The International Seismological Summary for 1928 April, May, June.

FORMERLY THE BULLETIN OF THE BRITISH ASSOCIATION SEISMOLOGY COMMITTEE.

The present number of the Summary deals with 183 epicentres, 47 being new and 136 old epicentres. La Paz and Sucre record 212 repetitions of 13°·0S. 69°·5W. as on April 9d., and 73 repetitions of 5°·0S. 78°·0W. as on May 14d. Manila gives 61 repetitions of 12°·3N. 121°·0E. as on June 15d.

The following are the cases of abnormal focus :—

Date, 1928.	d.	h.	m.	s.	Epicentre.		Focal Depth. (Below normal).
April	16	19	56	36	43·0N.	85·5E.	+·005
May	8	4	45	54	50·0N.	149·0E.	+·070
May	26	8	28	54	23·3S.	68·5W.	+·020
June	7	6	24	32	44·0N.	131·0E.	+·070

1931 November 25.

University Observatory, Oxford.

1928 APRIL, MAY, JUNE.

April 1d. 17h. 51m. 58s. Epicentre 10°·0N. 140°·0E. (as given by Irkutsk).

A = −·755, B = +·633, C = +·174; D = +·643, E = +·766; G = −·133, H = +·112, K = −·985.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Manila	19·2	286	e 3 58	−33	—	—	—	—
Irkutsk	51·2	333	e 9 18	+ 4	e 16 40	+ 6	25·6	35·2
Tashkent	69·0	311	11 9	− 2	i 20 11	− 3	33·0	41·5
Ekaterinburg	75·8	326	e 11 54	0	e 21 34	− 1	38·0	41·2
Baku	83·7	310	—	—	—	—	e 45·0	—
Kucino	88·4	327	—	—	—	—	e 47·1	—
Makeyevka	90·5	320	—	—	e 23 37	[+ 6]	40·7	56·8
Pulkovo	91·0	332	e 16 52	?PR_1	e 23 38	[+ 4]	48·0	59·1
Copenhagen	101·2	333	—	—	—	—	53·0	64·8
Feldberg N.	106·5	330	—	—	—	—	e 56·4	63·5
De Bilt	106·8	332	—	—	—	—	e 58·0	68·9
Strasbourg	107·9	329	—	—	—	—	e 65·0	—
Uccle	108·1	332	—	—	—	—	e 58·0	—
Kew	109·6	335	—	—	—	—	e 67·0	—
Paris	110·3	331	—	—	—	—	e 64·0	—
Toronto	115·5	30	—	—	34 2?	?	—	—

Additional readings: Feldberg e = +57m.44s. De Bilt MN = +70·0m.

April 1d. Readings also at 1h. (Melbourne), 5h. (Ksara), 10h. (La Paz and Suva), 16h. (La Paz), 18h. (near Toyooka), 19h. (Theodosia and Yalta), 23h. (La Paz).

April 2d. 4h. 37m. 42s. Epicentre 25°·0S. 68°·5W.

A = +·332, B = −·843, C = −·423; D = −·930, E = −·367; G = −·155, H = +·393, K = −·906.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Sucre	6·7	27	1 44	+ 2	3 1	− 1	3·4	3·9
La Paz	8·5	2	i 2 11	+ 2	i 3 55	+ 5	4·4	4·5
Santiago	8·6	193	e 2 42	+32	3 52	− 1	4·5	—
La Plata	13·5	140	3 15	− 5	5 53	− 3	7·0	—

La Paz gives also iE = +4m.15s., MN = +4·7m.

April 2d. Readings also at 1h. (Toronto), 3h. (near Tashkent), 4h. (De Bilt, Copenhagen, Feldberg, and near Ksara), 9h. (near Yalta), 10h. (Zagreb and near Vienna), 11h. (Yalta), 12h. and 15h. (near Tananarive), 18h. (near Ottawa and near Tucson), 19h. (near Manila), 22h. (Adelaide, Riverview, Melbourne, Wellington, and Feldberg), 23h. (Baku, Copenhagen, Ekaterinburg, Pulkovo, De Bilt, Uccle, Kew, Paris, and Granada).

April 3d. 16h. 42m. 40s. Epicentre 11°·5S. 14°·7W.

$A = +\cdot948$, $B = -\cdot249$, $C = -\cdot199$; $D = -\cdot254$, $E = -\cdot967$; $G = -\cdot193$, $H = +\cdot051$, $K = -\cdot981$.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Plata		45·6	233	—	—	—	—	19·3	—
Entebbe		47·5	80	10 10	+79	15 30	−18	22·2	24·2
San Fernando		48·6	10	—	—	15 45	−16	24·3	25·6
Malaga		49·2	11	e 9 13	+12	e 15 31	−38	e 21·2	—
Sucre		49·2	256	9 0	− 1	i 16 4	− 5	20·0	—
Almeria		49·7	12	e 8 46	−19	i 14 36	−99	24·3	25·6
Granada		49·8	11	i 9 14	+ 8	e 16 50	+34	24·6	29·8
Rio Tinto		49·9	9	11 20?	?PR_1	—	—	—	24·3
Algiers		51·1	20	—	—	—	—	23·3	26·3
Alicante		51·7	15	—	—	e 20 5	?SR_1	e 25·0	26·4
La Paz		52·0	260	e 9 20	0	i 16 47	+ 3	24·3	31·2
Toledo		52·3	11	—	—	—	—	e 22·7	26·2
Tortosa	N.	54·2	15	—	—	—	—	—	32·1
Rocca di Papa		58·9	25	11 54	+110	—	—	e 30·3	33·9
Moncalieri		60·0	19	—	—	18 36	+13	31·0	36·4
Florence		60·1	23	e 10 20	+ 7	—	—	30·3	31·3
Tananarive	E.	60·3	105	—	—	e 18 32	+ 5	30·8	32·1
Paris		62·2	13	—	—	—	—	e 31·3	32·3
Chur		62·2	19	e 10 25	+ 2	19 16	+25	—	—
Ravensburg		63·1	19	—	—	—	—	e 31·3	—
Strasbourg		63·3	17	e 10 39	+ 5	—	—	e 28·3	—
Zagreb	N.W.	63·6	25	e 10 43	+ 7	—	—	e 31·8	37·0
Kew		64·2	10	e 10 58	+19	—	—	e 29·3	33·3
Oxford		64·3	10	—	—	—	—	—	31·4
Uccle		64·5	14	—	—	e 19 20?	+ 1	e 28·3	—
Graz		64·5	23	—	—	—	—	e 30·7	34·1
Feldberg	N.	64·9	17	—	—	e 19 23	− 1	e 30·3	32·3
De Bilt		65·8	14	—	—	e 19 43	+ 8	e 29·3	33·3
Vienna		65·8	23	e 10 43	− 7	20 41	[+ 2]	e 34·3	39·8
Budapest		66·2	25	e 11 20	+27	—	—	e 33·8	40·3
Stonyhurst		66·2	9	—	—	—	—	e 32·3	—
Hamburg		68·4	16	e 11 36	+29	—	—	e 33·3	35·3
Copenhagen		70·9	16	11 20?	− 2	20 36	− 1	32·3	38·1
Lund		71·1	16	—	—	20 38	− 1	34·3	—
Konigsberg	N.	72·6	20	—	—	—	—	e 50·3	—
Harvard	N.	74·5	321	—	—	—	—	e 31·8	—
Makeyevka		75·6	34	e 11 52	− 1	21 26	− 7	34·6	43·9
Upsala		75·9	17	—	—	—	—	40·3	—
Georgetown	Z.	76·8	316	e 11 57	− 3	e 22 27	[+26]	e 35·9	41·7
Baku		79·0	45	e 12 21	+ 8	i 22 10	− 2	36·3	53·8
Ottawa		79·0	321	—	—	e 22 9	− 3	e 36·3	40·3
Pulkovo		79·8	21	12 19	+ 1	i 22 16	− 5	35·3	46·5
Kucino		80·2	28	—	—	22 12	−13	36·7	48·9
Toronto		80·4	319	—	—	e 22 25	− 3	34·8	43·8
Cincinnati		82·1	315	—	—	i 22 33	−14	38·3	—
St. Louis	E.	86·1	311	e 13 4	+10	e 23 9	[+ 6]	40·1	44·1
	N.	86·1	311	e 13 4	+10	e 23 10	[+ 7]	40·1	46·7
Bombay		91·5	70	—	—	e 24 20?	− 9	—	—
Ekaterinburg		91·8	32	13 24	− 2	24 13	−20	40·3	57·5
Tashkent		93·1	49	13 29	− 4	24 20	−26	38·3	54·9
Kodaikanal		94·2	80	54 32	?L	—	—	(54·5)	—
Victoria	E.	110·9	318	29 9	?PS	—	—	55·6	58·2
Irkutsk		116·6	36	—	—	26 54	?Σ	57·3	74·4
Wellington		126·5	189	—	—	—	—	67·3	—

Additional readings and notes: San Fernando MN = +26·3m. Almeria PR_1 = +11m.2s., MN = +27·8m., MZ = +29·8m. Granada PR_1 = +11m.33s., PR_2 = +12m.56s., i = +14m.59s., and +15m.56s., PSP = +18m.28s. La Paz iSE = +16m.50s., MN = +26·5m. Toledo MNW = +26·5m. Florence e = +8m.40s. Paris MN = +37·3m. Zagreb ePNE = +10m.47s., eLNE = +37·0m. Feldberg e = +27m.2s. = SR_2 +9s. De Bilt eSR_1 = +23m.49s., MN = +39·5m., MZ = +40·2m. Budapest MN = +37·8m. Hamburg MZ = +40·3m. Copenhagen eN = +23m.56s. SR_1 = +24m.56s., MN = +37·1m. Georgetown readings have been increased by 1h. Ottawa eLN = +33·3m. Kucino e = +18m.50s. = PR_2 +4s., SR_1 = +27m.22s. Cincinnati eN = +30m.0s. St. Louis eN = +19m.29s., e = +29m.4s., and +32m.4s., eN = +37m.4s. Irkutsk reading entered as S is given as $S_cP_cP_cS$, SR_1 = +35m.58s.

April 3d. Readings also at 1h. (Victoria, Tucson, St. Louis, Cincinnati, Ottawa, Georgetown, and La Paz), 2h. (Ekaterinburg and Pulkovo), 3h. (near Toyooka (2)), 7h. (Rocca di Papa), 9h. (near Toyooka), 11h. (Riverview and Melbourne), 13h. (Sucre), 20h. (Suva), 23h. (near Tacubaya).

April 4d. Readings at 5h. (near Tacubaya), 6h. (Bombay (3)), 8h. (near Tacubaya), 9h. (Bombay), 12h. and 19h. (La Paz), 21h. (La Plata, La Paz, Sucre, and Santiago), 22h. (La Paz, Sucre, and near Taihoku).

April 5d. 16h. 48m. 58s. Epicentre 35°·7N. 134°·8E. (as on 1928 Feb. 22d.).

A = −·572, B = +·576, C = +·584.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Toyooka	0·2	175	i 0 3	− 1	—	—	i 0·1	0·1
Kobe	1·1	163	e 0 18	+ 1	—	—	0·5	0·6
Sumoto	1·4	177	e 0 37	?	(e 0 37)	− 2	0·7	0·7

No additional readings.

April 5d. Readings also at 1h. (near Batavia), 3h. (near Tacubaya), 8h. (Wellington), 16h. (near Toyooka), 17h. (La Paz), 18h. (Rocca di Papa), 20h. (Wellington), 22h. (near Batavia and Malabar).

April 6d. 10h. 38m. 12s. Epicentre 29°·0S. 71°·0W. (as on 1928 Jan. 14d.).

A = +·285, B = −·827, C = −·485; D = −·946, E = −·326;
G = −·158, H = +·458, K = −·875.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Santiago		4·5	177	e 2 0	?S	(e 2 0)	− 4	3·1	—
Sucre		11·3	29	2 37	−12	4 46	−16	5·5	6·2
La Plata		12·6	121	3 11	+ 4	5 49	+15	7·2	—
La Paz	E.	12·8	13	3 12	+ 2	5 41	+ 2	6·1	7·7
	N.	12·8	13	3 12	+ 2	5 44	+ 5	6·3	8·5
Apia		92·5	254	—	—	—	—	—	45·8
Baku		130·9	60	—	—	—	—	e 78·2	—
Ekaterinburg		136·4	36	—	—	—	—	70·8	—
Tashkent		145·6	59	—	—	—	—	e 81·8	—

No additional readings.

April 6d. Readings also at 0h. (near Algiers), 1h. (Yalta and near Toyooka), 3h. (Vienna), 6h. (Yalta), 7h. (Tortosa), 8h. (La Paz, La Plata, and Sucre), 10h. (near Mizusawa), 11h. (La Paz, La Plata, Sucre, and near Taihoku), 14h. (Zagreb), 16h. (Tucson, near Tacubaya, Oaxaca, and Vera Cruz), 19h. (Nagasaki), 20h. (near Tacubaya), 22h. (Vienna and near Chur).

April 7d. 7h. 33m. 33s. Epicentre 22°·0N. 120°·5E. (as on 1928 Feb. 23d.).

A = −·471, B = +·799, C = +·375; D = +·862, E = +·508;
G = −·190, H = +·323, K = −·927.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Taihoku	N.	3·2	18	0 47	− 3	1 0	−28	1·2	1·5
Hong Kong		5·9	274	2 42	?S	(2 42)	+ 1	—	4·3
Manila		7·4	176	e 1 54	+ 2	(i 3 18)	− 3	i 3·3	—
Phu-Lien		13·0	267	—	—	5 27?	−17	—	—
Irkutsk		32·7	342	—	—	e 15 17	?	17·4	24·0
Tashkent		46·9	310	—	—	e 16 5	+25	e 25·4	32·6
Ekaterinburg		55·4	325	e 9 46	+ 4	e 17 27	+ 1	27·4	30·4
Kucino		67·9	323	—	—	—	—	e 35·8	—
Makeyevka		69·0	317	—	—	—	—	e 39·4	—
Pulkovo		71·2	329	—	—	—	—	e 28·4	—
Copenhagen		81·5	328	—	—	—	—	43·4	—
Uccle		88·2	325	—	—	—	—	e 46·4	—

Tashkent gives also e = +19m.27s. = SR_1 +19s.

April 7d. 20h. 10m. 36s. Epicentre 55°·0S. 24°·0W. (as on 1925 March 14d.).

$A = +\cdot524$, $B = -\cdot233$, $C = -\cdot819$; $D = -\cdot407$, $E = -\cdot914$; $G = -\cdot748$, $H = +\cdot333$, $K = -\cdot574$.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Plata		30·8	297	—	—	—	—	14·4	—
Cape Town		36·1	72	—	—	—	—	—	18·9
Sucre		47·6	303	8 40	−11	15 34	−15	21·9	28·2
La Paz		51·2	302	i 9 17	+ 3	16 31	− 3	25·4	30·8
Tananarive		64·1	86	—	—	—	—	31·4	34·4
Entebbe		71·6	60	—	—	20 54	+ 9	—	41·7
Riverview		91·1	176	—	—	e 22 54	[−41]	e 44·1	50·4
San Fernando	E.	92·7	14	—	—	—	—	—	54·7
Granada		93·8	16	—	—	—	—	e 47·4	49·4
Tortosa		89·1	20	—	—	—	—	e 49·4	52·6
Florence	Z.	103·2	26	—	—	—	—	e 51·9	55·1
Georgetown	Z.	104·3	320	—	—	—	—	e 41·2	53·5
Paris		106·2	19	—	—	—	—	e 53·4	—
Strasbourg		106·9	22	—	—	e 41 24?	?	e 56·4	—
Kew		108·3	15	—	—	e 42 24?	?SR_3	53·4	58·4
Uccle		108·4	20	—	—	—	—	e 52·4	—
Feldberg	N.	108·6	21	—	—	e 25 12	[+ 8]	e 56·5	60·4
Bombay		109·3	84	—	—	e 28 24?	?PS	—	—
Toronto		109·3	321	—	—	28 24?	?PS	—	—
St. Louis	N.	109·4	310	—	—	e 25 39	[+31]	e 43·4	57·2
Ottawa		109·5	326	—	—	e 28 24?	?PS	58·4	—
De Bilt		109·8	20	—	—	—	—	e 53·4	60·2
Baku		114·2	52	—	—	25 35	[+ 8]	55·4	69·0
Copenhagen		114·6	21	—	—	e 29 36	?PS	57·4	64·5
Lund		114·8	21	—	—	—	—	55·4	—
Makeyevka		115·4	40	—	—	e 29 56	?PS	59·4	78·4
Kucino		121·7	36	e 22 42	?	—	—	60·5	69·3
Pulkovo		122·6	30	—	—	—	—	60·4	69·1
Scoresby Sund		125·5	1	—	—	—	—	59·4	—
Phu-Lien		129·8	114	—	—	—	—	61·4	—
Ekaterinburg		131·0	46	i 19 12	[− 9]	—	—	71·4	75·9
Irkutsk		149·9	75	19 50	[− 6]	—	—	76·0	87·4

Additional readings: La Paz PS = +16m.54s., SR_1 = +19m.42s., SR_2 = +21m.33s. Riverview MN = +51·3m. San Fernando MN = +53·8m. Feldberg e = +24m.10s. = PR_3 +12s. St. Louis eN = +29m.35s. and +34m.24s. = SR_1 −10s. Ottawa eN = +34m.48s. = SR_1 +12s., eLE? = +43·4m. De Bilt MN = +60·4m., MZ = +62·8m. Baku ePR_1 = +19m.53s., PPS = +29m.52s. Copenhagen eEZ = +29m.48s. = PS +0s. Kucino PS = +30m.54s., SR_1 = +37m.54s. Pulkovo PR_1 = +20m.45s., $S_cP_cP_cS$ = +27m.39s., PS = +30m.55s. Ekaterinburg iPR_1 = +21m.42s., $S_cP_cP_cS$ = +28m.42s. Irkutsk $S_cP_cP_cS$ = +30m.14s., SR_1 = +43m.26s.

April 7d. Readings also at 5h. (Riverview and Melbourne), 7h. (Santiago, near La Paz, and near Batavia), 11h. (near Batavia), 17h. (La Paz), 18h. (La Paz and Sucre), 23h. (Wellington).

April 8d. Readings at 1h. (near Toyooka), 5h. (Baku and near Taihoku), 7h. (La Paz and near Batavia), 8h. (Nagoya and near Toyooka), 14h. (near Theodosia and Yalta), 17h. (near Lick), 22h. (near Algiers).

April 9d. 17h. 34m. 8s. Epicentre 13°·0S. 69°·5W.

(given by Harvard).

A = +·341, B = −·913, C = −·225 ; D = −·937, E = −·350;
G = −·079, H = +·211, K = −·974.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz	E.	3·7	160	i 1 7	+ 9	—	—	—	—
Santiago		20·5	183	4 51	+ 4	8 39	+ 5	11·4	—
La Plata		24·3	156	i 5 21	−10	9 33	−17	11·9	—
Rio de Janeiro	E.	26·8	115	e 5 56	0	i 10 37	0	13·4	15·6
	N.	26·8	115	i 5 52	− 4	i 10 31	− 6	13·4	15·2
Port au Prince		31·7	357	e 6 51	+ 7	i 12 15	+12	e 18·8	21·8
Vera Cruz		41·5	321	9 51	?PR_1	16 0	+92	19·8	—
Tacubaya		43·6	318	8 2	−21	14 36	−20	18·6	25·9
Charlottesville	E.	51·7	353	—	—	i 16 36	− 4	22·1	26·6
	N.	51·7	353	·9 22	+ 4	—	—	23·8	27·9
Georgetown	Z.	52·4	355	i 9 10	−12	i 16 51	+ 2	e 24·3	30·8
Cincinnati		54·0	346	e 9 29	− 4	e 16 57	−12	e 25·5	29·4
St. Louis	E.	55·1	341	i 8 38	−62	e 17 8	−14	24·8	29·4
Harvard		55·4	358	e 9 44	+ 2	e 17 36	+10	e 26·2	30·6
Ithaca		55·8	355	e 9 47	+ 2	17 31	0	26·4	—
Chicago	E.	57·3	345	—	—	e 17 27	−23	e 24·1	31·2
	N.	57·3	345	—	—	17 40	−10	e 26·1	31·8
Toronto	E.	57·4	353	—	—	i 17 42	− 9	i 27·1	30·2
	N.	57·4	353	i 9 55	0	i 17 44	− 7	24·4	33·0
Ottawa		58·7	356	e 10 3	0	i 18 3	− 4	e 25·3	27·9
Tucson	E.	60·1	320	i 10 15	+ 2	e 18 22	− 2	26·7	35·5
	N.	60·1	320	i 10 13	0	i 18 24	0	27·5	37·5
Denver		62·2	330	—	—	i 18 52	+ 1	30·9	41·8
Lick	N.	70·2	319	e 11 19	+ 1	e 20 32	+ 4	—	—
Berkeley	E.	70·9	319	e 11 24	+ 2	e 20 39	+ 2	—	—
	N.	70·9	319	e 11 24	+ 2	e 20 40	+ 3	—	—
	Z.	70·9	319	e 11 23	+ 1	e 20 37	0	e 37·4	—
Spokane		74·2	330	e 11 40	− 3	e 21 10	− 6	33·9	38·9
San Fernando		77·4	48	11 58	− 5	i 22 4	+11	37·0	45·9
Rio Tinto		77·7	46	18 52?	?	—	—	—	45·9
Victoria	E.	77·7	328	12 3	− 2	21 55	− 2	36·4	42·1
	N.	77·7	328	12 5	0	21 55	− 2	34·8	46·1
Malaga		78·8	49	12 26	+14	22 31	+21	—	—
Granada		79·6	48	i 12 21	+ 4	i 22 28	+ 9	38·9	44·9
Almeria		80·4	48	i 12 17	− 4	22 27	− 1	40·2	44·6
Toledo		80·5	45	12 21	− 1	i 22 31	+ 2	e 36·2	38·8
Cape Town		81·2	124	12 23	− 3	22 39	+ 2	—	45·2
Alicante		82·3	48	—	—	e 17 44	?PR_2	e 41·4	—
Tortosa	N.	84·0	45	12 37	− 5	i 23 14	+ 6	38·4	49·1
Algiers		84·4	50	i 12 43	− 1	23 5	− 7	e 41·9	47·9
Bagnères		84·8	44	e 12 47	0	e 23 14	− 3	e 38·9	—
Barcelona		85·4	46	e 13 33	+43	e 23 21	− 2	e 38·9	46·4
Oxford		87·4	35	e 12 47	−14	23 37	− 8	e 36·9	47·1
Stonyhurst		87·6	34	e 12 38	−25	i 23 42	− 6	39·9	47·4
Kew		87·8	35	—	—	e 23 45	− 5	38·9	47·9
Edinburgh		88·1	30	—	—	e 23 52?	− 1	40·9	51·4
Paris		88·4	40	e 13 4	− 3	—	—	39·9	47·9
Dyce		89·2	330	—	—	i 23 53	−12	39·9	50·4
Scoresby Sund		89·6	15	—	—	—	—	57·9	—
Besançon		90·0	41	—	—	—	—	e 44·9	—
Uccle		90·2	38	e 13 9	− 8	e 23 44	[+15]	e 38·9	50·8
Moncalieri		90·4	44	e 13 4	−14	23 39	[+ 9]	35·0	58·2
		90·4	44	e 12 57	−21	24 39	+21	40·0	54·8
Neuchatel		90·5	43	e 13 13	− 6	e 26 12	?	—	—
Johannesburg		90·9	118	—	—	—	—	44·9	—
De Bilt		91·1	37	13 14	− 8	e 24 19	− 6	e 41·9	46·8
Strasbourg		91·5	40	i 13 5	−19	—	—	30·9	57·4
Zurich		91·7	43	i 13 19	− 6	23 51	[+13]	—	—
Chur		92·1	43	e 13 24	− 4	e 23 51	[+10]	—	—
Florence	Z.	92·5	46	i 13 22	− 8	27 22	?	45·9	49·9
Feldberg	E.	92·7	39	—	—	—	—	e 46·9	54·0
Rocca di Papa		92·9	48	e 13 21	−11	e 24 28	−16	e 42·9	65·3
Honolulu T.H.	E.	93·1	291	—	—	24 52	+ 6	43·6	46·9
Venice		93·7	45	e 13 37	+ 1	23 52	[+ 2]	—	—
Naples	E.	93·9	49	e 13 8	−29	e 24 8	[+17]	59·9	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Pompeii		94·0	49	e 14 2	+24	e 23 52	[0]	—	—
Bergen		94·0	28	—	—	—	—	e 45·9	—
Hamburg		94·3	36	i 13 29	−11	i 24 4	[+11]	e 40·9	46·9
Jena		94·6	39	e 13 33	− 8	e 24 52	−10	e 41·9	51·4
Laibach		95·2	44	e 17 28	?PR_1	e 26 7	?PS	e 46·9	—
Potsdam		95·8	38	—	—	—	—	e 47·9	50·9
Graz		96·2	43	e 17 41	?PR_1	—	—	e 44·9	54·5
Zagreb		96·2	45	e 13 37	−13	e 24 11	[+ 8]	e 49·5	—
Copenhagen		96·3	35	i 13 39	−12	e 25 1	−18	45·9	53·3
Lund		96·7	35	13 42	−11	25 5	−18	40·9	—
Vienna		97·0	42	e 15 14	+80	24 13	[+ 5]	e 46·9	54·9
Budapest		98·6	43	e 17 52?	?PR_1	—	—	e 46·4	64·9
Wellington	E.	99·7	223	—	—	i 24 25	[+ 3]	e 45·4	48·5
Upsala	E.	99·8	30	—	—	e 24 22	[− 1]	—	58·6
	N.	99·8	30	—	—	e 25 27	−27	e 41·9	57·0
Konigsberg	E.	100·7	36	—	—	—	—	e 49·9	51·9
Entebbe		101·7	90	e 17 8	?	27 28	?PS	48·2	55·7
Helsingfors		103·5	30	—	—	e 24 39	[− 1]	49·9	—
Helwan		105·7	64	17 44	[−23]	28 11	?PS	—	66·0
Pulkovo		106·1	30	—	—	26 16	−37	45·9	57·1
Ksara		109·9	57	19 17	?PR_1	—	—	56·9	—
Tananarive		110·2	116	—	—	28 52?	?PS	—	60·9
Kucino		110·5	35	—	—	—	—	50·6	61·1
Makeyevka		111·3	41	—	—	—	—	50·9	60·0
Riverview		119·2	218	—	—	—	—	e 56·1	68·9
Melbourne		119·8	211	—	—	e 25 52	[+ 7]	i 50·4	67·5
Baku		120·7	49	—	—	—	—	51·9	71·9
Ekaterinburg		122·2	29	e 19 2	[+ 3]	27 32	?Σ	48·9	68·7
Adelaide		125·1	208	—	—	—	—	e 58·2?	64·9?
Tashkent		134·4	43	i 19 31	[+ 2]	—	—	51·4	77·9
Perth		134·8	186	e 41 52	?	—	—	—	69·2
Irkutsk		140·4	5	19 33	[− 7]	28 38	?	61·4	80·1
Bombay		143·4	75	19 43	[− 3]	e 31 41	?	60·5	88·0
Hyderabad		148·8	77	19 58	[+ 4]	33 43	?	72·5	81·0
Zi-ka-wei		159·2	333	20 13	[+ 6]	—	—	77·9	97·0
Batavia	N.	160·5	169	e 20 45	[+36]	—	—	82·9	—
Manila	E.	169·7	280	e 20 12	[− 3]	e 50 22	?	e 74·0	—
Hong Kong		170·0	340	25 19	?PR_1	—	—	—	81·9
Phu-Lien		171·4	25	e 24 57	?PR_1	—	—	—	—

Additional readings and notes: Santiago PR_1 = +5m.19s. Charlottesville eN = +12m.34s. = PR_3 −15s. Georgetown PR_1Z = +10m.35s. Cincinnati ePR_1N = +11m.42s., i = +19m.15s. = [S] +7s. St. Louis iPSE = +17m.23s., iE = +19m.23s. = [S] +6s., and +20m.9s. Ithaca e = +19m.31s. = [S] +9s. Chicago PR_2 = +13m.21s., iSR_1E = +19m.7s. = [S] −27s., eSR_1N = +21m.56s. = SR_1 −26s. Ottawa iE = +19m.50s. = [S] +5s., +20m.42s., and +24m.37s. = SR_2 −6s., eSR_1N? = +22m.40s. = SR_1 −6s., eLN = +26·9m., MN = +33·4m.; T_0 = 17h.34m.14s. Tucson iPR_1N = +11m.58s. iPR_2N = +14m.11s., eSR_1E = +22m.54s. Denver SR_1 = +23m.37s., eN = +27m.52s.? Berkeley eZ = +11m.33s., eEZ = +29m.22s., eE = +32m.16s. Spokane e = +11m.44s., eSN = +21m.13s., MN = +41·9m., all readings being given for April 3d. San Fernando MN = +48·0m. Almeria MN = +50·5m. Toledo MNW = +38·6m.; epicentre 12°4′S. 69°6′W. Tortosa SE = +23m.16s. Algiers PR_1 = +16m.0s., MN = +54·4m. Barcelona PR_1 = +16m.7s., MN = +42·9m. Oxford i = +17m.50s., MN = +48·7m. Stonyhurst PS = +24m.48s.; epicentre 13°·0S. 69°·5W. Kew eS_cP_cSE = +23m.26s., iPSEZ = +24m.50s., SR_1 = +30m.4s., SR_2 = +33m.28s., LZ = +41·9m.; epicentre 12°·4S. 69°·6W. Paris MN = +40·9m. Uccle eS = +22m.50s., MN = +45·8m., true S is given as "e." Moncalieri (first line), eE = +9m.21s., (second line), L = +33·6m., MN = +53·2m. De Bilt PR_1Z = +16m.54s., MN = +42·9m., MZ = +46·6m. Rocca di Papa ePE = +13m.29s., P = +13m.34s., ePN = +13m.41s., S = +24m.34s. Honolulu T.H. eN = +39m.50s., LN = +44·8m., MN = +45·9m. Hamburg ePR_1Z = +17m.9s., MN = +49·9m., MZ = +51·9m. Jena eZ = +17m.21s., eS = +34m.22s., eLZ = +48·9m., MN = +46·4m., true S is given as "eN." Laibach e = +34m.40s. Zagreb eE = +17m.33s. = [P] +2s., e = +26m.23s. = PS +2s. Copenhagen ePE = +13m.40s., PR_1 = +17m.33s., eS_cP_cSE = +24m.15s., ePSZ = +26m.20s., ePPSE = +26m.35s., SR_1 = +31m.40s., SR_2 = +35m.52s.?, eLqN = +40·9m., MN = +45·5m., MZ = +52·6m. Lund +17m.37s. and +23m.52s. Vienna iZ = +17m.35s. = [P] +0s. Budapest MN = +49·4m. Konigsberg eLN = +44·6m., MN = +50·9m. Entebbe +18m.8s. = [P] +16s.

Continued on next page.

Helsingfors $PR_1 = +18m.16s.$ Pulkovo $iPR_1 = +18m.46s.$, $S_cP_cS = +24m.57s.$ $= [S] + 5s.$, $PS = +28m.9s.$ Ksara $PN = +22m.56s.$ $= PR_2 + 34s.$, $PR_1N = +24m.7s.$ $= PR_2 - 4s.$, $PR_2N = +26m.29s.$ $= \Sigma + 17s.$, $PR_3N = +28m.54s.$ $= PS - 3s.$, $PR_4 = +29m.47s.$, $PSN = +33m.15s.$ Kucino $PR_1 = +19m.5s.$, $PS = +28m.38s.$, $ePPS = +30m.11s.$ Makeyevka $PR_1 = +19m.24s.$, $PS = +29m.8s.$ Riverview $e? = +23m.16s.$ $= PR_2 - 21s.$, $ePS = +29m.58s.$, $MN = +68 \cdot 1m.$ Baku $ePR_1 = +20m.22s.$, $iPS = +30m.30s.$ Ekaterinburg $iPR_1 = +20m.32s.$, $iPS = +30m.17s.$ Tashkent $PR_1 = +22m.2s.$, $P_cP_cS = +22m.58s.$ Irkutsk $PR_1 = +22m.33s.$, $SR_1 = +41m.0s.$ Hyderabad $PR_1 = +23m.32s.$, $[S] = +30m.17s.$ $= \Sigma + 13s.$ Zi-ka-wei $PR_1Z = +24m.28s.$, $e = +36m.53s.$, $+42m.18s.$, and $+50m.28s.$ $= SR_2 - 22s.$ Batavia $iE = +21m.30s.$, $+21m.42s.$, and $+32m.38s.$

April 9d. Shocks from the epicentre of 17h. 34m. 8s. were recorded as follows

by La Paz :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
14	6	46	19	39	1	21	3	47
*17	35	15	19	52	29	21	22	24
19	1	31	20	11	26	21	52	49
19	13	51	20	15	35	22	52	33
19	24	16	20	28	1	23	43	14
19	31	34	20	41	38	23	52	28

by Sucre :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
14	8	19	18	39	19	20	43	36
18	17	37	19	33	55	21	6	30
18	29	43	20	12	34	21	55	30
18	34	46	20	17	31	22	54	26
			20	29	25			

* Separately computed.

April 9d. Readings also at 0h. (Zagreb, Melbourne, Ekaterinburg, Wellington, near Suva, and near Toyooka), 3h. (near Taihoku, near Hukuoka, and Nagasaki, near Toyooka), 5h. (near Toyooka), 7h. (Baku and Ekaterinburg), 8h. (Zagreb), 15h. (Lick and near Toyooka), 19h. (La Paz), 20h. (near La Paz and near Rocca di Papa), 23h. (La Paz, Sucre, and Santiago).

April 10d. 1h. 3m. 18s. Epicentre 37°·4N. 26°·1E. (given by Russian stations)

$A = +\cdot 713$, $B = +\cdot 349$, $C = +\cdot 607$; $D = +\cdot 440$, $E = -\cdot 898$; $G = +\cdot 545$, $H = +\cdot 267$, $K = -\cdot 794$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ksara		8·7	111	2 30	+18	3 42	−14	4·9	—
Budapest		11·3	335	e 6 17	?L	—	—	7·0	7·7
Florence	Z.	12·9	304	e 0 42?	?	—	—	—	8·7
Makeyevka		13·7	36	e 1 57	?	—	—	6·7	12·1
Moncalieri		15·7	305	—	—	—	—	e 8·0	—
Strasbourg		17·4	316	—	—	—	—	—	11·7
Feldberg	N.	17·9	321	—	—	—	—	e 9·7	10·8
Baku		18·7	73	e 4 27	+ 2	e 7 55	0	10·5	—
Kucino		20·0	20	—	—	e 8 30	+ 7	e 10·4	12·5
Lund		20·2	339	—	—	—	—	11·7	—
Uccle		20·4	318	—	—	—	—	e 10·7	—
Copenhagen		20·5	337	—	—	—	—	e 11·7	—
De Bilt		20·8	322	—	—	—	—	e 11·7	12·6
Pulkovo		22·5	6	5 10	− 1	9 13	− 2	12·7	13·7
Kew		23·3	315	—	—	—	—	e 12·7	—
Ekaterinburg		30·0	38	—	—	e 11 13	−21	—	—

Moncalieri gives also $e = +6m.17s.$, $S? = +8m.3s.$, $L = +9 \cdot 4m.$, $LE = +10 \cdot 4m.$

April 10d. After-shocks from the epicentre of April 9d. 17h. 34m. 8s. were recorded as follows by La Paz :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
0	25	49	5	16	47	12	6	27
1	7	44	5	26	26	12	12	40
1	15	47	5	49	0	12	28	14
1	22	28	6	17	54	12	35	54
1	49	36	6	40	59	12	49	59
2	6	32	6	51	4	13	21	59
2	8	40	7	40	29	14	12	17
2	45	44	7	59	27	14	23	25
3	12	11	9	22	24	15	22	51
3	15	25	9	54	7	17	3	49
3	23	49	10	3	49	18	0	32
3	28	12	11	13	32	18	4	46
4	9	15	11	19	41	18	45	24
4	22	6	11	33	0	20	44	59
4	45	35	11	46	36	23	43	59
5	2	22	11	53	44	23	45	1

by Sucre :—

h.	m.	s.	h.	m.	s.
5	27	36	11	20	54

April 10d. Readings also at 0h. (La Plata), 6h. (Victoria, Ottawa, Georgetown, St. Louis, Tucson, near Tacubaya, Oaxaca, Puebla, and Vera Cruz), 8h. (near Manila, near Almeria, and Granada), 10h. (near Manila), 11h. (Ekaterinburg, Irkutsk, Toyooka, Melbourne, and Riverview), 15h. (near La Paz), 16h. (Georgetown, Ottawa, Toronto, St. Louis, Cincinnati, Tucson, Berkeley, Tacubaya, and Chihuahua), 17h. (Ekaterinburg, Tashkent, Kucino, Copenhagen, Kodaikanal, Ithaca, and near Batavia), 18h. (La Paz and near Algiers), 19h. (Ekaterinburg and Tashkent), 20h. (Ekaterinburg, Tashkent, near Tacubaya, and near Oaxaca), 21h. (Ekaterinburg, Tashkent, Makeyevka, Baku (4), Bombay, Suva, Ottawa, Toronto, Georgetown, Tucson, and St. Louis), 22h. (Baku (2), near Theodosia, and Yalta), 23h. (Ekaterinburg, Tashkent, Zagreb, Vienna, Florence, De Bilt, Suva, Wellington, and near Apia).

April 11d. 16h. 24m. 0s. Epicentre 34°·0N. 135°·5E.

A = −·591, B = +·581, C = +·559.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Sumoto	0·6	304	e 0 13	+ 4	—	—	i 0·5	0·6
Osaka	0·7	355	0 11	0	(0 17)	− 3	0·3	0·9
Kobe	0·7	339	0 12	+ 1	(0 21)	+ 1	0·4	0·4
Nagoya	1·7	45	e 0 4	−22	—	—	e 1·0	—
Toyooka	1·7	340	i 0 22	− 4	(i 0 39)	− 9	i 0·6	0·7

Osaka gives MN = +0·8m.

April 11d. 21h. 44m. 54s. Epicentre 2°·5N. 126°·7E. (as on 1927 March 20d.).

A = −·597, B = +·801, C = +·044 ; D = +·802, E = +·598 ;
G = −·026, H = +·035, K = −·999.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Manila	13·3	335	e 3 27	+10	—	—	—	—
Batavia	21·0	246	5 58	+65	i 8 32	−12	—	—
Zi-ka-wei z.	29·1	351	e 6 21	+ 2	—	—	—	18·0
Irkutsk	53·1	344	9 26	− 1	16 55	− 2	24·4	—
Tashkent	64·3	316	10 41	+ 1	e 18 16	−61	e 29·1	35·5
Ekaterinburg	75·0	330	i 11 45	− 4	21 20	− 6	31·1	—
Baku	78·4	311	—	—	—	—	e 41·1	—
Makeyevka	87·2	319	e 15 6	+126	—	—	—	—

Zi-ka-wei readings have been increased by 1h. Tashkent S is given simply as " e."

April 11d. After-shocks from the epicentre of April 9d. 17h. 34m. 8s. were recorded as follows by La Paz :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
0	22	6	4	47	54	12	6	35
2	2	32	6	41	12	13	8	42
2	6	21	7	30	33	14	16	2
2	47	13	7	48	51	15	41	42
2	51	2	9	6	34	17	22	59
4	13	29	11	43	29	22	56	4
4	42	13	12	2	38			

by Sucre :—

h.	m.	s.
18	47	12

April 11d. Readings also at 0h. (Baku), 5h. (Ravensburg and Rocca di Papa), 8h. (Apia), 9h. (Batavia, Irkutsk, and Phu-Lien), 10h. (Baku, Bombay, Ekaterinburg (2), and Makeyevka), 11h. (Baku, Ekaterinburg, De Bilt, Irkutsk, and Makeyevka), 13h. (near Toyooka), 14h. (Graz), 18h. (near Matuyama, near Nagasaki, and Hukuoka), 20h. (near Yalta).

April 12d. 15h. 25m. 48s. Epicentre 36°·5N. 75°·0E.

A = +·208, B = +·776, C = +·595 ; D = +·966, E = −·259 ; G = +·154, H = +·575, K = −·804.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tashkent		6·5	319	1 41	+ 2	2 51	− 6	—	3·7
Baku		20·0	289	e 4 44	+ 3	e 8 18	− 5	e 10·6	—
Ekaterinburg		22·5	339	5 5	− 6	9 16	+ 1	12·2	13·7
Irkutsk		25·9	43	—	—	—	—	12·5	—
Makeyevka		29·3	305	—	—	(e 11 24)	+ 2	e 11·4	—
Kucino		31·5	320	—	—	e 12 12	+12	e 17·9	—
Pulkovo		36·7	324	—	—	—	—	e 19·2	—
Copenhagen		45·5	316	—	—	—	—	16·2	—
Feldberg	N.	48·5	309	—	—	—	—	—	29·2

Kucino gives also e = +17m.0s.

April 12d. 16h. 36m. 36s. Epicentre 37°·4N. 138°·8E. (as on 1927 Oct. 27d).

A = −·598, B = +·523, C = +·607 ; D = +·659, E = +·752 ; G = −·457, H = +·400, K = −·794.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	2·5	48	0 39	0	1 13	+ 4	—	—
Nagoya		2·7	213	e 0 19	−23	(0 52)	−22	0·9	1·2
Osaka		3·8	225	e 1 8	+ 9	(1 55)	+11	1·9	2·5
Kobe		4·0	228	1 4	+ 2	(1 55)	+ 5	1·9	2·2
Sumoto		4·4	227	e 1 8	0	(i 1 58)	− 3	i 2·0	2·0

Additional readings : Mizusawa SN = +1m.12s. Kobe MZ = +2·1m.

April 12d. 18h. 8m. 30s. Epicentre 28°·5S. 73°·0W.
A = +·257, B = −·840, C = −·477; D = −·956, E = −·292;
G = −·140, H = +·456, K = −·879.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Santiago		5·3	155	e 2 26	+64	3 34	+69	4·0	—
Sucre		11·8	39	i 2 53	− 3	i 5 9	− 5	i 6·0	6·7
La Paz		12·8	22	3 11	+ 1	i 5 42	+ 3	6·5	7·0
La Plata		14·3	120	i 3 44	+14	6 26	+11	7·5	—
Rio de Janeiro	E.	27·3	85	6 0	− 1	10 35	−11	—	—
	N.	27·3	85	5 57	− 4	10 38	− 8	—	—
Georgetown	Z.	67·5	357	i 10 52	− 9	—	—	39·8	—
St. Louis		69·0	347	e 11 31	+20	e 20 20	+ 6	40·5	46·5
Toronto		72·4	356	—	—	—	—	—	44·5
Ottawa		73·9	359	—	—	e 21 19	+ 6	e 29·5	—
Cape Town		75·7	121	—	—	—	—	—	42·5
Victoria		89·1	330	—	—	—	—	49·1	49·4
San Fernando	E.	90·3	49	—	—	—	—	—	59·2
Rio Tinto		90·8	47	46 30?	?L	—	—	(46·5)	52·5
Granada		92·4	49	—	—	—	—	48·5	52·5
Almeria		93·1	49	—	—	—	—	—	55·8
Tortosa	N.	97·1	47	—	—	—	—	e 53·5	55·7
Kew		102·2	38	—	—	—	—	e 48·5	—
Stonyhurst		102·3	36	—	—	—	—	e 53·5	60·5
Paris		102·4	41	—	—	—	—	e 53·5	61·5
Edinburgh		103·0	33	—	—	—	—	54·5	—
Uccle		104·4	40	—	—	e 25 5	[+20]	e 51·5	—
Strasbourg		105·3	43	—	—	e 39 30?	?	e 53·5	—
De Bilt		105·4	40	—	—	e 25 18	[+29]	e 50·5	58·5
Florence	Z.	105·5	49	—	—	—	—	e 66·0	66·8
Rocca di Papa		105·6	51	—	—	—	—	e 51·3	58·5
Feldberg	N.	106·5	41	—	—	e 33 41	?SR_1	e 52·3	63·5
Copenhagen		110·8	36	—	—	e 28 36	?PS	53·5	—
Pulkovo		120·9	34	e 20 32	?PR_1	e 30 27	?PS	61·5	90·4
Makeyevka		124·4	49	—	—	e 25 54	[− 4]	64·5	78·4
Kucino		124·8	40	—	—	e 39 54	?	e 58·9	73·8
Baku		132·3	60	e 21 56	?PR_1	e 40 6	?SR_1	61·5	82·9
Ekaterinburg		137·0	35	i 19 51	[+17]	—	—	57·5	84·3
Tashkent		146·8	56	e 19 48	[− 3]	e 23 30	?PR_1	e 73·5	89·7
Irkutsk		156·2	4	e 20 26	[+23]	—	—	e 85·0	100·2
Zi-ka-wei	Z.	167·2	286	e 20 42	[+29]	—	—	—	81·0

Additional readings: Santiago PR_1 = +2m.40s., PR_2 = +2m.58s. La Paz MN = +8·0m. Georgetown iZ = +28m.50s. = SR_3 − 11s. St. Louis eE = +21m.24s. = [S] +19s., eN = +24m.43s. and +27m.43s., eE = +28m.43s., e = +37m.30s. San Fernando MN = +57·6m. De Bilt MN = +62·2m., MZ = +67·8m. Rocca di Papa e = +41m.36s. = SR_2 − 24s., and +44m.0s. Feldberg e = +41m.30s. and +46m.23s. Makeyevka e = +31m.4s. Kucino e = +33m.24s. Baku e = +23m.4s. and +32m.18s. Ekaterinburg i = +23m.22s., e = +32m.28s., and +40m.18s. = SR_1 +2s. Irkutsk e = +24m.20s. = PR_1 +4s., +33m.26s., and +43m.55s. = SR_1 −7s.

April 12d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows by La Paz:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
4	14	7	8	58	25	13	31	53
4	33	20	12	25	3	17	51	8
5	1	0	12	35	52	23	49	55
			13	27	2			

by Sucre—

h.	m.	s.
11	37	10

April 12d. Readings also at 1h. (near Theodosia and Yalta), 3h. (Tucson, and Ottawa), 4h. (Tashkent), 6h. (Tananarive), 7h. (Batavia), 9h. (Baku, Tashkent (2), Ekaterinburg, Makeyevka, Kucino, Pulkovo, and De Bilt), 10h. (La Paz (2) and Sucre), 11h. (Graz), 12h. (near Sucre, near Bombay, near Toyooka), 13h. (La Plata), 17h. (Batavia, La Plata, and Sucre), 18h. (near Taihoku), 20h. (Florence, La Plata, La Paz, Sucre, Nagoya, and near Tashkent), 23h. (Taihoku, near Port au Prince, near Theodosia, and Yalta),

April 13d. 23h. 15m. 57s. Epicentre 15°·5N. 96°·4W.

(given by De Bilt).

A = −·107, B = −·958, C = +·267; D = −·994, E = +·111; G = −·003, H = −·266, K = −·964.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Oaxaca		1·6	347	0 3	−21	(0 24)	−21	0·4	0·5
Vera Cruz		3·7	4	(0 36)	−22	(1 35)	− 7	(1·6)	(2·3)
Puebla		3·9	334	(0 43)	−18	(1 33)	−14	(1·5)	(1·7)
Tacubaya		4·8	326	1 41	+27	—	—	2·8	3·0
Merida		8·4	48	(2 24)	+17	(4 0)	+13	—	(5·2)
Guadalajara		8·5	309	3 23	+74	(3 23)	−27	5·1	5·4
Mazatlan		12·2	312	—	—	—	—	6·7	—
Tucson	E.	21·4	325	i 5 9	+11	e 9 16	+23	11·8	14·1
	N.	21·4	325	i 5 10	+12	e 9 12	+19	e 11·6	13·9
St. Louis		23·8	12	i 5 27	+ 1	i 9 51	+11	i 12·6	15·4
Denver		25·4	344	e 5 45	+ 3	e 10 15	+ 4	—	14·9
Cincinnati		25·8	22	i 5 45	− 1	e 10 18	0	i 13·1	—
Chicago	E.	27·4	14	i 5 58	− 4	i 10 47	− 1	16·9	24·6
	N.	27·4	14	i 5 54	− 8	i 10 46	− 2	e 16·9	25·0
Charlottesville	N.	27·5	32	e 6 3	0	i 10 47	− 3	e 14·0	29·6
Georgetown	Z.	28·9	32	e 6 14	− 3	11 23	+ 8	—	23·0
Lick		31·3	320	—	—	—	—	e 14·4	—
Toronto	E.	31·7	25	e 6 41	− 3	e 11 50	−13	—	19·7
	N.	31·7	25	i 6 41	− 3	i 11 52	−11	15·2	24·5
Ithaca		31·9	30	e 6 31	−15	11 57	−10	15·1	—
Berkeley	E.	32·0	320	—	—	e 11 59	− 9	e 18·2	—
	N.	32·0	320	e 6 45	− 2	e 11 53	−15	e 19·1	—
	Z.	32·0	320	e 6 38	− 9	—	—	e 19·1	—
Harvard		34·5	35	e 7 8	− 1	e 12 44	− 4	e 20·9	28·7
Ottawa		34·6	27	i 7 1	− 9	i 12 37	−12	e 17·1	27·1
Spokane		36·6	336	e 7 36	+ 9	e 13 26	+ 8	—	20·1
Victoria		39·7	333	7 49	− 3	13 59	− 3	21·2	23·1
La Paz		42·4	138	8 7	− 7	i 14 37	− 3	18·1	20·8
Sucre		46·1	138	e 8 36	− 5	i 15 27	− 2	23·1	30·5
Honolulu T.H.		58·3	287	—	—	—	—	e 29·1	—
Rio de Janeiro		64·6	126	19 39	?	(19 39)	+19	37·9	—
Scoresby Sund		70·3	20	e 11 28	+ 9	20 45	+15	e 37·1	44·2
Edinburgh		79·0	35	—	—	e 22 23	+11	50·1	—
Oxford		81·0	40	—	—	22 43	+ 8	e 41·1	51·8
San Fernando		81·0	55	12 33	+ 8	22 33	− 2	37·1	46·5
Kew		81·7	40	e 12 36	+ 7	e 22 48	+ 5	41·1	—
Toledo	N.W.	81·9	50	e 12 36	+ 6	e 22 51	+ 6	—	—
Granada		82·9	53	i 12 43	+ 8	23 10	+14	40·9	44·0
Almeria		83·9	53	12 45	+ 4	23 13	+ 5	41·3	43·2
Paris		84·2	41	e 12 47	+ 4	e 23 17	+ 7	48·1	49·0
De Bilt		84·7	38	12 50	+ 4	23 21	+ 5	e 44·1	50·5
Uccle		84·7	39	e 12 51	+ 5	e 23 15	− 1	e 39·1	—
Alicante		84·9	51	—	—	(e 23 10)	− 8	e 23·2	—
Tortosa	N.	85·1	49	e 12 15	−34	23 20	0	38·3	47·2
Hamburg		86·9	35	e 12 3	−55	e 23 30	−10	e 47·1	62·1
Feldberg	N.	87·3	39	e 13 7	+ 6	e 23 40	− 4	—	52·9
Copenhagen		87·4	31	13 4	+ 3	24 44	?PS	42·1	46·4
Strasbourg		87·5	40	13 3	+ 1	e 23 32	−15	39·1	—
Lund		87·8	31	16 33	?PR_1	23 39	−11	38·0	—
Algiers		88·1	52	e 13 16	+10	23 54	+ 1	45·1	59·1
Upsala		88·1	27	—	—	24 3?	+10	—	—
Moncalieri	E.	88·7	44	13 12	+ 3	23 45	−15	38·6	—
		88·7	44	13 12	+ 3	23 31	−29	38·7	—
Helsingfors		91·0	25	e 16 57	?PR_1	28 39	?	—	—
Rocca di Papa		93·2	45	e 13 4	−29	e 24 58	+11	—	45·2
Pulkovo		93·4	24	13 32	− 2	24 11	−38	47·1	62·5
Zagreb	N.E.	93·7	41	e 13 47	+11	e 24 14	−39	e 55·0	—
	N.W.	93·7	41	e 13 44	+ 8	e 24 14	−39	e 53·0	—
Kucino		99·1	25	e 13 51	−15	e 24 33	[+14]	47·4	53·4
Makeyevka		104·6	29	—	—	25 7	[+22]	51·6	70·8
Ekaterinburg		105·2	13	e 14 26	− 9	i 25 8	[+20]	48·1	69·4
Irkutsk		109·9	346	—	—	25 28	[+18]	56·5	63·3
Ksara	N.	112·9	41	e 18 7	[−24]	e 20 58	?	30·1	—
Baku		115·9	27	—	—	—	—	57·1	75·3
Zi-ka-wei	Z.	120·9	321	e 20 37	?PR_1	—	—	—	73·1
Tashkent		121·7	11	—	—	—	—	e 57·1	74·6
Phu-Lien		137·3	326	—	—	—	—	75·1	—
Bombay		144·0	16	e 20 3?	[+16]	—	—	—	—

For Notes see next page.

NOTES TO APRIL 13d. 23h. 15m. 57s.

Additional readings and notes: Vera Cruz readings have been diminished by 2m. Puebla and Merida readings have been diminished by 1m. Tucson $eSR_1N = +10m.24s.$ St. Louis $iPR_1N = +6m.2s.$, $iSR_2N = +11m.22s.$ Denver $eSE = +10m.19s.$ Cincinnati $iS = +10m.21s.$ Charlottesville $iE = +10m.55s.$ Lick $eE = +14m.36s.$ and $+20m.43s.$, $eN = +18m.37s.$, $+21m.18s.$, and $+23m.43s.$; epicentre 12°·8N. 95°·0W. Berkeley $eE = +16m.3s.$, $eN = +16m.15s.$ Harvard $e = +9m.16s.$ and $+18m.24s.$ Spokane $PR_1 = +8m.46s.$ Victoria $LN = +20·6m.$; $T_0 = 23h.16m.0s.$ La Paz $SN? = +14m.44s.$ Rio de Janeiro $SN = +27m.13s.$, $SE = +28m.3s.$ Scoresby Sund $ePN = +11m.45s.$, $eE = +26m.39s.$, $eLE = +41·1m.$, $MN = +42·6m.$ San Fernando $MN = +45·6m.$ Granada $i = +13m.36s.$, $PR_1 = +15m.49s.$, $PSP = +24m.4s.$ Almeria $i = +23m.54s.$ $PS - 1s.$ Hamburg $MN = +54·1m.$ Feldberg $e = +16m.10s.$ and $+29m.32s. = SR_1 - 22s.$ Copenhagen $PR_1 = +16m.29s.$, $eS_cP_cSE = +23m.37s.$, $PS = +25m.47s.$, $SR_1 = +29m.45s.$, $MZ = +48·7m.$ Algiers $PR_1 = +16m.26s.$ Pulkovo $PR_1 = +17m.14s.$ Makeyevka $PR_1 = +18m.39s.$ Ekaterinburg $PS = +27m.59s.$ Irkutsk $PR_1 = +19m.22s.$, $PS = +28m.50s.$ Baku $PR_1 = +20m.6s.$, $PS = +29m.52s.$ Tashkent $iPR_1 = +20m.40s.$, $iPR_2 = +23m.36s.$, $PPS = +32m.44s.$

April 13d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows by La Paz:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	11	7	5	6	15	22	1	12
4	8	5	7	43	36	23	22	16
			14	56	1			

April 13d. Readings also at 0h. (Zi-ka-wei and near Taihoku), 2h. (Zagreb), 9h. (Algiers), 14h. (Florence), 15h. (near Almeria and Granada), 16h. (near Tacubaya, Oaxaca, and Vera Cruz), 17h. (Balboa Heights and near Tacubaya), 18h. (Adelaide), 19h. (near La Paz and Sucre), 20h. (near Tacubaya), 21h. (near Toyooka), 22h. (Ekaterinburg and Tashkent), 23h. (near Sucre).

April 14d. 8h. 59m. 43s. Epicentre 41°·7N. 26°·3E.

(deduced by comparison with 41°·5N. 26°·5E. of 1926 Sept. 3d.).

$A = +·669$, $B = +·331$, $C = +·665$; $D = +·443$, $E = -·896$; $G = +·596$, $H = +·295$, $K = -·747$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 17	− 5	i 2 25	0	—	3·0
Sarajevo		6·2	293	e 1 34	− 1	i 1 54	−45	—	2·1
Yalta		6·4	61	1 49	+11	3 7	+12	\i 3·4	4·7
Theodosia		7·3	59	2 7	+16	3 36	+18	4·0	11·5
Budapest		7·7	320	2 4	+ 7	—	—	4·0	—
Sebenico		7·9	289	e 2 9	+ 9	i 3 42	+ 8	(i 4·3)	5·8
Lemberg		8·3	350	(e 2 17)	+11	(e 3 53)	+ 8	e 3·9	6·5
Zagreb		8·5	303	i 2 10	+ 1	i 3 3	−47	—	4·8
Pompeii		8·9	268	e 2 23	+ 8	e 3 58	− 3	4·3	10·3
Naples	N.	9·1	269	i 2 28	+10	e 3 40	−26	—	5·3
Graz		9·4	309	i 2 19	− 3	i 4 11	− 2	—	5·6
Laibach		9·6	301	i 2 26	+ 2	i 4 39	+21	—	—
Vienna		9·6	316	e 2 22	− 2	3 52	−26	i 5·2	5·3
Rocca di Papa	E.	10·2	275	2 35	+ 2	3 48	−47	—	—
	N.	10·2	275	2 39	+ 6	3 52	−43	—	—
Venice		10·8	295	3 17?	+36	—	—	—	—
Ksara		10·9	133	3 3	+20	5 56	+64	6·5	—
Florence	Z.	11·2	286	i 2 52	+ 5	5 4	+ 5	5·4	6·2
Innsbruck	N.E.	12·0	303	2 51	− 8	i 5 23	+ 4	6·2	8·3
Helwan		12·5	161	3 22	+16	i 6 12	+40	—	12·6
Chur		13·0	299	i 3 13	0	6 49	+65	—	—
Ravensburg		13·3	303	3 16	− 1	4 41	−70	5·1	8·8
Jena	E.	13·6	317	e 3 17	− 4	i 5 47	−11	e 5·9	7·8
	N.	13·6	317	i 3 17	− 4	i 5 45	−13	e 6·1	6·6
	Z.	13·6	317	e 3 17	− 4	i 5 55	− 3	e 6·0	8·3

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Konigsberg		13·7	346	i 3 21	− 1	i 5 55	− 6	—	7·4
Zurich		13·8	300	i 3 22	− 1	i 6 0	− 3	—	—
Hohenheim		13·9	306	3 24	− 1	5 15	−51	5·7	8·7
Moncalieri		13·9	290	i 3 23	− 2	6 25	+19	—	8·5
	Z.	13·9	290	i 3 22	− 3	6 46	+40	—	13·0
Potsdam		13·9	324	i 3 24	− 1	e 5 57	− 9	e 7·1	9·8
Neuchatel		14·8	297	i 3 35	− 1	i 6 28	+ 1	—	—
Strasbourg		14·8	304	i 3 32	− 4	e 6 29	+ 2	8·3	9·8
Feldberg	N.	15·0	310	e 3 37	− 2	—	—	e 7·2	8·1
Grenoble		15·3	290	3 46	+ 3	i 6 41	+ 2	—	—
Besançon		15·5	298	3 44	− 2	6 42	− 2	8·3	9·3
Marseilles		15·5	283	3 49	+ 3	i 6 58	+14	7·3	9·4
Kucino		16·0	24	i 3 48	− 4	i 6 56	+ 1	e 7·3	14·3
Hamburg		16·1	323	i 3 53	0	e 7 0	+ 3	—	—
Lund		16·5	333	i 3 54	− 5	—	—	—	—
Copenhagen		16·7	332	i 3 58	− 3	6 56	−15	—	10·8
Puy de Dôme		17·3	292	4 3	− 6	i 7 19	− 6	9·3	11·1
Uccle		17·6	309	i 4 12	0	i 7 29	− 2	e 8·3	11·6
De Bilt		17·7	313	4 13	0	7 34	+ 1	8·9	11·9
Baku		17·8	86	i 4 32	+17	i 8 2	+26	—	—
Barcelona		18·0	277	e 4 18	+ 1	7 47	+ 7	e 8·6	12·9
Paris		18·1	301	i 4 18	0	i 7 39	− 3	9·3	13·3
Pulkovo		18·2	6	i 4 21	+ 2	7 37	− 7	9·3	19·8
Helsingfors		18·5	358	i 4 22	− 1	8 5	+14	9·4	—
Algiers		18·6	263	i 4 28	+ 4	i 7 48	− 5	8·8	16·0
Upsala		18·9	346	i 4 27	− 1	i 7 50	−10	12·8	—
Bagnères		19·2	283	e 4 34	+ 3	7 58	− 8	e 9·6	13·0
Tortosa	N.	19·3	276	4 36	+ 3	8 7	− 1	9·0	11·8
Kew		20·6	307	i 4 49	+ 1	i 8 37	− 1	10·7	14·9
Alicante		20·7	270	4 54	+ 5	8 42	+ 4	10·5	12·6
Oxford		21·3	308	i 4 54	− 3	i 8 46	− 4	—	—
Stonyhurst		22·6	312	i 4 59	−13	i 9 12	− 5	—	15·4
Almeria		22·6	267	i 5 19	+ 7	i 9 24	+ 7	i 12·9	17·9
Bergen		22·7	333	5 19	+ 6	—	—	13·0	17·3
Bidston		22·8	311	5 15	0	9 15	− 6	—	15·8
Toledo		22·9	276	i 5 14	− 2	i 9 23	0	e 10·7	14·4
Granada		23·4	268	i 5 21	0	i 9 36	+ 3	e 12·1	16·2
Edinburgh		23·5	317	5 23	0	9 35	0	10·3	16·5
Malaga		24·2	268	5 26	− 4	i 9 50	+ 2	13·3	18·7
Rio Tinto		25·5	272	4 17?	−86	—	—	—	13·3
San Fernando		25·6	269	i 5 37	− 7	i 9 37	−37	11·0	14·8
Ekaterinburg		26·6	44	i 5 55	+ 1	10 22	−11	—	—
Tashkent		31·8	78	6 46	+ 1	12 31	+26	—	22·3
Reykjavik		35·4	326	—	—	e 12 49	−12	17·9	25·5
Scoresby Sund		37·5	335	e 7 27	− 7	13 23	− 8	18·8	27·2
Azores		39·6	283	11 17	?	—	—	—	26·9
Entebbe		42·0	171	e 8 17	+ 6	14 12	−23	20·3	24·3
Bombay		45·4	105	8 43	+ 7	15 30	+10	24·1	39·8
Irkutsk		51·6	50	9 24	+ 7	16 43	+ 4	e 26·3	29·4
Calcutta	N.	54·6	90	9 31	− 6	—	—	—	—
Kodaikanal		54·6	110	17 41	?S	(17 41)	+25	33·1	36·0
Colombo		58·6	112	10 17?	+14	18 17?	+11	33·3	39·3
Tananarive	E.	63·7	158	10 54	+18	19 33	+24	31·0	40·5
	N.	63·7	158	10 54	+18	19 27	+18	31·5	40·5
Johannesburg		67·8	179	—	—	20 17?	+17	—	—
Harvard		67·8	309	e 11 30	+27	e 20 17	+17	e 30·5	33·4
Ottawa		68·7	313	i 11 17	+ 8	i 20 21	+11	e 30·3	41·7
Phu-Lien		69·2	81	e 11 27	+15	e 20 38	+22	31·8	—
Ithaca		70·9	310	11 32	+10	20 49	+12	33·3	—
Toronto		71·8	313	i 11 36	+ 8	i 20 52	+ 4	31·7	43·0
Zi-ka-wei		73·3	62	11 51	+13	21 31	+25	—	42·5
Georgetown	Z.	73·5	309	11 39	0	20 31	−37	35·6	50·8
Hong Kong		73·8	75	11 57	+16	—	—	—	43·8
Charlottesville	E.	75·0	309	i 11 57	+ 8	e 21 59	+33	e 33·9	39·8
	N.	75·0	309	i 11 57	+ 8	e 22 5	+39	e 34·0	44·9
Ootomari		75·1	40	21 42	?S	(21 42)	+15	36·2	43·0
Cape Town		75·9	187	—	—	21 2	−34	—	43·8
Chicago	E.	77·4	316	i 12 9	+ 6	i 21 58	+ 5	32·7	46·8
	N.	77·4	316	i 12 9	+ 6	i 21 58	+ 5	33·2	46·3
Hukuoka		77·5	56	e 21 58	?S	(e 21 58)	+ 3	42·1	46·2
Cincinnati		77·6	313	e 12 11	+ 6	e 21 31	−25	33·3	42·3
Nagasaki		77·7	57	—	—	—	—	e 39·9	—
Toyooka	N.	78·8	51	e 12 24	+12	e 22 36	+25	e 43·5	—
Sumoto		79·5	52	e 11 17	−59	—	—	i 44·2	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Kobe	E.	79·6	52	—	—	—	—	—	44·5
Osaka		79·8	52	12 39	+21	23 4	?PS	44·0	47·7
St. Louis	E.	81·1	315	i 12 31	+ 5	i 22 40	+ 4	38·4	42·3
	N.	81·1	315	i 12 30	+ 4	i 22 39	+ 3	38·4	42·3
Manila	E.	83·7	76	e 12 53	+13	e 23 8	+ 2	e 45·6	54·3
	N.	83·7	76	e 12 53	+13	e 24 3	?PS	e 45·3	53·0
Spokane		85·1	337	e 12 51	+ 2	e 23 24	+ 4	40·3	44·3
Victoria	E.	86·0	340	12 58	+ 5	23 37	+ 7	37·2	47·4
	N.	86·0	340	12 55	+ 2	23 24	− 6	39·4	46·4
Batavia		87·1	100	12 56	− 4	i 23 39	− 3	e 52·3	—
Rio de Janeiro	E.	91·0	239	e 23 57	?[S]	(e 23 57)	[+23]	37·1	43·8
	N.	91·0	239	e 23 49	?[S]	(e 23 49)	[+15]	37·0	43·8
Berkeley	E.	95·4	336	—	—	—	—	e 47·4	—
Lick	N.	95·7	336	e 17 17	?PR_1	—	—	e 48·6	—
Tucson	N.	96·2	325	13 43	− 7	24 15	[+12]	37·5	58·3
Sucre		103·6	257	e 18 38	?PR_1	—	—	52·3	64·4
La Paz		104·2	262	e 17 51	[−11]	—	—	51·3	63·5
La Plata		108·6	240	—	—	—	—	49·3	—
Honolulu T.H.	N.	116·9	4	—	—	—	—	e 58·9	—
Adelaide		127·8	106	e 20 55?	?PR_1	i 32 36	?PS	e 53·7?	78·8
Melbourne		133·7	107	e 23 5	?	—	—	—	80·8
Riverview		136·4	98	—	—	—	—	e 61·7	84·5
Sydney		136·4	98	—	—	70 5	?L	80·0	85·3
Wellington	E.	156·5	101	—	—	—	—	e 80·8	—

Additional readings and notes: Belgrade iP*N = +1m.25s., iP = +1m.41s., iN = +1m.58s., and +2m.5s. Sarajevo i = +1m.42s. Theodosia MN = +11·5m. Sebenico e = +3m.8s., S is given as i and L as iS. Lemberg gives P as S and S as L, also eP = 8h.59m.36s. Zagreb i = +2m.46s. and +2m.59s., MNW = +4·9m. Laibach i = +3m.48s.; all readings are given as i simply. Vienna iPZ = +2m.25s., i = +2m.29s., iN = +2m.39s., iEZ = +2m.46s., PR_1 = +2m.56s., iEN = +3m.5s., iZ = +3m.10s. and +3m.18s., iE = +3m.21s., iZ = +3m.25s. iN = +3m.29s., R_5P_2S = +3m.32s., iZ = +3m.44s., iN = +4m.16s., iZ = +4m.20s., R_8PS_2 = +4m.30s., SR_1 = +4m.44s. Rocca di Papa SE = +4m.6s. Innsbruck PR_1NE = +2m.58s., iNE = +3m.8s., and +3m.19s., SR_1NE? = +5m.34s. Jena iPE = +3m.25s., iPZ = +3m.27s. Konigsberg eE = +3m.26s., iZ = +3m.34s., iN = +3m.35s., iPR_2E = +3m.37s., iN = +4m.4s., iZ = +4m.13s., iN = +4m.15s., iE = +4m.16s., eNZ = +4m.59s., iN = +5m.25s., iSN = +5m.57s., SR_1EN = +6m.17s.? SR_1Z = +7m.17s.? Hohenheim PR_1 = +3m.36s. Moncalieri (first line) MN = +12·7m., (second line) MN = +8·6m. Potsdam i = +5m.31s., e = +6m.37s. Strasbourg MZ = +11·3m., MN = +12·3m. Feldberg iPN = +3m.38s., eN = +3m.47s., iN = +4m.30s. Marseilles e = +3m.52s. Hamburg iSE = +7m.13s. Copenhagen eEN = +5m.7s., iE = +7m.9s., eZ = +7m.11s., iZ = +9m.17s., MN = +11·3m., MZ = +13·1m. Puy de Dôme iP = +4m.11s., MN = +13·3m. Uccle i = +7m.36s. and +7m.43s., MN = +11·4m. De Bilt MN = +10·8m. Barcelona MN = +10·9m. Paris MN = +12·3m. Algiers MN = +12·3m. Upsala MN = +13·7m. Bagnères eLN = +9·0m., MN = +11·7m. Tortosa iPE = +4m.35s. Kew LN = +9·7m., MN = +11·2m., MZ = +17·0m. Alicante MN = +11·8m. Almeria PR_1 = +6m.31s., MZ = +13·1m. Toledo PR_1Z = +5m.38s., SR_1NE = +10m.8s., MNW = +14·5m., MZ = +19·9m. Granada MZ = +13·8m., MN = +15·3m. Reykjavik MN = +24·4m. Scoresby Sund PR_1 = +8m.43s., PR_2 = +8m.57s., eEN = +9m.12s., eE = +9m.35s., eN = +10m.3s. and +11m.17s., SR_1 = +15m.35s., MN = +29·1m. Tananarive PR_1 = +13m.34s., PR_2 = +14m.42s., PR_3 = +15m.36s., PS = +19m.42s. Harvard e = +19m.14s. and +23m.14s.; T_o = 9h.0m.27s. Ottawa iSR_2N = +28m.17s.; T_o = 8h.59m.56s. Toronto iSR_2N = +29m.7s., MN = +43·6m.; T_o = 9h.0m.1s. Hong Kong MN = +51·3m. Ootomari S = +30m.20s. = SR_2 + 9s. Chicago eN = +14m.42s. Cincinnati iE = +16m.12s., iPS = +22m.29s. Kobe MN = +44·8m. Osaka MN = +46·8m. St. Louis iN = +12m.42s., iSR_1N = +27m.56s., iSR_1E = +28m.2s. Spokane iE = +13m.2s., ePR_1 = +16m.24s. Batavia i = +23m.58s. and +24m.22s. = PS − 10s. Rio de Janeiro SN = +30m.27s. = SR_1 − 15s., SE = +30m.30s. = SR_1 − 12s. Berkeley eE = +36m.47s., +41m.59s., and +52m.5s., eN = +52m.8s., eZ = +52m.36s., eE = +56m.53s., eN = +56m.59s. Lick eE = +49m.23s., eN = +59m.35s., eE = +59m.47s. Tucson eN = +17m.22s. = [P] − 9s., LE = +40·4m. Sucre PR_1 = +23m.8s. = PR_2 + 0s., L = +44·3m. La Paz iP? = +18m.39s. = PR_1 − 3s., LN = +46·3m. Honolulu T.H. eLE = +70·7m. Adelaide e = +38m.50s. = SR_1 + 26s., MN = +75·9m. Riverview ePR_2? = +25m.15s., ePPS = +34m.54s., MN = +105·6m. Wellington eN = +88m.28s.

April 14d. 9h. 23m. 33s. Epicentre 41°·7N. 26°·3E. (as at 8h.).

		△	Az.	P.	O−C.	S.	O−C.	L.
		°	°	m. s.	s.	m. s.	s.	m.
Belgrade	N.	5·3	309	e 1 13	− 9	i 2 13	−12	2·5
Sarajevo		6·2	293	e 1 36	+ 1	i 2 54	+ 5	2·9
Yalta		6·4	61	e 1 46	+ 8	—	—	—
Theodosia		7·3	59	e 1 53	+ 2	e 3 17	− 1	3·3
Zagreb		8·5	303	—	—	e 4 3	+13	—
Rocca di Papa		10·2	275	e 3 36	+63	—	—	7·0
Florence		11·2	286	e 2 32	−15	—	—	5·6

Additional readings: Sarajevo e = +2m.33s. Rocca di Papa ePN = +3m.39s.

April 14d. 10h. 23m. 33s. Epicentre 41°·7N. 26°·3E. (as at 9h.).

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	i 1 15	− 7	i 2 26	+ 1	—	2·7
Sarajevo		6·2	293	e 1 34	− 1	i 3 8	+19	—	3·3
Theodosia		7·3	59	2 5	+14	3 28	+10	—	3·6
Budapest		7·7	320	e 2 11	+14	—	—	4·2	4·4
Lemberg		8·3	350	e 2 3	− 3	e 4 39	+54	—	6·2
Zagreb		8·5	303	(e 2 27?)	+18	(e 3 51)	+ 1	(e 4·4)	(4·6)
Pompeii		8·9	268	e 2 38	+23	e 4 58	+57	(e 5·0)	6·1
Naples	N.	9·1	269	e 3 9	+51	—	—	6·6	—
Graz		9·4	309	e 2 19	− 3	e 3 55	−18	4·3	7·3
Vienna	Z.	9·6	316	2 31	+ 7	—	—	—	5·8
Rocca di Papa		10·2	275	e 4 49	?S	(e 4 49)	+14	(e 5·7)	6·9
Makeyevka		10·4	48	—	—	e 4 34	− 6	i 6·2	—
Ksara	N.	10·9	133	e 3 2	+19	—	—	e 6·4	—
Florence		11·2	286	e 5 42	?L	—	—	(e 5·7)	6·9
Ravensburg		13·3	303	—	—	e 5 27?	−24	—	7·9
Jena	E.	13·6	317	—	—	e 6 27	+29	e 7·4	8·2
	N.	13·6	317	—	—	—	—	e 6·8	8·3
	Z.	13·6	317	—	—	e 6 27	+29	e 6·6	7·9
Konigsberg		13·7	346	i 3 29	+ 7	—	—	e 7·0	8·4
Zurich		13·8	300	e 3 23	0	e 6 28	+25	—	—
Moncalieri	Z.	13·9	290	e 5 34	?S	(e 5 34)	−32	(7·8)	—
Hohenheim		13·9	306	—	—	—	—	e 7·4	—
Strasbourg		14·8	304	7 56	?L	—	—	(7·9)	—
Neuchatel		14·8	297	e 3 36	0	e 6 35	+ 8	—	—
Besançon		15·5	298	—	—	—	—	e 7·4	—
Kucino		16·0	24	—	—	e 6 57	+ 2	9·2	—
Hamburg	Z.	16·1	323	e 3 57	+ 4	—	—	—	12·4
Lund		16·5	333	—	—	7 27?	+20	9·4	—
Copenhagen		16·7	332	e 3 54	− 7	—	—	—	10·5
Puy de Dôme		17·3	292	—	—	—	—	e 10·4	—
Uccle		17·6	309	e 9 27?	?L	—	—	(e 9·4)	—
De Bilt		17·7	313	—	—	—	—	e 9·4	—
Paris		18·1	301	—	—	e 8 27?	+45	10·4	11·4
Pulkovo		18·2	6	i 4 19	0	e 7 39	− 5	9·4	11·8
Upsala		18·9	346	e 4 25	− 3	e 7 58	− 2	—	10·9
Kew		20·6	307	e 8 41	?S	(e 8 41)	+ 5	(e 12·6)	—
Granada		23·4	268	e 10 5	?S	(e 10 5)	+32	—	—
Ekaterinburg		26·6	44	5 52	− 2	10 42	+ 9	13·4	16·8

Additional readings and notes: Belgrade iN = +1m.25s. and +2m.4s. Sarajevo e = +1m.57s. Budapest MN = +7·4m. Zagreb readings have been diminished by 10m. Rocca di Papa e = +3m.57s., eSE = +5m.44s. (entered as L), eSNZ = +5m.52s. Ksara readings are given as eN simply. Konigsberg iZ = +3m.53s., +4m.19s., +4m.50s., and +5m.39s., MZ = +9·4m., MN = +10·4m. Moncalieri gives S as P and L as S. Kucino e = +6m.3s. Hamburg ME = +11·4m. Copenhagen MZ = +12·2m. Upsala MN = +12·5m. Kew gives S as ePZ and L as eSE.

April 14d. 13h. 16m. 33s. Epicentre 35°·5N. 55°·0E. (as on 1927 July 29d.).

A = +·467, B = +·667, C = +·581 ; D = +·819, E = −·574 ;
G = +·333, H = +·476, K = −·814.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Baku		6·3	323	1 40	+ 4	i 2 40	−12	2·8	6·0
Tashkent		12·6	58	e 3 27	+20	—	—	i 6·8	8·8
Ksara	N.	15·8	269	3 56	+ 7	7 2	+12	9·0	—
Makeyevka		17·8	320	—	—	e 7 3	−33	11·0	13·8
Helwan		20·6	261	4 50	+ 2	8 38	+ 2	—	—
Ekaterinburg		21·7	9	e 5 3	+ 2	9 3	+ 4	11·4	14·0
Bombay		22·9	132	—	—	—	—	e 11·4	—
Kucino		23·4	336	e 5 21	0	e 9 21	−12	—	—
Pulkovo		29·1	334	e 7 5	?PR_1	i 11 15	− 4	17·4	20·0
Zagreb		31·0	302	e 6 27?	−11	—	—	e 23·3	—
Lund		34·7	319	—	—	—	—	19·4	—
Copenhagen		35·2	319	9 27?	?	—	—	—	23·6
Hamburg		36·0	316	—	—	—	—	e 24·4	—
Feldberg	N.	36·4	310	—	—	e 12 51	−25	e 23·8	27·2
Irkutsk		38·4	49	—	—	—	—	16·0	—
De Bilt		38·7	313	—	—	—	—	e 28·4	—

No additional readings.

April 14d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows at La Paz :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
5	41	4	9	23	59	13	54	41
8	22	23	10	50	47	15	13	1
8	27	9	12	14	7	16	31	26

at Sucre :—

h.	m.	s.	h.	m.	s.
9	24	51	12	15	24

April 14d. Readings also at 1h. (near Toyooka), 3h. (near Ksara), 4h. (Baku, Granada, Tashkent, and Tananarive), 7h. (Zi-ka-wei), 8h. (Kobe, near Tashkent, near Theodosia, and Yalta), 9h. (near Tacubaya), 10h. (Belgrade), 11h. (Moncalieri), 12h. (Budapest, Toyooka, and Zagreb (2)), 13h. (near Taihoku), 14h. (Kobe, near Sumoto, near Batavia and Malabar, near La Paz and Sucre), 15h. (Riverview, Melbourne, Wellington, Christchurch, Ekaterinburg, and Pulkovo), 16h. (Baku, Tashkent, Copenhagen, and Feldberg (2)), 19h. (Budapest), 21h. (Batavia, Neuchatel, near Theodosia, and Yalta), 22h. (Riverview).

April 15d. 10h. 9m. 28s. Epicentre 28°·7N. 51°·9E. (as on 1927 July 30d.).

A = +·541, B = +·690, C = +·480 ; D = +·787, E = −·617 ;
G = +·296, H = +·378, K = −·877.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Baku	11·8	353	e 3 1	+ 5	e 5 19	+ 5	6·3	—
Ksara	14·6	295	e 3 34	0	8 29	?	12·4	—
Tashkent	18·9	44	4 32	+ 4	i 8 4	+ 4	10·5	13·3
Makeyevka	22·1	335	—	—	9 4	− 3	10·6	12·7
Ekaterinburg	28·8	8	6 3	−13	10 54	−19	14·5	—
Kucino	28·8	344	—	—	e 11 50	+37	e 14·7	—
Pulkovo	34·3	341	6 52	−15	12 20	−24	14·5	—
Copenhagen	38·9	325	(8 32?)	+47	—	—	8·5	—
Irkutsk	45·0	43	—	—	—	—	23·0	29·2

Ksara gives also e = +5m.6s. and +6m.41s., eE = +7m.38s. Irkutsk e = +18m.25s. = SR_1 − 5s.

April 15d. 21h. 57m. 15s. Epicentre 40°·5N. 122°·0W. (as on 1927 Aug. 20d.).

A = −·403, B = −·645, C = +·649 ; D = −·848, E = +·530 ;
G = −·344, H = −·551, K = −·760.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Berkeley		2·6	186	e 0 32	− 9	i 0 58	−14	i 1·7	—
Lick	E.	3·5	174	e 0 43	−12	i 1 14	−23	—	—
		3·5	174	e 0 45	−10	i 1 19	−18	—	—
Spokane		7·9	23	e 2 15	+15	4 45	+71	5·8	—
Victoria	E.	8·0	354	2 52	+51	—	—	4·4	6·2
Tucson		12·1	130	—	—	6 8	+47	6·9	—
St. Louis	E.	24·4	84	—	—	e 9 57	+ 5	i 13·8	15·6
Toronto	N.	31·4	70	—	—	—	—	17·5	—
Ottawa		33·5	65	—	—	—	—	e 17·8	—
Scoresby Sund		55·4	24	—	—	—	—	30·8	—
Copenhagen		76·3	25	—	—	—	—	38·8	—
Pulkovo		77·2	15	—	—	—	—	e 42·8	—
Feldberg	N.	79·4	30	—	—	—	—	—	54·8
Ekaterinburg		82·6	359	—	—	—	—	39·8	—

Additional readings: Berkeley iSE = +1m.7s., iSZ = +1m.8s., iZ = +2m.3s., iN = +2m.5s. Lick (first line), iE = +47s., iPE = +50s., iE = +56s., +1m.18s., +1m.48s., and +1m.53s., (second line) eZ = +56s. and +1m.18s., iE = +1m.43s., eZ = +1m.46s. and +1m.51s., iE = +2m.24s., eZ = +2m.25s. Spokane ePE = +2m.16s. Tucson LN = +6·8m. St. Louis eN = +12m.51s., iLN = +13·7m. Ottawa eN = +14m.45s. $=SR_2-10s.$

April 15d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	14	1	5	41	28	14	19	41
1	45	16	9	27	41	19	3	39
3	58	1	10	12	6	20	20	48
			10	12	11			

April 15d. Readings also at 0h. (near Tashkent), 2h. (near Tacubaya), 3h. (Taihoku), 4h. (near Honolulu T.H.), 8h. (Bombay), 9h. (near Tacubaya), 10h. (near Manila), 11h. (Ekaterinburg, Irkutsk, and Tashkent), 21h. (Riverview), 23h. (near Taihoku).

April 16d. 8h. 41m. 0s. Epicentre 44°·0N. 152°·0E. (as on 1922 May 5d.).

A = −·635, B = +·338, C = +·695 ; D = +·469, E = +·883 ;
G = −·613, H = +·326, K = −·719.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ootomari		7·0	295	2 5	+19	(2 56)	−14	2·9	3·3
Mizusawa	E.	9·5	243	3 16	+53	4 11	− 5	—	—
Irkutsk		32·2	304	—	—	—	—	9·0	19·5
Ekaterinburg		55·1	320	e 9 36	− 4	—	—	25·0	33·5
Tashkent		58·2	300	—	—	i 17 54	− 7	e 26·0	31·8
Scoresby Sund		65·4	358	—	—	(19 0?)	−30	19·0	—
Tucino		65·8	326	—	—	e 26 59	?SR_2	31·3	36·5
Pulkovo		65·8	333	e 10 57	+ 7	e 19 42	+ 7	33·0	36·9
Upsala		69·7	339	—	—	—	—	—	42·0
Baku		70·4	310	e 11 25	+ 6	e 20 45	+14	34·5	44·9
Makeyevka		71·3	321	—	—	—	—	33·2	42·7
Lund		74·1	337	—	—	—	—	37·0	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Hamburg		77·2	338	—	—	—	—	e 42·0	—
Budapest		79·6	330	—	—	—	—	e 52·9	—
De Bilt		79·8	340	—	—	—	—	e 41·0	—
St. Louis		80·1	45	e 16 2	?PR_1	e 22 30	+ 6	42·0	—
Feldberg	N.	80·6	337	—	—	e 22 40	+10	e 40·0	45·9
Uccle		81·1	340	—	—	(e 21 0?)	−96	e 21·0	—
Ottawa		81·1	31	—	—	—	—	e 40·0	—
Kew		81·6	345	—	—	—	—	e 48·0	—
Zagreb		82·1	330	—	—	—	—	e 43·0	—
Strasbourg		82·3	338	—	—	—	—	e 48·0	—
Neuchatel		83·9	336	e 12 41	0	—	—	—	—
Moncalieri		85·5	336	—	—	e 37 16	?	47·3	—
Florence		85·5	332	—	—	—	—	—	54·0
Tortosa	N.	91·3	340	—	—	—	—	e 51·0	55·3
Granada		95·8	341	—	—	—	—	54·0	57·0
Rio Tinto		96·0	343	52 0?	?L	—	—	(52·0)	62·0

Additional readings: Ekaterinburg e = +19m.22s. = [S] +5s. and +19m.41s. = Σ +0s. Tashkent i = +19m.49s. = [S] +8s. and +20m.11s. = Σ +0s. Zagreb eL = +89·0m.

April 16d. 19h. 56m. 36s. Epicentre 43°·0N. 85°·5E. (as on 1927 Sept. 23d.).

A = +·057, B = +·729, C = +·682; D = +·997, E = −·078; G = +·054, H = +·680, K = −·731.

The depth of focus 0·005 assumed on 1927 Sept. 23d. has been retained.

		Corr. for Focus	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	°	m. s.	s.	m. s.	s.	m.	m.
Tashkent		−0·1	12·2	267	—	—	e 5 23	+ 2	e 8·1	8·7
Irkutsk		−0·1	15·6	47	3 43	− 3	6 33	−11	7·4	10·6
Ekaterinburg		−0·2	21·0	320	4 54	+ 3	8 44	+ 4	10·4	—
Bombay		−0·3	26·4	208	—	—	e 9 24?	−60	—	—
Baku		−0·3	26·6	277	—	—	e 11 3	+35	e 12·8	—
Pulkovo		−0·4	36·9	319	e 7 22	− 4	—	—	18·4	22·7
Copenhagen	N.	−0·5	46·9	314	—	—	—	—	e 25·4	—
De Bilt		−0·5	52·2	310	—	—	—	—	e 27·4	33·3

Additional readings and notes: Tashkent gives S as e, also iS = +7m.59s. Baku e = +15m.1s.; all readings are given as e's. Copenhagen eEZ = +28m.24s.?

April 16d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
3	50	18	14	29	56	22	6	52

April 16d. Readings also at 0h. (near Batavia and Malabar), 3h. (Bergen, near Mizusawa), 4h. (near Sumoto and Toyooka), 5h. (near Lick and near Sumoto), 6h. (Tashkent), 8h. (Ekaterinburg, Tashkent, Phu-Lien, Manila, Taihoku, and near La Paz), 9h. (Feldberg, Belgrade, and near Toyooka), 11h. (Algiers and near Tacubaya), 13h. (Zagreb, near Nagasaki, Hukuoka, near Toyooka, Matuyama, and Sumoto (3)), 18h. (Zagreb), 19h. (near Mizusawa and near Taihoku), 20h. (Suva and near Sumoto), 21h. (Ksara, Rocca di Papa, and near Nagasaki), 22h. (Baku, Ksara, and Tashkent).

April 17d. 3h. 25m. 12s. Epicentre 17°·5N. 94°·5W.

A = −·075, B = −·951, C = +·301 ; D = −·997, E = +·078 ;
G = −·024, H = −·300, K = −·954.

Deduced by comparison with the epicentre 18°·4N. 94°·3W. of 1920 April 19d.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Vera Cruz		2·3	318	(0 48)	+12	(1 8)	+ 5	(1·1)	(1·2)
Puebla		3·8	294	(0 41)	−18	(1 4)	−40	(1·1)	(1·3)
Tacubaya		4·9	294	1 3	−13	—	—	1·6	1·7
Merida		5·7	51	(1 1)	−27	(2 31)	− 5	—	(2·6)
Guadalajara		9·1	292	2 39	+21	—	—	4·5	4·9
Manzanillo		9·4	281	(2 48)	+26	(4 13)	0	(4·3)	(5·2)
Mazatlan		12·5	299	3 58	+52	—	—	—	8·5
Chihuahua		15·4	318	(3 39)	− 5	(6 39)	− 2	(6·6)	(8·0)
Tucson	E.	20·9	318	4 40	−12	8 37	− 5	11·0	12·7
	N.	20·9	318	4 40	−12	8 30	−12	10·7	12·2
Port au Prince		21·1	84	e 5 25	+31	i 9 28	+42	e 11·9	17·1
St. Louis		21·4	9	i 4 57	− 1	i 8 57	+ 4	i 10·8	12·1
Cincinnati		23·3	20	i 5 16	− 4	i 9 31	0	10·8	11·8
Charlottesville	E.	24·8	31	5 34	− 2	e 9 56	− 3	e 10·7	18·8
	N.	24·8	31	5 34	− 2	9 53	− 6	e 10·7	19·4
Chicago	E.	25·0	12	i 5 32	− 6	i 9 56	− 7	—	11·1
	N.	25·0	12	i 5 34	− 4	i 9 43	−20	—	10·3
Georgetown	E. N.	26·2	32	e 5 49	− 1	i 10 30	+ 4	—	—
	Z.	26·2	32	i 5 47	− 3	i 10 31	+ 5	e 12·7	19·4
Toronto	E.	29·1	23	i 6 4	−15	i 11 5	−14	11·8	20·4
	N.	29·1	23	i 6 2	−17	i 11 4	−15	14·0	22·4
Ithaca		29·2	28	6 17	− 3	11 13	− 7	13·8	—
Lick	E.	31·0	317	e 6 15	−23	e 11 17	−34	—	—
Harvard		31·9	34	e 6 16	−30	e 11 10	−57	i 13·6	21·8
Ottawa		32·0	25	i 6 35	−12	i 11 44	−24	e 14·3	21·8
Spokane		35·5	334	e 7 0	−18	e 12 31	−32	e 17·6	25·0
Victoria	E.	38·8	330	7 29	−15	13 22	−27	21·5	25·8
	N.	38·8	330	7 13	−31	13 9	−40	18·2	23·2
La Paz		42·8	142	i 8 17	0	i 14 44	− 1	18·1	20·2
Sucre		46·5	141	i 8 43	− 1	i 15 33	− 2	21·8	26·1
Honolulu T.H.	N.	59·5	285	e 10 8	− 1	i 17 58	−19	24·8	—
La Plata		62·9	146	i 10 37	+ 6	19 6	+ 6	36·3	—
Rio de Janeiro		64·4	128	e 10 48	+ 7	19 25	+ 7	32·0	33·1
Scoresby Sund	E.	67·8	20	e 11 5	+ 2	e 20 2	+ 2	33·8	45·5
	N.	67·8	20	e 11 5	+ 2	e 19 58	− 2	33·8	38·7
Edinburgh		76·3	36	e 12 28	+31	e 21 46	+ 5	36·8	45·3
Bidston		76·9	39	12 6	+ 6	21 53	+ 5	30·8	46·4
Stonyhurst		77·2	39	12 10	+ 8	i 21 52	+ 1	37·8	47·8
Rio Tinto		77·8	55	20 48?	?S	(20 48?)	−70	—	43·8
Oxford		78·3	40	i 12 18	+ 9	i 21 52	−12	e 37·6	39·3
San Fernando		78·4	56	i 12 23	+14	22 17	+12	36·6	44·9
Kew		79·0	40	i 12 15	+ 2	i 22 13	+ 1	38·4	39·1
Toledo		79·3	52	12 17	+ 2	e 22 14	− 1	e 33·7	40·5
Bergen		79·6	30	e 11 48?	−19	—	—	—	—
Malaga		79·7	55	i 12 52	+35	22 55	+35	—	—
Granada		80·2	55	i 12 23	+ 3	i 22 33	+ 8	33·4	39·9
Almeria		81·3	55	12 27	0	i 22 36	− 2	38·0	40·7
Paris		81·4	42	i 12 29	+ 2	i 22 37	− 2	34·8	39·8
De Bilt		82·0	39	12 31	+ 1	22 45	− 1	e 39·8	40·4
Uccle		82·0	40	e 12 29	− 1	i 22 42	− 4	e 34·8	42·2
Alicante		82·3	52	e 12 39	+ 7	22 57	+ 8	e 39·5	—
Tortosa	E.	82·4	50	e 13 0	+28	—	—	—	48·5
	N.	82·4	50	e 12 52	+20	22 49	− 1	36·2	45·6
Barcelona		83·3	49	e 12 34	− 4	23 0	0	35·8	—
Besançon		84·2	43	12 42	− 1	i 23 6	− 4	46·8	—
Hamburg		84·3	36	e 12 43	− 1	i 23 8	− 3	e 35·8	40·8
Feldberg	N.	84·6	40	12 46	0	i 23 3	[+ 9]	e 41·3	50·5
Copenhagen		84·7	34	e 12 45	− 1	e 23 0	[+ 6]	e 36·8	42·3
Strasbourg		84·8	41	i 12 43	− 4	i 23 12	− 5	38·8	51·5
Neuchatel		84·8	43	e 12 46	− 1	i 23 4	[+ 9]	—	—
Lund		85·2	34	13 12	+23	23 12	− 9	33·8	—
Upsala		85·5	28	e 12 46	− 5	23 17	− 8	e 36·3	46·2
Algiers		85·5	53	12 51	0	23 9	[+10]	e 40·8	43·8
Zurich		85·7	43	i 12 51	− 1	e 23 19	− 8	—	—
Moncalieri		86·0	45	e 12 22	−31	23 3	[+ 1]	39·0	—
Ravensburg		86·2	42	13 21	+27	23 23	− 9	—	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Jena		86·2	39	e 12 48	− 6	e 23 27	− 5	e 44·8	54·8
Potsdam		86·4	36	e 13 18	+23	e 23 28	− 6	e 47·8	53·8
Chur		86·5	43	i 12 55	− 1	—	—	—	—
Helsingfors		88·4	26	—	—	e 23 18	[0]	38·3	—
Florence	Z.	88·8	45	13 13	+ 4	23 38	[+17]	42·8	49·8
Konigsberg		89·2	32	—	—	i 23 56	− 9	e 36·4	—
Graz		90·1	40	e 13 6	−11	i 24 9	− 6	36·8	52·4
Vienna		90·2	38	13 10	− 7	24 14	− 2	e 41·8	53·8
Rocca di Papa		90·6	46	e 13 23	+ 4	i 23 49	[+17]	e 50·8	—
Pulkovo		90·8	25	13 13	− 7	24 4	? Σ	38·3	50·8
Zagreb		91·0	41	e 13 18	− 3	i 24 22	− 2	e 43·8	57·3
Naples	N.	92·0	46	e 20 59	?PR_3	(e 23 58)	[+18]	—	—
Budapest		92·1	39	e 13 38	+10	(24 48?)	+12	24·8	57·8
Pompeii		92·2	46	e 23 41	?S	(e 23 41)	[0]	—	—
Kucino		96·5	25	e 14 7	+15	25 1	−20	41·7	52·0
Makeyevka		102·0	30	—	—	i 24 43	[+ 9]	37·0	61·4
Wellington	E.	102·0	230	—	—	i 24 1	[−33]	e 46·6	—
Ekaterinburg		102·8	15	e 14 15	− 9	24 37	[0]	40·8	64·7
Ksara	N.	110·2	42	19 10	?PR_1	—	—	54·4	—
Baku		113·3	28	e 15 38	+25	25 38	[+15]	50·8	59·6
Tashkent		119·3	14	(20 2)	?PR_1	(26 45)	? Σ	—	—
Riverview		119·6	240	e 15 24	−16	—	—	e 50·3	62·0
Sydney		119·6	240	—	—	—	—	30·1	31·3
Melbourne		124·6	235	i 21 20	?PR_1	i 31 26	?PS	e 57·5	58·1
Manila		132·5	311	e 19 48	[+24]	—	—	—	—
Phu-Lien		136·5	330	e 21 53	?PR_1	—	—	—	—
Bombay		141·5	18	19 40	[− 2]	e 29 54	? Σ	65·7	91·1
Batavia	Z.	156·3	296	i 19 57	[− 7]	—	—	—	—

Additional readings and notes: Vera Cruz readings have been *diminished* by 1m. Puebla and Merida readings have been *diminished* by 3m. Manzanillo readings have been *increased* by 2m. Chihuahua readings have been *increased* by 1m. Tucson $PR_1N = +4m.50s.$, $PR_1E = +4m.56s.$ Port au Prince $i = +5m.49s.$ St. Louis $iPR_1 = +5m.23s.$, $iPR_2 = +5m.32s.$, $i = +5m.48s.$, $iP_cP = +8m.47s.$, $iSN = +8m.58s.$, $i = +9m.48s. = SR_1 - 12s.$, $iSR_2 = +10m.9s.$ Cincinnati $iPR_1? = +5m.48s.$, $iPR_2 = +5m.58s.$, $iP_cP = +9m.25s.$, $i = +9m.48s.$, $iN = +9m.54s.$, $iE = +10m.8s.$, $iSR_1 = +10m.28s.$ Chicago $iPR_1N = +6m.3s.$ Georgetown $PR_1E = +6m.25s.$, $PR_1NZ = +6m.26s.$, $PR_2EN = +6m.46s.$, $SR_1EN = +11m.29s.$ Toronto $PR_1N = +6m.50s.$, $iN = +10m.51s.$, and $+11m.42s.$; $T_o = 3h.24m.53s.$ Lick $ePN = +6m.16s.$, $eN? = +6m.19s.$, $eE = +6m.25s.$, $eN = +12m.35s.$, and $+15m.59s.$ Harvard $iN = +11m.50s.$, $i = +17m.38s.$; $T_o = 3h.25m.42s.$ Ottawa $i = +7m.4s.$, $iPR_1 = +7m.22s.$, $e = +7m.48s.$, $i = +8m.24s.$ and $+12m.30s.$, $MN = +23·8m.$; $T_o = 3h.25m.16s.$ Spokane $eSR_1 = +14m.53s.$ La Paz $PR_1E = +9m.36s.$, $PR_2E = +10m.24s.$ Sucre $i = +9m.24s.$, $PR_1 = +11m.6s.$, $iPS = +15m.54s.$, $SR_1 = +19m.6s.$ Honolulu, T.H. $SE = +18m.8s. = S - 9s.$ Rio de Janeiro $SN = +19m.28s.$ Scoresby Sund $eE = +11m.25s.$, $ePR_2E = +15m.23s.$, $iEN = +20m.11s.$, $PS = +20m.58s.$, $eE = +21m.45s.$, and $+23m.48s.?$, $SR_2 = +27m.42s.$, $e = +30m.48s.$? Kew $iZ = +12m.45s.$, $iE = +22m.34s.$, $eSR_2E = +27m.18s.$, $eN = +34m.6s.$, $MN = +40·0m.$, $MZ = +46·4m.$ Toledo $iNE = +22m.24s.$, $MNW = +40·3m.$ Granada $i = +13m.56s.$, and $+14m.42s.$, $PR_1 = +15m.7s.$, $iSZ = +22m.38s.$, $i = +23m.32s.$ Almeria $MZ = +46·4m.$ Paris $MN = +46·8m.$ De Bilt $iZ = +13m.1s.$, $eE = +28m.7s.$ $MN = +41·4m.$, $MZ = +53·5m.$ Uccle $MN = +42·4m.$ Hamburg $ePR_1N = +16m.9s.$, $eLZ = +39·8m.$, $MN = +45·8m.$ Feldberg $iN = +13m.14s.$, $eN = +15m.57s.$, $+21m.54s.$, $+27m.42s.$, $+28m.46s.$, and $+35m.48s.$ Copenhagen $eZ = +13m.14s.$, $PR_1 = +16m.0s.$, $PR_2 = +18m.0s.$, $PR_3 = +18m.48s.$, $eN = iE = +23m.10s. = \Sigma - 11s.$, $eZ = +23m.17s. = \Sigma - 4s.$, $SR_1 = +27m.48s.?$, $eE = +30m.48s.?$, $SR_2 = +32m.48s.$, $eLN = +35·8m.$, $MN = +37·3m.$, $MZ = +42·9m.$ Lund $+23m.20s.$ Upsala $MN = +52·4m.$ Jena $eZ = +13m.19s.$ and $+16m.18s. = PR_1 - 20s.$, $eSZ = +23m.29s.$, $eSN = +23m.31s.$, $eN = +24m.17s. = PS - 5s.$, $MN = +53·8m.$ Potsdam $e = +16m.36s. = PR_1 - 4s.$ $eLN = +44·8m.$ Vienna $iE = +15m.50s.$, $S_cP_cS = +23m.35s. = [S] + 6s.$, $iE = +24m.50s. = PS - 20s.$, $PPS = +26m.2s.$ Rocca di Papa $e = +20m.5s.$, $eS = +24m.40s.$ Pulkovo $PR_1 = +16m.51s.$, $S_cP_cS = +23m.36s. = [S] + 3s.$ Naples readings are given as separate ePs. Zagreb $eS = +23m.32s. = [S] - 2s.$, $LE = +37·8m.$ Kucino $PR_1 = +18m.0s.$, $S_cP_cS = +24m.21s. = [S] + 16s.$, $PS = +26m.23s.$ Makeyevka $PR_1 = +18m.24s.$, $PS = +27m.35s.$ Wellington $eN = +25m.9s. = \Sigma - 14s.$ Ekaterinburg $PS = +27m.30s.$ Ksara $PR_2N = +25m.13s. = [S] + 2s.$, $eN = +29m.7s. = PS + 7s.$; $T_o = 3h.25m.36s.$ Baku $PR_1 = +19m.28s.$, $PS = +29m.14s.$ Tashkent $S_cP_cSP = +30m.48s.$; the times entered are given as PR_1 and $S_cP_cP_cS$ respectively. Riverview $ePR_1? = +26m.20s.$, $e = +34m.31s.$ Melbourne $i = +38m.3s.$ Batavia $i = +20m.10s. = [P] + 7s.$

April 17d. 5h. 47m. 22s. Epicentre 41°·7N. 26°·3E. (as on 14d.).

A = +·669, B = +·331, C = +·665; D = +·443, E = −·896; G = +·596, H = +·295, K = −·747.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 20	− 2	i 2 25	0	i 2·6	2·7
Theodosia		7·3	59	e 2 12	+21	—	—	e 3·6	—
Budapest		7·7	320	e 2 38?	+41	—	—	4·5	—
Lemberg	E.	8·3	350	e 2 32	+26	—	—	—	5·3
	N.	8·3	350	e 2 26	+20	—	—	—	6·5
Zagreb	N.W.	8·5	303	—	—	—	—	i 4·3	—
Pompeii		8·9	268	e 4 51	?L	—	—	(e 4·8)	—
Naples	N.	9·1	269	e 3 48	?S	(e 3 48)	−18	(e 4·8)	—
Graz		9·4	309	e 0 56	?	—	—	—	5·1
Vienna		9·6	316	—	—	e 4 32	+14	—	6·6
Rocca di Papa		10·2	275	—	—	e 3 50	−45	e 5·9	6·4
Makeyevka		10·4	48	—	—	e 4 44	+ 4	5·8	6·3
Florence	Z.	11·2	286	4 33	?S	(4 33)	−26	—	7·5
Strasbourg		14·8	304	e 1 38?	?	—	—	—	8·6
Feldberg	N.	15·0	310	—	—	—	—	e 7·8	8·5
Hamburg		16·1	323	—	—	—	—	e 8·6	—
Lund		16·5	333	—	—	—	—	9·6	—
Copenhagen		16·7	332	—	—	e 7 38?	+27	—	10·5
Uccle		17·6	309	—	—	—	—	e 8·6	—
De Bilt		17·7	313	—	—	—	—	e 8·6	—
Paris		18·1	301	—	—	—	—	e 10·6	—
Pulkovo		18·2	6	e 4 16	− 3	—	—	9·1	—
Kew		20·6	307	—	—	—	—	e 10·6	—
Ekaterinburg		26·6	44	5 54	0	e 10 47	+14	12·6	14·7

Additional readings and note: Zagreb eNE = +4m.25s., iNE = +4m.32s., iNW = +5m.8s. Naples readings are given as separate Ps. Rocca di Papa eZ = +6m.12s.

The only readings given with definite phase are those for Belgrade, the P for Theodosia, Pompeii, Naples, Florence, Pulkovo, and Ekaterinburg; the remainder are described as "e."

April 17d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows at La Paz:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
4	5	14	10	25	2	20	22	14
4	26	29	13	52	22	21	4	41
5	33	33	15	3	59	21	35	42
			20	13	2			

at Sucre:—

h.	m.	s.	h.	m.	s.
13	53	29	21	37	19

April 17d. Readings also at 0h. (Ksara), 1h. (Budapest, Pulkovo, Theodosia, and near Yalta), 2h. (Zi-ka-wei, near Kobe (2), and Toyooka), 3h. (Manila), 5h. (Granada, Kobe, and Sydney), 7h. (near Tacubaya), 9h. (Taihoku), 10h. (Manila and near Tacubaya), 11h. (Georgetown and Tortosa), 14h. (La Plata, La Paz, and Sucre), 15h. (La Plata and Sucre), 17h. (Santiago), 18h. (La Plata, La Paz, Santiago, Rio de Janeiro, and Sucre), 19h. (Johannesburg), 20h. (La Plata and Sucre).

April 18d. 3h. 47m. 15s. Epicentre 26°·7N. 112°·0W.

A = −·335, B = −·828, C = +·449 ; D = −·927, E = +·375 ;
G = −·168, H = −·417, K = −·893.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Chihuahua		5·6	69	(1 51)	+24	—	—	(2·9)	(3·3)
Tucson	E.	5·7	10	1 21	− 7	2 26	−10	3·1	3·7
	N.	5·7	10	1 41	+13	2 30	− 6	3·2	3·8
Spokane		21·4	350	e 4 53	− 5	e 9 2	+ 9	e 10·2	11·2
St. Louis		21·8	52	e 5 3	0	i 8 58	− 3	e 10·8	11·9
Victoria	E.	23·4	341	9 40	?S	(9 40)	+ 7	12·2	14·8
Chicago		25·0	47	e 9 59	?S	(e 9 59)	− 4	i 13·0	13·8
Cincinnati		26·1	55	—	—	e 9 45	−39	e 13·4	15·8
Charlottesville	N.	30·3	60	—	—	e 12 15	+36	15·8	16·8
Toronto	N.	31·3	49	—	—	—	—	16·4	16·9
Georgetown	Z.	31·6	60	e 2 24	?	(e 12 7)	+ 6	18·0	19·8
Ithaca		32·9	52	—	—	—	—	16·8	—
Ottawa		34·4	48	—	—	e 12 15	−31	e 16·8	20·8
Scoresby Sund		65·0	21	—	—	—	—	30·8	35·0
Kew	N.	81·6	35	—	—	—	—	e 40·8	—
De Bilt	E.	84·0	33	—	—	—	—	e 45·8	52·5
Uccle		84·4	34	—	—	—	—	e 39·8	—
Paris		84·6	37	—	—	—	—	e 43·8	—
Copenhagen		85·0	27	—	—	—	—	36·8	—
San Fernando	E.	85·9	50	—	—	—	—	47·0	—
Granada		87·3	49	—	—	—	—	e 43·2	49·8
Strasbourg		87·5	35	—	—	—	—	e 45·8	—
Tortosa	N.	88·0	45	—	—	—	—	e 41·8	—
Pulkovo		88·1	18	—	—	—	—	e 42·8	—
Kucino		93·7	16	—	—	—	—	e 43·4	55·8
Makeyevka		100·6	20	—	—	—	—	e 53·0	—
Tashkent		112·0	359	—	—	—	—	e 43·8	56·8

Additional readings and notes : Chihuahua readings have been increased by 3m. Tucson SN = +2m.51s. Spokane eS = +9m.7s. Cincinnati eEN ? = +13m.40s. Charlottesville eLE = +18·2m., ME = +18·6m. Toronto eN = +14m.45s. ? Georgetown S is given as eLZ ? Ottawa MN = +18·8m. De Bilt eLN = +39·8m. San Fernando MN = +46·4m.

April 18d. 11h. 25m. 10s. Epicentre 44°·5N. 11°·5E. (as on 1925 June 16d.).

A = +·699, B = +·142, C = +·701 ; D = +·199, E = −·980 ;
G = +·687, H = +·139, K = −·713.

	Δ	Az.	P.	O−C.	S.	O−C.	L.
	°	°	m. s.	s.	m. s.	s.	m.
Venice	1·1	32	e 0 38	+21	—	—	(e 0·6)
Innsbruck	2·7	359	i 0 42	0	—	—	—
Chur	2·7	330	e 0 41	− 1	i 1 15	+ 1	—
Zagreb	3·4	66	e 0 48	− 5	i 1 14	−20	—
Zurich	3·5	325	i 0 52	− 3	i 1 39	+ 2	—
Neuchatel	4·0	310	e 1 4	+ 2	e 2 11	+21	—
Ekaterinburg	32·7	50	—	—	—	—	21·8

Additional readings : Innsbruck iNW = +47s. Zagreb eNW = +57s., i = +1m.2s., iNE = +1m.6s., iNW = +1m.7s., i = +1m.19s.

April 18d. 19h. 22m. 37s. Epicentre 41°·7N. 26°·3E.

(as on 14d.).

A = +·669, B = +·331, C = +·665 ; D = +·443, E = −·896 ;
G = +·596, H = +·295, K = −·747.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	i 1 19	− 3	i 2 25	0	—	2·6
Sarajevo		6·2	293	e 1 46	+11	i 2 10	−39	—	4·0
Yalta		6·4	61	e 1 56	+18	3 18	+23	3·9	—
Theodosia		7·3	59	2 12	+21	3 44	+26	4·2	4·4
Budapest		7·7	320	2 0	+ 3	—	—	4·0	—
Sebenico		7·9	289	e 1 59	− 1	i 3 47	+13	—	4·2
Lemberg		8·3	350	e 2 5	− 1	—	—	5·4	—
Zagreb		8·5	303	e 2 5	− 4	i 3 30	−20	—	4·4
Pompeii		8·9	268	i 2 22	+ 7	i 3 57	− 4	—	5·4
Naples	N.	9·1	269	i 2 17	− 1	e 3 33	−33	—	7·4
Graz		9·4	309	i 2 16	− 6	i 4 9	− 4	—	4·7
Laibach		9·6	301	e 2 19	− 5	—	—	—	—
Vienna		9·6	316	2 18	− 6	—	—	i 4·4	5·3
Rocca di Papa		10·2	275	2 29	− 4	—	—	i 5·8	—
Makeyevka		10·4	48	e 2 48	+12	i 4 57	+17	5·3	—
Venice		10·8	295	i 2 39	− 2	—	—	—	4·9
Ksara	N.	10·9	133	i 3 7	+24	i 5 59	+67	(i 6·0)	—
Florence	Z.	11·2	286	i 2 44	− 3	4 59	0	5·4	5·8
Innsbruck		12·0	303	2 50	− 9	i 5 10	− 9	i 5·7	6·7
Helwan		12·5	161	i 3 23	+17	i 6 1	+29	—	11·8
Chur		13·0	299	e 3 7	− 6	—	—	i 6·6	—
Ravensburg		13·3	303	3 14	− 3	4 55	−56	5·6	8·8
Jena	E.	13·6	317	i 3 18	− 3	i 5 57	− 1	e 6·4	7·2
	N.	13·6	317	i 3 19	− 2	i 5 57	− 1	e 6·2	7·2
	Z.	13·6	317	i 3 13	− 8	i 5 53	− 5	e 6·4	11·9
Konigsberg		13·7	346	e 3 19	− 3	5 48	−13	e 6·8	8·4
Zurich		13·8	300	i 3 18	− 5	e 5 50	−13	—	—
Hohenheim		13·9	306	3 23	− 2	5 23	−43	6·2	8·2
Moncalieri	E.	13·9	290	i 3 18	− 7	7 4	+58	—	11·1
		13·9	290	i 2 53	−32	6 18	+12	7·4	12·9
Potsdam		13·9	324	3 23	− 2	—	—	e 6·4	9·4
Neuchatel		14·8	297	3 29	− 7	i 6 11	−16	—	—
Strasbourg		14·8	304	i 3 29	− 7	e 6 15	−12	6·4	13·9
Feldberg	E.	15·0	310	e 3 34	− 5	i 6 23	− 9	—	7·8
	N.	15·0	310	e 3 35	− 4	i 6 22	−10	—	7·8
Grenoble		15·3	290	3 24	−19	i 6 11	−28	7·4	8·8
Besançon		15·5	298	i 3 38	− 8	6 29	−15	7·4	9·4
Marseilles		15·5	283	3 46	0	i 6 32	−12	e 7·9	10·8
Kucino		16·0	24	i 3 56	+ 4	i 7 17	+22	7·4	16·4
Hamburg		16·1	323	i 3 49	− 4	i 6 50	− 7	—	7·4
Lund		16·5	333	3 52	− 7	6 45	−22	8·4	—
Copenhagen		16·7	332	i 3 54	− 7	i 6 53	−18	—	11·4
Puy de Dôme		17·3	292	i 3 58	−11	i 7 14	−11	8·4	10·8
Uccle		17·6	309	i 4 11	− 1	i 8 20	+49	8·4	—
De Bilt		17·7	313	4 11	− 2	i 7 25	− 8	8·6	10·0
Baku		17·8	86	e 4 37	+22	—	—	—	—
Barcelona		18·0	277	i 4 13	− 4	7 37	− 3	8·5	12·3
Paris		18·1	301	i 4 14	− 4	i 7 33	− 9	9·1	15·4
Pulkovo		18·2	6	i 4 19	0	i 7 30	−14	8·9	19·0
Helsingfors		18·5	358	4 10	−13	7 39	−12	8·9	—
Algiers		18·6	263	i 4 24	0	i 7 44	− 9	8·9	12·1
Upsala		18·9	346	i 4 25	− 3	i 7 48	−12	—	11·3
Bagnères		19·2	283	i 4 30	− 1	i 7 59	− 7	e 9·4	12·8
Tortosa	N.	19·3	276	i 4 29	− 4	i 8 0	− 8	9·1	13·9
Kew		20·6	307	e 4 44	− 4	i 8 24	−12	9·8	14·7
Alicante		20·7	270	i 4 51	+ 2	i 8 31	− 7	10·0	17·4
Oxford		21·3	308	i 4 53	− 4	i 8 34	−16	i 9·8	14·4
Stonyhurst		22·6	312	i 5 5	− 7	i 9 2	−15	—	12·8
Almeria		22·6	267	i 5 9	− 3	i 9 14	− 3	12·2	14·4
Bergen		22·7	333	4 48	−25	8 48	−31	12·5	14·4
Bidston		22·8	311	5 10	− 5	9 8	−13	11·8	12·5
Toledo		22·9	276	i 5 10	− 6	i 9 13	−10	e 9·3	14·6
Granada		23·4	268	i 7 17	+116	11 28	+115	e 13·4	14·4
Edinburgh		23·5	317	5 19	− 4	9 26	− 9	—	13·8
Malaga		24·2	268	5 22	− 8	i 9 42	− 6	13·0	17·6
San Fernando		25·6	269	i 5 32	−12	9 52	−22	11·8	14·8

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ekaterinburg		26·6	44	i 5 59	+ 5	i 10 32	− 1	—	—
Tashkent		31·8	78	i 5 41	−64	11 5	−60	—	—
Reykjavik		35·4	326	—	—	—	—	e 15·4	—
Scoresby Sund		37·5	335	e 7 27	− 7	13 16	−15	17·4	24·3
Azores		39·6	283	6 47	−64	—	—	—	24·0
Entebbe		42·0	171	8 8	− 3	14 28	− 7	23·4	27·4
Bombay		45·4	105	8 55	+19	15 55	+35	25·2	25·4
Hyderabad		50·4	103	9 23	+14	16 41	+17	28·4	40·7
Irkutsk		51·6	50	i 9 26	+ 9	16 43	+ 4	26·0	29·0
Calcutta	E.	54·6	90	10 17	+40	18 10	+54	—	—
	N.	54·6	90	9 49	+12	17 47	+31	—	—
Kodaikanal		54·6	110	16 29	?S	(16 29)	−47	31·4	36·6
Tananarive		63·7	158	10 53	+17	e 19 34	+25	32·3	35·2
Harvard		67·8	309	—	—	i 20 15	+15	e 32·5	35·2
Ottawa		68·7	313	i 11 14	+ 5	i 20 15	+ 5	e 30·4	43·4
Phu-Lien		69·2	81	i 11 33	+21	e 20 41	+25	31·4	43·0
Ithaca		70·9	310	11 33	+11	20 46	+ 9	32·4	—
Toronto	E.	71·8	313	i 11 37	+ 9	e 20 47	− 1	33·3	38·6
	N.	71·8	313	i 11 36	+ 8	i 20 48	0	33·4	37·7
Zi-ka-wei		73·3	62	e 11 58	+20	21 35	+29	37·4	45·9
Georgetown	Z.	73·5	309	i 11 48	+ 9	i 22 0	?PS	e 37·3	49·3
Hong Kong		73·8	75	12 0	+19	21 43	+31	37·8	43·9
Charlottesville	E.	75·0	309	e 11 59	+10	i 21 29	+ 3	e 31·4	45·5
Ootomari		75·1	40	12 7	+17	21 42	+15	26·7	42·2
Cape Town		75·9	187	12 17	+23	21 46	+10	—	45·1
Taihoku	N.	77·3	69	—	—	e 25 55	?	44·4	—
Chicago	N.	77·4	316	i 12 13	+10	i 21 57	+ 4	e 36·7	43·3
Hukuoka		77·5	56	12 17	+13	—	—	—	—
Cincinnati		77·6	313	e 12 9	+ 4	i 22 3	+ 7	36·4	—
Nagasaki		77·7	57	12 29	+24	e 22 21	+24	42·6	49·5
Toyooka		78·8	51	i 12 32	+20	i 22 37	+27	i 42·5	—
Sumoto		79·5	52	e 12 29	+13	—	—	e 42·9	—
Kobe		79·6	52	e 12 34	+17	—	—	e 43·4	44·8
Osaka		79·8	52	12 42	+24	22 44	+23	43·2	48·2
Mizusawa	E.	79·8	46	12 31	+13	22 43	+22	—	—
St. Louis	E.	81·1	315	e 12 29	+ 3	e 22 36	0	34·6	42·4
	N.	81·1	315	i 12 31	+ 5	i 22 35	− 1	34·6	42·4
Manila	E.	83·7	76	e 12 55	+15	e 24 45	?	e 45·6	49·1
	N.	83·7	76	e 12 56	+16	e 24 43	?	e 45·7	51·0
Spokane		85·1	337	i 12 54	+ 5	e 23 14	− 6	40·4	48·4
Victoria	E.	86·0	340	13 1	+ 8	23 22	− 8	39·9	52·2
	N.	86·0	340	12 57	+ 4	23 22	− 8	41·5	53·6
Batavia		87·1	100	e 13 3	+ 3	—	—	e 49·4	73·4
Denver		87·4	325	—	—	e 23 23	−22	—	43·4
Malabar		88·4	101	13 19	+12	24 4	+ 8	—	—
Rio de Janeiro	E.	91·0	239	e 13 19	− 2	24 21	− 3	40·6	50·9
	N.	91·0	239	e 13 18	− 3	24 19	− 5	40·4	51·1
Berkeley	E.	95·4	336	e 13 44	− 1	e 25 1	− 9	e 44·7	—
Lick		95·7	336	e 13 47	0	e 24 59	−14	e 48·5	—
Tucson	E.	96·2	325	i 13 59	+ 9	e 25 7	−11	e 46·2	50·5
	N.	96·2	325	i 13 52	+ 2	e 24 19	[+16]	46·2	50·6
Sucre		103·6	257	e 17 42	[−18]	i 28 37	+128	45·9	65·7
La Paz		104·2	262	e 17 36	[−26]	28 36	+121	45·4	65·6
La Plata		108·6	240	—	—	—	—	58·6	—
Perth		110·3	115	i 35 13	?SR_1	—	—	—	—
Honolulu T.H.	E.	116·9	4	—	—	—	—	e 53·4	—
Adelaide		127·8	106	i 22 38	?	e 38 38	?SR_1	—	80·8
Melbourne		133·7	107	i 23 3	?	i 41 23	?	e 66·1	79·7
Riverview		136·4	98	—	—	—	—	e 67·4	80·9
Sydney		136·4	98	69 35	?L	74 35	?	80·4	81·9
Wellington		156·5	101	—	—	—	—	82·4	—

Additional readings: Belgrade iPN = +1m.33s. Sarajevo i = +1m.49s. and +1m.58s. Theodosia MN = +5·2m. Sebenico e = +2m.33s. Lemberg ePE = +2m.17s. Zagreb i = +2m.33s., +2m.36s., +2m.47s., +2m.48s., +2m.50s., +2m.53s., +2m.55s., +2m.58s., +3m.4s., and +3m.9s. Graz MN = +8·8m. Vienna iEN = +2m.21s., iZ = +2m.25s., +2m.33s., and +2m.43s., iN = +2m.41s., PR_1 = +2m.57s., iN = +3m.9s. and +3m.27s., P_gS = +3m.35s., iZ = +3m.41s., iE = +3m.49s., PS_g = +4m.13s.; epicentre 42°·1N. 25°·1E. Rocca di Papa PN = +2m.33s., PR_1E = +3m.31s., PR_1N = +3m.55s. Innsbruck PR_1NE = +2m.57s., iNE = +3m.10s., iNW = +3m.19s., iNE = +3m.22s., +4m.10s., and +4m.27s., iNW = +4m.48s., iSR_1 = +5m.30s. Ravensburg PR_1 = +3m.29s. Jena iPE = +3m.20s., iPN = +3m.21s., iPZ = +3m.23s., iZ = +3m.43s., and

Continued on next page.

+4m.3s., iN = +4m.7s., and +4m.51s. Konigsberg iPR$_1$N = +3m.26s., iPR$_1$E = +3m.27s., iPR$_1$Z = +3m.28s., iE = +3m.38s., iZ = +3m.42s., iE = +3m.45s., iZ = +3m.55s., iE = +3m.56s., iZ = +4m.7s., iE = +4m.15s., iN = +4m.26s., and +4m.44s., iZ = +4m.47s., eN = +4m.53s., eZ = +5m.3s., eE = +5m.13s., eSR$_1$?NZ = +5m.59s., iZ = +6m.14s., eLZ = +7·0m., MZ = +10·4m. Hohenheim PR$_1$ = +3m.39s. Potsdam i = +4m.1s. and +4m.31s., iN = +6m.2s., iE = +6m.8s. Strasbourg MN = +7·8m., MZ = +15·4m. Feldberg iPE = +3m.37s., iN = +3m.59s. and +4m.27s., iE = +4m.15s. Grenoble i = +3m.45s., PR$_2$? = +4m.38s. Hamburg iPEN = +3m.50s., SN = +6m.33s., SE = +6m.41s. Copenhagen i = +3m.59s., eZ = +5m.37s., eEN = +5m.41s., e = +6m.11s., iZ = +6m.57s. Puy de Dôme e = +4m.6s., i = +5m.16s., MN = +9·4m. De Bilt SN = +7m.16s., MN = +13·8m. Barcelona MN = +11·1m. Paris MN = +9·4m. Upsala MN = +12·8m. Bagnères MN = +13·3m. Tortosa PE = +4m.30s. Kew iP = +4m.46s., LN = +9·6m., MN = +10·4m., MZ = +12·1m. Alicante PR$_1$ = +7m.43s., MN = +17·9m. Toledo MNW = +14·5m., MZ = +19·1m. Granada P = +7m.19s. Malaga iPE = +5m.28s., iPN = +5m.31s., PR$_1$N = +7m.32s., PR$_2$N = +8m.48s. San Fernando MN = +15·4m. Scoresby Sund PR$_1$ = +8m.43s., eN = +10m.15s., SR$_1$ = +15m.11s., MN = +23·2m. Tananarive S$_e$S = +21m.4s., SR$_1$ = +24m.50s., LN = +32·0m., MN = +36·1m. Harvard e = +21m.17s. = Σ − 10s., +31m.15s., and +31m.55s. Ottawa i = +15m.27s. =PR$_2$ − 21s., eN = +25m.5s. =SR$_1$ + 25s., i = +27m.53s. = SR$_2$ − 15s., MN = +37·4m.; T$_0$ = 19h.22m.50s. Phu-Lien MN = +42·9m. Toronto iSE = +20m.53s.; T$_0$ = 19h.23m.0s. Zi-ka-wei MZ = +46·8m. Georgetown iZ = +14m.33s. =PR$_1$ − 23s., iPR$_2$Z = +16m.14s. Charlottesville eE = +26m.23s. ? Chicago eSR$_2$N = +29m.58s. Cincinnati iP = +12m.11s., ePS? = +22m.30s., SR$_1$ = +27m.15s., SR$_2$ = +31m.33s. Kobe MN = +50·6m., MZ = +51·7m. Osaka MN = +51·9m. Mizusawa PN = +12m.35s. St. Louis iE = +22m.40s., PSN = +22m.57s., iE = +23m.2s. = Σ + 2s., i = +23m.22s., SR$_1$ = +28m.3s., i = +33m.28s. Spokane ePR$_1$N = +16m.11s., eSE = +23m.20s. =S + 0s. Batavia iZ = +13m.6s., iP = +13m.10s., i = +13m.51s., +23m.44s. =S + 2s., +23m.55s. and +24m.47s. =PS + 15s. Denver eSR$_1$ = +28m.23s. ?, MN = +45·4m. Berkeley eE = +36m.47s. Tucson ePR$_1$N = +17m.38s., ePSN = +26m.23s. ?, eSR$_1$N = +31m.39s., eE = +41m.2s. Sucre ePR$_1$? = +20m.46s., SR$_1$ = +33m.3s. Honolulu T.H. PSN = +29m.57s., SR$_1$N = +36m.13s., eSR$_1$E = +36m.40s., eLN = +54·3m. Riverview ePR$_1$ = +23m.29s., e = +28m.27s. =PR$_3$ + 3s., ePR$_2$? = +29m.11s., ePR$_4$ = +31m.21s., PPS? = +35m.29s., e = +59m.47s., MN = +87·3m.

April 18d. 19h. 40m. 56s. (I)
19h. 51m. 4s. (II)
19h. 57m. 52s. (III)
20h. 5m. 45s. (IV)
20h. 49m. 51s. (V)
21h. 58m. 12s. (VI)
22h. 48m. 52s. (VII)
} (Epicentre 41°·7N. 26°·3E. (as at 19h. 22m).

			Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
			°	°	m. s.	s.	m. s.	s.	m.	m.
I	Belgrade	N.	5·3	309	e 1 22	0	i 2 29	+ 4	—	2·5
II		N.	5·3	309	e 1 22	0	2 23	− 2	—	—
III		N.	5·3	309	e 1 22	0	2 23	− 2	—	—
IV		N.	5·3	309	e 1 22	0	i 2 24	− 1	—	2·7
V		N.	5·3	309	e 1 22	0	2 24	− 1	—	2·5
VI		N.	5·3	309	1 22	0	2 45	+20	—	2·8
VII		N.	5·3	309	1 22	0	2 40	+15	i 2·8	2·8
I	Sarajevo		6·2	293	e 1 47	+12	i 3 1	+12	—	3·4
I	Yalta		6·4	61	i 1 59	+21	—	—	—	—
IV			6·4	61	e 1 48	+10	—	—	—	—
V			6·4	61	e 1 58	+20	—	—	—	—
VI			6·4	61	e 2 8	+30	—	—	—	—
I	Theodosia		7·3	59	e 2 17	+26	e 3 47	+29	(e 3·8)	—
II			7·3	59	e 1 39	−12	—	—	e 3·7	—
IV			7·3	59	e 2 1	+10	—	—	3·5	3·7
V			7·3	59	e 2 15	+24	—	—	—	—
VI			7·3	59	e 3 51	?L	—	—	(e 3·8)	—
V	Budapest		7·7	320	e 2 34	+37	—	—	4·2	—
VI			7·7	320	—	—	—	—	e 3·8	—
VII			7·7	320	—	—	—	—	e 4·4	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
I Zagreb		8·5	303	e 2 42	+33	—	—	e 4·2	—
IV		8·5	303	e 2 8	− 1	e 2 37	?	—	5·4
V		8·5	303	e 2 14	+ 5	e 4 3	+13	—	—
VI		8·5	303	—	—	e 4 30	?L	(e 4·5)	—
VII		8·5	303	—	—	—	—	e 4·6	—
I Vienna	Z.	9·6	316	2 12	−12	—	—	—	—
IV	Z.	9·6	316	2 59	+35	—	—	—	5·5
V	Z.	9·6	316	4 3	?S	(4 3)	−15	—	5·4
I Rocca di Papa		10·2	275	e 3 44	+71	—	—	—	6·5
II		10·2	275	e 4 13	?S	(e 4 13)	−22	e 5·5	6·1
III		10·2	275	e 3 17	+44	—	—	—	4·8
IV		10·2	275	4 42	?S	(4 42)	+ 7	—	5·8
V		10·2	275	2 45	+12	—	—	—	4·8

Additional readings: Belgrade I iPN = +1m.33s., iN = +2m.6s. and +2m.24s., II eN = +1m.32s., +2m.5s., iN = +2m.18s., III iN = +1m.27s., +1m.31s., and +2m.13s., V iN = +1m.26s., +1m.40s., +2m.9s., and +2m.20s. Sarajevo I i = +2m.8s. Theodosia IV MN = +5·2m. Rocca di Papa V PE = +3m.21s.

April 18d. 23h. 14m. 36s. Epicentre 41°·7N. 26°·3E. (as at 19h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 18	− 4	2 34	+ 9	—	3·0
Yalta		6·4	61	1 58	+20	i 3 15	+20	—	—
Theodosia		7·3	59	e 2 11	+20	3 35	+17	3·7	3·9
Budapest		7·7	320	2 1	+ 4	3 31	+ 2	4·2	—
Lemberg		8·3	350	e 2 12	+ 6	e 3 54	+ 9	—	6·0
Zagreb	N.E.	8·5	303	e 2 10	+ 1	i 3 52	+ 2	i 4·0	5·2
	N.W.	8·5	303	e 2 10	+ 1	i 3 54	+ 4	i 4·1	5·7
Pompeii		8·9	268	e 2 59	+44	e 4 49	+48	—	6·1
Graz		9·4	309	i 2 12	−10	i 4 4	− 9	—	5·9
Vienna		9·6	316	e 2 19	− 5	—	—	—	5·6
Rocca di Papa		10·2	275	2 30	− 3	e 4 1	−34	e 5·7	6·7
Makeyevka		10·4	48	e 2 53	+17	4 47	+ 7	5·2	6·9
Venice		10·8	295	2 24?	−17	—	—	—	7·4
Ksara	N.	10·9	133	e 3 12	+29	e 5 39	+47	7·0	—
Florence	Z.	11·2	286	e 2 45	− 2	5 9	+10	—	6·2
Innsbruck		12·0	303	e 2 51	− 8	i 5 28	+ 9	i 6·7	—
Chur		13·0	299	e 3 13	0	e 6 40	?L	(e 6·7)	—
Jena		13·6	317	e 3 24	+ 3	e 6 24	+26	—	8·6
Konigsberg		13·7	346	—	—	e 6 0	− 1	—	7·4
Zurich		13·8	300	e 3 21	− 2	e 5 39	−24	—	—
Moncalieri		13·9	290	e 3 40	+15	6 4	− 2	7·6	10·1
Neuchatel		14·8	297	e 3 36	0	e 6 19	− 8	—	—
Strasbourg		14·8	304	3 40	+ 4	i 6 27	0	7·4	9·6
Feldberg	N.	15·0	310	e 3 38	− 1	e 6 17	−15	e 7·3	8·4
Besançon		15·5	298	e 3 42	− 4	—	—	8·4	—
Kucino		16·0	24	i 3 59	+ 7	7 9	+14	7·9	11·1
Hamburg		16·1	323	e 3 51	− 2	e 6 51	− 6	e 7·8	13·8
Lund		16·5	333	—	—	6 54	−13	8·4	—
Copenhagen	E.	16·7	332	3 56	− 5	e 7 9	− 2	e 8·6	10·0
	N.	16·7	332	3 56	− 5	e 6 53	−18	e 9·0	12·5
Puy de Dôme		17·3	292	—	—	e 7 15	−10	e 9·4	—
Uccle		17·6	309	e 3 24?	−48	e 6 24?	−67	e 8·4	—
De Bilt		17·7	313	4 20	+ 7	7 26	− 7	e 8·4	11·5
Baku		17·8	86	i 4 40	+25	i 8 15	+39	—	—
Paris		18·1	301	i 5 17	+59	e 7 40	− 2	9·2	10·4
Pulkovo		18·2	6	i 4 19	0	7 36	− 8	9·4	11·4
Upsala		18·9	346	4 26	− 2	e 7 50	−10	—	11·6
Tortosa	N.	19·3	276	e 4 36	+ 3	8 3	− 5	9·3	11·8
Kew		20·6	307	e 4 46	− 2	e 8 29	− 7	10·3	13·0
Oxford		21·3	308	4 54	− 3	8 42	− 8	e 11·2	13·6
Stonyhurst		22·6	312	—	—	e 9 11	− 6	—	15·2
Almeria		22·6	267	e 5 33	+21	9 30	+13	—	15·6
Granada		23·4	268	i 5 17	− 4	i 9 32	− 1	—	13·5
Edinburgh		23·5	317	—	—	e 9 24?	−11	—	—
Ekaterinburg		26·6	44	5 59	+ 5	e 10 28	− 5	13·4	16·9
Scoresby Sund		37·5	335	7 30	− 4	—	—	22·4	—
Irkutsk		51·6	50	e 9 28	+11	e 16 53	+14	28·4	33·1

For Notes see next page.

NOTES TO APRIL 18d. 23h. 14m. 36s.

Additional readings: Belgrade iPN = +1m.23s., iN = +1m.34s., +2m.12s., and +2m.24s. Theodosia MN = +4·6m. Vienna i = +2m.30s. and +3m.20s., PS_2? = +4m.12s., SR_1? = +4m.28s. Rocca di Papa eP = +2m.39s. Chur eS = +7m.53s. Jena MZ = +7·3m. Konigsberg MZ = +8·4m., MN = +9·4m. Strasbourg MZ = +7·9m., MN = +8·2m. Hamburg MN = +12·2m., MZ = +14·9m. De Bilt MN = +10·0m., MZ = +11·6m. Upsala MN = +12·7m. Tortosa PE = +4m.31s. Kew MN = +11·4m. Scoresby Sund SR_1 = +15m.24s.?

April 18d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h., were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.
0	54	2	16	12	52
1	21	22	17	38	57

April 18d. Readings also at 4h. (near Wellington), 6h. (near Belgrade), 8h. (Budapest, Copenhagen, Ekaterinburg, Makeyevka, Pulkovo, Zagreb, and near Baku), 10h. (Manila), 11h. (Copenhagen, Ekaterinburg, Pulkovo, Phu-Lien, Tashkent, Vienna, and Manila (2)), 14h. (near Lick), 17h. (Copenhagen, Ekaterinburg, Perth, Tashkent, and near Mizusawa), 18h. (near Almeria, Granada, and San Fernando), 19h. (Rio Tinto and Vienna), 20h. (Theodosia), 21h. (Tucson, Zagreb (2), near Berkeley, and Lick), 22h. (Kew, La Paz (2), Makeyevka, Pulkovo, Tortosa, and Ravensburg).

April 19d. 1h. 1m. 10s. Epicentre 41°·7N. 26°·3E. (as on 18d.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 19	− 3	2 34	+ 9	—	2·7
Theodosia		7·3	59	e 3 33	?S	(e 3 33)	+15	—	—
Budapest		7·7	320	—	—	e 3 20	− 9	—	—
Zagreb		8·5	303	—	—	e 3 40	−10	e 4·4	—
Florence	Z.	11·2	286	—	—	—	—	e 7·2	15·3
Pulkovo		18·2	6	i 5 12	+53	—	—	—	—

No additional readings.

April 19d. 1h. 10m. 0s. Epicentre 41°·7N. 26°·3E. (as at 1h.1m.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade		5·3	309	e 1 13	− 9	2 18	− 7	i 2·6	2·8
Yalta		6·4	61	e 2 10	+32	3 17	+22	3·8	—
Theodosia		7·3	59	e 2 22	+31	e 3 44	+26	—	—
Budapest		7·7	320	e 2 26	+29	—	—	4·4	—
Zagreb		8·5	303	e 2 36	+27	—	—	i 5·0	—
Pompeii		8·9	268	e 4 40	?L	—	—	(e 4·7)	—
Graz		9·4	309	e 2 43	+21	e 4 32	+19	—	6·0
Vienna		9·6	316	2 24	0	—	—	—	6·0
Rocca di Papa		10·2	275	e 2 6	−27	—	—	5·6	7·3
Makeyevka		10·4	48	e 5 6	?S	(e 5 6)	+26	6·1	7·4
Moncalieri	E.	13·9	290	—	—	—	—	e 7·7	—
Strasbourg		14·8	304	e 7 0?	?	e 8 0?	?L	9·0	—
Feldberg	N.	15·0	310	—	—	—	—	e 7·4	8·6
Kucino		16·0	24	—	—	—	—	10·8	10·9
Hamburg		16·1	323	—	—	—	—	e 8·0	17·0
Lund		16·5	333	—	—	—	—	9·0	—
Copenhagen		16·7	332	7 0?	?	—	—	9·5	12·7
Uccle		17·6	309	—	—	—	—	e 9·0	—
De Bilt		17·7	313	—	—	—	—	e 10·0	11·7
Paris		18·1	301	—	—	—	—	e 10·8	—
Pulkovo		18·2	6	e 4 22	+ 3	e 9 49	?	10·3	11·5
Upsala		18·9	346	—	—	—	—	e 11·0	12·7
Kew		20·6	307	—	—	—	—	e 12·0	—
Granada		23·4	268	—	—	—	—	e 12·0	—
Ekaterinburg		26·6	44	—	—	e 10 55	+22	e 14·5	—

Additional readings: Belgrade eN = +1m.40s. Zagreb e = +4m.20s. and +4m.26s., i = +4m.42s. Moncalieri LE = +10·2m. Kucino e = +7m.36s. and +8m.54s. Ekaterinburg e = +16m.55s., L = +21·0m.

April 19d. 4h. 59m. 15s. Epicentre 41°·7N. 26°·3E. (as at 1h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 25	+ 3	2 20	− 5	—	2·5
Yalta		6·4	61	e 1 51	+13	e 3 11	+16	—	—
Theodosia		7·3	59	2 4	+13	3 32	+14	e 4·1	—
Budapest		7·7	320	—	—	e 3 0	−29	4·0	—
Zagreb		8·5	303	e 2 25	+16	—	—	e 4·0	—
Vienna		9·6	316	4 18	?S	(4 18)	0	—	—
Rocca di Papa		10·2	275	e 1 42	−51	—	—	—	6·0
Makeyevka		10·4	48	—	—	—	—	e 5·6	—
Strasbourg		14·8	304	—	—	e 6 45?	+18	7·8	—
Kucino		16·0	24	—	—	—	—	8·6	—
Hamburg		16·1	323	—	—	—	—	e 8·8	—
Lund		16·5	333	—	—	—	—	8·8	—
Copenhagen		16·7	332	—	—	—	—	8·8	—
Uccle		17·6	309	—	—	—	—	e 8·8	—
De Bilt		17·7	313	—	—	—	—	e 9·8	—
Paris		18·1	301	—	—	—	—	e 10·8	—
Pulkovo		18·2	6	4 12	− 7	—	—	9·8	10·8
Upsala		18·9	346	—	—	—	—	10·8	—
Ekaterinburg		26·6	44	—	—	—	—	15·8	—

Rocca di Papa gives also ePE = +2m.10s., eE = +2m.8s., eN = +3m.19s., eZ = +5m.47s.

April 19d. 5h. 12m. 45s. Epicentre 41°·7N. 26°·3E. (as on 19d. 4h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.
		°	°	m. s.	s.	m. s.	s.	m.
Belgrade	N.	5·3	309	e 1 15	− 7	e 2 30	+ 5	e 2·7
Zagreb		8·5	303	—	—	—	—	e 4·6

April 19d. 5h. 23m. 57s. Epicentre 41°·7N. 26°·3E. (as on 19d. 5h. 12m.)

	Δ	Az.	P.	O−C.	S.	O−C.	L.
	°	°	m. s.	s.	m. s.	s.	m.
Belgrade	5·3	309	e 1 22	0	i 2 25	0	i 2·6
Yalta	6·4	61	e 3 5	?L	—	—	(e 3·1)
Theodosia	7·3	59	e 3 23	?S	(e 3 23)	+ 5	—
Budapest	7·7	320	—	—	—	—	e 3·7
Zagreb	8·5	303	e 2 37	+28	e 3 45	− 5	—
Makeyevka	10·4	48	—	—	—	—	e 5·6
Kucino	16·0	24	—	—	—	—	e 9·8
Copenhagen	16·7	332	—	—	—	—	8·0
Pulkovo	18·2	6	—	—	—	—	9·5
Ekaterinburg	26·6	44	—	—	—	—	13·0

Belgrade gives also iN = +1m.31s. and +2m.17s.

April 19d.
5h. 55m. 12s. (I)
6h. 32m. 8s. (II)
6h. 46m. 18s. (III)
7h. 45m. 56s. (IV)
8h. 7m. 24s. (V)
9h. 57m. 6s. (VI)
10h. 9m. 6s. (VII)
22h. 21m. 3s. (VIII)

Epicentre 41°·7N. 26°·3E. (as at 5h. 23m.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
I	Belgrade N.	5·3	309	e 1 26	+ 4	i 2 26	+ 1	—	—
II	N.	5·3	309	e 1 25	+ 3	i 2 25	0	i 2·6	—
III	N.	5·3	309	e 1 25	+ 3	e 2 20	− 5	—	2·5
IV	N.	5·3	309	e 1 18	− 4	i 2 30	+ 5	i 4·0	—
V	N.	5·3	309	e 1 29	+ 7	e 2 19	− 6	—	—
VI	N.	5·3	309	e 1 23	+ 1	e 2 26	+ 1	i 2·5	—
VII	N.	5·3	309	e 1 22	0	e 2 26	+ 1	—	—
VIII	N.	5·3	309	e 1 21	− 1	i 2 29	+ 4	—	2·7

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
III	Theodosia	7·3	59	e 3 45	?L	—	—	(e 3·8)	—
IV		7·3	59	e 1 16	−35	e 2 45	−33	—	—
VI		7·3	59	e 2 5	+14	e 3 33	+15	3·9	—
II	Budapest	7·7	320	—	—	e 3 22	− 7	—	—
IV		7·7	320	—	—	e 2 41	−48	—	—
VI		7·7	320	—	—	e 3 31	+ 2	—	—
I	Zagreb	8·5	303	—	—	—	—	e 4·3	—
II		8·5	303	—	—	—	—	e 4·2	—
III		8·5	303	—	—	e 3 42?	− 8	e 4·5	—
IV		8·5	303	—	—	e 3 4?	−46	—	—
VI		8·5	303	—	—	e 4 2	+12	—	—
IV	Makeyevka	10·4	48	—	—	(e 4 46)	+ 6	e 4·8	—
VI		10·4	48	—	—	(e 4 36)	− 4	e 4·6	—
VI	Florence Z.	11·2	286	—	—	—	—	e 6·2	—
VII	Strasbourg	14·8	304	3 54?	+18	—	—	—	—
II	Copenhagen	16·7	332	—	—	—	—	8·9	—
III		16·7	332	—	—	—	—	8·7	—
IV		16·7	332	—	—	—	—	8·1	—
VI		16·7	332	—	—	—	—	13·9	—
III	Pulkovo	18·2	6	e 5 20	+61	—	—	—	—
IV		18·2	6	e 6 19	?	—	—	—	—
VI		18·2	6	e 4 30	+11	—	—	—	—
III	Ekaterinburg	26·6	44	—	—	—	—	13·7	—
IV		26·6	44	—	—	—	—	13·1	—
VI		26·6	44	—	—	—	—	12·9	—

Belgrade gives also: I eN = +2m.19s., II eN = +2m.22s., iN = +2m.30s., IV eN = +1m.31s., VI iN = +1m.36s., VII eN = +2m.7s., VIII iN = +1m.36s. and +1m.41s.

April 19d. 22h. 40m. 18s. Epicentre 41°·7N. 26°·3E. (as above).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Yalta		6·4	61	e 1 39	+ 1	e 2 53	− 2	—	—
Theodosia		7·3	59	e 1 53	+ 2	3 19	+ 1	3·7	—
Budapest		7·7	320	e 2 45	+48	—	—	3·9	4·0
Zagreb		8·5	303	e 2 12	+ 3	e 4 0	+10	i 4·1	4·4
Pompeii		8·9	268	e 3 47	?S	(e 3 47)	−14	—	—
Vienna		9·6	316	—	—	e 3 53	−25	i 4·7	5·1
Rocca di Papa		10·2	275	—	—	e 4 43	+ 8	e 5·4	6·4
Makeyevka		10·4	48	—	—	e 4 21	−19	6·5	7·2
Venice		10·8	295	6 17	?L	—	—	(6·3)	8·7
Florence	Z.	11·2	286	e 2 52	+ 5	(4 57)	− 2	—	6·1
Chur		13·0	299	e 2 54	−19	e 6 29	?L	(e 6·5)	—
Zurich		13·8	300	e 2 42?	−41	—	—	—	—
Moncalieri		13·9	290	—	—	e 6 7	+ 1	8·0	—
Strasbourg		14·8	304	—	—	e 6 42?	+15	—	—
Feldberg	N.	15·0	310	—	—	—	—	e 7·8	—
Kucino		16·0	24	—	—	—	—	e 11·7	—
Hamburg		16·1	323	—	—	e 7 42?	+45	—	—
Lund		16·5	333	—	—	6 18	−49	8·7	—
Copenhagen		16·7	332	—	—	e 5 42?	?	8·7	9·7
Uccle		17·6	309	—	—	—	—	e 8·7	—
De Bilt		17·7	313	—	—	—	—	e 8·7	11·4
Pulkovo		18·2	6	3 58	−21	7 30	−14	9·2	12·4
Upsala		18·9	346	—	—	—	—	e 10·2	—
Kew		20·6	307	—	—	e 7 42?	−54	10·7	—
Granada		23·4	268	—	—	—	—	e 12·7	14·7
Ekaterinburg		26·6	44	5 40	−14	10 33	0	13·7	16·7

Additional readings and note: Zagreb eNW = +3m.20s., eNE = +3m.32s., iNE = +3m.54s., MNW = +5·2m. Rocca di Papa eN = +4m.3s. and +4m.52s., eZ = +6m.23s. Makeyevka i = +5m.42s. Florence gives S as P. Feldberg eN = +8m.31s. Copenhagen MN = +12·2m. De Bilt MN = +9·7m.

April 19d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.
1	2	19	16	51	32
13	38	56	18	37	49

April 19d. Readings also at 0h. (Budapest), 1h. (Baku and Irkutsk), 2h. (Budapest and Zagreb), 4h. (Budapest, Feldberg, and Zagreb), 5h. (Santiago), 6h. (Zagreb), 12h. (near Toyooka), 14h. (Manila), 18h. (near Theodosia and Yalta), 19h. (near Tananarive), 23h. (near Sumoto and near Matuyama).

April 20d. 6h. 15m. 10s. Epicentre 41°·7N. 26°·3E. (as on 19d.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	i 1 14	− 8	i 2 27	+ 2	—	2·6
Yalta		6·4	61	e 1 51	+13	—	—	—	—
Theodosia		7·3	59	e 2 4	+13	e 3 28	+10	3·8	4·8
Budapest		7·7	320	e 2 50?	?	—	—	4·2	—
Zagreb		8·5	303	e 2 11	+ 2	e 4 6	+16	e 4·2	4·6
Pompeii		8·9	268	e 3 56	?S	(e 3 56)	− 5	—	—
Vienna		9·6	316	—	—	e 4 21	+ 3	i 5·0	6·2
Rocca di Papa		10·2	275	—	—	(e 4 57)	+22	(e 5·8)	(10·0)
Makeyevka		10·4	48	—	—	e 5 8	+28	6·7	—
Venice		10·8	295	1 50?	?	—	—	—	—
Florence	Z.	11·2	286	e 1 25	?	—	—	—	5·7
Moncalieri		13·9	290	e 2 18	−67	8 5	?	11·9	—
Strasbourg		14·8	304	—	—	—	—	e 7·8	—
Feldberg	N.	15·0	310	—	—	—	—	e 8·0	—
Kucino		16·0	24	—	—	—	—	e 9·9	—
Hamburg		16·1	323	—	—	—	—	e 7·8	—
Lund		16·5	333	—	—	—	—	8·8	—
Copenhagen		16·7	332	—	—	5 50?	?	8·8	10·4
Uccle		17·6	309	—	—	—	—	e 8·8	—
De Bilt		17·7	313	—	—	—	—	e 8·8	11·6
Pulkovo		18·2	6	—	—	9 23	?L	10·8	—
Upsala		18·9	346	—	—	—	—	9·8	—
Kew	N.	20·6	307	—	—	—	—	e 10·8	—
Granada		23·4	268	—	—	—	—	e 10·8	12·8
Ekaterinburg		26·6	44	5 50	− 4	10 43	+10	13·8	16·8
Irkutsk		51·6	50	—	—	—	—	e 28·7	33·0

Additional readings and note: Belgrade iN = +1m.31s., +2m.4s., and +2m.12s. Zagreb e = +3m.20s. Rocca di Papa readings have been increased by 8m. Makeyevka i = +5m.53s. Kucino eE = +7m.44s. and +8m.8s. Copenhagen MN = +12·4m.

April 20d. 8h. 15m. 40s. Epicentre 42°·0N. 46°·0E. (as on 1927 May 14d.).

A = +·516, B = +·535, C = +·669; D = +·719, E = −·695; G = +·465, H = +·481, K = −·743.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Baku	3·3	119	e 1 21	+29	i 2 25	+54	—	—
Makeyevka	8·3	320	e 2 57	+51	e 3 44	− 1	e 4·5	6·0
Kucino	14·7	342	—	—	e 6 8	−17	8·6	9·9
Ekaterinburg	17·6	27	i 4 13	+ 1	7 18	−13	10·3	13·2
Pulkovo	20·2	337	4 44	+ 1	8 36	+ 9	10·8	13·2
Lund	25·2	314	—	—	—	—	16·3	—
Copenhagen	25·7	314	e 5 44	− 1	e 10 20	+ 4	15·3	—
Hamburg	26·5	308	—	—	—	—	e 15·3	—

Additional reading and note: Makeyevka and Kucino readings are given simply as e. Kucino e = +7m.57s.

April 20d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
2	55	42	17	2	47	20	48	0

April 20d. Readings also at 0h. (Sebenico), 1h. (La Paz, Tucson, near Oaxaca, Puebla, Tacubaya, and Vera Cruz), 2h. (Vienna), 6h. (near Belgrade and near Tacubaya), 7h. (Taihoku), 10h. (near Tortosa), 11h. (near Sumoto), 14h. and 16h. (Taihoku), 17h. (Copenhagen, Ekaterinburg, Pulkovo, and near Tacubaya), 20h. (Florence), 22h. (Kucino and Tashkent).

April 21d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows :—

h.	m.	s.	h.	m.	s.
13	14	36	17	59	8
17	37	45	22	20	0

April 21d. Readings also at 0h. (Florence), 1h. (near Spokane), 2h. (near Wellington), 3h. (Baku, Ekaterinburg, Florence, and Tashkent), 5h. (Lick), 6h. (Copenhagen, Ekaterinburg, Pulkovo, and Zagreb), 7h. (Wellington), 11h. (Ekaterinburg, Irkutsk, and near Mizusawa), 13h. (Chur, Rocca di Papa, Zagreb, and Florence), 14h. (Florence, Kobe, and near Sumoto), 15h. (Ekaterinburg, Irkutsk, Mizusawa, and Tashkent), 16h. (Copenhagen and Makeyevka), 18h. (near Toyooka), 21h. (Ekaterinburg, Georgetown, Tananarive, Tashkent, near Batavia, and Malabar), 22h. (Kucino).

April 22d. 4h. 54m. 58s. Epicentre 47°·0N. 135°·0E.

A = −·482, B = +·482, C = +·731 ; D = +·707, E = +·707 ; G = −·517, H = +·517, K = −·682.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ootomari		5·3	91	(0 50)	−30	—	—	(1·4)	—
Sikka		5·9	65	(1 28)	− 3	(2 21)	−20	(2·4)	(2·4)
Mizusawa	E.	9·1	148	1 54	−24	3 10	−56	—	—
	N.	9·1	148	1 52	−26	3 12	−54	—	—
Toyooka		11·4	181	i 2 58	+ 8	(i 5 18)	+14	i 5·3	5·4
Nagoya		11·9	172	e 2 53	− 5	(5 6)	−11	5·1	5·7
Osaka		12·3	178	3 16	+13	(5 32)	+ 6	5·5	6·7
Kobe		12·3	180	i 3 4	+ 1	(i 5 29)	+ 3	i 5·5	5·5
Sumoto		12·7	180	e 3 8	− 1	(i 5 43)	+ 6	i 5·7	5·7
Hukuoka		13·9	196	—	—	—	—	6·6	—
Zi-ka-wei	Z.	18·9	218	4 46	+18	8 50	+50	—	11·7
Hong Kong		29·8	221	11 22	?S	(11 22)	− 9	—	—
Manila		34·5	205	e 6 45	−24	(e 11 42)	−66	—	—
Phu-Lien		34·9	230	7 11	− 1	—	—	16·0	—
Ekaterinburg		44·5	312	—	—	—	—	28·0	33·4
Tashkent		46·1	289	i 8 50	+ 9	i 15 48	+19	e 22·1	29·5
Pulkovo		55·8	325	i 9 51	+ 6	i 17 43	+12	—	—
Kucino		56·1	319	e 10 44	+57	i 17 44	+ 9	e 24·6	—
Makeyevka		60·8	311	10 21	+ 3	i 18 44	+11	—	—
Scoresby Sund		61·3	352	—	—	e 18 10	−30	26·0	—
Theodosia		64·1	310	e 10 46	+ 7	—	—	—	—
Yalta		65·1	310	e 10 46	0	—	—	—	—
Lund		66·3	329	—	—	19 28	−13	—	—
Copenhagen		66·5	329	e 10 49	− 6	e 19 32	−12	28·0	—
Edinburgh		71·3	337	—	—	20 2?	−40	—	—
De Bilt		72·0	330	11 24	− 6	20 36	−14	e 31·0	—
Zagreb		72·9	320	i 11 31	− 4	e 20 33	−28	—	—
Uccle		73·4	330	e 20 48	?S	(e 20 48)	−19	e 48·0	—
Strasbourg		74·0	327	e 11 32?	−10	e 21 2?	−12	29·0	—
Kew	E.	74·3	334	—	—	20 58	−20	—	—
Zurich		74·7	325	11 37	−10	—	—	—	—
Chur		74·8	325	i 11 38	−10	e 21 . 4	−20	—	—
Neuchatel		75·6	326	i 11 42	−11	e 21 15	−18	—	—
Florence	Z.	76·5	322	—	—	e 21 12	−31	—	—
Moncalieri		77·0	325	—	—	e 20 13	−36	25·6	—
Pompeii		77·5	319	e 21 47	?S	(e 21 47)	− 8	(e 27·0)	—
Rocca di Papa	E.	77·6	320	i 21 40	?S	(i 21 40)	−16	—	—
Ottawa		83·7	21	—	—	i 21 40	−86	—	—
Toronto	N.	84·4	25	—	—	i 21 38	−94	—	—
St. Louis		85·3	35	—	—	i 23 17	− 5	39·0	45·0
Georgetown	Z.	89·4	25	—	—	—	—	e 35·1	—

Additional readings and notes : Ootomari and Sikka readings have been increased by 1m. Osaka MN = +6·3m. Zi-ka-wei PR_1 = +5m.46s. Manila readings are given as separate P's. Ekaterinburg i = +17m.17s. and +17m.45s., e = +20m.3s. and +20m.42s. Kucino e = +11m.50s. = PR_1 −27s., i = +19m.8s. = [S] −16s., and +19m.50s. Scoresby Sund eEN = +19m.24s. = [S] −40s. and +20m.21s. = Σ −18s. Copenhagen eN = +20m.19s. = [S] −26s., eEN = +21m.51s. Uccle eS = +31m.40s. Zurich i = +12m.5s. Pompeii gives S as P and L as S. Rocca di Papa iPN = +21m.43s. = [S] −24s. St. Louis e = +19m.46s., iN = +21m.45s., iE = +21m.47s., iN = +22m.0s., and +23m.17s. Georgetown iZ = +19m.12s., +22m.32s., +30m.10s., and +31m.51s.

April 22d 19h. 59m. 18s. Epicentre 38°·0N. 23°·5E. (as on 1922 June 4d., but see April 22d. 20h.).

$A = +\cdot723$, $B = +\cdot314$, $C = +\cdot616$; $D = +\cdot399$, $E = -\cdot917$; $G = +\cdot565$, $H = +\cdot245$, $K = -\cdot788$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	7·2	323	e 2 12	+23	e 3 57	+42	(e 4·0)	4·5
Pompeii		7·4	293	e 2 7	+15	e 4 7	+46	(e 4·1)	—
Rocca di Papa		9·1	298	2 9	− 9	e 4 2	− 4	5·4	6·4
Zagreb		9·6	327	e 2 26	+ 2	i 4 50	+32	(i 4·8)	—
Budapest		10·0	323	e 3 12	+42	—	—	5·7	—
Yalta		10·3	48	e 2 25	− 9	—	—	—	—
Laibach		10·4	323	e 3 27	+51	—	—	i 6·2	—
Graz		10·8	329	e 2 39	− 2	e 5 4	+14	—	7·0
Florence	Z.	10·9	306	—	—	e 3 52	−60	—	7·2
Ksara	N.	10·9	109	e 2 47	+ 4	4 51	− 1	5·4	—
Venice		11·1	315	4 4	?S	(4 4)	−53	(6·4)	8·7
Theodosia		11·3	48	e 1 53	−56	—	—	—	—
Vienna		11·5	335	e 3 19	+27	6 2	+55	(6·0)	7·5
Lemberg	N.	11·8	2	—	—	—	—	e 5·7	10·6
Chur		13·5	315	e 3 11	− 9	—	—	—	—
Moncalieri		13·7	306	e 4 33	+71	6 42	+41	8·5	9·7
	Z.	13·7	306	e 3 22	0	6 48	+47	—	—
Ravensburg		14·1	318	—	—	e 6 2	− 8	—	8·4
Zurich		14·4	316	e 3 32	0	e 6 6	−12	—	—
Makeyevka		14·5	42	—	—	e 6 10	−10	7·6	10·8
Hohenheim		14·9	321	—	—	—	—	e 8·2	—
Neuchatel		15·1	312	e 3 40	0	e 8 33	?L	(e 8·6)	—
Jena	N.	15·4	331	—	—	—	—	e 7·7	7·9
Strasbourg		15·5	318	e 3 42?	− 4	—	—	7·7	8·7
Besançon		15·8	311	e 3 42?	− 7	—	—	—	—
Konigsberg		16·9	354	—	—	—	—	e 9·4	—
Hamburg		18·1	333	—	—	—	—	e 9·7	12·7
Paris		18·5	312	—	—	e 7 42?	− 9	—	—
Uccle		18·6	320	—	—	—	—	e 9·7	—
De Bilt		19·0	324	—	—	e 7 42?	−20	e 9·7	12·9
Lund		19·0	342	—	—	—	—	10·7	—
Copenhagen		19·2	341	—	—	8 0	− 6	10·7	12·8
Kucino		20·2	24	e 4 38	− 5	8 30	+ 3	10·7	12·8
Almeria		20·5	275	—	—	—	—	—	14·1
Baku		20·5	75	e 4 53	+ 6	i 8 48	+14	e 11·5	14·8
Granada		21·3	273	—	—	e 7 2	?	11·7	14·8
Kew		21·4	316	e 5 18	+20	e 9 0	+ 7	11·1	12·2
Oxford	E.	22·1	316	—	—	e 8 55	−12	i 12·7	—
Pulkovo		22·1	9	i 5 4	− 2	9 4	− 3	11·7	13·2
Upsala		22·2	352	—	—	—	—	e 12·2	13·1
Stonyhurst		23·7	320	—	—	e 8 57	−41	—	—
Edinburgh		25·2	324	—	—	—	—	e 14·2	—
Ekaterinburg		30·8	40	6 28	− 8	11 37	−11	e 15·7	20·5
Tashkent		35·0	71	—	—	—	—	14·6	16·9

Additional readings and note: Rocca di Papa ePN = +2m.21s., ePZ = +2m.29s. Zagreb e = +3m.16s. Venice gives S as P and L as S. Vienna PE = +4m.4s., iN = +4m.15s. and +4m.35s., PR_1 = +4m.50s., P_3S = +5m.28s., SR_1 = +6m.56s. Lemberg eE = +6m.36s. Makeyevka i = +6m.40s. = S +15s. Jena ME = +8·7m. De Bilt MN = +10·7m. Copenhagen MN = +13·2m., MZ = +13·9m. Oxford eN = +9m.2s. = S − 1s.

April 22d. 20h. 13m. 46s. Epicentre **38°0**·N. **23°·5**E.
(as at 19h.).

A = +·723, B = +·314, C = +·616; D = +·399, E = −·917;
G = +·565, H = +·245, K = −·788.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade		7·2	343	e 1 51	+ 2	i 3 37	+22	i 4·0	4·4
Pompeii		7·4	293	i 1 57	+ 5	e 3 29	+ 8	4·2	6·2
Rocca di Papa	E.	9·1	298	2 16	− 2	i 4 9	+ 3	—	5·7
	N.	9·1	298	2 16	− 2	i 4 20	+14	—	8·1
	Z.	9·1	298	2 15	− 3	e 4 2	− 4	i 5·3	5·7
Zagreb		9·6	327	i 2 22	− 2	i 4 55	+37	i 5·4	7·5
Budapest		10·0	343	e 2 36	+ 6	—	—	5·7	7·2
Yalta		10·3	48	e 2 39	+ 5	—	—	—	—
Laibach		10·4	323	e 2 48	+12	i 4 38	− 2	(i 5·7)	6·3
Helwan		10·4	139	i 2 39	+ 3	4 34	− 6	—	10·7
Graz		10·8	329	i 2 40	− 1	i 5 7	+17	5·5	7·3
Florence	Z.	10·9	306	e 2 39	− 4	4 49	− 3	5·7	6·3
Ksara		10·9	109	2 50	+ 7	4 58	+ 6	5·9	—
Venice		11·1	315	—	—	5 23	+26	—	6·4
Theodosia		11·3	48	e 2 58	+ 9	—	—	—	—
Vienna		11·5	335	2 47	− 5	5 9	+ 2	i 6·6	7·7
Lemberg	E.	11·8	2	e 3 14	+18	e 6 8	+54	e 6·6	7·5
	N.	11·8	2	e 2 50	− 6	e 6 20	+66	e 7·0	7·8
Innsbruck		12·8	320	3 14?	+ 4	i 5 47	+ 8	7·2	7·4
Chur		13·5	315	3 15	− 5	—	—	—	—
Moncalieri	Z.	13·7	306	2 38	−44	5 16	−45	—	10·1
		13·7	306	3 21	− 1	5 18	−43	7·5	11·5
Ravensburg		14·1	318	3 30	+ 3	6 9	− 1	6·8	8·2
Zurich		14·4	316	e 3 28	− 4	i 6 14	− 4	—	—
Makeyevka		14·5	42	i 3 38	+ 5	i 6 29	+ 9	7·5	11·3
Hohenheim		14·9	321	3 34	− 4	6 14	−16	6·9	10·0
Grenoble		15·1	304	e 3 49	+ 9	—	—	i 9·1	12·7
Neuchatel		15·1	312	i 3 37	− 3	i 6 23	−11	—	—
Jena	E.	15·4	331	i 3 49	+ 5	—	—	e 7·7	8·9
	N.	15·4	331	i 3 52	+ 8	i 6 53	+12	e 7·7	8·8
	Z.	15·4	331	i 3 50	+ 6	i 6 50	+ 9	e 7·9	12·1
Strasbourg		15·5	318	i 3 43	− 3	6 43	− 1	7·2	9·2
Besançon		15·8	311	i 3 47	− 2	6 48	− 2	—	9·2
Potsdam	E.	16·1	336	i 3 58	+ 5	e 6 54	− 3	e 8·7	10·0
	N.	16·1	336	i 3 56	+ 3	i 7 9	+11	e 8·7	11·0
Feldberg		16·2	323	i 4 0	+ 5	—	—	e 8·6	9·2
Algiers		16·2	272	3 52	− 3	i 7 1	+ 1	9·2	12·6
Barcelona		16·8	293	—	—	e 7 4	− 9	e 7·6	10·0
Konigsberg		16·9	354	e 4 5	+ 1	i 7 8	− 8	e 7·9	8·2
Puy de Dôme		17·1	303	4 1	− 5	—	—	e 8·7	—
Tortosa	N.	17·9	283	e 4 24	+ 8	7 38	0	—	18·6
Hamburg		18·1	333	i 4 20	+ 2	7 44	+ 2	e 10·0	11·5
Paris		18·5	312	i 4 20	− 3	e 7 50	− 1	10·0	10·2
Uccle		18·6	320	i 4 23	− 1	i 7 47	− 6	e 9·2	10·7
Alicante		18·8	278	4 30	+ 3	7 58	0	9·6	20·5
De Bilt		19·0	324	4 29	0	7 57	− 5	e 9·2	13·0
Lund		19·0	342	4 33	+ 4	7 58	− 4	10·2	—
Copenhagen		19·2	341	e 4 31	0	8 3	− 3	—	12·8
Kucino		20·2	24	i 4 44	+ 1	i 8 34	+ 7	9·8	13·0
Almeria		20·5	275	i 4 46	− 1	8 32	− 2	11·4	17·2
Baku		20·5	75	i 4 56	+ 9	i 8 35	+ 1	10·7	14·9
Granada		21·3	273	i 4 50	− 7	i 8 40	−10	e 11·5	14·5
Toledo		21·4	284	4 53	− 5	i 8 46	− 7	e 9·9	15·8
Kew		21·4	316	i 4 55	− 3	i 8 48	− 5	10·9	12·1
Oxford	E.	22·1	316	e 5 2	− 4	i 8 59	− 8	11·8	13·1
Malaga		22·1	275	5 3	− 3	8 58	− 9	13·5	—
Pulkovo		22·1	9	i 5 7	+ 1	i 9 7	0	11·7	13·4
Upsala		22·2	352	e 5 3	− 4	9 0	− 9	—	13·4
San Fernando		23·6	276	5 54	+30	9 24	−12	10·7	16·2
Stonyhurst		23·7	320	e 5 18	− 7	i 9 29	− 9	12·2	16·2
Bidston		23·9	319	5 32	+ 5	9 32	−10	11·2	14·6
Edinburgh		25·2	324	—	—	i 10 2	− 5	—	15·6
Bergen		25·2	339	5 31	− 9	10 7	0	15·2	—
Ekaterinburg		30·8	40	6 29	− 7	i 11 34	−14	14·2	20·2
Tashkent		35·0	71	7 11	− 2	—	—	—	29·4
Scoresby Sund		40·1	339	—	—	—	—	20·2	26·6

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Bombay		46·7	100	9 7	+22	16 7	+30	25·3	31·6
Hyderabad		52·0	98	—	—	—	—	—	31·4
Kodaikanal		55·6	106	30 14	?L	—	—	(30·2)	—
Irkutsk		55·7	48	9 50	+ 6	17 35	+ 5	26·5	36·7
Ottawa		69·6	313	e 11 26	+11	i 20 25	+ 4	e 32·2	35·2
Cape Town		72·1	184	—	—	—	—	—	40·2
Phu-Lien		72·2	79	—	—	—	—	—	40·2
Toronto	E.	72·6	312	e 14 59	?PR$_1$	e 20 26	−31	35·5	43·3
Hong Kong		77·1	73	—	—	—	—	—	51·9
Cincinnati		78·5	311	—	—	i 22 4	− 2	e 38·2	47·4
Chicago	E.	78·6	315	22 3	?S	(22 3)	− 4	38·2	39·2
St. Louis	E.	82·1	314	e 12 27	− 4	e 22 39	− 8	e 37·2	47·2
Rio de Janeiro		87·3	238	—	—	e 23 14	[+ 3]	e 43·2	—
Victoria	E.	88·7	339	23 52	?S	(23 52)	− 8	40·4	53·9
	N.	88·7	339	23 37	?S	(23 37)	[+17]	44·3	53·9
Tucson		97·8	324	—	—	—	—	49·2	—
Sucre		100·6	254	—	—	—	—	53·2	62·3
La Paz	N.	101·3	258	—	—	—	—	55·2	63·9

Additional readings and note: Belgrade iPN = +1m.52s., iN = +2m.16s., iPR$_1$ = +2m.28s., iN = +2m.36s., +2m.54s., +3m.4s., and +3m.18s. Zagreb i = +2m.32s., +2m.39s., +3m.5s., +3m.38s., +3m.46s., +3m.54s., +4m.23s. and +4m.45s., MNW = +6·5m. Laibach gives S as i and L as iS. Graz MN = +8·4m. Vienna iP = +2m.53s., iN = +3m.1s., iE = +3m.16s., PR$_1$ = +3m.41s., iN = +4m.7s., P$_2$S = +4m.32s., iN = +5m.31s., iE = +5m.46s., i = +6m.13s., SR$_1$ = +6m.28s. Innsbruck PR$_1$ = +3m.26s., iNW = +3m.32s., +4m.12s., and +5m.16s., iNE = +5m.24s., SR$_1$NW = +6m.18s., iNW = +6m.47s., MNW = +10·0m. Moncalieri (first line) MN = +10·0m., (second line) MN = +10·6m. Ravensburg PR$_1$ = +3m.45s. Hohenheim PR$_1$ = +3m.49s., i = +4m.30s., PR$_2$ = +4m.35s. Jena iE = +4m.19s. Strasbourg MZ = +10·7m. Potsdam e = +4m.24s., i = +4m.25s. and +4m.36s., e = +4m.42s., i = +7m.27s. and +7m.46s. Algiers MN = +15·2m. Barcelona MN = +9·7m. Konigsberg ePZ = +4m.8s., iPR$_1$EZ = +4m.14s., iZ = +5m.16s., and +6m.18s., iE = +5m.35s., iSR$_1$EZ = +7m.39s. Tortosa ePE = +4m.28s., ME = +15·5m. Hamburg eLN = +10·2m., MN = +12·1m., MZ = +13·2m. Alicante MN = +18·9m. De Bilt MN = +12·8m., MZ = +13·4m. Copenhagen MN = +13·2m., MZ = +14·0m. Almeria MZ = +18·2m. Granada iL = +12·3m. Toledo MNW = +17·5m. Kew iZ = +5m.24s. = PR$_1$ + 4s., iN = +9m.36s. = SR$_1$ + 0, MN = +12·3m., MZ = +14·4m. Oxford iE = +5m.21s., iSN = +8m.58s., Upsala MN = +16·1m. San Fernando MN = +15·4m. Ekaterinburg i = +11m.55s. Tashkent i = +8m.38s. = PR$_1$ + 16s., and +9m.14s., e = +14m.14s. Scoresby Sund MN = +26·3m. Cincinnati e = +22m.54s. = PS + 7s., iN = +28m.34s., eN = +31m.14s. = SR$_2$ − 2s., eLN = +36·2m. Chicago eN = +37m.14s. St. Louis iE = +12m.53s., iSE = +22m.43s., eE = +23m.36s. = PS + 4s., SR$_1$E = +28m.24s.

April 22d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d.17h. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.
1	49	2	4	31	27

April 22d. Readings also at 2h. and 3h. (near Lick), 4h. (Copenhagen, De Bilt, Florence, Uccle, near Zagreb, and near Lick), 5h. (Pulkovo), 8h. (Copenhagen), 11h. (Apia and Paris), 12h. (Paris and Suva), 16h. (Ekaterinburg, Irkutsk, Makeyevka, Tashkent, Zagreb, and near Ksara), 18h. (La Paz, Ekaterinburg, and Tashkent), 19h. (Baku, Budapest, Copenhagen, De Bilt, Ekaterinburg, Florence, Makeyevka, Pulkovo, Rocca di Papa (2), Strasbourg, Zi-ka-wei, near Apia, and near Zagreb), 20h. (Theodosia and Vienna).

April 23d. An after-shock from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. was recorded at La Paz at 21h.24m.32s.

April 23d. Readings also at 0h. (Sucre and near Manila), 7h. and 11h. (near Toyooka), 13h. (near Toyooka), 15h. (Graz), 20h. (Vienna), 21h. (La Paz).

April 24d. 1h. 14m. 48s. Epicentre 38°·0N. 23°·5E. (as on 22d.).

A = +·723, B = +·314, C = +·616; D = +·399, E = −·917; G = +·565, H = +·245, K = −·788.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Zagreb		9·6	327	e 2 12?	−12	e 4 50	?L	(e 4·8)	—
Budapest		10·0	343	—	—	e 3 32	−57	—	—
Yalta		10·3	48	e 3 51	?S	(e 3 51)	−46	—	—
Theodosia		11·3	48	e 2 57	+ 8	4 9	−53	4·3	4·4
Vienna		11·5	335	e 5 20	?S	(e 5 20)	+13	—	7·5
Makeyevka		14·5	42	e 5 19	?	e 6 39	+19	—	—
Copenhagen		19·2	341	—	—	—	—	10·2	—
Pulkovo		22·1	9	5 9	+ 3	—	—	i 10·8	—
Ekaterinburg		30·8	40	—	—	—	—	14·7	—

No additional readings.

April 24d. 15h. 44m. 28s. Epicentre 51°·2N. 176°·0W. (as on 1927 Jan. 2d.).

A = −·625, B = −·044, C = +·779; D = −·070, E = +·998; G = −·777, H = −·054, K = −·627.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Honolulu T.H.	E.	32·9	150	—	—	—	—	e 17·2	—
Victoria	E.	33·4	76	—	—	(12 10)	−20	12·2	19·8
Spokane		37·2	74	e 7 24	− 8	e 12 30	−57	—	—
Irkutsk		46·8	305	e 8 44	− 2	e 15 30	− 8	21·5	32·2
Zi-ka-wei	Z.	49·4	272	e 8 40	−23	e 16 19	+ 8	—	33·7
St. Louis	E.	58·5	68	i 10 7	+ 5	i 18 9	+ 4	e 28·0	32·5
	N.	58·5	68	i 10 7	+ 5	i 18 10	+ 5	e 27·5	32·0
Toronto	N.	60·9	56	—	—	—	—	e 33·8	—
Ottawa		61·5	52	—	—	e 18 32?	−10	e 28·5	—
Ekaterinburg		62·4	330	i 10 32	+ 4	18 59	+ 6	27·5	40·9
Pulkovo		67·0	347	e 10 34	−24	e 20 35	[−14]	36·5	42·7
Kucino		69·4	340	e 15 38	?PR_3	e 20 20	+ 1	37·4	47·0
Tashkent		71·5	315	i 11 27	0	20 41	− 3	34·5	40·4
Copenhagen		72·8	355	—	—	21 32?	[− 1]	33·5	49·8
Makeyevka		76·6	338	—	—	e 21 45	+ 1	39·9	46·4
De Bilt		76·7	359	—	—	e 27 8	?SR_1	e 47·5	—
Uccle		78·0	0	—	—	—	—	—	48·5
Paris		80·0	1	—	—	—	—	e 54·5	—
Baku		80·1	326	e 12 18	− 2	e 22 25	+ 1	39·7	46·2
Strasbourg		80·2	358	—	—	—	—	e 50·5	—
Granada		91·5	6	—	—	—	—	e 53·5	70·5

Additional readings: St. Louis eE? = +8m.52s., eN? = +9m.5s., iN = +13m.12s., iE = +18m.24s. Kucino e = +25m.32s. = SR_1 −10s. Makeyevka e = +30m.34s. = SR_1 −6s.

April 24d. 19h. 44m. 58s. Epicentre 24°·0N. 121°·0E. (as on 1927 Feb. 20d.).

A = −·470, B = +·783, C = +·407; D = +·857, E = +·515; G = −·210, H = +·349, K = −·914.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Taihoku		1·1	24	0 27	+10	(0 42)	+11	0·7	0·8
Hong Kong		6·5	257	3 42	?L	—	—	(3·7)	5·5
Zi-ka-wei	Z.	7·2	3	e 1 49	0	3 10	− 5	—	4·0
Manila		9·4	180	e 2 44	+ 2	—	—	e 8·6	—
Hukuoka		12·6	38	(2 55)	−12	—	—	2·9	3·0
Phu-Lien		13·7	259	e 3 34	+12	—	—	—	—
Irkutsk		31·0	340	6 22	−16	11 23	−28	e 13·5	20·4
Bombay		44·9	272	15 16	?S	(15 16)	+ 2	22·5	—
Tashkent		46·0	307	i 8 36	− 4	i 15 27	− 1	22·0	25·9
Ekaterinburg		54·0	325	i 9 33	0	17 9	0	25·0	30·9

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Baku		60·7	306	e 10 25	+ 8	e 18 49	+17	31·0	35·9
Makeyevka		67·8	315	—	—	e 20 4	+ 4	34·9	43·4
Pulkovo		69·8	328	e 11 15	− 1	—	—	34·0	44·6
Honolulu T.H.	E.	73·6	74	—	—	—	—	e 50·9	—
Upsala		75·8	330	—	—	—	—	41·0	—
Lund		79·7	328	—	—	—	—	42·0	—
Copenhagen		80·0	328	—	—	—	—	38·0	51·2
Vienna	Z.	81·3	320	12 24	− 3	—	—	—	—
Hamburg		82·3	326	—	—	—	—	e 43·0	45·0
De Bilt	E.	85·6	326	—	—	—	—	e 44·0	47·1
Strasbourg		86·2	321	—	—	—	—	e 44·0	—
Uccle		86·7	326	—	—	—	—	e 42·0	—
Victoria	E.	87·6	37	—	—	—	—	49·0	56·0
Kew		88·6	328	—	—	—	—	e 44·0	—
Paris		88·9	325	—	—	—	—	e 49·0	—
Granada		99·6	319	—	—	—	—	e 60·0	63·8
Ottawa		109·0	12	—	—	e 44 2?	?	e 60·0	—
Toronto	N.	109·8	16	—	—	—	—	74·7	—
St. Louis		110·9	26	—	—	e 28 49	?PS	1 55·0	73·4
Georgetown	Z.	114·9	16	—	—	—	—	77·6	78·3

Additional readings: Bombay S = +19m.48s. = SR_3 −11s. Copenhagen MN = +44·1m. De Bilt eLN = +41·0m., MN = +47·5m. Strasbourg L = +47·0m. Toronto eN = +37m.40s. St. Louis eE = +45m.54s., +46m.56s., and +61m.44s., eN = +63m.44s., eEN = +70m.2s. Georgetown eZ = +40m.8s., iZ = +41m.35s.

April 24d. 20h. 21m. 48s. Epicentre 51°·2N. 176°·0W. (as at 15h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Irkutsk		46·8	305	e 10 25	?PR_1	e 15 29	− 9	22·2	29·4
Ekaterinburg		62·4	330	i 10 31	+ 3	18 59	+ 6	30·2	38·7
Pulkovo		67·0	347	—	—	e 23 41	?SR_1	37·2	42·7
Kucino		69·4	340	—	—	—	—	e 46·4	—
Tashkent		71·5	315	i 11 28	+ 1	—	—	e 35·2	42·1
Makeyevka		76·6	338	—	—	—	—	39·3	45·6
Baku		80·1	326	—	—	—	—	40·2	46·1
Tortosa	N.	87·9	2	—	—	—	—	e 58·2	—
Granada		91·5	6	—	—	—	—	e 58·2	68·7

No additional readings.

April 24d. 21h. 32m. 30s. Epicentre 51°·2N. 176°·0W. (as at 20h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Honolulu T.H.	E.	32·9	150	—	—	—	—	e 17·0	—
Irkutsk		46·8	305	—	—	e 15 32	− 6	22·5	25·6
St. Louis		58·5	68	e 8 7	?	i 18 8	+ 3	32·2	36·2
Toronto	N.	60·9	56	—	—	—	—	e 32·9	—
Ottawa		61·5	52	—	—	e 18 30?	−12	e 28·5	—
Ekaterinburg		62·4	330	10 32	+ 4	18 58	+ 5	30·5	43·7
Pulkovo		67·0	347	—	—	e 24 31	?SR_1	37·5	45·3
Kucino		69·4	340	—	—	—	—	e 46·5	—
Tashkent		71·5	315	11 28	+ 1	e 25 24	?SR_1	34·5	44·7
Copenhagen		72·8	355	—	—	e 26 30?	?SR_1	33·5	—
Makeyevka		76·6	338	—	—	e 21 48	+ 4	40·3	44·8
De Bilt		76·7	359	—	—	—	—	e 39·5	—
Kew		77·3	3	—	—	—	—	e 47·5	—
Uccle		78·0	0	—	—	—	—	46·5	—
Baku		80·1	326	—	—	—	—	64·5	69·0
Strasbourg		80·2	358	—	—	—	—	e 52·5	—
Granada		91·5	6	—	—	—	—	e 54·5	65·5

Additional readings: St. Louis LN = +31·2m. Makeyevka e = +31m.6s. = SR_3 +26s.

April 24d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d.17h. were recorded by La Paz at 2h.52m.14s. and 3h.10m.18s. and by Sucre at 2h.53m.4s.

April 24d. Readings also at 0h. (near Belgrade), 5h. (Yalta), 8h. (La Paz), 9h. (La Paz and Sydney), 10h. (Ekaterinburg, near Tashkent, and near Toyooka), 14h. (Bombay, Ekaterinburg, and Tashkent), 18h. (Venice), 22h. (Ekaterinburg (2), Irkutsk, Kucino, Makeyevka (2), Pulkovo, Honolulu T.H. (2), Tashkent, Georgetown, St. Louis, near Zi-ka-wei, near Batavia and Malabar), 23h. (Kucino).

April 25d. 0h. 31m. 18s. Epicentre 38°·0N. 23°·2E.

A = +·724, B = +·310, C = +·616; D = +·394, E = −·919; G = +·566, H = +·243, K = −·788.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Pompeii		7·2	295	e 2 17	+ 2	e 3 42	+27	(e 3·7)	5·2
Naples	N.	7·4	295	e 1 47	− 5	e 4 2	+41	(e 4·0)	4·7
Rocca di Papa		8·8	299	2 6	− 7	e 3 25	−33	e 5·1	5·8
Zagreb		9·4	328	e 2 23	+ 1	e 4 5	− 8	—	7·3
Budapest		9·9	344	e 2 57	+28	—	—	5·7	7·1
Graz		10·7	330	e 2 39	− 1	e 4 50	+ 2	—	6·1
Florence	Z.	10·7	306	e 2 42	+ 2	—	—	—	9·0
Venice		10·9	316	4 42?	?S	(4 42?)	−10	(6·4)	8·7
Ksara		11·1	108	e 2 41	− 5	e 4 45	−12	6·5	—
Vienna		11·3	336	e 2 52	+ 3	5 2	0	i 6·6	7·6
Theodosia		11·4	48	e 3 14	+24	—	—	—	—
Innsbruck	N.W.	12·7	321	—	—	i 5 8	−29	—	—
Moncalieri		13·5	306	e 2 3	−77	6 13	+17	8·8	10·0
Zurich		14·2	316	i 3 26	− 3	i 6 13	0	—	—
Makeyevka		14·7	42	e 3 24	−11	—	—	8·6	10·4
Jena	N.	15·2	331	—	—	—	—	e 8·7	9·6
Strasbourg		15·4	319	—	—	—	—	e 7·7	8·7
Potsdam		16·0	337	—	—	—	—	e 8·7	11·7
Konigsberg	N.	16·9	355	—	—	—	—	e 10·4	—
Tortosa	N.	17·7	286	—	—	—	—	e 9·7	13·2
Hamburg		18·0	334	—	—	—	—	e 8·7	10·7
Uccle		18·4	320	—	—	—	—	e 8·7	10·5
Alicante		18·6	278	e 4 23	− 1	—	—	—	—
De Bilt		18·9	324	—	—	—	—	e 9·6	12·7
Lund		18·9	342	—	—	—	—	9·7	—
Copenhagen		19·1	341	—	—	7 54	−10	10·7	13·8
Kucino		20·3	24	e 4 24	−21	e 8 23	− 6	e 12·2	13·2
Baku		20·8	75	e 5 6	+15	8 44	+ 4	10·7	14·3
Granada		21·1	276	e 4 56	+ 2	e 8 46	0	—	12·3
Kew		21·2	317	—	—	e 8 42?	− 6	11·1	12·3
Oxford		21·9	317	—	—	—	—	e 11·7	12·7
Upsala	E.	22·1	353	—	—	—	—	e 12·2	13·0
Pulkovo		22·2	9	i 4 59	− 8	9 0	− 9	11·7	14·2
Edinburgh		25·0	324	—	—	e 9 42?	−21	—	—
Ekaterinburg		30·9	40	e 6 22	−15	11 31	−19	16·7	20·2
Tashkent		35·2	71	—	—	e 16 42	?	e 17·6	26·8
Irkutsk		55·8	48	—	—	—	—	e 21·8	34·0

Additional readings: Rocca di Papa eEZ = +2m.4s., PN = +2m.8s. Venice gives S as P and L as S. Vienna iE = +4m.11s. and +5m.22s., iN = +5m.39s., SR_1 = +6m.22s. Innsbruck eNW = +4m.18s. De Bilt MN = +10·5m.

April 25d. 1h. 16m. 40s. Epicentre 39°0N. 75°·0E. (as on 1928 March 7d.).

A = +·201, B = +·751, C = +·629; D = +·966, E = −·259; G = +·163, H = +·608, K = −·777.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tashkent		5·0	300	i 1 17	0	i 2 5	−12	—	—
Baku		19·3	282	i 4 24	− 9	i 7 45	−23	—	—
Calcutta	E.	20·0	142	5 1	+20	9 0	+37	12·4	—
	N.	20·0	142	5 2	+21	8 31	+ 8	12·4	—
Bombay		20·2	186	4 37	− 6	8 4	−23	9·8	12·2
Ekaterinburg		20·2	337	i 4 45	+ 2	8 24	− 3	10·8	12·5
Hyderabad		21·7	171	4 54	− 7	8 37	−22	—	13·9
Irkutsk		24·2	47	5 34	+ 4	9 54	+ 6	11·3	15·6

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Makeyevka		28·0	301	e 6 19	+11	(10 14)	−45	10·2	11·3
Kucino		29·7	317	e 7 14	+49	12 8	+39	e 18·0	—
Theodosia		29·8	294	e 6 44	+18	—	—	—	—
Ksara		31·7	274	6 56	+12	e 11 2	−61	12·5	—
Pulkovo		34·8	323	i 6 53	−18	12 13	−39	17·3	—
Upsala	E.	41·1	340	i 9 20	?PR_1	—	—	—	—
Vienna	Z.	42·4	305	i 8 27	+13	—	—	—	—
Zagreb		43·1	300	e 7 50	−29	—	—	—	—
Lund		43·4	315	9 52	?PR_1	—	—	—	—
Copenhagen		43·8	315	e 9 54	?PR_1	14 32	−27	19·3	—
Hamburg	Z.	45·5	313	e 10 6	?PR_1	—	—	—	—
De Bilt		48·7	310	—	—	e 19 56	?SR_1	—	—
Paris		51·2	307	e 18 1	?[S]	—	—	24·3	24·3

Additional readings : Ksara eE = +7m.19s. Vienna iZ = +9m.25s. =PR_1 −25s.

April 25d. 9h. 25m. 40s. Epicentre 41°·7N. 26°·3E. (as on 20d.).

A = +·669, B = +·331, C = +·665 ; D = +·443, E = −·896 ;
G = +·596, H = +·295, K = −·747.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	N.	5·3	309	e 1 23	+ 1	i 2 39	+14	—	3·7
Mostar		6·4	288	—	—	e 2 32	−23	e 3·8	4·0
Yalta		6·4	61	i 1 44	+ 6	(2 56)	+ 1	2·9	—
Theodosia		7·3	59	e 2 5	+14	(3 29)	+11	3·5	3·6
Budapest		7·7	320	e 2 20?	+23	—	—	4·5	5·8
Sebenico		7·9	289	e 1 56	− 4	e 3 13	−21	—	—
Lemberg	E.	8·3	350	e 1 44	−22	e 4 32	+47	—	5·2
	N.	8·3	350	e 1 26	−40	e 4 26	+41	—	6·2
Zagreb		8·5	303	e 2 5	− 4	e 3 47	− 3	e 3·9	5·6
Pompeii		8·9	268	e 3 15	+60	e 3 55	− 6	5·1	—
Naples	N.	9·1	269	3 20	+62	e 4 40	?L	(e 4·7)	6·3
Graz		9·4	309	e 2 24	+ 2	e 4 18	+ 5	—	6·2
Laibach		9·6	301	e 2 24	0	—	—	e 5·2	6·1
Vienna		9·6	316	e 2 23	− 1	4 32	+14	i 6·4	7·3
Rocca di Papa		10·2	275	e 2 36	+ 3	e 4 46	+11	5·9	6·9
Makeyevka		10·4	48	(2 38)	+ 2	—	—	2·6	—
Venice		10·8	295	4 57	?S	(4 57)	+ 7	(8·2)	8·8
Ksara	N.	10·9	133	3 6	+23	5 49	+57	6·3	—
Florence	Z.	11·2	286	e 2 50	+ 3	5 22	+23	—	5·9
Ravensburg		13·3	303	2 1	−76	6 20	+29	e 9·3	8·1
Jena		13·6	317	—	—	—	—	e 7·3	7·8
Konigsberg		13·7	346	i 4 25	+63	—	—	e 7·5	9·3
Zurich		13·8	300	e 3 28	+ 5	—	—	—	—
Moncalieri		13·9	290	3 8	−17	5 52	−14	8·3	11·5
Potsdam		13·9	324	—	—	—	—	e 7·3	10·7
Strasbourg		14·8	304	e 3 39	+ 3	e 6 35	+ 8	8·3	10·0
Feldberg	E.	15·0	310	—	—	—	—	e 8·5	9·9
Besançon		15·5	298	e 3 42	− 4	—	—	7·3	—
Kucino		16·0	24	i 3 44	− 8	6 56	+ 1	7·0	9·9
Hamburg	E.	16·1	323	—	—	e 6 50	− 7	—	10·7
	N.	16·1	323	—	—	e 6 51	− 6	e 9·5	15·8
	Z.	16·1	323	e 3 50	− 3	—	—	—	13·9
Lund		16·5	333	3 55	− 4	6 56	−11	8·3	—
Copenhagen		16·7	332	4 2	+ 1	7 4	− 7	8·8	12·3
Uccle		17·6	309	e 4 13	+ 1	e 7 30	− 1	e 8·3	11·6
De Bilt		17·7	313	4 14	+ 1	e 7 32	− 1	e 8·5	11·9
Baku		17·8	86	e 4 30	+15	i 8 1	+25	e 11·3	—
Barcelona		18·0	277	e 4 57	+40	—	—	e 9·6	13·7
Paris		18·1	301	e 4 17	− 1	e 7 45	+ 3	10·0	13·3
Pulkovo		18·2	6	i 4 18	− 1	i 7 32	−12	9·3	11·4
Helsingfors		18·5	358	4 17	− 6	7 45	− 6	10·3	—
Algiers		18·6	263	i 4 29	+ 5	7 55	+ 2	10·3?	12·3
Upsala		18·9	346	e 4 19	− 9	e 7 44	−16	—	12·4
Tortosa		19·3	276	4 39	+ 6	8 10	+ 2	e 9·3	15·1
Kew	E.	20·6	307	—	—	e 8 35	− 1	10·3	13·3
	N.	20·6	307	—	—	e 8 35	− 1	10·3	11·3
	Z.	20·6	307	i 4 50	+ 2	i 8 39	+ 3	10·3	13·4

Continued on next page,

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Alicante		20·7	270	e 5 3	+14	e 8 39	+ 1	e 12·0	—
Oxford		21·3	308	i 4 57	0	i 8 48	− 2	e 12·3	13·8
Stonyhurst		22·6	312	e 5 9	− 3	e 9 9	− 8	—	14·8
Toledo	N.E.	22·9	276	e 4 6	−70	e 8 12	−71	e 9·4	14·2
Granada		23·4	268	i 5 19	− 2	i 9 31	− 2	e 12·8	15·0
Edinburgh		23·5	317	e 7 20?	?	—	—	—	16·3
San Fernando		25·6	269	10 13	?S	(10 13)	− 1	14·2	16·9
Ekaterinburg		26·6	44	i 5 55	+ 1	i 10 31	− 2	13·3	16·9
Tashkent		31·8	78	i 6 44	− 1	i 12 1	− 4	e 18·3	26·1
Irkutsk		51·6	50	9 24	+ 7	16 47	+ 8	26·3	34·1
Ottawa		68·7	313	—	—	—	—	e 30·3	—
Toronto	N.	71·8	313	—	—	—	—	31·3	—
Georgetown	Z.	73·5	309	—	—	—	—	e 41·4	—
St. Louis	N.	81·1	315	—	—	—	—	42·4	46·3

Additional readings: Belgrade iPN = +1m.47s., iN = +1m.54s. Budapest MN = +7·8m. Sebenico e = +3m.4s. Zagreb iNE = +3m.41s. Laibach readings are given as e simply. Vienna PR_1 = +3m.11s., iE = +3m.34s., P_2S? = +3m.49s., iN = +4m.9s., iZ = +4m.11s., iEZ = +4m.24s., PS_2 = +4m.43s., iN = +4m.54s., iNZ = +5m.16s., iEN = +5m.35s., SR_1 = +5m.44s. Rocca di Papa ePZ = +2m.41s., ePE = +2m.43s., ePN = +2m.52s., eSZ = +4m.47s.; the P entered is given as ePZ. Venice gives S as P and L as S. Ravensburg PR_2 = +2m.48s., SR_1 = +7m.20s., MN = +8·6m. Jena eNZ = +6m.44s., eE = +6m.50s., MN = +9·7m., MZ = +9·6m. Konigsberg eE = +4m.46s., +6m.50s., and +7m.10s., eZ = +4m.48s. and +7m.20s., iZ = +7m.5s., iE = +7m.25s., MZ = +8·5m., MN = +10·3m. Moncalieri MN = +10·9m. Potsdam MN = +9·2m. Strasbourg MN = +8·8m., MZ = +9·7m. Hamburg iSE = +6m.57s. Copenhagen MN = +11·5m., MZ = +11·6m. Uccle MN = +10·1m. De Bilt MN = +12·7m. Barcelona P is given as e simply. Upsala MN = +13·0m. Tortosa MN = +13·7m. Oxford iSN = +8m.53s. Toledo MNW = +13·6m. Granada PR_1 = +6m.28s., i = +10m.28s. = SR_1 +4s. San Fernando MN = +16·8m. Georgetown L is given as eZ, also eLZ? = +45·1m.

April 25d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.
8	35	0	10	48	18
9	48	9	18	30	55

April 25d. Readings also at 3h. (Santiago), 5h. (Ekaterinburg, Irkutsk, and Tashkent), 10h. (near Algiers and near Toyooka), 16h. (Amboina, Baku, Ekaterinburg, Irkutsk, Makeyevka, Tashkent, Georgetown, Ottawa, Toronto, and St. Louis), 18h. (La Paz), 20h. (Zagreb), 21h. (near Osaka, Matuyama, Kobe, and Sumoto), 22h. (Tananarive), 23h. (Harvard, Toronto, and Mizusawa).

April 26d. 15h. 39m. 50s. Epicentre 37°·5N. 55°·0E.

A = +·455, B = +·650, C = +·609; D = +·819, E = −·574; G = +·349, H = +·499, K = −·793.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Baku	4·9	308	e 1 27	+11	2 22	+ 8	2·9	—
Tashkent	11·6	66	3 8	+15	i 5 4	− 5	6·4	8·4
Makeyevka	16·3	316	—	—	—	—	9·1	11·6
Ekaterinburg	19·7	9	i 4 37	0	8 12	− 5	10·2	13·0
Kucino	21·6	333	—	—	9 4	+ 7	12·6	—
Pulkovo	27·3	333	i 6 0	− 1	e 10 49	+ 3	15·2	—
Copenhagen	33·7	317	—	—	—	—	14·2	—
Irkutsk	37·1	50	—	—	—	—	18·2	—

No additional readings.

April 26d. 19h. 37m. 22s. Epicentre 18°·5N. 104°·5W. (as on 1921 May 1d.).

A = −·237, B = −·918, C = +·317 ; D = −·968, E = +·250 ;
G = −·079, H = −·307, K = −·948.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tacubaya		5·1	80	1 25	+ 6	—	—	2·5	2·6
Puebla		6·0	84	2 28	+56	—	—	3·2	3·4
Oaxaca		7·5	100	1 50	− 4	—	—	2·2	2·2
Vera Cruz		7·9	84	1 30	−30	—	—	2·2	2·8
Tucson		14·9	338	—	—	—	—	i 11·3	—
St. Louis	E.	23·6	29	e 5 24	0	i 9 47	+11	—	—
	N.	23·6	29	i 5 22	− 2	i 9 36	0	—	—
Georgetown	Z.	31·3	45	—	—	i 12 54	+58	i 22·6	—
Toronto		32·8	35	—	—	—	—	—	21·6
Victoria	E.	33·6	339	—	—	—	—	22·3	23·0
Ottawa		35·9	37	—	—	—	—	e 19·6	—
La Paz		50·0	133	16 22	?S	(16 22)	+ 3	—	—
Santiago		61·1	149	27 18	?L	—	—	(27·3)	—
La Plata		69·3	141	—	—	—	—	33·1	—

Additional readings and note : St. Louis eE = +9m.25s. Georgetown eZ = +8m.53s., LZ = +29·9m. ; the S and L entered are given simply as iZ.

April 26d. 23h. 59m. 40s. Epicentre 41°·7N. 26°·3E. (as on 25d.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	E.	5·3	309	e 1 25	+ 3	e 2 26	+1	—	2·6
	N.	5·3	309	e 1 19	− 3	i 2 31	+ 6	—	2·6
Budapest		7·7	320	e 3 10	?S	(e 3 10)	−19	—	4·2
Zagreb		8·5	303	e 2 44	+35	e 3 57	+ 7	e 5·0	—
Vienna	Z.	9·6	316	e 3 21	+57	—	—	—	—
Rocca di Papa	E.	10·2	275	—	—	e 4 9	−26	e 5·4	6·4
	N.	10·2	275	—	—	e 4 42	+ 7	e 4·9	6·4
Copenhagen		16·7	332	—	—	—	—	8·3	—
De Bilt		17·7	313	—	—	—	—	e 9·3	—
Pulkovo		18·2	6	e 4 24	+ 5	—	—	e 9·8	—
Kew	N.	20·6	307	—	—	—	—	e 10·3	—
Ekaterinburg		26·6	44	—	—	—	—	e 13·3	—

Ekaterinburg gives also e = +13m.7s.

April 26d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded at La Paz as follows :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
7	41	7	15	16	4	16	49	34
15	0	5	16	38	1	23	58	3

April 26d. Readings also at 0h. (La Paz), 1h. (near Lick), 6h. (near La Paz), 17h. and 19h. (La Paz), 20h. (La Paz and Rocca di Papa), 22h. (Feldberg, La Paz, and Sucre), 23h. (Apia).

April 27d. 0h. 7m. 0s. Epicentre 18°·5N. 104°·5W. (as on 26d.).
Very uncertain.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tacubaya		5·1	80	1 29	+10	—	—	2·6	2·8
Puebla		6·0	84	2 36	+64	—	—	3·3	3·5
Oaxaca		7·5	100	1 55	+ 1	(2 15)	−69	2·2	2·4
Vera Cruz		7·9	84	1 33	−27	(2 17)	−77	2·3	2·8
Merida		14·2	78	3 47	+18	5 27	−46	5·5	5·6
Tucson		14·9	338	—	—	—	—	i 11·5	—
St. Louis	N.	23·6	29	i 5 17	− 7	e 9 43	+ 7	e 11·5	14·6
Georgetown	Z.	31·3	45	e 6 13	−28	e 10 10	−106	e 19·2	24·0
Toronto		32·8	35	—	—	—	—	20·0	—
Victoria	E.	33·6	339	—	—	—	—	22·2	26·7
Ottawa		35·9	37	—	—	e 12 42	−27	e 20·0	—

Additional readings and notes : Vera Cruz readings are given for 20h. St. Louis iSN = +9m.45s., iSE = +9m.47s. Georgetown P and S are given simply as eZ. Ottawa eLN? = +23·0m.

April 27d. 13h. 18m. 0s. Epicentre 34°·5N. 27°·5E. (as on 1923 March 10d.).

A = +·731, B = +·381, C = +·566; D = +·462, E = −·887; G = +·502, H = +·262, K = −·824.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Helwan		5·6	144	1 32	+ 5	2 24	−10	—	5·7
Ksara	E.	7·0	93	1 44	− 2	2 51	−19	—	—
Rocca di Papa		13·7	307	e 3 16	− 6	—	—	—	—
Zagreb		14·3	326	e 3 25	− 5	—	—	—	—
Vienna	Z.	16·1	332	4 1	+ 8	—	—	—	—
Chur		18·3	318	(i 4 28)	+ 7	8 0	+13	—	—
Zurich		19·2	318	e 4 42	+11	e 8 27	+21	—	—
Strasbourg		20·4	320	e 5 0?	+14	—	—	—	—
Besançon		20·6	315	e 4 55	+ 7	—	—	—	—
Kucino		22·5	15	—	—	e 8 54	−21	e 13·9	—
Copenhagen		23·7	338	—	—	e 9 39	+ 1	12·0	—
De Bilt		23·8	325	—	—	—	—	e 12·0	—
Pulkovo		25·4	3	i 5 38	− 4	e 9 57	−14	14·0	—
Ekaterinburg		31·6	35	—	—	—	—	14·0	—

Additional readings: Rocca di Papa e = +3m.42s. Zagreb e = +3m.28s. and +3m.37s. Chur P has been increased by 2m. (compare Zurich). Kucino e = +10m.48s.

April 27d. 13h. 48m. 50s. Epicentre 21°·0N. 120°·0E. (as on 1918 Sept. 18d.).

A = −·467, B = +·808, C = +·358; D = +·866, E = +·500; G = −·179, H = +·310, K = −·934.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Taihoku	N.	4·3	19	e 1 12	+ 5	(1 55)	− 3	1·9	—
Hong Kong		5·6	286	1 28	+ 1	—	—	—	4·7
Manila		6·4	171	e 1 30	− 8	(i 2 40)	−15	i 2·7	—
Zi-ka-wei	Z.	10·3	7	—	—	—	—	e 5·2	8·6
Phu-Lien		12·5	271	e 3 0	− 6	—	—	—	—
Irkutsk		33·6	344	e 7 44	?PR_1	e 12 5	−29	17·7	22·8
Tashkent		47·2	310	—	—	—	—	e 25·2	30·9
Ekaterinburg		56·0	325	—	—	17 30	− 4	29·2	—
Baku		61·7	307	—	—	—	—	e 31·2	—
Kucino		68·4	324	—	—	—	—	e 38·3	—
Pulkovo		71·8	330	—	—	—	—	e 38·2	46·5
Copenhagen		82·1	328	—	—	—	—	41·2	52·8
De Bilt		87·6	326	—	—	—	—	e 48·2	57·2
Kew		90·8	328	—	—	—	—	e 56·2	—

Additional readings and note: Zi-ka-wei SZ = +5m.52s. Irkutsk e = +15m.23s., P and S are given as e simply.

April 27d. 20h. 34m. 50s. Epicentre **13°·0S. 69°·5W.**

(as on April 9d.).

A = +·341, B = −·913, C = −·225; D = −·937, E = −·350; G = −·079, H = +·211, K = −·974.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		3·7	160	i 1 8	+10	—	—	—	—
Sucre		7·3	146	i 1 54	+ 3	i 3 36	+18	4·1	—
La Plata		24·3	156	i 5 21	−10	i 9 36	−14	13·2	—
Rio de Janeiro		26·8	115	i 5 57	+ 1	(10 30)	− 7	10·5	15·5
Tacubaya		43·6	318	8 9	−14	14 38	−18	—	—
Charlottesville	E.	51·7	353	e 9 22	+ 4	16 34	− 6	—	26·2
	N.	51·7	353	e 9 10	− 8	e 16 34	− 6	e 20·2	25·4
Georgetown	Z.	52·4	355	i 9 21	− 1	i 16 50	+ 1	e 19·5	31·1
Cincinnati		54·0	346	i 9 33	0	e 16 59	−10	24·7	30·2
St. Louis	E.	55·1	341	e 9 40	0	i 17 16	− 6	25·8	32·0
	N.	55·1	341	i 10 9	+29	i 17 16	− 6	25·8	31·9

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Harvard		55·4	358	—	—	e 17 26	0	34·2	—
Ithaca		55·8	355	—	—	e 17 27	− 4	27·2	—
Toronto	E.	57·4	353	—	—	i 17 49	− 2	i 27·7	29·3
	N.	57·4	353	e 9 54	− 1	e 17 55	+ 4	28·2	35·2
Ottawa		58·7	356	e 10 3	0	i 18 8	+ 1	e 28·2	36·2
Tucson		60·1	320	9 23	−50	17 30	−54	27·4	34·9
Lick		70·2	319	e 11 23	+ 5	—	—	—	—
Berkeley	E.	70·9	319	—	—	—	—	e 38·4	—
Spokane		74·2	330	e 10 51	−52	e 21 12	− 4	—	45·4
San Fernando		77·4	48	12 7	+ 4	22 7	+14	36·2	49·1
Victoria	E.	77·7	328	12 7	+ 2	22 0	+ 3	36·6	48·0
Malaga		78·8	49	e 12 11	− 1	e 22 21	+11	—	—
Granada		79·6	48	i 12 20	+ 3	i 22 34	+15	e 38·2	43·1
Almeria		80·4	48	i 12 23	+ 2	22 39	+11	e 39·6	43·2
Toledo		80·5	45	e 12 26	+ 4	e 22 36	+ 7	e 35·6	45·8
Cape Town		81·2	124	—	—	i 22 40	+ 3	—	47·7
Alicante		82·3	48	e 12 38	+ 6	e 22 56	+ 7	e 45·1	—
Tortosa	N.	84·0	45	12 44	+ 2	23 12	+ 4	38·8	49·2
Algiers		84·4	50	e 12 58	+14	e 23 16	+ 4	e 40·2	46·7
Barcelona		85·4	46	e 12 51	+ 1	e 23 17	− 6	e 40·5	49·6
Oxford		87·4	35	e 12 55	− 6	23 41	− 4	e 37·2	48·6
Stonyhurst		87·6	34	e 13 6	+ 3	e 23 40	− 8	—	—
Kew		87·8	35	e 12 50	−14	e 23 51	+ 1	39·2	48·3
Edinburgh		88·1	30	e 13 50	+44	e 23 46	− 7	44·2	47·9
Paris		88·4	40	e 13 8	+ 1	e 23 58	+ 2	39·2	48·2
Scoresby Sund		89·6	15	13 11	− 3	23 46	[+20]	42·2	48·5
Besançon		90·0	41	—	—	—	—	e 46·2	—
Uccle		90·2	38	e 13 11	− 6	e 23 2	[−27]	e 41·2	51·0
Moncalieri		90·4	44	13 16	− 2	25 24	?PS	42·2	53·8
De Bilt		91·1	37	13 19	− 3	e 23 5	[−30]	e 44·2	50·5
Strasbourg		91·5	40	e 13 18	− 6	e 25 31	?PS	35·2	57·2
Zurich		91·7	43	—	—	—	—	e 47·6	—
Chur		92·1	43	e 13 27	− 1	—	—	e 47·5	—
Florence	Z.	92·5	46	e 13 40	+10	e 25 50	?PS	42·7	47·8
Ravensburg		92·5	42	—	—	—	—	e 49·2	—
Feldberg	N.	92·7	39	e 16 32	?PR_1	e 25 10	+28	e 42·5	51·1
Rocca di Papa		92·9	48	e 13 35	+ 3	—	—	—	—
Hamburg		94·3	36	e 13 40	0	e 23 10?	[−43]	e 46·2	51·2
Jena	N.	94·6	39	e 13 10	−31	—	—	e 50·2	51·7
Potsdam		95·8	38	—	—	—	—	e 48·2	58·2
Graz		96·2	43	—	—	e 26 32	?PS	e 46·2	55·0
Zagreb		96·2	45	e 16 48	[−43]	e 26 32	?PS	e 46·2	—
Copenhagen		96·3	35	e 13 41	−10	24 58	? Σ	47·2	54·8
Lund		96·7	35	17 40	?PR_1	—	—	46·2	—
Vienna		97·0	42	e 17 4	?PR_1	26 25	?PS	e 35·7	58·7
Budapest		98·6	43	—	—	e 28 10?	?	e 47·8	56·3
Wellington		99·7	223	—	—	—	—	55·2	—
Upsala		99·8	30	e 11 12	?	—	—	e 50·2	58·6
Helsingfors		103·5	30	—	—	e 27 38	?PS	51·2	—
Helwan		105·7	64	e 18 48	?PR_1	e 28 10	?PS	—	62·9
Pulkovo		106·1	30	14 28	−12	25 0	[+ 8]	51·2	56·0
Kucino		110·5	35	—	—	—	—	51·9	62·4
Makeyevka		111·3	41	—	—	—	—	50·6	63·6
Riverview		119·2	218	—	—	e 25 46	[+ 3]	e 70·3	—
Baku		120·7	49	—	—	—	—	e 49·2	64·9
Ekaterinburg		122·2	29	—	—	27 31	? Σ	48·2	67·4
Tashkent		134·4	43	19 33	[+ 4]	—	—	59·2	75·1
Irkutsk		140·4	5	19 31	[− 9]	29 19	? Σ	62·2	80·2
Bombay		143·4	75	e 20 41	[+55]	33 26	?	62·7	94·1
Zi-ka-wei	Z.	159·2	333	20 10	[+ 3]	—	—	85·0	102·0
Manila		169·7	280	e 20 10	[− 5]	—	—	—	—
Hong Kong		170·0	340	—	—	—	—	—	96·7
Phu-Lien		171·4	25	—	—	25 10?	?PR_1	—	—

Additional readings and notes: La Paz iE = +1m.16s., iN = +1m.18s. Rio de Janeiro ePE = +6m.0s. Georgetown PR_1Z = +10m.40s., iSZ = +15m.24s., LZ = +20·4m., true S is given as simply iZ. Cincinnati ePE = +9m.39s., iE = +19m.17s. = [S] +9s. St. Louis iPR_1N = +11m.55s., iPR_2N = +12m.54s., iPS = +17m.26s., iE = +19m.27s. = [S] +10s., SR_1 = +21m.17s. Toronto iSN = +18m.2s. = PS −17s., SR_2N? = +24m.37s.; T_o = 20h.34m.46s. Ottawa iN = +12m.19s., PR_1 = +13m.36s., SR_2E = +24m.28s.; T_o = 20h.34m.51s. Tucson eSR_1N = +21m.40s., MN = +35·0m. Spokane MN = +44·2m. San Fernando MN = +48·7m.

Continued on next page.

Granada iP = +12m.22s. Almeria PR_1 = +15m.31s. Toledo MNW = +46·0m. Tortosa SE = +23m.15s. Barcelona PS = +24m.23s. Stonyhurst ? = +24m.47s. =PS +9s. Kew iZ = +13m.9s., eS_cP_cS = +23m.25s., ePS = +24m.51s., SR_1 = +30m.34s., SR_2 = +33m.34s. Paris e = +16m.19s. =PR_1 −35s., MN = +45·2m.; true S is given as simply e. Scoresby Sund ePR_1Z = +16m.46s., $S_cP_cP_cS$ = +24m.5s., PS = +25m.4s., eN = +39m.4s. Uccle ePR_1 = +16m.40s., MN = +49·2m. Moncalieri MN = +53·2m. Chur e = +17m.3s. =PR_1 −18s. Feldberg eN = +17m.18s. =PR_1 −7s., +25m.40s. =PS +0s., +29m.13s., and +33m.46s., P and S are also given simply as e, ME = +52·2m. Rocca di Papa eZ = +13m.27s., PR_1 = +16m.24s. Hamburg eZ = +17m.20s. =PR_1 −16s. Jena ME = +9·2m. Copenhagen ePR_1 = +17m.36s., eS_cP_cSE = +23m.43s., ePSZ = +26m.21s., ePSE = +26m.32s., eN = +27m.52s., and +30m.34s., SR_1 = +31m.34s. and +32m.46s., SR_2 = +45m.10s.?, MN = +50·3m. Budapest MN = +58·8m. Pulkovo PR_1 = +18m.50s., PS = +28m.12s. Kucino ePR_1 = +19m.28s., PS = +28m.40s., PPS = +29m.58s. Makeyevka ePR_1 = +19m.34s., iPS = +29m.13s. Baku ePR_1 = +20m.30s., i = +20m.38s. and +40m.33s. Ekaterinburg PR_1 = +20m.41s., PS = +30m.19s. Tashkent P_cP_cS = +22m.58s., PS = +32m.10s., SR_1 = +39m.40s. Irkutsk PR_1 = +22m.40s., PPS = +34m.47s. Zi-ka-wei iPZ = +20m.58s., PR_1Z = +24m.10s., PR_2Z = +28m.9s.; all readings have been increased by 1h.

April 27d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows:

at La Paz

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	53	52	21	19	52	21	56	36
2	21	31	21	29	54	22	13	40
*20	35	58	21	31	12	22	39	4
20	54	32	21	37	12	22	56	45
21	18	17	21	44	24	23	33	34
			21	49	39			

at Sucre.

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	54	46	21	21	4	22	14	28
*20	36	44	21	32	6	23	34	40

* separately computed.

April 27d. Readings also at 1h. (Feldberg, Zagreb, and near Belgrade), 3h. (Manila), 7h. (Ksara (3)), 8h. (Yalta), 9h. (Taihoku and near Yalta), 12h. (Ekaterinburg, Zagreb, and near Manila), 13h. (Strasbourg and Tashkent), 15h. (Manila), 18h. (Ksara and near Toyooka), 19h. (Riverview and Wellington), 22h. (La Paz), 23h. (La Paz (3) and Hyderabad).

April 28d. 17h. 58m. 50s. Epicentre 41°·7N. 26°·3E. (as on 26d.).

A = +·669, B = +·331, C = +·665; D = +·443, E = −·896; G = +·596, H = +·295, K = −·747.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	E.	5·3	309	3 21	+119	i 4 19	+114	—	4·6
	N.	5·3	309	3 18	+116	i 4 27	+122	—	4·6
Yalta		6·4	61	e 1 39	+ 1	2 55	0	3·2	—
Theodosia		7·3	59	i 2 17	+26	i 3 44	+26	4·3	5·8
Budapest		7·7	320	e 2 7	+10	—	—	4·2	8·6
Lemberg		8·3	350	e 2 16	+10	—	—	e 4·6	5·9
Zagreb	N.E.	8·5	303	e 2 14	+ 5	—	—	i 4·0	—
	N.W.	8·5	303	e 2 11	+ 2	e 3 52	+ 2	e 4·0	5·2
Pompeii		8·9	268	e 3 52		¶S (e 3 52)	− 9	(e 4·8)	—
Naples	E.	9·1	269	e 4 13		¶S (e 4 13)	+ 7	—	6·7
Graz		9·4	309	e 2 19	− 3	e 4 25	+12	—	5·9
Laibach		9·6	301	e 2 19	− 5	—	—	e 4·7	6·0

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Vienna		9·6	316	2 25	+ 1	4 21	+ 3	i 5·2	5·7
Rocca di Papa		10·2	275	e 1 30	−63	—	—	i 5·8	6·2
Makeyevka		10·4	48	e 3 13	+37	e 4 48	+ 8	—	6·7
Florence	Z.	11·2	286	4 12	?S	(4 12)	−47	(e 6·5)	7·2
Chur		13·0	299	i 3 9	− 4	i 6 41	?L	(i 6·7)	—
Jena		13·6	317	e 4 28	+67	e 5 16	−42	—	5·9
Konigsberg	E.	13·7	346	—	—	—	—	e 7·6	9·7
Zurich		13·8	300	e 3 20	− 3	e 6 36	+33	—	—
Moncalieri		13·9	290	e 3 16	− 9	6 10	+ 4	7·5	—
Potsdam		13·9	324	—	—	—	—	e 7·7	9·5
Strasbourg		14·8	304	e 3 10?	−26	e 6 10?	−17	8·2	10·0
Besançon		15·5	298	—	—	—	—	e 8·2	—
Hamburg		16·1	323	e 3 50	− 3	e 6 56	− 1	e 9·2	11·4
Lund		16·5	333	3 57	− 2	—	—	9·2	—
Copenhagen		16·7	332	e 3 57	− 4	e 7 4	− 7	8·7	12·5
Uccle		17·6	309	e 4 10	− 2	e 7 23	− 8	e 8·2	10·2
De Bilt		17·7	313	4 19	+ 6	—	—	e 8·8	11·5
Baku		17·8	86	i 4 44	+29	i 8 24	+48	e 11·7	—
Paris		18·1	301	e 4 14	− 4	—	—	10·2	11·2
Pulkovo		18·2	6	i 4 23	+ 4	7 50	+ 6	9·7	11·7
Helsingfors		18·5	358	e 4 23	0	—	—	10·2	—
Upsala		18·9	346	—	—	—	—	e 10·4	11·2
Tortosa	N.	19·3	276	—	—	—	—	e 9·2	14·5
Kew		20·6	307	i 4 49	+ 1	e 8 32	− 4	10·4	12·4
Oxford		21·3	308	e 4 49	− 8	e 8 43	− 7	12·2	13·6
Stonyhurst		22·6	312	e 5 14	+ 2	e 9 9	− 8	—	15·0
Granada		23·4	268	i 5 16	− 5	—	—	e 13·2	14·4
Edinburgh		23·5	317	—	—	—	—	e 12·2	—
San Fernando	E.	25·6	269	—	—	—	—	—	15·3
Ekaterinburg		26·6	44	6 0	+ 6	10 46	+13	14·2	16·9
Tashkent		31·8	78	e 8 6	?PR_1	e 12 4	− 1	17·2	22·5
Irkutsk		51·6	50	9 28	+11	16 54	+15	28·2	33·2

Additional readings and note: Belgrade iN = +3m.34s. Budapest MN = +5·8m. Lemberg eE = +2m.40s., MN = +6·3m. Zagreb iNE = +4m.3s. and +4m.33s., iNW = +4m.15s. and +4m.46s. Pompeii gives S as P and L as S. Vienna PR_1 = +2m.58s., iE = +3m.24s., iN = +3m.30s., P_2S = +3m.55s., iLN = +5·0m. Rocca di Papa iE = +2m.4s., iLN = +5·6m. Florence gives S as P and L as S. Jena eN = +4m.40s., MN = +6·6m. Konigsberg eN = +7m.31s. Potsdam MN = +9·4m. Strasbourg MN = +8·2m., MZ = +9·0m. Hamburg MZ = +10·8m., MN = +14·9m. De Bilt MZ = +11·6m. Upsala MN = +12·6m. Granada readings have been diminished by 1h. San Fernando MN = +15·2m.

April 28d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows:—

at La Paz.

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	24	51	5	20	39	13	20	0
1	57	6	6	4	9	14	19	38
2	9	0	6	19	27	14	46	12
2	54	32	6	50	31	16	13	24
3	1	49	9	52	14	21	17	36
3	10	32	10	3	17			

at Sucre.

h.	m.	s.
21	18	28

April 28d. Readings also at 7h. (Baku, Ekaterinburg, and Tashkent), 9h. (near Lick and near Sumoto), 13h. (near Granada), 14h. (Rocca di Papa, Wellington, near Tacubaya, and Vera Cruz), 17h. (Toyooka), 21h. (near Taihoku).

April 29d. 9h. 49m. 12s. Epicentre 38°·0N. 23°·2E. (as on 25d.).

$A = +\cdot724$, $B = +\cdot310$, $C = +\cdot616$; $D = +\cdot394$, $E = -\cdot919$; $G = +\cdot566$, $H = +\cdot243$, $K = -\cdot788$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Sarajevo		6·8	330	—	—	e 2 47	−18	e 3·6	4·8
Belgrade	N.	7·1	344	e 1 48	0	i 4 1	?L	6·7	—
Pompeii		7·2	295	e 2 13	+24	e 4 3	?L	(e 4·0)	5·4
Naples	E.	7·4	295	e 1 50	− 2	e 4 20	?L	(e 4·3)	6·8
Rocca di Papa		8·8	299	e 2 11	− 2	—	—	5·0	6·2
Zagreb		9·4	328	e 2 26	+ 4	i 5 11	+58	e 5·3	6·5
Budapest		9·9	344	e 2 33	+ 4	—	—	6·3	7·3
Graz		10·7	330	e 2 50	+10	e 4 33	−15	—	7·2
Florence	Z.	10·7	306	—	—	—	—	e 5·8	7·8
Venice		10·9	316	e 3 48	?S	(e 3 48)	−64	—	7·2
Ksara	N.	11·1	108	2 43	− 3	3 51	−66	5·6	—
Vienna		11·3	336	2 50	+ 1	5 6	+ 4	i 6·6	7·8
Theodosia		11·4	48	e 2 55	+ 5	—	—	—	—
Chur		13·4	315	e 3 16	− 2	—	—	—	—
Moncalieri		13·5	306	e 3 12	− 8	7 14	?L	9·0	10·2
Ravensburg		13·9	319	3 32	+ 7	6 36	+30	7·9	8·2
Zurich		14·2	316	e 3 32	+ 3	e 6 6	− 7	—	—
Makeyevka		14·7	42	e 3 35	0	e 6 39	+14	8·0	11·0
Jena		15·2	331	e 3 48	+ 6	e 6 48	+11	—	8·8
Besançon		15·6	312	e 3 46	− 1	e 6 31	−15	—	—
Potsdam		16·0	337	—	—	e 6 48?	− 7	—	10·8
Feldberg		16·1	324	e 3 57	+ 4	—	—	e 8·2	9·3
Konigsberg		16·9	355	—	—	e 7 18	+ 2	e 8·8	13·8
Tortosa		17·7	286	—	—	—	—	e 9·8	12·3
Hamburg		18·0	334	e 4 14	− 3	—	—	e 10·4	12·5
Uccle		18·4	320	e 4 14	− 8	—	—	e 8·8	10·6
Paris		18·4	313	e 4 20	− 2	e 7 15	+ 2	10·6	10·8
De Bilt		18·9	324	4 27	− 1	7 58	− 2	e 9·5	10·7
Lund		18·9	342	4 27	− 1	8 0	0	10·8	—
Copenhagen		19·1	341	e 4 26	− 4	e 7 58	− 6	10·6	12·9
Kucino		20·3	24	4 45	0	8 32	+ 3	10·3	13·3
Baku		20·8	75	i 4 51	0	i 8 49	+ 9	10·8	14·5
Kew		21·2	317	e 5 18	+23	e 8 52	+ 4	10·8	12·3
Oxford		21·9	317	e 9 7	?S	(e 9 7)	+ 4	11·8	12·6
Helsingfors		22·1	2	e 5 0	− 6	e 8 55	−12	11·9	—
Upsala	E.	22·1	353	—	—	e 8 48	−19	—	13·0
Pulkovo		22·2	9	i 5 4	− 3	i 9 6	− 3	11·8	14·1
San Fernando		23·4	275	—	—	—	—	—	15·7
Ekaterinburg		30·9	40	—	—	e 11 26	−24	15·8	—
Tashkent		35·2	71	e 9 0	?PR_1	(13 48?)	+50	13·8	22·6
Irkutsk		55·8	48	—	—	e 22 20	?SR_1	32·8	—

Additional readings and notes: Sarajevo eS = +4m.38s. Belgrade eN = +2m.2s. and +2m.12s., iN = +2m.36s., +3m.24s., +4m.18s., and +4m.35s. Zagreb eNW = +2m.28s. and +3m.4s., e = +3m.7s., and +3m.22s., i = +3m.37s., iNW = +5m.2s. Vienna PR_1 = +3m.45s., iN = +5m.52s., iE = +5m.57s., iZ = +6m.5s. Ravensburg e = +6m.8s., SR_1 = +7m.0s. Jena MN = +8·7m., P and S are given as eE and eN respectively. Hamburg MN = +13·2m. Copenhagen MNZ = +13·9m. Kucino i = +4m.50s. Upsala MN = +15·5m.

April 29d. After-shocks from the epicentre 13°·0S. 69°·5W. of April 9d. 17h. were recorded as follows:—

at La Paz.

h.	m.	s.	h.	m.	s.	h.	m.	s.
4	39	26	11	57	14	16	13	5
5	57	14	13	27	59	19	8	49
10	16	27	13	36	39	22	46	34
			15	44	29			

at Sucre.

h.	m.	s.
22	45	55

April 29d. Readings also at 0h. (Taihoku), 1h. (La Paz), 4h. (Victoria), 7h. (near Yalta and Theodosia), 8h. (Copenhagen and Pulkovo), 11h. (Ksara and Zi-ka-wei), 12h. (Ravensburg), 16h. (near Toyooka), 17h. (near Venice), 19h. (near Yalta), 20h. (Zi-ka-wei), 23h. (Tashkent).

April 30d. 11h. 19m. 48s. Epicentre 27·6N. 57·8E.

A = +·472, B = +·750, C = +·463 ; D = +·846, E = −·533 ;
G = +·247, H = +·392, K = −·886.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Baku	14·4	335	e 3 31	− 1	i 6 15	− 3	e 8·9	—
Tashkent	16·6	32	i 4 46	+46	i 7 6	− 3	—	9·7
Ksara	19·8	294	4 39	0	8 21	+ 2	9·8	—
Kucino	31·6	339	—	—	e 12 24	+23	e 17·8	24·4
Pulkovo	37·3	337	—	—	—	—	e 10·2	—
Strasbourg	43·7	313	—	—	—	—	e 34·2	—

Kucino gives its readings as e simply, also e = +13m.30s. = SR_1 −10s., and +16m.0s.

April 30d. Readings also at 0h. (near Lick), 7h. (near Toyooka), 9h. (Baku), 10h. (Irkutsk, Tashkent, and near Toyooka), 11h. (near Hukuoka and Osaka), 14h. (Apia and near Nagasaki), 15h. (Ekaterinburg), 16h. (Irkutsk and La Paz), 20h. (Santiago).

May 1d. 0h. 11m. 12s. Epicentre 35°·5S. 73°·3W.

A = +·234, B = −·780, C = −·581 ; D = −·958, E = −·287 ;
G = −·167, H = +·556, K = −·814.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Santiago		3·0	48	1 8	+21	—	—	1·6	—
La Plata		12·6	92	3 5	− 2	5 43	+ 9	—	—
Sucre		18·0	26	i 4 13	− 4	i 7 31	− 9	8·9	12·3
La Paz	N.	19·6	15	i 4 38	+ 2	i 8 17	+ 2	10·4	13·4
Rio de Janeiro	E.	29·0	73	e 6 8	−10	11 20	+ 3	15·3	—
	N.	29·0	73	e 6 8	−10	11 8	− 9	15·5	—
Georgetown	Z.	74·5	357	e 12 48?	+62	i 21 27	+ 7	e 33·2	48·8
St. Louis		75·8	347	e 12 9	+15	i 21 34	− 1	32·6	46·0
Toronto		79·3	356	—	—	22 11	− 4	—	—
Ottawa		80·9	359	e 12 24	0	e 22 28	− 6	e 31·8	—
Victoria	N.	95·0	330	—	—	—	—	48·1	51·6
San Fernando	E.	95·1	49	—	—	—	—	—	59·2
Granada		97·2	50	i 17 31	[− 5]	e 28 2	?	i 47·3	52·8
Almeria		97·8	50	—	—	e 23 46	[−26]	—	53·2
Toledo		98·6	47	—	—	e 26 49	?PS	—	—
Alicante		99·9	50	—	—	—	—	e 58·6	—
Tortosa	N.	102·0	48	—	—	e 27 55	?PS	e 51·8	64·9
Oxford		107·5	39	e 18 50	?PR_1	—	—	e 50·8	62·3
Paris		107·8	43	—	—	—	—	e 56·8	61·8
Kew		107·8	40	—	—	—	—	e 55·8	—
Moncalieri	E.	108·7	48	e 17 54	[−24]	28 40	?PS	51·4	—
Edinburgh		109·0	33	—	—	—	—	(e 59·8)	—
Uccle		109·9	40	—	—	e 28 39	?PS	e 51·8	63·2
Rocca di Papa		110·1	52	e 18 18	[− 4]	—	—	e 51·5	64·5
Strasbourg		110·5	44	18 48?	[+24]	e 28 48?	?PS	54·8	—
De Bilt		111·0	40	e 19 20	?PR_1	e 28 52	?PS	e 54·8	63·5
Feldberg		111·8	42	—	—	e 27 7	−37	e 56·2	63·7
Scoresby Sund		112·2	15	—	—	29 6	?PS	60·8	69·0
Hamburg		114·2	40	—	—	—	—	e 61·8	69·8
Zagreb		114·2	50	—	—	—	—	e 62·8	—
Graz		114·4	47	—	—	—	—	e 66·8	—
Copenhagen		116·5	39	—	—	29 36	?PS	54·8	—
Lund		116·8	39	—	—	—	—	54·8	—
Upsala		120·5	35	—	—	—	—	—	68·8
Pulkovo		126·7	37	e 21 6	?PR_1	e 38 5	?SR_1	62·8	72·6
Makeyevka		129·0	52	—	—	e 24 36	?PR_2	66·8	81·6
Kucino		130·2	43	—	—	27 35	?PR_2	67·2	74·4
Baku		135·7	66	—	—	—	—	63·8	84·7
Ekaterinburg		142·7	40	19 41	[− 3]	—	—	59·8	80·3
Bombay		145·9	110	—	—	—	—	e 73·8	—
Tashkent		150·3	67	20 0	[+ 4]	—	—	e 67·8	86·1

For Notes see next page.

NOTES TO MAY 1d. 0h. 11m. 12s.

Additional readings and notes: Sucre MN = +11·9m. La Paz iN = +5m.38s., ME = +12·7m. St. Louis eSR_1 = +26m.27s., eSR_2 = +29m.29s. San Fernando MN = +58·4m. Granada PR_1 = +20m.52s. = PR_2 +16s., i = +27m.24s., eZ = +28m.57s. Edinburgh reading has been diminished by 1h. De Bilt MZ = +63·4m., MN = +65·0m. Scoresby Sund eEN = +34m.48s.? = SR_1 −22s. Hamburg MN = +64·8m., MZ = +66·8m. Makeyevka e = +34m.42s. Kucino PR_1 = +22m.51s., P_cP_cS = +24m.5s. Baku PR_1 = +22m.8s., P_cP_cS = +23m.14s., PPS = +34m.17s. Ekaterinburg PR_2 = +23m.25s., PS = +30m.40s., PPS = +32m.41s. Tashkent PR_1 = +21m.12s., PS = +30m.18s., SR_1 = +36m.28s.

May 1d. 11h. 38m. 6s. Epicentre 22°·3N. 143°·2E. (as on 1922 July 11d.).

A = −·741, B = +·554, C = +·380; D = +·599, E = +·801; G = −·304, H = +·227, K = −·925.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	16·9	355	(4 41)	+37	8 19	?L	(8·3)	—
Zi-ka-wei	Z.	21·3	299	e 5 6	+ 9	10 27	?L	(10·4)	—
Manila		22·5	254	e 4 54	−17	—	—	—	—
Irkutsk		42·2	326	—	—	e 13 54?	−44	—	—
Tashkent		63·7	308	—	—	i 19 12	+ 3	e 26·9	38·7
Ekaterinburg		67·4	324	10 59	− 1	e 19 59	+ 4	32·9	—
Pulkovo		81·6	332	—	—	e 22 18	−24	—	—

Additional readings and notes: Mizusawa readings are given as separate SE's. Zi-ka-wei P is given as eZ. Tashkent i = +20m.38s. = [S] +15s.

May 1d. 15h. 58m. 18s. Epicentre 38°·5N. 60°·0E.

A = +·391, B = +·678, C = +·623; D = +·866, E = −·500; G = +·311, H = +·539, K = −·783.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Tashkent	7·6	65	i 2 8	+13	3 30	+ 4	—	5·6
Baku	8·0	287	2 19	+18	4 1	+24	—	—
Ekaterinburg	18·3	1	e 4 17	− 4	e 7 39	− 8	8·7	12·0
Makeyevka	18·5	308	—	—	e 7 32	−19	8·7	—
Kucino	22·7	327	—	—	e 9 42?	+23	—	—
Pulkovo	28·3	328	e 6 8	− 3	e 11 5	+ 1	15·7	20·9
Irkutsk	33·3	51	—	—	—	—	e 18·3	—

No additional readings.

May 1d. 18h. 54m. 36s. Epicentre 67°·0N. 170°·0W.

A = −·385, B = −·068, C = +·920; D = −·174, E = +·985; G = −·907, H = −·160, K = −·391.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Sitka		18·7	105	—	—	—	—	10·6	—
Victoria	E.	30·0	106	11 23	?S	(11 23)	−11	15·9	17·3
Ootomari		31·6	256	e 11 36	?S	(e 11 36)	−25	15·9	19·0
Spokane		32·8	100	—	—	—	—	e 17·4	20·4
Berkeley	E.	39·4	114	—	—	—	—	e 20·1	—
Scoresby Sund		40·8	16	7 54	− 7	14 6	−12	21 4	24·8
Irkutsk		41·8	294	7 51	−18	e 13 56	−36	22·4	23·6
Honolulu T.H.	E.	46·3	165	—	—	—	—	e 21·4	25·4
Nagasaki		48·6	259	—	—	—	—	e 27·1	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tucson	E.	48·6	105	—	—	—	—	26·5	—
Chicago		49·3	79	—	—	e 16 17	+ 7	27·6	27·7
Ekaterinburg		50·6	328	i 9 4	− 7	16 13	−13	23·4	31·6
Ottawa		50·6	65	e 15 48	?S	(e 15 48)	−38	e 23·4	29·9
Toronto	N.	50·8	70	—	—	e 16 37	+ 8	27·4	—
St. Louis		51·0	83	—	—	e 16 37	+ 6	23·9	25·9
Pulkovo		52·4	349	9 17	− 5	16 42	− 7	25·4	32·0
Ithaca		52·9	69	—	—	—	—	e 24·4	—
Upsala		53·1	355	—	—	e 16 54	− 3	e 28·4	—
Zi-ka-wei	Z.	53·2	266	e 11 11	?	20 56	?SR_1	—	31·0
Harvard		54·8	64	—	—	—	—	e 27·8	33·8
Georgetown	Z.	55·8	71	i 9 52	+ 8	—	—	e 21·7	36·3
Charlottesville	E.	56·0	74	—	—	e 25 7	?	e 26·7	31·0
Edinburgh		56·7	10	—	—	i 17 50	+ 8	28·4	38·4
Lund		57·3	358	—	—	17 54	+ 4	—	—
Copenhagen		57·3	358	e 9 57	+ 3	e 17 54	+ 4	27·4	32·3
Konigsberg	E.	57·9	354	—	—	e 17 54	− 4	e 26·9	31·4
	N.	57·9	354	e 9 54	− 4	e 18 6	+ 8	e 31·4	33·4
Stonyhurst		58·8	10	—	—	e 18 19	+10	e 29·4	43·9
Hamburg		59·4	0	e 10 9	+ 1	e 18 0	−16	e 28·4	39·4
De Bilt		60·9	3	e 10 17	− 1	e 18 40	+ 5	e 29·4	33·6
Oxford		61·0	9	—	—	18 38	+ 2	—	—
Kew		61·3	8	e 10 24	+ 3	e 18 44	+ 4	29·4	36·4
Uccle		62·1	6	e 10 28	+ 2	e 18 55	+ 6	e 25·4	—
Tashkent		62·8	315	i 10 26	− 5	i 18 52	− 6	e 28·4	36·3
Makeyevka		63·1	340	—	—	e 18 59	− 3	27·4	41·3
Hong Kong		64·0	269	27 34?	?SR_3	—	—	—	35·9
Paris		64·1	7	e 10 24?	−15	—	—	34·4	47·4
Strasbourg		64·5	2	e 10 47	+ 5	e 19 29	+10	e 27·4	—
Zagreb		67·1	356	e 10 36?	−23	e 19 40	−11	e 31·4	—
Phu-Lien		68·3	274	—	—	—	—	33·4	—
Manila		68·5	259	—	—	e 17 24	?	—	40·4
Baku		68·5	328	e 11 11	+ 3	20 13	+ 5	34·7	45·7
Florence		69·2	359	18 54	?	21 4	[− 2]	29·9	45·9
Rocca di Papa		71·3	358	e 11 26	+ 1	e 19 30	−72	—	55·5
Tortosa		72·1	9	—	—	20 51	0	e 34·4	46·9
Toledo		72·6	11	e 11 23	−11	e 21 46	[+15]	e 37·1	43·9
Alicante		74·4	10	e 10 49	−56	—	—	e 41·7	—
Granada		75·3	12	11 36	−15	i 21 28	− 1	e 36·6	41·2
Almeria		75·7	10	e 11 36	−17	e 21 51	+17	—	47·0
San Fernando		75·8	14	—	—	21 24	−11	—	45·8
Hyderabad		82·1	297	22 41	?S	(22 41)	− 6	—	45·5
Bombay		82·6	302	22 46	?S	(22 46)	− 7	44·9	47·7
Kodaikanal		89·1	295	48 30	?L	—	—	(48·5)	—
La Paz		108·8	86	—	—	—	—	56·4	64·6

Additional readings: Sitka eN = +11m.13s. Victoria LN = +16·3m., MN = +21·0m. Berkeley eE? = 18h.39m.42s., eZ = +22·1m. Scoresby Sund PR_1 = +9m.37s., SR_1 = +17m.6s., SR_2 = +19m.18s., MN = +26·5m. Tucson LN = +27·2m. Chicago eE = +21m.55s. = SR_3 +8s., eLN = +27·2m., MN = +31·3m. Ottawa PR_2? = +16m.28s. = S + 2s., eS = +20m.24s. = SR_1 + 6s., MN = +32·7m. Toronto eN = +20m.32s. = SR_1 +10s. St. Louis iS = +20m.31s. = SR_1 +5s., eSR_1N = +21m.40s. = SR_2 +14s., eSR_2N = +22m.9s. Zi-ka-wei MEN = +29·4m. •Georgetown iZ = +11m.31s. Charlottesville eLN = +27·4m., MN = +31·1m. Copenhagen ePR_1N = +12m.0s., eN = +19m.48s. = [S] +14s., SR_1 = +21m.54s., SR_2 = +23m.54s., MNZ = +30·0m. Konigsberg eN = +18m.12s. = PS − 14s. and +19m.36s. = [S] − 3s. De Bilt MN = +34·2m., MZ = +43·4m. Kew SR_1 = +23m.24s.? Zagreb e = +19m.58s. Florence e = +13m.34s. Rocca di Papa iPN = +11m.6s., ePE = +12m.32s. Toledo MNW = +44·6m. Almeria PR_1 = +14m.22s. San Fernando MN = +43·2m. Bombay S = +31m.9s. La Paz MN = +67·8m.

May 1d. Readings also at 1h. (La Plata, near La Paz, and Sucre), 2h. (Georgetown, St. Louis, Tucson, near Tacubaya, and Vera Cruz), 4h. (near Oaxaca), 5h. (near Taihoku), 7h. (La Paz), 9h. (Georgetown, Ottawa, St. Louis, Toronto, Tucson (2), and near Mizusawa), 11h. (Apia, and near La Paz), 12h. (La Paz), 14h. (near Manila), 23h. (near La Paz).

May 2d. 14h. 3m. 13s. Epicentre 34°·2N. 72°·0E. (as on 1927 Sept. 30d.).

A = +·256, B = +·787, C = +·562; D = +·951, E = −·309;
G = +·174, H = +·535, K = −·827.

	Δ	Az.	P.	O−C.	S.	O−C.	L.
	°	°	m. s.	s.	m. s.	s.	m.
Baku	18·6	296	e 4 39	+15	e 8 10	+17	11·1
Ekaterinburg	23·9	344	i 5 27	0	9 42	0	11·3
Makeyevka	28·8	309	e 6 53	+37	11 22	+ 9	17·6
Kucino	31·8	323	—	—	e 12 29	+24	—
Pulkovo	37·2	326	7 28	− 4	—	—	—

No additional readings.

May 2d. 21h. 54m. 21s. Epicentre 39°·7N. 29°·3E.

A = +·671, B = +·377, C = +·639; D = +·489, E = −·872;
G = +·557, H = +·313, K = −·769.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Yalta		6·0	35	e 1 37	+ 5	2 51	+ 7	—	3·4
Theodosia		6·9	37	e 1 54	+ 9	e 3 20	+13	—	7·0
Ksara		7·9	136	2 7	+ 7	3 49	+15	4·3	—
Belgrade	E.	8·3	311	e 2 9	+ 3	i 4 6	+21	—	5·0
	N.	8·3	311	e 2 6	0	i 4 1	+16	—	4·8
Mostar		9·3	296	e 3 27	+67	—	—	e 6·1	6·4
Helwan		10·0	170	2 31	+ 1	4 19	−10	—	11·7
Makeyevka		10·4	34	2 43	+ 7	i 4 51	+11	5·8	10·0
Budapest		10·7	320	2 55	+15	4 55	+ 7	6·6	7·6
Lemberg	E.	10·8	341	2 45	+ 4	—	—	e 5·6	8·4
	N.	10·8	341	2 39	− 2	—	—	e 6·0	7·8
Pompeii		11·3	280	e 2 51	+ 2	e 5 1	− 1	—	9·6
Zagreb		11·5	306	e 2 54	+ 2	i 5 4	− 3	(i 5·8)	6·7
Naples	N.	11·6	280	e 2 56	+ 3	e 5 14	+ 5	6·6	9·6
Graz		12·4	311	i 3 8	+ 3	e 4 39?	−50	—	7·7
Vienna		12·6	317	e 2 58	− 9	i 5 37	+ 4	i 7·2	7·6
Rocca di Papa		12·8	284	e 3 9	− 1	5 58	+19	i 7·6	9·0
Venice		13·7	300	e 3 27	+ 5	e 6 4	+ 3	—	8·6
Florence		14·1	293	i 3 28	+ 1	7 30	?L	8·4	8·7
Innsbruck		15·0	306	e 3 45	+ 6	e 7 15	+43	8·2	8·6
Baku		15·7	81	i 3 59	+11	i 7 19	+31	8·4	14·4
Chur		16·0	303	e 3 53	+ 1	e 7 3	+ 8	—	—
Konigsberg		16·2	341	i 3 59	+ 4	i 7 1	+ 1	e 8·4	10·6
Ravensburg		16·3	306	3 59	+ 3	7 11	+ 9	e 8·5	10·6
Jena	E.	16·8	318	e 5 3	+61	e 7 15	+ 2	e 8·0	9·8
	N.	16·8	318	e 5 3	+61	e 7 11	− 2	e 8·0	9·9
Moncalieri		16·8	295	i 4 2	0	7 18	+ 5	8·4	10·6
Zurich		16·8	304	e 4 9	+ 7	i 7 19	+ 6	—	—
Hohenheim		16·9	309	e 4 4	0	7 16	0	e 9·2	9·9
Potsdam	E.	16·9	324	4 6	+ 2	e 7 12	− 4	e 9·0	10·5
	N.	16·9	324	4 6	+ 2	e 7 6	−10	e 7·6	10·5
Kucino		17·0	17	i 3 57	− 8	7 15	− 3	7·6	11·8
Strasbourg		17·8	307	4 14	− 1	i 7 39	+ 3	8·6	10·3
Feldberg	E.	18·0	312	e 4 17	0	e 7 44	+ 4	e 8·4	11·4
	N.	18·0	312	i 4 19	+ 2	i 7 37	− 3	e 8·5	10·4
Grenoble		18·2	295	4 26	+ 7	e 7 51	+ 7	e 9·6	12·6
Besançon		18·4	302	e 4 24	+ 2	7 56	+ 7	10·2	11·6
Hamburg	E.	19·2	323	—	—	i 8 2	− 4	e 9·8	11·6
	N.	19·2	323	—	—	i 8 4	− 2	e 10·4	13·6
	Z.	19·2	323	i 4 34	+ 3	—	—	—	13·8
Lund		19·2	332	4 35	+ 4	8 2	− 4	9·6	—
Copenhagen		19·5	330	(4 38)	+ 3	e 8 9	− 4	9·6	12·4
Pulkovo		20·1	2	i 4 42	0	8 27	+ 2	10·6	12·6
Helsingfors		20·6	354	4 53	+ 5	(8 42)	+ 6	10·0	—
Barcelona		20·6	280	4 52	+ 4	e 8 34	− 2	e 10·0	15·3
Uccle		20·6	311	4 48	0	i 8 38	+ 2	e 9·6	13·3
De Bilt		20·8	315	4 49	− 2	8 42	+ 2	9·2	15·1
Algiers		20·8	270	4 47	− 4	8 42	+ 2	10·9	15·2
Paris		21·1	305	e 4 55	+ 1	i 8 45	− 1	11·0	12·4

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Upsala		21·5	344	4 58	− 1	8 50	− 5	—	15·2
Bagnères		21·9	288	e 5 39?	+35	e 9 8	+ 5	e 12·2	14·1
Tortosa	E.	21·9	282	5 3	− 1	9 5	+ 2	—	15·5
	N.	21·9	282	5 7	+ 3	9 4	+ 1	9·9	17·1
Le Mans		22·4	301	e 6 39?	+89	—	—	15·3	17·5
Alicante		23·1	276	5 19	+ 1	9 29	+ 2	e 11·9	16·8
Kew	E.	23·6	310	e 5 19	− 5	e 9 34	− 2	—	13·7
	N.	23·6	310	5 21	− 3	e 9 32	− 4	11·4	13·6
	Z.	23·6	310	—	—	e 9 42	+ 6	—	14·4
Oxford		24·3	310	i 5 23	− 8	i 9 40	−10	12·2	16·0
Almeria		24·9	274	i 5 31	− 6	i 9 39	−22	12·6	17·1
Toledo		25·5	281	e 5 36	− 7	10 1	−12	e 11·4	17·2
Bergen		25·5	333	5 42	− 1	10 39?	+26	14·6	—
Stonyhurst		25·6	314	e 5 55	+11	i 10 14	0	—	14·6
Bidston		25·8	312	5 42	− 4	10 4	−14	11·7	14·6
Granada		25·8	275	? 5 40	− 6	i 10 10	− 8	13·4	17·4
Malaga		26·5	274	5 23	−30	9 51	+19	—	—
Ekaterinburg		26·6	40	i 5 52	− 2	10 29	− 4	12·2	17·6
Edinburgh		26·8	318	5 51	− 5	10 44	+ 7	13·2	16·0
San Fernando		28·0	275	5 49	−19	10 19	−40	14·6	18·6
Scoresby Sund		40·3	336	7 50	− 7	14 2	− 9	19·6	25·1
Bombay		42·7	106	8 11	− 5	14 37	− 7	22·0	29·7
Hyderabad		47·8	104	8 53	0	15 53	+ 2	25·6	31·4
Irkutsk		51·2	50	9 18	+ 4	i 16 39	+ 5	24·6	—
Kodaikanal		51·8	111	17 3	?S	(17 3)	+22	40·4	41·5
Phu-Lien		67·4	82	e 11 6	+ 6	e 20 2	+ 7	34·2	—
Ottawa		71·7	314	—	—	i 20 54	+ 8	e 30·6	—
Hong Kong		72·2	76	—	—	—	—	—	47·2
Zi-ka-wei	Z.	72·2	64	e 11 39	+ 8	e 21 9	+17	45·0	50·0
Cape Town		74·3	189	—	—	—	—	—	45·0
Toronto	N.	74·8	315	—	—	i 21 30	+ 6	34·6	41·1
Georgetown	Z.	76·6	310	i 12 4	+ 5	i 21 52	+ 8	e 35·6	53·2
St. Louis		84·1	317	e 12 36	− 7	i 23 6	− 3	37·1	44·1
Victoria	E.	88·7	343	23 58	?S	(23 58)	− 2	39·3	50·6
La Paz		106·1	263	e 19 17	?PR_1	—	—	56·6	66·6

Additional readings and notes: Theodosia MN = +6·8m. Belgrade iN = +2m.10s. and +2m.44s., iE = +2m.49s. Budapest MN = +8·6m. Zagreb iNE = +3m.0s., iNW = +3m.8s., iNE = +3m.51s., and +4m.53s., iNW = +5m.0s., iNE = +5m.4s. (entered as S) and +5m.12s., eNE = +5m.22s., iNE = +5m.37s., iNE = +5m.50s. and +6m.27s., MNW = +7·8m., L is given as iSNW. Vienna iE = +4m.37s., iN = +4m.45s., iZ = +5m.27s. and +5m.59s., iE = +6m.21s., iN = +6m.26s., iEZ = +6m.54s.; epicentre 39°·7N. 30°·5E. Rocca di Papa eE = +3m.5s., iPZ = +3m.12s. Innsbruck i = +3m.51s., iNE = +3m.58s., PR_1NE = +4m.8s., eSR_1NE = +7m.51s. Konigsberg iPE = +4m.1s., iPR_1 = +4m.12s., iPR_2N? = +4m.25s., eSE = +6m.57s., iN = +7m.19s., iSR_1E = +7m.41s. Moncalieri MN = +11·2m. Hohenheim iP = +4m.7s., PR_1 = +4m.18s. Potsdam iE = +4m.18s. Strasbourg PR_1 = +4m.35s., SR_1 = +8m.2s., MN = +11·2m., MZ = +12·2m. Feldberg iN = +6m.8s. Grenoble eS = +7m.57s. Hamburg iN = +9m.23s. Copenhagen iZ = +8m.18s., MZ = +14·2m. Helsingfors S is given as SR_1. Barcelona MN = +13·4m. Uccle MN = +11·9m. De Bilt iZ = +4m.52s., MN = +12·0m., MZ = +14·8m. Upsala SN = +8m.54s., MN = +14·1m. Alicante MN = +16·1m. Oxford MN = +14·2m. Almeria MZ = +19·0m. Toledo iP = +5m.39s., MNW = +15·6m., MZ = +18·6m. Granada PR_1 = +6m.44s.; epicentre 38°·7N. 30°·5E. San Fernando MN = +17·6m. Scoresby Sund PR_1 = +9m.25s., eEN = +5m.39s., SR_1 = +17m.33s. Ottawa eE = +25m.58s. = SR_1 − 18s. Toronto eN = +26m.2s. Georgetown LZ = +40·3m. St. Louis PSN = +24m.14s., SR_1N = +28m.43s., eN = +29m.27s. Victoria LN = +45·3m. La Paz MN = +63·5m.

May 2d. Readings also at 1h. (Yalta and near De Bilt), 2h. (near Hukuoka (2) and Nagasaki (2)), 3h. (Ekaterinburg, Pulkovo, and Taihoku), 5h. (near Tacubaya), 10h. (La Paz (2)), 11h. (Riverview, Suva, and Wellington), 12h. (Ottawa, Toronto, Georgetown, St. Louis, De Bilt, Uccle (2), Baku, and Ekaterinburg), 13h. (La Paz (2), Ottawa, De Bilt, Uccle, and near Algiers), 14h. (Georgetown), 15h. (Georgetown, Ottawa, St. Louis, and La Paz), 17h. (near Tacubaya), 19h. (Moncalieri), 20h. (Stonyhurst, near Taihoku, and near Yalta and Theodosia), 22h. (Theodosia), 23h. (Moncalieri).

May 3d. 1h. 25m. 13s. Epicentre 39°·7N. 29°·3E. (as on 2d.).

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Yalta	6·0	35	e 2 42	+70	(e 2 42)	− 2	—	—
Theodosia	6·9	37	e 1 44	− 1	e 3 10	+ 3	—	—
Makeyevka	10·4	34	—	—	—	—	e 6·7	11·2
Zagreb	11·5	306	e 5 47	?L	e 8 31	?	(e 5·8)	8·8
Strasbourg	17·8	307	—	—	—	—	e 9·8	—
Lund	19·2	332	—	—	—	—	10·8	—
Copenhagen	19·5	330	—	—	—	—	10·8	—
Pulkovo	20·1	2	(5 5)	+13	(8 52)	+27	(10·8)	(13·4)
Uccle	20·6	311	—	—	—	—	e 12·8	—
De Bilt	20·8	315	—	—	—	—	e 12·8	—
Kew	23·6	310	—	—	—	—	e 11·8	—
Ekaterinburg	26·6	40	—	—	e 10 24	− 9	16·3	—

Additional readings and note: Makeyevka L = +9·3m. Zagreb readings fit P and S if diminished by 3m. Pulkovo readings have been diminished by 2m. Ekaterinburg e = +13m.6s.

May 3d. Readings also at 0h. (Baku and Ekaterinburg), 2h. (near Yalta), 4h. (near La Paz), 6h. (near Lick), 8h. (Ravensburg), 9h. (near Tacubaya), 12h. (La Paz, Theodosia, and near Yalta), 16h. (Alicante), 20h. (near Tacubaya).

May 4d. Readings at 1h. (near Toyooka), 2h. (near Mizusawa and near Tananarive), 3h. (near Tucson), 4h. (near Taihoku), 5h. (Apia and Copenhagen), 14h. (near Toyooka (2)), 15h., 17h., and 20h. (near La Paz), 21h. (Taihoku and near Toyooka), 22h. (La Paz, near Vienna, and Zagreb), 23h. (near Nagasaki).

May 5d. 13h. 40m. 50s. Epicentre 36°·0N. 102°·0E. (as on 1928 March 7d.).

A = −·168, B = +·791, C = +·588; D = +·978, E = +·208; G = −·122, H = +·575, K = −·809.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Phu-Lien		15·8	164	e 4 17	+28	—	—	—	10·0
Irkutsk		16·3	5	—	—	—	—	—	8·5
Tashkent		25·9	292	e 5 46	− 1	10 25	+ 5	—	17·7
Bombay		30·8	245	—	—	e 11 51	+ 3	—	18·5
Kucino		46·7	317	—	—	e 18 46	?SR_1	e 24·8	—
Makeyevka		47·6	307	—	—	—	—	e 24·7	—
Pulkovo		50·5	324	—	—	—	—	e 26·2	28·7
Lund		60·3	322	—	—	—	—	31·2	—
Copenhagen		60·7	322	—	—	e 20 46	?Σ	e 31·2	33·1
Hamburg		62·8	320	—	—	—	—	e 32·2	—
Feldberg	N.	65·2	317	—	—	—	—	e 32·7	38·8
De Bilt		66·1	320	—	—	—	—	e 32·2	—
Strasbourg		66·4	315	—	—	—	—	e 32·2	—
Kew		69·3	320	—	—	—	—	e 33·2	—

Additional readings and note: Copenhagen eLN = +29·2m. Feldberg eLN = +35·1m., for this station and De Bilt the readings entered as L are given as e only. De Bilt eL = +35·2m.

May 5d. Readings also at 0h. (Ekaterinburg and Tashkent), 1h. (Taihoku), 4h. (Apia), 8h. (near Batavia), 14h. (near Kobe, Sumoto, and Toyooka), 15h. (near La Paz), 17h. (near Tacubaya), 18h. (La Paz), 21h. (Alicante), 22h. (near La Paz), 23h. (Zi-ka-wei and near La Paz).

May 6d. Readings at 0h. (Santiago), 1h. (near Taihoku), 5h. (Zi-ka-wei), 7h. (Copenhagen, De Bilt, and La Plata), 8h. (Santiago), 9h. (near Tacubaya), 11h. (near Mizusawa), 13h. (Santiago), 14h. (Amboina and near Lick), 15h. (La Paz (2)), 18h. (Santiago, Tashkent, La Paz, near La Plata, Ksara, and Helwan), 19h. (Ekaterinburg), 21h. (near Malabar).

May 7d. Readings at 0h. (Amboina and Taihoku), 2h. (Zi-ka-wei and near Tashkent), 6h. (Zi-ka-wei), 9h. (Suva and Taihoku), 10h. (near Bagnères and near Tortosa), 11h. (near La Paz), 12h. (near Sumoto and near La Paz), 15h. (La Paz), 17h. (Yalta), 18h. (near Lick), 21h. (Suva and near Theodosia and Yalta), 22h. (Georgetown and Taihoku), 23h. (Baku, Ekaterinburg, Tashkent, and near La Paz).

May 8d. 4h. 45m. 54s. Epicentre 50°·0N. 149°·0E.

(as on 1924 Oct. 23d.).

A = −·551, B = +·331, C = +·766; D = +·515, E = +·857; G = −·657, H = +·395, K = −·643.

A depth of focus 0·070 has been assumed. See the note at the end.

		Corr. for Focus	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	°	m. s.	s.	m. s.	s.	m.	m.
Sikka		+1·2	3·9	261	2 18	+59	(3 21)	+61	3·4	3·4
Ootomari		+0·7	5·3	233	e 1 35	+ 3	(2 52)	+ 8	2·9	—
Mizusawa		−1·3	12·2	210	3 0	+17	5 9	+17	—	—
Nagoya		−2·3	17·2	215	e 3 43	+ 5	(6 32)	+ 2	6·5	6·7
Toyooka		−2·4	17·7	221	i 3 59	+16	(i 6 26)	−13	i 6·4	6·8
Osaka		−2·5	18·2	218	3 49	+ 1	(6 15)	−33	6·2	8·0
Kobe		−2·5	18·4	219	i 3 55	+ 4	(i 6 52)	− 1	i 6·9	7·8
Sumoto		−2·6	18·8	219	e 3 57	+ 2	e 5 9	?	e 6·3	7·0
Nagasaki		−3·2	22·3	226	6 53	?	10 39	?L	(10·7)	—
Irkutsk		−4·0	27·7	292	5 17	− 8	—	—	—	—
Zi-ka-wei	E.	−4·0	27·9	238	e 5 18	− 9	9 20	−22	—	—
Taihoku		−4·6	32·8	232	—	—	e 9 44	?	10·1	—
Hong Kong		−5·3	38·8	237	6 48	−13	12 8	−24	15·8	15·9
Phu-Lien		−5·8	44·3	244	i 7 33	− 9	e 13 21	−24	—	—
Ekaterinburg		−6·2	49·4	315	i 8 15	− 5	14 38	−13	—	—
Honolulu T.H.		−6·2	50·4	104	i 8 19	− 8	e 14 56	− 9	e 24·2	—
Tashkent		−6·6	53·7	295	i 8 50	+ 2	i 15 35	− 7	—	—
Victoria	E.	−6·6	53·8	56	10 34	?PR$_2$	—	—	13·6	15·7
Calcutta		−6·6	54·2	265	8 53	+ 2	15 43	− 6	—	—
Amboina		−6·8	56·6	206	i 8 33	−33	i 15 41	−35	—	—
Scoresby Sund		−7·0	59·4	356	9 22	0	16 48	− 1	24·1	24·6
Pulkovo		−7·0	59·6	330	i 9 23	− 1	16 49	− 2	24·1	—
Kucino		−7·0	59·8	323	i 9 12	−13	16 36	−18	20·0	—
Helsingfors		−7·1	61·0	332	9 33	+ 1	17 7	− 1	—	—
Lick		−7·1	62·0	65	e 9 41	+ 3	e 17 21	+ 1	—	—
Hyderabad		−7·3	64·3	270	9 52	0	17 43	− 3	—	—
Upsala		−7·3	64·3	336	i 9 46	− 6	17 33	−13	e 25·1	—
Baku		−7·3	65·3	304	—	—	—	—	i 31·1	—
Makeyevka		−7·3	65·4	317	i 10 1	+ 1	18 1	+ 1	i 25·2	26·2
Bergen		−7·3	65·8	341	9 44	−18	i 14 54	?	—	—
Konigsberg		−7·4	66·7	330	e 8 6?	?	e 18 6?	− 9	e 26·5	28·1
Bombay		−7·4	66·8	274	10 11	+ 3	18 18	+ 2	31·2	38·6
Batavia		−7·5	67·0	227	i 10 8	− 1	i 18 16	− 1	—	—
Lund		−7·6	68·1	336	10 17	+ 1	—	—	—	—
Copenhagen		−7·6	68·3	336	i 10 18	+ 1	e 18 28	− 4	26·1	35·1
Theodosia		−7·6	68·9	317	i 10 23	+ 2	e 18 42	+ 2	—	—
Yalta		−7·7	69·8	317	i 10 25	− 1	—	—	—	—
Kodaikanal		−7·7	70·4	265	23 6	?	—	—	—	—
Hamburg		−7·7	70·8	337	i 10 34	+ 1	i 19 30	+28	e 27·1	39·1
Potsdam		−7·8	71·1	333	i 10 36	+ 2	—	—	—	—
Edinburgh		−7·8	71·6	345	9 39	−58	i 19 11	0	30·1	—
Tucson		−7·8	71·7	62	e 8 42	?	i 17 19	?	—	—
Jena		−7·9	72·8	334	i 10 44	0	e 19 59	+35	—	—
De Bilt		−7·9	73·4	338	i 10 49	+ 1	19 33	+ 2	e 28·1	29·4
Budapest		−7·9	73·4	328	i 10 53	+ 5	—	—	e 27·6	—
Stonyhurst		−7·9	73·4	343	e 10 48	0	i 17 33	?	—	—
Vienna		−7·9	73·6	330	i 10 49	0	17 49	?	—	—
Feldberg	N.	−7·9	74·2	336	i 10 53	− 1	e 19 38	− 3	e 29·5	47·2
Uccle		−8·0	74·8	339	i 10 55	− 2	e 19 45	− 3	e 24·1	—
Graz		−8·0	74·9	330	i 10 57	0	i 20 21	+32	31·1	44·5
Belgrade		−8·0	75·2	325	e 11 57	+58	—	—	—	—
Kew		−8·0	75·2	341	i 10 59	0	i 19 53	+ 1	29·1	—
Oxford	E.	−8·0	75·2	342	i 10 57	− 2	i 19 51	− 1	—	—

Continued on next page.

		Corr. for Focus	Δ	Az.	P.	O–C.	S.	O–C.	L.	M.
		°	°	°	m. s.	s.	m. s.	s.	m.	m.
Zagreb		−8·0	75·8	329	i 11 2	− 1	—	—	—	—
Strasbourg		−8·0	76·0	335	i 11 1	− 3	—	—	28·1	—
Innsbruck		−8·0	76·0	332	i 11 0	− 4	e 20 12	+10	—	—
Zurich		−8·1	76·8	334	i 11 8	− 1	e 20 8	− 2	—	—
Ottawa		−8·1	77·0	30	i 11 9	− 1	i 20 9	− 4	46·1	—
Paris		−8·1	77·1	339	i 11 9	− 2	i 20 11	− 3	30·1	43·1
Chur		−8·1	77·1	334	11 12	+ 1	20 12	− 2	—	—
St. Louis		−8·1	77·2	44	i 11 11	− 1	i 20 11	− 4	i 23·7	—
Toronto	N.	−8·1	77·3	35	i 11 11	− 1	i 20 12	− 4	45·4	—
Venice		−8·1	77·4	330	11 12	− 1	28 26	?SR_3	—	—
Ksara		−8·1	77·5	310	i 11 10	− 3	20 26	+ 7	33·1	—
Besançon		−8·1	77·7	335	11 9	− 6	20 6?	−15	—	—
Florence		−8·2	79·2	330	i 11 26	+ 3	—	—	—	—
Cincinnati		−8·2	79·2	40	e 11 20	− 3	i 20 32	− 6	e 24·1	—
Moncalieri		−8·2	79·2	334	11 13	−10	20 24	−14	29·4	—
Rocca di Papa		−8·2	80·6	329	i 11 26	− 6	20 45	−10	—	—
Pompeii		−8·2	80·8	327	e 11 18	−16	—	—	—	—
Georgetown	Z.	−8·3	82·2	35	i 11 35	− 6	—	—	31·3	—
Riverview		−8·4	83·9	178	e 13 0	+68	i 21 21	[−88]	—	47·8
Alicante		−8·5	87·6	337	—	—	e 21 34	[−99]	—	—
Algiers		−8·5	88·2	334	12 2	−15	—	—	—	—
Wellington	N.	−8·7	94·1	161	—	—	i 22 52	[−60]	—	—
La Paz		—	135·1	54	i 18 30	[−60]	21 24	?PR_1	23·2	24·3

Additional readings: Nagoya MN = +6·8m. Osaka MN = +9·3m. Kobe MN = +6·9m. Irkutsk e = +6m.47s. and +7m.56s. Phu-Lien iSR_1? = +16m.26s. Honolulu T.H. iE = +8m.24s., eN = +16m.59s., eE = +18m.10s. = SR_1 − 4s. Calcutta SN = +15m.44s. Amboina i = +15m.44s. Scoresby Sund PR_1 = +11m.12s., PR_2 = +12m.14s., SR_1 = +20m.12s., SR_2 = +22m.0s. Lick eE = +11m.29s., eN = +17m.25s., e = +18m.35s. Upsala PR_1N = +11m.39s., SN = +17m.31s., i = +18m.37s. Baku i = +15m.1s., +23m.3s., +26m.36s., +27m.37s., and +31m.6s. (entered as L). Konigsberg iE = +8m.10s., eE? = +12m.13s. and +12m.36s. = PR_1 − 13s., iE = +19m.6s.? Batavia P = +10m.12s., iSZ = +18m.21s., iZ = +18m.34s. Copenhagen eNZ = +12m.15s., eE = iZ = +12m.20s., PR_1 = +13m.0s., PR_2 = +14m.18s., eNZ = +16m.0s., eSN = +18m.48s., ePSZ = +18m.58s., eN = +19m.17s., eNZ = +21m.54s., SR_1 = +23m.12s., MZ = +27·8m. Hamburg eZ = +12m.33s., MN = +34·1m. Potsdam i = +12m.40s. Tucson e = +10m.41s. Jena iEN = +10m.45s., iNZ = +12m.42s., iE = +12m.51s. De Bilt iZ = +12m.55s., eEN = +23m.5s., MN = +30·2m. Vienna PR_1 = +12m.51s., PR_2 = +13m.50s., iN = +14m.38s., iZ = +14m.46s., iN = +17m.3s., and +20m.2s., iEN = +20m.51s., SR_1 = +21m.58s., SR_2 = +23m.1s. Feldberg eN = +15m.29s. = PR_2 + 12s., +22m.39s. = Σ + 26s., and +27m.24s. = SR_2 + 3s. Uccle e = +16m.37s. Belgrade iPN = +11m.58s., iN = +12m.36s., +12m.46s., and +14m.1s., iE = +12m.40s. Kew iPR_1Z = +13m.59s., ePR_2Z = +15m.37s., eE = +20m.14s., eZ = +20m.31s., SR_1E = +23m.29s. Oxford iE = +23m.30s. Zagreb e = +12m.37s. and +13m.14s., i = +14m.3s. = PR_1 − 5s. Strasbourg i = +14m.2s. = PR_1 − 8s. Innsbruck iNE = +11m.5s., +11m.18s., +12m.21s., and +13m.7s., iNW = +11m.21s., PR_1NE? = +13m.25s. Zurich i = +14m.8s. = PR_1 − 7s. Ottawa e = +23m.36s. Paris PR_1 = +14m.9s. St. Louis iN = +13m.14s., e = +14m.10s. = PR_1 − 9s. Toronto eN = +23m.44s. Florence iPR_1 = +13m.24s. Rocca di Papa SN = +20m.46s. Georgetown iZ = +14m.35s. = PR_1 − 24s., and +17m.41s. = PR_2 + 10s., eLZ = +25·3m. Riverview iS_cP_cS = +21m.8s. Algiers PR_1? = +15m.41s. Wellington iE = +21m.52s.

NOTE TO THE SHOCK OF MAY 8D.4H.

Using the T_0 and epicentre adopted, and collecting the residuals in Δ for the various groups of stations, we have the following table:—

No. of Stations	Group.	Rough Azimuth	Residuals. (1)	(2)	(3)
			°	°	°
6	America	32	−0·5	−8·3	−11·9
1	Honolulu T.H.	104	−0·8	−7·0	− 5·9
9	Japan	220	+0·2	−2·0	+ 1·2
3	Eastern Asia and Batavia	235	−1·0	−7·2	− 4·8
3	India	270	0·0	−6·9	− 7·5
35	Europe	335	−0·2	−7·8	−11·5

When the correction for depth of focus 0·070 has been applied the residuals for the various groups of stations are as in column headed Residuals (1). Without any assumption of focal depth the residuals are as given in (2).

Continued on next page.

The Japanese stations Kobe, Sumoto, and Toyooka give the epicentre North of Iturup Island, N. Japan, or roughly near 46°·0N. 149°·0E., an epicentre adopted for 1926 Feb. 11d. and for several earlier dates. If we compare the observed distances with those calculated for this epicentre we get the residuals in column (3), and it would seem that although a very great depth of focus would be required to bring into line five of the six groups, no such assumption could reconcile the Japanese group.

May 8d. Readings also at 1h. (Tananarive), 3h. (Yalta, La Plata, and near La Paz), 4h. (Lick, Mizusawa, Kobe, and near Manila), 5h. (Theodosia, Pulkovo, Tashkent, Nagoya, and near Manila), 10h. (Phu-Lien, Rocca di Papa), 13h. (near Lick), 14h. (2) and 16h. (near Kobe), 21h. (near La Paz), 22h. (Graz and near Vienna).

May 9d. 20h. 1m. 30s. Epicentre 40°·0N. 42°·0E. (as on 1925 March 12d.).

A = +·569, B = +·513, C = +·643 ; D = +·669, E = −·743 ;
G = +·478, H = +·430, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Baku		6·0	85	e 1 43	+11	i 3 5	+21	3·6	—
Makeyevka		8·5	342	e 2 36	+27	—	—	4·7	5·6
Kucino		16·0	352	—	—	—	—	e 9·5	—
Tashkent		20·6	78	i 4 42	− 6	i 8 29	− 7	e 9·5	14·0
Ekaterinburg		20·7	30	e 4 43	− 6	8 22	−16	10·5	13·8
Pulkovo		21·1	344	i 4 57	+ 3	8 55	+ 9	11·5	13·2
Copenhagen	E.	25·0	319	—	—	—	—	e 13·5	20·1
Feldberg	N.	25·5	305	—	—	e 10 54	+41	—	17·0

Additional readings: Baku i = +2m.25s. Copenhagen eLN = +12·5m., MN = +16·6m.

May 9d. Readings also at 1h. (Manila), 9h. (La Paz and near Sumoto), 11h. (Baku, Ekaterinburg, and Pulkovo), 12h. (near Lick), 14h. (Baku, Ekaterinburg, Irkutsk, Tashkent, and near Toyooka), 15h. (near Toyooka), 19h. (Tucson), 21h. (La Paz), 22h. (Ekaterinburg, Tashkent, and near Toyooka), 23h. (Apia).

May 10d. Readings at 1h. (Copenhagen), 2h. (Georgetown, Ottawa, St. Louis, Toronto, and near Toyooka), 3h. (Tucson), 6h. (Tananarive), 7h. (Tucson), 8h. (Georgetown, near Tucson, and near Sumoto), 12h. (near Granada), 16h. and 17h. (Tananarive), 18h. (near Sumoto), 19h. (near Tananarive), 20h. (St. Louis and Toronto), 21h. (Tucson), 23h. (near Algiers).

May 11d. Readings at 1h. (Amboina), 3h. and 5h. (near La Paz), 9h. (Baku, Ekaterinburg, Tashkent, and La Paz), 13h. (near Amboina), 15h. (near Manila), 16h. (near Wellington, near Neuchatel, and Zurich), 17h. (Tucson), 21h. (Rocca di Papa).

May 12d. 20h. 27m. 52s. Epicentre 0°·0 18°·0W.

(deduced by comparison with the epicentre 0°·0 18°·8W. of 1920 Dec. 5d.).

A = +·951, B = −·309, C = ·000 ; D = −·309, E = −·951 ;
G = ·000, H = ·000, K = −1·000.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
San Fernando		38·0	16	e 7 16	−22	13 36	− 2	20·7	23·1
Azores		38·4	351	15 56	?L	—	—	(15·9)	16·5
Malaga		38·8	18	7 33	−11	—	—	—	—
Granada		39·5	18	i 7 42	− 9	i 13 46	−13	19·9	25·6
Almeria		39·6	20	i 7 39	−12	e 13 42	−18	19·2	21·5
Algiers		41·6	26	8 0	− 8	14 16	−13	21·1	22·6
Alicante		41·6	20	e 8 16	+ 8	e 14 32	+ 3	e 17·5	—
Toledo		41·8	16	i 8 1	− 8	i 14 20	−12	e 18·2	25·1
Tortosa	N.	44·2	20	i 8 19	− 8	14 55	−10	e 22·1	31·3
Barcelona		45·3	22	e 8 28	− 7	e 15 8	−11	e 18·5	29·8
Cape Town		48·1	139	—	—	e 14 58	−57	—	28·4
Puy de Dôme		49·4	19	e 9 2	− 1	—	—	—	—
Rocca di Papa		50·1	30	e 9 4	− 4	e 16 19	− 1	e 26·1	29·5
Moncalieri		50·4	24	e 9 10	+ 1	i 16 25	+ 1	24·9	—
Florence		51·0	28	9 10	− 3	—	—	22·1	27·6
Besançon		51·6	21	—	—	—	—	25·1	—
Neuchatel		51·8	22	e 9 18	− 1	e 16 38	− 3	—	—
Paris		51·9	17	e 9 18	− 1	e 16 41	− 2	27·1	28·1
La Paz		52·1	251	e 9 17	− 4	i 16 45	0	22·5	28·0
Zurich		52·7	24	i 9 25	+ 1	16 51	− 1	—	—
Strasbourg		53·4	21	i 9 29	0	e 17 3	+ 2	e 23·1	—
Kew		53·6	13	i 9 30	0	e 17 4	0	27·1	29·7
Oxford	E.	53·7	13	—	—	i 17 ,5	0	e 23·1	36·1
Innsbruck	N.E.	53·8	25	9 38	+ 6	—	—	—	—
Uccle		54·2	19	e 9 34	0	e 17 13	+ 2	e 26·1	—
Zagreb		54·7	30	e 9 41	+ 4	e 17 8?	− 9	—	—
Feldberg	N.	55·0	21	i 9 41	+ 2	i 17 28	+ 7	e 25·3	30·5
Stonyhurst		55·4	12	e 9 44	+ 2	17 28	+ 2	e 26·1	—
De Bilt		55·6	19	9 46	+ 3	17 36	+ 7	e 27·1	32·1
Vienna		56·7	27	9 52	+ 2	17 47	+ 5	34·1	—
Edinburgh		57·2	10	—	—	17 53	+ 4	28·1	—
Hamburg		58·4	19	i 10 5	+ 4	e 18 8	+ 4	e 29·8	32·1
Ksara		60·7	50	e 10 25	+ 8	18 43	+11	—	—
Copenhagen		60·9	20	e 10 22	+ 4	18 41	+ 6	31·1	36·0
Lund		61·2	20	10 26	+ 6	18 46	+ 8	—	—
Konigsberg	E.	63·2	25	—	—	e 19 8?	+ 5	—	—
Upsala	N.	65·9	20	—	—	e 19 38	+ 2	—	—
Georgetown		66·4	315	e 10 52	− 2	e 22 30	?	32·9	37·2
Ottawa		68·0	321	e 12 56	+112	e 20 8	+ 6	e 28·1	—
Makeyevka		68·1	38	—	—	e 20 8	+ 5	24·2	28·0
Pulkovo		70·4	24	i 11 23	+ 4	20 37	+ 6	31·1	42·1
Scoresby Sund		70·6	358	—	—	20 43	+10	28·1	30·3
Kucino		71·6	30	e 11 29	+ 2	20 47	+ 2	33·8	38·7
Baku		73·4	48	e 11 50	+12	e 21 17	+10	e 43·2	—
St. Louis		76·2	310	—	—	e 21 38	− 1	e 35·8	39·1
Ekaterinburg		83·8	33	e 12 42	+ 1	23 5	− 2	38·1	48·7
Tashkent		88·0	50	e 13 2	− 3	i 23 59	+ 7	e 42·1	51·9
Victoria	E.	100·1	320	—	—	—	—	48·0	54·6
Irkutsk		109·1	35	—	—	(28 29)	?PS	60·1	—

Additional readings and notes: San Fernando MN = +25·5m. Granada iP = +7m.44s., PR_1 = +9m.9s., i = +12m.36s., epicentre 0°·8S. 14°·4W. Almeria PR_1 = +9m.11s. Algiers PR_1 = +8m.35s., i? = +17m.16s. = SR_1 −4s. Toledo MNW = +25·4m. Barcelona PR_1 = +10m.7s. Rocca di Papa iPZ = +9m.7s., iPN = +9m.9s. Florence PR_1 = +11m.9s. Paris PR_1 = +11m.19s. La Paz LN = +21·1m., MN = +26·2m. Strasbourg PR_1 = +12m.40s. = PR_2 −5s. Kew ePSZ = +17m.14s. Oxford SR_1E = +19m.30s. = [S] +24s. Zagreb e = +12m.46s. = PR_2 −13s. Feldberg ePR_1N = +12m.43s., eN = +21m.1s. De Bilt MNZ = +34·2m. Hamburg MZ = +38·1m., S is given as simply e. Copenhagen ePEN = +10m.23s., ePR_1Z = +12m.38s., ePR_2N = +14m.20s., SR_1 = +22m.43s., SR_2 = +25m.20s., MNZ = +38·0m. Georgetown eZ? = +7m.48s. Scoresby Sund readings except L and M are all given without phase; eN = +14m.8s.? and +20m.50s., eE = +21m.44s., MN = +35·7m. St. Louis eN = +21m.40s. and +26m.28s. Tashkent e = +14m.3s. Irkutsk SR_1 = +34m.20s., SR_2 = +38m.38s., the S entered is given as PS.

May 12d. Readings also at 2h. (Tucson and near Toyooka), 3h. (Apia), 6h. (La Paz and near Entebbe), 9h. (Zagreb), 10h. (Mizusawa, Zi-ka-wei, Irkutsk, Ekaterinburg, and Baku), 11h. (Tashkent), 12h. (Manila), 17h. (Florence), 18h. (Phu-Lien, Ekaterinburg, and Theodosia), 19h. (Tashkent).

May 13d. 20h. 6m. 10s. Epicentre 42°·0N. 46°·0E. (as on 1928 April 20d.).

A = +·516, B = +·535, C = +·669; D = +·719, E = −·695; G = +·465, H = +·481, K = −·743.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Baku		3·3	119	e 1 21	+29	e 2 19	+48	2·6	—
Makeyevka		8·3	320	e 2 14	+ 8	—	—	4·4	5·8
Ksara		11·4	227	e 1 54?	?	6 23	?	8·4	—
Tashkent		17·3	85	—	—	e 8 34	+69	e 8·8	12·2
Ekaterinburg		17·6	27	4 16	+ 4	7 25	− 6	9·3	—
Pulkovo		20·2	337	4 43	0	8 27	0	10·3	—
Copenhagen		25·7	314	e 5 38	− 7	10 14	− 2	14·8	—

Additional readings: Baku i = +1m.48s. Ksara LN = +8·8m. Tashkent e = +7m.55s.

May 13d. Readings also at 2h. (Batavia, Malabar, and Maron), 7h. (near Port au Prince, near Taihoku, near Nagasaki, and Hukuoka), 19h. (near La Paz), 23h. (Baku, Ekaterinburg, Tashkent, Phu-Lien, and Alicante).

May 14d. 2h. 46m. 55s. Epicentre 15°·0S. 144°·0E.

A = −·781, B = +·568, C = −·259; D = +·588, E = +·809; G = +·209, H = −·152, K = −·966.

Very rough.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Riverview		19·9	162	i 4 34	− 6	e 8 11	−11	e 9·2	11·8
Adelaide		20·5	193	i 8 40	?S	(i 8 40)	+ 6	—	17·8
Melbourne		22·8	178	—	—	—	—	e 10·3	16·7
Perth		30·7	232	22 26	?L	—	—	(22·4)	27·8
Wellington	E.	37·4	141	e 7 36	+ 3	—	—	—	11·0
Irkutsk		75·6	335	—	—	—	—	e 48·1	—
Tashkent		88·8	313	—	—	e 27 5	?	e 51·1	53·0
Ekaterinburg		99·0	325	—	—	e 39 13	?	53·1	—
Baku		102·7	309	—	—	—	—	e 63·1	—
Pulkovo		114·7	329	—	—	—	—	e 66·1	—
Scoresby Sund		123·9	353	—	—	—	—	67·1	—
Copenhagen		125·1	329	—	—	—	—	62·1	—
De Bilt		130·6	326	e 19 35	[+15]	—	—	e 69·1	—
Toronto		133·4	41	—	—	—	—	55·6	—
Ottawa	E.	134·9	38	—	—	—	—	60·1	—
Granada		143·7	312	—	—	—	—	82·1	89·6

Additional readings: Riverview iS = +8m.21s., MN = +12·2m. Wellington eN = +7m.57s. Tashkent e = +31m.5s.? Ottawa eLN = +53·1m.

May 14d. 6h. 55m. 15s. Epicentre 27°·5N. 142°·0E. (as on 1927 Aug. 12d.)

A = −·699, B = +·546, C = +·462; D = +·616, E = +·788; G = −·364, H = +·284, K = −·887.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Osaka		9·1	324	2 9	− 9	(3 51)	−15	3·9	4·6
Kobe		9·3	323	e 2 23	+ 3	—	—	—	—
Mizusawa	E.	11·6	357	—	—	5 13	+ 4	—	—
Manila		23·4	241	e 3 58	−83	—	—	—	—
Irkutsk		37·4	322	e 7 35	+ 2	(13 45)	+15	13·8	—
Tashkent		59·8	305	e 10 11	0	—	—	—	35·4
Baku		74·1	309	e 10 55	−48	e 20 21	−54	e 38·8	—
Copenhagen	N.	86·4	335	—	—	e 22 9	−85	e 43·8	—

Additional readings: Osaka MN = +4·7m. Irkutsk e = +8m.47s. = PR_1 − 3s Tashkent e = +16m.21s. and +17m.23s. Copenhagen eN = +19m.39s., eEN = +29m.27s. = SR_1 − 15s., eLE = +47·8m.

May 14d. 22h. 14m. 36s. Epicentre 5°·0S. 78°·0W.

A = + ·207, B = − ·974, C = − ·087 ; D = − ·978, E = − ·208 ; G = − ·018, H = + ·085, K = − ·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Balboa Heights	E.	14·1	354	3 54	+27	6 46	+36	8·6	14·3
	N.	14·1	354	3 54	+27	6 42	+32	8·0	9·6
La Paz	N.	15·1	140	i 3 43	+ 3	i 6 35	+ 1	7·6	8·4
Sucre		18·7	139	i 4 31	+ 6	i 8 8	+13	—	19·6
Port au Prince		24·2	13	e 5 41	+11	i 9 45	− 3	e 16·7	21·8
San Juan	E.	26·2	26	4 57	−53	i 8 16	?	9·9	27·5
	N.	26·2	26	4 58	−52	i 8 13	?	9·8	19·6
Merida		28·4	337	7 21	+69	12 12	+66	14·1	19·4
Oaxaca		28·8	320	7 42	+86	12 51	+98	15·3	18·9
Santiago		29·3	167	6 4	−17	11 24	+ 2	—	—
Vera Cruz		30·1	325	7 48	+79	13 0	?SR,	15·3	20·2
Tacubaya		32·1	319	6 36	−12	12 7	− 3	14·9	19·0
La Plata		35·2	150	7 4	−11	12 39	−19	18·7	—
Guadalajara		35·9	318	7 42	+21	13 19	+10	15·8	22·3
Rio de Janeiro	E.	38·0	122	i 7 34	− 4	13 27	−11	18·0	—
	N.	38·0	122	i 7 32	− 6	13 34	− 4	18·1	26·6
Charlottesville		43·0	0	i 8 11	− 7	i 14 40	− 8	i 19·9	21·9
Chihuahua		43·1	322	5 54	?	12 36	?	18·2	23·9
Georgetown	E.	43·9	2	e 8 26	+ 1	i 15 10	+ 9	e 22·1	—
	N.	43·9	2	i 8 23	− 2	i 15 3	+ 2	e 22·1	—
	Z.	43·9	2	i 8 21	− 4	i 15 2	+ 1	—	24·2
Cincinnati		44·5	355	e 8 28	− 2	i 15 1	− 8	20·6	23·9
St. Louis		45·0	348	i 8 26	− 7	i 15 3	−12	i 22·2	23·8
Ithaca		47·4	3	e 8 46	− 4	e 15 46	0	22·9	—
Chicago	E.	47·6	351	i 8 53	+ 2	i 15 43	− 6	19·1	22·0
	N.	47·6	351	i 8 50	− 1	—	—	23·9	21·6
Harvard		47·8	8	i 8 51	− 2	i 15 55	+ 4	e 23·4	—
Toronto	E.	48·6	359	e 9 4	+ 6	i 16 4	+ 3	21·6	27·4
	N.	48·6	359	i 8 52	− 6	i 16 11	+10	i 24·2	27·6
Tucson	E.	48·6	323	i 8 54	− 4	i 15 56	− 5	23·1	27·9
	N.	48·6	323	i 8 55	− 3	i 15 59	− 2	e 19·8	20·2
Ottawa		50·4	3	i 9 8	− 1	i 16 27	+ 3	i 22·9	28·6
Denver		51·1	335	9 23	+ 9	16 41	+ 9	23·5	28·4
Lick		58·6	320	e 10 7	+ 4	e 18 14	+ 8	—	—
	N.	58·6	320	e 10 8	+ 5	e 18 10	+ 4	—	—
Berkeley	E.	59·4	320	10 12	+ 4	e 18 15	− 1	e 30·1	—
	N.	59·4	320	10 15	+ 7	e 18 16	0	30·2	—
	Z.	59·4	320	10 7	− 1	—	—	e 30·1	—
Saskatoon		62·1	344	i 6 56	?	i 15 17	?	34·4	42·4
Spokane	E.	63·0	331	e 10 56	+24	e 19 10	+ 9	31·4	37·4
	N.	63·0	331	e 10 37	+ 5	e 19 12	+11	27·8	36·9
Victoria		66·4	329	11 2	+ 8	19 52	+10	30·7	41·4
Sitka	E.	77·3	332	e 12 5	+ 2	i 22 3	+11	e 38·2	49·1
	N.	77·3	332	e 12 16	+13	i 22 3	+11	e 38·6	49·1
San Fernando		78·5	51	i 12 17	+ 7	i 22 17	+11	37·3	52·3
Malaga		80·0	51	12 18	− 1	22 38	+15	34·4	—
Granada		80·7	51	i 12 27	+ 4	i 22 41	+10	31·6	43·4
Toledo		81·0	49	12 29	+ 4	i 22 40	+ 5	e 34·3	40·6
Almeria		81·6	51	i 12 32	+ 4	i 22 47	+ 5	34·4	63·4
Honolulu T.H.	E.	82·4	293	12 37	+ 5	22 51	+ 1	38·7	39·4
	N.	82·4	293	12 42	+10	22 54	+ 4	39·0	44·2
Alicante		83·3	50	12 54	+16	23 33	+33	e 32·6	46·5
Scoresby Sund		84·1	16	12 44	+ 1	e 23 12	+ 3	40·4	42·5
Tortosa	E.	84·7	48	12 46	0	23 13	− 3	e 38·4	52·0
	N.	84·7	48	12 44	− 2	23 18	+ 2	35·6	52·2
Bagnères		85·0	45	e 12 52	+ 4	23 19	0	e 35·4	46·4
Bidston		85·1	36	12 48	− 1	23 20	0	35·6	45·8
Stonyhurst		85·6	36	i 12 57	+ 6	i 23 15	−11	40·4	46·9
Edinburgh		85·7	33	12 54	+ 2	23 26	− 1	41·4	46·9
Le Mans		85·8	42	e 12 54	+ 2	23 24?	− 4	46·4	—
Oxford	E.	85·8	38	i 12 56	+ 4	i 23 29	+ 1	e 33·9	46·6
	N.	85·8	38	i 12 56	+ 4	i 23 23	− 5	e 35·3	59·0
Algiers		85·9	52	12 55	+ 2	23 34	+ 5	e 38·4	50·4
Barcelona		86·0	48	12 56	+ 3	23 35	+ 5	35·8	49·3
Kew		86·3	38	e 12 54	− 1	i 23 45	+12	38·3	46·7
Puy de Dôme		87·4	44	e 13 5	+ 4	23 37	− 8	e 42·4	47·5
Paris		87·6	40	e 13 0	− 3	i 23 32	−16	36·4	49·4
Uccle		89·0	39	e 13 8	− 2	e 23 41	−22	e 38·4	49·7

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Besançon		89·6	43	e 13 12	− 2	23 45	−25	36·4	46·4
De Bilt		89·7	38	13 11	− 3	e 23 41	−30	e 40·4	49·3
Neuchatel		90·2	44	i 13 13	− 4	e 23 50	−26	—	—
Moncalieri		90·5	45	13 18	− 1	23 55	−24	32·4	58·9
Strasbourg		90·9	41	13 16	− 5	e 23 54	−29	e 38·4	80·4
Bergen		91·1	29	13 6	−16	24 24?	− 1	—	48·4
Zurich		91·4	44	e 13 20	− 3	e 23 56	[+20]	—	—
Feldberg	E.	91·5	40	e 13 24	0	e 23 59	[+22]	—	51·5
	N.	91·5	40	e 13 21	− 3	e 23 18	[−19]	—	58·3
Chur		92·0	44	13 24	− 3	e 24 3	[+23]	—	—
Hohenheim		92·0	41	e 13 36	+ 9	24 22	−13	e 38·4	67·4
Ravensburg		92·1	43	13 27	− 1	24 4	−32	43·4	62·5
Apia		92·5	258	—	—	24 55	+15	44·7	50·4
Cape Town		92·6	125	13 25	− 5	24 2	−39	44·2	55·5
Hamburg	E.	92·8	37	—	—	e 24 0	−43	e 45·0	46·4
	N.	92·8	37	—	—	e 24 7	−36	e 40·7	52·4
	Z.	92·8	37	e 13 25	− 6	—	—	e 45·0	46·3
Florence		93·0	46	13 26	− 6	24 24	−21	44·4	48·4
Innsbruck	N.E.	93·3	43	e 13 36	+ 2	—	—	—	—
Jena	E.	93·6	40	e 13 36	0	e 24 24	−28	e 39·4	50·4
	N.	93·6	40	i 13 35	− 1	e 24 9	? Σ	e 45·4	51·4
	Z.	93·6	40	e 13 34	− 2	—	—	e 45·4	51·4
Rocca di Papa		93·8	49	e 13 30	− 7	e 24 13	[+22]	e 45·9	82·6
Venice		93·9	44	13 33	− 4	24 26	−29	—	—
Potsdam		94·6	38	i 13 38	− 3	e 24 14	[+19]	e 45·4	52·4
Copenhagen		94·6	35	e 13 34	− 7	24 14	[+19]	e 44·4	54·6
Lund		94·8	35	13 39	− 3	25 19	+15	—	—
Naples	N.	95·0	50	e 13 51	+ 8	e 24 19	[+22]	46·4	72·4
Pompeii		95·2	50	e 13 50	+ 6	e 24 10	[+12]	50·4	80·4
Graz		96·1	43	e 13 42	− 8	i 24 23	[+20]	41·4	58·3
Zagreb		96·4	45	e 13 44	− 7	e 24 16	[+12]	e 48·1	60·1
Vienna		96·7	42	e 13 42	−11	24 26	[+20]	e 40·4	60·4
Upsala		97·1	30	e 13 47	− 8	e 24 26	[+18]	e 46·4	54·2
Budapest		98·5	43	13 56	− 7	24 33	[+17]	49·9	66·4
Konigsberg	E.	99·1	35	e 14 2	− 4	—	—	e 45·6	56·6
	N.	99·1	35	e 14 10	+ 4	—	—	e 43·6	44·9
Wellington	E.	99·4	227	13 56	−11	i 25 14	? Σ	46·1	54·8
	N.	99·4	227	14 21	+14	25 21	? Σ	41·7	52·2
Belgrade	E.	99·5	45	e 14 4	− 4	e 24 37	[+16]	e 40·4	65·8
	N.	99·5	45	e 14 3	− 5	e 24 54	? Σ	—	—
Helsingfors		100·8	30	e 14 10	− 4	i 24 42	[+14]	48·0	—
Lemberg	E.	101·6	41	e 16 6	+108	e 28 12	+121	e 55·5	57·9
	N.	101·6	41	e 15 36	+78	e 27 48	?PS	e 56·7	59·9
Johannesburg		102·1	118	—	—	25 24?	? Σ	—	—
Pulkovo		103·5	29	14 17	−11	25 56	−33	45·4	58·2
Kucino		108·5	33	e 14 13	−38	26 8	? Σ	46·4	60·9
Helwan		109·2	60	e 14 45	− 9	26 39	? Σ	—	74·0
Yalta		109·3	44	e 17 33	?	—	—	—	—
Theodosia		109·9	43	e 17 36	?	—	—	—	—
Entebbe		110·4	90	e 13 5	−114	e 19 15	?PR_1	53·4	61·4
Makeyevka		110·9	39	14 51	−11	—	—	54·4	61·6
Ksara		112·6	55	15 10	+ 1	—	—	54·2	—
Riverview		119·5	225	i 16 28	+48	—	—	e 56·1	67·1
Sydney		119·5	225	20 12	?PR_1	30 12	?PS	60·6	62·5
Tananarive		121·3	117	—	—	26 29	?PR_2	60·2	72·9
Melbourne		121·5	219	i 20 29	?PR_1	—	—	57·6	62·6
Baku		121·5	45	e 15 47	− 3	—	—	—	—
Adelaide		127·3	218	i 21 12	?PR_1	i 33 18	?	i 53·2	77·6
Mizusawa	E.	130·9	318	19 28	[+ 7]	22 56	?	—	—
	N.	130·9	318	19 36	[+15]	22 55	?	—	—
Irkutsk		132·7	359	19 22	[− 2]	28 24	? Σ	64·4	74·9
Nagoya		135·9	317	e 19 40	[+ 8]	e 23 10	?	—	—
Osaka		137·2	318	19 17	[−17]	40 6	?SR_1	65·1	86·8
Kobe		137·4	318	i 19 37	[+ 2]	—	—	e 65·6	67·2
Sumoto		137·7	317	e 19 38	[+ 3]	e 35 38	?	e 67·6	—
Hukuoka		141·1	320	e 19 40	[− 1]	—	—	e 42·3	70·3
Nagasaki		142·0	320	e 19 47	[+ 4]	25 29	?	—	—
Zi-ka-wei		148·1	327	e 20 0	[+ 7]	—	—	67·9	82·3
Bombay		148·4	60	20 1	[+ 8]	34 1	?	80·0	97·9
Amboina		152·4	252	19 37	[−22]	—	—	78·3	83·4
Taihoku	E.	152·6	319	e 20 37	[+37]	—	—	—	—
Hyderabad		153·7	60	20 11	[+10]	24 8	?PR_1	74·5	92·0
Kodaikanal		155·1	76	19 30	[−32]	—	—	89·1	93·2
Colombo		157·9	84	20 14	[+ 8]	46 14	?	75·6	93·2

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Calcutta	N.	158·0	36	20 41	[+35]	35 27	?	—	—
Manila	E.	159·0	299	e 20 10	[+ 3]	35 52	?	74·3	79·2
	N.	159·0	299	e 20 12	[+ 5]	36 7	?	74·4	80·9
Hong Kong		159·0	327	20 19	[+12]	—	—	—	—
Phu-Lien		163·6	345	e 20 22	[+11]	—	—	78·4	97·6
Malabar		166·6	204	20 24	[+11]	i 25 25	?PR_1	38·4	83·4
Batavia		167·8	203	i 20 17	[+ 3]	—	—	70·4	—

Additional readings: La Paz iN = +4m.15s. and +5m.9s., ME = +7·9m.; T_0 = 22h.14m.39s.; epicentre 5°·4S. 78°·6W. Port au Prince i = +5m.50s. Santiago SR_1 = +12m.12s. Charlottesville iPR_1N = +9m.56s., eE = +10m.6s., PR_2N = +11m.1s., iE = +17m.54s. = SR_1 +4s., iLN = +20·4m., MN = +23·2m. Cincinnati ePR_1E = +10m.37s., eN = +11m.24s., iPS = +15m.34s., iSR_1E = +18m.4s., iSR_2E = +18m.34s. St. Louis ePE = +8m.27s., iPR_1N = +10m.15s., iN = +10m.29s., iE = +10m.35s., iPR_2N = +10m.52s., iPR_3N = +11m.8s., iN = +14m.9s., and +14m.51s., iPS = +15m.13s., iSR_1 = +18m.21s., i = +18m.51s., iSR_2E = +19m.30s., iSR_3 = +20m.3s. Ithaca e = +19m.15s. = SR_1 −1s. Chicago iPR_1N = +11m.0s., SR_1N = +18m.54s. Harvard i = +10m.58s. = PR_1 +4s., iSR_1 = +19m.31s. iSR_2 = +21m.23s.; T_0 = 22h.14m.33s. Toronto iPR_1N = PR_1E = +10m.47s., iN = +15m.21s., iE = +16m.10s.; T_0 = 22h.14m.7s. Tucson iN = +9m.42s., ePR_1E = +10m.25s., iSR_1E = +19m.50s. Ottawa PR_2N = +11m.54s., iE = +19m.26s., i = +20m.34s. = SR_1 +20s., eLN = +25·4m., MN = +30·4m.; T_0 = 22h.14m.33s. Denver i = +9m.33s., iPR_2 = +12m.21s., iSE = +16m.42s., eSR_1 = +20m.28s., iN = +22m.44s. = SR_2 +10s., iE = +22m.58s. Lick iPEN = +10m.20s., iN = +10m.36s., +11m.14s., eE = +17m.44s., eZ = +18m.27s. = PS −8s. Berkeley eE = +11m.0s., eEN = +18m.48s. = PS +2s., eE = +20m.17s., e = +22m.47s. = SR_1 −11s. Saskatoon eN = +10m.54s., SR_1N = +20m.0s., eL = +23·4m. Spokane iN = +11m.27s., i = +20m.45s. = Σ −9s., SR_1N = +23m.39s., SR_2N = +26m.27s. Victoria SN = +19m.57s.; T_0E = 22h.14m.49s.; T_0N = 22h.14m.43s. Sitka iSR_1E = +26m.27s., iSR_1N = +27m.17s., eSR_2E = +31m.11s., eSR_2N = +31m.19s. San Fernando PR_1 = +15m.32s. PR_2 = +17m.32s., PS = +23m.1s., SR_1 = +28m.27s., SR_2 = +31m.49s., SR_3 = +33m.4s., MN = +50·3m. Granada i = +14m.1s., PR_1 = +14m.50s. and +15m.30s., i = +19m.37s., iZ = +22m.50s.; epicentre 6°·2S. 77°·9W. Toledo MNW = +40·4m., MZ = +49·4m. Almeria PR_1 = +16m.4s., MZ = +47·0m. Honolulu T.H. PR_1E = +15m.44s., PSN = +23m.3is., PSE = +23m.51s., SR_1N = +25m.44s., SR_1E = +29m.39s., L_1E = +38·7m., L_2N = +39·0m. Alicante MN = +51·0m. Scoresby Sund iS = +23m.14s., PPS = +24m.42s., eE = +27m.6s., SR_1 = +29m.24s. ?, eEN = +36m.24s. ?, MN = +43·9m. Bagnères i = +12m.58s. Bidston P = +12m.57s., PR_1 = +19m.27s., S = +23m.33s., SR_1 = +26m.26s. Edinburgh i = +23m.42s., SR_1 = +29m.46s., SR_2 = +32m.34s. Oxford PR_1E = +16m.17s. Algiers PR_1 = +16m.26s. Barcelona MN = +52·8m. Kew iPZ = +12m.59s., iZ = +13m.7s., eS_cP_cS = +23m.28s., ePSE = +24m.32s., eN = +25m.4s., SR_1E = +29m.36s., MN = +39·5m., LZ = +42·8m., MZ = +47·0m. Paris iP = +13m.4s., MN = +38·4m. Uccle PR_1 = +16m.56s., SR_1 = +30m.13s., MN = +43·8m. De Bilt iZ = +13m.15s., MN = +50·6m., MZ = +51·4m. Moncalieri MN = +54·0m. Strasbourg PR_1 = +17m.11s., PR_2 = +19m.11s., PS = +24m.9s. = Σ +4s., MZ = +50·4m., MN = +61·4m. Feldberg ePR_1N = +16m.10s., eN = +20m.53s. = PR_3 −10s. Hohenheim PR_1 = +17m.16s., PR_2 = +19m.26s. Ravensburg PR_1 = +17m.52s., PR_2? = +20m.24s. Apia PR_1 = +17m.21s.; T_0 = 22h.14m.15s. Hamburg ePR_1Z = +16m.55s. Florence PR_1 = +17m.24s., PR_2 = +19m.39s., PR_3 = +22m.29s., PS = +25m.14s., SR_1 = +30m.44s., SR_2 = +38m.14s. = SR_3 +14s. Jena iPZ = +13m.39s., eN = +13m.57s., eZ = +13m.58s., iSN = +24m.13s., iN = +25m.31s., eE = +25m.39s., iE = +26m.14s., and +26m.43s., iN = +27m.5s. eE = +27m.8s. Rocca di Papa ePN = +13m.32s., ePE = +13m.34s., eS = +24m.22s., eSN = +24m.49s., iS = +24m.57s. Potsdam iE = +13m.43s., iN = +13m.56s., iPR_1 = +16m.54s., eSN = +24m.54s., ePSE = +25m.14s., e = +26m.14s. = PS +11s., and +26m.54s., eSR_1 = +30m.9s., e = +30m.44s., eN = +31m.44s. = SR_1 +14s., MN = +51·4m. Copenhagen e = +13m.37s., eEZ = +16m.48s., PR_1 = +17m.30s., eE = +22m.0s., eN = +23m.42s., i$S_cP_cP_cSEN$ = +24m.59s., iPSEZ = +26m.14s., ePSN = +26m.24s., ePPSE = +27m.0s., eEN = +30m.24s. ? SR_1 = +31m.12s., eEN = +34m.24s. ?, MN = +52·7m., MZ = +54·7m. Graz MN = +48·9m. Zagreb i = +13m.58s., eNW = +15m.56s., +17m.44s. = PR_1 −6s., +19m.6s., +21m.33s., and +21m.46s., eNE = +16m.42s., + 17m.51s. = PR_1 +1s., +20m.2s., and +23m.45s., iNE = +25m.34s., iNW = +27m.38s., eL = +41·7m., eLNW = +51·1m., MNW = +56·8m. Vienna iPZ = +13m.52s., iE = +15m.22s., PR_1 = +16m.59s., PR_2 = +19m.21s.,

Continued on next page.

iN = +21m.19s., iE = +21m.54s. = $PR_3 - 5$s., PPS = +26m.22s., iN = +27m.46s., iE = +28m.25s., SR_1 = +30m.34s., iEN = +32m.7s., SR_2? = +33m.27s., MN = +64·4m. Budapest MN = +59·4m. Konigsberg ePE? = +12m.38s., eE = +17m.16s., iEN = +18m.12s. = PR_1 +4s., eE = +20m.54s. = PR_2 +5s., e?E = +23m.9s., eN = +23m.16s., iE = +24m.36s. = [S]+17s., eN = +24m.54s. = $\Sigma - 8$s., eE = +26m.38s. = PS −16s., iEN = +27m.37s., iE = +28m.21s. and +33m.40s., iN = +35m.21s. Wellington iPR₁E = +17m.55s., iSR_1N = +32m.33s., SR_3E = +35m.48s.; T_0E = 22h.14m.54s.; T_0N = 22h.15m.37s. Belgrade eN = +18m.25s. = PR_1 +14s. Lund PR_1 = +17m.36s., ScP_cS = +24m.17s., PS = +26m.18s. Pulkovo P = +17m.50s. = [P] −9s., PR_1 = +18m.33s., ScP_cS = +24m.51s. Kucino P = +18m.6s. = [P] −11s., PR_1 = +18m.50s., ScP_cS = +24m.46s. Entebbe PR_1? = +14m.40s. = P −19s., SR_1? = +25m.30s. = [S]+18s. Makeyevka iPR_1 = +19m.27s., iPS = +29m.2s. Ksara PE = +18m.59s. = [P]+29s., PR_1E = +19m.55s., PR_3E = +22m.36s., PR_4E = +25m.46s. = [S]+26s., PSE = +29m.18s., PPSE = +30m.26s., SR_2E = +40m.18s.; T_0 = 22h.14m.48s. Riverview iPR_1 = +20m.11s. and +20m.44s., iPS = +29m.38s., and +30m.31s. = PS −8s., PPS = +32m.12s., iSR_1 = +36m.52s., SPS = +37m.12s., PPSS = +37m.32s., eN = +50m.6s., and +50m.24s., eE = +50m.30s., +50m.49s., and +51m.16s., MZ = +66·4m., MN = +67·3m. Sydney SR_1 = +37m.0s. Tananarive PR_1 = +20m.50s., PR_2 = +23m.17s. PS = +31m.2s., PPS = +32m.6s., SPS = +37m.17s. = SR_1 +14s., SR_2 = +43m.17s., SR_3 = +46m.21s., LN = +57·8m., MN = +65·8m. Melbourne i = +23m.39s. = PR_3 −18s., +30m.24s. = PS −35s., and +35m.24s. Baku P = +19m.26s. = [P]+29s., ePR_1 = +20m.47s. Irkutsk PR_1 = +21m.54s. Adelaide i = +38m.24s. = SR_1 +7s., and +42m.23s., MN = +66·2m. Osaka MN = +86·9m. Kobe PR_1 = +20m.12s., e = +41m.1s., MZ = +66·6m MN = +68·2m. Sumoto e = +51m.38s. = SR_3 +32s. Amboina i = +19m.50s. and +32m.27s. Hyderabad S = +39m.28s. Colombo PR_1 = +24m.29s., SR_1 = +61m.34s. Manila iPR_1E = +21m.33s., iPR_3E +22m.55s., iPR_2E = +27m.57s. Phu-Lien MN = +100·8m. Malabar i = +25m.25s. = PR_1 +9s. Batavia iZ = +20m.22s., iE = +20m.24s., iN = +20m.38s., i = +20m.58s., and +26m.7s., iN = +32m.1s. = Σ +11s.

May 14d. Readings also at 0h. (Copenhagen and Pulkovo), 2h. (La Plata and near Kobe), 3h. (Riverview), 5h. (Uccle), 6h. (near La Paz), 10h. (near Oaxaca and Tacubaya), 16h. (Mizusawa), 17h. (Taihoku), 20h. (near Tortosa), 22h. (Almeria, Granada, and Vienna), 23h. (Rocca di Papa, Vienna, and Sucre).

May 15d. 2h. 36m. 4s. Epicentre 5°·0S. 78°·0W.

(as on 14d.).

A = +·207, B = −·974, C = −·087; D = −·978, E = −·208; G = −·018, H = +·085, K = −·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz	N.	15·1	140	e 3 44	+ 4	i 6 50	+16	7·8	11·7
Sucre		18·7	139	i 4 24	− 1	i 8 3	+ 8	9·9	—
La Plata		35·2	150	7 2	−13	12 42	−16	—	—
Rio de Janeiro	E.	38·0	122	i 7 34	− 4	13 19	−19	17·9	27·8
	N.	38·0	122	i 7 36	− 2	13 16	−22	17·8	27·3
Georgetown	Z.	43·9	2	i 8 28	+ 3	i 15 3	+ 2	—	27·0
St. Louis		45·0	348	e 8 22	−11	e 14 58	−17	—	—
Ithaca		47·4	3	8 47	− 3	15 40	− 6	—	—
Harvard		47·8	8	i 8 55	+ 2	e 15 47	− 4	e 21·9	—
Tucson		48·6	323	8 48	−10	15 49	−12	23·4	—
Toronto	N.	48·6	359	e 8 51	− 7	e 15 47	−14	21·4	28·8
Ottawa		50·4	3	i 9 9	0	i 16 17	− 7	e 22·9	—
Lick	N.	58·6	320	e 7 41	?	e 14 46	?	—	—
Victoria	E.	66·4	329	10 54	0	19 44	+ 2	33·3	39·6
San Fernando		78·5	51	12 20	+10	i 22 20	+14	36·3	52·3
Malaga		80·0	51	12 29	+10	22 35	+12	—	—
Granada		80·7	51	i 12 27	+ 4	i 22 37	+ 6	35·9	46·0
Toledo		81·0	49	e 12 28	+ 3	e 22 34	− 1	e 34·6	45·2
Almeria		81·6	51	12 28	0	22 46	+ 4	36·9	44·2
Alicante		83·3	50	e 13 1	+23	e 23 16	+16	—	—
Scoresby Sund		84·1	16	12 44	+ 1	23 4	− 5	39·9	49·1

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tortosa	N.	84·7	48	e 12 48	+ 2	23 16	0	e 36·9	53·2
Stonyhurst		85·6	36	i 12 59	+ 8	23 16	−10	e 42·9	—
Edinburgh		85·7	33	12 58	+ 6	23 7	−20	44·9	49·9
Algiers		85·9	52	e 12 57	+ 4	e 23 21	− 8	e 42·9	49·9
Barcelona		86·0	48	—	—	e 23 27	− 3	—	51·7
Kew	E.	86·3	38	—	—	e 23 16	−17	42·6	45·6
	N.	86·3	38	—	—	e 23 29	− 4	42·6	47·2
	Z.	86·3	38	e 12 55	0	—	—	42·8	—
Paris		87·6	40	e 13 4	+ 1	e 23 24	[+11]	41·9	46·9
Uccle		89·0	39	e 13 7	− 3	e 23 35	[+13]	e 38·9	49·9
Besançon		89·6	43	e 13 17	+ 3	—	—	—	—
De Bilt		89·7	38	e 13 13	− 1	e 23 39	[+13]	e 43·9	49·2
Neuchatel		90·2	44	e 13 9	− 8	e 23 41	[+12]	—	—
Moncalieri		90·5	45	e 13 22	+ 3	23 42	[+11]	33·4	57·7
Strasbourg		90·9	41	e 13 18	− 3	e 23 57	? Σ	38·9	—
Zurich		91·4	44	e 13 20	− 3	e 23 53	[+17]	—	—
Feldberg	N.	91·5	40	e 13 28	+ 4	e 24 19	−10	e 30·5	50·8
Chur		92·0	44	e 13 28	+ 1	e 23 50	[+10]	—	—
Hamburg		92·8	37	e 13 26	− 5	e 23 56	[+11]	e 45·9	52·9
Rocca di Papa		93·8	49	e 13 30	− 7	—	—	e 58·8	59·8
Copenhagen		94·6	35	e 13 31	−10	e 24 6	[+11]	e 45·9	53·8
Lund		94·8	35	13 44	+ 2	(25 20)	+16	25·3	—
Naples	N.	95·0	50	e 17 49	?PR$_1$	—	—	—	—
Pompeii		95·2	50	e 17 31	?PR$_1$	e 24 16	[+18]	—	—
Zagreb		96·4	45	e 13 33	−18	e 24 6	[+ 2]	e 48·9	57·9
Vienna	Z.	96·7	42	e 13 34	−19	i 17 42	?PR$_1$	—	—
Upsala		97·1	30	—	—	e 24 13	[+ 5]	e 51·9	—
Konigsberg	E.	99·1	35	e 17 44	[+ 1]	—	—	—	50·9
Wellington	F.	99·4	227	—	—	—	—	e 46·5	—
Christchurch		100·4	224	—	—	—	—	e 21·0	25·9
Helsingfors		100·8	30	—	—	e 24 46	[+18]	52·9	—
Pulkovo		103·5	29	14 20	− 8	24 52	[+12]	48·9	57·5
Kucino		108·5	33	—	—	25 21	[+17]	54·2	60·2
Entebbe		110·4	90	—	—	—	—	—	62·9
Makeyevka		110·9	39	—	—	25 25	[+11]	50·9	65·4
Ksara	N.	112·6	55	—	—	—	—	59·3	68·3?
Riverview		119·5	225	—	—	—	—	e 56·9	65·6
Tananarive		121·3	117	—	—	—	—	63·2	68·9
Melbourne		121·5	219	—	—	—	—	e 56·9	61·4
Adelaide		127·3	218	—	—	—	—	e 59·5	66·1
Irkutsk		132·7	359	19 28	[+ 4]	28 56	? Σ	e 60·9	77·2
Bombay		148·4	60	20 7	[+14]	33 57	?	74·4	91·1
Hyderabad		153·7	60	—	—	—	—	—	91·0
Manila		159·0	299	e 20 12	[+ 5]	—	—	—	—
Phu-Lien		163·6	345	—	—	—	—	68·9	—
Batavia		167·8	203	i 21 0	?	i 30 2	?	—	—

Additional readings: La Paz iPN = +3m.50s.; T_0 = 2h.36m.0s. Georgetown PR$_1$Z = +10m.6s., SR$_1$Z = +18m.27s. St. Louis iPN = +8m.27s., iPR$_1$ = +10m.20s., iPS = +15m.11s., iSR$_1$E = +18m.18s., iSR$_1$N = +18m.22s. Ithaca e = +18m.40s. and +19m.32s. = SR$_1$ + 16s. Tucson SN = +15m.54s., SR$_1$E = +18m.44s., SR$_1$N = +18m.54s., LN = +22·8m. Ottawa PR$_1$N = +11m.8s., iE = +18m.56s., and +20m.11s. = SR$_1$ − 3s.; T_0 = 2h.36m.14s. Victoria SN = +19m.46s.; T_0 = 2h.36m.9s. San Fernando MN = +50·8m. Toledo i = +12m.35s., MNW = +58·0m. Almeria PR$_1$ = +15m.46s. Scoresby Sund MN = +45·5m. Tortosa ePE = +12m.52s. Paris iP = +13m.8s., PR$_1$ = +16m.33s. De Bilt iZ = +13m.18s., MN = +49·4m. Moncalieri MN = +55·6m. Strasbourg PR$_1$ = +17m.0s., PS? = +25m.21s. Feldberg eN = +9m.19s. and +16m.23s. Rocca di Papa eN = +13m.42s., iPE = +13m.45s., ePN = +13m.51s. Copenhagen eE = +13m.38s., PR$_1$ = +17m.20s., S$_c$P$_c$P$_c$S = +24m.46s., PS = +25m.57s., PPS = +26m.44s., SR$_1$ = +30m.56s. ?, eN = +33m.56s. ?, eLN = +40·9m., MN = +51·4m. Zagreb eNE = +13m.47s. +17m.14s., +26m.35s. = PS + 11s., and +27m.30s., eNW = +16m.26s., +17m.44s., and +24m.20s., eLNW = +52·9m. Konigsberg MN = +51·9m. Pulkovo PR$_1$ = +18m.26s. Kucino PR$_1$ = +19m.14s., PS = +28m.38s. Makeyevka PR$_1$ = +19m.27s., PS = +28m.25s. Ksara PR$_1$N = +19m.49s., PR$_2$N = +24m.57s., PR$_4$N = +25m.43s. = [S] + 23s., PSN = +29m.19s., PPSN = +30m.30s. ?, SR$_1$N = +35m.19s. ?, SR$_2$N = +43m.55s.; T_0 = 2h.35m.53s. Irkutsk iPR$_1$ = +21m.54s.

May 15d. 5h. 43m. 30s. Epicentre 54°·0S. 22°·5W. (as on 1923 June 2d.).

$A = +\cdot543$, $B = -\cdot225$, $C = -\cdot809$; $D = -\cdot383$, $E = -\cdot924$; $G = -\cdot748$, $H = +\cdot310$, $K = -\cdot588$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Plata		31·2	295	6 34	− 6	11 20	−34	14·8	—
Rio de Janeiro	E.	34·8	324	e 7 0	−11	13 0	+ 8	16·5	19·8
	N.	34·8	324	e 7 12	+ 1	12 45	− 7	16·6	19·3
Sucre		47·8	300	i 8 56	+ 3	i 15 52	+ 1	—	33·2
La Paz		51·4	299	i 9 24	+ 8	i 16 33	− 3	—	40·7
Adelaide		89·6	165	—	—	—	—	e 49·1	52·5
Riverview		92·0	175	—	—	—	—	e 36·2	55·6
San Fernando		92·4	13	—	—	—	—	—	54·4
Almeria		92·5	16	e 13 53	+23	—	—	—	52·6
Granada		92·6	15	13 51	+21	e 25·19	?PS	e 46·5	54·5
Algiers		93·4	21	—	—	26 43	+114	—	55·5
Alicante		94·3	18	—	—	—	—	e 51·4	—
Toledo	N.W.	95·2	14	—	—	—	—	e 48·4	56·9
Tortosa	N.	96·8	17	—	—	—	—	e 51·5	56·0
Ksara	N.	101·2	47	e 17 31	[−20]	—	—	55·5	—
Moncalieri		102·3	22	e 14 44	+22	25 3	[+28]	42·3	—
Kodaikanal		104·1	90	56 0	?L	—	—	(56·0)	—
Zagreb		105·0	27	e 19 12	?PR_1	—	—	e 64·5	—
Paris		105·0	17	e 19 11	?PR_1	—	—	56·5	61·5
Strasbourg		105·7	21	e 19 15	?PR_1	—	—	e 54·5	—
Kew		107·1	14	e 19 30	?PR_1	e 29 24	?	55·5	—
Uccle		107·2	19	—	—	e 29 3	?	e 42·5	—
Feldberg	N.	107·4	21	e 19 43	?PR_1	e 25 52	[+53]	—	57·2
De Bilt		108·6	19	e 19 39	?PR_1	e 29 16	?PS	e 57·5	68·2
Toronto		109·1	320	—	—	e 25 30?	[+24]	59·5	—
Ottawa		109·2	323	—	—	e 25 30	[+23]	e 54·5	—
Hamburg		110·9	20	—	—	—	—	e 61·5	70·5
Edinburgh		111·0	11	—	—	—	—	e 60·5	—
Baku		112·9	51	e 20 44	?PR_1	e 26 12	[+50]	59·4	72·2
Copenhagen		113·4	21	e 20 14	?PR_1	30 0	?PS	56·5	66·4
Lund		113·5	21	—	—	29 30?	?PS	—	—
Makeyevka		114·1	40	e 20 34	?PR_1	e 26 6	[+40]	65·5	89·6
Konigsberg		114·5	25	—	—	—	—	e 66·5	—
Kucino		120·4	35	e 21 12	?PR_1	e 43 54	?SR_2	—	—
Pulkovo		121·3	28	i 19 29	[+33]	e 26 33	?PR_2	61·5	70·1
Scoresby Sund		124·5	0	22 30?	?	26 42	?	62·5	—
Ekaterinburg		129·7	44	e 19 51	[+34]	—	—	67·5	80·9
Irkutsk		148·8	70	e 20 26	[+32]	—	—	80·5	105·7

Additional readings: La Paz iSN = +16m.31s., MN = +37·6m. San Fernando eP = +5h.37m.38s., MN = +52·9m. Granada i = +20m.23s. Zagreb eNW = +58m.30s. ? Feldberg eN = +29m.3s. = PS + 34s. De Bilt MN = +62·3m., MZ = +62·4m. Ottawa eN = +43m.48s. = SR_2 + 44s. Baku e = +30m.13s. Copenhagen ePR$_1$N = +22m.30s. ? = PR_2 − 18s., ePR$_2$EN = +26m.6s. = Σ − 28s., PS = +35m.30s. ? = SR_1 + 6s., SR_1 = +40m.30s. ? = SR_2 − 15s., SR_2 = +47m.30s. ?, MN = +65·6m. Makeyevka e = +30m.12s. = PS + 19s. Pulkovo i = +21m.9s. = PR_1 + 36s. Scoresby Sund eN = +31m.24s. = PS − 5s. Ekaterinburg e = +22m.14s., e = +23m.19s. Irkutsk e = +24m.20s., e = +39m.10s.

May 15d. 14h. 3m. 22s. Epicentre 46°·5N. 13°·0E. (as on 1928 Mar. 29d.).

$A = +\cdot671$, $B = +\cdot155$, $C = +\cdot725$; $D = +\cdot225$, $E = -\cdot974$; $G = +\cdot707$, $H = +\cdot163$, $K = -\cdot688$.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Laibach	1·1	113	e 0 16	− 1	0 32	+ 1	—	—
Innsbruck	1·4	305	e 0 14	− 7	i 0 32	− 7	i 0·6	—
Zagreb	2·2	108	e 0 35	+ 1	i 1 0	0	—	—
Chur	2·4	278	i 0 38	+ 1	i 1 9	+ 3	—	—
Ravensburg	2·7	299	0 48	+ 6	1 1	−13	1·2	1·4
Vienna	2·9	52	e 0 52	+ 7	1 21	+ 1	i 1·5	1·7
Zurich	3·2	288	i 0 46	− 4	i 1 34	+ 6	—	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Moncalieri		4·0	249	e 1 30	+28	2 13	+23	(2·2)	—
Strasbourg		4·1	302	e 1 26	+22	e 2 6	+13	(e 2·1)	—
Neuchatel		4·1	278	i 0 52	−12	i 1 48	− 5	—	—
Jena	E.	4·5	348	e 1 8	− 2	e 2 10	+ 6	e 2·3	2·9
Rocca di Papa		4·7	183	e 1 44	+31	e 2 14	+ 5	i 2·5	2·7
Feldberg	N.	4·8	322	—	—	—	—	e 2·4	3·2
Besançon		4·9	280	—	—	e 2 5	− 9	—	—
Konigsberg	N.	9·6	27	—	—	—	—	e 12·6	—

Additional readings and notes: Laibach e = +18s. Innsbruck PR_1NE = +24s. Zagreb iNW = +1m.4s., iNE = +1m.8s., i = +1m.10s. Ravensburg MN = +1·5m. Vienna PR_1 = +1m.1s. Zurich iP* = +52s., P = +56s. Moncalieri first reading is given simply as e. Neuchatel iP = +1m.7s. Rocca di Papa readings are given without phase.

May 15d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were record at La Paz :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	35	44	6	9	40	13	46	12
2	9	26	6	32	1	14	14	46
*2	39	48	6	40	1	14	23	46
2	58	30	7	31	22	14	30	37
3	11	53	7	33	24	15	10	1
3	38	13	8	12	1	17	6	4
3	52	11	9	17	21	19	16	0
3	54	55	10	22	6	19	40	51
4	20	12	10	42	43	20	38	44
4	55	1	10	48	37	20	48	56
4	59	19	11	50	17	22	15	26
5	4	56	12	11	22	22	17	48
5	14	35	12	28	6	23	12	25
6	1	17	13	25	1			

at Sucre :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
*2	40	28	4	21	4	14	31	14

* Separately computed.

May 15d. Readings also at 0h. (Sucre), 2h. (Graz), 4h. (Sucre and La Paz), 7h. (La Paz (2)), 8h. (Ottawa), 9h. (Manila), 11h. (Ekaterinburg and Tashkent), 12h. (near Amboina), 14h. (Sucre, Granada, and Rio de Janeiro), 15h. (Almeria and Copenhagen), 18h. (near Tacubaya, Merida, Oaxaca, and Vera Cruz), 21h. (Rio de Janeiro, Suva, La Paz, Besançon, Strasbourg near Chur, Zurich, and Neuchatel), 22h. (Christchurch and La Paz), 23h. (Florence, Granada, La Paz (2), and La Plata).

May 16d. 5h. 13m. 6s. Epicentre 49°·3N. 179°·3W.

A = −·652, B = −·008, C = +·758; D = −·012, E = +1·000; G = −·758, H = −·009, K = −·652.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Honolulu T.H.	N.	32·8	142	—	—	—	—	e 16·6	—
Irkutsk		46·1	305	8 31	−10	i 15 23	− 6	21·9	—
Scoresby Sund		59·1	9	10 6	0	18 12	0	e 30·9	—
St. Louis	E.	61·2	64	e 10 21	+ 1	e 18 38	0	—	—
	N.	61·2	64	e 10 19	− 1	e 18 36	− 2	—	—
Ekaterinburg		62·9	329	e 10 37	+ 6	i 19 7	+ 7	27·9	33·4
Toronto	N.	63·7	53	—	—	i 19 12	+ 3	33·9	—
Ottawa		64·4	50	e 10 42	+ 1	e 19 18	0	e 29·9	—
Georgetown	Z.	68·3	55	11 7	+ 1	20 16	+10	—	44·8
Pulkovo		68·3	345	11 7	+ 1	20 4	− 2	32·9	40·2
Kucino		70·5	340	11 19	− 1	20 31	− 1	35·3	39·2
Copenhagen		74·5	354	e 11 45	− 1	e 21 18	− 2	35·9	—
Lund		74·5	354	—	—	—	—	40·9	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Makeyevka		77·5	336	—	—	e 21 54	− 1	35·9	41·8
De Bilt		78·6	357	e 12 13	+ 2	e 22 3	− 4	e 37·9	—
Feldberg	N.	80·2	355	—	—	e 22 22	− 3	e 40·2	53·1
Baku		80·4	324	i 12 22	+ 1	22 31	+ 3	39·4	—
Zagreb		84·0	350	e 12 24	−18	e 22 54?	[+ 4]	—	—
Rocca di Papa		88·3	351	e 12 55	−12	(23 30)	[+13]	23·5	—
Granada		93·4	4	i 25 48	?PS	—	—	e 46·1	50·6

Additional readings: Honolulu T.H. e = +14m.3s. =SR_1 −5s. Scoresby Sund PR_2 = +13m.48s., eLN = +28·9m. Copenhagen SR_1 = +25m.54s. ? Rocca di Papa eZ = +12m.59s., eE = +13m.22s.

May 16d. 7h. 56m. 42s. Epicentre 5°·0S. 78°·0W. (as on 15d. 2h.).

A = +·207, B = −·974, C = −·087; D = −·978, E = −·208.
G = −·018, H = +·085, K = −·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		15·1	140	e 3 45	+ 5	i 6 43	+ 9	7·5	9·5
Sucre		18·7	139	i 4 27	+ 2	i 8 1	+ 6	9·6	11·7
La Plata		35·2	150	—	—	—	—	19·3	—
Rio de Janeiro		38·0	122	e 13 18	?S	(e 13 18)	−20	e 20·3	—
Georgetown	Z.	43·9	2	i 8 18	− 7	14 45	−16	e 18·7	26·7
St. Louis		45·0	348	i 8 23	−10	e 14 55	−20	—	—
Toronto	N.	48·6	359	—	—	e 15 41	−20	25·9	—
Tucson		48·6	323	e 8 52	− 6	—	—	—	—
Ottawa		50·4	3	e 9 3	− 6	e 16 18	− 6	e 22·8	—
Granada		80·7	51	12 19	− 4	i 22 36	+ 5	e 41·3	43·8
Scoresby Sund		84·1	16	e 12 18?	−25	23 1	− 8	38·3	—
Kew		86·3	38	e 12 54	− 1	e 23 30	− 3	42·3	45·3
Uccle		89·0	39	—	—	e 23 32	[+10]	e 43·3	—
De Bilt		89·7	38	e 13 12	− 2	e 23 30	[+ 4]	e 43·3	49·4
Strasbourg		90·9	41	—	—	e 23 18?	[−15]	45·3	—
Feldberg	N.	91·5	40	e 18 13	?	e 23 24	[−13]	44·7	52·6
Rocca di Papa		93·8	49	e 13 32	− 5	e 24 17	? Σ	e 51·0	54·1
Copenhagen		94·6	35	e 13 36	− 5	e 24 3	[+ 8]	43·3	54·4
Wellington	E.	99·4	227	—	—	—	—	e 46·3	—
Entebbe		110·4	90	—	—	—	—	—	67·3
Makeyevka		110·9	39	—	—	e 25 14	[0]	54·6	64·9
Ekaterinburg		118·8	25	—	—	e 30 6	?PS	48·3	68·6
Irkutsk		132·7	359	e 21 44	?PR_1	e 22 48	?	e 72·3	—

Additional readings: La Paz iPN = +3m.48s., iPE = +3m.49s., MN = +10·1m. Georgetown PR_1Z = +9m.49s. St. Louis iSE = +14m.58s., eE = +18m.14s. =SR_1 −16s., eN = +18m.36s. =SR_1 +6s. Ottawa eN = +20m.18s. =SR_1 +4s.: T_3 = 7h.56m.39s. Scoresby Sund PS = +24m.12s., SR_1 = +29m.0s. De Bilt MZ = +49·2m., MN = +49·8m. Feldberg eN = +24m.33s. =S +14s. Rocca di Papa ePN = +13m.43s. Copenhagen ePSZ = +25m.54s., SR_1 = +31m.18s. ? Wellington eLN = +47·6m. Makeyevka e = +34m.48s. =SR_1 −6s. Irkutsk readings are given as e simply.

ALTERNATIVE SOLUTION.

May 16d. 7h. 56m. 42s. Epicentre 4°·0S. 77°·5W.

A = +·216, B = −·974, C = −·070; D = −·976, E = −·216;
G = −·015, H = +·068, K = −·998.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		15·5	144	e 3 45	− 1	i 6 43	− 1	7·5	9·5
Sucre		19·2	142	i 4 27	− 4	i 8 1	− 5	9·6	11·7
Rio de Janeiro		38·1	124	e 13 18	?S	(e 13 18)	−21	e 20·3	—
Georgetown	Z.	42·9	1	i 8 18	+ 1	14 45	− 2	e 18·7	26·7
St. Louis		44·2	347	i 8 23	− 4	e 14 55	−10	—	—
Toronto	N.	47·7	358	—	—	e 15 41	− 9	25·9	—
Tucson		48·2	322	e 8 52	− 3	—	—	—	—
Ottawa		49·4	2	e 9 3	0	e 16 18	+ 7	e 22·8	—
Granada		79·7	51	12 19	+ 2	i 22 36	+16	e 41·3	43·8
Scoresby Sund		83·0	16	e 12 18?	−16	23 1	+ 4	38·3	—
Kew		85·2	38	e 12 54	+ 5	e 23 30	+ 9	42·3	45·3
Uccle		88·0	39	—	—	e 23 32	−20	e 43·3	—
De Bilt		88·7	38	e 13 12	+ 3	e 23 30	[+10]	e 43·3	49·4

May 16d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were recorded at La Paz as follows :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	46	39	10	1	34	15	28	41
2	45	59	10	25	12	15	41	43
3	53	48	12	37	0	17	27	36
4	11	5	13	33	1	18	0	1
5	56	4	14	5	11	21	36	54
*8	0	27	14	51	53			

* Separately computed.

May 16d. Readings also at 1h. and 2h. (La Paz), 3h. (Belgrade, Theodosia, Yalta, Zagreb, and La Paz), 4h. (La Plata), 8h. (near Theodosia and Yalta), 10h. (Ottawa and Rio de Janeiro), 11h. (Almeria (2) and Granada), 18h. (near La Paz), 22h. (Tucson).

May 17d. 10h. 53m. 30s. Epicentre 11°·4S. 74°·5W. (given by Sucre).

A = +·262, B = −·945, C = −·198 ; D = −·964, E = −·267 ; G = −·053, H = +·190, K = −·980.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		8·0	130	i 1 24	−37	i 2 33	−64	2·6	3·0
Sucre		11·7	131	i 2 59	+ 4	i 5 19	+ 7	6·2	6·4
La Plata		27·9	150	5 30	−37	9 48	−69	14·1	—
Georgetown	Z.	50·5	357	e 9 5	− 5	—	—	i 29·2	36·0
St. Louis		52·1	346	e 9 0	−21	e 16 54	+ 9	e 26·5	33·5
Toronto	N.	55·2	356	—	—	e 24 30?	?SR_2	33·5	—
Ottawa		56·8	359	—	—	23 30?	?SR_2	e 30·5	—
Spokane		70·3	331	—	—	—	—	e 31·3	—
Granada		82·2	50	—	—	i 34 49	?SR_2	40·5	43·5
Almeria		83·0	50	—	—	—	—	—	50·0
Scoresby Sund		89·3	15	—	—	—	—	42·5	—
Kew		89·4	37	—	—	—	—	e 44·5	—
Paris		90·3	40	—	—	e 30 30?	?SR_1	47·5	—
Uccle		91·9	39	—	—	—	—	e 45·5	—
De Bilt		92·7	37	—	—	29 30?	?	e 45·5	—
Strasbourg		93·4	41	—	—	—	—	e 31·5	—
Feldberg	N.	94·3	39	—	—	e 27 4	?	—	53·1
Copenhagen		97·7	35	—	—	24 30?	[+19]	—	—

Additional readings : La Paz i = +1m.33s., MN = +2·8m. Georgetown iZ = +21m.15s. and +23m.42s. St. Louis iN = +9m.8s. Spokane eE? = +31m.30s., eN = +38m.30s., eE = +48m.30s.

May 17d. 10h. 55m. 20s. Epicentre 3°·0N. 126°·0E. (as on 1925 June 3d.).

A = −·587, B = +·808, C = +·052 ; D = +·809, E = +·588 ; G = −·031, H = +·042, K = −·999.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		7·0	162	i 1 52	+ 6	i 3 10	0	—	—
Manila		12·6	337	e 3 45	+38	—	—	i 6·2	—
Batavia		21·2	244	i 4 53	− 2	i 8 53	+ 5	13·7	—
Hong Kong		22·5	330	5 20	+ 9	9 49	+34	—	—
Phu-Lien		26·0	315	5 50	+ 2	—	—	—	—
Kobe		32·8	13	e 6 52	− 3	—	—	—	—
Osaka		32·9	15	e 5 52	−64	—	—	13·2	19·0
Nagoya		33·8	16	e 7 0	− 3	—	—	—	—
Mizusawa	E.	38·7	21	7 40	− 4	—	—	—	—
Riverview		43·8	149	—	—	e 16 52	?	e 21·8	29·1
Irkutsk		52·5	344	i 9 30	+ 7	—	—	e 25·7	—
Tashkent		63·5	315	i 10 46	+11	i 19 30	+23	e 28·7	38·6
Ekaterinburg		74·2	329	i 11 54	+11	21 27	+11	31·7	43·7
Baku		77·5	312	i 12 11	+ 7	22 5	+10	40·2	—

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		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Kucino		86·5	326	12 52	− 4	23 16	[+10]	44·3	53·0
Makeyevka		86·5	319	e 12 57	+ 1	23 20	[+14]	44·4	53·2
Ksara		88·4	304	13 5	− 2	23 49	− 7	—	—
Pulkovo		90·3	330	13 12	− 6	24 8	− 9	49·7	54·4
Kew		109·1	329	—	—	—	—	e 68·7	—
Granada		118·4	316	—	—	—	—	e 66·7	73·2
Ottawa	N.	127·9	19	—	—	—	—	e 81·1	81·3
Toronto		128·1	22	—	—	—	—	e 80·0	—

Additional readings: Amboina iE = +3m.16s. Batavia i = +5m.45s. Osaka MN = +15·0m. Riverview MN = +28·4m. Irkutsk e = +13m.2s., +14m.3s., and +15m.36s. Kucino eSR$_1$ = +29m.10s. Pulkovo S$_c$P$_c$S = +23m.44s. = [S] +14s.

May 17d. 16h. 55m. 54s. Epicentre 34°·8N. 140°·2E.

A = −·631, B = +·526, C = +·571; D = +·640, E = +·768; G = −·438, H = +·365, K = −·821.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagoya		2·7	278	e 0 43	+ 1	(1 17)	+ 3	1·3	1·9
Osaka		3·9	270	1 0	− 1	(1 47)	0	1·8	3·1
Kobe		4·1	270	1 4	0	(1 52)	− 1	1·9	—
Sumoto		4·4	265	i 1 5	− 3	(i 1 54)	− 7	i 1·9	2·1
Toyooka		4·4	282	e 1 11	+ 3	—	—	i 2·3	—
Mizusawa	E.	4·4	9	—	—	2 2	+ 1	—	—

Osaka gives also MN = +2·7m.

May 17d. 22h. 39m. 10s. Epicentre 8°·2S. 152°·5E. (given by Russian stations).

A = −·878, B = +·457, C = −·148; D = +·462, E = +·887; G = +·126, H = −·066, K = −·990.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Riverview		25·6	183	e 5 8	−36	—	—	e 15·1	16·7
Zi-ka-wei	Z.	49·4	325	e 8 56	− 7	16 8	− 3	23·5	24·5
Irkutsk		73·1	332	11 44	+ 7	21 12	+ 9	35·8	—
Tashkent		90·4	312	e 13 21	+ 3	23 52	[+22]	38·8	49·6
Ekaterinburg		97·9	327	—	—	e 24 13	[+ 1]	47·8	—
Baku		104·9	310	—	—	—	—	e 49·3	—
Makeyevka		112·4	320	—	—	e 28 56	?PS	58·8	—
Pulkovo		112·9	335	e 19 40	?PR$_1$	e 28 56	?PS	59·8	66·0
St. Louis	N.	116·3	51	e 15 5	−21	e 20 40	?PR$_1$	—	23·2
Copenhagen		123·1	334	—	—	—	—	61·8	—
Ottawa		124·4	38	—	—	—	—	e 60·8	—
Georgetown	Z.	126·1	46	—	—	—	—	69·2	—
Feldberg	N.	128·5	331	—	—	—	—	—	75·8
De Bilt		128·7	334	—	—	—	—	e 65·8	—

Additional readings and note: Riverview MN = +17·8m. Pulkovo readings are given as e's. St. Louis eE = +15m.10s. Georgetown eZ = +64m.42s

May 17d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were recorded at La Paz as follows:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
0	6	53	1	36	21	21	43	58
1	3	41	2	17	38			

May 17d. Readings also at 4h., 5h., 8h. (2), 9h., and 10h. (2) (La Paz), 11h. (La Plata (2)), 14h. (Feldberg), 19h. (Nagoya), 21h. and 22h. (La Paz).

May 18d. 2h. 14m. 8s. Epicentre 52°·0N. 178°·0W. (as on 1924 Aug. 13d.).

A = −·615, B = −·021, C = +·788; D = −·035, E = +·999; G = −·788, H = −·028, K = −·616.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Irkutsk		45·3	305	8 16	−19	—	—	21·9	—
Scoresby Sund		56·3	10	—	—	17 52?	+14	30·9	41·4
St. Louis		59·3	67	e 10 7	0	e 18 11	− 4	27·9	33·9
Ekaterinburg		61·0	329	e 10 26	+ 7	e 18 37	+ 1	30·9	38·4
Ottawa		62·0	51	—	—	18 52?	+ 4	e 29·9	—
Pulkovo		66·0	345	i 11 2	+11	19 58	+21	34·9	46·4
Georgetown	Z.	66·1	58	e 10 58	+ 6	e 21 1	[+19]	41·0	43·9
Tashkent		70·0	313	i 11 14	− 3	20 26	0	e 33·9	44·5
Copenhagen		71·9	355	11 29	0	20 52	+ 3	33·9	—
Makeyevka		75·4	337	—	—	e 21 22	− 8	38·0	49·9
De Bilt		75·8	357	—	—	e 22 34	? Σ	e 46·9	—
Feldberg	N.	77·6	356	—	—	—	—	e 39·9	48·5
Baku		78·7	325	e 12 5	− 6	e 22 9	+ 1	40·4	51·8
Granada		90·7	5	—	—	—	—	e 48·9	60·5
Almeria		91·0	4	—	—	—	—	—	56·0

Additional readings: Scoresby Sund eN = +21m.52s. ? = SR_1 − 12s. St. Louis eN = +25m.13s. = SR_2 + 18s., MN = +32·9m. Ekaterinburg e = +14m.13s. = PR_2 − 3s. Makeyevka e = +30m.16s. = SR_2 − 1s.

May 18d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were recorded at La Paz:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
6	7	53	17	28	10	22	23	40
16	21	47	18	2	45			

at Sucre:—

h.	m.	s.	h.	m.	s.
18	3	26	22	24	19

May 18d. Readings also at 0h. (La Paz and Nagoya), 2h. (near Tacubaya and Oaxaca), 3h. (Baku, Ekaterinburg, Makeyevka, Pulkovo, Tashkent, Scoresby Sund, Copenhagen, Georgetown, and St. Louis), 4h. (Feldberg and Toronto), 5h. (Baku and Ekaterinburg), 6h. (Taihoku), 7h. (Rocca di Papa), 8h. (Rocca di Papa (2) and La Paz), 9h. (Baku, Irkutsk, and Tashkent), 10h. (Amboina and Ekaterinburg), 12h. (Manila), 13h. (Zagreb), 15h. (Irkutsk, Kucino, Copenhagen, and Rocca di Papa (2)), 16h. (Baku and Ekaterinburg), 17h. (Ekaterinburg, Pulkovo, Theodosia, and Zagreb), 18h. (Baku, Ekaterinburg, Kucino, Copenhagen (2), Feldberg, De Bilt, Uccle, and Sucre), 19h. and 20h. (near Sumoto), 22h. (La Paz and Sucre), 23h. (Baku, Ekaterinburg, Pulkovo, Tashkent, and De Bilt).

May 19d. 3h. 28m. 36s. Epicentre 13°·0N. 93°·0E.

A = −·051, B = +·973, C = +·225; D = +·999, E = +·052; G = −·012, H = +·225, K = −·974.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Calcutta	E.	10·5	336	2 47	+10	4 54	+11	—	—
	N.	10·5	336	2 48	+11	4 52	+ 9	—	—
Colombo		14·3	246	3 10	−20	5 54	−21	7·1	10·0
Phu-Lien		15·1	57	e 3 51	+11	e 6 45	+11	—	—
Kodaikanal		15·5	262	5 0	+14	—	—	8·9	10·7
Bombay		20·2	290	4 38	− 5	8 26	− 1	10·7	12·8
Hong Kong		22·2	62	9 9	?S	(9 9)	0	—	15·9
Batavia		23·6	144	e 7 6	?	—	—	—	—

Continued on next page.

		Δ °	Az. °	P. m. s.	O−C. s.	S. m. s.	O−C. s.	L. m.	M. m.
Tashkent		35·0	330	e 7 56	+43	i 13 55	+60	—	21·7
Irkutsk		40·3	11	e 7 44	−13	e 14 2	− 9	16·8	—
Baku		46·6	314	e 8 48	+ 4	e 15 46	+10	23·4	33·3
Ekaterinburg		50·3	339	8 54?	−15	16 5?	−18	23·9	—
Makeyevka		57·2	321	e 9 48	− 5	e 17 48	− 1	29·4	36·6
Theodosia		58·2	317	e 9 56	− 4	(e 17 54)	− 7	—	—
Simferopol		59·0	315	e 9 56	− 9	(e 18 1)	−10	e 18·0	—
Kucino		60·0	329	e 10 19	+ 7	18 18	− 5	33·4	39·1
Pulkovo		65·2	331	i 10 53	+ 7	19 22	− 5	35·4	44·5
Melbourne		70·3	140	—	—	—	—	e 33·4	47·7
Vienna	Z.	71·5	319	e 11 18	− 9	—	—	—	—
Riverview		72·5	134	—	—	e 24 54	?SR_1	e 34·0	36·5
Sydney		72·5	134	23 0	?	—	—	34·2	36·9
Lund		73·6	325	—	—	21 28	+19	—	—
Copenhagen		74·0	325	e 11 47	+ 5	e 21 8	− 6	40·4	—
Innsbruck		74·8	317	10 54	+ 6	—	—	—	—
Hamburg	Z.	75·5	323	—	—	—	—	e 36·3	—
Chur		76·1	316	i 11 47	− 9	i 11 49	?	—	—
Feldberg		76·6	320	—	—	e 21 30	−14	—	44·8
Zurich		76·7	316	i 12 1	+ 2	—	—	—	—
Strasbourg		77·2	319	e 11 24?	−38	—	—	e 36·4	—
Neuchatel		77·9	316	e 11 55	−11	—	—	—	—
De Bilt		78·5	322	e 12 14	+ 4	e 22 0	− 6	e 43·4	—
Uccle		79·1	320	—	—	e 21 24?	−49	e 43·4	—
Paris		80·6	319	i 12 25	+ 2	—	—	38·4	—
Kew		81·9	322	e 12 31	+ 1	—	—	45·4	—
Scoresby Sund	N.	85·7	344	—	—	e 23 18	− 9	e 35·4	—
Suva	E.	89·7	110	e 19 0	?PR_2	i 23 24	[− 2]	—	24·4
	N.	89·7	110	18 48	?PR_2	i 20 54	?PR_2	—	22·7
Wellington	E.	92·6	133	—	—	e 27 21	?	—	—
Apia		98·0	102	19 1	?	—	—	—	25·6
Ottawa		120·7	350	—	—	e 45 24?	?	e 61·4	—
Toronto		122·9	354	—	—	—	—	—	70·8
Georgetown	Z.	127·3	349	—	—	e 40 11	?	e 70·7	79·1
St. Louis		128·3	3	—	—	e 41 36	?	65·4	68·1
La Paz		161·4	257	21 19	[+70]	—	—	—	—

Additional readings: Tashkent i = +8m.3s. and +8m.32s. Irkutsk e = +9m.43s. = PR_1 +18s. Theodosia and Simferopol give their readings as P's of separate shocks. Riverview MN = +37·4m. Copenhagen ePR_2Z = +14m.36s., ePS = +21m.28s., SR_1 = +25m.24s. ?, SR_2 = +29m.24s. ?, eE = +34m.24s. ? Kew eZ = +36m.29s. St. Louis eN = +47m.14s. and +60m.14s.

May 19d. 6h. 32m. 30s. Epicentre 45°·5N. 13°·0E.

A = +·683, B = +·158, C = +·713; D = +·225, E = −·974; G = +·695, H = +·160, K = −·701.

Vienna gives epicentre 46°20′N. 10°20′E., but the Δs for this position will only then fit the observed readings for the two most distant stations, Vienna and Zagreb.

	Δ °	Az. °	P. m. s.	O−C. s.	S. m. s.	O−C. s.	L. m.	M. m.
Venice	0·5	262	e 0 25	+17	—	—	—	—
Innsbruck	2·1	328	e 0 24	− 9	(i 0 42)	−16	i 0·7	0·8
Zagreb	2·1	81	e 0 46	+13	i 1 7	+ 9	—	—
Chur	2·8	299	e 0 44	0	i 1 18	+ 1	—	—
Vienna	3·6	38	e 0 55	− 1	1 48	+ 9	—	1·8
Neuchatel	4·4	292	i 1 6	− 2	1 2 14	+13	—	—
Strasbourg	4·7	314	1 20	+ 7	2 16	+ 7	—	—
Besançon	5·2	291	—	—	e 2 12	−10	—	—

Additional readings: Chur i = +46s. Vienna PZ = +1m.1s., P_gS = +1m.26s.

May 19d. 9h. 32m. 0s. Epicentre 36°·2N. 142°·2E. (as on 1923 May 7d.).

$A = -\cdot638$, $B = +\cdot495$, $C = +\cdot591$; $D = +\cdot613$, $E = +\cdot790$; $G = -\cdot467$, $H = +\cdot362$, $K = -\cdot807$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	3·0	344	0 55	+ 8	1 23	0	—	—
	N.	3·0	344	0 53	+ 6	1 19	− 4	—	—
Nagoya		4·4	258	e 1 6	− 2	(1 47)	−14	1·8	2·3
Osaka		5·7	256	1 39	+11	(2 43)	+ 7	2·7	3·9
Kobe		5·9	257	e 1 26	− 5	—	—	3·1	3·5
Toyooka		6·0	265	i 1 31	− 1	(2 41)	− 3	2·7	3·5
Sumoto		6·2	255	e 1 34	− 1	(i 2 58)	+ 9	i 3·0	3·7
Hukuoka		10·0	258	2 26	− 4	—	—	5·0	—
Ootomari		10·5	2	e 2 47	+10	—	—	—	7·8
Nagasaki		10·8	254	e 2 50	+ 9	4 57	+ 7	5·9	6·8
Hong Kong		28·0	248	5 50	−18	10 28	−31	13·9	16·0
Manila		28·8	227	e 6 45	+29	(e 12 0)	+47	e 12·0	—
Irkutsk		31·1	314	e 6 18	−21	11 44	− 9	16·0	19·3
Phu-Lien		34·6	255	e 6 50	−20	—	—	15·0	—
Tashkent		55·4	300	i 9 41	− 1	i 17 12	−14	e 27·0	33·9
Ekaterinburg		56·0	320	i 9 43	− 3	i 17 26	− 8	25·0	35·3
Bombay		62·6	275	e 10 0?	−29	—	—	—	—
Victoria	E.	66·5	47	19 56	?S	(19 56)	+12	34·4	47·1
Kucino		67·9	325	—	—	19 56	− 5	31·3	42·0
Pulkovo		69·0	330	11 9	− 2	20 9	− 5	34·0	43·3
Baku		69·1	307	11 10	− 2	20 4	−11	33·5	44·6
Riverview		70·6	173	—	—	e 20 24	− 9	e 33·0	39·5
Makeyevka		72·2	319	11 27	− 4	e 21 9	+17	29·3	45·6
Scoresby Sund		72·8	356	—	—	—	—	36·0	—
Upsala		73·8	335	—	—	e 21 26	+14	e 39·0	—
Theodosia		75·4	318	—	—	e 21 41	+11	—	—
Simferopol		76·1	318	e 11 48	− 8	e 21 41	+ 3	—	—
Lund		78·4	335	12 6	− 3	22 20	+15	41·0	—
Copenhagen		78·6	335	e 12 5	− 6	e 22 0	− 7	39·0	43·0
Hamburg		81·2	334	e 12 20	− 6	e 22 52	+15	e 39·0	51·0
Budapest		82·1	325	—	—	—	—	e 43·5	52·2
Vienna	Z.	82·8	329	i 12 42	+ 7	—	—	—	—
Edinburgh		83·3	342	—	—	i 23 18	+18	45·0	—
Graz		84·0	328	—	—	—	—	e 45·0	54·0
De Bilt		84·1	335	12 37	− 6	e 22 57	−12	e 40·0	49·9
Feldberg	N.	84·5	333	—	—	e 22 56	−18	e 42·6	46·3
Zagreb		84·8	326	e 12 41	− 6	e 23 23	+ 6	e 46·0	—
Stonyhurst		84·9	340	—	—	e 23 26	+ 8	e 44·7	—
Uccle		85·5	335	—	—	e 23 0?	[+ 1]	e 43·0	—
Strasbourg		86·1	332	e 11 51	−63	e 22 31	[−32]	42·0	—
Kew		86·4	340	—	—	—	—	e 41·0	55·0
Oxford	E.	86·5	340	—	—	e 23 17	[+11]	e 36·0	51·1
Paris		87·8	336	e 13 54	+50	e 23 35	−15	46·0	47·0
Besançon		87·9	333	—	—	—	—	—	55·0
Florence		88·5	327	13 1	− 7	23 41	−17	45·5	50·5
Moncalieri		89·0	330	e 11 41	?	23 59	− 4	40·7	—
Rocca di Papa		89·5	326	i 55 7	?L	—	—	(i 55·1)	—
St. Louis		90·9	40	—	—	e 23 36	[+ 3]	e 40·2	45·8
Ottawa		91·6	26	—	—	e 23 48	[+10]	e 44·0	—
Toronto	N.	91·7	30	—	—	e 24 33	+ 1	52·0	—
Georgetown	Z.	96·6	30	i 17 0?	?PR_1	—	—	e 54·4	—
Granada		100·1	334	e 17 57	?PR_1	—	—	52·4	61·6

Additional readings: Nagoya P = +1m.10s., S = +1m.29s., MZ = +5·0m. Osaka MN = +4·9m. Kobe iP = +1m.42s., MZ = +3·2m. Toyooka MN = +3·7m. Sumoto MN = +3·3m. Irkutsk PR_1 = +7m.37s., SR_1 = +13m.24s. Kucino SR_1 = +24m.12s. Copenhagen ePR_1 = +15m.5s., e = +22m.23s., ePSEZ = +22m.53s., SR_1 = +26m.54s., MN = +42·5m., MZ = +49·1m. Hamburg MNZ = +53·0m. De Bilt MN = +45·5m., MZ = +53·2m. Zagreb e = +13m.37s., +16m.17s., and +53m.48s. St. Louis eN = +24m.0s., iE = +24m.32s., e = +30m.14s. = SR_1 − 27s.

May 19d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were recorded at La Paz at:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
4	49	17	16	0	0	16	47	10

May 19d. Readings also at 0h. (De Bilt, Uccle, Strasbourg, Kew, and Copenhagen), 2h. (Ekaterinburg, Pulkovo, Irkutsk, Vienna, Zagreb, Innsbruck, Neuchatel, Zurich, Chur, Simferopol, near Theodosia, and near Mizusawa) 3h. (Tashkent and near Algiers), 4h. (Baku, De Bilt, Ekaterinburg, Feldberg, Copenhagen, Irkutsk, Makeyevka, Scoresby Sund, and Tashkent, Theodosia (2), and Simferopol (2)), 5h. (Kew, Granada, Kucino, Pulkovo, Rocca di Papa, Strasbourg, and Uccle), 6h. and 9h. (La Paz), 12h. (La Paz and Manila), 13h. (La Paz and near Sumoto), 17h. (La Paz), 20h. (Irkutsk), 21h. (Copenhagen, Ekaterinburg, Pulkovo, and Tashkent).

May 20d. 16h. 29m. 6s. Epicentre 37°·5N. 140°·0E. (as on 1927 April 24d.).

A = −·608, B = +·510, C = +·609; D = +·643, E = +·766; G = −·466, H = +·391, K = −·793.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		1·9	28	1 2	+33	1 40	+47	—	—
Nagoya		3·4	227	i 0 47	− 6	(1 23)	−11	1·4	1·8
Toyooka		4·6	247	i 1 9	− 2	(1 2 11)	+ 5	i 2·2	2·7
Osaka		4·6	233	1 8	− 3	(2 5)	− 1	2·1	2·8
Kobe		4·8	235	i 1 7	− 7	(2 8)	− 3	2·1	2·9
Sumoto		5·2	234	i 1 11	− 9	(1 2 17)	− 5	i 2·3	3·1
Hukuoka		8·7	246	2 5	− 7	(4 21)	+25	4·4	4·8
Ootomari		9·4	12	2 59	+37	—	—	5·6	—
Nagasaki		9·6	243	2 14	−10	4 0	−18	—	5·8
Zi-ka-wei		16·6	253	4 53	+53	7 9	0	—	—
Taihoku	E.	20·0	237	e 5 29	+48	(9 19)	+56	9·3	—
Hong Kong		26·9	243	—	—	—	—	—	12·7
Manila		28·5	221	e 5 23	−50	(e 12 14)	+66	e 12·2	—
Irkutsk		28·9	312	6 11	− 6	11 5	−10	14·9	19·5
Phu-Lien		33·4	250	6 32	−28	—	—	—	—
Tashkent		53·3	299	9 26	− 2	16 59	− 1	e 23·9	30·4
Bombay		60·8	272	10 18	0	18 32	− 1	e 36·4	—
Kucino		65·9	323	10 56	+ 6	19 45	+ 9	31·3	37·5
Baku		66·9	305	i 11 1	+ 4	19 58	+ 9	32·9	43·1
Pulkovo		67·0	330	i 11 4	+ 6	20 1	+11	34·9	39·9
Makeyevka		70·0	317	e 11 20	+ 3	e 20 32	+ 6	32·9	44·3
Scoresby Sund		71·3	354	i 11 32	+ 7	20 57	+15	38·9	—
Upsala		71·8	334	e 11 32	+ 4	—	—	—	—
Theodosia		73·2	315	e 11 41	+ 4	e 21 14	+10	—	—
Simferopol		74·0	315	e 11 45	+ 3	—	—	—	—
Yalta		74·2	315	e 11 42	− 1	—	—	—	—
Lund		76·4	333	11 54	− 3	21 54	+12	—	—
Copenhagen		76·7	333	12 1	+ 2	e 21 52	+ 7	37·9	48·6
Hamburg		79·2	332	e 12 14	0	—	—	e 46·9	—
Ksara	N.	79·7	306	12 16	− 1	22 16	− 4	—	—
Budapest		80·2	324	e 12 14	− 6	e 22 24	− 1	e 51·9	—
Vienna	Z.	80·7	327	i 12 22	− 1	—	—	—	—
De Bilt		82·2	334	12 30	− 1	e 22 50	+ 2	e 41·9	—
Feldberg	N.	82·5	331	—	—	e 23 24	?PS	e 45·0	62·8
Zagreb		82·7	325	e 12 33	− 1	e 22 54?	0	e 45·9	—
Uccle		83·5	334	i 12 37	− 2	e 23 1	− 2	e 42·9	—
Strasbourg		84·1	330	i 11 39	−64	e 22 12	−57	43·9	—
Kew		84·5	336	i 12 43	− 2	e 23 15	+ 1	40·9	—
Chur		84·8	330	e 12 40	− 7	e 22 43	[−12]	—	—
Paris		85·8	334	i 12 49	− 3	—	—	46·9	—
Florence		86·4	326	12 42	−13	—	—	—	—
Rocca di Papa	N.	87·4	324	12 54	− 7	—	—	—	—
St. Louis		91·0	37	—	—	e 24 54	+30	e 46·9	50·6
Ottawa		91·1	24	—	—	e 23 36	[+ 1]	e 39·9	—
Georgetown	Z.	96·3	29	—	—	e 34 40	?	—	—
Granada		98·1	331	i 17 51	?PR_1	e 26 28	?	54·9	62·4

Additional readings: Mizusawa SN = +1m.41s. Nagoya S = +1m.15s. Osaka MN = +3·1m. Kobe MN = +2·6m., MZ = +2·7m. Sumoto MZ = +3·3m. Scoresby Sund PR_1 = +14m.12s., PPS = +22m.12s., SR_1 = +25m.12s. Copenhagen ePR_1NZ = +15m.0s., ePSNZ = +22m.21s., SR_1 = +26m.54s. ?, MN = +44·6m. Vienna iZ = +12m.42s., PR_1? = +15m.34s. Feldberg eN = +31m.36s. Zagreb e = +15m.33s. Rocca di Papa PE = +12m.58s., PR_1 = +16m.40s. St. Louis e = +31m.28s. = SR_1 +46s.

May 20d. 17h. 31m. 54s. (I)
17h. 58m. 28s. (II)
19h. 23m. 32s. (III)
Epicentre 37°·5N. 140°·0E.

(as at 16h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
I Mizusawa	E.	1·9	28	1 0	+31	1 41	+48	—	—
II	E.	1·9	28	—	—	1 42	+49	—	—
III	E.	1·9	28	1 0	+31	1 41	+48	—	—
I Nagoya		3·4	227	i 0 54	+ 1	(1 26)	− 8	1·4	1·8
II		3·4	227	e 0 56	+ 3	(1 25)	− 9	1·4	—
III		3·4	227	(e 0 55)	+ 2	(1 26)	− 8	1·4	(6·0)
I Toyooka		4·6	247	1 25	+14	(e 2 13)	+ 7	e 2·2	2·5
II		4·6	247	1 49	+38	—	—	—	—
III		4·6	247	i 1 16	+ 5	(i 2 17)	+11	i 2·3	2·5
I Osaka		4·6	233	1 9	− 2	(2 7)	+ 1	2·1	2·9
II		4·6	233	1 11	0	(2 7)	+ 1	2·1	3·1
III		4·6	233	1 11	0	(2 6)	0	2·1	2·8
I Kobe		4·8	235	1 10	− 4	(2 9)	− 2	2·2	3·8
II		4·8	235	1 8	− 6	(2 10)	− 1	2·2	—
III		4·8	235	1 11	− 3	(2 9)	− 2	2·2	3·4
I Sumoto		5·2	234	e 1 13	− 7	(i 2 25)	+ 3	i 2·4	—
III		5·2	234	e 0 47	−33	(i 2 6)	−16	i 2·1	—

Additional readings and note: Mizusawa III SN = +1m.43s. Nagoya III MN = (+1·8m.); all readings for Nagoya III have been increased by 1m. Osaka II MN = +3·6m., III MN = +2·9m. Kobe I MN = +2·3m., III MN = +2·3m.

May 20d. After-shocks from the epicentre 5°·0S. 78°·0W. of May 14d. were recorded at La Paz at :—

h.	m.	s.	h.	m.	s.
0	20	42	3	43	20

May 20d. Readings also at 0h. (near Toyooka), 1h. (near Tacubaya), 4h., 5h., and 7h. (La Paz), 10h. (Baku, Irkutsk, Makeyevka, and Tashkent), 11h. (Ekaterinburg and Zi-ka-wei), 12h. (Hong Kong, Phu-Lien, and Tashkent), 13h. (Baku, Ekaterinburg, and Irkutsk), 15h. (Sucre, La Paz, and Zi-ka-wei), 16h. (near La Paz and Sucre), 20h. (near La Paz).

May 21d. 2h. 16m. 8s. Epicentre 13°·5N. 92°·5W.

A = −·042, B = −·971, C = +·233; D = −·999, E = +·044; G = −·010, H = −·233, K = −·972.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tacubaya		8·8	313	2 12	− 1	3 58	0	4·2	4·4
Tucson		25·2	321	e 5 41	+ 1	—	—	12·4	—
St. Louis		25·2	4	e 5 40	0	e 10 4	− 3	16·9	19·2
Georgetown	Z.	28·8	25	—	—	8 32	?	12·1	20·6
Ottawa		34·9	21	—	—	—	—	e 15·9	—
Scoresby Sund		70·8	20	—	—	—	—	36·9	43·7
Kew		80·8	40	—	—	—	—	e 45·9	—
Uccle		83·8	40	—	—	—	—	—	50·9
Strasbourg		86·5	41	—	—	—	—	e 48·9	—
Taihoku	E.	129·2	319	—	—	e 40 41	?	—	—

Additional readings: Tucson LN = +13·9m. Ottawa L = +20·9m.

May 21d. 17h. 2m. 25s. Epicentre 5°·0S. 78°·0W. (as on 16d.).

A = +·207, B = −·974, C = −·087; D = −·978, E = −·208; G = −·018, H = +·085, K = −·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		15·1	140	i 3 52	+12	i 6 55	+21	8·2	10·7
Sucre		18·7	139	i 4 29	+ 4	i 8 2	+ 7	9·6	14·6
Santiago		29·3	167	—	—	—	—	—	19·3
La Plata		35·2	150	6 53	−22	—	—	—	—
Georgetown	Z.	43·9	2	i 8 16	− 9	i 14 52	− 9	e 23·9	28·0
Ottawa		50·4	3	—	—	e 16 25	+ 1	e 25·6	—
Granada		80·7	51	e 12 23	0	—	—	42·6	45·6
Uccle		89·0	39	—	—	e 23 41	−22	e 47·6	—
De Bilt		89·7	38	—	—	e 24 5	− 6	e 45·6	—
Copenhagen		94·6	35	—	—	e 24 5	[+10]	47·6	—
Pulkovo		103·5	29	—	—	—	—	e 53·6	—
Yalta		109·3	44	—	—	—	—	57·6	—
Baku		121·5	45	—	—	—	—	e 60·6	—
Tashkent		133·4	34	—	—	—	—	e 63·6	77·3

Copenhagen gives also eEN = +24m.53s. =S −9s.

May 21d. Readings also at 0h. (Simferopol, Theodosia, and Yalta), 4h. (near Manila), 7h. (Simferopol, Yalta, near Batavia, and Malabar), 13h. (Georgetown and St. Louis), 14h. (La Paz, Tananarive, and Toronto), 15h. (Riverview), 19h. (La Paz), 21h. (near La Paz and near Toyooka), 22h. (La Paz).

May 22d. 13h. 22m. 33s. Epicentre 12°·0S. 125°·0E.

A = −·561, B = +·801, C = −·208; D = +·819, E = +·574; G = +·119, H = −·170, K = −·978.

Very uncertain.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Adelaide		26·1	154	e 11 5?	?S	(e 11 5?)	+41	e 19·0?	20·4?
Melbourne		31·3	149	—	—	i 11 47	− 9	i 17·5	18·8
Riverview		32·3	138	e 7 7	+16	e 11 53	−20	e 15·8	20·1
Sydney		32·3	138	13 21	?S	(e 13 21)	+68	16·8	17·8
Irkutsk		66·7	347	e 10 55	− 1	19 44	− 2	34·4	—
Tashkent		73·9	320	e 13 5	+84	i 22 40	+87	e 37·4	50·6
Ekaterinburg		86·7	331	—	—	i 23 39	+ 1	36·4	—
Baku		86·8	314	e 18 57	?PR_2	e 31 45	?	e 49·4	—
Pulkovo		102·7	329	—	—	e 28 51	+150	55·4	—
Copenhagen		112·6	325	—	—	e 29 27?	?PS	57·4	—
Feldberg	E.	116·1	320	—	—	e 40 21	?	e 64·4	70·8
De Bilt		117·6	322	—	—	—	—	e 65·4	—
Paris		120·2	320	—	—	—	—	e 75·4	—
Granada		127·7	307	—	—	—	—	e 81·4	83·4
Ottawa		142·2	22	—	—	—	—	e 59·4	—

Additional readings and notes: Adelaide i = +13m.6s., eS = +16m.25s., MN = +19·8m. Riverview MN = +19·6m. Ekaterinburg i = +24m.6s. =PS −21s. Baku and Pulkovo readings are given as e simply. Copenhagen eEN = +35m.27s.? =SR_1 +11s.; readings given without phase.

May 22d. An after-shock from the epicentre 5°·0S. 78°·0W. of May 14d. was recorded at La Paz at 19h.54m.27s.

May 22d. Readings also at 0h. (Simferopol, Theodosia, and Yalta), 1h. (near Wellington), 3h. (La Paz and near Amboina), 4h. and 6h. (La Paz), 8h. (Yalta (2) and near La Paz), 19h. (Yalta), 20h. (Nagoya (2), near Mizusawa, and Osaka), 21h. (Suva), 22h. (La Paz).

May 23d. 20h. 24m. 44s. Epicentre 30°·0S. 77°·0W. (as on 1925 June 6d.).

A = +·105, B = −·844, C = −·500.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Santiago	6·4	125	i 2 31	+53	3 28	+33	3·9	—
La Paz	15·7	33	3 46	− 2	e 6 44	− 4	7·6	9·0
La Plata	16·8	112	4 6	+ 4	—	—	7·9	—

La Paz gives epicentre 32°·3S. 72°·0W.

May 23d. 20h. 54m. 40s. Epicentre 2°·0S. 131°·0E.

A = −·656, B = +·754, C = −·035; D = +·755, E = +·656;
G = +·023, H = −·026, K = −·999.

Very rough.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		3·3	238	0 44	− 8	1 26	− 5	—	—
Manila		19·4	329	e 4 44	+10	(e 8 33)	+23	e 8·6	—
Batavia		24·5	259	e 6 20?	+47	—	—	—	—
Perth		33·2	205	14 5	?SR_1	—	—	18·5	—
Adelaide		33·7	169	—	—	e 10 5	?	e 15·8?	19·5
Riverview		37·0	151	e 10 20	?	e 12 44	−40	e 20·4	23·8
Sydney		37·0	151	15 56	?SR_1	—	—	22·9	23·7
Melbourne		38·0	162	—	—	i 13 0	−38	e 19·6	21·7
Wellington	E.	55·6	141	—	—	—	—	—	35·3
Irkutsk		58·8	341	e 10 3	− 1	18 12	+ 3	29·3	—
Tashkent		70·6	315	—	—	i 20 28	− 5	e 33·3	43·3
Ekaterinburg		81·1	329	e 12 27	+ 1	e 22 31	− 5	40·3	—
Baku		84·6	311	e 12 39	− 7	23 2	−13	47·3	—
Kucino		93·4	326	—	—	e 24 32	−17	e 55·5	—
Makeyevka		93·4	319	—	—	e 23 50	[+ 2]	—	—
Pulkovo		97·1	330	—	—	e 24 14	[+ 6]	50·3	—
Copenhagen		107·4	330	—	—	24 20?	[−39]	52·3	—
Feldberg	N.	111·8	324	—	—	—	—	—	63·9
De Bilt		112·8	326	—	—	—	—	e 58·3	—
Granada		125·5	314	—	—	—	—	e 74·3	80·3
St. Louis		127·5	40	—	—	—	—	e 51·3	77·3
La Paz		153·5	135	20 20	[+19]	—	—	—	—

Additional readings and notes: Batavia gives epicentre 3°·3S. 131°·5E. Adelaide MN = +21·3m. Melbourne i = +15m.25s. The readings for Batavia, Adelaide, Riverview, and Melbourne are given without definite phase. Tashkent e = +13m.24s. and +28m.20s. Kucino e = +23m.56s. = [S] +8s. and +27m.20s. Copenhagen eN = +33m.20s.?, eE = +40m.26s. St. Louis eN = +48m.20s.?

May 23d. Readings also at 4h. (La Paz), 5h. (Baku, Irkutsk, Kucino, Tashkent, and Tucson), 7h. (Ekaterinburg, Tashkent, near La Paz, and near Apia), 8h. (La Paz), 10h. (near Toyooka), 11h. (near La Paz), 18h. (Feldberg, La Paz, and Manila).

May 24d. 5h. 37m. 30s. Epicentre 3°·0N. 91°·0W. (as on 1926 May 5d.).

A = −·017, B = −·998, C = +·052; D = −1·000, E = +·017;
G = −·001, H = −·052, K = −·999.

Doubtful identification.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		29·8	131	i 6 23	− 3	11 35	+ 4	15·2	17·4
Sucre		33·5	131	e 6 57	− 4	—	—	17·1	20·8
Tucson	E.	34·7	330	e 8 5	+54	—	—	e 19·9	—
	N.	34·7	330	e 8 10	+59	—	—	e 20·4	—
St. Louis	E.	36·1	2	e 7 22	− 1	i 12 46	−25	e 15·5	23·5
	N.	36·1	2	i 7 25	+ 2	i 12 46	−25	e 17·5	23·5

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Georgetown	Z.	38·6	19	e 7 21	−22	14 34	+48	e 20·7	29·2
Chicago		38·9	4	e 9 54	?PR_2	e 13 24	−27	e 19·7	—
Ottawa		44·4	15	e 8 18	−11	e 14 25	−42	e 19·5	22·9
Victoria	E.	53·2	334	18 19	?	—	—	29·2	34·8
Scoresby Sund		80·3	20	—	—	22 30?	+ 3	30·5	41·1
Oxford	E.	87·5	40	—	—	—	—	—	42·5
Kew		88·1	40	—	—	—	—	e 36·5	—
Paris		90·1	41	—	—	—	—	e 40·5	—
Uccle		91·0	39	—	—	e 23 30?	[− 4]	e 37·5	—
De Bilt		91·4	38	e 14 12	+49	e 23 43	[+ 7]	e 39·5	45·3
Strasbourg		93·5	41	—	—	—	—	e 25·5	—
Feldberg	N.	93·8	40	—	—	e 24 7	[+16]	e 44·4	57·4
Copenhagen		95·0	34	—	—	e 24 6	[+ 9]	38·5	46·9
Rocca di Papa		98·1	47	e 27 48	?	—	—	—	—
Pulkovo		102·5	26	—	—	—	—	42·5	51·1
Kucino		108·1	27	—	—	e 27 30	+19	—	—
Ekaterinburg		115·9	16	—	—	29 28	?PS	53·5	61·0
Irkutsk		123·3	349	—	—	—	—	65·5	—
Baku		123·8	35	—	—	—	—	e 41·5	—
Tashkent		132·2	19	—	—	e 33 52	?	e 57·5	70·2

Additional readings: Georgetown LZ = +21·6m. Chicago eE = +16m.4s. = SR_1 −19s.; all readings are given as e simply. Ottawa eN = +9m.56s. = PR_1 −18s., e = +17m.30s. De Bilt eLN = +36·5m. Copenhagen eEN = +24m.24s. = Σ −12s. Ekaterinburg e = +35m.17s. Tashkent e = +40m.30s.

May 24d. 19h. 52m. 0s. Epicentre 82°·0N. 8°·0W.

A = +·138, B = −·019, C = +·990; D = −·139, E = −·990; G = +·981, H = −·138, K = −·139.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Scoresby Sund	11·9	203	—	—	—	—	6·0	8·3
Pulkovo	24·4	131	i 5 31	− 1	9 50	− 2	13·0	—
Copenhagen	26·9	154	8 0?	?	—	—	—	—
Kucino	29·2	124	—	—	(e 11 30)	+10	e 11·5	—
Ekaterinburg	31·1	99	e 6 42	+ 3	11 43	−10	15·0	—
Makeyevka	36·8	128	—	—	e 15 27	?SR_1	18·2	19·7
Irkutsk	41·3	59	—	—	—	—	e 22·0	—
Baku	45·7	116	—	—	—	—	e 24·0	—
Tashkent	47·4	95	—	—	—	—	e 26·0	29·2

Scoresby Sund gives also MN = +12·5m.

May 24d. An after-shock from the epicentre 5°·0S. 78°·0W. of May 14d. was recorded at La Paz at 18h.24m.28s.

May 24d. Readings also at 0h. (Toronto and near Vera Cruz), 8h. (Mizusawa), 10h. (Taihoku), 11h. (Nagoya), 17h. (Mizusawa and near La Paz).

May 25d. 10h. 35m. 20s. Epicentre 41°·1N. 20°·8E. (given by Belgrade).

A = +·704, B = +·268, C = +·657.

		Δ	P.	O−C.	S.	O−C.	M.
		°	m. s.	s.	m. s.	s.	m.
Belgrade	N.	3·7	e 0 59	+ 1	i 1 52	+10	—
Zagreb		5·9	e 0 55	−36	e 2 33	− 8	—
Florence		7·5	e 2 40?	+46	—	—	5·8
Feldberg	N.	12·5	—	—	e 5 44	+12	6·7

Belgrade gives also eN = +1m.18s. and +1m.35s.

May 25d. Readings also at 0h. (Simferopol, Theodosia, and Yalta), 2h. (near Taihoku), 3h. (near Neuchatel), 5h. (Bombay), 6h. (Tortosa), 15h. and 18h. (near La Paz).

May 26d. 5h. 54m. 27s. Epicentre 40°·0N. 20°·0E. (as on 1926 Oct. 23d.).

A = +·720, B = +·262, C = +·643; D = +·342, E = −·940; G = +·604, H = +·220, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mostar		3·7	335	2 47	+109	4 7	+145	—	4·4
Pompeii		4·2	281	e 1 20	+15	e 2 20	+25	—	4·2
Belgrade	E.	4·8	4	e 1 34	+20	i 3 13	+62	—	4·5
	N.	4·8	4	e 1 29	+15	i 3 7	+56	i 3·6	4·5
Rocca di Papa		5·8	291	e 1 29	− 1	e 2 38	− 1	—	4·6
Zagreb	N.E.	6·5	335	e 1 46	+ 7	i 3 8	+11	—	4·7
	N.W.	6·5	335	e 1 41	+ 2	i 3 10	+13	i 3·7	—
Laibach		7·2	328	—	—	e 2 34	−41	(e 4·1)	—
Budapest		7·5	355	e 3 33?	?S	(e 3 33?)	+ 9	4·6	7·6
Florence		7·5	303	e 2 3	+ 9	4 0	+36	6·0	6·6
Graz		7·8	337	2 9	+11	e 3 21	−10	i 4·4	5·8
Venice		7·8	316	3 23	?S	(3 23)	− 8	(4·8)	7·1
Vienna		8·6	344	e 2 2	− 8	4 46	+53	—	6·0
Innsbruck		9·6	322	e 2 3	−21	i 4 5	−13	i 5·5	—
Moncalieri		10·3	303	e 2 0	−34	4 50	+13	7·0	—
Zurich		11·0	316	e 4 42	?S	(e 4 42)	−12	—	—
Simferopol		11·5	60	e 2 45	− 7	—	—	—	—
Hohenheim		11·6	322	i 4 13	?	i 5 13	+ 4	5·6	7·9
Neuchatel		11·8	310	e 2 44	−12	e 5 23	+ 9	—	—
Strasbourg		12·2	318	e 2 33?	−29	—	—	—	6·6
Jena		12·4	335	—	—	—	—	e 7·0	7·6
Feldberg	N.	13·0	325	—	—	—	—	e 7·2	10·3
Potsdam		13·3	341	—	—	e 5 51	0	—	8·6
Konigsberg	E.	14·8	1	—	—	—	—	e 8·3	—
Hamburg		15·2	337	—	—	—	—	e 7·6	11·8
Makeyevka		15·2	52	e 3 9	−33	—	—	6·6	10·8
Paris		15·2	311	e 9 9	?	—	—	10·8	12·6
De Bilt		15·8	325	—	—	e 6 57	+ 7	e 9·0	13·6
Alicante		16·0	271	—	—	—	—	e 9·6	—
Lund		16·3	346	—	—	7 3	+ 1	—	—
Copenhagen		16·5	345	—	—	e 6 57	−10	e 9·2	10·4
Kew		18·1	316	—	—	e 7 33	− 8	10·6	11·6
Granada		18·6	269	4 11	−13	e 8 54	+61	e 10·4	11·8
Oxford		18·8	316	—	—	—	—	8·3	13·4
Kucino		19·3	32	e 4 33	0	e 8 33	+25	e 11·6	13·6
Upsala	E.	19·9	356	—	—	—	—	e 11·2	—
Stonyhurst		20·5	320	—	—	—	—	e 13·2	—
Pulkovo		20·8	15	i 4 40	−11	8 29	−11	10·6	14·0
Edinburgh		22·0	324	—	—	e 9 33?	+28	—	—
Baku		22·7	79	e 5 11	− 2	e 10 42	+83	e 14·6	—
Tashkent		36·9	72	e 7 50	+21	—	—	22·6	26·2
Scoresby Sund		37·2	338	—	—	—	—	22·6	—
Irkutsk		56·3	47	—	—	—	—	35·6	—

Additional readings and notes: Mostar P = +3m.15s. Belgrade PN = +2m.58s. Rocca di Papa iPE = +1m.37s., iS = +2m.46s. Zagreb iNW = +2m.8s., +2m.41s., and +2m.49s., iNE = +2m.13s. Laibach gives S as e and L as S. Venice gives S as P and L as S. Vienna iE = +4m.7s. Moncalieri e = +2m.10s., S = +5m.13s. Zurich ePE = +4m.29s. Hohenheim MN = +9·6m. Konigsberg gives L as e, also L = +10·6m. Hamburg MN = +11·4m. De Bilt MZ = +11·6m., MN = +12·7m. Copenhagen eE = +9m.45s., MZ = +12·8m. Granada PR$_1$ = +5m.14s. Baku e = +12m.44s. Tashkent e = +7m.50s. (entered as P), +16m.41s., and +17m.43s.

May 26d. 8h. 28m. 54s. Epicentre 23°·3S. 68°·5W. (as on 1927 August 1d.).

A = +·337, B = −·855, C = −·396; D = −·930, E = −·367: G = −·145, H = +·368, K = −·918.

The depth of focus 0·050 assumed on 1927 Aug. 1d. has been modified in the present case to 0·020.

		Corr. for Focus	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	°	m. s.	s.	m. s.	s.	m.	m.
Sucre		0·0	5·2	36	i 1 20	0	i 2 20	− 2	i 3·1	3·3
La Paz		−0·1	6·8	2	1 50	+ 8	i 3 16	+14	3·6	3·8
Santiago		−0·2	10·3	191	2 26	− 5	3 56	−36	4·5	—
La Plata		−0·5	14·8	144	i 3 29	− 1	—	—	7·4	—
Georgetown	Z.	−2·5	62·7	353	i 10 14	+ 1	18 25	− 1	e 25·5	—
Cincinnati		−2·5	64·2	346	e 11 1	+38	(19 21)	+37	36·8	—
St. Louis		−2·5	65·2	341	i 11 30	+60	18 59	+ 2	36·1	—
Tucson		−2·6	68·8	321	e 10 54	+ 1	—	—	—	—
Ottawa		−2·6	69·1	355	e 10 51	− 4	i 19 48	+ 4	e 32·1	—
San Fernando	E.	−2·7	83·8	46	—	—	—	—	—	54·1
Granada		−2·7	85·9	47	i 12 32	− 5	—	—	48·1	52·6
Victoria	E.	−2·7	86·9	326	13 27	+44	(23 7)	− 3	23·1	23·8
Kew		−2·8	95·5	35	—	—	e 23 43	[−17]	43·1	—
Paris		−2·8	95·8	39	—	—	—	—	e 49·1	—
Uccle		−2·8	97·8	38	—	—	—	—	e 49·1	—
Strasbourg		−2·8	98·7	41	—	—	(e 23 6?)	?	e 23·1	—
De Bilt		−2·8	98·8	37	e 13 54	+ 5	e 24 50	? Σ9	e 49·1	—
Florence		−2·8	98·9	45	e 12 53	−47	e 18 6	?PR$_1$	—	32·0
Scoresby Sund	E.	−2·8	99·3	14	—	—	e 25 48	+27	—	—
Feldberg	N.	−2·8	99·8	39	—	—	e 24 59	? Σ	—	61·1
Suva	E.	−2·9	102·7	243	—	—	—	—	e 63·1	—
Copenhagen		−2·9	104·2	35	—	—	e 25 11	? Σ	52·1	—
Lund		−2·9	104·6	35	—	—	24 30	[−15]	—	—
Pulkovo		—	114·3	32	e 19 42	?PR$_1$	e 28 58	+54	55·1	—
Makeyevka		—	117·9	45	e 20 36	?PR$_1$	—	—	—	—
Kucino		—	118·2	37	e 19 17	?	e 25 47	[+ 7]	e 43·1	—
Baku		—	126·0	55	e 19 23	[+15]	e 26 0	[− 1]	e 65·1	—
Tashkent		—	140·5	50	e 17 14	?	i 23 58	?	—	—
Irkutsk		—	150·5	9	e 19 38	[−18]	e 23 18	?PR$_1$	—	—
Zi-ka-wei		—	168·2	314	e 20 1	[−13]	e 25 27	?PR$_1$	—	81·2
Phu-Lien		—	174·8	118	25 6	?PR$_1$	—	—	—	—

Additional readings and notes: La Paz iN = +2m.8s., i = +2m.25s., iSN? = +3m.22s. Georgetown iZ = +10m.49s. Cincinnati gives S as iSR$_1$. St. Louis i = +12m.2s., eN = +14m.16s. =PR$_2$ −20s., and +15m.59s., eE = +14m.21s. =PR$_2$ −15s., e = +19m.26s. and +19m.38s. Ottawa iE = +20m.30s. =[S] −36s. San Fernando MN = +53·4m. De Bilt e = +24m.4s. =[S] −14s. Scoresby Sund eEN = +24m.12s. =[S] −8s. Suva eN = +64m.42s. Copenhagen PR$_1$ = +18m.12s., eS$_0$P$_0$SEN = +24m.30s. = [S] −14s., eSR$_1$EN = +32m.6s.? Kucino e = +24m.20s. Baku e = +37m.59s. =SR$_1$ −3s. Tashkent i = +20m.46s.

May 26d. 14h. 3m. 15s. Epicentre 5°·0S. 78°·0W. (as on May 21d.).

A = +·207, B = −·974, C = −·087; D = −·978, E = −·208; G = −·018, H = +·085, K = −·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		15·1	140	3 52	+12	i 6 52	+18	7·8	10·6
Sucre		18·7	139	i 4 33	+ 8	i 8 7	+12	10·1	12·5
La Plata		35·2	150	—	—	—	—	20·2	—
Georgetown	Z.	43·9	2	i 8 19	− 6	i 15 27	+26	26·0	27·0
St. Louis	N.	45·0	348	i 8 15	−18	e 15 11	− 4	25·8	30·2
Toronto		48·6	359	10 45?	?PR$_1$	—	—	—	—
Ottawa		50·4	3	i 9 5	− 4	e 16 25	+ 1	e 22·8	—
Victoria	E.	66·4	329	—	—	—	—	e 38·4	41·4
San Fernando	E.	78·5	51	—	—	—	—	—	51·8

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Granada		80·7	51	12 24	+ 1	—	—	43·8	46·4
Almeria		81·6	51	12 28	0	—	—	—	50·2
Kew		86·3	38	—	—	e 23 21	−12	42·8	—
Paris		87·6	40	—	—	—	—	e 46·8	—
Uccle		89·0	39	—	—	e 23 45?	−18	e 45·8	—
De Bilt		89·7	38	13 11	− 3	e 24 5	− 6	e 42·8	78·2
Moncalieri		90·5	45	—	—	—	—	50·4	—
Strasbourg		90·9	41	—	—	—	—	e 43·8	—
Feldberg	N.	91·5	40	—	—	e 23 57	[+20]	—	52·2
Florence		93·0	46	—	—	—	—	e 46·8	52·8
Copenhagen		94·6	35	e 13 31	−10	e 24 9	[+14]	45·8	—
Wellington	E.	99·4	227	—	—	—	—	e 48·2	—
Suva	E.	101·3	250	—	—	e 39 24	?	—	—
Pulkovo		103·5	29	e 18 21	?PR_1	—	—	51·8	61·6
Kucino		108·5	33	e 18 3	[−14]	e 27 33	+18	e 52·2	58·8
Makeyevka		110·9	39	—	—	e 29 21	?PS	53·2	70·4
Riverview		119·5	225	—	—	e 26 39	[+55]	e 37·0	50·4
Baku		121·5	45	—	—	e 30 39	?PS	e 61·2	—
Irkutsk		132·7	359	—	—	e 26 45?	[+29]	86·8	—
Tashkent		133·4	34	—	—	—	—	e 108·5	—
Zi-ka-wei	Z.	148·1	327	e 19 56	[+ 3]	—	—	—	92·4

Additional readings and notes: La Paz iSN = +6m.55s., MN = +9·9m. Georgetown eZ = +10m.7s. St. Louis eN = +10m.7s., +18m.20s. = SR_1 −10s., +21m.18s., and +24m.31s. Ottawa eN = +20m.21s. = SR_1 +7s., LN = +34·8m. Georgetown, St. Louis, and Ottawa readings are given without phase. San Fernando MN = +49·2m. Copenhagen PR_1 = +17m.3s., SR_1 = +30m.45s.?, SR_2 = +34m.45s.? Wellington eN = +50m.7s. Suva eN = +40m.27s. = SR_3 −11s. Riverview e = +30m.15s. = PS −24s., MN = +49·9m.

May 26d. Readings also at 5h. (Yalta), 8h. (Rocca di Papa), 9h. (Pompeii, Rocca di Papa, and Zagreb), 10h. (La Paz and Sucre), 11h. (near Chur, Neuchatel, and Zurich), 12h. (Feldberg and Yalta), 13h. (Yalta), 15h. (Ottawa and Florence), 17h. (Phu-Lien), 18h. (Stonyhurst and near La Paz), 19h. (near Tashkent), 20h. (near Mizusawa), 21h. (La Paz).

May 27d. 5h. 40m. 24s. Epicentre 40°·0N. 142°·5E. (see 27d. 9h.).

A = −·608, B = +·466, C = +·643; D = +·609, E = +·793; G = −·510, H = +·391, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		1·4	231	0 36	+15	0 56	+17	—	—
Nagoya		6·6	224	e 1 45	+ 4	(e 2 21)	−39	e 2·4	4·0
Osaka		7·8	229	1 58	0	(3 48)	+17	3·8	4·8
Kobe	E.	7·9	230	e 3 49	?S	(e 3 49)	+15	—	—
Tashkent		53·9	299	9 32	0	—	—	e 27·6	33·5
Kucino		65·0	323	—	—	—	—	—	33·9
Suva	N.	67·0	144	—	—	e 18 18	−92	—	20·4
Baku		67·1	144	—	—	—	—	35·2	43·2
Makeyevka		69·5	318	—	—	—	—	e 39·6	45·0
Riverview		74·3	174	—	—	e 15 36	?PR_1	e 22·3	24·3
Adelaide		75·0	184	—	—	—	—	e 25·9	32·9
Copenhagen		75·3	334	—	—	—	—	38·6	—
De Bilt		80·7	335	—	—	—	—	e 43·6	—
Feldberg	N.	81·2	332	—	—	—	—	—	47·5
Uccle		82·1	335	—	—	—	—	e 44·6	—
Ottawa		88·0	26	—	—	—	—	e 73·6	—
Granada		96·8	334	—	—	—	—	e 59·6	65·1

Additional readings: Mizusawa SN = +59s. Nagoya MN = +3·8m. Osaka MN = +4·5m. Suva eE = +17m.42s., iE = +20m.12s. Makeyevka e = +34m.0s. Riverview MN = +24·7m. Adelaide MN = +30·0m.

May 27d. 9h. 50m. 18s. Epicentre 40°·0N. 142°·5E.

(as at 5h. and given in Bulletin Equake Research Institute, Tokyo, Vol. VII, pt. 2).

A = −·608, B = +·466, C = +·643; D = +·609, E = +·793; G = −·510, H = +·391, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		1·4	231	0 34	+13	—	—	—	—
Nagoya		6·6	224	i 1 47	+ 6	e 2 35	−25	3·3	4·3
Ootomari		6·6	1	1 45	+ 4	—	—	3·2	5·6
Toyooka		7·5	236	i 2 1	+ 7	3 29	+ 5	—	5·5
Osaka		7·8	229	2 3	+ 5	(3 48)	+17	3·8	7·2
Kobe		7·9	230	i 2 4	+ 4	i 3 37	+ 3	4·3	4·5
Sumoto		8·3	229	e 2 10	+ 4	e 3 10	−35	e 4·2	4·8
Sikka		9·2	2	2 23	+ 4	(4 13)	+ 5	4·2	5·7
Matuyama		9·9	235	i 2 17	−12	(i 3 20)	−66	i 3·3	4·9
Hukuoka		11·6	240	2 58	+ 5	—	—	5·9	7·4
Nagasaki		12·5	238	3 6	0	5 31	− 1	6·2	—
Zi-ka-wei	N.	19·2	249	4 29	− 2	8 21	+15	—	14·4
Taihoku	E.	23·1	236	3 51	−87	8 4	−83	10·2	—
Irkutsk		28·8	308	i 6 7	− 9	10 58	−15	13·7	19·4
Hong Kong		29·8	242	6 15	−11	11 22	− 9	14·2	18·9
Manila	E.	31·7	223	e 6 34	−10	13 25	+82	i 20·1	25·3
	N.	31·7	223	e 6 34	−10	i 13 19	+76	i 20·1	22·6
Phu-Lien		36·1	250	i 7 9	−14	12 45	−26	17·0	21·2
Amboina		45·6	201	(8 32)	− 5	(i 14 59)	−23	(23·7)	—
Calcutta	E.	48·7	269	9 57	+59	17 6	+64	25·4	34·0
	N.	48·7	269	9 46	+48	17 0	+58	25·3	33·0
Dehra Dun		52·5	281	10 36	+73	17 51	+61	29·4	37·1
Sitka	N.	53·4	43	e 10 7	+38	i 17 5	+ 4	i 22·9	22·9
Honolulu T.H.	E.	53·6	92	i 9 32	+ 2	i 17 2	− 2	24·2	25·4
	N.	53·6	92	—	—	e 16 52	−12	22·9	27·2
Tashkent		53·9	299	i 9 35	+ 3	17 6	− 2	—	21·8
Batavia		56·7	225	i 9 48	− 2	i 17 39	− 3	26·7	—
Hyderabad		59·2	270	10 3	− 3	18 12	− 1	31·1	37·9
Bombay		62·6	275	10 29	0	18 45	−11	32·7	36·5
Victoria	E.	63·6	49	10 45	+ 9	19 14	+ 6	29·9	35·8
	N.	63·6	49	10 45	+ 9	19 12	+ 4	36·4	39·0
Kodaikanal		64·4	265	8 24	?	—	—	36·9	44·1
Colombo		64·8	260	i 10 46	+ 2	19 26	+ 3	37·8	42·0
Kucino		65·0	323	i 10 54	+ 9	e 19 54	?PS	31·8	41·7
Pulkovo		65·9	330	i 10 56	+ 6	19 42	+ 6	31·7	40·3
Suva	E.	67·0	144	12 24	?	i 20 0	+10	e 31·8	—
	N.	67·0	144	12 42	?	21 30	? Σ	e 33·2	—
Baku		67·1	306	i 11 5	+ 6	i 20 11	+20	33·7	—
Spokane		67·3	47	e 11 2	+ 2	i 19 54	0	28·7	34·4
Helsingfors		67·6	332	i 11 5	+ 3	20 3	+ 6	29·7	—
Apia		68·6	132	—	—	20 5	− 4	31·9	34·7
Scoresby Sund		69·0	355	11 14	+ 3	20 22	+ 8	e 30·7	42·5
Makeyevka		69·5	318	i 11 18	+ 4	20 31	+11	34·1	45·1
Berkeley		70·1	58	e 11 26	+ 8	20 31	+ 4	e 32·5	—
Upsala		70·4	335	11 21	+ 2	20 33	+ 2	e 31·7	42·4
Lick	E.	70·8	58	e 11 24	+ 2	e 20 38	+ 2	e 29·1	—
Theodosia		72·8	316	11 40	+ 5	21 9	+ 9	—	47·2
Konigsberg		73·0	330	i 11 42?	+ 6	i 21 30	[− 4]	e 33·7	43·7
Simferopol		73·6	316	11 41	+ 1	21 11	+ 2	—	43·3
Bergen		73·7	340	(11 28)	−12	(20 42?)	−28	(40·7)	—
Yalta		73·8	316	e 11 39	− 2	—	—	—	—
Riverview		74·3	174	e 11 47	+ 3	i 21 9	− 9	e 30·9	56·9
Sydney		74·3	174	14 12	?	—	—	38·5	39·2
Adelaide		75·0	184	e 11 46	− 3	i 21 17	− 9	i 34·4	37·0
Lund		75·1	334	i 11 50	0	21 29	+ 2	—	—
Lemberg		75·2	324	e 11 48	− 2	e 21 24	− 4	39·1	48·6
Copenhagen		75·3	334	i 11 51	0	i 21 33	+ 4	33·7	44·4
Hamburg		77·8	334	i 12 7	+ 1	e 22 0	+ 2	e 36·9	46·1
Potsdam		77·8	331	i 12 6	0	e 22 17	+19	e 40·2	45·2
Melbourne		77·9	179	e 12 52	+46	i 21 47	−12	34·4	37·3
Dyce		78·4	341	12 9	0	22 28	+23	38·0	48·1
Budapest		79·2	325	12 16	+ 2	22 35	+21	41·2	49·2
Jena	E.	79·6	331	i 12 12	− 4	e 22 18	0	—	45·7
	Z.	79·5	331	i 12 13	− 3	e 23 12	?PS	e 37·7	53·6
Vienna		79·8	328	e 12 15	− 3	23 31	?PS	e 39·7	46·7
Edinburgh		79·8	342	12 17	− 1	22 21	0	36·7	46·5

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ksara	N.	79·8	306	12 19	+ 1	22 35	+14	39·4	—
Belgrade	E.	80·6	323	e 12 24	+ 1	e 22 28	− 2	e 39·7	45·9
	N.	80·6	323	e 12 22	− 1	e 22 31	+ 1	e 39·9	52·0
De Bilt		80·7	335	12 33	0	22 33	+ 2	e 37·7	47·7
Tucson	E.	80·9	56	e 12 23	− 1	22 23	−11	e 34·2	41·7
	N.	80·9	56	e 12 22	− 2	e 22 25	− 9	e 33·8	34·4
Graz		81·0	328	e 12 23	− 2	i 22 59	? Σ	41·7	52·3
Feldberg	E.	81·2	332	e 12 14	−12	i 22 36	− 1	e 37·6	47·4
	N.	81·2	332	i 12 25	− 1	e 22 36	− 1	e 37·7	40·4
Stonyhurst		81·4	340	12 26	− 1	22 37	− 2	38·8	46·0
Zagreb		81·8	325	e 12 17	−12	e 22 42?	− 2	e 32·3	52·7
Bidston		82·0	340	12 30	0	22 42	− 4	40·3	51·4
Uccle		82·1	335	e 12 29	− 2	i 22 47	0	37·7	48·3
Laibach		82·2	328	e 13 28	+57	e 24 6	?	e 41·7	48·7
Hohenheim		82·2	330	12 30	− 1	22 50	+ 2	42·7	47·7
Ravensburg		82·8	330	e 12 32	− 3	e 22 58	+ 3	e 41·7	48·8
Strasbourg		82·8	332	i 12 28	− 7	i 22 52	− 3	38·7	52·2
Kew		82·9	339	i 12 34	− 1	i 22 54	− 2	36·7	43·0
Oxford	E.	83·0	340	i 12 35	− 1	i 22 52	− 5	e 34·9	49·7
	N.	83·0	340	i 12 35	− 1	i 22 54	− 3	e 36·8	50·2
Zurich		83·5	330	e 12 37	− 2	i 22 57	− 6	—	—
Chur		83·6	330	e 12 37	− 3	i 22 58	− 7	—	—
Venice		83·6	327	e 12 42	+ 2	e 22 57	− 8	43·7	53·7
Neuchatel		84·4	331	i 12 41	− 3	i 23 4	− 8	—	—
Paris		84·4	335	i 12 42	− 2	i 23 6	− 6	39·7	51·7
Besançon		84·6	332	12 44	− 2	23 4	−11	35·7	46·7
Helwan		85·4	307	i 12 45	− 5	i 23 9	−14	—	55·4
Florence		85·4	327	i 12 45	− 5	23 23	0	41·7	45·7
Moncalieri		85·8	330	12 47	− 5	23 10	−18	44·0	51·1
Le Mans		85·9	336	—	—	e 22 42?	[−19]	42·7	53·7
Chicago	E.	86·4	35	e 12 49	− 6	i 23 15	[+10]	i 35·9	56·7
	N.	86·4	35	e 12 49	− 6	i 23 13	[+ 8]	40·2	48·7
Wellington	E.	86·4	157	13 5	+10	i 23 5	[0]	e 40·1	44·3
	N.	86·4	157	13 14	+19	i 23 4	[− 1]	e 40·2	45·5
Grenoble		86·4	331	e 12 54	− 1	e 23 23	−11	e 39·7	50·3
Rocca di Papa		86·4	325	12 49	− 6	e 23 7	[+ 2]	e 38·1	58·0
		86·4	325	e 12 50	− 5	e 23 16	[+11]	i 43·1	—
Pompeii		86·4	323	e 13 2	+ 7	e 24 32	?PS	36·7	50·7
Naples	E.	86·5	323	e 12 59	+ 3	e 23 39	+ 3	41·7	48·7
St. Louis		87·8	40	e 12 56	− 8	i 23 37	−13	e 38·1	45·1
Ottawa		88·0	26	i 12 57	− 8	i 23 36	−16	e 39·7	51·7
Toronto	E.	88·2	30	e 12 54	−12	i 23 24	[+ 8]	—	55·3
	N.	88·2	30	e 12 54	−12	i 23 25	[+ 9]	40·2	48·3
Marseilles		88·2	331	e 13 26	+20	e 23 46	− 8	e 41·7	51·0
Cincinnati		89·9	35	e 12 29	−46	i 24 1	−12	e 47·7	50·3
Bagnères		90·2	335	e 12 48	−29	e 23 20	[− 9]	e 44·7	50·8
Ithaca		90·3	28	—	—	e 23 42?	[+12]	42·7	—
Barcelona		91·0	331	e 13 2	−19	e 23 47	[+13]	e 31·4	53·3
Tortosa	N.	92·1	333	13 15	−13	23 55	[+14]	42·9	55·5
Harvard		92·2	25	—	—	e 24 20	−17	e 45·7	52·7
Georgetown	Z.	93·2	30	i 13 24	− 9	24 17	? Σ	42·4	64·1
Charlottesville	E.	93·4	31	—	—	24 18	? Σ	36·9	58·2
	N.	93·4	31	—	—	24 10	[+22]	36·1	58·2
Toledo		94·5	336	e 13 27	−14	24 4	[+10]	e 39·0	55·8
Algiers		94·6	329	e 13 29	−12	24 19	? Σ	47·7	55·7
Alicante		94·7	332	e 13 15	−27	e 23 55	[0]	e 31·4	62·3
Almeria		96·6	334	e 13 31	−21	e 24 10	[+ 4]	46·3	56·5
Granada		96·8	334	i 13 40	−13	25 9	−15	45·6	60·9
Malaga		97·5	334	13 28	−29	e 24 8	[− 2]	e 31·7	56·0
San Fernando		98·3	336	13 43	−19	i 24 23	[+ 8]	41·4	64·7
Entebbe		105·2	284	14 12	−23	24 52	[+ 4]	57·7	66·7
Tananarive		105·7	260	—	—	24 58	[+ 7]	54·0	64·7
Johannesburg		124·7	264	69 42?	?L	—	—	(69·7)	—
Cape Town		135·6	260	—	—	—	—	—	96·4
La Paz		144·5	58	i 19 51	[+ 3]	e 32 26	?	99·7	80·3
Sucre		148·2	58	e 19 56	[+ 3]	—	—	63·7	89·6
Rio de Janeiro	E.	162·2	17	e 20 12	[+ 3]	29 47	?	44·9	92·0
	N.	162·2	17	e 20 18	[+ 9]	29 49	?	45·0	89·8
La Plata		163·0	79	—	—	—	—	77·9	—

Additional readings and notes: Nagoya P = +1m.58s., MZ = +3·7m., MN = +4·1m. Toyooka MN = +5·1m. Osaka MZ = +5·0m., MN = +8·7m. Kobe MN = +5·0m., MZ = +5·4m. Sumoto MZ = +4·6m. Hukuoka MN = +8·2m. Zi-ka-wei PR_1N = +5m.29s., PSN = +8m.33s. = SR_1 − 8s.,

Continued on next page.

ME = +13·0m. Manila PSE = +12m.4s. =S +1s., iSR_2E = +16m.28s., iSR_2N = +17m.8s. Phu-Lien ePR_2 = +8m.38s., MN = +20·8m. Amboina i = +(18m.22s.) =SR_1 −20s.; one minute has been applied to all readings. Sitka iSR_1N = +19m.17s. =[S] +14s., iSR_2N = +20m.31s. =SR_1 −39s. Batavia iZ = +9m.51s., i = +9m.52s., and +10m.24s. Colombo eP = +7m.1s., L = +39·1m. Kucino PR_1 = +13m.18s. Suva iPR_1E = +17m.24s., SR_1E = +25m.24s., SR_2N = +29m.12s. =SR_2 +24s. Spokane SR_1N = +24m.19s. Apia PR_1 = +14m.11s.; T_o =9h.50m.58s. Scoresby Sund PR_1 = +13m.51s., eN = +16m.6s., eE = +17m.0s., PS = +20m.54s., eSR_1N = +25m.0s., iSR_1E = +25m.4s., SR_2 = +28m.24s., eLN = +31·7m., MN = +37·0m. Berkeley eSN = +20m.34s., eSZ = +20m.35s., eSR_2EN = +28m.30s., eSR_2Z = +28m.36s., eSR_2E = +30m.0s. Upsala MN = +44·5m. Konigsberg ePR_1Z? = +14m.30s., ePR_1?E = +14m.36s., eE = +29m.6s., MZ = +45·7m. Bergen readings are increased by 3min. Riverview e? = +11m.6s., iP = +11m.55s., PS = +21m.35s., PPPS? = +21m.47s., S_oS = +22m.13s., SR_1 = +26m.9s., SR_2 = +29m.59s., MN = +38·6m.; T_o = 9h.50m.51s. Adelaide iSR_2 = +29m.24s., iSR_3 = +31m.10s., MN = +43·7m. Lund +14m.39s. =PR_1 −30s., iPS? = +21m.53s. Lemberg ePE = +11m.54s., MN = +44·3m. Copenhagen PR_1 = +14m.44s., PR_2 = +16m.29s., e = +18m.18s. =PR_2 +29s., i = +20m.54s., iPSZ = +21m.59s., eN = +24m.30s., SR_1 = +26m.54s., MN = +44·3m., MZ = +47·8m. Hamburg ePR_1Z = +15m.5s., SR_1 = +27m.20s., eLN = +38·0m., eLZ = +39·7m., MN = +49·0m., MZ = +49·1m. Potsdam eLN = +37·7m. Melbourne SR_1 = +26m.47s., i = +30m.22s. Dyce PR_1 = +15m.11s., e = +17m.11s. =PR_2 −17s. Budapest i = +22m.41s. Jena iPEZ = +12m.16s., MN = +53·2m. Vienna iPZ = +12m.20s., PR_1 = +14m.15s., S_cP_cS = +22m.40s. PPS = +25m.57s., SR_2 = +35m.15s., MNZ = +50·7m. Edinburgh SR_1 = +27m.45s. Ksara PR_1N = +15m.29s., PR_2N = +16m.43s., SR_1N = +28m.8s.; T_o =9h.50m.26s. Belgrade iN = +13m.22s., eE = +13m.26s. De Bilt PR_1 = +15m.31s., eSR_1 = +27m.59s., MN = +51·7m., MZ = +52·2m. Tucson eSR_1N = +27m.31s., eSR_2E = +31m.13s. Feldberg ePR_1N = +15m.30s., eN = +18m.55s. =PR_2 −5s., eSR_1N = +27m.43s. Stonyhurst PR_1 = +15m.43s., PR_2 = +17m.32s., PR_3 = +19m.14s., SR_1 = +28m.16s. Zagreb e = +12m.27s., eNW = +12m.31s., i = +12m.51s., e = +15m.33s., +19m.7s. =PR_2 +1s., and +21m.53s., i = +23m.7s. = Σ +3s., e = +28m.14s. =SR_1 −26s., MNW = +48·7m. Uccle iPR_1 = +15m.41s., MN = +52·4m., MZ = +52·6m. Laibach e = +18m.29s. =PR_2 +23s. Hohenheim PR_1 = +15m.52s., PR_2 = +17m.42s., PS = +23m.42s., SR_1 = +29m.38s., SR_2 = +35m.2s. Ravensburg PR_1? = +17m.43s., MN = +54·3m. Strasbourg PR_2 = +17m.33s., PS = +23m.22s., MZ = +53·4m., MN = +53·7m. Kew iPR_1 = +15m.49s., ePR_2 = +17m.50s., iZ = +23m.10s. = Σ +4s., iPSE = +23m.42s., iPPSE = +24m.4s., iSR_1E = +28m.32s., iSR_2E = +31m.49s., LZ = +42·7m., MN = +49·7m., MZ = +51·8m. Oxford i = +15m.49s. = PR_1 −25s., iN = +17m.26s., iE = +17m.49s. =PR_2 −25s., iN = +27m.46s., iE = +28m.33s. =SR_1 −23s., eN = +28m.57s. ? =SR_1 +1s., iE = +31m.49s. Paris MN = +52·7m. Florence PR_1 = +16m.12s., PR_2 = +18m.22s., PS = +24m.21s., SR_1 = +29m.21s., SR_2 = +33m.32s. Moncalieri L = +29·8m., MN = +51·7m. Chicago ePR_1N = +16m.27s., iSR_1N = +28m.52s., iSR_1E = +29m.10s. Wellington iSR_1N = +28m.49s., iSR_1E = +28m.53s., iSR_2E = +33m.6s.; T_oE =9h.51m.9s.; T_oN =9h.51m.29s. Grenoble MN = +50·6m. Rocca di Papa iN = +12m.52s., iE = +12m.54s., PR_1N = +16m.19s., PR_1E = +16m.49s., i = +23m.28s. = Σ −7s. St. Louis ePE = +12m.59s., ePR_1N = +18m.26s., ePR_2N = +19m.55s., iS_cP_cS = +23m.22s., iSPS = +29m.29s., eN = +33m.21s., iSR_3N = +36m.4s. Ottawa ePR_1 = +16m.40s., eSR_1 = +29m.38s., iE = +36m.18s. =SR_2 −2s., MN = +57·9m.; T_o =9h.50m.33s. Toronto iSN = +23m.25s., iE = +23m.42s.?, iN = +29m.42s. ? =SR_1 −24s. Marseilles MN = +52·6m. Cincinnati eP_cP = +13m.12s., eS_cP_cS = +23m.40s., eN = +29m.52s., iSPSE = +29m.57s., iSR_2 = +36m.47s. Bagnères MN = +51·7m. Barcelona MN = +54·4m. Georgetown iZ = +17m.52s. =PR_1 +24s., SR_1Z = +30m.38s. Charlottesville eSR_1N = +30m.22s., eSR_2N = +34m.30s., eSR_2E = +34m.34s. Toledo i = +17m.23s., MNW = +55·7m., MZ = +60·0m. Alicante MN = +54·8m. Almeria PR_1 = +17m.34s., MZ = +63·9m. Granada PR_1 = +17m.42s., i = +17m.59s., PR_2 = +20m.11s., i = +25m.59s. =PS −29s., and +32m.11s. =SR_1 +13s., G = +33m.32s.; epicentre 39°·6N. 140°·0E. Malaga MN = +56·2m., MZ = +62·9m. San Fernando PR_1 = +17m.23s., SR_2 = +35m.59s., MN = +64·3m. Entebbe +18m.35s. =PR_1 −13s. Tananarive PR_1 = +18m.51s., PR_2 = +21m.25s., $S_cP_cP_cSN$ = +25m.3s., eN = +26m.11s. = Σ +25s., PS = +28m.15s., SPS = SR_1 = +33m.45s., PPSS = +33m.59s., SR_2 = +38m.42s., e = +44m.48s., and +63m.51s.; T_o =9h.50m.29s. Cape Town PR_1 = +32m.6s. La Paz PR_1 = +24m.1s., PR_2 = +26m.44s. =[S] +11s., S_cP_cS = +29m.49s., SR_2 = +42m.0s. =SR_1 +14s., SR_2 = +47m.5s., MN = +70·9m. Sucre iPN = +20m.0s. =[P] +7s.

May 27d. Readings also at 0h. (near Calcutta), 1h. (Bombay, Tashkent, Baku, Copenhagen, De Bilt, Feldberg, Uccle, and La Paz (2)), 2h. (La Paz), 3h. (Pompeii and near Rocca di Papa), 7h. (Yalta and near Kobe), 9h. (Almeria), 10h. (Nagoya and near Mizusawa (3)), 11h. (2) and 12h. (near Mizusawa), 16h. (La Paz and near Mizusawa), 17h. (La Paz and Zagreb), 18h. (Tucson, near Toyooka, and near Manila), 19h. (Batavia, Ekaterinburg, Phu-Lien, near Mizusawa, and near Zagreb), 20h. (Tashkent and near Mizusawa), 21h. (La Paz and near Mizusawa), 22h. (Ekaterinburg, Irkutsk, Pulkovo, near La Paz, and near Mizusawa (2)), 23h. (Baku (2), Pulkovo, and Tashkent).

May 28d. 6h. 41m. 6s. Epicentre 16°·5S. 180°·0 (as on 1924 March 26d.).

$A = -\cdot959$, $B = \cdot000$, $C = -\cdot284$; $D = \cdot000$, $E = +1\cdot000$; $G = +\cdot284$, $H = \cdot000$, $K = -\cdot959$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva	E.	2·2	222	e 0 24	−10	i 1 18	+18	—	—
	N.	2·2	222	0 18	−16	1 12	+12	—	—
Wellington	E.	25·2	189	—	—	10 10	+ 3	13·4	16·8
	N.	25·2	189	6 36	+56	10 14	+ 7	13·9	16·9
Christchurch		27·8	191	e 10 55	?S	(e 10 55)	0	17·1	22·8
Riverview		31·2	230	i 8 51	?	i 11 56	+ 2	e 14·7	18·6
Sydney		31·2	230	10 24	?S	(10 24)	−90	17·3	18·7
Melbourne		37·4	229	—	—	i 13 26	− 4	21·4	22·3
Adelaide		41·3	236	e 9 9?	+64	i 14 28	+ 3	i 17·6	29·2
Honolulu T.H.		43·5	31	—	—	—	—	e 17·4	19·9
Perth		59·7	242	35 14	?L	—	—	35·2	—
Manila		66·1	295	e 11 11	+19	—	—	—	—
Phu-Lien		81·1	294	e 12 28	+ 2	e 22 44	+ 8	—	—
Tucson		82·1	51	e 12 27	− 4	—	—	—	—
Victoria	E.	82·1	35	22 24	?S	(22 24)	−13	37·0	43·8
Irkutsk		94·5	323	e 13 28	−13	e 24 32	−29	48·9	—
St. Louis		100·0	52	19 37	?	e 25 6	? Σ	49·7	53·9
Cincinnati		104·5	51	—	—	—	—	55·9	—
La Paz		105·2	114	e 18 51	?PR_1	—	—	49·9	55·1
Toronto	N.	108·9	48	—	—	e 34 6	?SR_1	46·9	—
Georgetown	Z.	110·1	54	e 20 10	?	i 29 20	?PS	e 44·2	66·1
Ottawa	N.	111·7	47	—	—	e 34 42	?SR_1	e 46·9	—
Tashkent		116·2	308	i 19 56	?PR_1	e 26 0	[+27]	48·9	71·2
Ekaterinburg		119·7	326	e 20 2	?PR_1	—	—	46·9	70·6
Tananarive	E.	121·4	234	—	—	—	—	59·9	67·9
Scoresby Sund		124·4	8	—	—	31 54?	?PS	57·9	67·3
Baku		130·9	310	e 19 33	[+12]	—	—	55·9	84·4
Kucino		131·3	331	e 21 30	?PR_1	—	—	e 66·1	77·9
Pulkovo		131·5	340	i 19 49	[+27]	i 22 40	?	64·9	74·3
Konigsberg	E.	138·5	341	—	—	(23 54?)	?	23·9	—
Lund		139·5	349	24 54?	?	—	—	—	—
Copenhagen		139·7	349	e 19 30	[− 9]	—	—	60·9	72·8
Edinburgh		140·5	2	—	—	—	—	e 72·9	—
Hamburg		142·1	350	e 21 54?	?	—	—	e 68·9	—
Stonyhurst		142·6	2	—	—	—	—	e 74·9	—
Ksara	E.	143·4	303	e 18 54?	[−42]	—	—	—	—
De Bilt		144·2	354	e 19 40	[− 7]	—	—	e 64·9	82·5
Kew		145·0	0	e 19 54?	[+ 6]	—	—	73·9	80·9
Uccle		145·5	356	e 19 44	[− 5]	e 41 42	?SR_1	e 66·9	—
Vienna		145·5	340	e 19 37	[−12]	—	—	—	76·9
Feldberg	N.	145·6	350	e 20 27	[+38]	—	—	—	70·8
Strasbourg		147·3	349	e 19 47	[− 5]	—	—	41·9	—
Paris		147·6	357	e 20 25	[+33]	—	—	72·9	86·9
Zagreb		147·8	339	e 19 54?	[+ 1]	—	—	—	—
Zurich		148·3	348	e 18 57	[−56]	—	—	—	—
Neuchatel		149·0	349	e 19 46	[− 8]	—	—	—	—
Venice		149·3	342	e 20 32	[+37]	—	—	—	—
Moncalieri		150·8	349	e 20 34	[+37]	29 34	? Σ	77·2	—
Florence		151·1	343	19 57	[0]	—	—	—	80·7
Rocca di Papa	Z.	152·5	339	e 19 44	[−15]	—	—	—	—
Granada		159·1	8	i 20 18	[+11]	—	—	76·4	85·7
San Fernando	E.	159·3	14	—	—	—	—	—	90·6

Additional readings and notes: Christchurch S? = +15m.1s., SR_1? = +15m.49s. Riverview MN = +15·5m. Sydney S = +14m.24s. Melbourne i = +16m.24s. = $SR_1 - 9$s. Adelaide MN = +23·5m.

Continued on next page.

Honolulu T.H. eLN = +17·2m. Irkutsk e = +22m.20s. St. Louis e? = +28m.13s., eN = +34m.34s., eE = +35m.40s., eLN = +41·2m., MN = +45·9m. La Paz MN = +54·0m. Toronto LE = +59·9m. Tashkent e = +25m.12s. and +38m.54s. Ekaterinburg e = +30m.14s. = PS − 27s. and +36m.36s. = SR_1 − 7s. Scoresby Sund +36m.54s.?, MN = +70·3m. Baku e = +22m.45s. and +39m.11s. = SR_1 + 10s. Kucino e = +23m.14s. and +39m.12s. = SR_1 + 7s. Copenhagen ePR_1EZ = +31m.54s., eEZ = +37m.54s.?, MZ = +72·3m. De Bilt MZ = +84·0m., MN = +84·2m. Feldberg eN = +33m.32s. and +42m.18s. = SR_1 + 18s. Rocca di Papa ePN = +20m.6s., ePE = +20m.10s. Granada i = +22m.26s. San Fernando MN = +86·4m.

May 28d. 15h. 35m. 36s. Epicentre 40°·0N. 142°·5E.

(as on 27d. 9h.).

A = −·608, B = +·466, C = +·643 ; D = +·609, E = +·793 ; G = −·510, H = +·391, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	N.	1·4	231	0 31	+10	0 51	+12	—	—
Nagoya		6·6	224	e 1 43	+ 2	e 2 26	−34	3·1	3·3
Ootomari		6·6	1	1 44	+ 3	4 6	+66	4·7	6·5
Toyooka		7·5	236	2 0	+ 6	(e 3 36)	+12	e 3·6	4·5
Osaka		7·8	229	2 4	+ 6	(3 50)	+19	3·8	5·3
Kobe		7·9	230	i 2 5	+ 5	i 3 45	+11	4·1	4·4
Sumoto		8·3	229	e 2 5	− 1	e 2 58	−47	e 4·1	4·8
Hukuoka		11·6	240	e 2 52	− 1	—	—	e 5·8	8·2
Nagasaki		12·5	238	e 3 26	+20	7 18	?L	(7·3)	—
Zi-ka-wei		19·2	249	i 4 26	− 5	8 13	+ 7	—	10·9
Taihoku	N.	23·1	236	—	—	e 9 9	−18	—	—
Irkutsk		28·8	308	6 5	−11	11 20	+ 7	16·4	18·6
Hong Kong		29·8	242	6 14	−12	11 4	−27	—	19·9
Manila		31·7	223	e 7 6	+22	—	—	e 21·9	—
Phu-Lien		36·1	250	e 7 5	−18	e 12 45	−26	15·9	23·9
Dehra Dun		52·5	281	10 58	?	19 10	?	30·4	37·3
Ekaterinburg		53·3	319	i 9 29	+ 1	17 6	+ 6	25·4	34·9
Tashkent		53·9	299	—	—	e 17 42	?PS	26·4	34·3
Bombay		62·6	275	10 32	+ 3	e 18 57	+ 1	32·6	40·2
Kodaikanal		64·4	265	34 0	?L	—	—	(34·0)	—
Kucino		65·0	323	e 10 48	+ 3	19 44	+19	e 33·2	42·2
Pulkovo		65·9	330	10 54	+ 4	19 43	+ 7	35·4	42·3
Baku		67·1	306	—	—	—	—	32·4	38·0
Helsingfors		67·6	332	—	—	e 20 3	+ 6	36·4	—
Scoresby Sund		69·0	355	—	—	e 20 21	+ 7	32·4	43·6
Makeyevka		69·5	318	11 16	+ 2	20 28	+ 8	34·7	43·3
Upsala		70·4	335	—	—	e 20 30	− 1	e 37·4	46·1
Theodosia		72·8	316	e 11 30	− 5	—	—	—	—
Simferopol		73·6	316	e 11 38	− 2	—	—	—	—
Lund		75·1	334	11 49	− 1	21 30	+ 3	—	—
Copenhagen		75·3	334	11 53	+ 2	21 33	+ 4	37·4	48·4
Hamburg		77·8	334	e 12 7	+ 1	e 21 58	0	e 41·4	49·4
Potsdam		77·8	331	—	—	—	—	e 43·4	49·9
Budapest		79·2	325	e 11 59	−15	e 21 59	−15	43·0	51·4
Jena		79·5	331	—	—	—	—	e 44·4	52·4
Edinburgh		79·8	342	e 11 48	−30	e 22 37	+16	44·4	54·4
Ksara		79·8	306	e 12 18	0	e 22 27	+ 6	43·2	51·5
Vienna		79·8	328	i 12 15	− 3	—	—	e 42·4	55·9
De Bilt		80·7	335	12 23	0	22 32	+ 1	e 40·4	47·7
Graz		81·0	328	—	—	e 22 33	− 2	45·4	49·3
Feldberg	N.	81·2	332	e 12 15	−11	e 18 55	+18	e 39·2	43·8
Stonyhurst		81·4	340	—	—	e 22 43	+ 4	42·4	—
Zagreb	N.E.	81·8	325	e 12 24?	− 5	e 22 57	+13	e 45·4	52·0
	N.W.	81·8	325	e 12 24?	− 5	e 22 42	− 2	e 42·4	47·9
Uccle		82·1	335	e 12 28	− 3	e 22 42	− 5	e 39·4	53·5
Strasbourg		82·8	332	e 12 31	− 4	e 22 24?	[−18]	33·4	52·8
Ravensburg		82·8	330	—	—	—	—	e 44·4	—
Kew		82·9	339	e 12 34	− 1	e 22 53	− 3	40·4	48·5
Oxford		83·0	340	e 12 30	− 6	i 22 52	− 5	e 45·4	52·4
Zurich		83·5	330	i 12 36	− 3	—	—	47·4	—
Chur		83·6	330	12 35	− 5	—	—	47·6	—
Paris		84·4	335	—	—	e 23 5	− 7	46·4	53·4
Neuchatel		84·4	331	i 12 37	− 7	23 5	− 7	—	—
Besançon		84·6	332	—	—	—	—	—	49·4
Florence		85·4	327	i 12 46	− 4	23 12	−11	—	48·4

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Moncalieri		85·8	330	12 51	− 1	23 6	−22	46·0	59·8
Rocca di Papa		86·4	325	e 13 42	+47	e 23 15	−19	e 49·0	57·3
St. Louis	E.	87·8	40	—	—	e 23 33	−17	42·4	48·4
	N.	87·8	40	—	—	e 23 21	−29	42·4	54·4
Ottawa		88·0	26	—	—	e 23 36	−16	e 41·4	—
Toronto	N.	88·2	30	—	—	—	—	43·4	—
Tortosa	N.	92·1	333	—	—	—	—	e 51·4	61·3
Georgetown	Z.	93·2	30	—	—	e 23 1	[−46]	e 43·7	61·5
Toledo		94·5	336	—	—	—	—	e 37·5	61·9
Algiers		94·6	329	—	—	—	—	e 51·4	58·4
Alicante		94·7	332	—	—	—	—	e 54·0	—
Almeria		96·6	334	e 11 13	?	e 21 49	?	48·8	56·4
Granada		96·8	334	16 31	?	—	—	50·4	67·7
San Fernando		98·3	336	e 24 26	?[S]	(e 24 26)	[+11]	56·1	64·8
La Paz		144·5	58	e 20 0	[+12]	—	—	—	—

Additional readings and notes: Nagoya P = +1m.52s., MN = +3·4m. Osaka MN = +4·8m. Kobe MN = +4·3m., MZ = +4·6m. Sumoto MN = +5·0m. Hukuoka MN = +7·2m. Nagasaki PR_1 = +3m.50s., PR_2 = +3m.59s. Zi-ka-wei PSN = +8m.42s., MN = +11·1m., MZ = +13·0m. Phu-Lien ePR_2 = +8m.34s., MN = +23·8m. Tashkent e = +21m.24s. = SR_1 +3s. and +23m.24s. = SR_2 −13s. Scoresby Sund ePR_1N = +13m.55s., eE = +16m.54s. = PR_2 +22s., ePSN = +20m.48s., SR_1 = +24m.24s.?, MN = +38·6m. Upsala MN = +44·7m. Copenhagen PR_1 = +14m.48s., PR_2 = +16m.30s., PS = +22m.0s., SR_1 = +26m.6s., SR_2 = +30m.24s.?, MZ = +48·6m. Hamburg MN = +53·4m. Potsdam eN = +46m.54s. Jena eL_g = +48·4m., MN = +51·1m. Ksara eN = +31m.42s. = SR_2 +3s., readings are given as e simply. De Bilt MN = +51·9m., MZ = +52·6m. Feldberg ePR_1N = +15m.23s. Stonyhurst eSR_1? = +28m.3s. Uccle e = +28m.24s. = SR_1 −19s., MN = +52·8m. Strasbourg MZ = +55·4m. Kew ePR_1Z = +15m.44s., SR_1E = +28m.12s., SR_2E = +31m.30s., MN = +51·2m. Moncalieri L = +30·6m., MN = +55·2m. Rocca di Papa eE = +15m.38s. and +16m.36s. = PR_1 −4s., eN = +16m.14s. St. Louis i = +23m.37s., eE = +29m.20s., eN = +29m.30s. Toledo MNW = +58·9m. Almeria readings are given as e simply. San Fernando eS = +36m.26s., MN = +64·7m.

May 28d. 15h. 52m. 20s. Epicentre 40°·0N. 142°·5E. (as at 15h. 35m.).

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	1·4	231	0 24	+ 3	0 46	+ 7	—	—
Nagoya	6·6	224	e 1 41	0	—	—	3·3	3·7
Toyooka	7·5	236	e 1 56	+ 2	—	—	—	—
Osaka	7·8	229	2 17	+19	—	—	4·1	4·9
Kobe	7·9	230	e 2 44	+44	—	—	—	6·0

Additional readings: Mizusawa PN = +28s. Nagoya MN = +3·9m.

May 28d. 19h. 29m. 40s. Epicentre 40°·0N. 142°·5E. (as at 15h.).

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	1·4	231	0 28	+ 7	0 50	+11	—	—
Nagoya	6·6	224	e 1 37	− 4	—	—	—	—
Osaka	7·8	229	2 45	+47	—	—	4·6	4·7
Kobe	7·9	230	e 4 11	?L	—	—	(e 4·2)	—
Irkutsk	28·8	308	—	—	—	—	17·3	—
Ekaterinburg	53·3	319	9 24	− 4	e 21 30	?SR_1	27·3	34·0
Tashkent	53·9	299	—	—	—	—	e 22·3	33·7
Baku	67·1	306	—	—	—	—	e 37·9	43·6
Makeyevka	69·5	318	—	—	—	—	e 34·6	45·2
Copenhagen	75·3	334	—	—	—	—	39·3	—
De Bilt	80·7	335	—	—	—	—	e 45·3	—
Feldberg N.	81·2	332	—	—	—	—	e 45·3	46·7
Uccle	82·1	335	—	—	—	—	e 47·3	—

Mizusawa gives also SN = +59s.

May 28d. Readings also at 0h. (Apia and near Mizusawa), 1h. (Suva), 2h. (near Mizusawa), 3h. (Granada, Tucson, La Plata, Sucre, near La Paz, and near Mizusawa), 4h. (Mizusawa), 5h. (Tucson), 6h. (Tucson), 7h. (Georgetown and near Mizusawa (3)), 8h. (near Simferopol, Theodosia, and Yalta), 9h. (Simferopol and Tananarive), 10h. (Granada, Yalta, Baku, and Ekaterinburg), 11h. (Jena), 13h. (Baku, Ekaterinburg, Kucino, Nagoya, and near Mizusawa (2)), 14h. (Baku, Ekaterinburg, Bagnères, and near Toyooka), 15h. (La Paz, Mizusawa, Manila, and near Toyooka (2)), 16h. (near Mizusawa), 18h. and 19h. (near Mizusawa), 20h. (Kucino and near Mizusawa (4)), 21h. (Nagoya, Osaka, Kobe, Toyooka, and near Mizusawa), 22h. (near Mizusawa), 23h. (La Paz).

May 29d. 12h. 25m. 12s. Epicentre 8°·5S. 67°·0E. (as on 1924 Nov. 3d.).

$A = +\cdot386$, $B = +\cdot910$, $C = -\cdot148$; $D = +\cdot920$, $E = -\cdot391$; $G = -\cdot058$, $H = -\cdot136$, $K = -\cdot989$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Colombo		20·0	40	8 19	?S	(8 19)	− 4	—	12·6
Tananarive	E.	21·6	239	e 8 59	?S	(e 8 59)	+ 2	11·9	12·6
	N.	21·6	239	e 8 57	?S	(e 8 57)	0	11·8	13·0
Bombay		28·0	12	e 6 18	+10	10 48	−11	13·8	21·2
Tashkent		49·8	3	e 8 48?	−18	—	—	e 21·8	27·9
Baku		51·4	345	—	—	e 16 33	− 3	20·3	—
Makeyevka		62·1	340	—	—	—	—	25·7	34·1
Ekaterinburg		65·5	356	e 10 48	0	19 32	+ 1	31·8	—
Irkutsk		68·6	24	—	—	—	—	32·8	—
Copenhagen		78·4	333	—	—	—	—	25·8	—
Granada		80·0	312	—	—	—	—	38·8	42·0

Tananarive gives also eE = +9m.34s., PR_1 = +9m.44s.

May 29d. Readings also at 5h. (near La Paz), 6h. (near La Paz (2), Florence, near Kobe, Toyooka, and Mizusawa (2)), 7h. and 8h. (2) (near Mizusawa), 9h. (Nagoya and near Mizusawa), 10h. (Baku, Ekaterinburg, Irkutsk, Tashkent, and near Mizusawa), 14h. (near Mizusawa), 16h. (Ekaterinburg, Irkutsk, and Mizusawa), 17h. (Baku), 18h. (near Hukuoka), 21h. (near La Paz), 22h. (near Mizusawa), 23h. (Amboina).

May 30d. 20h. 1m. 50s. Epicentre 43°·6N. 13°·5E. (as on 1917 Nov. 13d.).

$A = +\cdot704$, $B = +\cdot169$, $C = +\cdot690$; $D = +\cdot233$, $E = -\cdot972$; $G = +\cdot671$, $H = +\cdot161$, $K = -\cdot724$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Florence		1·6	276	i 0 30	+ 6	—	—	—	1·0
Rocca di Papa		2·0	198	0 32	+ 1	—	—	1·3	1·4
Venice		2·0	338	i 0 31	0	0 49	− 6	—	3·7
Laibach		2·5	16	e 0 42	+ 3	e 1 14	+ 5	—	—
Naples	E.	2·8	168	e 1 0	+16	e 1 50	+33	—	3·2
Zagreb		2·8	37	e 0 44	0	i 1 31	+14	—	2·0
Pompeii		2·9	166	e 1 39	+54	—	—	—	—
Graz		3·7	21	i 0 55	− 3	i 1 32	−10	—	2·2
Innsbruck		3·9	339	e 0 58	− 3	1 46	− 1	1 1·9	2·2
Chur		4·2	318	i 1 3	− 2	—	—	—	—
Moncalieri		4·4	291	e 1 23	+15	2 32	+31	3·2	—
	Z.	4·4	291	e 0 46	−22	2 20	+19	—	—
Ravensburg		5·0	328	1 32	+15	2 8	− 9	2·5	2·9
Vienna		5·0	22	0 9	−68	1 18	−59	—	3·0
Belgrade	E.	5·1	77	e 1 46	+27	e 2 56	+36	—	3·3
	N.	5·1	77	e 1 46	+27	e 2 55	+35	—	3·4
Zurich		5·1	319	1 14	− 5	2 26	+ 6	—	—
Neuchatel		5·7	308	i 1 21	− 7	e 2 20	−16	—	—
Besançon		6·4	307	e 1 34	− 4	—	—	—	—
Strasbourg		6·4	324	e 1 29	− 9	e 3 0	+ 5	3·2	—
Feldberg	N.	7·4	334	e 2 40	+48	—	—	—	5·3
Jena		7·4	350	e 1 40	−12	(e 3 0)	−21	e 3·0	3·9

Continued on next page.

		Δ °	Az. °	P. m. s.	O−C. s.	S. m. s.	O−C. s.	L. m.	M. m.
Potsdam		8·7	358	—	—	e 3 46	−10	—	—
Paris		9·2	308	—	—	e 3 47	−21	5·0	5·2
Uccle		9·5	322	—	—	—	—	e 5·2	—
Tortosa	N.	10·0	258	—	—	—	—	e 5·2	6·8
De Bilt		10·1	329	—	—	e 5 16	?	e 5·7	6·9
Hamburg		10·3	348	—	—	e 4 34	− 3	—	8·0
Copenhagen		12·1	357	—	—	5 52	+31	—	9·1
Lund		12·1	359	—	—	—	—	6·2	—
Kew		12·1	315	—	—	e 5 40	+19	—	—
Konigsberg	N.	12·1	20	—	—	—	—	e 7·2	18·2
Oxford		12·8	315	—	—	—	—	e 7·6	9·5
Granada		14·5	249	—	—	—	—	8·0	12·6
Makeyevka		17·6	67	—	—	—	—	e 6·6	12·0
Pulkovo		19·1	26	—	—	e 7 26	−38	11·2	—
Kucino		19·8	44	—	—	e 8 3	−16	11·5	13·4
Ekaterinburg		32·1	49	—	—	—	—	15·2	—

Additional readings: Rocca di Papa eP = +33s., P = +37s. Zagreb eNW = +47s., i = +49s., +55s., +57s., +1m.1s., +1m.3s., +1m.7s., +1m.14s., +1m.18s., +1m.19s., +1m.24s., +1m.27s., and +1m.28s., MNW = +1·6m. Innsbruck iP*NE? = +1m.4s., iPNW? = +1m.9s., MNW = +2·1m. Chur iP = +1m.8s. Ravensburg PR_1 = +1m.54s. Vienna P* = +21s., P = +33s., P_2S = +1m.4s., PS_2 = +1m.38s., S = +1m.45s., MZ = +2·0m., Neuchatel eP? = +1m.40s. De Bilt MN = +7·3m., MZ = +7·4m. Hamburg MNZ = +5·2m. Copenhagen MZ = +7·5m. Kucino e = +10m.58s.

May 30d. Readings also at 2h. (La Paz (2)), 3h. (Toyooka, near Nagoya, and Osaka), 5h. (Wellington), 6h. (St. Louis, Makeyevka, Pulkovo, Suva, and near Apia), 7h. (Taihoku, Irkutsk, Baku, Ekaterinburg, Tashkent, Copenhagen, Feldberg, and Granada), 8h. (La Paz and near Mizusawa), 9h. (Feldberg, near Mizusawa, near Chur, Neuchatel, Zurich, and near Tacubaya), 10h. (San Fernando and Sydney), 11h. (La Paz), 12h. (Ekaterinburg, Irkutsk, Kobe, and Mizusawa), 13h. (Ekaterinburg, Irkutsk, and Tashkent), 14h. (Apia and Ekaterinburg), 15h. (La Paz and Rocca di Papa), 17h. (La Paz and Kobe, and near Mizusawa), 19h. (near Reykjavik), 21h. (Irkutsk), 22h. (Baku, Ekaterinburg, and La Paz).

May 31d. 7h. 25m. 54s. Epicentre 40°·0N. 142°·5E. (as on 28d.).

A = −·608, B = +·466, C = +·643; D = +·609, E = +·793; G = −·510, H = +·391, K = −·766.

		Δ °	Az. °	P. m. s.	O−C. s.	S. m. s.	O−C. s.	L. m.	M. m.
Mizusawa		1·4	231	0 31	+10	0 51	+12	—	—
Nagoya		6·6	224	e 1 39	− 2	2 35	−25	3·4	3·9
Ootomari		6·6	1	2 19	+38	—	—	4·5	—
Toyooka		7·5	236	1 56	+ 2	3 39	+15	e 5·4	—
Osaka		7·8	229	2 5	+ 7	—	—	3·8	4·9
Kobe		7·9	230	e 1 57	− 3	—	—	4·0	4·7
Sumoto		8·3	229	e 2 12	+ 6	e 3 10	−35	e 4·2	5·0
Hukuoka		11·6	240	e 5 48	?S	(e 5 48)	+39	e 7·8	8·2
Nagasaki		12·5	238	e 4 37	+91	7 19	?L	(7·3)	—
Zi-ka-wei	Z.	19·2	249	e 4 30	− 1	8 32	+26	11·4	13·2
Taihoku	E.	23·1	256	—	—	e 9 6	−21	—	—
Irkutsk		28·8	308	6 5	−11	e 11 18	+ 5	16·1	19·4
Hong Kong		29·8	242	11 11	?S	(11 11)	−20	—	20·3
Manila		31·7	223	e 8 6	?	—	—	—	—
Phu-Lien		36·1	250	6 6	−77	—	—	—	—
Ekaterinburg		53·3	319	i 9 6?	−22	16 44?	−16	25·1	35·1
Tashkent		53·9	299	e 9 46	+14	e 17 18	+10	e 26·1	34·1
Kucino		65·0	323	e 10 36	− 9	e 19 32	+ 7	31·6	42·1
Pulkovo		65·9	330	10 48	− 2	—	—	35·1	42·4
Baku		67·1	306	e 10 59	0	e 20 5	+14	33·1	39·2
Scoresby Sund		69·0	355	—	—	20 20	+ 6	36·1	43·6
Makeyevka		69·5	318	—	—	—	—	35·1	45·3
Upsala		70·4	335	—	—	—	—	—	42·1
Konigsberg	E.	73·0	330	—	—	—	—	e 41·1	43·1
Lund		75·1	334	11 48	− 2	21 30	+ 3	—	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Copenhagen		75·3	334	e 11 54	+ 3	e 21 30	+ 1	37·1	46·3
Hamburg		77·8	334	—	—	—	—	e 41·1	49·1
De Bilt		80·7	335	—	—	—	—	e 43·1	47·8
Feldberg	N.	81·2	332	—	—	e 22 42	+ 5	—	47·1
Zagreb		81·8	325	—	—	—	—	e 48·1	52·1
Strasbourg		82·8	332	e 12 6	−29	—	—	e 44·1	—
Kew		82·9	339	e 12 6?	−29	—	—	43·1	49·1
Paris		84·4	335	—	—	—	—	e 49·1	49·1
Florence		85·4	327	—	—	—	—	48·1	55·1
Moncalieri		85·8	330	e 9 38	?	—	—	48·1	—
Rocca di Papa		86·4	325	e 12 48	− 7	—	—	e 47·8	55·4
St. Louis		87·8	40	e 12 56	− 8	e 23 24	−26	e 49·1	61·1
Ottawa		88·0	26	—	—	—	—	e 45·1	—
Toronto		88·2	30	—	—	—	—	48·1	—
Tortosa	N.	92·1	333	—	—	—	—	e 65·1	68·0
Georgetown	Z.	93·2	30	e 1 16	?	(e 24 41)	− 6	58·1	—
Granada		96·8	334	—	—	—	—	53·1	57·1
San Fernando		98·3	336	—	—	—	—	56·0	64·5
La Paz		144·5	58	19 46	[− 1]	—	—	—	—

Additional readings: Mizusawa SN = +53s. Nagoya MN = +4·5m. Osaka MN = +4·6m. Pulkovo e = +18m.10s., and +20m.24s. Scoresby Sund MN = +50·4m. Copenhagen SR_1 = +26m.6s. ?, SR_2 = +32m.6s. ?, MZ = +48·6m. De Bilt MN = +51·9m., MZ = +52·6m. Rocca di Papa eN = +8m.46s., eE = +8m.50s., eN = +13m.32s., eLN = +57·6m. St. Louis e = +29m.29s. Georgetown eZ = +8m.20s.; true S is given as eL.

May 31d. 8h. 35m. 50s. Epicentre 40°·0N. 142°·5E. (as at 7h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	N.	1·4	231	0 28	+ 7	0 49	+10	—	—
Nagoya		6·6	224	e 1 43	+ 2	—	—	3·1	3·9
Toyooka		7·5	236	e 1 51	− 3	—	—	—	—
Osaka		7·8	229	2 23	+25	—	—	4·1	5·4
Kobe		7·9	230	e 2 18	+18	—	—	—	—
Zi-ka-wei	E.	19·2	249	(e 4 27)	− 4	(8 23)	+17	—	(11·2)
Irkutsk		28·8	308	e 6 0	−16	—	—	17·2	48·7
Ekaterinburg		53·3	319	—	—	—	—	18·2	25·5
Baku		67·1	306	—	—	—	—	37·2	43·4
Copenhagen		75·3	334	—	—	—	—	39·2	47·8
De Bilt		80·7	335	—	—	—	—	e 42·2	—
Feldberg	N.	81·2	332	—	—	—	—	e 46·2	52·1
Paris		84·4	335	—	—	—	—	e 54·2	—
Granada		96·8	334	—	—	—	—	e 63·1	65·2

Additional reading and note: Osaka MN = +5·2m. Zi-ka-wei readings have been increased by 15m.

May 31d. 12h. 33m. 24s. Epicentre 35°·5N. 140°·0E. (as on 1927 Aug. 7d.).

A = −·624, B = +·523, C = +·581; D = +·643, E = +·766; G = −·445, H = +·373, K = −·814.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagoya		2·5	262	e 0 39	0	1 12	+ 3	1·5	1·8
Mizusawa	E.	3·7	14	0 53	− 5	1 30	−12	—	—
Osaka		3·8	259	1 13	+14	—	—	2·2	2·7
Kobe	N.	4·1	266	e 1 0	− 4	—	—	2·2	2·5
Toyooka		4·2	273	e 1 10	+ 5	—	—	2·3	2·8
Sumoto		4·4	256	e 0 34	−34	e 1 23	−38	e 2·4	2·9
Irkutsk		30·3	315	—	—	—	—	16·6	—
Tashkent		54·2	299	—	—	e 16 36?	−35	—	—
Ekaterinburg		55·4	320	—	—	—	—	16·6	—
Baku		68·0	305	—	—	—	—	e 34·6	—

Additional readings: Nagoya P = +48s. Mizusawa SN = +1m.42s. Osaka MN = +3·0m. Kobe MZ = +2·4m. Sumoto MN = +2·8m.

May 31d. 13h. 48m. 48s. Epicentre 25°·8N. 128°·0E. (as on 1926 Aug. 7d.).

A = −·554, B = +·709, C = +·435; D = +·788, E = +·616; G = −·268, H = +·343, K = −·900.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Taihoku	E.	5·9	263	e 1 57	+26	—	—	—	—
Nagasaki		7·1	13	1 26	−22	4 17	+64	—	—
Hukuoka		8·0	15	e 2 12	+11	—	—	e 4·1	4·2
Zi-ka-wei	Z.	8·0	315	2 18	+17	4 10	+33	5·9	6·3
Sumoto		10·4	33	i 2 40	+ 4	(e 4 44)	+ 4	e 4·7	—
Kobe		10·8	33	e 2 45	+ 4	—	—	—	—
Osaka		11·0	34	2 49	+ 5	—	—	5·0	8·8
Toyooka		11·4	30	2 54	+ 4	—	—	—	—
Nagoya		12·1	37	e 3 4	+ 4	—	—	—	—
Manila		13·0	212	e 3 21	+ 8	—	—	e 7·8	—
Hong Kong		13·1	257	3 17	+ 3	—	—	—	9·0
Mizusawa	E.	17·3	36	(4 17)	+ 8	4 17	?P	—	—
Phu-Lien		20·3	260	4 41	− 4	e 8 24	− 5	—	—
Irkutsk		31·9	332	e 6 36	−10	12 0	− 7	17·2	22·2
Batavia		38·0	217	e 7 12?	−26	—	—	e 17·2	—
Ekaterinburg		56·3	324	9 54?	+ 6	i 17 48?	+10	29·9	—
Sydney		63·6	160	29 42	?	—	—	36·8	38·0
Baku		64·9	305	e 10 53	+ 9	19 42	+18	34·7	—
Kucino		69·0	324	e 11 12	+ 1	20 24	+10	33·1	44·4
Makeyevka		71·0	316	11 31	+ 8	20 51	+13	39·3	52·0
Pulkovo		71·6	329	11 32	+ 5	e 20 54	+ 9	39·2	46·0
Theodosia		73·8	315	e 11 54	+13	—	—	—	—
Simferopol		74·6	314	e 11 55	+ 9	—	—	—	—
Upsala		77·4	331	—	—	—	—	—	49·2
Scoresby Sund		81·4	350	e 12 30	+ 3	e 22 44	+ 5	e 48·2	—
Lund		81·6	330	—	—	22 46	+ 4	—	—
Copenhagen		81·9	330	e 12 34	+ 4	e 22 50	+ 5	43·2	54·5
Vienna		84·0	322	e 12 49	+ 7	—	—	—	56·2
Zagreb		85·6	320	e 12 42	− 9	e 23 12?	−14	e 49·2	56·2
Feldberg	N.	87·0	326	—	—	e 23 25	−16	e 47·8	52·6
De Bilt		87·5	328	e 13 3	+ 1	e 23 46	− 1	e 47·2	50·6
Strasbourg		88·5	325	e 13 12?	+ 4	e 23 12?	[− 6]	e 46·2	—
Florence		89·5	319	e 14 12	+59	24 7	− 2	—	56·2
Rocca di Papa		89·8	318	e 13 18	+ 3	—	—	—	42·0
Kew		90·4	331	e 13 12?	− 6	—	—	46·2	—
Oxford	E.	90·6	331	—	—	—	—	e 50·2	59·9
Moncalieri		90·8	323	e 13 37	+17	e 23 31	[− 2]	39·2	—
Paris		90·9	328	e 25 25	?PS	—	—	57·2	59·2
Granada		102·4	324	—	—	—	—	e 57·2	64·3
San Fernando	E.	104·4	325	—	—	—	—	—	61·9
Ottawa		105·6	17	—	—	—	—	e 56·2	—
St. Louis		106·4	30	—	—	e 29 16	?PR$_1$	e 44·2	70·2
Georgetown	Z.	111·2	21	—	—	e 27 32	− 7	70·2	—
La Paz		162·3	62	21 25	[+76]	—	—	—	—

Additional readings and notes: Osaka MN = +9·3m. Hong Kong MN = +9·7m.; readings have all been increased by 1h. Scoresby Sund eSR$_1$ = +28m.12s. ?, eLN = +43·2m. Copenhagen PR$_1$ = +15m.42s., SR$_1$ = +27m.12s. ?, SR$_2$ = +32m.12s. ?, MN = +47·7m. Vienna iPZ = +12m.55s. De Bilt eZ = +13m.20s., MN = +52·0m., MZ = +58·0m. Rocca di Papa iPN = +13m.32s. San Fernando MN = +61·2m. St. Louis e = +60m.35s. Georgetown iZ = +30m.6s.

May 31d. 20h. 53m. 33s. Epicentre 3°·2N. 127°·5E. (given by De Bilt).

A = −·608, B = +·792, C = +·056; D = +·793, E = +·609; G = −·034, H = +·044, K = −·998.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		6·9	175	i 1 36	− 9	—	—	i 3·4	—
Manila		13·1	331	e 3 32	+18	(i 6 17)	+31	i 6·3	—
Batavia	E.	22·7	246	i 5 12	− 1	—	—	—	—
Hong Kong		23·1	327	5 15	− 3	—	—	—	15·2
Phu-Lien		26·9	313	5 50	− 7	e 10 21	−18	12·4	—
Zi-ka-wei	Z.	28·6	349	e 6 12	− 2	12 14	+64	15·4	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Kobe		32·2	13	e 6 47	− 3	—	—	—	—
Nagoya		33·1	15	e 6 55	− 2	—	—	—	—
Mizusawa	E.	38·0	19	(7 35)	− 3	7 35	?P	—	—
Riverview		43·2	150	—	—	—	—	e 16·6	23·7
Irkutsk		52·7	344	i 9 28	+ 4	16 56	+ 4	27·4	—
Tashkent		64·4	315	i 10 49	+ 8	19 26	+ 8	29·4	45·4
Ekaterinburg		74·8	330	i 11 27?	−21	i 20 58?	−26	32·4	44·0
Baku		78·5	311	i 12 14	+ 4	i 22 6	0	38·0	52·2
Kucino		87·1	326	12 57	− 3	e 23 33	− 9	44·0	52·0
Makeyevka		87·2	319	e 13 0	0	23 37	− 6	42·6	53·2
Ksara		89·5	305	12 43	−30	23 29	[+ 4]	—	—
Pulkovo		90·8	331	e 13 14	− 6	i 24 9	−13	46·4	54·4
Victoria	E.	100·1	40	—	—	—	—	47·4	51·4
Lund		100·7	330	—	—	—	—	48·4	—
Copenhagen		101·1	330	—	—	e 24 27?	[− 2]	48·4	62·4
Scoresby Sund		103·5	351	—	—	e 25 27?	? Σ	e 54·4	60·0
Feldberg	N.	105·5	325	—	—	e 26 21	−26	e 54·4	55·6
De Bilt		106·5	328	—	—	—	—	e 54·4	63·4
Strasbourg		106·6	322	—	—	—	—	e 59·4	—
Uccle		107·6	326	—	—	—	—	e 55·4	—
Stonyhurst		109·4	330	—	—	—	—	e 61·4	—
Paris		109·5	323	—	—	—	—	e 64·4	—
Kew		109·7	328	—	—	—	—	e 67·4	—
Oxford		110·1	329	—	—	—	—	—	69·4
Granada		119·3	315	—	—	—	—	e 67·4	73·4
St. Louis		125·6	36	—	—	—	—	61·4	67·4
Ottawa		127·2	21	—	—	—	—	e 60·4	—
Toronto		127·3	24	—	—	—	—	60·4	—
La Paz		159·6	132	20 16	[+ 8]	—	—	—	—

Additional readings: Amboina i = +1m.55s. Batavia i = +.5m.14s. Kucino S_cP_cS = +23m.18s. = [S] +8s. Makeyevka S_cP_cS = +23m.23s. = [S] +13s. Copenhagen eE = +32m.27s.? = SR_1 − 24s., eEN = +37m.27s.? = SR_2 − 21s., E = +41m.27s.?, MN = +58·2m. Scoresby Sund eN = +29m.27s.?, +32m.27s.?, and +37m.27s.?, eLN = +56·4m. De Bilt MN = +61·6m., MZ = +64·5m. St. Louis eN = +41m.27s.?, eEN = +49m.27s.?

May 31d. 23h. 23m. 54s. Epicentre 41°·5S. 80°·0E. (as on 1927 Oct. 16d.).

A = +·130, B = +·738, C = −·663; D = +·985, E = −·174; G = −·115, H = −·653, K = −·749.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tananarive		35·2	300	12 48	?S	(12 48)	−10	—	15·9
Batavia		42·6	41	i 8 9	− 6	—	—	i 20·5	—
Adelaide		45·6	101	—	—	i 15 18	− 4	e 19·5	36·8
Melbourne		49·0	109	—	—	i 16 6	0	i 23·8	25·6
Kodaikanal		51·8	357	22 18	?SR_2	—	—	27·2	31·1
Riverview		55·3	107	—	—	e 17 33	+ 8	e 27·2	28·9
Sydney		55·3	107	17 6	?S	(17 6)	−19	28·1	30·5
Hyderabad		59·0	358	—	—	—	—	—	33·6
Entebbe		59·7	302	8 26	?	—	—	—	32·1
Bombay		60·8	353	10 15	− 3	18 40	+ 7	32·4	41·8
Calcutta	E.	64·5	9	(10 35)	− 7	(21 0)	? Σ	(33·4)	—
Phu-Lien		67·0	27	e 11 2	+ 4	e 19 57	+ 7	31·1	—
Manila		67·7	43	e 14 6?	?PR_1	—	—	—	—
Hong Kong		71·3	34	20 46	?S	(20 46)	+ 4	—	39·6
Dehra Dun		71·8	358	16 35	?PR_2	24 41	?SR_1	36·5	43·4
Zi-ka-wei	Z.	82·1	36	e 12 35	+ 4	23 35	?PS	47·6	52·1
Tashkent		83·4	352	e 12 40	+ 2	i 23 2	+ 1	—	48·4
Ksara	N.	85·6	325	e 12 48	− 3	23 13	−13	39·1	—
Baku		86·4	339	12 53	− 2	i 23 33	− 1	38·1	51·2
Irkutsk		96·1	14	e 13 36	−14	24 56	? Σ	49·1	56·0
Makeyevka		96·9	333	—	—	25 1	? Σ	42·0	63·9
Ekaterinburg		99·7	350	e 14 6?	− 3	—	—	39·1	51·3

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Rocca di Papa		103·0	316	—	—	e 25 49	? Σ	e 57·4	68·5
Kucino		103·6	337	—	—	24 48	[+ 7]	45·5	64·8
Algiers		105·1	306	—	—	e 28 22	?PS	e 50·1	65·1
Moncalieri		107·9	315	—	—	27 27	+18	58·3	—
		107·9	315	—	—	26 35	−34	55·0	—
Almeria		108·5	302	—	—	—	—	e 52·8	56·2
Pulkovo		109·2	336	—	—	—	—	53·1	62·3
Tortosa	N.	109·2	307	—	—	—	—	e 54·1	66·8
Granada		109·5	302	i 20 4	?PR_1	i 22 36	?PR_2	e 51·1	59·0
Strasbourg		110·2	317	—	—	26 6?	? Σ	e 47·1	—
San Fernando		110·7	300	—	—	—	—	55·8	67·9
Feldberg	N.	110·9	320	—	—	e 26 5	? Σ	e 53·2	64·0
Puy de Dôme		110·9	313	—	—	e 26 42	−54	—	—
Sucre		111·4	215	—	—	—	—	56·9	67·2
Hamburg		112·4	322	—	—	—	—	e 63·1	—
Lund		112·4	325	—	—	—	—	54·1	—
Copenhagen		112·7	325	—	—	26 6?	? Σ	53·1	62·8
Paris		113·0	315	—	—	e 44 6?	?SR_3	64·1	—
Upsala		113·5	331	—	—	—	—	e 66·1	—
De Bilt		113·8	319	e 19 47	?PR_1	—	—	e 61·1	64·5
Kew		116·1	317	—	—	e 26 6?	?	e 62·1	—
Oxford		116·7	315	—	—	—	—	e 56·1	88·8
Stonyhurst		118·5	318	—	—	e 25 0	?	e 74·1	—
Edinburgh		119·9	319	—	—	—	—	e 67·1	—
Dyce		120·1	321	—	—	—	—	—	77·1
Scoresby Sund		132·5	333	e 23 0	?	e 39 30	?SR_1	66·1	77·8
Ottawa		162·2	291	—	—	e 38 6	?	e 69·1	—
Victoria		162·2	59	—	—	—	—	77·5	85·9
Georgetown	Z.	162·4	268	i 19 13	[−56]	—	—	e 36·0	—
Toronto	N.	164·7	285	—	—	e 45 54	?SR_1	83·4	—
Cincinnati	E.	168·0	264	—	—	—	—	e 80·1	92·6
St. Louis		172·0	252	e 25 6	?PR_1	—	—	78·1	92·1

Additional readings: Tananarive $PR_1 = +13m.27s.$, $SR_1 = +15m.18s.$, $iSR_1N = +15m.24s.$ Batavia $i = +11m.20s.$ Adelaide $MN = +24·1m.$ Melbourne $i = +21m.55s. = SR_2 + 15s.$ Riverview $ePR_2? = +13m.12s.$, $eS_cS = +20m.16s.$, $eSR_3 = +25m.13s.$, $P_cSS_cP? = +26m.14s.$, $MN = +28·4m.$ Calcutta readings are diminished by 10m. Makeyevka $ePR_1 = +17m.30s.$, $S_cP_cS = +24m.18s. = [S] + 11s.$, $PS = +26m.25s.$ Ekaterinburg $e = +20m.39s.? = PR_2 - 16s.$ and $+22m.56s.? = PR_3 + 26s.$ Kucino $e = +22m.30s.$, $PS = +27m.30s.$ Algiers $e = +39m.26s.$ Moncalieri S (first line) $= +44m.19s.$, S? (second line) $= +42m.26s. = SR_2 - 16s.$ Pulkovo $ePR_1 = +19m.3s.$, $e = +33m.12s.$ Strasbourg $e = +34m.6s.?$ San Fernando $MN = +64·5m.$ Copenhagen $eEN = +29m.6s. = PS - 22s.$, $MN = +76·6m.$ De Bilt $MZ = +76·8m.$, $MN = +77·6m.$ Stonyhurst $e = +33m.30s.$ Scoresby Sund $MN = +80·1m.$ Ottawa $eN = +41m.18s.$, $e = +46m.6s.$, $eE = +52m.6s.$, and $+60m.6s.?$ Georgetown $iZ = +26m.28s. = [S] - 25s.$ Cincinnati $eE = +87m.6s.$ St. Louis $eE = +32m.6s. = \Sigma - 2s.$, $eN = +42m.6s.$, $e = +46m.27s.$, and $+61m.16s.$

May 31d. Readings also at 0h. (La Paz and near Mizusawa (2)), 6h. (La Paz and near Sucre), 7h. (near La Paz), 8h. (La Paz and near Mizusawa (2)), 9h. (Nagoya and near Mizusawa), 10h. (Nagoya, Baku, Ekaterinburg, Irkutsk, near Amboina, near Osaka, and near Mizusawa (2)), 11h. (La Paz and near Mizusawa), 12h. (Mizusawa and near Toyooka), 13h. (Mizusawa and near Amboina), 14h. (Mizusawa and Zi-ka-wei), 16h. (near La Paz and near Mizusawa), 17h. (Irkutsk, Wellington, Suva, Riverview, Melbourne, and Adelaide), 18h. (Baku, Copenhagen, Ekaterinburg, Feldberg, and Granada), 20h. (La Paz, Mizusawa, near Chur, Neuchatel, and Zurich), 23h. (near Kobe, Osaka, Sumoto, and Toyooka).

June 1d. 4h. 56m. 32s. Epicentre 40°·0N. 143°·5E. (as on 1926 June 14d.), See 1928 June 1d. 13h.

A = −·616, B = +·456, C = +·643; D = +·595, E = +·804; G = −·517, H = +·382, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		2·0	245	0 30	− 1	0 52	− 3	—	—
Nagoya		7·1	229	e 1 52	+ 4	(3 17)	+ 4	3·3	3·9
Osaka		8·3	232	2 53	+47	—	—	4·6	5·2
Zi-ka-wei	Z.	19·9	251	—	—	e 8 25	+ 4	(11·5)	33·3
Irkutsk		29·4	308	—	—	—	—	18·5	—
Tashkent		54·5	298	—	—	—	—	e 27·5	33·8
Copenhagen		75·7	334	—	—	—	—	41·5	—
De Bilt		81·1	335	—	—	—	—	e 51·5	—
Granada		97·1	334	—	—	—	—	e 64·4	73·5
Tananarive	E.	106·4	260	—	—	—	—	65·5	—

Additional readings and note: Mizusawa SN = +53s. Osaka MN = +6·2m. Zi-ka-wei gives S as e and L as S. Irkutsk e = +23m.28s. Granada L = +71·9m. Tananarive LN = +64·5m.

June 1d. 8h. 0m. 0s. Epicentre 3°·2N. 127°·5E. (as on 1928 May 31d.).

A = −·608, B = +·792, C = +·056; D = +·793, E = +·609; G = −·034, H = +·044, K = −·998.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		6·9	175	i 1 44	− 1	—	—	i 4·1	—
Manila		13·1	331	e 3 36	+22	—	—	i 6·7	—
Batavia	E.	22·7	246	e 4 54	−19	i 9 16	− 3	—	—
Hong Kong		23·1	327	—	—	(9 24)	− 3	9·4	—
Phu-Lien		26·9	313	5 0?	−57	—	—	—	—
Zi-ka-wei	Z.	28·6	349	e 6 9	− 5	11 7	− 3	—	49·6
Irkutsk		52·7	344	9 28	+ 4	16 55	+ 3	28·0	—
Tashkent		64·4	315	—	—	i 19 18	0	e 29·0	39·4
Ekaterinburg		74·8	330	e 11 57	+ 9	i 21 27	+ 3	32·0	45·7
Kucino		87·1	326	—	—	e 23 42	0	—	—
Ksara	N.	89·5	305	e 12 21	−52	23 6	−63	—	—
Copenhagen		101·1	330	e 20 0?	?	e 40 0?	?	48·0	—
Feldberg	N.	105·5	325	—	—	—	—	e 51·8	64·9
De Bilt		106·5	328	—	—	—	—	e 61·0	—
Kew		109·7	328	—	—	—	—	e 68·0	—
Granada		119·3	315	—	—	—	—	72·0	76·7
St. Louis		125·6	36	—	—	e 42 57	?SR_1	e 63·0	67·0
Ottawa		127·2	21	—	—	—	—	e 66·0	—
Toronto	N.	127·3	24	—	—	—	—	66·0	—
Georgetown	Z.	132·2	26	—	—	e 39 6	?SR_1	67·6	—

Additional readings: Batavia iE = +6m.11s., i = +9m.24s. Tashkent e = +12m.38s. and +20m.18s. = [S] −10s. Granada e = +64m.40s. St. Louis eE = +42m.57s., eN = +46m.0s. Georgetown iZ = +48m.34s.

June 1d. 12h. 23m. 20s. Epicentre 40°·0N. 143°·5E. (as at 4h., but see 13h.).

A = −·616, B = +·456, C = +·643; D = +·595, E = +·804; G = −·517, H = +·382, K = −·766.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	2·0	245	0 34	+ 3	0 57	+ 2	—	—
	N.	2·0	245	0 35	+ 4	0 56	+ 1	—	—
Ootomari		6·7	356	2 24	+42	—	—	4·9	—
Nagoya		7·1	229	e 1 52	+ 4	(3 14)	+ 1	3·2	3·6
Toyooka		8·1	240	i 2 5	+ 2	3 43	+ 3	i 4·4	—
Osaka		8·3	232	1 57	− 9	(3 57)	+12	3·9	4·9
Kobe		8·5	233	e 2 14	+ 5	(e 4 7)	+17	e 4·1	4·8
Sumoto		8·9	233	e 2 5	−10	(e 4 5)	+ 4	e 4·1	5·1

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Hukuoka		12·3	242	e 3 5	+ 2	—	—	e 6·5	—
Nagasaki		13·1	241	—	—	—	—	e 7·0	—
Taihoku	E.	23·7	237	—	—	—	—	12·7	—
Irkutsk		29·4	308	i 6 10	−12	e 11 6	−18	17·7	19·0
Hong Kong		30·4	243	—	—	—	—	—	20·3
Phu-Lien		36·8	250	e 7 0	−28	—	—	—	—
Ekaterinburg		53·8	319	i 9 33	+ 1	i 17 12	+ 6	25·7	35·6
Tashkent		54·5	298	i 9 34	− 2	—	—	—	34·1
Bombay		63·4	275	—	—	e 19 40?	?PS	—	—
Kucino		65·5	324	—	—	e 19 46	+15	e 34·7	42·6
Pulkovo		66·3	330	10 55	+ 1	e 19 36	− 5	e 30·7	39·7
Scoresby Sund		69·1	356	10 28	−44	e 20 40?	?PS	35·7	—
Makeyevka		70·1	317	e 11 22	+ 4	—	—	38·7	45·4
Upsala		70·7	335	—	—	—	—	e 43·7	—
Lund		75·4	334	—	—	—	—	39·7	—
Copenhagen		75·7	334	e 11 54	+ 1	e 21 28	− 6	35·7	—
Hamburg		78·3	334	—	—	—	—	e 44·7	45·7
Dyce		78·6	343	—	—	—	—	e 46·8	—
Budapest		79·6	325	—	—	—	—	e 45·2	51·7
Jena		79·9	331	—	—	—	—	e 45·7	—
De Bilt		81·1	335	e 12 24	− 2	—	—	e 42·7	47·7
Feldberg	N.	81·6	333	—	—	—	—	e 43·1	—
Zagreb		82·2	326	e 12 50	+19	e 14 51	?	e 46·7	52·2
Uccle		82·5	335	—	—	—	—	e 45·7	—
Strasbourg		83·2	332	e 11 40?	?	e 15 40?	?PR_1	e 44·7	—
Kew		83·2	339	e 12 40	+ 3	—	—	48·7	—
Oxford		83·3	340	—	—	—	—	e 43·7	55·4
Paris		84·8	335	—	—	—	—	e 48·7	54·7
Moncalieri		86·2	330	—	—	—	—	e 44·3	—
Rocca di Papa		86·9	326	—	—	—	—	e 48·8	57·4
St. Louis		87·3	40	—	—	e 23 40	− 4	—	49·7
Ottawa		87·7	27	—	—	—	—	e 56·7	—
Georgetown	Z.	92·8	31	—	—	e 27 40?	?	i 51·8	—
Granada		97·1	334	e 17 31	?PR_1	—	—	51·7	57·4

Additional readings: Nagoya MN = +3·9m. Toyooka eSN = +3m.49s. Osaka MN = +5·0m. Kobe MZ = +4·4m., MN = +4·9m. Sumoto eS = +3m.4s., MN = +4·8m. Tashkent i = +9m.49s., SR_1 = +20m.58s. Kucino e = +14m.58s. = PR_2 −12s., and +23m.34s. Hamburg MN = +49·7m. De Bilt MNZ = +52·7m. Feldberg e = +45m.57s., i? = +59m.8s. Zagreb eP = +6m.51s., e = +49m.4s. Moncalieri S? = +48m.18s., L = +50·8m. Georgetown iZ = +58m.16s.

June 1d. 13h. 12m. 13s. Epicentre 40°·0N. 143°·5E.

(as at 12h.).

A = −·616, B = +·456, C = +·643; D = +·595, E = +·804; G = −·517, K = +·382, K = −·766.

Deduced by comparison with the epicentre 40°·0N. 142°·5E. of 1928 May 27d.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		2·0	245	0 37	+ 6	0 59	+ 4	—	—
Ootomari		6·7	356	1 51	+ 9	4 2	+60	4·8	8·0
Nagoya		7·1	229	e 1 45	− 3	(3 10)	− 3	3·2	3·6
Toyooka	N.	8·1	240	i 2 2	− 1	i 3 37	− 3	e 4·8	6·1
Osaka		8·3	232	2 0	− 6	(3 56)	+11	3·9	5·0
Kobe		8·5	233	2 7	− 2	(3 52)	+ 2	3·9	4·6
Sumoto		8·9	233	e 2 10	− 5	(e 4 1)	0	e 4·0	5·2
Matuyama		10·6	238	2 3	−35	(e 4 55)	+10	e 4·9	6·3
Hukuoka		12·3	242	2 51	−12	(5 50)	+24	5·8	8·4
Nagasaki		13·1	241	e 3 9	− 5	5 58	+12	7·0	—
Zi-ka-wei		19·9	251	4 31	− 9	8 23	+ 2	—	11·1
Taihoku	E.	23·7	237	5 11	−14	9 22	−16	11·9	15·8
Irkutsk		29·4	308	i 6 11	−11	11 12	−12	15·8	19·4
Hong Kong		30·4	243	6 19	−13	11 20	−21	14·4	20·4
Manila	E.	32·2	226	e 6 34	−16	i 14 1	?SR_1	e 22·2	25·5
	N.	32·2	226	e 6 34	−16	i 13 58	?SR_1	e 21·8	24·4
Phu-Lien		36·8	250	7 11	−17	12 47	−34	16·8	24·0

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		45·9	203	e 8 5	−34	i 14 49	−38	17·8	—
Calcutta	E.	49·4	269	8 48	−15	16 6	− 5	28·2	—
	N.	49·4	269	8 56	− 7	16 14	+ 3	28·2	—
Honolulu T.H.		52·9	93	—	—	16 59	+ 4	e 24·8	26·7
Dehra Dun		53·2	281	10 3	+36	17 21	+22	30·4	33·8
Ekaterinburg		53·8	319	i 9 37	+ 5	i 17 13	+ 7	22·8	37·2
Tashkent		54·5	298	i 9 33	− 3	i 16 45	−30	—	36·9
Batavia		57·2	226	i 9 48	− 5	i 17 38	−11	36·0	—
Hyderabad		59·9	270	10 12	+ 1	18 41	+19	34·0	41·8
Victoria		63·1	50	—	—	19 14	+12	35·5	40·0
Bombay		63·4	275	10 35	+ 1	19 7	+ 1	33·0	40·3
Kodaikanal		65·2	265	19 5	?S	(19 5)	−22	41·9	48·6
Colombo		65·5	260	19 24	?S	(19 24)	− 7	—	39·9
Kucino		65·5	324	e 11 47	+59	e 19 53	+22	33·8	43·4
Pulkovo		66.3	330	i 10 56	+ 2	19 49	+ 8	e 30·3	42·3
Helsingfors		68·0	332	11 9	+ 5	20 8	+ 6	36·8	—
Scoresby Sund		69·1	356	11 17	+ 5	20 27	+12	34·8	43·9
Berkeley		69·5	59	e 11 22	+ 8	e 20 30	+10	—	—
Makeyevka		70·1	317	i 11 23	+ 5	20 37	+10	i 36·3	42·7
Upsala		70·7	335	11 23	+ 2	e 20 38	+ 4	e 36·8	43·2
Konigsberg		73·4	330	e 11 41	+ 3	e 21 17	+10	e 37·3	46·8
Theodosia		73·4	317	11 45	+ 7	21 14	+ 7	—	—
Bergen		74·0	340	11 59	+17	—	—	—	37·8
Simferopol		74·1	317	11 45	+ 2	21 20	+ 5	41·3	—
Riverview		74·2	174	e 11 1	−42	i 21 8	− 8	e 33·0	39·6
Sydney		74·2	174	20 59	?S	(20 59)	−17	37·0	38·3
Yalta		74·4	317	11 45	0	—	—	41·3	—
Lund		75·4	334	11 54	+ 3	21 35	+ 5	—	—
Lemberg	E.	75·6	324	e 11 59	+ 6	e 21 41	+ 8	e 42·1	49 2
	N.	75·6	324	e 11 47	− 6	e 21 35	+ 2	e 42·2	49·0
Copenhagen		75·7	334	11 54	+ 1	e 21 38	+ 4	38·8	48·7
Melbourne		77·8	179	—	—	i 21 47	−11	i 32·6	42·8
Potsdam		78·1	331	i 12 11	+ 3	i 22 4	+ 3	e 42·8	48·8
Hamburg		78·3	334	i 12 11	+ 2	i 22 8	+ 4	e 41·5	49·8
Dyce		78·6	343	e 12 18	+ 7	(22 23)	+16	22·4	47·4
Budapest		79·6	325	12 18	+ 1	22 22	+ 3	42·8	51·8
Jena		79·9	331	i 12 17	− 1	i 22 23	+ 1	e 42·8	53·0
Edinburgh		80·0	342	e 12 23	+ 4	22 29	+ 6	42·8	48·8
Vienna		80·2	328	e 12 18	− 2	22 29	+ 4	e 42·8	50·8
Tucson	N.	80·3	56	e 12 24	+ 3	e 22 32	+ 5	—	—
Ksara	N.	80·4	308	12 21	0	22 27	− 1	—	—
Belgrade	E.	81·0	323	e 12 24	− 1	e 22 36	+ 1	e 50·1	53·3
	N.	81·0	323	e 12 24	− 1	e 22 34	− 1	e 48·3	—
De Bilt		81·1	335	12 26	0	22 37	+ 1	e 38·8	47·8
Graz		81·4	328	i 12 27	0	e 22 40	+ 1	41·8	52·3
Feldberg		81·6	333	—	—	—	—	e 40·1	48·3
Bidston		82·2	340	e 12 21	−10	22 52	+ 4	42·2	51·9
Zagreb		82·2	326	e 12 27	− 4	e 22 47?	− 1	e 45·1	53·7
Uccle		82·5	335	e 12 31	− 2	e 22 48	− 4	e 39·8	48·3
Laibach		82·7	328	e 12 27	− 7	e 23 1	+ 7	44·8	53·8
Innsbruck		82·9	330	11 47?	?	—	—	e 52·9	—
Kew		83·2	339	i 12 38	+ 1	i 23 0	+ 1	41·1	48·6
Ravensburg		83·2	331	12 37	0	23 0	+ 1	e 44·8	53·7
Strasbourg		83·2	332	i 12 36	− 1	e 22 59	0	38·8	49·2
Oxford		83·3	340	12 40	+ 2	i 23 2	+ 2	e 37·8	56·8
Zurich		84·0	331	i 12 39	− 3	e 23 1	− 7	—	—
Neuchatel		84·8	332	i 12 43	− 4	e 23 6	−11	—	—
Paris		84·8	335	i 12 44	− 3	i 23 11	− 6	24·8	58·8
Besançon		85·0	333	e 12 46	− 2	—	—	46·8	—
Florence		85·8	327	12 47	− 5	23 21	− 7	44·8	49·4
Moncalieri		86·2	330	12 58	+ 4	23 19	−13	36·3	58·0
Wellington	E.	86·2	157	—	—	i 22 8	[−55]	e 41·1	—
	N.	86·2	157	—	—	i 22 15	[−48]	e 35·5	—
Naples	N.	86·9	324	e 13 0	+ 2	e 23 40	0	49·8	58·8
Pompeii	E.	86·9	324	e 12 36	−22	e 23 6	[− 2]	—	52·8
Rocca di Papa		86·9	326	e 12 53	− 5	e 23 19	[+11]	e 48·1	56·6
St. Louis	E.	87·3	40	e 12 54	− 7	23 38	− 6	—	40·8
	N.	87·3	40	e 12 54	− 7	23 34	−10	—	41·8
Ann Arbor	N.	87·3	34	—	—	i 23 35	− 9	e 51·7	—
Ottawa		87·7	27	—	—	i 23 39	−10	e 45·8	57·2
Toronto		87·8	30	e 12 47?	−17	i 23 39	−11	35·8	54·3
Ithaca		90·0	28	—	—	—	—	55·8	—
Bagnères		90·6	335	—	—	e 23 43	[+11]	e 47·8	—
Barcelona		91·3	332	e 13 14	− 9	—	—	e 51·4	58·7

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tortosa	N.	92·4	334	13 21	− 8	23 55	[+13]	e 42·8	62·5
Georgetown	Z.	92·8	31	i 13 18	−13	e 24 4	[+19]	e 43·1	60·7
Toledo		94·8	336	e 13 30	−12	23 8	[−48]	e 37·8	64·3
Algiers		95·0	330	—	—	24 5	[+ 8]	49·8	54·8
Alicante		95·0	333	e 13 1	−42	e 23 37	[−20]	e 37·8	64·8
Almeria		97·0	334	e 13 38	−16	25 5	−21	e 51·0	57·6
Granada		97·1	334	i 13 43	−12	e 25 15	−12	52·0	62·3
Malaga		97·8	335	e 14 31	+32	e 24 59	? Σ	—	—
San Fernando		98·6	336	—	—	e 24 35	[+18]	48·7	57·8
Entebbe		105·9	285	11 47?	?	—	—	—	69·8
Tananarive		106·4	260	e 18 48	[+38]	e 28 35	?PS	57·1	63·8
La Paz		143·9	59	19 47	[0]	—	—	69·8	75·2
Sucre		147·6	57	i 19 58	[+ 6]	—	—	—	—

Additional readings and notes: Ootomari MN = +6·6m. Nagoya S = +2m.33s., MN = +3·8m. Osaka MN = +4·6m. Kobe MN = +4·4m., MZ = +4·8m. Sumoto eS = +3m.9s. Hukuoka MN = +8·0m. Nagasaki PR_1 = +3m.24s., PR_2 = +3m.31s. Phu-Lien iP = +7m.12s., ePR_2 = +8m.38s. Honolulu T.H. eLN = +22·3m. Batavia i = +9m.50s. Scoresby Sund PR_1 = +13m.53s., PR_2 = +15m.11s., SR_1 = +25m.11s., SR_2 = +28m.29s., MN = +48·3m. Berkeley eN = +20m.31s., eZ = +20m.32s. Upsala PR_1 = +14m.1s., MN = +44·8m. Konigsberg ePR_1E = +14m.35s., PR_2E = +16m.11s. Riverview ePR_1? = +14m.39s., iPPPS = +21m.52s., MN = +42·1m. Lund +21m.58s. Copenhagen ePR_1 = +14m.46s., ePR_2 = +16m.29s., ePSZ = +21m.59s., SR_1 = +26m.47s. ? Potsdam iPR_1 = +15m.7s., MN = +49·8m. Hamburg MN = +52·8m. Dyce i = +17m.13s. = PR_2 −17s. Jena iPNZ = +12m.19s., eLE = +43·8m., MN = +52·4m. Vienna iPZ = +12m.19s., PR_1 = +14m.5s., PS = +23m.11s. De Bilt iPR_1Z = +15m.34s., MNZ = +52·7m. Bidston readings are given for 12h. Zagreb e = +12m.31s., eNE = +13m.6s. and +14m.41s., iNE = +15m.34s., eNE = +20m.42s., +28m.26s., +30m.17s., and +32m.11s., eLNW = +43·7m. Uccle MN = +53·0m. Kew PR_1Z = +15m.52s., SR_1E = +28m.26s., LZ = +45·8m., MN = +51·3m., MZ = +51·6m. Ravensburg PR_1 = +15m.58s., PR_2 = +18m.1s., PS = +24m.1s., SR_1 = +28m.39s. Strasbourg PR_1 = +15m.47s., MZ = +55·8m., MN = +57·8m. Paris MN = +48·8m. Moncalieri MN = +55·3m. Rocca di Papa P = +12m.54s., PR_1E = +16m.17s., PR_1N = +16m.29s., eSN = +23m.21s. St. Louis S_6P_6SN = +23m.19s., S_6P_6SE = +23m.22s., SR_1 = +29m.28s., SR_2 = +33m.44s. Ann Arbor eN? = +29m.35s. = SR_1 −19s. Ottawa eLE = +35·8m., LE = +51·8m., MN = +58·4m. Barcelona PR_1 = +16m.57s., PR_2 = +19m.15s., PR_3 = +20m.33s., PS = +24m.46s. Tortosa eLE = +37·8m., ME = +59·0m. Toledo MNW = +55·8m. Algiers PR_1 = +17m.1s., MN = +60·8m. Granada P = +13m.46s., PR_1 = +17m.42s., PR_2 = +20m.48s., i = +22m.26s. = PR_2 +23s. San Fernando MN = +64·8m. Tananarive eE = +18m.50s. = PR_1 −4s., eN = +21m.18s., PR_2 = +22m.17s., PR_c = +25m.2s. = [S] +8s., eN = +32m.11s., MN = +62·8m. La Paz MN = +120·0m.

June 1d. 15h. 5m. 8s. Epicentre 40°·0N. 143°·5E. (as on 13h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	2·0	245	0 32	+ 1	0 59	+ 4	—	—
	N.	2·0	245	0 33	+ 2	0 58	+ 3	—	—
Nagoya		7·1	229	e 1 46	− 2	(3 10)	− 3	3·2	3·4
Toyooka		8·1	240	1 56	− 7	—	—	—	—
Osaka		8·3	232	2 24	+18	—	—	4·2	4·9
Kobe		8·5	233	e 2 9	0	(e 4 3)	+13	e 4·0	4·4
Irkutsk		29·4	308	e 6 6	−16	e 11 18	− 6	e 14·6	18·8
Hong Kong		30·4	243	—	—	—	—	—	20·0
Phu-Lien		36·8	250	6 52?	−36	—	—	—	—
Ekaterinburg		53·8	319	i 9 31	− 1	e 17 5	− 1	26·9	35·5
Makeyevka		70·1	317	—	—	—	—	32·6	45·3
Copenhagen		75·7	334	—	—	—	—	35·9	—
De Bilt		81·1	335	—	—	—	—	e 49·9	52·6
Feldberg	N.	81·6	333	—	—	—	—	e 35·5	50·5
Zagreb	N.E.	82·2	326	—	—	—	—	e 51·9	—
Hohenheim		82·6	331	—	—	—	—	e 41·9	—
Kew		83·2	339	—	—	—	—	e 49·9	—

Additional readings: Nagoya MN = +3·6m. Zagreb eNW = +48m.52s. ?

June 1d. 18h. 21m. 40s. Epicentre 40°·0N. 143°·5E. (as at 15h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		2·0	245	0 33	+ 2	0 52	− 3	—	—
Nagoya		7·1	229	e 1 43	− 5	2 47	−26	3·5	3·7
Toyooka		8·1	240	1 58	− 5	—	—	—	—
Osaka		8·3	232	2 12	+ 6	(3 58)	+13	4·0	4·7
Kobe		8·5	233	e 2 11	+ 2	(e 3 59)	+ 9	e 4·0	—
Sumoto		8·9	233	e 2 31	+16	e 3 31	−30	e 4·5	—
Zi-ka-wei	Z.	19·9	251	4 32	− 8	8 24	+ 3	12·1	13·0
Irkutsk		29·4	308	6 10	−12	e 11 5	−19	16·3	18·8
Hong Kong		30·4	243	—	—	—	—	—	20·0
Phu-Lien		36·8	250	—	—	—	—	16·3	—
Ekaterinburg		53·8	319	i 9 36	+ 4	17 13	+ 7	25·3	35·2
Tashkent		54·5	298	—	—	—	—	e 27·3	34·7
Kucino		65·5	324	—	—	—	—	e 35·6	42·3
Pulkovo		66·3	330	e 11 17	+23	—	—	38·3	42·5
Makeyevka		70·1	317	—	—	—	—	32·4	45·2
Lund		75·4	334	—	—	—	—	44·3	—
Copenhagen		75·7	334	14 20?	?	—	—	38·3	48·4
Budapest		79·6	325	—	—	—	—	e 50·8	—
De Bilt		81·1	335	—	—	—	—	e 51·3	52·7
Feldberg	N.	81·6	333	—	—	—	—	e 45·3	47·3
Zagreb		82·2	326	—	—	—	—	e 48·3	52·3
Uccle		82·5	335	—	—	—	—	e 46·3	—
Kew		83·2	339	—	—	—	—	e 50·3	—
Strasbourg		83·2	332	—	—	—	—	e 43·3	—
Paris		84·8	335	—	—	—	—	e 53·3	—
Rocca di Papa		86·9	326	—	—	—	—	e 47·6	57·8
Almeria		97·0	334	—	—	—	—	—	43·0
Granada		97·1	334	—	—	—	—	e 53·3	61·2

Additional readings: Mizusawa PN = +34s. Osaka MN = +4·3m.

June 1d. 22h. 6m. 12s. Epicentre 40°·0N. 143°·5E. (as at 18h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa		2·0	245	0 35	+ 4	0 55	0	—	—
Nagoya		7·1	229	e 1 52	+ 4	(3 25)	+12	3·4	4·0
Toyooka		8·1	240	3 1	+58	4 42	+62	—	—
Osaka		8·3	232	2 26	+20	—	—	4·1	5·2
Kobe		8·5	233	e 3 7	?S	(e 3 7)	−43	—	—
Sumoto		8·9	233	e 2 17	+ 2	e 3 18	−43	e 4·3	4·8
Zi-ka-wei	Z.	19·9	251	e 4 32	− 8	8 28	+ 7	11·6	13·3
Irkutsk		29·4	308	6 6	−16	e 11 3	−21	18·9	—
Hong Kong		30·4	243	—	—	—	—	—	20·3
Phu-Lien		36·8	250	e 7 8	−20	—	—	—	—
Ekaterinburg		53·8	319	i 9 32	0	17 9	+ 3	25·8	35·6
Tashkent		54·5	298	i 9 30	− 6	—	—	e 26·8	34·7
Kucino		65·5	324	—	—	e 19 33	+ 2	e 32·0	42·8
Pulkovo		66·3	330	e 10 48	− 6	—	—	38·8	42·1
Scoresby Sund		69·1	356	—	—	20 18	+ 3	38·8	—
Makeyevka		70·1	317	i 11 15	− 3	e 20 32	+ 5	35·2	45·4
Lund		75·4	334	—	—	—	—	41·8	—
Copenhagen		75·7	334	—	—	21 24	−10	38·8	48·7
Hamburg		78·3	334	—	—	—	—	e 48·8	—
Budapest		79·6	325	—	—	—	—	e 51·3	—
De Bilt		81·1	335	—	—	—	—	e 45·8	52·7
Feldberg	N.	81·6	333	e 15 48	?PR_1	—	—	—	47·1
Zagreb		82·2	326	e 11 48?	−43	—	—	—	52·8
Uccle		82·5	335	—	—	—	—	e 45·8	—
Kew		83·2	339	—	—	—	—	e 46·8	—
Strasbourg		83·2	332	—	—	—	—	e 45·8	—
Paris		84·8	335	—	—	—	—	e 53·8	—
Rocca di Papa		86·9	326	—	—	e 30 3	?SR_1	e 49·8	62·1
Ottawa		87·7	27	—	—	—	—	e 51·8	—
Tortosa	N.	92·4	334	—	—	—	—	e 60·8	—
Granada		97·1	334	—	—	—	—	e 54·8	59·3

Additional readings: Nagoya MN = +3·9m. Osaka MN = +5·0m. Kucino e = +23m.44s.

June 1d. Readings also at 1h. (Granada and near Tacubaya), 2h. (near Mizusawa), 4h. (Mizusawa (2) and La Paz), 5h. (La Paz and near Batavia), 6h. (Copenhagen, De Bilt, Ekaterinburg, Irkutsk, and near Victoria), 7h. (La Paz, Neuchatel, and Tashkent), 10h. (Zagreb), 11h. (La Paz, Sucre, Manila, near Kobe, and Sumoto), 12h. (Nagoya and Mizusawa (3)), 13h. (Nagoya (3) and near Mizusawa (6)), 14h. (near Mizusawa (4)), 15h. (La Paz, Tashkent, and Mizusawa), 16h. (near Amboina and near Mizusawa (2)), 17h. (near Nagoya), 18h., 20h., 21h., and 22h. (near Mizusawa), 23h. (Perth).

June 2d. 0h. 2m. 4s. (I)
9h. 8m. 3s. (II)
17h. 30m. 15s. (III)
} Epicentre 40°·0N. 143°·5E. (as on 1d.).

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
I Mizusawa	E.	2·0	245	0 33	+ 2	0 53	− 2	—	—
I	N.	2·0	245	0 34	+ 3	0 51	− 4	—	—
II	E.	2·0	245	0 32	+ 1	0 55	0	—	—
III		2·0	245	0 31	0	0 54	− 1	—	—
I Nagoya		7·1	229	—	—	e 2 49	−24	—	—
II		7·1	229	—	—	e 3 0	−13	—	—
III		7·1	229	e 1 48	0	—	—	—	—
III Zi-ka-wei	Z.	19·9	251	e 4 27	−13	8 31	+10	—	13·2
I Irkutsk		29·4	308	5 32	+10	—	—	16·9	—
II		29·4	308	e 5 35	−47	—	—	18·0	—
I Ekaterinburg		53·8	319	—	—	—	—	26·9	—
II		53·8	319	(i 9 25)	− 7	—	—	28·0	—
III		53·8	319	i 9 31	− 1	e 17 9	+ 3	24·8	35·4
I Tashkent		54·5	298	—	—	—	—	e 26·9	32·7
II		54·5	298	—	—	e 18 57	[−15]	—	30·6
I Kucino		65·5	324	—	—	—	—	e 36·9	—
I Makeyevka		70·1	317	—	—	—	—	e 43·3	—
II		70·1	317	—	—	—	—	e 23·0	—
I Çopenhagen		75·7	334	—	—	—	—	42·9	—
II		75·7	334	—	—	—	—	37·0	—
III		75·7	334	—	—	—	—	40·8	—
I Feldberg		81·6	333	—	—	—	—	—	51·9

Mizusawa gives also (II) SN = +56s., (III) PN = +32s. Ekaterinburg II P has been *increased* by 6m.

June 2d. 20h. 12m. 54s. Epicentre 83°·0N. 70°·0E.

A = +·042, B = +·115, C = +·993; D = +·940, E = −·342;
G = +·339, H = +·933, K = −·122.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Pulkovo		25·2	229	i 5 38	− 2	e 10 8	+ 1	16·1	18·8
Ekaterinburg		26·3	191	i 5 53	+ 2	e 10 26	− 2	13·1	—
Copenhagen		31·0	246	—	—	—	—	e 14·1	—
Lund		31·0	245	—	—	—	—	14·1	—
Irkutsk		32·1	141	—	—	e 11 36	−34	21·1	23·2
Hamburg		33·4	250	—	—	—	—	e 16·1	18·1
De Bilt		35·4	254	—	—	—	—	e 19·1	—
Makeyevka		36·2	218	—	—	—	—	e 17·1	—
Feldberg	N.	36·9	250	—	—	—	—	17·1	24·8

Additional readings: Irkutsk e = +17m.21s. De Bilt eL = +24·1m.

June 2d. Readings also at 0h. (near Batavia and Malabar), 2h. (Feldberg and Perth), 4h. (near Mizusawa (2)), 5h. (Copenhagen and near Mizusawa), 8h. (near Algiers and near Manila), 11h. (La Paz, Sucre, and near Mizusawa), 13h. (Mizusawa (2)), 16h. and 19h. (near Tacubaya), 22h. (Mizusawa and Rocca di Papa).

June 3d. 6h. 38m. 12s. Epicentre 5°·0S. 108°·0W.

A = −·308, B = −·947, C = −·087; D = −·951, E = +·309;
G = +·027, H = +·083, K = −·996.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tacubaya		25·9	19	5 45	− 2	10 16	− 4	12·1	13·9
Tucson	E.	37·4	356	—	—	—	—	e 17·9	—
La Paz		40·7	110	8 9	+ 8	—	—	17·0	20·7
Sucre		44·0	113	8 21	− 5	—	—	18·0	—
St. Louis		46·6	20	e 8 46	+ 2	—	—	e 19·0	—
Toronto	N.	55·0	25	—	—	—	—	30·8	—
Victoria	E.	55·0	349	—	—	—	—	28·7	31·7
Ottawa		58·0	27	—	—	—	—	e 31·8	—
Scoresby Sund		93·4	20	—	—	—	—	48·8	—
Granada		104·5	53	—	—	—	—	e 46·3	50·8
De Bilt		108·0	36	—	—	—	—	e 56·8	—
Feldberg	N.	110·6	37	—	—	—	—	e 55·8	79·4
Copenhagen		110·9	30	—	—	—	—	51·8	—

Additional readings: Tucson eN = +16m.26s. St. Louis iE = +17m.27s.
Scoresby Sund eN = +31m.48s.? and +38m.48s.?

June 3d. 8h. 30m. 48s. Epicentre **30°·5N. 129°·0E.**

A = −·542, B = +·670, C = +·508; D = +·777, E = +·629;
G = −·319, H = +·394, K = −·862.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki		2·3	18	i 0 38	+ 2	0 55	− 8	—	—
Hukuoka		3·3	21	0 52	0	1 33	+ 2	—	1·7
Sumoto		6·3	51	e 1 37	+ 1	(i 3 8)	+16	i 3·1	3·4
Zi-ka-wei	E.	6·5	278	1 42	+ 3	3 14	+17	—	5·9
Kobe		6·6	49	1 40	− 1	—	—	3·3	3·7
Osaka		6·8	51	1 38	− 6	(3 11)	+ 6	3·2	5·0
Toyooka		7·0	42	i 1 46	0	—	—	i 3·4	4·8
Nagoya		8·1	52	i 2 4	+ 1	—	—	4·0	4·5
Taihoku	E.	8·5	232	e 1 29	−40	2 36	−74	4·4	5·6
Mizusawa	E.	13·1	46	3 14	0	6 18	+32	13·8	—
	N.	13·1	46	3 6	− 8	6 23	+37	—	—
Hong Kong		15·6	242	4 0	+13	7 10	+24	8·2?	10·9
Manila		17·5	207	e 4 29	+18	—	—	i 13·9	15·2
Ootomari		19·4	29	4 30	− 4	7 55	−15	9·9	12·4
Phu-Lien		22·3	250	e 5 20	+11	9 27	+16	10·7	15·8
Calcutta	E.	37·0	269	10 14	?	—	—	21·1	—
	N.	37·0	269	10 44	?	—	—	21·5	—
Batavia		42·4	216	i 8 18	+ 4	i 14 39	− 1	e 26·2	31·2
Dehra Dun		43·5	283	8 10	−12	13 22	−93	22·2	24·5
Bombay		51·8	273	9 12	− 7	16 55	+14	28·1	31·2
Kodaikanal		51·9	260	23 48	?	—	—	29·2	32·3
Ekaterinburg		53·2	320	i 9 30	+ 3	i 17 1	+ 2	24·2	34·7
Kucino		65·8	322	11 0	+10	i 19 42	+ 7	31·2	41·5
Riverview		67·7	160	—	—	e 20 0	+ 2	e 33·6	38·5
Sydney		67·7	160	21 18	?S	(21 18)	[+23]	31·2	32·2
Pulkovo		68·1	328	i 11 7	+ 2	20 6	+ 3	37·2	43·8
Makeyevka		68·5	315	11 12	+ 4	20 10	+ 2	33·8	42·9
Melbourne		69·9	167	—	—	i 23 42	?	—	42·2
Theodosia		71·3	313	e 11 33	+ 8	e 20 43	+ 1	35·2	—
Simferopol		71·5	313	e 11 31	+ 4	—	—	39·7	—
Yalta		72·2	312	—	—	—	—	38·7	—
Upsala		73·6	330	e 11 40	0	e 21 6	− 3	—	47·0
Konigsberg		75·0	325	e 13 54	?	e 18 36	?	e 38·2	46·2
Lemberg	N.	75·8	320	—	—	—	—	e 39·9	45·3
Ksara	N.	75·8	301	12 1	+ 7	21 40	+ 5	—	—
Scoresby Sund		76·9	351	e 14 12?	?	e 21 46	− 2	e 36·2	54·4
Lund		78·0	329	—	—	21 59	− 1	—	—
Bergen		78·1	335	—	—	—	—	e 40·2	—
Victoria	E.	78·1	40	22 41	?PS	—	—	41·4	47·8
Copenhagen		78·3	329	12 10	+ 1	22 1	− 3	39·2	49·7
Budapest		79·9	320	e 12 39	+20	e 22 18	− 4	42·2	50·7
Potsdam		80·1	326	—	—	—	—	e 42·2	48·2

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Belgrade	E.	80·6	317	—	—	—	—	e 41·3	—
Hamburg		80·8	328	e 12 24	0	e 22 18	−15	e 38·8	52·3
Vienna		80·9	321	i 12 25	+ 1	22 34	0	e 45·2	51·2
Jena		81·8	325	e 12 30	+ 1	e 22 40	− 4	e 38·7	49·0
Graz		82·1	321	—	—	—	—	e 41·7	51·2
Zagreb		82·6	320	e 12 35	+ 1	e 22 49	− 4	e 44·2	47·2
Dyce		83·1	337	—	—	23 3	+ 5	44·2	54·5
Feldberg	N.	83·7	326	e 12 30	−10	i 22 58	− 8	e 45·1	46·6
De Bilt		84·0	330	12 38	− 4	22 59	− 9	e 44·2	53·1
Edinburgh		84·5	335	—	—	e 23 14	0	46·2	51·8
Uccle		85·2	329	e 12 45	− 4	—	—	e 44·2	53·6
Strasbourg		85·2	325	e 12 40	− 9	e 23 2	−19	34·2	54·6
Chur		85·4	323	e 12 58	+ 8	—	—	e 46·6	—
Zurich		85·6	323	e 12 46	− 5	e 22 18	−68	—	—
Stonyhurst		85·8	333	—	—	e 23 16	−12	48·2	49·2
Kew		86·4	331	e 12 54	− 1	e 23 17	−17	45·2	56·2
Florence		86·4	320	13 0	+ 5	e 22 12	[−53]	44·2	47·7
Oxford		86·9	331	—	—	e 23 14	[+ 6]	e 45·2	56·4
Besançon		86·9	325	—	—	e 23 25	−15	—	47·2
Rocca di Papa		87·0	318	e 12 57	− 2	—	—	e 47·1	51·6
Paris		87·4	328	e 12 59	− 2	e 23 30	−15	46·2	56·2
Moncalieri	E.	87·5	323	e 13 36	+34	23 54	+ 7	34·2	57·2
		87·5	323	e 12 26	−36	23 30	−17	32·8	53·0
Bagnères		92·6	325	—	—	—	—	e 51·2	—
Barcelona		92·9	324	—	—	—	—	e 51·2	60·3
Tortosa	N.	94·2	324	—	—	—	—	e 49·2	60·2
Entebbe		95·5	275	—	—	—	—	—	59·2
Algiers		95·7	320	e 14 6	+19	—	—	51·2	61·2
Alicante		96·6	323	—	—	e 30 21	?	e 52·2	—
Toledo		97·2	325	—	—	e 26 47	?PS	e 40·8	62·5
Almeria		98·6	324	—	—	—	—	e 51·6	55·0
Granada		99·1	324	e 16 39	?	i 27 11	?PS	e 50·2	65·1
Ottawa		100·8	17	—	—	e 28 36	+153	e 46·2	—
San Fernando		100·9	325	23 59	?	36 29	?	55·0	59·5
Ann Arbor	N.	101·2	24	—	—	—	—	e 63·4	—
Toronto		101·4	20	—	—	e 45 12?	?	55·7	55·7
St. Louis		101·8	30	e 17 56	[+ 3]	e 32 54	?SR_1	e 45·2	54·2
Sucre		162·7	52	20 20	[+10]	—	—	—	—

Additional readings: Sumoto MNZ = +3·5m. Zi-ka-wei ePZ = +1m.44s., iPZ = +2m.14s., MZ = +4·8m. Kobe PR_1 = +2m.10s., MN = +3·9m. Osaka MN = +6·8m. Toyooka MN = +3·7m. Manila iLN = +13·2m., MN = +16·4m. Phu-Lien MN = +13·8m. Batavia i = +8m.20s., iN = +10m.36s., iZ = +15m.28s.; readings are all given without phase. Riverview MN = +42·3m. Konigsberg e = +19m.54s. Lemberg eE = +40m.12s., ME = +47·5m. Scoresby Sund eL = +38·2m., MN = +48·8m. Copenhagen eE = +22m.11s. and +22m.42s. =PS − 3s., eSR_1N = +27m.12s.? SR_1 = +30m.48s., MZ = +49·8m. Potsdam MN = +46·7m. Hamburg MN = +50·3m., MZ = +51·6m. Jena eLEN = +44·2m., eLZ = +46·2m., eLE = +49·2m., MNZ = +52·2m. Graz MN = +51·6m. Zagreb e = +12m.48s., eE = +23m.28s. =PS − 10s., e = +42m.12s.? Feldberg eN = +19m.12s. =PR_1 − 15s., +27m.30s. and +43m.1s., ME = +53·7m. De Bilt iPR_1Z = +15m.53s., MZ = +54·2m., MN = +54·4m. Uccle MN = +50·1m., Strasbourg MZ = +55·2m. Rocca di Papa PR_1E = +16m.20s., PR_1N = +16m.32s. Paris e = +16m.20s. =PR_1 − 28s. Moncalieri (second line), MN = +52·2m. Barcelona MN = +60·2m. Tortosa ME = +61·4m. Toledo MNW = +57·8m. Granada i = +29m.5s. Ottawa e = +42m.12s.? San Fernando MN = +57·5m. St. Louis MN = +56·2m.

June 3d. 9h. 18m. 35s. Epicentre 30°·5N. 129°·0E. (as at 8h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki		2·3	18	i 0 39	+ 3	0 57	− 6	—	—
Hukuoka		3·3	21	0 48	− 4	1 29	− 2	—	1·9
Sumoto		6·3	51	e 1 37	+ 1	(3 6)	+14	3·1	3·4
Zi-ka-wei	E.	6·5	278	1 40	+ 1	3 27	+30	(3·4)	6·7
Kobe		6·6	49	e 1 40	− 1	—	—	3·5	3·6
Osaka		6·8	51	2 1	+17	—	—	3·6	4·7
Toyooka		7·0	42	1 46	0	—	—	3·6	4·1

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagoya		8·1	52	e 2 0	− 3	—	—	4·3	—
Taihoku	E.	8·5	232	e 2 1	− 8	(3 46)	− 4	3·8	—
Hong Kong		15·6	242	—	—	—	—	—	10·9
Manila		17·5	207	e 4 35	+24	—	—	—	—
Phu-Lien		22·3	250	—	—	e 9 25	+14	11·4	—
Irkutsk		28·3	327	e 5 58	−13	e 12 25	?SR_1	—	—
Upsala		73·6	330	—	—	—	—	e 42·4	—
Lund		78·0	329	—	—	—	—	42·4	—
Copenhagen		78·3	329	—	—	—	—	41·4	49·6
Hamburg		80·8	328	—	—	—	—	e 43·4	49·4
Jena	N.	81·8	325	—	—	—	—	e 45·4	52·4
De Bilt	N.	84·0	330	—	—	—	—	—	54·4
Granada		99·1	324	—	—	i 30 40	?	60·4	65·7

Additional readings and note: Hukuoka MN = +1·7m. Zi-ka-wei ePZ = +1m.49s., iPZ = +2m.15s., MZ = +15·0m. Kobe PR_1 = +2m.7s., MN = +3·8m., MZ = +3·9m. Osaka MN = +4·2m. Toyooka MN = +4·0m. Irkutsk readings are given as e simply. Hamburg MZ = +51·4m. De Bilt MZ = +54·1m.

June 3d. Readings also at 2h. (Wellington, Riverview, Sydney, and near Merida), 3h. (Adelaide, Melbourne, Christchurch, Suva, Manila, Zi-ka-wei, Victoria, St. Louis, Ekaterinburg, Kucino, Makeyevka, Pulkovo, Copenhagen, De Bilt, Uccle, and Scoresby Sund), 4h. (Kew, Paris, Feldberg, and Granada), 5h. (La Paz and Sucre), 7h. (La Paz), 8h. (Hohenheim and Wellington), 9h. (near Matuyama and near Nagasaki (2)), 10h. (near Osaka, Kobe, and Hukuoka), 15h. (near Lick), 16h. (Ekaterinburg, Tashkent, and La Paz), 17h. (near Osaka, Kobe, and Sumoto), 18h. (Irkutsk and near Tucson), 21h. (near Nagasaki), 22h. (Scoresby Sund, Kew, De Bilt, Uccle, Strasbourg, Rocca di Papa, Granada, Entebbe, Ekaterinburg, and Nagasaki), 23h. (Copenhagen, Feldberg, Pulkovo, Tashkent, Kucino, Bombay, St. Louis, Toronto, and Ottawa).

June 4d. 7h. 52m. 45s. Epicentre 30°·5N. 129°·0E. (as on 3d.).

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki	2·3	18	0 38	+ 2	0 57	− 6	—	—
Hukuoka	3·3	21	0 52	0	1 27	− 4	—	1·5
Osaka	6·8	51	3 37	?S	(3 37)	+32	5·4	6·2

Osaka gives also MN = +7·9m.

June 4d. Readings also at 1h. (Nagasaki and near Tacubaya), 2h. (Bombay, De Bilt, Scoresby Sund, Georgetown, Ottawa, St. Louis, and Toronto), 3h. (Yalta and near Nagasaki), 4h. (Ekaterinburg, Nagasaki, and Tashkent), 5h. (Apia), 6h. (Granada and near Nagasaki), 8h. (Suva), 11h. (La Paz, La Plata, near Santiago, and near Yalta), 12h. (De Bilt, Uccle, La Paz, Sucre, and Taihoku), 14h. (near Manila), 19h. (Santiago), 20h. (Mizusawa) 21h. (near Nagasaki and Hukuoka).

June 5d. 5h. 55m. 18s. Epicentre 30°·5N. 129°·0E. (as on 4d.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki		2·3	18	i 0 36	0	i 0 55	− 8	—	1·0
Hukuoka		3·3	21	0 49	− 3	1 25	− 6	—	2·0
Matuyama		4·6	42	e 0 57	−14	i 1 12	−54	—	2·2
Sumoto		6·3	51	e 1 36	0	i 2 25	−27	i 3·2	3·5
Zi-ka-wei	N.	6·5	278	e 2 6	+27	2 58	+ 1	—	4·3
Kobe		6·6	49	i 1 41	0	—	—	3·4	3·6
Osaka		6·8	51	1 59	+15	—	—	3·5	5·6
Toyooka		7·0	42	i 1 47	+ 1	—	—	i 3·5	—
Nagoya		8·1	52	2 4	+ 1	—	—	4·3	5·1
Taihoku	N.	8·5	232	2 57	+48	3 46	− 4	4·7	6·4
Mizusawa	E.	13·1	46	(3 14)	0	3 14	?P	—	—
Hong Kong		15·6	242	—	—	—	—	—	12·2
Manila		17·5	207	e 3 59	−12	—	—	—	—
Phu-Lien		22·3	250	4 42	−27	—	—	—	—

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		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Irkutsk		28·3	327	e 5 59	−12	i 11 10	+ 6	i 14·6	17·8
Tashkent		48·6	300	—	—	—	—	—	34·7
Bombay		51·8	273	—	—	—	—	e 27·7	—
Ekaterinburg		53·2	320	9 29	+ 2	16 57	− 2	24·7	33·3
Pulkovo		68·1	328	—	—	—	—	37·7	43·5
Makeyevka		68·5	315	—	—	e 18 30	?	35·7	40·5
Lund		78·0	329	—	—	—	—	41·7	—
Copenhagen		78·3	329	—	—	e 22 0	− 4	39·7	49·8
Hamburg		80·8	328	—	—	—	—	e 43·7	52·7
Feldberg	N.	83·7	326	—	—	—	—	e 45·5	47·8
De Bilt		84·0	330	—	—	—	—	e 44·7	54·4
Strasbourg		85·2	325	e 12 42?	− 7	e 23 42?	+21	45·7	—
Uccle		85·2	329	—	—	—	—	e 44·7	—
Kew		86·4	331	e 12 58	+ 3	—	—	44·7	—
Oxford		86·9	331	—	—	—	—	e 45·7	55·2
Paris		87·4	328	—	—	—	—	e 48·7	—
Granada		99·1	324	—	—	—	—	e 54·2	60·9
Ottawa		100·8	17	—	—	—	—	e 52·7	—
St. Louis	E.	101·8	30	—	—	—	—	—	55·7
Georgetown	Z.	106·4	21	—	—	—	—	e 65·8	—

Additional readings and notes: Hukuoka P = +55s., MN = +2·2m. Sumoto MN = +3·3m. Zi-ka-wei MZ = +4·8m.; the reading entered as P is given as eN simply. Osaka MN = +6·4m. Nagoya MN = +5·4m. Irkutsk e = +10m.40s.; P and S are given without phase. Hamburg MN = +50·7m. Feldberg eN = +46m.17s. St. Louis MN = +61·7m.

June 6d. Readings also at: 0h. (near Nagasaki), 6h (near Nagasaki), 8h. (near Kobe), 12h. (Zagreb), 14h. (near Sumoto), 15h. (Mizusawa and Wellington), 19h. (near Mizusawa), 20h. (Manila).

June 6d. 19h. 10m. 15s. Epicentre 19°·5S. 174°·2W. (as on 1927 July 5d.).

A = −·938, B = −·095, C = −·334; D = −·101, E = +·995; G = +·332, H = +·034, K = −·943.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Apia		6·1	23	e 1 23	−10	2 3	−43	2·2	3·0
Suva	E.	7·1	280	i 1 57	+ 9	i 4 15	+62	i 4·6	5·5
	N.	7·1	280	i 2 9	+21	i 4 27	+74	—	5·5
Wellington	E.	23·7	201	—	—	—	—	e 11·9	16·5
Riverview		33·9	238	e 8 45	?	e 12 58	+19	e 16·8	22·0
Sydney		33·9	238	12 33	?S	(12 33)	− 6	22·0	23·1
Victoria	E.	81·7	31	22 47	?S	(22 47)	+ 4	39·0	40·8
St. Louis		97·6	51	—	—	—	—	e 44·8	47·8
Irkutsk		100·3	321	e 17 42	[− 6]	—	—	45·8	52·6
Toronto	E.	106·7	48	—	—	—	—	53·8	—
Georgetown	Z.	107·5	53	e 37 2	?	—	—	54·0	56·2
Ottawa		109·6	48	e 34 33	?SR_4	—	—	e 47·8	—
Tashkent		122·4	307	e 37 45?	?SR_4	—	—	e 56·8	89·8
Ekaterinburg		125·2	327	e 20 49	?PR_4	—	—	50·8	68·8
Pulkovo		136·1	341	e 22 30	?PR_4	—	—	64·8	73·8
Kuino		136·5	334	e 22 27	?PR_4	—	—	e 62·0	—
Makeyevka		141·4	324	e 22 27	?PR_4	—	—	62·2	77·6
Copenhagen		143·5	351	—	—	—	—	67·8	84·0
De Bilt	Z.	147·4	0	e 20 6	[+14]	—	—	e 80·8	—
Kew		147·7	10	—	—	—	—	e 75·8	—
Uccle		148·7	0	—	—	—	—	e 81·8	—
Feldberg	N.	149·2	354	—	—	—	—	e 81·6	89·8
Vienna	Z.	150·0	346	e 19 58	[+ 2]	—	—	—	—
Paris		150·6	4	e 20 1	[+ 4]	—	—	79·8	—
Strasbourg		150·9	357	e 19 45?	[−12]	—	—	e 72·8	—
Granada		160·5	23	e 20 36	[+27]	i 26 15	?	e 70·8	83·4

Additional readings and note: Apia P = 19h.10m.7s.; the reading entered as P is given as e simply. Wellington eN = +11m.59s., MN = +18·5m. Riverview MN = +20·9m. Sydney S = +17m.45s.(=L). Victoria PN = +22m.25s. St. Louis eN = +36m.45s. = SR_4 − 5s. Ekaterinburg e =. +31m.49s. = PS + 13s., and +37m.48s. = SR_4 − 4s. De Bilt eLEN = +77·8m.

June 6d. Readings also at 2h. (Simferopol, Theodosia, Yalta, and near Sumoto), 3h. and 4h. (Bombay), 9h. (near Hukuoka), 10h. (near Tananarive), 11h. (La Paz), 15h. (Riverview, Wellington, and near Suva), 16h. (Irkutsk, Ekaterinburg, Pulkovo, Ottawa, Georgetown, and St. Louis), 17h. (Granada, Kobe, and near Nagoya), 18h. (near Toyooka), 19h. (Sucre, near La Paz, and near Mizusawa), 20h. (near Batavia and Malabar), 21h. (near Toyooka).

June 7d. 6h. 24m. 32s. Epicentre 44°·0N. 131°·0E. (as on 1927 May 17d.).

A = −·472, B = +·543, C = +·695; D = +·755, E = +·656; G = −·456, H = +·524, K = −·719.

The depth of focus 0·070 used with this epicentre on 1920 May 6d. and 1918 April 10d. is adopted for the present shock.

		Corr. for Focus	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	−0·6	9·0	119	2 11	+ 4	3 51	+ 4	—	—
	N.	−0·6	9·0	119	2 12	+ 5	3 50	+ 3	—	—
Toyooka		−0·6	9·0	159	2 9	+ 2	(3 45)	− 2	3·7	3·8
Osaka		−0·8	9·9	158	2 37	+19	(4 4)	− 2	4·1	4·9
Kobe		−0·8	9·9	160	2 7	−11	(i 3 58)	− 8	i 4·0	4·0
Nagoya		−0·8	9·9	151	e 2 19	+ 1	(4 2)	− 4	4·0	—
Sumoto		−0·8	10·2	161	e 2 19	− 3	(4 6)	− 7	4·1	4·1
Irkutsk		−2·7	19·5	305	i 3 7	?	5 29	?	i 6·3	10·2
Hong Kong		−3·7	25·7	218	—	—	—	—	—	12·6
Manila		−4·4	30·6	198	—	—	(i 9 50)	−36	i 9·8	—
Phu-Lien		−4·4	30·8	230	4 28?	?	—	—	—	—
Ekaterinburg		−5·8	44·4	314	i 7 42	− 1	i 13 41	− 5	—	—
Tashkent		−5·8	44·4	290	i 6 40	−63	i 12 32?	−74	—	23·2
Batavia		−6·7	54·7	210	—	—	i 15 31	−23	—	—
Pulkovo		−6·8	57·8	325	i 9 13	0	i 16 33	+ 2	29·4	38·8
Scoresby Sund		−7·2	63·9	351	—	—	e 17 54	+12	—	—
Simferopol		−7·3	64·5	310	—	—	e 17 54	+ 5	—	—
Lund		−7·5	67·4	329	—	—	18 31	+ 9	—	—
Copenhagen		−7·5	67·6	329	—	—	18 34	+10	—	—
De Bilt		−7·9	73·2	328	e 12 48	?	e 19 37	+ 8	e 47·5	—
Feldberg	N.	−7·9	73·4	327	—	—	e 19 34	+ 3	—	—
Oxford		−8·0	75·8	333	—	—	e 20 3	+ 3	—	—

Additional readings: Kobe MNZ = +4·1m. Sumoto eS = +3m.16s. Tashkent i = +15m.28s. Copenhagen eEN = +22m.28s. ?

June 7d. 12h. 53m. 36s. Epicentre 35°·0N. 20°·0E.

A = +·770, B = +·280, C = +·574; D = +·342, E = −·940; G = +·539, H = +·196, K = −·819.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Pompeii	E.	7·2	325	e 1 42	− 7	e 3 42	+27	—	—
Naples	N.	7·4	324	e 3 3	?S	(e 3 3)	−18	—	—
Rocca di Papa		8·8	322	—	—	—	—	e 4·4	7·5
Belgrade	N.	9·8	2	e 2 27	0	i 4 23	0	e 4·9	—
Florence		11·0	325	e 0 24?	?	e 7 24?	?	—	—
Zagreb		11·2	346	e 2 48	+ 1	4 46	−13	—	—
Venice		11·9	333	e 4 46?	+108	6 44?	+87	—	—
Strasbourg		16·3	330	—	—	—	—	e 7·4	—
Feldberg	N.	17·4	335	—	—	—	—	e 8·7	—
Makeyevka		18·7	40	—	—	—	—	e 2·4	—
Paris		18·9	321	—	—	—	—	e 5·4	—
Granada		19·1	283	—	—	—	—	e 11·9	13·9
Uccle		19·4	329	—	—	7 24?	−46	—	—
Hamburg		19·9	342	—	—	—	—	e 9·4	—
De Bilt		20·1	333	—	—	—	—	e 10·4	—
Lund		21·2	349	—	—	—	—	10·4	—
Copenhagen		21·3	348	—	—	—	—	9·4	12·7
Kew		22·0	325	—	—	—	—	e 12·4	—
Pulkovo		25·6	12	e 4 30	−74	—	—	11·9	13·8
Ekaterinburg		34·9	39	—	—	—	—	15·4	—

Additional readings: Belgrade eN = +5m.56s. Zagreb eNW = +2m.7s.

June 7d. Readings also at 0h. (Ekaterinburg and Tashkent), 2h. (Apia, Honolulu T.H., Wellington, and Strasbourg), 3h. (Copenhagen, De Bilt, Uccle, Kew, Granada, Pulkovo, Makeyevka, Tashkent, Irkutsk, St. Louis, and Georgetown), 6h. (near Mizusawa and near Tacubaya), 10h. (near Tacubaya), 13h. (near Toyooka), 14h. (Kodaikanal), 18h. (Manila), 22h. (Ekaterinburg, Irkutsk, and Tashkent), 23h. (near Mizusawa).

June 8d. 9h. 33m. 6s. Epicentre 31°·7N. 131°·0E. (as on 1913 Jan. 5d.).

$A = -\cdot558$, $B = +\cdot642$, $C = +\cdot526$; $D = +\cdot755$, $E = +\cdot656$; $G = -\cdot345$, $H = +\cdot397$, $K = -\cdot851$.

Deduced from the origin 30°·5N. 129°·0E. of June 5d.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki	1·4	318	0 17	− 4	0 36	− 3	—	—
Hukuoka	1·9	345	e 0 38	+ 9	1 8	+15	—	—
Sumoto	4·2	50	e 0 44	−21	—	—	i 2·8	—
Kobe	4·6	49	e 2 20	?S	(e 2 20)	+14	e 3·2	—
Osaka	4·8	49	1 6	− 8	—	—	3·3	5·9
Phu-Lien	24·4	249	—	—	—	—	11·9	—
Irkutsk	28·3	325	—	—	—	—	16·9	—
Ekaterinburg	53·4	320	—	—	—	—	27·9	—
Pulkovo	68·0	328	—	—	—	—	e 40·1	—

Additional readings: Osaka MN = +6·2m. Pulkovo L = +42·4m.

June 8d. 14h. 39m. 10s. Epicentre 12°·0S. 177°·0W. (as on 1927 March 23d).

$A = -\cdot977$, $B = -\cdot051$, $C = -\cdot208$; $D = -\cdot052$, $E = +\cdot999$; $G = +\cdot208$, $H = +\cdot011$, $K = -\cdot978$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva	E.	7·6	215	(i 1 38)	−17	(i 3 38)	+12	—	4·8
	N.	7·6	215	(i 1 26)	−29	(i 3 32)	+ 6	—	—
Wellington	E.	30·2	192	i 8 35	?	11 34	− 3	—	13·0
	N.	30·2	192	i 8 58	?	i 11 56	+19	—	17·9
Christchurch		32·8	194	e 9 32	?	12 50	+29	16·2	18·1
Riverview		36·3	227	e 8 19	?PR_1	e 12 30	−44	e 15·5	21·8
Honolulu T.H.	E.	38·3	30	e 7 45	+ 5	13 37	− 5	16·3	18·8
	N.	38·3	30	—	—	14 10	+28	16·0	17·4
Melbourne		42·6	226	—	—	i 14 15	−28	20·4	24·3
Adelaide		46·2	233	—	—	e 18 40	?SR_1	e 22·3	32·8
Perth		64·4	240	33 50	?L	—	—	(33·8)	—
Manila		67·0	292	e 11 34	+36	—	—	—	—
Zi-ka-wei	Z.	73·1	310	11 47	+10	17 43	?	36·0	37·3
Victoria		76·8	34	12 0	0	21 52	+ 5	42·3	47·8
Tucson	E.	77·1	53	11 56	− 6	21 50	0	34·3	—
	N.	77·1	53	11 56	− 6	21 46	− 4	35·0	—
Phu-Lien		81·9	294	10 50?	?	—	—	—	—
Irkutsk		92·6	324	e 13 18	−12	23 49	[+ 5]	44·8	51·4
St. Louis	E.	95·0	53	e 14 10	+27	e 23 44	[−13]	43·8	46·8
	N.	95·0	53	e 14 10	+27	—	—	38·8	43·3
Cincinnati		99·4	52	—	—	e 25 20	? Σ	44·2	48·2
Charlottesville	E.	104·0	54	—	—	—	—	e 50·5	54·8
La Paz		104·1	111	—	—	—	—	54·8	63·0
Georgetown	Z.	105·2	54	e 14 42	+ 7	e 25 37	? Σ	e 43·5	57·5
Ottawa		106·4	44	—	—	e 24 50	[− 4]	e 44·8	—
Bombay		112·7	285	—	—	—	—	e 70·8	—
Tashkent		115·5	310	i 20 47	?	—	—	e 47·8	64·8
Ekaterinburg		117·4	329	e 19 0	[+15]	25 55	[+18]	52·8	67·6
Scoresby Sund		119·5	9	e 20 50?	?PR_1	—	—	50·8	69·9
Tananarive		126·3	235	—	—	—	—	65·8	67·8
Pulkovo		128·1	342	—	—	—	—	59·8	75·0
Kucino		128·5	335	—	—	—	—	e 60·8	70·8
Baku		130·1	313	e 22 48	?	e 40 20	?	e 67·8	—
Upsala	N.	130·9	350	—	—	—	—	e 65·8	—
Makeyevka		133·6	328	e 19 32	[+ 5]	e 22 38	?PR_1	61·8	76·6
Lund		135·6	352	—	—	—	—	62·8	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Copenhagen		135·7	352	19 36	[+ 5]	—	—	64·8	72·1
Edinburgh		135·8	5	—	—	—	—	79·8	
Stonyhurst		137·9	4	—	—	—	—	e 73·8	—
Hamburg		138·0	352	—	—	e 22 38	?PR_1	e 68·8	—
De Bilt		139·9	357	e 19 41	[+ 2]	—	—	e 75·8	81·5
Oxford		140·1	4	—	—	e 41 25	?SR_1	e 73·8	89·8
Kew		140·5	3	e 19 48	[+ 8]	e 21 21	?	66·8	—
Uccle		141·2	359	—	—	—	—	e 76·8	—
Feldberg	N.	141·6	354	e 22 50?	?PR_1	—	—	e 70·0	80·9
Budapest		142·0	341	—	—	—	—	e 72·8	—
Vienna		142·1	345	i 19 30	[−13]	28 1	?	—	82·8
Ksara		142·9	311	19 39	[− 6]	—	—	79·0	—
Paris		143·1	0	e 19 40	[− 5]	—	—	71·8	86·8
Strasbourg		143·2	354	e 19 13	[−32]	—	—	69·8	89·6
Zagreb		144·4	344	e 19 39	[− 8]	—	—	e 80·2	—
Florence		147·4	345	e 18 50?	[−62]	—	—	—	73·8
Rocca di Papa		149·1	345	e 19 34	[−20]	—	—	e 91·7	93·3
Granada		154·2	12	i 20 52	[+51]	—	—	74·6	82·4
Almeria		154·7	10	e 20 7	[+ 5]	—	—	—	86·7

Additional readings and notes: Suva readings have been *diminished* by 6m. Christchurch S = +14m.8s., the reading entered as S is given as ?. Riverview eSR_1? = +13m.50s., MN = +18·9m. Honolulu T.H. eE = +9m.10s., eN = +9m.20s. Melbourne i = +17m.10s. = SR_1 − 30s. Adelaide iSR_1 = +20m.48s., MN = +25·2m. Irkutsk ePR_1 = +17m.12s., SR_1 = +32m.32s. St. Louis PSE = +24m.26s. = Σ − 10s. Cincinnati eE = +24m.5s. = [S] − 16s., MN = +46·3m. Charlottesville eLN? = +46·8m., MN = +58·8m. La Paz PR_1? = +25m.10s. = [S] + 27s. Ottawa eN = +26m.20s. = Σ + 30s., eE = +29m.2s., e = +33m.56s. = SR_1 − 2s. Ekaterinburg PR_1 = +20m.16s., SR_1 = +37m.14s. Scoresby Sund e = +31m.50s.? and +36m.50s.? = SR_1 + 10s., MN = +67·0m. Pulkovo PR_1 = +21m.20s., PPS = +34m.11s. Kucino P_cP_cS = +22m.36s., PS = +32m.32s., SR_1 = +39m.2s., Copenhagen P = +22m.32s. = PR_1 + 26s., SR_1 = +41m.50s.?, eLEN = +55·8m., MNZ = +70·1m. De Bilt MZ = +86·2m., MN = +86·3m. Feldberg eN = +47m.18s. = SR_2 + 6s., eLN = +73·2m. Ksara S_cP_cPE = +23m.3s. = PR_1 + 10s., PR_1E = +24m.51s., S_cP_cPSEN = +29m.3s., $S_cP_cP_cSE$ = +33m.3s., PR_1E = +33m.39s., PS_cP_cSEN = +35m.3s. PR_1' = +37m.7s., $PS_cP_cS'N$ = +37m.26s., PPPS'N = +44m.22s., SPSN = +46m.18s., PPSSE = +46m.58s., $SR_1'N$ = +49m.16s., $SR_1'E$ = +67m.26s., T_0 = 14h.38m.26s. Zagreb e = +28m.33s. and +29m.43s. = Σ + 5s. Rocca di Papa ePN = +19m.46s., e = +25m.2s. Granada iZ = +24m.23s. = PR_1 + 19s., +26m.32s. = [S] − 12s. and +32m.25s.

June 8d. Readings also at 2h. (Copenhagen, Feldberg, Zagreb, near Manila, near Simferopol, Theodosia, Yalta, and near Ksara), 4h. (near Taihoku), 5h. (near Toyooka), 6h. (Georgetown, Ottawa, Toronto, Cincinnati, St. Louis, and near Malabar), 9h. (Tananarive), 11h. and 13h. (La Paz), 21h. (Suva), 22h. (Ekaterinburg, Irkutsk, and Pulkovo).

June 9d. 2h. 40m. 50s. Epicentre 33°·6N. 111°·4W. (as on 1924 June 18d.).

A = −·304, B = −·776, C = +·553; D = −·931, E = +·365; G = −·202, H = −·515, K = −·833.

Very doubtful.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tucson		1·4	161	e 0 20	− 1	i 0 40	+ 1	—	—
Lick	E.	9·2	297	—	—	e 3 54	−14	—	—
Berkeley	N.	9·8	298	—	—	e 4 39	+16	—	—
Victoria	E.	17·3	333	8 10	?S	(8 10)	+45	10·8	11·9
	N.	17·3	333	3 40	−29	—	—	10·5	—
St. Louis		17·8	68	e 4 52	+37	e 8 20	+44	10·4	12·6
Cincinnati	E.	22·3	68	—	—	—	—	15·2	—
Ann Arbor	N.	23·4	60	—	—	—	—	e 14·1	—
Toronto	E.	26·7	58	—	—	—	—	16·2	19·2
Georgetown	Z.	28·0	69	(e 5 36)	−32	(e 10 42)	−17	(e 15·0)	(22·4)
Ottawa		29·6	56	—	—	—	—	e 17·2	21·2
Scoresby Sund		58·4	23	—	—	—	—	33·2	—

Additional readings and notes: Tucson eE = +24s., iN = +1m.3s., i = +1m.22s. Lick iE = +4m.36s., eE = +5m.24s., and +6m.22s. Berkeley eE = +5m.10s., eZ = +5m.25s., eN = +5m.29s., readings for the above three stations are all given without phase. St. Louis eSN = +8m.22s. Cincinnati eN = +13m.15s., eE = +13m.40s., eN = +13m.50s., eE = +14m.15s., LN = +14·4m. Toronto eE = +15m.49s. Georgetown readings have all been increased by 3m.

June 9d. 8h. 44m. 40s. Epicentre 44°·5N. 11°·5E. (as on 1928 April 18d.).

$A = +\cdot699$, $B = +\cdot142$, $C = +\cdot701$; $D = +\cdot199$, $E = -\cdot980$; $G = +\cdot687$, $H = +\cdot139$, $K = -\cdot713$.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Chur	2·7	330	e 0 42	0	i 1 11	− 3	—	—
Rocca di Papa	2·8	161	e 1 8	+24	e 1 23	+ 6	—	2·3
Zagreb	3·4	66	—	—	—	—	e 2·0	—
Zurich N.	3·5	325	—	—	e 1 46	+ 9	—	—
Neuchatel N.	4·0	310	e 0 52	−10	e 1 36	−14	—	—

Additional readings: Zagreb e = +2m.15s. and +2m.30s. Zurich e = +1m.20s.

June 9d. 14h. 52m. 3s. Epicentre 35°·7N. 134°·8E. (as on 1928 April 5d.).

$A = -\cdot572$, $B = +\cdot576$, $C = +\cdot584$.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Toyooka	0·2	175	i 0 2	− 2	(0 3)	− 3	0·1	—
Kobe	1·1	163	0 17	0	(0 30)	− 1	0·5	0·5
Osaka	1·2	154	0 23	+ 5	(0 39)	+ 6	0·6	0·8
Sumoto	1·4	177	e 0 21	0	(0 39)	0	0·6	0·7
Nagoya	1·8	107	—	—	e 0 53	+ 2	—	—

No additional readings.

June 9d. Readings also at 1h. (La Paz (2) and Sucre (2)), 3h. (Tucson), 4h. (Taihoku and Tucson), 5h. (Kodaikanal, Tucson, and Zagreb), 6h. (Tucson), 8h. (Lick and Tucson (3)), 15h. (Toyooka (3)), 16h. (near Mizusawa), 19h. (La Paz and near Toyooka), 20h. (Ekaterinburg and Pulkovo).

June 10d. Readings at 1h. (near Toyooka), 4h. (near Batavia and Malabar), 10h. (near Toyooka, near Kobe, and Sumoto), 11h. (Tucson), 12h. and 13h. (near Sumoto), 16h. (Tucson), 17h. (Tucson and Wellington), 18h. (near La Paz and near Merida), 22h. (Ekaterinburg and Batavia), 23h. (Tashkent).

June 11d. 4h. 16m. 0s. Epicentre 34°·0N. 136°·0E. (as on 1928 Feb. 15d.).

$A = -\cdot596$, $B = +\cdot576$, $C = +\cdot559$.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Osaka	0·8	325	0 16	+ 4	(0 27)	+ 5	0·5	1·1
Sumoto	0·9	291	e 0 17	+ 3	(0 29)	+ 4	0·5	0·5
Kobe	1·0	316	0 14	− 1	(0 29)	+ 1	0·5	0·5
Nagoya	1·4	33	0 16	− 5	(0 29)	−10	0·5	—
Toyooka	1·8	328	i 0 24	− 4	(i 0 47)	− 4	i 0·8	0·8

Osaka gives also MN = +0·9m.

June 11d. 6h. 11m. 0s. Epicentre 15°·5N. 56°·5E. (as on 1927 Oct. 28d.).

A = +·532, B = +·804, C = +·267; D = +·834, E = −·552;
G = +·147, H = +·223, K = −·964.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Bombay	16·0	75	—	—	e 6 0?	−55	—	—
Baku	25·6	348	e 5 38	− 6	i 10 21	+ 7	15·5	19·6
Ksara	26·1	318	—	—	15 20	?L	18·3	—
Tashkent	28·1	21	e 5 21	−48	(e 10 42)	−19	e 10·7	11·5
Makeyevka	36·0	340	e 8 21	?PR$_1$	e 12 54	−16	18·0	24·2
Ekaterinburg	41·5	3	1 7 56	−11	e 14 18	−10	21·0	27·1
Pulkovo	48·3	345	—	—	i 16 3	+ 5	26·0	—
Copenhagen	52·4	331	—	—	16 54	+ 5	29·0	—
Irkutsk	52·6	35	e 9 19	− 5	e 16 51	0	31·0	34·9
De Bilt	54·5	325	—	—	—	—	e 36·0	—

Additional readings and notes: Tashkent e = +6m.42s. = PR$_1$ − 11s. Ekaterinburg S = +10m.47s. = PR$_2$ + 25s. Pulkovo i = +19m.54s. = SR$_1$ + 20s. Copenhagen eE = +20m.0s.? and eEN = +23m.0s.? = SR$_2$ − 4s. Of the readings tabulated only those for Baku and Ksara are given with phase; all the others record only e or i.

June 11d. Readings also at 6h. (near Ksara (2)), 7h. (Baku (2), Ekaterinburg (2), Tashkent, near La Paz, and Sucre), 8h. (Zagreb), 9h. (Mizusawa, Rocca di Papa, Strasbourg, Suva, and near Nagoya), 17h. (Rocca di Papa, La Paz, and near Sumoto), 18h. (Yalta, La Paz, Sucre, and near Wellington), 19h. (Sucre (2)), 21h. (Sucre and near La Paz), 22h. (La Paz), 23h. (near Sucre).

June 12d. Readings at 0h. (Taihoku), 4h. (2) and 5h. (La Paz), 13h. (Simferopol), 14h. (Tucson, near Tacubaya (2), and Vera Cruz), 15h. (Yalta), 21h. (Tucson), 22h. (near La Paz).

June 13d. 7h. 54m. 48s. Epicentre 45°·0N. 11°·0E. (as on 1928 Jan. 1d.).

A = +·694, B = +·135, C = +·707; D = +·191, E = −·982;
G = +·694, H = +·135, K = −·707.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Florence		1·2	171	0 12	− 6	i 0 29	− 4	—	0·7
Chur		2·1	331	e 0 32	− 1	i 1 28	+30	—	—
Moncalieri		2·3	270	e 0 45	+ 9	1 11	+ 8	—	—
	Z.	2·3	270	e 0 44	+ 8	1 12	+ 9	—	—
Innsbruck		2·3	7	e 0 36	0	i 1 0	− 3	i 1·2	—
Zurich		2·9	325	i 0 41	− 4	1 22	+ 2	—	—
Neuchatel		3·5	306	i 0 47	− 8	e 1 26	−11	—	—
Rocca di Papa		3·5	159	i 0 54	− 1	1 41	+ 4	2·1	2·8
Zagreb		3·6	77	e 1 3	+ 7	e 1 44	+ 5	i 2·0	2·1
Besançon		4·1	305	1 9	+ 5	i 1 44	− 9	—	—
Strasbourg		4·1	330	1 17	+13	2 10	+17	—	—
Vienna		4·9	47	e 1 46	+30	—	—	i 2·7	3·3
Pompeii	E.	5·0	147	e 2 58	?L	—	—	(e 3·0)	—
Feldberg	N.	5·4	343	—	—	—	—	e 3·1	—
Jena	E.	5·9	5	e 1 54	+23	i 2 52	+11	e 3·2	3·4
Paris		6·9	306	—	—	e 2 36	−31	4·7	—
Uccle		7·3	325	—	—	e 3 12?	− 6	—	—
Potsdam		7·5	10	—	—	3 12?	−12	—	—
De Bilt		8·0	334	—	—	—	—	e 4·2	—
Hamburg		8·6	356	—	—	—	—	e 4·2	—
Kew		9·9	315	—	—	—	—	e 6·2	—
Copenhagen		10·8	4	—	—	—	—	5·2	—
Bergen		15·8	350	e 2 12?	?	—	—	—	—

Additional readings and note: Chur P^e = +34s. Innsbruck iS^e = +1m.7s. Zurich iP = +49s. Neuchatel iP = +57s. Rocca di Papa iPE = +1m.1s. Zagreb iNW = +1m.21s., +1m.31s., and +1m.37s., eSNW = +1m.47s. Strasbourg P = +1m.29s., S = +2m.28s., SR$_1$ = +2m.35s., SR$_2$ = +2m.52s. Jena readings are given without phase. Paris e = +3m.49s.

June 13d. 8h. 6m. 28s. Epicentre 34°·0N. 134°·8E. (as on 1928 March 23d.).

A = −·584, B = +·588, C = +·559; D = +·710, E = +·705; G = −·394, H = +·397, K = −·829.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Sumoto	0·4	11	i 0 9	+ 3	(i 0 18)	+ 7	i 0·3	0·3
Kobe	0·7	25	i 0 11	0	(i 0 23)	+ 3	i 0·4	0·4
Osaka	0·9	38	0 10	− 4	(0 25)	0	0·5	0·5
Toyooka	1·6	0	i 0 25	+ 1	(i 0 46)	+ 1	i 0·8	0·8
Nagoya	2·1	57	e 0 31	− 2	(0 56)	− 2	1·0	1·0

Osaka gives also MN = +0·6m.

June 13d. Readings also at 14h. (Ekaterinburg, Irkutsk, and Tashkent), 16h. (Simferopol, Theodosia, Yalta, Irkutsk, Mizusawa, and near Taihoku), 17h. (Ekaterinburg), 21h. (near Sucre and near Taihoku), 22h. (Sucre, La Paz, and near Mizusawa), 23h. (Baku and Ekaterinburg).

June 14d. 0h. 27m. 36s. Epicentre 31°·5N. 130°·0E. (as on 1926 Dec. 1d.).

A = −·548, B = +·653, C = +·522; D = +·766, E = +·643; G = −·336, H = +·400, K = −·853.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Nagasaki	1·3	356	i 0 28	+ 8	i 0 51	+15	—	0·9
Hukuoka	2·1	10	0 40	+ 7	1 10	+12	—	—
Sumoto	5·0	54	1 9	− 8	(2 2)	−15	2·0	2·1
Kobe	5·3	52	i 1 14	− 8	(i 2 27)	+ 2	i 2·4	—
Toyooka	5·7	45	1 20	− 8	(e 2 24)	−12	e 2·4	—
Nagoya	6·8	56	e 1 38	− 6	(2 51)	−14	2·9	3·0

No additional readings.

June 14d. 16h. 41m. 15s. Epicentre 35°·0N. 26°·0E. (as on 1927 Sept. 12d.).

A = +·736, B = +·359, C = +·574; D = +·438, E = −·899; G = +·516, H = +·251, K = −·819.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Ksara	N.	8·3	95	1 56	−10	i 3 17	−28	3·6	—
Rocca di Papa		12·4	307	e 3 22	+17	—	—	e 6·4	8·9
Zagreb		13·2	328	—	—	e 5 33	−16	e 6·9	—
Budapest		13·5	340	—	—	—	—	e 7·8	—
Florence	Z.	14·3	311	e 6 14	?S	(e 6 14)	− 1	(e 8·6)	10·7
Makeyevka		15·8	31	—	—	e 6 45	− 5	9·6	12·4
Strasbourg		19·1	321	—	—	e 6 45?	?	—	—
Baku		19·6	67	e 4 37	+ 1	—	—	e 11·8	—
Paris		22·1	316	—	—	—	—	e 13·8	—
Uccle		22·2	322	—	—	—	—	e 9·8	—
Lund		22·4	341	—	—	—	—	13·8	—
De Bilt		22·6	325	—	—	—	—	e 13·8	—
Copenhagen		22·7	340	—	—	—	—	9·8	16·2
Granada		23·9	284	—	—	—	—	e 16·0	18·4
Pulkovo		24·9	5	5 37	0	9 59	− 2	13·8	15·0
Edinburgh		28·8	326	—	—	—	—	—	16·8
Tashkent		34·2	66	—	—	—	—	e 14·6	19·6

Additional readings and notes: Rocca di Papa eN = +3m.42s., eE = +3m.46s., eL = +7·8m. Zagreb e = +7m.45s.?, readings for these two stations are given as e only. Florence gives S as P and L as S. Kew (Δ = 25°·0 Az. = 319°) gives e = 16h.40m.

June 14d. Readings also at 0h. (Baku, Copenhagen, Ekaterinburg, Granada, and Tashkent), 3h. (near Manila), 5h. (La Paz), 6h. (Taihoku, Florence, near Chur, Neuchatel, and Zurich), 9h. (Phu-Lien), 11h. (La Paz), 13h. (Ekaterinburg, Irkutsk, Tashkent, and near Mizusawa), 14h. (Ottawa and Toronto), 15h. (Feldberg and near Toyooka), 16h. (near Mizusawa), 20h. (Suva), 21h. (Simferopol, Theodosia, and Yalta), 22h. (near Malabar, and near Port au Prince), 23h. (Simferopol, Theodosia, and Yalta).

June 15d. 6h. 12m. 30s. Epicentre 12°·3N. 121°·0E.

(given by Manila).

A = −·503, B = +·837, C = +·213; D = +·857, E = +·515;
G = −·110, H = +·183, K = −·977.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Manila		2·3	0	i 0 42	+ 6	(i 1 4)	+ 1	i 1·1	—
Hong Kong		11·9	328	2 55	− 3	5 5	−12	7·0	8·0
Phu-Lien		16·2	313	3 55	0	i 7 2	+ 2	8·5	10·0
Amboina		17·5	156	i 4 22	+11	—	—	i 10·0	—
Zi-ka-wei		18·9	1	i 4 22	− 6	7 50	−10	10·1	14·0
Nagasaki		22·0	20	e 4 59	− 6	9 5	0	—	—
Hukuoka		22·9	20	i 5 1	−15	i 9 18	− 5	e 12·7	17·2
Batavia		23·2	218	i 5 19	0	i 9 40	+11	13·2	16·5
Malabar		23·6	215	i 5 26	+ 2	i 8 54	−42	—	—
Sumoto		25·4	28	e 5 33	− 9	e 9 58	−13	e 13·8	—
Kobe		25·8	28	i 5 33	−13	i 10 17	− 1	e 18·5	24·5
Osaka		25·9	28	5 19	−28	(10 9)	−11	10·1	13·3
Toyooka		26·4	26	i 5 42	−10	i 10 31	+ 1	e 13·3	16·1
Nagoya		27·1	30	e 5 51	− 8	(10 35)	− 8	10·6	—
Mizusawa	E.	32·2	31	6 32	−18	14 6	?SR_1	23·7	—
	N.	32·2	31	6 31	−19	14 11	?SR_1	23·7	—
Calcutta	E.	32·7	293	6 48	− 6	12 1	−18	17·7	22·0
	N.	32·7	293	6 58	+ 4	12 16	− 3	17·4	22·6
Ootomari		38·9	25	e 7 30	−15	(13 46)	− 5	13·8	27·7
Colombo		40·9	267	e 7 48	−14	14 8	−12	25·6	26·6
Hyderabad		41·4	283	8 2	− 4	14 14	−13	19·9	27·0
Irkutsk		42·2	347	i 7 54	−18	e 13 51	−47	22·5	25·3
Perth		44·5	186	(i 8 20)	−10	i 15 2	− 7	24·2	28·8
Bombay		46·7	285	8 41	− 4	15 19	−18	23·4	30·6
Adelaide		50·1	161	i 9 5	− 3	i 16 19	− 1	23·0	29·2
Tashkent		53·5	315	i 9 30	0	i 17 9	+ 6	—	—
Riverview		54·3	150	i 9 36	+ 1	i 17 18	+ 5	e 26·7	36·6
Sydney		54·3	150	8 18	−77	17 0	−13	28·5	31·5
Melbourne		54·9	157	i 9 40	+ 2	i 17 25	+ 5	—	30·8
Suva	N.	64·2	118	i 10 54	+15	—	—	—	—
Baku		67·7	310	i 11 8	+ 6	i 20 8	+10	32·5	47·5
Christchurch		73·0	143	15 0	?PR_1	22 0	? Σ	40·2	50·0
Wellington	E.	73·0	141	i 11 35	− 1	i 21 2	0	36·2	39·5
	N.	73·0	141	11 35	− 1	i 20 57	− 5	37·1	37·2
Kucino		76·0	325	11 48	− 7	21 24	−13	36·5	47·0
Makeyevka		76·2	318	e 11 57	+ 1	21 42	+ 3	37·5	41·2
Honolulu T.H.	E.	77·2	70	i 12 5	+ 3	21 48	− 3	35·0	40·6
	N.	77·2	70	i 12 5	+ 3	21 56	+ 5	31·7	33·5
Theodosia		78·3	315	12 9	0	e 21 58	− 6	—	—
Tananarive		78·9	248	i 12 14	+ 2	22 17	+ 6	e 37·0	44·5
Simferopol		79·1	315	12 10	− 4	e 22 8	− 5	—	—
Yalta		79·1	315	e 12 12	− 2	—	—	—	—
Ksara	N.	79·2	303	i 12 16	+ 2	i 22 18	+ 4	38·1	42·5
Pulkovo		79·7	330	12 12	− 5	22 10	−10	38·5	49·8
Helsingfors		82·3	330	12 29	− 3	22 35	−14	37·5	—
Helwan		83·6	300	12 36	− 4	i 22 58	− 7	—	56·2
Lemberg	E.	85·0	320	e 12 42	− 6	e 23 0	−19	e 41·7	57·1
	N.	85·0	320	e 12 42	− 6	e 23 6	−13	e 42·0	56·9
Upsala	E.	86·0	331	e 12 43	−10	23 12	−18	e 40·5	53·9
Belgrade	N.	88·6	316	e 12 38	−30	e 23 42	−17	58·1	—
Budapest		88·6	320	13 3	− 5	23 44	−15	44·5	58·0
Entebbe		88·6	271	13 30?	+22	(24 30?)	+31	—	24·5
Lund		89·5	329	13 3	−10	—	—	41·5	—
Copenhagen		89·9	329	e 13 4	−11	i 24 1	−12	43·5	55·8
Vienna		90·3	321	e 13 7	−11	23 52	−25	e 44·5	59·5
Potsdam		90·8	325	—	—	e 23 56	[+23]	e 47·5	56·5
Graz		91·2	320	i 13 22	0	e 24 14	−12	41·5	59·8
Zagreb		91·3	318	e 13 13	−10	e 23 52	[+16]	e 49·1	—
Hamburg		92·1	327	e 13 18	−10	e 24 12	−24	e 45·5	49·5
Laibach		92·2	319	e 14 21	+53	e 24 13	−24	45·5	52·5
Jena	E.	92·3	324	e 13 18	−11	e 24 18	−20	—	50·0
	N.	92·3	324	—	—	e 24 23	−15	e 41·5	51·5
	Z.	92·3	324	e 13 15	−14	—	—	—	59·0
Scoresby Sund		93·4	349	13 24	−10	23 58	[+10]	45·5	58·2
Venice		93·9	320	e 13 23	−14	e 24 51	− 4	—	—
Pompeii	E.	94·1	315	e 13 46	+ 7	e.25 26	+29	52·5	67·5

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Feldberg	N.	94·4	325	—	—	e 24 43	−17	e 44·4	52·0
Hohenheim		94·5	324	—	—	—	—	e 37·8	—
Rocca di Papa		95·0	316	13 27	−16	e 25 35	+29	e 48·1	52·2
Chur		95·2	321	e 13 30	−14	—	—	e 50·1	—
Florence	Z.	95·2	318	i 13 30	−14	i 25 0	− 8	46·5	53·5
De Bilt		95·4	326	13 34	−11	e 24 7	[+ 8]	e 47·5	52·2
Strasbourg		95·5	323	13 18	−28	24 55	−16	43·5	59·5
Zurich		95·5	321	e 13 33	−13	e 24 55	−16	e 49·7	—
Dyce		96·3	334	—	—	24 11	[+ 7]	34·5	53·0
Uccle		96·5	325	e 13 33	−19	e 24 15	[+10]	e 43·5	60·2
Neuchatel		96·7	321	e 13 40	−13	e 24 20	[+14]	—	—
Victoria		97·0	37	13 39	−15	24 19	[+11]	37·8	69·6
Moncalieri	E.	97·1	319	13 16	−39	24 52	? Σ	43·4	66·5
		97·1	319	e 13 13	−42	24 3	[− 5]	47·8	65·0
Besançon		97·2	322	—	—	e 25 17	[+ 8]	50·5	—
Edinburgh		97·6	333	e 17 30?	[− 7]	i 26 30	?PS	49·5	61·6
Stonyhurst		98·4	330	e 13 46	−16	24 0	[−15]	48·5	55·5
Paris		98·4	325	e 13 45	−17	e 26 17	+37	49·5	61·5
Kew		98·6	329	e 13 48	−15	e 25 31	−11	48·5	55·0
Oxford		99·0	329	e 14 42	+37	e 24 13	[− 6]	e 43·5	62·5
Bidston		99·0	330	17 1	[−42]	24 30	[+11]	46·5	62·5
Puy de Dôme		99·6	323	—	—	e 25 30?	−22	e 49·5	—
Spokane		100·8	35	—	—	e 24 30	[+ 2]	e 45·5	57·5
Barcelona		102·3	319	—	—	—	—	e 47·2	57·1
Berkeley		102·5	45	e 19 45	?	e 24 44	[+ 8]	e 53·0	—
Lick	E.	103·2	45	—	—	—	—	e 53·5	—
Algiers		103·8	315	e 14 22	− 7	26 3	−28	55·5	65·5
Tortosa	E.	104·1	319	—	—	—	—	e 47·5	68·4
Alicante		105·6	317	e 19 8	?PR_1	e 28 30	?PS	e 40·1	71·0
Toledo		107·1	320	e 16 21	?	e 28 26	?PS	e 48·8	60·7
Cape Town		107·2	237	—	—	25 25	[+27]	—	61·8
Almeria		107·6	317	e 15 9	+23	25 51	? Σ	54·7	73·6
Granada		108·3	317	e 14 31	−19	—	—	57·4	70·3
Malaga		109·1	317	e 17 17	?	e 28 49	?PS	40·0	—
San Fernando		110·4	316	18 17	[− 6]	30 17	?	52·3	66·5
Tucson		113·4	45	—	—	e 26 39	? Σ	47·0	—
Chicago	E.	119·9	23	i 20 1	?PR_1	—	—	50·5	71·3
	N.	119·9	23	i 20 5	?PR_1	—	—	52·6	74·1
Ottawa		120·4	11	e 20 19	?PR_1	—	—	e 51·5	65·5
Ann Arbor	N.	120·9	20	—	—	e 25 24	[−24]	e 57·7	76·0
Toronto	N.	121·1	16	e 20 22	?PR_1	—	—	51·5	73·7
St. Louis	E.	121·3	28	e 19 54	?	—	—	e 51·8	65·8
Ithaca		122·9	14	e 20 35	?PR_1	e 30 37	?PS	54·5	—
Cincinnata	E.	123·4	22	e 20 17	?PR_1	—	—	54·5	—
Harvard		124·2	10	—	—	—	—	e 74·5	—
Georgetown	Z.	126·1	16	i 19 10	[+ 2]	32 34	?	e 54·5	80·0
Charlottesville	N.	126·5	18	i 21 1	?PR_1	—	—	e 48·5	80·5
La Plata		157·4	182	20 8	[+ 3]	—	—	76·5	—
Rio de Janeiro	E.	161·6	233	e 20 0	[− 9]	—	—	—	—
La Paz		170·2	116	e 20 20	[+ 5]	i 26 50	?	79·5	96·0
Sucre		171·0	139	20 23	[+ 8]	—	—	84·0	95·7

Additional readings and notes: Phu-Lien MN = +16·6m. Amboina i = +4m.26s. Zi-ka-wei iPN = +4m.28s., MZ = +11·3m., MN = +12·2m. Nagasaki i = +5m.6s., PR_1 = +5m.28s., PR_2 = +5m.38s. Batavia iP = +5m.20s., i = +6m.12s. Kobe MN = +19·3m., MZ = +19·5m. Osaka MN = +13·4m. Toyooka MN = +21·3m. Ootomari S = +11m.58s. Colombo iP = +9m.38s. = PR_1 +5s. Irkutsk iPR_1 = +10m.1s. Perth eP = +5m.20s., iS = +14m.30s., SR_1 = +18m.20s.; the reading entered as P is given as iPR_1. Adelaide PR_1 = +10m.54s., i = +18m.37s., MN = +30·4m. Riverview PR_1 = +11m.46s., PR_2 = +12m.54s., PR_3 = +13m.30s., iSN = +17m.21s., PS = +17m.38s., PPPS = +17m.50s., SR_2 = +23m.19s., SR_3 = +24m.10s., P_cSS_cP = +25m.34s., MZ = +35·0m., MN = +35·3m.; T_c = 6h.12m.26s. Suva iE = +5m.42s., MN = +14·0m., ME = +25·9m. Christchurch PR_1 = +18m.45s., S = +24m.24s.; true S is given simply as ? Wellington iSR_2E = +29m.30s., iSR_2N = +30m.2s.; T_gE = 6h.12m.28s.; T_gN = 6h.12m.33s. Honolulu T.H. PR_1N = +14m.50s. PR_1E = +15m.10s., PR_2E = +17m.0s., PR_2N = +17m.40s., SR_1E = +26m.7s. Tananarive PR_1 = +15m.35s., PR_2 = +17m.14s., PR_3 = +18m.44s., SR_1 = +27m.44s., SR_2 = +31m.44s. Upsala SN = +23m.16s., MN = +47·8m. Budapest MN = +50·0m. Copenhagen ePN = +13m.8s., ePR_1EN = +16m.43s., e = +18m.18s., eNZ = +19m.42s. = PR_2 +19s., S_gP_gS = +23m.40s., PS = +25m.12s., MN = +49·4m., MZ = +55·9m. Vienna

Continued on next page.

iPZ = +13m.8s., PR_1 = +16m.49s., PR_2 = +19m.36s., PS = +24m.56s., SR_1 = +29m.44s., SR_2 = +34m.36s. Potsdam MN = +54·4m. Zagreb e = +13m.52s., +16m.44s. = PR_1 − 32s., +18m.13s., and +18m.54s., ePS = +24m.10s., e = +27m.2s., +29m.20s., +31m.59s., and +36m.48s. Hamburg MZ = +56·5m. Jena eN = +30m.11s. and +37m.7s. Scoresby Sund PR_1 = +17m.11s., PS = +25m.30s.?, eE = +29m.30s.?, and +38m.30s.? = SR_3 + 22s. Feldberg e?N = +22m.30s., eN = +26m.41s., +27m.54s., +30m.30s., +31m.12s., +32m.35s., +34m.51s., +37m.9s., and +42m.8s. Hohenheim e = +30m.30s. ? : readings are given for 5h. Rocca di Papa ePE = +13m.29s., ePN = +13m.31s., i = +13m.35s., PR_1 = +17m.22s., iS = +24m.53s. Florence PR_1 = +17m.35s., PR_2 = +19m.34s., PR_3 = +21m.40s., SR_1 = +26m.0s. = PS − 10s., SR_2 = +39m.18s. = SR_3 + 38s. De Bilt ePR₁Z = +17m.23s., MN = +53·2m., MZ = +59·4m. Strasbourg PR_1 = +17m.23s., PR_3 = +21m.23s., S_cP_cS = +23m.53s., PS = +25m.57s. Dyce e = +31m.30s. = SR_1 − 21s. Uccle ePR₁ = +17m.31s., i = +24m.50s. = Σ + 5s., MN = +53·0m. Neuchatel ePR₁ = +17m.31s. Moncalieri (second line) L = +40·2m., MN = +57·8m. Stonyhurst PR_1 = +17m.42s., SR_1? = +32m.0s. Paris e = +17m.47s. = PR_1 − 15s., MN = +53·5m. Kew PR_1 = +17m.50s., PR_2 = +20m.32s., iS_cP_cS = +24m.27s., ePSZ = +26m.39s., ePPSE = +27m.48s., eSR₁N = +32m.12s., eSR₁E = +36m.30s., eSR₂N = +41m.12s., LZ = +53·5m., MZ = +64·4m. Oxford e = +17m.48s. = [P] + 5s. and +21m.39s. Spokane eN = +43m.30s. Berkeley eE = +24m.46s., eZ = +28m.20s., eE = +32m.30s., eEZ = +47m.54s. Algiers PR_1 = +18m.42s. Alicante MN = +79·0m. Toledo MNW = +58·9m. Cape Town PR_1 = +18m.15s. = [P] + 3s. Almeria PR_1 = +19m.25s. Granada PR_1 = +19m.4s., PR_2 = +21m.47s., PS = +27m.49s. San Fernando MN = +76·0m. Tucson PR_1 = +19m.32s., SR_1N = +35m.32s., SR_1E = +35m.37s., LN = +46·3m. Chicago eN = +26m.57s., eE = +27m.5s. = Σ − 8s., iN = +29m.50s., eE = +29m.51s., eN = +35m.54s., iE = +36m.33s. = SR_1 − 12s. Ottawa ePR₃ = +26m.2s., iPS = +30m.26s., iPR₁ = +36m.54s., eLN = +54·5m., MN = +71·5m. Ann Arbor ePR₁ = +20m.30s., ePS = +30m.30s., eSR₁ = +35m.54s.; T_o = 6h.13m.0s. Toronto eE = +20m.30s. ? = PR_1 − 2s., eN = +25m.57s. = [S] + 9s., iN = +30m.30s. ? = PS + 25s., eN = +36m.41s. = SR_1 − 20s., LE = +57·1m. St. Louis iPR₁E = +20m.31s., ePR₂E = +22m.58s., ePR₃E = +25m.55s., $eS_cP_cP_cS$ = +27m.0s., iPSE = +30m.28s., iSR₁E = +37m.1s., eE = +41m.16s., eSR₃E = +46m.10s. Cincinnati iPR₁E = +20m.42s., eSR₁E = +37m.10s., eSR₂E = +46m.30s. Georgetown iPR₁Z = +21m.7s., iPR₂ = +25m.38s. Charlottesville eN = +26m.21s., and +31m.7s., eE = +31m.12s., eN = +36m.30s., LE = +54·0m., ME = +75·5m. Rio de Janeiro eN = +19m.42s. = [P] − 27s. La Paz P_cP_cS = +24m.10s., PR_1 = +25m.58s., i = +29m.37s. = PR_2 + 6s., S_cP_cSP = +35m.30s., i = +36m.25s., SR₁E = +46m.36s., SR₂N = +53m.8s., SR₃N = +58m.10s., LN = +81·5m., MN = +98·9m. Sucre iPR₁ = +25m.31s., PR₂ = +29m.11s., S_cP_cSP = +36m.7s., SR_1 = +46m.11s., i = +48m.30s.

June 15d. 17h. 16m. 10s. Epicentre 12°·3N. 121°·0E.

(given by Manila and as at 6h.).

		Δ	Az.	P.	O − C.	S.	O − C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Manila		2·3	0	i 0 35	− 1	—	—	—	—
Hong Kong		11·9	328	2 52	− 6	(5 3)	−14	5·0	6·3
Taihoku	E.	12·7	2	e 2 10	−59	—	—	4·8	—
Phu-Lien		16·2	313	3 50	− 5	6 50	−10	8·3	13·4
Amboina		17·5	156	i 4 32	+21	—	—	e 9·8	—
Zi-ka-wei		18·9	1	4 26	− 2	7 58	− 2	—	15·9
Nagasaki		22·0	20	e 5 5	0	9 2	− 3	—	—
Hukuoka		22·9	20	i 5 16	0	i 9 24	+ 1	e 12·7	13·3
Batavia		23·2	218	i 5 18	− 1	10 4	+35	14·8	—
Sumoto		25·4	28	e 5 35	− 7	e 10 1	−10	e 14·9	—
Kobe		25·8	28	5 43	− 3	10 19	+ 1	—	—
Osaka		25·9	28	5 44	− 3	(10 4)	−16	10·1	12·5
Toyooka		26·4	26	i 5 48	− 4	i 10 21	− 9	—	—
Nagoya		27·1	30	e 5 56	− 3	10 41	− 2	—	—
Mizusawa	E.	32·2	31	6 40	−10	11 24	−47	15·0	—
	N.	32·2	31	6 37	−13	11 24	−47	14·9	—
Calcutta	E.	32·7	293	6 52	− 2	12 26	+ 7	18·1	—
Colombo		40·9	267	e 8 0	− 2	14 5	−15	24·8	32·8?
Hyderabad		41·4	283	8 0	− 6	14 30	+ 3	22·0	26·8

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Irkutsk		42·2	347	e 7 52	−20	14 16	−22	19·8	24·7
Kodaikanal		42·7	274	8 26	+10	—	—	23·1	28·0
Perth		44·5	186	e 8 10	−20	i 15 8	− 1	24·5	—
Bombay		46·7	285	8 53	+ 8	15 34	− 3	23·6	29·0
Adelaide		50·1	161	e 9 1	− 7	i 16 26	+ 6	i 23·0	28·8
Riverview		54·3	150	e 9 9	−26	i 17 18	+ 5	e 26·9	30·2
Sydney		54·3	150	8 56	−39	16 38	−35	30·1	31·8
Melbourne		54·9	157	i 10 5	+27	e 17 27	+ 7	—	30·3
Ekaterinburg		63·7	329	10 50?	+14	e 19 40?	+31	28·8	35·0
Suva	N.	64·2	118	i 10 44	+ 5	—	—	—	—
Baku		67·7	310	i 11 13	+11	i 19 58	0	32·8	50·0
Wellington		73·0	141	—	—	—	—	28·8	—
Kucino		76·0	325	11 56	+ 1	21 41	+ 4	35·5	41·5
Honolulu T.H.		77·2	70	—	—	e 21 50	− 1	e 35·1	—
Theodosia		78·3	315	e 12 8	− 1	e 22 8	+ 4	—	—
Tananarive		78·9	248	12 25	+13	22 19	+ 8	e 37·6	39·8
Simferopol		79·1	315	e 12 12	− 2	—	—	—	—
Yalta		79·1	315	e 12 20	+ 6	—	—	—	—
Ksara	N.	79·2	303	i 12 27	+13	22 28	+14	36·2	42·8
Pulkovo		79·7	330	12 18	+ 1	22 14	− 6	37·8	50·7
Helsingfors		82·3	330	e 12 35	+ 3	23 33	+44	39·8	—
Helwan		83·6	300	12 41	+ 1	23 3	− 2	—	56·1
Upsala		86·0	331	e 12 51	− 2	e 23 23	− 7	e 34·8	46·6
Budapest		88·6	320	13 4	− 4	23 53	− 6	44·8	58·3
Lund		89·5	329	—	—	23 55	−14	43.8	—
Copenhagen		89·9	329	13 8	− 7	24 8	− 5	41·8	58·0
Vienna		90·3	321	e 13 15	− 3	e 24 0	−17	e 47·8	60·8
Potsdam		90·8	325	—	—	e 23 50?	−32	e 46·8	53·1
Graz		91·2	320	e 13 17	− 5	—	—	45·8	50·8
Zagreb		91·3	318	e 13 21	− 2	e 24 4	−23	e 45·3	54·8
Bergen		91·4	335	—	—	—	? —	e 43·8	—
Hamburg		92·1	327	e 13 24	− 4	e 24 28	− 8	e 44·8	49·8
Jena		92·3	324	e 13 20	− 9	e 24 29	− 9	e 48·8	50·3
Venice		93·9	320	13 59?	+13	—	—	—	—
Feldberg	N.	94·4	325	—	—	e 24 41	−19	e 47·8	51·8
Rocca di Papa		95·0	316	e 13 40	− 3	25 6	0	e 47·8	61·9
Chur		95·2	321	i 13 37	− 7	—	—	e 50·3	—
Florence	Z.	95·2	318	i 12 50	−54	24 50	−18	50·8	53·8
De Bilt		95·4	326	e 14 6	+21	—	—	e 46·8	52·0
Strasbourg		95·5	323	e 13 38	− 8	e 24 58	−13	38·8	55·7
Zurich		95·5	321	e 13 38	− 8	e 24 39	−32	—	—
Dyce		96·3	334	—	—	e 24 54	−25	35·8	54·3
Uccle		96·5	325	e 12 50?	−62	e 25 4	−17	e 44·8	52·6
Victoria	E.	97·0	37	24 29	?S	(24 29)	[+21]	40·0	69·0
Moncalieri		97·1	319	e 13 46	− 9	26 10	?PS	48·2	71·8
Besançon		97·2	322	—	—	24 50?	? Σ	50·8	—
Edinburgh		97·6	333	—	—	26 13	?PS	48·8	54·4
Stonyhurst		98·4	330	e 13 28	−34	—	—	48·8	55·8
Paris		98·4	325	e 13 51	−11	e 25 22	−18	47·8	56·8
Kew		98·6	329	e 14 32	+29	—	—	48·8	53·1
Oxford		99·0	329	—	—	—	—	e 49·6	55·1
Bidston		99·0	330	18 50	?PR_1	29 28	?	45·9	54·2
Barcelona		102·3	319	—	—	—	—	e 51·4	57·7
Algiers		103·8	315	e 14 26	− 3	26 7	−24	55·8	65·8
Tortosa		104·1	319	—	—	—	—	e 42·8	57·0
Alicante		105·6	317	e 14 45	+ 8	—	—	e 40·6	69·4
Toledo		107·1	320	e 13 25	−79	e 24 28	[−29]	e 39·0	65·5
Cape Town		107·2	237	—	—	i 25 10	[+12]	—	—
Almeria		107·6	317	—	—	—	—	52·5	56·9
Granada		108·3	317	e 18 0	[−16]	—	—	55·5	64·2
San Fernando		110·4	316	—	—	—	—	59·8	65·3
Tucson	N.	113·4	45	e 19 20	?PR_1	e 26 51	? Σ	—	—
Ottawa		120·4	11	e 16 14	+30	e 25 50?	[+ 4]	e 51·8	—
Ann Arbor	N.	120·9	20	e 20 32	?PR_1	e 30 38	?PS	e 51·0	—
Toronto	N.	121·1	16	i 20 33	?PR_1	—	—	64·8	69·8
St. Louis	E.	121·3	28	e 20 32	?PR_1	—	—	e 50·8	62·8
Ithaca		122·9	14	—	—	—	—	54·8	—
Cincinnati		123·4	22	—	—	e 27 0	? Σ	55·8	71·8
Harvard		124·2	10	—	—	—	—	e 66·8	—
Georgetown	Z.	126·1	16	i 21 3	?PR_1	i 30 42	?	e 53·0	81·7
Rio de Janeiro	N.	161·6	233	e 24 5	?PR_1	—	—	—	—
La Paz		170·2	116	e 18 26	[−109]	—	—	80·8	94·7
Sucre		171·0	139	e 20 5	[−10]	—	—	82·8	104·3

For Notes see next page.

NOTES TO JUNE 15d. 17h. 16m. 10s.

Additional readings: Phu-Lien MN = +12·3m. Amboina i = +4m.45s. and +4m.48s. Zi-ka-wei PE = +4m.28s., iPN = +4m.32s., PR_1E = +5m.56s. SN = +8m.14s., PSE = +8m.18s., MZ = +12·2m. Batavia iPE = +5m.23s., i = +5m.26s., iZ = +5m.30s., and +10m.11s. = $SR_1 - 7$s. Kobe PR_1 = +6m.16s. Osaka MN = +13·3m. Colombo iP = +9m.40s. = PR_1 +7s. Perth iS = +15m.20s. Adelaide i = +19m.30s., iSR_1 = +20m.30s., iSR_2 = +21m.32s., MN = +30·3m. Riverview PS = +17m.38s., SR_1 = +21m.24s., iSR_2 = +23m.27s., SR_3 = +24m.11s., MZ = +31·9m., MN = +34·9m. Sydney readings are given for 15h. Suva iE = +11m.50s. Honolulu T.H. eE = +22m.5s. = [S] + 1s. Tananarive PR_1 = +15m.16s., S_eS = +23m.22s., e = +26m.57s., +27m.10s., and +34m.54s. Ksara PR_1N = +15m.44s.; T_o = 17h.16m.41s. Upsala MN = +47·3m. Budapest MN = + 8·3m. Copenhagen eS_eP_eS = +23m.50s., PS = +25m.8s., SR_1 = +29m.50s. ? and +36m.50s. ? = $SR_3 - 8$s., MN = +48·4m., MZ = +56·5m. Vienna iPZ = +13m.16s. Potsdam eL = +48·8m. Zagreb e = +14m.28s., eNE = +15m.58s., e = +17m.0s. = $PR_1 - 16$s. and +19m.10s. = $PR_2 - 27$s., eNE = +21m.38s. = PR_3 +37s., ePS = +24m.20s., eL = +48·4m. Hamburg eZ = +17m.3s. = $PR_1 - 18$s., MZ = +56·8m. Jena eZ = +16m.3s., eSE = +24m.32s., eLN = +45·8m., MN = +50·6m. Feldberg eN = +30m.22s., +31m.15s. = $SR_1 - 13$s., +35m.32s. = $SR_2 - 26$s., +36m.5s. = SR_2 +7s., and +38m.14s. = $SR_1 - 10$s. Rocca di Papa PR_1 = +17m.22s., eS = +21m.48s. = PR_3 +6s., eL = +55·9m. De Bilt MN = +51·6m., MZ = +64·2m. Strasbourg PR_1 = +17m.28s., MZ = +58·8m. Dyce e = +26m.40s. = PS − 17s. Uccle MN = +52·2m. Moncalieri MN = +53·5m. Paris PR_1 = +17m.52s., MN = +52·8m. Kew ePR_1Z = +18m.28s., LZ = +53·8m., MZ = +65·4m. Algiers MN = +70·8m. Granada iZ = +19m.7s. = $PR_1 - 1$s., and +21m.21s., G = +38m.26s. San Fernando MN = +72·8m. Tucson eE = +19m.40s. = PR_1 +0s., and +26m.47s. = Σ +13s. Ottawa eN = +20m.28s. = PR_1 +2s., and +30m.14s., e = +36m.56s. = SR_1 +8s. eLN = +53·8m., Ann Arbor e?N = +36m.14s. = $SR_1 - 44$s. St. Louis eE = +30m.35s. = PS +22s., +32m.45s., +36m.35s. = $SR_1 - 28$s., and +43m.35s. Cincinnati e = +37m.20s. = $SR_1 - 8$s., eE = +39m.0s. Rio de Janeiro eE = +24m.40s. = $PR_1 - 8$s. La Paz LN = +78·3m., MN = +106·1m.

June 15d. After-shocks from the epicentre 12°·3N. 121°·0E. were recorded by Manila at the following times:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
6	53	12	9	31	26	14	56	47
6	55	53	9	42	32	16	48	35
7	4	45	9	55	3	17	30	18
7	19	30	11	20	27	17	33	4
7	27	58	11	22	43	17	55	11
7	42	6	11	47	32	18	0	53
8	29	57	11	51	17	18	37	41
8	49	3	12	11	8	20	34	29
9	10	47	13	28	2	21	24	28
9	24	47	14	53	41	21	58	11

June 15d. Readings also at 0h. (Simferopol, Theodosia, and Yalta), 4h. (Rio de Janeiro, Sucre, San Fernando, Granada, Rocca di Papa, Strasbourg, and Kew), 5h. (De Bilt, Paris, Pulkovo, and Tashkent), 8h. and 17h. (near La Paz), 18h. (Simferopol, Vienna, and near Amboina), 19h. (Florence and Scoresby Sund), 20h. (Tashkent and near Amboina), 21h. (Ekaterinburg, Irkutsk, and Tashkent (2)), 22h. (near Sumoto), 23h. (near La Paz).

June 16d. 18h. 26m. 36s. Epicentre 7°·0S. 145°·0E. (as on 1927 Sept. 8d.).

$A = -\cdot 813$, $B = +\cdot 569$, $C = -\cdot 122$; $D = +\cdot 574$, $E = +\cdot 819$; $G = +\cdot 100$, $H = -\cdot 070$, $K = -\cdot 993$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		17·1	280	i 4 42	+36	i 7 19	− 1	—	—
Riverview		27·4	169	e 5 55	− 7	i 10 27	−21	e 14·4	19·3
Sydney		27·4	169	11 24	?S	(11 24)	+36	16·4	16·9
Adelaide		28·3	191	e 6 8	− 5	i 10 58	−10	i 13·2	17·6
Melbourne		30·7	180	—	—	i 11 30	−16	16·4	19·2
Manila		32·2	312	e 7 6	+16	—	—	—	—
Perth		36·9	224	7 24	− 5	13 9	−13	e 21·2	—
Batavia		37·9	269	i 7 38	+ 1	—	—	—	—
Wellington		43·3	147	—	—	—	—	18·4	—
Zi-ka-wei	Z.	44·3	331	8 15	−13	14 45	−21	22·8	24·9
Mizusawa	E.	46·3	356	(8 20)	−22	15 21	−11	—	—
Honolulu T.H.	E.	62·6	62	—	—	—	—	e 28·4	—
Irkutsk		68·7	335	i 11 4	− 5	20 7	− 3	34·4	41·9
Tashkent		84·1	313	e 15 12	?	e 23 18	+ 9	e 39·4	49·2
Ekaterinburg		92·8	327	e 13 18	−13	i 24 3	? Σ	36·4	81·9
Tananarive		94·7	250	—	—	—	—	55·4	57·4
Victoria	E.	96·4	42	23 23	?[S]	23 23	[−41]	43·4	47·9
Baku		98·4	311	e 17 40	[0]	e 27 42	?	e 50·4	—
Kucino		105·4	325	—	—	e 27 42	?PS	44·6	—
Makeyevka		106·5	318	—	—	e 25 42	? Σ	55·4	67·8
Pulkovo		108·3	331	—	—	—	—	56·4	67·8
Copenhagen		118·7	331	—	—	25 24?	[−18]	55·4	71·9
De Bilt		124·2	331	—	—	—	—	e 63·4	76·2
Strasbourg		125·0	327	e 20 24?	?PR_1	—	—	e 33·4	—
Edinburgh		125·1	339	—	—	—	—	—	76·4
Uccle		125·4	331	—	—	—	—	e 63·4	—
Toronto		126·6	39	—	—	i 32 46	?	67·4	—
Kew		127·1	332	e 33 24?	?	e 43 23	?SR_3	63·4	—
Paris		127·6	330	—	—	—	—	e 65·4	78·4
Ottawa		128·0	36	—	—	e 30 48	?	63·4	—
Granada		138·5	321	—	—	e 23 16	?	e 76·4	79·2

Additional readings and note: Amboina i = +7m.25s. Riverview SR_2 = +12m.2s., eL = +14·0m., MN = +17·4m.: T_0 = 18h.26m.37s. Adelaide MN = +18·1m. Melbourne i = +12m.42s. Batavia iZ = +7m.41s., i = +7m.42s., S? = +8m.10s., i = +8m.23s. Mizusawa readings are given as separate SE readings. Honolulu T.H. eN = +28m.54s. Ekaterinburg S_eP_eS = +23m.30s. = [S] − 15s. Makeyevka e = +29m.0s. Pulkovo PR_1 = +18m.43s., PPS = +28m.32s., SR_1 = +33m.48s. Copenhagen ePR_1Z = +20m.12s., PR_2 = +22m.48s., ePS = +30m.6s., ePPSE = +31m.30s., SR_1 = +36m.36s., SR_2 = +40m.24s. ?, MN = +72·2m. Strasbourg ePR_1 = +23m.24s. ? Ottawa eE = +38m.36s. = SR_1 + 10s., eN? = +42m.24s. ?, eLN? = +55·4m.

June 16d. After-shocks from the epicentre 12°·3N. 121°·0E. as on June 15d. were recorded by Manila at the following times:—

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	6	35	11	40	33	15	37	8
6	27	9	15	0	13	19	38	39

June 16d. Readings also at 1h. (Santiago and near Apia), 3h. (Kobe and near Toyooka), 4h. (Batavia and Theodosia), 6h. (Ekaterinburg and Irkutsk), 9h. (Baku, Ekaterinburg, and near Ksara), 12h. (Yalta), 13h. (near Amboina), 18h. (La Paz), 23h. (near Simferopol and Theodosia).

June 17d. 3h. 19m. 19s. Epicentre 16°·2N. 97°·2W.

(as given by De Bilt).

A = −·120, B = −·953, C = +·279; D = −·992, E = +·125;
G = −·035, H = −·277, K = −·960.

		△	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Oaxaca		0·9	27	1 1	+47	—	—	1·2	—
Puebla		3·0	341	(0 59)	+12	—	—	(1·7)	—
Vera Cruz		3·2	18	(0 53)	+ 3	—	—	(1·6)	(2·6)
Tacubaya		3·8	330	1 12	+13	—	—	2·2	2·3
Manzanillo		7·4	293	2 37	+45	4 3	+42	4·1	4·7
Guadalajara		7·5	307	(1 45)	− 9	(3 18)	− 6	(3·4)	(4·2)
Merida		8·6	55	(2 36)	+26	(4 19)	?L	(4·3)	(4·6)
Mazatlan		11·2	310	2 53	+ 6	5 13	+14	5·5	5·6
Chihuahua		14·9	328	(3 41)	+ 3	(6 28)	− 2	(6·8)	(8·3)
Tucson	E.	20·3	325	i 4 51	+ 9	i 8 49	+20	—	9·1
	N.	20·3	325	i 4 54	+ 9	i 8 47	+18	—	11·1
St. Louis		23·2	14	i 5 14	− 5	i 9 56	+27	e 12·1	—
Port au Prince		23·8	81	e 5 38	+12	i 9 50	+10	i 14·2	17·7
Denver	E.	24·5	345	e 5 32	− 1	i 10 3	+ 9	i 12·7	13·3
	N.	24·5	345	i 5 32	− 1	i 9 57	+ 3	i 12·6	13·4
Cincinnati		25·5	23	i 5 23	−20	e 10 6	− 7	12·4	13·7
Chicago	E.	26·9	16	i 5 29	−28	—	—	i 15·5	—
	N.	26·9	16	i 5 25	−32	—	—	i 15·1	—
Charlottesville	E.	27·3	34	i 5 57	− 4	i 10 34	−12	13·3	—
	N.	27·3	34	i 5 57	− 4	i 10 37	− 9	13·7	—
Ann Arbor		28·5	21	i 5 59	−14	i 11 11	+ 3	e 14·6	20·7
Georgetown	E.	28·7	34	i 6 1	−14	11 2	−10	e 13·1	17·6
San Juan		29·7	81	e 6 13	−12	12 41	?SR_1	15·2	—
Lick	Z.	30·2	320	e 8 29	?	e 14 11	?	e 18·1	—
Berkeley		31·0	320	e 6 33	− 5	e 11 45	− 6	i 16·9	—
Toronto	E.	31·3	26	i 6 31	−10	i 11 39	−17	—	23·4
	N.	31·3	26	i 6 21	−10	i 11 41	−15	i 15·0	23·7
Ithaca		31·6	30	i 6 30	−13	11 39	−22	—	25·0
Harvard		34·2	36	i 6 59	− 8	e 12 29	−14	i 16·8	29·9
Ottawa		34·3	28	i 6 57	−10	i 12 27	−17	e 16·1	21·5
Spokane		35·6	337	e 7 10	− 8	e 12 50	−14	e 17·7	19·8
Saskatoon		36·7	350	(i 7 13)	−15	(i 13 1)	−19	(e 17·7)	(19·7)
Victoria		38·7	333	7 40	− 4	13 40	− 8	20·2	25·7
La Paz	E.	43·5	139	i 8 13	− 9	i 14 38	−17	20·8	23·5
	N.	43·5	139	i 8 19	− 3	i 14 43	−12	i 21·4	23·5
Sucre		47·2	139	i 8 40	− 8	i 15 31	−13	21·8	26·3
Sitka	E.	49·9	335	i 9 16	+10	e 16 36	+18	i 26·1	29·8
	N.	49·9	335	e 9 14	+ 8	e 16 11	− 7	i 26·0	29·2
	N.	49·9	335	e 9 14	+ 8	e 16 11	− 7	i 26·0	29·2
Santiago		55·7	155	e 9 51	+ 7	17 26	− 4	26·2	—
Honolulu T.H.	E.	57·3	286	i 10 10	+16	i 18 11	+21	25·4	31·3
	N.	57·3	286	i 10 11	+17	18 7	+17	27·3	33·9
La Plata		63·2	145	10 35	+ 2	18 57	− 6	30·9	—
Azores		65·6	56	11 17	+28	19 23	− 9	32·1	—
Rio de Janeiro	E.	65·7	127	i 10 55	+ 6	19 27	− 6	32·0	39·6
	N.	65·7	127	i 10 51	+ 2	i 19 31	− 2	32·2	38·1
Reykjavik		69·0	27	11 15	+ 4	20 55	[−10]	e 36·1	45·2
Scoresby Sund		69·9	20	e 11 23	+ 7	i 20 44	+19	e 35·7	—
Edinburgh		78·9	35	12 14	+ 2	22 20	+ 9	39·7	44·3
Dyce		79·1	34	12 17	+ 3	i 22 30	+17	30·7	41·5
Bidston		79·4	38	12 19	+ 4	22 27	+11	33·8	42·8
Apia	Z.	79·6	254	12 38	+21	—	—	37·7	—
Stonyhurst		79·8	38	i 12 16	− 2	i 22 33	+12	38·3	40·4
Oxford	E.	80·9	40	i 12 25	+ 1	i 22 38	+ 4	e 37·0	50·7
San Fernando		81·2	55	i 12 28	+ 2	i 22 26	−11	36·7	42·7
Kew		81·6	40	i 12 30	+ 2	i 22 54	+12	39·1	40·8
Bergen		82·0	29	12 15	−15	e 23 41?	− 5	e 31·7	40·7
Toledo		82·1	51	i 12 31	0	i 22 58	+11	e 35·6	42·3
Malaga		82·5	54	12 27	− 6	23 14	+22	27·7	43·2
Granada		83·1	54	i 12 39	+ 2	23 4	+ 6	31·1	42·0
Almeria		84·1	54	i 12 41	− 2	23 10	+ 1	38·2	41·4
Paris		84·1	41	i 12 43	0	i 23 18	+ 9	34·7	43·7
Bagnères		84·4	47	e 12 43	− 1	e 23 5	− 7	e 38·7	44·1
De Bilt		84·6	37	12 46	0	23 10	− 5	e 40·7	43·3
Uccle		84·6	39	i 12 43	− 3	i 23 24	+ 9	e 40·7	50·6
Alicante		85·1	51	i 12 58	+ 9	23 28	+ 8	33·6	54·1

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		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tortosa	E.	85·2	49	12 47	− 2	23 24	+ 3	—	54·3
	N.	85·2	49	i 12 46	− 3	23 31	+10	36·1	45·8
Puy de Dôme		85·3	44	e 12 49	− 1	23 39	+17	e 35·7	49·4
Barcelona		86·1	48	12 50	− 4	23 36	+ 5	38·1	46·0
Besançon		86·8	42	12 59	+ 1	23 41	+ 2	39·7	55·7
Hamburg		86·8	35	i 12 58	0	i 23 41	+ 2	e 39·7	47·7
Copenhagen		87·2	32	e 12 57	− 3	23 52	+ 9	e 36·7	46·5
Feldberg		87·2	39	e 12 58	− 2	e 23 42	− 1	e 42·0	44·3
Neuchatel		87·4	43	e 12 59	− 2	i 23 44	− 1	—	—
Strasbourg		87·4	40	i 12 57	− 4	i 23 43	− 2	39·7	47·2
Lund		87·6	32	i 13 0	− 3	i 23 58	+10	—	—
Marseilles		87·8	45	e 13 5	+ 1	e 23 51	+ 1	e 40·7	45·7
Upsala		87·8	27	12 58	− 6	i 23 36	−14	e 40·7	46·1
Hohenheim		88·3	39	e 13 2	− 5	23 41	−14	42·8	54·0
Algiers		88·3	51	13 1	− 6	23 56	+ 1	41·7	46·7
Zurich		88·4	42	13 3	− 4	e 23 45	−11	—	—
Moncalleri		88·7	44	i 13 2	− 7	23 21	[+ 1]	33·0	53·9
Jena	E.	88·8	37	i 13 3	− 6	i 24 5	+ 4	e 44·2	45·7
	N.	88·8	37	i 13 5	− 4	i 24 7	+ 6	e 47·7	48·2
	Z.	88·8	37	i 13 5	− 4	i 24 11	+10	e 42·7	45·7
Ravensburg		88·8	40	13 6	− 3	23 52	− 9	e 42·7	58·1
Potsdam		89·0	35	i 13 10	0	e 24 6	+ 3	e 39·7	50·5
Chur		89·2	42	i 13 8	− 3	23 51	−14	—	—
Suva		89·9	251	i 12 35	−40	22 59	[−28]	40·7	—
	N.	89·9	251	i 12 35	−40	22 53	[−34]	40·7	53·1
Innsbruck		90·2	40	e 13 23	+ 6	23 53	[+24]	e 39·1	69·8
Helsingfors		90·7	25	e 12 47	−33	i 23 51	[+19]	41·7	—
Florence		91·5	44	13 22	− 2	23 52	[+15]	43·7	45·7
Venice		91·6	40	e 13 20	− 5	i 23 58	[+20]	46·8	54·9
Laibach		92·6	40	e 13 26	− 4	i 24 11	? Σ	44·7	55·7
Vienna		92·7	37	13 21	−10	24 47	+ 5	e 34·7	57·7
Pulkovo		93·0	24	i 13 25	− 7	—	—	40·7	47·9
Rocca di Papa	E.	93·3	45	13 32	− 2	24 8	[+20]	e 35·2	49·2
	N.	93·3	45	13 26	− 8	24 17	[+29]	43·2	—
Zagreb		93·6	40	e 13 29	− 7	i 23 59	[+ 9]	e 55·0	60·0
Budapest		94·7	37	13 35	− 7	24 14	[+19]	41·7	51·2
Naples	E.	94·7	45	e 13 36	− 6	e 24 16	[+21]	47·7	51·7
Pompeii		95·0	45	e 13 49	+ 6	e 23 54	[− 3]	38·7	60·7
Lemberg	E.	96·2	35	e 13 53	+ 3	e 26 23	?PS	e 35·7	55·0
	N.	96·2	35	e 13 47	− 3	e 26 17	?PS	—	59·2
Belgrade		96·8	40	e 11 52	?	i 25 31	+ 7	e 38·3	54·6
Ootomari		97·3	325	e 17 34	?PR$_1$	e 24 59	−30	32·0	58·0
Kucino		98·5	25	i 13 47	−16	24 29	[+13]	46·6	53·4
Wellington	E.	99·2	230	13 36	−30	i 24 29	[+ 9]	i 45·8	47·6
	N.	99·2	230	13 36	−30	i 24 40	[+20]	i 44·7	56·4
Christchurch		101·2	228	e 13 23	−53	24 17	[−13]	45·1	—
Mizusawa	E.	102·4	317	25 48	?S	(25 48)	−31	44·0	—
	N.	102·4	317	25 49	?S	(25 49)	−30	42·9	—
Makeyevka		104·3	29	14 17	−14	24 47	[+ 3]	50·7	65·0
Ekaterinburg		104·6	13	i 14 21	−11	i 24 27	[−18]	—	53·8
Simferopol		104·6	35	—	—	24 9	[−26]	—	—
Yalta		104·9	34	—	—	—	—	e 53·7	—
Theodosia		105·1	33	e 13 27	−68	24 16	[−32]	—	66·3
Nagoya		107·4	316	e 19 40	?PR$_1$	—	—	—	—
Toyooka		108·5	316	i 19 23	?PR$_1$	e 28 43	?PS	—	—
Osaka		108·7	316	16 51	?	28 46	?PS	52·1	71·5
Kobe		108·9	316	e 19 21	?PR$_1$	e 28 32	?PS	e 46·1	63·6
Irkutsk		109·0	346	—	—	—	—	e 52·7	—
Sumoto		109·3	315	e 19 4	?PR$_1$	e 28 55	?PS	e 45·8	—
Helwan		112·3	46	14 51	−17	27 49	+ 1	—	66·2
Hukuoka		112·6	318	e 19 44	?PR$_1$	e 29 25	?PS	—	62·4
Ksara		112·9	40	14 50	−21	—	—	54·0	—
Nagasaki		113·6	318	e 19 45	?PR$_1$	e 29 25	?PS	56·9	79·8
Baku		115·7	27	e 15 11	−13	—	—	—	—
Riverview	E.	116·7	240	—	—	e 25 45	[+11]	i 53·7	71·8
Sydney		116·7	240	19 41	?PR$_1$	29 53	?PS	54·2	63·5
Zi-ka-wei		119·7	322	i 15 30	−11	—	—	—	—
Cape Town		120·0	120	—	—	27 24	? Σ	—	67·7
Tashkent		121·1	11	19 7	[+12]	—	—	—	82·5
Melbourne		121·7	234	i 20 41	?PR$_1$	i 26 9	[+19]	56·9	57·5
Taihoku	E.	124·1	317	e 20 27	?PR$_1$	—	—	72·5	74·0
Adelaide		127·0	239	—	—	i 23 24	?	i 52·7	80·5
Entebbe		127·7	77	20 41?	?PR$_1$	—	—	66·7	73·7
Johannesburg		128·3	111	—	—	30 41?	?	—	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Hong Kong		130·7	320	19 37	[+17]	21 51	?PR_1	—	74·9
Manila		131·3	307	e 19 41	[+19]	e 33 14	?	e 65·1	—
Amboina		133·7	280	i 19 45	[+18]	i 23 10	?	55·7	67·7
Phu-Lien		136·3	326	e 19 49	[+16]	34 35	?	65·7	76·7
Calcutta		140·9	351	23 5	?PR_1	41 22	?SR_1	66·8	78·2
Bombay		143·5	15	19 41	[− 5]	33 17	?	72·3	89·0
Hyderabad		146·1	7	19 53	[+ 3]	—	—	66·3	93·1
Perth		146·2	235	10 1	?	—	—	i 61·7	92·0
Tananarive	E.	146·3	98	i 19 54	[+ 4]	—	—	e 73·8	90·6
	N.	146·3	98	19 49	[− 1]	—	—	e 71·7	103·2
Kodaikanal		153·0	12	16 11	?	—	—	75·0	118·1
Malabar		154·2	287	20 19	[+18]	—	—	—	—
Batavia		154·4	290	i 20 4	[+ 3]	—	—	e 60·7	77·9
Colombo		156·7	7	20 14	[+10]	39 9	?	79·8	86·5

Additional readings and notes: Puebla readings have been *diminished* by 1m. Vera Cruz and Guadalajara readings have been *increased* by 1m. Merida readings have been *diminished* by 3m. Chihuahua readings have been *increased* by 2m. Tucson iE = +5m.29s. St. Louis iN = +6m.35s. and +9m.11s. Port au Prince iP = +6m.16s. Denver iPR_1 = +6m.8s., i = +6m.29s., iP_cPN = +8m.46s., iP_cPE = +8m.50s., iSR_1N = +11m.7s., iSR_2E = +11m.31s. Cincinnati iSR_1E = +11m.14s. Charlottesville iSR_1E = +11m.51s., iSR_1N = +11m.57s. Ann Arbor iSR_1 = +12m.47s.; T_0 = 3h.18m.36s. Georgetown iPZ = +5m.59s., iPN = +6m.0s., iPR_1 = +6m.49s. San Juan ePN = +6m.24s., LN = +15·1m. Lick iZ = +19m.59s. Berkeley iPZ = +6m.34s., iZ = +6m.36s., eN = +7m.45s., eE = iZ = +7m.47s., iZ = +9m.30s., eN = +10m.38s., eSE = +11m.46s., iZ = +12m.43s., eE = +12m.44s., eN = +12m.46s., eZ = +14m.0s., iN = +14m.54s., iE = +14m.56s., iZ = +14m.59s. Toronto i = +7m.41s.? = PR_1 +6s., iSR_1N = +13m.19s.; T_0 = 3h.19m.18s. Harvard iPR_1 = +8m.1s. iPR_2 = +8m.25s., i = +9m.9s., e = +10m.37s., i = +11m.45s., +16m.15s., and +17m.45s.; T_0 = 3h.19m.7s. Ottawa ePR_2N = +8m.1s. = PR_1 − 12s., eE = +8m.5s., PSE = +10m.49s., iSR_1 = +13m.57s., iSR_2E = +14m.25s. = SR_1 − 17s., eE = +17m.41s., eN = +18m.5s., MN = +21·3m.; T_0 = 3h.19m.20s. Spokane iP = +7m.11s., ePR_1N = +8m.24s., iPR_1 = +8m.34s., iPR_2N = +8m.47s., P_cP = +9m.18s., eSN = +12m.53s., i = +15m.41s., S_cSEN? = +17m.20s. Saskatoon PR_2 = (+8m.39s.) = PR_1 − 4s., iSR_2 = (+15m.53s.), MN = (+22·7m.); T_0 = (3h.19m.12s.); all readings have been increased by 4m. La Paz iN = +8m.45s. and +9m.30s., PR_1N = +10m.10s., PR_2N = +10m.43s., SR_1N = +17m.56s., SR_2N = +19m.5s. Sucre i = +8m.45s. and +9m.18s., PR_1 = +10m.46s., PR_2 = +11m.33s., SR_1 = +18m.33s., i = +19m.33s. = SR_1 + 21s., and +20m.33s. = SR_2 + 7s. Sitka iPR_1 = +11m.13s., iN = +16m.32s. = PS − 6s., eN = +17m.56s., +21m.51s., and +23m.32s., eE = +23m.56s. Santiago SR_1 = +24m.9s. = SR_2 − 17s. Honolulu T.H. ePR_2E = +13m.21s., ePR_2N = +13m.31s., SR_1E = +22m.12s., SR_1N = +22m.31s., SR_2N = +24m.31s. Reykjavik PR_1 = +14m.17s., PS = +20m.36s., SR_1 = +26m.26s., MN = +56·5m. Scoresby Sund ePR_1E = +14m.9s., iPR_2E = +15m.42s., iN = +16m.2s. = PR_2 + 2s., eN = +16m.57s. = PR_2 + 14s., and +19m.2s., PS = +21m.29s., iN = +22m.48s., iSR_1E = +25m.42s., iSR_1N = +26m.5s., iSR_2E = +28m.32s., eN = +30m.29s., eE = +31m.59s., eLN = +33·7m. Edinburgh PR_1 = +15m.26s., SR_1 = +28m.5s. Dyce e = +15m.24s. = PR_1 − 18s., and +21m.4s., i = +26m.39s. Apia eZ = +19m.36s., +34m.49s., and +36m.16s.; T_0 = 3h.19m.5s. Oxford iE = +15m.18s. and +28m.24s. San Fernando SR_1 = +27m.54s., SR_2 = +33m.10s., MN = +46·2m. Kew iPR_1E = +15m.36s., ePR_2 = +17m.59s., SR_1E = +27m.59s., SR_2E = +32m.11s., LN = +39·0m., LZ = +40·2m., MZ = +44·0m., MN = +44·2m. Bergen PR_1 = +15m.35s. Toledo MZ = +43·9m., MNW = +44·2m. Malaga MZ = +41·4m., MN = +47·6m. Granada P = +12m.41s. Almeria PR_1 = +15m.58s., PR_2 = +18m.34s., PS = +24m.5s., MZ = +42·5m. Paris MN = +44·7m. Bagnères PS = +24m.12s. De Bilt eN = +23m.21s., MN = +46·5m. Uccle iPR_1 = +16m.0s., MN = +46·0m., MZ = +50·5m. Alicante MN = +49·9m. Barcelona PR_1 = +16m.8s., PS = +24m.35s., MN = +50·3m. Besançon PR_1 = +16m.21s. Hamburg iPE = ePN = +12m.59s., iPR_1EZ = +16m.18s. eSR_1E = +29m.33s., eSR_2N = +33m.53s. Copenhagen PR_1 = +16m.17s., e = +18m.5s., eN = +19m.11s., eEN = +22m.47s., eS_cP_cSEN = +23m.21s., ePSEN = +24m.42s., ePSZ = +24m.59s., SR_1 = +28m.59s., SR_2 = +32m.41s., iLE = +41·4m., MZ = +48·9m., MN = +53·6m. Feldberg iPN = +13m.1s. eN = +14m.33s., ePR_1N = +16m.6s., ePR_1E = +16m.23s., iPR_1N = +16m.28s., ePR_2N = +17m.57s., iPR_2N = +18m.20s., eN = +21m.48s., +24m.41s. = PS + 8s., +28m.1s., and +34m.58s., MN = +44·5m. Strasbourg PR_1 = +16m.37s., PS = +24m.35s. Lund +23m.5s. = [S] − 8s. and +24m.47s. = PS + 9s., PR_1 = +16m.47s., SR_2 = +33m.41s.? Upsala

Continued on next page.

$PR_1 = +16m.28s.$, $MN = +17·6m.$ Algiers $PR_1 = +16m.12s.$ Hohenheim $PR_1 = +16m.25s.$, $PR_2 = +18m.30s.$, $SR_1 = +28m.49s.$, $SR_2 = +32m.19s.$, $MN = +47·9m.$ Moncalieri $L = +24·0m.$, $MN = +60·9m.$ Jena $ePR_1N = +16m.33s.$, $ePR_1EZ = +16m.37s.$, $ePR_1E = +16m.41s.$, $ePR_2E = +18m.4s.$, $ePR_2NZ = +18m.21s.$, $eSE = +23m.41s.$, $iPSE = +25m.1s.$, $iPSN = +25m.5s.$, $iPSE = +25m.11s.$, $iE = +30m.33s.$ $= SR_1 + 19s.$, $i = +32m.41s.$, $eE = +33m.41s.$, $+35m.13s.$, and $+36m.47s.$ $= SR_2 + 11s.$ Ravensburg $PR_1 = +16m.36s.$, $PR_2 = +19m.39s.$, $MN = +52·9m.$ Potsdam $iPR_1 = +16m.39s.$, $ePS = +24m.59s.$ $i = +26m.59s.$ and $+32m.11s.$, $MN = +47·7m.$ Suva $iPR_1N = +16m.59s.$, $PR_1E = +17m.23s.$, $SR_1E = +28m.47s.$, $iSR_1N = +29m.23s.$, $iSR_2N = +33m.41s.$, $T_eE = 3h.19m.18s.$, $T_eN = 3h.19m.24s.$ Innsbruck $ePR_1NW? = +16m.59s.$, $PR_2NE = +23m.59s.$, $PS? = +25m.17s.$, $SR_1? = +30m.29s.$, $MNW = +57·6m.$ Helsingfors $i = +13m.13s. = P - 7s.$ Laibach $e = +17m.6s. = PR_1 - 18s.$, and $+34m.51s.$ Vienna $PR_1 = +17m.1s.$, $PR_2 = +19m.13s.$, $iE = +22m.6s.$, and $+22m.59s.$, $S_cP_cS = +24m.0s. = [S] + 16s.$, $PS = +25m.17s.$, $iN = +26m.57s.$, $iE = +27m.56s.$, $SR_1 = +31m.21s.$, $iN = +33m.0s.$, $PR_2 = +41m.3s.$ Pulkovo $iPR_1 = +17m.8s.$, $S_cP_cP_cS = +24m.12s.$, $PS = +25m.25s.$ Rocca di Papa $PR_1 = +17m.11s.$ Zagreb $i = +13m.34s.$, $+14m.59s.$, $+17m.13s. = PR_1 - 19s.$, $e = +21m.21s. = PR_2 - 3s.$, $+23m.7s.$, $+35m.3s.$ and $+44m.3s.$ Budapest $PR_1 = +17m.24s.$, $MN = +52·2m.$ Belgrade $iSE = +23m.24s. = [S] - 43s.$, $eLN = +38·5m.$, $MN = +54·4m.$ Kucino $PR_1 = +17m.29s.$, $PS = +26m.41s.$ Wellington $iSR_1 = +31m.25s.$, $SR_2 = +35m.41s.?$, $T_eN = 3h.19m.34s.$, $T_eE = 3h.19m.45s.$ Mizusawa $SE = +33m.13s. = SR_1 + 5s.$, $SN = +33m.17s. = SR_1 + 9s.$ Makeyevka $PR_1 = +18m.36s.$, $PS = +27m.43s.$ Ekaterinburg $iPR_1 = +18m.41s.$ Kobe $MN = +47·4m.$, $MZ = +59·8m.$ Irkutsk $ePR_1 = +19m.6s.$, $PS = +28m.34s.$, $SR_1 = +34m.29s.$ Helwan $PR_1 = +19m.31s.$, Hukuoka $MN = +74·3m.$ Ksara $P'EN = +18m.32s.$, $PR_1N = +22m.20s. = PR_2 - 26s.$, $PR_2N = +24m.39s.$, $PR_4EN = +25m.33s. = [S] + 11s.$, $PSEN = +29m.1s.$, $PPSE = +30m.11s.$, $SR_1N = +35m.7s.$ Nagasaki $ePR_1 = +22m.45s.$ Baku $iPR_1 = +19m.37s.$ Riverview $ePR_1 = +20m.11s.$, $ePR_2 = +22m.47s.$, $PR_4 = +25m.58s.$, $iS_cP_cP_cS = +27m.10s.$, $iPS = +29m.58s.$, $PPPS = +31m.29s.$, $i = +34m.36s.$, $iSR_1 = +35m.43s.$, $iN = +36m.16s.$ $iE = +36m.37s.$, and $+37m.39s.$, $SR_2 = +40m.16s.$, $SR_3 = +44m.19s.$, $PR_4' ? = +44m.39s.$, $eLN = +47·7m.$, $+48·7m.$, and $+49·8m.$, $MN = +66·3m.$ Sydney $SR_1 = +36m.41s.$, $SR_2 = +42m.41s.$ readings having been increased by 1h. Cape Town $PR_1 = +20m.23s.$ Tashkent $eP = +15m.31s.$, $iPR_1 = +19m.47s.$, $PPS = +31m.41s.$ Melbourne $i = +30m.21s.$, $+37m.26s. = SR_1 + 18s.$, and $+42m.1s.$ Taihoku $eE = +64m.0s.$ Adelaide $iSR_1 = +32m.6s. = PS + 18s.$, $i = +38m.28s. = SR_1 + 14s.$, $MN = +65·6m.$ Hong Kong $MN = +76·6m.$ Manila $eSN? = +33m.2s.$ Phu-Lien $MN = +86·3m.$ Tananarive $PR_1 = +23m.23s.$, $eE = +25m.38s.$, $PR_2 = +26m.23s. = [S] + 12s.$, $eN = +27m.47s.$, $PR_3 = +29m.59s.$, $PR_4 = +31m.14s.$, $eE = +31m.47s.$, $PS_cP_cS = +33m.38s.$, $PSEN = +34m.23s.$, $PPS = +36m.5s.$, $SR_1 = +42m.9s.$, $SPS = +42m.50s.$, $SR_2 = +47m.35s.$, $SR_3 = +56m.8s.$ Malabar $i = +20m.36s.$ Batavia $iZ = +20m.9s.$, $iE = +20m.15s.$, $iZ = +20m.16s.$, and $+30m.26s. = \Sigma - 11s.$ Colombo $L = +59·6m.$

June 17d. 6h. 40m. 54s. Epicentre 23°·5S. 178°·0E. (as on 1927 June 27d.).

$A = -·916$, $B = +·032$, $C = -·399$ $D = +·035$, $E = +·999$.
$G = +·398$, $H = -·014$, $K = -·917$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva		5·4	4	i 1 30	+ 7	2 42	+14	—	4·2
Apia	Z.	13·7	47	e 3 43	+21	—	—	—	5·8
Wellington	E.	18·0	188	i 4 56	+39	i 7 33	− 7	i 15·1	—
	N.	18·0	188	i 4 51	+34	i 7 26	−14	i 15·1	—
Riverview		25·6	240	i 6 10	+26	i 10 16	+ 2	i 13·2	15·8
Melbourne		31·6	235	—	—	i 11 50	−11	i 15·1	15·4
Adelaide		36·0	243	e 7 43	+21	i 12 48	−22	—	17·4
Manila		67·5	301	i 11 10	+ 9	—	—	—	—
Malabar		69·2	271	i 11 26	+14	i 19 56	−20	—	—
Batavia		70·2	271	i 11 29	+11	i 20 8	−20	—	—
Nagoya		70·4	326	e 11 21	+ 2	—	—	—	—
Osaka		70·8	324	e 11 21	− 1	(e 19 39)	−57	e 19·6	21·0
Mizusawa	E.	71·5	332	(11 27)	0	11 27	?P	—	—
Taihoku	E.	73·1	310	e 10 28	−69	—	—	10·7	—
Hong Kong		77·4	302	—	—	—	—	—	21·3
Phu-Lien		82·4	297	e 12 29	− 3	e 21 51	−59	—	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Plata		101·2	136	23 25	?	27 28	+81	30·0	—
La Paz		104·0	117	e 17 13	[−48]	i 23 45	[−58]	27·6	—
Sucre		105·1	120	18 19	[+14]	—	—	—	—
Tashkent		119·0	305	i 18 47	[− 3]	i 20 16	?PR_1	—	—
Ekaterinburg		124·4	324	e 19 1	[− 3]	—	—	—	—
Scoresby Sund		131·6	8	e 19 6?	[−16]	e 38 0	?	—	—
Baku		133·6	306	i 21 53	?PR_1	—	—	—	—
Pulkovo		136·9	337	i 19 7	[−27]	i 21 55	?PR_1	—	—
Upsala		141·2	344	e 19 25?	[−16]	—	—	—	—
Theodosia		143·0	315	(i 19 34)	[−11]	—	—	i 19·6	—
Simferopol		143·8	314	e 19 30	[−17]	—	—	e 19·6	—
Yalta		143·9	314	e 19 29	[−18]	—	—	—	—
Ksara	E.	145·4	296	19 40	[− 9]	—	—	—	—
Lund		146·0	345	19 36	[−14]	—	—	—	—
Copenhagen		146·1	345	e 19 32	[−18]	30 6?	? Σ	—	—
Hamburg		148·6	347	e 19 37	[−17]	e 41 36	?SR_1	—	—
Potsdam		149·0	340	i 19 49	[− 5]	—	—	—	—
Jena		150·7	342	i 19 44	[−13]	—	—	—	—
De Bilt	Z.	150·9	351	i 19 48	[− 9]	—	—	—	—
Vienna	Z.	151·3	334	e 19 39	[−19]	—	—	—	—
Kew	Z.	152·0	358	i 19 43	[−16]	—	—	—	—
Uccle		152·3	351	19 42	[−17]	—	—	—	—
Zagreb		153·4	331	e 19 48	[−12]	—	—	—	—
Strasbourg		153·8	345	19 47	[−14]	—	—	—	—
Paris		154·4	353	e 19 50	[−11]	—	—	—	—
Zurich		154·7	343	i 19 46	[−16]	—	—	—	—
Chur		155·0	341	19 46	[−16]	—	—	—	—
Neuchatel		155·5	345	i 19 40	[−22]	—	—	—	—
Florence		157·0	335	e 19 16	[−49]	—	—	—	—
Rocca di Papa		158·0	330	19 50	[−16]	—	—	e 27·6	—
Granada		166·3	5	i 20 0	[−12]	—	—	—	—
Almeria		166·6	359	—	—	—	—	—	49·5

Additional readings: Suva MN = +4·1m.; T_0N = 6h.40m.54s. Riverview i = +10m.22s., +13m.26s., and +13m.42s. Adelaide MN = +16·7m. Malabar i = +11m.31s. and +20m.27s. Batavia i = +11m.32s., iZ = +11m.35s., i = +11m.36s. Upsala PR_1 = +22m.55s. Simferopol eP = +21m.10s. Copenhagen iPNZ = +19m.37s., ePR_1Z = +22m.54s., eZ = +26m.0s. =[S]−35s., eEN = +41m.0s. Hamburg iPZ = +19m.40s. Jena eE = +19m.42s., iEN = +19m.48s., iZ = +19m.50s. Uccle e = +19m.50s. Zurich i = +20m.18s. and +20m.34s. Rocca di Papa PR_1 = +21m.52s.

June 17d. 22h. 20m. 57s. Epicentre 16°·2N. 97°·2W. (as at 3h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Puebla		3·0	341	0 53	+ 6	(1 23)	0	1·4	1·5
Vera Cruz		3·2	18	(0 23)	−27	(1 11)	−17	(1·2)	(2·2)
Tacubaya		3·8	330	(0 53)	− 6	—	—	(1·9)	2·0
Guadalajara		7·5	307	—	—	—	—	—	3·8
Merida		8·6	55	(2 42)	+32	(4 9)	+16	(4·3)	(5·7)
Tucson		20·3	325	4 57	+12	9 0	+31	11·3	12·4
St. Louis	E.	23·2	14	e 5 18	− 1	e 9 34	+ 5	—	—
Cincinnati		25·5	23	i 5 45	+ 2	i 10 13	0	—	—
Chicago	N.	26·9	16	—	—	e 10 9	−30	e 16·3	—
Georgetown	Z.	28·7	34	i 6 8	− 7	e 10 53	−19	—	18·9
Berkeley	E.	31·0	320	—	—	—	—	e 16·4	—
Toronto	N.	31·3	26	—	—	i 11 51	− 5	22·2	30·6
Ottawa		34·3	28	—	—	i 12 31	−13	e 16·0	23·0
Victoria		38·7	333	13 53	?S	(13 53)	+ 5	21·0	23·6
La Paz		43·5	139	e 8 15	− 7	—	—	—	—
Sucre		47·2	139	i 8 40	− 8	15 30	−14	24·5	26·9
Rio de Janeiro	N.	65·7	127	—	—	e 19 28	− 5	—	—
Scoresby Sund		69·9	20	e 11 21	+ 5	20 39	+14	e 39·0	43·6
Stonyhurst		79·8	38	—	—	e 22 25	+ 4	e 43·0	—
Oxford	E.	80·9	40	—	—	e 22 35	+ 1	e 39·0	49·0
Kew		81·6	40	i 12 30	+ 2	e 22 49	+ 7	39·0	49·0
Granada		83·1	54	i 12 37	0	e 23 8	+10	40·6	43·2
Almeria		84·1	54	e 12 37	− 6	e 23 7	− 2	41·3	42·2
Paris		84·1	41	i 12 42	− 1	—	—	44·0	49·0
De Bilt		84·6	37	i 12 46	0	e 23 13	− 2	e 40·0	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Uccle		84·6	39	e 12 45	− 1	e 22 3?	−72	e 42·0	—
Alicante		85·1	51	e 14 58	?	—	—	—	—
Hamburg		86·8	35	—	—	—	—	e 50·0	55·0
Copenhagen		87·2	32	e 13 0	0	e 23 36	− 7	e 42·0	46·8
Feldberg	N.	87·2	39	—	—	e 23 33	−10	e 52·0	54·8
Strasbourg		87·4	40	12 57	− 4	e 23 3?	[− 8]	42·0	—
Neuchatel		87·4	43	e 13 2	+ 1	—	—	—	—
Lund		87·6	32	—	—	—	—	45·0	—
Zurich		88·4	42	e 13 13	+ 6	—	—	—	—
Vienna	Z.	92·7	37	i 13 24	− 7	—	—	—	—
Pulkovo		93·0	24	i 17 9	?PR_1	—	—	51·6	—
Rocca di Papa		93·3	45	—	—	e 23 51	[+ 3]	e 45·8	—
Zagreb		93·6	40	—	—	—	—	e 52·0	—
Kucino		98·5	25	—	—	e 24 51	? Σ	—	—
Makeyevka		104·3	29	e 18 27	?PR_1	—	—	55·0	—
Ekaterinburg		104·6	13	e 18 51	?PR_1	e 25 4	[+19]	50·0	65·2
Irkutsk		109·0	346	e 19 14	?PR_1	e 28 46	?PS	59·0	—
Baku		115·7	27	—	—	—	—	64·0	—
Tashkent		121·1	11	e 20 36	?PR_1	e 30 26	?PS	e 67·0	78·6

Additional readings and notes: Vera Cruz readings have been *increased* by 1m. Tacubaya readings have been *diminished* by 1m. Merida readings have been *increased* by 2m. Tucson $SR_1E = +10$m.24s., $SR_1N = +10$m.27s., $LN = +11·2$m. Chicago eE = +16m.13s. Berkeley eZ = +19m.21s., eEN = +19m.45s.?, eZ = +20m.45s., eN = +21m.3s., eZ = +21m.27s., eE = +22m.9s. and +24m.27s., eZ = +24m.33s. Victoria LN = +20·6m. Scoresby Sund $SR_1 = +27$m.3s. ?, eLN = +37·0m., MN = +42·6m. Granada P = +12m.39s. Copenhagen $PR_1 = +16$m.21s., eN = +22m.57s. = [S] − 13s., $eSR_1E = +29$m.33s., eLN = +39·0m., MN = +53·2m. Kucino e = +27m.21s. = PS + 33s. and +32m.39s. = SR_1 + 20s. Ekaterinburg e = +27m.55s. = PS − 1s.

June 17d. 23h. 24m. 40s. Epicentre 16°·2N. 97°·2W. (as at 22h.).

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Puebla		3·0	341	0 53	+ 6	(1 38)	+15	1·6	1·9
Vera Cruz		3·2	18	(0 27)	−23	(1 17)	−11	(1·3)	(1·5)
Tacubaya		3·8	330	(1 2)	+ 3	—	—	2·0	2·2
Manzanillo		7·4	293	(1 55)	+ 3	1 55	?P	2·0	2·3
Guadalajara		7·5	307	—	—	—	—	—	3·8
Merida		8·6	55	(2 42)	+32	(4 9)	+16	(4·3)	(4·3)
Chihuahua		14·9	328	(3 26)	−12	(6 26)	− 4	(6·4)	(8·2
Tucson	E.	20·3	325	4 58	+13	8 56	+27	11·3	11·6
	N.	20·3	325	4 58	+13	8 48	+19	11·2	12·1
St. Louis	E.	23·2	14	i 5 19	0	e 9 32	+ 3	—	—
Cincinnati		25·5	23	i 5 45	+ 2	i 10 7	− 6	—	—
Chicago	N.	26·9	16	—	—	(10 8)	−31	10·1	10·4
Georgetown	Z.	28·7	34	i 6 9	− 6	—	—	—	21·7
Toronto	N.	31·3	26	i 6 33	− 8	i 11 52	− 4	—	24·2
Ithaca		31·6	30	—	—	—	—	e 15·3	—
Ottawa		34·3	28	e 6 56	−11	i 12 35	− 9	e 21·3	27·3
Spokane		35·6	337	e 7 20	+ 2	e 12 40	−24	e 20·3	22·3
Victoria		38·7	333	7 45	+ 1	13 50	+ 2	19·8	23·5
La Paz		43·5	139	8 14	− 8	i 14 36	−19	19·8	24·9
Sucre		47·2	139	i 8 45	− 3	i 15 29	−15	23·2	26·9
Rio de Janeiro	N.	65·7	127	—	—	19 28	− 5	—	—
Scoresby Sund		69·9	20	e 11 26	+10	20 44	+19	e 37·3	43·3
Edinburgh		78·9	35	—	—	e 22 20?	+ 9	43·3	—
Stonyhurst		79·8	38	12 22	+ 4	22 27	+ 6	e 42·0	—
Oxford	E.	80·9	40	e 12 26	+ 2	e 22 38	+ 4	e 37·3	49·3
San Fernando	E.	81·2	55	—	—	—	—	—	45·8
Kew		81·6	40	i 12 28	0	e 22 45	+ 3	39·3	49·3
Granada		83·1	54	i 12 32	− 5	23 9	+11	38·1	40·9
Almeria		84·1	54	i 12 37	− 6	—	—	42·3	44·1
Paris		84·1	41	i 12 43	0	e 23 6	− 3	42·3	57·3
De Bilt		84·6	37	i 12 47	+ 1	e 23 16	+ 1	e 40·3	46·0
Uccle		84·6	39	e 12 45	− 1	e 23 14	− 1	e 38·3	—
Alicante		85·1	51	e 12 26	−23	e 22 58	[+ 1]	e 41·5	—
Hamburg		86·8	35	e 12 59	+ 1	e 23 20?	−19	e 50·3	56·3
Copenhagen		87·2	32	e 12 59	− 1	24 8	+25	e 41·3	47·4

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Feldberg	N.	87·2	39	—	—	e 23 40	− 3	e 46·2	54·7
Strasbourg		87·4	40	12 58	− 3	e 23 20?	−25	38·3	—
Neuchatel		87·4	43	e 13 0	− 1	e 23 51	+ 6	—	—
Lund		87·6	32	—	—	23 20?	[+ 7]	41·3	—
Zurich		88·4	42	e 13 0	− 7	—	—	—	—
Moncalieri		88·7	44	e 10 11	?	23 35	−25	38·7	—
Vienna		92·7	37	i 12 25	−66	—	—	—	57·3
Pulkovo		93·0	24	e 13 27	− 5	—	—	43·3	52·9
Rocca di Papa		93·3	45	e 22 44	?	—	—	e 51·9	57·3
Zagreb		93·6	40	e 11 33	?	e 24 8	[+18]	—	—
Kucino		98·5	25	—	—	e 24 56	? Σ	51·5	61 7
Makeyevka		104·3	29	e 18 25	?PR_1	—	—	51·3	59·5
Ekaterinburg		104·6	13	e 18 42	?PR_1	e 25 3	[+18]	49·3	65·6
Irkutsk		109·0	346	e 19 13	?PR_1	e 28 36	?PS	—	—
Baku		115·7	27	—	—	—	—	e 60·3	—
Tashkent		121·1	11	—	—	—	—	e 58·3	76·9
Melbourne		121·7	234	—	—	—	—	e 67·4	69·8

Additional readings and notes : Vera Cruz readings have been *increased* by 1m. Tacubaya readings have been *diminished* by 1m. Merida readings have been *increased* by 2m. Chihuahua readings have been *increased* by 3m. Tucson $SR_1 = +10$m.26s. Chicago LE = +10·3m., ME = +18·8m. Georgetown $SR_1Z = +12$m.25s. Ottawa MN = +23·8m. Spokane e = +14m.17s. Scoresby Sund $PR_2 = +15$m.44s., $SR_1 = +25$m.20s. ?, eL = +36·3m., MN = +42·2m. Granada P = +12m.35s. San Fernando MN = +46·2m. De Bilt MN = +46·2m., MZ = +56·3m. Copenhagen $PR_1 = +16$m.26s., eEZ = +18m.20s., eN = +18m.56s. $=PR_2 + 0$s., and +22m.56s., $S_cP_eS = +23$m.26s. =[S] +16s., PS = +24m.44s., $SR_1 = +28$m.20s. ?, eLN = +37·3m., MN = +52·7m. Feldberg eN = +28m.44s. Pulkovo i = +17m.11s. Kucino e = +27m.8s. and +32m.14s. Ekaterinburg e = +27m.50s. Irkutsk e = +34m.37s.

June 17d. After-shocks from the epicentre 12°·3N. 121°·0E. as on June 15d. were recorded by Manila at the following times :—

h.	m.	s.	h.	m.	s.
7	0	8	17	21	58
13	21	28	23	24	0

June 17d. Readings also at 0h. (Zagreb and Copenhagen), 1h. (Pulkovo and Tashkent), 2h. (Copenhagen, Florence, and near Mizusawa), 3h. (Mizusawa, Granada, La Paz, and near Puebla), 5h. (Tucson, near Puebla, and near Matuyama), 6h. (Tucson (2) and near Puebla), 7h. (4) and 8h. (Tucson), 10h. (near Puebla), 11h. (Tucson (2) and Victoria), 12h. (Tucson (3), Neuchatel, Vienna, Zagreb, Zurich, near Mostar, and near Vera Cruz), 13h. (La Paz, Tucson (2) and near Vera Cruz), 14h. (La Paz), 15h. (Tucson and near Vera Cruz), 16h. (Ekaterinburg and Tashkent), 17h. (Tucson, near Tacubaya, Oaxaca, and Vera Cruz), 18h. (Mizusawa, La Paz, near Tacubaya, and Vera Cruz), 19h. (near Oaxaca), 20h. (Tucson, near Oaxaca, Puebla, Tacubaya, Vera Cruz, and near Amboina), 21h. (Tucson, near Oaxaca, Puebla, Tacubaya, and Vera Cruz (2)), 22h. (Nagoya, near Mizusawa, and near Oaxaca), 23h. (Nagoya, near Kobe, Sumoto, Mizusawa, and near Oaxaca (2)).

June 18d. 12h. 59m. 28s. Epicentre 7°·0S. 124°·0E. (as on 1927 Sept. 4d.).

A = −·555, B = +·823, C = −·122 ; D = +·829, E = +·559 ;
G = +·068, H = −·101, K = −·993.

Very uncertain.

	Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
	°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina	5·3	51	1 19	− 3	2 16	− 9	—	—
Manila	21·8	352	e 8 33	?S	(e 8 33)	−28	—	—
Perth	26·1	196	10 32	?S	(10 32)	+ 8	—	—
Melbourne	36·1	150	—	—	—	—	i 18·8	18·9
Riverview	36·7	141	—	—	i 12 38	−42	—	17·5
Irkutsk	61·6	347	—	—	i 18 43	0	—	—
Tashkent	69·5	320	—	—	i 20 46	?PS	—	44·7
Ekaterinburg	81·9	330	—	—	i 22 46	+ 1	41·0	—
Baku	82·7	314	—	—	e 24 6	?PS	—	—
Sucre	152·4	161	19 30	[−29]	—	—	—	—
La Paz	153·6	153	19 31	[−30]	—	—	—	—

Additional readings : Amboina i = +1m.24s. Melbourne i = +15m.47s. = $SR_1 + 25$s., +16m.37s. $=SR_2 + 22$s., and +17m.9s. Riverview i = +10m.49s., MN = +17·8m.

June 18d. 15h. 40m. 15s. Epicentre 16°·2N. 97°·2W. (as on 17d.).

A = −·120, B = −·953, C = +·279; D = −·992, E = +·125; G = −·035, H = −·277, K = −·960.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Puebla		3·0	341	(0 26)	−21	(1 1)	−22	(1·0)	(1·5)
Vera Cruz		3·2	18	(1 17)	+27	—	—	(2·3)	(2·6)
Tacubaya		3·8	330	1 18	+19	—	—	2·3	2·6
Guadalajara		7·5	307	(1 36)	−18	—	—	—	(6·6)
Tucson		20·3	325	4 53	+ 8	8 49	+20	11·1	11·5
St. Louis	E.	23·2	14	e 5 15	− 4	e 9 42	+13	—	16·8
Georgetown	Z.	28·7	34	i 6 11	− 4	—	—	20·5	30·0
Toronto		31·3	26	—	—	e 11 45	−11	e 21·4	—
Ottawa		34·3	28	—	—	i 12 30	−14	e 21·0	—
Victoria		38·7	333	13 55	?S	(13 55)	+ 7	20·8	25·9
Kew		81·6	40	—	—	—	—	e 46·8	—
Granada		83·1	54	i 12 33	− 4	—	—	—	41·2
Almeria		84·1	54	—	—	—	—	—	37·8
Paris		84·1	41	—	—	—	—	e 47·8	—
De Bilt		84·6	37	—	—	e 23 15	0	e 39·8	—
Uccle		84·6	39	—	—	—	—	e 48·8	—
Copenhagen		87·2	32	e 12 51	− 9	22 45?	−58	43·8	—
Strasbourg		87·4	40	—	—	—	—	e 46·8	—
Graz		92·8	38	(e 13 45?)	+14	—	—	e 13·8	20·3
Pulkovo		93·0	24	—	—	—	—	e 58·8	—
Ekaterinburg		104·6	13	—	—	e 24 58	[+13]	52·2	—
Irkutsk		109·0	346	e 18 45	?PR_1	—	—	e 59·8	—
Baku		115·7	27	—	—	—	—	e 73·8	—
Tashkent		121·1	11	e 21 33	?PR_1	—	—	e 65·8	77·2

Additional readings and notes: Puebla readings have been *diminished* by 7m. Vera Cruz readings have been *increased* by 2m. Guadalajara readings have been *increased* by 3m. Tucson LN = +11·2m., MN = +13·6m. Granada P = +12m.35s. Copenhagen PR_1 = +16m.15s. Tashkent e = +40m.45s.

June 18d. 21h. 56m. 40s. Epicentre 2°·1N. 127°·8E. (as on 1925 Aug. 14d.).

A = −·612, B = +·790, C = +·037; D = +·790, E = +·613; G = −·022, H = +·029, K = −·999.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		5·8	177	2 27	+57	(2 27)	−12	5·0	—
Manila		14·2	332	e 3 39	+10	—	—	e 10·7	—
Batavia		22·5	248	i 5 17	+ 6	9 34	+19	—	—
Hong Kong		24·1	328	5 25	− 4	—	—	—	10·0
Phu-Lien		27·8	314	e 6 0	− 6	—	—	—	—
Zi-ka-wei	Z.	29·7	349	6 11	−14	11 9	−20	—	18·2
Riverview		42·1	150	—	—	—	—	e 24·4	27·6
Irkutsk		53·8	345	i 9 25	− 7	e 16 47	−19	33·3	—
Tashkent		65·4	317	i 10 51	+ 4	e 19 32	+ 2	29·2	43·2
Ekaterinburg		75·9	329	e 11 56	+ 2	21 31	− 5	35·8	71·8
Baku		79·4	312	e 12 18	+ 3	22 22	+ 6	34·8	—
Kucino		88·2	326	—	—	—	—	e 54·5	—
Makeyevka		88·3	319	—	—	e 23 20	[+ 3]	69·7	84·6
Pulkovo		91·9	330	e 13 26	0	24 28	− 6	46·3	59·6
Copenhagen		102·2	330	—	—	27 20?	?PS	51·3	—
Feldberg	N.	106·6	325	—	—	—	—	e 57·0	65·5
De Bilt		107·6	326	—	—	—	—	e 55·3	69·8
Strasbourg		107·6	322	—	—	—	—	e 60·3	—
Uccle		108·6	325	—	—	—	—	e 55·3	—
Kew		110·8	328	—	—	—	—	e 58·3	—
Granada		120·0	314	—	—	—	—	e 69·3	74·8
San Fernando	E.	122·4	317	—	—	—	—	—	83·4

Additional readings: Amboina i = +3m.28s. and +4m.10s. Batavia iE = +5m.19s.; T_0 = 21h.56m.20s.; epicentre 2°·0N. 130°·1E. Riverview e? = +17m.26s. = SR_1 −4s., MN = +27·7m. Kucino eL = +74·8m. Makeyevka e = +42m.50s., +46m.20s., and +53m.27s. San Fernando MN = +82·8m.

June 18d. After-shocks from the epicentre 12°·3N. 121°·0E. as on June 25d. were recorded at Manila at the following times :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
6	31	45	9	54	0	17	27	22
8	33	49	15	30	10			

June 18d. Readings also at 0h. (Wellington, Baku, Rocca di Papa, near Zagreb, near Zurich, and Neuchatel), 1h. (Zurich, Granada, and near Tacubaya), 2h. (near Oaxaca, Tacubaya (2), and Vera Cruz (2)), 5h. near Tacubaya and Vera Cruz), 6h. (Lick and near Oaxaca), 7h. (Lich and near Matuyama), 8h. (near Tacubaya and Vera Cruz), 9h. (La Paz), 12h. (Tucson, near Oaxaca, Vera Cruz, and Tacubaya), 15h. (near Oaxaca), 16h. (near Tacubaya), 17h. (Mizusawa), 18h. (near Ksara), 19h. (Granada, near Oaxaca, and Vera Cruz), 20h. (near Tacubaya).

June 19d. After-shocks from the epicentre 12°·3N. 121°·0E., as on June 15d. were recorded by Manila at the following times :—

h.	m.	s.	h.	m.	s.
8	15	26	21	0	0

June 19d. Readings also at 0h. (near Mostar), 1h. (near La Paz, near Oaxaca, and Tacubaya), 2h. (Rocca di Papa), 3h. (Suva), 4h. (Batavia, Bombay, Tucson, Victoria, Puebla, near Oaxaca, Tacubaya, and Vera Cruz), 7h. (near Kobe and Sumoto), 8h. (Ekaterinburg, Manila, and Tashkent), 9h. (Copenhagen), 11h. (Taihoku), 14h. (Ekaterinburg, Irkutsk, and Tashkent), 15h. (Florence), 16h. (Florence, near Oaxaca, Tacubaya, and Vera Cruz), 17h. (Tucson), 18h. (Tucson, near Taihoku, near Oaxaca, Puebla, Tacubaya, and Vera Cruz), 19h. (Georgetown), 21h. (Strasbourg).

June 20d. After-shocks from the epicentre 12°·3N. 121°·0E. as on June 15d. were recorded by Manila at

h.	m.	s.	h.	m.	s.	h.	m.	s.
1	57	54	7	54	54	13	55	0

June 20d. Readings also at 1h. (Tashkent, near Toyooka, near Tacubaya, and near Oaxaca), 2h. and 5h. (near Tacubaya), 6h. (Mizusawa), 8h. (near Sumoto and Toyooka (3), near Oaxaca, and Tacubaya), 9h. (near Tananarive, near Simferopol, and Yalta), 11h. (near Oaxaca and Tacubaya), 12h. (near Oaxaca and Tacubaya), 15h. (near Victoria (2)), 17h, (near Taihoku), 20h. (near Sumoto), 21h. (Mizusawa), 22h. (near Oaxaca and Tacubaya), 23h. (Victoria).

June 21d. 3h. 45m. 54s. Epicentre 17°·5S. 168°·8E. (as on 1928 March 18d.).

A = −·935, B = +·185, C = −·301 ; D = +·194, E = +·981 ; G = +·295, H = −·058, K = −·954.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva	E.	9·1	95	1 42	−36	—	—	7·5	8·3
Riverview		22·7	221	e 5 19	+ 6	i 9 30	+11	e 11·6	13·1
Sydney		22·7	221	4 48	−25	9 18	− 1	11·6	12·6
Wellington	E.	24·3	169	—	—	e 10 41	+51	—	16·7
Melbourne		29·1	221	—	—	e 10 46	−33	—	16·4
Adelaide		32·0	231	e 5 41?	−66	e 11 44	−24	i 17·6	21·8
Perth		49·7	243	25 6	?L	—	—	(25·1)	—
Irkutsk		89·2	326	e 13 4	− 7	e 23 21	[− 2]	e 43·1	—
Victoria	E.	89·3	38	23 46	?S	(23 46)	−20	43·8	47·3
Tashkent		108·5	309	i 18 55	?PR_1	e 27 6	− 9	e 51·1	60·4
Ekaterinburg		114·5	325	(19 6?)	?PR_1	e 29 16	?PS	35·1	—
Toronto	E.	117·7	49	—	—	—	—	61·1	—
Georgetown	Z.	119·5	54	—	—	—	—	i 57·8	—
Ottawa	E.	120·1	47	—	—	—	—	e 61·6	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Kucino		126·9	327	e 21 4	?PR$_1$	e 25 23	?	e 50·8	63·7
Pulkovo		128·3	335	19 22	[+ 7]	e 21 16	?PR$_1$	—	—
Copenhagen		137·8	340	e 19 40	[+ 4]	—	—	62·1	—
Vienna	Z.	142·0	331	19 42	[− 1]	i 22 45	?PR$_1$	—	—
De Bilt		143·1	343	i 19 46	[+ 1]	i 22 53	?PR$_1$	e 74·1	—
Feldberg	N.	143·7	339	—	—	e 23 6	?PR$_1$	e 41·8	84·3
Zagreb		143·8	327	e 20 6?	[+19]	—	—	—	—
Uccle		144·5	343	e 19 48	[0]	e 23 6?	?PR$_1$	e 41·1	—
Kew		145·0	348	e 19 51	[+ 3]	—	—	74·1	—
Strasbourg		145·4	338	e 19 50	[+ 1]	e 23 6?	?PR$_1$	e 34·1	—
Zurich		146·0	335	i 19 54	[+ 4]	—	—	—	—
Paris		146·8	343	i 19 57	[+ 6]	—	—	82·1	—
Neuchatel		147·0	335	i 19 56	[+ 5]	—	—	—	—
Besançon		147·1	333	19 55	[+ 4]	—	—	—	—
Florence		147·6	329	i 19 58	[+ 6]	e 21 6	?	—	—
Pompeii	E.	147·9	321	e 20 14	[+21]	—	—	—	—
Rocca di Papa		148·3	325	e 19 53	[0]	—	—	—	—
Moncalieri		148·3	334	e 19 57	[+ 4]	—	—	—	—
Granada		159·3	343	e 19 50	[−17]	—	—	81·8	90·6

Additional readings and note: Suva iN = 3h.45m.0s. also = +7m.6s., MN = +13·8m. Riverview iP = +5m.23s., i = +9m.26s., iS = +9m.41s., eLN = +12·1m., MN = +13·3m.; T_0 = 3h.45m.45s. Adelaide MN = +19·6m. Irkutsk e = +28m.35s. Ekaterinburg PR$_1$ is given as an earlier L reading. Georgetown LZ = +64·2m. Kucino e = +30m.26s. Copenhagen eEZ = +22m.22s. = PR$_1$ + 2s., e = +23m.12s. Kew eE = +41m.54s. = SR$_1$ + 2s. Granada iZ = +20m.14s. = [P] + 7s. and +24m.31s. = PR$_1$ − 3s.

June 21d. 10h. 40m. 8s. Epicentre 18°·0S. 179°·5W.

A = −·951, B = −·008, C = −·309; D = −·009, E = +1·000; G = +·309, H = +·003, K = −·951.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva	E.	2·0	266	(i 0 28)	− 3	(i 0 52)	− 3	—	—
	N.	2·0	266	(i 0 36)	+ 5	(i 0 58)	+ 3	—	—
Apia		8·5	62	2 14	+ 5	4 6	+16	—	5·6
Wellington	E.	23·8	191	i 5 35	+ 9	i 9 42	+ 2	i 11·0	15·9
	N.	23·8	191	i 5 27	+ 1	i 9 41	+ 1	i 11·7	15·9
Christchurch		26·4	193	6 44	+52	8 56	?	9·9	—
Riverview		30·6	233	i 6 29	− 5	e 11 36	− 8	e 15·0	26·5
Sydney		30·6	233	6 10	−24	11 46	+ 2	15·3	16·7
Melbourne		36·8	230	i 7 27	− 1	i 13 12	− 9	i 18·6	25·9
Adelaide		40·8	238	e 7 52	− 9	i 14 5	−13	19·2	33·3
Honolulu T.H.	E.	44·7	30	8 12	−19	14 44	−27	19·2	20·8
	N.	44·7	30	e 8 9	−22	14 48	−23	18·0	20·5
Amboina		53·1	279	i 9 52	+25	i 17 19	+22	22·9	31·9
Perth		59·4	243	e 18 27	?S	(e 18 27)	+11	30·1	40·5
Manila		67·1	296	e 11 12	+13	—	—	e 32·9	—
Osaka		67·8	322	11 2	− 1	(19 23)	−37	19·4	20·8
Mizusawa	N.	67·9	330	—	—	28 34	?L	(28·6)	—
Sumoto		67·9	321	e 11 10	+ 7	—	—	e 27·7	—
Kobe		68·0	322	11 6	+ 2	e 20 46	[−11]	31·6	—
Nagasaki		70·1	317	e 11 42	+24	e 20 56	[−16]	e 28·3	—
Batavia		72·6	270	i 11 38	+ 4	—	—	37·9	40·3
Hong Kong		76·3	300	11 58	+ 1	21 52	[− 6]	36·7	40·4
Berkeley		77·5	43	e 12 4	0	e 21 54	− 1	e 37·4	—
Lick	E.	77·6	43	e 12 3	− 2	e 21 55	− 1	—	—
	E.	77·6	43	e 12 2	− 3	e 22 4	[− 3]	—	—
Phu-Lien		82·1	295	e 12 30	− 1	e 22 52	+ 5	39·9	—
Tucson	E.	82·7	53	12 33	− 1	—	—	e 47·1	—
	N.	82·7	53	12 34	0	e 22 41	−13	e 33·9	—
Victoria	E.	83·1	34	12 33	− 4	22 45	−13	37·7	38·0
	N.	83·1	34	12 33	− 4	22 52	− 6	37·6	38·0
Denver		90·2	48	e 12 2	−75	e 22 42	[−47]	e 37·0	44·0
Irkutsk		96·0	324	13 33	−16	24 52	−24	—	—
St. Louis	N.	100·6	52	—	—	i 25 24	−37	41·6	—
Colombo		102·2	273	9 53	?	—	—	56·1	59·9

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Chicago	E.	103·3	50	(e 17 32)	[−27]	i 26 25	− 2	46·5	50·0
La Plata		103·4	134	18 23	[+24]	—	—	48·9	—
La Paz		104·2	112	14 20	−11	—	—	48·3	56·0
Cincinnati		105·0	52	—	—	i 25 42	? Σ	42·9	—
Kodaikanal		105·4	275	27 40	?PS	—	—	68·5	77·6
Sucre		105·6	117	e 14 28	− 9	25 22	[+32]	46·2	52·3
Toronto		109·5	49	e 19 3	?PR_1	i 26 52?	−32	e 51·4	57·1
Charlottesville	N.	109·5	54	—	—	e 26 52	−32	e 44·9	52·9
Georgetown	Z.	110·7	53	i 16 17	?	e 26 18	? Σ	51·9	56·1
Ithaca		111·5	50	—	—	—	—	50·9	—
Bombay		111·9	283	20 40	?PR_1	31 14	?	52·9	74·3
Ottawa	E.	112·3	47	—	—	26 8	? Σ	e 51·9	55·9
	N.	112·3	47	—	—	27 4	−44	e 46·9	56·9
Tashkent		117·5	307	i 18 55	[+ 9]	—	—	50·9	63·6
Rio de Janeiro	N.	120·9	131	e 20 22	?PR_1	—	—	e 56·0	—
Tananarive	E.	120·9	233	—	—	—	—	58·5	61·4
	N.	120·9	233	—	—	e 28 16	−40	66·8	70·7
Ekaterinburg		121·2	325	—	—	25 58	[+10]	46·9	60·7
Scoresby Sund		125·8	9	—	—	26 4	[+ 3]	65·9	73·2
Baku		132·2	309	19 27	[+ 4]	—	—	58·4	88·3
Kucino		132·9	331	e 19 10	[−15]	—	—	56·5	62·7
Pulkovo		133·0	340	19 22	[− 3]	26 2	[−15]	53·7	80·2
Upsala	N.	136·4	348	e 22 58	?PR_1	—	—	e 54·9	77·6
Makeyevka		137·2	323	19 33	[− 1]	—	—	—	81·3
Dyce		140·7	2	—	—	—	—	75·2	93·0
Lund		141·1	349	19 52?	[+11]	—	—	56·9	—
Copenhagen		141·2	349	e 19 32	[− 9]	e 27 4	?	e 57·9	62·7
Edinburgh		142·0	3	e 19 37	[− 6]	—	—	57·9	—
Hamburg		143·7	350	e 19 49	[+ 3]	—	—	e 59·9	77·9
Stonyhurst		144·0	3	—	—	—	—	e 70·9	—
Potsdam		144·2	345	e 18 52?	[−55]	—	—	—	—
Bidston		144·5	4	21 9	?	—	—	—	70·2
Ksara	N.	144·7	301	e 19 46	[− 2]	—	—	71·9	—
De Bilt		145·7	353	19 41	[− 8]	—	—	60·4	125·2
Jena		145·9	347	e 19 44	[− 6]	—	—	e 69·9	78·1
Oxford		146·2	3	e 19 49	[− 1]	—	—	—	119·9
Kew		146·5	1	e 19 46	[− 5]	—	—	60·9	118·9
Budapest		146·8	335	19 50	[− 1]	—	—	—	82·4
Uccle		147·0	355	e 19 48	[− 3]	—	—	e 59·9	88·9
Vienna		147·1	340	e 19 47	[− 4]	29 58	? Σ	e 60·9	76·9
Feldberg	N.	147·2	350	i 19 51	[0]	—	—	e 65·8	81·2
Graz		148·4	339	e 19 55	[+ 2]	—	—	59·9	101·4
Belgrade	N.	148·4	331	e 19 54	[+ 1]	e 34 16	?	—	—
Strasbourg		148·9	350	19 52	[− 2]	—	—	49·9	53·4
Paris		149·1	357	e 19 54	[0]	e 35 33	?	62·9	88·9
Ravensburg		149·3	348	19 53	[− 2]	28 53	?	e 61·9	—
Innsbruck		149·4	344	e 19 58	[+ 3]	—	—	—	—
Zagreb		149·4	337	e 19 55	[0]	—	—	e 65·9	—
Zurich		149·9	349	i 19 54	[− 2]	—	—	—	—
Besançon		150·4	352	e 19 57	[+ 1]	—	—	—	—
Neuchatel		150·5	351	i 19 54	[− 3]	—	—	—	—
Venice		150·8	343	i 20 10	[+13]	—	—	—	—
Moncalieri		152·3	349	e 20 3	[+ 4]	37 5	?	49·5	113·2
Florence	Z.	153·3	343	e 21 52	[+112]	—	—	42·9	61·9
Rocca di Papa		154·1	339	e 19 12	[−49]	—	—	e 66·2	117·9
Pompeii	E.	154·2	335	e 20 5	[+ 4]	e 31 5	? Σ	—	—
Barcelona		156·5	357	—	—	—	—	e 45·2	55·6
Tortosa	N.	157·2	0	e 20 16	[+11]	e 31 21	?PR_2	e 48·9	115·5
Toledo		157·8	9	i 20 3	[− 3]	e 36 33	?	e 65·8	80·4
Alicante		159·6	2	—	—	—	—	e 45·7	85·7
Granada	Z.	160·5	10	—	—	—	—	—	85·9
San Fernando		160·6	17	e 18 15	?	e 37 40	?	73·8	117·0
Malaga		160·8	12	e 20 26	[+17]	30 2	?	39·0	—
Almeria		161·0	7	20 21	[+12]	—	—	79·7	102·8
Algiers		161·1	354	e 20 34	[+15]	—	—	80·9	109·9

Additional readings and notes: Suva readings have been *diminished* by 2m. Wellington iPR_1 = +6m.17s., T_0N = 10h.40m.9s., T_0E = 10h.40m.27s. Riverview iP = +7m.43s. and +9m.9s., P_0P = +9m.16s., iS = +11m.44s., +12m.1s., and +12m.9s., iSR_1 = +13m.28s., SR_2 = +13m.55s., eLZ = +14·9m., MN = +18·8m., MZ = +25·2m. ; T_0 = 10h.39m.53s. Melbourne iPR_2 = +8m.52s. Adelaide iPR_1 = +9m.46s., iSR_1 = +17m.31s., MN = +30·6m. Honolulu T.H. eSR_1E = +16m.58s., SR_1N = +17m.42s. Perth

Continued on next page.

iS = +25m.6s. Batavia iZ = +11m.39s. =P +5s. Hong Kong ? = +19m.1s. Berkeley eSN = +21m.49s., eE = +35m.10s., eN = +35m.28s., and +37m.10s., eE = +37m.22s. Tucson iPR_1N = +15m.41s., eSR_2E = +32m.48s. Irkutsk ePR_1 = +17m.17s., S_cP_cS = +24m.23s., PS = +26m.18s. St. Louis iPSN = +26m.33s., eN = +28m.46s., and +33m.45s. Chicago iE = +23m.57s. =[S] −42s., eE = +31m.28s La Paz MN = +62·4m. Cincinnati $eS_cP_cP_cSEN$ = +27m.9s., ePSEN = +28m.9s. Sucre SR_2 = +33m.56s. =SR_1 +8s. Georgetown iZ = +19m.17s. =PR_1 −6s., and +29m.24s. =PS +18s. Ottawa ePR_1E = +19m.17s., PR_2 = +21m.59s. PSN = +28m.52s., SR_1 = +34m.52s. Tashkent iPR_1 = +20m.4s., iPS = +30m.2s. Rio de Janeiro eE = +20m.32s. =PR_1 +1s., eLE = +56·9m. Tananarive eN = +30m.28s. =PS −27s., eE = +30m.37s. =PS −16s., and +34m.43s., eN = +37m.4s. =SR_1 +6s., eE = +38m.4s., eN = +40m.25s., eE = +40m.31s., e = +41m.37s., +42m.12s. =SR_2 −21s., and +46m.16s. = SR_1 −14s. Ekaterinburg ePR_1 = +20m.28s., PS = +30m.39s. Scoresby Sund ePR_1EN = +21m.1s., eN = +22m.28s., PR_2 = +24m.10s., $S_cP_cP_cS$ = +28m.28s., SR_1 = +38m.6s., SR_2 = +42m.10s., eLEN = +51·9m., MN = +72·4m. Baku PR_2 = +24m.26s., PPS = +34m.1s., SR_1 = +39m.28s. Kucino PR_1 = +21m.39s., P_cP_cS = +22m.45s., PS = +31m.40s. Pulkovo iPR_1 = +21m.48s., iP_cP_cS = +23m.1s. Makeyevka P_cP_cS = +23m.4s., SR_1 = +39m.28s. Dyce i = +22m.28s. =PR_1 −10s., i = +29m.38s. = Σ +21s. Copenhagen ePR_1N = +22m.34s., eP_cP_cS = +23m.28s., eZ = +30m.34s., PPS = +35m.22s., eN = +37m.46s., eE = +38m.28s., SR_1 = +41m.4s., eEN = +56m.16s., eLEN = +61·9m., MN = +74·8m., MZ = +78·3m. Stonyhurst SR_1? = +41m.32s. De Bilt iZ = +19m.45s. = [P] −4s., eEN = +41m.52s. =SR_1 −9s., MN = +87·7m., MZ = +123·1m. Jena eN = iZ = +19m.48s. =[P] −1s. Kew ePR_1 = +21m.28s., eE = +42m.5s. =SR_1 −5s., MN = +116·1m., MZ = +116·9m. Uccle e = +41m.52? =SR_1 −24s. Vienna iPZ = +19m.48s., PR_1 = +23m.5s., PR_2 = +25m.53s., SR_1 = +35m.52s.? Feldberg eN = +21m.9s., +23m.11s. =PR_1 −8s., and +35m.18s. Graz P = +23m.23s. =PR_1 −3s., i = +24m.21s., MN = +82·9m. Strasbourg MZ = +49·9m., MN = +57·2m. Paris MN = +115·9m. Ravensburg PR_1 = +22m.48s., PR_2 = +24m.32s., SR_1 = +34m.48s. Innsbruck PR_1NE? = +23m.16s. Zagreb i = +20m.3s. =[P] +9s., and +21m.6s., e = +22m.5s., and +24m.9s. Zurich i = +20m.0s. =[P] +5s. Neuchatel e = +27m.57s. Rocca di Papa ePZ = +19m.30s., PR_1Z = +23m.7s., eLZ = +95·2m. Toledo iZ = +20m.38s., iNW = +20m.40s. Alicante e = +32m.13s., MN = +111·0m. San Fernando MN = +113·0m. Almeria MZ = +100·6m. Algiers ? = +28m.9s., MN = +103·9m.

June 21d. 16h. 27m. 7s. Epicentre 59°·4N. 146°·0W.

(deduced by comparison with the epicentre 60°·0N. 146°·0W. of 1925 Feb. 23d.).

A = −·422, B = −·285, C = +·861; D = −·559, E = +·829; G = −·714, H = −·481, K = −·509.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Sitka	E.	6·0	108	i 1 48	+16	i 3 14	+30	i 3·8	5·9
	N.	6·0	108	i 1 47	+15	i 3 3	+19	i 3·9	6·8
Victoria		17·2	120	4 21	+14	(7 53)	+31	7·9	9·9
Spokane		20·4	112	i 4 58	+12	i 8 59	+27	e 11·3	12·6
Saskatoon		22·9	91	i 4 47	−29	i 8 57	−26	e 10·9	12·7
Berkeley		26·3	134	e 5 57	+ 6	e 10 40	+12	—	—
Lick		27·0	134	e 6 1	+ 3	—	—	—	12·9
	E.	27·0	134	e 6 0	+ 2	e 10 50	+ 9	e 13·9	—
Tucson	E.	35·7	125	i 7 20	+ 1	13 10	+ 4	20·2	21·8
	N.	35·7	125	i 7 19	0	e 13 7	+ 1	e 17·4	23·2
Honolulu T.H.	E.	39·1	199	e 7 26	−21	i 13 43	−10	16·7	18·4
	N.	39·1	199	i 7 36	−11	i 13 43	−10	18·6	21·6
Chicago	E.	39·4	90	i 6 47	−63	i 12 57	−60	19·0	24·5
St. Louis		40·4	95	e 7 52	− 6	i 14 16	+ 3	20·9	—
Chihuahua		40·9	121	6 6	−116	12 31	−109	17·7	23·7
Ann Arbor		41·0	87	e 8 5	+ 2	i 14 17	− 4	e 20·4	23·4
Toronto		42·2	81	i 8 8	− 4	14 33	− 5	19·7	24·9
Ootomari		42·4	286	8 4	−10	14 19	−21	17·8	26·1
Ottawa		42·8	77	i 8 17	0	14 38	− 7	i 19·6	24·9
Cincinnati	E.	43·0	90	e 7 46	−32	i 14 15	−33	20·4	22·1
	N.	43·0	90	e 7 43	−35	i 14 18	−30	20·4	22·1
Ithaca		44·6	80	8 38	+ 8	15 4	− 6	20·4	26·4

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Georgetown		46·9	85	e 8 44	− 2	i 15 39	− 1	e 20·5	25·6
	Z.	46·9	85	i 8 46	0	i 15 45	+ 5	—	—
Harvard		47·3	77	—	—	i 16 48	+63	e 23·2	26·4
Mizusawa	N.	48·8	280	—	—	15 47	−17	25·2	—
Tacubaya		52·1	120	9 10	−11	16 50	+ 5	24·4	30·6
Vera Cruz		53·6	117	7 33	−117	15 24	−104	24·4	31·6
Nagoya		53·9	280	(e 9 15)	−17	—	—	—	—
Toyooka		54·7	281	i 9 35	− 2	(i 17 15)	− 2	i 17·2	—
Irkutsk		54·9	316	i 9 34	− 4	i 17 6	−14	27·9	35·0
Osaka		55·1	280	9 40	0	17 18	− 4	30·9	37·0
Kobe		55·2	280	9 39	− 1	i 17 20	− 4	e 29·3	30·0
Sumoto		55·6	280	e 17 24	?S	(e 17 24)	− 5	e 28·4	—
Bergen		58·2	16	9 53	− 7	e 17 53?	− 8	—	—
Hukuoka		58·4	284	e 10 8	+ 7	e 18 4	0	e 25·8	38·6
Nagasaki		59·4	284	e 12 3	+115	e 21 16	+180	—	34·5
Dyce		59·9	22	10 13	+ 2	18 16	+ 6	29·2	34·9
Upsala		60·1	10	10 9	− 4	18 17	− 7	e 26·9	34·5
Helsingfors		60·2	5	i 10 12	− 1	18 19	− 7	29·2	—
Pulkovo		60·8	2	i 10 16	− 2	18 29	− 4	26·9	35·1
Edinburgh		61·0	24	e 10 28	+ 9	i 18 36	0	27·9	34·3
Ekaterinburg		61·9	345	i 10 24	0	i 18 38	− 9	24·9	36·7
Stonyhurst		63·0	24	10 39	+ 7	e 18 54	− 7	29·9	35·0
Bidston		63·3	24	10 20	−14	19 9	+ 4	28·9	41·6
Copenhagen		63·6	13	i 10 35	− 1	i 19 5	− 3	30·9	32·1
Lund		63·7	13	—	—	19 10	+ 1	30·9	—
Kucino		64·8	357	i 10 17	−27	18 53	−30	29·2	38·9
Zi-ka-wei	E.	64·8	290	—	—	19 26	+ 3	37·2	41·1
	N.	64·8	290	10 42	− 2	19 20	− 3	35·7	42·0
	Z.	64·8	290	i 10 41	− 3	—	—	34·4	42·4
Oxford	E.	65·3	24	10 49	+ 2	i 19 32	+ 3	e 25·5	42·3
	N.	65·3	24	i 10 29	−18	i 19 31	+ 2	e 29·5	42·0
Hamburg		65·4	15	i 10 50	+ 3	i 19 34	+ 4	e 34·9	37·9
Kew		65·7	24	i 10 51	+ 2	i 19 37	+ 4	30·9	36·7
Port au Prince		65·8	95	—	—	—	—	e 33·1	39·0
De Bilt		66·1	19	10 54	+ 2	19 42	+ 4	e 30·9	38·1
Potsdam		67·0	14	i 11 5	+ 7	i 19 44	− 6	e 34·9	46·5
Uccle		67·2	20	e 11 0	+ 1	i 19 55	+ 3	27·9	33·1
Jena	E.	68·2	16	e 11 5	0	i 20 8	+ 4	e 34·9	42·4
	N.	68·2	16	e 11 5	0	i 20 5	+ 1	e 35·9	40·4
	Z.	68·2	16	i 11 6	+ 1	e 20 7	+ 3	e 35·9	42·5
Feldberg	N.	68·5	17	i 11 8	0	i 20 5	− 3	—	38·0
Paris		68·8	23	i 11 11	+ 1	i 20 13	+ 1	30·9	33·9
San Juan	N.	69·1	89	—	—	—	—	e 30·9	—
Strasbourg		69·9	19	i 11 15	− 1	i 20 26	+ 1	31·9	43·6
Taihoku	E.	69·9	285	—	—	e 20 16	− 9	—	—
Balboa Heights	E.	70·4	106	20 53	?S	(20 53)	+22	(38·9)	—
Ravensburg		70·9	19	e 11 29	+ 7	20 38	+ 1	e 29·9	57·0
Besançon		71·0	20	11 25	+ 2	20 33	− 5	e 32·9	—
Azores		71·1	46	13 53?	+149	(20 35)	− 4	—	20·6
Zurich		71·2	18	i 11 25	+ 1	i 20 45	+ 5	—	—
Neuchatel		71·3	19	i 11 26	+ 1	e 20 39	− 3	—	—
Vienna		71·4	12	e 11 25	− 1	20 45	+ 2	e 34·9	48·9
Innsbruck		71·8	15	e 11 17	−11	20 17	−31	—	—
Graz		72·4	13	e 11 34	+ 2	i 22 1	? Σ	38·9	46·1
Budapest		72·4	10	11 33	+ 1	20 57	+ 2	32·9	42·4
Makeyevka		72·5	357	i 11 41	+ 8	i 20 58	+ 2	33·9	44·5
Grenoble		72·8	20	e 11 42	+ 7	e 21 6	+ 6	e 32·9	—
Laibach		73·4	13	e 11 50	+12	e 21 10	+ 3	36·9	51·9
Moncalieri		73·4	20	e 11 35	− 3	16 6	?PR_2	35·0	49·9
Venice		73·6	15	e 11 43	+ 3	20 57	−12	45·0	50·2
Zagreb		73·7	13	e 11 40	0	e 21 3	− 7	e 36·6	47·9
Bagnères		73·9	25	—	—	e 24 53?	?SR_4	e 33·9	—
Florence		75·1	16	e 12 55	+65	23 51	?	30·9	34·9
Belgrade	E.	75·2	10	e 11 48	− 2	e 20 40	+12	e 34·8	51·6
	N.	75·2	10	e 11 47	− 3	e 21 14	−14	e 43·7	—
Tashkent		75·2	334	i 11 46	− 4	—	—	—	—
Theodosia		75·5	0	e 11 58	+ 6	e 21 42	+10	39·9	—
Simferopol		75·7	0	e 11 50	− 3	e 21 28	− 6	39·9	—
Barcelona		75·8	24	e 11 53	− 1	e 21 38	+ 3	e 34·5	42·4
Hong Kong		75·8	290	11 56	+ 2	21 35	0	35·2	41·7
Toledo		75·8	29	i 11 55	+ 1	i 21 41	+ 6	e 34·9	44·1
Tortosa	E.	76·0	26	—	—	21 38	+ 1	e 34·9	45·8
	N.	76·0	26	11 55	0	i 21 39	+ 2	e 36·9	49·2
Yalta		76·1	0	e 11 26	−30	—	—	37·9	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Rocca di Papa	E.	77·4	16	e 11 59	− 4	21 50	− 3	e 38·1	57·2
	N.	77·4	16	e 11 57	− 6	21 55	+ 2	e 38·1	50·5
	Z.	77·4	16	e 11 54	− 9	21 51	− 2	e 35·5	57·2
Alicante		78·2	27	12 14	+ 6	i 22 14	+12	e 31·6	48·2
Granada		78·5	30	i 12 12	+ 2	i 22 19	+13	e 38·0	47·0
Pompeii	E.	78·6	15	e 12 26	+15	e 22 6	− 1	40·9	47·9
San Fernando		78·6	31	i 12 11	0	i 22 11	+ 4	37·3	47·9
Malaga		78·7	30	12 19	+ 8	22 23	+15	—	—
Manila		79·0	280	e 12 26	+13	—	—	e 43·0	—
Almeria		79·1	29	12 11	− 3	i 22 15	+ 2	33·8	48·5
Baku		79·4	348	i 12 12	− 3	—	—	—	—
Algiers		80·5	24	12 17	− 5	22 25	− 4	e 29·9	45·9
Phu-Lien		80·6	295	e 12 17	− 6	22 20	−10	37·9	45·6
Suva	E.	82·8	215	i 11 41	−54	—	—	37·9	—
	N.	82·8	215	e 11 23	−72	i 21 47	−68	40·6	—
Dehra Dun		83·2	323	12 39	+ 2	23 9	+10	35·4	57·0
Calcutta	E.	86·8	311	16 39	?PR_1	—	—	46·6	—
	N.	86·8	311	16 21	?PR_1	—	—	52·8	—
Ksara	N.	86·8	359	e 12 53	− 5	23 22	−17	41·3	—
Helwan		90·8	2	e 13 25	+ 5	23 35	[+ 2]	—	—
Amboina		91·1	266	—	—	i 24 17	− 8	e 38·9	—
Bombay		95·5	324	13 30	−16	24 7	[+ 7]	45·7	61·8
La Paz		98·1	107	e 10 11	?	i 24 31	[+17]	48·7	56·1
Sucre		101·6	106	e 13 17	−61	—	—	51·9	66·3
Kodaikanal		102·1	317	14 59	+38	—	—	59·6	64·7
Batavia		104·0	282	i 20 1	?PR_1	i 24 2	[−41]	e 53·9	—
Colombo		104·4	314	15 24	+52	—	—	58·9	65·2
Wellington	E.	105·8	210	—	—	i 26 27	−23	e 36·9	58·0
	N.	105·8	210	—	—	i 25 0	[+ 9]	e 37·6	54·2
Riverview		106·6	230	e 14 48	+ 6	—	—	e 40·9	75·9
Sydney		106·6	230	—	—	—	—	57·5	60·9
Christchurch		108·4	210	—	—	28 15	+61	54·6	77·2
Melbourne		112·6	232	—	—	i 27 23	−28	—	55·9
Adelaide		112·8	239	—	—	e 29 13	?PS	54·4	64·4
Rio de Janeiro	E.	116·0	90	e 20 5	?PR_1	—	—	e 53·9	73·9
	N.	116·0	90	e 20 12	?PR_1	—	—	e 55·6	60·4
La Plata		118·7	110	—	—	—	—	58·9	—
Perth		121·1	259	28 48	?S	(28 48)	−10	—	—
Tananarive		138·3	342	i 19 20	[−17]	26 56	[+31]	72·4	86·4
Cape Town		152·5	29	i 33 29	?	—	—	—	87·9

Additional readings and notes: Victoria PN = +4m.23s.; T_oE = 16h.27m.4s.; T_oN = 16h.27m.8s. Spokane i = +5m.13s., iPR_1 = +5m.20s., iE = +5m.34s., i = +5m.38s., and +7m.17s., iN = +9m.33s., MN = +12·4m. Berkeley eN = +6m.48s. and +8m.39s., eE = +8m.41s., eSE = +10m.41s., eE = +12m.34s. and +13m.25s., eN = +13m.19s., iE = +13m.37s. Lick (first line) ePZ = +6m.2s., eZ = +7m.59s. and +9m.29s., MZ = +13·9m. (second line) eE = +17m.53s. Tucson iPR_1N = +8m.49s., iPR_1E = +8m.51s., eSR_1N = +15m.11s., eSR_1E = +16m.2s. Honolulu T.H. iPR_1N = +9m.20s., PR_1E = +9m.53s., eSR_1N = +16m.17s. Chicago iPR_1E = +8m.24s., iSR_1E = +16m.24s. St. Louis iN = +7m.58s., iPR_1N = +9m.21s., iSR_1N = +16m.57s., eSR_1E = +18m.14s. Ann Arbor ePR_1 = +9m.41s., eSR_1 = +16m.41s., iSR_1 = +17m.23s., eL = +19·7m., MN = +26·8m.; T_o = 16h.27m.18s. Toronto iPR_1N = +9m.53s. ?, iSR_1EN = +14m.25s, −S − 13s., SR_1N = +17m.10s., MN = +25·6m.; T_o = 16h.27m.18s. Ottawa iPR_1 = +9m.56s., SR_1 = +17m.18s.; T_o = 16h.27m.22s. Cincinnati iPR_1 = +9m.37s., iSR_1 = +17m.20s. Georgetown iPE = +8m.45s., SR_1EN = +18m.37s. . Harvard i = +19m.42s. and +20m.25s. = SR_2 − 3s.; T_o = 16h.26m.54s. Mizusawa LE = +30·5m. Nagoya readings have been increased by 10m. Kobe MZ = +34·8m. Nagasaki eSR_1 = +25m.8s. Dyce PR_2 = +13m.51s., i = +20m.24s. = E − 3s. Upsala MN = +34·6m. Stonyhurst PR_1 = +12m.59s., PR_2 = +14m.41s., PR_3 = +15m.17s., S_oS? = +20m.38s. = [S] + 20s., SR_1 = +23m.19s., SR_2 = +26m.24s. = SR_3 + 12s. Bidston PR_1 = +13m.53s., SR_1 = +23m.13s. Copenhagen ePR_1NZ = +12m.41s., ePR_1NZ = +14m.35s., eE = +16m.53s., eNZ = +18m.5s., eZ = +18m.29s., iSE = +19m.10s., iE = +20m.29s. = [S] + 7s., eN = +20m.41s., eE = +22m.35s., SR_1 = +23m.23s., SR_2 = +26m.29s., MZ = +38·0m., MN = +39·4m. Lund +20m.40s. Zi-ka-wei PR_1Z = +13m.17s., PR_2Z = +15m.39s. Oxford iPN = +10m.57s., iN = +13m.15s. and +15m.40s. = PR_2 − 5s., iE = +20m.43s. = [S] + 8s., and +23m.35s., iN = +23m.39s. Hamburg ePR_1Z = +13m.15s., iSN = +19m.36s., eSR_1N = +23m.52s., eSR_1E = +27m.14s., MZ = +39·9m. Kew i = +11m.3s., PR_1Z = +13m.17s., PR_2 = +14m.40s., iZ = +19m.51s. = PS − 16s., iPSE = +20m.46s. = [S] + 8s., SR_1N = +23m.53s., SR_2E = +27m.24s.,

Continued on next page.

LZ = +33·9m., MN = +40·4m., MZ = +40·6m. Port au Prince MNW = +44·8m. De Bilt PR_1 = +13m.27s., SR_1 = +23m.53s., SR_2 = +27m.32s., MZ = +40·6m., MN = +40·9m. Potsdam PR_1 = +13m.33s., e = +20m.46s. = [S] − 3s., +24m.11s. and +27m.33s. = SR_2 − 2s., MN = +39·7m. Uccle PR_1 = +13m.32s., iSR_1 = +24m.4s., MN = +40·6m. Jena ePE = +11m.23s., ePR_1E = +13m.35s., ePR_1N = +13m.36s., ePR_1Z = +13m.41s., iSE = +20m.11s., eN = +21m.8s. = [S] + 9s., eE = +22m.53s ., eEN = +24m.32s., eN = +25m.16s. = SR_1 − 8s., and +27m.24s., eE = +27m.53s. = SR_2 − 6s. Feldberg eN = +13m.15s., iN = +13m.37s., eN = +19m.53s., iN = +24m.33s. Paris MN = +38·9m. San Juan eE = +26m.29s. Strasbourg P_gP = +11m.40s., iPR_1 = +13m.53s., PR_2 = +15m.57s., PR_3 = +16m.40s., MN = +42·9m., MZ = +45·4m. Balboa Heights gives S as P and L as S. Ravensburg PR_1 = +14m.14s., PR_2 = +15m.53s., e = +19m.13s., SR_1 = +25m.13s., MN = +42·3m. Vienna PR_1? = +15m.3s. iN = +18m.7s., PPS? = +21m.43s., iE = +27m.21s., SR_2 = +29m.10s. Graz iP = +11m.47s., iSR_1 = +25m.46s., iSR_2 = +29m.25s., MN = +51·9m. Moncalieri MN = +45·9m. Zagreb e = +14m.32s. = PR_1 − 25s. and +16m.18s. = PR_2 − 23s., ePS = +21m.12s., e = +25m.53s. ?, +28m.42s., and 29m.39s. = SR_2 − 5s. Barcelona MN = +46·0m. Toledo iZ = +12m.6s. and +12m.29s., MNWZ = +45·9m. Rocca di Papa iZ = +12m.1s., iEN = +12m.8s., eLZ = +42·6m. Alicante MN = +48·6m. Granada PR_1 = +15m.19s., PR_2 = +17m.7s., S = +22m.23s., i = +24m.25s. San Fernando SR_2 = +32m.26s., MN = +46·3m. Almeria PR_1 = +15m.21s., PR_2 = +18m.36s. = PR_3 + 2s. Algiers PR_1 = +15m.17s., MN = +51·9m. Phu-Lien MN = +52·6m. Suva SR_1N = +27m.5s. Ksara PR_1N = +16m.8s., PR_2N = +19m.43s., SR_1N = +29m.11s. : T_0 = 16h.27m.32s. La Paz P′ = +10m.54s., iN = +18m.8s. = PR_1 + 7s., LE = +46·2m. Sucre PR_1 = +16m.2s., iPS? = +24m.50s. = [S] + 18s. Batavia i = +32m.50s. = SR_1 − 38s. Riverview eP? = +18m.41s. = PR_1 − 15s., e = +23m.2s. = PR_2 − 36s., eS_gP_gS = +25m.4s., iPS = +26m.34s. = S − 23s., +29m.26s., +32m.26s. and +32m.36s., SR_1 = +34m.7s., SR_2 = +38m.53s., e = +43m.53s. = SR_3 − 23s., +44m.21s., and +44m.41s., MN = +56·6m. Melbourne i = +35m.18s. = SR_1 + 2s., and +39m.18s. Adelaide MN = +63·0m. Tananarive PR_1 = +22m.23s., PR_2 = +25m.27s., S_eP_eS = +29m.15s., PR_1 = +29m.32s., PS_eP_eS = +32m.28s., PPS = +34m.35s., SPS = +40m.29s., SR_2 = +45m.38s., SR_3 = +49m.38s., LN = +77·4m., MN = +106·9m.

June 21d. An after-shock from the epicentre 12°·3N. 121°·0E. as on June 15d. was recorded by Manila at 23h. 58m. 21s.

June 21d. Readings also at 1h. (near Tacubaya), 2h. and 3h. (near Lick), 6h. (near Tacubaya), 7h. (near Oaxaca and Tacubaya), 9h. (Tashkent and near Tacubaya (2)), 10h. (near Tananarive), 11h. (Ksara, Vienna, Zagreb, Zurich, Chur, and Neuchatel), 12h. (Granada, Uccle, Ann Arbor, and Toronto), 14h. (La Paz, Reykjavik, and Mizusawa), 15h. (Tucson, near Oaxaca, Puebla, Tacubaya, and Vera Cruz), 16h. (Ottawa and Toronto), 17h. (Sucre and La Paz), 18h. (Alicante, Almeria, Granada, Scoresby Sund, Tortosa, Uccle, and Zagreb), 22h. (Suva), 23h. (near Tacubaya (2)).

June 22d. After-shocks from the epicentre 12°·3N. 121°·0E. as on June 15d. were recorded by Manila at the following times :—

h.	m.	s.	h.	m.	s.	h.	m.	s.
9	32	46	13	33	9	16	54	31
10	23	26	15	17	55	20	17	18

June 22d. Readings also at 0h. (near Oaxaca (2) and Tacubaya (2)). 4h. (Toyooka), 5h. (Suva), 7h. (Ekaterinburg, Wellington, and near Mizusawa), 8h. (Tashkent and Wellington), 9h. and 10h. (Manila), 11h. (Amboina, near Oaxaca, and Tacubaya), 12h. (Mizusawa, near Simferopol, Theodosia, and Yalta), 16h. (Mizusawa), 17h. (near Tacubaya), 19h. (Tucson), 20h. (Yalta), 21h. (La Plata, near La Paz, and Sucre), 22h. (St. Louis and Georgetown), 23h. (Simferopol, Theodosia, and Yalta).

June 23d. After-shocks from the epicentre 12°·3N. 121°·0E., as on June 15d., were recorded by Manila at the following times :

h.	m.	s.	h.	m.	s.
1	44	43	21	40	52

June 23d. Readings also at 2h. (Ekaterinburg, Irkutsk, near Taihoku), 4h. (near Tacubaya), 5h. (Belgrade), 6h. (Georgetown, St. Louis, Tucson, near Oaxaca, Tacubaya, and Vera Cruz), 7h. (Cincinnati, De Bilt, Georgetown, Honolulu T.H., Ottawa, St Louis, Scoresby Sund, Toronto, and near Victoria), 11h. (Wellington), 15h. (Theodosia, near Simferopol, Yalta, and near Toyooka), 16h. (near Tacubaya), 17h. (near Ksara), 20h. (near Oaxaca, Tacubaya, and Vera Cruz), 21h. (Tucson).

June 24d. 4h. 34m. 22s. Epicentre 35°·0N. 69°·0E. (as on 1927 Oct.2d.).

$A = +\cdot294$, $B = +\cdot765$, $C = +\cdot574$; $D = +\cdot934$, $E = -\cdot358$; $G = +\cdot205$, $H = +\cdot536$, $K = -\cdot819$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Baku		16·0	296	i 4 11	+19	i 7 29	+34	—	10·6
Bombay		16·5	167	4 12	+13	6 14	−53	8·7	12·8
Hyderabad		19·5	152	4 42	+ 7	8 2	−11	—	11·5
Calcutta	E	21·0	122	5 6	+13	8 49	+ 5	12·2	—
	N	21·0	122	5 9	+16	8 48	+ 4	—	—
Ekaterinburg		22·5	348	i 5 0	−11	i 8 55	−20	10·6	12·5
Kodaikanal		25·9	161	10 26	?S	(10 26)	+ 6	—	—
Makeyevka		26·4	309	i 5 50	− 2	10 14	−16	i 10·3	12·6
Ksara	N	27·2	279	6 7	+ 7	11 22	+37	—	—
Theodosia		27·5	302	e 5 38?	−25	—	—	—	—
Yalta		28·1	300	e 6 4	− 5	—	—	—	—
Simferopol		28·2	301	e 6 10	0	12 1	+58	—	—
Kucino		29·7	324	6 14	−11	11 4	−25	11·9	12·9
Pulkovo		35·2	326	i 6 59	−16	i 12 26	−32	15·6	—
Phu-Lien		35·9	105	6 52	−29	e 11 43	?	—	—
Helsingfors		37·7	326	7 26	−10	13 2	−32	—	—
Konigsberg		38·6	316	i 7 26	−17	e 12 26	−80	e 16·1	18·6
Budapest		38·8	307	7 47	+ 3	9 26	?PR_1	e 16·3	—
Vienna		40·6	309	e 7 51	− 9	9 58	?PR_2	—	10·6
Zagreb		41·0	300	e 7 55	− 8	e 14 24	+ 3	—	—
Upsala	E	41·2	324	e 7 51	−14	—	—	—	—
Hong Kong		41·3	96	9 18	+73	—	—	—	—
Potsdam		42·7	312	i 8 11	− 5	—	—	—	20·6
Pompeii	E	42·7	296	e 8 51	+35	—	—	—	—
Lund		42·8	317	8 11	− 6	17 48	?SR_2	—	—
Copenhagen		43·3	317	i 8 11	− 9	e 14 37	−15	17·5	18·3
Venice		43·5	303	8 32	+10	—	—	—	—
Jena		43·6	310	e 8 16	− 7	—	—	e 17·6	20·6
Rocca di Papa		43·9	296	e 8 20	− 5	—	—	e 15·5	22·6
Innsbruck		44·0	305	7 38?	−48	—	—	—	—
Florence		44·5	300	8 26	− 4	9 4	?	—	—
Hamburg		44·6	314	i 8 23	− 7	—	—	e 18·3	22·5
Feldberg	N	45·7	310	i 9 12	+34	e 15 56	+32	e 19·5	—
Zurich		45·9	304	i 8 33	− 6	—	—	—	—
Strasbourg		46·3	307	i 8 36	− 6	—	—	34·6	—
Moncalieri		46·8	302	e 8 44	− 2	15 19	−19	19·5	—
Neuchatel		47·1	304	i 11 17	?PR_1	—	—	—	—
De Bilt		47·6	312	8 47	− 4	e 15 38	−11	e 23·6	—
Besançon		47·7	306	e 9 11	+19	—	—	—	—
Uccle		48·2	310	e 8 50	− 5	e 15 49	− 7	e 24·6	—
Paris		49·7	310	e 9 4	− 1	—	—	—	—
Manila		50·8	100	e 9 7	− 5	—	—	—	—
Kew		51·0	312	e 9 11	− 2	16 24	− 7	27·6	34·6
Dyce		51·3	320	9 24	+ 9	i 16 25	−10	30·5	—
Oxford		51·6	312	9 16	− 1	—	—	i 20·7	35·5
Stonyhurst		51·9	314	e 9 16	− 3	16 34	− 9	e 34·6	—
Edinburgh		52·1	317	e 9 14	− 7	—	—	—	—
Algiers		52·3	292	e 11 48	?PR_1	e 19 51	?	—	—
Tortosa	N	53·0	299	e 9 29	+ 3	—	—	—	—
Alicante		54·4	295	e 10 9	+34	—	—	e 24·4	—
Batavia		54·5	132	e 9 38?	+ 2	—	—	i 27·6	—
Almeria		56·4	295	i 9 50	+ 2	—	—	—	—
Granada		57·2	295	10 3	+10	e 18 22	+33	e 23·7	28·7
Ottawa		93·6	336	e 17 38	?PR_1	e 24 26	−26	e 31·1	—
Toronto		96·1	338	—	—	26 51	?PS	—	—
Sucre		136·6	281	e 20 58	[+85]	—	—	—	—
La Paz		137·6	284	19 41	[+ 6]	22 46	?PR_1	—	—

For Notes see next page.

NOTES TO JUNE 24d. 4h. 34m. 22s.

Additional readings: Ksara PR_2?EN = +7m.44s.; T_o = 4h.33m.42s. Konigsberg iZ = +7m 38s., iEZ = +8m 8s., eEZ = +9m 14s., eE = +13m.26s., and +14m 8s., eEN = +15m 38s., eLZ = +16·6m., MN = +16·6m., MZ = +19·6m. Vienna iPZ = +7m 54s., PR_1 = +8m.32s. Zagreb e = +8m.24s., +9m.47s. = PR_1 + 13s., and +12m.57s. Upsala e = +8m.26s. and +9m.25s. = PR_1 − 11s. Hong Kong ? = +13m.28s. = S − 57s. and +16m.58s. = SR_1 − 16s. Potsdam i = +8m.52s. and +9m.55s. = PR_1 + 1s., e = +10m.26s. = PR_2 − 2s., and +17m.38s.? = SR_1 − 5s. Copenhagen eN = +8m.20s., iEZ = +8m.37s. and +8m.50s., eN = +9m.2s., eEZ = +9m.56s. = PR_1 − 5s., eN = iEZ = +10m.32s. = PR_2 − 5s., eN = +15m.22s., iE = +15m.32s., eZ = +17m.44s. = SR_1 − 12s., iEZ = +18m.7s., MZ = +18·1m. MN = +21·4m. Jena eZ = +8m.14s., iEZ = +8m.24s., iEN = +8m.26s., iE = +8m.52s., iNZ = +8m.54s., iE = +8m.55s., eE = +10m.34s. = PR_2 − 6s., eEN = +10m.38s., iE = +11m.4s., and +11m.28s. Rocca di Papa P = +8m.21s., PR_1E = +8m.48s. Hamburg iZ = +9m.4s. and +10m.50s., MN = +25·7m. Feldberg eN = +10m.22s. Zurich i = +11m.17s. Strasbourg i = +9m.3s., +9m.15s., and +10m.30s. = PR_1 − 7s., e = +19m.4s. = SR_1 + 8s. De Bilt i = +9m.13s. and +9m.24s., eSR_1 = +19m.22s., eLN = +25·6m.; epicentre 36°·6N. 67°·0E. Uccle i = +9m.29s., e = +10m.46s., and +19m.14s. = SR_1 − 18s. Paris e = +9m.30s. and +20m.8s. = SR_1 + 8s. Kew iP(2) = +9m.50s., PR_1(2) = +11m.51s., S(2) = +17m.10s., SR_1 = +20m.34s., MN = +30·6m.; suggests probably two shocks. Dyce i = +17m.7s. = PS + 11s. Oxford i = +9m.54s. Stonyhurst iP = +9m.54s., ? = +17m.14s. = PS + 9s. and +20m.49s. = SR_1 + 7s. Granada i = +14m.23s. = PR_2 + 23s. and +18m.52s. = PS + 34s. Ottawa eN = +25m.38s. = PS − 12s. Sucre i = +23m.50s.

June 24d. Readings also at 1h. (Hong Kong, Phu-Lien, and near Taihoku), 4h. (Simferopol), 6h. (La Paz), 7h. (Ksara and Zagreb), 12h. (near Manila), 13h. (La Paz), 18h. (Taihoku), 20h. (Irkutsk, Tashkent, and Manila), 22h. (Irkutsk (2)), Ksara (2), Makeyevka (2), and Tashkent (2)).

June 25d. 7h. 20m. 42s. Epicentre 20°·5S. 72°·0W.

A = +·289, B = −·891, C = −·350; D = −·951, E = −·309; G = −·108, H = +·333, K = −·937.

		Δ	Az.	P.	O − C.	S.	O − C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
La Paz		5·4	44	i 1 22	− 1	i 2 33	+ 5	—	3·0
Sucre		6·6	78	i 1 36	− 5	i 2 44	−16	3·0	3·5
La Plata		19·0	142	4 31	+ 2	8 10	+ 8	10·3	—
Rio de Janeiro	N.	26·8	100	e 5 42	−14	—	—	16·1	—
Georgetown	Z.	59·6	356	i 10 15	+ 6	18 18	0	e 32·6	44·1
St. Louis		61·5	345	—	—	e 18 43	+ 1	e 34·5	—
Toronto		64·5	355	—	—	—	—	32·3	—
Ottawa		66·0	358	—	—	e 19 36	− 1	e 30·3	—
San Fernando	E.	84·2	48	—	—	—	—	—	50·7
Granada		86·4	48	—	—	—	—	e 40·8	47·3
Kew		95·2	37	—	—	—	—	e 48·3	—
Paris		95·7	40	—	—	—	—	e 50·3	—
Moncalieri	E.	97·4	45	—	—	—	—	50·7	—
Scoresby Sund		97·4	15	—	—	e 24 18?	[+ 8]	47·3	—
Uccle		97·6	39	—	—	—	—	e 45·3	—
De Bilt		98·5	38	—	—	—	—	e 49·3	—
Strasbourg		98·7	42	—	—	—	—	e 50·3	—
Rocca di Papa		99·7	50	—	—	—	—	e 56·3	66·5
Copenhagen		103·8	36	—	—	e 24 18?	[−24]	49·3	—
Pulkovo		113·8	32	—	—	—	—	57·3	63·4
Kucino		118·0	37	—	—	—	—	e 57·0	—
Makeyevka		118·3	45	—	—	—	—	66·3	70·2
Ekaterinburg		129·8	30	—	—	—	—	67·3	—
Tashkent		141·3	48	—	—	—	—	e 59·3	72·3
Irkutsk		148·1	4	i 19 59	[+ 6]	—	—	e 80·3	—

Additional readings and note: La Paz i = +2m.12s., MN = +3·4m. Sucre iPN = +1m.42s., i = +2m.52s. Rio de Janeiro LE = +14·6m. St. Louis eE? = +7m.58s., eEN = +9m.46s., eE = +11m.31s., eEN = +20m.7s. = [S] + 1s. San Fernando MN = +51·2m. Moncalieri eE = +44m.50s. Scoresby Sund eEN = +26m.18s.? = PS − 17s., eN = +31m.18s.?; readings given only to the nearest minute.

Jan. 25d. Readings also at 0h. (near Toyooka), 3h. (near Lick), 5h. (near Manila, near Oaxaca, and Tacubaya), 6h. (Yalta and near Simferopol), 7h. (near La Paz and Sucre), 12h. (near Tacubaya), 15h. (Mizusawa, near Batavia, and Malabar, near Simferopol, Theodosia, and Yalta, near Oaxaca and Tacubaya), 18h. and 19h. (near Toyooka), 20h. (Taihoku), 22h. (near La Paz (2) and Sucre (2)).

June 26d. 23h. 26m. 3s. Epicentre 47°·2N. 13°·7E. (as on 1923 Nov. 28d.).

A = +·660, B = +·161, C = +·734.

		Δ	Az.	P.	O−C.	S.	O−C.	M.
		°	°	m. s.	s.	m. s.	s.	m.
Innsbruck		1·6	272	e 0 21	− 3	i 0 51	+ 6	—
Treviso		1·9	214	0 31	+ 2	—	—	—
Venice		2·0	208	i 0 36	+ 5	—	—	—
Vienna		2·1	60	i 0 51	+18	1 30	+32	1·6
Zagreb		2·1	131	0 35	+ 2	e 1 2	+ 4	1·1
Jena	E.	3·9	340	—	—	e 1 27	−20	2·5
Strasbourg		4·2	291	e 1 48	?S	(e 1 48)	− 7	—

Additional readings: Innsbruck iP = +37s., iNW = +40s. Strasbourg ePʔ = +2m.4s., iPR_2 = +2m.18s.

June 26d. An after-shock from the epicentre 12°·3N. 121°·0E., as on June 15d., was recorded by Manila at 4h. 35m. 26s.

June 26d. Readings also at 0h. (near Neuchatel), 2h. (near Toyooka), 3h. (Tashkent and near Irkutsk), 12h. (La Paz and Sucre), 15h. (near Tananarive), 17h. (near Tacubaya), 18h. (Taihoku), 19h. (Rocca di Papa), 20h. (La Paz), 22h. (near Oaxaca, Tacubaya, and Vera Cruz).

June 27d. 0h. 51m. 5s. Epicentre 16°·2N. 97°·2W. (as on 18d.).

A = −·120, B = −·953, C = +·279; D = −·992, E = +·125; G = −·035, H = −·277, K = −·960.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Oaxaca		0·9	27	(0 14)	0	—	—	(0·5)	(0·6)
Puebla		3·0	341	1 3	+16	—	—	1·5	—
Vera Cruz		3·2	18	(1 23)	+33	—	—	(2·2)	(2·6)
Tacubaya		3·8	330	1 19	+20	—	—	2·3	2·6
Tucson		20·3	325	—	—	—	—	10·9	—
St. Louis		23·2	14	e 5 3	−16	i 9 32	+ 3	15·0	—
Georgetown	Z.	28·7	34	e 6 19	+ 4	—	— e	15·0	29·7
Toronto		31·3	26	—	—	—	—	—	20·9
Ottawa		34·3	28	—	— e	12 25	−19	21·9	—
Victoria	N.	38·7	333	—	—	—	—	21·5	25·5

Additional readings and notes: Oaxaca readings have been *increased* by 2m. Vera Cruz readings have been *increased* by 3m. St. Louis readings have been diminished by 1h. Georgetown eZ = 0h.50m.27s.

June 27d. 1h. 31m. 30s. Epicentre 20°·0N. 121°·0E. (as on 1924 Jan. 27d.).

A = −·484, B = +·806, C = +·342; D = +·857, E = +·515; G = −·176, H = +·293, K = −·940.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Taihoku	E.	5·1	6	e 1 18	− 1	(2 12)	− 8	2·2	—
Manila		5·4	180	e 1 30	+ 7	(i 2 29)	+ 1	2·5	—
Hong Kong		6·7	292	—	—	—	—	—	4·5
Phu-Lien	E.	13·5	276	e 3 6	−14	—	—	7·0	—
Irkutsk		34·8	344	—	—	—	—	e 15·5	—
Tashkent		48·5	309	—	—	i 16 43	+43	24·3	30·5
Ekaterinburg		57·3	327	e 9 41	−13	e 17 38	−12	21·5	—
Kucino		69·8	324	—	—	—	—	e 40·0	—
Makeyevka		70·7	316	—	—	e 20 25	− 9	38·5	—
Pulkovo		73·2	329	—	—	—	—	41·5	46·5
Copenhagen		83·4	327	—	—	e 22 30?	[−16]	44·5	53·0
De Bilt		89·0	325	—	—	—	—	e 56·5	—
Strasbourg		89·4	322	—	—	—	—	e 55·5	—
Kew		92·1	327	—	—	—	—	e 57·5	—

Taihoku S = +1m.34s.

June 27d. An after-shock from the epicentre 12°·3N. 121°·0E., as on June 15d., was recorded by Manila at 16h. 7m. 42s.

June 27d. Readings also at 2h. (Tashkent and near Mizusawa), 4h. (near Tananarive), 7h. (near Suva, near Tacubaya, and Oaxaca), 8h. (near Oaxaca, Tacubaya, and Vera Cruz), 9h. (Tucson, near Oaxaca, Tacubaya, and Vera Cruz), 10h. (near Toyooka), 18h. (near Malabar and near Mizusawa), 20h. (near Ksara), 22h. (La Paz), 23h. (Tashkent).

June 28d. 1h. 27m. 3s. Epicentre 8°·5S. 67°·0E. (as on 1928 May 29d.).

A = +·386, B = +·910, C = −·148; D = +·920, E = −·391; G = −·058, H = −·136, K = −·989.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Tananarive		21·6	239	8 15	?S	(8 15)	−42	11·7	12·8
Bombay		28·0	12	6 7	− 1	10 47	−12	14·3	20·7
Tashkent		49·8	3	i 9 5	− 1	i 16 10	− 6	e 23·0	31·4
Baku		51·4	345	e 9 7	− 9	e 16 39	+ 3	e 26·0	—
Makeyevka		62·1	340	—	—	e 19 1	+12	33·2	39·4
Ekaterinburg		65·5	356	e 10 52	+ 4	e 19 36	+ 5	27·0	—
Irkutsk		68·6	24	—	—	—	—	35·0	—
Pulkovo		74·2	343	e 11 52	+ 9	e 21 24	+ 8	e 41·0	—
San Fernando	E.	81·8	309	—	—	—	—	—	54·4

Additional readings: Tananarive PR_1 = +9m.49s., e = +10m.10s., and +10m.28s., eEN = +11m.2s., SR_1 = +11m.34s. San Fernando MN = +52·0m.

June 28d. Readings also at 3h. (near La Paz), 4h. (Manila and near Sumoto (2)), 8h. (Tashkent), 9h. (Apia), 14h. (near Ksara), 17h. (near Oaxaca and Tacubaya).

June 29d. 19h. 39m. 45s. Epicentre 4°·8N. 126°·0E. (as on 1926 Aug. 15d.).

A = −·586, B = +·806, C = +·084 ; D = +·809, E = +·588 ; G = −·049, H = +·068, K = +·997.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Amboina		8·8	166	i 2 2	−11	—	—	—	—
Manila		10·9	334	i 3 3	+20	—	—	i 6·0	—
Hong Kong		21·0	328	5 0	+ 7	—	—	—	10·6
Batavia		22·1	240	i 5 11	+ 5	i 9 17	+10	—	—
Phu-Lien		24·7	312	5 36	+ 1	e 10 1	+ 4	11·8	—
Zi-ka-wei	Z.	26·7	352	5 37	−18	11 1	+26	16·8	21·1
Irkutsk		50·7	345	i 9 11	0	i 16 29	+ 2	24·2	—
Ekaterinburg		72·7	330	i 11 39	+ 5	e 21 3	+ 5	30·2	40·0
Baku		76·3	311	i 12 0	+ 3	i 21 47	+ 6	37·8	47·2
Kucino		85·0	326	e 12 46	− 2	e 23 38	+19	41·2	47·8
Makeyevka		85·1	319	i 12 47	− 2	23 7	[+10]	42·2	53·8
Ksara		87·5	305	13 1	− 1	23 26	[+14]	—	—
Pulkovo		88·7	331	e 13 3	− 6	i 24 9	+ 9	43·2	48·8
Lund		98·5	330	—	—	—	—	49·2	—
Copenhagen		99·0	330	—	—	e 24 28	[+ 9]	47·2	54·8
Zagreb		100·0	319	—	—	e 24 22	[− 2]	—	—
Scoresby Sund		101·7	350	—	—	24 42	[+10]	56·2	—
De Bilt	E.	104·3	327	—	—	e 25 19	[+35]	e 53·2	57·6
Uccle		105·4	325	—	—	—	—	e 51·2	—
Kew		107·6	330	—		—	—	e 60·2	—
Granada		117·1	316	—	—	—	—	e 65·0	72·8

Additional readings: Amboina i = +1m.28s. and +2m.7s. Batavia i = +5m.13s., iZ = +5m.14s., i = +5m.35s. and +6m.26s. Kucino S_cP_cS = +23m.5s. = [S] + 9s. Pulkovo S_cP_cS = +23m.35s. = [S] + 15s., $S_cP_cP_cS$ = +23m.53s. = Σ + 2s. ; epicentre 5°·0N. 126°·3E. Scoresby Sund +28m.15s.? De Bilt eLN = +51·2m., MN = +57·8m.

June 29d. 22h. 49m. 38s. Epicentre 15°·5S. 171°·0E.

A = −·952, B = +·151, C = −·267 ; D = +·156, E = +·988 ; G = +·264, H = −·042, K = −·964.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Suva	E.	7·5	111	i 2 34	+40	i 3 40	+16	—	—
	N.	7·5	111	i 2 16	+22	i 3 28	+ 4	—	—
Apia		16·8	86	4 2	0	7 1	−12	7·8	11·4
Riverview		25·6	221	i 5 31	−13	9 52	−22	e 13·1	14·6
Sydney		25·6	221	5 40	− 4	10 16	+ 2	13·7	14·6
Wellington	E.	26·0	174	i 5 58	+10	i 10 14	− 8	i 12·1	12·9
	N.	26·0	174	i 5 37	−11	i 9 33	−49	i 11·0	14·4
Christchurch		28·1	177	7 57	+108	10 33	−28	11·4	—
Melbourne		32·0	221	i 6 28	−19	i 11 48	−20	—	20·2
Adelaide		34·9	230	i 6 53	−19	i 12 13	−41	i 15·1	21·2
Amboina		43·7	280	i 7 46	−38	i 17 39	?SR_1	24·1	—
Honolulu T.H.	E.	47·8	40	i 8 42	−11	15 38	−13	18·8	23·4
	N.	47·8	40	i 8 45	− 8	15 45	− 6	20·3	22·5
Perth		52·5	240	—	—	16 52	+ 2	—	32·8
Manila		57·9	299	e 9 56	− 2	—	—	i 24·4	—
Osaka		60·5	326	10 16	0	(18 31)	+ 1	18·5	21·8
Kobe		60·6	326	10 13	− 3	18 28	− 3	28·2	29·5
Sumoto		60·6	325	e 10 16	0	(e 18 41)	+10	e 18·7	—
Mizusawa	E.	61·3	335	10 16	− 5	18 32	− 8	27·2	—
	N.	61·3	335	10 28	+ 7	18 36	− 4	26·4	—
Toyooka	E.	61·5	326	i 10 15	− 7	(e 18 55)	+13	e 18·9	—
Nagasaki		62·2	322	e 11 2	+36	18 44	− 7	—	26·8
Hukuoka		62·5	323	e 10 25	− 4	18 47	− 8	—	29·8
Malabar		62·5	271	i 10 33	+ 4	i 18 50	− 5	—	—
Taihoku	E.	62·9	310	e 10 29	− 2	(19 3)	+ 3	19·0	—
Batavia		63·5	272	i 10 39	+ 4	i 19 14	+ 7	28·4	—
Zi-ka-wei		66·6	316	i 10 40	−15	e 19 43	− 2	27·3	32·8
Ootomari		67·1	340	—	—	—	—	e 31·2	—
Hong Kong		67·3	304	11 1	+ 1	(19 52)	− 2	19·9	29·0

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Phu-Lien		72·9	298	11 33	− 2	20 57	− 4	30·4	—
Berkeley		82·1	48	e 12 33	+ 2	e 22 50	+ 3	e 40·0	—
Lick	E.	82·4	48	e 12 28	− 4	e 23 42	?PS	e 37·6	—
Sitka	N.	85·0	27	—	—	—	—	e 35·2	36·1
Victoria	E.	86·4	36	12 53	− 2	23 17	−17	35·2	35·6
	N.	86·4	36	12 47	− 8	23 17	−17	35·4	36·1
Tucson	E.	88·6	56	12 58	−10	23 28	[+ 9]	39·6	—
	N.	88·6	56	12 58	−10	23 25	[+ 6]	36·4	—
Irkutsk		88·7	326	i 12 56	−13	24 9	+ 9	41·4	46·0
Calcutta	E.	89·3	293	13 7	− 5	24 1	− 5	—	—
	N.	89·3	293	12 22	−50	24 50	?PS	—	—
Spokane		89·6	40	e 13 22	+ 8	e 23 36	[+10]	36·4	—
Colombo		92·9	276	14 32	+60	23 55	[+10]	41·4	51·4
Kodaikanal		96·0	280	16 34	?	—	—	39·1	55·1
Dehra Dun		100·2	300	15 9	+57	25 51	− 7	32·6	32·8
Bombay		102·4	286	16 7	?	25 45	−34	43·8	56·4
St. Louis	E.	106·4	53	e 14 14	−27	i 24 54	[0]	e 48·9	57·9
Chicago	E.	108·7	50	—	—	24 53	[−12]	48·5	58·3
Cincinnati	E.	110·8	51	e 17 12	?	—	—	52·0	—
La Plata		111·5	138	—	—	—	—	47·4	—
Ann Arbor	E.	111·6	49	—	—	e 28 58	?PS	e 50·1	—
La Paz		113·5	115	18 31	[− 1]	i 30 42	?	47·6	57·9
Ekaterinburg		114·0	325	e 14 49	−27	25 32	[+ 6]	45·4	63·2
Toronto	N.	114·4	47	e 20 0	?PR_1	27 33	−32	48·4	—
Tananarive	E.	114·6	240	—	—	—	—	54·6	64·4
Sucre		114·8	120	18 55	[+18]	30 40	?	57·4	66·2
Georgetown	Z.	116·6	53	15 7	−20	i 29 56	?PS	e 49·6	61·1
Ithaca		116·9	49	—	—	e 36 34	?SR_1	53·4	—
Ottawa		117·2	45	i 20 3	?PR_1	i 25 47	[+11]	e 50·4	64·1
Harvard		120·9	48	—	—	e 34 40	?	e 47·7	66·2
Baku		123·5	309	e 19 2	[0]	—	—	52·5	72·4
Cape Town		124·1	207	—	—	—	—	—	78·4
Scoresby Sund		124·4	5	—	—	e 26 10	[+12]	51·4	52·8
Kucino		126·2	329	—	—	—	—	58·0	67·5
Pulkovo		127·3	336	19 10	[− 2]	—	—	50·4	71·0
Rio de Janeiro	E.	129·1	137	e 21 30	?PR_1	32 57	?PS	54·7	64·9
	N.	129·1	137	e 21 28	?PR_1	32 52	?PS	54·6	—
Makeyevka		129·6	320	—	—	—	—	—	73·6
Upsala		131·6	342	—	—	22 41	?PR_1	e 56·4	72·6
Theodosia		132·6	317	—	—	—	—	62·4	—
Simferopol		133·4	317	e 20 48	?	—	—	—	—
Yalta		133·5	316	e 21 32	?PR_1	—	—	59·4	—
Konigsberg		134·5	335	e 23 40	?	—	—	e 36·9	43·9
Ksara	E.	135·7	302	19 51	[+20]	—	—	71·4	—
Lund		136·3	340	22 10	?PR_1	—	—	58·4	—
Copenhagen		136·5	341	e 19 20	[−13]	—	—	58·4	77·3
Dyce		137·9	354	—	—	i 30 35	−16	40·7	70·4
Hamburg		139·1	341	e 19 22?	[−16]	—	—	e 59·4	76·4
Potsdam		139·2	338	e 21 22?	?PR_1	—	—	e 64·2	69·9
Edinburgh		139·3	355	—	—	e 25 52	?PR_2	—	74·4
Budapest		140·5	330	e 20 32	[+52]	—	—	e 63·4	82·9
Jena		140·9	339	e 21 22	?	e 23 22	?PR_1	e 60·4	74·9
Stonyhurst		141·2	352	e 20 16	[+35]	—	—	70·4	76·4
Vienna		141·2	333	e 19 29	[−12]	—	—	e 63·4	76·4
De Bilt	E.	141·7	345	e 19 35	[− 7]	—	—	—	74·2
Belgrade	E.	142·0	324	e 23 3	?PR_1	—	—	e 68·1	81·0
Feldberg	N.	142·5	340	e 20 8	[+24]	—	—	e 67·1	82·2
Uccle		143·1	345	e 20 10	[+25]	—	—	e 41·4	76·2
Zagreb		143·1	330	e 19 45	[0]	—	—	e 72·4	—
Oxford		143·2	351	e 23 39	?PR_1	—	—	e 49·4	80·7
Kew		143·3	350	e 19 37	[− 9]	—	—	65·4	79·2
Hohenheim		143·5	339	e 19 34?	[−12]	e 26 48	[+16]	e 69·4	—
Strasbourg		144·1	340	19 57	[+10]	—	—	40·4	81·9
Ravensburg		144·2	338	e 19 22?	[−25]	26 52	[+19]	e 54·4	—
Zurich		144·9	337	e 20 5	[+17]	—	—	—	—
Venice		145·1	331	19 53	[+ 5]	71 3	?L	(71·0)	—
Paris		145·3	346	i 19 43	[− 6]	e 37 22?	?	61·4	76·4
Neuchatel		145·8	337	e 19 45	[− 5]	—	—	—	—
Besançon		145·9	340	e 19 49	[− 1]	—	—	47·4	—
Florence		146·9	331	e 19 49	[− 2]	28 17	?	60·4	70·4
Moncalieri	E.	147·3	337	19 42	[−10]	35 0	?	46·1	—
		147·3	337	19 46	[− 6]	37 9	?	47·9	83·2
Pompeii	E.	147·5	325	e 20 9	[+17]	e 29 22	?PR_2	80·4	—

Continued on next page.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Naples	E.	147·6	325	e 20 22	[+30]	e 27 22	?PR_2	—	—
Rocca di Papa		147·7	328	e 19 46	[− 6]	e 29 29	?PR_2	81·0	86·8
Bagnères		151·3	346	e 20 22?	[+25]	—	—	e 49·4	—
Barcelona		152·3	342	—	—	—	—	e 75·6	83·6
Tortosa	N.	153·3	344	e 19 55	[− 5]	29 50	? Σ	e 66·4	83·1
Toledo		155·2	351	19 59	[− 3]	e 35 40	?	—	81·7
Alicante		156·0	343	e 20 30	[+27]	e 31 12	? Σ	40·8	85·4
Algiers		156·1	336	e 20 46	[+43]	31 24	? Σ	e 64·4	83·4
Almeria		157·8	346	20 4	[− 2]	—	—	—	89·2
Granada	Z.	157·8	349	i 20 1	[− 5]	—	—	66·6	89·7
San Fernando	E.	158·9	353	—	—	—	—	—	97·8

Additional readings and notes: Riverview $PR_1 = +6$m.4s., +6m.28s., +7m.4s., and +7m.52s., $P_cP = +8$m.58s., S = +10m.16s. and +11m.40s., eLZ = +12·6m., MZ = +13·9m.; $T_0 = 22$h.49m.30s. Melbourne iPR₂ = +7m.32s. $= PR_1 - 12$s. Adelaide $iPR_2 = +8$m.4s. $= PR_1 - 17$s., $iSR_1 = +14$m.5s.?, $iSR_2 = +14$m.38s.?, MN = +24·1m. Amboina i = +10m.18s., $= PR_1 + 11$s. and +11m.5s., iSN = 17m.43s. Honolulu T.H. $PR_1N = +10$m.35s., $PR_1E = +10$m.37s. Batavia iZ = +10m.35s., iN = +11m.12s. and +12m.24s., iZ = +49m.51s. Zi-ka-wei eE = +10m.53s., $PR_2Z = +13$m.38s., $PR_2Z = +15$m.22s., SZ = +19m.52s., PSZ = +20m.8s., $SR_1Z = +23$m.40s., LZ = +25·1m., MZ = +45·5m. Berkeley ePE = +12m.40s., eZ? = +13m.45s., eE = +23m.33s., eN = +23m.37s., eE = +37m.40s., eZ = +37m.42s. Lick readings have been increased by 1h. Tucson PSN = +23m.55s., eE = +24m.51s. = PS + 1s., eN = +25m.8s., $SR_1N = +29$m.43s. Irkutsk $PR_1 = +16$m.52s., $S_cP_cS = +23$m.34s. = [S] + 14s. Spokane eN = +22m.52s.; all readings have been increased by 1h. St. Louis eE = +15m.14s., $iPR_1E = +18$m.37s., eE = +20m.37s., $PR_2E = +23$m.22s., iPSE = +27m.46s., $P_cS_cS_cPE = +29$m.5s., eSPSE? = +33m.9s., $iSR_1E = +33$m.29s., iE = +37m.10s. Chicago $PR_1E = +18$m.40s., PSE = +27m.56s., iE = +29m.17s., $iSR_2E = +34$m.8s., $= SR_1 - 19$s. Cincinnati $iPR_1E = +19$m.16s., $iPR_2E = +25$m.20s. = [S] + 7s., $iP_cS = +28$m.40s., $eSR_1 = +35$m.0s., LN = +46·7m. Ann Arbor eE = +30m.52s., +34m.58s. $= SR_1 - 4$s., and +39m.28s. La Paz P = +19m.2s., $PR_1E = +23$m.19s., $iPR_2N = +25$m.34s. = [S] + 10s. $PR_2E = +27$m.30s. = S − 28s., $PR_2N = +27$m.35s. = S − 23s., PS = +31m.47s., $SR_1E? = +36$m.49s., $SR_1N = +37$m.34s., $SR_2N = +42$m.46s., LN = +46·7m. Ekaterinburg $PR_1 = +19$m.32s., PS = +29m.16s. Toronto iE = +29m.18s. = PS − 28s., iE = eN = +35m.40s. $= SR_1 + 2$s. Tananarive $PR_1 = +19$m.55s., $PR_2 = +24$m.37s., PS = +29m.19s., PPS = +30m.55s., $SR_1E = +35$m.40s., $SR_1N = +35$m.46s., $SR_2 = +40$m.10s., $SR_2 = +43$m.55s., e = +45m.43s., LN = +53·9m., MN = +62·6m. Sucre $SR_1 = +35$m.52s., L = +49·4m. Georgetown $PR_1Z = +19$m.45s. Ottawa iE = +27m.2s. = Σ + 5s., eN = +27m.46s., iE = +29m.46s. = PS − 29s. and +36m.12s. $= SR_1 + 0$s., eLN = +48·4m., MN = +60·9m. Baku $iPR_1 = +20$m.54s., PS = +30m.46s. Scoresby Sund $ePR_1EN = +20$m.40s., eE = +28m.46s., ePSN = +30m.28s.?, $eSR_1EN = +37$m.34s., $SR_2 = +42$m.10s., MN = +67·0m. Kucino $ePR_1 = +20$m.59s., $PR_2 = +23$m.26s., $S_cP_cP_cS = +27$m.24s. Pulkovo $iPR_1 = +21$m.7s., $S_cP_cP_cS = +27$m.57s., PS = +31m.16s. Makeyevka $iPR_1 = +21$m.26s., $P_cP_cS = +22$m.38s. Upsala MN = +76·4m. Konigsberg e = +24m.58s. and +32m.40s. Ksara $PR_1E = +22$m.10s., $PR_2E = +26$m.58s. = [S] + 37s., $PR_2E = +29$m.35s., $PR_1N = +31$m.37s. Lund $SR_2? = +45$m.10s. Copenhagen eZ = +19m.57s., eEN = +20m.10s., $ePR_1 = +22$m.8s., eEN = +24m.48s., e = +24m.40s., $eS_cP_cP_cSEN = +28$m.28s., $eS_cP_cSP = +32$m.22s., ePPSEN = +34m.29s., eE = +35m.16s., $eSR_1EN = +40$m.16s., $SR_2 = +45$m.9s., eEN = +48m.58s., MN = +70·6m., MZ = +77·1m. Dyce e = +23m.3s., i = +25m.5s., i = +25m.39s. = $PR_2 - 20$s., i = +29m.4s. = $\Sigma + 4$s. Hamburg eN = +23m.10s., e = +40m.40s. $= SR_1 - 1$s. Potsdam e = +23m.52s., +55m.10s., and +60m.52s., MN = +78·4m. Jena eE = +41m.22s., eN = +41m.52s., MN = +83·4m. Stonyhurst $iPR_2 = +29$m.6s., $SR_1 = +41$m.8s., $SR_2 = +46$m.26s., ? = +59m.16s. Vienna $PR_1 = +22$m.36s., $PR_2 = +24$m.2s., iE = +26m.14s. $= PR_2 - 9$s., PPS = +29m.2s., $SR_2 = +36$m.23s., iN = +41m.15s. $= SR_1 + 9$s. De Bilt eEN = +34m.58s. and +41m.10s. = $SR_1 - 3$s., MN = +74·8m., MZ = +75·4m. Belgrade eE = +24m.28s., +26m.54s. = [S] + 23s., and +43m.0s. Feldberg eN = +36m.43s., +41m.16s. $= SR_1 + 6$s. and +45m.18s. Uccle $ePR_1 = +22$m.48s., MN = +77·3m. Zagreb e = +19m.53s. and +20m.33s., eNE = +21m.51s., e = +22m.51s. $= PR_1 - 3$s., eNW = +23m.4s., e = +23m.54s., eNW = +24m.16s. and +27m.34s., e = +26m.27s. = [S] − 5s. Oxford i = +41m.34s. $= SR_1 + 4$s. and +46m.59s. $= SR_2 - 32$s. Kew $PR_1 = +23$m.49s., $SR_1 = +41$m.34s., eE = +60m.4s., MZ = +81·0m., MN = +83·2m. Hohenheim $PR_1 = +21$m.34s., $PR_2 = +22$m.28s., $= PR_1 - 28$s.,

Continued on next page.

$eSR_1 = +31m.2s. = S - 21s.$ Strasbourg $i = +20m.20s.$, and $+21m.51s.$, $iPR_1 = +23m.9s.$, $e = +29m.56s. = \Sigma + 20s.$ Ravensburg $PR_1 = +21m.25s.$ Neuchatel $e = +23m.0s. = PR_1 - 10s$ Florence $eP = +20m\ 34s.$ Moncalieri (second line) $MN = +83{\cdot}4m.$ Rocca di Papa $eP = +19m.47s.$, $iPE = +19m.53s.$, $iPN = +20m.10s.$, $eLE = +66{\cdot}0m.$, $eLN = +72{\cdot}0m.$ Tortosa $ME = +94{\cdot}0m.$ Alicante $MN = +83{\cdot}2m.$ Toledo $MNW = +84{\cdot}4m.$ Algiers $MN = +85{\cdot}4m.$ Almeria $MZ = +86{\cdot}1m.$ Granada $iZ = +21m.0s.$ and $+22m.20s.$, $PR_1Z = +24m.22s.$, $iZ = +26m.42s. = [S] - 6s.$ and $+29m.10s.$, $PR_2Z = +30m.27s. = \Sigma - 29s.$, $PR_2Z = +34m.24s.$, $iZ = +37m.33s.$ and $+39m.2s.$, $G = +53m.46s.$ San Fernando $MN = +96{\cdot}4m.$

June 29d. Readings also at 0h. (near Sumoto), 1h. (Tucson and Tacubaya (3)), 2h. (near Tacubaya and Oaxaca (2)), 8h. (near Toyooka), 11h. (near Manila), 12h. (near Sumoto), 15h. (near Tacubaya), 19h. (La Paz), 20h. (Tashkent), 21h. (La Paz and Sucre), 22h. (St. Louis and near Tacubaya), 23h. (Batavia, Tashkent, Vienna, Zagreb, Rocca di Papa, and near Toyooka).

June 30d. 9h. 33m. 0s. Epicentre 31°·0S. 65°·5W. (as on 1927 April 20d.).

$A = +{\cdot}355$, $B = -{\cdot}780$, $C = -{\cdot}515$; $D = -{\cdot}910$, $E = -{\cdot}415$; $G = -{\cdot}213$, $H = +{\cdot}469$, $K = -{\cdot}857$.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Santiago		5·0	239	1 30	+13	1 44	−33	2·3	—
La Plata		7·5	123	1 59	+ 5	3 17	− 7	3·7	—
Sucre		12·0	1	2 54	− 5	i 5 11	− 8	5·9	6·3
La Paz		14·7	350	3 37	+ 2	i 6 22	− 3	7·4	9·2
Rio de Janeiro	E.	21·5	73	e 4 40	−19	—	—	—	—
Georgetown	Z.	70·7	350	—	—	e 20 12	−22	e 30·1	—
St. Louis	E.	73·3	340	—	—	e 21 7	+ 1	—	—

Additional readings: Rio de Janeiro $eN = +4m.43s.$ Georgetown $eZ = +19m.17s.$ St. Louis $iE = +20m.25s.$ and $+20m.29s.$

June 30d. 22h. 21m. 45s. Epicentre 25°·0N. 150°·0E.

$A = -{\cdot}785$, $B = +{\cdot}453$, $C = +{\cdot}423$; $D = +{\cdot}500$, $E = +{\cdot}866$; $G = -{\cdot}366$, $H = +{\cdot}211$, $K = -{\cdot}906$.

Very rough.

		Δ	Az.	P.	O−C.	S.	O−C.	L.	M.
		°	°	m. s.	s.	m. s.	s.	m.	m.
Mizusawa	E.	16·0	334	—	—	6 43	−12	—	—
Tashkent		67·1	309	i 11 32	+33	e 25 3	?SR_1	—	31·6
Ekaterinburg		68·9	325	e 11 9	− 1	e 20 12	− 1	21·3	—
Pulkovo		82·0	335	i 12 28	− 2	i 21 30	−16	—	—
Makeyevka		85·0	323	e 12 27	−21	e 21 52	?	28·3	—
Ksara		94·1	312	e 14 9	+30	—	—	—	—
St. Louis	E.	95·0	45	—	—	i 23 54	[− 3]	e 26·6	—
Vienna	Z.	95·8	333	i 13 53	+ 5	—	—	—	—
Zagreb		97·8	330	e 14 6	+ 7	—	—	—	—
Innsbruck		98·6	335	i 14 4	+ 1	—	—	—	—
Strasbourg		99·0	338	e 14 15?	+10	—	—	—	—
Zurich		99·7	335	i 14 12	+ 3	—	—	—	—
Neuchatel		100·6	335	i 14 16	+ 3	—	—	—	—

Additional readings: Mizusawa $SN = +6m.44s.$ Strasbourg reading has been diminished by 1h. Zurich $i = +14m.32s.$ Neuchatel $e = +14m.39s.$

June 30d. Readings also at 0h. (near Tacubaya), 1h. (La Paz and Tashkent), 8h. (Sucre and near La Paz), 9h. (Apia, Baku (2), and Ekaterinburg (2)), 10h. (Naples and Pompeii), 11h. (Oaxaca, Tacubaya, and Vera Cruz), 13h. (near Tacubaya (2) and near Tananarive), 16h. (La Paz and Taihoku), 21h. (La Paz, Rocca di Papa, and near Toyooka (3)).

TABLE.

Degrees.	P sec.	S sec.	S − P sec.	Degrees.	P sec.	S sec.	S − P sec.	Degrees.	P sec.	S sec.	S − P sec.
1	15	28	13	51	553	991	438	101	855	1565	710
2	31	55	24	52	560	1004	444	102	860	1575	715
3	47	83	36	53	566	1016	450	103	865	1584	719
4	62	110	48	54	573	1029	456	104	870	1593	723
5	77	137	60	55	579	1041	462	105	874	1602	728
6	92	164	72	56	586	1054	468	106	879	1612	733
7	106	190	84	57	592	1066	474	107	884	1621	737
8	121	217	96	58	599	1079	480	108	888	1630	742
9	136	243	107	59	605	1091	486	109	893	1639	746
10	150	269	119	60	612	1103	491	110	897	1648	751
11	164	294	130	61	619	1116	497	111	902	1657	755
12	179	319	140	62	625	1128	503	112	907	1666	759
13	193	344	151	63	632	1141	509	113	911	1674	763
14	206	368	162	64	638	1153	515	114	916	1682	766
15	219	392	173	65	645	1165	520	115	920	1690	770
16	232	415	183	66	651	1177	526	116	925	1698	773
17	245	438	193	67	658	1190	532	117	929	1706	777
18	257	460	203	68	664	1202	538	118	934	1714	780
19	269	482	213	69	671	1214	543	119	938	1722	784
20	281	503	222	70	677	1226	549	120	942	1729	787
21	293	524	231	71	683	1238	555	121	947	1737	790
22	305	545	240	72	690	1250	560	122	952	1744	792
23	317	565	248	73	696	1262	566	123	957	1752	795
24	328	584	256	74	702	1274	572	124	961	1759	798
25	338	603	265	75	709	1286	577	125	966	1766	800
26	348	622	274	76	715	1297	582	126	970	1773	803
27	358	641	283	77	721	1309	588	127	974	1780	806
28	368	659	291	78	727	1320	593	128	978	1787	809
29	378	677	299	79	733	1332	599	129	983	1794	811
30	388	694	306	80	739	1343	604	130	988	1801	813
31	398	711	313	81	745	1355	610	131	992	1807	815
32	407	728	321	82	750	1366	616	132	996	1814	818
33	416	744	328	83	756	1377	621	133	1001	1821	820
34	425	760	335	84	762	1388	626	134	1005	1827	822
35	433	775	342	85	768	1399	631	135	1009	1833	824
36	442	790	348	86	773	1410	637	136	1014	1840	826
37	450	804	354	87	779	1421	642	137	1018	1846	828
38	458	818	360	88	785	1432	647	138	1023	1852	829
39	466	832	366	89	790	1443	653	139	1027	1858	831
40	475	847	372	90	796	1454	658	140	1031	1864	833
41	483	861	378	91	801	1464	663	141	1035	1869	834
42	491	875	384	92	807	1475	668	142	1039	1875	836
43	498	888	390	93	812	1485	673	143	1043	1881	838
44	506	902	396	94	818	1496	678	144	1047	1886	839
45	513	915	402	95	823	1506	683	145	1051	1892	841
46	520	928	408	96	829	1516	687	146	1055	1897	842
47	527	941	414	97	834	1526	692	147	1059	1902	843
48	534	954	420	98	840	1536	696	148	1063	1907	844
49	540	966	426	99	845	1546	701	149	1067	1912	845
50	547	979	432	100	851	1556	705	150	1071	1917	846

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