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Introduction.

The present publication contains the result of the seismometrical observations made at the Central Meteorological Observatory, Tokyo in the year 1926.

Position of Observatory : —

Longitude :	139° 45′E
Latitude :	35° 41′N
Height from mean sea level :	21m
Geological nature :	diluvium.

Instrument :—The instrument in use of this observatory are as follows :—

Wiechert's 200 kg horizontal seismograph

			EW comp.	NS comp.
Constants	Magnification	V_0	77	79
	Damping coef.	v	3.6	3.7
	Coeff. of friction	ε	0.013	0.013
	Proper period (sec)	T_0	3.9 sec.	4.0 sec.

Wiechert's 80 kg vertical seismograph

Constants	Magnification	V_0	70
	Damping coeff.	v	3.0
	Coeff. of friction	ε	0.004
	Proper period	T_0	4.4 sec

Galitzin's seismograph with photographic registration

			EW comp.	NS comp.
Constants	Max. magnification	V_0	1000	1000
	Damping coeff.	v	7.0	7.0
	Proper period	T_0	19_s sec.	19_s sec.
	Proper period of galvanometer	T_g	16_n sec.	16_s sec.

Mainka's 450 kg Horizontal seimograph

			EW component		NS component	
			I	II	I	II
Constatns	Magnification	V_0	88	125	88	102
	Damping coeff.	v	2.6	2.6	3.0	2.2
	Coeff. of friction	ε	0.016	0.025	0.019	0.024
	Proper period	T (sec)	$9.^s8$	$7.^s5$	$11.^s4$	$11.^s5$

Fürst Galitzin's Vertical seismograph with photographic registration.

Constants	Max. Magnification	V_0	1000
	Damping coeff.	v	7.0
	Proper period	T_0 (sec)	$10.^{s}0$
	Proper period of galvanometer	T_g	$12.^{s}0$

Omori's Horizontal seismograph (improved at our observatory) with magnetic damper.

			EW comp.	NS comp.
Constants	Magnification	V_0	20	20
	Damping coeff.	v	2.2	2.1
	Coeff. of friction	ϵ	0.003	0.003
	Proper period of galvanometer	T (sec)	16^{s}	16^{s}

Omori's Portable seismometer

			EW comp.	NS comp.
Constants	Magnification	V_0	50	50
	Coeff. of friction	ϵ	0.005	0.006
	Proper period	T (sec)	4	4

For the recording of teleseismic disturbances and distant earthquakes, we use the seismographs of Galtzin, Mainka and Omori, and for the observations of near earthquakes, the Wiechert seismograph and Omori seismometer are used.

Scales of the intensity of earthquake:—The intensity of earthquakes, have been estimated according to the scale 0 to 6 and the comparison of our scale with Cancani's scale is as follows;—

Cancani scale	I II	III IV	V VI	VII VIII	IX	X	XI XII
Our Scale	0	1	2	3	4	5	6
Name	No feeling	Slight	Moderate	Rather Strong	Strong	Very strong	Disastrous
Acceleration mm/sec²	<2.5 | 2.5–5.0	5–10	10–25	25–50	50–100	100–250 | 250–500	500–1000	1000–2500	2500–5000 | >5000

Methods of determining the epicentre:—The follwing four methods are used to determine a epicenter of any earthquake from the observations taken at the stations in this country:—

1. By the direction of initial motion.

2. By the epicentral distance determined from Prof. Omori's formula $\triangle = 7.42t$ for the near earthquakes, where $\triangle$ is the epicentral distance and t the duration of the preliminary tremor PL.

3. By the isochronal lines, which are drawn with the data taken from the reports of the meteorological stations. At these stations the time are kept by marine chronometers, the daily rate of which being determined by catching the wireless

time signals.

4. By iso—PL lines according to S. I. Kunitomi's method. These lines are drawn so as to pass the places having the preliminary tremor of equal duration.

The positions of epicetres of the earthquakes thus determined are given in the annexed table with their longitude and latitude and also found in the charts on which are marked the positions of epicentres of remarkable and moderate earthquakes occurred in the year 1926.

Method of the keeping time :—Time of occurrence of an earthquake and other time elements in our seismometrical reports are deduced from seismograms with three standard clocks and chronometers which are connected to the time-tick system of each seismograph.

These are as follows :—

1. Clemens Riefler's Astronomical clock No. 482, München.
2. Dent standard Clock No. 3072, London.
3. Chronometer No. 128. Favre-Brandt, Nardin.

Chronometers as used in time-tick { Marine Chronometer No. 460 Merke G. M. B. H. Hamburg. / Chronometer No. 835 W. Bröcking Hamburg.

In the present report, times are all referred to the Greenwich mean time.

Symbols and Notations :—Symbols and notations used in this reports are as follows :—

1. phases of the seismogram.

P (undae primæ)=First preliminary tremor.
$\bar{P}$=Individual or upper first preliminary tremor.
PR_n=Longitudinal waves n-times reflected at the earth's surface.
S (undae seundæ)=Second preliminary tremor.
$\bar{S}$=Individul, or upper second preliminary tremor.
SR_n=Transverse waves n-times reflected at the earth's surface.
PS=Waves changed from londitudinal to transverse oscillation, or vice versa, through reflection at the earth's surface.

L (undae longæ)=Long waves at the beginning of the surface phase.

Q (undea quartæ)=Shorter and more regular waves in the surface phase.

M (undae maximæ)=Greatest motion in the surface phase, usually in the group here defined as Q.

C (Coda)=Tail or end portion.

F (Finis)=End of discernible movements.

2. Nature of the motion.

i (impetus)=Sudden beginning of the motion.

e (emersio)=Gradual beginning of the motion.

T (Period)=Time of one complete oscillation.

A=Amplitude of the earth motion in microns.

A_E=E—W component of A.

A_N=N—S component of A.

A_Z=Vertical component of A.

3. Character of the Earthquake.

d (terræ motus domesticus)=Local shock.

v (terræ motus vicinus)=Near shock.

r (terræ motus remotus)=Distant shock (Origin from 1000 km to 5000 km. distant)

u (terræ motus ultimus)=Very distant shock or teleseism (Origin more than 5000 km. distant)

Seismograms :—

The reproduction of a seismogram of the earthquake which occurred in the year 1926 is inserted in the annexed plates.

Data of the earthquakes :—

In the case of remarkable earthquakes, a full data reported from the metorological stations of this country are given in the present report. The positions of these stations are found also in the annexed plates.

General view of the seismic activity of Japan in the year 1926.

In this year 4913 earthquakes are recorded on the seismographs at the meteorological observatories in this country of which 391 are also recorded by the instruments installed at the Central Meteorological Observatory, Tokyô. The monthly number of earthquake recorded at Tôkyô is given in the following table:—

		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sepet.	Oct.	Nov.	Dec.	Sum
Number of unfelt Earthquake		24	25	30	42	53	29	26	54	26	33	33	16	391
Number of felt Earthquake		3	10	5	7	5	4	5	10	3	1	3	4	60
Intensity of felt Earthquake	Slight I	3	9	5	4	2	3	4	8	3	1	3	3	48
	Moderate II	0	1	0	2	3	1	1	1	0	0	0	1	10
	Rather Strong III	0	0	0	1	0	0	0	0	0	0	0	0	1
	Strong IV	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very Strong V	0	0	0	0	0	0	0	1	0	0	0	0	1

In the whole country, the number of earthquakes recorded in this year, is a little less than that in the last year, but when we compare this number to that in 1924, we have the increase of 1088. It is clear that the total number of the earthquakes recorded in the last year is greatly increased by the numerous aftershocks of the destructive earthquake occurred in the northern district of Tazima on 23rd May 1925. In this year, there was experienced no destructive one in this country. The total number of the earthquake recorded compared to that in the last year is as follows:—

	1925	1926	Difference
Number of unfelt earthpuake	1886	1272	(−) 614
Number of felt earthpuake	3411	3641	(+) 230
Total number of eathquake	5297	4913	(−) 384

Thus, in this year, though the number of earthquakes decreases than that in the last year, a number of remarkable earthquakes occur everywhere of our country show-

ing that the seismic activity does not decrease throughout the whole year.

In this year the localities where the seismic activity is predominate are the outer earthquake zone which runs along the Pacific from Tisima Islands to Tyôsi, the neighbourhood of the old fault in Mino, Kii straits and Okinawa islands. The positions of epicentres of the remarkable earthquakes which occurred in this year are shown on the annexed plate.

The mean daily number of earthquakes which are recorded by all the observatories of our country is 13. 4.

Nextly the total earthquakes are classified by their magnitude of felt area is as follows :—

Number of	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept,	Oct.	Nov	Dec.	Sum
Remarkable earthquake	2	2	3	2	1	2	2	1	1	1	0	0	17
Moderate earthquake	4	3	1	3	4	5	3	2	3	4	2	2	36
Earthquake of small felt area	10	12	15	3	16	7	10	5	7	5	7	10	107
Local earthquake	124	80	91	85	90	85	88	135	72	88	93	81	1112
Total number of Felt earthquake	140	97	110	93	111	99	103	143	83	98	102	93	1272
Total number of Unfelt eathquake	312	214	222	207	263	292	225	443	411	330	339	383	3641
Total Sum	452	311	332	300	374	391	328	586	494	428	441	476	4913

Lastly, the following table is the classification of the earthquake occurred in this country and its neighbourhood by the positions of their epicentres

District		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Sum
Hokkaido	Tisima Is.						1							1
	Pacific	17	9	10	6	11	7	7	5	6	5	12	9	104
	Inland	1		2			1				2	1	1	8
North-eastern Part of the Honsyû	Pacific	6	5	2		7	5	7		4	8	5	6	55
	Inland	2	2	6	3	4	2		3	2	4	3	1	32
	Japan Sea													

Disrtict		Jan.	Feb'	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Sum
Kawntô	Pacific	12	4	9	4	5	3	9	5	8	9	11	4	83
	Inland	16	26	10	24	24	14	9	25	13	9	12	19	201
	Sagaminada	8	7	12	6	5		7		1	3			49
Middle Part of Honsyû	Japan Sea and its coast	4	1	2		1		1			2			11
	Inland		3	5	5	2	5	6	9		2	2	5	44
	Pacific	3			2	1	1	2				2		11
Kinki	Kii Straits	49	21	30	20	25	28	28	25	13	31	29	23	322
	Inland	3		3	2	7	2	1	2	4	1	2	2	29
Tyugoku and Sikoku	San-in	1		2	2	1		1	1	4	2	5	9	28
	North-Tazima	1	5	1		1	3	2	1	2	1	1		18
	Sanyô	2		1		1		2	1	1	1	5	1	15
	Seto inland Sea	4	2				4	1	1	5			3	20
	Sikoku			2		5	3		2	1	1	1	1	16
	Pacific	2												2
Kyûsyû	Northera Part	4	3	2	1	1	8	1	1	4	1	5		31
	Southern Part	3	1	3	6	4	4	3				1	4	29
Okinawa Is.		1	5	4	8	3	5	13	57	2	11	4	1	114
Taiwan		1	1	4	3	2	4	2	3	12	3	1	4	40
Tyôsen			1						1		1			3
Karahuto			1		1			1			1			4
The other Part						1			1					2
Sum		140	97	110	93	111	100	103	143	82	98	102	93	1272

TABLE. I

Table of Shocks observed at The Central Meteorological Obser atory, Tokyo, in the Year 1926.

January.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
1	10	P	09	03	03.1						157	Felt slightly,
		$\overline{P}$			09.2							Kasima-nada.
		S(I.)			24.2							141°.5E, 36°.5 N;
		MN			24.6	—240			3			Felt area 141000 sq. Km.
		MN			52.0	± 16						
		MN		04	17.5	15						*v.*
		MN			47.2	15			3			
		ME		03	30.5		— 15					
		ME		42	42.4		—150					
		F		59								
2	10	P	09	35	41.2					E33.2	155	Kasima-nada.
		L		36	02.0					N20.0		141°.2E, 36°.4N
		ME			15.5			± 95				Felt area 41400 sq. Km.
		ME			39.5			— 70				*v.*
		MN			12.6	65						
		eF		44								
3	11	P	17	59	21.1					E? N?	128	Felt slightly,
		L			38.9					UP.		The coast of
		MN			—	±465						Honmoku (Bay of
		ME			—		±465					Tokyo.).
		eF	18	04								*d.*
4	12	P	21	59	16.3						42	Felt Slightly,
		L			22.1							The coast of
		MN			22.4	— 56						Honmoku (Bay of
		ME			2.25	—	— 30					Tokyo).
		F	22	00	36							*d.*
5	15	P	14	55	05.5						89	SSE off the
		L		57	02.1							coast of Kusiro.,
		MN			02.6	21			2.8			
		ME					19		2.3			*v.*
		F	15	03	28							
6	25	iP	00	45	19.6							
		L		56	01.9							t. Distant Earthquake.
		F	02	23	38							

February.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity. Ebicentre and Remarks
7	3	iP	21	47	00.0						20	Felt slightly.
		L			27.3							
		MN			31.2	64			1.4			
		ME			31.7		81					NE off the coast of
		F		53	30							Hatizyô. I.
												140°.7 E, 34°.5 N.
8	4	P	06	45	38.5						720	Eastern part of Tugaru
		L		47	15.5							-strait.
		MN		48	43.4	298			3.2			
		ME			17.5		128		2.2			141°.7 E 41°.6N.
		F	07	07	40							*v.*
												Felt area 870000sq. Km
9	4	iP	12	15	02.6						39	Felt slighty.
		L			17.6							
		MN			19.2	28						Valley of river
		ME			17.8		— 45					Ara-kawa. *d.*
		F	13	16	25							
10	7	iP	03	47	20.5						98	Valley of River
		L			33 7							Kinugawa. *d.*
		MN			35.2	— 64						
		ME			35.2		84					
		F		52	10							
11	9	ip	17	12	17.5						33	Felt slightly.
		L			21.9							Valley of River Ara-
		MN			21.9	— 71						kawa. *d.*
		ME			21.9		— 52					
		F		13	50							
12	9	iP	17	13	47.1						36	Felt slightly.
		L			51.9							
		MN			51.9	—39						Valley of River Ara-
		ME			51.9		—27					kawa. *d.*
		F	17	14	55							
13	11	eP	05	07	41.2							N. off the coast of
												Ogasawra Island.
												142°.4E, 30°.4N.
14	13	iP	14	58	34.4						67	Felt Moderately.
		L			43.4							
		MN			49.1	161						Valley of River
		ME			47.0		184					Kinu-gawa. *d.*

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ km	Intensity, Epicentre and Remarks.
		F	15	07	30							140°.1 E, 36.°1 N.
15	17	P	10	43	26.2							WSW to cape E imo.
												142°.5 E, 41°.7 N;
												Felt area 314000 q. Km.
												.v
16	20	iP	20	35	09.7						39	Felt slightly.
		L			14.9							
		MN			14.9	— 59						Neighbourhood of
		ME			15.5					37		Tokyo.
		F			50							*d.*
17	22	iP	01	20	04.8						71	Felt slightly.
		L			14.3							
		ME			18.1					—189		Neighbourhood of
		MN			19.6	266						Tokyo (Bay of Tokyo.)
		F		31	05							*d.*
18	25	P	06	02	51.1						110	Felt slightly.
		L		03	0.59							Lake Kasumiga-ura.
		MN			18.6	24						*d.*
		ME			23.5			31				
		F		06	11							
19	27	P	20	34	05.9						53	Felt slightly.
		L			13.0							
		MN			06.4	— 38						Upper valley of River
		ME			06.6			81		1.0		Edo-gawa. *d.*
		F		36	06							

March.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
20	4	P	09	37	31.0							
		PP		39	41.0							
		PPP		40	44.0							
		S?		43	39.0							Distant Earthquake.
		S?		44	49.0							*r.*
		SS?		47	52.0							
		L		51								
21	8	eP	20	23	58.2						745	Off the cape Erimo,
		iS		25	38.6	— 14 — 30				0.4		Hokkaido.
		L?		26	30.							145°3E 41°5N

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity. Epicentre and Remarks.
		M_1		27	—	± 50	± 50		3.0			
		M_2		30	—	±100	±100		9—8			Felt area 565000 Sq. km.
		F	21	14								*v.* ;
22	13	P	03	57	57.8						99	Felt slightly.
		I.		58	11.1							Off the caost of Komina-
		F	04	00								to, Bôso Peninsula.
												d.
23	15	P	08	00	18.8						202	Upper Valley of river
		L			46.0							Toyo-Kawa.
		F			04.20							137°5E 35°0N,
												Felt area 94000 sq. km.
												v.
24	18	eP	14	18	57							
		S		29	47							Distant earthquake.
		L		42	35							*r.* ;
		F		15	50							
25	19	eP	20	34	09.9						760	E. part of the Tugalu
		S		35	17.0							Strait.
		L		35	52.4							142°1E. 41°0N,
		M_1		36	21.5	± 50	±100		5.0			Felt area 94000 sq. km.
		M_2		37	11	± 90	±130		7.0			*v.* ;
		F	21	—								
26	20	P	11	00	17.1						62	Felt slightly,
		L			26.0	— 90	+130					Valley of River Kinugawa.
		F		03	—							*d.*
27	22	P	06	21	48.7						63	Felt slightly,
		L			57.2							Valley of River Tone.
		M		22	02.2	—200	+100	±40				*d.*
		F		24								
28	23	P	11	00	55.8						133	Felt slightly,
		L		01	13.6							Neighbourhood of
		F		04	—							Lake Kasumiga-Ura *d.*
29	25	P	13	20	43.7						613	Felt slightly,
		L		22	06.3							S. off the ccast of
		ME		—					60			Cape Erimo.
		MN		—				90				143°4E. 41°6N.
		F		39	—							Felt area 565000 sq. km.
												v.

April.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
30	1	iP	16	04	54.6						360	Felt moderatly,
		iL		05	42.8							Off the coast of
		MN		05	44.2	—1800						Ensyû-nada.
		ME		05	44.2	700			2.0			138°0E 32°7N,
		F		34	00							Felt area 375000 sq. km.
												v.
31	6	P	19	34	05.0							Off the coast of
		S		35	22.0							Cape Erimo.
		L		36	06.0							143°9E 41°2N.
		MN		39	12.0	22			7		1023	Felt area 350000 sq. km.
		ME		38	51.0		22		7			*v.*
		eF	20	00	—							
32	6	eP	23	47	25.4						1023	Southern part of
		eS		49	43.4							Hyûga-na la
		F	24	02	30							132°0E 32°N.
												Felt area 113000 sq. km.
												v.
33	7	P	09	54	39.1						41	Felt slightly,
		L		54	44.6							Neighbourhood of
		MN			44.8	— 35						Tokyo.
		ME			44.8			— 19				*d.*
		F		55	49							
34	10	P	01	18	34						284	The mouth of River
		L		19	12.2							Sidu (Rikuzen district.)
		MN		19	40.0	—						141°6E 38°8N.
		ME			41.0			—				Felt area 116000 sq. km.
		F		23	04.3							*v.*
35	11	iP	06	26	02.1					N 2	68	Felt slightly,
		iL		26	11.3					W 3		Bay of Tokyo.
		MN			11.4	— 40						(Neighbourhood of
		ME			11.5			+100				Kisarasdu)
		F		28	12							*d.*
36	12	P	08	40	33							
		PP		43	02							Distant earthquake.
		PPP		44	14							*v.*
		S		47	34							
		PS(PPS)		48	06							
		SS		51	07							
		SSS		52	04							
		L		52	56							

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
		ME	09	01	54		±284					
		MN	08	58	43	—376						
		F	11	—	—							
37	13	iP	17	08	27.1					S 9	61	Felt slightly,
		L			35.2					W3		Neighbourhood of
		MN			35.3	67		0.3				Lake Kasumiga-ura
		ME			40.8		47	0.4				(Neighbourhood of
		F		12	57							Tuti-ura.) *d.*
38	13	P	17	56	28.0					S 2	45	Felt slightly,
		L			34.0					E 4		Upper Valley of
		MN			34.5					D 3		River Sagami.
		ME			34.4							*d.*
		F		58	20							
39	15	e	09	44	—							
		L?		53	—							
		F	11	—								
40	16	e	00	43	—							Distant earthquake.
		e		56	—							*r*
41	18	iP	06	54	27.6					S 57	33	Felt rather strongly,
		L		54	32.0					W 9		Bay of Tokyo.
		MN			33.0	—1000				D250		139.°9E 35.°1N.
		ME			33.0		—1300					Felt area 40000 sq. km.
		F	07	05	—							*d.*
42	22	P	23	51	08							
		e		52	21							Distant earthquake.
		S(SR)		55	30							*r.*
		L		57	02							
		ME	24	57	37		± 6			II.		
		MN	25	00	27					II.		
		F	—									
43	25	eP	04	04	09.7							Upper Valley of
		S		07	35.0							River Ara-kawa.
		F		23	10							(Neighbourhood of Kumagaya.) *d.*
44	27	iP	14	17	20.2						72	Felt moderately,
		L		17	29.9							Lower Valley of
		MN			30.1	—405						River Kinu. ×
		ME			30.1			—565				*d.*
		F		22	20							

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
45	28	P	11	33	25.0							Distant earthquake.
		eF	12	30								*r.*
46	30	iP	15	35	02.5					N 8	175	The coast of
		iL		35	26.0					W17		Cape Sioya.
		MN			34.9	56						141°3E 37°2N.
		ME			35.4			± 57				Felt area 56000 sq. km.
		F		40	—							*r.*
47	30	iP	17	36	22.0						69	Felt moderately,
		iL			31.3							Valley of River Kinu.
		MN			31.4	—520						140.°1E 36°.1N.
		ME			〃			+605				Felt area 58700 sq. km.
		F		41	20							*d.*
48	30	iP	15	35	02 5						175	Off the coast of
		iL		35	260							Cape Sioya.
		MN		35	34.9	+ 56				—		141.°03E 37.°2N.
		ME		35	35.4			± 57		—		*v.*
		F		40	00							
49	30	P	17	36	22							Felt slightly,
		iL		36	31					—		Upper Valley of River
		ME		36	31.4			+605		—		Arakawa. (Neighbour-
		MN		41	22	—520						hood of Kōnosu)
												a.

May

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
50	7	P	6	12	40.2							
		S		13	29.9							
		I.		14	56.6							Neighbourhood of
		ME		18	41.6			+750		8.8		Titi-Zima Is.
		MN		21	05.3			+925		7.5		
		MN		17	16.1	±975				7.5		
		MN		18	19.3	±1050				8.6		
		F		7	08.—							
51	11	P	21	41	08.2						42	Felt slightly,
		L		41	13.9							Bay of Tokyo.
		MN		41	13.9	±150				—		*d.*
		ME		41	13.9			± 43		—		
		eF		43	00							

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
52	18	P	1	24	10.8							Off the coast of
		eS		24	36.7							Kasima-nada.
		L		24	44.8							(141°0E 36°5N)
		MN		24	51.0	— 88			—			
		ME		24	55.7		— 75		—			*d.*
		F		34	00							
53	18	iP	16	59	52.8						to {W 0.8 E 0.3	Felt moderately,
		L	17	00	00.9							Valley of River
		ME		00	02.0		+ 43		1.0			Kinu-gawa.
		MN		00	02.4	+143			0.9			(139°9E 36°2N)
		eF		05	20							Felt area 47200 sq. km.
54	20	P	11	48	14.0							Felt moderately,
		L		48	21.3							Epicenter is the valley
		MN		48	22.1	— 80			0.8			of River Tone.
		ME		48	23.9		—170		0.9			*d.*
		F		51	25.0							
55	20	P	23	11	16.0							Felt slightly,
		L		11	21.8							Bay of Tokyo.
		MN		11	22.7	— 34			0.5			*d.*
		F		13	—							
56	26	iP	19	46	29.0							Off cape Erimo,
		iL		47	54.0							(142°8E 41°0N)
		MN_1		48	22.0	±230			1.3			Felt area 1255000 sq. km.
		ME_1		48	55.0		±150		1.2			*v.*
		MN_2		49	37.0	±300			1.4			
		ME_2		50	07.0		±200		1.4			
		F	20	11	—							

June.

No.	Date	phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
57	4	eP	15	09	14.8							Off cape Erimo.
		L		10	29.2							(143°5E 41°3N)
		F		17	00							Felt area 330000 sq. km.
												v.
58	5	eP	9	11	59.7						792	Off the coast of
		L		13	46.4							Hyûga-nada.
		MN		14	32.9	— 43			3.1			(132°2E 32°5N)
		ME		16	31.8		— 50		4.4			Felt area 3140000 sq. km.
		F		27	—							*v.*

No.	Date	phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
59	6	el	18	22	01.0						640	Southern off to the
		L		23	27.3							cape Erimo.
		F		29	—							(143°9E 41.7N)
												c.
60	9	P	1	28	10.1						42	Felt slightly,
		L		28	15.7							*a.*
		MN		28	16	— 80			—			Upper valley of River
		ME		28	16		+ 39		—			Tama-gawa.
		F		29	40							
61	14	eP	23	33	23.0						312	Off the coast of
		L		34	04.8							Kinkwa-zan.
		F		39	—							(141°4E 37°7N)
												Felt area 1580000 sq. km.
												c.
62	26	P	10	42	16.3						75	Felt slightly,
		L		42	26.4							Off the coast of
		MN		42	28.0	— 37			0.5			Cape Nozima.
		ME		42	28.0		— 36		0.6			*c.*
		F		45	—							
63	26	P	19	58	34.1						N5 W5 9800	Western part of the Sea
		S	20	09	23.0							of Candia (Mediteranean
		F	21	00	—							Sea.)
												(22°N 35°E)
												t.
64	26	P	22	39	43.4						36	Felt slightly,
		L	39		48.3							Valley of River
		MN		39	53.0	+ 35						Kobitu in Bôsô Peninsula.
		ME		39	53.0		+ 57					(140°2E 35°4N)
		F		47	—							Felt area 710000 sq. Km.
												c.
65	28	P	3	22	56.8							After shock of
		S		28	58.8							Mediterranean
		L		35	29.8							Earthquake
		F	5	07								*t.*
66	28	P	9	50	50.6						97	Felt slightly,
		L		51	03.6							Valley of River
		MN		51	04	+ 173			0.3			Kobitu.
		ME		51	40		+176		0.5			*d.*
		F		54	50							

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
67	29	P	14	30	14.5						1190	SW-ern Sea of Okinawa
		L		32	54.4							Is. (Liuku-Islands)
		MN		33	54.0	—930			4.8			(127°2E 25°0N)
		ME		34	44.0		—530		6.0			Felt very strongly at
		F	15	30	—							Okinawa Is.

July

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
68	10	P	23	01	36.0							Off the coast of
		L		01	50.5							Kasima-nada.
		F		24	40.0							Felt area 76000 sq. km.
69	12	P	10	07	07.8					S 13 W19 U 4		Felt slightly.
		L			17.2							Neighbourhood of
		MN			17.5	+ 55			—			Titibu Mountain group.
		ME			17.5		— 54		—			*d*.
		F		12	08							
70	12	P	14	04	49.8					N 12 E 28		Felt slightly,
		L		04	55.1					D 11		Local shock,
		MN		04	55.2	— 40						Upper valley of
		ME		04	55.2		+ 38					River Tama-gawa.
		F		06	15							*a*.
71	14	iP	10	02	02.0							Felt slightly,
		iL		02	29.7							Upper valley of
		MN		02	30.3	± 12			0.2			River Sagami.
		ME		02	30.8		± 13		0.3			*d*.
		F		08	—							
72	16	iP	19	39	40.7							Felt slightly,
		iL		39	45.6							Local shock,
		MN		39	45.7	— 56			—			
		ME		39	45.7		+ 56		—			Valley of River
		F		40	37							Rokugō. *d*.
73	20	P	14	00	00.8							Upper Valley of River
		L			22.6							Ibi-gawa.
		F	14	03	—							(136°9E 35°3N)
												Felt area 34600 sq. km.
												v.
74	26	P	18	55	55.0							Central part of
		L		56	44.5							Kinki.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
		MN	19	00	08.5	±181			4.3			Deep earthquake,
		ME		00	09.1		+140			4.0		Felt area 1525000 sq. km.
		F		20	55							*v.*

August.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
75	3	P	3	46	25.8							Off the coast of
		S		50	58.8							Kôsyun. (Formosa)
		L		53	53.8							(121°2E 22°1N)
		F	4	50	—							*d.*
76	3	iP	9	26	23.9					SSE		Felt very strongly,
		L			29.6							Bay of Tôkyô.
		ME			27		+9000		—			(139°8E 35°4N)
		MN			25	+17500			—			Felt area 408000 sq. km.
		F		32	—							*d.*
77	6	P	4	12	27.4							Felt slightly,
		L		2	32.2							Upper Valley of River
		MN			33.0	— 29			—			Edo-gawa.
		ME			33.0		+ 37		—			*d.*
78	6	P	6	57	15.0							Southern part of
		S	7	01	32.0							Isigaki I.
		L		03	21.0							*v.*
		F		57	—							(124°0E 23°8N)
79	7	P	1	23	43.0							Felt slightly,
		L			48.2							Bay of Tokyo.
		F		26	50'							Local shock. *d.*
80	7	iPv	6	15	07.4							Felt slightly,
		iPH			09.7							South to the coast
		L			27.2							of Mera.
		F		19	40							*d.*
81	8	P	18	48	03.5							Felt slightly,
		L			08.7							Neighbou hood of mouth of River Rokugo. *d.*
82	8	P	19	02	39.8							Felt slightly.
		L			44.9							Westren coast of Kisarazu, Tiba prefecture. *d.*
83	8	p	19	09	30.7							Felt slightly
		L			35.5							Do. *d.*

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
84	10	P	14	49	59.1							Felt slightly,
		L		50	24.2							Coast of Kudyûkuri-hama. *d.*
85	13	P	4	29	01.4					NE		Felt slightly,
		L			13·9							Eastern foot of Mt. Huzi. *v.*
86	15	P	9	42	58.5							Felt slightly,
		L		43	09.2							Mouth of River Naka-gawa. *d.*
87	25	eP	5	55	29.0							Distant earthquake
		iS	6	05	21.0							*r.*
		eL		15	53.0							

September.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
88	4	iP	15	38	50.8						580	Felt slightly,
		L		40	10.3							Eastern off the Cape Erimo
		F	16	01	00							(143°9E 42°2N)
												Felt area 753000 sq. km.
												v.
89	7	iP	13	38	05.0						62	Felt slightly,
		iL		38	13.4							Northern off the coast of
		M_N		38	13.6	+ 68		0.3				Kisaradu.
		M_E		38	13.8		— 75	0.3				*d.*
		F		40	15							
90	7	iP	12	30	42.2					S 14		Distant earthquake.
		S		38	28.5					E 11		*r.*
		F	13	08	30							
91	10	P	10	43	34.8							Distant earthquake.
		S		47	18.0							*r.*
		F	11	54	—							
92	12	P	15	48	05.0						2250	North-eastern off the coast
		L	15	52	53.0							of Taitô.
		M_N		54	31.0	± 39		0.7				(121°9E 23°4N)
		M_E		54	45.0		± 41	8.0				Felt area 157000 sq. km.
		F	16	32	00							*r.*
93	16	P	20	49	17.1						83	Felt slightly,
		L		49	28.3							Twin earthquakes : —

No.	Date	Pahse	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity. Epicentre and Remarks
		M_N		49	28.4							{1 Valley of Rvier Kinu.
		M_E		49	28.4							{2 Mouth of River Sagami.
		F		53	12							*v*
94	23	P	16	18	11.0						408	Off the coast of Miyako.
		L		19	06.0							(142°3E 39°7N)
		M_N		19	40.5	± 23			1.5			Felt area 141000 sq. km.
		M_E		20	05.0		± 25		3.1			*r*.
		F		27	20							
95	30	P	14	44	34.1						269	Off the bay of Sidukawa.
		L		44	10.4							(141°6E 38°2N)
		M_N		44	10.5	— 49						Felt area 102000 sq.km.
		M_E		44	10.5		+ 37					*v*.
		F	15	01	44							

October.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
96	2	P	19	03	23.1						91	Kasima-Nada.
		L		03	35.9							(141°1E 36°0N)
		M_N		03	41.0	— 28			1.1			Felt area 86000 sq. km.
		M_E		03	48.5		— 30		1.0			*r*.
		F		14	02							
97	3	P	08	27	27.4						421	Off the coast of Iwaki.
		L		28	22.9							(142°3E 37°8N)
		M_N		29	58.2	+500			2.3			Felt area 126000 sq. km.
		M_E		31	09.5		±600		2.2			*v*.
		F		58	37							
98	3	P	19	50	57.0							Distant earthquake
		S	20	01	25.7							*r*.
		F	21	35	—							
99	13	eP	06	09	13.0							Neighbourhood of
		S		13	54.0							New Guinea.
		L		19	08.0							*r*.
		F	07	54	05							
100	13	P	19	15	06.0							Sea of Okhotsk.
		S		21	37.0							*r*.
		eL		27	16.0							
		F	20	55	—							
101	19	P	00	31	35.7						546	South-western off the
		L		32	49.2							Cape Erimo.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
		M_E		34	07.7	38			4.0			(142°1E 41°6N)
		F		38	—							Felt area 423000 sq. km.
												r.
102	20	P	01	42	07.8						297	Upper valley of river
		L		42	48.1							Kuduryû.
		F		50	—							(136°3E 35°7N)
												Felt area 98000 sq. km.
												v.
103	26	P	03	52	02.3							Distant earthquake.
		S		57	45.6							*r*.
		L	04	02	37.7							
		F	05	12	—							
104	26	P	06	19	00.5							Distant earthquake.
		L		30	33.5							*d*.
		F	07	00	—							
105	28	P	19	45	36.0						137	Felt slightly.
		L		45	54.4							Off the coast of Tyosi.
		M_N		45	59.5	+ 53			3.0			*d*.
		M_E		45	59.5		— 75		3.5			
		F		50	36							

November.

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	Δ Km	Intensity, Epicentre and Remarks
106	2	P	21	16	31							Neighbourhood of
		S		19	51							Kamchatka.
		F	22	—	—							*r*.
107	5	ip	19	05	33.6					N2.0	138	Felt slightly,
		L		05	52.1					E1.1		The coast of Kasima-Nada.
		M_E		06	02.8	+ 61						*v*.
		M_N		06	26.9		—104		2.0			
		F		15	30							
108	10	iP	08	57	49.1						376	North to the City of Kyôto.
		L		58	39.8							(135°8E 353°N)
		M_N	08	59	31.1	± 27			4.5			Felt area 60000 sq. km.
		M_E	09	00	02.1		± 38					*v*.
		F		04	50							
109	11	eP	07	02	09.5						380	Off the coast of Iwaki,
		L		03	00.8							district.
		MN		03	28.0	± 320			3.6			(141°5E 37°5N)

No.	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
		M_F		03	12.6		±396		3.8			Felt area 142000 sq. km.
		F		38	—							*v.*
110	15	P	22	47	08.1						65	Felt slightly,.
		L		47	16.9							Valley of River
		F		49	10							Tamagawa.
												d.
111	19	iP	21	51	57.3						30	Felt slightly,.
		L		52	01.4							Valley of River Edo,
		M_N		52	03.0	± 66						Neighbourhood of Matudo.
		F		53	17							*d.*
112	27	P	05	25	50							Distant earthquake
		S		32	50							*r.*
		F		55	—							

December.

No	Date	Phase	G.M.T. h	m	s	Amplitude A_N μ	A_E μ	A_Z μ	Period s	First motion	△ Km	Intensity, Epicentre and Remarks
113	5	P	21	12	54.6						160	Felt slightly.
		S		13	16.1							Northern part of Kasima-
		M_E		13	45.0	± 70						Nada.
		M_N		13	39.0			±110				(141°2E 36°8N)
		F		25	—							Felt area 90400 sq. km.
												v.
114	6	P	00	01	56.0						82	Felt slightly.
		S		02	07	— 40	— 10					Lower Valley of River
												Tone.
												d.
115	6	P	12	45	11.7						77	Felt slightly.
		S		45	22.1	± 25	± 20					Upper Valley of River
		F		48	—							Kinu.
												d.
116	12	iP	22	01	25.7						N15	131 Felt moderately.
		S(?)		01	39.4						E30	Western branch of
		M_N		01	45						D90	Lake Kasumigaura.
		M_E		01	45							(140°2E 36°1N)
		M_D		01	48							*v.*
		F		17	—							

TABLE II.

TABLE OF REMARKABLE EARTQUAKES.

No.	Time of Occurrence G.M.T.				Epicenter	Note
		th	h	m		
1	Jan.	15	14	53	Far off the coast of Nemuro. $\begin{cases}\lambda = 146^\circ 0\,\mathrm{E}\\ \varphi = 41^\circ 3\,\mathrm{N}\end{cases}$	Felt in the whole Island of Hokkaidô, northern part of the Oou and some parts of the Kwantô district.
2		21	21	27	Northern part of the Bungo Channel. $\begin{cases}\lambda = 132^\circ 1\,\mathrm{E}\\ \varphi = 33^\circ 7\,\mathrm{N}\end{cases}$	Felt in some part of the district of Sikoku, Kyûsyû and Tyûgoku.
3	Feb.	4	6	44	Eastern part of the Tagaru Straits. $\begin{cases}\lambda = 141^\circ 7\,\mathrm{E}\\ \varphi = 41^\circ 6\,\mathrm{N}\end{cases}$	Felt in the whole Island of Hokkaidô, a part of the Kurile Islands, the Oou and North Kwantô districts.
4		11	5	6	Far northern off the Island of Ogasawara. $\begin{cases}\lambda = 142^\circ 4\,\mathrm{E}\\ \varphi = 30^\circ 4\,\mathrm{N}\end{cases}$	Felt slightly at Titizima I. only but felt instrumentaly all over the country.
5		17	10	42	WNW to the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 142^\circ 5\,\mathrm{E}\\ \varphi = 41^\circ 7\,\mathrm{N}\end{cases}$	Felt in the whole Island of Hokkaidô and northern part of the Oou district.
6	Mar.	8	20	22	SE to the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 145^\circ 3\,\mathrm{E}\\ \varphi = 41^\circ 5\,\mathrm{N}\end{cases}$	Felt in the southern part of Hokkaidô and along the pacific coast of the Oou district.
7		25	13	18	Off the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 143^\circ 4\,\mathrm{E}\\ \varphi = 41^\circ 6\,\mathrm{N}\end{cases}$	Felt in Hokkaidô, the Oou district, and the middle part of the Kwantô district.
8	Apr.	1	16	04	Off Ensyûnada $\begin{cases}\lambda = 138^\circ 0\,\mathrm{E}\\ \varphi = 32^\circ 7\,\mathrm{N}\end{cases}$	The earthquake showing abnormal distribution of felt areas. Felt along the pacific coast of our Islands, besides felt at Akita, Hukui and Osaka and their localities. Depth of focus may be tolerably deep.

No.	Time of Occurrence G.M.T.				EPicenter	Note
		th	h	m		
9	Apr.	6	19	35	Off the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 143°9\ \mathrm{E}\\ \varphi = 41°2\ \mathrm{N}\end{cases}$	Felt in a southern part of Hokkaidô and northern part of the Oou district.
10	May.	26	19	45	SW to the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 142°8\ \mathrm{E}\\ \varphi = 41°0\ \mathrm{N}\end{cases}$	Felt in the whole part of Hokkaidô, the most part of the Oou district, some part of the Kwantô district and Karahuto.
11	June.	5	9	10	Northern part of Hyûga-nada. $\begin{cases}\lambda = 132°2\ \mathrm{E}\\ \varphi = 32°5\ \mathrm{N}\end{cases}$	Felt in the districts of Kyûsyû, Sikoku, Tygoku and some parts of Kinki.
12		29	14	26	SW off the Okinawa Islands. $\begin{cases}\lambda = 127°2\ \mathrm{E}\\ \varphi = 25°0\ \mathrm{N}\end{cases}$	Felt in all the Islands of Ryukyu, strongly felt at Naha, Okinawa.
13	July.	26	18	55	Central part of Kinki. $\begin{cases}\lambda = 136°0\ \mathrm{E}\\ \varphi = 34°8\ \mathrm{N}\end{cases}$	The earthquake showing abnormal distribution of felt areas. Felt in whole the district of Kinki, besides, felt at some places of our country, here and there, even in Hokkaidô where Δ is more than 1000 km. Depth of focus may be tolerably deep.
14	Aug.	3	9	25	Tôkyô Bay. $\begin{cases}\lambda = 139°8\ \mathrm{E}\\ \varphi = 35°4\ \mathrm{N}\end{cases}$	Felt in the most part of the Main Island of Japan. Strongly felt at Tôkyô and its localities.
15	Sep.	4	15	37	E to the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 143°9\ \mathrm{E}\\ \varphi = 42°2\ \mathrm{N}\end{cases}$	Felt in the whole Island of Hokkaidô, the most part of the Oou district, some parts of the Kwantô district and Karahuto.
16	Oct.	19	0	30	SE to the coast of the cape Erimo, Hokkaidô. $\begin{cases}\lambda = 142°1\ \mathrm{E}\\ \varphi = 41°6\ \mathrm{N}\end{cases}$	Felt in the whole Island of Hokkaidô, and Pacific coast of the northern part of the Main Island. (Honsyu)

TABLL III.

TABLE OF MODERATE EARTHQUAKES.

No.	Time of Occurrence	th	h	m	Epicenter.
1	Jan.	10	9	02	Kasima-nada. $\lambda=141°.5E$ $\varphi=36°.5N$
2		14	8	52	Valley of river M nobe. $\lambda=133°.8E$ $\varphi=33°.8N$
3		30	11	53	Northern off the strait of Bun ɛ. $\lambda=132°.1E$ $\varphi=33°.6N$
4	Feb.	3	21	47	Far north-eastern off the Island of Hatidyô. $\lambda=40°.7E$ $\varphi=34°.5N$
5		13	14	58	Valley of river Kinu. $\lambda=140°.1E$ $\varphi=36°.1N$
6	Mar.	15	7	59	Upper valley of river Toyokawa. $\lambda=137°.5E$ $\varphi=35°.0N$
7		19	20	33	Eastern part of the Tugaru straits. $\lambda=142°.1E$ $\varphi=41°.0N$
8	Apr.	6	23	46	Southern part of Hyûga-nada. $\lambda=132°.0E$ $\varphi=32°.0N$
9		10	01	17	The bay of Sidukawa, Rikuzen district. $\lambda=141°.6E$ $\varphi=38°.8N$
10		18	6	54	The bay of Tôkyô. $\lambda=139°.9E$ $\varphi=35°.1N$
11		30	15	34	Off the coast of Sioya-saki. $\lambda=141°.3E$ $\varphi=37°.2N$
12		30	17	36	Valley of river Kinu. $\lambda=141°.1E$ $\varphi=36°.1N$
13	May.	18	01	23	Kasima-nada. $\lambda=141°.0E$ $\varphi=36°.5N$
14		18	16	59	Valley of river Kinu. $\lambda=1390.9E$ $\varphi=36°.2N$
15	Jun.	4	15	07	Sou hern off the c ast of the Cape Erimo. $\lambda=143°.5E$ $\varphi=41°.3N$
16		6	18	21	SE to the coast of the Cape Erimo. $\lambda=143°.9E$ $\varphi=41°.7N$
17		14	23	33	SSE of to the coast of Kinkwazan. $\lambda=141°.4E$ $\varphi=37°.7N$
18		26	22	39	Valley of river Kobitu.

No.		Time of Occurrence			Ep.center.
		th	h	m	
					λ=140°.2E φ=35°.7N
19	July.	10	23	01	NNE to of the coast of Tyôsi.
					λ=140°.8E φ=36°.1N
20		20	13	59	Uppe valley of river Ibi.
					λ=136°.9E φ=35°.3N
21	Aug.	3	03	40	Eastern off the coast of Kôsyun, Formosa.
					λ=121°.2E φ=22°.1N
22		6	15	53	Southern off the Islands Isigaki.
					λ=124°.0E φ=25°.8N
23	Sept.	12	15	44	Far north-eastern off the coast of Taito, Formosa.
					λ=121°.9E φ=23°.4N
24		23	16	17	Off the bay of Miyako.
					λ=142°.3E φ=39°.7N
25		30	14	41	Off the bay of Sidukawa, Rikuzen district.
					λ=141°.6E φ=38°.2N
26	Oct.	2	19	03	Kasima-nada.
					λ=141°.1E φ=36°.0N
27		3	8	25	Off the coast of Iwaki.
					λ=142°.3E φ=37°.8N
28		19	14	05	Neighbourhood of yagi.
					λ=135°.6E φ=34°.6N
29		20	01	40	Upper valley of river Kuduryû.
					λ=136°.3E φ=35°.7N
30	Nov.	10	08	56	North to the City of Kôyto.
					λ=135°.8E φ=35°.3N
31		11	03	01	Off the coast of Iwaki.
					λ=141°.5E φ=37°.5N
32	Dec.	05	21	11	Northern part of Kasima-nada.
					λ=141°.2E φ=36°.8N
33		12	22	01	Western part of te Lake of Kasumiga -ura.
					λ=140°.2E φ=36°.1N

Note on The Principal Earthquakes in the Year 1926.

1. Earthquake occurred at about 14h 53m, on Jan. 15th 1926.

This earthquake shook the southern half of Hokkaidô and the pacific coast of Oou province. Seismic intensities observed at the various stations are as follows:—

Intensity { moderate; Obihiro, Nemuro,
slight; Asahikawa, Kusiro, Sapporo, Miyako, Hakodate, Muroran, Morioka.

The epicentre of this earthquake lies at a distance of 220 km to the SSE of Nemuro. Some of the seismometrical data reported from the meteorological station are as follows:—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Obihiro	14	35	23,0		42.0		
Kusiro			25.0		45.0	SW	
Nemuro			33.0		43.0		90
Ootomari			34.0		29.0		130
Miyako			55.0	01	05.0	NE	82
Hakodate			55.7	01	02.5	NNE	450
Morioka	54	14.5					
Niigata			33.8	01	23.3		
Sumoto			44.2	01	30.0		
Tyôsi	55	02.9		01	05.4		8
Tokyô			05.5	01	56.6		21
Numadu			12.2				
Nagoya			17.0				
Yokohama			17.7	01	48.0		
Kyôto			25.0				
Oosaka			27.0	02	14.0		

2. Earthquake occurred at about 21h 27m, on Jan. 21st, 1926.

This disturbance originated at about 30 km. to the North of the cape Sata, northern part of Bungo Channel and felt in some parts of Sikoku, Kyûsyû and sothuwestern part of Tyûgoku. The seismic intensities observed at the various meteorological stations are,

Intensity	Rather strong;	Kure.
	Moderate;	Ooita, Matuyama, Hirosima.
	Slight;	Hukuoka, Miyazaki, Okayama, Tadotu, Niihama, Adumadaira, Simonoseki, Wakayama.

Some of the seismometerical data reported from the meteorological stations are as follows :—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Ooita	21	27	0.29		10.9		900
Kure			05.3		13.2		700
Matuyama			12.7		10.4	ENE	
Hirosima			14.0		12.6		230
Kôti			14.6		12.0		
Hukuoka			19.5		18.5		
Miyazaki			21.3		21.5		
Okayama			27.0		27.0		280
Nagasaki			29.0		38.0		3
Sumoto			34.9		36.6		35
Sakai			37.8		30.0		
Kagosima			39.0		27.0		120
Tadotu			39.0		23.0		130
Kôbe			42.0		38.3		25
Kyôto			44.2		42.0		
Simonoseki			53.0		19.0		
Gihu			58.3		45.6		

3. Earthquake occurred about 16h 44m, on Feb. 4th 1926.

On this day, the whole parts of Hokkaidô and Oou province, Southern part of Kurile Islands and northern part of Kwantô district have experienced a rare great shaking but as the epicentre lies far off the coast, no damage is sustained in everywhere.

The epicentre of this disturbance lies about 50 km. to the SE of the cape Esan, Hokkaidô. Some of the seismometrical data reported from the meteorological stations are as follows :—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max, Amp, μ
Hakodate	6	44	34.5		12.5	ENE	3850
Supporo			35.4		13.8	SSE	1866
Muroran			39.0		14.0	NNW	1920
Asahikawa			42.0		43.4	NNE	113
Miyako			46.0		18.0	ESE	2184
Morioka			47.2		22.2	N	501
Akita			50.0		34.0	SW	1210
Midusawa			52.0		26.0	SSW	1750
Isinomaki			54.0		47.0	S	535
Hahoro			58.1		57.3		16
Nemuro	45	07.0			35.4	SW	210
Tukubasan			10.9		58.0		40
Niigata			18.5	01	00.5	NE	1567
Utunomiya			27.7	01	15.2		568
Nagano			30.0	01	39.0	SSW	
Takada			30.6		59.7	SSW	553
Kumagaya			33.8	01	23.8		238
Tyôsi			34.7	01	37.5	WSW	104
Tôkyô			38.5	01	37.0		298

4. Earthquake occurred at about 5h 06m, on Feb 11th, 1926.

This earthquake shook the Titizima I. only but felt instrumentary all over the country. The eqicentre of this shock is about 350 km to the North of Titizima I.

Some of the seismometrical data reported from the meteorological stations are as follows:—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Titizima	5	06	29.0		42.0		
Mera	07		26.4	01	11.6		13
Miyazaki			31.4	01	45.8		18
Tyôsi			46.6	01	15.2		17
Numadu	08		20.1				
Kumagaya			22.2		45.7		18
Tôkyô			41.2				32
Isinomaki	09		28.3		31.9		13

5. Eathquake occurred at about 10h 42m, on Feb. 17th, 1926.

This earthquake shook the whole island of Hokkaidô and the northern part of Oou province. The Epicentre of this quake lies at about 60 km. to the SE of cape the Erimo, Hokkaidô.

Some of the seismometrical data reported from the meteorological stations are as follows :—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Sapporo	10	42	07.3		15.6	SW	
Nemuro			23.0		26.2	SSW	
Morioka			27.2		31.6		
Muroran			31.0		15.9		
Midusawa			31.0		40.0		
Kusiro			35.0		20.0	SW	140
Kôhu			38.0		41.0		
Hakodate			40.3		19.5	NE	880
Miyako			47.0		30.0	ESE	72
Tukubasan	43	15.6		01	03.3		10
Tyôsi		21.6		01	08.0		12
Tôkyô		26.2					
Numadu		49.8		01	06.7		

6. Earthquake occurred at about 20h 21m, on Mar. 8th, 1926.

This earthquake is similar to that occurred on Feb. 4th of this year, and the pacific coastal region of Hokkaidô and Oou district are shaken. The seismic intensities observed at the stations are

Seismic Instensity
- Strong; C. Esan.
- Rather strong; C. Siokubi.
- Moderate; Onahama, Hakodate, Midusawa, Muroran, Nemuro.
- Slight; Kusiro, Sapporo, Miyako, C. Erimo.

The epicentre of this earthquake s about 100 km. to the SE of the cape Erimo and some of the seismometrical data reported from the meteorological stations are as follows :—

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Nemuro	20	21	16.8		22.0		

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Obihiro		22	10.0		49.0		
Kusiro			44.0		32.0		
Sapporo		23	00.0		56.6		
Miyako			06.0		56.0		
Midusawa			20.0	01	07.0		
Tyôsi			34.4	01	48.0		
Kumagaya			57.2	02	51.0		48
Tôkyô			58.2	01	40.4		100
Numadu	24		12.5	01	51.0		

7. Earthquake occurred at about 13 18^{m}, on Mar. 25th, 1926.

By this earthquake, the area including the pacific coast of Hokkaidô and that of the north-eastern part of our main island were shaken. The seismic intensities observed at the stations are

Seismic Intensity
- Strong; Nemuro.
- Rather strong; Kusiro, C. Nosyappu.
- Moderate; Obihiro, Hakodate, Midusawa, C. Otiisi.
- Slight; Miyako, Muroran, C. Erimo, Mito.

The epicentre of this eathquake is about 70 km. to the South of the Cape Erimo. Some of the seismometrical data reported from the meteorological stations are as follows : —

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Obihiro	13	18	50.0		14.0	to S to E	
Nemuro		19	04.5		12.3	S	
Asahikawa			22.7		29.1		66
Kusiro			26.0				
Onahama			27.0		59.2		156
Miyako			43.0		41.0		108
Morioka			49.9		42.8	NE	550
Midusawa			56.0		51.0		550
Tôkyô	20		43.7	01	22.6		90

8. Earthquake occurred at about 16^{h} 04^{m}. on Apr. 1st, 1926.

By this earthquake a several parts of our empire are shaken and show so-

called abnormal distribution of felt area. The seismic intensities observed at the various stations are,

Intensity	Rather strong;	Utunomiya.
	Moderate;	Iida, Tôkyô, Kumagaya, Yokohama, Tyôsi, Kôhu, Morioka, Yokosuka, Onahama.
	Slight;	Oosaka, Numadu, Hikone, Mera, Mito, Mt. Tukuba, Miyako, Isinomaki, Akita, Kusiro, Aidu, Hukui, Turuga.

The depth of this earthquake may be very deep and the epicentre lies at about 220 km. to the South of the cape Onmae, Siduoka Prefecture.

Some of the seismometrical data reported from the meteorological stations are as follows: —

Station	Time of occurrence h	m	s	Duration of PS m	s	First motion	Max. Amp. μ
Hamamatu	16	04	26,0		35		246
Siomisaki			35.3		36.5		233
Tu			35.3		37.5	WSW	1100
Sumoto			39.8		39.2	WNW	90
Iida			42.6		40.3	SSW	746
Oosaka			44.5		40.0	NW	525
Numadu			45.1		41.6	WSW	1625
Toyooka			46.7		41.4	SE	435
Mera			48.4		44.9	SW	199
Nagano			52.1		46.5	SE	478
Kumagaya			55.3		47.5	S	325
Miyako	05	05.0		01	15.0	SSW	300
Yamagata		01.8		01	02.4	NE	
Midusawa		26.0		01	08.0		220
Nagoya		37.0			36.0		1630
Akita		51.0		01	07.0	NNW	550
Hakodate	06	11.0		01	24.0	NE	340
Titizima	09	50.0		01	23.0		

9. Earthquake occurred at about 19h 33m, on Apr. 6th, 1926.

The sôuthern part of Hokkaidô and the pacific coast of Oou were shaken by

this earthquake. The epicentre is at about 120 km to the South of cape Erimo and some of the seismometrical data reported from the meteorological stations are as follows: —

Station	Time of occurrence h	m	s	Duration of PS s	First motion	Max. Amp. μ
Onahama	19	33	02.0	56.0		116
Kusiro			07.0	5.3		1020
Sapporo			08.0	26.8		1394
Miyako			10.0	20.0		192
Morioka			15.1	30.4	NE	30
Hakodate			26.0	44.0	ENE	1600
Isinomaki			30.4	36.4		200
Nemuro			36.1	33.8		370
Ootomari			46.0	36.0		220

10. Earthquake occurred at about 19 h 45 m, on May 26, 1926.

The whole island of Hokkaidô and some parts of Karahuto Saghalien, Oou and Kwantô districts are shaken by this shock. The felt area exceeds 1,255,000 square kilometers and the seismic intensity observed at various stations are

Seismic Intensity
- Rather strong — Muroran, Hakodate, C. Erimo, C. Siriya.
- Moderate — Miyako, Obihiro, Kusiro. Morioka, Midusawa, Sapporo,
- Slight — Isinomaki, Akita, Utunomiya, Nemuro, Sikka.

The epicentre of this earthquake lies at about 100 km to the S of the cape Erimo. Some of the seismometrical data reported from the meteorological stations are as follows:-

Station	Time of occurrence h	m	s	Duration of PS m	s	First mation	Max. Amp. μ
Muroran	19	45	13.0		17.0	NNE	
Miyako			23.0		17.0	WSW	421
Obihiro			26.0		20.0	SE	
Hakodate			30.5		21.0	E	5910
Kusiro			31.0		25.0	SW	772
Morioka			38.2		18.7	N25°E	
Midusawa			40.0		27.0		1200
Isinomaki			42.5		32.0		275

Station	Time of occurrence h	m	s	Duration of PS m	s	First mation	Max. Amp. μ
Sapporo			54.4		24.0	SE	
Akita		46	00.0		45.0	NE	1080
Utunomiya			07.2	01	04.2		298
Mito			21.0	01	10.3		250
Niigata		23.0		45.1		S	952
Kumagaya		24.2	01	10.2			2300
Tyôsi		25.8	01	22.0		SE	
Takada		26.3	01	08.7			118

11. Earthquake occured at about 9h 10m on June 5th, 1926.

By this earthquake, a great part of Kyûsyû and western part of Sikoku and Tyûgoku were shaken. In some districts of south-eastern Kyûsyû, it was felt very strongly. The epicentre of this earthquake is placed in Hyûganada, about 100 km to the NE of Miyazaki.

Some seismometrical data reported from the meteorological station are as follows:-

Station	Time of occurrence h	m	s	Duration of PS m	s	Eirst motion	Max. Amp.
Matuyama	9	10	07.4		31.6	SW	
Nagasaki			11.0		25.0	NNW	807
Miyazaki			11.4		22.0	ENE	1940
Kumamoto			16.4		25.0	NNE	
Hukuoka			18.7		30.0	NNE	
Tadotu			19.0		46.0		141
Ooita			21.5		31.5		80
Huzan			26.0				95
Kyôto			36.4	01	06.0	NE	
Sumoto			56.1		56.8	NE	

12. Earthquake occurred at about 14h 26m on June 29th, 1926.

This earthquake shook the Okinawa Islands strongly and at the city of Naha, many stone-walls were cracked or broken down. It was felt moderately even at Naze about 400 km, apart from the epicentre which situated at about 160 km SE to the city of Naha.

Some seismometrical data reported from the meteorological stations are as follows:-

Station	Time of occurrence			Duration of PS		First motion	Max. Amp.
	h	m	s	m	s		μ
Naze	14	27	09.0		25.3		
Kagosima		28	26.0	01	15.0		840
Nagasaki			32.0	01	09.0		303
Taihoku			32 0		56.4	N56°W	
Ooita			42.3	01	41.3	NE	760
Hukuoka			47.7	01	19 4		375
Huzan			55.0	01	32.0		560
Oosaka		29	25.4	02	42.0		875
Hamada			41.0	01	37.0		

13. Earthquake occurred at about 18h 55m, on July 26th, 1926.

This earthquake originated at the central part of Kinki district. It was felt not only in a whole district of kinki but in some places of San-in, Kyûsyû, Kwantô, Oou and Hokkaidô and show so-called abnormal distribution of felt area. Moreover, the duration of prelmiinary tremor observed even at the stations near tne epicentre are comparatively long. From these facts it may be said that the origin lies in a tolerably greater depth.

Seismic intensity observed at the various stations are

Seismic Intensity	Moderate	Sumoto, Onahama, Ooita
	Slight	Tu, Hikone, Siomisaki, Kyôto, Mt. Unzen Okayama, Yokohama, Tukubasan, Miyako Sakai, Kusiro, Utunomiya, Tôkyô, Wakayama, Turuga, C. Kengasaki.

Some of the seismometrical date reported from the meteorological stations are as follows:-

Station	Time of occurrence			Duration of PS.		First motion	Max. Amp.
	h	m	s	m	s		μ
Titizima	3	53	22.1	01	45.8		42
Tu	55		24.4		36.4	WNW	160
Hikone			30.7		34.8	WNW	688
Matuyama			31.8		46.7	ENE	
Siomisaki			36.0		37.5	NNE	550
Kyôto			36.0		35.1	NE	538
Oosaka			57.8		37.0	NE	1550
Yagi			45.0		37.3	NE	1050

Station	Time of ocurrence h	m	s	Duration of PS. m	s	First motion	Max. Amp.
Nagano			46.1		47.0	toW	163
Husiki			46.1		38.3	N55°W	1125
Numadu			51.6		47.1	SE	1025
Yokohama			54.9		46.5		1400
Kakioka		57.2			52.0		143

14. Earthquake occurred at about 9h 20 , on Aug. 3rd, 1926.

The city of Tôkyô was shaken strongly on Aug. 3rd at about the dinner time. It was felt, by this earthquake, at the greater part of our main island and the seismic intensity observed at the stations are

Seismic Intensity	Very strong	Tôkyô.
	Strong	Yokohama, Yokosuka, Kohu, Mera, Onahama.
	Rather strong	Kakioka, Asio.
	Moderate	Kumagaya, Numadu, Tyôsi Mito, Mt. Tukuba, Utunomiya, Iida, Nagoya.
	Slight	Hatizyô I. Maebasi, Nagano, Hukui, Takayama, Niigata, Gihu, Hikone, Nagaturo.

From the study of direction of initial motion, it is found that this earthquake occurs along a fault line running from the off of Haneda to Kisaradu acrossing transversally the bay of Tôkyô. The depth of focus determined from P and $\overline{P}$ hodograph is adout 40 km.

Some of the seismometrical data reported from the meteorological station are as follows:-

Station	Time of occurnence h	m	s	Duration of PS m	s	First motion	Max. Amp.
Yokohama	9	26	21.5		6.0	SSE	
Tôkyô			23.9		5 9	SSW	17500
Kohu		26.0			18.0	E	1625
Mera		26.6				SSW	
Kakioka		28.3			11.5	NE	
Kumagaya		30.4			12.1	NNW	15000
Maebasi		30.8			21.4	NW	
Numadu		31.0			12.9	NNE	1650
Tyôsi		31.9			12.6	NNW	171

Onahama	37.0	17.3	SSE	1600
Iida	41.3	18.3		1670
Nagano	41.7	24.5	NW	
Niigata	50.5	44.8	NE	1967
Nagoya	51.0	33.2	NE	1150
Kyôto	27 03.5	50.2	ENE	188
Siomisaki	04.2	52.5	NE	42
Isinomaki	06.2	35.6		324
Oosaka	07.3		WSW	864
Kôbe	13.0	56.6		338

15. Earthquake occurred at about 15^{h} 37^{m}, on Sept. 15th. 1926

This disturbance shook the whole island of Hokkaido and Oou besides a part of Karahuto and Kwantô. Felt area was so wide that it exceeds more than 753 000 sq, km. The seismic intensity observed at various stations are

Seismic Intensity		
	Strong	Kusiro, Nemuro, C. Nosyappu.
	Rather strong	Sapporo, Hokadate, C. Erimo, C. Otiisi.
	Moderate	Obihiro, Asahikawa, Onahama, Miyako, Muroran, Morioka, C. Siokubi, C. Esan.
	Slight	Isinomaki, Akita, Mito, Mt. Tukuba, Utunomiya, Asio, Sikka.

The epicentre of this earthquake is about 61 km to the East of C. Erimo and a little damages on timnies, stone-walls and etc. are found in some places in Hokkaidô. Some of the seismometrical data reqorted from the meteorological stations are as follows:-

Station	Time of occurrence h	m	s	Duration of PS s	First motion	Max. Amp.
Sapporo	0	36	39.0	24.0	WNW	
Obihiro		37	15.0			
Kusiro			24.0		SW	
Asahikawa		29.0	14.0		NW	1175
Nemuro		36 4	16.1		ENE	
Miyako		45.0	32.0		SSW	
Muroran		46.0	25.0		E	
Hakodate		46.5	29 5			7850
Morioka		56.6	36.4		N25°E	

Station	Time of occurrence h	m	s	Dnration of PS s	First motion	Max. Amp. μ
Ootomari		38	03.0			1068
Isinomaki			11.5	46.2	toN toE	300
Akita			34.0	52.0	SW	
Mito	35.0	01	07.0			410
Kakioka	41.8	01	12.2			
Tyôsi	47.8	01	15.5			153
Kumagaya	48.5	01	16.0			237

16. Earthquake occurred at about 0h 29m, on Oct. 19th, 1926.

By this disturbance, the pacific coastal region of Hokkaidô and northeastern part of our main island are shaken. The seismic intensity observed at the stations are

Seismic Intensity	Rather strong	Obihiro, C. Esan.
	Moderate	Muroran, Nemuro, Hakodate, Midusawa.
	Silght	Sapporo, Kusiro, Asahikawa, Miyako, Isinomaki, Mito.

The epicentre of this earthquake is about 100 km to the SE of C. Erimo. Some of the seismometrical data reported from the seismometrical stations are as follows:-

Station	Time of occurrence h	m	s	Duration of PS s	First motion	Max. Amp. μ
Muroran	0	29	13.0	18.3	ENE	1230
Obihiro			45·0		NNE	
Sapporo		30	03.8	21.5	NW	812
Nemuro			24 3	16.0	SSE	
Asahikawa			26.0	20.0		760
Hakobate			29.5	21.5	ENE	2270
Miyako			35.0	28.0		
Sendai			55·9	43·4	S	203
Kakioka	31		24.7	01 16.8		597

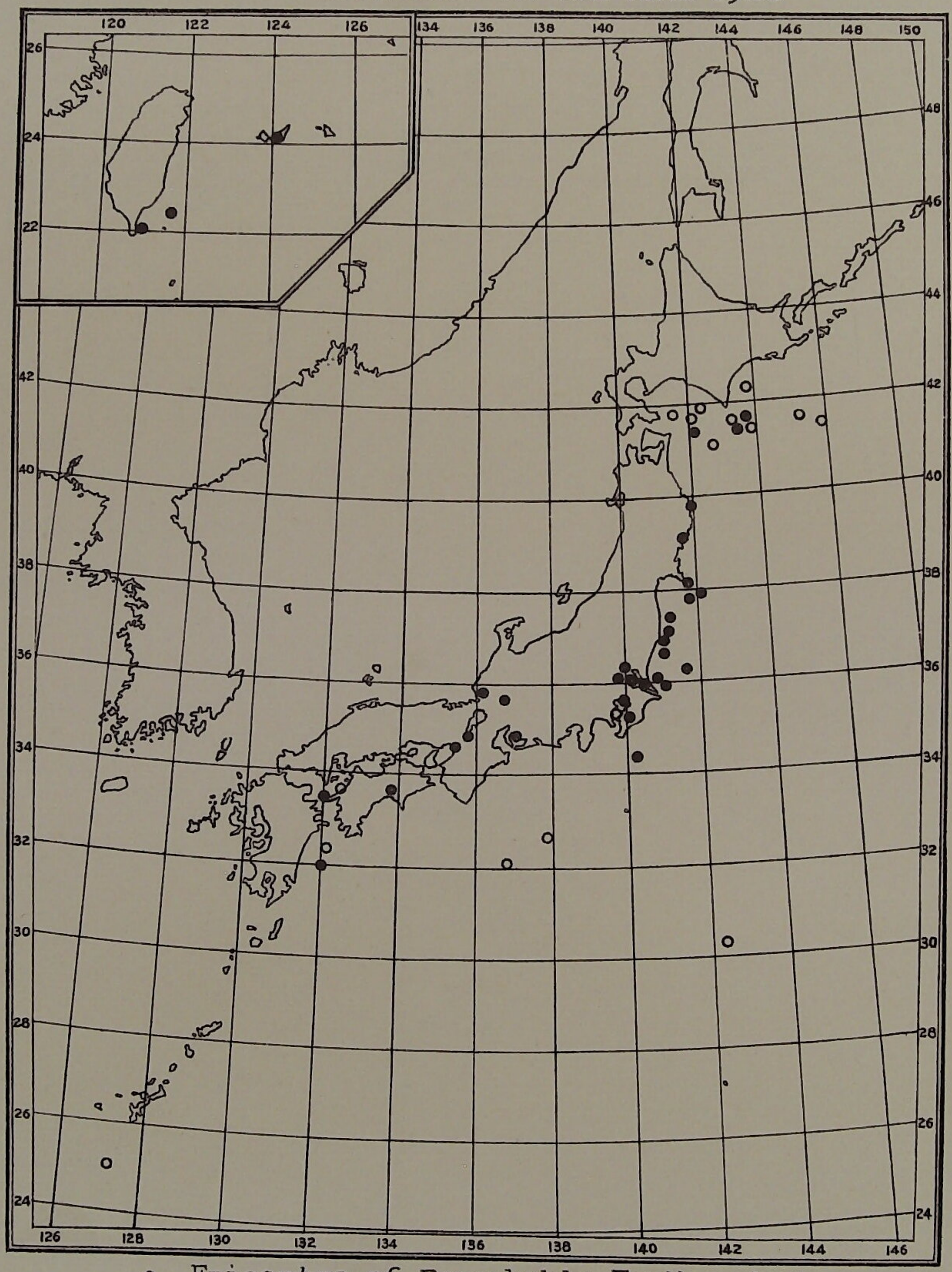
List of Volcanic Activities of Japan in the Year 1926.

Name of Volcanoes	Date Day Time (G.M.T.)	Remarks
Yake-dake λ=137°36' φ= 36°14' h=2053m	Jan 27th 7h 45m	Eruption Ashes fell over a part of Sinano. Emitted sands with a sound like thunder.
Tokati-dake λ=142°40' φ= 43°23' h=2077m	May 7th 16h—	Eruption. Emitted a small volume of ashes. Lava stones of 4 c.m—8 c.m fell over the neibourhood of the crater.
	May 12th 19h—	Rumbliug. The volcano rumbles violently from about 4h. Slight earthquake is felt at the neighbourhood of the mountain. 14th—Smokes are emitted all day long. 17th—On this day, rumbling is not heard but smokes are emitted violently.
	May 24th 2h—	Small eruption.
	May 24th 7h 10m	Great eruption. This eruption is not said to be very strong, but the mud like lavas melt the laiden snow, and this mud-flow rushes down to the Town of Kami-Hurano, and carry away 55 houses and 316 persons are killed. Damged area is 4-5 square km.
	Sept. 8th 7h 25m	Eruption. The smokes are emitted as high as above 7km.
	Sept 10th 6h 47m	Strong eruption.

	Date Day Time (G.M.T.)	Remarks
	Sept 10th 9h 50m	The mud-flow rushes down to the foot of the mountain. On its way, this mud-flow separates in two directions, one rushes down to the village of Kami-Hurano the other to the hot-spring of Biyei. The total cou se of the former is about 2000 m and that of the latter is about 600 m. Ashes fall over the eastern part of Hokkaido. Rumblings and small eruptious are obserued conitnuously till 15th.
	Dec. 10th	Small eruption. A small quantity of mud flow rushes to Arai-zawa.
	Dec. 16th 20h—	Emitted smoke during 20h on 16th and 0h on 17th
	Dec. 24th 23h—	Emitte l smoke. smokes rise as high as about 500m.

Name of Volcanoes	Date Day Time (G.M.T.)	Remarks
Tarumae-yama. $\lambda = 141°23'$ $\varphi = 42°42$ h= 1023m	Oct. 19th	Eruption. The smoke rises up to about 2000m high, and ashes fall to the thickness of about 2 mm over the villages of Syadai and Sira-oi.
	Oct. 23rd 18h 40m	Eruption. Ashes fall only over a neighbourhood of crater.
	Oct. 29th 21h 25m	Eruption. The sound is heard far to Sapporo and ashes fall over Titose Aibetu, Kawakami and Naganum .

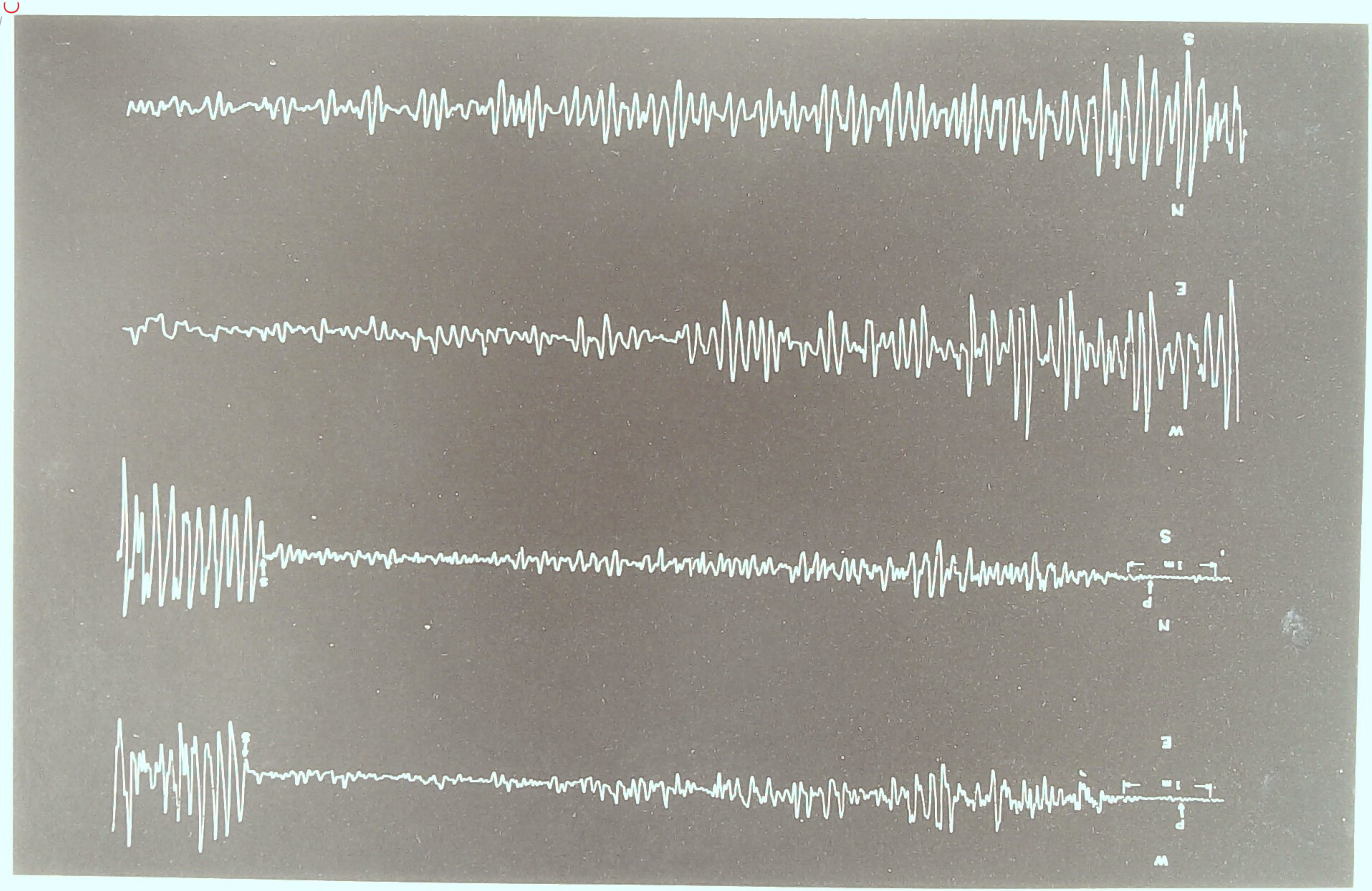
DISTRIBUTION OF EPICENTRES OF REMARKABLE AND MODERATE EARTHQUAKES IN THE YEAR 1926



○ Epicentre of Remarkable Earthquakes

● Epicentre of Moderate Earthquakes

MAP OF JAPAN
SHOWING THE
METEOROLOGICAL AND SEISMOGICAL STATIONS



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