZ}	10	21	37						No "N" record, 14d. 9h. 57m.
	L_{EZ}		46							to 11h. 27m.
	F	12	0							
Oct. 15.	L	19	9							
	F		30							

P1023,17179-1263,100M/29

International Seismological Centre From the ISC collection scanned by SISMOS

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	As μ	Az μ	Δ KM.	
Oct. 16.	L	01	14						(8400)	
	F		30							No "N" record, 16d. 9h. 53m to 18d. 10h. 15m.
Oct. 16	eP_Z	20	39	18						
	eS_E		48	58						
	SR_{1E}		54·0							
	SR_{2E}		57·6							
	L_E	21	6							
	L_Z		10							
	F	22	10							
Oct. 19.	eP_Z	10	26	9					(10500)	Dilatation.
	iz		26	40						
	PR_{1Z}		29	56						Pacific Ocean off Northern Chile. 21°S, 72°W. according to American broadcast message.
	$ScPcS_{NE}$		36	35						
	PS_Z		38·5							
	SR_{1E}		43·8							
	L_{NE}		47							
	M_1		56	52	30	−46				
	L_Z		58							
	M_2	11	3	36	25			−48		
	M_3		3	41	25		+50			
	F	13	40							
Oct. 19.	L	20	45							
	F	21	35							
Oct. 20.	L	00	53							
	F	1	0							
Oct. 21	e_Z	11	29							
	L_{NE}		25							
	L_Z		30							
	F	12	10							
Oct. 22.	L	19	31							
	F		50							
Oct. 24.	e_E	6	57·8							
	L	7	21							
	F	8	0							
Oct. 29.	e_{NE}	6	12·5							
	L_{NE}		16							
	L_Z		25							
	F		50							

J. W. Whipple
Supt.
2·11·29.

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3717.

AIR MINISTRY, METEOROLOGICAL OFFICE, LONDON.

EDINBURGH. 19 DEC 1929

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR NOVEMBER, 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	$Ak/\pi L_1$ (SEC).
N	9th Sept. 1929.	24·68.	25·5.	0·00.	46·8.
E	10th Sept. 1929.	24·80.	24·7.	+0·09.	43·5.
Z	10th Sept. 1929.	13·04.	12·9.	+0·10.	113.

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
Nov. 1.	iP_{EZ}	7	1	30					2030	Dilatation.
	iS_{EZ}		4	56						
	L_{NE}		6·3							
	L_Z		9·2							
	F		55							
Nov. 4.	eL	16	54							
	F	17	5							
Nov. 5.	e_{NE}	12	11·3							
	L_{NE}		33·4							
	L_Z		44							
	F	13	10							
Nov. 8.	e_E	3	43·6							
	L	4	2							
	F		15							
Nov. 9.	eL	2	20							
	F		45							
Nov. 13.	eL	1	32							
	F	2	10							
Nov. 15.	iPR_1	19	9	59					(12000)	Caroline Islands. 8°N, 143°E, according to Strasbourg.
	ePS		19	26						
	SR_1		25·9							
	L		45							
	M_1		47	54	32	+109				
	M_2		48	55	29		−99			
	M_3		51	21	31	+83				

International Seismological Centre From the ISC collection scanned by SISMOS

FORM : 3718.

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN. NOVEMBER, 1929.

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
Nov. 15. (ctd.)	M_4	19	53	29	25		-99			
	M_5		53	50	22			-51		
	M_6		53	50	22	+82		+37		
	M_7	20	1	21	17					
	F	22	30							
Nov. 17.	e_Z	3	57·4							
	e	4	8	27						
	e		11	15						
	L_{NE}		29							
	M_1		36	2	41	+73				
	L_Z		38							
	M_2		41	58	26	-43				
	M_3		43	7	29		+49			
	M_4		53	1	22		-42			
	M_5		53	7	19			+24		
	F	6	40							
Nov. 18.	L_{NE}	6	33							
	L_Z		50							
	F	7	25							
Nov. 18.	eP_{EZ}	20	39	10					3930	Compression. Near Newfoundland. 47°N, 58°W, according to American broadcast message. 46°N, 54°W according to Strasbourg. ⊙
	PR_{IEZ}		41	5						† Negative maximum off chart.
	iS		44	53						
	L_{NE}		47·0							※ Positive and negative maxima off chart.
	L_Z		47·6							
	M_1		51	9	23		+270†			
	M_2		51	35	19	-287†				
	M_3		51	39	23			+522		
	M_4		51·6–54·1		(20)		>350※			
	M_5		52·0–54·8		(20)			>500※		
	M_6		53	48	17	+251				
	M_7		54	37	16		-291			
	M_8		55	4	15			+276		
	F	22	35							
Nov. 23.	L_{NE}	00	59							Earlier phases masked by wind and microseisms.
	L_Z	1	10							
	F		50							

⊙ A note relating to this earthquake appears in "NATURE" No. 3195, dated 30.11.29.

F. J. W. Whipple
Supt.

2.12.29.

International Seismological Centre From the ISC collection scanned by SISMOS

KEW OBSERVATORY, RICHMOND, SURREY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR DECEMBER, 1929.

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 (SEC).	PENDULUM FREE PERIOD T (SEC).	DAMPING CONSTANT μ^2	Ak/π_L (SEC)$^{-1}$
N	9th Sept. 1929	24·68.	25·5.	0·00.	46·8.
E	10th Sept. 1929.	24·80.	24·7.	+0·09.	43·5.
Z	10th Sept. 1929.	13·04.	12·9:	+0·10.	113 .

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.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	AMPLITUDE. An μ	Ae μ	Az μ	Δ KM.	REMARKS.
Dec. 3.	eL	8	46							Disturbed by wind and microseisms.
	F	9	20							
Dec. 6.	eL	12	21							
	F		55							
Dec. 6.	eL_{NE}	17	30							
	eL_Z		44							
	F	18	(40)							
Dec. 6.	eL	21	0							
	F		55							
Dec. 9.	e_Z	7	2	56						
	L_{NE}		36							
	L_Z		44							
	F	8	50							
Dec. 13.	e_Z	4	48							
	L_{NE}		54							
	L_Z		57							
	F	5	20							
Dec. 14.	eL_{NE}	22	33							
	eL_Z		36							
	F		50							
Dec. 15.	eP	1	38	15					(2430)	
	$e(S)_E$		42	14						
	L_{NE}		43							
	L_Z		43·2							
	F	2	15							

P3127, 22585, 1520, 100, 1/30, M&S

International Seismological Centre From the ISC collection scanned by SISMOS

DATE.	PHASE.	G.M.T. HR.	MIN.	SEC.	PERIOD. SEC.	An	Ae	Az	KP.	
Dec. 16.	eL_{NE}	12	28							
	eL_Z		31							
	F	13	10						1930	Notation.
Dec. 17.	eP	11	10	22.						Epicentre Between
	P_cP		10·9							Kamchatka and
	iS		20	1						Aleutian Islands;
	SR_1		25·1							53°N, 170·5°E,
	SR_2		28·4							(according to Strasbourg.)
	L_{NE}		30·5							
	L_Z		34·0							
	M_1		35	36	(38)	−475*				* Positive and negative maxima off chart.
	M_2		35	47	18		+73			
	M_3		37	59	25		+160†	−218†		† Positive maxima off chart.
	M_4		51	21	16					
	M_5		51	33	22	+227†		−182†		(Maxima could not be measured from 12h. 46m. to 12h. 2m; trace very faint.)
	M_6		56	3	16			−154†		
	M_7	12	1	13	17					
	F	16	15							
Dec. 17.	eL	22	32							
	F	23	20							
Dec. 18.	eL_{NE}	7	42							
	eL_Z		48							
	F	8	25							
Dec. 18.	eL_{NE}	16	53							
	F	17	10							
Dec. 24.	eL_{NE}	5	52							
	eL_Z		58							
	F	6	40							
Dec. 30.	eL	12	34							
	F	13	25							
Dec. 31.	L_{NE}	2	0							
	eL_Z		12							
	F		50							
Dec. 31.	eL_{NE}	5	39							
	eL_Z		42							
	F	6	25							
Dec. 31.	eL	23	22							
	F		40							

Hypocentre Sept.
14.1.57.