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OF THE

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KOBE, JAPAN.

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From Jan. 1 1932, to Mar. 31 1932.

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KÔBE JAPAN.

SEISMOLOGICAL BULLETIN

of the Imperial Marine Observatory and the Kobe Meteorological Observatory of Japan.

$\varphi = 34^\circ\ 41'\ 18''$ $\lambda = 135^\circ\ 10'\ 51''$ h = 58.3 m Underground : Diluvial Series.

Instruments: Omori's Seismograph. (Horizontal Pendulum)

Wiechert Seismograph. (Horizontal & Vertical)

Jan.

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	15.3		0.001	20
AN:	19.2		0.001	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	6.1	Aperiodic	0.006	121
AN:	6.3	,,	0.006	118
AZ:	4.0	,,	0.004	97

Feb.

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	15.4		0.001	20
AN:	18.5		0.001	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	6.7	Aperiodic	0.008	110
AN:	6.7	,,	0.005	96
AZ:	4.3	5.5	0.005	92

Mar.

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	15.6		0.001	20
AN:	19.0		0.001	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	6.8	Aperiodic	0.006	114
AN:	6.3	,,	0.005	115
AZ:	4.3	,,	0.004	71

No.	Date	Phase	Time G. M. T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
1	Jan. 1	eP	8 47 59					56	In the Wakaura bay, Kii channel.
		S	8 48 06						
		ME	8 48 07	0.8	−3				
		MN	8 48 07			±2			
		eF	8 48 36						
2	Jan. 2	ePE	21 55 08						In the Hyuga nada, SE

No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		eSE	21 55 55						off Miyazaki prefecture.
		ME	21 56 07	3.1	+2				
		MN	21 56 23	3.1		+2			
		eFEN	22 04 ±						
		eFZ	22 02 ±						
3	Jan. 5	S	6 27 48						In the Wakaura bay, Kii channel.
		iE	6 27 52						
		ME	6 27 54	0.6	+3				
		MN	6 28 00			−2			
		eFE	6 28 50						
		eFN	6 28 36						
4	Jan. 5	eE	11 26 34						A distant earthquake. Felt In Guam Isl, Pacific Ocean. Very faint record.
		eN	11 26 35						
		MN	11 27 30	2.6		±2			
		eF	11 38 ±						
5	Jan. 7	iSEN	11 30 10						WSW off Hatidyo Isl. Deep focus earthquake.
		iSZ	11 30 11						
		MEN	11 30 12	3.4	−7	+3			
		MZ	11 30 13	1.8			+2		
		eFEN	11 44 ±						
		eFZ	11 36 ±						
6	Jan. 7	P	17 15 59					90	Upper valley of the Hidaka river, Wakayama prefecture.
		S	17 16 11						
		M	17 16 12		−9	±6			
		FE	17 16 38						
		FN	17 16 34						
		FZ	17 16 43						
7	Jan. 9	iP	10 29 24	1.8	+13	−25		5280	East off New Guinea, Pacific Ocean. Record is deep focus type, P phase is larger and distinct.
		iPZ	10 29 22				−19		
		i	10 29 27						
		FRE	10 31 11		+20				

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude AE	Amplitude AN	Amplitude AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		SE	10	35	26						
		eSN	10	35	25						
		SZ	10	35	25						
		SME	10	35	34	3.1	+26				
		SRN	10	36	26	3.8		−17			
		SRZ	10	36	25	3.8			+3		
		MZ	10	41	00	17.0					
		eFE	10	56	±						
		eFN	10	57	±						
		eFZ	10	58	±						
8	Jan. 11	P	8	47	13					51	In the Wakaura bay, Kii Channel.
		SE	8	47	19						
		SN	8	47	20						
		ME	8	47	20	0.9	−3				
		MN	8	47	20	0.6		−4			
		eMZ	8	47	20						
		the	end	part		overla	ped by	the	fo	llowing	earthquake.
9	Jan. 11	P	8	47	29					51	Ditto.
		SEN	8	47	36						
		SZ	8	47	33						
		ME	8	47	36	0.5	−36				
		MN	8	47	36	0.5		−34			
		MZ	8	47	34				±11		
		FE	8	55	01						
		FN	8	54	45						
		FZ	8	50	52						
10	Jan. 11	P	17	28	52					96	Northern part of the Biwa lake.
		S	17	29	05						
		ME	17	29	08		±2				
		MN	17	29	08	0.5		±2			
		eF	17	29	32						
11	Jan. 11	S	18	39	40						Near Wakayama city.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_E	18	39	40		±3				
		M_N	18	39	40	0.4		−6			
		F	18	40	54						
12	Jan. 15	iP	14	05	17					113	Near Hikone, East coast of the Biwa lake.
		S_{EN}	14	05	32						
		S_Z	14	05	33						
		M_E	14	05	33	0.8	+6				
		M_N	14	05	33			−13			
		M_Z	14	05	33	0.9			+5		
		F_E	14	06	36						
		F_N	14	06	57						
		F_Z	14	06	40						
13	Jan. 17	e_N	7	33	30						In the Wakaura bay, Kii channel.
		i_S ?	7	33	37						
		i_{EN}	7	33	41						
		M_E	7	33	42	0.6	+4				
		M_{NZ}	7	33	42			−4	±2		
		F_E	7	34	30						
		F_N	7	33	23						
		F_Z	7	34	36						
14	Jan. 21	S_E	5	41	42		±2				Local shock. Very small movement.
		F	5	41	52						
15	Jan. 21	eP	14	44	10					429	Near Osumi channel, Southern part of Kyusyu. Felt in Southern part of Kyusyu.
		$\bar{P}_N$	14	44	19						
		S	14	45	08						
		M_E	14	45	28	1.4	−5				
		M_N	14	45	24	1.4		−4			
		M_Z	14	45	23	1.3			±2		
		eF_E	14	50	±						
		eF_N	14	49	±						
		eF_Z	14	48	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
16	Jan. 23	iPZ	16	18	51					46	In the Wakaura bay, Kii channel.
		iSEN	16	18	58						
		iSZ	16	18	57						
		ME	16	18	59	0.5	+7				
		MN	16	18	59			−4			
		MZ	16	19	00				±2		
		FE	16	19	20						
		FN	16	19	18						
		eF	16	21	±						
17	Jan. 24	ePEN	3	54	35					8470	A distant earthquake. North off Solomon Ils ?
		ePZ	3	54	33						
		SE	4	04	18						
		SRN	4	06	03	4.0		±2			
		eMN	4	17	36	18.1		±1			
		eFE	4	21	±						
		eFN	4	24	±						
		eFZ	4	29	±						
18	Jan. 27	eP	12	17	13					408	In the Hyuga Nada, SE off Miyazaki prefecture. Moderate shocks were felt in the epicentral region.
		eE	12	18	03						
		eN	12	18	00						
		SN	12	18	08						
		SZ	12	18	09						
		ME	12	18	32	1.7	+9				
		MN	12	18	26			−8			
		MZ	12	18	19	1.9			−5		
		eFE	12	29	±						
		eFNZ	12	25	±						
19	Jan. 27	ME	18	43	49		±2				Near mouth of the Gokase river, Miyazaki prefecture.
		MN	18	43	48						
		FE	18	44	19						
		FN	18	44	21						
20	Jan. 29	ePE	13	49	28						A distant earthquake.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_N	13	49	26						Near Slomon Ils.
		eP_Z	13	49	25						
		e_Z	13	51	18						
		eL_E	14	00	22	36.2					
		eL_N	14	00	11	37.6					
		M_E	14	00	54	36.2	−5				
		M_N	14	03	32	25.1		−4			
		M_Z	14	04	29	21.8			−7		
		eF_{EZ}	15	12	±						
		eF_N	15	16	±						
21	Jan. 29	eP_N	15	47	24						A distant earthquake.
		eP_Z	15	47	17						An after shock of No 20.
		eL_N	16	00	21						
		eL_Z	16	00	24	21.2					
		M_N	16	01	12	24.2		−2			
		M_Z	16	01	34	26.8			+1		
		eF_E	16	25	±						
		eF_N	16	27	±						
		eF_Z	16	31	±						
22	Jan. 31	e_E	5	31	54	1.2	±2				Near mouth of the Oyodo river, Miyazaki prefecture.
		e_N	5	31	52	1.5		±1			
		eF_E	5	36	±						
		eF_N	5	35	±						
23	Jan. 31	e_E	9	19	40						Near Tôkamati, Nigata prefecture.
		e_N	9	20	53	1.7					
		M_E	9	22	21		±2				
		M_N	9	22	56			±1			
		eF	9	25	±						
24	Feb. 2	e_E	11	00	02						North of the Hatidyo Isl.
		iS	11	01	10	3.0					
		M_E	11	01	23	1.7	−4				
		M_N	11	01	24	4.0		+5			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF$_{EN}$	11	05	±						
		eF$_Z$	11	03	±						
25	Feb. 3	iP	7	36	18	3.8	+3.4			790	NW off Bonin Isl. Weak shocks were felt at Bonin Isl.
		S	7	37	45						
		M$_{1EN}$	7	37	49	2.9	−11	−14			
		M$_Z$	7	37	58	5.7			−6		
		M$_2$E	7	38	24	4.8	+7				
		M$_2$N	7	38	20	5.5		+8			
		eF$_E$	7	48	±						
		eF$_N$	7	49	±						
		eF$_Z$	7	46	±						
26	Feb 3	iP$_N$	22	03	23					56	In the Wakaura bay, Kii channel.
		iP$_Z$	22	03	22						
		iS$_E$	22	03	31						
		M	22	03	31	0.5	+5	+6			
		F$_E$	22	04	42						
		F$_N$	22	04	40						
		F$_Z$	22	04	47						
27	Feb. 4	S	5	27	15						Local shock.
		M	5	27	16		±3				
		F	5	27	21						
28	Feb. 4	e	7	22	24						In the Kii channel.
		S	7	22	32						
		M$_{EN}$	7	22	33	0.5	+3	+3			
		M$_Z$	7	22	34						
		F	7	33	00						
29	Feb. 10	S	14	48	16						In the Wakaura bay, Kii channel.
		M	14	48	16						
		F	14	48	24						
30	Feb. 10	eP$_E$	15	33	19					48	Near Wakayama city.

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		S	15 33 25						
		M_E	15 33 25	0.5	−4				
		M_N	15 33 26			±4			
		M_Z	15 33 25				±2		
		F_E	15 33 50						
		F_N	15 33 52						
31	Feb. 11	eP	3 11 26						Local shock.
		M	3 11 27		±2	±1			
		F	3 11 38						
32	Feb. 14	S	3 01 17						Local shock.
		M	3 01 17		±1	±2			
		F	3 01 23						
33	Feb. 14	P	21 33 45					428	NE off Tanegasima, Ryukyu Ils.
		P_Z	21 33 43						
		S_{EZ}	21 34 43	1.9					
		eS_N	21 34 42						
		M_1E	21 34 44	1.2	−3				
		M_1N	21 34 44	1.6		−3			
		M_1Z	21 34 45	2.0			−2		
		M_2E	21 35 01	1.9	−4				
		M_2N	21 34 50	1.6		+3			
		M_2Z	21 34 56	1.4			+2		
		eF_{EN}	21 42 ±						
		eF_Z	21 39 ±						
34	Feb. 19	P	13 26 31					332	Southeast off Hatidyo Isl. Felt in the Pacific coast of Kwanto and Oou distric. Depth of focus is 150 km.
		iS	13 27 16		−15	−31	−13		
		M_1E	13 27 18	3.2	−35				
		M_1N	13 27 17	2.9		+64			
		M_1Z	13 27 18	2.3			−16		
		M_2E	13 29 21	2.9	+19				
		M_2N	13 28 28	2 6		−25			
		M_2Z	13 28 21	2.9			−10		

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF$_{EN}$	13	39	±						
		eF$_Z$	13	36	±						
35	Feb. 21	i$_N$	1	38	50						In the Kumano nada, ?
		M$_E$	1	39	01	1.4	+4				SE off Kii peninsula.
		M$_N$	1	38	50	1.1		−7			
		M$_Z$	1	38	51	1.4			+6		
		eF$_E$	1	45	±						
		eF$_N$	1	44	±						
		eF$_Z$	1	41	±						
36	Feb. 21	e$_Z$	15	57	08						In the Osumi channel,
		M$_E$	15	58	49	2.2	+3				South of Kyusyu.
		M$_N$	15	59	35						
		M$_Z$	15	58	45				±2		
		eF$_E$	16	04	±						
		eF$_N$	16	06	±						
		eF$_Z$	16	01	±						
37	Feb. 23	e	0	33	36						A distant earthquake,
		eF$_{EN}$	0	40	±						55°8S 29°7W (J.S.A.)
		eF$_Z$	0	38	±						
38	Feb. 24	S$_N$	1	52	48						Local shock.
		M	1	52	53	0.8	±2	±3			Very small movement.
		F$_E$	1	53	20						
		F$_N$	1	53	27						
39	Feb. 25	eP$_E$	6	11	00					203	In the Iyo nada,
		eP$_N$	6	10	58						Inland sea.
		eP$_Z$	6	10	59						
		S$_{EN}$	6	11	26						
		eS$_Z$	6	11	28						
		M$_E$	6	11	38	0.6	−5				
		M$_N$	6	12	27	0.6		−7			
		M$_Z$	6	11	37	1.4			−4		

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF	6	13	±						
40	Feb. 25	e_N	11	56	02						A distant earthquake.
		eF	12	24	±						
41	Feb. 26	P_{EN}	7	01	56		−1.7	−7.5		33	Near Myoken zuan, Osaka prefecture.
		P_Z	7	01	54				−6.0		
		S	7	02	00						
		M_E	7	02	01	0.9	+31				
		M_N	7	02	01	0.6		±22			
		M_Z	7	02	59	0.5			+33		
		F_E	7	05	00						
		F_N	7	04	29						
		F_Z	7	05	22						
42	Feb. 28	eP_N ?	3	01	01					287	Mouth of the Nobu river, Nigata prefecture.
		e_Z	3	00	54						
		e_N	3	01	18						
		S_N	3	01	40						
		S_Z	3	01	44						
		M_E	3	01	45	1.6	−6				
		M_N	3	01	44	1.4		−9			
		M_Z	3	01	46	1.6			−11		
		eF_{EN}	3	05	±						
		eF_Z	3	04	±						
43	Mar. 1	P	7	13	56					56	Near Yagi, Nara prefecture. Weak shocks were felt at Nara and Osaka prefecture.
		S	7	14	04						
		M_E	7	14	04	0.5	−9				
		M_N	7	14	04			+11			
		M_Z	7	14	05				+6		
		F_E	7	14	51						
		F_N	7	14	57						
		F_Z	7	16	08						
44	Mar. 1	P_{EN}	15	42	53					272	Middle basin of the Ooi

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_Z	15	42	59						river, Sizuoka prefecture.
		e_E	15	43	26						Perceptible at Sizuoka,
		S_{EN}	15	43	30	1.0	−7	+3			Yamanashi and Kanagawa
		S_Z	15	43	29						prefecture.
		$\bar{S}$?	15	43	34		−7	+8	+4		
		M_E	15	43	37	1.0	−11				
		M_N	15	43	40	1.6		+8			
		M_Z	15	43	37	1.1			−10		
		eF	15	48	±						
45	Mar. 3	e_E	22	54	29						Very faint record.
		e_N	22	54	26						
		eF	23	01	±						
46	Mar. 7	iP	17	42	05	1.2	+1.3	−3.0	−1.4	266	In the Osaka bay.
		S	17	42	41						Deep focus earthquake.
		M_E	17	42	41	1.2	−3				Focus depth about 250
		M_{NZ}	17	42	42	1.5		+2	−1		km.
		eF	17	47	±						
47	Mar. 8	eM_E	4	37	02	3.0	±3				A distant earthquake.
		eF_E	4	43	±						Kamchatka district.
		eF_N	4	42	±						
48	Mar. 10	S	12	41	42						Basin of the Naka R,
		M	12	41	43		±3	±3			Tokusima prefecture.
		F_E	12	41	59						Very small movement.
		F_N	12	42	02						Masked by microseisms.
49	Mar. 11	S	6	19	59						Local shock.
		M	6	20	04	0.8	±1	±3			Small movement.
		F_E	6	20	22						
		F_N	6	20	27						
50	Mar. 14	S	21	41	07						Ditto.
		M	21	41	08			+4			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		F_E	21	41	25						
		F_N	21	41	26						
51	Mar. 15	eP_N	4	37	36					2825	A distant earthquake.
		e_N	4	38	25						Felt in Guam Isl,
		eS_{EN}	4	42	06						Pacific Ocean.
		eL_E	4	43	10						Probable epicenter:
		M_E	4	46	03	10.4	+6				12°.6 N 146°.3 E,
		M_N	4	45	56						according to Manila's
		eF_E	4	58	±						report.
		eF_N	5	00	±						
		eF_Z	4	52	±						
52	Mar. 17	eP	0	51	48					386	Southern part of the
		i_E	0	51	55						Bungo channel.
		S_E	0	52	40						
		M_E	0	52	53	6.5	+21				
		M_N	0	52	51	5.2		+14			
		M_Z	0	52	47				−7		
		eF_{EN}	1	03	±						
		eF_Z	0	55	±						
53	Mar. 19	P_Z	11	04	41					2305	A distant earthquake.
		eP_E	11	04	53						East off Marianne Ils,
		S_N	11	08	30						Micronesia, Pacific Ocean.
		eL_N	11	11	03						Felt in Guam Isl.
		eL_Z	11	11	11						
		M_E	11	11	56	17.7	±4				
		M_N	11	12	29	17.5		±5			
		M_Z	11	11	46	19.8			±5		
		eF_E	11	36	±						
		eF_N	11	38	±						
		eF_Z	11	30	±						
54	Mar. 25	S	23	47	58						Local shock.
		M	23	47	59		−3	−4			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		F	23	48	12						
55	Mar. 26	P	0	07	43					5830	A distant earthquake.
		iS	0	15	10						Alaska district.
		eL_N	0	24	53						
		M_E	0	27	48	22.2	±2				
		M_N	0	27	28	20.7		±5			
		M_Z	0	30	00	19.0					
		eF_E	0	48	±						
		eF_N	0	49	±						
		eF_Z	0	45	±						
56	Mar. 26	P	9	59	55					4155	A distant earthquake.
		i_E	10	00	43						Banda sea, Molucca Ils.
		i_N	10	01	12						
		S_E	10	05	51	8.9					
		M_N	10	15	17	20.0		±4			
		M_Z	10	14	59	21.5			±5		
		eF_E	10	39	±						
		eF_N	10	38	±						
		eF_Z	10	48	±						

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SUMOTO JAPAN.

SEISMOLOGICAL BULLETIN

A Branch Station of the Kobe Meteorological Observatory of Japan.

$\varphi = 34^\circ\ 21'$ $\lambda = 134^\circ\ 53'$ h = 109.0 m. Underground : Cretaceous.

Instrument : Omori's Seismograph. (Horizontal Pendulum.) Wiechert Seismograph. (Horizontal & Vertical)

Jan.

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	16.8	2.8	0.004	20
A_N:	16.2	2.1	0.001	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	5.0	Aperiodic	0.004	104
A_N:	4.5	„	0.003	101
A_Z:	4.2	„	0.002	64

Feb.

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	16.8	3.1	0.001	20
A_N:	16.5	2.2	0.001	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	4.6	Aperiodic	0.004	111
A_N:	4.6	„	0.003	102
A_Z:	4.2	„	0.003	67

Mar.

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	17.2	2.8	0.001	20
A_N:	17.4	2.2	0.0004	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	4.7	Aperiodic	0.004	113
A_N:	4.4	„	0.003	110
A_Z:	4.2	„	0.003	6.8

No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
1	Jan. 1	P	8 47 54					30	In the Wakaura bay, Kii channel.
		S	8 47 58						
		M_{EN}	8 47 58	0.3	+4	−6			
		M_Z	8 48 00				−1		
		F	8 48 37						
2	Jan. 2	eP_E	21 54 54					346	In the Hyuga nada, SE

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_N	21	54	55						off Miyazaki prefecture.
		e_E	21	55	02						
		S_E	21	55	38						
		S_N	21	55	45						
		M_E	21	55	50	1.9	+1				
		M_N	21	55	57	1.9		−3			
		F	22	00	±						
3	Jan. 5	eP	2	51	00					46	In the Wakaura bay, Kii channel.
		eS	2	51	06						
		M_{EN}	2	51	07		−1	±1			
		F	2	51	24						
4	Jan. 5	iP	6	27	37					38	Ditto.
		S	6	27	42						
		M_{EN}	6	27	44	0.4	−1	−4			
		M_Z	6	27	44				±1		
		F	6	28	36						
5	Jan. 5	eP	13	00	17						In the Kii channel.
		M_E	13	01	07	2.4	−1.7				
		M_N	13	01	18	1.9		+1.5			
		F	13	02	22						
6	Jan. 7	eP_E ?	11	28	51					561	WSW off Hatidyo Isl, Deep focus earthquake.
		eS_{EN}	11	30	07						
		M_E	11	30	09	3.1	−5				
		M_N	11	30	11	2.4		−2			
		M_Z	11	30	09	3.2			−2		
		F	11	37	±						
7	Jan. 7	P	17	15	57					78	Upper valley of the Hidaka river, Wakayama prefecture.
		S	17	16	07						
		M_E	17	16	08	0.5	−7				
		M_{NZ}	17	16	08	0.4		+6	+2		
		F	17	16	35						

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
8	Jan. 9	iP	10 29 21		+11.7	−6.9	−25.0	4265	A distant earthquake.
		PM_E	10 29 28	2.6	−35				East off New Guinea,
		PM_N	10 29 29	2.6		−22			Pacific Ocean.
		PM_Z	10 29 27	2.3			+45		Deep focus earthquake.
		S_E	10 35 24						
		S_N	10 35 23						
		S_Z	10 35 21						
		SM_E	10 35 32	4.1	−25				
		SM_N	10 35 30	3.8		+17			
		SM_Z	10 35 27	3.0			−5		
		eL	10 40 ±						
		M_E	10 41 08	10.3	−7				
		M_N	10 42 17	12.2		−11			
		M_Z	10 40 32	13.1			−8		
		F_{EN}	10 58 ±						
		F_Z	10 55 ±						
9	Jan. 9	P	14 48 48					22	In the Wakaura bay,
		S	14 48 51						Kii channel.
		M	14 48 51		−2	−1			
		F	14 49 08						
10	Jan. 11	P	8 47 07					29	Ditto.
		S	8 47 11						
		M_E	8 47 11	0.4	−4				
		M_N	8 47 12	0.3		−7			
		M_Z	8 47 13						
		The end part overlaped by the following earthquake.							
*11	Jan. 11	eP	8 47 21					26	Ditto.
		S	8 47 24						Perceptible.
		M_E	8 47 29	0.9	−53				
		M_N	8 47 29	0.4		−61			
		M_Z	8 47 33				−18		
		C_{EN}	8 47 46						
		F_E	8 51 13						
		F_N	8 50 40						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		F_Z	8	50	±						
12	Jan. 11	P	18	39	28					41	Near Wakayama city.
		S	18	39	34						
		M	18	39	34		−4	−8	±2		
		F	18	40	05						
13	Jan. 13	P	1	12	03					26	In the Wakaura bay, Kii channel.
		S	1	12	06						
		M_E	1	12	06	0.2	+2				
		M_N	1	12	07	0.3		−5			
		M_Z	1	12	07				−2		
		F	1	12	26						
14	Jan. 15	eP	14	05	35					65	Near Hikone, East coast of the Biwa lake.
		S	14	05	43						
		M_E	14	05	47	1.0	−1.4				
		M_N	14	05	49	1.4		+1.5			
		F	14	06	30						
15	Jan. 15	eP	16	46	00						Near Wakayama city.
		F	16	46	12						
16	Jan. 16	S	15	11	15						Ditto.
		M_{EN}	15	11	15		±1	±1			
		F	15	11	22						
*17	Jan. 17	P	7	33	23		+1.0	−1.0	−0.8	30	In the Wakaura bay, Kii channel.
		S	7	33	27						Perceptible.
		M_E	7	33	27	0.2	+8				
		M_N	7	33	28	0.4		−20			
		M_Z	7	33	28	0.2			±2		
		M_2N	7	33	32	0.4		−11			
		F	7	34	59						
18	Jan. 21	eP_E	14	44	05					376	Near Ôsumi channel,

No.	Date	Phase	Time G.	M	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_N	14	44	08						Southern part of Kyusyu.
		S_{EN}	14	44	57						Felt in Southern part of
		S_Z	14	45	01						Kyusyu.
		M_E	14	45	01	2.1	+3				
		M_N	14	45	01	2.1		−5			
		M_Z	14	45	03	1.0			−1		
		F_{EN}	14	47	51						
		F_Z	14	46	±						
19	Jan. 22	eP	16	13	43					38	In the Kii channel.
		S	16	13	48						
		M_E	16	13	49	0.4	+4				
		M_N	16	13	49	0.5		±5			
		F	16	14	22						
20	Jan. 23	P	16	18	46					27	In the Wakaura bay,
		S	16	18	50						Kii channel.
		M_E	16	18	50	0.4	−5				
		M_N	16	18	51	0.4		−5			
		M_Z	16	18	50	0.5			−1		
		F	16	19	34						
21	Jan. 24	eP_E	3	54	29					8790	A distant earthquake.
		eP_N	3	54	37						North off Solomon Ils.
		eP_Z	3	54	32						
		eS_E	4	04	25						
		eS_N	4	04	41						
		F	4	37	±						
22	Jan. 24	eP	22	26	33					33	In the Wakaura bay,
		S	22	26	38						Kii channel.
		M_E	22	26	38		±1				
		M_N	22	26	38	0.4		−2			
		F	22	26	53						
23	Jan. 25	eP	10	55	36					17	Near Wakayama city.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		S	10	55	39						
		MEN	10	55	39	10.3	+1	−2			
		F	10	55	55						
24	Jan. 25	P	11	40	46					31	In the Wakaura bay, Kii channel.
		S	11	40	50						
		ME	11	40	50		+1				
		MN	11	40	50			−2			
		F	11	40	59						
25	Jan. 27	PE	12	16	51					503	In the Hyuga nada, SE off Miyazaki prefecture. Moderate shocks were felt near the epicentral coast.
		PN	12	16	52						
		PZ	12	16	50						
		SE	12	18	02						
		SNZ	12	17	58						
		ME	12	18	17	2.3	−12				
		MN	12	18	03	2.3		−11			
		MZ	12	18	05	1.4			−3		
		FEN	12	25	23						
		FZ	12	20	42						
26	Jan. 27	eP	18	42	45						Mouth of the Gokase R, Miyazaki prefecture.
		SEZ	18	43	29						
		SN	18	43	30						
		ME	18	43	38	1.7	+2				
		MN	18	43	33	1.5		−2			
		MZ	18	43	30	0.9			−1		
		FEN	18	45	46						
		FZ	18	44	±						
27	Jan. 29	e	0	24	43						Near Miyosi, Hirosima prefecture.
		S	0	24	45						
		MEN	0	24	46	0.5	+1	±1			
		F	0	25	04						
28	Jan. 29	PEZ	13	49	34					4315 ?	A distant earthquake.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		P_N	13	49	33						Near Solomon Ils.
		S_E	13	56	06						
		S_{NZ}	13	55	26						
		L_{EN}	14	00	26						
		M_1E	14	00	27	32.3	−217				
		M_N	14	02	39	25.5		+125			
		M_Z	14	04	26	22.3			±44		
		M_2E	14	03	11	23.6	−110				
		F_E	16	30	±						
		F_N	16	28	±						
29	Jan. 31	eP	5	30	46						Near Mouth of the Oyodo river, Miyazaki prefecture.
		S_N	5	31	29						
		M_E	5	31	45	1.7	+1				
		M_N	5	31	34	1.7		±1			
		M_Z	5	31	32	1.6			±1		
		F	5	33	±						
30	Jan. 31	eP	9	20	15					465	Near Tôkamachi, Niigata prefecture.
		S	9	21	18						
		M_E	9	21	32	2.4	−1				
		M_N	9	21	36	2.4		+1			
		F	9	23	±						
31	Jan. 31	eP	19	48	29						Middle basin of the Tesio river, Hokkaido.
		L	19	53	±						
		F	20	07	±						
32	Feb. 1	S	21	25	25						Near Syohara, Hirosima prefecture.
		M_E	21	25	28		+1				
		M_N	21	25	28	0.4		±2			
		F	21	26	03						
33	Feb. 2	eP_E	11	00	26					347	North off the Hatidyo Isl.
		eP_N	11	00	25						
		S	11	01	12						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_E	11	01	22	2.3	+2				
		M_N	11	01	24	2.6		+3			
		F	11	04	±						
34	Feb. 3	iP_{EN}	4	25	41		−2.7	+2.0		435	South far off Ensyu nada.
		iP_Z	4	25	40				+1.8		
		eS_E	4	26	40						
		eS_N	4	26	39						
		M_E	4	26	42	3.3	−3				
		M_N	4	26	40	2.1		−4			
		F	4	29	±						
35	Feb. 3	P_{EN}	7	36	19					619	Northwest off Bonin Isl. Weak shocks were felt in Bonin Isl.
		P_Z	7	36	20						
		S_E	7	37	42						
		S_N	7	37	43						
		M_E	7	37	47	3.1	−14				
		M_N	7	37	46	3.6		+16			
		F	7	44	±						
*36	Feb. 3	iP	22	03	17		+0.9	−2.0	−2.2	35	In the Wakaura bay, Kii channel. Perceptible.
		S	22	03	22						
		M_{EN}	22	03	23	0.4	−15	−33			
		M_Z	22	03	22	0.4			−6		
		F	22	05	±						
37	Feb. 4	eP	7	22	17					20	In the Kii channel.
		S	7	22	20						
		M_{EN}	7	22	20	0.3, 0.4	±1	±2			
		F	7	22	40						
38	Feb. 10	eP	3	49	18					35	Near Wakayama city.
		S	3	49	23						
		M_E	3	49	24		−2				
		M_N	3	49	24			+2			
		F	3	49	39						

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
39	Feb. 10	P	9 50 37					31	In the Wakaura bay,
		S	9 50 41						Kii channel.
		M	9 50 42	0.4	+3	−4			
		F	9 51 08						
40	Feb. 10	P	14 48 03					29	Ditto.
		S	14 48 07						
		M_{EN}	14 48 08	0.3	+3	−3			
		M_Z	14 48 08	0.4			+1		
		F	14 48 27						
41	Feb. 10	P	15 33 15					31	Near Wakayama city.
		S	15 33 19						
		M_E	15 33 19	0.4	−6				
		M_N	15 33 21	0.4		+7			
		M_Z	15 33 19	0.3			+2		
		F	15 33 50						
42	Feb. 10	S	16 56 27						Ditto.
		M_E	16 56 28		−2				
		M_N	16 56 28	0.3		+3			
		F	16 56 40						
43	Feb. 10	S	17 25 49						Ditto.
		M_{EN}	17 25 49		+2	−1			
		F	17 25 53						
44	Feb. 12	S	2 07 49						East far off Karenko,
		M_E	2 08 06	2.5	+1				Formosa.
		M_N	2 08 07	1.5		−1			
		F	2 11 ±						
45	Feb. 13	P	13 32 37					33	Near Wakayama city.
		S	13 32 42						
		M_E	13 32 42		−2				
		M_N	13 32 42	0.3		−4			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		F	13	33	15						
46	Feb. 14	P	8	02	03					27	Local shock.
		S	8	02	07						
		M_E	8	02	07	0.3	−2				
		M_N	8	02	07	0.3		−4			
		F	8	02	32						
47	Feb. 14	iP	21	33	37		+0.9	−1.0	−1.5	411	NE off Tanegasima, Ryukyu Ils.
		S_{EN}	21	34	32						
		S_Z	21	34	33						
		M_E	21	34	51	1.9	±3				
		M_N	21	34	37	1.7		−5			
		M_Z	21	34	51	1.9			−2		
		F_{EN}	21	38	04						
		F_Z	21	36	±						
48	Feb. 15	eP_N	1	07	52						In the Hyuga nada, East off Miyazaki prefecture.
		eS_{EN}	1	08	24						
		M_E	1	08	33	2.1	−1				
		M_N	1	08	35	1.1		−1			
		F	1	10	±						
49	Feb. 15	P	8	16	58					29	In the Wakaura bay, Kii channel.
		S	8	17	02						
		M_{EZ}	8	17	02		+4		±1		
		M_N	8	17	02	0.3		±5			
		F	8	17	32						
50	Feb. 16	S_N	19	56	12						Ditto.
		M_N	19	56	12						
		F	19	56	22						
51	Feb. 16	eP	20	18	24					26	Ditto.
		S	20	18	27						
		M_E	20	18	28	0.4	+1				

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		M_N	20 18 28	0.3		−1			
		F	20 18 41						
52	Feb. 17	S	12 45 51						In the Kii channel.
		M_E	12 45 51		−2				
		M_N	12 45 52	0.4		−6			
		F	12 46 14						
53	Feb. 19	P	3 13 57					36	Near Wakayama city.
		S	3 14 02						
		M_E	3 14 03		±1				
		M_N	3 14 03	0.4		−2			
		F	3 14 10						
54	Feb. 19	P	13 26 32		−1.8	+2.0	+0.7	343	SE off Hatidyo Isl, Felt along the Pacific coast of Kwanto and Oou district. Focus depth is 150km.
		S	13 27 18						
		M_E	13 27 21	3.4	−23				
		M_N	13 27 19	3.0		+36			
		M_Z	13 27 19	2.9			−9		
		F_{EN}	13 34 ±						
		F_Z	13 32 ±						
55	Feb, 21	eP	1 38 48					460	Faint record. In the Kumano nada, ? SE off Kii peninsulla.
		eS	1 39 50						
		F	1 43 ±						
56	Feb. 21	eP	15 56 43					714	In the Osumi channel, South off Kyusyu.
		S_E	15 58 18						
		S_N	15 58 20						
		M_E	15 58 39	3.0	−3				
		M_N	15 58 38	2.2		+3			
		F	16 02 ±						
57	Feb. 23	cP_E	0 32 53						A distant earthquake.
		e_E	0 33 33						
		e_N	0 33 15						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eZ	0	33	29						
		M_E	0	33	43	2.6	−2				
		M_N	0	33	54	2.4		−2			
		M_Z	0	33	38	2.8			+2		
		F	0	39	±						
58	Feb. 25	P_{EZ}	6	10	46					245	In the Iyo nada,
		P_N	6	10	45						Inland sea.
		S_{EZ}	6	11	20						
		S_N	6	11	16						
		M_E	6	11	22	1.9	−7				
		M_N	6	11	21	1·1		−9			
		M_Z	6	11	29	1.5			+3		
		F	6	13	36						
59	Feb. 25	eP_N	12	24	02					72	In the Kii channel.
		S	12	24	12						
		M_E	12	24	13	0.3	+3				
		M_N	12	24	13	0.4		−3			
		F	12	24	46						
60	Feb. 26	S	5	39	23						Basin of the Arita R,
		M_E	5	39	24		+1				Wakayama prefecture.
		M_N	5	39	24	0.3		+2			
		F	5	39	56						
61	Feb. 26	P	7	02	02		−0.5	−2.0	+1.5	74	Near Myoken zuan,
		S	7	02	12						Osaka Prefecture.
		M_E	7	02	14	0.6	+5				
		M_N	7	02	12	0.4		−13			
		M_Z	7	02	15	0.9					
		F	7	03	46						
62	Feb. 28	eP	0	00	40					75	Local shock. ?
		eS	0	00	50						
		M_E	0	00	59	1.5	+1				

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_N	0	00	51	0.9		−1			
		F	0	03	±						
63	Feb. 28	P	3	01	08					361	Mouth of the Nobu R, Niigata prefecture.
		S_E	3	01	55						
		S_{NZ}	3	01	57						
		M_E	3	02	08	2.6	+3				
		M_N	3	02	04	2.2		−3			
		M_Z	3	02	03	1.9			+1		
		F_{EN}	3	07	±						
		F_Z	3	04	±						
64	Feb. 28	eP	4	21	32					62	Near Tadotu, Sikoku district. Time is uncertain.
		S	4	21	40						
		M_E	4	21	40	0.3	−3				
		M_N	4	21	40	0.4		±4			
		F	4	22	19						
65	Feb. 29	eS	4	06	10						Local shock.
		F	4	06	16						
66	Feb. 29	eP	7	09	36						Ditto.
		eF	7	11	±						
67	Mar. 1	eS	4	53	39						Ditto.
		F	4	53	52						
68	Mar. 1	P	7	14	00					76	Near Yagi, Nara prefecture. Weak shocks were felt Nara and Osaka prefecture.
		S	7	14	10						
		M_E	7	14	10	0.4	−2				
		M_N	7	14	10	0.3		+4			
		F	7	15	13						
69	Mar. 1	eP_N	15	43	03					292	Middle basin of the Ooi river, Sizuoka prefecture. Perceptible at Sizuoka, Yamanasi and Kanagawa
		S	15	43	43						
		M_E	15	43	48	1.5	−2				

International Seismological Centre

No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		M_N	15 43 52	1.7		−3			prefecture.
		M_Z	15 43 58	1.2			−1		
		F	15 45 11						
70	Mar. 1	P	16 39 06					31	In the Wakaura bay,
		S	16 39 11						Kii channel.
		M_{EN}	16 39 12	0.3	−4	−3			
		F	16 39 34						
71	Mar. 5	eP	8 49 59					303	Near Sata cape,
		S	8 50 40						Sikoku district.
		M_E	8 50 50	1.6	+1				
		M_N	8 50 45	1.3		−1			
		F	8 51 53						
72	Mar. 7	eS	0 52 40						Near Hatidyo Isl.
		M_E	0 52 41	0.4	±1				
		M_N	0 52 46	0.6		±1			
		F	0 52 57						
73	Mar. 7	P	17 42 06					278	In the Osaka bay.
		S_E	17 42 43						Deep focus earthquake,
		S_{NZ}	17 42 44						focus depth about 250km.
		M_{EN}	17 42 44	1.7, 07	−3	+2			
		M_Z	17 42 45	1.2			+1		
		F	17 44 ±						
74	Mar. 8	P_{EN}	4 36 01						A distant earthquake.
		P_Z	4 36 02						Kamchatka district.
		F	4 43 ±						
75	Mar. 10	P	12 41 19					74	Basin of the Naka R,
		S	12 41 29						Tokusima prefecture.
		M_{EN}	12 41 30	0.3	+4	−12			
		M_Z	12 41 32	0.3			+3		
		F	12 42 16						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
76	Mar. 11	P	17	49	12					27	In the Wakaura bay,
		S	17	49	16						Kii channel.
		M_E	17	49	16	0.2	+9				
		M_{NZ}	17	49	16	0.3		−15	±2		
		F	17	50	41						
77	Mar. 13	eP	1	33	34						Near Wakayama city.
		S	1	33	37						
		M_E	1	33	37		+2				
		M_N	1	33	37	0.4		−2			
		F	1	33	54						
78	Mar. 14	eS_E	13	57	06						West far off Kunsan,
		eS_N	13	57	12						Korea, in the Yellow sea.
		M_E	13	57	21	1.9	±0.4				
		M_N	13	57	30	1.9		+0.5			
		M_Z	13	57	19	1.4			−0.6		
		F	14	00	±						
79	Mar. 15	P_{EN}	4	37	38		−1.8	+2.3		2745	A distant earthquake.
		P_Z	4	37	39				+3.0		Felt in Guam Isl,
		S	4	42	01						Pacific Ocean.
		eL_{EN}	4	43	22						
		M_E	4	43	36	11.6	+10				
		M_N	4	46	34	10.9		+11			
		M_Z	4	43	36	10.9			+3		
		F_E	4	54	±						
		F_N	4	56	±						
		F_Z	4	51	±						
80	Mar. 17	P_{EN}	0	51	37					431	Southern part off the
		P_Z	0	51	42						Bungo channel.
		S_{EN}	0	52	29						
		S_Z	0	52	27						
		M_E	0	52	29	2.6	+19				
		M_N	0	52	31	1.9		−17			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_Z	0	52	34	1.8			+5		
		F_E	1	02	±						
		F_N	1	01	±						
		F_Z	0	56	±						
81	Mar. 17	eP ?	7	20	44						Off Hatidyo Isl. ?
		F	7	23	±						
82	Mar. 19	P_{EN}	11	04	35					2350	A distant earthquake. East off Marianne Ils, Micronesia. Felt in Guem Isl.
		eP_Z	11	04	42						
		S_E	11	08	30						
		S_N	11	08	26						
		L_E	11	11	25						
		L_N	11	11	13						
		M_E	11	14	10	15.0	+13				
		M_N	11	12	33	12.4		−20			
		M_Z	11	12	22	14.1			−6		
		F_E	11	31	±						
		F_N	11	27	±						
		F_Z	11	23	±						
83	Mar. 21	P	3	15	35					25	In the Wakaura bay.
		S	3	15	38						
		M_{EN}	3	15	38	0.4	+3	+4			
		M_Z	3	15	38						
		F	3	16	14						
84	Mar. 22	eP	14	07	08						Local shock. ?
		F	14	09	±						
85	Mar. 22	eP	20	26	53					?	Local shock. ?
		S	20	27	04						
		M_E	20	27	05		±0.4				
		M_N	20	27	05	0.5		−0.9			
		F	20	27	39						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
86	Mar. 26	PEZ	0	07	43					5880	A distant earthquake.
		PN	0	07	44						Alaska district.
		SEN	0	15	13						
		SZ	0	15	14						
		eLEN	0	18	±						
		ME	0	29	54	15.0	−11				
		MN	0	30	24	16.9		+44			
		MZ	0	29	51	19.4			+10		
		F	0	55	±						
87	Mar. 26	PNZ	9	59	51			−1.8	−1.5	4105	A distant earthquake.
		PE	9	59	52		−0.4				Banda sea, Molucca Ils.
		S	10	05	44						
		LE	10	13	00						
		LN	10	12	44						
		ME	10	14	01	14.5					
		MN	10	16	54	17.7	−17	+44			
		MZ	10	14	42	14.1			−17		
		FEN	10	36	±						
		FZ	10	26	±						
88	Mar. 27	eP	22	54	24					39	In the Wakaura bay,
		S	22	54	30						Kii channel.
		ME	22	54	30		±1				
		MN	22	54	30	0.3		−3			
		MZ	22	54	30				+1		
		F	22	55	09						
89	Mar. 30	eP	23	39	45					26	Ditto.
		S	23	39	48						
		ME	23	39	48		+2				
		MN	23	39	49	0.4		−3			
		F	23	40	08						

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TOYOOKA JAPAN.

SEISMOLOGICAL BULLETIN

A Branch Station of the Kobe Meteorological Observatory of Japan.

$\varphi = 35^\circ\ 32'$ $\lambda = 134^\circ\ 49'$ h = 32.2 m. Underground : Tertiary.

Instrument : Omori's Seismograph (Horizontal Pendulum.) Wiechert Seismograph. (Horizontal & Vertical)

Jan.

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	20.8	3.0	0.002	20
A_N:	9.3	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	5.5	10.0	0.003	106
A_N:	5.6	10.0	0.006	98
A_Z:	3.9	4.3	0.002	87

Feb.

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	20.8	3.0	0.002	20
A_N:	9.9	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	5.8	10.0	0.003	96
A_N:	6.0	10.0	0.004	99
A_Z:	3.8	4.1	0.002	41

Mar.

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	20.8	3.0	0.002	20
A_N:	9.9	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
A_E:	5.6	10.0	0.004	99
A_N:	6.2	10.0	0.004	85
A_Z:	3.7	3.6	0.002	48

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
1	Jan. 9	iP_{EZ}	10	29	30		+6.5		−23.0	4365	A distant earthquake. East off NewGuinea, Pacific Ocean. Deep focus earthquake.
		iP_N	10	29	31			−15.3			
		S_{EZ}	10	35	38						
		S_N	10	35	39						
		eL_E	10	40	44						
		eF_E	10	53	±						
		eF_Z	10	50	±						

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
2	Jan. 11	iPE	17	28	52					81 ?	Nothern part of the Biwa Lake.
		iSEN	17	29	03						
		iSZ	17	29	05						
		ME	17	29	03		−7				
		MN	17	29	05			+8			
		FE	17	29	31						
		FN	17	29	39						
		FZ	17	29	49						
3	Jan. 15	iP	14	05	18					128	Near Hikone, East coast of the Biwa Lake.
		iS	14	05	35						
		MEN	14	05	35		+8	−16			
		MZ	14	05	36						
		FE	14	06	10						
		FN	14	06	18						
		FZ	14	05	56						
4	Jan. 21	ePE	16	44	15						Local shock.
		ePN	16	44	17						
		SE	16	45	20						
		SN	16	45	18						
		MN	16	45	20			+5			
		FE	16	45	56						
		FN	16	46	48						
5	Jan. 27	ePEZ	12	17	19					468	In the Hyuga nada, Southeast off Miyazaki prefecture. Moderate shocks were felt in the near epicentral coast.
		PN	12	17	19						
		SEZ	12	18	21						
		SN	12	18	22						
		ME	12	18	30		+11				
		MN	12	18	31			−17			
		MZ	12	18	30				−6		
		FE	12	20	14						
		FN	12	20	07						
		FZ	12	20	21						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
6	Jan. 29	iPEZ	13	49	33					5300	A distant earthquake.
		iPN	13	49	42						Near Solomon Ils.
		iLE	14	00	30						
		iLN	14	00	51						
		ME	14	04	00	19.6	+10				
		MN	14	04	05	22.8		−15			
		eF	14	59	±						
7	Jan. 31	iP	10	47	48					17	Local shock.
		iS	10	47	50						
		M	10	47	50		±7	−32	±2		
		FE	10	48	05						
		FN	10	48	11						
		FZ	10	48	15						
8	Feb. 3	iP	2	27	35					20	Ditto.
		ePZ	2	27	34						
		iS	2	27	38						
		iSZ	2	27	37						
		MEN	2	27	38		−9	±13			
		FE	2	27	50						
		FN	2	27	57						
		eFZ	2	28	±						
9	Feb. 3	iP	7	36	31		−3.1	+4		681	Northwest off Bonin Isl,
		iPZ	7	36	29				(−7.3) ?		Weak shocks were felt
		SEZ	7	38	03						in Bonin Isl.
		SN	7	38	02						
		ME	7	38	08	2.4	+23				
		MN	7	38	07	3.7		−56			
		MZ	7	38	10				−20		
		FE	7	39	55						
		eFN	7	39	41						
		eFZ	7	39	09						
10	Feb. 14	iPEZ	21	33	48					475	Northeast off Tanega

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		iP_N	21	33	49						Sima, Ryukyu Ils.
		eS_{EZ}	21	35	53						Faint record.
		iS_N	21	35	53						
		eF_E	21	36	31						
		eF_N	21	36	19						
		eF_Z	21	36	39						
11	Feb. 19	iP	13	26	38		+0.3	−0.2		390	Southeast off Hatidyo
		iP_Z	13	26	37				−0.4		Isl. Felt in the Pacific
		iS	13	27	30						coast of Kwanto and Oou
		iS_Z	13	27	31						district.
		M_E	13	27	33	2.4	+33				Deep focus earthquake.
		M_N	13	27	34	3.3		−50			
		M_Z	13	27	37	2.6			+78		
		eF_E	13	31	14						
		eF_N	13	30	±						
		eF_Z	13	30	22						
12	Feb. 21	eP_E	15	58	27						In the Osumi channel.
		eP_N	15	58	19						South of Kyusyu.
		eS_E	15	59	06						Faint record.
		eS_N	15	58	58						
		M_N	15	59	12			−6			
		eF_E	16	00	22						
		eF_N	16	00	28						
13	Feb. 25	iP	6	11	04					206	In the Iyo Nada,
		iP_Z	6	11	08						Inland Sea.
		S_E	6	11	33						
		S_N	6	11	31						
		S_Z	6	11	32						
		M_E	6	11	41	0.9	−8				
		M_N	6	11	44	0.9		−8			
		M_Z	6	11	41	0.8			+5		
		eF_E	6	12	31						
		eF_N	6	12	39						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF$_Z$	6	12	24						
14	Feb. 26	iP	7	02	03					73	Near Myoken zan, Osaka prefecture.
		S	7	02	13						
		eS$_Z$	7	02	13						
		M$_E$	7	02	15	0.4	−18				
		M$_N$	7	02	14	0.4		−20			
		F$_E$	7	03	32						
		F$_N$	7	03	25						
		F$_Z$	7	03	52						
15	Feb. 28	eP$_E$	0	00	15						Upper basin of the Ota river, Hirosima prefecture.
		eP$_N$	0	00	18						
		S$_E$	0	00	42						
		S$_N$	0	00	43						
		eM$_E$	0	00	46		+3				
		eM$_N$	0	00	51			−5			
		F$_E$	0	01	21						
		F$_N$	0	01	21						
16	Feb. 29	iP$_E$	3	00	57					230	Local shock. ?
		iP$_N$	3	00	58						
		eS$_E$	3	01	29						
		iS$_N$	3	01	29						
		M$_E$	3	01	47		+4				
		M$_N$	3	01	34			+6			
		F$_E$	3	02	47						
		F$_N$	3	02	44						
17	Mar. 1	eP$_E$	7	14	08					131	Near Yagi, Nara prefecture. Weak shocks were felt at the Osaka and Nara prefecture.
		S$_E$	7	14	25						
		S$_N$	7	14	25						
		M$_E$	7	14	26		±4				
		F$_E$	7	14	55						
		F$_N$	7	14	55						

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
18	Mar. 1	iP_E	15 43 05					267	Middle basin of the Ooi river, Sizuoka prefecture. Perceptible at Sizuoka, Yamanasi and Kanagawa prefecture.
		iP_N	15 43 06						
		iP_Z	15 43 09						
		eS_E	15 43 36						
		iS_N	15 43 36						
		$i\bar{S}_E$	15 43 41						
		$i\bar{S}_N$	15 43 42						
		iS_Z	15 43 43						
		M_E	15 43 43		−6				
		M_N	15 43 50			+9			
		M_Z	15 43 45	1.7			−14		
		F_E	15 44 19						
		F_N	15 44 45						
		eF_Z	15 44 37						
19	Mar. 15	eP_E	4 37 52						A distant earthquake. Felt in Guam Isl, in Pacific Ocean.
		eP_N	4 37 47						
		eS_E	4 43 09						
		eL_E	4 47 12						
		eF_E	4 51 ±						
20	Mar. 17	iP_E	0 52 00					356	Southern part of the Bungo channel.
		iP_N	0 51 58						
		iP_Z	0 51 57						
		S_{EN}	0 52 47						
		S_Z	0 52 50						
		M_E	0 53 01	2.4	−37				
		M_N	0 52 58	2.0		+42			
		M_Z	0 52 52				+17		
		F_E	0 56 24						
		F_N	0 56 16						
		F_Z	0 54 48						
21	Mar. 19	iP	2 00 33					28	Local shock.
		S	2 00 37						
		M	2 00 37						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF$_{EN}$	2	00	53						
22	Mar. 26	iP$_{EN}$	0	07	38					4645	A distant earthquake.
		iP$_Z$	0	07	35						Alaska district.
		eS$_E$	0	13	57						
		S$_N$	0	14	01						
		eL$_N$	0	24	24						
		M$_1$N	0	26	34	22.7		+8			
		M$_2$N	0	28	20	18.6		+9			
		eF$_E$	0	49	±						
		eF$_N$	0	50	±						
23	Mar. 26	iP	10	00	01					4265	A distant earthquake.
		iP$_Z$	10	00	00						Banda sea, Molucca Ils.
		S$_E$	10	06	03						
		eS$_N$	10	06	05						
		eL$_N$	10	15	51						
		M$_N$	10	19	01	18.8		−6			
		eF$_E$	10	29	±						
		eF$_N$	10	30	±						

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SEISMOLOGICAL BULLETIN

OF THE

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AND

KOBE METEOROLOGICAL OBSERVATORY.

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KÔBE JAPAN.

SEISMOLOGICAL BULLETIN

of the Imperial Marine Observatory and the Kobe Meteorological Observatory of Japan.

$\varphi = 34^\circ\ 41'\ 18''$ $\lambda = 135^\circ\ 10'\ 51''$ h = 58.3 m Underground : Diluvial Series.

Instruments: Omori's Seismograph. (Horizontal Pendulum)

Wiechert Seismograph. (Horizontal & Vertical)

April

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	15.8		0.001	20
A_N:	19.6		0.001	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	6.9	Aperiodic	0.006	106
A_N:	6.3	,,	0.008	109
A_Z:	4.8	6.3	0.004	78

May

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	15.6		0.001	20
A_N:	19.5		0.001	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	6.9	Aperiodic	0.006	106
A_N:	6.7	,,	0.006	97
A_Z:	4.1	7	0.004	86

June

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	15.0		0.001	20
A_N:	18.7		0.001	20

	T_o	ε	$\frac{r}{T_o^2}$	V
A_E:	6.1	Aperiodic	0.006	141
A_N:	6.3	”	0.005	114
A_Z:	4.3	7	0.004	86

No.	Date	Phase	Time G. M. T.			Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
57	April 4	iP_{EN}	19	18	05	E 3.8 N 4.0	−3.6	+7.4		610	South off Hatidyo Isl. Deep focus earthquake. Focal depth about 300 km.
		iP_Z	19	18	04	4.2			+9.2		
		iS	19	19	12		+23.7	−55.7			
		S_Z	19	19	13				+28.2		
		M_E	19	19	42	5.1	+96				
		M_N	19	19	32	5.6		−65			
		M_Z	19	19	38	3.8			+38		

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_2N	19	19	48	5.1		−70			
		FE	19	43	±						
		FN	19	45	±						
		FZ	19	42	±						
58	April 6	ePN	9	15	17						Near Macheng, Middle basin of the Yang-tse-Kiang river, China. Destructive at the epi-central region.
		eS	9	18	44	3.9					
		eLE?	9	21	02						
		LN?	9	20	56						
		ME	9	21	36	3.9	+5				
		MN	9	21	18	5.6		+7			
		eFE	9	33	±						
		eFN	9	34	±						
59	April 11	ePEN	18	14	02						Near Kasukabe, Saitama Prefecture. Weak shocks were felt at the Kwanto district.
		eSE	18	15	31						
		ME	18	15	38		±3				
		eFE	18	20	±						
		eFNZ	18	19	±						
60	April 13	ePE	0	00	57						Very faint record. A distant earthquake. Southe off Australia ?.
		ePN	0	00	55						
		eME	0	13	42						
		eMN	0	13	50						
		eMZ	0	13	45	3.3					
		eFE.Z	0	25	±						
		eFN	0	28	±						
61	April 22	ePN	5	06	55						A distant earthquake. West Java, according to Batavia's report.
		ePZ	5	06	58						
		eE	5	08	59						
		eE	5	09	01	3.5	+2				
		eFE.N	5	17	±						
		eFZ	5	16	±						
62	April 23	ePN	14	00	30						Very small movement.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		S_N	14	00	38						Near Isiyama, Southern coast of the Biwa Lake.
		M_N	14	00	38	0.4		+4			
		F_N	14	00	51						
63	April 25	i	9	55	30						Very small movement. Looal shook.
		$M_{N.E}$	9	55	30		±3	±3			
		eF	9	55	38						
64	April 26	e_N	3	42	55						Near Tiba City, Tiba Prefecture.
		S_E	3	43	39						
		M_E	3	43	49	1.4	+4				
		eF_E	3	49	±						
		eF_N	3	50	±						
		eF_Z	3	47	±						
65	April 26	e_E	13	35	47						A distant earthquake. Direction of . Okhostk Sea.
		e_Z	13	35	43						
		S_E	13	39	13	2.7					
		M_E	13	41	00	3.8	±1				
		eF_E	13	46	±						
		$eF_{N.Z}$	13	44	±						
66	April 28	iP	3	43	55	E 2.0 N 1.6 Z 1.8	−4	+7	+6	287	In the Kumano-Nada, SE off the Kii Peninsula. Weak shocks were felt at the Kwanto distrlct. Focal depth about 250 km.
		$iS_{E.N}$	3	44	33						
		S_Z	3	44	34						
		M_1E	3	44	35	2.3	+53				
		M_1N	3	44	35			+37			
		M_Z	3	44	38	2.3			+13		
		M_2E	3	46	44	2.8	+12				
		M_2N	3	46	39	2.5		−13			
		eF_E	3	54	±						
		eF_N	3	53	±						
		eF_Z	3	51	±						
67	April 29	P	4	51	51					33	In the Osaka Bay.
		S	4	51	56						

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		ME	4	51	56	0.6	−4				
		MN.Z	4	51	56			±3	±1		
		FE.N	4	52	31						
		FZ	4	52	24						
68	April 29	F?	8	03	32						South off the Hatidyo Isl.
		PZ?	8	03	33						
		eZ	8	05	04						
		eME?	8	04	54	4.6	±1				
		eFE	8	12	±						
		eFN	8	13	±						
		eFZ	8	10	±						
69	April 29	eP?	17	36	49						A distant earthquake. Epicenter in philippine-Deep. Felt in Mindanao, according to Manila's report.
		eSN	17	42	18	2.4		+2			
		eFE	17	50	±						
		eFN	17	52	±						
		eFZ	17	48	±						
70	May 2	ePE	23	30	23					642	In rhe Ariake Bay, Kagosima Prefecture. Weak shocks were felt at the Shouthern part of Kyusyu district.
		eFZ	23	30	25						
		iE	23	31	22						
		i_1N	23	30	53						
		i_2N	23	31	34						
		iSE.N	23	31	54	1.8	+27	+6			
		iSZ	23	31	57	3.0			−15		
		ME	23	32	13	2.3	+66				
		MN	23	32	06	2.1		−51			
		MZ	23	32	10	2.5			−36		
		FE	23	46	±						
		FN	23	45	±						
		FZ	23	43	±						
71	May 5	P	4	11	48		+2	+2		270	In the Osaka Bay. Focal depth about 300Km.
		PMN	4	11	51	1.0?		−28			
		PMZ	4	11	51	2.5?			−45		

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		$S_{E.N}$	4	12	25		−44	−38			
		$M_1E.N$	4	12	29	E 3.4 N 5.7	+281	+148			
		M_1Z	4	12	32	2.7			+35		
		M_2E	4	14	45	3.0	+81				
		M_2Z	4	14	28	2.7			−39		
		$eF_{E.N}$	4	26	±						
		eF_Z	4	22	±						
72	May 9	iS	3	50	58						Lower basin of the Kii River, Wakayama Prefecture.
		$M_{E.N}$	3	50	58		+4	+3			
		F	3	51	29						
73	May 11	$eP_{E.Z}$	6	54	58					1350 ?	ESE off Hatidyo Isl ?
		eP_N	6	55	04						
		P_Z	6	55	07						
		S_E	6	57	21						
		eS_N	6	57	27						
		eS_Z	6	57	17						
		eL_E	6	58	01						
		eL_Z	6	57	57						
		M_E	6	59	33	9.7	+12				
		M_N	6	59	41	9.7		−4			
		M_Z	6	59	22	8.7			+4		
		$eF_{E.N}$	7	18	±						
		eF_Z	7	12	±						
74	May 11	S	12	14	00						Very small movement. Near Wakayama City.
		M	12	14	01		−1	±1			
		F	12	14	07						
75	May 12	P_N	0	32	02					72	In the Kii Channel.
		S	0	32	11						
		$M_{E.N}$	0	32	12		±2	±3			
		eF_E	0	32	44						
		eF_N	0	32	49						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
76	May 12	P	11	59	42					35	In the Tomogasima Strait, Kii Channel.
		S	11	59	47						
		S_Z	11	59	46						
		$M_{E.N}$	11	59	47	0.7	−21	−21			
		M_Z	11	59	47				±10		
		F_E	12	01	28						
		F_N	12	01	16						
		F_Z	12	01	26						
77	May 14	iP	13	17	58		+2.7	+2.5		3705	A distant earthquake. Molucca passage, NE of Celebes Isl. Destructive in the epicentral region. ipr phase very sharp.
		iP_Z	13	17	57				+6.4		
		iP_R	13	18	19		+40	+153	+176		
		S_E	13	23	29	19.5					
		eS_Z	13	23	31						
		SR_N	13	25	34						
		M_1E	13	26	33	26.6	+136				
		M_1N	13	26	26			−185			
		M_1Z	13	26	26	18.6			−79		
		M_2E	13	27	03	22.2	−152				
		M_2N	13	28	26	43.0		+102			
		M_2Z	13	28	42	46.3			+58		
		PR_3Z?	13	50	26						Pr_3Z?, Pr_3E?, ie phase is antipodal reflection P wave?.
		PR_3E?	13	51	27						
		iE	13	52	30						
		eF_E	15	39	±						
		eF_N	15	27	±						
		eF_Z	15	34	±						
78	May 15	P	7	12	50		−27	−3.4	+3.9	?	Near Sakai City, Osaka Prefecture. Felt at Osaka and district.
		iE	7	12	59	0.4	±4				
		iN	7	13	06						
		$M_{E.N}$	7	13	10	0.6	−4	−4			
		M_Z	7	13	12				±4		
		F_E	7	15	10						
		F_N	7	14	33						
		F_Z	7	15	15						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
79	May 18	ePE	7	55	57					83	Local shock?.
		eSE	7	56	08						Severe microseisms.
		ME	7	56	15	0.6	+4				
		MN	7	56	13	0.8		−4			
		MZ	7	56	12	0.7			+4		
		FE	7	56	58						
		FN	7	57	01						
		FZ	7	56	30						
80	May 20	ePN	11	55	18						Middle basin of the Tone River, Kwanto ditrects. Weak shicks were felt at the Kwanto district.
		eSE ?	11	56	26						
		ME.N	11	56	37	1.9	−4	+3			
		MZ	11	56	32	1.9			+4		
		eFE.N	12	01	±						
		eFZ	12	00	±						
81	May 21	eP	15	50	58					7	Very small movement. Locai shock.
		SE	15	50	59						
		ME.N	15	50	59		+5	±2			
		FE	15	51	20						
		FN	15	51	15						
82	May 23	iPE.N	20	18	17		−0.9	+0.9		88	Near Hinomisaki, Kii Channel.
		iS	20	18	28						
		SZ	20	18	29						
		ME.N	20	18	29	E 0.5 N 0.6	+30	+23			
		MZ	20	18	30	0.5			+10		
		FE	20	21	08						
		FN	20	21	07						
		FZ	20	20	43						
83	May 24	PE.N	2	25	07					106	Off the Mouth of Hidaka R, Wakayama Prefecture.
		iE.N	2	25	09						
		eE	2	25	19						
		eSN	2	25	22						
		ME.N	2	25	24	0.5	±2	±2			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF	2	27	±						
84	May 26	$iP_{E.N}$	16	20	10	2.4	+4.3	−6.4		7370	A distant earthquake. SW off Fiji Ils, South Pacific Ocean. Record is deep-focus-type.
		P_Z	16	20	10	3.1			−11.5		
		iP_{R_1E}	16	20	20	4.9	+18.5				
		iP_{R_1N}	16	20	21	5.6		−31.2			
		iP_{R_1Z}	16	20	21	4.1			−67.9		
		iP_{R_2E}	16	21	24	3.4	+64.2				
		eP_{R_2N}	16	23	24	7.2		+20.2			
		S_N	16	28	59	6.1		+47			
		eS_Z	16	29	04	4.8			−8		
		iN	16	29	02						
		$SM_{E.N}$	16	29	12	E 9.4 N 9.0	+44	+37			
		iE	16	29	53		+98				
		eN	16	32	40						
		eZ	16	32	54						
		M_N	16	34	12	20.0		+200			
		eM_Z	16	37	22	18.3			±2		
85	May 26	$P_{N.Z}$	16	47	49	Z 1.3			−1.0		An after shock or antipodal reflectional wave Pr_3 of previons earthquake?
		P_{R_1Z}	16	47	58	5.4			−5.1		
		eE	16	53	47	12.7	+4				
		eZ	16	53	40	15.0			+3		
		eF_E	17	23	±						
		eF_N	17	22	±						
		eF_Z	17	19	±						
86	May 26	$iE.N$	20	48	59						Very small movement. In the Kii Channel.
		iN	20	49	01			−1			
		$M_{E.N}$	20	49	03		±1	−1			
		F_E	20	49	24						
		F_N	20	49	19						
87	May 26	$P_{E.Z}$	22	32	24					7290	A distant earthquake. Related to No 84.
		$S_{E.N}$	22	41	08	4.8					
		eE	22	42	40	4.3	+1				

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF_E	22	54	±						
		eF_N	22	55	±						
		eF_Z	22	53	±						
88	May 27	eS	3	21	46						Local shock.
		M_E	3	21	49	1.3	+3				
		M_N	3	21	48	1.1		+3			
		F_E	3	22	00						
		F_N	3	21	57						
89	May 28	P	2	23	59						NE off Amami-Osima, Ryukyu Ils. Perceptible at the Northern part of Ryukyu Islands, and Kyusyu distriot.
		$i_{E.N}$	2	24	16						
		eS_E	2	25	36	13.7					
		eS_N	2	25	10	22.8					
		M_E	2	27	04	10.1	+54				
		M_N	2	28	10	11.0		−28			
		M_Z	2	28	16	12.3			−19		
		eF_E	3	13	±						
		eF_N	3	12	±						
		eF_Z	2	57	±						
90	May 23	P_N	5	04	25						Ditto.
		e_E	5	05	37						
		e_N	5	09	11						
		M_N	5	09	27	10.6		±2			
		eF_E	5	17	±						
		eF_N	5	18	±						
		eF_Z	5	16	±						
91	May 30	P_N	0	02	18					13	Perceptible at the Northern foot of Mt. Rokuko, NE of Kobe.
		iS	0	02	20	0.5	+12	+7			
		$M_{E.N}$	0	02	21				±6		
		M_Z	0	02	22						
		F_E	0	02	52						
		F_N	0	02	53						

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
92	june 1	eP_N	17 32 41					53	Upper valley of the Arita River, Wakayama Prefecture.
		eP_Z	17 32 42						
		iS	17 32 48						
		iE	17 32 52						
		iN	17 32 53						
		M_E	17 32 53	0.8	−4				
		M_N	17 32 53	0.8		−4			
		F_E	17 33 52						
		F_N	17 33 48						
		F_Z	17 33 43						
93	June 1	$iP_{N.E}$	19 33 40					76	Near the mouth of Arita R, Wakayama Prefecture. Moderate shocks were felt at the Wakayama City.
		iP_Z	19 33 41						
		iN	19 33 43						
		$iS_{E.N}$	19 33 50						
		$M_{E.N}$	19 33 52	E 0.4 N 0.5	−44	+60			
		M_Z	19 33 53	0.5			−19		
		$eF_{E.N}$	19 39 ±						
		eF_Z	19 38 ±						
94	June 1	eE	21 12 08						Upper valley of the Masuda River, Gifu Prefecture.
		S	21 12 22						
		M_E	21 12 24		−3				
		M_N	21 12 25	0.4		−2			
		M_Z	21 12 23				−3		
		F_E	21 12 52						
		F_N	21 12 49						
		F_Z	21 12 45						
95	June 3	$P_{E\,N}$	0 20 34					720	SE off the Kinkazan, Miyagi Prefecture. Weak shocks were felt at the Oou district.
		P_Z	0 20 33						
		e_E	0 20 47		−4				
		e_Z	0 20 48			+3			
		i_N	0 21 10			−11			
		S_Z	0 21 53	1.9					
		M_E	0 22 41	6.3	−14				

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_Z	0	22	24	5.3			−7		
		eF_E	0	33	±						
		eF_N	0	34	±						
		eF_Z	0	32	±						
96	June 3	eP_E	10	51	08					107°	A distant earthquake.
		P_Z	10	51	10						Destructive in Mexico.
		e_Z	10	56	01						
		S_E?	11	05	21	20.0					
		eS_N	11	03	27	16.6					
		eS_Z	11	04	01						
		eL_N	11	19	55	24.8					
		eL_Z	11	25	05						
		M_1E	11	49	38	17.8	−12				
		M_1N	11	49	34	17.8		+19			
		M_1Z	11	42	59	18.7			+7		
		M_2E	11	54	53	18.4	−19				
		M_2N	11	55	39	17.1		−19			
		M_2Z	11	52	10	15.0			+13		
		M_3E	11	57	22	18.0	−12				
		M_3N	11	57	18	14.6		−20			
		M_3Z	12	03	19	16.8			+14		
		M_4E	12	04	16	15.1	−16				
		M_4N	12	08	51	16.0		−13			
		$eF_{E.N}$	13	06	±						
		eF_Z	13	05	±						
97	June 9	eP_N	2	02	53						ESE off the Siriya Cape, Aomori Prefecrture. perceptible at the Oou and Hokkaido.
		eP_Z	2	02	56						
		eS_E	2	04	53						
		eS_Z	2	04	47						
		M_E	2	05	59	4.8	−4				
		M_N	2	05	51	3.6		+3			
		M_Z	2	06	01	5.0			−2		
		$eF_{E.N}$	2	16	±						
		eF_Z	2	11	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
98	June 4	$P_{E.N}$	14	11	15					68	Midlle basin of the Arita river, Wakayama Prefecture.
		P_Z	14	11	14						
		$S_{E.N}$	14	11	25						
		i_Z	14	11	17				−13		
		S_Z	14	11	24						
		M_E	14	11	27	0.7	−14				
		M_N	14	11	25	0.7		+13			
		F_E	14	15	58						
		F_N	14	15	40						
99	June 8	eP_E	6	15	01					590	In the Hiuga-nada, East off Miyazaki Prefecture. Perceptible at the coast of Bungo Channel.
		$eP_{N.Z}$	6	15	02						
		i_E	6	15	26	1.8	+4				
		$i_{N.Z}$	6	15	27	N 1.8 Z 1.5		−4	−4		
		$S_{E.N}$	6	16	06						
		S_Z	6	16	04						
		M_1E	6	16	20	1.6	+20				
		M_1N	6	16	25	1.8		−29			
		M_1Z	6	16	17	1.5			−19		
		$M_{2E.Z}$	6	16	25	N 1.8 E 1.9	−24		−20		
		eF_E	6	26	±						
		eF_N	6	27	±						
		eF_Z	6	25	±						
100	June 8	eP_E	10	55	09					534	Ditto.
		eP_N	10	55	10						
		e_Z	10	55	26						
		$S_{N.Z}$	10	56	09						
		M_E	10	56	34	2.7	−9				
		$M_{N.Z}$	10	56	14	N 3.4 Z 3.2		+9	+6		
		eF_E	11	06	±						
		$eF_{N.Z}$	11	05	±						
101	June 8	P_E	15	00	32						Very faint record. A distant earthquake. Felt in Northern part of Mindanao.
		e_E	15	03	02	3.5	±1				
		e_N	15	01	19	3.4		±1			

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF_E	15	13	±						
		eF_N	15	12	±						
		eF_Z	15	10	±						
102	June 10	P_N	20	28	27	5.9		+3			Very faint record.
		P_Z	20	28	25	5.8			+1		A distant earthquake.
		i_E	20	29	20	3.9	+2				Felt in Northern part of
		eM_N	20	40	08	17.3		±1			Mindanao.
		eM_Z	20	40	00	17.3					
		eF_E	20	45	±						
		eF_N	20	48	±						
		eF_Z	20	46	±						
103	June 11	i_S	16	37	42						Near Takasago, Hyogo
		M_E	16	37	43		+2				Prefecture.
		$M_{N.Z}$	16	37	42			−3	−1		Felt at the Southern
		F_E	16	38	07						part of Harima Province.
		F_N	16	38	13						
		F_Z	16	38	17						
104	June 11	P	17	04	59		−0.5	+1	+1	2500	South off Marianne Ils,
		PM	17	05	02	E 1.3 N.Z 1.2	−3	−6	+4		North Pacific Ocean.
		eS_E	17	09	04						Strong shocks were felt
		SM_E	17	10	49	3.8	+3				at the Guam Isl.
		eM_N	17	15	43	15.0 ?					P phase is distinct.
		eF_E	17	19	±						
		$eF_{N.Z}$	17	20	±						
105	June 13	$iP_{N.Z}$	21	02	25			+3	+4	2310	A distant earthquake.
		eL_E	21	06	28						Felt in NW Luzon.
		M_{EN}	21	06	33	16.2	±5	±5			Disturbed by microseisms.
		eM_Z	21	11	06	19.6					
		eF_E	21	24	±						
		eF_N	21	22	±						
		eF_Z	21	19	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
106	June 14	iP	6	04	15		−4	−15	−10	2270	A distant earthquake.
		iE.N	6	04	34	4.1					Strong shocks were felt
		SE	6	07	51						at the NWrn part of
		eFE.N	6	22	±						Luzon, Philippine.
		eFZ	6	19	±						Each phase is very sharp.
107	June 14	eP	11	25	08					2440	A distant earthquake.
		iPN	11	25	17						Gulf of Tongking, South
		eSE	11	29	08	6.2					China Sea. (by Manila,
		eFE	11	37	±						Hongkong, Amboina, and
		eFN	11	36	±						Kobe)
											Record is deep-focus-type.
108	June 16	iPN	1	27	13			+5		5000?	A distant earthquake.
		iPZ	1	27	10				+4		Northern part of
		eSE	1	34	00						Sumatora.
		iE	1	34	40	6.9	±2				
		eLE	1	43	±	32.0?					
		eLZ	1	47	±						
		eME	1	46	03	34.−					
		MZ	1	49	51	19.0					
		eFE	2	04	±						
		eFN	1	58	±						
		eFZ	1	59	±						
109	June 16	P	8	33	28					560	Lower basin of the Kinu
		iP̄E?	8	33	52						River, Kwanto district.
		eS	8	34	29						Weak shocks were felt
		S̄N?	8	34	40						at the Kwanto district.
		LE.N?	8	34	54						
		ME	8	34	55	3.7	+10				
		MN	8	35	01	3.7		+11			
		MZ	8	35	04	1.9			−9		
		eFE.N.	8	46	±						
		eFZ	8	44	±						
110	June 16	eFE	20	18	34					820?	Northern part of the

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_N	20	18	31						Kasima Sea.
		P_Z	20	18	33						
		S_N	20	20	00						
		eS_Z	20	20	09						
		M_N	20	20	20			−2			
		M_Z	20	20	26	3.0			+2		
		M_E	20	21	12	2.6	±2				
		$eF_{E.Z}$	20	25	±						
		eF_N	20	26	±						
111	June 18	eP_E	1	32	23					393	Southern part of the Hiuga-nada, SE off Miyazaki Prefecture. Weak shocks were felt at the coast of Bungo Channel.
		eP_Z	1	32	25						
		i_1E	1	32	30		(−)				
		i_1N	1	32	30			(−)			
		iZ	1	32	31				+6		
		$i_2E.N$	1	32	39		−8	+15			
		S_E	1	33	16						
		S_N	1	33	14						
		S_Z	1	33	15						
		M_E	1	33	22	3.2	+129				
		M_N	1	33	19	3.8		−108			
		M_Z	1	33	21	3.3			−72		
		$eF_{E.N}$	1	48	±						
		eF_Z	1	43	±						
112	June 18	eP_N	10	26	09					120° ?	A distant earthquake. Destructive in Colima, Mexico. 18°8 N 104°5 W (U.S.A.)
		P_Z	10	26	26	4.5					
		eE	10	30	45	3.3					
		iZ	10	30	44	3.2					
		eE	10	38	14						
		eN	10	39	53						
		eZ	10	40	13	3.5					
		eL_E	11	06	36						
		eL_N	11	05	14						
		eL_Z	11	05	26						
		M_1E	11	22	49	19.0	±7				

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_1Z	11	19	56	21.4		±4			
		M_2E	11	28	01	19.1	±8				
		M_1N	11	28	38	17.7		±6			
		M_2Z	11	25	16	16.2			±6		
		M_3E	11	33	51	16.0	±7				
		M_2N	11	33	35	14.8		±7			
		M_3Z	11	32	22	16.2			±6		
		eF_E	12	28	±						
		eF_N	12	29	±						
		eF_Z	12	32	±						
113	June 22	$P_{E.Z}$	0	37	15		−2		+1	561	Off the Tyosi, Tiba Prefecture. Weak shocks were felt at Kwanto district
		iZ	0	37	33						
		$\bar{S}_N$?	0	38	31						
		M_E	0	39	06	3.9	−89				
		M_N	0	38	47	4.2		+155			
		M_Z	0	39	00	2.0			−100		
		eF_E	0	59	±						
		eF_N	0	55	±						
		eF_Z	0	53	±						
114	June 22	e_E	13	48	±						A distant earthquake. Destructive in Colima, Mexico. Record is not distinct.
		M_E	14	08	19	20.0					
		M_N	14	05	00	20.0					
		M_Z	14	04	47	21.0					
		eF_E	14	42	±						
		eF_N	14	31	±						
		eF_Z	14	30	±						
115	June 24	e_E	15	58	46	2.2					Far off Kasima Sea. Very faint record.
		e_N	15	58	31						
		M_E ?	15	59	45	2.9	±1				
		eF_E	16	05	±						
		eF_N	16	03	±						
116	June 25	P	13	33	06					113	An after shock of North

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		S	13	33	21						Tango earthquake on Mar. 7th 1927.
		M	13	33	22	E.N 0.8 Z 1.0	−4	−5	+3		
		F_E	13	34	18						
		F_N	13	34	16						
		F_Z	13	34	00						
117	June 26	eP_E	19	23	16					2000	SE far off Nemuro, Hokkaido. Faint record.
		F_Z	19	23	17						
		eS_E	19	26	39						
		eL_E	19	29	02						
		M_1E	19	30	28	18.5	±2				
		M_1N	19	31	35	17.3		±1			
		M_1Z	19	31	49	17.5			±1		
		M_2E	19	36	12	16.8	±2				
		M_2Z	19	35	15	18.2			±1		
		eF_E	19	50	±						
		eF_N	19	48	±						
		eF_Z	19	51	±						
118	June 29	eP_E	18	17	56					1020	East far off the mouth of Mabuti River, Aomori Prefecture.
		eP_Z	18	17	50						
		S	18	19	45						
		eL	18	20	15						
		M_E	18	20	53	16.4	+9				
		M_N	18	20	42	16.4		+5			
		eF_E	18	42	±						
		eF_N	18	36	±						
		eF_Z	18	32	±						

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SUMOTO JAPAN.

SEISMOLOGICAL BULLETIN

A Branch Station of the Kobe Meteorological Observatory of Japan.

$\varphi = 34^\circ\ 21'$ $\lambda = 134^\circ\ 53'$ h = 109.0 m. Underground : Cretaceous.

Instrument : Omori's Seismograph. (Horizontal Pendulum.) Wiechert Seismograph. (Horizontal & Vertical)

Apirl

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	17.6	1.9	0.0003	20
AN:	17.1	2.4	0.0003	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	4.8	Aperiodic	0.002	110
AN:	4.5	„	0.002	108
AZ:	4.3	„	0.002	64

May

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	18.5	1.9	0.0004	20
AN:	17.2	1.9	0.0002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	4.7	Aperiodic	0.001	115
AN:	4.4	„	0.003	108
AZ:	4.4	„	0.002	60

June

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	16.8	2.0	0.0002	20
AN:	16.7	2.0	0.0003	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	4.9	Aperiodic	0.003	104
AN:	4.6	„	0.002	100
AZ:	4.4	„	0.004	63

No.	Date	Phase	Time G. M. T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
90	April 4	iP	19 18 03		−4.5	+3.9	+2.8	497	South off Hatidyo Isl. Depth of focus about 300km.
		iS	19 19 10						
		ME	19 19 16	3.7	−63				
		M1N	19 19 15	6.6		+89			
		MZ	19 19 14	1.8			−13		
		M2N	19 19 50	6.6		+46			
		eFEN	19 50 ±						

No	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eFZ	19	47	±						
91	April 4	eP	22	49	54					26	Local shock.
		S	22	49	57						
		MEN	22	49	57	0.3	−1	±2			
		F	22	50	04						
92	April 6	PE	9	15	14		+				Near Macheng, middle basin of the Yang-tse-kiang River, China. Destructive at the epicentral region.
		PN	9	15	30			+			
		LE	9	20	28						
		LN	9	20	29						
		ME	9	21	22	4.2	−2				
		MN	9	21	59	3.6		+3			
		MZ	9	20	59	2.4			+1		
		FE	9	30	16						
		FN	9	29	32						
93	April 8	P	10	43	35					28	In the Wakaura Bay, Kii Channel. Times is uncertain.
		S	10	43	39						
		MEN	10	43	39		±1	+3			
		F	10	44	00						
94	April 9	eP	1	43	24						Near Hinomisaki, Waka-yama Prefecture.
		S	1	43	25						
		MEN	1	43	25		±1	±1			
		F	1	43	34						
95	Aqril 11	ePEN	18	14	03					562	Near Kasukabe, Saitama Prefecture. Weak shocks were felt at Kwanto district.
		SE	18	15	14						
		SN	18	15	24						
		ME	18	15	48	2.4	+1				
		MN	18	15	32	2.4		+1			
		F	18	19	50						
96	April 13	ePE		00	14					8080	A distant earthquake. South off western Aust-ralia?
		ePN	0	00	30			+0.9			

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		ePZ	0	00	24				−1.6		
		SE	0	09	46						
		SN	0	09	44						
		ME	0	10	31	7.3	−3				
		FE	0	22	±						
		FN	0	25	±						
97	April 13	P	7	30	25					41	In the Kii Channel.
		S	7	30	30						
		MENZ	7	30	31	E 0.4	−4	−3	±1		
		F	7	31	02						
98	April 13	P	8	34	23					36	Ditto.
		S	8	34	28						
		MEN	8	34	28	N 0.5	±0.4	−2			
		F	8	34	50						
99	April 21	SEN	11	54	48						Local shock.
		F	11	54	57						
100	April 22	ePEN	5	06	54						A distant earthquake. West Java, according to Batavia's report.
		PZ	5	06	53						
		eE	5	07	25	3.3	−1				
		FEN	5	10	13						
		FZ	5	09	±						
101	April 22	eP	15	19	17					39	In the Wakaura Bay, Kii Channel.
		S	15	19	22						
		MEN	15	19	22		−1	−2			
		F	15	19	38						
102	April 23	S	14	00	50						Near Isiyama, Southern coast of the Biwa Lake.
		F	14	01	02						
103	April 26	eEN	3	43	15						Near Tiba City, Tiba Prefecture.
		eF	3	47	±						

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No	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
*104	April 26	P	12	15	51					28	In the Wakaura Bay,
		S	12	15	55						Kii Channel.
		M_{EN}	12	15	56	0.3	−4		−2		Perceptible.
		M_N	12	15	55	0.4		−7			
		F	12	16	28						
105	April 26	P	12	16	35					21	Near Wakayama City.
		S	12	16	38						
		M_{EN}	12	16	38	N 0.4	±0.4	+1			
		F	12	16	47						
106	April 26	e_E	13	39	09						A distant earthquake.
		e_N	13	39	12						Okhotsk Sea.
		eF	13	43	±						
107	April 27	eP	16	56	19					28	Local shock.
		S	16	56	23						
		M_{EN}	16	56	23		±1	−2			
		F	16	56	36						
108	April 28	P_{EN}	3	43	55		+2.7	+0.9		234	P in mimute gap.
		P_Z	3	43	56				+5.9		In the Kumano-nada, SE
		S_E	3	44	33						off the Kii Peninsula.
		S_{NZ}	3	44	34						Weak shocks were felt at
		M_{EN}	3	44	35	E 3.9 N 2.8	+13	+3.0			the Kwanto district.
		M_Z	3	44	36	2.5			+10		Focal depth about 250km.
		eF_{EN}	3	51	±						
		eF_Z	3	48	±						
109	April 29	eP	4	51	48					54	In the Osaka Bay.
		S	4	51	55						
		M_{EN}	4	51	55	0.5	+2	−3			
		F	4	52	28						
110	April 29	e	8	05	08						South off the Hatidyo Isl.
		eF	8	08	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
111	April 29	P	17	35	32						A distant earthquake.
		eEN	17	39	38						Philippine Deep.
		eF	17	43	±						Times is uncertain.
112	April 30	SEN	6	08	52						Local shock.
		MEN	6	08	53	N 0.3	±1	+1			
		F	6	08	59						
113	April 30	P	19	21	20					21	Near Wakayama City.
		S	19	21	23						
		MEN	19	21	23	E 0.3 N 0.2	±1	−3			
		F	19	21	40						
114	April 30	P	22	23	21					30	Ditto.
		S	22	23	25						
		MEN	22	23	25	N 0.4	+3	+4			
		F	22	23	48						
115	May 2	P	23	30	19		+0.9	+0.9	+0.7	611	In the Ariake Bay, Kagosima Prefecture. Weak shocks were felt at the southern part of Kyusyu.
		SE	23	31	42						
		SN	23	31	39						
		SZ	23	31	43						
		ME	23	31	54	2.5	−44				
		M_1N	23	31	53	2.5		−52			
		MZ	23	31	56	2.4			+30		
		M_2N	23	31	59	2.5		−46			
		CE	23	33	13						
		CN	23	32	55						
		eFE	23	44	±						
		eFN	23	45	±						
		eFZ	23	39	±						
116	May 5	PE	4	11	50		+0.9			275	In the Osaka Bay. Focal depth about 300km.
		iPNZ	4	11	49			−1.9	+8.3		
		PME	4	11	57	0.9	+19				
		PMNZ	4	11	52	N 0.9		+22	+27		

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		S	4	12	26						
		M_{EN}	4	12	30	3.9	+108	+76			
		M_Z	4	12	29	3.6			+32		
		eF_{EN}	4	27	±						
		eF_Z	4	19	±						
117	May 8	P	11	27	57					23	Near Wakayama City.
		S	11	28	00						
		M_{EN}	11	28	01	E 0.3 N 0.4	−2	+3			
		F	11	28	21						
118	May 8	eP	11	55	58						Basin of the Sizuma River, Simane Prefecture.
		S	11	56	04						
		M_{EN}	11	56	06	N 0.9	−2	±1			
		F	11	56	37						
119	May 9	P	3	50	52					38	Lower basin of the Kii River, Wakayama Prefecture.
		S	3	50	57						
		M_{EN}	3	50	57	E 0.4 N 0.3	±2	−4			
		F	3	51	35						
120	May 10	iP_{NZ}	14	59	20			−0.9		29	In the Wakaura Bay, Kii Channel.
		S_{NZ}	14	59	24						
		M_{NZ}	14	59	25	N 0.4		±3	±1		
		F_{NZ}	14	59	53						
121	May 11	P_E	6	55	01		−0.4			1390?	ESE off the Hatidyo Isl?
		P_N	6	55	02			−0.9			
		P_Z	6	54	59				−0.8		
		S_E	6	57	30						
		S_N	6	57	22						
		S_Z	6	57	28						
		eL_E	6	58	53						
		eL_N	6	58	56						
		M_E	6	59	16	9.4	−11				
		M_N	7	02	16	9.4		+13			

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		M_Z	6 59 33	9.1			+2		
		eF_E	7 22 ±						
		eF_N	7 20 ±						
		eF_Z	7 10 ±						
122	May 11	P	12 13 45					39	Near Wakayama City.
		S	12 13 50						
		M_{EN}	12 13 50	E 0.3 N 0.4	±0.4	−2			
		F	12 14 20						
123	May 12	P	0 31 56			−0.9		44	In the Kii Channel.
		S	0 32 02						
		M_{EZ}	0 32 02	E 0.4 S 0.3	−6		−2		
		M_N	0 32 03	0.4		−10			
		F	0 32 58						
124	May 12	P	2 34 14					22	Near Wakayama City.
		S	2 34 17						
		M_E	2 34 18	0.4	+7				
		M_{NZ}	2 34 18			−14	+3		
		F	2 34 55						
*125	May 12	P	11 59 39				+3.7	16	In the Tomogasima Strait, Northern part of the Kii Channel. A slight shocks was felt.
		S	11 59 41						
		M	11 59 42	0.4	+72	+39	−18		
		F_{EN}	11 59 52						
		F_Z	12 00 53						
126	May 14	iP_{EN}	13 17 54		+1.3	+2.3		3725	A distant earthquake. Molucca passage, NE of Celebes. Desturctive in the epicentral region.
		iP_Z	13 18 00				+4.2		
		S_E	13 23 30						
		S_N	13 23 26						
		S_Z	13 23 27						
		SM_E	13 23 37	9.8	−350				
		SM_N	13 23 30	9.8		−584			
		L_E	13 25 34						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		L_N	13	25	54						
		L_Z	13	26	11						
		M_E	13	26	18	27.6	+1960				
		M_1N	13	26	15	14.1		−1058			
		M_Z	13	26	15	12.4			+285		
		M_2E	13	28	35	13.5	+621				
		M_2N	13	27	29	12.4		−433			
		eF_E	15	33	±						
		eF_N	15	53	±						
		eF_Z	14	19	±						
127	May 14	P	19	47	31					26	Near Wakayama City.
		S	19	47	34						
		MEN	19	47	35	0.3	−3	−4			
		F	19	47	55						
128	May 15	ePEN	18	26	44					13	Local shock.
		SEN	18	26	46						
		MEN	18	26	46	N 0 3	+1	−1			
		FEN	18	26	57						
129	May 20	eP	1	31	11					17	Ditto.
		S	1	31	14						
		ME	1	31	14		−2				
		MN	1	31	15	0.8		−2			
		F	1	31	38						
130	May 20	ePE	11	55	24					458	Middle basin of the Tone River. Weak shocks were felt at Kwanto district.
		ePN	11	55	25						
		PEN	11	55	34						
		SE	11	56	29						
		SN	11	56	24						
		ME	11	56	52	1.4	−1				
		MN	11	56	44	2.0		±1			
		FEN	12	00	21						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
131	May 20	eP	21	18	16					37	Near Wakayama City.
		S	21	18	21						
		M_{EN}	21	18	21	N 0.4	±1	−3			
		F	21	18	42						
132	May 20	eP	23	05	11					17	Local shock.
		S	23	05	13						
		M_{EN}	23	05	13	N 0.3	±1	−2			
		F	23	05	28						
*133	May 23	iP	20	18	12		+2.0	−1.9	−3.3	59	Near Hinomisaki, Kii Channel, Perceptible.
		iS	20	18	20						
		M	20	18	20	E 0.5 N 0.4 Z 0.6	−58	−44	+8		
		M_2E	20	18	26	0.5	+28				
		F_{EN}	20	20	48						
		F_Z	20	18	35						
134	May 24	P	2	24	55					71	Off the mouth of the Hidaka River, Wakayama Prefecture.
		S	2	25	05						
		M	2	25	05	EZ 0.5 N 0.3	−17	+15	+3		
		F_{EN}	2	26	45						
		F_Z	2	26	06						
135	May 25	eP_N	3	28	48					27	In the Kii Channel.
		S_{EN}	3	28	52						
		M_{EN}	3	28	52	N 0.4	−1	−2			
		F	3	29	32						
136	May 26	eP_{EN}	13	47	01						South off Omai-saki, Sizuoka Prefecture.
		F	13	47	12						
137	May 26	iP_E	16	20	10		+2.6			7250	A distant earthquake. SW off Fiji Ils, South Pacific Ocean.
		iP_N	16	20	12			−0.9			
		iP_Z	16	20	09				−5.0		
		PM_{EZ}	16	20	25	3.5	−30		+53		
		PM_N	16	20	37	2.7		−15			

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		SEN	16	28	53						
		ME	16	29	52	6.4	+44				
		MN	16	29	12	8.1		+108			
		MS	16	30	01	3.2			−6		
		eFE	17	42	±						
		eFN	17	38	±						
		eFS	16	58	±						
138	May 26	P	19	12	19		+			70	Southern part of Kii Channel.
		S	19	12	28						
		ME	19	12	28	0.4	±3				
		MN	19	12	29	0.4		+4			
		F	19	12	59						
139	May 26	P	20	48	46					34	In the Kii Channel.
		S	20	48	51						
		ME	20	48	51		+2				
		MN	20	48	52	0.3		−3			
		F	20	49	21						
140	May 26	ePEN	22	34	18						A distant earthquake, Related to No 137.
		eS	22	41	07						
		F	22	59	±						
141	May 28	iP	2	22	54		−4.3	−13.9	−5.8	1375	NE off Amami-Osima, Ryukyu Ils. Perceptible at the Northern part of Ryukyu and Kyusyu district.
		SE	2	25	24						
		SN	2	25	20						
		SZ	2	25	14						
		LE	2	26	34						
		ME	2	26	45	9.2	+106				
		MN	2	26	58	11.1		−160			
		MZ	2	27	39	10.5			+13		
		eFE	3	03	±						
		eFN	2	59	±						
		eFZ	2	46	±						

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No.	Date	Phase	Time G. M. T.	Period	Amplitude AE	AN	AZ	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
142	May 28	PEN	5 04 13		+0.4	+0.9		1650	Ditto.
		PZ	5 04 12				+0.8		After shock of No 141.
		eSE	5 07 15						
		eSN	5 06 52						
		eLE	5 07 47						
		ME	5 09 52	9.1	−4				
		MN	5 09 23	11.6		±6			
		eFEN	5 30 ±						
		eFZ	5 20 ±						
143	May 30	eP	0 02 26					36	Near Mt. Rokuko, NE of Kobe.
		S	0 02 31						
		ME	0 02 35	0.6	±0.4				
		MN	0 02 31	0.3		−3			
		F	0 03 04						
144	May 31	P	17 17 12					27	Near Wakayama City.
		S	17 17 16						
		MEN	17 17 16	N 0.3	−2	−2			
		F	17 17 36						
145	June 1	P	17 32 37					42	Upper valley of the Arita River, Wakayama Prefecture.
		S	17 32 43						
		MEN	17 32 45	E 0.4 N 0.5	−7	+7			
		F	17 33 36						
*146	June 1	iPEN	19 33 35		+1.3	−4.0		43	Slight shocks were felt. Near the mouth of Arita River, Wakayama Prefecture. Moderate shocks were felt at the Wakayama City.
		iPZ	19 33 43				−3.2		
		iSEN	19 33 41						
		iSZ	19 33 40						
		MEZ	19 33 41	E 0.9 Z 0.5	−89		−16		
		MN	19 33 42	0.6		−96			
		FEN	19 37 48						
		FZ	19 36 50						
147	June 3	PE	0 20 37					581	SE off the Kinkazan,

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		P_N	0	20	39						Miyagi Prefecture.
		P_Z	0	20	38						Weak shocks were felt
		S_E	0	21	59						at the Oou district.
		S_N	0	21	54						
		M_E	0	23	01	4.5	−4				
		M_N	0	22	48	2.4		−6			
		M_Z	0	22	45	2.5			−1		
		eF_E	0	34	±						
		eF_N	0	32	±						
		eF_Z	0	27	±						
148	June 3	P_E	10	51	11						A distant earthquake.
		P_N	10	51	07						Destructive in Mexico.
		iE	10	55	46						
		iN	10	55	21						
		S_E	11	04	18						
		S_N	11	03	33						
		M_1E	11	41	07	20.9	−142				
		M_1N	11	21	52	20.0		+183			
		M_1Z	11	29	25	20.6			±87		
		M_2N	11	80	31	20.9		+200			
		M_2E	11	53	01	18.4	−125				
		M_2Z	11	58	21	18.8			+80		
		eF_E	13	07	±						
		eF_N	13	09	±						
		eF_Z	12	39	±						
149	June 4	eP_E	2	03	12					783	ESE off the Siriya-Cape,
		eP_N	2	03	06						Aomori Prefecture.
		eS_E	2	04	57						Perceptible at Oou and
		eS_N	2	04	52						Hokkaido.
		M_E	2	06	05	2.4	+4				
		M_N	2	06	08	4.0		+2			
		M_Z	2	06	33	2.8			±1		
		eF_{EN}	2	13	±						
		eF_Z	2	09	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
*150	June 4	iPEN	14	11	13		+1.9	−1.5		42	Middle basin of the Arita River, Wakayama Prefecture. Perceptible.
		iPZ	14	11	12				−1.6		
		iS	14	11	18						
		M	14	11	20	EN 0.4 Z 0.2	−52	+90	−13		
		FE	14	15	54						
		FN	14	15	08						
		FZ	14	13	04						
151	June 5	PEN	1	37	35					54	In the Wakaura Bay, Kii Channel.
		S	1	37	42						
		ME	1	37	42	0.3	+2				
		MN	1	37	43	0.3		−3			
		F	1	38	09						
152	June 5	eSEN	1	38	18						Local shock.
		F	1	38	34						
153	June 8	PEN	6	14	58		+1.0	+1.0		376	In the Hyuga-Nada, east off Miyazaki Prefecture. Perceptible at the coast of Bungo Channel.
		PZ	6	14	56				+0.8		
		SE	6	15	45						
		SN	6	15	49						
		SZ	6	15	50						
		ME	6	16	21	1.6	+23				
		MN	6	16	18	1.8		−22			
		MZ	6	16	13	1.8			+13		
		FEN	6	26	14						
154	June 8	PEZ	10	54	56		+0.5			362	Ditto.
		PN	10	55	01			+			
		SE	10	55	43						
		SNZ	10	55	48						
		M_1E	10	56	11	2.5	+10				
		MN	10	56	33	2.5		−16			
		MZ	10	56	15	2.0			−8		
		M_2E	10	56	38	2.4	−13				
		eFEN	11	06	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eF_Z	11	01	±						
155	June 8	eP	12	35	55					27	Near Wakayama City.
		S	12	35	58						
		M_{EN}	12	35	59	N 0.3	±1	±1			
		F	12	36	13						
156	June 8	eP_E	15	00	10					3110	A distant earthquake. Felt in northern part of Mindanao.
		eP_N	15	00	18						
		eS_E	15	05	09						
		eS_N	15	04	59						
		M_E	15	05	25	3.4	−1				
		M_N	15	05	38	2.6		±1			
		eF_{EN}	15	14	±						
157	June 9	eP_{EN}	10	51	36					28	Local shock.
		S_{EN}	10	51	40						
		M_N	10	51	41	0.4		+2			
		F	10	51	52						
158	June 10	eP_E	20	27	10						A distant earthquake. Felt at the nothern part of Mindanao.
		eP_N	20	27	11						
		P_Z	20	27	21						
		i_E	20	27	53						
		i_N	20	27	50						
		eS_E	20	32	36						
		eS_N	20	32	37						
		eL_E	20	35	50						
		eL_N	20	35	44						
		F_E	20	58	±						
		F_N	20	54	±						
		F_Z	20	41	±						
159	June 10	P	21	00	00					42	In the Wakaura Bay, Kii Channel.
		S	21	00	06						
		M_{EN}	21	00	06	0·3	+3	−5			

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude AE	Amplitude AN	Amplitude AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		F	21	00	45						
160	June 11	iP	17	04	57		−1.4	+1.5	−1.6	2470	South off Marianne Ils, North Pacific Ocean. Strong shocks were felt at the Guam Isl.
		SEN	17	09	00						
		eFEN	17	24	±						
		eFZ	17	22	±						
161	June 11	P	19	48	33					46	Basin of the Arita River, Wakayama Prefecture.
		S	19	48	39						
		ME	19	48	40	0.5	−2				
		MN	19	48	39	0.4		−3			
		F	19	49	02						
162	June 12	ePN	10	01	44					33	Local shock.
		SN	10	01	49						
		F	10	02	00						
163	June 12	P	20	28	15					58	Ditto.
		S	20	28	23						
		ME	20	28	24	0.5	+1				
		MN	20	28	23	0.4		−2			
		F	20	28	41						
164	June 13	ePN	21	02	18			−1.0		2410	A distant earthquake. Felt in NW Luzon.
		iPEN	21	02	20		+2.9	+1.5			
		iPZ	21	02	19				+3.2		
		SEN	21	06	18						
		MEN	21	06	34	E 6.2 N 7.7	−3	+12			
		eFE	21	22	±						
		eFN	21	25	±						
165	June 14	P	0	13	00					37	Lower basin of the Hidaka River, Wakayama Prefecture.
		S	0	13	05						
		ME	0	13	05	0.3	−1				
		MN	0	13	06	0.3		−2			
		F	0	13	25						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
166	June 14	iP	6	04	09		−5.8	−5.0	−6.3	2290	A distant earthquake. Strong shocks were felt at the north western Luzon, Philippine.
		PM_E	6	04	38	4.1	−14				
		PM_N	6	04	40	4.3		+12			
		PM_Z	6	04	31	3.4			+15		
		S_{EN}	6	07	53						
		S_Z	6	08	05						
		SM_E	6	08	26	3.6	−4				
		SM_N	6	08	50	4.7		−3			
		eF_{EN}	6	32	±						
167	June 14	P_E	11	25	06					2360	Gulf of Tongking, South China Sea.
		P_N	11	25	04						
		S_{EN}	11	28	59						
		eF	11	41	±						
168	June 16	P_{EZ}	1	27	08		+1.9		+2.4	5105	A distant earthquake. Northern part of Sumatora.
		P_N	1	27	09			+1.0			
		eS_E	1	33	55						
		eS_N	1	33	59						
		eF_E	1	56	±						
		eF_N	1	51	±						
169	June 16	P	2	55	20					21	In the Wakaura Bay, Kii Channel.
		S	2	55	22						
		M	2	55	23	E.N 0.3	+6	−8	+2		
		F	2	55	53						
170	June 16	P_E	8	33	40					435	Lower basin of the Kinu River. Weak shocks were felt at the Kwanto district.
		P_N	8	33	43						
		P_Z	8	33	41						
		S	8	34	40						
		M_{EN}	8	35	17	E 2.7 N 2.9	+5	−4			
		M_Z	8	35	36	2·1			+2		
		F_E	8	40	52						
		F_N	8	40	46						
		eF_Z	8	37	±						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
171	June 16	eE	20	19	33						Northern part of Kasima Sea.
		eN	20	19	26						
		SE	20	20	18						
		SN	20	20	21						
		ME	20	20	24	1.6	+1				
		MN	20	20	22	3.0		+2			
		FE	20	22	57						
		FN	20	22	37						
172	June 18	PEN	1	32	17		−1.9	−1.0		277	Southern part of the Hyuga-Nada, SE off Miyazaki Prefecture. Weak shocks were felt at the coast of Bungo Channel.
		PZ	1	32	20				+1.6		
		SE	1	32	55						
		SN	1	32	53						
		SZ	1	32	58						
		ME	1	33	07	2.4	+93				
		MN	1	33	13	2.3		+83			
		MZ	1	33	10	2.3			−46		
		FEN	1	42	47						
		FZ	1	29	52						
173	June 18	iEN	10	30	32						A distant earthquake. Destructive iu Corima, Mexico.
		iZ	10	30	46						
		SE	10	40	23						
		SN	10	40	27						
		ME	11	27	26	17.8	−69				
		MN	11	33	50	15.9		+72			
		MZ	11	33	59	15.5			−50		
		eFE	12	42	±						
		eFN	12	29	±						
		eFZ	12	11	±						
174	June 22	PE	0	37	18		−0.9			532	Off the Tyôsi, Tiba Prefecture. Weak shocks were felt at Kwanto district.
		PNZ	0	37	20			+2.0	−1.6		
		SE	0	38	33						
		SN	0	38	32						
		SZ	0	38	39						

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No.	Date	Phase	Time G. h	M. m	T. s	Period s	Amplitude A_E μ	A_N μ	A_Z μ	Δ km.	Remarks
		M_E	0	39	11	4.1	+70				
		M_N	0	39	05	3.8		+61			
		M_Z	0	39	16	3.3			+29		
		F_E	0	55	14						
		F_N	0	57	24						
		F_Z	0	49	49						
175	June 22	eP_N	13	46	31						A distant earthquake. Destructive in Corima, Mexico
		eL_{EN}	13	58	31						
		eF_E	14	38	±						
		eF_N	14	35	±						
176	June 24	P	12	54	28					30	Near Wakayama City.
		S	12	54	32						
		M	12	54	33	E.N 0.3	−2	+3	±1		
		F	12	54	55						
177	June 24	eP_E	15	58	03						Far off Kasima Sea.
		eP_N	15	57	58						
		S_E	15	58	44						
		S_N	15	58	45						
		M_E	15	59	08	2.7	+1				
		M_N	15	58	54	2.7		±1			
		F_E	16	02	06						
		F_N	16	03	05						
178	June 25	e	13	33	22						An after shock of North Tango earthquake, on March 7th 1927.
		S	13	33	30						
		M_E	13	33	36	0.8	−1				
		M_N	13	33	31	0.5		−2			
		F	13	34	18						
179	June 25	P	17	00	24					28	Basin of the Arita River, Wakayama Prefecture.
		S	17	00	28						
		M_{EN}	17	00	29	E 0.2 N 0.3	−3	−4			
		M_Z	17	00	28				+2		

No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		F	17 00 46						
180	June 26	P	14 54 57					24	Near Wakayama City.
		S	14 55 00						
		M_{EN}	14 55 01	E 0.3 N 0.4	−3	−5			
		F	14 55 25						
181	June 26	P_E	19 23 26					2000	SE far off Nemuro, Hokkaido.
		P_N	19 23 22						
		S_{EN}	19 26 47						
		L_E	19 29 21						
		L_N	19 29 27						
		M_E	19 30 30	15.0	+11				
		M_N	19 31 58	15.0		+15			
		M_Z	19 32 03	16.9			±7		
		eF_E	19 48 ±						
		eF_N	19 51 ±						
		eF_Z	19 42 ±						
182	June 27	P	0 06 16					51	In the Kii Channel.
		S	0 06 22						
		M_E	0 06 22	0.3	+2				
		M_N	0 06 23	0.3		−3			
		F	0 06 55						
183	June 27	P	5 28 48					30	Near Wakayama City.
		S	5 28 52						
		M_{EN}	5 28 52	N 0.4	+1	−2			
		F	5 29 06						
184	June 28	eP	14 54 10						Local shock.
		S	14 54 13						
		M_E	14 54 13	0.4	±1				
		M_N	14 54 15	0.4		±2			
		F	14 54 31						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
185	June 29	PEN	18	17	59					1020	East far off the mauth of Mabuti River, Aomori Prefecture.
		SE	18	19	50						
		SN	18	19	48						
		eLE	18	24	59						
		LN	18	23	39						
		ME	18	25	18	10.6	±4				
		MN	18	25	21	13.5		+15			
		MZ	18	26	06	10.6			±3		
		eF	18	37	±						

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TOYOOKA JAPAN.

SEISMOLOGICAL BULLETIN

A Branch Station of the Kobe Meteorological Observatory of Japan.

$\varphi = 35^\circ\ 32'$ $\lambda = 134^\circ\ 49'$ h = 32.2 m. Underground : Tertiary.

Instrument : Omori's Seismograph (Horizontal Pendulum.) Wiechert Seismograph. (Horizontal & Vertical)

April

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	20.8	3.0	0.002	20
AN:	9.9	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	5.8	10.0	0.003	97
AN:	6.0	10.0	0.004	95
AZ:	3.8	3.8	0.002	43

May

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	20.8	3.0	0.002	20
AN:	9.9	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	5.6	10.0	0.004	105
AN:	6.0	10.0	0.004	92
AZ:	3.8	4.0	0.002	57

June

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	20.8	3.0	0.002	20
AN:	9.9	3.0	0.002	20

	T_0	ε	$\frac{r}{T_0^2}$	V
AE:	5.7	10.0	0.002	100
AN:	6.2	10.0	0.004	100
AZ:	3.8	6.5	0.002	65

No.	Date	Phase	Time G. M. T.	Period	Amplitude AE	Amplitude AN	Amplitude AZ	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
24	April 4	ePEN	19 18 13		+	−		566	South off Hatidyo Isl. Focal depth about 300km.
		ePZ	19 18 15				−23		
		iPE	19 18 16		+4.1				
		iPN	19 18 15			−9.5			
		iPZ	19 18 17				−16.3		
		iSE	19 19 30		−93				
		iSN	19 19 29			−93			

No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		iSZ	19	19	31				−33		
		M_1E	19	19	34		+93				
		M_1N	19	19	29	5.5		−221			
		M_1Z	19	19	34				+33		
		M_2EN	19	20	19	6.2	+113	+74			
		eFE	19	38	±						
		eFN	19	39	±						
		eFZ	19	32	±						
25	April 11	ePE	18	14	11					422	Near Kasukabe, Saitama Prefecture. Very faint recard.
		ePN	18	14	16						
		ePZ	18	14	02						
		iSN	18	15	13						
		MN	18	15	20			+6			
		eFE	18	17	24						
		eFN	18	17	15						
		eFZ	18	17	30						
26	April 13	iPE	12	04	15					21	Local shock.
		ePN	12	04	16						
		iSE	12	04	18						
		ME	12	04	18		±5				
		eFE	12	04	24						
		eFN	12	04	26						
27	April 26	ePE	3	43	00						Near Tiba City, Kwanto district.
		ePN	3	43	04						
		iSE	3	43	41						
		iSN	3	43	40						
		MN	3	43	51			−3			
		eFE	3	44	57						
		eFN	3	44	50						
28	April 28	iP	3	43	59		+1.5	−1.1	−4.7 ?	306	In the Kumano-nada, SE off Kii, Peninsula. Weak shocks were felt at Kwanto district.
		iS	3	44	41						
		MEN	3	44	42	2.0	+22	+16			

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No.	Date	Phase	Time G. M. T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h m s	s	μ	μ	μ	km.	
		M_Z	3 44 43				−5		Focal depth about 250km.
		eF_E	3 47 34						
		eF_N	3 47 54						
		eF_Z	3 46 39						
29	May 2	ePE	23 30 37					569	In the Ariake Bay, Kagosima Prefecture. Weak shocks were felt at the southern part of Kyusyu.
		ePN	23 30 35						
		iP_E	23 30 43						
		iP_N	23 30 42						
		iS_E	23 32 00						
		iS_N	23 31 59						
		M_E	23 32 22	1.6	+59				
		M_N	23 32 17	2.6		+109			
		eF_E	23 41 ±						
		eF_N	23 42 ±						
30	May 5	iP_{EN}	4 11 49		−1.0	+2.2 ?		276	In the Osaka Bay. Focal depth about 300km.
		iP_Z	4 11 50				−3.5		
		iS	4 12 26						
		M_{EN}	4 12 32	4.1	+186	+220			
		M_Z	4 13 18				−33		
		eF_E	4 22 ±						
		eF_N	4 22 ±						
		eF_Z	4 18 ±						
31	May 11	ePE	6 55 16					?	ESE off the Hatidyo Isl.
		ePN	6 55 30						
		iL_E	6 55 54						
		eL_Z	6 55 56						
		eF_{EN}	7 10 ±						
		eF_Z	7 07 ±						
32	May 12	iS_{EN}	14 49 56						Near Tôkaiti Hirosima Prefecture.
		eF_{EN}	14 50 19						
33	May 14	ePE	13 18 07		−0.1			3690	A distant earthquake.

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eP_N	13	18	03			+2.7			Molucca Passage, NE of Celebes. Destructive in the epicentral region.
		eP_Z	13	18	04				+2.6		
		iP_E	13	18	09		−5.7				
		iP_N	13	18	07			+10.9			
		iP_Z	13	18	08				+11.4		
		iP_{R_1E}	13	19	06						
		iP_{R_1N}	13	19	32						
		iP_{R_2}	13	20	10						
		iS_E	13	23	25		+65				
		iS_{NZ}	13	23	43			+76	−26		
		eS_{RE}	13	26	30						
		iS_{RN}	13	26	28						
		iS_{RZ}	13	26	33						
		eL_E	13	28	22						
		iL_N	13	28	49						
		iL_Z	13	28	22						
		M_1E	13	31	53		−67				
		M_1N	13	33	10			+93			
		M_2E	13	34	51		−57				
		M_2N	13	35	06			−70			
		M_3N	13	37	26			+60			
		M_4N	13	39	12			−85			
		eF	14	14	±						
34	May 15	iP_{EN}	7	13	19						Near Sakai, Osaka City. Small movement.
		eF_{EN}	7	13	53						
35	May 17	eP_E	13	42	01						Local shock. Small movement.
		iS_{EN}	13	42	10						
		eF_E	13	43	26						
		eF_N	13	43	28						
36	May 20	eP_E	1	30	50						Ditto.
		eP_N	1	30	51						
		iS_{EN}	1	31	01						
		M_E	1	31	03						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		M_N	1	31	05						
		eF_{EN}	1	31	36						
37	May 20	eP_E	11	55	20						Middle basin of the Tone River, Kwanto district.
		eP_N	11	55	19						
		eP_Z	11	55	11						
		eS_E	11	56	29						
		eF_E	11	57	25						
		eF_N	11	58	19						
		eF_Z	11	57	23						
38	May 23	eP_E	20	18	27					158	Near Hinomisaki, Kii Channel.
		iP_N	20	18	29						
		iS_E	20	18	49						
		iS_N	20	18	50						
		M_{EN}	20	18	51		±5	+7			
		eF_E	20	21	58						
		eF_N	20	22	13						
39	May 26	iP_E	16	20	15		+1.0			7540	A distant earthquake. SW off Fiji Ils, south Pacific Osean. P and S very sharp, other waves small and indefinite.
		iP_{NZ}	16	20	14			−2.2	−6.1		
		iP_{RE}	16	20	26		+8.6				
		iP_{RN}	16	20	27			−17.4			
		iP_{RZ}	16	20	25				−3.5		
		iS_E	16	29	12		+13				
		iS_N	16	29	10			+35			
		eS_Z	16	29	07						
		iS_{RE}	16	29	49		+25				
		iL_E	16	33	29						
		eL_E	16	33	23						
		eF_E	17	01	±						
		eF_N	17	04	±						
		eF_Z	16	55	±						
40	May 28	iP_{EN}	2	23	08		−29	−20.1		1660	NE off Amami-Osima, Ryukyu Ils. Perseptible at the North-
		iP_Z	2	23	07				−7.0		

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eS_E	2	26	00						ern part of Ryukyu and
		iS_N	2	26	00						Kyusyu district.
		iL_E	2	27	08						
		iL_N	2	27	00						
		iL_Z	2	27	02						
		M_E	2	29	43		−23				
		M_1N	2	28	06			+27			
		M_2N	2	28	38			−27			
		M_3N	2	33	29			−17			
		eF_E	2	49	±						
		eF_N	2	53	±						
		eF_Z	2	50	±						
41	May 30	iP_E	0	02	31					48	Near Mt. Rokuko, NE of
		iS_{EN}	0	02	37						Kobe.
		M_{EN}	0	02	37		−4	−3			
		F_{EN}	0	02	59						
42	June 1	iP_{EN}	19	33	54					153	Near the mauth of Arita
		iS_{EN}	19	34	15						River, Wakayama Prefec-
		M_E	19	34	15		−20				ture. Moderate shocks
		M_N	19	34	17			±13			were felt at the
		eF_{EN}	19	36	24						Wakayama City.
											(By Omori's portable
											seismometer)
43	June 3	iP_E	0	20	28					561	SE off Kinkazan, Miyagi
		iP_N	0	20	30						Prefecture.
		iS_E	0	21	43						Weak shocks were felt
		eS_N	0	21	49						at the Oou district.
		M_E	0	21	48		+10				(By Omori's portable
		M_N	0	23	29			+18			seismometer)
		eF_E	0	25	21						
		eF_N	0	25	±						
44	June 3	eP_N	10	52	05						A distant earthquake.
		eS_N	11	10	29						Destructive in Mexico.
		eL_N	11	20	39						Times are uncertain.

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		eL$_E$	11	20	23						
		eF	13	30	±						
45	June 4	iP$_N$	14	11	31					145	Middle basin of the Arita River, Wakayama Prefecture. (By Omori's portable seismometer.)
		iS$_{EN}$	14	11	50						
		M$_E$	14	11	51		±13				
		M$_N$	14	11	52			+13			
		F$_E$	14	12	27						
		F$_N$	14	12	42						
46	June 8	P$_E$	6	15	23					413	In the Hyuga-nada, East off Miyazaki Prefecture. Perceptible at the coast of Bungo Channel. P phase is not distinct.
		eP$_N$	6	15	23						
		eP$_Z$	6	15	15						
		iS$_{EN}$	6	16	19						
		iS$_Z$	6	16	17						
		M$_E$	6	16	42	1.8	+38				
		M$_N$	6	16	33	2.0		−31			
		M$_Z$	6	16	29	1.5			−34		
		eF$_{EN}$	6	25	±						
		eF$_Z$	6	21	±						
47	June 8	iP$_E$	10	55	36					315	In the Hyuga-nada, East off Miyazaki Prefecture. Perceptible at the coast of Bungo Channel.
		iP$_N$	10	55	37						
		eP$_Z$	10	55	30						
		iP$_Z$	10	55	36						
		iS$_{EN}$	10	56	19						
		iS$_Z$	10	56	20						
		M$_E$	10	56	38	2.4	+16				
		M$_N$	10	56	42	1.8		−19			
		M$_Z$	10	56	32	1.5			−8		
		eF$_{EN}$	11	04	±						
		eF$_Z$	11	00	±						
48	June 11	eP$_E$	17	05	03						South of Marianne Ils, North Pacific Ocean. Strong shocks were felt at the Guam Isl.
		iP$_N$	17	05	08						
		iP$_Z$	17	05	06						

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No.	Date	Phase	Time G.	M.	T.	Period	Amplitude A_E	A_N	A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
		e_N	17	06	15						
		eF_{EZ}	17	13	±						
		eF_N	17	17	±						
49	June 14	iP	6	04	18		−3.0	−3.0	−6.2	2350	A distant earthquake. Strong shocks were felt at the NW-tern part of Luzon, Philippine. After S waves small and faint.
		i_E	6	04	35						
		i_Z	6	04	36						
		iS_{EN}	6	08	11						
		eF_E	6	27	±						
		eF_N	6	24	±						
		eF_Z	6	17	±						
50	June 16	iP_E	8	33	29		+1.0			519	Lower basin of the Kinu River, Kwanto district. Weak shocks were felt at Kwanto district.
		eP_N	8	33	31			?			
		iP_Z	8	33	31				+0.8		
		iS_E	8	34	39						
		iS_N	8	34	38						
		iS_Z	8	34	50						
		M_E	8	35	13		+8				
		M_N	8	34	59	1.7		−20			
		M_Z	8	35	02				+11		
		eF_E	8	39	20						
		eF_N	8	40	55						
		eF_Z	8	37	23						
51	June 18	iP_{EN}	1	32	35					376	Southern part of Hyuga-nada, SE off Miyazaki Prefecture. Weak shocks were felt at the coast of Bungo Channel
		iP_Z	1	32	34						
		iS_E	1	33	26						
		iS_{NZ}	1	33	25						
		M_E	1	33	39	2.6	−69				
		M_N	1	33	45	2.6		+69			
		M_Z	1	33	29	3.1			−45		
		F_E	1	40	59						
		F_N	1	40	52						
		eF_Z	1	40	58						

No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude AE	Amplitude AN	Amplitude AZ	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
52	June 18	iPRE	10	30	43						A distant earthquake. Destructive in Colima, Mexico. 18°8N 105°.5W (J.S.A.)
		iPRN	10	30	46						
		iPRZ	10	30	39						
		eSE	11	04	47						
		eSN	11	00	49						
		eSZ	11	04	07						
		ME	11	29	24		−14				
		MN	11	29	26			+11			
		eFE	12	10	±						
		eFN	12	07	±						
		eFZ	12	10	±						
53	June 22	iPEZ	0	37	17		−		+	638	Off the Tyosi, Tiba Prefecture. Weak shocks were felt at Kwanto bistrict.
		iPN	0	37	16			?			
		iE	0	37	36						
		iN	0	38	25						
		iZ	0	37	35						
		iSEN	0	38	43						
		iSZ	0	38	40						
		M1E	0	39	01	2.7	+60				
		M1N	0	38	55	4.1		−152			
		M1Z	0	38	45	2.5			+134		
		M2E	0	39	13	3.4	+60				
		M2N	0	39	11	3.7		+121			
		M2Z	0	39	01	2.5			138		
		eFEN	0	49	±						
		eFZ	0	46	±						
54	June 22	eLE	14	04	±						A distant earthquake. Destructive in Mexico. Trace of only.
		eFE	14	15	±						
* 55	June 25	iP	13	32	51		−1.0	−2.0	+3.8	26	An after shock of North Tango earthquake on Mar. 7th 1927. Perceptible.
		iS	13	32	54						
		M	13	32	55		+75	+80	±22		
		FEN	13	34	27						
		FZ	13	34	21						

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No.	Date	Phase	Time G.	Time M.	Time T.	Period	Amplitude A_E	Amplitude A_N	Amplitude A_Z	Δ	Remarks
			h	m	s	s	μ	μ	μ	km.	
56	June 29	iP_E	18	17	46						East far off the mouth of Mabuti River, Aomori Prefecture. Faint record.
		iP_N	18	17	44						
		iP_Z	18	17	39						
		eS_E	18	19	28						
		eS_N	18	19	46						
		eL_E	18	20	42						
		eL_N	18	20	47						
		eF_E	18	35	±						
		eF_{NZ}	18	32	±						

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