International Seismological Centre

REVIEW OF RESEARCH FOR DISASTER PREVENTION
No. 1

SEISMOLOGICAL DATA OF MATSUSHIRO EARTHQUAKE SWARM (REPORT I)

OBSERVATIONS BY THE NETWORK OF JMA DURING AUGUST 1965 TO DECEMBER 1966

防 災 科 学 技 術 研 究 資 料
第 1 号

松 代 群 発 地 震 観 測 資 料 (第1報)

昭和 42 年 3 月
科 学 技 術 庁
国立防災科学技術センター

Published by the National Research Center for Disaster Prevention
Science and Technology Agency, Tokyo
March 1967

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550.340.6(521.52)

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Foreword

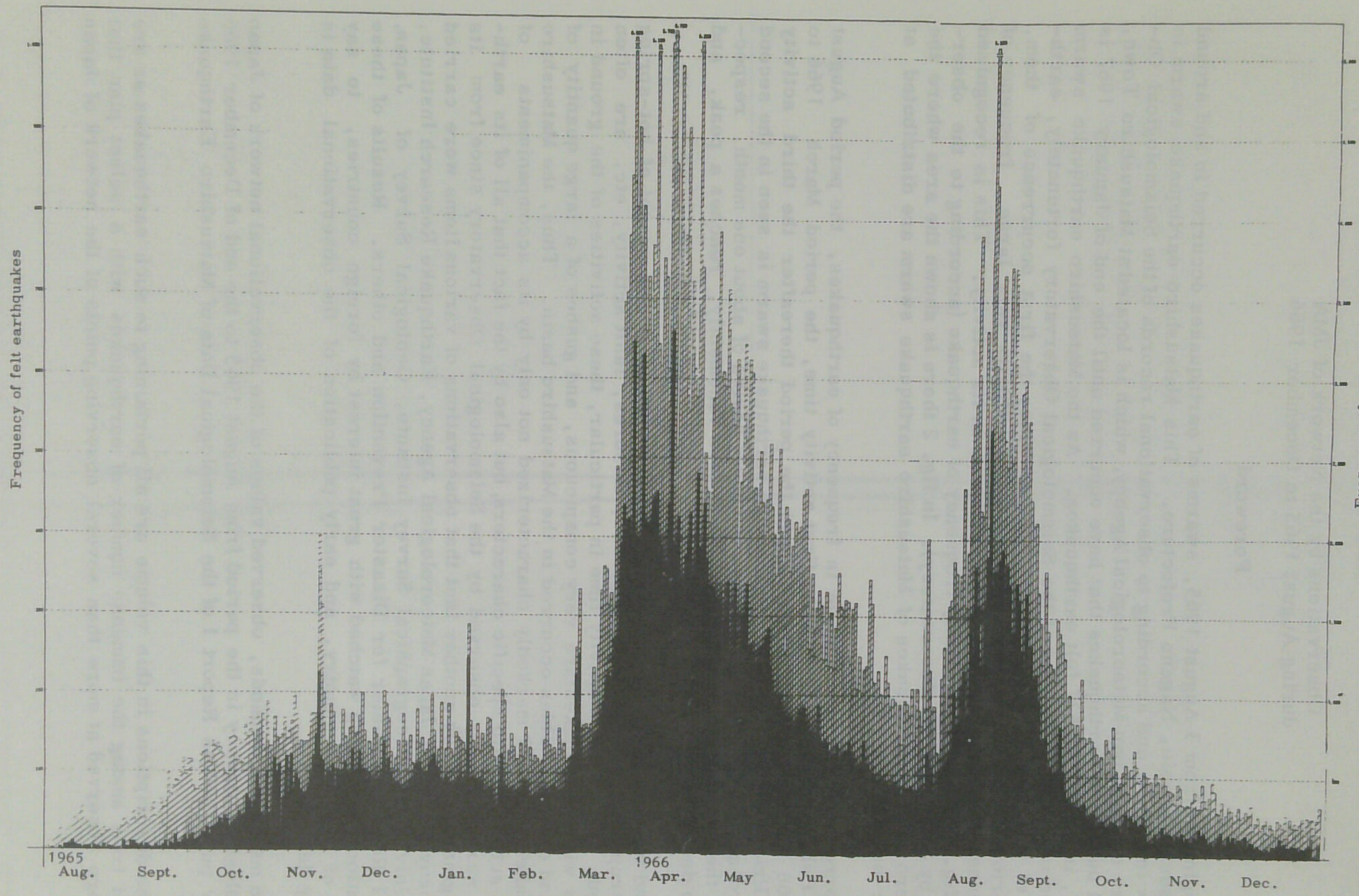
Beginning from 3 August 1965, swarms of earthquakes occurred in and around the Matsushiro basin, Nagano Prefecture. This Matsushiro earthquake swarm is still now in action, and according to observational records of the Seismological Observatory of the Japan Meteorological Agency, which is located at Matsushiro Town, the total number of earthquakes that have occurred until the end of January 1967 is 631,511, including 59,537 felt earthquakes. As the Matsushiro earthquake swarm occurred in the neighborhood of the Seismological Observatory fortunately, earthquakes of this swarm were always observed since the first occurrence of them. This earthquake swarm is characterized not only by its very large frequency of occurrence, but also by the remarkable change in its activity. This is recognized also in fig. 1 indicating the daily frequency of earthquake (according to the observations by Seismological Observatory). In fig. 2 there is shown the area where the epicenters of the earthquakes of Matsushiro earthquake swarm are distributed at the year-end of 1966.

Corresponding to the change in frequency of earthquakes, the period August 1965 to February 1966 is named the first activity time, the period March 1966 to July 1966 the second activity time, and the period thereafter the third activity time. Principal activity of the Matsushiro earthquake swarm is seen in the second and third activity times, and then in the early period of about one month, respectively, the frequency of earthquakes increases vehemently, reaches a peak, and tends to decrease gradually.

And in parallel with seismic activity, fluctuations of the amount of hot-spring water eruption, upheavals of the ground, fissures, fault activity, etc. are often observed. In the third activity time in particular, these activities of the ground in company with earthquakes are very conspicuous, and gushes of a large quantity of water and even landslides occurred in the Matsushiro basin. Thus, the Matsushiro earthquake swarm is markedly characterized not only by its accompaniments of various activities with specific characters, but also by the fact that all of its earthquakes were perfectly observed by the Seismological Observatory since from its very beginning, and by another fact that observations of various items were carried out at many places by Japan Meteorological Agency, Earthquake Research Institute, Kyoto University, Geographical Survey Institute, Geological Survey of Japan, National Research Center for Disaster Prevention and others. Results of these observations are being watched with great interest by foreign countries, to say nothing of our home country, and early publication of the observational data is strongly demanded.

To meet such demands, observed values of the observational network of Japan Meteorological Agency in the period from August 1965 to the end of December 1966 are now published as Report I of the Seismological Data of Matsushiro Earthquake Swarm.

The descriptions in this volume are all pertaining to such earthquakes as are selected from among the immense number of earthquakes with a select plan that they were observed at more than several observing points of the network of Japan



▨ : Frequency of recorded earthquakes, ■ : Frequency of felt earthquakes.

Fig. 1. Daily frequency of earthquakes observed at Matsushiro Seismological Observatory, JMA.

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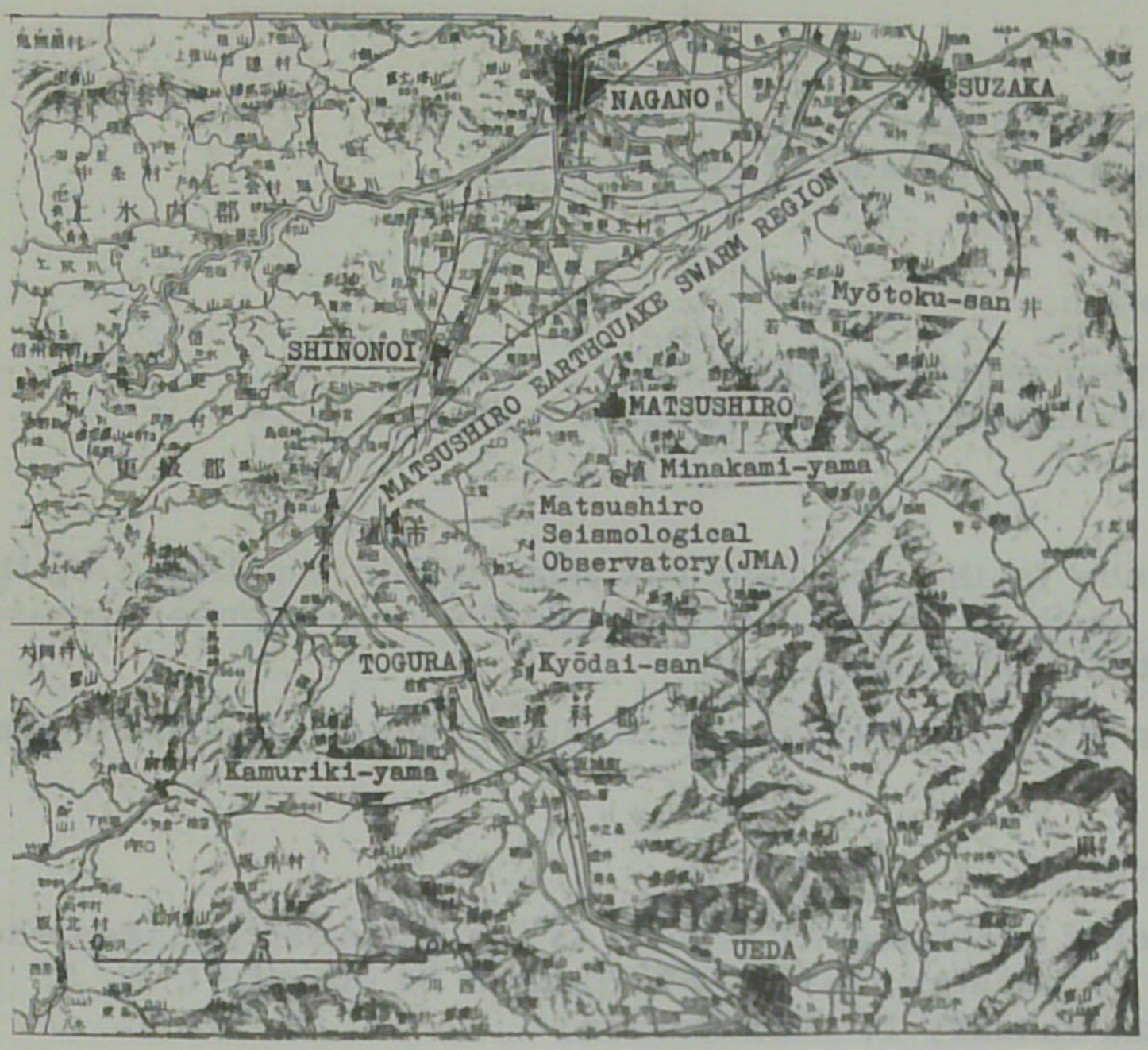


Fig. 2. Matsushiro earthquake swarm region.

Meteorological Agency and their focal positions and so on could be determined; that is to say, a part of felt earthquakes are here described. The form of representation is the same as that used in the Seismological Bulletin of Japan Meteorological Agency, and the present publication has the character of an appendix to the bulletin.

In February 1967, answering to the requests from inhabitants of Matsushiro Town, the Matsushiro Earthquake Center was established in the town for the purpose of collecting the materials for the research on Matsushiro earthquake swarm, under the joint auspices of the government offices concerned. The present publication should be regarded as the first activity of Matsushiro Earthquake Center.

It is intended to publish the observational data of Matsushiro earthquake swarm in the form of series, as soon as they are collected by cooperations of the government organs and universities concerned, so as to make them serviceable for the studies on earthquakes home and abroad, and on the prevention of disasters arising from earthquake.

Furthermore, the expenses required for publishing the present data are paid out of the expense for coordination and acceleration of special studies regarding Matsushiro earthquake swarm, sponsored by the Science and Technology Agency.

Kazuhiko Terada

Director, National Research Center
for Disaster Prevention

No. 1, March, 1967

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Introductory note

1. Phase.

Special symbol A for phases is used as follows:
APP and ASS represent pP and sS respectively.
Others are popular ones.

2. Nature of the motion.

I : Sudden commencement of a phase.
E: Gradual or indistinct commencement of a phase.

3. Amplitude.

Maximum amplitude is the apparent maximum double amplitude on the seismogram of VI, W or S seismographs (cf. page 7 and response curves), divided by 2 and the static magnification.

Initial motion is given by the ground displacement at the commencement of an earthquake.

4. Limit of seismometry.

Seismogram reading excluding Matsushiro is limited to earthquakes whose double trace amplitude is greater than one millimeter on one of VI, W, S, P and VD seismograms from January 1, 1965 onward.

In counting unfelt earthquakes we took no count of Matsushiro's data.

5. Period.

T: Period, duration of one complete oscillation.

6. JMA seismic intensity scales.

The intensity of the shock is estimated according to the scales 0-7 as follows.

0: No feeling. Shocks too weak to cause human feelings and registered only by a seismograph, but special symbol (X) is used when shocks are felt by some neighbours, but not by observer.

1: Slight. Extremely feeble shocks felt only by persons at rest or by those who are observant of an earthquake.

2: Weak. Shocks felt by most persons, slight shaking of doors and Japanese latticed sliding doors (shoji).

3: Rather strong. Slight shaking of houses and buildings, rattling of doors and Japanese latticed sliding doors (shoji), swinging of hanging objects like electric lamps, and moving of liquids in vessels.

4: Strong. Strong shaking of houses and buildings, overturning of unstable objects, and spilling of liquids out of vessels.

5: Very strong. Cracks in the walls, overturning of gravestones, stone lanterns, etc., and damage to chimneys and mud-and-plaster warehouses.

6: Disastrous. Demolition of houses by less than 30% in total number, landslips, fissures in the ground, etc.

7: Very disastrous. Demolition of houses by more than 30%, intense landslips, large fissures in the ground, and faults.

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7. The felt earthquakes in the list of earthquake origins are classified according to the distances of the furthest point where the shock is felt, as follows. And the unfelt shock is given as (U).

Remarkable earthquake (R):	Distance of the furthest point, where shock is felt, is greater than 300 km.
Moderate earthquake (M):	The distance is smaller than 300 km, but greater than 200 km.
Earthquake of small felt area (S):	The distance is smaller than 200 km, but greater than 100 km.
Local earthquake (L):	The distance is smaller than 100 km.

8. Earthquake origins in the list are the result by use of electronic data processing machine. Travel time tables of Wadati et al. are employed as standard travel times of P and S waves for calculation.

9. Magnitudes (M) are determined for earthquakes whose focal depths are smaller than 60 km, by using Tsuboi's formula

$$M = \log (A_N^2 + A_E^2)^{1/2} + 1.73 \log \Delta - 0.83,$$

where Δ : distance (km),

A_N, A_E : max. ground amplitudes, N- and E-components (μ).

And those ground amplitudes are of seismometers with periods of about five seconds, and of waves shorter than five seconds. Our magnitudes are the values averaged over magnitudes for every $(A_N^2 + A_E^2)^{1/2}$ and given as M and MX,

where M: when four and more stations report maximum ground amplitudes,

MX: when one to three stations report maximum ground amplitudes.

10. Time refers to Japanese Standard Time (JST).
(GMT) = (JST) - 9 hours.

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JMA stations and their seismographs

Station	λ	φ	Seismographs	Station	λ	φ	Seismograph
Abashiri	+144°17.0'	+44°01.0'	S,VI,OP	Nagasaki	+129°52.2'	+32°42.9'	S,VD,EM
Aikawa	138 14.5	38 01.2	S,VI,OP	Nagatsuro	138 50.8	34 36.0	S
Ajiro	139 05.8	35 02.6	S,VI,OP	Nagoya	136 58.1	35 09.9	S,VI,OP
Akita	140 06.1	39 43.1	S,VI,OP	Nara	135 50.0	34 41.0	S,P(H,V)
Aomori	140 47.0	40 49.0	S,W	Nemuro	145 35.2	43 19.7	S,VI,VD,OP
Asahikawa	142 22.4	43 46.2	S,VI,OP	Niigata	139 03.1	37 54.6	S,W,P(H,V)
Ashizuri	133 01.0	32 43.0	S,W	Nobeoka	131 41.0	32 35.0	S
Asosan	131 04.5	32 52.7	S,I	Obihiro	143 13.3	42 55.2	S,P(H,V)
Chichibu	139 04.9	35 59.5	S,P	Ofunato	141 43.1	39 03.7	S,VI
Choshi	140 50.6	35 43.5	S,W	Oita	131 37.4	33 14.0	S,W
Fukue	128 50.0	32 42.0	S,W	Okayama	133 54.9	34 40.9	S,P(H,V)
Fukui	136 13.6	36 03.2	S,P(H,V)	Omaezaki	138 12.8	34 36.2	S,W
Fukuoka	130 22.8	33 34.8	S,VI,M(H)	Onahama	140 54.4	36 56.7	S,VI,OP
Fukushima	140 28.5	37 45.4	S,VI,OP	Osaka	135 32.3	34 38.9	S,VI
Funatsu	138 45.8	35 29.9	S,P	Oshima	139 22.7	34 45.7	S,W
Gifu	136 45.9	35 23.9	S,W	Owase	136 11.7	34 04.0	S,VI,OP
Hachijojima	139 47.3	33 06.1	S,VI	Rumoi	141 38.0	43 57.0	S,P(H,V)
Hachinohe	141 31.5	40 31.5	S,VI,OP	Saga	130 18.3	33 14.7	S,P(H,V)
Hakodate	140 45.5	41 48.8	S,VI,OP	Saigo	133 20.0	36 12.3	S,P
Hamada	132 04.4	34 53.6	S,W	Sakata	139 50.2	38 54.2	S,P(H,V)
Hamamatsu	137 43.4	34 42.5	S,VI,OP	Sapporo	141 19.9	43 03.5	S,VI,OP
Hikone	136 14.8	35 16.4	S,W	Sendai	140 54.0	38 15.6	S,VI
Himeji	134 42.1	34 50.2	S,P(H,V)	Shimonoseki	130 56.5	33 57.2	S,P(H,V)
Hiroo	143 19.0	42 17.0	S,P(H,V)	Shionomisaki	135 45.8	33 26.9	S,W
Hiroshima	132 26.2	34 21.8	S,W	Shirakawa	140 13.5	37 07.1	S,P(H,V)
Iida	137 50.1	35 30.6	S,VI,OP	Shizuoka	138 24.4	34 58.4	S,W
Ishinomaki	141 18.2	38 25.5	S,VI,OP	Sumoto	134 54.5	34 20.1	S,VI,OP
Izuhara	129 17.7	34 12.2	S,P(H,V)	Suttsu	140 14.4	42 47.4	S,P(H,V)
Kagoshima	130 33.2	31 34.4	S,W,I	Takada	138 15.0	37 06.3	S,P(H,V)
Kakioka	140 11.6	36 13.9	S,W	Takamatsu	134 03.5	34 19.0	S,W
Kameyama	136 27.9	34 51.4	S,W	Takayama	137 15.3	36 09.1	S,P(H,V)
Kanazawa	136 38.9	36 32.8	S,VI,OP	Tokushima	134 34.6	34 03.9	S,P(H,V)
Karuizawa	138 33.1	36 20.4	S,P(H,V),I	Tokyo	139 45.5	35 41.1	S,J,VI',VD',I'
Kobe	135 10.8	34 41.3	S,P(H,V)	Tomisaki	139 49.7	34 55.2	S,VI,OP
Kochi	133 32.0	33 33.0	S,W	Torishima	140 18.3	30 28.9	S,VD,I
Kofu	138 33.5	35 39.9	S,W	Tottori	134 10.7	35 30.7	S,P(H,V)
Kumagaya	139 23.1	36 08.8	S,VI,OP	Toyama	137 12.5	36 42.4	S,W
Kumamoto	130 42.6	32 48.6	S,W	Toyooka	134 49.2	35 32.2	S,W
Kushiro	144 23.7	42 58.7	S,VI	Tsu	136 31.1	34 42.1	S,P(H,V)
Kyoto	135 44.1	35 00.7	S,VI,OP	Tsuruga	136 03.9	35 39.0	S,P(H,V)
Maebashi	139 03.9	36 24.1	S,W	Tsurugisan	134 05.8	33 51.1	S,P
Maizuru	135 23.2	35 28.3	S,P(H,V)	Unzendake	130 15.2	32 44.1	S,I
Matsue	133 04.3	35 27.3	S,P	Urakawa	142 46.8	42 09.5	S,VI,OP
Matsumoto	137 58.4	36 14.6	S,P(H,V)	Utsunomiya	139 52.3	36 32.8	S,W
Matsushiro	138 12.5	36 32.3	S,L,AW,G,B,V,C	Uwajima	132 33.5	33 13.5	S,P
Matsuyama	132 46.8	33 50.4	S,W	Wajima	136 53.9	37 23.4	S,W
Mishima	138 55.8	35 06.7	S,W	Wakayama	135 10.0	34 13.6	S,W,I
Mito	140 28.3	36 22.7	S,VI,OP	Wakkanai	141 40.5	45 25.0	S,VI,OP
Miyako	141 58.1	39 38.7	S,W	Yakushima	130 29.8	30 27.0	S,W
Miyazaki	131 25.6	31 55.0	S,W	Yamagata	140 21.0	38 15.2	S,P(H,V)
Mizusawa	141 08.0	39 08.0	P(H,V)	Yokohama	139 39.3	35 26.2	S,W
Morioka	141 10.1	39 41.8	S,VI,OP	Yonago	133 20.6	35 26.0	S,P(H,V)
Muroran	140 59.0	42 19.0	S,P(H,V)				
Murotomisaki	134 10.7	33 14.9	S,W	Ishigakijima	124 10.0	24 20.0	
Nagano	138 11.8	36 39.6	S,W	Naha	127 41.0	26 14.0	

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Notations:-

λ	:	Longitude.
φ	:	Geographical latitude.
W	:	Wiechert's horizontal and vertical seismographs (masses, H: 200 kg, V: 80 kg).
P	:	Portable seismograph (horizontal only).
P(H, V)	:	do (mass, 22.5 kg).
S	:	Strong motion seismograph.
M(H)	:	Mainka's horizontal seismograph (mass, 450 kg).
G	:	Galitzin's seismograph.
L	:	1,000 kg long-period seismograph, JMA type.
I	:	Ishimoto's seismograph.
V	:	Short-period vertical seismograph.
AW	:	Anderson-Wood's seismograph.
C	:	Capacity type seismograph.
EM	:	Electromagnetic seismograph.
OP	:	JMA 59-type electromagnetic seismograph with optical recorder.
VI	:	JMA 59-type electromagnetic seismograph with visible recorder.
VD	:	JMA 61-type electromagnetic seismograph with visible recorder.
B	:	Benioff's seismograph (short and long periods).
J	:	Remote recording JMA 63-type seismograph.
VI', VD', I'	:	Remote recording JMA 63-types of I, VD and VI respectively.

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List of Earthquake Origins

		Date and Time (J.S.T.)			C	Origin Time			Location						Depth	M
									Longitude			Latitude				
		d	h	m		m	s	± s	°	′	± ′	°	′	± ′	km	
1965	October	1	17	27	L	27	041	002	138	11	01	36	30	01	00	43
	November	2	05	02	L	02	038	002	138	14	01	36	30	01	00	39
		4	23	45	S	45	457	001	138	12	01	36	31	01	00	45
		5	10	07	L	07	251	003	138	14	02	36	31	01	00	41
		13	23	14	S	14	302	001	138	13	01	36	31	00	00	46
		16	00	18	L	18	178	002	138	15	01	36	32	01	00	39
		18	18	14	L	14	509	002	138	16	02	36	32	01	00	36
		21	03	30	L	30	323	001	138	13	01	36	32	01	00	48
		21	15	38	L	38	337	001	138	15	01	36	29	01	00	43
		22	21	09	S	09	115	001	138	14	01	36	31	00	00	45
		22	22	30	S	30	021	002	138	10	01	36	33	01	00	47
		23	02	57	S	57	379	002	138	14	01	36	31	01	00	50
	December	1	21	54	L	54	383	003	138	07	02	36	30	01	00	35
		8	06	54	L	54	026	002	138	13	01	36	32	01	00	41
		9	23	11	L	11	532	002	138	12	01	36	32	01	00	42
		12	06	18	L	18	053	002	138	11	01	36	33	01	00	38
		19	13	43	L	43	022	002	138	15	01	36	30	01	00	40
		27	01	16	L	16	084	003	138	17	01	36	31	01	00	40
1966	January	3	03	59	M	59	128	002	138	12	01	36	31	01	00	47
		8	22	34	L	34	288	002	138	16	01	36	32	01	00	47
		15	01	21	L	21	111	002	138	19	01	36	34	01	00	41
		20	23	58	L	58	542	003	138	14	02	36	31	01	00	39
		23	20	15	M	15	553	001	138	13	01	36	31	01	00	51
	February	7	04	05	S	05	117	002	138	13	01	36	30	01	00	49
		11	01	17	L	17	382	003	138	12	02	36	36	01	20	45
		12	04	05	L	05	554	002	138	09	01	36	33	01	20	42
		14	07	32	L	32	027	001	138	15	01	36	32	00	00	37 X
		16	17	11	L	11	440	002	138	13	01	36	29	01	00	36
		27	10	06	L	05	595	002	138	10	01	36	30	00	00	35
		28	15	53	L	53	478	004	138	12	02	36	32	01	00	40
	March	8	19	28	S	28	535	001	138	17	01	36	31	01	00	45
		10	07	03	L	03	428	002	138	11	01	36	31	01	00	45
		10	11	15	L	15	367	004	138	07	02	36	30	01	00	39
		22	07	59	L	59	492	002	138	13	02	36	34	01	20	37
		24	14	03	L	03	467	001	138	13	01	36	33	00	20	37
		28	11	10	L	10	478	003	138	17	02	36	32	01	00	39
		30	14	35	L	35	190	001	138	14	01	36	31	00	00	43
	April	1	05	25	L	25	163	001	138	17	01	36	33	01	00	46
		1	10	40	L	40	267	002	138	13	01	36	31	01	00	41
		2	06	09	L	09	245	002	138	14	01	36	31	01	00	40
		3	07	00	L	00	372	002	138	12	00	36	28	01	00	
		3	13	56	L	55	593	002	138	18	01	36	33	01	00	42
		3	23	47	L	47	492	001	138	16	01	36	30	01	00	41
		5	17	51	S	51	147	002	138	19	01	36	35	01	00	54
		6	17	07	L	07	456	002	138	19	01	36	33	01	00	41
		9	04	35	L	35	150	004	138	12	03	36	32	01	20	39
		9	23	16	L	15	572	002	138	18	01	36	10	01	00	37
		11	02	59	L	59	351	003	138	13	02	36	32	01	20	39
		11	04	57	S	57	240	002	138	12	01	36	31	01	00	47
		11	06	06	L	06	130	002	138	12	01	36	34	01	00	47
		11	14	50	L	50	238	002	138	16	01	36	32	01	00	41
		12	07	28	L	28	266	002	138	17	01	36	31	01	00	39
		12	07	29	L	29	534	002	138	17	01	36	31	01	00	39
		12	09	26	L	26	468	001	138	15	01	36	26	00	00	37 X
		13	13	44	L	44	075	002	138	16	01	36	30	01	00	39
		13	18	38	L	38	332	002	138	11	01	36	31	01	00	43
		14	09	09	L	09	058	001	138	14	01	36	29	00	00	44
		15	13	45	L	45	247	001	138	15	01	36	32	01	20	40
		16	02	03	L	03	308	003	138	08	02	36	38	01	00	40
		16	09	07	L	07	270	001	138	16	01	36	30	01	00	43
		16	15	06	L	06	401	001	138	16	01	36	30	01	00	45
		16	18	49	L	49	132	001	138	18	01	36	32	01	00	41
		17	10	21	L	21	330	002	138	14	01	36	32	01	00	47
		17	15	46	L	46	536	002	138	15	01	36	33	01	00	47
		17	16	14	L	14	297	002	138	13	01	36	33	01	00	39 X
		17	20	01	L	01	514	001	138	13	01	36	30	00	00	42
		17	20	06	L	06	416	003	138	14	02	36	31	01	00	39
		17	20	28	L	28	154	003	138	17	02	36	26	01	00	47
		18	05	44	L	44	088	002	138	18	01	36	32	01	00	39
		19	07	35	S	35	133	002	138	20	01	36	33	01	00	47
		21	03	55	L	55	114	002	138	13	01	36	34	01	00	41
		21	09	53	L	53	275	002	138	13	01	36	31	01	20	40
		21	20	25	L	25	463	002	138	18	01	36	32	01	00	40
		22	03	00	L	00	093	002	138	18	01	36	32	01	00	41
		24	20	30	L	30	279	002	138	18	01	36	32	01	00	41
		26	15	27	L	27	329	002	138	17	01	36	32	01	00	39
		29	18	21	L	21	574	002	138	15	01	36	32	01	00	39
		30	17	42	L	42	505	002	138	18	01	36	33	01	00	43

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		Date and Time (J.S.T.) d	h	m	C	Origin Time m	·s	± ·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	M ·
1966	May	1	04	48	L	48	306	001	138	09	01	36	32	01	00	40
		2	00	44	L	44	030	002	138	19	01	36	33	01	00	45
		2	01	52	L	51	583	002	138	15	01	36	35	01	00	41
		2	13	29	L	29	320	001	138	18	01	36	30	00	00	44
		4	08	37	L	36	599	001	138	18	01	36	32	01	00	40
		4	10	48	L	48	439	001	138	16	01	36	31	00	00	46
		4	14	31	L	31	408	002	138	16	01	36	30	01	00	37
		5	12	55	L	55	063	002	138	18	01	36	33	01	00	41
		6	04	59	L	59	079	002	138	20	01	36	32	01	00	42
		6	11	08	L	08	567	001	138	18	01	36	31	01	00	46
		6	16	04	L	03	571	002	138	17	01	36	33	01	00	41
		6	19	06	L	05	590	001	138	17	01	36	31	01	00	43
		6	19	08	L	08	124	001	138	15	01	36	31	01	00	50
		6	19	52	L	52	434	002	138	17	01	36	32	01	00	40
		6	20	31	L	31	452	003	138	22	01	36	30	01	00	39
		8	00	01	L	01	054	002	138	15	01	36	33	01	00	40
		10	12	25	L	25	336	002	138	14	01	36	30	01	00	40
		12	01	02	L	02	219	003	138	14	01	36	27	01	00	36
		14	19	36	L	36	292	002	138	18	01	36	32	01	00	40
		14	22	24	L	24	118	002	138	17	01	36	31	01	00	42
		14	23	13	L	13	362	001	138	04	01	36	27	01	00	44
		15	08	01	L	01	050	003	138	12	02	36	35	01	00	40
		15	14	21	L	21	484	006	138	18	04	36	33	01	00	39
		17	01	25	L	25	356	002	138	12	01	36	29	01	00	38
		19	15	28	L	28	313	001	138	17	01	36	32	01	00	40
		19	19	28	L	28	205	002	138	12	01	36	32	01	00	40
		19	21	51	L	51	063	001	138	13	01	36	31	00	00	43
		19	23	09	L	09	337	003	138	06	01	36	31	01	00	37
		20	08	31	L	31	202	002	138	09	01	36	33	01	00	42
		20	09	30	S	30	346	001	138	13	01	36	34	01	00	49
		20	09	50	L	50	228	002	138	16	01	36	30	01	00	40
		21	10	51	L	51	082	002	138	14	01	36	34	01	00	40
		21	22	48	L	48	087	002	138	18	01	36	32	01	00	43
		22	17	27	L	27	220	002	138	13	01	36	33	01	00	42
		23	02	22	L	22	399	002	138	18	01	36	34	01	00	40
		23	09	11	L	11	174	002	138	15	01	36	36	01	00	41
		24	23	11	L	11	114	002	138	14	01	36	35	01	00	41
		25	02	55	L	55	052	001	138	16	01	36	31	01	00	45
		25	05	57	L	56	590	002	138	17	01	36	30	01	00	47
		25	11	05	L	05	518	001	138	12	01	36	34	01	20	39
		25	11	27	L	27	252	003	138	14	01	36	33	01	00	42
		25	20	30	L	30	055	003	138	09	02	36	38	01	00	42
		26	16	25	L	25	097	002	138	11	01	36	34	01	00	40
		27	20	17	L	17	518	002	138	10	01	36	32	01	00	43
		27	22	02	L	02	500	001	138	16	01	36	34	01	00	44
		28	12	28	L	28	149	001	138	20	01	36	35	01	00	42
		28	14	21	M	21	197	001	138	13	01	36	34	01	00	53
		28	22	33	L	33	468	002	138	11	01	36	35	01	20	44
		29	12	47	L	47	475	002	138	09	01	36	33	01	00	40
		30	01	59	L	59	294	003	138	16	02	36	32	01	00	37
		30	13	27	L	27	459	002	138	10	01	36	31	01	00	43
	June	3	03	29	L	29	537	003	138	18	02	36	32	01	00	40
		5	06	56	L	56	088	004	138	20	02	36	33	02	00	41
		6	20	10	S	10	321	001	138	13	01	36	33	01	00	45
		10	10	36	L	36	271	002	138	18	01	36	32	01	00	40
		10	10	54	L	54	468	002	138	10	01	36	33	01	00	41
		10	18	09	L	09	483	002	138	13	01	36	29	01	00	43
		11	12	05	S	05	286	001	138	17	01	36	34	01	00	47
		11	13	17	L	17	417	002	138	14	02	36	34	01	20	38
		12	09	43	M	43	053	001	138	19	01	36	32	01	00	50
		12	20	27	L	27	492	002	138	09	01	36	30	01	00	40
		15	03	55	L	54	595	001	138	13	01	36	33	00	20	39
		15	09	42	L	42	416	002	138	16	01	36	36	01	00	41
		21	22	05	S	05	104	002	138	17	01	36	34	01	00	48
		25	07	02	L	02	324	001	138	18	01	36	32	01	00	40
		26	09	41	L	41	518	003	138	12	02	36	33	01	00	40
		26	12	32	L	31	561	003	138	22	02	36	32	01	00	43
		26	16	34	S	34	500	001	138	21	01	36	33	01	00	50
		26	18	01	L	01	278	002	138	20	01	36	34	01	00	40
		27	04	05	S	05	307	002	138	19	01	36	32	01	00	45
		27	15	56	L	56	003	003	138	13	02	36	27	01	00	39
		28	17	32	L	32	189	001	138	18	01	36	31	01	00	44
		28	18	10	L	10	277	001	138	20	01	36	35	01	00	46
	July	1	05	32	L	32	201	002	138	09	01	36	31	01	00	45
		2	14	06	L	06	274	004	138	11	03	36	32	01	00	40
		6	19	00	L	00	255	001	138	17	01	36	34	01	20	38
		7	22	24	L	24	394	002	138	17	01	36	35	01	00	42
		8	15	15	L	14	567	001	138	15	01	36	36	00	00	39
		9	16	06	L	06	110	002	138	15	01	36	31	01	00	41
		10	15	43	L	43	513	002	138	12	01	36	32	01	00	47
		10	20	13	L	13	211	001	138	16	01	36	32	00	00	39
		11	11	26	L	26	133	002	138	18	01	36	30	01	00	41
		12	14	09	L	08	573	002	138	20	01	36	33	01	00	44

International Seismological Centre

	Date and Time (J.S.T.)			C	Origin Time			Location						Depth	M
								Longitude			Latitude				
	d	h	m		m	•s	± •s	°	′	± ′	°	′	± ′	km	•
1966	18	05	40	L	40	078	004	138	18	01	36	30	02	20	39
	18	12	05	L	05	342	002	138	15	01	36	30	01	20	38
	19	07	07	L	07	175	002	138	16	01	36	33	01	00	39
	22	14	16	L	16	365	002	138	11	01	36	29	01	00	39
	26	07	26	L	26	194	002	138	18	01	36	32	01	00	39
	28	15	06	L	06	501	003	138	17	01	36	39	02	00	40
August	1	09	44	L	44	318	002	138	15	01	36	35	01	00	40
	3	01	29	L	29	308	002	138	13	01	36	31	01	00	39
	3	03	48	M	48	328	001	138	12	01	36	28	01	00	53
	4	09	33	L	33	582	003	138	14	02	36	33	01	00	39
	4	21	33	L	33	454	001	138	19	01	36	33	01	00	44
	5	10	26	L	26	302	003	138	16	02	36	35	01	00	39
	6	03	47	L	47	436	002	138	18	01	36	31	01	20	40
	8	09	37	S	37	158	001	138	19	01	36	32	01	00	51
	9	12	34	L	33	598	004	138	15	01	36	25	02	00	37
	10	15	45	L	45	530	002	138	18	01	36	33	01	00	39
	12	04	55	L	55	531	002	138	18	01	36	32	01	00	43
	12	20	31	L	31	305	009	138	17	06	36	30	03	00	40
	14	01	41	S	41	384	002	138	11	01	36	34	01	00	45
	14	04	05	L	05	002	001	138	13	01	36	29	01	00	41
	14	19	57	S	57	287	002	138	18	01	36	30	01	00	41
	16	13	16	L	16	143	002	138	12	01	36	31	01	20	41
	16	18	42	L	42	095	002	138	10	01	36	29	01	00	42
	18	00	38	L	38	469	001	138	14	01	36	30	00	00	41
	18	01	08	L	08	337	002	138	13	01	36	32	01	00	40
	19	16	58	L	58	400	002	138	22	01	36	33	01	20	40
	20	04	30	L	29	579	002	138	18	01	36	31	01	00	40
	20	18	32	L	32	310	002	138	17	01	36	31	01	00	45
	20	19	50	L	50	167	002	138	16	01	36	32	01	00	49
	21	15	29	L	29	353	002	138	11	01	36	34	01	00	41
	25	20	43	L	43	414	002	138	18	01	36	31	01	00	38
	27	22	29	L	29	077	008	138	07	02	36	36	03	20	39
	28	13	09	M	09	201	001	138	08	01	36	28	00	00	53
	28	13	23	L	23	378	002	138	14	01	36	30	01	00	40
	28	13	32	L	32	543	001	138	10	01	36	28	01	20	42
	28	13	53	L	53	446	003	138	11	01	36	28	01	00	39
	28	14	04	L	04	172	002	138	11	01	36	30	01	00	41
	29	00	36	S	36	141	002	138	15	01	36	34	01	00	51
	29	10	37	L	36	596	002	138	17	01	36	32	01	00	41
	30	06	06	L	06	043	002	138	09	01	36	27	01	20	43
	31	07	15	L	15	102	003	138	09	01	36	33	01	00	38
	31	07	36	L	36	077	002	138	14	01	36	32	01	00	39
	31	07	41	L	41	172	003	138	10	01	36	21	02	20	38
	31	13	37	L	37	126	001	138	15	01	36	29	01	00	41
September	2	09	52	L	52	414	003	138	14	01	36	32	01	00	40
	2	10	01	L	01	353	006	138	17	03	36	32	03	00	39
	3	18	50	L	50	084	002	138	14	01	36	32	01	00	41
	6	03	37	S	37	385	002	138	11	01	36	33	01	00	48
	6	23	45	L	45	007	001	138	12	01	36	32	01	00	40
	7	15	18	L	18	516	007	138	07	03	36	26	04	20	41
	8	21	23	L	23	329	002	138	13	01	36	31	01	00	43
	9	16	14	S	14	371	002	138	09	01	36	36	01	00	46
	9	16	41	L	41	165	003	138	09	01	36	25	02	00	41
	10	02	49	L	49	279	002	138	13	02	36	32	01	00	42
	11	02	11	L	11	072	002	138	21	01	36	37	01	00	44
	11	19	55	S	55	460	001	138	17	01	36	35	00	00	44
	12	03	29	L	29	097	003	138	16	02	36	28	02	00	39
	13	02	00	L	00	062	004	138	11	02	36	33	01	00	38
	13	06	35	L	35	484	002	138	12	01	36	33	01	00	38
	14	06	26	L	26	374	001	138	18	01	36	33	01	00	47
	14	09	25	L	25	383	002	138	10	01	36	28	01	00	40
	14	10	14	M	14	155	002	138	15	01	36	34	01	00	50
	14	23	28	L	28	109	002	138	17	01	36	30	01	00	40
	16	06	37	L	37	411	001	138	18	01	36	33	01	00	43
	16	20	50	S	50	356	002	138	14	01	36	33	01	00	42
	17	09	27	L	27	418	002	138	20	01	36	37	01	00	40
	19	21	55	L	55	258	002	138	15	01	36	36	01	00	40
	20	07	06	L	06	198	002	138	15	01	36	27	01	20	37
	24	16	53	L	53	189	003	138	18	02	36	30	01	20	37
	24	19	29	L	29	188	003	138	17	01	36	34	01	00	41
	27	04	03	L	03	153	002	138	09	01	36	31	01	00	49
	27	19	22	L	22	308	002	138	10	01	36	32	01	00	44
	30	04	28	L	28	479	003	138	17	01	36	33	01	00	39
October	3	07	25	L	25	235	002	138	18	01	36	30	01	00	38
	3	11	32	L	32	490	002	138	09	01	36	29	01	00	43
	3	14	57	L	57	508	004	138	13	02	36	28	02	00	40
	6	11	31	L	31	369	003	138	20	02	36	30	01	00	40
	12	03	35	L	35	434	002	138	14	01	36	32	01	00	41
	13	06	01	S	01	313	002	138	10	01	36	36	01	00	48
	19	00	04	S	04	452	001	138	10	01	36	30	01	00	46

International Seismological Centre

	Date and Time (J.S.T.)			C	Origin Time			Location						Depth	M
								Longitude			Latitude				
	d	h	m		m	•s	± •s	°	′	± ′	°	′	± ′	km	•
1966 October	23	11	14	S	14	109	002	138	10	01	36	30	01	00	47
	26	03	04	M	04	067	002	138	22	01	36	33	01	00	53
	26	03	13	L	13	392	002	138	17	02	36	37	01	20	39
	26	05	35	L	35	009	003	138	23	01	36	38	01	00	37
	28	20	03	L	03	292	003	138	13	02	36	24	01	20	43
	31	14	01	L	01	117	002	138	22	01	36	35	01	00	40
November	7	15	02	L	02	267	003	138	19	03	36	33	02	20	37
	8	18	09	L	09	224	002	138	10	01	36	27	01	00	39
	16	08	02	L	02	148	002	138	20	01	36	32	01	00	40
	20	17	23	L	23	049	003	138	19	01	36	33	01	00	38
	25	02	04	L	04	147	002	138	14	01	36	30	01	00	42
December	1	18	34	L	34	157	003	138	16	02	36	25	01	00	40
	1	19	36	L	36	360	002	138	18	01	36	33	01	00	39
	5	04	25	L	24	586	001	138	13	01	36	30	00	00	36
	12	05	13	L	13	489	002	138	19	01	36	31	01	00	38
	14	12	39	L	39	095	003	138	18	01	36	33	01	00	37 X
	21	12	55	L	55	127	003	138	11	03	36	38	02	20	38 X
	22	18	41	L	41	379	002	138	23	02	36	54	01	00	42

International Seismological Centre

Earthquakes Observed by Seismological Stations of J. M. A.

1965 October

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
1	17	27	041	002	138	11	01	36	30	01	00	43

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P
MATSUS	3	P	17	27	072																	
NAGANO	3	IP	17	27	092	N	60	W	55	U	152	IS	27	121	31	1	1	38	1	1	15	1
MATSUM	0	IP	17	27	128	S	3	W	4	U	10	IS	27	179								
KARUI7	0	IP	17	27	133			W	2	D	4	S	27	180	10	1	1	10	1	2		
TAKADA	0	P	17	27	177							S	27	256								
MAEBAS	0	IP	17	27	195	S		E	1	D	4	IS	27	290	23		3	16		3	21	
TOYAMA	0	EP	17	27	225							S	27	311	21		3	16		3	8	
KOFU	0	EP	17	27	236							IS	27	356	19		0	22		0		
CHICHI	0	EP	17	27	247							IS	27	364								
KUMAGA	0	EP	17	27	279							S	27	420	17		4	16		5	13	
FUNATS	0	P	17	27	292							S	27	433								
UTSUNO	0	P	17	27	317					D	3	ES	27	506	6		1	5		1	5	
WAJIMA	0	EX	17	27	319										17		1	15		1		
MISHIM	0	EP	17	27	348							S	27	537	13		1	16		1	7	
AJIRO	0	P	17	27	361							S	27	579	5		1	8		1	3	
NAGOYA	0	EP	17	27	372	N	1	E	1	D	1	S	27	596	15		1	13		1	6	
GIFU	0	EP	17	27	374							S	27	583	17		2	18		2	5	
MITO	0	EP	17	27	390							ES	28	040	6		1	5		1	2	
OMAEZA	0	EP	17	27	400							S	28	106	13		2	13		2	9	
HAMAMA	0	P	17	27	402							S	28	079	10		2	9		2	6	
YOKOHA	0	EX	17	27	455							IS	28	047	28		2	19		1		
TOKYO	0	EX	17	27	464							X	28	080	30		4	13		4		
TOMISA	0	EP	17	27	474							ES	28	190	10		4	9		3	7	
ONAHAM	0	EX	17	27	524										8		1	8		1	3	
KAKIOK	0	ES	17	28	00										7		1	7		1	2	
HIKONE	0	S	17	28	102										14		1	12		1	5	
TSU	0	EX	17	28	158																	
TOYOOK	0	X	17	28	369										12		1	9		1		
OSAKA	0	EX	17	28	412										8		5	13		5	4	
NIIGAT	0	X	17	28	564										9		1	16		2		

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
18	20	01										

MATSUS	3	IP	20	01	582	N		W		U		ES	01	583								
NAGANO	1	IP	20	01	590							IS	02	015	59			59			40	
KARUI7	0	EP	20	02	036							S	02	090								
TAKADA	0	EP	20	02	075							ES	02	162								
MATSUM	0	EP	20	03	036							IS	03	088								

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
21	05	21										

MATSUS	3	IP	05	21	486	S		E		U		ES	21	504								
NAGANO	2	IP	05	21	487							IS	21	512	11	1		13	1		11	1
MATSUM	0	IP	05	21	516	S		W		U	7	IS	21	568								
KARUI7	0	EP	05	21	528							ES	21	578								
TAKADA	0	P	05	21	565							S	22	054								
KOFU	0	EP	05	22	035							IS	22	146	9		0	8		0	7	

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
28	22	11										

MATSUS	3	IP	22	11	556			W		U												
NAGANO	2	P	22	12	093	N	7	W	33	U	65	S	12	111	98			24	1		97	
KARUI7	0	EP	22	12	151							ES	12	208								

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Station	Intensity	Phase (J. S. T.) h m · s	Initial Motion N μ	E μ	Z μ	Phase m · s	Maximum Amplitude = A N P T E P T Z P T
MATSUM	0	IP 22 12 160			U 2	IS 12 215	
TAKADA	0	EP 22 12 192				ES 12 271	
MITO	0	EP 22 12 418				IS 13 055	AN 4 P T 0 AE 6 P T 0 AZ 1 P T 0

1965

November

Origin Time d h m · s	± · s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
2 05 02 038	002	138 14	01	36 30	01	00	39

Station	Intensity	Phase (J. S. T.) h m · s	Initial Motion N μ	E μ	Z μ	Phase m · s	Maximum Amplitude = A N P T E P T Z P T
MATSUS	3	P 05 02 066					
NAGANO	3	P 05 02 081				IS 02 104	16 1 21 1 18 1
MATSUM	0	IP 05 02 123	S	W 2	U 8	IS 02 176	
KARUIZ	0	EP 05 02 128				ES 02 176	
TAKADA	0	EP 05 02 189				ES 02 254	
MAEBAS	0	IP 05 02 193		W 1	D 4	ES 02 296	10 3 7 4 6 0
KOFU	0	EP 05 02 222				ES 02 337	10 0 14 1 5 1
TOYAMA	0	EP 05 02 23				S 02 458	7 4 7 3 4 2
KUMAGA	0	EP 05 02 250				S 02 416	8 4 9 4 11 4
FUNATS	0	P 05 02 271				S 02 423	
KANAZA	0	EP 05 02 322				S 02 510	
MISHIM	0	EP 05 02 362				S 02 535	8 0 9 0 2 1
NAGOYA	0	EP 05 02 369	S	O W 0	D 0	S 02 592	5 1 6 1 2 1
GIFU	0	EP 05 02 40					6 1 7 2
YOKOHA	0	EP 05 02 42				IX 03 017	9 1 7 1

Origin Time d h m · s	± · s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
3 00 25							

Station	Intensity	Phase (J. S. T.) h m · s	Initial Motion N μ	E μ	Z μ	Phase m · s	Maximum Amplitude = A N P T E P T Z P T
MATSUS	3	P 00 25 265					
NAGANO	2	IP 00 25 290	N 9	W 7	U 61	IS 25 316	82 96 79
KARUIZ	0	EP 00 25 326				S 25 377	
MATSUM	0	EP 00 25 327				IS 25 378	
TAKADA	0	P 00 25 374				S 25 456	
YOKOHA	0	EP 00 26 194					6 0

Origin Time d h m · s	± · s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
4 23 45 457	001	138 12	01	36 31	01	00	45

Station	Intensity	Phase (J. S. T.) h m · s	Initial Motion N μ	E μ	Z μ	Phase m · s	Maximum Amplitude = A N P T E P T Z P T
MATSUS	4	P 23 45 484					
NAGANO	3	IP 23 45 502	N 13	W 7	U 51	IS 45 522	60 1 0 10 2 0 70 1
MATSUM	1	IP 23 45 547	S	W 2	U 6	IS 46 001	
KARUIZ	0	IP 23 45 551	N 2		D 3	ES 45 593	15 1 2 10 1 2 50 1
TAKADA	1	P 23 45 593				S 46 069	
MAEBAS	0	IP 23 46 029	N 1	W 4	D 12	S 46 130	61 4 38 4 60 4
TOYAMA	0	P 23 46 048	N	E	D	IS 46 180	49 4 39 4 20 3
KOFU	0	EP 23 46 052				ES 46 170	37 0 45 0 14 0
TAKAYA	0	EP 23 46 053				S 46 167	
CHICHI	0	EP 23 46 059				ES 46 188	
KUMAGA	0	EP 23 46 072				S 46 241	41 7 46 4 29 4
IIDA	0	EP 23 46 077				ES 46 234	11 2 11 2 9 0
FUNATS	0	P 23 46 097				S 46 233	
WAJIMA	0	EP 23 46 115				ES 46 366	42 1 27 1 13 1
UTSUNO	0	EP 23 46 127			D 8	ES 46 333	13 1 13 1 15 1

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A × 10^P μ N: A_N	P	T s	E: A_E	P	T s	Z: A_Z	P	T s
KANAZA	0	EP 23 46 131				S 46 300									
AIKAWA	0	IP 23 46 140	N 0	W 0	U 0	IS 46 340	13		0	23		0	5		0
KAKIOK	0	EP 23 46 16				ES 46 39	12		1	11		1	5		1
NIIGAT	X	P 23 46 169				S 46 390	35		0	37		5	10		1
SHIZUO	0	EP 23 46 170				ES 46 396	10		1	11		1	5		1
MISHIM	0	EP 23 46 176				S 46 369	31		1	31		1	9		1
AJIRO	0	P 23 46 179				S 46 398	8		0	10		0	3		0
GIFU	0	P 23 46 183				S 46 401	32		2	32		1	12		1
TOKYO	0	EP 23 46 184				ES 46 434	50		4	33		4	26		4
NAGOYA	0	EP 23 46 191	S 2	W 2	D 5	S 46 427	22		2	23		2	9		1
FUKUI	0	X 23 46 198				X 47 472									
MITO	0	IP 23 46 210		E 1		IS 46 461	26		2	44		3	20		3
HAMAMA	0	P 23 46 219	N 2	E 1		S 46 476	16		1	13		2	9		1
TSU	0	EP 23 46 225													
YOKOHA	0	EX 23 46 234	N 2		D 4	IS 46 445	57		1	33		1	11		2
OMAEZA	0	EP 23 46 250				ES 46 525	16		3	19		3			
OSHIMA	0	P 23 46 262				S 46 503	19		1	12		1	3		
TSURUG	0	EP 23 46 263				S 46 510									
HIKONE	0	P 23 46 273				S 46 536	22		1	22		1	9		2
KAMEYA	0	P 23 46 283				S 46 574	8		3	6		3	6		2
KYOTO	0	EP 23 46 351				IS 47 055	6		2	5		0	3		1
TOYOOK	0	EX 23 46 453				S 47 234	13		1	13		1			
OSAKA	0	EP 23 46 459				X 47 245	15		3	20		5	5		3
SAKATA	0	EX 23 46 480													
WAKAYA	0	EX 23 46 525				EX 47 395	7		1	8		1			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
5 10 07 251	003	138 14	02	36 31	01	00	41

MATSUS	4	P	10	07	280												
NAGANO	2	IP	10	07	298	N	8	W	2	U	39	IS	07	320	23 1	26 1	84
MATSUM	0	IP	10	07	336	S	2	W	4	U	10	IS	07	391			
KARUI7	0	IP	10	07	341	N	2	W	2	D	4	IS	07	393			
TAKADA	0	P	10	07	382							S	07	473			
MAEBAS	0	P	10	07	410					D	2	IS	07	497	21 5	14 4	23 4
TOYAMA	0	EP	10	07	447							S	07	567	15 4	13 2	7 3
KOFU	0	EP	10	07	449							ES	07	564	12 1	14 0	8 1
IIDA	0	EP	10	07	474							ES	08	070	4 2	5 1	2 1
KUMAGA	0	EP	10	07	482							ES	08	185	19 6	20 4	9 5
FUNATS	0	P	10	07	486							S	08	030			
KANAZA	0	EP	10	07	500							S	08	112	60 3	90 3	20
MISHIM	0	EP	10	07	565							IS	08	153	12 1	15 1	4 1
AJIRO	0	P	10	07	570							S	08	183	6 1	8 1	2 1
GIFU	0	P	10	07	587							S	08	203	15 2	15 2	5 1
NAGOYA	0	EP	10	07	587	S	1	W	1	D	2	S	08	205	11 1	11 1	4 1
OMAEZA	0	EP	10	08	039										12 2	8 2	
HIKONE	0	EP	10	08	082							S	08	319	13 1	13 1	3 2
YOKOHA	0	IX	10	08	241										24 1	13 1	

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
8 12 38							

MATSUS	3	P	12	38	096					
NAGANO	1	IP	12	38	116	IS	38	140	89	86	45
KARUI7	0	IP	12	38	157	ES	38	207			
MATSUM	0	EP	12	38	158	IS	38	209			
TAKADA	0	EP	12	38	195	ES	38	293			

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
8	20	15								

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
MATSUS	3	P	20	15	442															
NAGANO	1	IP	20	15	443				IS	15	468	85			12	1		63		
MATSUM	0	EP	20	15	493				IS	15	549									
KARUI7	0	EP	20	15	500				ES	15	550									
TAKADA	0	EP	20	15	543				ES	16	023									

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
11	13	04								

MATSUS	3	P	13	04	328							IS	04	365	13	1		13	1		89	
NAGANO	1	P	13	04	345							ES	04	432								
KARUI7	0	EP	13	04	385				U	2		IS	04	446								
MATSUM	0	IP	13	04	393							ES	04	526								
TAKADA	0	EP	13	04	428																	

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
11	22	51								

MATSUS	2	P	22	51	507							IS	51	546	96			17	1		55	
NAGANO	2	P	22	51	522							IS	52	013								
MATSUM	0	P	22	51	560	W		U	3			ES	52	015								
KARUI7	0	EP	22	51	567																	

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
13	23	14	302	001	138	13 01	36	31 00	00	46

MATSUS	4	P	23	14	327																			
NAGANO	3	IP	23	14	351	N	63	W	26	U	340	IS	14	372	60	1	0	90	1		50	1	0	
KARUIZ	1	IP	23	14	389	N	7	W	6	D	6	ES	14	437	30	1	2	30	1	1	10	1	2	
MATSUM	2	IP	23	14	392	S	4	W	8	U	16	IS	14	451	10	1	1	50		1	10	1	1	
TAKADA	1	P	23	14	433							S	14	515										
MAEBAS	0	IP	23	14	460	N	1	W	7	D	17	S	14	545	71		3	55		4	69		3	
KOFU	1	IP	23	14	488	S	10	E	5	U	16	IS	15	005	40		0	53		0	23		1	
TAKAYA	0	P	23	14	489							S	15	008										
TOYAMA	0	EP	23	14	491							IS	15	027	53		4	50		4	33		3	
CHICHI	0	EP	23	14	497							IS	15	013										
KUMAGA	0	EP	23	14	514							S	15	138	58		3	58		4				
IIDA	0	IP	23	14	527	S	6	W	6	U	10	IS	15	070	20		1	16		2	10		1	
FUNATS	0	P	23	14	544							S	15	083										
KANAZA	0	EP	23	14	560							S	15	144										
UTSUNO	0	P	23	14	571							S	15	155	16		2	16		1				
AIKAWA	0	EP	23	14	583	N	3			U	2	IS	15	182	26		1	14		0	5		1	
WAJIMA	0	EP	23	14	599							ES	15	185	70		1	70		1	18		1	
MISHIM	0	IP	23	15	000					U	2	IS	15	200	39		1	38		1	18		1	
SHIZUO	0	P	23	15	007							S	15	223	10		1	15		1	6		1	
NIIGAT	0	P	23	15	007							S	15	230	34		2	56		5	12		5	
KAKIOK	0	EP	23	15	01							EX	15	15	22		1	17		1	6		1	
TOKYO	0	EP	23	15	014							ES	15	238	70		4	45		3	63		4	
AJIRO	0	IP	23	15	017	S	1	E	0	U	1	IS	15	231	18		0	20		0	6		1	
GIFU	0	P	23	15	032	N		E	4	D		S	15	244	53		2	49		1	12		1	
NAGOYA	0	IP	23	15	035	S	3	W	2	U	2	IS	15	261	39		1	40		1	21		1	
MITO	0	EP	23	15	044							IS	15	294	19		1	17		1	9		2	
FUKUI	0	P	23	15	050							X	15	348										
YOKOHA	0	IP	23	15	051					D	3	IS	15	274	80		1				15		1	
HAMAMA	0	EP	23	15	055							S	15	328	15		2	20		3	8		1	
OMAEZA	0	P	23	15	074							S	15	355	14		4	22		4	17		2	
OSHIMA	0	P	23	15	077							IS	15	336	24		1	15		1	5			
TSURUG	0	EP	23	15	091							S	15	367										
ONAHAM	0	EP	23	15	106							ES	15	400	18		1	23		1	9		3	

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A×10^{n} μ								
			h	m	• s	N μ	E μ	Z μ		m	• s	N A_N μ	N P	N T S	E A_E μ	E P	E T S	Z A_Z μ	Z P	Z T S
HIKONE	0	EP	23	15	110				S	15	374	37		1	34		1	13		1
KAMEYA	0	EP	23	15	118				S	15	358	14		1	13		2	8		2
FUKUSH	0	EP	23	15	121				ES	15	433	8		1	5		1	2		1
TOMISA	0	EP	23	15	140							11		2	10		3	7		3
TSU	0	EP	23	15	147				IS	15	437									
NARA	0	EP	23	15	190															
KYOTO	0	EP	23	15	202				IS	15	504	10		2	7		1	4		1
SENDAI	0	EX	23	15	21							5		3	4		2	2		2
TOYOOK	0	EP	23	15	268				ES	16	051	15		1	28		1	5		1
OSAKA	0	EX	23	15	291				X	16	082	16		2	31		4	9		2
SAKATA	0	EX	23	15	556															

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
14	08	34								

MATSUS	3	P	08	34	022															
NAGANO	2	P	08	34	028															
MATSUM	0	EP	08	34	066				IS	34	053	94			95			62		
KARUI7	0	EP	08	34	066				IS	34	118									
TAKADA	0	EP	08	34	114				ES	34	117									
									ES	34	206									

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
15	04	07								

MATSUS	3	P	04	07	545															
NAGANO	3	IP	04	07	565	N	24	W 59 U 91	IS	07	588	30	1		20	1		20	1	
MATSUM	0	EP	04	08	005				IS	08	060									
KARUIZ	0	EP	04	08	018				ES	08	071									
TAKADA	0	EP	04	08	051				ES	08	132									
MAEBAS	0	P	04	08	085			U				7		2	11		2	6		2
TOYAMA	0	EP	04	08	10							8		2	8		3	5		3
KUMAGA	0	EP	04	08	159				EX	08	558	10		3	9		4	10		4
WAJIMA	0	EX	04	08	335							21		1	11		1			

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
16	00	18	178	002	138	15 01	36	32 01	00	39

MATSUS	3	P	00	18	207															
NAGANO	2	IP	00	18	237				S	18	255	22	1		29	1		17	1	
KARUIZ	0	EP	00	18	270				IS	18	320									
MATSUM	1	IP	00	18	271			U 4	IS	18	322									
TAKADA	0	EP	00	18	310				ES	18	396									
MAEBAS	0	IP	00	18	332			W D 2	S	18	428	14		3	11		3	10		3
KOFU	0	IP	00	18	366	S	2	U 4	ES	18	487	6		1	9		1	4		1
TOYAMA	0	P	00	18	375				S	18	50	8		4	5		4	4		3
KUMAGA	0	EP	00	18	407				EX	19	378	10		3	10		4	8		3
GIFU	0	P	00	18	511				S	19	125	10		2						
WAJIMA	0	EX	00	18	524							14		1	13		1			
NAGOYA	0	EP	00	18	528	N	1	E 1 D 1	S	19	140	6		1	5		1	3		1
YOKOHA	0	EP	00	18	561				IS	19	164	13		1						
MISHIM	0	EX	00	19								6		1	6		1	3		1
HIKONE	0	EP	00	19	005				ES	19	269	8		1	5		1	3		2

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Origin Time						Location							Magnitude
						Longitude		Latitude			Depth		
d	h	m	s	± s		° ′	± ′	° ′	± ′		km		
18	18	14	509	002		138 16	02	36 32	01		00		36

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	18	14	541																			
NAGANO	2	P	18	14	556	N		W		U		S	14	576		14	1		18	1		11	1	
KARUIZ	0	EP	18	14	594							ES	15	040										
MATSUM	1	IP	18	14	599					U	4	IS	15	050										
TAKADA	0	P	18	15	040							S	15	136										
MAEBAS	0	IP	18	15	064			W		D	3	S	15	154		5		3	6		3	6		3
KOFU	0	IP	18	15	102	S	1	E				ES	15	224		6		1	7		1			
CHICHI	0	EP	18	15	120							ES	15	226										
KUMAGA	0	EX	18	15	150											7		3	6		8	5		4
AJIRO	0	P	18	15	227							S	15	442		3		0	5		0	1		0
YOKOHA	0	EP	18	15	267											7		1						

Origin Time						Location							Magnitude
						Longitude		Latitude			Depth		
d	h	m	s	± s		° ′	± ′	° ′	± ′		km		
19	20	46											
MATSUS	3	P	20	46	480																			
NAGANO	2	P	20	46	500							S	46	520		13	1		13	1		10	1	
KARUIZ	0	EP	20	46	530							ES	46	585										
TAKADA	0	P	20	46	591							S	47	080										
KOFU	0	EP	20	47	048							ES	47	169		5		0	7		0	4		0

Origin Time						Location							Magnitude
						Longitude		Latitude			Depth		
d	h	m	s	± s		° ′	± ′	° ′	± ′		km		
21	03	30	323	001		138 13	01	36 32	01		00		48
MATSUS	4	P	03	30	354																			
NAGANO	3	IP	03	30	377	N	30	W	9	U	130	IS	30	395		10	2		80	1		40	1	
MATSUM	1	IP	03	30	413	S	7	W	14	U	30	IS	30	464		20	1	3	10	1	3	20	1	3
KARUIZ	0	IP	03	30	428			W	8	D	14	S	30	487		40	1	1	50	1	2	30	1	1
TAKADA	1	P	03	30	461	N	5	E	1	U	9	S	30	556										
MAEBAS	0	IP	03	30	481	N		W	3	D	10	S	30	578		13	1	3	84		3	14	1	3
TAKAYA	0	EP	03	30	514							IS	31	026										
CHICHI	0	EP	03	30	516							IS	31	027										
KOFU	0	IP	03	30	517	S	9	E	4	U	10	IS	31	033		52		1	66		1	30		1
TOYAMA	0	IP	03	30	523			E	2	D	17	IS	31	079		10	1	4	65		4	40		4
IIDA	0	IP	03	30	545	S	8	W	4			IS	31	102		24		2	33		1			
KUMAGA	0	EP	03	30	546							ES	31	071		97		5	12	1	4	55		3
FUNATS	0	P	03	30	563							S	31	099										
KANAZA	0	EP	03	30	586							S	31	162										
WAJIMA	0	EP	03	30	587							S	31	193		68		1	69		1	18		1
UTSUNO	0	EP	03	30	596			W	8			ES	31	173		20		2	21		1			
SHIZUO	0	EP	03	31	001							S	31	233		13		1	17		1	8		2
AIKAWA	0	EP	03	31	008	N	1					IS	31	202		21		1	24		1	8		3
TOKYO	0	EP	03	31	024							ES	31	245		13	1	4	93		4	11	1	4
MISHIM	0	IP	03	31	031					D	4	IS	31	245		54		1	54		1	18		1
NIIGAT	0	P	03	31	039							S	31	270		53		4	10	1	5	20		5
KAKIOK	0	EP	03	31	04							S	31	268		19		1	22		1	13		1
AJIRO	0	IP	03	31	041	S	0			U	1	S	31	260		21		1	40		1	3		1
NAGOYA	0	IP	03	31	054	S	2	W	3	U	4	IS	31	274		56		2	55		2	20		1
YOKOHA	0	IP	03	31	●60			E	2	U	8	IS	31	313		11	1	2	91		2	31		2
SHIRAK	0	EP	03	31	061							ES	31	291										
GIFU	0	P	03	31	067	S	3	W	3			S	31	285		78		2	81		2	17		1
FUKUI	0	P	03	31	067							S	31	324										
MITO	0	IP	03	31	074							ES	31	304		22		4	20		4	15		3
TSURUG	0	EP	03	31	076							S	31	369										
HAMAMA	0	P	03	31	080					U	3	S	31	356		31		2	40		2	18		1
OMAEZA	0	EP	03	31	099							ES	31	376		33		3	45		4	43		2
OSHIMA	0	P	03	31	120							IS	31	362		34		1	24		2	10		2
ONAHAM	0	EP	03	31	133							ES	31	441		31		2	27		1	12		3
TOMISA	0	EP	03	31	138											22		4	15		4	14		3
FUKUSH	0	EX	03	31	143											9		1	8		1	2		2
HIKONE	0	P	03	31	143							S	31	380		64		1	60		1	16		2
KAMEYA	0	P	03	31	152							S	31	426		24		2	16		2	11		2
KYOTO	0	EP	03	31	175							IS	31	461		15		2	11		1	4		1
TSU	0	IP	03	31	176							IS	31	466										

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A (μ)								
			N	E	Z		N			E					
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
NARA	0	EP 03 31 257				ES 31 579									
OWASE	0	P 03 31 260				S 32 042	6		2	4		2	5		2
SENDAI	0	EP 03 31 269				ES 32 042	7		3	5		2	5		2
TOYOOK	0	EP 03 31 301				ES 32 098	23		1	19		1	9		1
TOKUSH	0	EP 03 31 446				ES 32 301									
AKITA	0	EX 03 31 50					6		4	7		4			
OSAKA	0	X 03 32 101					34		4	42		5	16		2
MIZUSA	0	X 03 32 130				EX 32 450	10		2	5		2			
OITA	0	EX 03 33 526					7		3	6		3			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
21	15	38	337	001	138 15	01	36 29	01	00	43

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A (μ)								
			N	E	Z		N			E					
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	3	P 15 38 369													
NAGANO	3	IP 15 38 387	N 30	W 9	U 130	IS 38 419	33	1		42	1		26	1	
KARUI7	0	EP 15 38 397				ES 38 447									
MATSUM	1	IP 15 38 425	S 2	W 3	U 8	IS 38 476									
TAKADA	0	P 15 38 475				S 38 567									
MAEBAS	0	IP 15 38 497		W 1	D 4	S 38 589	53		3	28		3	43		3
CHICHI	0	EP 15 38 522				IS 39 054									
TAKAYA	0	EP 15 38 524				S 39 035									
KOFU	0	IP 15 38 526	S 4	E 1	U 3	ES 39 044	20		1	28		2	10		1
TOYAMA	0	IP 15 38 541		E 2	D 3	S 39 080	30		4	21		3	14		3
IIDA	0	IP 15 38 556	S 2	W 1	U 2	IS 39 104	11		2	14		1	4		1
FUNATS	0	P 15 38 570				S 39 125									
KUMAGA	0	EP 15 38 580				ES 39 116	32		5	47		5	32		3
UTSUNO	0	EP 15 39 011	S 1	W 3	D 3	ES 39 181	9		1	9		2	15		1
AIKAWA	0	EP 15 39 028	N 2	E 2	D 2	IS 39 226	8		1	9		0	4		0
MISHIM	0	EP 15 39 035				IS 39 245	19		1	23		1	9		1
SHIZUO	0	EP 15 39 040				S 39 269	6		1	7		1	3		1
TOKYO	0	EP 15 39 048				ES 39 257	48		4	38		6	41		5
AJIRO	0	IP 15 39 054			D 1	ES 39 267	6		1	10		1	2		1
KAKIOK	0	EP 15 39 06				S 39 283	12		1	8		1	4		1
GIFU	0	P 15 39 067				S 39 296	24		1	27		2	9		1
FUKUI	0	X 15 39 072				X 39 506									
NAGOYA	0	EP 15 39 075	N 2	E 2	D 2	IS 39 292	21		1	24		1	8		1
OMAEZA	0	EP 15 39 085				ES 39 400	14		3	16		4			
HAMAMA	0	IP 15 39 099				ES 39 36	11		2	15		2	7		2
TSURUG	0	EP 15 39 099				S 39 392									
MITO	0	EP 15 39 105				S 39 332	6		1	10		1	5		1
OSHIMA	0	EP 15 39 120				S 39 376	13		1	9		1			
YOKOHA	0	IP 15 39 133	S 2		D 10	IS 39 318	24		1	21		1	11		2
HIKONE	0	EP 15 39 184				S 39 395	26		1	19		1	7		1
KAMEYA	0	EP 15 39 198				IS 39 452	7		4	6		4	4		2
TSU	0	EP 15 39 211				IS 39 480									
KYOTO	0	EP 15 39 246				IS 39 520	5		2	4		2	1		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
22	21	09	115	001	138 14	01	36 31	00	00	45

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A (μ)								
			N	E	Z		N			E					
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	4	P 21 09 142													
NAGANO	3	IP 21 09 164	N 90	W 67	U 227	S 09 185	45	1		75	1		45	1	
MATSUM	1	IP 21 09 205	S 4	W 5	U 14	IS 09 258	75		3			3	75		3
KARUI7	0	IP 21 09 206		W 2	D 4	ES 09 257	20	1	1	20	1	1	10	1	1
TAKADA	0	P 21 09 247				S 09 339									
MAEBAS	0	IP 21 09 267	N	W 1	D 6	S 09 375	56		3	36		5	47		4
KOFU	0	IP 21 09 305	S 4	E 3	U 5	IS 09 422	23		0	35		0	15		1
TOYAMA	0	IP 21 09 306	S	E	D	IS 09 452	27		5	31		3	24		3
TAKAYA	0	EP 21 09 308				S 09 379									
CHICHI	0	EP 21 09 312				ES 09 431	10	1	3	75		3	10	1	3
IIDA	0	IP 21 09 336	S 5	W 2	U 4	IS 09 494	11		2	12		2	6		1
KUMAGA	0	EP 21 09 339				S 09 466	39		5	48		4	37		4
FUNATS	0	P 21 09 355				S 09 490									
KANAZA	0	EP 21 09 388				S 09 560									

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
WAJIMA	0	EP	21	09	390							S	09	594	58		1	38		1	16		0
UTSUNO	0	P	21	09	398	N	1	W	3	D	6	S	09	581	13		2	13		2	12		1
AIKAWA	0	IP	21	09	403	N	1	W	0	U	1	ES	09	592									
MISHIM	0	EP	21	09	411							IS	10	015	19		1	22		1	9		1
NIIGAT	0	IP	21	09	432					D	10	S	10	060	51		1	16	1	1	8		1
AJIRO	0	IP	21	09	436					U	0	ES	10	053	7		1	15		1	3		1
SHIZUO	0	P	21	09	437							S	10	051	6		2	8		2	4		2
KAKIOK	0	P	21	09	440							S	10	072	10		1	9		1	4		1
NAGOYA	0	IP	21	09	447	S	1	W	1	U	2	IS	10	074	23		2	22		2	9		1
FUKUI	0	X	21	09	448																		
TOKYO	0	EP	21	09	45							ES	10	09	50		4	41		4	43		4
GIFU	0	P	21	09	452							S	10	073	34		2	32		2	7		1
MITO	0	IP	21	09	463							IS	10	116	10		1	12		2	5		2
YOKOHA	0	IP	21	09	472					D	7	IS	10	113	34		2	37		1	10		2
HAMAMA	0	IP	21	09	483	N	1	E	0			S	10	160	16		2	15		2	10		1
OSHIMA	0	EP	21	09	498							ES	10	161	12		1	12			5		
OMAEZA	0	P	21	09	507							S	10	179	16		2	20		2	9		2
TSURUG	0	EP	21	09	511							S	10	168									
HIKONE	0	EP	21	09	522							S	10	176	25		1	24		1	10		2
ONAHAM	0	EP	21	09	525							ES	10	228	11		1	14		1	5		3
TOMISA	0	P	21	09	527							ES	10	192	20		2	17		2	12		2
CHOSHI	0	EP	21	09	530							ES	10	232									
FUKUSH	0	EP	21	09	533							ES	10	226	6		1	4		1	2		1
KAMEYA	0	P	21	09	546							IS	10	230	9		2	9		2	7		2
TSU	0	EP	21	09	570							ES	10	260									
KYOTO	0	EP	21	10	014							IS	10	318	7		2	6		2	2		1
NARA	0	EP	21	10	038							ES	10	393									
OSAKA	0	EP	21	10	075							ES	10	469	12		2	20		4	6		3
TOYOOK	0	EP	21	10	097							ES	10	499	10		1	8		1			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
22	22	30	021	002		138	10	01	36	33	01	00	47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	4	P	22	30	045																		
NAGANO	4	IP	22	30	073	N	171	W	124	U	290	S	30	094	18	2		18	2		15	2	
MATSUM	2	IP	22	30	108	S	3	W	3	U	10	IS	30	161	35	1	3	15	1	2	10	1	3
KARUIZ	1	P	22	30	119							S	30	174	40	1	2	40	1	2	20	1	1
TAKADA	2	P	22	30	161	N	5	E	1	U	9	S	30	257									
MAEBAS	0	IP	22	30	186	N		W	2	D	5	X	30	295	14	1	3	80		3	10	1	3
KOFU	0	IP	22	30	214	S	15	E	5	U	8	ES	30	327	56		3	41		0	23		2
TOYAMA	0	IP	22	30	215			E		D	6	IS	30	365	11	1	4	91		4	12		4
CHICHI	0	EP	22	30	227							ES	30	348	15	1	3	14	1	3	15	1	3
TAKAYA	0	EP	22	30	231							S	30	325									
IIDA	0	IP	22	30	244	S	4	W	2	U	2	IS	30	398	25		3	36		5	22		3
KUMAGA	0	EP	22	30	250							S	30	396	10	1	4	94		4	82		4
FUNATS	0	P	22	30	260							S	30	403									
KANAZA	0	EP	22	30	288							S	30	460									
WAJIMA	0	EP	22	30	299							S	30	450	13	1	1	91		1	29		1
UTSUNO	0	EP	22	30	302	S	2	W	6	D	3	S	30	477	39		3	25		3	22		1
AIKAWA	0	IP	22	30	304	N	0	W	0	U	0	IS	30	504	14		1	17		1	5		3
MISHIM	0	IP	22	30	333			W	1	U	2	ES	30	539	28		2	49		4	11		1
SHIZUO	0	P	22	30	336	S	3	E	1	U	3	S	30	564	12		3	12		5	9		4
KAKIOK	0	P	22	30	340	S	1	W	1			ES	30	521	16		1	14		1	5		0
NIIGAT	0	IP	22	30	343					D	10	S	30	558	51		1	16	1	1	8		1
AJIRO	0	IP	22	30	343	S	0			U	1	ES	30	564	11		1	15		2	6		1
FUKUI	0	P	22	30	348	S	6	W	6	D	2	S	31	039									
TOKYO	0	EP	22	30	35							ES	30	58	10	1	5	85		4	11	1	5
NAGOYA	0	IP	22	30	354	S	1	W	1	U	2	IS	30	580	62		2	70		1	29		1
SHIRAK	0	EP	22	30	356							S	30	597									
GIFU	0	P	22	30	357	N		E		D		S	30	566	90		1	32		1	24		1
YOKOHA	0	IP	22	30	366			E	2	D	7	IS	31	019	67		1	60		2	33		3
MITO	0	IP	22	30	376							IS	31	025	29		5	23		4	15		3
HAMAMA	0	IP	22	30	386							IS	31	058	30		1	35		2	20		1
TSURUG	0	EP	22	30	399							S	31	082									
OSHIMA	0	P	22	30	403							S	31	104	13		1	16			7		
TOMISA	0	EP	22	30	420							EX	31	254	33		3	33		4	32		3
HIKONE	0	P	22	30	423							S	31	090	55		1	64		1	18		1

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = 0.0 mm								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
ONAHAM	0	EP 22 30 428				ES 31 133	26		1	36		2	9		2
KAMEYA	0	IP 22 30 443			U 2	IS 31 139	19		3	28		4	15		3
FUKUSH	0	EP 22 30 454				ES 31 142	11		1	7		1	4		3
TSU	0	EP 22 30 464				ES 31 175									
KYOTO	0	EP 22 30 473				ES 31 222	7		2	7		1	6		5
CHOSHI	0	EP 22 30 510				IS 31 158									
NARA	0	EP 22 30 531				ES 31 290									
OWASE	0	P 22 30 534				S 31 320	5		2	4		2	3		1
SENDAI	0	EP 22 30 560				ES 31 357	9		2	6		3	3		2
SAKATA	0	EX 22 30 593				EX 31 431									
TOYOOK	0	EP 22 30 596				ES 31 386	21		1	23		1			
OSAKA	0	EP 22 31 00				S 31 403	47		4	75		5	16		3
WAKAYA	0	EX 22 31 113				EX 31 580	10		1	10		1			
MIZUSA	0	EX 22 31 191				X 32 044	8		2	8		3	4		2
AKITA	0	EX 22 32 00					6		4	6		4			
OITA	0	EX 22 32 063				EX 33 273	8		4	10		4	4		3
SHIMON	0	EX 22 33 31													

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	Depth km	•
23	02	57	379	002	138	14	01	36	31	01	00	50

MATSUS	4	P	02	57	407																	
NAGANO	4	IP	02	57	422							S	57	445	18	2		18	2		10	2	
MATSUM	2	IP	02	57	471	S	22	W	31	U	59	IS	57	524	25	1	3	15	1	2	35	1	3
KARUIZ	2	IP	02	57	498	N	23	W	21	D	35	S	57	555	70	1	3	60	1	2	30	1	1
TAKADA	1	P	02	57	516	N	7	E	2	U	21	S	58	002									
MAEBAS	0	IP	02	57	518	N	5	W	10	D	31	IS	58	024	25	1	3	20	1	4	31	1	3
TAKAYA	0	P	02	57	572							S	58	079									
KOFU	2	IP	02	57	572	S	14	E	6	U	5	IS	58	093	75		0	12		1	45		1
TOYAMA	0	IP	02	57	578	N	1	E	6	D	14	IS	58	128	20	1	4	16	1	4	13	1	3
KUMAGA	0	EP	02	58	000							S	58	129	18	1	7	21	1	4	14		4
CHICHI	0	IP	02	58	006	N	3	W	3			ES	58	116	25	1	3	20	1	4	16	1	3
IIDA	0	IP	02	58	008	S	16	W	8	U	1	IS	58	158	45		2	60		4	32		3
FUNATS	0	P	02	58	026							S	58	173									
KANAZA	0	P	02	58	053	S		E		D		S	58	228									
UTSUNO	0	EP	02	58	054	N	2	W	25			ES	58	237	49		2	59		1			
AIKAWA	0	IP	02	58	064	N	1	W	0	U	1	IS	58	260	33		0	28		1	14		1
SHIZUO	0	IP	02	58	086	S	5	E	2	U	3	IS	58	310	33		1	44		1	19		1
MISHIM	0	IP	02	58	092					U	4	IS	58	305	14	1	1	13	1	1	51		1
KAKIOK	0	P	02	58	093	S		E	8	U	2	S	58	310	38		1	45		1	12		1
NIIGAT	0	IP	02	58	095					U	19	S	58	319	14	1	5	19	1	5	47		5
TOKYO	0	EP	02	58	10							ES	58	325	23	1	4	16	1	4	19	1	4
NAGOYA	0	IP	02	58	101	S	11	W	10	U	11	IS	58	336	97		1	97		1	44		1
AJIRO	0	IP	02	58	104	S	0			U	1	S	58	323	45		1	85		1	20		1
GIFU	0	P	02	58	114	S		W	5			S	58	335	17	1	2	13	1	2	45		1
SHIRAK	0	P	02	58	117					D	2	S	58	369									
FUKUI	0	P	02	58	123	N	2	E	4	U	4	S	58	313									
MITO	0	IP	02	58	126					D	5	IS	58	386	56		2	42		3	25		2
WAJIMA	0	EP	02	58	128							S	58	250	17	1	1	14	1	1	35		1
YOKOHA	0	IP	02	58	134	S	6	E	6	U	7	IS	58	381	22	1	2	20	1	2	56		2
HAMAMA	0	IP	02	58	140	S	5	W	2	U	9	S	58	389	77		1	65		2	48		1
TSURUG	0	EP	02	58	157							IS	58	429									
OSHIMA	0	P	02	58	159							S	58	428	71		1	53		2	20		2
OMAEZA	0	P	02	58	162							S	58	445	68		2	91		2	43		2
TOMISA	0	P	02	58	182					U	1	S	58	460	95		3	78		3	60		3
CHOSHI	0	IP	02	58	183			W	2	D	2	IS	58	461									
KAMEYA	0	P	02	58	186	S		W		U	3	S	58	497	38		1	37		4	23		2
ONAHAM	0	IP	02	58	189					D	6	IS	58	502	40		2	58		1	25		3
FUKUSH	0	P	02	58	196	S	3	W	3	D	1	ES	58	499	19		2	14		1	9		5
AKITA	0	EX	02	58	22										10		2	9		3	7		2
TSU	0	IP	02	58	225							IS	58	535									
KYOTO	0	EP	02	58	235							IS	58	576	24		2	15		1	10		1
NARA	0	EP	02	58	255							ES	59	017									
OSAKA	0	EP	02	58	286							ES	59	089	61		3	88		5	24		2
SAKATA	0	EP	02	58	305							ES	59	062									
OWASE	0	P	02	58	320							S	59	120	13		2	7		2	8		1
SENDAI	0	P	02	58	337					D	2	S	59	092	14		2	9		3	5		3
TOYOOK	0	EP	02	58	356							ES	59	161	54		1	68		1	12		1
SUMOTO	0	P	02	58	364					U		S	59	290	8		10	8		2	5		4

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Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A × 10³ N AN μ	N P	N T s	E AE μ	E P	E T s	Z AZ μ	Z P	Z T s
SHIONO	0	EP 02 58 381				EP 59 286	8		2	11		2	7		1
KOBE	0	EP 02 58 399				ES 59 205									
MIZUSA	0	P 02 58 417				S 59 335	13		2	13		2	8		2
HACHIJ	0	P 02 58 432				S 59 260									
WAKAYA	0	EP 02 58 442				ES 59 281	20		1	14		1			
TAKAMA	0	EP 02 58 475				ES 59 413	11		6	8		6	3		2
TOKUSH	0	EP 02 58 484				ES 59 355									
MUROTO	0	EP 02 59 064				ES 00 042	4		2	6		2			
MATSUY	0	EX 02 59 143				EX 00 256	6		5	4		4	2		4
OITA	0	EX 02 59 465				EX 01 037	14		6	11		5	5		2
FUKUOK	0	EX 03 00 042				EX 01 200	6		2	4		2			
NAGASA	0	X 03 00 160				X 01 460	3			2					
SHIMON	0	EX 03 00 58					7		2	5		2			
KUMAMO	0	EX 03 01 32					11		3	8		3			
KAGOSH	0	X 03 02 027													

Origin Time d h m s ± s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
24 14 13				

Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A × 10³ N AN μ	N P	N T s	E AE μ	E P	E T s	Z AZ μ	Z P	Z T s
MATSUS	3	P 14 13 384													
NAGANO	3	IP 14 13 414	N 50	W 16	U 273	IS 13 444	49 1			72 1			38 1		
KARUI7	0	P 14 13 452			D	S 13 507	10 1		2	10 1		2	60		1
MATSUM	0	IP 14 13 474	S 2	W 5	U 14	IS 13 525									
TAKADA	0	P 14 13 493				S 13 579									
TOYAMA	0	P 14 13 524				S 14 079	29		4	24		3	20		3
KOFU	0	IP 14 13 550	S 5	E 4	U 3	IS 14 071	17		0	18		0	10		1
MAEBAS	0	IP 14 13 554	N	W 1	D 6	S 14 057	36		3	26		3	38		3
CHICHI	0	EP 14 13 557				ES 14 082									
TAKAYA	0	EP 14 13 560				S 14 065									
IIDA	0	EP 14 13 584				ES 14 133	8		1	8		4	4		3
KUMAGA	0	EP 14 13 590				S 14 170	29		4	29		4	26		4
KANAZA	0	EP 14 14 00				ES 14 186				80		3	35		
FUNATS	0	P 14 14 008				S 14 152									
UTSUNO	0	EP 14 14 034		W 2		ES 14 218	6		2	6		2			
AIKAWA	0	IP 14 14 041	S 1	E 0	U 1	ES 14 240	6		1						
MISHIM	0	EP 14 14 049				ES 14 256	19		1	13		1	7		1
NIIGAT	0	P 14 14 066				S 14 290	20		1	27		2	8		4
OMAEZA	0	EP 14 14 068					11		2	8		2			
GIFU	0	P 14 14 078	S	W	U	S 14 306	24		2	16		2	6		1
AJIRO	0	IP 14 14 080	S 0		U 0	ES 14 300	6		1	10		1	3		1
TOKYO	0	IP 14 14 081				ES 14 278	27		4	25		4	22		4
NAGOYA	0	P 14 14 090	S 1	W 1	U 2	IS 14 316	20		2	20		1	8		1
KAKIOK	0	P 14 14 10					9		1	6		1	2		1
MITO	0	IP 14 14 110				IS 14 370	6		1	7		2	4		2
YOKOHA	0	EP 14 14 118		E 2	U 2	IS 14 359	20		1	27		1			
HAMAMA	0	IP 14 14 125	S 2		U 1	ES 14 380	7		2	9		2	5		1
HIKONE	0	P 14 14 163				S 14 424	17		1	19		1	7		1
TSU	0	EP 14 14 198													
ONAHAM	0	EX 14 14 224					10		2	8		1	3		2
OSHIMA	0	ES 14 14 401					12		1	7					
OSAKA	0	X 14 15 095					10		4	14		4	4		3

Origin Time d h m s ± s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
29 13 57				

Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A × 10³ N AN μ	N P	N T s	E AE μ	E P	E T s	Z AZ μ	Z P	Z T s
MATSUS	3	P 13 57 308													
NAGANO	1	IP 13 57 339	N 14	W 4	U 71	S 57 362	81			10 1			54		
MATSUM	0	EP 13 57 371				IS 57 422									
KARUI7	0	EP 13 57 380				IS 57 429									
TAKADA	0	EP 13 57 414				S 57 500									
KOFU	0	EP 13 57 472				ES 57 597	9		0	8		0	7		0

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1965
December

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
1	21	54	38.3	0.03	138	07	02	36 30	01	00	3.5

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	N P	N T	E AE	E P	E T	Z AZ	Z P
MATSUS	3	P	21	54	42.2														
NAGANO	1	IP	21	54	43.5	N 28	W 41	U 79	IS	54	46.0	64			95			63	
MATSUM	0	IP	21	54	48.2			U 2	IS	54	53.2								
KARUIZ	0	EP	21	54	48.2				ES	54	54.2								
TAKADA	0	EP	21	54	52.3				ES	55	01.1								
KOFU	0	IP	21	54	58.4			U 1	IS	55	10.9	7		0	7		0	3	

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
8	06	54	02.6	0.02	138	13	01	36 32	01	00	4.1

MATSUS	3	P	06	54	05.7																			
NAGANO	2	IP	06	54	07.9	N	11	W	19	U	99	S		54	10.5	28	1		17	1		41	1	
MATSUM	0	IP	06	54	11.3	S	1	W	3	U	10	IS		54	16.6									
KARUIZ	0	IP	06	54	12.4	N		W		D	3	IS		54	17.5									
TAKADA	0	EP	06	54	16.0							ES		54	25.2									
MAEBAS	0	IP	06	54	18.0			W	1	D	3	IS		54	28.7	12		3	9		3	10		
KOFU	0	IP	06	54	21.9					U	3	IS		54	34.5	15		0	18		0	9		
TOYAMA	0	P	06	54	22.1					D		S		54	36	12		2	12		2	9		
IIDA	0	EP	06	54	24.4							ES		54	39.6	5		2	3		1	1		
KUMAGA	0	EP	06	54	26.0							ES		55	28.4	10		4	13		5	12		
FUNATS	0	P	06	54	27.5							S		54	41.0									
UTSUNO	0	EP	06	54	30.1							ES		54	47.4	7		2	4		1			
AIKAWA	0	IP	06	54	31.2					U	0	ES		54	51.0	5		0	10		0			
AJIRO	0	P	06	54	34.8							ES		54	56.9	4		1	6		1	1		
GIFU	0	P	06	54	35.8							S		54	57.8	14		2	12		2			
NAGOYA	0	IP	06	54	36.0	S	1	W	1	D	2	S		54	59.0	10		1	10		1	4		
HAMAMA	0	IP	06	54	39.0							S		55	05.6	8		1	5		1	4		
WAJIMA	0	EX	06	54	41.8											21		1	15		1			
YOKOHA	0	EP	06	54	42.1							IS		55	03.0	15		1	10		1			
HIKONE	0	EP	06	54	49.3							S		55	09.9	11		1	9		1	4		
NIIGAT	0	X	06	54	55.7														40		1			
ONAHAM	0	EX	06	55	14.1											5		1	7		1	2		
OMAEZA	0	EP	06	55	43.4											7		2	7		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
9	23	11	53.2	0.02	138	12	01	36 32	01	00	4.2

MATSUS	4	P	23	11	55																			
NAGANO	2	IP	23	11	56.7	N	25			U	98	IS		11	58.7	33	1		36	1		20	1	
AIKAWA	0	EP	23	12								ES		12	42.8				6		0			
MATSUM	1	IP	23	12	02.5	S	2	W	5	U	18	IS		12	07.4	50		3	25		3	50		
KARUIZ	0	IP	23	12	02.6	N	2	W		D	8	IS		12	07.6									
TAKADA	0	P	23	12	07.3							S		12	16.8									
MAEBAS	0	IP	23	12	10.1					D	2	IS		12	20.1	38		3	11		3	17		
TOYAMA	0	P	23	12	12.1					D		S		12	27	19		4	13		3	11		
KOFU	0	IP	23	12	12.6	S	4	E	2	U	4	IS		12	24.2	17		0	20		0	10		
TAKAYA	0	EP	23	12	12.6							S		12	23.2									
CHICHI	0	EP	23	12	13.3							ES		12	25.2									
FUNATS	0	P	23	12	14.5							S		12	31.1									
KUMAGA	0	EP	23	12	15.9							S		12	30.2	21		4	33		4	18		
IIDA	0	EP	23	12	16.2							ES		12	31.0	10		2	7		5	4		
UTSUNO	0	EP	23	12	19.9							ES		12	38.6	6		1	7		2			
KAKIOK	0	EP	23	12	22							ES		12	48	9		1	9		1	2		
KANAZA	0	EX	23	12	22																			
MISHIM	0	EP	23	12	22.8							S		12	43.3	15		1	13		1	4		
SHIZUO	0	EP	23	12	24.0							ES		12	46.9	5		1	6		1	4		
AJIRO	0	IP	23	12	25.1							S		12	46.7	5		1	9		1	3		
WAJIMA	0	EX	23	12	25.5											26		1	27		1			
TOKYO	0	EP	23	12	26							ES		12	48	27		4	24		5	22		
GIFU	0	P	23	12	26.2							S		12	48.1	18		1	14		1			
NAGOYA	0	P	23	12	26.4	S	1	W	1	U	1	S		12	48.6	16		1	17		1	7		
HAMAMA	0	IP	23	12	29.7							S		12	57.6	6		1	10		2	5		
YOKOHA	0	EP	23	12	30.7							IS		12	51.7	26		1	19		1			

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^n μ							
						N		E		Z						N				E			
			h	m	• s		μ		μ		μ		m	• s		AN	P	T	AE	P	T	AZ	P
																μ		S	μ		S	μ	
OMAEZA	0	EP	23	12	312											8		2	9		2	8	
TSURUG	0	EP	23	12	328							ES	12	588									
HIKONE	0	EP	23	12	354							S	12	598		14		1	12		1	5	
NIIGAT	0	X	23	12	434														25		1		
ONAHAM	0	EX	23	13	080											9		1	7		1	3	
OSAKA	0	EX	23	13	198											10		3	15		5	5	

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′	km	•
11	06	07											

MATSUS	3	P	06	07	142																		
NAGANO	2	IP	06	07	147	N	13	W	6	U	59	IS	07	169	96			12	1		84		
MATSUM	0	IP	06	07	205	S		W		U	2	IS	07	258									
KARUIZ	0	EP	06	07	213							S	07	268									
TAKADA	0	EP	06	07	247							ES	07	331									
KOFU	0	IP	06	07	319	S	2					IS	07	433	8		0	9		0			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′	km	•
12	06	18	053	002		138	11	01	36	33	01	00	38

MATSUS	3	P	06	18	069																		
NAGANO	2	P	06	18	085							S	18	110	14	1		16	1		11	1	
MATSUM	0	EP	06	18	137					U	2	IS	18	189									
KARUIZ	0	EP	06	18	153							S	18	205									
TAKADA	0	P	06	18	193							S	18	275									
MAEBAS	0	P	06	18	205					D		S	18	312	17		3	7		2	11		3
TOYAMA	0	EP	06	18	24							ES	18	435	10		4	6		4	3		3
KUMAGA	0	EP	06	18	300							ES	19	074	15		7	17		5	9		3
GIFU	0	EP	06	18	37							ES	19	001	6		2	7		2			
ONAHAM	0	EX	06	18	547										6		1	4		1			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′	km	•
19	13	43	022	002		138	15	01	36	30	01	00	40

MATSUS	4	P	13	43	047																		
NAGANO	3	IP	13	43	068	N	19	W	2	U	86	S	43	088	30	1		60	1		31	1	
MATSUM	1	IP	13	43	109					U	1	S	43	161									
KARUIZ	0	IP	13	43	119					U	3	S	43	173									
TAKADA	0	P	13	43	152							S	43	234									
MAEBAS	0	P	13	43	184					D	1	IS	43	281	14		5	10		2	10		3
TOYAMA	0	EP	13	43	212							S	44	365	15		4	12		4	12		3
KOFU	0	EP	13	43	213							ES	43	350	9		0	9		1	5		1
IIDA	0	EP	13	43	245							ES	43	383	5		1	5		1	2		1
KUMAGA	0	EP	13	43	252							S	43	401	13		3	7		2	6		4
UTSUNO	0	EP	13	43	288							ES	43	461	6		2	4		2			
WAJIMA	0	EX	13	43	303										15		1	16		1			
MISHIM	0	EP	13	43	335										5		1	6		4	1		0
GIFU	0	P	13	43	356							S	43	567	10		2	9		1	6		1
NAGOYA	0	EP	13	43	360					U		S	43	584	11		1	11		1	5		1
MITO	0	IP	13	43	382							IS	44	026	7		0	4		0	2		1
HAMAMA	0	P	13	43	385							S	44	034	6		1	6		1	4		1
YOKOHA	0	EP	13	43	406							IX	44	018	9		1	10		1			
OMAEZA	0	EP	13	43	409										7		4	7		4			
HIKONE	0	EP	13	43	458							S	44	086	10		1	10		1	4		1
NIIGAT	0	IX	13	43	561													16		1			
ONAHAM	0	EX	13	44	144										7		1	5		1	2		1

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Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	·s	± ·s		° ′	± ′	° ′	± ′	km			·
27	01	16	084	003		138 17	01	36 31	01	00			40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase		Maximum Amplitude = A×10^P μ								
						N		E		Z				N			E			Z		
			h	m	·s	μ		μ		μ		m	·s	AN	P	T	AE	P	T	AZ	P	
														μ		S	μ		S	μ		
MATSUS	3	P	01	16	112																	
NAGANO	3	IP	01	16	145	N	20	W	9	U	93	ES	16 165	20	1		25	1		13	1	
MATSUM	0	IP	01	16	166			W	1	U	3	IS	16 218									
KARUI7	0	EP	01	16	176							IS	16 232									
TAKADA	0	EP	01	16	223							S	16 305									
MAEBAS	0	IP	01	16	236					D	1	EX	16 348	9		3	5		2	6		
KOFU	0	EP	01	16	287							ES	16 400	6		1	8		1	4		
TOYAMA	0	P	01	16	306					D		S	16 41	8		3	9		3	9		
KUMAGA	0	EX	01	16	358									6		4	8		5	12		
AIKAWA	0	IP	01	16	370	S	0	W	0	U	0	ES	16 564	3		1	5		1	2		
NAGOYA	0	EP	01	16	424	N		E				S	17 046	7		2	7		1	3		
GIFU	0	EP	01	16	442							S	17 028	10		1	9		2	5		
HAMAMA	0	P	01	16	452					U		S	17 097	5		1	5		2	3		
WAJIMA	0	EX	01	16	501									14		1	11		1			
YOKOHA	0	IX	01	17	087									10		2	6		1			
HIKONE	0	ES	01	18	146									7		1	8		1	4		

1966

January

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	·s	± ·s		° ′	± ′	° ′	± ′	km			·
3	03	59	128	002		138 12	01	36 31	01	00			47

MATSUS	4	P	03	59	138																		
NAGANO	3	P	03	59	171							S	59 195	90	1		80	1		57	1	
MATSUM	2	IP	03	59	197	S	1	W	2	U	6	IS	59 252	15	1	3				50		
KARUIZ	2	IP	03	59	210			E	8	U	12	IS	59 261	20	1	2	30	1	2	10	1	
TAKADA	0	P	03	59	267							S	59 345									
MAEBAS	0	IP	03	59	293					D	3	ES	59 394	54		3	26		4	38		
KOFU	0	IP	03	59	321	S	9	E	3	U	12	ES	59 443	39		2	50		1	18		
TOYAMA	0	IP	03	59	325							IS	59 487	60		3	41		4	43		
IIDA	0	EX	03	59	342																		
KUMAGA	0	EP	03	59	350							S	59 494	60		5	60		4	60		
CHICHI	0	EP	03	59	357							ES	59 485									
FUNATS	0	P	03	59	365							S	59 518									
AIKAWA	0	EP	03	59	404	S	1	E	1	D	0	IS	00 016	10		1						
UTSUNO	1	IP	03	59	405	N	2	W	6			S	59 566	27		0	21		0	25		
MISHIM	0	P	03	59	433							IS	00 042	32		1	34		1	11		
KAKIOK	0	EP	03	59	435							S	00 039	29		1	25		1	9		
TOKYO	0	EP	03	59	436							ES	00 050	68		4	53		4	65		
AJIRO	0	P	03	59	451							S	00 069	7		0	9		0	4		
SHIZUO	0	EP	03	59	453							S	00 075	9		1	9		4			
WAJIMA	0	EX	03	59	464							ES	00 025	51		1	63		1			
OMAEZA	0	EP	03	59	465							ES	00 199	22		4	32		4	12		
GIFU	0	P	03	59	468	S	3	W	3	U	3	S	00 081	51		2	53		1	9		
MITO	1	EP	03	59	472							IS	00 120	72		0	50		0	12		
NAGOYA	0	P	03	59	474	N	1	E	1	D	1	IS	00 100	42		1	43		1	16		
YOKOHA	0	EP	03	59	482							IS	00 126	54		4	38		2	17		
NIIGAT	0	EX	03	59	486							ES	00 067	16		1	20		1			
FUKUI	0	P	03	59	489	S	4	W	4	U	3	S	00 153									
HAMAMA	0	P	03	59	492					U	1	S	00 144	35		1	31		2	15		
OSHIMA	0	P	03	59	506							S	00 181	19		1	12			8		
TSURUG	0	EP	03	59	526							S	00 198									
TOMISA	0	P	03	59	526					D	3			15		2	13		3	70		
ONAHAM	0	IP	03	59	547					U	4	IS	00 226	19		1	27		1	11		
FUKUSH	0	IP	03	59	548	N	1	E	1	D	1	S	00 248	8		2	7		1	3		
HIKONE	0	EP	03	59	558							IS	00 197	36		1	28		1	10		
KAMEYA	0	EP	03	59	576							IS	00 254	13		2	11		2	8		
KYOTO	0	EP	03	59	589							IS	00 350	8		2	6		1	2		
CHOSHI	0	EP	04	00	014							S	00 218									
NARA	0	EP	04	00	026																	
TOYOOK	0	EX	04	00	089							X	00 495	17		1	16		1			
OSAKA	0	EX	04	00	139							X	00 527	32		5	30		4	10		

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	·s	±·s		°	′	± ′	°	′	± ′	km	·
8	22	34	288	002		138	16	01	36	32	01	00	47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	·s		μ		μ		μ		m	·s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	4	P	22	34	307																			
NAGANO	3	IP	22	34	331	N	325	W	276	U	361	IS	34	355		90	1	2	15	2	1	10	2	2
MATSUM	2	IP	22	34	370	S	4	W	4	U	8	IS	34	423		35	1	3				15	1	3
KARUI7	X	P	22	34	380	N				D		IS	34	431		50	1	2	35	1	2	20	1	1
TAKADA	0	P	22	34	422							S	34	499										
MAEBAS	0	IP	22	34	423			W	2	D	8	IS	34	513		14	1	3	97		3	11	1	3
KOFU	0	IP	22	34	478	S	7	E	4	U	10	ES	35	093		57		3	53		3	25		1
TOYAMA	0	IP	22	34	481							S	35	059		83		3	12	1	3	88		4
CHICHI	0	EP	22	34	487							IS	35	008										
KUMAGA	0	EP	22	34	503							IS	35	058		11	1	4	97		4	12	1	3
IIDA	0	IP	22	34	516	S	4	W	2	U	5	IS	35	072		20		2	31		3	23		3
FUNATS	0	P	22	34	526							S	35	078										
UTSUNO	0	EP	22	34	554	N	2	W	12			ES	35	142		27		2	21		5			
KANAZA	0	EP	22	34	560							ES	35	120		35	'	4	40	'	2	20	1	2
AIKAWA	0	IP	22	34	569					U	1	IS	35	166		10		1	13		0			
MISHIM	0	IP	22	34	596					U		S	35	170		42		1	45		3	12		3
SHIZUO	0	EP	22	34	599							ES	35	229		10		4	15		4	7		2
AJIRO	0	IP	22	35	006					U	1	S	35	226		9		3	19		3	7		4
KAKIOK	0	X	22	35	01											19		1	17		1	5		1
FUKUI	0	X	22	35	014																			
SHIRAK	0	EP	22	35	015							ES	35	263										
TOKYO	0	EP	22	35	02							ES	35	23		12	1	4	84		4	11	1	4
GIFU	0	P	22	35	022	N	4	E	4	D	5	S	35	237		71		2	52		2	18		2
NAGOYA	0	P	22	35	030	N	6	E	5	D	5	S	35	248		55		1	76		1	25		1
NIIGAT	0	EP	22	35	031							IS	35	219		20		2	31		1			
MITO	0	IP	22	35	033							IS	35	286		29		3	22		4	13		3
YOKOHA	0	IP	22	35	041					D	12	IS	35	281		10	1	4	74		3	21		3
OMAEZA	0	EP	22	35	048							S	35	360		46		3	50		4	20		3
HAMAMA	0	P	22	35	053							S	35	320		35		2	34		2	20		1
TSURUG	0	EP	22	35	067							ES	35	365										
OSHIMA	0	P	22	35	076							S	35	334		19		2	24		2	7		2
CHOSHI	0	EP	22	35	088																			
ONAHAM	0	EP	22	35	094							ES	35	386		27		2	23		2	9		2
HIKONE	0	EP	22	35	095							S	35	361		66		1	45		1	18		2
FUKUSH	0	P	22	35	105	N	3	E	3			S	35	400		11		2	9		1	6		4
KAMEYA	0	EP	22	35	138							IS	35	404		22		4	19		4			
KYOTO	0	EP	22	35	140							IS	35	474		13		1	10		1	6		3
NARA	0	EP	22	35	172							ES	35	562										
SENDAI	0	EX	22	35	21							EX	35	56		8		5	4		3	3		5
TOYOOK	0	EP	22	35	265							S	36	067		24		1	21		1	4		2
OSAKA	0	EX	22	35	279							X	36	072		43		4	66		5	18		3
SUMOTO	0	X	22	35	364			W		U		EX	36	221		5		5	4		4	2		4
MIZUSA	0	EX	22	35	440							X	36	310		8		3	6		2			
OITA	0	EX	22	37	521											6		3	9		5			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	·s	±·s		°	′	± ′	°	′	± ′	km	·
15	01	21	111	002		138	19	01	36	34	01	00	41

MATSUS	3	P	01	21	144					D														
NAGANO	3	IP	01	21	153	N	14	W	16	U	106	S	21	177		60	1		70	1		31	1	
KARUIZ	0	EP	01	21	195							ES	21	250										
TAKADA	0	P	01	21	239							S	21	319										
MAEBAS	0	P	01	21	256					D	1	S	21	351		24		3	13		3	21		3
KOFU	0	EP	01	21	307							ES	21	508		10		1	10		3	6		1
TOYAMA	0	P	01	21	310							S	21	511		12		2	7		1	8		3
KUMAGA	0	EP	01	21	330							ES	21	457		19		4	18		4	19		4
IIDA	0	EP	01	21	341							ES	21	500		5		1	5		1	2		1
UTSUNO	0	P	01	21	373							S	21	544		8		1	8		0			
OMAEZA	0	EP	01	21	401											7		2	7		4			
WAJIMA	0	EX	01	21	440											18		1	25		1			
MITO	0	EP	01	21	441							IS	22	084		9		1	7		1	3		1
NAGOYA	0	EP	01	21	472	N	1	E	1	U	1	ES	22	090		10		1	9		1	5		1
GIFU	0	EP	01	21	480							S	22	081		6		1	16		2	6		1
HAMAMA	0	IP	01	21	483					U	1	S	22	125		10		2	6		1	4		2
HIKONE	0	EP	01	22	019							ES	22	191		11		1	10		1	5		2
ONAHAM	0	EX	01	22	218											7		1	6		1	2		1

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Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	·s	± ·s		° ′	± ′	° ′	± ′	km			·
20	23	58	542	003		138	14 02	36	31 01	00			39

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	·s	μ		μ		μ			m	·s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	2	P	23	58																			
NAGANO	2	IP	23	58	581	N	16	W	28	U	46	IS	59	003	14	1		30	1		12	1	
KARUIZ	0	EP	23	59	018							ES	59	077									
MATSUM	0	IP	23	59	035							IS	59	093									
TAKADA	0	P	23	59	081					U	2	S	59	160									
MITO	0	EP	23	59	305							IS	59	520	7		0	5		0	1		0

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	·s	± ·s		° ′	± ′	° ′	± ′	km			·
23	20	15	553	001		138	13 01	36	31 01	00			51

MATSUS	5	P	20	15	575			E																
NAGANO	4	IP	20	16	003	N	370	W	250	U	780	S		16	024	20	2		25	2		13	2	
MATSUM	3	IP	20	16	043	S	18	W	43	U	140	IS		16	093	50	1	3	50	1	3	25	1	3
TAKADA	2	P	20	16	078	N	11	E	6	U	45	S		16	166	30	1	2	35	1	2	10	1	2
MAEBAS	1	IP	20	16	106	N	3	W	11	D	35	IS		16	203	29	1	3	21	1	5	28	1	4
TAKAYA	0	P	20	16	138							IS		16	248									
TOYAMA	0	IP	20	16	144	N	2	E	12	D	66	IS		16	289	20	1	4	15		4	15		5
KOFU	2	IP	20	16	146	S	24	E	16	U	10	IS		16	266	17	1	0	21	1	0	11	1	
CHICHI	2	IP	20	16	159	N	6	W	3			IS		16	271	30	1	1	24	1	3	21	1	2
KUMAGA	0	P	20	16	165	N	7			U		S		16	300	17	1	3	25	1	4	15	1	4
IIDA	1	IP	20	16	176	S	19	W	14	U	31	IS		16	322	71		2	68		1	29		1
FUNATS	2	IP	20	16	180	S	25	E	5			IS		16	309									
KANAZA	0	P	20	16	220	N		E		D		S		16	376									
UTSUNO	0	IP	20	16	221	N	6	W	26	D	35	IS		16	410	61		2	50		2	54		1
WAJIMA	0	EP	20	16	222							ES		16	413	20	1	2	15	1	2	70		1
AIKAWA	0	IP	20	16	238	N	7	E	3	U	8	IS		16	436	30		0	53		0	15		1
MISHIM	0	IP	20	16	250	S	4			U	4	IS		16	450	14	1	1	11	1	2	54		1
SHIZUO	0	P	20	16	257	S	5	E	3	D	3	ES		16	482	33		1	44		1	20		3
TOKYO	1	P	20	16	264							ES		16	496	22	1	4	18	1	4	17	1	5
NIIGAT	0	EP	20	16	266					U	46	IS		16	483	57		2	90		2	33		
AJIRO	1	IP	20	16	269	S	1	E	1	U	2	IS		16	487	43		1	97		1	28		1
KAKIOK	0	P	20	16	271	S	1	E	2			S		16	502	81		1	52		1	23		2
SHIRAK	0	P	20	16	280					D	2	S		16	541									
GIFU	0	P	20	16	282	S	5	W	5			S		16	498	16	1	2	19	1	2	41		1
NAGOYA	0	IP	20	16	284	S	6	W	5	U	7	IS		16	504	13	1	1	11	1	1	58		1
YOKOHA	0	IP	20	16	298			W	5	D	10	IS		16	530	24	1	1	17	1	1	58		2
MITO	0	IP	20	16	299					D	1	ES		16	554	40		5	52		2	28		3
OMAEZA	0	IP	20	16	304	N	13	E	3	U	5	IS		17	004	92		4	12	1	4	50		2
HAMAMA	0	IP	20	16	305	S		W		U	1	S		16	562	10	1	1	87		2	46		1
TSURUG	0	EP	20	16	314							S		17	001									
OSHIMA	0	P	20	16	318			E	2	U	8	IS		16	588	82		1	74			29		2
CHOSHI	0	EX	20	16	319							EX		17	025									
HIKONE	0	EP	20	16	338							S		17	005	16	1	1	12	1	1	46		1
FUKUI	0	IP	20	16	340	N	10	E	12	D	8	IS		16	541									
TOMISA	0	P	20	16	345					U	3					48		4	45		2	28		2
FUKUSH	0	EP	20	16	352							ES		17	075	26		2	17		2	8		5
ONAHAM	0	IP	20	16	362					D	5	IS		17	054	82		1	60		1	26		2
KAMEYA	0	IP	20	16	380					D	5	IS		17	069	61		2	42		2	25		2
KYOTO	0	EP	20	16	397							IS		17	146	37		1	28		2	12		1
TSU	0	IP	20	16	400							IS		17	080									
NARA	0	EP	20	16	416							ES		17	176									
SENDAI	0	EX	20	16	436							S		17	243	20		2	14		2	3		2
OWASE	0	P	20	16	453							S		17	220	14		2	12		2	10		2
SAKATA	0	IP	20	16	491					D	4	ES		17	240									
TOYOOK	0	P	20	16	508					D		IS		17	312	73		1	57		1	25		0
OSAKA	0	EP	20	16	518							S		17	312	70		3	87		3	41		3
KOBE	0	EP	20	16	555							ES		17	341									
MIZUSA	0	P	20	16	562							X		17	542	20		4	16		2	10		2
HACHIJ	0	P	20	16	588							X		17	000									
TOKUSH	0	EP	20	16	590							ES		17	482									
HIMEJI	0	EP	20	16	598							ES		17	427									
WAKAYA	0	X	20	17	000							X		17	459	30		1	28		1			
SUMOTO	0	IP	20	17	040							IX		17	070									
OKAYAM	0	EP	20	17	079					D	1	EX		17	464	8		4	10		2	4		4
												S		18	007	9		1	12		1	4		1
AKITA	0	EX	20	17	11											9		3	12		4	6		3
TAKAMA	0	EX	20	17	132							EX		18	056	12		6	9		6	4		2
KOCHI	0	EX	20	17	293							EX		18	301	7		3	6		3			
MUROTO	0	EX	20	17	296							X		18	338	6		2	7		2	3		1

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ebruary

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^n								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN	P	T	AE	P	T	AZ	P	T
							μ		S	μ		S	μ		S
HIROSH	0	EX 20 17 323				X 18 408	4		2	3		2	4		2
MATSUY	0	E7 20 17 325				E 18 408	6		6	5		5	2		2
OITA	0	EX 20 19 059					14		4	14		5	7		4
FUKUOK	0	EX 20 19 37					6		3	5		2	2		3

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
7	04	05	117	002		138	13	01	36	30	01	00	49

MATSUS	5	P	04	05	138									05	186	11	2	1	15	2	1	70	1	1
NAGANO	3	IP	04	05	167	N	112	W	6	U	96			05	256	50	1	3	45	1	3	25	1	2
KARUI7	1	IP	04	05	209			E	8	U	14	S		05	338									
TAKADA	0	P	04	05	254	N	7	E	2	U	20	ES		05	374	20	1	5	99		4	13	1	3
MAEBAS	0	IP	04	05	270	N	1	W	4	D	17	S		05	442	73		3	68		1	33		1
KOFU	1	IP	04	05	307	S	2	E	10	U	29	IS		05	429									
TAKAYA	0	EP	04	05	308							S		05	436	20	1	3	15	1	3	15	1	2
CHICHI	0	EP	04	05	320	N	5					IS		05	471	13	1	4	92		4	11	1	3
TOYAMA	0	IX	04	05	338					D	19	IX		05	481	11	1	3	11	1	4	11	1	3
KUMAGA	1	P	04	05	340	N	2					S		05	485									
FUNATS	0	P	04	05	341	S	15	E	5			S		05	488	40		2	42		1	26		3
IIDA	0	IP	04	05	344	S	5	W	3	U	7	IS		05	558									
KANAZA	0	EP	04	05	390							ES		05	561	36		3	28		1			
UTSUNO	0	IP	04	05	391	N	4	W	17			S		05	589	16		2	17		1	6		3
AIKAWA	0	IP	04	05	396	N	1	W	0	U	0	IS		05	578	15	1	1	10	1	1	27		1
WAJIMA	0	EP	04	05	403							ES		06	030	64		1	70		4	18		1
MISHIM	0	IP	04	05	415	S	1			U	4	IS		06	041	27		2	48		1	9		2
NIIGAT	0	EX	04	05	416							IS		06	034	11	1	5	10	1	4	11	1	4
TOKYO	0	EP	04	05	425							ES		06	052	14		1	20		4	7		4
SHIZUO	0	P	04	05	428							S		06	022	40		1	34		1	13		1
KAKIOK	0	P	04	05	434	S	3	E	5	D	1	S		06	060	16		1	24		1	7		1
AJIRO	0	IP	04	05	435	S	1	W	0	U	2	S		06	094									
SHIRAK	0	EP	04	05	444							S		06	078	11	1	2	11	1	2	29		2
GIFU	0	P	04	05	451	S	1	W	4	U	3	IS		06	080	85		1	10	1	1	40		1
NAGOYA	0	IP	04	05	460	N	1	E	1	D	5	X		06	186	59		3	72		4	25		2
OMAEZA	0	EP	04	05	462							S		06	075									
FUKUI	0	P	04	05	463							IS		06	106	53		0	41		1	17		3
MITO	0	IP	04	05	466							EX		06	115	13	1	4	77		2			
YOKOHA	0	EX	04	05	471							S		06	130	60		1	55		2	32		1
HAMAMA	0	IP	04	05	481							ES		06	172									
TSURUG	0	EP	04	05	484							S		06	160	48		1	26		2	10		2
OSHIMA	0	IP	04	05	492					U	3					30		3	22		3	13		4
TOMISA	0	P	04	05	512							ES		06	223	38		1	42		2	17		3
ONAHAM	0	IP	04	05	529					U	12	IS		06	179	91		1	69		1	21		1
HIKONE	0	P	04	05	530							S		06	238	17		2	13		1	7		4
FUKUSH	0	P	04	05	535	N	4	E	3	U	2	IS		06	238	31		4	29		2	18		1
KAMEYA	0	IP	04	05	550					U	3	IS		06	302									
KYOTO	0	IP	04	05	570							IS		06	249									
TSU	0	EP	04	05	575							ES		06	366									
NARA	0	EP	04	05	594							ES		06	39	12		5	7		2	2		2
SENDAI	0	EP	04	06	00							S		06	440	10		2	6		2	6		1
OWASE	0	P	04	06	027							S		06	487	58		5	68		5	17		1
OSAKA	0	EP	04	06	091							EX		06	495	43		1	36		1	7		
TOYOOK	0	X	04	06	097							EX		06	566									
KOBE	0	EX	04	06	143							ES		07	059									
TOKUSH	0	EP	04	06	151							S		06	499	20		1	16		1			
WAKAYA	0	X	04	06	206							ES		07	111	10		2	8		2	5		2
SHIONO	0	EP	04	06	225							S		07	046	7		7	6		3	3		4
SUMOTO	0	EX	04	06	228							S		07	019	13		3	9		3			
MIZUSA	0	EX	04	06	259							EX		07	227	9		5	7		5			
TAKAMA	0	EX	04	06	310							EX		07	495	6		5	5		3			
SAKATA	0	EX	04	06	364											7		3	8		3	6		3
KOCHI	0	EX	04	06	463											7		3	9		5	4		3
AKITA	0	EX	04	07	018																			
OITA	0	EX	04	08	367																			

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Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	s	± s	° ′	± ′	° ′	± ′	km		
11	01	17	38.2	0.03	138 12	02	36 36	01	20		4.5

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																		S			S			S
MATSUS	3	P	01	17	40.9																			
NAGANO	3	IP	01	17	42.2	N	29	W	13	U	132	ES	17	44.4		30	1		50	1		30	1	
KARUIZ	0	IP	01	17	46.8	S	4	E	7	U	11	IS	17	51.8		20	1	2	20	1	2	10	1	1
MATSUM	X	IP	01	17	47.6	N	2	E	3	D	10	IS	17	52.9										
TOYAMA	0	EP	01	17	50							S	18	05.7		41		3	43		4			
MAEBAS	0	IP	01	17	53.0			W	6	D	6	IS	18	02.9		12	1	5	39		4	47		3
KOFU	0	IP	01	17	56.5	S	5	E	3	U	11	ES	18	09.1		27		3	24		3	11		1
IIDA	0	EP	01	18	00.8							ES	18	14.8		16		1	15		1			
FUNATS	0	P	01	18	01.4							S	18	16.3										
KUMAGA	0	EP	01	18	02.0							ES	18	29.2		41		3	39		3	39		4
UTSUNO	0	IP	01	18	03.9	N	1	W	3	D	2	S	18	26.0		20		1	11		1	13		1
WAJIMA	0	EP	01	18	06.0											40		1	30		1	27		1
MISHIM	0	EP	01	18	07.6											14		1	19		1			
OMAEZA	0	EP	01	18	08.0											13		2	20		5	9		3
KAKIOK	0	P	01	18	09.2	N	1					S	18	28.4		25		1	18		1	5		1
AJIRO	0	IP	01	18	09.6	S	0	E	0	U	1	ES	18	31.2		6		0	6		0	2		0
SHIZUO	0	EP	01	18	11.2							ES	18	30.6		6		1	8		2			
TOKYO	0	EP	01	18	11.5							ES	18	30.0		28		3	33		4	43		4
GIFU	0	P	01	18	11.6	S	1	W	4			S	18	34.6		25		2	36		2			
MITO	0	IP	01	18	12.0							IS	18	36.0		17		1	19		1	6		1
NAGOYA	0	EP	01	18	12.0	N	0	E	0	U	2	ES	18	34.8		27		2	22		2	10		1
FUKUI	0	P	01	18	12.6																			
HAMAMA	0	IP	01	18	14.2	N	1	W				ES	18	38		24		1	20		1	15		1
OSHIMA	0	P	01	18	16.2											12		3	9		2	5		1
ONAHAM	0	EX	01	18	18.8							ES	18	47.1		22		1	24		1	6		2
FUKUSH	0	EX	01	18	19.0											7		2	4		1			
HIKONE	0	P	01	18	20.3							S	18	46.0		28		1	19		1	8		2
KAMEYA	0	EP	01	18	21.6							IS	18	50.1		13		1	6		2	6		2
TSU	0	EP	01	18	22.6							IS	18	55.3										
KYOTO	0	EP	01	18	23.8							ES	18	54.8		6		1	4		1	3		1
NIIGAT	0	X	01	18	29.6							S	18	40.5		20		1	20		2			
NARA	0	EP	01	18	32.8																			
CHICHI	0	EP	01	18	56.4							ES	19	08.6										
OSAKA	0	X	01	19	18.2											17		4	21		4	10		2

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	s	± s	° ′	± ′	° ′	± ′	km		
12	04	05	55.4	0.02	138 09	01	36 33	01	20		4.2

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																		S			S			S
MATSUS	4	P	04	05	56.7																			
NAGANO	3	IP	04	05	59.6	N	44	W	9	U	113	S	06	01.5		40	1		40	1	1	30	1	
TOYAMA	0	EP	04	06	02.3							S	06	15.8		26		2	19		4			
MATSUM	0	IP	04	06	02.9	S	2	W	4	U	14	IS	06	08.0										
KARUIZ	0	IP	04	06	04.3					D	2	IS	06	09.6		10	1	1	10	1	2			
TAKADA	0	P	04	06	08.0							S	06	16.6										
MAEBAS	0	P	04	06	10.6			W		D	2	S	06	20.9		34		3	21		3	23		3
KOFU	0	IP	04	06	14.1	S	4	E	3			IS	06	25.7		13		0	16		0			
CHICHI	0	EP	04	06	14.9							ES	06	26.1										
IIDA	0	EP	04	06	16.8							ES	06	31.6		7		2	8		2			
FUNATS	0	P	04	06	18.6							S	06	32.1										
KUMAGA	0	EX	04	06	18.6											21		4	25		4	33		4
UTSUNO	0	P	04	06	21.9							S	06	39.6		7		2	6		2			
AIKAWA	0	EP	04	06	22							IS	06	42.6		6		1						
KANAZA	0	EP	04	06	23.6																			
MISHIM	0	EP	04	06	23.9							ES	06	45.3		10		1	11		1	7		1
AJIRO	0	IP	04	06	26.1					U	0	S	06	48.5		6		1	8		1	3		2
KAKIOK	0	P	04	06	26.4							ES	06	48		7		1	5		1	4		1
GIFU	0	P	04	06	27.6							S	06	48.7		22		1	18		1	6		1
NAGOYA	0	EP	04	06	27.6	S	0	E	0	U	0	S	06	50.0		16		2	14		1	7		1
FUKUI	0	X	04	06	27.8																			
TSURUG	0	EP	04	06	28.9							S	07	01.6										
HAMAMA	0	P	04	06	29.9							ES	06	55		10		3	10		3	4		2
OMAEZA	0	EP	04	06	30.4											9		2	8		2			
WAJIMA	0	EX	04	06	33.4											46		1	28		1			
HIKONE	0	EP	04	06	34.8							IS	07	01.6		15		1	18		1	8		1
YOKOHA	0	EP	04	06	35.5											19		1	18		1			
TOYOOK	0	X	04	07	30.7											11		1	9		1			

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Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
14	07	32	027	001	138	15	01	36	32	00	00	37

Station	Intensity	Phase (J.S.T.)	h	m	·s	Initial Motion N	E	Z	Phase	m	·s	Maximum Amplitude = A×10^P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
						μ	μ	μ				μ		S	μ		S	μ		S
MATSUS	3	P	07	32	058															
KARUI7	0	EP	07	32	113				ES	32	159									
MATSUM	0	P	07	32	125				IS	32	178									
TAKADA	0	EP	07	32	166				ES	32	250									
MAEBAS	0	P	07	32	182			D	S	32	274	7		4	7		3	8		3
KUMAGA	0	EX	07	32	269							7		5	6		5	7		5
HAMAMA	0	P	07	32	395			D 1	ES	33	04	5		1	5		1	3		1

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
16	17	11	440	002	138	13	01	36	29	01	00	36

Station	Intensity	Phase (J.S.T.)	h	m	·s	Initial Motion N	E	Z	Phase	m	·s	Maximum Amplitude = A×10^P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
						μ	μ	μ				μ		S	μ		S	μ		S
MATSUS	3	P	17	11	452															
NAGANO	1	IP	17	11	493	N	10	W	6 U 44	S	11	518	90		1	75		1	49	1
KARUI7	0	EP	17	11	526					ES	11	576								
MATSUM	0	P	17	11	529					IS	11	580								
TAKADA	0	EP	17	11	578					ES	12	068								
MAEBAS	0	EP	17	12	001					IS	12	085	7		2	4		2	8	3
KOFU	0	IP	17	12	031	S	2	E	1	ES	12	171	5		1	6		1	3	0
KUMAGA	0	EP	17	12	068								7		3	6		2	6	3
HAMAMA	0	IP	17	12	200					ES	12	44	5		1	5		2	2	2

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
23	13	25										

Station	Intensity	Phase (J.S.T.)	h	m	·s	Initial Motion N	E	Z	Phase	m	·s	Maximum Amplitude = A×10^P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
						μ	μ	μ				μ		S	μ		S	μ		S
MATSUS	3	P	13	25	292															
NAGANO	2	IP	13	25	408	N	19	W	6	ES	25	432	14	1		15	1			
MATSUM	0	IP	13	25	444				U 4	IS	25	494								
KARUI7	0	EP	13	25	452					S	25	504								
TAKADA	0	EP	13	25	492					ES	25	578								
KOFU	0	EP	13	25	546					IS	26	066	10		0	8		0		
HAMAMA	0	P	13	26	110					ES	26	36	10		4	5		3	2	2
GIFU	0	X	13	26	305								7		1	7		1		

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
25	11	05										

Station	Intensity	Phase (J.S.T.)	h	m	·s	Initial Motion N	E	Z	Phase	m	·s	Maximum Amplitude = A×10^P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
						μ	μ	μ				μ		S	μ		S	μ		S
MATSUS	3	P	11	05	087															
NAGANO	2	IP	11	05	106	N	6	W	3 U 42	IS	05	128	12	1		12	1		79	
MATSUM	0	P	11	05	141					IS	05	192								
KARUIZ	0	IP	11	05	151				D 4	ES	05	200								
TAKADA	0	EP	11	05	190					ES	05	276								
IIDA	0	EP	11	05	274					ES	05	406	7		0	5		0	2	0

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
27	10	05	595	002	138	10	01	36	30	00	00	35

Station	Intensity	Phase (J.S.T.)	h	m	·s	Initial Motion N	E	Z	Phase	m	·s	Maximum Amplitude = A×10^P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
						μ	μ	μ				μ		S	μ		S	μ		S
MATSUS	1	P	10	06																
NAGANO	1	IP	10	06	044	N	10	W	5 U 39	ES	06	068	87			90			65	
MATSUM	0	IP	10	06	080				U 3	IS	06	134								
KARUIZ	0	EP	10	06	086					S	06	140								
TAKADA	0	EP	10	06	134					ES	06	209								
KOFU	0	EP	10	06	196					ES	06	306	6		0	7		0	3	1

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Origin Time						Location								Magnitude
						Longitude			Latitude			Depth		
d	h	m	·s	±	·s	°	′	± ′	°	′	± ′	km		·
28	15	53	478	004		138	12	02	36	32	01	00		40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	·s		μ		μ		μ		m	·s	A_N	P	T	A_E	P	T	A_Z	P	T
															μ		S	μ		S	μ		S
MATSUS	3	P	15	53	505																		
NAGANO	2	IP	15	53	525	N	34	W	8	U	44	ES	53	551	43	1		36	1		23	1	
MATSUM	0	IP	15	53	569	S	1	W	2	U	3	IS	54	021									
KARUI7	0	EP	15	53	572							ES	54	023									
TAKADA	0	P	15	54	004							S	54	093									
MAEBAS	0	IP	15	54	040					D	4	S	54	218	19		3	16		4	23		4
TOYAMA	0	P	15	54	077							S	54	17	19		4	18		4			
KOFU	0	EP	15	54	082							IS	54	190	9		1	9		2	7		1
MISHIM	0	EP	15	54	101							ES	54	381	6		1	6		1	3		1
IIDA	0	EP	15	54	102							ES	54	284	6		2	5		2	2		1
UTSUNO	0	P	15	54	156							S	54	332	5		2	4		1			
KANAZA	0	EP	15	54	160							S	54	338									
AIKAWA	0	IP	15	54	163	S	3	W	0	D	1	IS	54	363	4		1	8		1	4		0
NAGOYA	0	EP	15	54	216					D	1	ES	54	440	11		2	12		2	5		1
GIFU	0	EP	15	54	23							S	54	436	14		1	15		2			
TOKYO	0	EX	15	54	24							S	54	460									
HAMAMA	0	IP	15	54	240	S	1	W	1			ES	54	48	9		2	8		2	4		1
HIKONE	0	EP	15	54	279							S	54	551	11		1	12		1	5		1

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Origin Time						Location								Magnitude
						Longitude			Latitude			Depth		
d	h	m	·s	±	·s	°	′	± ′	°	′	± ′	km		·
8	19	28	535	001		138	17	01	36	31	01	00		45

MATSUS	4	P	19	28	563																			
NAGANO	3	IP	19	28	599	N	39	W	19	U	103	S	29	014	50	1		70	1		33	1		
KARUIZ	2	IP	19	29	025					D	2	S	29	075	20	1	2	20	1	2	10	1	2	
MATSUM	2	IP	19	29	030	S	2	W	6	U	16	IS	29	084	10	1	3	10	1	3				
TAKADA	0	P	19	29	077							S	29	170										
MAEBAS	0	IP	19	29	085	N	1	W	4	D	15	IS	29	180	58		6	46		3	47		3	
CHICHI	0	EP	19	29	123							IS	29	240										
KOFU	0	IP	19	29	131	S	11	E	3	U	25	ES	29	253	30		1	47		1	22		1	
TOYAMA	0	IP	19	29	133					D	8	S	29	257	35		4	28		4	28		4	
KUMAGA	0	EP	19	29	150							IS	29	354	50		3	48		5	48		4	
IIDA	0	IP	19	29	160					U	8	ES	29	326	15		2	21		1	8		1	
FUNATS	0	IP	19	29	167							IS	29	313										
UTSUNO	0	P	19	29	202							S	29	374	14		1	14		1	26		1	
KANAZA	0	EP	19	29	207							S	29	424										
AIKAWA	0	IP	19	29	219	N				U		IS	29	418	11		1	7		0	5		1	
MISHIM	0	P	19	29	228					U	2	IS	29	422	38		1	32		1	13		1	
TOKYO	0	EP	19	29	239							ES	29	485	38		5	33		4				
KAKIOK	0	P	19	29	242							EX	29	49	19		1	16		1				
SHIZUO	0	P	19	29	248							S	29	460	8		0	12		0	5		1	
NIIGAT	0	E	19	29	250							S	29	451	14		4	23		6	6		1	
AJIRO	0	IP	19	29	251	S	1	E	0	U	1	IS	29	471	13		0	18		0	4		1	
OMAEZA	0	EP	19	29	252										13		3	19		4				
GIFU	0	P	19	29	274			E	4			S	29	491	48		2	40		1	14		1	
MITO	0	IP	19	29	278							IS	29	526	17		1	14		1	5		1	
YOKOHA	0	EP	19	29	285					D	5	S	29	518	54		1	39		1	10		1	
FUKUI	0	P	19	29	287							S	29	541										
HAMAMA	0	IP	19	29	287					U	1	S	29	550	19		1	21		2	7		1	
TSURUG	0	EP	19	29	314							S	29	596										
OSHIMA	0	P	19	29	316							S	29	577	21		1	16		2				
ONAHAM	0	EX	19	29	334										17		1	21		1	4		1	
FUKUSH	0	EX	19	29	350										7		1	5		1	2		1	
HIKONE	0	EP	19	29	360							S	30	007	37		1	29		1	10		2	
KAMEYA	0	EP	19	29	362							ES	30	043	14		2	9		2	8		1	
KYOTO	0	EP	19	29	392							IS	30	160				7		1	4		1	
NARA	0	EP	19	29	442																			
TOYOOK	0	EP	19	29	504							ES	30	314	13		1	12		1	4		1	
OSAKA	0	EP	19	29	562							ES	30	336	20		4	25		4	8		3	

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
10	07	03	428	002	138	11 01	36	31 01	00	45

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N: A_N μ	P	T	E: A_E μ	P	T	Z: A_Z μ	P	T
MATSUS	4	IP	07	03	451															
NAGANO	3	IP	07	03	470	N 28	W 13	U103	S	03	490	10	2		10	2		68	1	
MATSUM	X	P	07	03	518				S	03	568	20	1	3	15	1	3	50		3
KARUIZ	0	EP	07	03	531				ES	03	579	30	1	2	30	1	2	10	1	2
TAKADA	0	P	07	03	562				S	04	050									
MAEBAS	0	IP	07	03	592			D 6	IS	04	091	70		5	37		3	51		2
TOYAMA	0	IP	07	04	016			D 3	S	04	169	45		3	40		3	49		3
TAKAYA	0	EP	07	04	017				S	04	127									
KOFU	0	IP	07	04	017	S 5	E 3	U 6	ES	04	144	29			20		1	9		1
CHICHI	0	EP	07	04	019				ES	04	142									
IIDA	0	IP	07	04	048			U 4	IS	04	302	14		3	17		4	15		4
KUMAGA	0	P	07	04	051			D 1	S	04	159	52		4	47		4	43		4
FUNATS	0	P	07	04	072				S	04	206									
WAJIMA	0	EP	07	04	095				ES	04	300	60		1	38		1	13		1
KANAZA	0	EP	07	04	096			D	S	04	280									
UTSUNO	0	IP	07	04	098	N 1	W 4	D 5	S	04	278	16		3	10		3	23		1
MISHIM	0	EP	07	04	123				ES	04	329	17		1	25		4	7		2
MITO	0	EP	07	04	131				IS	04	434	11		5	10		4	6		2
AJIRO	0	IP	07	04	149	S 0	E 0	U 1	S	04	368	4		1	10		1	3		1
KAKIOK	0	EP	07	04	15				EX	04	34	12		1	10		1	4		1
NIIGAT	0	E	07	04	150				S	04	362	18		4	32		5	8		5
NAGOYA	0	IP	07	04	160	S 1	W 1	U 2	S	04	388	23		1	34		1	10		1
FUKUI	0	P	07	04	164				S	04	426									
YOKOHA	0	IP	07	04	171			D 8	S	04	429	34		4	20		2	16		4
TOKYO	0	EP	07	04	180				ES	04	41	41		5	42		2	57		4
HAMAMA	0	IP	07	04	185			U 1	S	04	465	15		3	15		2	9		2
OMAEZA	0	EP	07	04	208							18		4	17		4	8		2
TSURUG	0	EP	07	04	215				S	04	488									
TOMISA	0	EP	07	04	221							9		4	10		4	6		4
HIKONE	0	P	07	04	225				S	04	496	28		1	30		1	9		1
KAMEYA	0	EP	07	04	244				ES	04	542	9		3	14		4	8		3
ONAHAM	0	EX	07	04	249				ES	04	563	14		1	17		1	5		1
KYOTO	0	EP	07	04	278				ES	05	032	5		1	6		1	3		5
OSAKA	0	EP	07	04	419				ES	05	202	19		4	34		4	8		2
TOYOOK	0	EP	07	04	420				ES	05	196	11		1	13		1			
MIZUSA	0	EP	07	05	000				S	05	465	4		2	5		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
10	11	15	367	004	138	07 02	36	30 01	00	39

Station	Intensity	Phase	h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A×10^P μ N: A_N μ	P	T	E: A_E μ	P	T	Z: A_Z μ	P	T
MATSUS	3	P	11	15	390			D 11	IS	15	435	37	1		55	1		22	1	
NAGANO	3	P	11	15	413			D 1												
MATSUM	0	IP	11	15	458				S	15	528									
KARUIZ	0	EP	11	15	472				ES	15	593									
TAKADA	0	EP	11	15	519															
MAEBAS	0	EP	11	15	531				S	16	035	10		4	8		3	14		4
TOYAMA	0	EP	11	15	54				ES	16	12	12		4	9		3	10		3
KUMAGA	0	EP	11	16	000				S	16	200	11		2	11		4	7		3
UTSUNO	0	EX	11	16	025				ES	16	245	6		2	5		1	3		1
NAGOYA	0	P	11	16	108	S	E	D 1	S	16	336	6		1	6		1	3		1
NIIGAT	0	X	11	16	252				S	16	320	5		1	10		1			

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Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	° ′	± ′	° ′	± ′	km			・
22	07	59	492	002		138 13	02	36 34	01	20			37

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	・s	μ		μ		μ		m	・s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	07	59	518																			
NAGANO	0	IP	07	59	535	N	8	W	3	U	39	S	59	557		74		1	76			36		1
KARUI7	0	IP	07	59	573					U	4	S	00	010										
MATSUM	1	IP	07	59	581	N		E		D	4	IS	00	036										
TAKADA	0	EP	08	00	008							S	00	105										
MAEBAS	0	EP	08	00	037							ES	00	128		8		5	6		3	6		3
KUMAGA	0	EX	08	00	093											6		3	5		3	6		4
IIDA	0	EP	08	00	112							ES	00	256		8		0	4		0	3		0
HAMAMA	0	P	08	00	250					U	2					5		1	5		1	3		1

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	° ′	± ′	° ′	± ′	km			・
24	14	03	467	001		138 13	01	36 33	00	20			37

NAGANO	2	IP	14	03	511	S	10	E	5			IS	03	536		19	1		22	1		12	1	
KARUI7	0	EP	14	03	547							ES	03	595										
MATSUM	0	P	14	03	554					U		IS	04	011										
TAKADA	0	EP	14	03	583							S	04	075										
MAEBAS	0	IP	14	04	008					D	4	IS	04	102		10		0	4		3	8		3
AIKAWA	0	IP	14	04	140					D	1	IS	04	333		5		0	8		0	3		0

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	° ′	± ′	° ′	± ′	km			・
28	11	10	478	003		138 17	02	36 32	01	00			39

MATSUS	3	P	11	10	507																			
NAGANO	3	IP	11	10	526	N	3	W	3	U	45	ES	10	539		30	1		60	1		50	1	
KARUI7	0	EP	11	10	567							ES	11	016										
MATSUM	0	IP	11	10	571	S		W	2	U	4	IS	11	031										
TAKADA	0	P	11	11	006							S	11	086										
KOFU	0	EP	11	11	073							ES	11	189		7		0	8		0	3		1
GIFU	0	EP	11	11	24							ES	11	44		4		1	6		2			

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	° ′	± ′	° ′	± ′	km			・
30	14	35	190	001		138 14	01	36 31	00	00			43

MATSUS	3	P	14	35	218																			
NAGANO	3	P	14	35	236							ES	35	253		14	2		80	1		70	1	
KARUI7	0	IP	14	35	270	N	6	W	6	D	12	S	35	324		10	1	1	15	1	2			
MATSUM	X	IP	14	35	283	S	2	W	8	U	20	IS	35	333										
TAKADA	1	P	14	35	322							S	35	412										
MAEBAS	0	IP	14	35	349	N		W	3	D	8	IS	35	442		27		3	23		4	20		3
TAKAYA	0	EP	14	35	382							S	35	495										
TOYAMA	0	P	14	35	384							S	35	518		28		1	29		1	13		3
CHICHI	0	EP	14	35	389							IS	35	520										
KOFU	0	EP	14	35	391							IS	35	498		14		0	31		0	11		1
KUMAGA	0	P	14	35	411	S	1			D	1	S	35	569		22		3	24		5	15		4
IIDA	0	EP	14	35	414							ES	35	560		12		0	12		0	4		1
FUNATS	0	P	14	35	419							S	35	565										
UTSUNO	0	P	14	35	460					D	3	S	36	028		12		1	8		1	10		1
KANAZA	0	EP	14	35	473							ES	36	036										
AIKAWA	0	IP	14	35	474					U	1	IS	36	074		20		0	20		0	6		0
MISHIM	0	EP	14	35	495							S	36	090		24		1	20		1	7		1
WAJIMA	0	EP	14	35	499							ES	36	095		36		1	22		1			
SHIZUO	0	EP	14	35	507							ES	36	116		10		1	9		1	4		2
KAKIOK	0	EP	14	35	51							ES	36	09		10		1	11		1	4		1
AJIRO	0	P	14	35	515							IS	36	125		5		0	8		0	3		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
			h	m	• s	N		E		Z			m	• s	N			E			Z		
							μ		μ		μ				AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
GIFU	0	P	14	35	521																		
NAGOYA	0	P	14	35	522	S	2	W	2	U	2	S	36	128	12		2	12		2			
MITO	0	IP	14	35	534							ES	36	168	9		1	9		1	4		1
YOKOHA	0	EP	14	35	539							IS	36	188	14		1	11		1	4		2
												IS	36	182	24		4	20		1			
HAMAMA	0	P	14	35	544					U	1	S	36	190	14		1	10		2	8		1
TSURUG	0	EP	14	35	571							S	36	270									
OMAEZA	0	EP	14	35	572										11		3	10		1			
HIKONE	0	EP	14	36	005							S	36	265	15		1	13		1	4		2
NIIGAT	0	E	14	36	034							S	36	121	10		3	15		1			
ONAHAM	0	EX	14	36	298										11		2	13		2	7		2
TOYOOK	0	EP	14	36	379							S	36	562	8		1	14		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
1	05	25	163	001	138 17	01	36 33	01	00	46

MATSUS	4	P	05	25	19																			
NAGANO	4	IP	05	25	211	N	2	W	2	U	13	S	25	232	18	2		25	2		15	2		
KARUI7	1	IP	05	25	252	N	6			D	2	S	25	304	25	1	1	15	1	2	15	1	1	
MATSUM	2	IP	05	25	257	S	3	W	6	U	16	S	25	314	10	1	3	10	1	3				
TAKADA	0	P	05	25	299							S	25	398										
MAEBAS	1	IP	05	25	315	N	1	W	7	D	24	IS	25	414	85		4	48		4	61		4	
TOYAMA	0	IP	05	25	354					D	13	S	25	515	57		4	38		3	28		2	
KOFU	0	IP	05	25	359	S	8	E	7	U	14	ES	25	481	30		0	45		0	24		1	
TAKAYA	0	P	05	25	363							S	25	480										
CHICHI	0	EP	05	25	372							ES	25	468										
KUMAGA	0	P	05	25	374	N	2	W	1	U	1	S	25	520	60		5	50		4	46		4	
SHIRAK	0	EP	05	25	385							E	26	163										
IIDA	0	IP	05	25	394	S	7	W	3	U	10	IS	25	550	25		2	26		1	10		0	
FUNATS	0	IP	05	25	397							IS	25	539										
UTSUNO	0	IP	05	25	428	N	3	W	14	D	19	S	26	005	24		1	19		1	23		1	
AIKAWA	0	IP	05	25	437	N	0	W	0			IS	26	026	13		1	13		1	7		1	
NIIGAT	0	EP	05	25	463					U	4	S	26	090	18		4	36		7	8		4	
KAKIOK	0	IP	05	25	469							IS	26	079	31		1	20		1	9		1	
KANAZA	0	P	05	25	478	S		E		D		S	26	032										
MISHIM	0	P	05	25	482							S	26	069	40		1	39		1				
AJIRO	0	IP	05	25	487	S	0			U	1	S	26	107	9		0	14		0	5		1	
TOKYO	0	P	05	25	488							ES	26	114	36		5	47		4				
SHIZUO	0	P	05	25	498							S	26	137	10		1	11		1	6		2	
GIFU	0	P	05	25	500							S	26	125	40		2	58		2	14		1	
NAGOYA	0	P	05	25	504	S	2	W	1	U	2	IS	26	128	44		1	47		1	19		1	
MITO	0	IP	05	25	505					D	1	IS	26	156	25		0	35		1	10		2	
YOKOHA	0	IP	05	25	507	N	2	W	2	D	4	IS	26	158	69		2	54		2	17		1	
FUKUI	0	P	05	25	512	S	8	W	8	U	7	S	26	158										
HAMAMA	0	P	05	25	524					U	2	S	26	180	24		1	26		2	14		1	
TSURUG	0	EP	05	25	529							S	26	219										
OSHIMA	0	EP	05	25	53										14		1	11		1	5		1	
OMAEZA	0	EP	05	25	541							ES	26	220	26		3	28		3	17		2	
FUKUSH	0	EX	05	25	561										10		1	7		1	3		1	
ONAHAM	0	EX	05	25	568							ES	26	255	21		1	22		1	11		3	
HIKONE	0	EP	05	25	573							IS	26	246	42		2	37		1	16		1	
SAKATA	0	EP	05	26	030							ES	26	589										
SENDAI	0	EP	05	26	04							EX	26	38	5		2	5		2	2		2	
												EX	26	44										
KYOTO	0	EP	05	26	072							ES	26	358	8		2	9		0	3		1	
NARA	0	EP	05	26	092																			
TOYOOK	0	EP	05	26	129							S	26	543	29		1	24		1	6		1	
OSAKA	0	X	05	26	525										30		2	30		4	15		3	
MIZUSA	0	P	05	26	579							S	27	059	5		2	10		2	6		2	
SHIONO	0	EX	05	27	124										8		3	6		3	3		2	

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Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	・s	± ・s	° ′	± ′		° ′	± ′	Depth km	・
1	10	40	267	002	138 13	01		36 31	01	00	41

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	・s	μ		μ		μ		m	・s			A_N	P	T	A_E	P	T	A_Z	P	
																μ		S	μ		S	μ		
MATSUS	3	P	10	40	264																			
NAGANO	3	IP	10	40	333	N	15	W	6	U	39	ES	40	355		20	1	1	30	1		20	1	
KARUI7	0	EP	10	40	349							ES	40	399										
MATSUM	1	IP	10	40	369			E	2	D	5	IS	40	424										
TAKADA	0	P	10	40	406							S	40	492										
MAEBAS	0	P	10	40	428			W		D		S	40	524		20		3	11		3	14		
KOFU	0	IP	10	40	463	S	5	E	4	U	10					10		1	11		0	7		
IIDA	0	EP	10	40	500							ES	41	050		8		0	6		0	3		
UTSUNO	0	IP	10	40	540			W	2	D	3	S	41	205		7		1	7		1	5		
KANAZA	0	EP	10	40	550							ES	41	124										
MISHIM	0	EX	10	40	57											6		1	7		1	3		
WAJIMA	0	EX	10	40	570											21		1	25		1			
KAKIOK	0	P	10	40	59							S	41	19		9		1	8		1	3		
TOYAMA	0	P	10	41	008							S	41	17		9		2	9		2	9		
GIFU	0	EP	10	41	018							S	41	170		11		2	13		1			
MITO	0	EP	10	41	025							IS	41	260		18		0	12		0	3		
HAMAMA	0	EP	10	41	03							ES	41	29		11		2	9		2	5		
NAGOYA	0	EP	10	41	034	N	0	E	0	D	0	ES	41	244		9		1	11		1	4		
YOKOHA	0	EP	10	41	060											10		0	6		1			
NIIGAT	0	E	10	41	072							S	41	206		5		2	8		1			
HIKONE	0	EP	10	41	113							S	41	352		13		1	9		1	3		
ONAHAM	0	EX	10	41	350											9		2	10		1	3		

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	・s	± ・s	° ′	± ′		° ′	± ′	Depth km	・
1	12	04									

MATSUS	2	P	12	04																				
NAGANO	2	IP	12	04	526	N	7	W	1	U	34	ES	04	547										
KARUI7	0	EP	12	04	558							ES	05	008										
MATSUM	0	IP	12	04	563					U	3	IS	05	017										
TAKADA	0	EP	12	04	599							ES	05	091										
KOFU	0	EP	12	05	041							ES	05	182		3		0	8		0			

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	・s	± ・s	° ′	± ′		° ′	± ′	Depth km	・
2	06	02									

MATSUS	3	P	06	02	317																			
NAGANO	3	EP	06	02	348							ES	02	369		50	1		50	1		40	1	
KARUI7	0	EP	06	02	451							ES	02	508		10	1	1	20	1	1			
MATSUM	X	IP	06	02	460					U	2	IS	02	518										
TAKADA	0	P	06	02	484							S	02	576										
MAEBAS	0	P	06	02	526			W				S	03	026		23		4	18		3			
CHICHI	0	EP	06	02	557							IS	03	084										
KOFU	0	IP	06	02	563	S	4	E	4			ES	03	120		15		1	21		1			
IIDA	0	EP	06	02	594							ES	03	146		9		0	7		0	4		
KUMAGA	0	EP	06	03	000							ES	03	220		22		3	19		5	18		
WAJIMA	0	EP	06	03	00							ES	03	217		41		1	53		1			
UTSUNO	0	IP	06	03	039			W	2	D	3	S	03	215		15		1	7		1	8		
KANAZA	0	EP	06	03	046							S	03	226										
TOYAMA	0	IP	06	03	071							S	03	227		17		4	16		3	12		
KAKIOK	0	EP	06	03	08							ES	03	29		11		1	8		1	4		
MISHIM	0	EP	06	03	082							ES	03	283		12		1	10		1	3		
AJIRO	0	IP	06	03	091					U	1	S	03	316		3		1	5		1	2		
GIFU	0	EP	06	03	104							S	03	336		23		2	19		1	7		
MITO	0	EP	06	03	115							IS	03	366		23		0	20		0	3		
NAGOYA	0	EP	06	03	116							S	03	336		18		1	15		1	7		
HAMAMA	0	IP	06	03	134							ES	03	38		11		2	10		2	5		
TSURUG	0	EP	06	03	135																			
YOKOHA	0	EP	06	03	168											12		2	9		1			
HIKONE	0	EP	06	03	229							S	03	445		14		1	16		1	5		
NIIGAT	0	E	06	03	290							S	03	306		15		1	8		1			
TOYOOK	0	EP	06	03	339							ES	04	151		10		1	7		1			
ONAHAM	0	EX	06	03	411											9		1	8		1	2		

Observations by the Network of JMA during Aug. 1965 to Dec. 1966

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Origin Time								Location								Magnitude
								Longitude			Latitude			Depth		
d	h	m	• s	±	• s			°	′	± ′	°	′	± ′	km		•
2	06	09	245	002				138	14	01	36	31	01	00		40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase		Maximum Amplitude = A×10^P μ							
						N		E		Z				N			E			Z		
			h	m	• s		μ		μ		μ		m • s	AN		P T	AE		P T	AZ		P T
														μ		S	μ		S	μ		S
MATSUS	3	P	06	09	263							ES	09 309	20	1		30	1		20	1	
NAGANO	2	IP	06	09	289	N	32	W	1	U	34	ES	09 384									
KARUIZ	0	EP	06	09	327							IS	09 390									
MATSUM	0	P	06	09	337					U		S	09 454									
TAKADA	0	P	06	09	374																	
MAEBAS	0	EP	06	09	411							S	09 493	11	4	7	3					
KOFU	0	IP	06	09	441	S	2	E	3			ES	09 587	6	1	7	0					
IIDA	0	EP	06	09	470							ES	10 022	5	0	4	1	1	1			
UTSUNO	0	P	06	09	514					U	3	S	10 095	7	1	5	1	5	1			
KANAZA	0	E	06	09	516																	
TOYAMA	0	IP	06	09	542					D	1	ES	10 104	8	4	7	3	7	3			
WAJIMA	0	EP	06	09	566							ES	10 106	23	1	21	1					
NAGOYA	0	EP	06	09	595							S	10 212	7	1	7	1	3	1			
MITO	0	EP	06	10	006							IS	10 246	12	0	10	0	2	0			
HAMAMA	0	P	06	10	008					U	4	ES	10 27	6	2	8	3	3	1			
HIKONE	0	EP	06	10	108							S	10 321	7	1	7	1	3	1			
NIIGAT	0	E	06	10	166							S	10 182	6	1	8	1					
ONAHAM	0	EX	06	10	359									5	1	6	1					

Origin Time								Location								Magnitude
								Longitude			Latitude			Depth		
d	h	m	• s	±	• s			°	′	± ′	°	′	± ′	km		•
3	01	59														

MATSUS	3	P	01	59	576																	
NAGANO	2	P	02	00	004							ES	00 024									
MATSUM	0	P	02	00	032							IS	00 084									
KARUIZ	0	P	02	00	033							IS	00 082									
TAKADA	0	P	02	00	103							S	00 175									
MAEBAS	0	P	02	00	104					D		S	00 201	9	3	8	4	10	4			
KUMAGA	0	EX	02	00	135									10	3	7	2	15	3			
TOYAMA	0	EP	02	00	23							S	00 37	5	3	5	2	4	3			
KANAZA	0	EP	02	00	234							S	00 402	50	3	50	2					
GIFU	0	EP	02	00	278							S	00 496	6	2	4	2					
NIIGAT	0	X	02	00	445									5	5	6	5					

Origin Time								Location								Magnitude
								Longitude			Latitude			Depth		
d	h	m	• s	±	• s			°	′	± ′	°	′	± ′	km		•
3	07	00	372	002				138	12	00	36	28	01	00		

MATSUS	2	P	07	00																		
NAGANO	2	IP	07	00	425	N	3			U	24	S	00 450									
KARUIZ	0	P	07	00	454							ES	00 503									
MATSUM	0	IP	07	00	455					U	6	IS	00 508									
TAKADA	0	P	07	00	515							S	01 003									
KOFU	0	EP	07	00	572							IS	01 076	5	0	10	0					

Origin Time								Location								Magnitude
								Longitude			Latitude			Depth		
d	h	m	• s	±	• s			°	′	± ′	°	′	± ′	km		•
3	13	55	593	002				138	18	01	36	33	01	00		42

MATSUS	3	P	13	56	027																	
NAGANO	3	P	13	56	039							S	56 056	80	1		12	2		50	1	
KARUIZ	0	EP	13	56	078							IS	56 131	10	1	2	10	1	2			
MATSUM	X	P	13	56	092							IS	56 148									
TAKADA	0	P	13	56	131							ES	56 329									
MAEBAS	0	IP	13	56	143					D	2	S	56 349							31		4
KOFU	0	IP	13	56	186					U	3	ES	56 310	14		3	13		3	7		1
IIDA	0	IP	13	56	220	S	1	E	2	U	1	IS	56 370	8		2	10		1	5		3

International Seismological Centre

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A×10^P μ N AN	N P	N T s	E AE μ	E P	E T s	Z AZ μ	Z P	Z T s
KUMAGA	0	EP 13 56 225				ES 56 502	30		4	22		4	23		4
TOYAMA	0	IP 13 56 263				IS 56 409	22		4	16		4	17		3
AIKAWA	0	IP 13 56 270		E 0 U 1		IS 56 464	6		1	6		1	3		1
WAJIMA	0	EP 13 56 279				ES 56 457	52		1	51		1			
MISHIM	0	EX 13 56 29					6		1	7		1	3		2
KANAZA	0	EP 13 56 290				S 56 457									
NIIGAT	0	EP 13 56 310				S 56 533	13		6	18		5	8		6
MITO	0	EP 13 56 347				IS 56 574	9		0	10		0	2		0
NAGOYA	0	EP 13 56 348	N	E	D	S 56 564	16		2	19		2	6		2
GIFU	0	EP 13 56 35				S 56 564	16		2	28		2	6		1
HAMAMA	0	P 13 56 362				ES 57 02	10		2	11		2	5		2
OMAEZA	0	EP 13 56 375					8		3	14		4			
TSURUG	0	EP 13 56 402													
TOYOOK	0	EP 13 56 583				IS 57 378	11		1						
HIKONE	0	S 13 57 078					15		1	12		2	5		1

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
3 23 47 492	001	138 16	01	36 30	01	00	41

MATSUS	3	P 23 47 520																				
NAGANO	2	IP 23 47 540	N	3	W		U	15	ES	47	563	20	1	0	20	1	0	10	1	
KARUI7	0	P 23 47 575					D		S	48	024									
TAKADA	0	P 23 48 029							S	48	113									
MAEBAS	0	P 23 48 040					D		IS	48	140	13		4	18		4	29		3
KOFU	0	IP 23 48 079	S	2	E	1	U	3	ES	48	196	11		1	16		0	6		1
CHICHI	0	EP 23 48 088							IS	48	430									
IIDA	0	EP 23 48 110							ES	48	248	6		0	5		0	2		1
FUNATS	0	IP 23 48 119							IS	48	262									
KUMAGA	0	EP 23 48 120							S	48	245	14		3	15		5	17		3
TOYAMA	0	P 23 48 146							S	48	285	10		2	10		3			
KANAZA	0	EP 23 48 158							ES	48	374									
UTSUNO	0	P 23 48 161							S	48	336	14		0	12		0			
AIKAWA	0	IP 23 48 176	S	0	E	0	D	1	IS	48	376	4		1	7		1	1		1
TOKYO	0	EP 23 48 20							ES	48	387	8		2	10		4			
GIFU	0	P 23 48 200							S	48	442	8		1	14		1	6		1
AJIRO	0	IP 23 48 207					U	0	S	48	420	4		0	5		0	2		0
MISHIM	0	EP 23 48 211							S	48	394	11		1	11		1	4		0
NAGOYA	0	EP 23 48 225	N	0	E	0	U	0	S	48	460	10		1	9		1	4		1
MITO	0	IP 23 48 238							IS	48	484	20		0	14		1	4		0
HAMAMA	0	P 23 48 250							ES	48	50	9		2	5		1	5		1
OMAEZA	0	EP 23 48 296										7		3	6		2			
HIKONE	0	EP 23 48 308							S	48	562	9		1	7		1	3		1
ONAHAM	0	EX 23 49 011										11		1	8		2	4		1

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
5 17 51 147	002	138 19	01	36 35	01	00	54

MATSUS	4	P 17 51 191																				
NAGANO	5	IP 17 51 207	S		E	700	D	700	S	51	228	14	3		92	2		39	2	
KARUI7	2	IP 17 51 229	S	44	E	30	U	50	ES	51	285	23	2	3	33	2	2	90	1	3
MATSUM	3	IP 17 51 261	S	2	W	6	U	16	S	51	318	18	2	3	80	1	4	30	1	3
TAKADA	2	P 17 51 275	N	46	E	13	U	156	S	51	355	90	1	3	13	2	3	60	1	3
CHICHI	0	P 17 51 278	S		E							50	1		70	1		20	1	
MAEBAS	1	IP 17 51 294	N	7	W	14	D	43	IS	51	388	51	1	3	56	1	3	72		3
TAKAYA	0	P 17 51 347							S	51	490									
KOFU	1	IP 17 51 353	S	43	E	20			IS	51	532	23	1	4	48	1	4	10	1	1
KUMAGA	1	IP 17 51 362	N	6	W	4	D	3	IS	51	544	30	1	4	31	1	5	29	1	4
TOYAMA	0	IP 17 51 375	N	3	E	13	D	74	IS	52	561	39	1	3	39	1	3	37	1	3
IIDA	1	IP 17 51 390	S	20	W	21	U	27	IS	51	534	14	1	1	17	1	2	12	1	4
FUNATS	0	P 17 51 394							S	52	029	0	1	4	0	1	4			
UTSUNO	1	IP 17 51 404	N	4	W	19	D	17	S	51	578	16	1	4	13	1	4	10	1	4

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
AIKAWA	0	IP	17	51	423	N	38	W	7	U	78	IS	52	012		91		2	92		3	77		2
KANAZA	0	P	17	51	428	N		E		D		S	52	000										
KAKIOK	0	P	17	51	43	S	1	W	3	U	3	ES	52	05		91		1	75		1	54		5
TOKYO	0	P	17	51	432							ES	52	201		37	1	4	29	1	4	37	1	4
SHIZUO	0	IP	17	51	438	S	8	E	1	U	4	S	52	062		11	1	5	12	1	5	55		5
WAJIMA	1	IP	17	51	441	N	3	W	7	U	18	IS	52	057		30	1	1	29	1	1	11	1	1
NIIGAT	1	IP	17	51	450	N	3	E	1	U	32	S	52	045		11	2	4	12	2	5	60	1	4
MISHIM	0	IP	17	51	455	S	14	E	3	U	18	IS	52	087		13	1	3	23	1	4	55		3
SHIRAK	0	IP	17	51	464			E		D		IS	52	112										
AJIRO	0	IP	17	51	475	S	2	E	1	U	3	ES	52	202		55		4	97		4	36		5
MITO	1	IP	17	51	485					D	2	IS	52	120		11	1	2	12	1	2	66		3
YOKOHA	0	IP	17	51	486	N	2	W	2	D	25	IS	52	140		47	1	3	25	1	3	17	1	4
GIFU	0	P	17	51	486	N	6	E	6			S	52	129		70	1	2	11	2	2	30	1	2
FUKUI	0	P	17	51	488	N	1	E	6	D	6	S	52	186										
NAGOYA	0	IP	17	51	500					D	3	S	52	140		23	1	2	24	1	2	93		2
CHOSHI	0	EP	17	51	513							ES	52	243										
												EX	52	341										
HAMAMA	0	IP	17	51	518	S	4	W	1	U	5	S	52	170		18	1	2	14		3	11		2
OSHIMA	0	IP	17	51	530	S	10			U	19	IS	52	204		65		1	56		5	44		1
OMAEZA	0	P	17	51	532							S	52	237		22	1	4	47	1	5	98		4
TSURUG	0	EP	17	51	534							S	52	223										
ONAHAM	0	IP	17	51	536					D	6	IS	52	263		15	1	3	16	1	1	71		4
FUKUSH	0	IP	17	51	540	N	6	E	6	U	6	S	52	235		73		1	52		1	50		5
HIKONE	0	IP	17	51	553	N	6	E	7	D	8	S	52	251		26	1	1	27	1	2	85		1
YAMAGA	0	P	17	51	558					U	3	ES	52	282										
NAGATS	0	E	17	51	558														10	1	4			
TOMISA	0	EP	17	51	562											96		5	93		5	59		4
KYOTO	0	EP	17	52	003	N	3	E	3	D	2	IS	52	341		40		3	53		2	26		5
SENDAI	0	EP	17	52	010							ES	52	400		59		6	42		5	25		6
SAKATA	0	EP	17	52	011							S	52	371		20	1	3	15	1	2	50		2
TSU	0	IP	17	52	012							IS	52	332										
NARA	0	EP	17	52	047							ES	52	447		15	1	2	10	1	1	80		
OWASE	0	P	17	52	060							S	52	442		32		2	25		2	18		4
OSAKA	0	P	17	52	076							S	52	464		25	1	3	25	1	4	75		1
AKITA	0	EP	17	52	122							EX	52	554		26		4	28		4	16		4
MIZUSA	0	P	17	52	128							S	53	073		53		4	60		2	16		2
TOYOOK	0	EP	17	52	130	N		W				ES	52	549		22	1	1	99		1	34		2
SUMOTO	0	P	17	52	145					D		ES	53	022		34		8	29		5	12		4
												IX	52	270										
OFUNAT	0	P	17	52	166	S	3	W	2	D	2	ES	53	112		12		6	11		6	16		6
MORIOK	0	EP	17	52	169							S	53	170		9		5	5		5	10		5
												IX	52	255										
KOBE	0	EP	17	52	181							ES	53	027		50		6	10	1	5	40		2
TOKUSH	0	EP	17	52	205							ES	53	092										
HIMEJI	0	EP	17	52	211							ES	53	081										
SHIONO	0	EP	17	52	232							ES	53	087		31		4	33		3	14		2
MIYAKO	0	EP	17	52	24											10		6	9		8			
TAKAMA	0	EP	17	52	256							ES	53	266								7		1
TURUGI	0	EP	17	52	291							ES	53	228										
OKAYAM	0	EP	17	52	299							ES	53	240		11		1	9		1	7		1
HACHIN	0	IP	17	52	329	S	1			D	1					5		7	7		7	6		5
AOMORI	0	EP	17	52	33							ES	53	36		18		3	16		3			
MATSUE	0	EP	17	52	399							ES	53	478										
MATSUY	0	EP	17	52	461							ES	53	559		23		5	13		7	7		6
KOCHI	0	EP	17	52	514							ES	53	565		23		6	25		5			
HIROSH	0	EP	17	52	536	N	1	E	2	D	0	S	54	039		14		4	8		5	9		2
URAKAW	0	EP	17	52	570											5		4	6		2			
HAMADA	0	EP	17	53	021							ES	54	010		13		7	4		6			
OITA	0	EP	17	53	044							ES	54	436		64		6	54		6	24		5
FUKUOK	0	EP	17	53	12							ES	54	45		19		3	9		2	5		5
ASHIZU	0	EX	17	53	134							ES	54	251		14		5	16		9			
NAGASA	0	EP	17	53	138							ES	55	200										
KUMAMO	0	EP	17	53	158							ES	54	485		12		2	12		2	7		4
SAGA	0	EP	17	53	376							S	55	169										
KAGOSH	0	EX	17	55	427											19		3	17		3	3		2

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Origin Time d	h	m	·s	±·s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
5	18	44								

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
MATSUS	3		18	44	32															
NAGANO	3	IP	18	44	322	S 14	E 15	D 32	S	44	335									
KARUIZ	0	IP	18	44	374			D 4	ES	44	430									
TAKADA	0	EP	18	44	413				S	44	484									
MAEBAS	0	IP	18	44	446		W 1	D 6	S	44	528	10		3	11		3	12		4
KUMAGA	0	EP	18	44	504				ES	45	060	11		3	13		5	13		4
IIDA	0	EP	18	44	530				ES	45	082	5		1	3		1	1		1
MITO	0	EP	18	45	025				IS	45	264	9		0	10		1	2		0
KAKIOK	0	EP	18	45	05				ES	45	19	9		1	7		1	5		1
GIFU	0	EP	18	45	058				S	45	268	9		1	13		1			
YOKOHA	0	EP	18	45	062				S	45	287	10		0	6		1			
HAMAMA	0	P	18	45	077				ES	45	36	5		2	4		2	3		1
NIIGAT	0	X	18	45	170				S	45	195	6		2	6		2			

Origin Time d	h	m	·s	±·s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
6	17	07	456	002	138	19 01	36	33 01	00	41

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
MATSUS	2	P	17	07																
NAGANO	3	IP	17	07	500	S 4	E 2	D 32	S	07	518	50			25	1		20	1	
KARUIZ	0	P	17	07	538				S	07	588									
MATSUM	X	P	17	07	561			D	IS	08	026									
TAKADA	0	P	17	07	581				S	08	055									
MAEBAS	0	IP	17	07	598			D 2	S	08	089	21		3	21		3	26		3
KOFU	0	IP	17	08	048			U 2	ES	08	174	12		1	20		1	7		1
TOYAMA	0	P	17	08	06				S	08	21	7		3	12		3	8		2
KUMAGA	0	EP	17	08	072				ES	08	240	13		5	20		5	16		4
IIDA	0	EP	17	08	092				ES	08	248	7		1	8		2	3		1
CHICHI	0	EP	17	08	093				ES	08	349									
KANAZA	0	EP	17	08	130				S	08	318	65		1	50		1	50		
KAKIOK	0	EP	17	08	16				ES	08	37	7		1	8		1	3		1
MISHIM	0	EP	17	08	170							9		1	7		1	2		1
YOKOHA	0	EP	17	08	184				IX	08	443	8		1	7		1			
MITO	0	EP	17	08	198				IS	08	420	9		1	8		1	2		1
NAGOYA	0	EP	17	08	204	S 2	W 1	U 1	S	08	440	14		1	11		1	4		1
GIFU	0	P	17	08	206				S	08	436	8		1	13		2	13		1
HAMAMA	0	P	17	08	227			U 1	S	08	484	9		2	5		2	5		1
FUNATS	0	P	17	08	258				S	08	443									
OMAEZA	0	EP	17	08	261										6		3			
HIKONE	0	EP	17	08	314				S	08	562	14		1	9		1	4		2
NIIGAT	0	X	17	08	342							6		4	8		5			
TOKYO	0	EP	17	08	37				ES	08	58	17		4	8		4	11		4

Origin Time d	h	m	·s	±·s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
9	04	35	150	004	138	12 03	36	32 01	20	39

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
MATSUS	3	P	04	35	156															
NAGANO	2	IP	04	35	177	N 35	E 35	U 34	ES	35	192									
KARUIZ	0	P	04	35	225				S	35	281									
MATSUM	X	IS	04	35	225			U 3	IS	35	279									
TAKADA	0	EP	04	35	273				S	35	347									
KOFU	0	IP	04	35	325	S 1	E 1	U 2	IS	35	448	7		0	9		0	4		0
KUMAGA	0	EX	04	35	349							5		1	6		1	3		2
IIDA	0	EP	04	35	356				ES	35	504	5		0	3		1	2		1
WAJIMA	0	EX	04	35	440							13		1	16		1			
GIFU	0	EP	04	35	47				S	36	081	4		1	7		2	3		1
NIIGAT	0	X	04	35	470							8		1	10		1			
NAGOYA	0	EP	04	35	498				S	36	096	7		1	6		1	2		1

Origin Time d	h	m	·s	±·s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude ·
9	23	15	572	002	138	18 01	36	10 01	00	37

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
MATSUS	3	P	23	15	599															
NAGANO	2	P	23	16	020				S	16	040	39			35			38		
KARUIZ	0	EP	23	16	057				S	16	107									
MATSUM	0	EP	23	16	068				IS	16	125									
TAKADA	0	P	23	16	108				S	16	192									
MAEBAS	0	IP	23	16	118			D 2	S	16	219	9		4	6		4	8		3
KOFU	0	IP	23	16	163	S 1	E 1	U 1	ES	16	283	5		1	7		0	4		1
MISHIM	0	EP	23	16	29				ES	16	485	5		1	6		1	2		0
GIFU	0	P	23	16	307				S	16	534	4		2	8		2			
KUMAGA	0	EX	23	16	209							8		5	8		5	5		3

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
11	02	59	35.1	0.03	138	13	02	36 32 01	20	3.9

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	3	P	02	59	36.0															
NAGANO	3	IP	02	59	39.1				S	59	41.4	10	1		20	1		20	1	
KARUI7	0	EP	02	59	42.5				ES	59	47.9									
MATSUM	0	IP	02	59	42.6	S	W	2 U 6	IS	59	47.9									
TAKADA	0	P	02	59	46.8				S	59	55.2									
MAEBAS	0	EP	02	59	49.0				ES	59	59.6	9		3	7		3	8		3
KOFU	0	IP	02	59	52.2			U 1	IS	00	04.2	9		0	21		0	5		0
KUMAGA	0	EX	02	59	54.5							8		3	6		1	5		4
FUNATS	0	IP	02	59	57.7				IS	00	13.8									
KANAZA	0	EP	03	00																
MISHIM	0	EP	03	00	03.5				ES	00	23.7			1	6		1	4		1
NAGOYA	0	P	03	00	06.6	N 1	E 1	D 1	S	00	30.0	6		1	6		1	3		1
NIIGAT	0	E	03	00	07.3				ES	00	27.1	5		1	10		1			
YOKOHA	0	EP	03	00	09.0				S	00	33.0	10		1	10		1			
HAMAMA	0	IP	03	00	09.9			U 2	ES	00	30	5		1	4		1	3		1
GIFU	0	EP	03	00	12				S	00	29.3	4		1	6		2			
HIKONE	0	EP	03	00	22.3				S	00	40.0	8		1	5		1	4		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
11	04	57	24.0	0.02	138	12	01	36 31 01	00	4.7

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	4	P	04	57	26.3															
NAGANO	3	IP	04	57	28.9	N 40	W 6	U 31	ES	57	30.9	20	2	2	15	2	2	12	2	1
MATSUM	1	IP	04	57	33.0	S	W 2	U 2	IS	57	38.8	25	1	3	25	1	3	50		3
KARUIZ	1	IP	04	57	33.4	S 4	E 8	U 14	S	57	39.1	50	1	2	50	1	2	10	1	1
TAKADA	1	P	04	57	37.5	N 5	E 2	U 7	S	57	45.9	20	1	4	20	1	4	50		4
MAEBAS	2	IP	04	57	40.6	N 1	W 3	D 10	IS	57	51.2	14	1	4	10	1	3	12	1	3
TOYAMA	0	IP	04	57	43.1	0	E 3	D 9	IS	58	00.1	88		3	62		3	70		3
KOFU	1	IP	04	57	43.3	S 13	E 6	U 11	ES	57	55.2	57		1	66		1	23		1
CHICHI	0	EP	04	57	43.6				S	57	56.4									
IIDA	0	IP	04	57	46.8	S 4	W 2	U 4	IS	58	02.8	30		3	35		4	17		1
KUMAGA	0	IP	04	57	46.9	N 1	E 5	U 2	S	58	01.2	11	1	5	10	1	5	57		3
FUNATS	0	P	04	57	46.9				S	58	03.2									
WAJIMA	0	EP	04	57	50.7				S	58	08.8	70		1	72		1	18		1
KANAZA	0	P	04	57	51.2	N	E	D	S	58	09.2									
AIKAWA	0	IP	04	57	51.8	N 0	E 0	U 0	IS	58	11.4	11		1	16		1	6		1
UTSUNO	1	IP	04	57	52.1	N 2	W 7	D 10	IS	58	10.5	83		1	37		1	33		1
MISHIM	0	IP	04	57	54.1	S 3		U 4	IS	58	16.1	58		1	54		4	16		1
NIIGAT	0	EP	04	57	54.6				S	58	16.5	41		5	75		5	20		5
AJIRO	0	IP	04	57	56.4	S 1	E 0	U 1	S	58	19.2	11		1	18		1	6		1
KAKIOK	0	P	04	57	56.8	N	E 5	U	S	58	18.8	53		1	38		1	16		1
TOKYO	0	EP	04	57	57				IS	58	18	72		5	99		4	77		3
SHIZUO	0	EP	04	57	57.1				ES	58	20.1	12		1	16		1			
SHIRAK	0	IP	04	57	57.6				ES	58	23.5									
NAGOYA	0	P	04	57	58.0	S 2	W 2	U 2	S	58	19.4	50		2	60		2	21		2
YOKOHA	0	IP	04	57	58.8			D 18	IS	58	23.8	70		2	59		2	30		3

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
11	05	14								

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	3	P	05	14	32															
NAGANO	3	EP	05	14	33.4				ES	14	35.7	40	1		40	1		90	1	
KARUI7	0	P	05	14	35.8				IS	14	41.4									
MATSUM	X	IP	05	14	37.5	S	W 2	U 4	S	14	42.9									
TAKADA	0	P	05	14	40.7				S	14	48.7									
KUMAGA	0	EX	05	14	50.4							6		4	7		5	4		4
AIKAWA	0	IP	05	14	55.6	N 0	W 0	U 0	IS	15	15.2	5		1	6		1	3		1
NIIGAT	0	X	05	14	57.0							4		2	4		1			
WAJIMA	0	EX	05	14	57.5							17		1	15		1			

Seismological Data of Matsushiro Earthquake Swarm (Report I)

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Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	°	′ ± ′	°	′ ± ′	km			M
11	06	06	130	002		138	12 01	36	34 01	00			47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase		Maximum Amplitude = A × 10^P μ								
						N		E		Z				N			E			Z		
			h	m	・s	μ		μ		μ		m	・s	AN	P	T	AE	P	T	AZ	P	T
														μ		S	μ		S	μ		S
MATSUS	5	P	06	06	17																	
NAGANO	3	EP	06	06	173							S	06 193	24	2	1	22	2	1	10	2	1
MATSUM	2	IP	06	06	226	S	W 2 U 8					IS	06 281	50	1	3	30	1	3	10	1	3
KARUIZ	1	IP	06	06	228	S	2 E 6 U 10					IS	06 284	60	1	2	60		1	15	1	2
TAKADA	1	P	06	06	263							S	06 343	30	1	4	20	1	4	15	1	4
MAEBAS	1	IP	06	06	294	N	W 1 D 8					IS	06 393	21	1	5	19	1	3	17	1	3
TOYAMA	0	IP	06	06	323		D 10					IS	06 476	93		4	96		4	99		4
KOFU	0	IP	06	06	325	S	11 E 6 U 9					ES	06 453	80		2	74		1	25		1
CHICHI	0	EP	06	06	328							S	06 470									
TAKAYA	0	P	06	06	330							S	06 540									
KUMAGA	0	P	06	06	360	N	2 W 2 D 1					S	06 548	18	1	3	15	1	5	10	1	3
IIDA	0	IP	06	06	360	S	2 W 1 U 3					IS	06 520	32		1	48		3	34		3
FUNATS	0	P	06	06	373							S	06 534									
WAJIMA	0	EP	06	06	394							S	06 582	59		1	67		1	21		1
KANAZA	0	P	06	06	398		E D					S	06 596									
AIKAWA	0	IP	06	06	405	N	1 E 1 U 1					ES	07 008	8		1	16		3	7		3
UTSUNO	0	IP	06	06	406	N	2 W 7 D 10					S	06 583	54		3	27		4	34		1
NIIGAT	0	EP	06	06	408							S	07 067	48		3	86		5	30		4
MISHIM	0	EP	06	06	427							IS	07 045	45		1	47		4	14		1
GIFU	0	EP	06	06	44																	
KAKIOK	0	IP	06	06	452	N	U 1					S	07 060	37		1	21		1	15		1
AJIRO	0	IP	06	06	455	S	1 E 0 U 1					ES	07 082	12		2	17		2	12		3
FUKUI	0	P	06	06	460							S	07 153									
SHIRAK	0	EP	06	06	468																	
TOKYO	0	EP	06	06	47							ES	07 10	95		3	84		3	10	1	4
NAGOYA	0	P	06	06	474	S	3 W 2 U 4					S	07 100	60		3	57		3	13		1
MITO	0	IP	06	06	481							IS	07 137	38		3	37		3	19		3
YOKOHA	0	IP	06	06	481		D 13					ES	07 117							42		3
SHIZUO	0	EP	06	06	487							ES	07 114	12		4	17		4			
HAMAMA	0	IP	06	06	500							S	07 154	48		2	38		3	19		1
TSURUG	0	EP	06	06	502							ES	07 178									
OMAEZA	0	EP	06	06	510							ES	07 198	53		4	47		4	22		3
OSHIMA	0	EP	06	06	514							S	07 184	17		1	15		2	8		2
HIKONE	0	EP	06	06	521							S	07 204	41		1	23		1	14		2
CHOSHI	0	EP	06	06	528							ES	07 230									
TOMISA	0	EP	06	06	532									34		3	33		4	17		4
FUKUSH	0	EP	06	06	540							ES	07 220	10		1	8		1	5		2
TSU	0	EP	06	07	000							ES	07 207									
OSAKA	0	EP	06	07	027							ES	07 411	55		4	75		4	20		3
KYOTO	0	EP	06	07	035	S	1 W 1 U 1					ES	07 380	7		3	9		5	6		4
NARA	0	EP	06	07	040																	
OWASE	0	P	06	07	043									4		2	4		2	3		1
SAKATA	0	EP	06	07	053							ES	07 379									
SENDAI	0	EP	06	07	056							ES	07 426	9		4	9		4	6		4
AKITA	0	EX	06	07	06									6		4	7		4	3		3
TOYOOK	0	EP	06	07	094							ES	07 496	23		1	14		1			
WAKAYA	0	EP	06	07	104							ES	07 592	6		1	7		1			
MIZUSA	0	EP	06	07	127							S	08 037	18		2	6		3	6		2
SUMOTO	0	P	06	07	225		D					ES	08 078	5		3	6		4	3		4
												IX	07 238									
KOCHI	0	EP	06	07	472							ES	08 512				5		3			
OITA	0	EX	06	09	404									8		3	15		5			

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	・s	±	・s	°	′ ± ′	°	′ ± ′	km			M
11	14	50	238	002		138	16 01	36	32 01	00			41

MATSUS	3	P	14	50	268																		
NAGANO	3	IP	14	50	290	N	30 W 5 U 38					ES	50 311	50	1		50	1		30	1		
KARUIZ	0	IP	14	50	332	N	D 3					IS	50 378										
MATSUM	1	IP	14	50	333	S	W 2 U 7					IS	50 390										
TAKADA	0	P	14	50	362							S	50 444										
MAEBAS	0	IP	14	50	387	N	1 W 3 D 12					IS	50 486	16		4	10		4	11		4
KOFU	0	IP	14	50	429	S	4 E 1 U 6					IS	50 555	22		0	25		0	8		1
TOYAMA	0	IP	14	50	433		D 5					ES	50 58	9		1	6		1	7		1
KUMAGA	0	EP	14	50	446							S	51 016	13		5	15		4	13		4
CHICHI	0	EP	14	50	448							S	50 560										
IIDA	0	EP	14	50	464							ES	51 018	11		0	8		0	2		0
FUNATS	0	IP	14	50	482							IS	51 037										

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A ×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s	μ		μ		μ			m	s		AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
UTSUNO	0	IP	14	50	501			W 4	D	6		S	51	075		9		2	7		1	8		1
KANAZA	0	EP	14	50	512							S	51	204		50			50					
NIIGAT	0	E	14	50	513							S	51	155		5		3	6		4			
WAJIMA	0	EP	14	50	520							S	51	081		31		1	31		1			
MISHIM	0	EP	14	50	527							IS	51	147		14		1	17		1	4		1
KAKIOK	0	EP	14	50	55							ES	51	15		9		1	7		1	3		1
AJIRO	0	IP	14	50	556				U	0		S	51	178		4		0	5		0	2		0
GIFU	0	EP	14	50	582							S	51	202		7			14		2	4		1
NAGOYA	0	EP	14	50	585							S	51	204		12		1	15		1	6		1
MITO	0	IP	14	50	590				D	1		IS	51	225		13		0	14		0	3		0
YOKOHA	0	EP	14	50	597							IS	51	225		10		1	8		1			
TOKYO	0	EX	14	51	00											8		3	6			10		2
HAMAMA	0	P	14	51	000							S	51	262		8		1	6		2	4		1
OMAEZA	0	EP	14	51	023											7		2	8		3			
HIKONE	0	EP	14	51	133							S	51	315		14		1	13		2	10		1
TOYOOK	0	EP	14	51	187							ES	52	016		9		1	9		1			
ONAHAM	0	EX	14	51	278											5		1	5		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth	
d	h	m	s	± s	° ′	± ′	° ′	± ′	km	
12	05	58								

MATSUS	3	P	05	58	185							S	58	244										
NAGANO	2	IP	05	58	219							ES	58	295										
KARUIZ	0	IP	05	58	241			W		D	4	S	58	385										
TAKADA	0	EP	05	58	299							ES	58	467		4		1	7		0	2		1
KOFU	0	IP	05	58	345					D		IS	59	048		3		1	6		0	2		1
AIKAWA	0	IP	05	58	449	N	0	E	0	U	0					3		1	3		2			
NIIGAT	0	X	05	59	093																			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth	
d	h	m	s	± s	° ′	± ′	° ′	± ′	km	
12	07	28	266	002	138 17	01	36 31	01	00	39

MATSUS	3	P	07	28	292							S	28	327		25	1		40	1		20	1	
NAGANO	3	IP	07	28	306	N	2	W	1	U	34	S	28	400										
KARUIZ	0	EP	07	28	350							S	28	420										
MATSUM	X	IP	07	28	362					U		ES	28	574		8		0	6		0	4		1
KOFU	0	IP	07	28	452					U	1	ES	29	006		6		2	5		3	3		3
TOYAMA	0	EP	07	28	46							S	29	231		12		4	12		4	8		4
KUMAGA	0	EX	07	28	490							IS	29	252		4		2	6		1	2		1
GIFU	0	EP	07	29	02							S	29	286		5		1	5		0	1		0
MITO	0	EP	07	29	025							S	29	236		6		3	4		2	2		1
HAMAMA	0	P	07	29	032					U	1					5		1	5		1	2		1
NAGOYA	0	EP	07	29	039	S	0	W	0	U	0					5		2	3		3			
NIIGAT	0	E	07	29	180											6		0	6		1			
YOKOHA	0	EP	07	29	224														7		5			
TOKYO	0	EX	07	29	24																			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth	
d	h	m	s	± s	° ′	± ′	° ′	± ′	km	
12	07	29	534	002	138 17	01	36 31	01	00	39

MATSUS	3	IP	07	29								S	29	591		5	1		70	1		45	1	
NAGANO	3	IP	07	29	574	N	12	W	9	U	38	IS	30	071										
KARUIZ	0	P	07	30	022					D		IS	30	092										
MATSUM	X	IP	07	30	032					U	2	S	30	174		13		4	7		4	13		3
MAEBAS	0	IP	07	30	082	N		W	1	D	4	ES	30	242		9		1	9		1	5		1
KOFU	0	IP	07	30	126					U	3	ES	30	304		3		1	5		0	1		0
IIDA	0	EP	07	30	156							ES	30	28		7		3	5		3	5		2
TOYAMA	0	EP	07	30	17																			

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A × 10^S N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
GIFU	0	EP 07 30 272				S 30 513	7		2	10		2	2		1
MITO	0	EP 07 30 273				IS 30 522	4		1	5		1	2		1
NAGOYA	0	EP 07 30 285				S 30 504	7		1	10		1	2		1
HAMAMA	0	EP 07 30 30				ES 30 55	5		1	4		2	3		1
NIIGAT	0	E 07 30 435					5		4	6		6			
HIKONE	0	S 07 31 014					10		1	7		1	4		1

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
12 09 26 468	001	138 15	01	36 26	00	00	37

MATSUS	2	P	09	26																
NAGANO	2	IP	09	26	533							S	26	553						
KARUI7	0	EP	09	26	539							ES	26	593						
MATSUM	0	IP	09	26	547			U				S	27	008						
KUMAGA	0	EX	09	27	049										7	5	6	4	4	4
KOFU	0	EP	09	27	056							ES	27	157	8	1	8	1	3	1
MITO	0	EP	09	27	203							IS	27	440	4	1	5	0	1	0

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
12 19 53							

MATSUS	3	P	19	53	500															
NAGANO	3	EP	19	53	516							ES	53	536	20	1		30	1		20	1	
KARUI7	0	EP	19	53	550															
MATSUM	X	IP	19	53	558	W	2	U	8			IS	54	016						
TAKADA	0	EP	19	53	599							S	54	079						
KOFU	0	EP	19	54	058							ES	54	174	10		1	7		1			
KUMAGA	0	EX	19	54	110										7		4	6		5	2		1
WAJIMA	0	EX	19	54	166										12		1	10		1			
MITO	0	EP	19	54	214							IS	54	452	8		0	7		0	2		0
GIFU	0	EP	19	54	29							S	55	090	8		1	6		2			
HIKONE	0	S	19	54	542										7		1	5		1			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
12 20 53							

MATSUS	3	P	20	53	179															
NAGANO	3	IP	20	53	198	N	16	E	3	U	33	ES	53	221	50	1		50	1		40	1	
MATSUM	1	P	20	53	226							IS	53	275									
KARUI7	X	IP	20	53	234	N	4	W	8	D	14	IS	53	288									
TAKADA	0	P	20	53	275							S	53	361									
MAEBAS	0	IP	20	53	307	N		W	1	D	2	IS	53	410	27		1	14		4	16		3
TOYAMA	0	IP	20	53	324					D		JS	53	451	21		2	21		2	7		2
CHICHI	0	EP	20	53	324							IS	53	458									
KOFU	0	IP	20	53	335					D	1	IS	53	456	14		1	16		0	7		1
IIDA	0	EP	20	53	362							ES	53	500	16		0	19		1	7		1
KUMAGA	0	P	20	53	369	S	1			D	1	S	53	524	24		1	21		2	8		2
FUNATS	0	IP	20	53	387							IS	53	526									
WAJIMA	0	EX	20	53	417										17		1	16		1			
KANAZA	0	EP	20	53	42							S	53	578									
AIKAWA	0	IP	20	53	424	S	0	W	0	D	0	IS	54	020	3		1	9		1	2		0
UTSUNO	0	P	20	53	425							S	53	594	11		1	7		1			
MISHIM	0	EP	20	53	445							S	54	037	10		1	13		1	4		1
TOKYO	0	EP	20	53	45							ES	54	09	8		2	12		2			
KAKIOK	0	EP	20	53	45										7		1	7		1	3		1
NAGOYA	0	EP	20	53	465							S	54	096	13		1	10		1	4		1
MITO	0	EP	20	53	500							IS	54	154	9		1	7		1	3		1

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^A μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
YOKOHA	0	EP 20 53 533				ES 54 154	11		1	11		1			
OMAEZA	0	EP 20 53 540					14		2	19		1	8		3
NIIGAT	0	EP 20 53 543				S 54 138	13		2	17		1			
ONAHAM	0	EX 20 54 161					10		1	12		1	4		2
HIKONE	0	ES 20 54 181					5		2	8		1	2		1
HAMAMA	0	EP 20 54 52				S 55 146	11		1	15		2	5		1

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
13	13	44	075	002	138	16	01	36	30	01	39

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^A μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
MATSUS	3	P 13 44 104													
NAGANO	3	IP 13 44 129	N 25	W 9	U 76	ES 44 150	30	1		20	1		99	9	
KARUI7	0	EP 13 44 156				S 44 207									
MATSUM	X	IP 13 44 161			U	IS 44 218									
TAKADA	0	P 13 44 211				S 44 291									
MAEBAS	0	IP 13 44 230		W	D 3	S 44 325	11		4	7		4	8		4
KOFU	0	IP 13 44 263			U 1	IS 44 380	6		0	9		0	4		1
TOYAMA	0	IP 13 44 272			D	S 44 410	6		1	5		2	7		1
KANAZA	0	EP 13 44 356				ES 44 520	50		2	50		2			
WAJIMA	0	EX 13 44 403					23		1	21		1			
GIFU	0	EP 13 44 42				S 45 036	7		1	6		1			

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
13	18	38	332	002	138	11	01	36	31	01	43

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^A μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
MATSUS	3	P 18 38 365				ES 38 386									
NAGANO	3	IP 18 38 372	N 4	E 1	U 22	IS 38 479									
MATSUM	X	P 18 38 423			U	S 38 479	20	1	2	15	1	3			
KARUI7	0	P 18 38 423			U	S 38 542									
TAKADA	0	P 18 38 474				ES 39 000	24		4	22		3	20		3
MAEBAS	0	IP 18 38 494		W 1	D 2	ES 39 051	10		0	14		2	7		1
KOFU	0	IP 18 38 524	S 2	E 1	U 3	S 39 083	14		3	18		3			
TOYAMA	0	P 18 38 547				ES 39 104	7		3	10		4	5		4
IIDA	0	EP 18 38 556				S 39 124									
FUNATS	0	P 18 38 562				ES 39 186									
KANAZA	0	EP 18 39 000		W 2	D 3	S 39 186	11		1	8		1	5		1
UTSUNO	0	IP 18 39 007				IS 39 250	10		1	10		1	2		1
MISHIM	0	EP 18 39 035				S 39 268	9		4	15		6	6		3
NIIGAT	0	P 18 39 043				ES 39 28	10		1	10		1	4		1
KAKIOK	0	EP 18 39 06				ES 39 28	20		4	10		2	34		4
TOKYO	0	EP 18 39 07				IS 39 338	14		0	13		0	4		1
MITO	0	EP 18 39 084				IS 39 334	19		1	10		1			
YOKOHA	0	EP 18 39 087				ES 39 36	8		1	10		3	4		2
HAMAMA	0	P 18 39 100	N 1			ES 39 399	11		4	9		3			
OMAEZA	0	EP 18 39 134				ES 39 405	8		1	9		1	4		1
HIKONE	0	EP 18 39 167					8		1	6		1	2		1
ONAHAM	0	EX 18 39 439				S 40 121	6		2	8		1	3		1
GIFU	0	EP 18 40 09					11		4	15		4	5		3
OSAKA	0	ES 18 40 123													

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
14	09	09	058	001	138	14	01	36	29	00	44

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^A μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
MATSUS	4	P 09 09 077													
NAGANO	3	IP 09 09 111	S 10	W 4	D 14	IS 09 133	55	1		75	1		25	1	
MATSUM	1	P 09 09 138			U	S 09 191									
KARUI7	1	IP 09 09 143	N 8	W 10	D 12	S 09 201									

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^n								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	A_N	P	T	A_E	P	T	A_Z	P	T
															μ		S	μ		S	μ		S
TAKADA	1	P	09	09	200							S	09	280									
MAEBAS	0	IP	09	09	207	N		W	1	D	4	S	09	303	39		4	39		5	40		3
CHICHI	0	EP	09	09	237							S	09	352									
KOFU	0	IP	09	09	242	N	4	W	1	D	3	ES	09	359	18		1	20		0	11		1
TOYAMA	0	IP	09	09	247					D	11	IS	09	412	44		3	32		4	28		1
TAKAYA	0	EP	09	09	252							ES	09	355									
KUMAGA	0	P	09	09	264					U	6	S	09	410	38		4	44		4	31		4
IIDA	0	EP	09	09	272							ES	09	410	24		0	16		0	4		1
FUNATS	0	IP	09	09	302							IS	09	436									
KANAZA	0	EP	09	09	324					D		ES	09	480									
UTSUNO	0	IP	09	09	332			W	4	D	5	S	09	545	23		2	14		2	8		1
MISHIM	0	EP	09	09	344																		
AIKAWA	0	EP	09	09	347			E	0	U	1	IS	09	556	23		1	19		1	7		1
WAJIMA	0	EP	09	09	348							IS	09	540	9		1	12		1	6		1
NIIGAT	0	EP	09	09	365							S	09	529	47		1	38		1			
KAKIOK	0	EP	09	09	37							S	09	593	9		4	14		5	4		4
												ES	10	00	9		1	8		1	4		1
AJIRO	0	IP	09	09	371	S	0			U	1	IS	09	590	6		1	9		1	3		1
SHIZUO	0	EP	09	09	373							ES	09	577	9		1	6		1	4		3
GIFU	0	P	09	09	375							S	09	598	23		1	26		1	9		2
NAGOYA	0	P	09	09	387	N		E		D													
YOKOHA	0	IP	09	09	398					D	5	IS	10	049	31		1	19		1	10		2
TOKYO	0	EP	09	09	40							ES	10	01	42		3	53		4	57		4
MITO	0	IP	09	09	400							ES	10	040	8		3	11		2	5		2
FUKUI	0	P	09	09	410							S	10	029									
HAMAMA	0	IP	09	09	410							S	10	062	16		2	18		2	7		1
HIKONE	0	EP	09	09	439							ES	10	101	14		1	12		1	6		2
OMAEZA	0	P	09	09	444										20		4	22		4	8		2
TOMISA	0	P	09	09	449										10		2	11		2	7		3
TSURUG	0	EP	09	09	45																		
ONAHAM	0	EX	09	09	502							ES	10	173	14		1	15		1	7		3
OSAKA	0	EP	09	10	024							ES	10	417	12		3	10		3	6		2
TOYOOK	0	P	09	10	038							ES	10	416	13		1	10		1			

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
15	13	45	247	001	138	15	01	36	32	01	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^n								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	A_N	P	T	A_E	P	T	A_Z	P	T
															μ		S	μ		S	μ		S
MATSUS	2	P	13	45																			
NAGANO	3	IP	13	45	295	S	22	E	8			ES	45	317	30	1		35	1		25	1	
KARUI7	0	IP	13	45	321	N	3	W	4	D	6	S	45	270									
MATSUM	0	IP	13	45	334					U	2	IS	45	395									
TAKADA	0	EP	13	45	373							S	45	453									
MAEBAS	0	IP	13	45	379			W		D	2	IS	45	480	14		1	13		2	14		3
TOYAMA	0	EP	13	45	41							S	45	596	8		1	7		1	4		2
KOFU	0	IP	13	45	429	N	2	W	1	D	2	IS	45	549	13		1	11		0	7		1
KUMAGA	0	EP	13	45	450							S	46	000	11		5	13		7	9		6
IIDA	0	EP	13	45	464							ES	46	012	4		2	3		1	1		1
UTSUNO	0	P	13	45	506							S	46	065	7		1	6		2			
AIKAWA	0	IP	13	45	518	N	0	E	0	U	1	IS	46	112	5		1	8		1	2		1
WAJIMA	0	EX	13	45	521										19		1	18		1			
KANAZA	0	EP	13	45	54																		
MISHIM	0	EP	13	45	546							IS	46	138	9		1	12		1	2		1
MITO	0	EP	13	45	565							IS	46	211	9		0	10		0	4		0
NIIGAT	0	X	13	46	050										5		1	8		2			
TOKYO	0	EX	13	46	12										7		3	7		2			
ONAHAM	0	EX	13	46	292										7		1	6		1	2		1

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
16	02	03	308	003	138	08	02	36	38	01	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^n								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	A_N	P	T	A_E	P	T	A_Z	P	T
															μ		S	μ		S	μ		S
MATSUS	3	P	02	03	350							ES	03	387	25	1		40	1		30	1	
NAGANO	3	IP	02	03	367	N	33	E	10	U	68	IS	03	471									
MATSUM	X	IP	02	03	412					U	4	S	03	503									
TAKADA	0	EP	02	03	419																		

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Station	Intensity	Phase (J. S. T.)				Initial Motion N		Initial Motion E		Initial Motion Z		Phase			Maximum Amplitude = A × 10^P N A_N	N P	N T	E A_E	E P	E T	Z A_Z	Z P	Z T
			h	m	• s		μ		μ		μ		m	• s	μ		S	μ		S	μ		S
KARUI7	0	EP	02	03	424							S	03	475									
MAEBAS	0	P	02	03	485			W				IS	03	587	10		1	13		0			
TOYAMA	0	EP	02	03	507							ES	04	085	6		2	6		2			
KOFU	0	IP	02	03	520	S	1	E	1	U	3	IS	04	044	9		0	14		0	6		1
KUMAGA	0	EP	02	03	550							S	04	080	11		4	11		2	12		4
UTSUNO	0	P	02	03	596							S	04	174	10		1	7		0	3		1
WAJIMA	0	EX	02	04	027										17		1	17		1			
KAKIOK	0	P	02	04	06							S	04	26	7		1	5		1	2		1
NAGOYA	0	EP	02	04	066							S	04	294	9		1	8		1	3		1
GIFU	0	EP	02	04	07							S	04	265	6		1	7		1	4		1
MITO	0	EP	02	04	082							IS	04	328	14		0	20		0	5		0
YOKOHA	0	EP	02	04	087							IS	04	331	6		1	6		1			

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
16	09	07	270	001	138 16	01	36 30	01	00	43

Station	Intensity	Phase (J. S. T.)				Initial Motion N		Initial Motion E		Initial Motion Z		Phase			Maximum Amplitude = A × 10^P N A_N	N P	N T	E A_E	E P	E T	Z A_Z	Z P	Z T
			h	m	• s		μ		μ		μ		m	• s	μ		S	μ		S	μ		S
MATSUS	4	P	09	07	296																		
NAGANO	3	IP	09	07	325	N	46	E	7	U	73				80	1		10	2		90	1	
MATSUM	1	IP	09	07	353	S	3	W	7	U	20	IS	07	406									
KARUI7	X	IP	09	07	359	N	3	W	1	D	6	ES	07	412	15	1	2	20	1	2			
TAKADA	0	EP	09	07	397							S	07	495									
MAEBAS	0	IP	09	07	432			W	1	D	8	S	07	536	29		4	18		3	24		4
TAKAYA	0	EP	09	07	453							ES	07	567									
TOYAMA	0	IP	09	07	460					D	8	S	07	595	24		2	20		3	13		2
CHICHI	0	EP	09	07	466							IS	07	594									
KOFU	0	IP	09	07	467	S	1	E	1	U	5	IS	07	584	20		1	34		0	17		1
IIDA	0	IP	09	07	490	S	3	W	1	U	1	IS	08	040	8		2	8		1	5		1
KUMAGA	0	EP	09	07	505							S	08	060	22		4	23		4	17		4
FUNATS	0	IP	09	07	515							IS	08	059									
UTSUNO	0	IP	09	07	547			W	6	D	3	S	08	121	7		2	7		1			
KANAZA	0	EP	09	07	55																		
AIKAWA	0	IP	09	07	550	N	0	E	0			IS	08	140	5		1	14		1	4		1
NIIGAT	0	X	09	07	560										10		3	22		1			
WAJIMA	0	EX	09	07	577										26		1	33		1			
OMAEZA	0	EP	09	07	585										11		2	13		2			
KAKIOK	0	EP	09	07	59							ES	08	24	10		1	9		1	2		1
MISHIM	0	EP	09	07	597							IS	08	182	18		1	19		1	7		1
AJIRO	0	P	09	07	598							S	08	205	6		1	9		1	3		1
TSURUG	0	EP	09	08																			
TOKYO	0	EP	09	08	00							ES	08	23	19		5	16		3			
GIFU	0	P	09	08	004							S	08	219	22		2	20		2	9		1
NAGOYA	0	EP	09	08	008							S	08	228	17		1	19		1	7		1
YOKOHA	0	EP	09	08	019							ES	08	262	30		2	19		1			
FUKUI	0	P	09	08	020							S	08	269									
MITO	0	EP	09	08	034							ES	08	250	6		1	6		1	4		1
HAMAMA	0	P	09	08	038	S	2					ES	08	30	13		1	10		3	4		1
HIKONE	0	EP	09	08	053							S	08	337	20		1	18		1	9		2
TSU	0	EP	09	08	219																		
TOYOOK	0	EP	09	08	274							S	09	036	16		1	12		1			

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
16	15	06	401	001	138 16	01	36 30	01	00	45

Station	Intensity	Phase (J. S. T.)				Initial Motion N		Initial Motion E		Initial Motion Z		Phase			Maximum Amplitude = A × 10^P N A_N	N P	N T	E A_E	E P	E T	Z A_Z	Z P	Z T
			h	m	• s		μ		μ		μ		m	• s	μ		S	μ		S	μ		S
MATSUS	4	P	15	06	414										10	2		80	1		60	1	
NAGANO	3	IP	15	06	458	N	62	W	24	U	74				20	1	2	15	1	2	10	1	1
KARUI7	1	IP	15	06	477			E	10	U	10	ES	06	529									
MATSUM	1	IP	15	06	495	S	3	W	6	U	21	IS	06	545									
TAKADA	0	P	15	06	546	N	4	E	2	U	11	S	07	042									
MAEBAS	0	IP	15	06	552			W		D	4	S	07	045	46		5	38		4	50		4
CHICHI	0	EP	15	06	588							S	07	105									
KOFU	0	IP	15	06	593	S	7	E	7	U	14	IS	07	116	36		3	28		3	13		1
KUMAGA	0	EP	15	07	010							ES	07	156	45		7	46		7	28		6
TOYAMA	0	IP	15	07	02					D	3	S	07	151	36		2	37		1	29		3

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^P μ					
			N	E	Z		N			E		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S
IIDA	0	EP 15 07 028				ES 07 168	15		1	13		1
FUNATS	0	IP 15 07 031				IS 07 200						
OMAEZA	0	EP 15 07 049					13		5	19		5
WAJIMA	0	EX 15 07 059					52		1	45		1
UTSUNO	0	IP 15 07 064		W 5		S 07 234	18		1	14		1
AIKAWA	0	IP 15 07 086	N 0	E 1		IS 07 282	15		1	16		1
KANAZA	0	EP 15 07 098				ES 07 264			1			
MISHIM	0	EP 15 07 102				S 07 310	18		1	21		1
NIIGAT	0	X 15 07 110				S 07 332	15		4	26		5
KAKIOK	0	EP 15 07 12				ES 07 32	22		1	14		1
TOKYO	0	EP 15 07 13				ES 07 33	33		4	25		4
GIFU	0	P 15 07 140	S 5	W 6	U 4	S 07 363	24		2	26		1
NAGOYA	0	P 15 07 140	N 1	E 0	D 2	S 07 372	25		1	21		1
SHIZUO	0	IP 15 07 141	N 4	E 3		S 07 336	9		1	7		1
MITO	0	IP 15 07 152				IS 07 390	34		0	19		0
FUKUI	0	P 15 07 153				S 07 419						
HAMAMA	0	EP 15 07 16				S 07 421	29		2	20		2
YOKOHA	0	EP 15 07 174				IS 07 425	18		1	21		1
HIKONE	0	EP 15 07 201				S 07 475	26		1	23		1
FUKUSH	0	EX 15 07 217					7		2	5		1
							0					
TOYOOK	0	EP 15 07 294							1	9		1
ONAHAM	0	EX 15 07 338					19		1	20		1
TSU	0	EP 15 07 467										

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
16	18	49	132	001	138 18	01	36 32	01	00	41

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^P μ					
			N	E	Z		N			E		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S
MATSUS	3	P 18 49 16										
NAGANO	3	IP 18 49 181	N 15	W 10	U 64	S 49 202	40	1		50	1		30	1	
KARUI7	0	IP 18 49 216				ES 49 265									
KUMAGA	0	EX 18 49 220					7		4	11		6	7		6
MATSUM	1	IP 18 49 229	S	W	U 4	IS 49 286									
TAKADA	0	P 18 49 268				S 49 350									
MAEBAS	0	IP 18 49 277			D 6	S 49 377	11		4	8		3	12		4
TOYAMA	0	IP 18 49 328				ES 49 451	8		4	9		4	3		1
KOFU	0	IP 18 49 328	S 2	E 2	U 4	IS 49 445	11		0	12		0	5		1
MITO	0	EP 18 49 467				IS 50 117	12		0	9		0	3		0
NAGOYA	0	EP 18 49 480	S	W	U	S 50 104	7		1	11		1	4		1
MISHIM	0	EX 18 49 49					9		1	8		1			
HAMAMA	0	IP 18 49 499			2	ES 50 16	6		3	6		3	2		1
GIFU	0	EP 18 49 52				S 50 100	8		2	13		2			
HIKONE	0	S 18 50 215					18		1	16		1	4		1
TOYOOK	0	ES 18 50 512					10		1	6		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
17	10	21	330	002	138 14	01	36 32	01	00	47

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^P μ					
			N	E	Z		N			E		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S
MATSUS	5	P 10 21 31										
NAGANO	4	P 10 21 366				IS 21 386	70	2		72	2		28	2	
KARUI7	X	IP 10 21 424	N 4	W 4	D 6	S 21 477	30	1	1	25	1	2	10	1	1
MATSUM	1	IP 10 21 432	S 4	W 5	U 8	IS 21 489									
TAKADA	0	P 10 21 468	N 9	E 4	U 27	S 21 540									
MAEBAS	0	IP 10 21 486	N	W 4	D 12	S 21 584	11	1	4	58		4	90		3
TAKAYA	0	EP 10 21 530				ES 22 052									
KOFU	0	IP 10 21 532	S 5	E 6	U 7	ES 22 057	36			50		1	18		1
CHICHI	0	EP 10 21 542				S 22 047									
TOYAMA	0	IP 10 21 542	0	E 4	D 2	IS 22 084	95		3	64		3	49		2
KUMAGA	0	EP 10 21 544				ES 22 090	10	1	5	76		4	65		4
IIDA	0	IP 10 21 568	S 7	W 3	U 10	IS 22 122	33		2	24		2	14		1
FUNATS	0	P 10 21 598				S 22 133									
UTSUNO	0	IP 10 22 000	N 1	W 10	D 3	S 22 181	26		4	18		1	8		3
KANAZA	0	EP 10 22 010				ES 22 192	31	1	3	40	1	2	18	1	2
WAJIMA	0	EP 10 22 010				ES 22 188	17	1	1	20		1	56		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
AIKAWA	0	IP	10	22	015	N	5	E	2	U	6	IS	22	203		12		2	15		1	8		3
MISHIM	0	EP	10	22	040							S	22	255		23		2	32		4	9		2
SHIZUO	0	EP	10	22	051	S	3	W	4	U	2	S	22	289		11		2	12		2	6		3
AJIRO	0	P	10	22	060							S	22	243		6		0	10		0	3		1
SHIRAK	0	EP	10	22	065							ES	22	333										
OMAEZA	0	EP	10	22	065							ES	22	427		36		4	38		4	17		2
KAKIOK	0	EP	10	22	07							ES	22	27		16		1	12		1	6		1
GIFU	0	P	10	22	075	S	2	W	1			S	22	294		52		2	70		2	17		2
FUKUI	0	P	10	22	080							S	22	330										
NAGOYA	0	P	10	22	080					U	2	IS	22	312		50		1	63		1	20		1
MITO	0	IP	10	22	084					D	1	IS	22	328		25		3	25		0	15		4
HAMAMA	0	P	10	22	102					U	1	S	22	381		24		2	35		2	15		1
YOKOHA	0	IP	10	22	107					D	15	IS	22	337		67		2	69		2	27		1
TOKYO	0	EX	10	22	11							ES	22	332		38		5	70		5			
TSURUG	0	EP	10	22	11							ES	22	398										
OSHIMA	0	P	10	22	118											12		1	13		1	5		2
ONAHAM	0	EX	10	22	139							ES	22	432		24		3	19		2	13		4
FUKUSH	0	EP	10	22	146							ES	22	442		17		1	9		1	4		2
TOMISA	0	P	10	22	146											23		2	25		3	14		4
TSU	0	EP	10	22	211							IS	22	499										
NARA	0	EP	10	22	246																			
KYOTO	0	EP	10	22	250							IS	22	552		11		2	9		2	5		1
OWASE	0	P	10	22	286							S	23	060		4		1	3		2	3		2
WAKAYA	0	EP	10	22	294							S	23	084		10		2	9		2			
SENDAI	0	EP	10	22	297							ES	23	060		8		2	6		3	5		4
TOYOOK	0	EP	10	22	317							S	23	130		33		1	26		1	6		1
SUMOTO	0	EP	10	22	419							S	23	289		4		2	7		2	3		2
												IX	22	444										
MITO	0	IS	10	23	086											20		1	19		1			
OSAKA	0	X	10	23	119											44		4	47		5	21		4
KOCHI	0	EP	10	23	128							ES	24	168		3		2	3		2			
SHIONO	0	ES	10	23	287											6		2	7		2	3		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km	•
17	15	46	536	002	138 15	01	36 33	01	00	47

MATSUS	5	P	15	46	558																				
NAGANO	3	IP	15	46	577	N	58	E	6	U	72					41	2	0	41	2	0	20	2		
MATSUM	1	P	15	47	027	S		W	2	U		IS	47	085		40	1	3	30	1	3	10	1	3	
KARUI7	1	IP	15	47	029	S	6	E	6	U	8	ES	47	081		45	1	2	40	1	2	20	1	1	
TAKADA	0	P	15	47	073							S	47	159		20	1	3	25	1	3	10	1	3	
MAEBAS	0	IP	15	47	093	N		W	1	D	8	S	47	202		15	1	5	13	1	3	12	1	3	
KOFU	0	IP	15	47	127	S	7	E	7	U	11	ES	47	246		56		4	54		3	20		3	
CHICHI	0	EP	15	47	131							S	47	267											
TOYAMA	0	IP	15	47	134	N		E		D	7	IS	47	282		78		3	95		3	10	1	4	
IIDA	0	IP	15	47	160	S	1			U	3	IS	47	306		28		2	39		4	26		4	
KUMAGA	0	P	15	47	171	N	1	W	1	D	1	S	47	301		14	1	3	12	1	5	12	1	4	
FUNATS	0	P	15	47	179							S	47	319											
KANAZA	0	EP	15	47	192							ES	47	364											
UTSUNO	0	P	15	47	205	N	1	W	8			S	47	385		35		3	25		4				
WAJIMA	0	EP	15	47	206											11	1	1	10	1	1	35		1	
AIKAWA	0	IP	15	47	211							IS	47	409		10		1	21		2	7		1	
NIIGAT	0	EP	15	47	239							S	47	451		29		1	60		1	11		3	
KAKIOK	0	EP	15	47	25							ES	47	47		18		1	17		1	8		1	
SHIZUO	0	P	15	47	252	S	3					S	47	458		12		1	11		4	7		3	
AJIRO	0	IP	15	47	257	S	0			U	1	S	47	479		6		0	7		0	3		1	
GIFU	0	P	15	47	266	S	2	W	3			S	47	486		38		1	33		1				
YOKOHA	0	EP	15	47	273					D	8	IS	47	529		66		2	52		2	40		4	
NAGOYA	0	P	15	47	273	S	2	W	2	U	2	S	47	500		59		1	51		1	17		1	
MITO	0	IP	15	47	280					D	1	IS	47	540		42		0	34		0	21		4	
FUKUI	0	P	15	47	285							S	47	518											
HAMAMA	0	P	15	47	299	N	3	E	1			S	47	552		45		1	40		3	19		1	
TOKYO	0	EP	15	47	30							ES	47	52		82		4	77		5	77		4	
OSHIMA	0	P	15	47	309											11		1	8		1	6		2	
OMAEZA	0	EP	15	47	316							ES	47	599		39		4	38		4	13		3	
HIKONE	0	EP	15	47	321							S	48	000		45		1	33		1				
TOMISA	0	EP	15	47	328											33		4	28		3	19		4	
TSURUG	0	EP	15	47	329							S	47	593											
FUKUSH	0	EP	15	47	349											10		1	6		1	2		1	

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Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
ONAHAM	0	EX 15 47 419													
TSU	0	EP 15 47 435				ES 48 061	27		3	30		1	9		3
						ES 48 091									
KYOTO	0	IP 15 47 437	N 4	E 4	D 2	IS 48 191	8		2	8		3	5		5
NARA	0	EP 15 47 476													
SENDAI	0	EP 15 47 48				ES 48 197	6		3	9		3	3		2
TOYOOK	0	EP 15 47 546				ES 48 309	27		1	19		1	6		1
SUMOTO	0	EP 15 48 021				ES 48 478	4		5	5		5	3		4
OSAKA	0	EX 15 48 436					37		4	66		4	20		3

Origin Time d h m s ± s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude
17 16 14 297 002	138 13 01	36 33 01	00	39

Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
NAGANO	2	EP 16 14					45		0						
MATSUS	3	P 16 14 31													
MATSUM	0	IP 16 14 393	S W	U 2		IS 14 451									
KARUIZ	0	EP 16 14 399				ES 14 450									
TAKADA	0	EP 16 14 434				S 14 510									
MAEBAS	0	IP 16 14 455		D 2		S 14 565	7		4	7		4	6		3
KOFU	0	IP 16 14 498		U 1		ES 15 018	5		1	8		1	4		1
MISHIM	0	EP 16 15 01				ES 15 223	6		1	6		1	2		0
WAJIMA	0	EX 16 15 017					27		1	26		1			
NAGOYA	0	EP 16 15 044	W 0	U 1		S 15 272	9		1	8		1	2		1

Origin Time d h m s ± s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude
17 20 01 514 001	138 13 01	36 30 00	00	42

Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	4	P 20 01 52													
NAGANO	3	IP 20 01 564	S 2	E 4	D 13	S 01 586	60	1		70	1		30	1	
MATSUM	1	IP 20 01 599		D		IS 02 053	10	1	3	10	1	3			3
KARUIZ	0	EP 20 02 000				S 02 053	10	1	2	10	1	2			
TAKADA	0	EP 20 02 064				S 02 138									
MAEBAS	0	P 20 02 071		D		S 02 176	27		4	21		3	28		3
TOYAMA	0	P 20 02 108		D		S 02 266	33		3	22		3	36		3
KOFU	0	IP 20 02 116	S 4	E 6	U 4	ES 02 246	13		3	14		3	5		1
IIDA	0	EP 20 02 134				ES 02 280	8		3	7		4	6		3
FUNATS	0	P 20 02 143				S 02 283									
KUMAGA	0	EX 20 02 164					32		5	41		5	20		5
WAJIMA	0	EX 20 02 170					22		1	27		1			
AIKAWA	0	IP 20 02 197		U 0		IS 02 492	3		1	7		2			
MISHIM	0	EP 20 02 213					6		1	8		1	4		2
KAKIOK	0	EP 20 02 24				ES 02 44	9		1	5		1	5		1
GIFU	0	P 20 02 243	S 2	W 2		S 02 444	19		1	13		1	4		1
NAGOYA	0	EP 20 02 244		U		S 02 472	19		1	20		1	7		1
MITO	0	EP 20 02 262				IS 02 518	7		0	3		1	3		1
YOKOHA	0	EP 20 02 272					10		0	15		1			
HAMAMA	0	P 20 02 275				ES 02 52	10		3	10		3	5		1
OMAEZA	0	EP 20 02 276					9		4	13		4			
NIIGAT	0	X 20 02 553				S 03 113	12		1	18		1			
HIKONE	0	ES 20 02 576					14		1	12		1	6		1

Origin Time d h m s ± s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude
17 20 06 416 003	138 14 02	36 31 01	00	39

Station	Intensity	Phase (J. S. T.) h m s	Initial Motion N μ	E μ	Z μ	Phase m s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	4	P 20 06 42													
NAGANO	2	IP 20 06 460	N 6	U 40		IS 06 478	40	1		35	1		99	9	
KARUIZ	0	EP 20 06 496				ES 06 550									
MATSUM	X	IP 20 06 498		U		IS 06 551									
TAKADA	0	EP 20 06 546				S 07 034									

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MAEBAS	0	P	20	06	580					D		S	07	079		10		4	8		3	10		2
KOFU	0	IP	20	07	012	S	1	E	1			ES	07	130		6		1	6		0	3		1
TOYAMA	0	P	20	07	03							ES	09	18		9		3	6		3	7		4
WAJIMA	0	EX	20	07	140											12		1	11		1			
NAGOYA	0	P	20	07	153			W		U		S	07	376		5		1	7		1	3		1
GIFU	0	EP	20	07	17							S	07	355		8		2	7		1			
MITO	0	EP	20	07	173							IS	07	420		7		1	3		1	3		1
ONAHAM	0	EX	20	07	562											5		1	5		1			

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	°	′ ± ′	°	′ ± ′	km		•
17	20	28	154	003	138	17 02	36	26 01	00		47

NAGANO	3	IP	20	28	181	N	5	W	2	U	33	S	28	226		11	2		80	1		40	1		
MATSUS	5	P	20	28	19																				
KARUI7	0	P	20	28	213							S	28	264		20	1	2	20	1	2	10	1	2	
MATSUM	1	EP	20	28	262							IS	28	314		15	1	3	15	1	3	50		3	
TAKADA	1	EP	20	28	330							S	28	394											
MAEBAS	0	EP	20	28	332							S	28	435		61		5	35		4	38		3	
CHICHI	0	EP	20	28	358							ES	28	484											
IIDA	0	EP	20	28	362							ES	28	542		12		3	14		4	10		3	
KOFU	0	IP	20	28	366					U	4	ES	28	490		21		4	25		3	7		1	
TOYAMA	0	P	20	28	369					D		IS	28	528		61		4	41		3	68		3	
FUNATS	0	P	20	28	384							S	29	056											
KUMAGA	0	EP	20	28	402							ES	28	560		50		5	58		5	33		3	
AIKAWA	0	EP	20	28	454					D	1	ES	29	051		3		1	8		2	3		1	
KANAZA	0	EP	20	28	454							ES	29	016											
TOKYO	0	EX	20	28	47							ES	29	13		33		4	35		3	30		4	
MISHIM	0	EP	20	28	483											9		4	15		4	4		3	
SHIZUO	0	EP	20	28	484							ES	29	082		7		3	6		5	3		3	
WAJIMA	0	EX	20	28	488											35		1	29		1				
AJIRO	0	P	20	28	492							ES	29	116		3		0	5		1	2		1	
GIFU	0	P	20	28	503	S	4	W	4			S	29	113		29		2	16		1	11		2	
NAGOYA	0	P	20	28	516	N	2	E	1	D	3	S	29	132		21		1	23		1	12		1	
MITO	0	EP	20	28	516							IS	29	176		8		0	5		0	4		1	
												IX	29	110											
FUKUI	0	P	20	28	524							S	29	134											
HAMAMA	0	P	20	28	536							S	29	202		14		1	20		3	7		1	
OMAEZA	0	EP	20	28	544											20		4	18		2				
																16		3	16		3				
YOKOHA	0	EP	20	28	562																				
TOYOOK	0	EP	20	29	165							ES	29	532		10		1	8		1				
ONAHAM	0	EX	20	29	200											11		2	10		2	4		2	
OSAKA	0	EX	20	29	568											22		4	37		4	10		3	

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	°	′ ± ′	°	′ ± ′	km		•
18	05	44	088	002	138	18 01	36	32 01	00		39

MATSUS	3	P	05	44	120							ES	44	151		40	1		70	1		35	1		
NAGANO	3	IP	05	44	133	S	5	E	1	D		S	44	225											
KARUI7	0	EP	05	44	167							IS	44	244											
MATSUM	X	IP	05	44	185					D		S	44	292											
TAKADA	0	EP	05	44	220																				
MAEBAS	0	EP	05	44	240							ES	44	325		10		3	7		3	10		3	
KOFU	0	EP	05	44	289							ES	44	410		7		1	6		1				
UTSUNO	0	P	05	44	342							S	44	518		6		0	8		0				
MITO	0	EP	05	44	431							IS	45	067		6		0	7		0	3		0	
HAMAMA	0	P	05	44	456					D	1	ES	45	10		5		2	4		1	2		1	
																6		2	8		2				
GIFU	0	EP	05	44	49							S	45	047		4		1	5		1				
ONAHAM	0	EX	05	45	197																				

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Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	s	± s	° ′	± ′	° ′	± ′	km		
19	07	35	133	002	138 20	01	36 33	01	00		47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s	μ		μ		μ		m	s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	07	35	172																			
NAGANO	3	IP	07	35	192							S	35	218		60	1	3	11	2	3	50	1	3
KARUI7	2	IP	07	35	219	S	8	E	18	U	22	S	35	269		40	1	2	45	1	2	25	1	1
MATSUM	1	IP	07	35	233	N	4	E	3	D	6	IS	35	292		25	1	3	10	1	3			3
TAKADA	0	P	07	35	267	N	5	E	2	U	22	S	35	353										
MAEBAS	2	IP	07	35	271	N	1	W	3	D	12	IS	35	364		14	1	3	10	1	3	18	1	4
KOFU	0	IP	07	35	333	S	15	E	13	U	31	ES	35	463		62			75			36		1
TOYAMA	0	P	07	35	343			E	1			IS	35	482		11	1	3	87		3			
TAKAYA	0	EP	07	35	343							ES	35	463										
KUMAGA	0	P	07	35	356							S	35	480		12	1	5	12	1	4	70		4
IIDA	0	IP	07	35	368	S	2	W	1	U	3	IS	35	516		38		1	37		1	18		3
FUNATS	0	IP	07	35	375							IS	35	523										
KANAZA	0	P	07	35	406	N		E		D		S	35	590										
MISHIM	0	EP	07	35	409							S	36	029		32		1	51		1	11		2
UTSUNO	1	IP	07	35	410	N	4	W	11			IS	35	581		35		1	38		1			
AIKAWA	0	IP	07	35	416	N	3	W	0	U	7	IS	36	016		13		2	16		1	9		2
WAJIMA	0	EP	07	35	420							S	36	001		75		1	57		1	17		1
NIIGAT	0	IP	07	35	444	N	2	E	1	U	3	S	36	066		37		5	80		5	18		5
KAKIOK	1	P	07	35	445	S	1	W	1	D	1	S	36	053		44		1	38		1	12		1
SHIZUO	0	P	07	35	451	S	1	E	1	U	1	S	36	085		18		0	18		1	10		8
AJIRO	0	IP	07	35	453	S	1	E	0	U	2	IS	36	074		25		1	17		0	5		1
GIFU	0	P	07	35	472	N	1	E	1	D	1	S	36	105		44		2	89		2	22		2
SHIRAK	0	EP	07	35	477							ES	36	117										
TOKYO	0	EP	07	35	48							ES	36	10		11	1	4	78		4	83		5
MITO	1	IP	07	35	480							IX	35	492										
NAGOYA	0	P	07	35	480	N	2	E	2	D	2	IS	36	123		14	1	0	87		0	28		1
FUKUI	0	P	07	35	489							IS	36	110		59		2	56		2	31		1
OMAEZA	0	EP	07	35	493							S	36	154										
YOKOHA	0	IP	07	35	500	N	3	W	4	D	7	ES	36	210		46		4	73		4	17		2
HAMAMA	0	IP	07	35	505	N	3	E	2			IS	36	157		48		1	49		1	37		3
OSHIMA	0	IP	07	35	515							S	36	160		60		2	51		2	33		1
TSURUG	0	EP	07	35	523							IS	35	184		21		1	18		2	9		1
HIKONE	0	P	07	35	532							IS	36	203										
TOMISA	0	IP	07	35	535					U	1	S	36	217		59		1	36		1	19		2
																17		4	18		4	10		4
ONAHAM	0	IP	07	35	543					D	4	ES	36	233		38		1	30		1	11		2
FUKUSH	0	EP	07	35	554							ES	36	248		13		2	10		1	6		4
KYOTO	0	EP	07	36	020							IS	36	350		10		2	8		2	5		1
TSU	0	EP	07	36	031							IS	36	300										
SAKATA	0	EP	07	36	036							ES	36	392										
SENDAI	0	EP	07	36	04							ES	36	490		8		3	8		2	2		2
NARA	0	EP	07	36	041							ES	36	397										
TOYOOK	0	EP	07	36	107							S	36	516		31		1	16		1	6		1
SUMOTO	0	P	07	36	120					D		ES	37	072		5		4	4		4	3		5
OSAKA	0	EP	07	36	122							ES	36	514		44		5	37		4	16		3

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	s	± s	° ′	± ′	° ′	± ′	km		
21	03	55	114	002	138 13	01	36 34	01	00		41

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s	μ		μ		μ		m	s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	03	55	150																			
NAGANO	3	IP	03	55	163	N	35	E	10	U	59	ES	55	178		35	1		25	1	0	30	1	
MATSUM	1	IP	03	55	211	S	2	W	2	U	10	IS	55	269										
KARUIZ	0	EP	03	55	219							IS	55	272										
TAKADA	0	P	03	55	247							S	55	324										
MAEBAS	0	IP	03	55	280			W	1	D	4	S	55	386		14		4	7		2	8		3
TOYAMA	0	IP	03	55	307					D	3	S	55	44		11		2	10		2	8		2
KOFU	0	IP	03	55	317	S	3	E	1	U	4	IS	55	442		9		1	13		1	6		1
IIDA	0	EP	03	55	346							ES	55	496		7		2	8		1	6		0
FUNATS	0	P	03	55	367							S	55	514										
WAJIMA	0	EP	03	55	373							ES	55	557		39		1	51		1			
KANAZA	0	EP	03	55	376							ES	55	550										
AIKAWA	0	IP	03	55	389	N	0	E	0	U	0	IS	55	588		3		1	5		1	2		0
TOKYO	0	EP	03	55	42							ES	56	03		9		6	7		3	10		4
MISHJM	0	EP	03	55	442							ES	56	033		8		1	10		1	3		1
AJIRO	0	P	03	55	444							S	56	069		3		1	5		1	1		1
OMAEZA	0	EP	03	55	448											8		1	6		1			
NIIGAT	0	EP	03	55	450							S	56	050		13		1	32		1			
NAGOYA	0	P	03	55	456	N	1	E	0	D	2	S	56	084		20		1	10		1	5		1
GIFU	0	EP	03	55	46							S	56	067		13		1	10		1			
MITO	0	EP	03	55	473							IS	56	125		5		0	6		1	2		1
YOKOHA	0	EP	03	55	473							IS	56	127		13		1	9		1			
HAMAMA	0	P	03	55	480					D	1	ES	56	16		6		1	6		1	4		1
HIKONE	0	EP	03	55	531							S	56	200		13		1	14		1	5		1

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
21	09	53	275	002	138	13	01	36 31 01	20	40

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
															μ		S	μ		S	μ		S
NAGANO	3	IP	09	53		N	16	W	4	U	92	S	53		30	1		20	1		20	1	
MATSUS	3	P	09	53	312																		
KARUI7	0	IP	09	53	348					D	3	ES	53	399									
MATSUM	2	IP	09	53	355					U	6	IS	53	410									
TAKADA	0	P	09	53	398							S	53	482									
MAEBAS	0	IS	09	53	416			W	1	D	2	S	53	513	13		3	8		3	18		3
KOFU	0	IP	09	53	450	S	4			U	7	ES	53	583	9		0	13		0	5		1
KUMAGA	0	EX	09	53	472										11		3	11		5	10		3
MISHIM	0	EP	09	53	571							ES	54	153	11		1	10		1	4		1
AJIRO	0	P	09	53	580							ES	54	195	3		0	5		0	1		0
NAGOYA	0	EP	09	54	000							S	54	224	7		1	9		1	4		1
GIFU	0	EP	09	54	01							S	54	226	10		1	9		1	4		
YOKOHA	0	EP	09	54	011										12		1	8		1			
MITO	0	EP	09	54	012							IS	54	250	7		0	18		0	3		0
NIIGAT	0	X	09	54	095										5		1	5		1			
WAJIMA	0	EP	09	54	152										17		1	17		1			
TOKYO	0	EX	09	54	216										8		4	4		3	11		4
HIKONE	0	S	09	54	338										7		1	7		1	3		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
21	20	25	463	002	138	18	01	36 32 01	00	40

MATSUS	3	P	20	25	492																		
NAGANO	3	IP	20	25	515	N	18	W	14	U	66	ES	25	534	70	1		10	2		50	1	
KARUI7	0	P	20	25	556							ES	26	012									
MATSUM	0	IP	20	25	566					U	3	IS	26	020									
TAKADA	0	P	20	25	599							S	26	077									
MAEBAS	0	IP	20	26	017			W	1	D	4	S	26	118	14		4	10		4	12		4
KOFU	0	EP	20	26	061							ES	26	190	10		1	9		1	3		1
TOYAMA	0	IP	20	26	061					D		ES	26	212	9		4	7		4	7		2
KUMAGA	0	X	20	26	087					D	1				15		5	12		5	8		5
KANAZA	0	EP	20	26	139							ES	26	318									
AIKAWA	0	IP	20	26	141	N	0	E	0	U	1	IS	26	340	6		1	5		1			
WAJIMA	0	EX	20	26	151										33		1	31		1			
MISHIM	0	EP	20	26	166							ES	26	375	6		1	6		1	2		0
NIIGAT	0	X	20	26	195										5		1	5		1			
MITO	0	EP	20	26	208							IS	26	454	7		0	7		0	3		1
GIFU	0	EP	20	26	212							S	26	426	9		2	14		2	4		1
NAGOYA	0	EP	20	26	213	N		W		U		IS	26	436	8		1	12		1	4		1
YOKOHA	0	EP	20	26	219							S	26	469	12		2	7		2			
HAMAMA	0	IP	20	26	232	N	1					ES	26	48	5		1	6		2	3		1
HIKONE	0	EP	20	26	331							S	26	552	10		1	8		1	4		1
TOKYO	0	EX	20	26	442										6		5	5		5	10		4

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
22	03	00	093	002	138	18	01	36 32 01	00	41

MATSUS	3	P	03	00	120																		
NAGANO	3	IP	03	00	139	N	16			U	27	ES	00	160	50	1		50	1		30	1	
MATSUM	0	P	03	00	192					D		IS	00	247									
KARUI7	0	EP	03	00	206										15		5	12		3	8		5
KUMAGA	0	EX	03	00	210																		
TAKADA	0	P	03	00	221							S	00	301									
MAEBAS	0	IP	03	00	248			W		D	2	S	00	340	13		4	8		3	12		4
KOFU	0	IP	03	00	286					U	3	ES	00	409	6		2	6		1	6		1
TOYAMA	0	EP	03	00	29							ES	00	43	8		2	7		2			
NIIGAT	0	X	03	00	355										5		1	9		1			
WAJIMA	0	EP	03	00	365							ES	00	548	23		1	30		1			
KANAZA	0	EP	03	00	372							ES	00	524									
MITO	0	EP	03	00	432							IS	01	082	9		1	9		0	3		1
NAGOYA	0	EP	03	00	435							S	01	064	6		1	7		1	1		1
HAMAMA	0	P	03	00	462					U	1	S	01	120	6		1	5		2	4		1
YOKOHA	0	EP	03	00	475													7		1			

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude N AN μ	N P	N T	E AE μ	E P	E T	Z AZ μ	Z P	Z T
ONAHAM	0	EX 03 01 196					4		1	5		1			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
24 20 30 279	002	138 18	01	36 32	01	00	41

NAGANO	3	IP	20	30	229	N	14	W	12	U	64	S		30	249	25	1		50	1		30	1			
MATSUS	3	P	20	30	310																					
KARUIZ	0	EP	20	30	360							S		30	412											
MATSUM	X	IP	20	30	377	S		W	2	U	3	IS		30	433											
TAKADA	0	P	20	30	414							S		30	502											
MAEBAS	0	IP	20	30	431			W	1	D	4	S		30	526	11		4	7		3	9		4		
TOYAMA	0	IP	20	30	474					D		ES		31	04	6		3	5		2	5		2		
KOFU	0	IP	20	30	475	S	1	E	1	U	3	ES		30	593	6		1	9		1	5		1		
KUMAGA	0	EX	20	30	502											10		5	10		4	8		4		
KANAZA	0	EP	20	30	546																					
WAJIMA	0	EP	20	30	560							ES		31	146	22		1	29		1					
MISHIM	0	EP	20	30	589							ES		31	192	8		1	6		1	1		0		
GIFU	0	EP	20	31	02							S		31	242	6		2	10		2	4				
NAGOYA	0	EP	20	31	027							S		31	252	8		1	10		1	3		1		
HAMAMA	0	IP	20	31	047							ES		31	30	5		2	5		2	3		1		
YOKOHA	0	EP	20	31	121											10		1								
TOYOOK	0	EP	20	31	259							IS		32	066	6		1	4		1					
HIKONE	0	S	20	31	359											9		1	7		1	4		1		

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
26 15 27 329	002	138 17	01	36 32	01	00	39

NAGANO	2	IP	15	27																						
MATSUS	3	P	15	27	360																					
KARUIZ	0	P	15	27	416							ES		27	468											
MATSUM	0	P	15	27	426					D		IS		27	481											
TAKADA	0	EP	15	27	464							S		27	546											
MAEBAS	0	EP	15	27	483							S		27	574	11		4	8		3	14		3		
TOYAMA	0	EP	15	27	50							ES		28	09	7		4	6		4	3		3		
KOFU	0	IP	15	27	521	S	2	E	1	U	3	ES		28	044	7		2	9		0	4		1		
KANAZA	0	EP	15	28	000							ES		28	160											
MISHIM	0	EP	15	28	016							ES		28	226	6		1	8		1	2		0		
NAGOYA	0	EP	15	28	068							S		28	304	5		1	8		1	4		1		
GIFU	0	EP	15	28	08							S		28	299	8		2	6		1	3				
HAMAMA	0	IP	15	28	096							ES		28	34	8		1	5		1	3		1		
MITO	0	EP	15	28	112							IS		28	316	10		0	7		0	2		0		
YOKOHA	0	EP	15	28	137											7		1								
TOKYO	0	EP	15	28	25											7		4	8		4	10		4		

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
27 01 59							

NAGANO	2	IP	01	59																						
MATSUS	2	P	01	59																						
KARUIZ	0	EP	02	00	005							S		00	061											
MATSUM	0	IP	02	00	015					U		IS		00	074											
TAKADA	0	EP	02	00	048							S		00	130											
KOFU	0	IP	02	00	108	S	1	E	1	U	1	ES		00	229	6		1	7		1	4		1		
KUMAGA	0	EX	02	00	120											7		1	7		5	5		4		
KANAZA	0	EP	02	00	180							ES		00	352											
WAJIMA	0	EX	02	00	215											9		1	9		1					
MITO	0	EP	02	00	256							IS		00	496	5		0	6		0	2		0		

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A ×10⁻³ μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN	P	T	AE	P	T	AZ	P	T
							μ		S	μ		S	μ		S
NIIGAT	0	E 02 00 417				S 00 447	1		1	4		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
29	18	21	574	002	138 15	01	36 32	01	00	39

MATSUS	3	P	18	21	593																
NAGANO	3	IP	18	22	009	N	14	W	1	U	64	ES	22	029	30	1	25	1	15	1	
MATSUM	X	IP	18	22	061					U		IS	22	117							
KARUI7	0	EP	18	22	063							S	22	114							
TAKADA	0	EP	18	22	110							S	22	180							
KUMAGA	0	EX	18	22	180										10	4	7	3	3	3	
MAEBAS	0	ES	18	22	229										11	3	8	3			
WAJIMA	0	EP	18	22	260										28	1	24	1			
MITO	0	EP	18	22	313							IS	22	570	6	0	6	0	2	1	
HAMAMA	0	P	18	22	334							S	23	001	6	1	5	2	3	1	
NAGOYA	0	EP	18	22	339							S	22	532	6	1	8	1	3	1	
HIKONE	0	S	18	23	045										8	1	8	1	3	1	

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
30	17	42	505	002	138 18	01	36 33	01	00	43

MATSUS	3	P	17	42	535																
NAGANO	3	IP	17	42	559	N	32	W	14	U	70	ES	42	586	50	1	70	1	40	1	
KARUI7	0	IP	17	42	594					U	5	ES	43	048							
CHICHI	0	EP	17	43	000							ES	43	128							
MATSUM	1	IP	17	43	007	N				D	5	IS	43	067							
TAKADA	0	P	17	43	043							S	43	127							
MAEBAS	0	IP	17	43	057			W		D	2	S	43	149	36	3	18	4	34	4	
TOYAMA	0	P	17	43	110							S	43	252	8	2	9	1	14	3	
OMAEZA	0	EP	17	43	120										11	4	11	4			
IIDA	0	EP	17	43	136							ES	43	290	8	2	12	1	5	1	
KUMAGA	0	EP	17	43	150							ES	43	296	30	4	24	5	11	4	
UTSUNO	0	IP	17	43	164	N	1	W	3			S	43	350	7	1	6	1	4	2	
KANAZA	0	EP	17	43	180							ES	43	340							
AIKAWA	0	IP	17	43	183	N	2	E	0	U	3	IS	43	380	8	1	7	1	3	1	
TOKYO	0	EP	17	43	185							ES	43	40	16	7	19	5	18	5	
MISHIM	0	EP	17	43	187							ES	43	421	9	1	13	1	3	1	
WAJIMA	0	EP	17	43	188							S	43	370	39	1	43	1	11		
MITO	0	IP	17	43	245							IS	43	481	14	1	13	1	4	1	
NAGOYA	0	P	17	43	252	S		W		U	2	S	43	484	17	1	17	1	8	1	
GIFU	0	P	17	43	255							S	43	476	13	2	20	2			
FUKUI	0	P	17	43	256							S	43	526							
HAMAMA	0	IP	17	43	274							ES	43	52	15	2	10	2	7	2	
NIIGAT	0	E	17	43	316							IS	43	534	13	2	17	1			
YOKOHA	0	EP	17	43	375										12	1	9	1			
HIKONE	0	S	17	43	591										18	1	13	1	7	2	
ONAHAM	0	EX	17	44	013										9	1	8	1	3	2	

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Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
1	04	48	306	001	138 09	01	36 32	01	00	40

MATSUS	3	P	04	48																	
NAGANO	3	IP	04	48	350	N	49	W	10	U	68	S	48	371	30	1	30	1	30	1	
KARUI7	0	IP	04	48	407					U	2	ES	48	460							
TAKADA	1	P	04	48	437							S	48	523							
KOFU	0	IP	04	48	509			E	1			ES	49	029	6	0	8	0			
IIDA	0	EP	04	48	534							ES	49	084	8	0	4	1	2	1	

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude								
			h	m	• s	N μ	E μ	Z μ		m	• s	N A_N μ	N P	N T s	E A_E μ	E P	E T s	Z A_Z μ	Z P	Z T s
KUMAGA	0	EX	04	48	540							13		3	10		4	4		3
KANAZA	0	EP	04	48	559				ES	49	126	50		2	50		3			
UTSUNO	0	P	04	48	580				S	49	160	7		1	4		1			
WAJIMA	0	EP	04	48	584				ES	49	161	22		1	30		1			
NIIGAT	0	E	04	49	041				S	49	248	10		1	13		1			
GIFU	0	P	04	49	050				S	49	266	9		2	8		1			
NAGOYA	0	P	04	49	054			U 1	S	49	376	8		1	11		1	5		1
MITO	0	IP	04	49	066				IS	49	302	10		0	9		0	3		0
HAMAMA	0	EP	04	49	08				S	49	332	6		1	6		2	4		2
HIKONE	0	S	04	49	377							9		1	9		1			
ONAHAM	0	EX	04	49	420							5		1	5		1			
TOYAMA	0	EP	04	49	507				ES	49	04	7		3	10		3			

Origin Time					Location								Magnitude
					Longitude			Latitude			Depth		
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	km		•
2	00	44	030	002	138	19	01	36	33	01	00		45

MATSUS	4	P	00	44	067																				1
NAGANO	4	IP	00	44	084	N	32	W	18	U	56	ES	44	104	14	2		16	2		80	1			
KARUI 7	X	IP	00	44	129	N				D	2	IS	44	177	15	1	2	20	1	2	40		1		
MATSUM	1	IP	00	44	130	S	3	W	4	U	8	IS	44	192											
CHICHI	0	EP	00	44	133							ES	44	232											
TAKADA	0	P	00	44	156	N	4	E	2	U	14	S	44	246											
MAEBAS	0	IP	00	44	196					D	12										58		4		
OSHIMA	0	EX	00	44	22										9		2	7		1	3		2		
TAKAYA	0	EP	00	44	223							S	44	351											
KOFU	0	IP	00	44	228	S	6	E	3	U	6	ES	44	360	23		0	31		0	14		1		
TOYAMA	0	IP	00	44	232					D		IS	44	380	44		3	35		3	22		3		
KUMAGA	0	EP	00	44	246							ES	44	424	84		5	62		4	40		4		
IIDA	0	EP	00	44	260							ES	44	418	21		2	17		2	10		2		
FUNATS	0	P	00	44	273							S	44	416											
WAJIMA	0	EP	00	44	298							S	44	483	64		1	63		1	14		1		
UTSUNO	0	P	00	44	303	N	2	W	8	D	8	S	44	483	17		3	13		2	10		1		
AIKAWA	0	IP	00	44	313	N	1	W	0	U	2	IS	44	508	11		1	11		0	7		4		
KANAZA	0	P	00	44	324	S		E		D		S	44	496											
NIIGAT	0	IP	00	44	336					U	2	IS	44	565	20		1	32		6	8		4		
KAKIOK	0	P	00	44	337					U		S	44	547	19		1	14		1	5		1		
OMAEZA	0	EP	00	44	352							ES	45	096	19		4	25		4	10		2		
AJIRO	0	IP	00	44	359	S	0			U	1	S	44	579	6		0	6		0	3		1		
SHIZUO	0	P	00	44	368	N	4	W	1	D	3	ES	44	597	8		3	8		2	5		2		
MITO	0	IP	00	44	375							IS	45	028	24		0	22		0	10		3		
NAGOYA	0	P	00	44	378	S	1	W	2	U	2	S	45	000	29		2	36		1	11		1		
YOKOHA	0	IP	00	44	381					D	5	IS	45	028	64		4	43		2	17		2		
TOKYO	0	EP	00	44	385							ES	45	000	30		5	38		4	47		5		
												L	44	260											
TSURUG	0	EP	00	44	399							ES	45	095											
												X	45	575											
HAMAMA	0	P	00	44	400					U	1	ES	45	07	16		2	21		2	9		2		
HIKONE	0	EP	00	44	431							S	45	096	24		2	21		2	14		1		
TOMISA	0	P	00	44	434										11		3	11		2	7		3		
FUKUSH	0	P	00	44	437							IS	45	144	8		2	4		1					
ONAHAM	0	IP	00	44	444					U	3	IS	45	140	14		2	14		1	9		3		
KYOTO	0	EP	00	44	538							IS	45	244	7		2	6		2	2		1		
NARA	0	EP	00	44	570																				
SAKATA	0	EX	00	44	577																				
TOYOOK	0	P	00	45	000							S	45	423	19		1	13		1	3		1		
OSAKA	0	EP	00	45	024							ES	45	422	30		4	27		3	11		2		
MIZUSA	0	EP	00	45	282							ES	46	097	5		2	5		3					
WAJIMA	0	EX	00	46											63		1	46		1	17		1		
SHIMON	0	EX	00	47	25																				

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
2	01	51	583	002	138	15 01	36	35 01	00	41

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
NAGANO	2	IP	01	52																
MATSUS	3		01	52	025															
KARUIZ	0	EP	01	52	078				ES	52	126									
MATSUM	1	IP	01	52	085			U	IS	52	143									
TAKADA	0	P	01	52	110				S	52	190									
KOFU	0	IP	01	52	182	S	2 E 3	U 6	ES	52	306	9	1	9	0	6	1			
KUMAGA	0	EX	01	52	210							11	5	8	3	3	3			
WAJIMA	0	EX	01	52	308							21	1	20	1					
NAGOYA	0	EP	01	52	330	N	E	D	S	52	560	7	1	8	1	3	1			
MITO	0	EP	01	52	334				IS	52	578	11	0	9	0	3	0			
HAMAMA	0	P	01	52	358	N	0 E 0		ES	53	00	5	1	5	2	4	1			
HIKONE	0	EP	01	52	388				IS	53	058	8	1	5	1	4	1			
NIIGAT	0	X	01	53	520							5	1	7	1					

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
2	13	29	320	001	138	18 01	36	30 00	00	44

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	3	P	13	29	352															
NAGANO	3	EP	13	29	372	S	0 E 0	D 6	ES	29	393	30	1		50	1		40	1	
KARUIZ	0	IP	13	29	407		W 4	D 8	S	29	463									
MATSUM	0	IP	13	29	417			U	IS	29	478									
TAKADA	0	P	13	29	459				S	29	531									
MAEBAS	0	IP	13	29	470	N	W 2	D 8	S	29	567	19	4		15	4		24	3	
KUMAGA	0	EX	13	29	500							22	1		22	4		7	4	
KOFU	0	EP	13	29	514				IS	30	030	19	1		19	1		11	1	
TOYAMA	0	IP	13	29	518			D 4	ES	30	049	12	1		15	1		9	3	
IIDA	0	EP	13	29	550				ES	30	100	6	2		6	2		2	1	
UTSUNO	0	P	13	29	569		W 3		S	30	146	8	1		7	2				
KANAZA	0	P	13	30	000				S	30	172									
WAJIMA	0	EP	13	30	005							26	1		26	1				
OMAEZA	0	EP	13	30	027							6	2		6	1				

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
4	08	36	599	001	138	18 01	36	32 01	00	40

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	2	P	08	37																
NAGANO	3	IP	08	37	049	N	12 W 5	U 68	IS	37	073	60	1		60	1		30	1	
KARUIZ	0	IP	08	37	090			D 6	S	37	146									
MATSUM	0	IP	08	37	102			D 1	IS	37	165									
TAKADA	0	EP	08	37	129				S	37	211									
MAEBAS	0	IP	08	37	146			D 2	S	37	239	17	3		8	3		16	4	
KOFU	0	IP	08	37	193	S	1 E 1	U 5	ES	37	323	8	1		10	0		5	1	
KUMAGA	0	EX	08	37	225							18	4		10	3		4	3	
IIDA	0	EP	08	37	230				ES	37	380	6	0		4	0		2	0	
TOYAMA	0	EX	08	37	25				ES	37	41	5	2		7	2				
UTSUNO	0	P	08	37	261				S	37	426	7	0		8	0		6	0	
NAGOYA	0	EP	08	37	336				ES	37	576	7	1		7	1		4	1	
MITO	0	IP	08	37	345			D 0	IS	37	572	16	0		14	0		4	0	
HAMAMA	0	P	08	37	366				ES	38	02	6	1		5	1		3	1	
GIFU	0	EP	08	37	37				S	37	574	7	1		9	1				
NIIGAT	0	X	08	37	425							2	1		10	1				
WAJIMA	0	EX	08	37	451							17	1		17	1				

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
4	10	48	439	001	138	16 01	36	31 00	00	46

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Station	Intensity	Phase (J. S. T.)				Initial Motion									Phase			Maximum Amplitude $= A \times 10^{P}$ μ								
			h	m	• s	N		E		Z								N			E			Z		
						μ		μ		μ					m	• s		An	P	T	Ae	P	T	Az	P	T
																		μ		s	μ		s	μ		s
MATSUS	4	P	10	48	458										ES	48	504	15	2		12	2		11	2	
NAGANO	4	IP	10	48	485	N	14	W	1	U	68				IS	48	586									
MATSUM	1	P	10	48	530	S		W		U					S	48	584	40	1	2	30	1	2	10	1	2
KARUI7	0	P	10	48	533					D					S	49	053									
TAKADA	1	P	10	48	574										IS	49	107	12	1	4	79		3	70		3
MAEBAS	0	IP	10	48	595	N		W	1	D	6				ES	49	158									
CHICHI	0	EP	10	49	026										S	49	179	79		4	63		3	72		4
TOYAMA	0	IP	10	49	039			E	4	D	5				ES	49	180	31		3	38		3	10		1
KOFU	0	IP	10	49	039	S	6	E	3	U	9				IS	49	220	25		3	29		4	11		4
IIDA	0	IP	10	49	066	S	2	W	1	U	2				S	49	250	11	1	3	80		5	25		4
KUMAGA	0	P	10	49	070					D	1				S	49	233									
FUNATS	0	IP	10	49	088										IS	49	312	8		1	9		1	5		1
AIKAWA	0	P	10	49	105	S	0	E	1	D	0							64		1	69		1	20		
WAJIMA	0	EP	10	49	108																					
UTSUNO	0	P	10	49	109			W	6						S	49	292	39		1	21		1	14		1
SHIZUO	0	EP	10	49	148	S	3	W	1	U	2				S	49	408	10		0	10		0	6		1
TOKYO	0	EP	10	49	154										ES	49	376	55		5	68		4	61		4
MISHIM	0	P	10	49	156										IS	49	364	26		2	40		4	9		1
NIIGAT	0	X	10	49	161										S	49	383	14		1	28		1			
KAKIOK	0	P	10	49	164										S	49	363	24		1	17		1	7		1
AJIRO	0	IP	10	49	165	S	0			U	1				S	49	394	9		1	9		1	3		2
SHIRAK	0	EP	10	49	171										ES	49	445									
GIFU	0	P	10	49	174										S	49	395	31		2	26		2			
YOKOHA	0	IP	10	49	180										IS	49	435	70		5	30		2	19		3
NAGOYA	0	P	10	49	184					U	2				S	49	420	28		1	31		1	14		1
MITO	0	IP	10	49	193										IS	49	450	46		0	45		0	19		4
FUKUI	0	P	10	49	196																					
HAMAMA	0	P	10	49	208			E	1						S	49	467	35		1	33		2	14		2
OMAEZA	0	EP	10	49	212										ES	49	516	29		4	37		4	10		4
OSHIMA	0	P	10	49	227					U	3							9		2	7		2	7		2
ONAHAM	0	IP	10	49	231					U	4				ES	49	538	27		1	30		1	8		2
TSURUG	0	EP	10	49	240										ES	49	496									
TOMI'SA	0	IP	10	49	242					U	2							16		4	15		4	7		3
HIKONE	0	EP	10	49	256										S	49	508	21		1	20		1			
FUKUSH	0	EX	10	49	269													6		1	5		1			
KYOTO	0	EP	10	49	349										ES	50	049	5		2	6		3	4		4
SENDAI	0	EP	10	49	40										ES	50	17	5		2	4		3	2		2
OSAKA	0	EP	10	49	431										S	50	229	32		4	54		5	13		3
TOYOOK	0	EP	10	49	443										ES	50	233	11		1	9		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
4	14	31	408	002	138 16	01	36 30	01	00	37

NAGANO	2	IP	14	31																						
MATSUS	3	P	14	31	431																					
KARUI7	0	IP	14	31	494					D	3				S	31	549									
MATSUM	0	IP	14	31	496					D	1				IS	31	554									
TAKADA	0	EP	14	31	549										S	32	031									
MAEBAS	0	IP	14	31	557					D	3							9		3	7		3	10		4
KOFU	0	EP	14	32	000										ES	32	116	5		1	9		1	3		1
GIFU	0	EP	14	32	14										S	32	35	4			6		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
5	12	55	063	002	138 18	01	36 33	01	00	41

MATSUS	3	P	12	55	100																					
KARUI7	0	IP	12	55	153					U	6				S	55	206									
MATSUM	1	P	12	55	162										IS	55	217									
TAKADA	0	P	12	55	193										S	55	283									
MAEBAS	0	IP	12	55	210			W		D	2				S	55	305	20		5	13		3	20		4
CHICHI	0	EP	12	55	244										ES	55	373									
KOFU	0	IP	12	55	263	S	5	E	3	U	8				ES	55	383	12		1	10		1	9		1
TOYAMA	0	P	12	55	264										S	55	403	13		1	12		2	8		3

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A ×10P μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	An μ	P	T s	Ae μ	P	T s	Az μ	P	T s
KUMAGA	0	EP 12 55 282				ES 55 426	17		5	18		4	10		3
IIDA	0	EP 12 55 292													
UTSUNO	0	P 12 55 322		W 3		ES 55 436	7		1	7		1	3		1
KANAZA	0	EP 12 55 336				S 55 495	7		1	7		1			
MISHIM	0	EP 12 55 380													
KAKIOK	0	EP 12 55 39				ES 55 562	6		1	8		1	2		1
						S 55 583	12		1	9		1	4		1
GIFU	0	P 12 55 406													
NAGOYA	0	EP 12 55 408	S 0	W 0	U 1	S 56 034	10		1	16		2			
MITO	0	EP 12 55 410				S 56 036	12		1	12		1	6		1
OMAEZA	0	EP 12 55 424				IS 56 050	28		0	19		0	6		0
HAMAMA	0	IP 12 55 428	N 1	E 1			6		3	8		3			
						S 56 084	13		1	11		1	6		1
YOKOHA	0	EP 12 55 428													
WAJIMA	0	EX 12 55 434					9		1	11		1			
TOKYO	0	EP 12 55 452					17		1	23		1			
HIKONE	0	EP 12 55 495				ES 56 200	12		4	12		4	18		4
NIIGAT	0	X 12 55 534				S 56 145	13		1	8		1	5		1
						S 55 583	8		2	8		2			
ONAHAM	0	EX 12 56 110					7		1	6		1			

Origin Time		Location				Magnitude
		Longitude		Latitude		
d h m • s	± • s	° ′	± ′	° ′	± ′	Depth km •
6 04 59 079	002	138 20	01	36 32	01	00 42

MATSUS	3	P	04	59	116																	
NAGANO	3	IP	04	59	136	S	1			D	12	IS	59	161	60	1		80	1		50	1	
KARUIZ	0	IP	04	59	177					D	2	S	59	224									
MATSUM	0	IP	04	59	183	S		W	2	U	10	IS	59	236									
TAKADA	0	P	04	59	216							S	59	300									
MAEBAS	0	IP	04	59	229	N		W	1	D	4	S	59	328	14		4	11		4	10		4
KOFU	0	IP	04	59	271					U	1	IS	59	393	6		0	8		1	4		1
TOYAMA	0	EP	04	59	28							ES	59	42	8		2	7		1	5		1
KUMAGA	0	EX	04	59	281										9		4	10		6	10		4
WAJIMA	0	EP	04	59	353							S	59	537	31		1	26		1			
AIKAWA	0	IP	04	59	361	N	0	W	0	U	1	IS	59	560	8		1	8		0	5		0
KANAZA	0	EP	04	59	372							ES	59	556									
TOKYO	0	EP	04	59	376							ES	59	588	7		4	7		4	8		4
NIIGAT	0	X	04	59	413										5		2	5		1			
GIFU	0	EP	04	59	416							S	00	043	6		1	11		2			
NAGOYA	0	EP	04	59	423	S	1	W	0	U	1	S	00	056	5		1	8		1	3		1
MITO	0	IP	04	59	425							IS	00	068	8		0	7		0	3		0
HAMAMA	0	P	04	59	443	N	1	E	0			ES	00	11	6		2	4		1	3		1
HIKONE	0	EP	04	59	513							S	00	165	9		1	7		1			
YOKOHA	0	IS	05	00	078										13		2	9		2			
TOYOOK	0	EP	05	00	085							S	00	457	8		1	8		1			
ONAHAM	0	EX	05	00	189										6		1	6		1	1		1

Origin Time		Location				Magnitude
		Longitude		Latitude		
d h m • s	± • s	° ′	± ′	° ′	± ′	Depth km •
6 11 08 567	001	138 18	01	36 31	01	00 46

MATSUS	3	P	11	08	598																	
NAGANO	3	IP	11	09	018	N	20	W	4	U		ES	09	039				60	1		40	1	
KARUIZ	X	IP	11	09	058	S	4	E	6	U	8	S	09	109	20	1	2	30	1	2	10	1	1
MATSUM	2	IP	11	09	061	N	2	E	1	D	2	IS	09	126									
TAKADA	0	P	11	09	105							S	09	184									
MAEBAS	1	IP	11	09	113	N	1	W	3	D	10	S	09	203	12	1	3	58		4	12	1	4
CHICHI	0	EP	11	09	140							IS	09	260									
KOFU	0	IP	11	09	158	S	7	E	4	U	14	ES	09	280	39		3	35		3	16		1
TOYAMA	0	IP	11	09	163					D	7	IS	09	293	5		3	4		3	5		3
KUMAGA	0	EP	11	09	182							S	09	322	69		4	61		4	60		4
IIDA	0	EP	11	09	196							ES	09	342	18		1	23		1	13		4
FUNATS	0	IP	11	09	209							IS	09	351									
KANAZA	0	P	11	09	226	S		E		D		S	09	424									
UTSUNO	0	IP	11	09	227	N	2	W	10	D	5	IS	09	400	20		1	18		0	16		1
AIKAWA	0	IP	11	09	249	N	1	W	0	U	1	IS	09	440				8		1	6		3

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^{n}								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	A_N	P	T	A_E	P	T	A_Z	P	T
															μ		S	μ		S	μ		S
WAJIMA	0	EP	11	09	256							ES	09	439	55		1	38		1	14		
MISHIM	0	EP	11	09	266							ES	09	478	37		1	23		1	9		1
TOKYO	0	EP	11	09	27							ES	09	51	52		5	55		5	67		4
NIIGAT	0	IP	11	09	270					U	2	IS	09	490	26		5	50		6	9		6
KAKIOK	0	P	11	09	280	S	1	E	5	U	1	S	09	477	24		1	20		1	7		1
AJIRO	0	IP	11	09	284	S	0	E	0	U	1	S	09	503	8		0	6		0	3		1
SHIZUO	0	EP	11	09	290							S	09	492	8		1	11		1	6		2
SHIRAK	0	EP	11	09	292							ES	09	536									
MITO	0	IP	11	09	304							IS	09	544	39		1	32		1	15		4
GIFU	0	P	11	09	309							S	09	548	27		2	56		2	14		2
NAGOYA	0	EP	11	09	312	S	0	W	1	U	1	S	09	540	32		1	33		1	20		1
YOKOHA	0	IP	11	09	324					D	8	IS	09	557	51		4	31		2	20		3
OMAEZA	0	EP	11	09	334										24		4	41		4	10		2
HAMAMA	0	P	11	09	335	N	2	E	1			S	09	596	30		2	26		2	15		1
OSHIMA	0	P	11	09	341										10		1	10		1	7		1
TSURUG	0	EP	11	09	354							ES	10	028									
ONAHAM	0	IP	11	09	368					U	3	IS	10	056	20		2	21		1	6		1
HIKONE	0	EP	11	09	372							IS	10	043	42		1	25		1	13		2
FUKUI	0	P	11	09	382								09	586									
FUKUSH	0	EX	11	09	385										6		1	6		1	3		5
SAKATA	0	EX	11	09	545																		
OSAKA	0	EP	11	09	554							S	10	344	27		4	27		4	8		1
TOYOOK	0	ES	11	10	360										19		1	9		1			

Origin Time					Location							
					Longitude			Latitude			Depth	Magnitude
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	km	•
6	16	03	571	002	138	17	01	36	33	01	00	41

MATSUS	3	P	16	03	595																			
NAGANO	2	IP	16	04																				
KARUIZ	0	IP	16	04	068	S	2	E	2	U	4	S	04	122	1	1	3	10	1	2				
MATSUM	1	IP	16	04	073					D	3	IS	04	133										
TAKADA	0	P	16	04	106							S	04	180										
MAEBAS	0	EP	16	04	125							S	04	220	19		3	14		3	22		3	
CHICHI	0	EP	16	04	141							ES	04	271										
KOFU	0	IP	16	04	169	S	3	E	1	U	6	ES	04	289	10		1	13		1	10		1	
TOYAMA	0	P	16	04	175					D		S	04	313	13		1	10		2	7		3	
KUMAGA	0	EP	16	04	190							ES	04	329	18		5	14		4	11		3	
IIDA	0	EP	16	04	202							ES	04	346	8		0	8		1	5		0	
KANAZA	0	EP	16	04	247							ES	04	430										
WAJIMA	0	EP	16	04	275							ES	04	438	28		1	30		1				
MISHIM	0	EP	16	04	278							S	04	478	12		1	13		1	4		1	
AJIRO	0	IP	16	04	294					U	0	IS	04	513	7		0	5		0	1		0	
GIFU	0	EP	16	04	31							S	04	547	10		1	13		1	4			
NIIGAT	0	X	16	04	314							S	04	500	7		2	11		6				
NAGOYA	0	P	16	04	315					U	1	S	04	548	10		1	12		1	6		1	
SHIZUO	0	EP	16	04	318							ES	04	526	4		1	7		1	2		2	
YOKOHA	0	EP	16	04	327					U	3	ES	04	567				12		4				
MITO	0	EP	16	04	337							IS	04	560	10		1	8		1	4		2	
HAMAMA	0	P	16	04	344	N	1			D	1	ES	05	00	11		1	10		1	5		1	
OMAEZA	0	EP	16	04	379										5		3	8		4				
HIKONE	0	EP	16	04	396							IS	05	054	14		1	9		1	3		1	
TOKYO	0	EX	16	04	49										10		5	13		5	16		4	
ONAHAM	0	EX	16	04	595										6		1	6		1	2		1	
ONAHAM	0	EX	16	14	083										10		1	10		1	3		1	

Origin Time					Location							
					Longitude			Latitude			Depth	Magnitude
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	km	•
6	19	05	590	001	138	17	01	36	31	01	00	43

MATSUS	3	P	19	06	010																			
NAGANO	3	IP	19	06	034	N	24	W	6	U	62	ES	06	054	40	1	1	40	1		15	1		
KARUIZ	0	EP	19	06	081							S	06	132										
MATSUM	1	IP	19	06	082	S		W	2	U	5	IS	06	138	45	1	3	50	1	3	20	1	3	
TAKADA	0	P	19	06	128							S	06	202										

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
MAEBAS	0	IP 19 06 138	N	W 1	D 4	S 06 234	27		4	22		3	54		4
CHICHI	0	EP 19 06 174				S 06 281									
TOYAMA	0	P 19 06 193				ES 06 34	12		2	14		2			
KOFU	0	IP 19 06 194	S 2	E 1		ES 06 303	15		4	21		1			
KUMAGA	0	EX 19 06 201					22		3	26		4	21		3
IIDA	0	EP 19 06 214				ES 06 380	6		2	7		1	5		3
FUNATS	0	IP 19 06 225				IS 06 378									
UTSUNO	0	P 19 06 251		W 3	D 2	S 06 427	13		1	19		1	9		0
KANAZA	0	EP 19 06 254				ES 06 424									
WAJIMA	0	EX 19 06 276					24		1	20		1			
MISHIM	0	EP 19 06 292				ES 06 511	14		1	14		1	5		1
NIIGAT	0	P 19 06 292			U 1	S 06 507	7		2	11		2	3		1
KAKIOK	0	X 19 06 298					7		1	6		1	1		1
SHIRAK	0	EP 19 06 313				ES 06 562									
TOKYO	0	EP 19 06 32				ES 06 50	19		4	18		5	19		4
						EX 06 34									
GIFU	0	P 19 06 321				S 06 551	17		1	12		1	4		1
NAGOYA	0	EP 19 06 330	N 1	E 1	D 1	S 06 560	10		1	18		1	6		1
MITO	0	IP 19 06 337				IS 06 581	7		1	8		1	5		2
OMAEZA	0	EP 19 06 347					9		2	11		2			
HAMAMA	0	IP 19 06 355	N 1	E 1		S 07 030	14		2	7		3	5		1
YOKOHA	0	EP 19 06 372				IX 06 592	22		4	12		1			
HIKONE	0	EP 19 06 403				IS 07 065	14		1	9		1			
ONAHAM	0	EX 19 06 516					11		1	8		1	3		2
TOYOOK	0	EP 19 06 569				ES 07 372	10		1	5		1			
TSU	0	EP 19 07 118													
MIZUSA	0	EP 19 07 305													
OSAKA	0	X 19 07 382					9		4	11		4	3		2
KYOTO	0	IP 19 08 043	N 2	E 4	D 3	IS 08 360	16		2	10		1	7		3

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
6 19 08 124	001	138 15	01	36 31	01	00	50

MATSUS	4	P	19	08	13															
NAGANO	4	IP	19	08	174	N	17	W	2	U	58	ES	08	194	23	2	2	30	2		15	2	
KARUI7	1	IP	19	08	208			E	12	U	12	S	08	264	60	1	2	70	1	2	20	1	1
MATSUM	2	IP	19	08	220					U	5	IS	08	276									
TAKADA	2	EP	19	08	262							S	08	342	30	1	3	35	1	3	25	1	3
MAEBAS	0	IP	19	08	272	N	1	W	3	D	12	S	08	375	20	1	3	18	1	4	29	1	4
CHICHI	0	EP	19	08	301							IS	08	415									
TAKAYA	0	EP	19	08	319							ES	08	555									
KOFU	0	IP	19	08	321	S	12	E	11			ES	08	464	79		2	89		1			
TOYAMA	0	P	19	08	322							IS	08	44	16	1	3	14	1	3	18	1	4
KUMAGA	0	EP	19	08	345							S	08	493	16	1	5	17	1	4	16	1	4
IIDA	0	IP	19	08	350	S	11	W	5	U	9	IS	08	508	60		1	53		3	34		3
FUNATS	0	IP	19	08	373							IS	08	521									
UTSUNO	0	IP	19	08	383	N	2	W	20	D	10	IS	08	553	79		1	34		1	60		2
KANAZA	0	EP	19	08	392							ES	08	564									
WAJIMA	0	EP	19	08	400							S	08	581	21	1	1	21	1	1	49		1
AIKAWA	0	IP	19	08	408	N	0	W	0	U	2	ES	08	598	54		1	63		1			
MISHIM	0	EP	19	08	417							ES	09	010	45		1	51		4	18		1
NIIGAT	0	IP	19	08	440					D	3	IS	09	055	78		1	14	1	5	28		4
KAKIOK	0	P	19	08	440	S	1	E	8	U	2	S	09	041	59		1	50		1	15		1
AJIRO	0	IP	19	08	443	S	1			U	1	IS	09	064	18		1	14		0	4		1
SHIRAK	0	EP	19	08	445							ES	09	099									
TOKYO	0	P	19	08	445							S	09	036	14	1	4	14	1	4	15	1	5
SHIZUO	0	P	19	08	452							S	09	072	14		6	23		4			
GIFU	0	P	19	08	464	N	5	W	6	D	4	S	09	085	12	1	2	67		2	31		2
YOKOHA	0	IP	19	08	467					D	16	IS	09	116	17	1	4	83		4	43		4
NAGOYA	0	P	19	08	472	N	8	E	10	D	8	S	09	104	58		1	72		1	31		1
MITO	0	IP	19	08	472							IS	09	114	83		1	65		1	39		3
FUKUI	0	P	19	08	476	S	6	W	5	U	4	S	09	140									
HAMAMA	0	IP	19	08	486	N	2	E	1			S	09	150	73		1	51		4	30		1
OSHIMA	0	IP	19	08	499	S	3	E		U	3	S	09	162	24		1	21		2	11		2
OMAEZA	0	EP	19	08	500										53		4	84		5	35		2
CHOSHI	0	P	19	08	501																		
TOMISA	0	IP	19	08	518					D	2	S	09	293	34		3	29		2	21		3
TSURUG	0	EP	19	08	519							ES	09	192									
ONAHAM	0	IP	19	08	527					D	6	IS	09	221	69		2	68		1	15		2

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^{P} μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		s	μ		s	μ		s
FUKUSH	0	P	19	08	538											24		2	22		1	7		4
HIKONE	0	P	19	08	539							S	09	205		64		2	70		1			
SENDAI	0	EP	19	09	00							ES	09	39		13		3	9		2	4		4
OWASE	0	P	19	09	037							S	09	516		7		2	5		2	5		2
SAKATA	0	EP	19	09	041							ES	09	389										
NARA	0	EP	19	09	059																			
TOYOOK	0	EP	19	09	094							ES	09	505		42		1	24		1			
AKITA	0	EX	19	09	102											90		3	10		5	5		3
OSAKA	0	EP	19	09	108							ES	09	504		67		3	89		5	28		3
HACHIJ	0	EP	19	09	148							ES	09	590		8			7					
KOBE	0	EX	19	09	150																			
TOKUSH	0	EP	19	09	175							ES	10	062										
SUMOTO	0	IP	19	09	198	S	1	W		U	1	S	10	052		6		6	5		5			
												IX	09	235										
WAKAYA	0	EP	19	09	225							ES	10	053		17		1	8		1			
SHIONO	0	EP	19	09	242							ES	10	107		8		2	7		3	6		2
SHIMON	0	EX	19	09	25																			
OKAYAM	0	EP	19	09	272							ES	10	216		10		3	10		5	10		4
TAKAMA	0	EP	19	09	307							ES	10	237		7		6	6		6			
OITA	0	EX	19	10	161							ES	11	391		12		2	16		5			

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	s	± s	° ′	± ′	° ′	± ′			
6	19	52	434	002	138 17	01	36 32	01		00	40

NAGANO	2	IP	19	52																				
MATSUS	2	P	19	52																				
KARUI7	0	EP	19	52	520							S	52	573										
MATSUM	0	IP	19	52	529					U	1	IS	52	590										
TAKADA	0	P	19	52	566							S	53	052										
MAEBAS	0	IP	19	52	585					D	2	S	53	079		14		3	11		3	20		4
KOFU	0	IP	19	53	028	S	2	E	1			ES	53	153		7		0	11		0			
TOYAMA	0	P	19	53	031							ES	53	16		8		2	10		2	4		2
KUMAGA	0	EX	19	53	060											11		4	13		3	10		4
KANAZA	0	EP	19	53	110							ES	53	303										
MISHIM	0	EP	19	53	131							ES	53	366		6		1	6		1	2		0
WAJIMA	0	EX	19	53	141											12		1	14		1			
NAGOYA	0	EP	19	53	180	S	1	W	1	U	1	S	53	412		6		1	11		1	3		1
MITO	0	IP	19	53	181					D	0	IS	53	424		11		0	9		0	3		1
HAMAMA	0	P	19	53	200	N	1	E				S	53	452		8		1	4		3	4		1
YOKOHA	0	EP	19	53	272											8		3						
TOKYO	0	EP	19	53	37											9		5	8		5	11		4
NIIGAT	0	E	19	54	255							S	54	355		5		1	8		6			

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	s	± s	° ′	± ′	° ′	± ′			
6	20	31	452	003	138 22	01	36 30	01		00	39

MATSUS	2	P	20	31																				
NAGANO	2	IP	20	31																				
MAEBAS	0	EP	20	31	009							S	32	105		14		3	10		2	22		4
KARUI7	0	EP	20	31	504							S	31	560										
MATSUM	0	P	20	31	555							IS	32	013										
TAKADA	0	P	20	31	594							S	32	076										
KUMAGA	0	EX	20	32	050											11		4	13		3	9		4
KOFU	0	IP	20	32	055	S	1	E	1			ES	32	176		7		2	6		1			
TOYAMA	0	EP	20	32	06							ES	32	21		5		2	7		2	5		2
WAJIMA	0	EX	20	32	130											9		1	9		1			
KANAZA	0	EP	20	32	134							ES	32	312										
NIIGAT	0	X	20	32	198							S	32	380		5		1	5		6			
MITO	0	IP	20	32	202					D	0	IS	32	446		6		1	6		0	3		0
NAGOYA	0	EP	20	32	207	S	1	W	1	U	1	S	32	444		5		1	8		1	2		1
GIFU	0	P	20	32	207							S	32	427		6		1	3		1			
TOKYO	0	EP	20	32	22							ES	32	43		8		4	8		5	8		3

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
HAMAMA	0	P 20 32 227	N 1	D 1		ES 32 50	7		1	5		1	3		1
YOKOHA	0	EP 20 32 240					6		3						
ONAHAM	0	EX 20 32 595					6		1	5		1			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
7 09 10							

NAGANO	2	IP	09	10																
MATSUS	3	P	09	10	324															
MATSUM	0	IP	09	10	357			U	2	IS	10	410								
KARUI7	0	IP	09	10	367			D	10	S	10	420								
TAKADA	0	EP	09	10	418					S	10	498								
KOFU	0	EP	09	10	477					IS	10	576	11		0	19		0	6	1
KANAZA	0	EP	09	10	566					ES	11	128								
GIFU	0	P	09	11	005					S	11	24	5		2	4		1	3	
MISHIM	0	EP	09	11	020					ES	11	173	6		1	6		1	2	0
YOKOHA	0	P	09	11	082					IX	11	259	9		1	6		1		

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
8 00 01 054	002	138 15 01		36 33 01		00	40

NAGANO	2	IP	00	01																
MATSUS	3	P	00	01	070															
KARUI7	0	P	00	01	141			U		S	01	193								
MATSUM	0	IP	00	01	150	E		D	5	IS	01	209								
TAKADA	0	P	00	01	185					S	01	267								
KANAZA	0	EP	00	01	324					ES	01	491	50		2	50		2		
WAJIMA	0	EX	00	01	345								9		1	9		1		

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
10 12 25 336	002	138 14 01		36 30 01		00	40

MATSUS	2	P	12	25																
NAGANO	3	IP	12	25	385	N	10	W	4	U	79	IS	25	407	40	1		60	1		50	1	
KARUI7	0	EP	12	25	423							S	25	476									
MATSUM	0	IP	12	25	431					U	5	IS	25	489									
TAKADA	0	P	12	25	474							S	26	556									
KOFU	0	IP	12	25	525	S	2	E	1	U	2	ES	26	046	8		0	6		0	3		0
MITO	0	IP	12	26	077					U	1	IS	26	362	7		0	5		0	2		0
GIFU	0	EP	12	26	11							S	26	291				6		2			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
12 01 02 219	003	138 14 01		36 27 01		00	36

NAGANO	2	IP	01	02					
MATSUS	3	P	01	02	245				
MATSUM	0	P	01	02	298	IS	02	354	
KARUI7	0	EP	01	02	298	ES	02	350	

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Station	Intensity	Phase (J. S. T.) h m · s	Initial Motion N μ	E μ	Z μ	Phase m · s	Maximum Amplitude = A × 10^F μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
KOFU	0	IP 01 02 402	S 1	E 1	U 1	ES 02 526	6		0	9		0	4		2
IIDA	0	EP 01 02 436				ES 02 572	6		0	2		0			
KANAZA	0	EP 01 02 520				S 03 120									

Origin Time d h m · s	± · s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
14 19 36 292	002	138 18	01	36 32	01	00	40

MATSUS	3	P	19	36	32															
NAGANO	3	IP	19	36	340	N	4	W	2	U	40	IS	36	363	40	1		70	1		45	1	
KARUIZ	0	P	19	36	376					D		S	36	429									
MATSUM	0	IP	19	36	388	S		W	2	U	6	IS	36	446									
TAKADA	0	P	19	36	422							S	36	510									
MAEBAS	0	IP	19	36	439					D	2	S	36	535	11		4	8		3	14		3
TOYAMA	0	EP	19	36	495							ES	37	03	9		4	6		1			
KOFU	0	EP	19	36	496							ES	37	018	7		1	7		1	3		0
KUMAGA	0	EX	19	36	520										12		4	11		5	8		3
KANAZA	0	EP	19	36	560							S	37	142									
WAJIMA	0	EX	19	36	583										17		1	17		1			
NAGOYA	0	EP	19	37	030	N	1	W	0	U	1	S	37	264	5		1	8		1	2		1
MITO	0	EP	19	37	045							IX	37	140	8		0	6		0	2		0
GIFU	0	EP	19	37	05							ES	37	26									
HAMAMA	0	P	19	37	058	N	1					ES	37	32	6		2	5		2	2		1
NIIGAT	0	E	19	37	212										5		3	3		1			
TOKYO	0	EP	19	37	260							ES	37	468	9		4	8		4	10		4
TOYOOK	0	X	19	38	062										5		1	7		1			

Origin Time d h m · s	± · s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
14 22 24 118	002	138 17	01	36 31	01	00	42

MATSUS	3	P	22	24	16															
NAGANO	3	IP	22	24	165	N	56	W	16	U	68	S	24	184	65	1		80	1		50	1	
KARUIZ	0	EP	22	24	219							S	24	269									
MATSUM	X	IP	22	24	221					U	2	S	24	279									
TAKADA	0	P	22	24	260							S	24	332									
MAEBAS	0	IP	22	24	278	N		W	1	D	6	S	24	372	21		4	8		3	16		4
TOYAMA	0	EP	22	24	30							S	24	47	15		1	12		2			
KOFU	0	IP	22	24	318	S	3	E	3	U	5	ES	24	447	11		1	16		1	7		1
FUNATS	0	P	22	24	327							S	24	505									
KUMAGA	0	EX	22	24	334										21		5	16		5	11		4
IIDA	0	IP	22	24	352	N	2			U	1	ES	24	500	9		2	8		2	4		1
UTSUNO	0	P	22	24	393							S	24	564	8		1	6		1			
AIKAWA	0	IP	22	24	403	N	1	W	0			IS	24	590	3		1	6		1			
WAJIMA	0	EP	22	24	416							S	24	599	42		1	57		1	13		
KAKIOK	0	EP	22	24	43							ES	25	04	9		1	6		1	2		1
OMAEZA	0	EP	22	24	430										7		2	8		2			
NIIGAT	0	E	22	24	430							S	25	040	9		1	13		1			
MISHIM	0	EP	22	24	431							ES	25	038	6		1	9		1	2		1
NAGOYA	0	EP	22	24	465	N	1			D	1	S	25	092	16		1	19		1	5		1
GIFU	0	EP	22	24	471							S	25	082	10		1	17		2	6		1
MITO	0	IP	22	24	475							IS	25	115	11		1	15		0	5		1
HAMAMA	0	P	22	24	486		E	1				S	25	135	9		1	10		2	6		1
TSURUG	0	EP	22	24	513							ES	25	179									
HIKONE	0	EP	22	24	545							S	25	202	13		1	13		1	5		2
TOYOOK	0	EP	22	25	097							ES	25	499	8		1	6		1			
TOKYO	0	EP	22	25	100							ES	25	340	10		5	13		5	12		4
OSAKA	0	EX	22	25	493										10		3	6		2	5		2
															0								

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Origin Time						Location						Depth km	Magnitude M
d	h	m	s	±	s	Longitude °	′	±	Latitude °	′	±		
14	23	13	36.2	0.1		138	04	01	36	27	01	00	4.4

Station	Δ km	Phase (J. S. T.) h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A × 10^P μ N Ax	P	T	E Ax	P	T	Z Az	P	T
					μ	μ	μ						S	μ		S	μ		S
NAGANO	2	1 P	23	13															
WATSUS	3	P	23	13	40.4														
WATSUW	2	1 P	23	13	42.6	S	6 W	6 U	3	1 S	13	46.8	10	1	2	50		2	50	2
KARUIZ	0	1 P	23	13	46.6		W	2 D	10	S	13	51.2	25	1	3	15	1	2		
YOKOWA	0	E P	23	13	50					S	14	14	13		1	17		1		
TAKADA	0	P	23	13	51.3					S	14	08.0								
WAKAYA	0	1 P	23	13	53					S	14	06.6	54		3	42		4		
KOFU	0	E P	23	13	53.8			D	2	E S	14	05.7	61		4	28		4	34	4
	0	E P	23	13	56.0					1 S	14	07.2	16		4	29		4	9	1
IIDA	0	1 P	23	13	57.0			U	3	E S	14	10.0	18		2	19		4	5	3
FUNATS	0	P	23	13	58.6					S	14	15.6								
KUWAGA	0	E P	23	14	01.0					S	14	16.0	42		3	45		4	32	4
HAJIWA	0	E P	23	14	04.0					E S	14	22.6	28		1	24		1		
AIKAWA	0	1 P	23	14	06.2	N	0 W	0		1 S	14	27.2	3		1	5		1		
UTSUNO	0	P	23	14	06.6		W	3		S	14	25.2	12		3	11		1		
NISHIW	0	E P	23	14	07.2					E S	14	30.7	10		1	9		1	3	1
GIFU	0	E P	23	14	07.2								14		2	7		2	5	1
NAGOYA	0	P	23	14	07.6			U	2	S	14	30.0	15		1	18		2	8	1
SHIZUO	0	E P	23	14	08.0					S	14	28.0	6		1	8		1	4	1
NIIGAT	0	E P	23	14	08.0					S	14	33.0	10		4	20		5	4	4
FUKUI	0	P	23	14	08.4	S	W	U		S	14	34.0								
KAKIOK	0	P	23	14	09.5		E	2 U		E S	14	32.2	13		1	11		1	5	1
HAMAMA	0	P	23	14	11.8	N	1 E	0		S	14	36.4	12		2	17		3	6	1
TOKYO	0	E P	23	14	12.0					E S	14	35.0	19		3	23		6	20	4
WITO	0	1 P	23	14	13.0					E S	14	38.6	8		4	6		4	5	2
OWAEZA	0	E P	23	14	13.8								16		5	20		5		
HIKONE	0	P	23	14	14.6					E S	14	39.2	11		1	11		1	4	2
ONAHAM	0	E X	23	14	20.9					E S	14	52.5	13		1	12		1	4	1
TOYOOK	0	E P	23	14	31.3					E S	15	11	11		1	4		1		
CHICHI	0	E P	23	14	56.5					E S	15	10.6								
OSAKA	0	X	23	15	13.6								12		3	21		4	6	3

Origin Time						Location						Depth km	Magnitude M
d	h	m	s	±	s	Longitude °	′	±	Latitude °	′	±		
15	08	01	05.0	0.0	3	138	12	02	36	35	01	00	4.0

Station	Δ km	Phase h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A × 10^P μ N Ax	P	T	E Ax	P	T	Z Az	P	T
					μ	μ	μ						S	μ		S	μ		S
MATSUS	3	P	08	01															
NAGANO	3	1 P	08	01	10.5	N	18 W	4 U		E S	01	12.5	30	1		40	1		25	1
KARUIZ	0	P	08	01	15.6			U		S	01	20.4								
MATSUM	0	P	08	01	15.9					S	01	21.6								
TAKADA	0	E P	08	01	18.4					S	01	27.0								
WAKABA	0	1 P	08	01	20.3			D	2	S	01	30.4	10		4	6		3	12	3
KOFU	0	E P	08	01	25.8					E S	01	38.0	8		1	7		1		
KOMAGA	0	E X	08	01	28.4								9		5	10		4	7	4
KANAZA	0	E P	08	01	29.0					S	01	48.0								
HAJIMA	0	E P	08	01	34.6					S	01	52.5	22		1	26		1		
NIIGAT	0	E	08	01	40.0					S	01	57.5	4		2	5		4		
GIFU	0	E P	08	01	41					S	02	02.8	6		1	9		2		
WITO	0	E P	08	01	41.8					1 S	02	04.8	9		0	7		0	3	0
HAMAMA	0	P	08	01	43.0	S	1 W	1 U	1	E S	02	08	6		1	5		2	4	1
NAKAYA	0	P	08	01	51.5					S	01	52.0	26			26				
HIKONE	0	E P	08	01	52.2					S	02	14.2	8		1	5		1	3	2
TOKYO	0	E P	08	02	06.0					E S	02	28.0	5		5	8		5	7	4

Origin Time						Location						Depth km	Magnitude M
d	h	m	s	±	s	Longitude °	′	±	Latitude °	′	±		
15	14	21	48.4	0.0	6	138	18	04	36	33	01	00	3.9

Station	Δ km	Phase h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A × 10^P μ N Ax	P	T	E Ax	P	T	Z Az	P	T
					μ	μ	μ						S	μ		S	μ		S
MATSUS	2	P	14	21															
NAGANO	3	1 P	14	21	56.4	N	22 W	4 U		S	21	58.4	30	1		45	1		30	1
KARUIZ	0	P	14	21	58.5					S	22	03.6								
MATSUM	0	P	14	21	59.0					1 S	22	04.5								
TAKADA	0	P	14	22	01.5					S	22	09.9								

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^n μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
GIFU	0	EP 14 22 27				S 22 457	5		1	8		1			
NIIGAT	0	E 14 22 403					4		1	5		2			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
17	01	25	356	002	138 12	01	36 29	01	00	38

NAGANO	2	IP	01	25																	
MATSUS	3	P	01	25	370																
MATSUM	0	IP	01	25	434			W		U	2	IS	25	490							
KARUIZ	0	IP	01	25	446					D	2	S	25	499							
TAKADA	0	EP	01	25	502							S	25	580							
MAEBAS	0	IP	01	25	514					D	2	S	26	011	10	3	10	3	10	3	
TOYAMA	0	P	01	25	551							ES	26	06	4	3	6	3	3	4	
KOFU	0	EP	01	25	552							IS	26	066	4	1	7	1	3	1	
KUMAGA	0	EX	01	25	590										11	3	9	4	10	3	
WAJIMA	0	EX	01	26	100										8	1	6	1			
															0						
HAMAMA	0	P	01	26	115					U	1	ES	26	36	7	2	4	1	3	1	
ONAHAM	0	EX	01	26	474										3	1	5	1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
19	15	28	313	001	138 17	01	36 32	01	00	40

MATSUS	2	P	15	28																	
NAGANO	3	IP	15	28	353	N	4	W	1	U	32	IS	28	376	30	1	40	1	30	1	
KARUIZ	0	IP	15	28	409					D	2	S	28	460							
MATSUM	0	IP	15	28	411	S	1	W	4	U	10	IS	28	471							
TAKADA	0	P	15	28	450							S	28	530							
MAEBAS	0	IP	15	28	468	N		W	1	D	4	S	28	563	9	4	8	5	9	2	
KOFU	0	IP	15	28	512	S	2	E	1	U	4	IS	29	031	11	0	16	0	5	1	
TOYAMA	0	P	15	28	517					D		ES	29	05	8	4	6	2	5	2	
KUMAGA	0	EX	15	28	530										10	4	9	5	6	3	
AIKAWA	0	IP	15	28	597	N	0	W	0	U	0	IS	29	196	6	1	5	1			
KANAZA	0	EP	15	29	000							ES	29	194							
KAKIOK	0	EP	15	29	01							ES	29	23	7	1	5	1	2	1	
WAJIMA	0	EP	15	29	020							ES	29	202	14	1	15	1			
MISHIM	0	EP	15	29	035							ES	29	222	8	1	12	1	2	1	
GIFU	0	EP	15	29	054							S	29	576	7	1	9	1			
MITO	0	EP	15	29	059							IS	29	302	9	0	9	0	2	1	
NAGOYA	0	EP	15	29	060							ES	29	300	5	1	6	1	2	1	
HAMAMA	0	P	15	29	082	N		E	1			ES	29	35	5	1	4	2	2	1	
HIKONE	0	EP	15	29	150							S	29	402	7	1	6	1	2	1	
NIIGAT	0	E	15	29	225										5	1	5	5			
															0						
TOKYO	0	EP	15	29	280							ES	29	500		4	7	5	5	4	
ONAHAM	0	EX	15	29	434										4	1	5	1			
TOYOOK	0	X	15	30	094										6	1	7	1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
19	19	28	205	002	138 12	01	36 32	01	00	40

NAGANO	2	IP	19	28																	
MATSUS	3	P	19	28																	
MATSUM	1	IP	19	28	294					U	2	IS	28	351							
KARUIZ	0	IP	19	28	304					U	3	S	28	354	0						
TAKADA	0	P	19	28	337							S	28	417							
MAEBAS	0	IP	19	28	368					D	2	S	28	469	10	4	7	3	9	3	
KOFU	0	IP	19	28	402	S	2	E		U	3	ES	28	520	5	1	7	0	3	1	
KUMAGA	0	EX	19	28	440										8	3	6	3	6	3	
KANAZA	0	EP	19	28	470							ES	29	042							

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
WAJIMA	0	EP	19	28	478							ES	29	060		21		1	22		1			
GIFU	0	EP	19	28	54							S	29	156		8		1	6		1			
MITO	0	EP	19	28	550							IS	29	215		10		0	10		0	3		0
NAGOYA	0	EP	19	28	570							S	29	172		7		1	8		1	4		1
HAMAMA	0	P	19	28	575	N	1			D	1	S	29	242		6		1	5		1	3		1
HIKONE	0	EP	19	29	031							S	29	280		8		1	8		1	3		1
NIIGAT	0	X	19	29	043							S	29	136		5		1	9		1			
TOKYO	0	EP	19	29	180							IS	29	412		6		5	7		4	7		4
YOKOHA	0	S	19	29	206											6		1						

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
19	21	51	063	001	138	13	01	36	31	00	43

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	4	P	21	51	085																			
NAGANO	3	IP	21	51	107	N	24	W	1	U		S	51	129		60	1		55	1		40	1	
MATSUM	1	IP	21	51	152	S		W		U	5	IS	51	211										
KARUIZ	0	IP	21	51	158					U	2	S	51	215		10	1	2	10	1	2			
TAKADA	0	P	21	51	202	N	4	E	2	U	4	S	51	288										
MAEBAS	0	IP	21	51	223			W		D	4	S	51	326		29		4	26		3	22		2
TOYAMA	0	EP	21	51	251							S	51	38		17		3	20		3			
CHICHI	0	EP	21	51	252							S	51	362										
KOFU	0	IP	21	51	257					U	5	ES	51	380		12		3	10		3	7		1
IIDA	0	IP	21	51	284	S	1			U	2	ES	51	434		6		3	9		4	4		3
KUMAGA	0	EX	21	51	290											25		3	19		4	16		4
FUNATS	0	P	21	51	306							S	51	441										
KANAZA	0	EP	21	51	325							S	51	508										
UTSUNO	0	EP	21	51	330							S	51	511		17		1	11		1	14		1
WAJIMA	0	EP	21	51	347							ES	51	533		22		1	26		1			
NIIGAT	0	P	21	51	372											7		4	16		5	4		3
MISHIM	0	EP	21	51	376							ES	51	574		10		1	13		4	4		1
GIFU	0	EP	21	51	393							S	51	598		16		2	8		1			
NAGOYA	0	EP	21	51	399							S	52	032		11		1	15		1	8		1
OMAEZA	0	EP	21	51	414											7		3	7		3			
MITO	0	IP	21	51	420							IS	52	066		13		0	8		1	3		1
YOKOHA	0	IP	21	51	422					U	4	ES	52	066		14		1	13		1			
HAMAMA	0	P	21	51	430	N	2	E	1			S	52	099		12		2	9		2	6		1
TOKYO	0	EP	21	51	450							ES	52	250		18		4	22		4	16		3
HIKONE	0	EP	21	51	472							S	52	137		15		1	17		1	4		1
ONAHAM	0	EX	21	51	488							ES	52	210		10		1	9		1	3		2
TOYOOK	0	EP	21	52	025							ES	52	426		8		1	8		1			
OSAKA	0	ES	21	52	448											9		4	13		4	3		2

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	•
19	23	09	337	003	138	06	01	36	31	01	37

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	3	P	23	09	37																			
NAGANO	3	IP	23	09	397	S	8	E	1	D	60	IS	09	420		69			61			68		
MATSUM	0	IP	23	09	425					U	1	IS	09	480										
KARUIZ	0	IP	23	09	433					D	2	S	09	479										
TAKADA	0	EP	23	09	483							S	09	565										
AIKAWA	0	IP	23	10	023	N	0	E	0	U	0	IS	10	220		2		1	5		1			
WAJIMA	0	EX	23	10	053											8		1	8		1			
NIIGAT	0	X	23	10	282											4		1	3		1			

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Origin Time						Location								Magnitude
						Longitude			Latitude			Depth		
d	h	m	s	± s		°	′	± ′	°	′	± ′	km		•
20	08	31	202	002		138	09	01	36	33	01	00		42

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	s	μ		μ		μ			m	s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	2	P	08	31																			
NAGANO	2	IP	08	31																			
MATSUM	0	P	08	31	291							IS	31	352									
KARUIZ	0	EP	08	31	305							S	31	360									
TAKADA	0	EP	08	31	331							S	31	413									
WAJIMA	0	EP	08	31	473							S	32	053	16		1	16		1			
MITO	0	EP	08	31	555							IS	32	202	4		0	7		0	2		0

Origin Time						Location								Magnitude
						Longitude			Latitude			Depth		
d	h	m	s	± s		°	′	± ′	°	′	± ′	km		•
20	09	30	346	001		138	13	01	36	34	01	00		49

MATSUS	4	P	09	30	384																			
NAGANO	4	IP	09	30	400	N	23	W	9	U		IS	30	420	30	1		30	1		18	1		
MATSUM	2	IP	09	30	433			W	2	U	4	IS	30	494	40	1	3	35	1	3	10	1	3	
KARUIZ	2	IP	09	30	447	N				D	2	S	30	502										
TAKADA	1	P	09	30	478	N	13	E	6	U	9	S	30	561	35	1	4	35	1	4	20	1	4	
MAEBAS	1	IP	09	30	506	N		W	1	D	6	S	31	007	20	1	6	12	1	5	17	1	3	
TOYAMA	0	IP	09	30	534					D		IS	31	092	19	1	4	16	1	4	13	1	3	
KOFU	1	IP	09	30	541	S	2	E	1	D	1	ES	31	071	64		4	72		4	33		1	
TAKAYA	0	P	09	30	543							S	31	068										
CHICHI	0	EP	09	30	548							S	31	067										
KUMAGA	0	EP	09	30	574					U	4	S	31	116	16	1	5	16	1	4	12	1	4	
IIDA	1	IP	09	30	576	S	8	W	6	U	1	IS	31	132	60		2	50		3	32		4	
FUNATS	1	IP	09	30	594							IS	31	139										
UTSUNO	0	P	09	31	006	N	1	W	3	D	1	S	31	196	46		2	32		2	16		1	
KANAZA	0	P	09	31	020	N		E		D		S	31	184										
WAJIMA	0	P	09	31	021	N	3			U	4	S	31	204	21	1	1	21	1	1	56		1	
AIKAWA	0	IP	09	31	023	N	5	E	0	U	9	IS	31	222	21		1	20		0	18		3	
MISHIM	0	IP	09	31	049	S	3			U	2	IS	31	270	40		2	55		4	18		3	
NIIGAT	0	P	09	31	050							IS	31	270	43		2	80		2	11		4	
KAKIOK	0	EP	09	31	06			E				S	31	203	34		1	21		1	15		1	
SHIRAK	0	EP	09	31	061			E	2	U	4	ES	31	329										
SHIZUO	0	P	09	31	064	S	3	W	3	U	2	ES	31	305	18		3	24		3	10		3	
AJIRO	0	IP	09	31	070					U	0	S	31	305	9		0	8		0	4		1	
GIFU	0	P	09	31	085	S	4	W	5			S	31	305	86		2	96		2	30		2	
TOKYO	0	EP	09	31	086							ES	31	295	10	1	6	13	1	5	89		4	
FUKUI	0	P	09	31	090	N	6	E	4	D	5	S	31	284										
MITO	0	IP	09	31	095							IS	31	351	49		1	37		0	31		3	
NAGOYA	0	P	09	31	096					U	2	IS	31	330	66		2	88		1	28		1	
HAMAMA	0	P	09	31	110	S	1	W		U	1	S	31	383	44		1	74		2	34		2	
YOKOHA	0	IP	09	31	120	S	2	E	2	U	20	IS	31	358	13	1	3	12		3	42		3	
OMAEZA	0	EP	09	31	130							ES	31	215	66		4	75		5	37		2	
OSHIMA	0	IP	09	31	136					U	3	S	31	380	20		1	18		1	11		2	
TSURUG	0	EP	09	31	141							ES	31	413										
HIKONE	0	P	09	31	146							IS	31	442	66		1	63		1	29		1	
TOMISA	0	IP	09	31	149					D	1	ES	31	482	37		3	26		4	12		3	
ONAHAM	0	IP	09	31	162					U	9	ES	31	476	48		1	36		1	25		4	
FUKUSH	0	EP	09	31	163							ES	31	420	26		1	14		1	5		3	
SENDAI	0	EP	09	31	25							ES	32	072	14		3	12		2	4		6	
TSU	0	EP	09	31	255							IS	31	523										
KYOTO	0	EP	09	31	270	N	1	E	1	D	1	IS	31	573	17		2	11		8	5		6	
OWASE	0	P	09	31	280							S	32	082	10		2	6		3	7		2	
NARA	0	EP	09	31	281																			
SAKATA	0	EP	09	31	301							S	32	053										
TOYOOK	0	EP	09	31	320							ES	32	121	31		1	23		1	6		3	
AKITA	0	EX	09	31	334										10		2	9		3	5		3	
OSAKA	0	P	09	31	337					U	5	S	32	135	97		4	76		5	33		2	
SHIONO	0	EP	09	31	368							ES	32	276	11		2	11		2	6		2	
KOBE	0	EX	09	31	375																			
WAKAYA	0	EP	09	31	438							ES	32	226	12		1	12		1				
TOKUSH	0	EP	09	31	441							ES	32	333										
SUMOTO	0	EP	09	31	441							S	32	291	8		6	9		2	4		3	
												IX	31	451										
MIZUSA	0	P	09	31	450							S	32	250	13		2	13		2	8		2	
OKAYAM	0	EP	09	31	480							IS	32	425	15		1	12		2	10		1	
TURUGI	0	EP	09	32	002							EX	34	04										
SHIMON	0	EX	09	32	36										4		4	3		2	5		4	
HIROSH	0	EX	09	33	212																			

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A ×10^F μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
OITA	0	EP 09 33 591					19		5	18		5	9		3
FUKUOK	0	EX 09 34 220	N 2	W 2	U		5		2	4		2	2		2
KUMAMO	0	EP 09 34 32					5		2	4		3	1		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
20	09	50	228	002	138 16	01	36 30	01	00	40

NAGANO	2	IP	09	50																
MATSUS	3	P	09	50	25										0					
MATSUM	0	IP	09	50	317				D	2	IS	50	375		0					
KARUIZ	0	P	09	50	327				U		ES	50	379							
TAKADA	0	P	09	50	363						S	50	441							
MAEBAS	0	IP	09	50	389	N	W	1	D	6	S	50	488		13	1	8	5	9	4
KOFU	1	IP	09	50	417				U	1	IS	50	541		9	1	11	0	5	0
TOYAMA	0	IP	09	50	427				D	5	S	50	543		4	2	8	3	7	3
IIDA	0	EP	09	50	460						ES	51	012		6	0	9	0	4	3
WAJIMA	0	EP	09	50	497						ES	51	082		26	1	22	1		
KANAZA	0	EP	09	50	498						S	51	126							
AIKAWA	0	IP	09	50	499	N	O E	O	U	1	IS	51	102		6	0	6	0	2	0
MITO	0	EP	09	50	562						IS	51	232		6	0	5	0	2	1
GIFU	0	EP	09	50	57						S	51	18		6	1	6	1		
NAGOYA	0	EP	09	50	579						S	51	208		6	1	7	1	2	1
HAMAMA	0	EP	09	51	01						ES	51	25		5	1	5	2	3	1
NIIGAT	0	X	09	51	145										9	1	12	1		
NIIGAT	0	X	09	51	150										9	1	12	1		
TOKYO	0	EX	09	51	16										0		8	4		

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
21	10	51	082	002	138 14	01	36 34	01	00	40

NAGANO	2	IP	10	51																
MATSUS	3	P	10	51	105															
MATSUM	X	IP	10	51	171				U		IS	51	226							
KARUIZ	0	P	10	51	180				D		ES	51	230							
TAKADA	0	P	10	51	209						S	51	291							
MAEBAS	0	IP	10	51	239	N	W	1	D	4	S	51	342		15	4	9	3	15	4
TOYAMA	0	IP	10	51	279				D	3	S	51	414		8	3	8	3	6	2
KOFU	0	EP	10	51	290						ES	51	400		9	0	13	0	4	0
KUMAGA	0	EX	10	51	300										13	4	11	4	13	4
WAJIMA	0	EP	10	51	379										20	1	26	1		
MISHIM	0	EP	10	51	405						ES	51	591		6	1	6	1	4	1
GIFU	0	EP	10	51	43										8	2	4	2		
MITO	0	IP	10	51	433						IP	52	085		8	0	5	0	3	1
NAGOYA	0	EP	10	51	435	N	1 E	0	D	1	S	52	048		4	1	7	1	3	1
YOKOHA	0	IP	10	51	440				D	4	IS	52	087		10	1	7	1		
HAMAMA	0	P	10	51	445						ES	52	11		4	1	6	2	3	1
HIKONE	0	P	10	51	536						S	52	164		5	1	7	1	3	1

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
21	22	48	087	002	138 18	01	36 32	01	00	43

NAGANO	2	IP	22	48																		
MATSUS	2	P	22	48																		
KARUIZ	0	IP	22	48	174	S	2	E	4	U	4	IS	48	227	10	1	2	20	1	2		
MATSUM	1	IP	22	48	186			E		D	3	S	48	244								
TAKADA	0	P	22	48	217							S	48	315								

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10⁴ μ							
						N		E		Z						N				E			
			h	m	• s	μ		μ		μ		m	• s			AN μ	P	T s	AE μ	P	T s	AZ μ	P	T s
MAEBAS	0	IP	22	48	232			W	1	D	4	S	48	339		49		3	24		4	43		4
KOFU	0	IP	22	48	279	S	3	E	1	U	7	ES	48	397		16		6	20		3	7		1
TOYAMA	0	IP	22	48	295					D	3	S	48	435		15		2	11		1	15		2
KUMAGA	0	EX	22	48	300											37		3	30		3	26		4
CHICHI	0	EP	22	48	305							S	48	400										
IIDA	0	IP	22	48	318					U	2	ES	48	462		6		1	8		1	4		1
FUNATS	0	P	22	48	322							S	48	469										
UTSUNO	0	P	22	48	346			W	2			S	48	516		7		1	10		1			
KAKIOK	0	EP	22	48	35			W	2			S	48	597		10		1	8		1	4		1
KANAZA	0	P	22	48	369					D		S	48	568										
WAJIMA	0	EP	22	48	380							ES	48	563		41		1	41		1			
MISHIM	0	EP	22	48	389					D	2	ES	49	000		9		1	12		1	4		1
NIIGAT	0	EP	22	48	400							S	49	015		10		2	15		6	4		3
MITO	0	IP	22	48	428			W	0	D	1	IS	49	068		22		0	13		0	6		1
YOKOHA	0	EP	22	48	431							ES	49	068		13		1	15		1	10		3
GIFU	0	P	22	48	432							S	49	054		15		1	17		1			
NAGOYA	0	EP	22	48	438					D		S	49	064		13		1	14		1	8		1
FUKUI	0	X	22	48	452																			
HAMAMA	0	P	22	48	455							ES	49	11		9		2	8		3	5		1
ONAHAM	0	EX	22	48	512											8		1	8		1	3		1
HIKONE	0	EP	22	48	523							S	49	174		17		1	14		1	7		1
TOYOOK	0	EP	22	49	096											11		1	8		1			

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	Depth km •
22	17	27	220	002	138	13	01	36	33	01	00 42

NAGANO	2	P	17	27																				
MATSUS	4	P	17	27	242																			
MATSUM	X	P	17	27	310							S	27	363										
KARUIZ	0	IP	17	27	319					U	2	ES	27	369										
TAKADA	0	P	17	27	350							S	27	432										
MAEBAS	0	P	17	27	381					D		S	27	487		22		4	14		4	13		3
TOYAMA	0	IP	17	27	410					D		S	27	561		14		3	21		3	13		3
KOFU	0	IP	17	27	416					U	1	ES	27	540		9		1	11		3	5		1
IIDA	0	E	17	27	444																			
KUMAGA	0	EP	17	27	455							S	28	151		18		3	19		3	15		3
WAJIMA	0	EX	17	27	502											17		1	19		1			
OMAEZA	0	EP	17	27	509											16		4	13		4			
NIIGAT	0	EP	17	27	530							S	28	142		7		2	15		6	4		4
MISHIM	0	EP	17	27	532											6		1	6		1	2		1
KAKIOK	0	P	17	27	550			E	2			S	28	104		9		1	5		1	2		1
NAGOYA	0	EP	17	27	558					D	1	S	28	184		8		1	11		1	6		1
HAMAMA	0	P	17	27	585							ES	28	24		9		1	6		2	5		1
MITO	0	IP	17	27	587							IS	28	232		7		0	8		0	3		1
GIFU	0	EP	17	27	59							S	28	17		8		1	4		1			
YOKOHA	0	EP	17	28	015											13		2	12		1			
HIKONE	0	EP	17	28	042							S	28	290		11		1	11		1	3		1
ONAHAM	0	EX	17	28	328											5		1	6		1			
KANAZA	0	EP	17	28	499							ES	29	080										

Origin Time					Location						Magnitude
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′	Depth km •
23	02	22	399	002	138	18	01	36	34	01	00 40

NAGANO	1	IP	02	22																				
MATSUS	3	P	02	22	432																			
KARUIZ	0	IP	02	22	488	S		E		U	3	S	22	538										
MATSUM	X	IP	02	22	509					D	1	IS	22	565										
TAKADA	0	P	02	22	531							S	23	017										
MAEBAS	0	IP	02	22	548			W		D	2	S	23	042		24		3	11		3	17		3
KOFU	0	IP	02	22	593	S	2	E	1	U	4	ES	23	111		9		1	9		1	5		1
KUMAGA	0	EX	02	23	015											13		4	13		4	14		4
IIDA	0	EP	02	23	032							ES	23	182		4		1	5		1	2		1
TOYAMA	0	P	02	23	04							ES	23	17		9		2	7		2			

International Seismological Centre

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10⁻³ μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
									S			S			S
WAJIMA	0	EX 02 23 089					14		1	19		1			
KANAZA	0	EP 02 23 101				S 23 280									
MISHIM	0	EP 02 23 106				ES 23 321	5		1	9		1	2		1
NIIGAT	0	E 02 23 140					5		1	8		1			
MITO	0	EP 02 23 143				IS 23 375	15		0	11		0	3		0
GIFU	0	EP 02 23 15				S 23 367				11		1			
HAMAMA	0	EP 02 23 17				ES 23 42	8		2	6		2	4		1
HIKONE	0	EP 02 23 226				S 23 487	10		2	6		2	3		1

Origin Time					Location						Depth km	Magnitude •
					Longitude			Latitude				
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
23	09	11	174	002	138	15	01	36	36	01	00	41

NAGANO	2	IP	09	11																			
MATSUS	2	P	09	11																			
NIIGAT	0	X	09	11	085											5		1	16		1		
MATSUM	X	IP	09	11	282			W	1	U	4	IS	11	337									
KARUIZ	0	EP	09	11	285							ES	11	334									
TAKADA	0	EP	09	11	291							S	11	389									
MAEBAS	0	IP	09	11	343					D	2	S	11	450	7		1	7		2	7		4
TOYAMA	0	IP	09	11	371					D	3	ES	11	52	6		2	5		3	5		3
KOFU	0	IP	09	11	377	S	2	E	1	U	3	IS	11	507	11		0	14		0	6		0
KUMAGA	0	EX	09	11	417										5		1	6		1	3		1
NAGOYA	0	EP	09	11	525							S	12	152	0 1		1	9		1	2		1
MISHIM	0	EX	09	11	53										5		1	6		1	2		0
GIFU	0	EP	09	11	55										8		1	6		1			
WAJIMA	0	EX	09	12	024										22		1	28		1			
HIKONE	0	EP	09	12	036							S	12	248	9		1	8		1	3		1

Origin Time					Location						Depth km	Magnitude •
					Longitude			Latitude				
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
24	23	11	114	002	138	14	01	36	35	01	00	41

NAGANO	2	IP	23	11																			
MATSUS	2	P	23	11																			
KARUIZ	0	IP	23	11	213					D	6	S	11	269									
MATSUM	0	IP	23	11	220					U		IS	11	282									
TAKADA	0	EP	23	11	240							S	11	314									
TOYAMA	0	P	23	11	325							S	11	450	6		2	5		1			
KUMAGA	0	EX	23	11	333										10		3	12		5	5		5
KOFU	0	IP	23	11	338	S	2	E	3			IS	11	440	21		1	30		0	10		1
FUNATS	0	IP	23	11	354							IS	11	508									
KANAZA	0	EP	23	11	38										50		2	50		2	50		2
UTSUNO	0	EP	23	11	384							S	11	548	7		1	4		0			
WAJIMA	0	EX	23	11	436										6		1	19		1			
MISHIM	0	EP	23	11	441							ES	12	027	6		1	7		1	2		0
MITO	0	IP	23	11	454							IS	12	101	7		0	6		0			0

Origin Time					Location						Depth km	Magnitude •
					Longitude			Latitude				
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
25	02	55	052	001	138	16	01	36	31	01	00	45

MATSUS	3	P	02	55	083																		
NAGANO	3	IP	02	55	103	N	24	W	9	U	64	IS	55	126	90	1		10	2		80	1	
KARUIZ	0	IP	02	55	144	S	3	E	8	U	6	S	55	197	20	1	2	25	1	2	10	1	2
MATSUM	1	IP	02	55	145	N		E		D	4	IS	55	203	15	1	3	50		3			3
TAKADA	0	P	02	55	187							S	55	275									
MAEBAS	0	IP	02	55	205			W	1	D	6	S	55	300	63		5	41		3	56		4
CHICHI	0	EP	02	55	233							S	55	353									
KOFU	0	IP	02	55	246	S	7	E	7	U	14	ES	55	368	24		1	27		5	21		1
TOYAMA	0	IP	02	55	251					D	3	IS	55	391	44		3	34		3	27		4
KUMAGA	0	EP	02	55	270							S	55	409	51		5	50		5	32		3

International Seismological Centre

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T
IIDA	0	IP	02	55	280	N	2	E	1	U	1	IS	55	426		20		1	19	2		8		1
FUNATS	0	P	02	55	293							S	55	435										
UTSUNO	0	P	02	55	317	N	2	W	6			S	55	486		17		1	16	1				
KANAZA	0	EP	02	55	320							S	55	489										
AIKAWA	0	IP	02	55	329	N	1	W	0	U	1	IS	55	536		7		2	10	1		6		3
WAJIMA	0	EP	02	55	339							ES	55	524		35		1	10	1		11		1
KAKIOK	0	EP	02	55	35							S	55	561		26		1	20	1		9		1
MISHIM	0	EP	02	55	354							S	55	549		18		1	25	1		9		1
SHIZUO	0	EP	02	55	356							S	55	582		8		1	10	1		6		2
NIIGAT	0	P	02	55	362					D	3	S	55	585		17		2	40	5		11		3
TOKYO	0	EP	02	55	38							ES	56	000		35		4	40	4		45		4
GIFU	0	P	02	55	388							S	56	017		26		2	41	2		13		1
MITO	0	IP	02	55	389							IS	56	039		34		1	30	1		11		1
NAGOYA	0	EP	02	55	396	S	1	W	0	U	2	S	56	028		26		1	25	2		11		1
FUKUI	0	P	02	55	398							S	56	070										
YOKOHA	0	IP	02	55	41					U	4	IS	56	05		27		1	29	2		13		3
OMAEZA	0	EP	02	55	419											18		3	31	4		8		2
HAMAMA	0	IP	02	55	421	N	1	E	1			S	56	070		31		1	25	2		2		1
FUKUSH	0	P	02	55	462	S	1	E	1			ES	56	162		5		2	4	1				
HIKONE	0	EP	02	55	464							S	56	121		27		1	18	1		10		1
ONAHAM	0	EX	02	55	467							IS	56	141		22		1	20	1		4		1
KYOTO	0	EP	02	55	506							IS	56	292		6		2	5	2		3		1
TOYOOK	0	P	02	56	034							S	56	437		15		1	6	1		3		
SENDAI	0	EP	02	56	036							ES	56	404		8		2	8	2		3		1
SAKATA	0	EX	02	56	306																			
OSAKA	0	EX	02	56	419											18		4	17	3		8		2

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
25	05	56	590	002		138	17	01	36	30	01	00	47

MATSUS	4	P	05	57	018																				
NAGANO	3	IP	05	57	043	N	4	W	7	U	58	ES	57	065		14	2		17	2		10	2	
MATSUM	1	IP	05	57	082	S	2	W	4	U	9	IS	57	135		30	1	3	25	1	3	10	1	3
KARUIZ	X	IP	05	57	090					U	4	S	57	139		40	1	2	50	1	3	30	1	1
TAKADA	0	P	05	57	123	N	5	E	2	U	11	S	57	197										
MAEBAS	1	IP	05	57	147	N	1	W	5	D	15	S	57	245		18	1	4	88		4	93		3
CHICHI	0	EP	05	57	176							S	57	294										
KOFU	0	IP	05	57	186	S	10	E	4	U	16	ES	57	308		47		2	48		3	28		1
TOYAMA	0	IP	05	57	197					D	3	S	57	318		63		3	61		3	61		3
IIDA	0	IP	05	57	206	S	4	W	2	D	2	IS	57	364		25		2	30		4	18		3
KUMAGA	0	P	05	57	215							S	57	406		11	1	4	87		4	85		4
FUNATS	0	P	05	57	215							S	57	360										
UTSUNO	0	P	05	57	260	N	2	W	13	D	12	S	57	438		27		2	23		2	23		1
KANAZA	0	EP	05	57	260							S	57	430										
AIKAWA	0	IP	05	57	270	N	1	W	0	U	1	IS	57	480		8		2	9		2	5		2
WAJIMA	0	EP	05	57	276							ES	57	462		66		1	83		1	12		1
MISHIM	0	IP	05	57	294					U	4	IS	57	496		54		1	44		4	18		1
SHIZUO	0	EP	05	57	301							S	57	530		10		1	13		4	6		4
TOKYO	0	EP	05	57	303							ES	57	523		80		4	73		4	81		4
NIIGAT	0	P	05	57	311					D	4	S	57	515		32		5	59		5	13		1
AJIRO	0	IP	05	57	314	S	1			U	1	S	57	536		8		1	14		1	4		1
SHIRAK	0	EP	05	57	321							ES	57	572										
NAGOYA	0	P	05	57	327	S	1	W	1	U	1	S	57	560		44		2	60		1	22		1
MITO	0	IP	05	57	334							IS	57	593		32		1	24		1	18		4
FUKUI	0	P	05	57	336	S	3	W	4	D	3	S	58	054										
GIFU	0	P	05	57	336							S	57	548		61		2	53		2	16		1
YOKOHA	0	EP	05	57	35					U	3	IS	57	59		83		2	66		2	16		2
HAMAMA	0	IP	05	57	360	N	1	E	2			S	58	030		31		2	30		2	20		1
OMAEZA	0	P	05	57	367							S	58	068		41		4	45		4	17		3
TSURUG	0	EX	05	57	368							ES	58	015										
OSHIMA	0	P	05	57	369					U	3	IS	58	034		24		1	13		1	10		2
TOMISA	0	IP	05	57	384					D	1					22		3	19		4	11		2
HIKONE	0	EP	05	57	397							S	58	066		59		1	41		1	12		2
ONAHAM	0	EX	05	57	404							ES	58	096		21		1	19		2	7		2
FUKUSH	0	P	05	57	409											9		2	8		1			
CHOSHI	0	EP	05	57	439																			
KYOTO	0	EP	05	57	442							IS	58	225		11		1	7		1	5		8
SENDAI	0	EP	05	57	515							S	58	260		14		3	9		3	10		2
KOBE	0	EX	05	57	521																			

International Seismological Centre

Station	Intensity	Phase (J. S. T.)				Initial Motion				Phase				Maximum Amplitude = A × 10^n μ							
						N		E		Z				N				E			
			h	m	• s	μ		μ		μ		m	• s	AN	P	T		AE	P	T	
														μ		S		μ		S	
TOYOOK	0	EP	05	57	556							ES	58 367	18		1		18		1	
NARA	0	EP	05	57	567																
SAKATA	0	EX	05	58	010																
KAKIOK	0	P	05	58	312	N	3	E	3	D	1	S	58 497	28		1		20		1	
OSAKA	0	X	05	58	358									38		4		50		5	

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
25	11	05	518	001	138 12	01	36 34	01	20	39

MATSUS	2	P	11	05																		
NAGANO	3	IP	11	05	559	N	4	W	3	U	34	IS	05 580	20	1		40	1		30	1	
KARUIZ	0	EP	11	06	003							S	06 059									
MATSUM	1	IP	11	06	004					U		IS	06 067									
TAKADA	0	EP	11	06	034							S	06 126									
MAEBAS	0	IP	11	06	063			W		D	2	S	06 160	15		4		9		4	15	3
KOFU	0	IP	11	06	107	S	1	E	1	U	3	ES	06 229	10		1		11		1	5	1
TOYAMA	0	P	11	06	109					D	2	S	06 244	6		2		5		2	5	3
KUMAGA	0	EX	11	06	150									13		5		13		5	10	4
WAJIMA	0	EX	11	06	228									9		1		13		1		
MISHIM	0	EP	11	06	237									6		1		6		1		0
MITO	0	IP	11	06	256					D	1	IS	06 505	9		0		7		0	2	0
HAMAMA	0	P	11	06	282							S	06 532	5		2		7		2	3	1
NAGOYA	0	EP	11	06	300							S	06 492	6		1		6		1	2	1
GIFU	0	EP	11	06	32							S	06 483					8		1		
NIIGAT	0	X	11	06	441									3		1		3		1		

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
25	11	27	252	003	138 14	01	36 33	01	00	42

NAGANO	1	IP	11	27																		
MATSUS	2	P	11	27																		
MATSUM	0	IP	11	27	347					U		IS	27 406									
KARUI7	0	P	11	27	348					U		S	27 401									
TAKADA	0	P	11	27	388							S	27 464									
MAEBAS	0	IP	11	27	407			W		D	3	S	27 505	12		4		7		3	11	3
KOFU	0	IP	11	27	453	S	1	E	1	U	3	ES	27 584	9		1		9		1	6	1
KUMAGA	0	EX	11	27	460									12		5		10		4	7	4
WAJIMA	0	EP	11	27	577									26		1		32		1		
GIFU	0	EP	11	27	59							S	28 215	8		1		11		2		
HAMAMA	0	P	11	28	025							ES	28 28	6		1		5		2	4	1
MITO	0	EP	11	28	025							IS	28 250	12		0		11		0	4	0
NAGOYA	0	EP	11	28	027							ES	28 232	7		1		7		1	4	1
YOKOHA	0	EP	11	28	083									8		1		9		1		
HIKONE	0	IS	11	28	332									8		1		7		1	3	2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
25	20	30	055	003	138 09	02	36 38	01	00	42

MATSUS	2	P	20	30																		
NAGANO	3	IP	20	30	043	N	15	W	9	U	32	IS	30 060	10	2		50	1		40	1	
KARUI7	0	IP	20	30	167					D	2	S	30 221									
MATSUM	0	EP	20	30	170							IS	30 230									
TAKADA	0	EP	20	30	196							S	30 278									
MAEBAS	0	IP	20	30	224			E		U	2	IS	30 319	15		5		20		1	19	4

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude $A \times 10^{1}$ μ								
						N		E		Z						N				E				
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T		A_E	P	T		A_Z	P	T
																			S				S			S
KOFU	0	IP	20	30	263					U	3	ES	30	385		21		1		16		1		10		1
KUMAGA	0	EP	20	30	300							S	30	457		20		1		20		5		15		4
UTSUNO	0	P	20	30	335					D	3	S	30	504		14		0		11		0		4		1
AIKAWA	0	IP	20	30	342	S	0	W	0	D	0	IS	30	532		5		1		5		1		2		1
WAJIMA	0	EP	20	30	352							ES	30	535		21		1		32		1		8		1
KAKIOK	0	EP	20	30	36							S	30	565		9		1		8		1		4		1
KANAZA	0	EP	20	30	366																					
MISHIM	0	EP	20	30	377							ES	30	571		12		1		16		1		5		1
TOKYO	0	EX	20	30	39											9		2		16		3		14		4
GIFU	0	EP	20	30	40							S	31	023		6		2		6		1				
MITO	0	IP	20	30	409							IS	31	064		20		0		21		0		6		1
YOKOHA	0	EP	20	30	420											13		1		9		1				
NAGOYA	0	EP	20	30	429							S	31	048		5		1		6		1		3		1
HAMAMA	0	P	20	30	440							ES	31	10		5		2		5		2		4		2
NIIGAT	0	X	20	30	515							S	30	593		8		2		11		2				
ONAHAM	0	EX	20	31	076											9		1		9		1		3		2

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
26	16	25	097	002		138	11	01	36	34	01	00	40

NAGANO	2	IP	16	25																						
MATSUS	2	P	16	25																						
MATSUM	0	IP	16	25	191	S		W	2	U	9	IS	25	245												
KARUIZ	0	IP	16	25	201	N		W		D	2	S	25	252												
TAKADA	0	EP	16	25	226							S	25	320												
MAEBAS	0	IP	16	25	264			W		D	2	S	25	367		9		3		7		3		7		4
TOYAMA	0	P	16	25	302					D		ES	25	449		4		1		5		3		3		1
KOFU	0	EP	16	25	309							IS	25	420		15		0		16		0				
KUMAGA	0	EX	16	25	350											7		3		7		4		6		4
KANAZA	0	EP	16	25	371																					
MISHIM	0	EP	16	25	404							ES	26	006		6		1		6		1		3		0
OMAEZA	0	EP	16	25	498															7		2				
TOKYO	0	EX	16	25	512											7		4		6		4				
YOKOHA	0	ES	16	26	105											10		1		7		1				
HIKONE	0	S	16	26	163											7		1		7		1				

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
27	20	17	518	002		138	10	01	36	32	01	00	43

MATSUS	3	P	20	17	547																					
NAGANO	3	IP	20	17	564							ES	17	582		10	2			20	2			14	2	
MATSUM	2	IP	20	18	007			W		U	9	IS	18	062												
KARUIZ	X	IP	20	18	020			E		U	4	S	18	074		10	1	2		10	1	2				
TAKADA	2	P	20	18	047							S	18	125												
MAEBAS	0	IP	20	18	074	N		W	1	D	4	S	18	186		24		1		12		3		13		2
TOYAMA	0	P	20	18	105					D		S	18	240		15		2		13		2				
KOFU	0	IP	20	18	118	S	3	E	3	U	5	IS	18	255		11		0		19		0		7		2
IIDA	0	IP	20	18	144					U	4	IS	18	282		10		1		10		1		5		1
KUMAGA	0	EP	20	18	152							ES	18	296		15		3		14		3		9		3
FUNATS	0	P	20	18	162							S	18	313												
KANAZA	0	P	20	18	182					D																
UTSUNO	0	P	20	18	188			W	3	D	3	S	18	372		11		1		7		1		4		1
WAJIMA	0	EP	20	18	189							ES	18	378		30		1		45		1		13		1
AIKAWA	0	IP	20	18	196	N	0	E	0	U	0	IS	18	396		6		1		8		0		3		1
NIIGAT	0	EP	20	18	226					U	1	S	18	447		21		1		26		2		8		1
GIFU	0	EP	20	18	24							S	18	558		12		1		14		1		7		1
KAKIOK	0	EP	20	18	25							ES	18	45		12		1		8		1		45		1
NAGOYA	0	EP	20	18	255							S	18	484		24		1		22		1		7		1
MISHIM	0	EP	20	18	256							ES	18	443		11		1		13		1		2		0
TOKYO	0	EP	20	18	272							ES	18	500		10		5		11		5		7		4
YOKOHA	0	EP	20	18	279					U	2	S	18	526		19		1		12		1				
MITO	0	IP	20	18	280					D	2	IS	18	528		14		0		12		1		4		1
HAMAMA	0	P	20	18	288	N	1					ES	18	53		7	1			9		1		4		1
OMAEZA	0	EP	20	18	312											11		3		7		4				

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^P μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
ONAHAM	0	EX 20 18 339					6		1	6		1	2		2
HIKONE	0	EP 20 18 341				IS 18 581	19		1	14		1	5		1
OSAKA	0	EX 20 19 246					7		4	9		5	3		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
27	22	02	500	001	138 16	01	36 34	01	00	44
MATSUS	3	P	22	02	527																						
NAGANO	4	IP	22	02	547	N	51	W	13	U	65	ES	02	565	21	2		18	2		12	2	
MATSUM	1	IP	22	02	598			W	1	U	4	IS	03	053									
KARUIZ	1	IP	22	02	598					U	2	S	03	049	15	1	2	15	1	2	50		2
TAKADA	1	P	22	03	033	N	4	E	1	U	13	S	03	115									
MAEBAS	0	IP	22	03	047	N	1	W	3	D	9	S	03	151	29		4	18		3	26		4
TOYAMA	0	IP	22	03	096					D	3	S	03	247	17		3	15		3	10		2
KOFU	0	IP	22	03	097	S	7	E	1	U	11	ES	03	214	15		1	19		1	10		1
CHICHI	0	EP	22	03	100							S	03	205									
KUMAGA	0	EP	22	03	116							ES	03	258	23		5	19		3	17		4
IIDA	0	EP	22	03	130							ES	03	280	10		2	6		2	3		1
FUNATS	0	P	22	03	141							S	03	291									
TSURUG	0	EP	22	03	153							S	03	424									
UTSUNO	0	P	22	03	159	N	1	W	6	D	6	S	03	335	15		1	13		1	6		1
WAJIMA	0	EP	22	03	161							S	03	343	49		1	63		1	11		1
KANAZA	0	EP	22	03	177							ES	03	344									
AIKAWA	0	IP	22	03	178	N	2	W	0	U	3	IS	03	372	9		1	11		1	6		2
NIIGAT	0	EP	22	03	199					U	2	S	03	413	18		1	17		1	8		1
KAKIOK	0	EP	22	03	21							ES	03	42	15		1	11		1	5		1
GIFU	0	EP	22	03	235							S	03	446	17		2	22		2			
TOKYO	0	EP	22	03	235							ES	03	44	15		5	17		5	6		4
MITO	0	IP	22	03	244							IS	03	494	32		0	31		0	9		0
NAGOYA	0	EP	22	03	246	N	1	E	1	D	1	S	03	470	13		2	14		1	5		1
YOKOHA	0	EP	22	03	260					U	3	IS	03	499	17		1	18		2			
HAMAMA	0	P	22	03	274	N	1	E	1			ES	03	52	10		1	10		2	6		1
OMAEZA	0	EP	22	03	307										8		2	7		2			
HIKONE	0	EP	22	03	330							IS	03	579	12		1	11		1	5		2
ONAHAM	0	EX	22	03	332										8		1	8		1	2		2
TOYOOK	0	P	22	03	482							S	04	283	11		1	6		1			
OSAKA	0	EX	22	04	259										10		4	8		4	5		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
28	12	28	149	001	138 20	01	36 35	01	00	42
NAGANO	3	IP	12	28	194	S	4	E	2	D	1	IS	28	219	80	1		13	2		80	1	
MATSUS	3	P	12	28	200																		
KARUIZ	X	IP	12	28	241					U	2	ES	28	294	10	1	1	10	1	2			
MATSUM	X	P	12	28	258							IS	28	323									
TAKADA	0	EP	12	28	268							S	28	346									
MAEBAS	0	IP	12	28	298			W		D	2	S	28	392	26		3	24		3	28		4
CHICHI	0	EP	12	28	335							IS	28	452									
KOFU	0	IP	12	28	347					U	4	ES	28	474	11		0	20		4	8		1
TOYAMA	0	P	12	28	356					D		S	28	492	15		3	13		2	10		3
KUMAGA	0	EP	12	28	359							S	28	510	13		6	22		5	14		4
IIDA	0	EP	12	28	390							ES	28	540	6		1	8		2	5		3
UTSUNO	0	P	12	28	407							S	28	577	8		2	8		1			
WAJIMA	0	EP	12	28	429							ES	29	018	18		1	19		1			
KANAZA	0	EP	12	28	430																		
NIIGAT	0	EP	12	28	447					U	1	S	29	043	8		1	13		4	4		1
MISHIM	0	EP	12	28	448							S	29	070	9		1	9		1	3		0
KAKIOK	0	P	12	28	448							S	29	054	9		1	8		1	5		1
OMAEZA	0	EP	12	28	487													7		5			
YOKOHA	0	EP	12	28	491							ES	29	128	11		1	9		1			
MITO	0	IP	12	28	492							IS	29	122	24		0	18		0	5		1
NAGOYA	0	EP	12	28	501					U	1	S	29	140	10		1	10		1	5		1
GIFU	0	P	12	28	520							S	29	134	10		2	12		2	6		2
HAMAMA	0	P	12	28	530							S	29	186	9		2	6		2	4		1

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^{n} μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
HIKONE	0	EP 12 28 577				S 29 258	13		1	9		1	4		1
TOKYO	0	EP 12 29 068				ES 29 280	18		4	10		4	14		4
ONAHAM	0	EX 12 29 179					5		1	8		1			
FUNATS	0	P 12 29 403				S 29 571									

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
28	14	21	197	001	138 13	01	36 34	01	00	53

MATSUS	5	P	14	21	220							S	21	261	10	3	4	70	2	3	29	2	3
NAGANO	4	IP	14	21	242	N	17	W	1	U	64	S	21	345	10	2	5	11	2	4	40	1	
KARUIZ	2	P	14	21	292			E		U		S	21	352	13	2	3	13	2	4	30	1	3
MATSUM	3	IP	14	21	296	S	2	W	2	U	6	S	21	406	60	1	4	55	1	4	35	1	4
TAKADA	2	P	14	21	324	N	3	E	1	U	11	S	21	480	51	1	5	52	1	5	24	1	4
MAEBAS	1	IP	14	21	357	N		W	3	D	7	S	21	520	40	1	3	35	1	3	50	1	4
TOYAMA	0	IP	14	21	385		0	E	5	D	13	IS	21	543	21	1	5	22	1	4	67		2
KOFU	0	IP	14	21	391	S	7	E	4	U	5	ES	21	598									
TAKAYA	0	EP	14	21	393							S	21	529									
CHICHI	2	P	14	21	403	S		E				ES	21	584	10	1	3	14	1	4	95		4
IIDA	0	EP	14	21	422							IS	21	579	35	1	7	30	1	5	23	1	4
KUMAGA	1	EP	14	21	422							S	22	024									
FUNATS	0	P	14	21	456							S	22	027	17	3	4	14	3	4	11	3	4
KANAZA	0	P	14	21	460	N		E				S	22	060	21	1	1	11	1	5			
UTSUNO	1	P	14	21	468	N	1	W	9			S	22	068	20		3	49		2	26		4
AIKAWA	0	IP	14	21	473	N	1	E	0	U	1	IS	22	114	20	1	5	20	1	5	11	1	5
NIIGAT	1	IP	14	21	497					U	2	IS	22	085	20	1	1	21	1	1	96		1
WAJIMA	1	IP	14	21	501	N	4	W	4	U	5	S	22	140	54		8	80		9	37		9
SHIZUO	0	P	14	21	506	S	8	E	3	U	5	S	22	137	90		1	17	1	4	36		3
MISHIM	0	IP	14	21	508	S	10	E	3	U	2	IS	22	150	15	1	1	94		1	44		1
KAKIOK	0	P	14	21	509	S	1	E	2	U		S	22	168	18		1	23		1	9		1
AJIRO	0	IP	14	21	521					U	0	S	22	139	28	1	5	64		3	37		4
GIFU	0	P	14	21	529	N	4	E	4			S	22	174	30	1	3	39	1	5			
TOKYO	0	EP	14	21	534							ES	22	198									
SHIRAK	0	EP	14	21	536							ES	22	180	14	1	2	17	1	2	39		1
NAGOYA	0	P	14	21	542	N	2	E	2	D	2	IS	22	212	22	1	1	12	1	1	73		5
MITO	1	IP	14	21	550							S	22	295									
FUKUI	0	P	14	21	551	S	5	W	6	U	3	S	22	224	86		3	12	1	6	55		2
HAMAMA	0	P	14	21	563							S	22	267	21	1	4	18	1	6			
TSURUG	0	P	14	21	583							S	22	269	42		4	32		2	21		2
OMAEZA	0	P	14	21	591	N	6	E	4			S	22	297	27		4	30		6	12		4
OSHIMA	0	P	14	21	596							S	22	278	14	1	4	11	1	5	34		5
FUKUSH	0	EP	14	22	001							S	22	330	62		3	63		5	42		4
HIKONE	0	P	14	22	002							IS	22	282	87		2	86		1	26		2
TOMISA	0	IP	14	22	010					D	3	ES	22	419	30		6	33		4	22		5
ONAHAM	0	IP	14	22	028			E	9	U	14				50		2	50		1	50		1
CHOSHI	0	EP	14	22	030							ES	22	516	23		3	24		7	8		3
KYOTO	0	EP	14	22	061							S	22	480	6		3	6		4	40		6
NARA	0	EP	14	22	066							S	22	571							14		4
SENDAI	0	EP	14	22	090							ES	23	038									
OWASE	0	P	14	22	100							IS	22	566	24	1	5	35	1	5	73		4
TOYOOK	0	P	14	22	16										19		5	25		4	9		3
TOKUSH	0	EP	14	22	162							ES	23	055									
OSAKA	0	P	14	22	175					D	5	S	23	361	5		4	5		4	3		3
AKITA	0	EX	14	22	178							S	23	122				12			15		
KOBE	0	EP	14	22	205							S	23	132	9		8	6		5	5		6
SAIGO	0	EP	14	22	232	S	0	W	0	U	0	S	23	110	23		4	33		5	20		2
HACHIJ	0	EP	14	22	246							S	23	222	6		5	5		6	5		4
OFUNAT	0	P	14	22	253	S	1			D	1	S	23	134	17		6	19		6	11		5
MIZUSA	0	P	14	22	260							IX	22	298									
MORIOK	0	EP	14	22	265							S	23	086	35		1	13		1	12		1
SUMOTO	0	P	14	22	280							IS	23	179	14		6	24		7	6		4
WAKAYA	0	P	14	22	286	N	6	E	8			S	23	294	20		5	16		6	2		5
SHIONO	0	EP	14	22	317							IS	23	429	10	1	4	15	1	5			
TAKAMA	0	EP	14	22	350							ES	23	295	8		5	5		5	6		4
SAKATA	0	EX	14	22	37							IX	24	095									
TURUGI	0	EP	14	22	380																		
HAMADA	0	EP	14	22	438																		

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A × 10^P μ								
						N	E	Z				N			E			Z		
			h	m	• s	μ	μ	μ		m	• s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
KOCHI	0	EP	14	22	491				ES	23	550	12		3	15		3			
MIYAKO	0	EX	14	22	52							4		6	5		5			
HIROSH	0	EP	14	22	59				ES	24	070	13		4	5		5	6		4
AOMORI	0	EX	14	22	59							13		2	10		2			
MATSUY	0	EP	14	23	015				ES	24	090	21		6	11		5	4		5
SHIMON	0	EX	14	23	08				EX	24	26									
URAKAW	0	EX	14	23	157							3		3	6		4	3		4
NAGASA	0	EP	14	23	200				ES	25	220									
KUMAMO	0	EP	14	23	24					?	16?	15		4	8		4	3		5
OITA	0	EP	14	23	317				ES	24	458	49		6	40		4			

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth km		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
28	22	33	468	002	138	11 01	36	35 01	20		44

MATSUS	3	P	22	33	488								S	33	521	22	2		34	2		20	2	
NAGANO	3	IP	22	33	500	N	22	E	5	U	62		IS	34	008	10	1	3	50		3			
MATSUM	1	P	22	33	555								S	34	008	10	1	2	15	1	2			
KARUIZ	0	IP	22	33	558	S		E	1	U	2		S	34	064									
TAKADA	2	P	22	33	586																			
MAEBAS	0	IP	22	34	021	N		W	1	D	4		S	34	131	32		5	26		5	24		3
CHICHI	0	EP	22	34	045								S	34	181									
TOYAMA	0	IP	22	34	049					D	3		S	34	176	28		1	26		3	22		2
KOFU	0	IP	22	34	057	S	2	E	1	U	3		ES	34	181	17		0	20		0	7		1
IIDA	0	IP	22	34	082					U	1		ES	34	226	10		1	12		2	5		1
KUMAGA	0	EP	22	34	090								ES	34	279	28		4	29		4	26		4
FUNATS	0	P	22	34	103								S	34	250									
WAJIMA	0	EP	22	34	112								S	34	295	61		1	96		1	18		1
KANAZA	0	EP	22	34	118																			
AIKAWA	0	IP	22	34	128	N	0	E	0	U	1		IS	34	328	11		1	11		1	3		1
UTSUNO	0	P	22	34	134			W	3				S	34	316	23		1	5		1			
NIIGAT	0	EP	22	34	158					U	2		IS	34	380	39		1	58		1	23		1
KAKIOK	0	EP	22	34	17								ES	34	40	13		1	8		1	4		1
GIFU	0	P	22	34	187								S	34	401	16		2	16		1			
OMAEZA	0	EP	22	34	194								ES	34	541	8		3	9		2			
NAGOYA	0	EP	22	34	195	S	1	W	0	U	1		S	34	424	24		1	24		1	14		1
SHIZUO	0	EP	22	34	196								ES	34	412	7		1	6		1	3		1
TOKYO	0	EP	22	34	205								ES	34	435	17		4	23		5			
YOKOHA	0	EP	22	34	215								IS	34	464	13		1	13		1	7		2
MITO	0	IP	22	34	217								IS	34	468	17		1	15		0	4		2
HAMAMA	0	P	22	34	229								S	34	496	9		1	14		1	5		2
OMAHAM	0	EX	22	34	272											11		1	11		1	2		2
HIKONE	0	EP	22	34	284								S	34	538	23		1	23		1	7		1
TOYOOK	0	EP	22	34	437								ES	35	240	9		1	6		1			
OSAKA	0	X	22	35	251											10		4	16		5	4		3

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth km		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
29	12	47	475	002	138	09 01	36	33 01	00		40

NAGANO	2	IP	12	47																		
MATSUS	3	P	12	47	510																	
MATSUM	X	IP	12	47	569	W		U	8				IS	48	023							
KARUIZ	0	IP	12	47	582			D	2				S	48	040							
TAKADA	0	EP	12	48	010								S	48	094							
MAEBAS	0	IP	12	48	045			D	2				S	48	159	19		3	8		3	9		3
KOFU	0	IP	12	48	080			U	1				ES	48	206	7		1	9		1	3		1
KUMAGA	0	EX	12	48	126											9		3	9		4	8		4
KANAZA	0	EP	12	48	146																			
WAJIMA	0	EX	12	48	186											13		1	17		1			
NAGOYA	0	EP	12	48	219	E	1	D	1				S	48	448	5		1	7		1	3		1
GIFU	0	EP	12	48	25								S	48	45	3		1	6		1			
NIIGAT	0	X	12	48	250								S	48	420	6		1	7		1			
TOYAMA	0	P	12	48	275								ES	48	413	6		3	6		3	4		3
HIKONE	0	P	12	48	291								S	48	550	7		1	6		1	3		1

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
30	01	59	29.4	0.03	138	16.02	36	32.01	00	3.7

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N: A_N	P	T (S)	E: A_E	P	T (S)	Z: A_Z	P	T (S)
NAGANO	2	IP	01	59																
MATSUS	3	P	01	59	33.1															
KARUIZ	0	EP	01	59	39.7				S	59	44.6									
TAKADA	0	P	01	59	43.0				S	59	50.6									
MATSUM	0	IS	01	59	45.0															
MAEBAS	0	IP	01	59	45.1			D 2	S	59	54.6	9		4	7		4	7		4
KOFU	0	EP	01	59	49.1				ES	00	01.2	6		1	6		1			
KUMAGA	0	EX	01	59	51.7							8		2	8		4	6		3
WAJIMA	0	EP	01	59	58.7				ES	00	15.4	26		1	26		1			
KANAZA	0	EP	02	00								50		2	60		2	40		2

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
30	13	27	45.9	0.02	138	10.01	36	31.01	00	4.3

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N: A_N	P	T (S)	E: A_E	P	T (S)	Z: A_Z	P	T (S)
MATSUS	3	P	13	27	49.5															
NAGANO	3	IP	13	27	51.5	N 2	E 2	U 15	IS	27	53.9	11	2		15	2		10	2	
MATSUM	1	IP	13	27	54.7	S 3	W 4	U 3	IS	27	59.9									
KARUIZ	0	IP	13	27	55.9	N	W 6	D 24	S	28	00.9	10	1	2	10	1	1			
TAKADA	0	P	13	28	00.7				S	28	08.3									
MAEBAS	1	IP	13	28	02.2	N	W 1	D 4	S	28	12.7	49		1	18		1	17		4
CHICHI	0	P	13	28	05.2	S			IS	28	18.1									
KOFU	0	EP	13	28	05.8				IS	28	17.4	24		0	35		0			
IIDA	0	IP	13	28	08.0	S 1		U 4	IS	28	21.8	20		0	20		1	8		1
KUMAGA	0	EP	13	28	09.0				S	28	30.4	17		5	18		2	8		4
FUNATS	0	P	13	28	11.3				S	28	24.7									
KANAZA	0	EP	13	28	11.8				S	28	31.2									
WAJIMA	0	EX	13	28	12.7							20		1	19		1			
AIKAWA	0	IP	13	28	13.4	S 0	W 0	D 0	IS	28	33.4	7		1	16		1	5		1
UTSUNO	0	P	13	28	13.6		W 2		S	28	31.3	17		1	9		1			
MISHIM	0	EP	13	28	15.4				ES	28	37.2	15		1	15		1	5		1
SHIZUO	0	EP	13	28	17.2				S	28	39.8	8		1	6		1	5		1
GIFU	0	EP	13	28	17.3							8		1	6		1			
KAKIOK	0	EP	13	28	18				ES	28	39	9		1	8		1	4		1
NAGOYA	0	EP	13	28	18.0			D 1	ES	28	41.2	13		1	13		1	5		1
TOKYO	0	P	13	28	18.5				S	28	33.6	13		4	18		4			
MITO	0	IP	13	28	21.3				IS	28	47.0	15		1	11		1	5		1
YOKOHA	0	EP	13	28	21.7				ES	28	46.3	19		1	17		1			
HAMAMA	0	P	13	28	21.8				ES	28	47	13		1	16		2	6		1
OMAEZA	0	EP	13	28	23.1				ES	28	52.6	13		2	16		2	13		2
NIIGAT	0	E	13	28	39.5			D 5	IS	28	38.7	25		1	37		1	9		1
HIKONE	0	ES	13	28	48.5							8		1	9		1	4		1
ONAHAM	0	EX	13	28	50.2							14		1	14		1	4		2
TOYOOK	0	ES	13	29	20.7							8		1	9		1			

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Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
3	03	29	537	003	138	18	02	36	32	01	0	40

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N: A_N	P	T	E: A_E	P	T	Z: A_Z	P	T
												μ		S	μ		S	μ		S
MATSUS	2	P	03	29																
NAGANO	3	IP	03	29	591	N 5	W 3	U 31	IS	30	014	60	1		70	1		70	1	
KARUIZ	0	EP	03	30	026				S	30	083									
MATSUM	0	P	03	30	038				IS	30	098									
TAKADA	0	EP	03	30	063				S	30	143									
GIFU	0	EP	03	30	07				S	30	268	5	2		8	2				
MAEBAS	0	IP	03	30	088			D 2	S	30	180	12	3		5	3		7	3	
KUMAGA	0	EX	03	30	180							10	4		7	3		11	4	
KANAZA	0	EP	03	30	26				ES	30	42									
NIIGAT	0	X	03	30	278							3	1		4	1				
HAMAMA	0	P	03	30	309			D	S	30	560	5	2		5	2		2	2	
WAJIMA	0	EX	03	30	314							10	1		14	1				

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
5	06	56	088	004	138	20	02	36	33	02	0	41

NAGANO	2	IP	06	56																		
MATSUS	3	IP	06	56	126																	
MATSUM	0	EP	06	56	183							IS	56	238								
KARUIZ	0	IP	06	56	198						D 3	S	56	249								
TAKADA	0	P	06	56	230							S	56	310								
MAEBAS	0	IP	06	56	259	N	W	1	D	4		S	56	361	21	3		15	3		24	3
TOYAMA	0	IP	06	56	285				D	3		S	56	395	17	3		18	3		14	3
KOFU	0	EP	06	56	301							IS	56	412	12	0		13	0		6	1
IIDA	0	EX	06	56	318																	
UTSUNO	0	P	06	56	320	S	2	W 3	D	2		S	56	555	14	1		12	1		6	1
KUMAGA	0	EX	06	56	329										21	4		16	4		20	4
KANAZA	0	EP	06	56	359																	
WAJIMA	0	EX	06	56	363										14	1		13	1			
NAGOYA	0	EP	06	56	432	N	1	E 1	D	1		ES	57	060				9	1		3	1
MITO	0	IP	06	56	445				U	1		IS	57	103	11	0		7	0		4	0
HAMAMA	0	P	06	56	464				U	2		ES	57	12	5	2		6	2		4	2
NIIGAT	0	EX	06	56	519							S	57	031	11	1		13	1			
ONAHAM	0	EX	06	57	212										5	1		5	1			

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
6	20	10	321	001	138	13	01	36	33	01	0	45

MATSUS	3	IP	20	10	354				D													
NAGANO	3	IP	20	10	367	N	36	W 11	U	62		IS	10	386	26	2		13	2		13	2
MATSUM	1	IP	20	10	418	S	4	W 8	U	22		IS	10	474								
KARUIZ	X	IP	20	10	424	N	6	W 5	D	7		S	10	478	20	1	1	20	1	2	10	1 2
TAKADA	0	P	20	10	446							S	10	528								
MAEBAS	1	IP	20	10	484	N	3	W 7	D	28		IS	10	583	32		2	35		1	35	3
CHICHI	0	EP	20	10	511							S	11	030								
TOYAMA	0	IP	20	10	514			E 1	D	13		IS	11	056	49		3	29		2	25	2
TAKAYA	0	EP	20	10	515							S	11	033								
KOFU	1	IP	20	10	517	S	5	E 4	U	11		IS	11	043	41		1	44		1	22	1
KUMAGA	0	EP	20	10	533							ES	11	099	36		2	38		1	25	4
IIDA	0	IP	20	10	550	S	8		U	9		IS	11	106	21		2	16		3	10	0
FUNATS	1	IP	20	10	566							IS	11	110								
KANAZA	0	EP	20	10	580							ES	11	165	18		2	22		2	18	2
UTSUNO	0	P	20	10	593	N	2	W 12	D	15		S	11	172	28		1	30		1	19	1
AIKAWA	0	EP	20	11	002	S	1					IS	11	192	8		1	12		1	5	0
WAJIMA	0	EP	20	11	005							ES	11	191	41		1	55		1		
MISHIM	0	EP	20	11	015							IS	11	230	34		1	32		1	15	0
NIIGAT	0	P	20	11	017				U	1		S	11	240	17		1	28		5	6	4
SHIZUO	0	EP	20	11	032							S	11	262	8		1	10		1	5	1
TOKYO	0	P	20	11	041							ES	11	25	31		2	34		4	36	4
AJIRO	0	IP	20	11	048	S		E	U	1		S	11	273	9		0	9		0	3	1
SHIRAK	0	EP	20	11	053							ES	11	312								
GIFU	0	P	20	11	057							S	11	277	34		2	31		1	12	1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
NAGOYA	0	EP	20	11	060	N	2	E	2	D	1	IS	11	296		42		1	30		1	14		1
YOKOHA	0	EP	20	11	060					D	3	S	11	306		41		1	49		1	12		2
FUKUI	0	P	20	11	066							S	11	311										
MITO	0	IP	20	11	074					U	1	IS	11	325		33		0	38		1	10		4
HAMAMA	0	P	20	11	085			W	1	U	1	S	11	369		18		2	15		2	10		1
TSURUG	0	EP	20	11	097							S	11	383										
OMAEZA	0	EP	20	11	104							ES	11	425		14		4	15		4			
OSHIMA	0	P	20	11	108							S	11	379		13		1	13		1	7		2
ONAHAM	0	EP	20	11	137							ES	11	444		19		1	15		1	10		3
HIKONE	0	EP	20	11	138							S	11	405		23		1	17		2	11		1
FUKUSH	0	EX	20	11	138											7		1	7		1	2		1
TOMISA	0	P	20	11	144											12		2	11		3	6		2
KYOTO	0	EP	20	11	215							ES	11	520		8		2	5		2			
TOYOOK	0	EP	20	11	294							ES	12	085		16		1	14		1	3		2
SAKATA	0	EX	20	11	307																			
OSAKA	0	S	20	12	106											16		3	21		4	9		2

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth km		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
10	10	36	271	002	138 18	01	36 32	01	0		40

NAGANO	2	IP	10	36																				
MATSUS	3	IP	10	36	301	S				D														
KARUI7	0	IP	10	36	355					U	3	S	36	405										
MATSUM	0	IP	10	36	366			E	2	D	6	IS	36	425										
TAKADA	0	EP	10	36	407							S	36	491										
MAEBAS	0	EP	10	36	417							S	36	510		7		3	7		4	11		3
TOYAMA	0	P	10	36	474							S	37	011		8		2	8		1	5		3
KOFU	0	EP	10	36	474							ES	36	583		7		1	6		1	4		1
GIFU	0	EP	10	37	016							S	37	240		4		1	8		1			
WAJIMA	0	EX	10	37	042											10		1	19		1			
HAMAMA	0	EP	10	37	06							ES	37	30		11		2	6		2	4		2

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth km		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
10	10	54	468	002	138 10	01	36 33	01	0		41

MATSUS	3	P	10	54	48																			
NAGANO	3	P	10	54	501	S	2	E	2	D	5	IS	54	517		15	2		18	2		90	1	
MATSUM	0	IP	10	54	557					U	3	IS	55	015										
KARUIZ	0	EP	10	54	564							IS	55	025										
TAKADA	0	EP	10	55	003							S	55	081										
MAEBAS	0	IP	10	55	031					D	2	ES	55	132		16		4	11		4	17		4
TOYAMA	0	EP	10	55	05							S	55	19		18		3	12		3	12		3
KOFU	0	EP	10	55	067							ES	55	190		8		1	8		0	4		1
UTSUNO	0	EP	10	55	149			E	3			ES	55	325		11		1	9		1	4		1
WAJIMA	0	EX	10	55	165											25		1	24		1			
NAGOYA	0	EP	10	55	212							S	55	436		12		1	11		1	6		1
GIFU	0	EP	10	55	22							S	55	416		8		1	8		1			
HIKONE	0	EP	10	55	297							ES	55	536		13		1	14		1	5		1
NIIGAT	0	EX	10	55	380							S	55	498		10		1	6		1			

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth km		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
10	18	09	483	002	138 13	01	36 29	01	0		43

MATSUS	3	IP	18	09	517	N	14	W	4	U	58	ES	09	571		10	2		20	2		12	2	
NAGANO	3	IP	18	09	546					U														

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
MATSUM	1	IP	18	09	568	S 2	W	5	U	12		IS	10	017									
KARUI7	0	IP	18	09	572		W	14	D	28		S	10	033	10	1	2	15	1	2	50		1
TAKADA	1	P	18	10	026							S	10	108									
MAEBAS	1	IP	18	10	040	N	W	1	D	6		S	10	143	29		5	27		4	24		3
CHICHI	1	EP	18	10	056							S	10	190									
KOFUBB	0	IP	18	10	070				U	1		IS	10	191	30		0	50		0	16		0
TOYAMA	0	IP	18	10	078				D	4		IS	10	218	24		3	23		1	15		1
IIDA	0	EP	18	10	098							ES	10	238	6		2	11		1	5		1
KUMAGA	0	EP	18	10	100							S	10	266	26		5	25		5	24		5
FUNATS	0	IP	18	10	121							IS	10	254									
KANAZA	0	EP	18	10	140							ES	10	320	20		1	21		2	15		2
UTSUNO	0	P	18	10	151		W	3	D	4		IS	10	326	16		2	13		1	6		1
AIKAWA	0	IP	18	10	174	N	W		U	1		IS	10	378	11		0	22		0	8		0
WAJIMA	0	EP	18	10	176							ES	10	359	31		1	32		1			
OMAEZA	0	EP	18	10	185							ES	10	537	14		3	15		3			
MISHIM	0	P	18	10	190							IS	10	379	19		1	19		1	7		1
AJIRO	0	IP	18	10	203				D			S	10	414	5		0	6		0	2		0
SHIZUO	0	EP	18	10	203							S	10	408	10		0	8		0	3		1
NIIGAT	0	X	18	10	208							S	10	420	15		1	12		1			
GIFU	0	EP	18	10	216							ES	10	434	14		2	8		1	5		1
NAGOYA	0	EP	18	10	219							S	10	440	13		1	10		1	8		1
MITO	0	IP	18	10	235				U	1		IS	10	484	12		0	12		0	5		1
YOKOHA	0	EP	18	10	236							IS	10	472	37		1	26		1			
HAMAMA	0	EP	18	10	24							S	10	491	11		1	12		2	5		2
OSHIMA	0	P	18	10	275							S	10	516	14		0	8		1	3		
FUKUI	0	X	18	10	276																		
TSURUG	0	EP	18	10	285							ES	10	557									
TOYOOK	0	EP	18	10	498							S	11	278	10		1	6		1			
ONAHAM	0	EX	18	11	011										14		1	12		1	4		2

Origin Time					Location						Depth km	Magnitude •
d	h	m	• s	± • s	Longitude °	′	± ′	Latitude °	′	± ′		
11	12	05	286	001	138	17	01	36	34	01	0	47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
MATSUS	3	IP	12	05	314	N	W		U														
NAGANO	4	IP	12	05	330	N 2	E	3	U	12		ES	05	335	15	2	2	12	2	1	70	1	
KARUI7	2	IP	12	05	383		E	4	U	6		S	05	433	30	1	1	30	1	1	10	1	1
MATSUM	1	IP	12	05	385	S 2	W	5	U	12		IS	05	442									
TAKADA	0	P	12	05	412	N 7	E	2	U	22		S	05	494									
MAEBAS	0	IP	12	05	433	N 4	W	9	D	33		S	05	539	10	1	4	58		4	85		3
TOYAMA	0	IP	12	05	482		E	2	D	17		IS	06	025	65		2	50		2	50		2
TAKAYA	0	P	12	05	483							S	06	003									
KOFU	0	IP	12	05	484	S 12	E	8	U	20		IS	06	003	46		1	82		1	33		1
CHICHI	0	EP	12	05	485							IS	06	000									
KUMAGA	0	EP	12	05	489							S	06	039	78		5	68		5	62		4
IIDA	0	IP	12	05	516	S 8	W	6	U	10		IS	06	068	41		1	46		1	17		1
FUNATS	0	IP	12	05	526							IS	06	073									
UTSUNO	0	IP	12	05	553	N 1	W	18	D	9		S	06	127	30		1	27		2	24		1
WAJIMA	0	EP	12	05	558							S	06	147	12	1	1	15	1	1	30		1
KANAZA	0	EP	12	05	558							ES	06	140	29		3	26		2	17		2
AIKAWA	0	IP	12	05	562	N 4	W		U	6		IS	06	152	13		1	14		0	8		1
OMAEZA	0	EP	12	05	566							ES	06	353	34		4	35		4	18		2
NIIGAT	0	EP	12	05	589							IS	06	207	43		1	25		1	8		1
MISHIM	0	IP	12	05	593				U			IS	06	203	56		1	52		1	18		1
SHIZUO	0	EP	12	06	004							S	06	227	9		1	16		1	8		2
SHIRAK	0	EP	12	06	005							ES	06	256									
AJIRO	0	P	12	06	009							IS	06	227	12		0	13		0	4		0
GIFU	0	P	12	06	025							S	06	240	55		2	70		2	16		1
MITO	0	EP	12	06	028							IS	06	278	42		1	48		0	16		2
NAGOYA	0	P	12	06	028				U	2		IS	06	254	57		1	52		1	23		1
FUKUI	0	P	12	06	040	N 4	E	4	D	3		S	06	326									
HAMAMA	0	P	12	06	052							ES	06	30·	31		2	35		2	19		1
OSHIMA	0	P	12	06	067				U	2		S	06	322	21		1	13		1	5		1
HIKONE	0	EP	12	06	072							IS	06	352	45		1	45		1	21		2
TSURUG	0	EP	12	06	076							ES	06	347									
TOMISA	0	P	12	06	085										16		2	14		3	9		3
ONAHAM	0	EX	12	06	094							ES	06	439	27		1	30		1	12		2
FUKUSH	0	EP	12	06	095							ES	06	396	16		1	13		1	3		1
TSU	0	EP	12	06	169																		

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A (×10⁻³ mm)								
						N	E	Z					N			E			Z		
			h	m	• s	μ	μ	μ		m	• s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
KYOTO	0	EP	12	06	188				IS	06	520		10		2	8		0	3		6
NARA	0	EP	12	06	188																
SENDAI	0	EP	12	06	189				EX	07	032		8		3	5		2			
SAKATA	0	EP	12	06	262				ES	06	592										
TOYOOK	0	P	12	06	268			U	S	07	062		27		1	23		1	4		1
OSAKA	0	EP	12	06	281				S	07	072		45		4	33		4	17		1
SUMOTO	0	EP	12	06	316				ES	07	185		4		4	6		2	3		2
									IX	06	394										
									EX	07	233										
WAKAYA	0	P	12	06	364				S	07	163		9			7					
OKAYAM	0	EP	12	06	425		E		IS	07	354		10		0	6		4	5		4
SHIONO	0	EP	12	06	427				ES	07	290					6		2	3		1

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
11	13	17	417	002	138 14	02	35 34	01		20	38

MATSUS	2	P	13	17																				
NAGANO	3	IP	13	17	454	N	15	W	4	U	64	S		17	475	45	1	0	70	1	0	38	1	
MATSUM	0	IP	13	17	501					U	2	IS		17	561									
KARUIZ	0	P	13	17	502							S		17	552									
TAKADA	0	P	13	17	532							S		18	018									
MAEBAS	0	EX	13	17	557											10		4	9		4	9		4
TOYAMA	0	IP	13	18	003					D	3	S		18	150	7		1	7		1	5		2
WAJIMA	0	EP	13	18	069							S		18	255	30		1	46		1			
NAGOYA	0	EP	13	18	144							ES		18	376	8		1	9		1	3		1
NIIGAT	0	X	13	18	335											8		1	4		1			

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
12	09	43	053	001	138 19	01	36 32	01		0	50

MATSUS	4	IP	09	43	085	S		E		D														
NAGANO	4	IP	09	43	104	N	64	W	28	U	69	S		43	132	17	2	3	21	2	3	11	2	2
KARUIZ	2	IP	09	43	133	S	40	E	52	U	80	S		43	184	90	1	2	80	1	2	40	1	2
MATSUM	2	IP	09	43	155	N	9	E	20	D	49	IS		43	215	35	1	3	30	1	3	15	1	3
TAKADA	1	P	09	43	183	N	5	E	2	U	20	S		43	265	30	1	2	30	1	2	20	1	3
MAEBAS	1	IP	09	43	185	N	1	W	3	D	7	S		43	289	31	1	4	21	1	3	29	1	4
CHICHI	2	IP	09	43	233	S	5	E	8			IS		43	360									
KOFU	1	IP	09	43	237	S	31	E	22	U	55	ES		43	360	13	1	4	15	1	4	53		1
TAKAYA	0	P	09	43	243							S		43	394									
TOYAMA	0	IP	09	43	254							IS		43	394	22	1	4	18	1	4	20	1	4
KUMAGA	1	P	09	43	259					D	1	S		43	410	17	1	4	19	1	5	17		4
FUNATS	0	IP	09	43	274	S	43	E	18			IS		43	421									
IIDA	0	IP	09	43	280	S	6	W	4	U	10	IS		43	428	62		2	76		4	39		3
UTSUNO	1	IP	09	43	313	N	2	W	20	D	23	IS		43	478	10	1	1	10	1	1	59		1
KANAZA	0	P	09	43	334	N	3	E	3	D	15	ES		43	500	74		2	11		2	44		3
AIKAWA	0	IP	09	43	336	N	3	W		U	7	IS		43	526	28		1	38		1	15		1
OMAEZA	0	EP	09	43	347							S		44	097	57		5	90		5	38		2
WAJIMA	0	EP	09	43	348							S		43	531	13	1	1	17	1	1	36		1
MISHIM	0	IP	09	43	352	S	8	E	1	U	12	IS		43	587	69		1	12	1	1	27		1
NIIGAT	0	EP	09	43	353					U	1	IS		43	570	62		4	13	1	6	42		4
SHIZUO	0	IP	09	43	355	S	5			U	3	ES		43	581	25		2	38		1	16		2
AJIRO	0	IP	09	43	369	S	3	E	1	U	4	ES		43	584	12		0	16		0	6		1
SHIRAK	0	EP	09	43	380							IS		44	011									
GIFU	0	P	09	43	382	N	4	E	4	D	3	S		44	014	95		2	13	1	1	64		2
YOKOHA	0	IP	09	43	387	S	6	E	2	U	16	IS		44	029	11	1	4	11	1	4	60		2
MITO	2	IP	09	43	388							IS		44	026	27	1	1	22	1	0	67		1
FUKUI	0	P	09	43	389							S		44	060									
NAGOYA	0	P	09	43	392	N	3	E	2	D	4	S		44	024	94		2	10	1	2	58		1
HAMAMA	0	IP	09	43	412					U	2	S		44	070	11	1	2	86		1	63		2
OSHIMA	0	IP	09	43	423	S	7			U	10	S		44	114	28		1	27		1	25		2
TSURUG	0	EP	09	43	435							ES		44	123									
TOMISA	0	P	09	43	436							ES		44	220	34		4	36		2	22		4

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^P μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
ONAHAM	0	EP 09 43 444				IS 44 137	95		1	10	1	1	31		1
HIKONE	0	P 09 43 455				IS 44 133	11	1	1	10	1	1	39		1
CHOSHI	0	EP 09 43 458				ES 44 121									
FUKUSH	0	IP 09 43 461	N 5	E 4	U 3	S 44 142	26		1	17		2	11		5
KYOTO	0	EP 09 43 507				IS 44 295	16		2	15		2	7		2
SENDAI	0	EP 09 43 542				ES 44 320	12		4	13		4	6		6
NARA	0	EP 09 43 547				ES 44 327									
OSAKA	0	EP 09 43 560				ES 44 351	76		4	76		5	29		3
OWASE	0	P 09 43 574				S 44 380	6		1	7		2	7		2
SAKATA	0	EP 09 44 017				IS 44 319									
TOYOOK	0	IP 09 44 032			U		25		1	37		1	7		1
SUMOTO	0	P 09 44 034				ES 44 478	8		5	6		5	4		4
						IX 44 164									
KOBE	0	EP 09 44 071				ES 44 513									
TOKUSH	0	EP 09 44 071													
AKITA	0	EX 09 44 102				EX 44 584	10		5	10		4	5		2
SHIONO	0	EP 09 44 158				ES 45 015	10		1	10		1	9		2
WAKAYA	0	P 09 44 163				S 44 550	16			9					
OKAYAM	0	IP 09 44 189	W		U	IS 45 154	10		1	10		3	10		4
MUROTO	0	P 09 44 198				S 45 165	6		4	5		3	3		2
MIZUSA	0	EP 09 44 219				S 44 579	25		2	15		2	12		1
TAKAMA	0	EP 09 44 241				ES 45 117	6		2	6		2	2		1
MATSUY	0	EP 09 44 514				ES 45 547	3		3	1		4			
SHIMON	0	EX 09 45 04													
OITA	0	EX 09 45 521				EX 46 325	14		3	13		4	8		4
KUMAMO	0	EX 09 46 515					6		2	5		2			

Origin Time		Location					Magnitude
		Longitude		Latitude		Depth km	
d h m • s	± • s	° ′	± ′	° ′	± ′		•
12 20 27 492	002	138 09	01	36 30	01	0	40

MATSUS	3	IP	20	27	518	S	W	D											
NAGANO	3	IP	20	27	543	N 7		U 11		S	27	564	45	1	1	30	1	0	25 1
MATSUM	X	IP	20	27	575			U 9		IS	28	029							
KARUIZ	0	P	20	27	587					S	28	038							
TAKADA	0	P	20	28	027					S	28	099							
MAEBAS	0	IP	20	28	051			D 2		S	28	158	16		3	11		3	9 2
KOFU	0	IP	20	28	086			U 1		ES	28	210	10		0	12		0	3 0
TOYAMA	0	P	20	28	096					S	28	216	13		2	10		3	11 3
IIDA	0	EP	20	28	112					ES	28	256	4		4	3		3	5 0
FUNATS	0	P	20	28	116					S	28	269							
KUMAGA	0	EX	20	28	127								11		4	8		3	10 4
KANAZA	0	EP	20	28	130					ES	28	320							
WAJIMA	0	EX	20	28	194								8		1	10		1	
GIFU	0	EP	20	28	22					S	28	435	13		2	6		1	
NAGOYA	0	EP	20	28	224	N 1	E 1	D 1		ES	28	452	8		1	8		1	4 1
HAMAMA	0	EP	20	28	25					ES	28	51	4		3	5		3	2 2
YOKOHA	0	EP	20	28	256					IS	28	497	10		1	6		1	
NIIGAT	0	EX	20	28	412								4		2	7		1	
HIKONE	0	ES	20	28	534								9		1	11		1	

Origin Time		Location					Magnitude
		Longitude		Latitude		Depth km	
d h m • s	± • s	° ′	± ′	° ′	± ′		•
15 03 54 595	001	138 13	01	36 33	00	20	39

MATSUS	2	P	03	55						S	55	128							
NAGANO	2	IP	03	55						S	55	145							
KARUIZ	0	EP	03	55	074			U 2		S	55	192							
MATSUM	0	IP	03	55	082														
TAKADA	0	EP	03	55	112														
KOFU	0	IP	03	55	178			U 2		ES	55	298	7		0	8		0	3 1
KUMAGA	0	EX	03	55	210								7		5	6		3	6 4
NIIGAT	0	EX	03	55	305								2		2	4		1	
MITO	0	IP	03	55	322			D 1		IS	55	572	9		0	9		0	3 0

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A Cent.								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
WAJIMA	0	EX 03 55 326					10		1	10		1			
GIFU	0	EP 03 55 34					4		1	8		2			

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
15	09	42	416	002	138 16 01		36 36 01		0 41

MATSUS	3	IP	09	42	453	S		E		D														
NAGANO	3	IP	09	42	463	N	49	W	1	U	73	ES	42	484	50	1	1	40	1	1	35	1		
KARUIZ	0	EP	09	42	512							ES	42	578										
TAKADA	0	EP	09	42	546							S	43	028										
MATSUM	1	P	09	42																				
TOYAMA	0	IP	09	43	003					D	4	S	43	09	10		2	14		2	8		1	
KUMAGA	0	EX	09	43	012										10		4	10		4	7		4	
KOFU	0	IP	09	43	014	S	3	E	3	U	5	IS	43	144	10		0	15		0	5		1	
IIDA	0	IP	09	43	048					U	8	IS	43	206	8		2	7		2	10		0	
KANAZA	0	EP	09	43	080					D		ES	43	280	22		6	34		7	24		6	
AIKAWA	0	IP	09	43	091	N				U		IS	43	282	5		1	10		0	4		0	
UTSUNO	0	P	09	43	092			W	3	D	2	S	43	266	7		1	5		2	6		1	
FUNATS	0	IP	09	43	097							IS	43	211										
WAJIMA	0	EP	09	43	109							ES	43	291	32		1	45		1				
MISHIM	0	EP	09	43	132							ES	43	334	10		1	6		1	2		1	
NIIGAT	0	EX	09	43	143							IS	43	340	6		1	26		1				
NAGOYA	0	EP	09	43	162	N	1	E	1	D	1	IS	43	392	17		1	16		1	8		1	
YOKOHA	0	EP	09	43	162							IS	43	411	10		1	13		1				
GIFU	0	EP	09	43	169							S	43	370	14		2	14		1				
HAMAMA	0	P	09	43	181							ES	44	45	7		1	9		2	4		1	
MITO	0	IX	09	43	182							IS	43	424	6		0	7		0	2		1	
HIKONE	0	EP	09	43	260							S	43	499	11		1	16		2	5		2	

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
21	22	05	104	002	138 17 01		36 34 01		0 48

MATSUS	3	P	22	05	130																			
NAGANO	4	IP	22	05	141	N	1	W		U	8	IS	05	162	36	2		44	2		22	2		
KARUIZ	1	IP	22	05	203	S	8	E	6	U	10	S	05	256	45	1	3	40	1	1	25	1	2	
MATSUM	1	IP	22	05	210			E		D	2	IS	05	266	30	1	3	20	1	3	50		3	
TAKADA	1	P	22	05	238	N	7	E	2	U	31	S	05	318										
MAEBAS	1	IP	22	05	253	N	1	W	4	D	11	S	05	355	17	1	3	92		3	15	1	4	
CHICHI	0	EP	22	05	285							ES	05	405										
TAKAYA	0	P	22	05	310							S	05	436										
KOFU	0	IP	22	05	312	S						ES	05	430	49		3	54		2	23		2	
TOYAMA	0	IP	22	05	314			E	2	D	12	IS	05	451	54		3	63		2	77		4	
KUMAGA	0	EP	22	05	320							S	05	500	13	1	5	91		4	88		3	
IIDA	0	IP	22	05	322	S	5	W	3	U	6	IS	05	494	36		1	41		1	18		3	
TOMISA	0	EX	22	05	327							ES	06	132	18		3	17		2	11		2	
FUNATS	0	IP	22	05	355							IS	05	503										
UTSUNO	0	P	22	05	373	N	3	W	8	D	9	S	05	545	38		4	38		3	15		2	
AIKAWA	0	IP	22	05	375					D		IS	05	578										
WAJIMA	0	EP	22	05	387							S	05	573	11	1	1	12	1	1	21		1	
KANAZA	0	P	22	05	388	S	3	E	3	D	15	S	05	572	43		2	32		2	34		2	
MISHIM	0	IP	22	05	407	S	1			U	2	ES	06	013	25		1	32		1	15		1	
NIIGAT	0	P	22	05	420					U	4	IS	06	026	33		4	82		6	17		4	
AJIRO	0	P	22	05	429							ES	06	056	5		0	4		0	3		1	
TOKYO	0	EP	22	05	434							ES	06	042	61		4	77		5				
SHIZUO	0	EP	22	05	441							ES	06	058	13		6	16		2	9		2	
SHIRAK	0	EP	22	05	441							ES	06	084										
GIFU	0	P	22	05	443	S	4	W	5	U	3	S	06	068	55		2	94		2	28		2	
MITO	0	IP	22	05	447					U	1	IS	06	093	31		1	29		1	23		3	
NAGOYA	0	P	22	05	453	S	2	W	1	U	2	IS	06	086	59		2	45		1	32		1	
FUKUI	0	P	22	05	469	S	6	W	9	U	7	S	06	128										
HAMAMA	0	P	22	05	475							S	06	133	45		1	40		2	19		2	

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
TSURUG	0	EP	22	05	485							S	06	179									
OSHIMA	0	P	22	05	488	S	3	E		U	3				11		2	12		2	8		2
FUKUSH	0	EP	22	05	507							S	06	212	11		1	10		1	6		4
OMAEZA	0	EP	22	05	509							ES	06	271	37		4	67		4			
HIKONE	0	EP	22	05	510							ES	06	193	53		1	51		1	24		1
ONAHAM	0	IP	22	05	515					U	5	IS	06	201	33		2	29		1	11		2
KYOTO	0	EP	22	05	573	S		W		U		IS	06	322	13		1	10		1	5		0
NARA	0	EP	22	05	586							ES	06	366									
SAKATA	0	EP	22	06	004							ES	06	380									
SENDAI	0	EP	22	06	01							ES	06	444	9		2	5		4	3		3
OWASE	0	P	22	06	024										5		2	4		2	3		2
OSAKA	0	EP	22	06	060							ES	06	447	46		4	44		4	14		2
TOYOOK	0	P	22	06	084	S		W		U		IX	07	497	43		1	23		1	7		1
SUMOTO	0	EP	22	06	096							ES	06	577	6		7	4		3	2		2
												EX	06	187									
												EX	07	056									
AKITA	0	EX	22	06	130										6		3	7		3			
KOBE	0	EX	22	06	14																		
WAKAYA	0	P	22	06	158							S	07	031	7			6					
TOKUSH	0	EP	22	06	171																		
MIZUSA	0	EP	22	06	190							ES	07	030	8		2	8		2	6		1
OKAYAM	0	EP	22	06	250							ES	07	198	6		3	10		4	10		4
SHIONO	0	EP	22	06	262							ES	07	116	7		2	7		3	4		2
SHIMON	0	EP	22	07	13							ES	08	34									
OITA	0	EX	22	08	394										6		4	9		5			

Origin Time							Location								Magnitude
							Longitude			Latitude			Depth km		
d	h	m	• s	± • s			°	′	± ′	°	′	± ′			
24	10	07													

Origin Time							Location								Magnitude
							Longitude			Latitude			Depth km		
d	h	m	• s	± • s			°	′	± ′	°	′	± ′			•
25	07	02	324	001			138	18	01	36	32	01	0		40

MATSUS	2	P		10	07																							
NAGANO	3	IP		10	07	308	N	3	W	2	U	42	S		07	327											
KARUIZ	0	P		10	07	350					D		S		07	398											
MATSUM	0	EP		10	07	356							IS		07	414											
TAKADA	0	EP		10	07	380							S		07	454											
MISHIM	0	EP		10	07	414							ES		08	170	6		1	6		1	3		0		
KOFU	0	EP		10	07	453							IS		07	569	10		1	14		1	7		1		
KUMAGA	0	EX		10	07	468											6		1	7		5	5		3		
WAJIMA	0	EX		10	07	543											13		1	15		1					
ONAHAM	0	EX		10	08	350											7		1	6		1	5		1		

MATSUS	2	P		07	02																							
NAGANO	3	IP		07	02	373	S	1	E		D	13	S		02	394	35	1	0	60	1	0	38	1			
KARUIZ	0	P		07	02	419							S		02	465											
MATSUM	0	IP		07	02	425					U	2	IS		02	485											
TAKADA	0	P		07	02	460							S		02	536											
MAEBAS	0	IP		07	02	474					D	2	ES		02	570	11		3	4		2	9		4		
KOFU	0	IP		07	02	518	S	1	E		U	2	ES		03	039	6		1	6		1	5		1		
TOYAMA	0	P		07	02	519					D		ES		03	058	6		3	5		2	5		1		
KUMAGA	0	EP		07	02	535							S		03	080	10		3	8		4	7		4		
IIDA	0	EP		07	02	554							ES		03	104	3		1	2		1	1		1		
WAJIMA	0	EX		07	03	026											15		1	17		1					
NIIGAT	0	EX		07	03	059											4		1	5		4					
NAGOYA	0	EP		07	03	072	N	1			D	1	S		03	300	6		1	8		1	4		1		
GIFU	0	EP		07	03	08							S		03	292	6		2	12		2					
HAMAMA	0	P		07	03	095							S		03	346	5		1	5		2	2		1		
TOKYO	0	EP		07	03	128							ES		03	340	5		4	4		4	7		4		
HIKONE	0	EP		07	03	173							S		03	413	10		1	7		1					

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude — N				E				Z			
		h m • s	N μ	E μ	Z μ	m • s	An μ	P	T S		Ae μ	P	T S		Az	P	T S	
YOKOHA	0	ES 07 03 338					8		1		6		2					
TOYOOK	0	X 07 04 076					8		1		10		2					

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
26	09	41	518	003	138 12 02		36 33 01		0	40

MATSUS	2	P	09	41																				
NAGANO	2	IP	09	41																				
MATSUM	0	IP	09	42	014					U	4	IS	42	070										
KARUIZ	0	IP	09	42	016	N		W		D	3	S	42	070										
TAKADA	0	EP	09	42	055							S	42	145										
MAEBAS	0	IP	09	42	080					D	2	ES	42	191	19	3	8	4	13	3				
KOFU	0	EP	09	42	127							ES	42	233	6	3	8	3	3	1				
KANAZA	0	EP	09	42	212																			
NAGOYA	0	EP	09	42	266	N	1			D	1	ES	42	492	8	1	7	1	3	1				
WAJIMA	0	EX	09	42	272										21	1	23	1						
NIIGAT	0	EX	09	42	433										4	2	4	3						
ONAHAM	0	EX	09	43	035										5	1	7	1	2	1				

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
26	12	31	561	003	138 22 02		36 32 01		0	43

MATSUS	3	P	12	32	008																			
NAGANO	3	IP	12	32	019	N	32			U	72	ES	32	040	13	2		10	2		70	1		
KARUIZ	0	EP	12	32	070							IS	32	120										
MATSUM	1	IP	12	32	071	S		W		U	4	IS	32	130										
TAKADA	0	P	12	32	091	N	5	E	1	U	9	S	32	173										
MAEBAS	0	IP	12	32	132	N		W	1	D	6	S	32	231	20	4		8	3		15	3		
KOFU	0	IP	12	32	170	S	2	E	1	U	3	ES	32	305	10	3		12	4		3	1		
IIDA	0	IP	12	32	198	S	3			U	2	ES	32	354	10	1		9	2		3	2		
KUMAGA	0	EP	12	32	218							ES	32	319	27	5		20	4		8			
YOKOHA	0	EP	12	32	23							S	32	48	18	2		18	2					
KANAZA	0	EP	12	32	238							ES	32	442										
UTSUNO	0	P	12	32	241			W	3	D	2	S	32	424	12	1		7	2		5	1		
AIKAWA	0	IP	12	32	247					U	1	IS	32	442	10	1		14	0		4	1		
WAJIMA	0	EP	12	32	269							S	32	450	63	1		81	1					
NIIGAT	0	EP	12	32	276							S	32	490	20	1		20	1		6	1		
TOKYO	0	P	12	32	280							S	32	500	9	3					13	4		
												EX	32	38										
MISHIM	0	EP	12	32	298							S	32	511	6	2		6	2		1	0		
OMAEZA	0	EP	12	32	308										9	4		7	4					
NAGOYA	0	EP	12	32	316	N	1	E	1	D	1	S	32	546	17	2		17	2		8	2		
GIFU	0	P	12	32	318							S	32	536	17	2		20	2		6	2		
MITO	0	EP	12	32	327							IS	32	570	9	1		12	0		5	2		
HAMAMA	0	IP	12	32	341							ES	33	01	9	1		11	2		6	2		
HIKONE	0	EP	12	32	370							S	33	057	14	1		12	1		7	1		
TOYAMA	0	IP	12	33	061					D	5	S	33	214	25	2		16	2		13	2		
ONAHAM	0	EX	12	33	074										9	2		6	1		4	3		
OSAKA	0	EX	12	33	339										14	2		12	3		6	2		

Origin Time					Location					Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
26	16	34	500	001	138 21 01		36 33 01		0	50

MATSUS	3	P	16	34	539																			
NAGANO	4	IP	16	34	548	N	6	W	5	U	48	ES	34	570	25	2	1	38	2	1	11	2		

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A/T (μ/s)								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
																	S			S			S
KARJI7	2	IP	16	34	596	S	38	E	6	U	34	S	35	046	90	1	3	90	1	3	15	1	2
MATSUM	2	IP	16	35	007	N	5	E	8	D	19	IS	35	073	45	1	3	25	1	3	10	1	3
TAKADA	1	P	16	35	033	N	9	E	4	U	27	S	35	109	30	1	4	35	1	4	20	1	4
MAEBAS	1	IP	16	35	056			W	1	D	6	S	35	150	23	1	3	25	1	3	36	1	4
CHICHI	0	P	16	35	079	S						S	35	208									
TOYAMA	0	IP	16	35	102	S	1	E	3	D	20	IS	34	250	13	1	3	14	1	2			
KOFU	1	IP	16	35	103	S	13	E	8			ES	35	231	85		3	17	1	3			
TAKAYA	0	EP	16	35	106							S	35	260									
KUMAGA	0	EP	16	35	110							S	35	250	24	1	4	20	1	5	8		
YOKOHA	0	EP	16	35	130					D	10	IS	35	378	12	1	3	13	1	2	54		3
IIDA	1	IP	16	35	138	S	2	W	1	U	5	IS	35	294	53		1	57		3	43		3
FUNATS	0	P	16	35	148							S	35	306									
UTSUNO	0	P	16	35	161	N	2	W	5	D	2	IS	35	337	74		3	58		3	6		1
TOKYO	0	EP	16	35	177							ES	35	390	16	1	4	14	1	5	16	1	4
KANAZA	0	P	16	35	180					D		S	35	390	57		2	50		2	65		2
AIKAWA	0	IP	16	35	180	N	10	W	0	U	11	IS	35	364	26		2	29		1	9		1
WAJIMA	0	P	16	35	190					U	4	S	35	379	14	1	1	11	1	1	39		1
NIIGAT	0	P	16	35	197							IS	35	407	61		5	12	1	6	28		4
AJIRO	0	IP	16	35	226	S	1	E	0	U	1	ES	35	470	7		1	12		1	5		1
SHIZUO	0	P	16	35	236	S	1	W	3			S	35	468	19		1	35		7			
SHIRAK	0	EP	16	35	239							ES	35	478									
NAGOYA	0	P	16	35	248	N	4	E	3	D	4	S	35	460	69		1	77		1	47		1
MITO	1	IP	16	35	249							IS	35	480	83		1	72		1	42		3
GIFU	0	P	16	35	252							S	35	480	11	1	2	58		1	46		2
FUKUI	0	P	16	35	266							S	35	518									
HAMAMA	0	IP	16	35	275	N	2	E	2	U	6	IS	35	538	97		1	71		1	45		1
OSHIMA	0	IP	16	35	285					U	5	S	35	577	28		1	27		1	21		1
OMAEZA	0	EP	16	35	286							S	35	579	63		4	82		4	27		4
TOMISA	0	EP	16	35	296							ES	35	572	27		2	19		3	19		3
FUKUSH	0	P	16	35	299	S	3	W	3	D	2	S	35	589	19		1	17		1	11		4
ONAHAM	0	EP	16	35	306							ES	36	013	70		1	89		1	19		1
HIKONE	0	P	16	35	315							S	36	006	95		1	74		1	23		1
TSURUG	0	EP	16	35	338							S	36	014									
NARA	0	EP	16	35	368							ES	36	138									
KYOTO	0	EP	16	35	371							ES	36	128	14		1				7		5
SAKATA	0	EP	16	35	388							S	36	158									
SENDAI	0	EP	16	35	392							ES	36	180	13		2	14		2	5		4
TSU	0	EP	16	35	414							IS	36	082									
OWASE	0	P	16	35	438							S	36	246	6		2	7		2	6		1
OSAKA	0	EX	16	35	479							X	36	318	61		3	61		5	23		1
TOYOOK	0	EP	16	35	487							S	36	304	28		1	50		1	9		1
KOBE	0	EX	16	35	52																		
HACHIJ	0	EP	16	35	554							EX	39	394	8			9					
MIZUSA	0	P	16	35	555							S	36	405	13		4	15		2	8		2
SUMOTO	0	EP	16	35	565							ES	36	423	8		5	6		5	3		2
CHOSHI	0	ES	16	35	580																		
WAKAYA	0	P	16	35	590							S	36	443	17			9					
MISHIM	0	IX	16	35		S	4	E	1	U	4	IS	35		45		3	10	1	4	26		1
SHIONO	0	EP	16	36	002							ES	36	473	9		1	7		5	6		1
AKITA	0	EX	16	36	052							EX	36	428	10		3	9		4	8		3
OKAYAM	0	EP	16	36	056							ES	36	576	10		2	10		2	10		3
MUROTO	0	P	16	36	075							EX	36	200	3		3	5		5	3		5
TAKAMA	0	EP	16	36	077							ES	37	045	7		2	6		1	1		1
TOKUSH	0	EP	16	36	150																		
SHIMON	0	EP	16	36	30							ES	37	50									
OITA	0	EX	16	36	538							EX	38	173	11		5	15		4			
KAGOSH	0	EX	16	39	235										5		3	4		3			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
26	18	01	278	002	138 20	01	36 34	01	0	40

MATSUS	2	P	18	01																				
NAGANO	3	IP	18	01	327	N		W	1	U	9	S		01	343	20	1		40	1				
KARUIZ	0	IP	18	01	371					U	4													
MATSUM	0	IP	18	01	387					U	4	IS		01	453									
TAKADA	0	EP	18	01	402							S		01	476									
MAEBAS	0	P	18	01	424					D		S		01	520	11		3	12		3	17		3
KOFU	0	IP	18	01	474	S	2	E	1	U	2	ES		02	006	8		1	9		4	3		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10P μ							
						N		E		Z					N			E			Z	
			h	m	·s		μ		μ		μ		m	·s	AN	P	T	AE	P	T		
																	s			s	μ	s
TOYAMA	0	IP	18	01	477			E	1	D	1	ES	02	03	6		2	2		2	5	3
KUMAGA	0	EP	18	01	493							S	02	028	10		3	12		1	8	
KANAZA	0	EP	18	01	560							ES	02	140								
WAJIMA	0	EX	18	01	594										14	1	1	14		1		
MITO	0	EP	18	02	030							IS	02	252	12		1	9		1	4	1
GIFU	0	EP	18	02	04							S	02	260	9		1	4		1	4	1
NAGOYA	0	EP	18	02	045							S	02	272	6		1	5		1	4	1
HAMAMA	0	P	18	02	053	S	1					S	02	310	7		1	5		1	4	1
NIIGAT	0	EX	18	02	110										7		1	4		1		
TOKYO	0	EP	18	02	128							ES	02	348	8		4				10	4
ONAHAM	0	EX	18	02	284										6		1	5		1		
HIKONE	0	S	18	02	391										7		1	7		1	2	1

Origin Time					Location								Magnitude
					Longitude			Latitude			Depth km		
d	h	m	·s	±·s	°	′	± ′	°	′	± ′			·
27	04	05	307	002	138	19	01	36	32	01	0		45

MATSUS	3	P	04	05	339																		
NAGANO	3	IP	04	05	360	N	70	W	10	U	60	S	05	380	13	2	0	15	2	0	14	2	
MATSUM	1	IP	04	05	406	S		W	2	U	5	IS	05	462	15	1	3						
KARUIZ	0	IP	04	05	411			E	4	U	4	S	05	461	20	1	2	25	1	2	10	1	2
TAKADA	0	P	04	05	449							S	05	521									
MAEBAS	1	IP	04	05	464	N	1	W	1	D	9	S	05	565	73		4	49		4	80		3
CHICHI	0	EP	04	05	501							S	06	016									
TOYAMA	0	IP	04	05	503			E	2	D	6	IS	06	047	40		3	45		3	39		3
KOFU	0	IP	04	05	503	S	7	E	6	U	9	ES	06	033	24		2	29		1	30		2
KUMAGA	0	EP	04	05	505							S	06	063	17	1	5	56		4	8		
IIDA	0	IP	04	05	542	S	3	W	1	U	3	IS	06	096	18		2	17		3	10		3
FUNATS	0	P	04	05	545							S	06	095									
UTSUNO	0	P	04	05	547	N	2	W	12			S	06	117	24		2	20		2	4		0
KANAZA	0	EP	04	05	580							ES	06	150	21		2	19		3	23		2
WAJIMA	0	EP	04	05	587							S	06	175	73		1	63		1	15		1
AIKAWA	0	IP	04	05	590	N	3	W		U	3				12		1	13		1	5		1
YOKOHA	0	EP	04	06	00					U	5	IS	06	24	40		2	45		2	12		2
NIIGAT	0	P	04	06	011					U		IS	06	229	21		1	44		6	4		1
MISHIM	0	EP	04	06	013					U		IS	06	228	27		1	25		1	9		1
SHIZUO	0	EP	04	06	014							ES	06	257	8		1	8		4	7		2
TOKYO	0	EP	04	06	040							ES	06	248	33		5	41		4	46		4
GIFU	0	P	04	06	046							S	06	268	35		2	39		2			
FUKUI	0	P	04	06	054																		
MITO	0	IP	04	06	056							IS	06	304	29		1	25		1	15		2
NAGOYA	0	EP	04	06	066					D	1	S	06	282	17		2	22		2	11		1
HAMAMA	0	IP	04	06	085	N	3	E	1	D	4	S	06	338	19		2	22		2	10		2
OSHIMA	0	EP	04	06	088					U	2	S	06	376	11		1	8		1	5		2
OMAEZA	0	EP	04	06	100							ES	06	390	15		4	29		4	12		2
TSURUG	0	EP	04	06	114							S	06	392									
HIKONE	0	EP	04	06	115							S	06	399	22		1	22		1	8		1
ONAHAM	0	EP	04	06	115							IS	06	408	23		1	21		1	7		1
FUKUSH	0	EP	04	06	121							ES	06	408	11		2	7		1	2		1
KYOTO	0	EP	04	06	171							IS	06	533	6		2				3		5
TOMISA	0	P	04	06	173					U	1				11		2	9		2	8		3
SENDAI	0	EX	04	06	22							EX	07	00	6		3	5		2			
NARA	0	EP	04	06	266																		
TOYOOK	0	EP	04	06	280							ES	07	103	16		1	10		1			
OSAKA	0	X	04	06	366							X	07	087	30		4	28		5	11		2
MIZUSA	0	EX	04	06	508							S	07	203	5		2	5		3			
SAKATA	0	EX	04	07	540																		

Origin Time					Location								Magnitude
					Longitude			Latitude			Depth km		
d	h	m	·s	±·s	°	′	± ′	°	′	± ′			·
27	15	56	003	003	138	13	02	36	27	01	0		39

MATSUS	3	P	15	56	020																		
MATSUM	0	IP	15	56	081					U	2	IS	56	130									

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		AN	P	T	AE	P	T	AZ	P	S
KARUIZ	0	P	15	56	091							S	56	140										
MAEBAS	0	IP	15	56	153			W		D	2	ES	56	254		17		3	7		2	9		3
TAKADA	0	EP	15	56	166							ES	56	238										
KOFU	0	IP	15	56	180					U	3	ES	56	322		6		0	11		0	5		1
TOYAMA	0	EP	15	56	189							ES	56	34		6		2	6		3	5		3
KUMAGA	0	EP	15	56	210							S	56	372		10		3	8		3	8		3
KANAZA	0	EP	15	56	290							S	56	460		50		2	50		2	50		5
GIFU	0	EP	15	56	32											8		1	6		1			
NAGOYA	0	EP	15	56	333	S	1	W	1	U	1	S	56	564		7		1	5		1	3		1
WAJIMA	0	EX	15	56	333											11		1	10		1			
NIIGAT	0	EX	15	56	538											4		1	5		1			
TOKYO	0	EX	15	56	54											8		4	6		4	7		4

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
28	17	32	189	001	138 18	01	36 31	01		0	44

MATSUS	2	P	17	32																					
NAGANO	3	IP	17	32	242	N	19	W	7	U	68	ES	32	264	80	1		10	2		60	1			
KARUIZ	X	IP	17	32	275	S	2	E	6	U	8	S	32	324	20	1	2	10	1	2	50		2		
MATSUM	1	IP	17	32	286					D	4	IS	32	345	15	1	3	10	1	3			3		
TAKADA	0	P	17	32	326							S	32	404											
MAEBAS	0	IP	17	32	340	N		W	1	D	4	S	32	433	40		3	28		4	46		3		
CHICHI	0	EP	17	32	365							S	32	504											
KOFU	0	IP	17	32	382	S	8	E	7	U	8	ES	32	502	23		1	27		4	15		1		
TOYAMA	0	IP	17	32	397					D	3	IS	32	539	26		2	22		2	20		3		
KUMAGA	0	EP	17	32	405							ES	32	545	36		5	31		4	22		4		
IIDA	0	IP	17	32	416					U	1	IS	32	562	13		1	14		1	6		1		
FUNATS	0	IP	17	32	433							IS	32	581											
UTSUNO	0	P	17	32	441			W	6	D	6	S	33	016	15		1	17		1	10		1		
OMAEZA	0	EP	17	32	446										14		5	18		6	13		3		
KANAZA	0	EP	17	32	460					D		ES	33	082	16		2	15		2	15		2		
AIKAWA	0	IP	17	32	470	N	2	W		U	2	IS	33	068	5		1	8		0	3		2		
TOKYO	0	EP	17	32	477							ES	33	102	18		4	31		4	36		4		
WAJIMA	0	EP	17	32	481							ES	33	060	33		1	47		1					
NIIGAT	0	EX	17	32	497							S	38	110	10		1	25		6	8		4		
AJIRO	0	IP	17	32	509							S	33	126	7		0	4		0	2		0		
SHIZUO	0	EP	17	32	510							ES	33	117	8		0	8		1	5		2		
YOKOHA	0	EP	17	32	525										21		1	23		1					
MITO	0	EP	17	32	528							IS	33	170	52		0	30		0	11		0		
GIFU	0	P	17	32	532							S	33	155	19		1	31		2	8		2		
NAGOYA	0	EP	17	32	537	S	1	W	1	U	1	IS	33	160	22		1	21		1	13		1		
FUKUI	0	P	17	32	540							S	33	204											
TSURUG	0	EP	17	32	583							S	33	258											
ONAHAM	0	EX	17	33	100										17		2	15		1	8		2		
KYOTO	0	EP	17	33	103							ES	33	407	5		1	4		1	2		2		
TOYOOK	0	EP	17	33	135							X	33	579	13		1	6		1					
SAKATA	0	EX	17	33	163										24		1	17		1					
HIKONE	0	S	17	33	270										4		4	6		4					
AKITA	0	EX	17	34	098																				

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
28	18	10	277	001	138 20	01	36 35	01		0	46

MATSUS	3	P	18	10	317																				
NAGANO	3	IP	18	10	326	N	8	W	7	U	50	S	10	345	29	2		26	2		16	2			
KARUIZ	1	IP	18	10	365	S	13	E	6	U	15	S	10	415	40	1	2	50	1	3	20	1	2		
MATSUM	1	IP	18	10	385	N		E		D	5	IS	10	445	10	1	3	50		3					
TAKADA	0	P	18	10	404	N	5	E	1	U	9	S	10	484											
MAEBAS	0	IP	18	10	427			W		D	2	S	10	520	73		4	92		3	11	1	3		
KOFU	0	IP	18	10	477	S	9	E	6	U	18	ES	11	010	44		1	53		4	16		1		
KUMAGA	0	P	18	10	485					D	1	S	11	043	77		5	67		4	44		4		
TOYAMA	0	IP	18	10	489					D	4	S	11	05	41		3	60		2	64		3		

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
IIDA	0	EP	18	10	514	S	2			U	4	IS	11	068		15		3	18		3	14		4
OMAEZA	0	EP	18	10	520							ES	11	373		22		4	36		5	10		3
FUNATS	0	IP	18	10	526							IS	11	081										
UTSUNO	0	P	18	10	533					D	2	S	11	101		27		2	19		1	12		1
MISHIM	0	EX	18	10	55											20		1	25		4	7		1
AIKAWA	0	IP	18	10	551	N	2	W		U	4	IS	11	140		10		1	14		0	4		1
WAJIMA	0	EP	18	10	556							ES	11	140		58		1	47		1	12		1
KANAZA	0	EP	18	10	558							S	11	208		19		1	20		2	24		2
TOKYO	0	EP	18	10	561							ES	11	179		52		4	41		6	56		4
NIIGAT	0	EX	18	10	570							S	11	180		23		1	34		4	13		4
SHIZUO	0	P	18	11	004							S	11	222		9		1	13		1	10		1
MITO	0	EP	18	11	024							IS	11	250		37		1	31		1	19		2
YOKOHA	0	EP	18	11	032							ES	11	274		39		1	44		1	16		3
ONAHAM	0	EX	18	11	033											26		3	33		1	7		1
NAGOYA	0	P	18	11	036	N	4	E	4	D	2	S	11	264		27		1	16		1	18		1
GIFU	0	P	18	11	042							S	11	260		38		1	21		1	10		1
FUKUSH	0	EP	18	11	078							S	11	367		8		1	10		1	3		1
TSURUG	0	EP	18	11	095							S	11	384										
TSU	0	EP	18	11	126																			
SAKATA	0	EP	18	11	173							ES	11	533										
NARA	0	EP	18	11	199							ES	11	571										
KYOTO	0	EP	18	11	204							ES	11	517		5		1	5		1	2		1
TOYOOK	0	EP	18	11	270	S		E				ES	12	083		25		1	21		1			
HIKONE	0	S	18	11	379											32		1	32		1	8		1
AKITA	0	EX	18	12	058											5		3	6		3			
OSAKA	0	EX	18	12	234																	9		2

1966	Origin Time					Location					Magnitude
						Longitude		Latitude		Depth km	
	d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
July	1	05	32	251	002	138 09	01	36 31	01	0	45

MATSUS	3	P	05	32	280			W																
NAGANO	3	IP	05	32	291	N	17	E	3	U	56	S	32	309		24	2		34	2		20	2	
MATSUM	0	IP	05	32	341					U	7	IS	32	398										
KARUI7	X	IP	05	32	356					D	3	S	32	406		15	1	3	20	1	2			
TAKADA	1	EP	05	32	390							S	32	455										
MAEBAS	1	P	05	32	411					D		ES	32	517		33		4	40		4	70		3
TOYAMA	0	IP	05	32	432			E	2	D	9	IS	32	570		36		3	41		3	40		3
KOFU	0	IP	05	32	441					U	1	ES	32	562		16		0	19		0	8		1
CHICHI	0	EP	05	32	463							ES	32	583										
IIDA	0	EP	05	32	474							ES	33	026		13		3	11		3			
KUMAGA	0	EP	05	32	480							S	33	084		34		5	39		3	40		4
KANAZA	0	P	05	32	504					D		S	33	080		13		2	15		3	20		3
WAJIMA	0	EP	05	32	512							ES	33	095		83		1	70		1	15		1
UTSUNO	0	EP	05	32	516			W	2	U	4	ES	33	113		30		1	20		1	9		1
AIKAWA	0	IP	05	32	523	S		W		D		IS	33	114		10		1	20		0	4		0
MISHIM	0	EP	05	32	567							ES	33	167		13		1	12		1	5		1
NIIGAT	0	P	05	32	568					U	1	S	33	170		15		1	30		2	6		1
NAGOYA	0	EP	05	32	588							S	33	216		14		2	18		2	6		2
GIFU	0	P	05	32	594							S	33	195		20		2	18		2			
TOKYO	0	EP	05	32	596							ES	33	228		20		4	50		4	53		4
MITO	0	EP	05	33	005							IS	33	260		24		0	22		0	8		0
HAMAMA	0	P	05	33	013	N	1			D	1	S	33	282		10		2	13		3	4		2
YOKOHA	0	EP	05	33	023							IS	33	275		30		1	31		3			
OMAEZA	0	EP	05	33	028							ES	33	312		13		3	21		3			
ONAHAM	0	EP	05	33	068							ES	33	381		18		2	15		1	10		3
HIKONE	0	EP	05	33	068							S	33	332		14		1	12		1	4		1
TOYOOK	0	EP	05	33	216							S	34	003		10		1	7		1	3		2
SAKATA	0	EX	05	33	327																			
OSAKA	0	X	05	34	028											18		3	23		5	7		2

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Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
2	14	06	274	004	138	11	03	36	32	01	0	40

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	2	P	14	06																
NAGANO	2	IP	14	06																
KARUIZ	0	IP	14	06	369			U 3	S	06	423									
TAKADA	0	EP	14	06	412				S	06	488									
MATSUM	0	IS	14	06	445															
KOFU	0	EP	14	06	478				ES	06	597	8		1	9		0	3		1
KUMAGA	0	EP	14	06	494				ES	07	039	5		1	7		3	2		1
MITO	0	EP	14	07	058				IS	07	260	12		0	7		0	3		1
WAJIMA	0	EX	14	07	125							10		1	12		1			
GIFU	0	X	14	07	251										9		2			

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
6	19	00	255	001	138	17	01	36	34	01	20	38

Station	Intensity	Phase	h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	2	P	19	00																
NAGANO	2	IP	19	00																
KARUIZ	0	EP	19	00	328				S	00	378									
MATSUM	0	P	19	00	350				IS	00	413									
TAKADA	0	EP	19	00	368				S	00	442									
MAEBAS	0	EP	19	00	390				S	00	483	7		3	8		3			
KOFU	0	IP	19	00	438	S	2 E	U 3	ES	00	565	5		0	8		0	4		1
KUMAGA	0	EP	19	00	439				S	00	574	10		0	8		4	7		4
GIFU	0	EP	19	00	44				S	01	220	6		2	9		2			
UTSUNO	0	EP	19	00	498				IS	01	073	8		0	6		0	3		0
NIIGAT	0	E	19	00	522				ES	01	140	4		1	3		1			
MITO	0	EP	19	00	587				IS	01	214	15		0	8		0	3		0
YOKOHA	0	EP	19	01	164							6		0						

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
7	22	24	394	002	138	17	01	36	35	01	0	42

Station	Intensity	Phase	h	m	s	Initial Motion N	E	Z	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	3	P	22	24	428			U												
NAGANO	3	IP	22	24	442	N 20	W 10	U 70	S	24	462	55	1	0	85	1	1	50	1	
KARUIZ	X	EP	22	24	491				IS	24	541									
MATSUM	X	IP	22	24	497		W	U 5	IS	24	556									
TAKADA	0	P	22	24	522	N 4	E 1	U 9	S	24	598									
MAEBAS	0	IP	22	24	533	N	W 1	D 6	S	25	029	13		4	8		4	9		3
TOYAMA	0	IP	22	24	592			D 2	S	25	147	8		3	7		3	4		2
KOFU	0	IP	22	24	596	S 4	E 1	U 8	ES	25	108	13		1	16		0	7		1
KUMAGA	0	EP	22	25	012				S	25	151	17		5	16		4	18		5
IIDA	0	EP	22	25	028				ES	25	186	6		0	9		0	3		0
FUNATS	0	IP	22	25	029				IS	25	177									
KANAZA	0	EP	22	25	062															
UTSUNO	0	P	22	25	063	N 1	W 2	D 4	S	25	234	10		0	7		0	4		1
AIKAWA	0	EP	22	25	072	N 1	W 1	U 1	IS	25	264	6		0	7		0	2		1
NIIGAT	0	EP	22	25	093			U 1	ES	25	315	6		1	7		1	2		1
WAJIMA	0	EX	22	25	099							21		1	24		1			
MISHIM	0	EP	22	25	104				ES	25	313	12		1	18		1	3		1
MITO	0	IP	22	25	140			D 1	IS	25	386	14		0	15		0	4		1
TOKYO	0	EP	22	25	146				ES	25	366				10		3			
NAGOYA	0	EP	22	25	147	N 1	E 1	D	S	25	376	11		1	11		1			
YOKOHA	0	EP	22	25	162				IS	25	415	14		1	12		1			
HAMAMA	0	P	22	25	165	N 1		D 1	ES	25	41	8		1	6		1	5		1
GIFU	0	EP	22	25	17				S	25	364	14		1	15		1			
ONAHAM	0	EX	22	25	277							5		1	7		1	2		1
HIKONE	0	S	22	25	481							9		1	11		1	4		1
TOYOOK	0	ES	22	26	177							8		1	4		1			

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Origin Time								Location								Magnitude
								Longitude			Latitude			Depth km		
d	h	m	·s	±	·s			°	′	± ′	°	′	± ′			·
8	15	14	567	001				138	15	01	36	36	00	0		39

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	·s	μ		μ		μ			m	·s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	2	P	15	15																			
NAGANO	2	IP	15	15																			
KARUIZ	0	EP	15	15	061							ES	15	114									
MATSUM	0	IP	15	15	078					U	2	IS	15	141									
TAKADA	0	EP	15	15	091							S	15	171									
KUMAGA	0	EP	15	15	190							S	15	313	7		0	6		1	2		0
MITO	0	EP	15	15	320							IS	15	546	8		0	5		0	2		0
WAJIMA	0	EX	15	15	431										6		1	7		1			
GIFU	0	EP	15	15	45							S	15	542	5		2	7		2			

Origin Time								Location								Magnitude
								Longitude			Latitude			Depth km		
d	h	m	·s	±	·s			°	′	± ′	°	′	± ′			·
9	16	06	110	002				138	15	01	36	31	01	0		41

MATSUS	2	P	16	06																					
NAGANO	3	IP	16	06	155	N	14	W	8	U	66	S	06	173	35	1		40	1		35	1	
KARUIZ	0	P	16	06	200					D		S	06	250									
MATSUM	0	IP	16	06	204					U	3	IS	06	262									
MAEBAS	0	IP	16	06	260	N		W	1	D	4	S	06	358	13		4	9		4	11		4
KUMAGA	0	EX	16	06	296										14		4	11		3	7		4
TOYAMA	0	IP	16	06	302					D	2	S	06	445	6		1	7		1	4		1
KOFU	0	EP	16	06	305							ES	06	419	12		0	12		0	7		1
IIDA	0	EP	16	06	338							ES	06	498	5		1	4		1	2		1
KANAZA	0	EP	16	06	380										50		2	70		2	70		2
MISHIM	0	EP	16	06	415							ES	07	015	10		1	11		1	4		0
GIFU	0	EP	16	06	450							S	07	065	9		2	16		2			
NAGOYA	0	EP	16	06	450							S	07	080	10		1	11		1	5		1
WAJIMA	0	EP	16	06	456										20		1	19		1			
MITO	0	EP	16	06	465							IS	07	096	5		0	8		1	3		1
OMAEZA	0	EX	16	06	47										6		2	6		2			
HAMAMA	0	P	16	06	478	N				D	2	S	07	123	6		3	6		2	4		1
TOKYO	0	EX	16	06	48													10		4			
HIKONE	0	EP	16	06	559							S	07	188	11		1	9		1	5		1

Origin Time								Location								Magnitude
								Longitude			Latitude			Depth km		
d	h	m	·s	±	·s			°	′	± ′	°	′	± ′			·
10	15	43	513	002				138	12	01	36	32	01	0		47

MATSUS	4	P	15	43	555						U														
NAGANO	4	IP	15	43	572	N	61	W	32	U	74	S	43	592	20	2	1	20	2	1	70	1	
MATSUM	1	IP	15	44	001			W		U	6	IS	44	057	20	1	3	10	1	3			
KARUI7	1	IP	15	44	016	S	5	E	8	U	10	S	44	070	30	1	3	40	1	3	20	1	2
TAKADA	0	P	15	44	057	N	9	E	4	U	29	S	44	133									
MAEBAS	0	IP	15	44	071	N	3	W	5	D	19	S	44	169	92		4	67		4	13	1	4
TAKAYA	0	P	15	44	100							S	44	236									
KOFU	0	IP	15	44	114	S	12	E	10	U	18	ES	44	223	47		1	49		1	27		1
TOYAMA	0	IP	15	44	115			E	3	D	12	IX	44	265	70		3	57		2	28		2
KUMAGA	0	EP	15	44	134							S	44	282	96		5	84		3	52		5
IIDA	0	IP	15	44	150	S	5	W	3	U	7	IS	44	300	29		1	35		1	20		3
FUNATS	0	P	15	44	170							S	44	316									
WAJIMA	0	EP	15	44	188							ES	44	373	14	1	1	10	1	1	19		1
UTSUNO	0	IP	15	44	189	N	3	W	12			S	44	359	27		2	23		1			
AIKAWA	0	EP	15	44	193	N	5	W				IS	44	384	16		1	13		2			
KANAZA	0	P	15	44	194	S	5	W	4	D	16	S	44	382	36		2	35		2	35		2
NIIGAT	0	IP	15	44	220					U	4	S	44	438	25		4	57		6	13		4
MISHIM	0	IP	15	44	221	S	1			U	3	S	44	424	31		1	32		1	9		2
TOKYO	0	EP	15	44	228							ES	44	426	45		4	55		4	77		4
AJIRO	0	IP	15	44	250	S	1	E		U	1	S	44	465	8		0	7		0	3		0
GIFU	0	P	15	44	260							S	44	472	44		2	78		2	20		1
MITO	0	IP	15	44	263							IS	44	506	35		1	32		1	17		2
YOKOHA	0	P	15	44	268					D	6	IX	44	519	48		1	56		1			
FUKUI	0	P	15	44	270	S	11	W	12	U	9	S	44	524									
NAGOYA	0	P	15	44	270	S	2	W	2	U	2	IS	44	500	54		1	65		1	27		1

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^P μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
HAMAMA	0	P 15 44 288	N 1	E	D 1	S 44 547	50		2	47		2	25		2
OMAEZA	0	EP 15 44 293				S 44 588	26		4	47		4	17		2
OSHIMA	0	EP 15 44 294			U 3	IS 44 575	13		1	16		2	8		2
TSURUG	0	EP 15 44 314				S 44 584									
FUKUSH	0	EP 15 44 317				ES 45 023	17		1	9		1	3		1
HIKONE	0	P 15 44 320				S 45 009	68		1	54		1	20		1
TOMISA	0	EP 15 44 322					18		4	14		2	10		2
ONAHAM	0	IP 15 44 325			U 4	ES 45 020	27		1	26		1	10		2
KYOTO	0	EP 15 44 382				ES 45 130	11		2	10		2	5		1
TSU	0	EP 15 44 384				IS 45 074									
NARA	0	EP 15 44 407				ES 45 175									
SENDAI	0	EP 15 44 42				ES 45 18	5		2	5		4	2		2
SAKATA	0	EX 15 44 449				S 45 275	44		5	31		5	17		2
OSAKA	0	EP 15 44 477				ES 45 384	5		5	6		2	2		2
SUMOTO	0	P 15 44 501			D	IX 45 021									
						EX 45 453									
TØYOOK	0	EX 15 44 506				EX 45 317	40		1	23		1	6		1
AKITA	0	EX 15 44 51					5		4	4		3			
KOBE	0	EX 15 44 55													
WAKAYA	0	EX 15 44 566				EX 45 432	7			6					
MIZUSA	0	X 15 45 045				EX 45 290	5		2	6		3			
SHIONO	0	EX 15 45 053				EX 45 522	6		2	7		2	3		2

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	± • s		° ′	± ′		° ′	± ′			
10	20	13	211	001		138	16	01	36	32	00	0	39

MATSUS	2	P	20	13								S	13	360						
NAGANO	2	IP	20	13																
KARUIZ	0	EP	20	13	309							S	13	360						
MATSUM	0	IP	20	13	312					U	2	IS	13	369						
TAKADA	0	EP	20	13	350							ES	13	460						
MAEBAS	0	IP	20	13	366					D	2	S	13	465	7	4	4	4	7	4
TOYAMA	0	IP	20	13	407					D	1	S	13	544	6	1	6	1	4	1
KOFU	0	IP	20	13	408					U	2	ES	13	532	5	1	8	0	3	1
KUMAGA	0	EX	20	13	460										10	4	8	4	6	4
KANAZA	0	EP	20	13	482															
WAJIMA	0	EP	20	13	494										19	1	24	1		
NAGOYA	0	EP	20	13	555							S	14	188	7	1	6	1	2	1
GIFU	0	EP	20	13	57							S	14	175	6	2	9	2		
NIIGAT	0	E	20	13	580							ES	14	130	5	1	4	1		
YOKOHA	0	ES	20	14	210										6	2	8	2		

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	± • s		° ′	± ′		° ′	± ′			
11	11	26	133	002		138	18	01	36	30	01	0	41

NAGANO	2	IP	11	26																
MATSUS	3	P	11	26	167							S	26	271						
KARUIZ	0	IP	11	26	216	N	4	W	6	D	8	IS	26	280						
MATSUM	0	EP	11	26	223							S	26	361						
TAKADA	0	EP	11	26	277															
MAEBAS	0	IP	11	26	281	N	1	W	3	D	9	S	26	376	16	3	19	3	19	3
KOFU	0	EP	11	26	323							ES	26	439	14	1	18	1	6	1
TOYAMA	0	IP	11	26	324					D	2	S	26	458	14	3	14	2	7	2
FUNATS	0	IP	11	26	368							IS	26	515						
UTSUNO	0	P	11	26	394	N	1	W	3	D	4	S	26	564	10	0	12	0	9	1
YOKOHA	0	EP	11	26	408							IS	27	120	15	1	10	1		
KANAZA	0	P	11	26	412					U		S	26	590	10	2	14	2	15	2
AIKAWA	0	EP	11	26	42							IS	27	038	5	1	4	1	2	3
WAJIMA	0	EX	11	26	420										21	1	16	1		
MISHIM	0	EP	11	26	467							ES	27	052	15	1	19	1	5	1
MITO	0	IP	11	26	469							IS	27	106	8	0	7	1	3	1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A counts								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
OMAEZA	0	EP	11	26	471											7		2	7		2			
NAGOYA	0	EP	11	26	477					D	1	ES	27	108		7		1	6		1	2		1
TOKYO	0	EP	11	26	482							ES	27	092		7		4	11		3	9		4
GIFU	0	P	11	26	491	S	3	W	4			S	27	090		13		1	13		1			
HAMAMA	0	P	11	26	498	S	1	W	1	U	3	S	27	143		8		1	6		2	4		1
HIKONE	0	EP	11	26	551							ES	27	213		9		1	7		1	3		1
NIIGAT	0	X	11	27	030											4		2	4		5			
ONAHAM	0	EX	11	27	203											8		1	8		1	4		0
KUMAGA	0	P	11	27	349	N	1	W		U	1	S	28	100		17		4	20		4	17		4

Origin Time				Location					Magnitude
				Longitude		Latitude		Depth	
d	h	m • s	± • s	° ′	± ′	° ′	± ′	km	•
12	14	08 573	002	138 20	01	36 33	01	0	44

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A counts								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	14	09	010																			
NAGANO	3	IP	14	09	022	N	3	W	1	U	29	S	09	043		14	2		15	2		90	1	
KARUIZ	X	IP	14	09	074	S		E		U	4	S	09	128		15	1	2	20	1	2	10	1	1
MATSUM	1	IP	14	09	078	S		W		U	8	IS	09	139										
TAKADA	0	P	14	09	104							S	09	186										
MAEBAS	1	IP	14	09	132	N	1	W	4	D	11	S	09	228		28		1	17		4	24		3
CHICHI	0	EP	14	09	142							S	09	298										
TOYAMA	0	IP	14	09	176					D	4	S	09	308		30		2	17		2	9		1
KUMAGA	0	EP	14	09	176							S	09	340		34		5	41		1	16		4
KOFU	0	IP	14	09	178	S	8	E	4	U	15	ES	09	301		25		1	35		0	13		1
IIDA	0	EP	14	09	208							ES	09	354		18		0	25		0	8		0
FUNATS	0	IP	14	09	218							IS	09	369										
UTSUNO	0	P	14	09	242	N	2	W	2	D	4	S	09	412		21		1	19		0	9		1
AIKAWA	0	IP	14	09	246	N	2			U	2	IS	09	436		11		0	7		1	4		3
WAJIMA	0	EP	14	09	264							S	09	439		42		1	47		1			
NIIGAT	0	P	14	09	272					U	1	ES	09	490		10		1	20		2	4		1
SHIZUO	0	EP	14	09	289							ES	09	520		8		1	7		1	6		2
MISHIM	0	EP	14	09	294							ES	09	502		12		1	23		1	7		1
AJIRO	0	IP	14	09	297					U	1	S	09	523		5		0	5		0	2		0
TOKYO	0	EP	14	09	310							ES	09	530		14		4	22		4	17		5
OMAEZA	0	EP	14	09	313											12		4	11		4	8		2
FUKUI	0	P	14	09	321							S	09	588										
NAGOYA	0	EP	14	09	324	S	1	W	1	U	1	IS	09	556		24		1	21		1	11		1
MITO	0	EP	14	09	329							IS	09	570		32		1	37		0	11		1
HAMAMA	0	P	14	09	336					U	1	S	10	596		11		1	15		1	9		1
HIKONE	0	EP	14	09	372							IS	10	060		18		1	20		1	9		1
ONAHAM	0	EX	14	09	385											8		1	10		1	3		1
FUKUSH	0	EP	14	09	397							S	10	084		7		1	4		1	1		1
KYOTO	0	EP	14	09	488							ES	10	188		4		2	5		0	1		1
TOYOOK	0	EP	14	09	551							ES	10	356		14		1	11		1			

Origin Time				Location					Magnitude
				Longitude		Latitude		Depth	
d	h	m • s	± • s	° ′	± ′	° ′	± ′	km	•
13	18	01							

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A counts								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	2	P	18	01																				
NAGANO	3	IP	18	01	395	N	16	W	5	U	68	IS	01	416		70	1		60	1		90	1	
KARUIZ	0	P	18	01	461							S	01	511										
MATSUM	0	EP	18	01	476							IS	01	535										
TAKADA	0	EP	18	01	501							S	01	577										
MAEBAS	0	IP	18	01	521					U	2	S	02	016		8		3	8		3	13		3
KOFU	0	IP	18	01	565					U	1	ES	02	088		6		1	6		1	3		1
TOYAMA	0	IP	18	01	572					D	1	S	02	111		6		2	6		2	6		1

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Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
18	05	40	078	004	138	18	01	36	30	02	20	39

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
MATSUS	2	P	05	40																
NAGANO	1	IP	05	40																
KARUIZ	0	EP	05	40	144				ES	40	193									
MATSUM	0	EP	05	40	163				IS	40	221									
TAKADA	0	EP	05	40	192				ES	40	352									
MAEBAS	0	IP	05	40	205			D 2	S	40	297	8	3	7	3	6	4			
KOFU	0	IP	05	40	248	S 1 E		U 1	ES	40	374	5	1	7	0	3	1			
IIDA	0	EP	05	40	288				ES	40	436	3	1	4	1	1	1			
KUMAGA	0	EX	05	40	290							9	4	6	3	5	3			
MITO	0	EP	05	40	398				IS	41	043	8	0	6	1	2	0			
NAGOYA	0	EP	05	40	402			U 1	S	41	036	5	1	8	1	3	1			
WAJIMA	0	EP	05	40	413				ES	40	533	13	1	17	1					
GIFU	0	EP	05	40	415				S	41	022	6	1	9	2					
HAMAMA	0	P	05	40	430			U 2	S	41	080	5	1	4	1	2	1			
NIIGAT	0	X	05	40	578							4	2	4	2					
HIKONE	0	S	05	41	148							9	1	5	1	3	1			

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
18	12	05	342	002	138	15	01	36	30	01	20	38

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
MATSUS	2	P	12	05																
NAGANO	2	IP	12	05																
KARUIZ	0	IP	12	05	410	N		D 4	S	05	460									
MATSUM	1	EP	12	05	423				IS	05	477									
TOYAMA	0	IP	12	05	514				ES	06	06	4		3	6		3	3		2
KOFU	0	EP	12	05	517				IS	06	031	11		1	13		1	8		1
KUMAGA	0	EP	12	05	535				S	06	066	6		1	5		5	4		4
WAJIMA	0	EX	12	06	044							9		1	16		1			

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
19	07	07	175	002	138	16	01	36	33	01	0	39

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
MATSUS	2	P	07	07																
NAGANO	3	IP	07	07	218	N 3 W	2	U 26	S	07	240	80	1		13	2		10	2	
KARUIZ	0	P	07	07	262			D	S	07	314									
MATSUM	0	EP	07	07	275				IS	07	334									
TAKADA	0	EP	07	07	305				S	07	375									
KOFU	0	EP	07	07	377				IS	07	492	6		1	8		0	5		1
KUMAGA	0	EX	07	07	409							3		3	5		5	3		3
WAJIMA	0	EX	07	07	467							8		1	12		1			

Origin Time d	h	m	·s	±·s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude ·
22	14	16	365	002	138	11	01	36	29	01	0	39

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N μ	E μ	Z μ	Phase	m	·s	Maximum Amplitude = A×10^P μ N AN	P	T S	E AE	P	T S	Z AZ	P	T S
MATSUS	3	IP	14	16	399															
NAGANO	3	IP	14	16	405	N 8 E	2	U 56	IS	16	430	35	1	1	40	1	1	30	1	
MATSUM	1	IP	14	16	447			U 4	IS	16	496									
KARUIZ	0	IP	14	16	456	W		D 8	S	16	510									
TAKADA	0	EP	14	16	524				S	17	594									
TOYAMA	0	EP	14	16	53				IS	17	081	7		1	9		1			
MAEBAS	0	EP	14	16	531				IS	17	031	13		1	5		0	6		4
KOFU	0	EP	14	16	556				IS	17	070	10		0	14		0	8		1
OMAEZA	0	EX	14	17								6		1	7		1			
KANAZA	0	EP	14	17	010				ES	17	180			2						

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^n μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
WAJIMA	0	EX 14 17 076					6		1	6		1			
HAMAMA	0	P 14 17 113			D 1	S 17 355	5		1	6		1	2		1
NIIGAT	0	E 14 17 162				S 17 297	10		1	14		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
26	07	26	194	002	138 18	01	36 32	01	0	39

NAGANO	2	IP	07	26																
MATSUS	3	IP	07	26	222															
MATSUM	0	P	07	26	293					D		IS	26	349						
KARUIZ	0	P	07	26	293					U		S	26	348						
TAKADA	0	EP	07	26	327							S	26	401						
MAEBAS	0	EP	07	26	344							ES	26	441	8	3	7	3	13	3
TOYAMA	0	EP	07	26	387							ES	29	05	6	2	5	2	5	1
KOFU	0	IP	07	26	389	S	2	E	1	U	3	ES	26	511	5	1	7	1	5	1
KUMAGA	0	EX	07	26	420										8	4	9	3	7	3
UTSUNO	0	EP	07	26	459			W	1	D	1	S	27	030	5	0	6	0	4	1
KANAZA	0	EP	07	26	476							ES	27	064						
WAJIMA	0	EP	07	26	500							ES	27	067	15	1	20	1		
TOKYO	0	EX	07	26	504										5	4	8	4	7	4
GIFU	0	EP	07	26	549							S	27	169	7	2	4	2		
MITO	0	IP	07	26	554					D	1	IS	27	185	12	0	10	0	4	0
HAMAMA	0	P	07	26	563					D	1	ES	27	21	6	1	5	1	5	1
YOKOHA	0	EP	07	26	583												6	1		

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
28	15	06	501	003	138 17	01	36 39	02	0	40

MATSUS	2	P	15	06																
NAGANO	3	IP	15	06	511	N	6	W	3	U	10	S	06	530	40	1	3	85	1	1	15	2	4
KARUIZ	0	EP	15	07	008							ES	07	064									
MATSUM	0	P	15	07	021							IS	07	083									
TAKADA	0	EP	15	07	051							S	07	125									
MAEBAS	0	IP	15	07	063					D	2	S	07	162	13		3	10		4	13		3
KOFU	0	EP	15	07	106							ES	07	239	13		1	19		1	6		1
TOYAMA	0	P	15	07	110							S	07	261	7		3	13		3	6		3
KUMAGA	0	EX	15	07	144										16		4	16		5	11		4
UTSUNO	0	EP	15	07	150							ES	07	341	7		2	14		2	7		1
FUNATS	0	IP	15	07	165							IS	07	303									
KANAZA	0	EP	15	07	200							ES	07	360									
WAJIMA	0	EX	15	07	226										22		1	24		1			
MITO	0	IP	15	07	260					U	1	IS	07	500	8		0	8		1	3		1
HAMAMA	0	EP	15	07	28							ES	07	53	6		2	4		2	3		1
NIIGAT	0	E	15	07	322										7		4	5		3			
TOKYO	0	EX	15	07	324													8		1	8		2
YOKOHA	0	EP	15	07	334							ES	07	505	11		1	7		1			
GIFU	0	EP	15	07	47																		
ONAHAM	0	EX	15	07	520										8		1	7		1	3		2

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
1	09	44	31.8	0.02	138	15.01	36	35.01	0	4.0

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	1	P	09	44																
NAGANO	2	IP	09	44																
KARUIZ	0	P	09	44	41.5			U	ES	44	48.2									
MATSUM	0	EP	09	44	42.1				IS	44	47.4									
TAKADA	0	EP	09	44	44.3				S	44	52.5									
MAEBAS	0	IP	09	44	47.1			D 2	S	44	56.8	16		3	11		3	19		3
TOYAMA	0	EP	09	44	51				ES	45	10.0	6		1	8		2	7		3
KUMAGA	0	EP	09	44	55.3				ES	45	06.7	12		4	14		3	10		3
MITO	0	EP	09	45	06.6				IS	45	30.0	10		0	7		0	3		1
GIFU	0	EP	09	45	07.8				S	45	29.4	8		2	4		1			
HAMAMA	0	P	09	45	08.8				S	45	34.6	8		1	5		3	4		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	01	29	30.8	0.02	138	13.01	36	31.01	0	3.9

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	2	P	01	29																
NAGANO	2	EP	01	29																
KARUIZ	0	P	01	29	39.6			U	S	29	45.2									
MATSUM	0	IP	01	29	40.1			U 2	IS	29	45.2									
TAKADA	0	EP	01	29	44.2				S	29	52.8									
MAEBAS	0	EP	01	29	47.9				IS	29	57.9	11		3	7		4	8		3
KOFU	0	IP	01	29	49.9	S	1	U 1	ES	30	02.5	6		1	8		1	3		1
TOYAMA	0	EP	01	29	49.9				ES	30	02.9	7		1	7		3	5		2
KUMAGA	0	EX	01	29	53.0							9		4	10		4	9		3
KANAZA	0	EP	01	29	58.4				ES	30	14.0									
WAJIMA	0	EX	01	30	03.5							15		1	23		1			
NIIGAT	0	E	01	30	05.1				S	30	24.2	11		1	13		1	2		
NAGOYA	0	EP	01	30	06.0				S	30	26.8	9		1	9		1	4		1
HAMAMA	0	EP	01	30	08				ES	30	34	4		1	5		2	3		1
TOKYO	0	EX	01	30	10.2										8		5	5		4
YOKOHA	0	EP	01	30	14.3										6		0			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	03	48	32.8	0.01	138	12.01	36	28.01	0	5.3

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N			E			Z			Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	5	P	03	48																						
NAGANO	4	IP	03	48	38.3	N	34		W	2		U	66		S	48	40.6	42	2	3	35	2	2	23	2	1
MATSUM	3	IP	03	48	41.5	S	30		W	53		U	74		IS	48	46.8	15	2	3	13	2	3	60	1	3
KARUIZ	2	IP	03	48	42.1	N	36		W	24		D	20		S	48	47.6	23	2	2	21	2	2	90	1	2
TAKADA	2	P	03	48	47.2	N	23		E	11		U	84		S	48	55.7	55	1	3	55	1	3	25	1	3
MAEBAS	2	IP	03	48	48.8	N	6		W	20		D	63		S	48	59.1	80	1	5	55	1	4	68	1	4
CHICHI	2	P	03	48	50.0	S			E						IS	49	01.2	50	1	3	50	1	4	30	1	3
TAKAYA	0	P	03	48	50.8										S	48	59.4									
KOFU	2	IP	03	48	51.5	S	41		E	27		U	56		IS	49	04.5	19	1	1	42	1	2	13	1	2
TOYAMA	0	IP	03	48	52.5							D	101		S	49	07.1	35	2	4	35	2	3	30	2	3
KUMAGA	1	IP	03	48	54.4	N	3		W	3		D	7		S	49	08.6	32	1	6	29	1	5	25	1	3
IIDA	1	IP	03	48	54.4	S	36		W	23		U	32		IS	49	09.2	14	1	2	18	1	4	61		2
FUNATS	1	EP	03	48	56.3	S	30		E	20					S	49	10.8									
UTSUNO	1	EX	03	48	59.8																					
KANAZA	0	IP	03	49	00.0	N	4		E	26		D	66		S	49	16.4	14	1	2	20	1	2	11	1	1
WAJIMA	1	IP	03	49	01.3	S	4		E	6		D	7		S	49	20.2	41	1	1	39	1	1	81		1
MISHIM	0	IP	03	49	02.5	S	12		E	4		U	16		IS	49	21.0	19	1	1	25	1	1	89		1
NIIGAT	1	IP	03	49	03.8	N	1		E	1		U	18		IS	49	26.4	18	1	4	27	1	5	86		5
SHIZUO	0	IP	03	49	04.1	S	13		E	5		U	8		S	49	25.4	47		5	10	1	5	42		3
TOKYO	0	IP	03	49	04.2										ES	49	26.0				41	2	4	43	2	4
AJIRO	2	IP	03	49	04.6	S	3		E	1		U	3		IS	49	27.0	70		1	11	1	1	23		1
GIFU	0	P	03	49	05.3	N	4		E	4		D	3		S	49	26.7	27	1	2	29	1	2	97		2
FUKUI	0	P	03	49	05.6	N	2		E	6		D	4		S	49	32.9									
SHIRAK	0	IP	03	49	05.7	S	2		W	4		D	6		ES	49	32.7									
YOKOHA	0	IP	03	49	05.8	S	4		E	3		U	5		IS	49	30.3	38	1	2	46	1	2	14	1	2
NAGOYA	0	P	03	49	06.0	N	1		E	1		D	2		IS	49	28.0	21	1	2	20	1	2	72		2

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^n μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MITO	0	IP	03	49	066			W	3	D	10	IS	49	298	13	1	4	11	1	2	10	1	4
HAMAMA	0	P	03	49	083	S	11	W	7	U	13	IS	49	369	17	1	2	21	1	2	11	1	2
TSURUG	0	IP	03	49	089	N	2	E	4	D	2	S	49	376	15	1	16	10	1	18			
OMAEZA	0	P	03	49	095	S		W		U	12	IS	49	393	22	1	4	34	1	4	10	1	3
OSHIMA	0	IP	03	49	104	S	9	E	2	U	16	IS	49	370	11	1	1	81		1	46		2
HIKONE	0	P	03	49	119							IS	49	395	18	1	2	18	1	1	53		2
TOMISA	0	IP	03	49	120	N	1	W	1	D	4	S	49	213	11	1	3	10	1	4	65		2
CHOSHI	1	P	03	49	132					D	2	ES	49	552	43		4	31		2	26		3
FUKUSH	0	P	03	49	133	N	1	E	3	U	1	ES	49	426	59		1	45		1	20		4
TSU	0	EP	03	49	135							IS	49	425									
ONAHAM	0	IP	03	49	138	N	16	W	7	D	24	IS	49	434	12	1	1	15	1	1	11	1	4
YAMAGA	0	EP	03	49	166							ES	49	484									
KYOTO	0	EP	03	49	173							IS	49	527	69		1	48		4	20		5
NARA	0	EP	03	49	201							ES	49	575	10	1	2	50		2	50		2
SENDAI	0	EP	03	49	210							ES	50	026	45		2	35		2	14		4
OWASE	0	P	03	49	222							S	50	000	23		2	20		2	20		2
OSAKA	0	EP	03	49	230							ES	50	034	23	1	4	24	1	4	88		3
KOBE	0	EX	03	49	297																		
SUMOTO	0	IP	03	49	299							ES	50	165	23		8	23		5	13		4
												IX	49	417									
												EX	50	262									
TOYOOK	0	P	03	49	300					U		S	50	104							19		1
AKITA	0	P	03	49	311					U					21		4	27		4	15		5
MIZUSA	0	P	03	49	333							S	50	193	30		3				24		2
HACHIJ	0	EP	03	49	351	N	2					IS	50	209	24		2	25		1	9		
AIKAWA	0	IP	03	49	363	N	20	W	2	U	20	IS	49	564	77		0	57		0	40		3
TOKUSH	0	EP	03	49	364							ES	50	268									
OFUNAT	0	EP	03	49	366							ES	50	244	7		5	6		4	6		6
WAKAYA	0	P	03	49	367							S	50	234	33			30					
SAIGO	0	IP	03	49	370	S		W	1	U	1	S	50	365	6		1	7		2	5		2
MORIOK	0	IP	03	49	375	N		E		U		ES	50	281	8		4	7		4	7		5
												X	50	368									
TAKAMA	0	EP	03	49	378							IS	50	438	23		6	27		5	5		1
SHIONO	0	EP	03	49	385							ES	50	242	28		2	36		2	17		2
TURUGI	0	EX	03	49	396																		
MIYAKO	0	EP	03	49	431							ES	50	35	6		2	8		4	5		3
OKAYAM	0	EP	03	49	454							ES	50	374	40		5	30		6	30		4
MUROTO	0	IP	03	49	463					U					15		9	14		7	8		5
HACHIN	0	EP	03	49	495							ES	50	523	3		5	3		6	4		6
AOMORI	0	EP	03	49	536										13		2	11		2	4		2
HAMADA	0	EP	03	49	555							ES	50	540	8		4	4		3	5		2
												IX	51	219									
HIROSH	0	EP	03	49	57							ES	51	01	15		4	8		4	11		3
MATSUY	0	EP	03	50	036							ES	51	118	19		5	14		5			
SHIMON	0	EP	03	50	13							ES	51	37	11		2	5		5	7		4
URAKAW	0	EX	03	50	165										5		4	5		4	3		4
OITA	0	EP	03	50	166							IX	52	000	43		7	42		5			
ASHIZU	0	EX	03	50	288							EX	51	388	7		3	11		8	5		8
MIYAZA	0	EX	03	50	334							X	52	316	8		5	6		4	4		3
NAGASA	0	EP	03	50	410							ES	52	340									
KUMAMO	0	EX	03	50	45							X	52	445	17		2	9		2	3		3
FUKUOK	0	EX	03	50	510	N		E		U		EX	52	200	7		3	8		2	5		2
SAGA	0	EX	03	51	234							EX	52	301									
KAGOSH	0	EX	03	52	598										19		2	18		2			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
4	09	33	582	003		138	14	02	36	33	01	0	39

NAGANO	2	IP	09	33																			
MATSUS	2	P	09	34																			
KARUIZ	0	P	09	34	076					U		ES	34	126									
MATSUM	0	EP	09	34	080							IS	34	144									
TAKADA	0	EP	09	34	118							S	34	200									
MAEBAS	0	EP	09	34	135							S	34	236	8		3	7		3	11		3
KUMAGA	0	EP	09	34	230							ES	34	406	6		4	7		3	6		4
HAMAMA	0	P	09	34	362					U	2	S	35	020	5		1	4		3	3		1
WAJIMA	0	EX	09	34	445										9		1	12		1			

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	Initial Motion E μ	Initial Motion Z μ	Phase m • s	Maximum Amplitude = A×10^r μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
NIIGAT	0	E 09 34 508					6		1	6		1			
ONAHAM	0	IS 09 38 203					11		1	13		0	3		1

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
4 21 33 454	001	138 19	01	36 33	01	0	44

Station	Intensity	Phase	h	m	• s	Initial Motion N		Initial Motion E		Initial Motion Z		Phase	m	• s	Maximum Amplitude = A×10^r μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	3	IP	21	33	489																		
NAGANO	3	IP	21	33	499	S	3	E	1	D	58	IS	33	519	85	1	1	80	1	1	65	1	
KARUIZ	0	IP	21	33	544	N	8	W	4	D	14	IS	33	594									
MATSUM	1	IP	21	33	559					D	2	IS	34	018									
TAKADA	0	EP	21	33	587							S	34	059									
MAEBAS	1	IP	21	34	005	N	1	W	3	D	11	S	34	101	35		4	28		5	40		3
CHICHI	0	EP	21	34	030							S	34	293									
TOYAMA	0	IP	21	34	052					D	5	S	34	262							18		3
KOFU	0	EP	21	34	059							ES	34	167	22		1	27		0	14		1
KUMAGA	0	P	21	34	060					U	1	S	34	241	33		1	33		5	29		4
IIDA	0	EP	21	34	086							ES	34	244	7		1	7		1	3		1
FUNATS	0	P	21	34	092							S	34	241									
UTSUNO	0	P	21	34	114	N	1	W	3	D	4	S	34	284	19		1	19		0	11		1
KANAZA	0	P	21	34	124					D		S	34	309	80		2	11	1	3	10	1	2
AIKAWA	0	IP	21	34	130					D		IS	34	326	10		0	8		1	4		0
WAJIMA	0	EP	21	34	133							ES	34	330	37		1	29		1			
KAKIOK	0	EP	21	34	16							ES	34	37	20		1	14		1	6		1
TOKYO	0	P	21	34	165							ES	34	37	9		3	20	1	4	18	1	4
MISHIM	0	EP	21	34	171							S	34	360	19		1	19		1	5		1
NIIGAT	0	E	21	34	180							S	34	365	10		1	16		1			
SHIZUO	0	EP	21	34	182							ES	34	399	6		1	8		1	4		1
MITO	0	IP	21	34	194							IS	34	436	24		0	31		1	10		1
NAGOYA	0	P	21	34	210	S	1			U	2	S	34	432	9		1	10		1	7		1
YOKOHA	0	EP	21	34	218							S	34	457	28		1	21		1			
GIFU	0	EP	21	34	219							S	34	437	14		2	14		2	6		1
HAMAMA	0	P	21	34	224							ES	34	48	17		1	9		2	6		2
OMAEZA	0	EP	21	34	237										7		2	9		2			
TOMISA	0	P	21	34	248										6		2	6		4	4		3
ONAHAM	0	EX	21	34	272										16		1	15		1	16		3
HIKONE	0	EP	21	34	305							S	34	546	11		1	11		1			
OSAKA	0	X	21	35	247										8		2	8		2	4		1

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
5 10 26 302	003	138 16	02	36 35	01	00	39

Station	Intensity	Phase	h	m	• s	Initial Motion N		Initial Motion E		Initial Motion Z		Phase	m	• s	Maximum Amplitude = A×10^r μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	2	P	10	26																			
NAGANO	2	IP	10	26																			
KARUIZ	0	EP	10	26	393							S	26	449									
MATSUM	0	IP	10	26	418					U		IS	26	475									
TAKADA	0	EP	10	26	428							S	26	506									
KOFU	0	IP	10	26	502	S	2			U	4	ES	27	024	5		0	7		0	3		0
KUMAGA	0	EP	10	26	549							S	27	060	5		5	4		4	3		4
WAJIMA	0	EX	10	27	025										14		1	14		1			
MITO	0	EP	10	27	066							IS	27	300	8		0	10		0	3		0

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	・s	± ・s		°	′	± ′	°	′	± ′	km	・
6	03	47	436	002		138	18	01	36	31	01	20	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	・s	μ		μ		μ		m	・s		AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	2	P	03	47																			
NAGANO	2	IP	03	47																			
KARUIZ	0	IP	03	47	507	S		E		U	3	S	47	561									
MATSUM	0	IP	03	47	523					D		IS	47	580									
TAKADA	0	P	03	47	554							S	48	028									
MAEBAS	0	EP	03	47	569							S	48	060	16		3	10		3	8		3
KOFU	0	IP	03	48	008	S	1	E		U	2	ES	48	131	9		1	8		1	4		1
KUMAGA	0	EP	03	48	041							S	48	165	11		4	10		5	9		4
NIIGAT	0	E	03	48	108							S	48	327	5		1	5		1			
WAJIMA	0	EP	03	48	141							ES	48	282	23		1	27		1			
NAGOYA	0	EP	03	48	156					U	1	S	48	400	8		1	6		1	4		1
MITO	0	IP	03	48	171					D	2	IS	48	391	7		0	7		1	4		1
GIFU	0	EP	03	48	177							S	48	400	6		1	8		1			
HAMAMA	0	P	03	48	193					U	1	ES	48	44	7		1	6		1	4		1
TOKYO	0	EP	03	48	304							ES	48	512	8		4	9		4	10	1	4
ONAHAM	0	EX	03	48	498										5		1	4		1			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	・s	± ・s		°	′	± ′	°	′	± ′	km	・
8	09	37	158	001		138	19	01	36	32	01	0	51

MATSUS	3	IP	09	37	196																			
NAGANO	4	IP	09	37	211	N	13	W	6	U	69	IS	37	232	28	2	1	47	2	2	12	2	1
KARUIZ	2	IP	09	37	258	S	12	E	28	U	28	IS	37	311	10	2	4	80	1	2	50	1	3
MATSUM	2	IP	09	37	261	S		W		U	6	IS	37	317	80	1	3	40	1	4	25	1	3
TAKADA	1	P	09	37	293	N	14	E	6	U	48	S	37	377	50	1	4	50	1	4	20	1	4
MAEBAS	2	IP	09	37	313	N	4	W	7	D	21	ES	37	415	43	1	3	24	1	3	44	1	4
CHICHI	0	EP	09	37	339							EX	37	595									
KOFU	0	IP	09	37	353	S	19	E	11			ES	37	475	13	1	2	15	1	2			
TAKAYA	0	P	09	37	360							S	37	489									
KUMAGA	1	P	09	37	360	N	3	E	3	U	4	S	37	504	26	1	4	23	1	4	22	1	4
TOYAMA	0	IP	09	37	363					D	30	IS	37	509	24	1		20	1		20	1	4
IIDA	1	IP	09	37	388	S	6	W	4	U	12	IS	37	550	79		1	11	1	1	45		4
FUNATS	0	P	09	37	396							S	37	529									
UTSUNO	X	IP	09	37	412	N	7	W	29	D	26	S	37	584	82		2	91		5	37		1
KANAZA	0	IP	09	37	438	N		E		D		S	38	000	98		2	89		2	55		2
WAJIMA	0	IP	09	37	439	N	3	W	6	U	5	S	38	031	15	1	1	18	1	1	43		1
AIKAWA	0	IP	09	37	445	N	19	W	2	U	18	IS	38	044	50		2	35		1	25		3
TOKYO	0	P	09	37	455							S	38	068	17	2	4	22	2	5	29	2	4
NIIGAT	0	IP	09	37	464	N				U	12	IS	38	084	11	1	4	17	1	6	53		6
MISHIM	0	IP	09	37	466	S	5			U	5	S	38	066	56		1	75		1	27		4
KAKIOK	0	EP	09	37	47							ES	38	06	44		1	40		1	16		1
SHIZUO	0	P	09	37	474							ES	38	083	34		6	45		7	28		2
SHIRAK	0	EP	09	37	475							ES	38	128									
AJIRO	0	IP	09	37	481	S	1	E	0	U	1	EX	38	235	18		4	40		4	15		4
OSHIMA	0	P	09	37	489			E	3	U	7	IS	38	240	28		1	36		2	26		2
GIFU	0	P	09	37	495	N	4	E	5	D	3	S	38	121	14	1	1	23	1	2	79		2
MITO	1	IP	09	37	499							IS	38	143	82		4	66		1	57		3
NAGOYA	0	IP	09	37	504	N	6	E	5	D	4	IS	38	136	13	1	2	15	1	2	67		2
OMAEZA	0	EP	09	37	506							ES	38	106	11	1	4	20	1	4	42		4
YOKOHA	0	IP	09	37	506			W	5	D	20	IS	38	151				15	1	4	76		3
FUKUI	0	P	09	37	512	S	11	E	12	D	6	S	38	162									
HAMAMA	0	IP	09	37	530							S	38	184	12	1	1	90		2	56		1
FUKUSH	0	EP	09	37	557							ES	38	269	22		2	18		1	16		4
TOMISA	0	IP	09	37	563	N	2	E	1	U	2				49		4	38		2	22		4
ONAHAM	0	IP	09	37	563					D	6	IS	38	255	10	1	1	67		1	52		4
YAMAGA	0	EP	09	37	580							ES	38	311									
KYOTO	0	EP	09	38	014							IS	38	376	28		1	20		2	11		4
TSU	0	EP	09	38	020							ES	38	280									
CHOSHI	0	P	09	38	026							ES	38	335									
SENDAI	0	EP	09	38	04							ES	38	436	23		2	17		3	5		5
NARA	0	EP	09	38	048							ES	38	423									
TSURUG	0	EX	09	38	051							X	38	335									
SAKATA	0	EP	09	38	064							ES	38	431									
OWASE	0	P	09	38	074							S	38	452	14		2	8		2	6		2
OSAKA	0	EP	09	38	116							ES	38	515	13	1	5	12	1	5	45		2
TOYOOK	0	P	09	38	137							ES	38	538	88		1	66		1	14		1
AKITA	0	EX	09	38	145							EX	39	112	13		4	16		5	8		3
SUMOTO	0	P	09	38	153							ES	39	030	14		7	11		5	5		2

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^{n} μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN	P	T	AE	P	T	AZ	P	T
							μ		S	μ		S	μ		S
SUMOTO						EX 38 240									
						EX 39 108									
HACHIJ	0	EP 09 38 189				EX 38 333									
OFUNAT	0	EP 09 38 205				S 39 151	6		5	4		4	4		5
MIZUSA	0	P 09 38 206				S 39 066	20		3				12		1
TOKUSH	0	EP 09 38 215				ES 39 112									
SHIONO	0	EP 09 38 228				S 39 101	18		2	16		3	14		2
OKAYAM	0	EP 09 38 272				ES 39 206	15		4	12		4	12		4
MUROTO	0	EP 09 38 310				ES 39 354	8		3	7		2	3		3
TAKAMA	0	EP 09 38 325				ES 39 283	10		6	13		6	2		1
AOMORI	0	EX 09 38 40					8		2	8		2			
MATSUY	0	EP 09 38 547				ES 40 007	9		5	4		5	3		2
HIROSH	0	EX 09 38 549				EX 40 042	5		3	3		3	5		3
KUMAMO	0	EP 09 39 14				EX 41 14	7		2	6		2	3		4
ASHIZU	0	EP 09 39 220				ES 40 326	4		4	5		8	2		9
OITA	0	EX 09 40 369					18		5	23		5	14		4
FUKUOK	0	EX 09 41 04					4		3	5		2	2		2
KAGOSH	0	EX 09 41 399					7		3	7		3	1		2

Origin Time		Location				Magnitude
		Longitude		Latitude		
d h m • s	± • s	° ′	± ′	° ′	± ′	Depth km •
9 12 33 598	004	138 15	01	36 25	02	0 37

MATSUS	2	P	12	34																		
NAGANO	2	IP	12	34																		
KARUIZ	0	IP	12	34	069	N		W		D		2	S		34	125						
MATSUM	0	IP	12	34	079					U			IS		34	134						
KOFU	0	EP	12	34	174								ES		34	288	5		0	7		1		
KUMAGA	0	EX	12	34	194												7		4	9		4	10	4
KANAZA	0	EP	12	34	260								ES		34	478	40		2	50		2	35	2
MISHIM	0	EP	12	34	316								S		34	470	6		1	6		1	0	

Origin Time		Location				Magnitude
		Longitude		Latitude		
d h m • s	± • s	° ′	± ′	° ′	± ′	Depth km •
10 15 45 530	002	138 18	01	36 33	01	0 39

MATSUS	2	P	15	45																		
NAGANO	2	IP	15	45																		
TOYAMA	0	EP	15	45	132								ES		45	282	7		1	7		1	5	1
KARUIZ	0	IP	15	46	027	S		E	1	U		2	S		46	078								
MATSUM	0	P	15	46	037								IS		46	093								
TAKADA	0	EP	15	46	064								S		46	144								
MAEBAS	0	P	15	46	084					D			S		46	176	14		3	8		3	8	4
KOFU	0	IP	15	46	123	S	1			U		3	ES		46	242	5		1	9		0	3	1
KUMAGA	0	EX	15	46	160												9		4	11		4	8	3
KANAZA	0	EP	15	46	218								ES		46	404	50		2	50		2		
WAJIMA	0	EX	15	46	272												11		1	17		1		
MITO	0	EP	15	46	276								IS		46	514	12		1	7		1	3	1
GIFU	0	EP	15	46	282								S		46	508	6		1	7		1		
HAMAMA	0	P	15	46	309					U		1	ES		46	56	5		2	4		2	3	1
TOKYO	0	P	15	46	40												6		3	10	1	4	8	4
NIIGAT	0	E	15	46	451												4		1	5		1		

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Origin Time						Location						Depth km	Magnitude
				±		Longitude		Latitude					
d	h	m	s	s		°	′ ± ′	°	′ ± ′				•
12	04	55	531	002		138	18 01	36	32 01			0	43

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	s	μ		μ		μ			m	s	AN μ	P	T	AE μ	P	T	AZ μ	P	T
MATSUS	3	IP	04	55	564	S		W		U							S						
NAGANO	3	IP	04	55	575	S	1	W	6	U	1	IS	55	597									
KARUIZ	X	IP	04	56	023			E	2			S	56	075									
MATSUM	1	IP	04	56	032	S		W		U	6	IS	56	090									
TAKADA	0	P	04	56	060							S	56	142									
MAEBAS	1	IP	04	56	084	N	1	W	3	D	8	S	56	177	25		4	19		4	21		3
KOFU	0	IP	04	56	120	S	3	E	1	U	5	ES	56	244	20		1	28		0	10		1
TOYAMA	0	IP	04	56	131					D	3	S	56	269	7		1	10		2	8		1
KUMAGA	0	EP	04	56	150							S	56	279	21		5	17		6	15		4
IIDA	0	EP	04	56	158							ES	56	294	8		1	11		0	3		1
FUNATS	0	IP	04	56	164							IS	56	316									
UTSUNO	0	P	04	56	198							S	56	360	10		1	10		1	7		1
NIIGAT	0	IP	04	56	218					U	2	ES	56	440	6		2	9		5	5		1
MISHIM	0	EP	04	56	222							S	56	453	10		1	14		1	4		1
KAKIOK	0	EP	04	56	228							ES	56	442	10		1	11		1	5		1
TOKYO	0	EP	04	56	250							ES	56	492									
MITO	0	IP	04	56	271							IS	56	510	28		0	28		0	8		0
NAGOYA	0	EP	04	56	273			W		U	1	S	56	512	13		1	13		1			
YOKOHA	0	EP	04	56	286					D	3	IS	56	541	15		1	12		1			
GIFU	0	P	04	56	293							S	56	498	11		1	23		1			
OMAEZA	0	EP	04	56	295							ES	57	016	7		2	9		5			
HAMAMA	0	P	04	56	305	S	1	E	1			S	56	555	9		1	7		2	5		1
HIKONE	0	EP	04	56	345							IS	57	021	21		1	15		1	5		1
ONAHAM	0	EX	04	56	386										7		1	7		1	2		1
TOYOOK	0	EP	04	56	516							ES	57	324	13		1	6		1			
OSAKA	0	X	04	56	542										9		4	10		3	3		2

Origin Time						Location						Depth km	Magnitude
				±		Longitude		Latitude					
d	h	m	s	s		°	′ ± ′	°	′ ± ′				•
12	20	31	305	009		138	17 06	36	30 03			0	40

MATSUS	2	P	20	31																			
NAGANO	0	EP	20	31																			
MATSUM	0	IP	20	31	390					D	2	IS	31	448									
TAKADA	0	EP	20	31	455							ES	31	529									
TOYAMA	0	P	20	31	505							S	32	023	6		3	6		2	6		2
AIKAWA	0	IP	20	31	590	S	1	W				IS	32	186	5		0	9		0	1		0
WAJIMA	0	EP	20	32	007							ES	32	171	20		1	17		1			
GIFU	0	P	20	32	04							S	32	26	5		1	8		1			
NIIGAT	0	E	20	32	316										5		1	5		1			

Origin Time						Location						Depth km	Magnitude
				±		Longitude		Latitude					
d	h	m	s	s		°	′ ± ′	°	′ ± ′				•
14	01	41	384	002		138	11 01	36	34 01			0	45

MATSUS	3	IP	01	41	424	S		E		U													
NAGANO	3	IP	01	41	441	N	18	E	1	U	56	IS	41	465	75	1	1	80	1	2	40	1	1
KARUIZ	X	IP	01	41	479	N	2	W	2	D	4	S	41	529	20	1	1	30	1	2	10	1	1
MATSUM	1	IP	01	41	483	S	4	W	5	U	14	IS	41	533									
TAKADA	0	P	01	41	507							S	41	591									
TAKAYA	0	P	01	41	583							S	42	085									
CHICHI	0	EP	01	41	587							IS	42	107									
TOYAMA	0	P	01	41	591					D	5	S	42	130	54		4	44		3	41		4
KOFU	0	IP	01	41	592	S	5	E		U	7	ES	42	114	27		0	42		0	24		1
IIDA	0	IP	01	42	010							IS	42	162	16		2	22		4	8		1
FUNATS	1	P	01	42	025							S	42	164									
KUMAGA	0	EP	01	42	026							ES	42	174	58		3	50		4	28		3
KANAZA	0	P	01	42	058					D		S	42	238	16		4	21		2	12		2
AIKAWA	0	IP	01	42	075	N		W		U	2	ES	42	282	10		0	10					
OMAEZA	0	P	01	42	078							ES	42	478	24		2	25		2	15		2
UTSUNO	0	P	01	42	081			W	8			S	42	257	17		3	14		2			
MISHIM	0	EP	01	42	092							IS	42	302	29		1	25		1	9		1
NIIGAT	0	P	01	42	096					U	2	S	42	320	15		2	34		4	9		4
AJIRO	0	IP	01	42	113					D	1	S	42	341	8		1	10		1	3		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
SHIZUO	0	EP	01	42	117							ES	42	309		6		2	12		2	5		2
KAKIOK	0	EP	01	42	124							ES	42	324		18		1	13		1	6		1
NAGOYA	0	EP	01	42	124					U	2	IS	42	352		26		1	28		1	17		1
TOKYO	0	EP	01	42	124							ES	42	348		42	1	4	49	1	4	59	1	4
GIFU	0	P	01	42	128							S	42	330		41		2	36		2	14		2
FUKUI	0	P	01	42	135	N	2	E	3	D	2	S	42	391										
MITO	0	IP	01	42	145							IS	42	394		18		5	13		2	10		3
YOKOHA	0	EP	01	42	15					D	4	IS	42	396		52		1	59		2	15		2
HAMAMA	0	IP	01	42	160	S	1	E	1	D	2	S	42	405		19		2	20		2	10		2
TSURUG	0	EP	01	42	176							S	42	441										
OSHIMA	0	P	01	42	181					D	5	EX	42	434		13		1	11		1	5		2
TOMISA	0	IP	01	42	193					U	1					15		4	9		4	8		3
HIKONE	0	EP	01	42	205							IS	42	469		35		2	72		2	18		1
ONAHAM	0	EX	01	42	207											13		1	12		1	7		3
FUKUSH	0	EP	01	42	214							ES	42	515		8		1	5		1	2		3
KYOTO	0	EP	01	42	267							IS	42	593		6		2	6		1	3		5
SENDAI	0	EX	01	42	33											5		2	3		2	1		2
TOYOOK	0	P	01	42	344							ES	43	148		25		1	17		1	4		1
OSAKA	0	X	01	42	352							X	43	110		26		5	37		5	12		3
SAKATA	0	EX	01	42	490																			
MAEBAS	0	IP	01	42	553					D	6	IS	42	053		65		3	40		3	43		3

Origin Time						Location						Depth km	Magnitude
						Longitude			Latitude				
d	h	m	s	±	s	°	′	± ′	°	′	± ′		
14	04	05	002	001		138	13	01	36	29	01	0	41

MATSUS	4	IP	04	05	024	N		E		U															
NAGANO	3	IP	04	05	047							IS	05	060		30	1	1	20	1	1	25	1		
MATSUM	X	IP	04	05	087	S		W	2	U	7	S	05	138											
KARUI7	0	IP	04	05	089	N	2	W	2	D	4	S	05	139											
TAKADA	0	P	04	05	146							S	05	230											
MAEBAS	0	IP	04	05	156			W		D	4	IS	05	257		20		3	14		3	9		3	
TOYAMA	0	P	04	05	191							S	05	323		9		1	8		1				
KOFU	0	IP	04	05	197	S	3	E	1	U	4	ES	05	316		11		1	16		1	6		1	
IIDA	0	E	04	05	218																				
KUMAGA	0	EP	04	05	220							ES	05	370		16		3	17		4	12		4	
FUNATS	0	P	04	05	242							S	05	374											
KANAZA	0	EP	04	05	260							ES	05	440		7		4	6		2	5		2	
WAJIMA	0	EX	04	05	267											28		1	18		1				
MISHIM	0	EP	04	05	299							ES	05	504		10		1	9		1	5		1	
OMAEZA	0	EP	04	05	308											7		2	7		2				
TOKYO	0	EP	04	05	320											11	1	4	18	1	4	8		4	
NAGOYA	0	P	04	05	327	N		E	1	D	1	S	05	556		11		1	9		1	5		1	
NIIGAT	0	E	04	05	328											5		1	13		1				
GIFU	0	P	04	05	342							S	05	548		14		2	11		1				
MITO	0	IP	04	05	346							IS	06	004		7		0	4		1	3		1	
YOKOHA	0	EP	04	05	358					D	2	S	05	595		18		1	14		1				
HAMAMA	0	P	04	05	364					D	2	S	06	051		5		1	6		2	4		2	
HIKONE	0	EP	04	05	461							IS	06	074		22		1	18		1	5		2	
MATSUM	0	P	04	05	505							IS	05	562											
ONAHAM	0	EX	04	06	087											4		1	5		1				
OSAKA	0	X	04	06	096											8		3	9		5	4		3	

Origin Time						Location						Depth km	Magnitude
						Longitude			Latitude				
d	h	m	s	±	s	°	′	± ′	°	′	± ′		
14	19	57	287	002		138	18	01	36	30	01	0	41

NAGANO	2	IP	19	57																					
MATSUS	3	IP	19	57	316	S		E		D															
KARUI7	0	IP	19	57	375	S	1	E	1	U	4	S	57	426											
MATSUM	0	IP	19	57	382					U	4	IS	57	435											
TAKADA	0	P	19	57	426							S	57	508											
MAEBAS	0	IP	19	57	443			W	1	D	2	IS	57	545		23		4	14		3	9		4	

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^n μ								
			h	m	• s	N	μ	E	μ	Z	μ		m	• s	N: A_N μ	P	T s	E: A_E μ	P	T s	Z: A_Z μ	P	T s
KOFU	0	IP	19	57	478	S	3	E		U	7	ES	58	002	9		0	11		0	6		1
TOYAMA	0	P	19	57	497							S	58	031	8		2	8		3	9		4
IIDA	0	EP	19	57	510							ES	58	054	4		2	7		3	3		4
KUMAGA	0	EP	19	57	534							ES	58	090	15		4	12		3	15		3
UTSUNO	0	P	19	57	539			W	3	D	4	S	58	104	17		1	12		4	5		1
KANAZA	0	EP	19	57	566							ES	58	121	6		3	5		3	4		3
AIKAWA	0	IP	19	57	575	S		W		D		IS	58	168	6		0	10		1	2		1
MISHIM	0	EP	19	57	585							S	58	194	11		1	11		1	4		1
KAKIOK	0	EP	19	58	01							ES	58	21	10		1	9		1	4		1
WAJIMA	0	EX	19	58	018										20		1	14		1			
TOKYO	0	EP	19	58	022							ES	58	230	12	1	4	13	1	4	17	1	3
NAGOYA	0	EP	19	58	024							S	58	260	8		1	8		1	5		1
GIFU	0	P	19	58	027							S	58	244	9		2	8		2			
MITO	0	IP	19	58	029					D		IS	58	281	19		0	10		0	4		0
YOKOHA	0	EP	19	58	044					D		IS	58	290	13		1	12		1			
NIIGAT	0	E	19	58	050							S	58	210	9		1	10		1			
HAMAMA	0	IP	19	58	055	N	1	E	1	D	2	S	58	323	6		2	8		3	4		1
OMAEZA	0	EP	19	58	070													7		5			
HIKONE	0	EP	19	58	102							ES	58	364	9		1	8		1			

Origin Time						Location						Depth km	Magnitude •
d	h	m	• s	± • s		Longitude °	′	± ′	Latitude °	′	± ′		
16	13	16	143	002		138	12	01	36	31	01	20	41

NAGANO	2	IP	13	16																			
MATSUS	3	IP	13	16	168	N		E		U													
MATSUM	1	IP	13	16	218					U	5	IS	16	265									
KARUIZ	0	IP	13	16	232			W		D	14	IS	16	288									
TAKADA	0	EP	13	16	266							S	16	350									
MAEBAS	0	P	13	16	297					D		IS	16	403	21		1	11		0	9		3
TOYAMA	0	IP	13	16	314					D		S	16	444	10		1	13		1	4		2
KOFU	0	IP	13	16	337	S	2					IS	16	447	15		0	16		0	7		1
IIDA	0	EP	13	16	348							IS	16	484	18		0	15		0	5		0
KUMAGA	0	EP	13	16	364							ES	16	524	10		5	10		3	7		4
UTSUNO	0	EP	13	16	381			W	1	D	1	S	16	587	6		1	6		1	11		1
KANAZA	0	EP	13	16	394							ES	16	560	11		2	10		2	5		2
WAJIMA	0	EX	13	16	462										11		1	13		1			
NAGOYA	0	EP	13	16	465							S	17	080	8		1	7		1	3		1
MITO	0	EP	13	16	488							IS	17	143	7		1	7		1	3		1
HAMAMA	0	P	13	16	495					D	1	ES	17	12	6		2	11		2	4		2
NIIGAT	0	E	13	16	505										8		2	13		1			
OMAEZA	0	EP	13	16	510							LS	17	185	13		4	9		3			
YOKOHA	0	EP	13	16	538										9		1	9		1			
TOKYO	0	EX	13	16	56										5		4	10	1	6	6		4
ONAHAM	0	EX	13	17	267										5		1	8		1			

Origin Time						Location						Depth km	Magnitude •
d	h	m	• s	± • s		Longitude °	′	± ′	Latitude °	′	± ′		
16	18	42	095	002		138	10	01	36	29	01	0	42

NAGANO	2	IP	18	42																			
MATSUS	4	IP	18	42	119	N		E		U													
MATSUM	X	IP	18	42	185					U	4	IS	42	237									
KARUIZ	0	P	18	42	188					D		S	42	242	30	1	2	30	1	2			
TAKADA	0	EP	18	42	240							S	42	318									
MAEBAS	0	IP	18	42	258			W	1	D	2	IS	42	363	27		3	21		3	9		2
KOFU	0	IP	18	42	287	S	2	E	1	U	4	IS	42	415	13		1	14		1	7		1
TOYAMA	0	IP	18	42	297					D	3	S	42	455	11		3	15		3	11		3
IIDA	0	EP	18	42	312							ES	42	454	8		3	11		3	3		2
KUMAGA	0	EP	18	42	316							ES	42	470	25		3	20		3	20		3
FUNATS	0	P	18	42	336							S	42	476									
KANAZA	0	EP	18	42	374							ES	42	532	10		3	10		3	7		2
GIFU	0	P	18	42	380							S	42	577	14		2	6		2			
MISHIM	0	EP	18	42	393							ES	42	597	11		1	9		1	4		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^{F} μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
WAJIMA	0	EX	18	42	395											15		1	18		1			
KAKIOK	0	EP	18	42	41							ES	43	02 -		8		1	9		1	5		1
UTSUNO	0	EP	18	42	410			W	3	D	2	S	42	577		9		2	9		1	6		1
NAGOYA	0	EP	18	42	426	N	1	E	1	D	1	ES	43	052		13		1	16		1	7		1
TOKYO	0	EX	18	42	432											9		4	18	1	3	12	1	4
OMAEZA	0	EP	18	42	434											8		4	9		4			
MITO	0	EP	18	42	435							IS	43	095		12		0	7		1	4		1
YOKOHA	0	EP	18	42	439							IS	43	090		26		1	12		1			
HAMAMA	0	P	18	42	452							ES	43	12		7		1	6		3	5		2
HIKONE	0	EP	18	42	505							ES	43	156		13		1	13		1	5		1
OSAKA	0	X	18	43	052											13		4	13		5			

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		
18	00	38	469	001		138	14	01	36	30	00	0	41

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^{F} μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	3	IP	00	38	494	S		W		U														
NAGANO	3	IP	00	38	510											50	1		40	1	1	35	1	
MATSUM	X	IP	00	38	559	S		W		U	4	IS	39	015										
KARUIZ	0	P	00	38	565					U		IS	39	024										
TAKADA	1	P	00	39	013							S	39	093										
MAEBAS	0	IP	00	39	027					D	2	S	39	131		15		4	15		3	19		3
TOYAMA	0	IP	00	39	061					D	3	S	39	193		10		2	9		2	10		4
KOFU	0	IP	00	39	065	S	3	E	1	U	4	ES	39	191		7		1	8		0	3		1
KUMAGA	0	EX	00	39	100											15		5	11		4	11		3
KANAZA	0	EP	00	39	128							ES	39	318		6		5	6		3	4		2
UTSUNO	0	P	00	39	150							S	39	330		9		1	6		1			
AIKAWA	0	IP	00	39	160	S	1	W		U		IS	39	357		5		0	10		0	1		0
NIIGAT	0	E	00	39	176							S	39	390		6		1	8		1	3		3
WAJIMA	0	EP	00	39	189							ES	39	367		33		1	32		1			
GIFU	0	EP	00	39	21							S	39	423		13		2	8		2			
NAGOYA	0	EP	00	39	210	N	1	E	1	D	1	S	39	440		9		1	9		1	6		1
TOKYO	0	IP	00	39	212					U		ES	39	410		8		3	17	1	4	12	1	4
MITO	0	IP	00	39	220					D		ES	39	460		12		0	8		0	3		1
YOKOHA	0	EP	00	39	225							ES	39	467		12		1	12		1			
HAMAMA	0	P	00	39	240					D	2	ES	39	50		7		1	6		2	4		1
OMAEZA	0	EP	00	39	254											7		4	7		4			
HIKONE	0	IS	00	39	550											10		1	12		1	2		1
ONAHAM	0	EX	00	39	589											4		1	6		1			

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		
18	01	08	337	002		138	13	01	36	32	01	0	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^{F} μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
NAGANO	2	IP	01	08																				
MATSUS	3	IP	01	08	364	S		E		U														
MATSUM	0	EP	01	08	431							IS	08	485										
KARUIZ	0	P	01	08	433					U		S	08	492										
TAKADA	0	P	01	08	473							S	08	555										
MAEBAS	0	P	01	08	494					D		IS	08	598		8		4	7		3	9		3
TOYAMA	0	P	01	08	526							S	09	080		4		3	5		3	5		3
KOFU	0	IP	01	08	533	S	2	E	1	U	1	ES	09	057		4		0	7		0	3		1
KUMAGA	0	EX	01	08	560											8		4	6		3	5		3
WAJIMA	0	EP	01	09	006							ES	09	193		23		1	26		1			
UTSUNO	0	P	01	09	021							S	09	196		8		1	5		0			
NIIGAT	0	E	01	09	060							S	09	260		5		1	9		1			
YOKOHA	0	EP	01	09	077											6		1						
TOKYO	0	P	01	09	078											5		4	11	1	4	8		4
NAGOYA	0	EP	01	09	078							S	09	308		6		1	6		1	3		1
MITO	0	EP	01	09	094							IS	09	340		12		0	10		0	4		1
HAMAMA	0	P	01	09	107							S	09	372		5		2	5		2	3		1
HIKONE	0	S	01	09	418											6		1	6		1	2		1

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	·s	±·s		°	′	± ′	°	′	± ′		·
19	16	58	400	002		138	22	01	36	33	01	20	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N			E			Z				N			E			Z		
			h	m	·s		μ			μ		μ		m	·s	AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	2	P	16	58																				
NAGANO	3	IP	16	58	451	N	29	W	8	U	70	IS	58	473		30	1		30	1		30	1	
MATSUM	0	IP	16	58	494					D	2	IS	58	553										
MAEBAS	0	IP	16	58	515					D	2	IS	59	032		12		3	10		3	19		3
TAKADA	0	P	16	58	522							S	58	594										
KARUIZ	0	EP	16	58	526							S	58	576										
KOFU	0	IP	16	58	587	S	2	E	1	U	2	ES	59	098		6	1		7	4		5	1	
TOYAMA	0	P	16	58	599							S	59	125		9	2		9	1		7	2	
KUMAGA	0	EP	16	59	014							S	59	145		12	3		12	5		13	4	
AIKAWA	0	IP	16	59	071	N		E				IS	59	268		9	1		9	0				
WAJIMA	0	EP	16	59	086							ES	59	275		16	1		30	1				
MISHIM	0	EP	16	59	133											5	1		6	1		2	0	
MITO	0	EP	16	59	147							IS	59	376		15	0		10	0		4	0	
NIIGAT	0	E	16	59	153							S	59	296		10	1		11	1				
HAMAMA	0	P	16	59	180					U	1	S	59	418		6	1		5	2		5	1	
YOKOHA	0	EP	16	59	185														6	0				

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	·s	±·s		°	′	± ′	°	′	± ′		·
20	04	29	579	002		138	18	01	36	31	01	0	40

NAGANO	2	IP	04	30																				
MATSUS	3	IP	04	30	005	S		W		U														
MATSUM	0	IP	04	30	078					U	5	IS	30	134										
KARUIZ	0	EP	04	30	079							S	30	131										
TAKADA	0	EP	04	30	122							S	30	196										
MAEBAS	0	IP	04	30	125					D	2	IS	30	226		8		3	4		3	6		2
KOFU	0	IP	04	30	173	S	1	E		U	2	ES	30	301		7	0		11	1		5	1	
KUMAGA	0	EX	04	30	189											6	4		5	4		5	3	
WAJIMA	0	EP	04	30	277							ES	30	425		23	1		30	1				
NAGOYA	0	EP	04	30	315							S	30	544		11	1		7	1		3	1	
NIIGAT	0	E	04	30	325							S	30	493		8	1		18	1				
OMAEZA	0	EP	04	30	340											7	2		7	2				
HAMAMA	0	P	04	30	345							ES	31	02		4	1		5	2		3	1	
GIFU	0	EP	04	30	39							S	30	530		6	1		6	1		3	1	
HIKONE	0	S	04	31	049											8	1		8	1		2	1	

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	·s	±·s		°	′	± ′	°	′	± ′		·
20	18	32	310	002		138	17	01	36	31	01	0	45

NAGANO	3	IP	18	32	206							ES	32	224		90	1	1	90	1		75	1	1
MATSUS	3	IP	18	32	345	S		W		U														
MATSUM	1	P	18	32	412							IS	32	468										
KARUIZ	0	IP	18	32	415			E		U	4	S	32	470		15	1	3	15	1	2			
MAEBAS	0	IP	18	32	454	N		W	1	D	2	IS	32	553		40		5	32		3	45		3
TAKADA	0	EP	18	32	455							S	32	533										
CHICHI	0	EP	18	32	485							ES	33	087										
TAKAYA	0	EP	18	32	505							S	33	038										
TOYAMA	0	IP	18	32	509					D	7	S	33	043		27		3	30		2	23		3
KOFU	0	IP	18	32	517	S	5	E	4	U	7	ES	33	063		16		1	18		1	7		1
KUMAGA	0	P	18	32	540					U	1	S	33	080		45		4	39		4	40		4
IIDA	0	IP	18	32	544					U	3	IS	33	092		12		3	13		4	7		3
FUNATS	0	P	18	32	563							S	33	096										
KANAZA	0	P	18	32	586							ES	35	24		27		4	20		4	15		5
UTSUNO	0	P	18	32	587			W	3	D	3	ES	34	043		47		3	46		3	21		4
WAJIMA	0	EP	18	32	590							ES	33	179		81		1	97		1	25		1
AIKAWA	0	IP	18	32	592			E				IS	33	494		32		2	26		2	34		3
NIIGAT	0	P	18	33	017							ES	34	105		75		4	84		3	23		3
SHIZUO	0	EP	18	33	025							ES	33	273		4		1	7		3	4		1
MISHIM	0	EP	18	33	025							ES	33	230		18		1	20		3	7		1
AJIRO	0	IP	18	33	043					U	1	ES	33	269		5		1	5		1	2		1
KAKIOK	0	P	18	33	045			E	2							38		1	41		1	30		0
GIFU	0	P	18	33	055							S	33	269		36		2	26		2	13		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion N		Initial Motion E		Initial Motion Z		Phase				Maximum Amplitude = A × 10³ μ N A_N	N P	N T	E A_E	E P	E T	Z A_Z	Z P	Z T
			h	m	• s		μ		μ		μ		m	• s		μ		s	μ		s	μ		s
YOKOHA	0	EP	18	33	059					D	2	IS	33	311		24		2	18		2	8		4
FUKUI	0	P	18	33	062	S	5	W	4	U	6													
NAGOYA	0	EP	18	33	066	N	1			D	1	S	33	284		25		1	26		1	15		1
MITO	0	IP	18	33	069					D	1	IS	33	327		13		4	8		1	8		2
HAMAMA	0	P	18	33	090					D	2	ES	33	36		19		2	17		2	9		2
TSURUG	0	EP	18	33	097							EX	33	395										
TOKYO	0	EP	18	33	100							ES	33	310		19	1	4	47	1	3	34	1	4
OSHIMA	0	P	18	33	100					U		S	35	520		20		1	14		1	10		2
TOMISA	0	IP	18	33	120					U	1					20		4	23		3	13		2
OMAEZA	0	EP	18	33	120							ES	33	398		20		4	18		4			
HIKONE	0	EP	18	33	151							IS	33	397		22		1	25		1	8		2
OSAKA	0	X	18	33	182							X	34	494		35		3	30		5	19		3
KYOTO	0	EP	18	33	211							ES	33	521		6		2	6		4	3		5
TSU	0	EP	18	33	220																			
TOYOOK	0	EP	18	33	289							ES	34	096		18		1	13		1			
SUMOTO	0	EP	18	33	333											5		4	4		4	4		6
			18	33	333							EX	33	416										
												EX	34	274										
												EX	36	367										
OKAYAM	0	EP	18	33	488							ES	34	390		10		4	13		4	10		4
SAIGO	0	P	18	34	385	S	1	E		U		S	36	164		11		3	10		4	7		3

Origin Time						Location Longitude			Location Latitude			Depth km	Magnitude •
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		
20	18	35											

MATSUS	1	P	18	35																					
NAGANO	2	EP	18	35																					
MATSUM	0	IP	18	35	081					U	3	IS	35	142											
KARUIZ	0	EP	18	35	127							ES	35	176											
WAJIMA	0	EX	18	35	159											61		3	79		3	19		3
GIFU	0	EP	18	35	16							ES	35	57		17		3	9		2			
TOYAMA	0	P	18	35	19											23		4	30		4	13		3
KOFU	0	EP	18	35	288							ES	35	421		26		2	37		2	8		2
FUNATS	0	P	18	35	303							S	35	420										
SHIZUO	0	EP	18	35	332							ES	35	534		8		2	9		3	5		3
MISHIM	0	EX	18	35	38											21		3	19		4	9		4
YOKOHA	0	IS	18	35	395											32		2	32		3	19		3

Origin Time						Location Longitude			Location Latitude			Depth km	Magnitude •
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		
20	19	50	167	002		138	16	01	36	32	01	0	49

MATSUS	4	P	19	50																					
NAGANO	4	IP	19	50	214	N	32	W	1	U	60	IS	50	233		50	2		38	2		25	2		
MATSUM	2	P	19	50	259	S		W		U		IS	50	314											
KARUIZ	X	P	19	50	266			E		U		S	50	323		60	1	3	60	1	2	30	1	2	
TAKADA	1	P	19	50	299	N	5	E	2	U	11	S	50	381		30	1	4	30	1	4	10	1	4	
MAEBAS	0	IP	19	50	326	N		W	1	D	8	ES	50	452		21	1	5	15	1	5	22	1	4	
CHICHI	0	EP	19	50	355							ES	50	486											
TOYAMA	0	IP	19	50	364			E	2			IS	50	538		18	1	4	20	1	4	14	1	4	
KOFU	0	IP	19	50	368	S	4	E	3	U	3	ES	50	490		85		5	82		3	24		3	
TAKAYA	0	EP	19	50	370							S	50	481											
KUMAGA	0	EP	19	50	378							S	50	575		17	1	5	19	1	4	15	1	4	
IIDA	0	IP	19	50	392	S	3	W	1	U	2	IS	50	530		46		3	62		3	33		4	
FUKUI	0	P	19	50	416							IS	50	566											
FUNATS	0	P	19	50	416			W	11			ES	51	026		57		4	59		4	23		1	
UTSUNO	0	P	19	50	435							ES	51	100		75		4	76		4	32		2	
KANAZA	0	P	19	50	440							S	51	036		23	1	1	26	1	1	77		1	
WAJIMA	0	EP	19	50	447							IS	51	048		31		2	34		2	10		4	
AIKAWA	0	IP	19	50	450	N	1	W		U	3					64		5	94		5	44		4	
NIIGAT	0	P	19	50	463					U	3	ES	51	171		45		2	81		4	18		1	
MISHIM	0	EP	19	50	466																				

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
SHIZUO	0	EP	19	50	476							S	51	125		20		4	28		4	18		4
OMAEZA	0	EP	19	50	487							ES	51	306		66		3	66		4			
KAKIOK	0	P	19	50	491			E	2	U	1	S	51	193		34		1	28		1	12		1
AJIRO	0	P	19	50	491							ES	51	113		23		4	18		4	10		4
GIFU	0	EP	19	50	502							S	51	086		62		2	51		2	21		1
NAGOYA	0	EP	19	50	510	N		E		D	1	ES	51	140		71		1	74		3	31		1
SHIRAK	0	EP	19	50	513							IS	51	260										
TOKYO	0	P	19	50	518							S	51	146		11	2	4	19	2	4	18	2	4
YOKOHA	0	IP	19	50	529	S	3	E	4	U	16	IS	51	170		12	1	4	12	1	2	35		2
TSURUG	0	EP	19	50	532							ES	51	217										
HAMAMA	0	IP	19	50	540							S	51	223		48		2	53		2	21		1
OSHIMA	0	P	19	50	551					U	2					24		3	25		5	10		3
FUKUSH	0	EX	19	50	584											18		1	14		1	7		5
TOMISA	0	IP	19	50	585	S	1			D	1					33		4	33		5	23		4
HIKONE	0	EP	19	51	005							ES	51	240		60		1	73		1	24		1
ONAHAM	0	EX	19	51	030							ES	51	366		46		2	37		1	17		3
TSU	0	EP	19	51	060							ES	51	400										
KYOTO	0	EP	19	51	068							ES	51	468		12		1	15		4	10		4
SENDAI	0	EP	19	51	092							ES	51	53		16		2	10		4	5		5
NARA	0	EP	19	51	096											50		2						
SAKATA	0	EP	19	51	101																			
TOYOOK	0	EP	19	51	137											67		1	25		1	14		1
OSAKA	0	P	19	51	141							S	51	540		75		5	85		5	29		3
OWASE	0	P	19	51	155											10		2	6		3	13		4
AKITA	0	EX	19	51	18											9		4	11		4	5		4
SUMOTO	0	P	19	51	259							ES	52	115		8		5	7		5	4		5
												EX	51	343										
MIZUSA	0	P	19	51	259							X	52	259		15		2	12		5	4		2
WAKAYA	0	P	19	51	273							S	52	160		9			6					
OKAYAM	0	IP	19	51	345			W				IS	52	249		15		3	16		3	10		3
SHIONO	0	EX	19	51	345							ES	52	224		7		3	8		3	4		2
TAKAMA	0	EX	19	51	402							ES	52	282		8		4	8		4	2		1
SAKATA	0	EX	19	51	420																			
MUROTO	0	X	19	51	589							EX	52	541		6		4	6		4			
OITA	0	X	19	52	151											23		5	20		5			
KUMAMO	0	X	19	54	196											8		3	3		2			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
21	15	29	353	002		138	11	01	36	34	01	0	41

MATSUS	3	IP	15	29	394								S	29	422	35	1	1	35	1	1	40	1		
NAGANO	3	IP	15	29	399	N	30	E	1	U	67		S	29	509										
MATSUM	1	IP	15	29	452	S		W	2	U	6		IS	29	511										
KARUI7	0	EP	15	29	459								IS	29	570										
TAKADA	0	P	15	29	490								S	30	018	13		4	8		3	9		3
MAEBAS	0	IP	15	29	517			W	1	D	6		IS	30	112	13		3	11		2	9		1
TOYAMA	0	IP	15	29	549					D	6		S	30	081	10		1	16		1	6		1
KOFU	0	IP	15	29	551	S	4	E	1	U	3		ES	30	136	6		2	6		2	4		1
IIDA	0	EP	15	29	586								ES	30	144										
FUNATS	0	P	15	29	596								S	30	154	12		5	12		5	8		3
KUMAGA	0	EP	15	30	000								ES	30	207	6		2	7		2			
KANAZA	0	EP	15	30	002								IS	30	231	5		0	5		0	2		0
AIKAWA	0	IP	15	30	033	S		W		U			S	30	210	8		1	5		1			
UTSUNO	0	P	15	30	040			W	3				ES	30	209	33		1	58		1			
WAJIMA	0	EP	15	30	044																				
NIIGAT	0	E	15	30	065								S	30	275	10		1	22		1			
TOKYO	0	P	15	30	100								S	30	316	7		5	13		4	10		4
MISHIM	0	EP	15	30	102								S	30	274	9		1	8		1	4		1
NAGOYA	0	EP	15	30	104								S	30	324	18		1	10		1	5		1
YOKOHA	0	EP	15	30	11									30	36	13		1	13		1			
MITO	0	IP	15	30	123								IS	30	366	8		0	7		1	3		1
HAMAMA	0	P	15	30	124								S	30	399	6		1	7		1	5		2
GIFU	0	EP	15	30	151								S	30	302	13		1	11		1	7		1
OMAEZA	0	EP	15	30	161											8		1	7		1			
HIKONE	0	S	15	30	439											13		1	11		1	5		1

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
25	20	43	414	002	138	18	01	36 31	01	0	38

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
															μ		S	μ		S	μ		S
NAGANO	2	IP	20	43																			
MATSUS	3	P	20	43	448																		
MATSUM	0	IP	20	43	509					U	2	IS	43	566									
KARUIZ	0	EP	20	43	510																		
TAKADA	0	P	20	43	550							S	44	028									
MAEBAS	0	IP	20	43	566	N		W	1	D	4	IS	44	065	11		0	4		4	8		4
KOFU	0	IP	20	44	011	S	1	E		U	3	IS	44	136	5		1	10		0	4		1
KUMAGA	0	EX	20	44	050										7		1	6		2	6		4
YOKOHA	0	EP	20	44	145										6		1						
MITO	0	IP	20	44	160							IS	44	413	7		0	7		0	2		1
NAGOYA	0	EP	20	44	165							S	44	396	6		1	5		1	2		1
HAMAMA	0	P	20	44	188	N	1			D	1	S	44	431	5		2	4		2	2		1
WAJIMA	0	EX	20	44	198										16		1						
NIIGAT	0	E	20	44	333										6		1	8		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
27	22	29	077	008	138	07	02	36 36	03	20	39

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N		E		Z		Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	1	P	22	29																			
NAGANO	2	IP	22	29																			
MATSUM	0	IP	22	29	166					U	2	IS	29	223									
KARUIZ	0	EP	22	29	174							S	29	230									
MAEBAS	0	IP	22	29	232	N		W	1	D	2	ES	29	339	7		0	7		0	4		3
KOFU	0	IP	22	29	275	S	1	E		U	2	IS	29	400	4		0	8		0	4		0
KUMAGA	0	EX	22	29	300										5		4	4		2	4		3
WAJIMA	0	EX	22	29	410										9		1	16		1			
MITO	0	EP	22	29	438							IS	30	076	12		0	7		0	3		0
NIIGAT	0	E	22	29	520										3		1	8		1			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
28	13	09	201	001	138	08	01	36 28	00	0	53

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N		E		Z		Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T	E AE	P	T	Z AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	4	P	13	09	237																		
NAGANO	4	IP	13	09	252	N	26	E	1	U	4	ES	09	272	63	2	3	72	2	4	28	2	3
MATSUM	3	IP	13	09	278	S	10	W	12	U	48	IS	09	329	13	2	2	95	1	3	40	1	2
KARUIZ	3	IP	13	09	300	N	6	W	34	D	58	S	09	344	20	2	2	21	2	2	90	1	4
TAKADA	2	P	13	09	348	N	9	E	2	U	11	S	09	450	70	1	4	95	1	4	35	1	4
MAEBAS	1	IP	13	09	372	N	4	W	25	D	36	S	09	488	15	2	6	60	1	3	65	1	4
TAKAYA	0	EP	13	09	375							S	09	479									
TOYAMA	0	P	13	09	384					D	3	S	09	507	35	1	3	35	1	3	37	1	4
KOFU	1	IP	13	09	394	S	20	E	8	U	9	ES	09	522	12	1	1	22	1	1	65		1
CHICHI	0	P	13	09	397	N		W				ES	09	505	13	2	8	90	1	7	60	1	3
IIDA	1	IP	13	09	412					U	1	ES	09	568	16	1	2	11	1	2	18		3
KUMAGA	0	P	13	09	425	N	2	W	1	D	7	S	09	588	33	1	5	28	1	5	26	1	4
FUNATS	2	P	13	09	438							S	10	006	1	1	3	0	1	3	0	1	4
KANAZA	0	P	13	09	460					D		ES	10	030	11		3	13		3	8		3
WAJIMA	0	EP	13	09	473							S	10	060	23	1	1	18	1	1	86		1
UTSUNO	0	P	13	09	478	N	2	W	11	D	8	IS	10	049	18	1	4	16	1	4	81		4
TOKYO	0	EP	13	09	490							ES	10	110	27	1	5	40	1	5	31	1	5
AIKAWA	0	IP	13	09	491	N	1	W		U	3	IS	10	100	60		1	50		4	26		4
MISHIM	0	P	13	09	507	S	7	E	3	U	2	S	10	095	88		1	17	1	4	45		2
KAKIOK	1	EP	13	09	51							ES	10	18	85		1	69		1	40		1
SHIZUO	0	P	13	09	513	S	7	E	3	U	3	ES	10	149	49		2	54		3	36		3
NIIGAT	2	IP	13	09	520					U	5	IS	10	160	13	1	4	32	1	5	90		4
AJIRO	0	P	13	09	522							S	10	075	33		2	49		1	12		1
GIFU	0	P	13	09	523	S	3	W	4	U		S	10	129	19	1	4	98		2			
NAGOYA	1	P	13	09	526	S	1	W	2	U	4	IS	10	140	17	1	1	15	1	1	79		1
FUKUI	0	P	13	09	538	S	4	W	6	U	3	S	10	180									
SHIRAK	0	EP	13	09	539							ES	10	205									
YOKOHA	0	EP	13	09	549					U	4	IS	10	208	31	1	2	30	1	2	11	1	3
HAMAMA	0	P	13	09	552					U	1	S	10	230	12	1	3	13	1	3	60		2
MITO	1	IP	13	09	555			W	4	D	8	IS	10	220	14	1	4	12	1	4	11	1	3

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A sin 2πt/T N: A_N μ	P	T S	E: A_E μ	P	T S	Z: A_Z μ	P	T S
TSURUG	0	EP 13 09 560				ES 10 231									
OMAEZA	0	EP 13 09 570				S 10 259	19 1		4	28 1		5	10 1		3
OSHIMA	0	EP 13 09 578	S 4		U 3	IS 10 231	50		1	49		1	31		2
HIKONE	0	P 13 09 599				IS 10 250	17 1		1	12 1		1	60		1
TOMISA	0	IP 13 10 001			D 1	ES 10 296	87		4	11 1		3	55		4
FUKUSH	0	EP 13 10 016				S 10 320	52		4	39		5	27		4
CHOSHI	0	EP 13 10 023				ES 10 373									
ONAHAM	0	IP 13 10 032			D 6	IS 10 350	13 1		2	12 1		1	45		4
KYOTO	0	EP 13 10 050				IS 10 400	45		2	30		3	15		4
YAMAGA	0	EX 13 10 06													
NARA	0	EP 13 10 079				ES 10 447									
OWASE	0	P 13 10 107				IS 10 490	15		2	15		4	13		4
SAKATA	0	EP 13 10 125				S 10 504	20 1		4	25 1		5	10 1		3
OSAKA	0	P 13 10 129				S 10 508	20 1		4	21 1		5	67		3
SENDAI	0	EP 13 10 14				IS 10 572	52		4	33		4	20		5
TOYOOK	0	EP 13 10 153				ES 10 541	75		1	59		1	21		1
SUMOTO	0	P 13 10 165				ES 11 020	17		6				11		5
KOBE	0	EX 13 10 20				IX 10 267									
AKITA	0	EX 13 10 210					50		6	50		7			
						EX 11 200	37		5	40		5	14		6
TOKUSH	0	EP 13 10 217				ES 11 119									
SHIONO	0	EP 13 10 230				ES 11 091	18		2	16		2	10		1
HACHIJ	0	EP 13 10 232				IS 11 095	29			19		14	8		
WAKAYA	0	EP 13 10 238				ES 11 057	24			20					
SAIGO	0	EP 13 10 245	S W U			S 11 087	6		3	5		1	3		3
OFUNAT	0	EP 13 10 258				ES 11 134	15		7	9		6	9		6
MIZUSA	0	P 13 10 293				S 11 138				45		2	10		2
MORIOK	0	IP 13 10 302	N		U	ES 11 253	8		5	6		6	9		6
						EX 11 322									
OKAYAM	0	EP 13 10 335				IS 11 233	30		4	22		4	40		4
MUROTO	0	EP 13 10 350				ES 11 300	15		9	13		9	6		4
TAKAMA	0	EP 13 10 370				ES 11 275	21		7	17		7	3		1
TURUGI	0	EP 13 10 379				ES 11 408									
AOMORI	0	EX 13 10 385					10		3	9		3			
HACHIN	0	EP 13 10 405					5		5	5		5	6		7
HAMADA	0	EP 13 10 451				ES 11 450	7		8	3		5	4		6
HIROSH	0	EP 13 10 505				S 12 036	17		5	8		4	10		5
MATSUY	0	EP 13 10 520				ES 12 002	16		3	9		4	4		3
SHIMON	0	EP 13 11 04				ES 12 40	13		2	5		2	6		4
URAKAW	0	EX 13 11 058					6		4	6		5	4		4
KUMAMO	0	EP 13 11 13				X 13 146	12		2	9		2	3		4
ASHIZU	0	EX 13 11 171				EX 12 314	10		3	20		8	4		7
NAGASA	0	P 13 11 205				X 13 215									
FUKUOK	0	EX 13 11 380				EX 13 06	14		3	4		1	3		3
OITA	0	EX 13 11 380				EX 12 435	50		5	33		4			
MIYAZA	0	ES 13 12 510					6		3	8		3	3		3
KAGOSH	0	EX 13 13 496					13		3	14		3			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
28 13 23 378	002	138 14	01	36 30	01	0	40

NAGANO	2	IP	13	23																			
MATSUS	3	P	13	23	395																		
MATSUM	1	IP	13	23	465	N		E	2	D	8	IS	23	514									
KARUI7	0	IP	13	23	469			E	4	U	6	S	23	512									
TAKADA	0	EP	13	23	512							S	24	012									
MAEBAS	0	EP	13	23	539							S	24	035	20	5	13	5	17	3
KOFU	0	IP	13	23	562	S	2	E		U	4	ES	24	075	8	3	8	3	3	1
TOYAMA	0	EP	13	24	00							S	24	11	16	4	13	2	10	2
KUMAGA	0	EX	13	24	000										14	5	11	6	9	3
IIDA	0	EP	13	24	008							ES	24	128	6	0	8	0	1	0
KANAZA	0	EP	13	24	074										7	3	7	2	5	2
WAJIMA	0	EX	13	24	082										14	1	13	1		
NAGOYA	0	EP	13	24	108					D	1	S	24	336	6	0	7	1	4	1
GIFU	0	EP	13	24	111							ES	24	323	8	2	8	1		
OMAEZA	0	EP	13	24	118										7	2				
YOKOHA	0	EP	13	24	140										6	1	6	1		
HAMAMA	0	EP	13	24	15							S	24	400	6	1	9	1	5	1

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Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A × 10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
HIKONE	0	EP 13 24 182				S 24 443	6		2	6		1	3		1
ONAHAM	0	EX 13 24 512					7		1	7		1			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
28 13 32 543	001	138 10	01	36 28	01	20	42

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A × 10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
MATSUS	3	P 13 32													
NAGANO	2	IP 13 33													
MATSUM	1	IP 13 33 008	S 5	W 7	U 30	IS 33 056									
KARUI7	1	IP 13 33 022		W 10	D 18	ES 33 076	20	1	2	20	1	2			
TAKADA	0	EP 13 33 072				S 33 160									
MAEBAS	0	IP 13 33 089	N	W 1	D 4	IS 33 193	28		3	18		4	19		3
TOYAMA	0	EP 13 33 10				ES 33 20	17		3	17		3	14		4
CHICHI	0	EP 13 33 115				ES 33 232									
KOFU	0	EP 13 33 119				IS 33 232	21		1	35		0	10		1
IIDA	0	EP 13 33 140				ES 33 286	9		1	7		1	1		0
KUMAGA	0	EP 13 33 145				ES 33 320	24		4	23		4	14		3
FUNATS	0	P 13 33 157				IS 33 298									
KANAZA	0	EP 13 33 185				ES 33 364	8		4	10		2	6		2
WAJIMA	0	EX 13 33 202					25		1	19		1			
UTSUNO	0	P 13 33 203		W 3	D 2	S 33 380	9		1	6		2	6		1
OMAEZA	0	EP 13 33 225					9		2	11		2			
NIIGAT	0	P 13 33 230			U 2	S 33 457	13		1	17		1	5		1
MISHIM	0	EP 13 33 238				SS 33 434	12		1	12		1	7		1
AJIRO	0	P 13 33 242				S 33 458	3		0	6		0	2		1
TOKYO	0	EP 13 33 245				ES 33 463	11		4	22		5	17		4
NAGOYA	0	P 13 33 248			U 2	S 33 472	10		1	10		3	5		1
KAKIOK	0	EP 13 33 25				ES 33 48	10		1	9		1	2		1
GIFU	0	EP 13 33 25				ES 33 452	14		1	10		1			
YOKOHA	0	EP 13 33 262				IS 33 515	28		2	15		2			
MITO	0	IP 13 33 272			D 1	IS 33 536	5		1	4		1	4		2
HAMAMA	0	EP 13 33 28				ES 33 50	6		2	7		3	5		2
TSURUG	0	EP 13 33 292				ES 33 552									
HIKONE	0	EP 13 33 326				S 33 580	15		1	15		1	5		1
OSAKA	0	X 13 33 528					10		4	10		5			
ONAHAM	0	EX 13 34 057					8		1	8		1	3		1
TSU	0	EP 13 36 033				IS 36 322									

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
28 13 53 446	003	138 11	01	36 28	01	0	39

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A × 10^P μ N AN μ	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
NAGANO	2	IP 13 53													
MATSUS	3	P 13 53 474													
MATSUM	1	IP 13 53 527			U 4	IS 53 577									
KARUI7	0	EP 13 53 540				ES 53 588									
TAKADA	0	EP 13 53 580				S 54 070									
MAEBAS	0	IP 13 54 008		W	D 2	S 54 110	12		3	6		2	6		4
KOFU	0	IP 13 54 031			U 1	IS 54 152	7		1	12		0	4		1
TOYAMA	0	EP 13 54 04				ES 54 19	6		2	6		2	5		3
IIDA	0	E 13 54 040													
KUMAGA	0	EP 13 54 077				ES 54 226	8		1	8		4	7		3
KANAZA	0	EP 13 54 106					5		2	5		2			
NIIGAT	0	E 13 54 161				S 54 377	10		1	20		3			
GIFU	0	ES 13 54 182				ES 54 387	8		1	8		1			
NAGOYA	0	EP 13 54 186	N 1	E	D 1	S 54 396	6		1	8		1	4		1
HIKONE	0	EP 13 54 244				S 54 501	8		1	8		1	3		1
TOKYO	0	EX 13 54 365					6		4	8		3	8		5
YOKOHA	0	IS 13 54 448					12		1	9		1			
ONAHAM	0	EX 13 55 032					6		1	7		1			

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′		・
28	14	04	172	002		138	11	01	36	30	01	0	41

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N			E			Z			N			E			Z		
			h	m	・s		μ			μ		μ		m	・s	A_N	P	T	A_E	P	T	A_Z	P	T
																	S			S			S
NAGANO	2	IP	14	04									IS	04	309								
MATSUM	1	IP	14	04	255						U	5	IS	04	309								
KARUIZ	0	IP	14	04	270						U	4	S	04	324								
TAKADA	0	EP	14	04	308								S	04	392								
MAEBAS	0	IP	14	04	330	N		W	1	D	2		IS	04	430	20		3	11		3	11		3
TOYAMA	0	P	14	04	360						D	3	S	04	541	10		2	9		2	11		4
KOFU	0	IP	14	04	361	S	2	E			U	4	IS	04	483	10		0	17		0	7		1
IIDA	0	EP	14	04	390								ES	04	532	4		0	5		1	1		0
KUMAGA	0	EP	14	04	400								S	04	560	15		4	13		4	8		3
KANAZA	0	EP	14	04	432								ES	05	001	6		2	6		3	5		2
MISHIM	0	EP	14	04	44											9		1	12		1	3		1
WAJIMA	0	EX	14	04	479											16		1	17		1			
TOKYO	0	EX	14	04	507											9		4	10		4	13		4
GIFU	0	EP	14	04	508								ES	05	120	10		1	7		1			
NAGOYA	0	EP	14	04	508								S	05	124	7		0	8		1	5		1
NIIGAT	0	E	14	04	515								S	05	113	5		1	19		1			
MITO	0	IP	14	04	520								IS	05	170	8		0	4		1	2		1
YOKOHA	0	EP	14	04	522								IS	05	166	11		1	10		1			
HAMAMA	0	P	14	04	540						D	1	S	05	180	5		1	5		2	4		1
OMAEZA	0	EP	14	04	546														7		2			
HIKONE	0	EP	14	04	572								S	05	240	8		1	10		1	3		1
OSAKA	0	X	14	05	472											9		3	11		4			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′		・
29	00	36	141	002		138	15	01	36	34	01	0	51

Station	Intensity	Phase (J. S. T.)				Initial Motion									Phase			Maximum Amplitude = A × 10^P μ								
						N			E			Z						N			E			Z		
			h	m	・s		μ			μ			μ		m	・s	A_N	P	T	A_E	P	T	A_Z	P	T
																		S			S			S
MATSUS	4	P	00	36	170																				
NAGANO	4	IP	00	36	192	N	17	W	7	U	54				IS	36	212	37	2	1	50	2	3	25	2	3
KARUIZ	2	IP	00	36	236			E	20	U	18				S	36	288	14	2	2	19	2	2	60	1	3
MATSUM	2	IP	00	36	241					U	3				IS	36	298	10	2	3	90	1	3	20	1	3
TAKADA	2	P	00	36	270	N	9	E	2	U	27				S	36	352	75	1	4	95	1	4	35	1	4
KOFU	2	IP	00	36	338	S	21	E	4	U	9				IS	36	479	15	1	5	21	1	4	48		3
TOYAMA	0	P	00	36	338	S	3	E	2	D	13				S	36	460	32	1	4	23	1	4	32	1	4
MAEBAS	2	IP	00	36	340	N	3	W	8	D	28				S	36	442	50	1	4	45	1	6	60	1	3
KUMAGA	0	P	00	36	354										ES	36	495	32	1	5	26	1	4	25	1	4
IIDA	0	IP	00	36	370	S	5	W	3	U	3				IS	36	568	57		2	68		3	17		4
FUNATS	0	IP	00	36	385										IS	36	543									
UTSUNO	0	EX	00	36	394																					
KANAZA	0	P	00	36	417						D				ES	36	588	90		3	88		4	68		3
AIKAWA	0	IP	00	36	423	N	8	W		U	1				IS	37	018	66		1	48		0	20		2
WAJIMA	0	EP	00	36	429										S	37	016	16	1	1	16	1	1	67		1
MISHIM	0	IP	00	36	445	S	6	E		U	5				S	37	046	87		3	13	1	4	36		3
KAKIOK	0	EP	00	36	45										S	37	09	59		1	52		1	20		1
NIIGAT	0	IP	00	36	450	N	1	E		U	2				IS	37	060	15	1	5	26	1	5	81		5
TOKYO	0	IP	00	36	460										IS	37	086	23	1	5	26	1	4	28	1	4
SHIZUO	0	P	00	36	462	S	5								ES	37	104	49		6	48		5	37		5
SHIRAK	0	EP	00	36	464										IS	37	119									
AJIRO	0	IP	00	36	465	S		E		U	1				S	37	088	24		3	32		4	13		4
NAGOYA	0	EP	00	36	480	S		W		U					S	37	128	88		1	77		1	36		1
MITO	0	IP	00	36	487			W		D	5				IS	37	135	11	1	5	87		3	81		3
GIFU	0	P	00	36	491	N	6	E	6						ES	37	083	12	1	4	58		3	21		1
FUKUI	0	P	00	36	495	S	6	W	6	U	6				S	37	151									
YOKOHA	0	IP	00	36	495	N	5	W	4	D	25				IS	37	151	25	1	4	24	1	4	76		4
HAMAMA	0	IP	00	36	515										S	37	176	55		3	10	1	4	30		2
OSHIMA	0	EP	00	36	521	S	3	E		U					IS	37	196	30		4	27		4	15		2
TSURUG	0	EP	00	36	536										ES	37	212									
CHOSHI	0	EP	00	36	538										ES	37	233									
TOMISA	0	IP	00	36	545						D	1						63		4	61		3	43		3
ONAHAM	0	IP	00	36	546			W	2	D	8				IS	37	240	11	1	2	12	1	1	34		2
FUKUSH	0	P	00	36	550	S	1	W	1	D	1				S	37	252	46		1	56		1	19		4
HIKONE	0	P	00	36	550										S	37	235	71		4	63		4	34		4
YAMAGA	0	EP	00	36	576										ES	37	298									
KYOTO	0	EP	00	37	011										ES	37	329	20		4	26		5	15		5
SENDAI	0	EP	00	37	032										ES	37	380	31		3	22		3	11		6
NARA	0	EP	00	37	034										ES	37	410									
SAKATA	0	EP	00	37	037										S	37	394	15	1	3	10	1	2	50		2
OWASE	0	P	00	37	060										S	37	440	11		7	10		5	11		7
TOYOOK	0	EP	00	37	073													48			37		1	10		

International Seismological Centre

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A × 10^P μ								
						N	E	Z					N			E			Z		
			h	m	• s	μ	μ	μ		m	• s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
SUMOTO	0	P	00	37	127				ES	37	580		11		7				6		6
									EX	37	233										
AKITA	0	EX	00	37	140				EX	38	108		17		4	24		5	10		3
OSAKA	0	IP	00	37	144				S	37	502		17	1	4	21	1	5	48		4
MIZUSA	0	P	00	37	179				S	37	559		30		3	26		5	10		2
HACHIJ	0	EP	00	37	181				ES	38	034		13			12					
OFUNAT	0	EP	00	37	187				ES	38	068		7		6	5		6	6		4
OMAEZA	0	S	00	37	206								15	1	4	24	1	4	63		4
WAKAYA	0	EP	00	37	242				ES	38	050		16			10					
SHIONO	0	EP	00	37	252				ES	38	080		10		4	12		4	6		2
MUROTO	0	EP	00	37	299				ES	38	355		11		8	14		5	5		5
OKAYAM	0	EP	00	37	327				IS	38	247		20		4	15		4	14		4
TAKAMA	0	EP	00	37	341				ES	38	289		13		6	12		6			
HIROSH	0	EP	00	37	408				S	39	014		6		4	3		5	4		3
AOMORI	0	EX	00	37	444								9		2	10		2	3		1
MATSUY	0	EX	00	37	543				ES	39	026		13		5	9		5			
SHIMON	0	EP	00	38	00				ES	39	36		5		2	2		2	4		4
KUMAMO	0	EP	00	38	09				EX	40	067		7		3	4		2	3		4
ASHIZU	0	EX	00	38	140				EX	39	260		6		4	11		8	3		3
OITA	0	EX	00	38	243				EX	39	406		27		6	23		5			
NAGASA	0	EX	00	40	180																

Origin Time						Location						Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
29	10	36	596	002		138	17	01	36	32	01	0	41

MATSUS	3	P	10	37	020																		
NAGANO	3	IP	10	37	037	N	20	E	9	U	66	IS	37	055	50	1		50	1		40	1	
KARUIZ	0	P	10	37	084					U		S	37	125	10	1	3	15	1	2			
MATSUM	X	IP	10	37	095					D	2	IS	37	154									
MAEBAS	0	IP	10	37	143					D	2	S	37	235	31		3	18		2	38		3
KOFU	0	IP	10	37	185	S	1	E		U	2	ES	37	334	7		3	13		3	5		1
CHICHI	0	EP	10	37	188							ES	37	303									
TOYAMA	0	EP	10	37	20							ES	37	27	15		3	12		2	10		2
MISHIM	0	EP	10	37	21										6		1	9		1	4		1
KUMAGA	0	EP	10	37	210								37	379	24		5	18		5	14		3
IIDA	0	E	10	37	222																		
UTSUNO	0	EP	10	37	240					D	2	S	37	429	8		1	7		2	5		1
OMAEZA	0	EP	10	37	264										7		4	7		4			
KANAZA	0	EP	10	37	266																		
WAJIMA	0	EP	10	37	280							ES	37	457	26		1	32		1			
NIIGAT	0	E	10	37	297							S	37	496	8		1	10		5	5		2
KAKIOK	0	EP	10	37	30							S	37	510	8		1	5		1	2		1
NAGOYA	0	EP	10	37	333	S	1	W	1	U	1	ES	37	596	6		1	7		1	5		1
YOKOHA	0	EP	10	37	341							S	37	596	9		4						
MITO	0	IP	10	37	344							IS	37	578	14		1	9		1	5		1
GIFU	0	EP	10	37	346							ES	37	560	12		1	7		2			
HAMAMA	0	P	10	37	365							S	38	022	10		2	5		1	4		1
TOKYO	0	EP	10	37	370							ES	37	584	13		4	14		4	16		4
HIKONE	0	EP	10	37	436							ES	38	088	8		1	7		1	3		1
ONAHAM	0	EX	10	38	104										7		1	9		1	3		1

Origin Time						Location						Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
30	06	06	043	002		138	09	01	36	27	01	20	43

MATSUS	2	P	06	06																			
NAGANO	1	IP	06	06																			
MATSUM	1	IP	06	06	105	S	4	W	5	U	12	IS	06	151	15	1	3	10	1	2	50		3
KARUIZ	0	IP	06	06	122			W	4	D	6	IS	06	177	45	1	3	30	1	2	10	1	3
TAKADA	0	EP	06	06	171							S	06	265									
MAEBAS	0	IP	06	06	194			W	1	D	2	ES	06	305	97		5	74		4	62		4
CHICHI	0	EP	06	06	219							S	06	339									
KOFU	0	EP	06	06	220							ES	06	333	15		4	18		3			

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^n								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
IIDA	0	EP 06 06 230	S 2			ES 06 360	14		2	12		1	1		1
KUMAGA	0	P 06 06 248			U 1	S 06 415	61		4	53		4	43		3
FUNATS	0	P 06 06 248				S 06 394									
KANAZA	0	P 06 06 281				ES 06 46	14		4	18		2	9		2
UTSUNO	0	EP 06 06 303				ES 06 493	11		3	11		4	4		1
SHIZUO	0	EP 06 06 334				S 06 567	7		0	6		0			
NAGOYA	0	EP 06 06 339			U 1	IS 06 560	23		1	23		1	10		1
AJIRO	0	EP 06 06 339				ES 06 553	4		1	5		1	2		1
NIIGAT	0	EP 06 06 340			D 2	ES 06 574	15		6	22		5	8		4
WAJIMA	0	EX 06 06 345					22		1	29		1			
MISHIM	0	EP 06 06 345				ES 06 573	12		1	12		1	5		1
TOKYO	0	EP 06 06 346				ES 06 554	48		4	48		5	38		4
GIFU	0	EP 06 06 350	N 3	E 3		S 06 550	24		2	14		2	8		2
YOKOHA	0	EP 06 06 366			U 3	S 07 025	27		1				10		1
FUKUI	0	P 06 06 369				S 07 012									
TSURUG	0	EP 06 06 369				S 07 050									
HAMAMA	0	EP 06 06 38				ES 07 04	11		2	11		3	6		2
OMAEZA	0	EP 06 06 381				ES 07 081	14		4	28		5			
MITO	0	IX 06 06 384				ES 07 050	12		4	9		3	8		3
HIKONE	0	P 06 06 425				S 07 064	16		1	19		2	9		1
ONAHAM	0	EX 06 06 460				ES 07 153	14		1	12		1	7		3
TOMISA	0	EP 06 06 468					9		5	8		5	5		3
KYOTO	0	EP 06 06 494				IS 07 200	5		3	4		1	3		5
TOYOOK	0	EP 06 06 570				ES 07 359	14		1	7		1			
OSAKA	0	EP 06 07 015				ES 07 370	18		4	31		5	9		4

Origin Time		Location			Magnitude
		Longitude	Latitude	Depth km	
d h m • s	± • s	° ′ ± ′	° ′ ± ′		•
31 07 15 102	003	138 09 01	36 33 01	0	38

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^n								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
MATSUS	3	P 07 15 124													
NAGANO	3	IP 07 15 141	N 10	E 6	U 74	IS 15 161	35	1		50	1	0	50	1	
MATSUM	X	IP 07 15 189			U	IS 15 244									
KARUIZ	0	P 07 15 210			U	S 15 260									
TAKADA	0	EP 07 15 228				S 15 306									
MAEBAS	0	EP 07 15 260				IS 15 363	7		1	7		4	4		5
TOYAMA	0	EP 07 15 29				ES 15 42	8		3	9		3	5		2
KUMAGA	0	EX 07 15 350					6		3	6		3	5		3
WAJIMA	0	EX 07 15 404					18		1	19		1			
MITO	0	EP 07 15 443				IS 16 105	5		1	6		0	2		0
NIIGAT	0	E 07 16 011					5		1	5		1			

Origin Time		Location			Magnitude
		Longitude	Latitude	Depth km	
d h m • s	± • s	° ′ ± ′	° ′ ± ′		•
31 07 36 077	002	138 14 01	36 32 01	0	39

Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^n								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
NAGANO	2	IP 07 36													
MATSUS	3	P 07 36 107													
MATSUM	X	IP 07 36 172			U 2	IS 36 227									
KARUIZ	0	P 07 36 179			U	IS 36 236									
TAKADA	0	EP 07 36 208				S 36 292									
MAEBAS	0	EP 07 36 237				IS 36 353	11		1	7		4	4		2
KUMAGA	0	EX 07 36 260					7		1	5		1	4		3
TOYAMA	0	EP 07 36 27				ES 36 44	7		3	6		3	4		2
KOFU	0	IP 07 36 276			U 3	ES 36 400	6		0	9		0	3		1
MITO	0	EP 07 36 432				IS 37 086	9		0	9		0	3		0
WAJIMA	0	EX 07 36 435					17		1	20		1			
NAGOYA	0	EP 07 36 450				S 37 042	9		1	6		1	3		1
NIIGAT	0	E 07 36 570					7		1	10		1			

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	± s		°	′	± ′	°	′	± ′		
31	07	41	172	003		138	10	01	36	21	02	20	38

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
MATSUS	1	P	07	41																				
NAGANO	1	IP	07	41																				
MATSUM	0	P	07	41	231					U		S	41	280										
KARUIZ	0	IP	07	41	250					D	3	S	41	300										
MAEBAS	0	P	07	41	324					D		ES	41	437		8		3	11		3	9		3
TAKADA	0	EP	07	41	324							S	41	400										
KUMAGA	0	EP	07	41	360							ES	41	550		12		3	6		3	6		3
TOYAMA	0	EP	07	41	38							ES	41	53		6		3	6		3	5		3
NIIGAT	0	E	07	42	096											2		1	8		1			
TOKYO	0	EP	07	42	11							ES	42	31		5		4	8		4	5		5

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	± s		°	′	± ′	°	′	± ′		
31	13	37	126	001		138	15	01	36	29	01	0	41

NAGANO	2	IP	13	37																					
MATSUS	4	P	13	37	149																				
MATSUM	X	IP	13	37	213	S		W	2	U	10	IS	37	266											
KARUIZ	X	IP	13	37	22C	N	2	W		D	4	S	37	265					10	1	2				
ONAHAM	0	EX	13	37	226											8		1	10		1	3		1	
TAKADA	0	EP	13	37	268							S	37	354											
MAEBAS	0	IP	13	37	283			W	1	D	4	S	37	383		16		3	22		3	23		3	
KOFU	0	EP	13	37	319							IS	37	443		11		0	17		0	7		1	
TOYAMA	0	P	13	37	330					U	3	S	37	434		16		2	15		2	11		3	
IIDA	0	EP	13	37	342							ES	37	484		7		0	5		1	1		0	
KUMAGA	0	EP	13	37	354							ES	37	492		20		3	12		4	20		4	
FUNATS	0	IP	13	37	366							IS	37	511											
UTSUNO	0	P	13	37	386	S	2	W	3	D	6	S	37	560		7		1	7		1	7		1	
KANAZA	0	EP	13	37	390							ES	37	570		7		2	6		2				
WAJIMA	0	EX	13	37	437											18		1	17		1				
KAKIOK	0	EP	13	37	44							ES	38	06		7		1	6		1	2		1	
GIFU	0	EP	13	37	450	N	3	E	3			ES	38	070		10		1	8		1	4		1	
SHIZUO	0	EP	13	37	452							ES	38	054		5		1	8		1	3		1	
MISHIM	0	EP	13	37	453							ES	38	033		8		1	9		1	4		1	
TOKYO	0	P	13	37	460							ES	38	070		7		4	19		4	11		4	
NAGOYA	0	EP	13	37	464	S	1	W	1			S	38	100		8		1	13		1	5		1	
YOKOHA	0	EP	13	37	466					U	2	ES	38	116		12		1							
OMAEZA	0	EP	13	37	468											7		3	7		2				
MITO	0	EP	13	37	474							IS	38	110		8		1	4		1	4		2	
HAMAMA	0	P	13	37	490					U	2	ES	38	15		10		1	9		1	6		1	
HIKONE	0	P	13	37	533							S	38	189		13		1	7		1	3		1	
OSAKA	0	X	13	38	146											9		3	8		5				

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	± s		°	′	± ′	°	′	± ′		
2	09	52	414	003		138	14	01	36	32	01	0	40

NAGANO	2	IP	09	52																					
MATSUS	3		09	52	44																				
KARUIZ	0	EP	09	52	502																				
MATSUM	0	EP	09	52	505							IS	52	560											
TAKADA	0	EP	09	52	546							S	53	022											
MAEBAS	0	P	09	52	569					D		S	53	073		13		5	17		3	15		3	
TOYAMA	0	EP	09	53	01							ES	53	17		11		3	14		3	9		3	
KOFU	0	IP	09	53	012					U	1	ES	53	154		6		4	7		3	3		1	
KUMAGA	0	EP	09	53	045							ES	53	327		15		3	11		3	10		4	
YOKOHA	0	EP	09	53	144							EX	53	400		8		1							
WAJIMA	0	EP	09	53	146											46		1	40		1				
MITO	0	EP	09	53	155							IS	53	412		5		0	3		0	2		0	

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^n μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	AN	P	T	AE	P	T	AZ	P	T
							μ		S	μ		S	μ		S
HAMAMA	0	P 09 53 175				S 53 465	8		1	5		2	4		2
HIKONE	0	S 09 53 485					8		1	9		1	3		1

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
2	10	01	353	006	138 17	03	36 32	03	0 39

NAGANO	2	IP	10	01																
MATSUS	2	P	10	01																
MATSUM	0	P	10	01	436								IS	01	495					
KARUIZ	0	P	10	01	436				U				ES	01	494					
TAKADA	0	EP	10	01	472								S	01	552					
MAEBAS	0	IP	10	01	506	N	W	1	D	2	S	02	002	8	4	7	2	11	2	
TOYAMA	0	EP	10	01	58						ES	02	08	12	3	6	3	8	3	
KUMAGA	0	EP	10	02	049						ES	02	350	13	3	8	3	8	4	
NAGOYA	0	EP	10	02	096						S	02	316	8	1	7	1	4	1	
MITO	0	EP	10	02	100						IS	02	344	8	0	5	0	3	1	
HAMAMA	0	P	10	02	110						ES	02	37	5	1	4	1	4	1	
TOKYO	0	EX	10	02	312									8	3	12	4	13	4	
YOKOHA	0	ES	10	02	347									8	1					
HIKONE	0	S	10	02	413									6	1	6	1	3	1	

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
3	18	50	084	002	138 14	01	36 32	01	0 41

NAGANO	2	EP	18	50																
MATSUS	2	P	18	50																
KARUIZ	0	EP	18	50	175								S	50	229					
MATSUM	X	IP	18	50	184				U				IS	50	236					
TAKADA	0	EP	18	50	221								S	50	297					
MAEBAS	0	P	18	50	239				D				S	50	336	8	3	7	3	11	3	
KOFU	0	IP	18	50	277	S	1	E	U	5	ES	50	403	6	0	9	1	4	1	
KUMAGA	0	P	18	50	314				D	1	ES	50	449	9	3	9	3	8	4	
MISHIM	0	EP	18	50	398						ES	51	016	6	1	8	1	3	1	
WAJIMA	0	EX	18	50	426									30	1	25	1			
MITO	0	EP	18	50	434						IS	51	075	13	0	8	0	3	0	
NAGOYA	0	EP	18	50	435	N	1	E	U	1	ES	51	060	4	1	8	1	3	1	
HAMAMA	0	EP	18	50	44						ES	51	11	7	1	4	2	4	1	
TOKYO	0	EP	18	50	528									8	4	8	4	8	4	
NIIGAT	0	EX	18	51	010									5	1	7	1			
YOKOHA	0	IS	18	51	069									8	1	9	1			
HIKONE	0	S	18	51	172									6	1	9	1	2	1	
ONAHAM	0	EX	18	51	180									6	1	5	1			

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
5	21	50							

MATSUS	2	P	21	50																
NAGANO	1	P	21	50																
KARUIZ	0	P	21	50	329				D				S	50	378					
MATSUM	X	IP	21	50	335				D	2			IS	50	391					
TAKADA	0	EP	21	50	384								S	50	470					
MAEBAS	0	IP	21	50	419	N	W	1	D	4	S	50	514	11	3	12	3	9	3	
KOFU	0	EP	21	50	427						ES	50	540	7	0	8	1	3	0	
KUMAGA	0	EP	21	50	456						ES	51	044	13	4	9	4	6	4	
WAJIMA	0	EX	21	50	565									27	1	11	1			
MISHIM	0	EP	21	50	570						ES	51	143	6	1	6	0	2	0	
YOKOHA	0	EP	21	50	575						ES	51	225	9	1					
GIFU	0	EP	21	50	597						ES	51	214	6	1	3	1			

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Origin Time					Location						Magnitude
					Longitude			Latitude		Depth km	
d	h	m	s	± s	° ′	± ′		° ′	± ′		
6	03	37	385	002	138 11	01		36 33	01	0	48

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	s		μ		μ		μ		m	s		AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	4	P	03	37	414																			
NAGANO	4	IP	03	37	432	N	62	W	3	U		S	37	451		25	2		30	2		15	2	
KARUIZ	X	IP	03	37	483	S	3	E	6	U	10	S	37	538		13	2	2	10	2	2	40	1	2
MATSUM	2	IP	03	37	484			W	2	U	9	IS	37	537		45	1	3	35	1	3	50		3
TAKADA	1	P	03	37	512	N	5	E	1	U	9	S	37	596		25	1	4	25	1	4	10	1	4
MAEBAS	1	IP	03	37	563	N	1	W	3	D	9	ES	38	060		20	1	5	11	1	5	13	1	3
TOYAMA	0	IP	03	37	573	S		E		D	13	S	38	099		15	1	4	13	1	3	15	1	4
TAKAYA	0	EP	03	37	574							S	38	104										
CHICHI	0	EP	03	37	576							ES	38	120										
KOFU	0	IP	03	37	576	S	9	E	8	U	17	ES	38	111		69		4	49		3	23		3
KUMAGA	0	EP	03	37	599							S	38	156		13	1	4	14	1	5	10	1	4
IIDA	0	IP	03	38	012							IS	38	166		32		2	46		3	7		4
FUNATS	0	P	03	38	021							S	38	207										
KANAZA	0	P	03	38	050							ES	38	260		50		4	50		4	29		3
UTSUNO	0	P	03	38	058	N	3	W	11			S	38	237		41		3	30		4			
WAJIMA	0	EP	03	38	058							IS	38	213					26	1	1	70		0
AIKAWA	0	IP	03	38	063	N	1	W		U	1	IS	38	258		26		1	16		0	8		0
MISHIM	0	EP	03	38	079							ES	38	271		34		1	63		4	12		2
NIIGAT	0	EP	03	38	093					D	8	S	38	308		14	1	4	28	1	4	32		4
TOKYO	0	P	03	38	096							S	38	313		84		5	11	1	5	88		4
SHIZUO	0	EP	03	38	099							ES	38	334		14		4	16		5	10		1
KAKIOK	0	X	03	38	10											23		1	27		1	10		1
AJIRO	0	IP	03	38	108	S	1	E		U	1	ES	38	340		9		1	10		1	4		1
FUKUI	0	P	03	38	115																			
SHIRAK	0	EP	03	38	116							ES	38	382										
NAGOYA	0	EP	03	38	122					U	2	IS	38	356		53		3	45		1	17		1
YOKOHA	0	EP	03	38	125					U	3	IS	38	367		82		4	85		4	25		2
GIFU	0	P	03	38	131							X	38	249		52		1	41		2	25		1
MITO	0	IP	03	38	139							IS	38	389		42		4	34		1	24		3
HAMAMA	0	P	03	38	151							S	38	422		31		1	31		2	16		1
OSHIMA	0	EP	03	38	160					U	3					21		3	12		2	5		2
TSURUG	0	EP	03	38	175							S	38	459										
OMAEZA	0	P	03	38	176							S	38	474		45		5	51		5	25		3
HIKONE	0	P	03	38	184							IS	38	463		51		1	41		1	18		5
TOMISA	0	IP	03	38	187	U	2									25		5	30		4	13		4
FUKUSH	0	P	03	38	194											6		1	4		1	4		4
ONAHAM	0	EX	03	38	199							ES	38	517		35		1	34		1	10		3
CHOSHI	0	EP	03	38	257																			
TSU	0	EX	03	38	260																			
NARA	0	EP	03	38	282																			
KYOTO	0	EX	03	38	290							ES	39	039		7		2	11		5	7		6
OSAKA	0	P	03	38	300							S	39	120		75		5	10	1	5	20		3
SAKATA	0	EX	03	38	33							ES	39	083										
SENDAI	0	EP	03	38	34							ES	39	120		10		6	7		2	4		6
OWASE	0	P	03	38	346							S	39	180		5		2	5		4	5		1
SUMOTO	0	EP	03	38	359							ES	39	254		7		4	7		4	4		6
												IX	38	465										
TOYOOK	0	EP	03	38	365							ES	39	157		23		1	16		1	8		1
WAKAYA	0	X	03	38	478							X	39	322		7			4					
SHIONO	0	EX	03	38	522							ES	39	378		5		3	7		3	2		2
TAKAMA	0	EX	03	38	573							EX	39	508		6		6	6		6			
MUROTO	0	EP	03	39	011							EX	40	161		4		4	5		5			
AKITA	0	EX	03	39	34											7		4	8		4	5		3

Origin Time					Location						Magnitude
					Longitude			Latitude		Depth km	
d	h	m	s	± s	° ′	± ′		° ′	± ′		
6	03	40									

NAGANO	3	EP	03	40											20	2		17	2		10	2		
MATSUS	3	P	03	40	02																			
KARUIZ	0	EP	03	40	077										70	1	1	80	1	2	30	1	3	
MATSUM	1	EP	03	40	103							IS	40	158	35	1	3	20	1	3	50		3	
CHICHI	0	EP	03	40	121							ES	40	324										
IIDA	0	EP	03	40	168							ES	40	380	20		3	34		4	5		4	
TAKAYA	0	EP	03	40	194							S	40	314										
TAKADA	1	S	03	40	216										20	1	4	15	1	4	10	1	4	
KAKIOK	0	EX	03	40	23										10		1	8		1	4		1	
FUNATS	0	P	03	40	256							S	40	401										

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A×10^n μ								
						N	E	Z				N			E			Z		
			h	m	• s	μ	μ	μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
												μ		S	μ		S	μ		S
TOYAMA	0	EP	03	40	26				ES	40	41	85		4	94		4	65		4
AIKAWA	0	IP	03	40	263				IS	40	482	11		2	13		0	5		6
MAEBAS	0	E	03	40	279							14	1	5	10	1	3	11	1	3
KANAZA	0	EP	03	40	280															
WAJIMA	0	EP	03	40	282															
UTSUNO	0	EP	03	40	287				IS	40	471				17	1	1	53		1
MISHIM	0	EP	03	40	303				ES	40	465	30		3	21		4			
SHIZUO	0	EP	03	40	314							18		2	31		4	9		3
GIFU	0	EP	03	40	350				ES	40	540	8		3	10		3	4		
									ES	40	571	31		3	26		2	7		1
NAGOYA	0	EP	03	40	356															
MITO	0	IP	03	40	363				S	40	580	41		3	32		3	11		1
HAMAMA	0	EP	03	40	38				ES	41	015	27		5	22		4	19		4
KUMAGA	0	EP	03	40	380				S	41	052	31		2	29		2	13		2
OITA	0	EX	03	41	041							99		3	75		5	68		3
												14		3	11		4			
SHIMON	0	EP	03	41	05							5		4	3		4	2		3
HIKONE	0	ES	03	41	076							30		2	23		1	9		1
WAKAYA	0	P	03	41	084							3			6					
ONAHAM	0	EX	03	41	133				S	41	542	21		3	15		1	5		2
OSAKA	0	X	03	41	200							61		5	62		5	16		3
TOYOOK	0	ES	03	41	370							22		2	16		1			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′	km	•
6	23	45	007	001		138	12	01	36	32	01	0	40

MATSUS	1	P	23	45																
NAGANO	1	P	23	45																
MATSUM	0	IP	23	45	100				U	5	IS	45	153							
KARUI7	0	P	23	45	102				D		S	45	155							
TAKADA	0	EP	23	45	147						S	45	223							
MAEBAS	0	IP	23	45	167			W	D	2	S	45	268	9		3	7	2	9	3
KOFU	0	IP	23	45	207				U	1	IS	45	327	6		1	6	1	3	1
KUMAGA	0	EP	23	45	229						ES	45	390	8		3	8	4	7	3
NIIGAT	0	EX	23	45	311									7		0	12	0		
TOKYO	0	EP	23	45	32									6		3	8	4	6	4
GIFU	0	EP	23	45	33						S	45	56	8		1	6	1		
WAJIMA	0	EP	23	45	337						ES	45	448	75		1	30	1		
YOKOHA	0	EP	23	45	38						IS	46	02	8		1	6	1		
HIKONE	0	S	23	46	081									6		1	8	1	2	1

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′	km	•
7	15	18	516	007		138	07	03	36	26	04	20	41

NAGANO	2	P	15	18																
MATSUS	4	P	15	18	511															
MATSUM	0	IP	15	18	579				U		IS	19	037							
KARUI7	0	IP	15	18	589	N	W	4	D	4	S	19	045							
TAKADA	0	EP	15	19	018						S	19	100							
TOYAMA	0	P	15	19	071				U	3	ES	19	19	15		3	18	3	10	3
MAEBAS	0	IP	15	19	081				D	4	S	19	184	17		4	19	4	34	3
KOFU	0	EP	15	19	082						IS	19	200	12		0	9	0	6	1
KUMAGA	0	EX	15	19	110									22		4	16	3	24	4
KANAZA	0	EP	15	19	148									5		2	5	2		
WAJIMA	0	EX	15	19	212									54		1	30	1		
TOKYO	0	EP	15	19	224						ES	19	435	8		4	26	4	20	4
MITO	0	EP	15	19	237						IS	19	495	5		0	6	0	4	1
YOKOHA	0	EP	15	19	246						ES	19	498	7		3	10	3		
NIIGAT	0	EX	15	19	270						S	19	429	9		4	11	4	5	4
HIKONE	0	EP	15	19	297						S	19	563	6		1	6	1	2	1
ONAHAM	0	EX	15	20	028									7		2	8	1	4	1

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Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	±	s	°	′	± ′	°	′	± ′		•
8	21	23	329	002		138	13	01	36	31	01	0	43

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	s	μ		μ		μ		m	s		AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
NAGANO	2	IP	21	23																			
MATSUS	3	P	21	23	353																		
KARUIZ	0	P	21	23	414							S	23	464									
MATSUM	X	IP	21	23	421					U	3	IS	23	481									
TAKADA	0	P	21	23	466							S	23	546									
MAEBAS	0	IP	21	23	487					D	2	S	23	590	29		4	28		3	30		3
TOYAMA	0	P	21	23	519					D		S	24	058	20		4	18		3	16		4
CHICHI	0	EP	21	23	522							ES	24	042									
KOFU	0	IP	21	23	527	S	3	E	1	U	3	ES	24	051	11		3	9		3	5		1
IIDA	0	EP	21	23	554							ES	24	108	6		3	9		3	5		4
KUMAGA	0	EP	21	23	556							ES	24	154	26		3	20		3	18		3
FUNATS	0	P	21	23	568							S	24	113									
KANAZA	0	EP	21	23	598							ES	24	164	10		4	11		3	6		2
UTSUNO	0	P	21	24	001			W	2	D	2	S	24	182	13		1	7		1	9		1
MISHIM	0	EP	21	24	026							ES	24	241	11		1	12		3	1		1
WAJIMA	0	EP	21	24	047							IS	24	200	70		1	51		1			
TOKYO	0	EX	21	24	048										19		4	25		3	20		3
NAGOYA	0	EP	21	24	072							S	24	296	12		1	12		1	8		1
GIFU	0	EP	21	24	076							S	24	288	16		2	9		1	6		1
MITO	0	IP	21	24	083					D		ES	24	331	12		1	9		1	5		3
HAMAMA	0	P	21	24	095							ES	24	35	14		1	10		2	6		1
HIKONE	0	EP	21	24	133							ES	24	394	15		1	14		1	4		1
OMAEZA	0	IX	21	24	14										8		4	11		4			
ONAHAM	0	EX	21	24	150							ES	24	438	10		1	10		1	3		1
NIIGAT	0	EX	21	24	155							ES	24	260	67		6	37		5	12		4
OSAKA	0	X	21	25	068										18		4	18		4	5		3

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	±	s	°	′	± ′	°	′	± ′		•
8	21	32											

MATSUS	2	P	21	32																			
NAGANO	2	P	21	32																			
KARUIZ	0	EP	21	32	098							S	32	148									
MAEBAS	0	IP	21	32	156					D	2	S	32	272	5		4	7		3	9		3
TAKADA	0	P	21	32	162							S	32	232									
TOYAMA	0	EP	21	32	20							S	32	370	6		2	6		2	5		2
KOFU	0	EP	21	32	204							ES	32	333	5		1	7		0	3		1
KUMAGA	0	EX	21	32	240										6		3	6		4	6		4
MISHIM	0	EP	21	32	294							ES	32	513	6		1	6		1	2		0
WAJIMA	0	EP	21	32	338							IS	32	487	25		1	25		1			
YOKOHA	0	IS	21	33	011										8		1						

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	±	s	°	′	± ′	°	′	± ′		•
9	16	14	371	002		138	09	01	36	36	01	0	46

MATSUS	3	P	16	14	408																			
NAGANO	3	IP	16	14	419	N	28	W	9	U	72	S	14	436	18	2		11	2		11	2		
KARUIZ	0	IP	16	14	470	N	8	W	6	D	14	S	14	521	50	1	2	50	1	2	30	1	1	
MATSUM	1	P	16	14	477							IS	14	534										
TAKADA	0	P	16	14	498							S	14	580										
TAKAYA	0	EP	16	14	569							S	15	089										
KOFU	1	IP	16	14	571	S	4	E	1	U	7	IS	15	093	37		0	46		1	23		1	
TOYAMA	0	IP	16	14	574	S	3	E	3	D	9	S	15	078	82		4	80		3	56		4	
KUMAGA	0	EP	16	14	580							ES	15	120	58		3	47		5	54		5	
MAEBAS	0	IP	16	14	582	N	4	W	8	D	25	ES	15	086	43		4	50		4	57		3	
IIDA	0	EP	16	15	004							IS	15	154	26		1	27		0	11		1	
FUNATS	0	IP	16	15	025							IS	15	162										
UTSUNO	0	IP	16	15	041	N	4	W	11	D	9	IS	15	238	39		1	23		2	16		1	
KANAZA	0	P	16	15	044					D		ES	15	204	20		2	25		2	19		2	
AIKAWA	0	IP	16	15	048	N		E		U		IS	15	242	8		1	6		1	3		3	
NIIGAT	0	EX	16	15	070							ES	15	300	40		4	66		5	14		4	
WAJIMA	1	EP	16	15	073							IS	15	234	17	1	1	16	1	1				

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × [illegible]								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MISHIM	0	EP	16	15	081							IS	15	289	46		1	54		1	11		1
KAKIOK	0	EP	16	15	086							S	15	285	18		1	16		1	8		1
SHIZUO	0	EP	16	15	090							ES	r15	323	14		1	11		1	8		1
TOKYO	0	EP	16	15	092							ES	15	298	41		3	34		4	32		4
AJIRO	0	IP	16	15	103	N	1	E		D	1	EX	15	123									
GIFU	0	P	16	15	111							S	15	319	9		0	9		0	3		1
FUKUI	0	P	16	15	112							S	15	335	38		1	50		1			
												S	15	374									
MITO	0	IP	16	15	115					D	2	IS	15	366	17		0	18		3	11		3
NAGOYA	0	EP	16	15	117	N	2	E	2	D	1	IS	15	348	42		1	41		1	16		1
YOKOHA	0	EP	16	15	127							S	15	374	64		2	46		1	14		3
HAMAMA	0	P	16	15	140							S	15	401	24		1	20		1	14		1
TOYOOK	0	ES	16	15	141																6		1
OMAEZA	0	EP	16	15	146										20		2	20		4	17		3
OSHIMA	0	IP	16	15	161			W		D	5	IS	15	425	12		1	8		1	5		1
TOMISA	0	EP	16	15	173							S	15	385	15		2	13		4	8		3
TSURUG	0	EP	16	15	180							S	15	457									
ONAHAM	0	IP	16	15	189					U	7	IS	15	493	22		2	22		1	17		4
HIKONE	0	EP	16	15	192							S	15	455	46		1	29		1	20		1
NARA	0	EP	16	15	251																		
KYOTO	0	EP	16	15	259							ES	16	019				8		0	3		1
FUKUSH	0	EX	16	15	283										7		1	4		1			
OSAKA	0	EP	16	15	380							S	16	126	26		4	27		4	14		2
WAKAYA	0	EP	16	15	433							S	16	278	8			4					

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
9	16	41	165	003	138 09	01	36 25	02	0	41

NAGANO	1	EP	16	41																			
MATSUS	2	P	16	41																			
MATSUM	X	IP	16	41	232	S		W	3	U	8	IS	41	290									
KARUI7	0	IP	16	41	253	N	2	W	8	D	10	S	41	307	50	1	2	40	1	2	20	1	2
KOFU	0	EP	16	41	349							ES	41	473	7		1	10		4	5		1
TOYAMA	0	EP	16	41	35							ES	41	48	16		3	17		4	7		4
IIDA	0	EP	16	41	360							ES	41	514	6		3	6		1	2		1
KUMAGA	0	EP	16	41	384							ES	41	544	32		3	26		4	22		3
MAEBAS	0	P	16	41	400					D		ES	41	508	39		5	33		4	25		3
KANAZA	0	EP	16	41	412							ES	42	000	8		3	7		4	5		3
UTSUNO	0	P	16	41	439							S	42	030	6		1	5		2	5		1
NIIGAT	0	EP	16	41	459							ES	42	121	14		4	30		5	9		4
GIFU	0	EP	16	41	48							ES	42	105	8		2	6		1			
NAGOYA	0	EP	16	41	480							ES	42	128	9		1	12		1	5		1
WAJIMA	0	EP	16	41	493										14		1	14		1			
TOKYO	0	EX	16	41	500							ES	42	142	19		4	20		4	15		3
HAMAMA	0	EP	16	41	513					U		ES	42	17	6		3	6		4	3		2
MITO	0	EP	16	41	515							ES	42	170	6		3	5		3	4		3
YOKOHA	0	EP	16	41	516							ES	42	162	13		1	10		1			
OMAEZA	0	EP	16	41	554										13		3	8		7			
HIKONE	0	EP	16	41	567							ES	42	198	8		1	8		1	6		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
10	02	49	279	002	138 13	02	36 32	01	0	42

MATSUS	2	P	02	49																			
NAGANO	3	IP	02	49	320	S	4	W		D	21	S	49	339	15	2		90	1		70	1	
MATSUM	X	IP	02	49	372					D	2	IS	49	427									
KARUI7	0	P	02	49	386	S				U		S	49	439	30	1	2	30	1	2			
TAKADA	0	EP	02	49	407							S	49	483									
MAEBAS	0	IP	02	49	423			W		D	2	ES	49	528	17		4	21		4	13		4
TOYAMA	0	EP	02	49	47							S	49	553	27		4	22		3	16		4
KOFU	0	IP	02	49	480					U	1	ES	49	594	9		3	10		3	4		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion				Phase				Maximum Amplitude = A×10^P μ								
						N		E		Z				N				E				
			h	m	• s		μ		μ		μ	m	• s	AN	P	T		AE	P	T		AZ	P	T
																S				S				S
IIDA	0	EP	02	49	502							ES	50 060	5		1		7		3		3		1
KUMAGA	0	EP	02	49	510							ES	50 076	27		5		20		5		12		3
UTSUNO	0	EP	02	49	567							S	50 138	11		1		7		1		4		1
NIIGAT	0	EP	02	49	578							ES	50 201	24		1		42		4		10		5
WAJIMA	0	EP	02	49	594							IS	50 119	48		1		62		1				
MISHIM	0	EP	02	50	003							ES	50 225	6		1		11		1		2		1
NAGOYA	0	EP	02	50	015					D	1	S	50 244	9		1		12		1		5		1
KAKIOK	0	EP	02	50	02							S	50 220	8		1		6		1		2		1
TOKYO	0	EP	02	50	022							ES	50 228	14		4		20		4		14		4
												EX	50 278											
MITO	0	IP	02	50	034							IS	50 288	9		1		5		1		3		1
YOKOHA	0	EP	02	50	042							S	50 295	10		1		11		1				
HAMAMA	0	P	02	50	057					D		S	50 316	6		1						10		1
HIKONE	0	EP	02	50	106							ES	50 352	12		1		13		1		3		1
OMAEZA	0	EP	02	50	115							ES	50 367	11		5		13		5				

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
11	02	11	072	002	138 21	01	36 37	01		0	44

NAGANO	2	IP	02	11																						
MATSUS	2	P	02	11																						
KARUI7	0	IP	02	11	162			E	4	U	14	S	11 210	20	1	2		30	1	3		10	1	1
MATSUM	X	IP	02	11	192					D	4	IS	11 257													
TAKADA	0	P	02	11	194							S	11 278													
MAEBAS	0	IP	02	11	222	S		E	1	U	2	S	11 312	45		5		59		5		84		3
CHICHI	0	EP	02	11	254							IS	11 374													
KUMAGA	0	EP	02	11	274							ES	11 420	51		4		53		4		42		4
KOFU	0	IP	02	11	283	S	2	E		U	4	IS	11 411	23		4		49		4		8		3
IIDA	0	EP	02	11	320							ES	11 474	11		0		12		4		5		3
FUNATS	0	P	02	11	322							S	11 478													
UTSUNO	0	P	02	11	329							S	11 486	11		0		12		3				
GIFU	0	EP	02	11	331							S	12 064	20		1		19		1				
TOYAMA	0	EP	02	11	34							S	11 493	26		4		23		3		19		2
AIKAWA	0	IP	02	11	342	N	1	W		U	3	IS	11 532	7		1		5		2		3		0
WAJIMA	0	EP	02	11	359							ES	11 510	30		1		31		1				
KANAZA	0	EP	02	11	362							ES	11 520	10		3		11		4		10		2
NIIGAT	0	EP	02	11	363							IS	11 563	29		4		45		5		14		6
KAKIOK	0	EP	02	11	367							ES	11 56	14		0		13		0		9		0
TOKYO	0	EP	02	11	372							ES	11 584	40		3		29		3		17		3
MISHIM	0	EP	02	11	372									11		3		19		3		4		1
MITO	0	IP	02	11	408							IS	12 040	15		1		15		1		10		3
NAGOYA	0	EP	02	11	429			E		D	1	S	12 078	15		1		15		1		8		1
FUKUI	0	P	02	11	445																					
HAMAMA	0	P	02	11	452							S	12 115	14		2		11		3		5		1
TOMISA	0	IP	02	11	465					U				6		3		7		2		5		3
ONAHAM	0	EX	02	11	467									10		1		16		1		5		3
OMAEZA	0	EP	02	11	490									14		4		24		4		8		2
HIKONE	0	EP	02	11	502							ES	12 167	15		1		13		1		6		1
OSAKA	0	X	02	12	080									16		3		21		4		7		2

Origin Time					Location						Magnitude
					Longitude		Latitude			Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
11	19	55	460	001	138 17	01	36 35	00		0	44

MATSUS	2	P	19	55																						
NAGANO	3	IP	19	55	511	S	1	E		D	9	IS	55 529	60	1			50	1			40	1			
KARUI7	0	IP	19	55	551	N	4	W	8	D	20	S	56 001	20	1	2		20	1	2		10	1	1		
MATSUM	X	IP	19	55	572					D	2	IS	56 033													
TAKADA	0	P	19	55	590							S	56 066													
MAEBAS	1	IP	19	56	013	N	1	W	4	D	17	S	56 110	28		1		30		5		33		3		
CHICHI	0	EP	19	56	050							S	56 165													

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
TOYAMA	0	IP	19	56	052					D	4	S	56	189		23		4	23		4	14		4
KOFU	1	EP	19	56	059					D	1	IS	56	177		38		0	50		0	31		1
KUMAGA	0	EP	19	56	080							ES	56	256		24		4	30		6	22		3
IIDA	0	EP	19	56	100							ES	56	250		8		2	13		1	3		1
FUNATS	0	P	19	56	114							IS	56	260										
UTSUNO	0	P	19	56	122					D	3	S	56	291		22		1	14		1	8		1
AIKAWA	0	IP	19	56	137	S		W		D	1	IS	56	328		8		1	7		1	2		1
KANAZA	0	EP	19	56	142							ES	56	326		10		2	9		3	10		3
KAKIOK	0	EP	19	56	159							S	56	380		18		1	11		1	6		1
WAJIMA	0	EP	19	56	167							ES	56	337		60		1	51		1			
MISHIM	0	P	19	56	168							IS	56	372		24		1	25		1	4		1
NIIGAT	0	EP	19	56	171							S	56	365		19		1	26		4			
TOKYO	0	EP	19	56	172							ES	56	374		8		4	20		4	18		4
MITO	0	IP	19	56	195							IS	56	446		24		1	20		1	9		1
YOKOHA	0	EP	19	56	198					D	4	ES	56	455		28		1	21		2			
GIFU	0	EP	19	56	201							S	56	416		10		1	8		1			
NAGOYA	0	EP	19	56	210	N	1	E		D	1	ES	56	452		8		1	9		1	4		1
HAMAMA	0	P	19	56	240							S	56	488		15		1	10		2	5		1
TOMISA	0	P	19	56	265											15		4	8		3	4		3
OMAEZA	0	EP	19	56	273							ES	56	580		13		2	13		3			
ONAHAM	0	EX	19	56	312											12		1	14		1	6		2
OSAKA	0	EP	19	56	455							S	57	259		12		4	13		5	5		3
HIKONE	0	S	19	56	571											7		1	8		1	2		1

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
12	03	29	097	003		138	16	02	36	28	02	0	39

NAGANO	1	IP	03	29																				
MATSUS	2	P	03	29																				
MATSUM	1	IP	03	29	174				U	2	IS	29	221											
KARUIZ	0	IP	03	29	175			E	U	2	IS	29	224											
TAKADA	0	EP	03	29	243						S	29	323											
MAEBAS	0	P	03	29	248				D		ES	29	347		18		5	10		3	6		3	
KUMAGA	0	EP	03	29	310						ES	29	496		11		4	10		3	7		3	
TOYAMA	0	EP	03	29	36						ES	29	45		9		4	9		3	6		3	
GIFU	0	EP	03	29	417						S	30	029		8		1	6		1				
NAGOYA	0	EP	03	29	423	S		W	U	1	S	30	040		6		1	7		1	3		1	
TOKYO	0	EP	03	29	424										5		4	7		4	7		4	
WAJIMA	0	EX	03	29	425										12		1	12		1				
HAMAMA	0	P	03	29	453						ES	30	10		5		2	5		2	3		2	
NIIGAT	0	ES	03	30	030										10		3	11		6				
YOKOHA	0	IS	03	30	08										6		1							

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		•
13	00	56											

NAGANO	0	IP	00	56																				
MATSUS	2	P	00	56																				
MATSUM	0	IP	00	56	199				U	4	IS	56	243											
KARUIZ	0	IP	00	56	224				D	4	S	56	276											
MAEBAS	0	P	00	56	264				D		ES	56	384		9		5	10		3	7		4	
TOKYO	0	EP	00	56	292						ES	56	508		5		4	10		4	7		4	
KUMAGA	0	EP	00	56	340						ES	56	454		6		4	7		4	7		3	
WAJIMA	0	EX	00	57	004										14		1	12		1				
YOKOHA	0	IS	00	57	116										6		2							

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
13	02	00	062	004	138 11	02	36 33	01	0	38

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A × 10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
NAGANO	2	IP	02	00																
MATSUS	2	P	02	00																
MATSUM	0	IP	02	00	153	S	W 2	U 9	IS	00	209									
KARUIZ	0	EP	02	00	168				S	00	220									
TAKADA	0	EP	02	00	197				S	00	273									
MAEBAS	0	IP	02	00	219	N	W 1		S	00	324	12	3	7	3	6	3			
KOFU	0	IP	02	00	266	S 1	E	U 1	IS	00	393	12	0	12	0	5	0			
TOYAMA	0	EP	02	00	27				ES	00	41	7	3	7	3	7	3			
KUMAGA	0	EX	02	00	304							6	3	7	4	7	4			
KANAZA	0	EP	02	00	326							5	3	6	4					
NIIGAT	0	EX	02	00	420				ES	00	590	7	1	11	6					
YOKOHA	0	EP	02	00	425				S	01	076	6	1	6	1					
WAJIMA	0	EP	02	00	437				ES	00	524	37	1	30	1					
TOKYO	0	EX	02	00	49									8	5	8	4			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
13	06	35	484	002	138 12	01	36 33	01	0	38

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A × 10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
NAGANO	2	IP	06	35																
MATSUS	2	P	06	35																
MATSUM	X	IP	06	35	577		U		IS	36	038									
KARUIZ	0	IP	06	35	590		U		S	36	042									
TAKADA	0	P	06	36	017				S	36	103									
MAEBAS	0	P	06	36	046		D		S	36	147	11	5	7	3	6	2			
TOYAMA	0	P	06	36	072				ES	36	16	7	3	6	3	8	2			
KOFU	0	IP	06	36	086	S 1	E	U 3	ES	36	210	4	0	7	0	3	1			
KANAZA	0	EP	06	36	203							5	2	5	2					
GIFU	0	EP	06	36	229				ES	36	434	8	1	6	1					
NAGOYA	0	EP	06	36	234		D 0		S	36	460	7	1	8	1	4	1			
WAJIMA	0	EX	06	36	234							43	1	44	1					
HAMAMA	0	P	06	36	260				S	36	524	6	1	6	1	3	1			
YOKOHA	0	EP	06	36	320							6	1	6	0					
TOKYO	0	EX	06	36	33									9	4	7	4			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
14	06	26	374	001	138 18	01	36 33	01	0	47

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A × 10^P μ N AN	P	T s	E AE	P	T s	Z AZ	P	T s
MATSUS	3	P	06	26	406															
NAGANO	3	IP	06	26	415	N 6	W 3	U 64	IS	26	430	16	2	3	17	2	3	10	2	1
KARUIZ	X	IP	06	26	463	S 8	E 12	U 10	S	26	519	70	1	2	75	1	2	25	1	2
MATSUM	1	IP	06	26	480	N 8	E 9	D 20	IS	26	532	25	1	3	25	1	3	10	1	3
TAKADA	1	P	06	26	502	N 4		U 4	S	26	580	20	1	4	25	1	4	10	1	4
MAEBAS	0	IP	06	26	553	N 1	W 3	D 4	IS	27	059	18	1	3	15	1	3	19	1	3
CHICHI	0	EP	06	26	557				ES	27	095									
KOFU	0	IP	06	26	570	S 10	E 7	U 12	ES	27	116	44		2	71		3	21		1
TOYAMA	0	IP	06	26	575		E 0	D 6	S	27	114	8		4	7		3	6		3
									IS	27	154	16		2	25		3	15		3
IIDA	0	EP	06	27	000				ES	27	160	20	1	3	11	1	3	90		3
KUMAGA	0	EP	06	27	000				S	27	173									
FUNATS	0	P	06	27	005				S	27	215	42		2	24		2	13		1
UTSUNO	0	P	06	27	032	N 1	W 4	D 2	S	27	216	35		2	32		2	19		2
KANAZA	0	P	06	27	046	N 1	E 3	D 3	IS	27	246				15		1	4		4
AIKAWA	0	IP	06	27	050	N	E	U 2	IS	27	249	11	1	1	16	1	2			
WAJIMA	0	EP	06	27	063				S	27	283	31		2	30		4			
MISHIM	0	P	06	27	072				S	27	291	60		4	13	1	5	36		4
NIIGAT	0	IP	06	27	072		D 7					34		4	47		5	15		4
OMAEZA	0	EX	06	27	076				S	27	286	35		1	19		1	10		1
KAKIOK	0	EP	06	27	083				S	27	314	9		1	13		3	9		2
SHIZUO	0	P	06	27	086				ES	27	346									
SHIRAK	0	EP	06	27	088				ES	27	316	8		2	11		2	4		2
AJIRO	0	IP	06	27	097		U 1		IX	27	360	51		4	81		3	23		3
YOKOHA	0	EP	06	27	103		U 2													

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10² μ								
			h	m	• s	N		E		Z			m	• s	N			E			Z		
							μ		μ		μ				AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
FUKUI	0	P	06	27	111	N	6	E	7	D	1	S	27	379									
MITO	0	IP	06	27	115							IS	27	346	36		1	26		3	21		1
NAGOYA	0	EP	06	27	117	S	1	W	1	U	2	S	27	356	45		1	37		1	24		1
GIFU	0	P	06	27	119							S	27	351	49		1	23		1	16		1
TOKYO	0	EX	06	27	120							EX	27	340	76		4	85		5	92		4
HAMAMA	0	IP	06	27	145							S	27	401	45		2	39		3	19		1
TSURUG	0	EP	06	27	157							ES	27	439									
FUKUSH	0	EX	06	27	166										6		1	6		1	4		4
ONAHAM	0	EX	06	27	179							ES	27	463	27		2	28		1	15		2
HIKONE	0	EP	06	27	202							IS	27	467	34		1	28		1			
TOMISA	0	EP	06	27	230										18		3	17		3	9		3
KYOTO	0	IP	06	27	234	N		E		D		IS	27	595				5		2	3		5
SENDAI	0	EP	06	27	26							ES	28	05	7		4	7		2	2		4
NARA	0	EP	06	27	271																		
OWASE	0	P	06	27	286										3		2	3		3	2		3
SAKATA	0	EX	06	27	301																		
OSAKA	0	P	06	27	352							S	28	118	43		4	51		5	13		3
TOYOOK	0	EP	06	27	353							ES	28	156	16		1	19		1	4		2
MIZUSA	0	EP	06	27	390							X	28	330	13		3	8		3	4		1
HACHIJ	0	EP	06	27	396							S	28	252	10			9					
WAKAYA	0	X	06	27	447							X	28	321	8			8					
AKITA	0	EX	06	27	555										5		4	6		5			
OITA	0	EX	06	30	052										9		5	11		5			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
14	09	25	383	002	138 10	01	36 28	01	0	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10² μ								
			h	m	• s	N		E		Z			m	• s	N			E			Z		
							μ		μ		μ				AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
NAGANO	2	IP	09	25																			
MATSUS	3	P	09	25	415																		
MATSUM	X	IP	09	25	461	S	3	W	4	U	12	IS	25	513									
KARUIZ	0	IP	09	25	478					D	10	S	25	535									
TAKADA	0	P	09	25	520							S	26	008									
MAEBAS	0	IP	09	25	551					D	2	IS	26	062	17		3	7		4	15		4
KOFU	0	IP	09	25	569	S	2	E		U	3	IS	26	089	17		0	29		0	9		0
TOYAMA	0	P	09	25	572							S	26	114	9		4	11		3	8		4
CHICHI	0	EP	09	25	577							S	26	103									
KUMAGA	0	EP	09	25	590							ES	26	174	12		3	11		3	7		3
IIDA	0	EP	09	25	596							ES	26	142	6		1	5		1	1		1
KANAZA	0	EP	09	26	041							ES	26	212	5		2	5		2			
UTSUNO	0	EP	09	26	061					D	1	ES	26	226	6		1	3		1	3		1
MISHIM	0	EP	09	26	097							ES	26	293	9		1	9		1	4		1
NIIGAT	0	EP	09	26	100							S	26	325	70		4	19		5	11		4
NAGOYA	0	EP	09	26	102					U	1	S	26	332	6		1	7		1	4		1
TOKYO	0	EP	09	26	106							ES	26	324	10		4	10		4	9		4
OMAEZA	0	EP	09	26	125										7		2	7		2			
YOKOHA	0	EP	09	26	139					D	2	IS	26	389	22		1	13		0			
HAMAMA	0	EP	09	26	14							ES	26	41	5		1	6		2	3		1
WAJIMA	0	EX	09	26	204										30		1	23		1			
HIKONE	0	EP	09	26	216							S	26	441	11		1	8		1			
OSAKA	0	X	09	27	108										6		3	6		4			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
14	10	14	155	002	138 15	01	36 34	01	0	50

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10² μ								
			h	m	• s	N		E		Z			m	• s	N			E			Z		
							μ		μ		μ				AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
MATSUS	4	P	10	14	191																		
NAGANO	4	IP	10	14	201	N	60	W	3	U	68	ES	14	219	34	2	3	47	2	1	15	2	
MATSUM	2	IP	10	14	256	S	14	W	22	U	74	IS	14	313	20	1	1	25	1	2	15	1	1
KARUIZ	2	IP	10	14	259	N	26	W	20	D	30	S	14	315	65	1	1	70	1	2	20	1	1
TAKAYA	0	X	10	14	282							IX	14	419									
TAKADA	2	P	10	14	286	N	5			U	21	S	14	362	30	1	4	35	1	4	15	1	4
MAEBAS	2	IP	10	14	335	N	8	W	23	D	71	IS	14	436	17	1	5	20	1	4	12	1	5
KOFU	1	IP	10	14	342	S	14	E	11	U	25	IS	14	480	11	1	1	14	1	1	49		1

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
CHICHI	1	IP	10	14	353	N	8	E	5			IS	14	478										
TOYAMA	0	IP	10	14	353	S	6	E	10	D	42	S	14	496		22	1	4	15	1	3	12	1	3
KUMAGA	1	P	10	14	364	N	4	E	3	D	4	ES	14	540		14	1	2	15	1	5	85		4
IIDA	0	IP	10	14	386	S	20	E	11	U	28	IS	14	532		65		4	67		1	31		4
KANAZA	0	P	10	14	420	N	2	E	6	D	13	S	15	000		66		2	76		2	53		2
WAJIMA	0	EP	10	14	425	S	12	E	9			IS	15	020		27	1	1	22	1	1	84		2
UTSUNO	1	IP	10	14	430	N	9	W	45	D	51	IS	14	597		11	1	1	11	1	0	66		1
AIKAWA	0	IP	10	14	432	N	1	W		U	1	IS	15	018		40		1	49		1	14		2
NIIGAT	1	IP	10	14	455					U	23	IS	15	079		12	1	1	18		1	73		4
MISHIM	0	P	10	14	467							IS	15	065		12	1	1	13	1	1	41		1
KAKIOK	0	IP	10	14	467	N	1	W	3	U	4	EP	15	10		61		1	58		1	20		0
TOKYO	0	EP	10	14	468							ES	15	074		89		3	15	1	4	14	1	4
OMAEZA	0	EP	10	14	469											88		4	80		5	53		2
SHIZUO	0	P	10	14	473	S	6	E	3	U	3	S	15	100		29		1	37		4	26		4
SHIRAK	0	EP	10	14	481							ES	15	136										
GIFU	0	P	10	14	483							S	15	115		12	1	2	98		2	44		1
AJIRO	0	IP	10	14	484	S		E	1	U	2	S	15	110		38		1	36		1	9		1
NAGOYA	0	IP	10	14	492	S	5	W	4	U	4	IS	15	120		12	1	1	91		1	37		1
MITO	1	IP	10	14	500					D	5	IS	15	156		79		1	84		1	47		4
YOKOHA	0	IP	10	14	503	N	4	W	4	D	16	IS	15	152		30	1	2	16	1	4	62		4
FUKUI	0	P	10	14	506	S	8	W	11	U	7	S	15	150										
HAMAMA	0	IP	10	14	521	S	6	W	1	U	7	IS	15	206		63		1	55		2	35		1
TSURUG	0	EP	10	14	535							S	15	209										
TOMISA	0	EP	10	14	552											48		2	43		3	21		3
TSU	0	EP	10	14	562							ES	15	303										
FUKUSH	0	EP	10	14	563							ES	15	270		23		1	25		1	6		2
ONAHAM	0	IP	10	14	564			W	2	D	5	IS	15	258		80		1	73		1	60		3
CHOSHI	0	EP	10	14	565							ES	15	244										
HIKONE	0	EP	10	14	566							S	15	247		94		1	63		1	36		1
YAMAGA	0	EP	10	14	582							ES	15	327										
KYOTO	0	EP	10	15	012							ES	15	358					16		2	7		2
NARA	0	EP	10	15	030							ES	15	400		50		1						
SENDAI	0	EP	10	15	046							ES	15	418		13		2	15		2	5		2
OWASE	0	P	10	15	065							S	15	477		6		1	9		1	8		1
SAKATA	0	EP	10	15	088							ES	15	435										
AKITA	0	EX	10	15	113											9		3	8		3	6		2
TOYOOK	0	EP	10	15	125					D		ES	15	515		70		1	57		1	11		2
SUMOTO	0	P	10	15	136					D		ES	15	590		7		5	12		3			
												EX	15	233										
												EX	16	118										
OSAKA	0	P	10	15	140							S	15	541		67		4	88		5	27		2
KOBE	0	EX	10	15	17							EX	15	585										
WAKAYA	0	EP	10	15	197							S	15	579		16			13					
HACHIJ	0	EP	10	15	210			E	3			IS	16	046		11		1	11		1			
OKAYAM	0	EP	10	15	230							ES	16	223		20		4	10		4	10		4
SHIONO	0	EP	10	15	244							ES	16	150		8		2	12		2	6		2
MIZUSA	0	X	10	15	248							X	16	108		18		2	14		2	8		2
TOKUSH	0	EX	10	15	301							ES	16	202										
TAKAMA	0	EX	10	15	331							EX	16	270		11		4	10		1	2		1
MUROTO	0	P	10	15	388							ES	16	390		4		5	6		3			
												IX	15	471										
HIROSH	0	EX	10	15	535							EX	17	020		5		3	3		3	6		3
SHIMON	0	EX	10	16	05							EX	17	37		5		2	3		2	2		2
FUKUOK	0	EX	10	16	33							EX	18	02		5		2	3		2	2		2
OITA	0	EX	10	17	172											16		3	17		4	10		3
KAGOSH	0	EX	10	17	594											9		3	6		2			
KUMAMO	0	X	10	18	06											7		2	4		2	2		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
14	23	28	109	002	138 17	01	36 30	01	0	40

NAGANO	2	IP	23	28																				
MATSUS	2	P	23	28																				
MATSUM	0	IP	23	28	204					U		IS	28	262										
KARUIZ	0	P	23	28	207					U		S	28	258										
TAKADA	0	EP	23	28	250							S	28	330										

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10² μ							
						N		E		Z						N			E			Z	
			h	m	• s	μ		μ		μ			m	• s		A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MAEBAS	0	IP	23	28	264			W		D	2	S	28	361		9		4	7		3	9		3
KOFU	0	IP	23	28	294	S	1	E		U	4	ES	28	415		8		1	7		1	5		1
TOYAMA	0	EP	23	28	31							ES	28	47		8		2	7		2	5		2
KUMAGA	0	EX	23	28	344											10		5	6		4	5		3
KANAZA	0	EP	23	28	420											5		2	5		3			
TOKYO	0	EX	23	28	454											8		4	7		4	9		4
NAGOYA	0	EP	23	28	456	N		E		D	1	S	29	088		8		0	6		1	3		1
MITO	0	EP	23	28	459							IS	29	104		13		0	7		0	3		0
GIFU	0	EP	23	28	48							S	29	079		7		1	11		1			
YOKOHA	0	EP	23	28	482							EX	29	093					6		1			
HAMAMA	0	P	23	28	484					D	1	ES	29	21		7		1	6		1	4		1
WAJIMA	0	IX	23	28	585											36		1	59		1			
HIKONE	0	S	23	29	195											8		0	6		1			

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km		•
15	03	56									

NAGANO	2	IP	03	56																			
MATSUS	2	P	03	56																			
KARUIZ	0	P	03	56	559					U		S	57	015									
MATSUM	0	IP	03	56	571					U		IS	57	031									
TAKADA	0	EP	03	56	587							S	57	073									
TOYAMA	0	EP	03	57	07							ES	57	23		6		3	6		3	4	2
MAEBAS	0	P	03	57	121					U		S	57	212		16		3	14		3	10	3
KUMAGA	0	EX	03	57	140											13		3	8		3	7	3
TOKYO	0	EX	03	57	248											9		4	9		4	7	4
YOKOHA	0	EP	03	57	25														6		1		
WAJIMA	0	EX	03	57	298											25		1	19		1		

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km		•
16	06	37	411	001	138	18 01	36	33 01	0		43

MATSUS	3	P	06	37	447																		
NAGANO	3	IP	06	37	467	N	5	W	2	U	36	IS	37	491		80	1		90	1			
KARUIZ	0	IP	06	37	506	S		E		U	3	S	37	557									
MATSUM	1	P	06	37	512							IS	37	571									
TAKADA	0	P	06	37	541							S	38	019									
MAEBAS	0	IP	06	37	564			W	1	D	4	S	38	057		31		3	25		4	31		4
KOFU	0	IP	06	38	001	S	2	E	1	U	3	ES	38	126		14		3	13		3	10		1
CHICHI	0	EP	06	38	007							S	38	111									
TOYAMA	0	P	06	38	017					D	4	S	38	162		27		3	17		3	14		4
KUMAGA	0	EP	06	38	022							S	38	151		25		5	27		4	18		4
IIDA	0	EP	06	38	042							ES	38	196		8		1	11		1	3		1
FUNATS	0	P	06	38	054							S	38	190									
UTSUNO	0	P	06	38	071			W	3	D	5	S	38	242		10		1	10		1	6		1
KANAZA	0	EP	06	38	084							ES	38	260		12		2	11		2	6		2
AIKAWA	0	IP	06	38	091	N		W				IS	38	292		8		1						
NIIGAT	0	EP	06	38	103							ES	38	337		24		4	31		6	12		3
OMAEZA	0	EP	06	38	119											8		3	14		4			
KAKIOK	0	EP	06	38	12							ES	38	33		10		1	8		1	4		1
MISHIM	0	EP	06	38	126											12		1	12		1	2		1
WAJIMA	0	EP	06	38	128							ES	38	281		49		1	62		1			
YOKOHA	0	EP	06	38	144							S	38	395		13		1	16		1			
NAGOYA	0	EP	06	38	153	S	1	W	1	U	1	S	38	388		14		2	16		1	9		1
MITO	0	IP	06	38	153							IS	38	395		12		1	11		1	6		1
TOKYO	0	EP	06	38	164							ES	38	382		18		4	22		5	19		4
FUKUI	0	X	06	38	166																			
GIFU	0	EP	06	38	171							S	38	484		16		1	27		2			
HAMAMA	0	P	06	38	185							S	38	435		14		1	7		2	5		2
ONAHAM	0	EX	06	38	204							ES	38	500		12		1	8		2	3		0
HIKONE	0	EP	06	38	241							S	38	497		18		1	15		1	7		1
TOYOOK	0	EP	06	38	396							ES	39	202		12		1	5		1			

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A × 10^F μ								
			N	E	Z		N			E			Z		
		h m • s	点	μ	μ	m • s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
OSAKA	0	X 06 38 508					13		4	11		5	5		2

Origin Time					Location				Magnitude
					Longitude		Latitude		
d h m • s	± • s				° ′	± ′	° ′	± ′	Depth km	•
16 20 50 356	002				138 14	01	36 33	01	0	42
MATSUS	2	P	20	50																					
NAGANO	3	IP	20	50	393	N	7	W	3	U	56	IS	50	411	50	1		70	1		30	1	
KARUIZ	X	IP	20	50	425	S	2	E		U	4	S	50	475	10	1	2	20	1	2			
MATSUM	1	IP	20	50	445					D	4	IS	50	505									
TAKADA	0	P	20	50	471							S	50	549									
MAEBAS	0	IP	20	50	500					D	2	S	50	593	29		3	21		5	30		4
KOFU	0	IP	20	50	537	S	3	E	1	U	7	ES	51	062	11		1	16		3	8		1
TOYAMA	0	EP	20	50	54							ES	51	13	14		4	17		2	12		4
CHICHI	0	EP	20	50	544							S	51	020									
KUMAGA	0	EP	20	50	560							S	51	090	25		5	18		5	16		4
FUNATS	0	P	20	50	564							S	51	131									
IIDA	0	EP	20	50	574							ES	51	128	7		0	8		1	3		1
UTSUNO	0	P	20	51	001			W	1	D	2	S	51	175	15		0	15		0	7		0
KANAZA	0	EP	20	51	002							ES	51	182	5		2	5		2	5		2
AIKAWA	0	IP	20	51	015	N	1	E		U	1	IS	51	206	7		1				2		1
TOKYO	0	EP	20	51	029							EX	51	124	18		4	16		5	16		4
WAJIMA	0	EP	20	51	035							ES	51	218	60		1	61		1			
NIIGAT	1	EP	20	51	038							IS	51	255	28		0	34		0	10		3
KAKIOK	0	EP	20	51	05							ES	51	24	13		1	9		1	5		1
MISHIM	0	EP	20	51	054										10		1	10		1	3		1
YOKOHA	0	EP	20	51	064							ES	51	318	12		1	13		1			
MITO	0	IP	20	51	085							IS	51	320	40		0	14		1	7		1
NAGOYA	0	EP	20	51	090	S	1	W		U	1	S	51	324	13		1	11		1	6		1
GIFU	0	EP	20	51	097							S	51	310	11		2	8		1			
HAMAMA	0	IP	20	51	119							S	51	370	14		1	10		2	6		1
OMAEZA	0	EP	20	51	130										7		5	7		5			
HIKONE	0	EP	20	51	183							IS	51	455	13		1	11		1	4		1
ONAHAM	0	EX	20	51	223										8		1	10		1	3		0
OSAKA	0	X	20	51	498										9		4	10		5			

Origin Time					Location				Magnitude
					Longitude		Latitude		
d h m • s	± • s				° ′	± ′	° ′	± ′	Depth km	•
17 09 27 418	002				138 20	01	36 37	01	0	40
NAGANO	2	IP	09	27																					
MATSUS	2	P	09	27																					
CHICHI	0	EP	09	27	477							IS	28	113											
KARUIZ	0	IP	09	27	507					U	4	S	27	554											
TAKADA	0	EP	09	27	536							S	28	020											
MATSUM	0	IP	09	27	537					U		IS	28	003											
MAEBAS	0	IP	09	27	568	N		W		D	2	S	28	059	15		3	14		5	19		3		
KUMAGA	0	EP	09	27	589							ES	28	159	11		1	13		5	9		4		
KOFU	0	IP	09	28	016	S	2			U	2	ES	28	151	9		1	11		3	4		1		
TOYAMA	0	EP	09	28	04					D	1	S	28	143	9		3	9		4	6		2		
KANAZA	0	EP	09	28	104										5		2	5		2					
NIIGAT	0	EP	09	28	110							S	28	312	7		4	11		5					
MITO	0	IP	09	28	167							IS	28	386	11		1	8		1	3		1		
NAGOYA	0	EP	09	28	180							S	28	420	9		1	8		1	3		1		
GIFU	0	EP	09	28	195							S	28	406	9		1	14		2					
HAMAMA	0	P	09	28	199							S	28	462	5		2	4		2	3		2		
TOKYO	0	EX	09	28	328										10		3	7		3	6		4		
YOKOHA	0	EP	09	28	367										12		1	9		1					
HIKONE	0	S	09	28	527										9		1	6		2	3		1		

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Origin Time										Location								Depth km	Magnitude •
					d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′						
					19	21	55	258	002	138 15	01	36 36	01					0	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
NAGANO	2	IP	21	55																				
MATSUS	2	P	21	55																				
KARUIZ	0	IP	21	55	351					U	2	IS	55	406										
MATSUM	0	IP	21	55	375					D		IS	55	446										
TAKADA	0	EP	21	55	380							S	55	454										
MAEBAS	0	EP	21	55	425							ES	55	524		10		2	9		4	17		3
KOFU	0	IP	21	55	463					U	1	ES	55	589		5		0	8		3	2		1
KUMAGA	0	EX	21	55	484											11		2	10		4	10		4
MITO	0	EP	21	55	598							IS	56	227		9		1	8		1	3		1
YOKOHA	0	EP	21	56	086											8		1	6		1			1
NIIGAT	0	ES	21	56	160											10		3	18		4			

Origin Time										Location								Depth km	Magnitude •
					d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′						
					20	07	06	198	002	138 15	01	36 27	01					20	37

NAGANO	2	EP	07	06																				
MATSUS	2	P	07	06																				
MATSUM	0	IP	07	06	268					U	2	IS	06	322										
KARUIZ	0	P	07	06	272					D		S	06	323										
MAEBAS	0	IP	07	06	329	N		W	1	D	4	ES	06	427		10		4	9		4	13		3
TAKADA	0	EP	07	06	330							S	06	390										
TOYAMA	0	EP	07	06	38							ES	06	51		10		4	9		2	6		2
KOFU	0	EP	07	06	383							ES	06	497		7		1	7		1	3		1
KUMAGA	0	EX	07	06	420											12		4	7		5	8		3
GIFU	0	EP	07	06	53							S	07	138		8		1	5		1			

Origin Time										Location								Depth km	Magnitude •
					d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′						
					24	16	53	189	003	138 18	02	36 30	01					20	37

NAGANO	2	IP	16	53																				
MATSUS	2	P	16	53																				
KARUIZ	0	IP	16	53	261					D	5	ES	53	320										
MATSUM	0	EP	16	53	268							IS	53	320										
TAKADA	0	EP	16	53	316							S	53	402										
KOFU	0	IP	16	53	359	S	1	E		D	1	IS	53	488		7		0	7		0	2		1
KUMAGA	0	EX	16	53	376											8		4	8		4	9		4
TOYAMA	0	P	16	53	377					D		ES	53	55		7		3	10		3	7		3
KANAZA	0	EP	16	53	455											5		2	5		2	6		2
AIKAWA	0	IP	16	53	458	N		W		D		IS	54	060		3		1	6		0	2		0

Origin Time										Location								Depth km	Magnitude •
					d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′						
					24	19	29	188	003	138 17	01	36 34	01					0	41

MATSUS	3	P	19	29	21							ES	29	258		40	1		70	1		20	1	
NAGANO	3	EP	19	29	238							S	29	337										
KARUIZ	0	EP	19	29	287							S	29	396										
TAKADA	0	EP	19	29	316																			
MATSUM	X	IS	19	29	357																			
KOFU	0	IP	19	29	386	E		U	4			ES	29	536		8		1	11		1	5		1
TOYAMA	0	P	19	29	387			D	4			S	29	536		15		2	12		3	7		3
KUMAGA	0	EX	19	29	420											20		5	12		3	10		4
IIDA	0	EP	19	29	422							ES	29	574		6		1	5		1	2		1
KANAZA	0	EP	19	29	460											7		2	6		3	7		3
MISHIM	0	EP	19	29	495							ES	30	112		8		1	10		1	3		1
TOKYO	0	EX	19	29	506											85		2	14		4			
GIFU	0	EP	19	29	558							S	30	168		9		2	11		2			

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
OMAEZA	0	EP	19	29	558											7		3	8		4			
NAGOYA	0	EP	19	29	570							S	30	168		12		1	11		1	4		1
NIIGAT	0	EX	19	30	110																			
HIKONE	0	S	19	30	283											9		1	8		1	4		1

Origin Time					Location							Magnitude
					Longitude			Latitude			Depth km	
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		•
27	04	03	153	002	138	09	01	36	31	01	0	49

MATSUS	4	P	04	03	189																					
NAGANO	3	IP	04	03	216	N	49	E	2	U	60	IS	03	235	25	2	2	20	2	2	10	2				
MATSUM	2	IP	04	03	242	S	18	W	16	U	40	IS	03	293	40	1	3	48	1	3	20	1	3			
KARUI7	2	IP	04	03	252			W	9	D	18	IS	03	309	70	1	4	90	1	2	25	1	4			
TAKADA	1	P	04	03	297							S	03	387	25	1	3	25	1	3	15	1	3			
TOYAMA	0	IP	04	03	332	S	5	E	6	D	13	S	03	446	20	1	4	16	1	4	16	1	4			
CHICHI	0	EP	04	03	333							S	03	453												
TAKAYA	0	EP	04	03	338							IS	03	453												
KOFU	1	IP	04	03	349	S	11	E	8	U	9	IS	03	468	46		2	59		3	33		1			
IIDA	1	IP	04	03	374	S	13	W	12	U	18	IS	03	538	56		2	61		4	21		2			
KUMAGA	0	EP	04	03	384							ES	03	544	66		3	74		3	61		4			
FUNATS	0	P	04	03	399	S	5	E	5			S	03	558												
KANAZA	0	EP	04	03	420							ES	03	587	50		3	64		2	36		2			
UTSUNO	0	P	04	03	438	N	3	W	21			S	04	025	56		2	40		2						
AIKAWA	0	IP	04	03	440	N	1	W		U		IS	04	038	21		1	25		2	29		3			
MISHIM	0	EP	04	03	454							ES	04	065	50		1				18		1			
TOKYO	0	EP	04	03	474							ES	04	074	13	1	4	14	1	4	10	1	5			
NIIGAT	1	P	04	03	474					U	13	IS	04	098	93		5	30	1	5	54		4			
KAKIOK	0	EP	04	03	478							ES	04	13	35		1	32		1	16		1			
AJIRO	0	IP	04	03	479	S		E		U	1	S	04	103	16		1	22		2	6		2			
SHIZUO	0	P	04	03	480	S	5	E	3			S	04	093	19		4	24		4						
NAGOYA	0	P	04	03	490	S	1	W	1	U	3	ES	04	116	65		2	40		1	23		1			
GIFU	0	P	04	03	491							S	04	100	86		2	79		2	25		2			
SHIRAK	0	EP	04	03	495							ES	04	167												
YOKOHA	0	EP	04	03	500					U	4	IS	04	153	17	1	2	14	1	2	53		2			
MITO	0	IP	04	03	514							IS	04	175	40		2	33		2	34		3			
HAMAMA	0	P	04	03	515							S	04	160	50		2	60		2	28		1			
OMAEZA	0	EP	04	03	531							ES	04	222	87		3	74		3	36		2			
TSURUG	0	EP	04	03	531							S	04	205												
OSHIMA	0	IP	04	03	536					U	3	S	04	209	30		3	30		4	10		2			
TOMISA	0	IP	04	03	565					U	2				41		3	27		2	19		3			
HIKONE	0	EP	04	03	567							S	04	225	55		2	54		1	31		2			
FUKUSH	0	EP	04	03	571							S	04	285	21		2	15		2	5		4			
ONAHAM	0	IP	04	03	582					U	14	ES	04	290	48		1	48		2	26		3			
TSU	0	EP	04	03	585							IS	04	285												
CHOSHI	0	EP	04	03	586							S	04	364												
KYOTO	0	EP	04	04	019							ES	04	349	16		2	10		2	7		5			
SAKATA	0	EP	04	04	06							ES	04	465												
NARA	0	EP	04	04	060							ES	04	426												
SENDAI	0	EX	04	04	100							ES	04	480	28		4	10		4	3		8			
OWASE	0	P	04	04	106							S	04	520	10		2	5		2	6		2			
SHIONO	0	EP	04	04	121							ES	04	572	10		2	12		2	4		1			
TOYOOK	0	EP	04	04	126							S	04	522	31		1	27		1						
WAKAYA	0	EP	04	04	129							ES	04	539	29			11								
SUMOTO	0	EP	04	04	142							ES	04	594	5		5	7		3						
												EX	04	076												
KOBE	0	EX	04	04	145							S	04	517	70		5	10	1	4	32		3			
OSAKA	0	P	04	04	151							ES	05	125												
TOKUSH	0	EP	04	04	217										11											
HACHIJ	0	EX	04	04	238																					
OKAYAM	0	IP	04	04	290			F				IS	05	200	13		2	10		4	9		2			
TURUGI	0	EP	04	04	413																					
MUROTO	0	EP	04	04	502							ES	05	535	5		6	5		7	2		5			
SHIMON	0	EP	04	05	04							ES	06	35	4		2	3		2	4		4			
AKITA	0	EX	04	05	10										11		4	14		4	5		4			
OITA	0	EX	04	05	410										13		5	9		4	5		3			
KUMAMO	0	S	04	07	093										6		2	5		2	1		3			

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Station	Intensity	Phase (J. S. T.)	Initial Motion			Phase	Maximum Amplitude = A×10^B μ								
			N	E	Z		N			E			Z		
		h m • s	μ	μ	μ	m • s	A_N	P	T	A_E	P	T	A_Z	P	T
							μ		S	μ		S	μ		S
MATSUS	3	P 04 38 592													
NAGANO	1	IP 04 39													
MATSUM	0	IP 04 39 043			U 4	IS 39 089									
KARUIZ	0	IP 04 39 057			D 6	IS 39 113									
TAKADA	0	EP 04 39 089				S 39 181									
KOFU	0	IP 04 39 153			U 1	IS 39 279	9		1	12		1	5		1
YOKOHA	0	EP 04 39 327				S 39 568	13		1	8		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
27	19	22	308	002	138 10	01	36 32	01	0	44

MATSUS	3	P	19	22	337							IS	22	368	11		3	14		3	55	1	
NAGANO	3	IP	19	22	351	N	10	E	2	U	54	IS	22	368	11		3	14		3	55	1	
MATSUM	1	IP	19	22	400					U		IS	22	455	13	1	3	10	1	3			
KARUIZ	X	IP	19	22	408	S		E	2	U	4	S	22	466	10	1	1	20	1	2			
TAKADA	1	P	19	22	435							S	22	533									
TOYAMA	0	P	19	22	494					D	4	S	22	589	45		4	56		3	43		3
CHICHI	0	EP	19	22	506							IS	23	033									
KOFU	0	IP	19	22	506	S	3	E	2	U	3	IS	23	030	22		1	20		3	8		1
IIDA	0	EP	19	22	534							ES	23	090	11		2	18		3	4		1
KUMAGA	0	EP	19	22	550							ES	23	154	37		3	41		4	32		4
FUNATS	0	P	19	22	554							S	23	106									
KANAZA	0	EP	19	22	572							ES	23	128	16		5	15		4	11		3
MISHIM	0	EP	19	22	582							ES	23	223	12		1	19		5	5		1
AIKAWA	0	IP	19	22	586	N		E		U		IS	23	188	6		1	7		1	4		1
UTSUNO	0	P	19	22	590			W	4	D	3	S	23	169	22		2	10		0	6		2
NIIGAT	0	EP	19	23	017							S	23	239	36		4	83		5	23		4
FUKUI	0	P	19	23	036																		
KAKIOK	0	EP	19	23	041							ES	23	250	12		1	10		1	5		1
GIFU	0	EP	19	23	043							S	23	260	19		2	13		2	7		1
SHIZUO	0	EP	19	23	045							ES	23	256	6		1	6		1	4		2
TOKYO	0	EP	19	23	052							ES	23	262	24		4	44		4	25		4
NAGOYA	0	EP	19	23	057					U	1	S	23	280	20		1	17		1	10		1
YOKOHA	0	EP	19	23	059					U	6	S	23	305	22		1	21		1			
MITO	0	IP	19	23	073							IS	23	317	20		0	14		0	5		0
HAMAMA	0	P	19	23	076							ES	23	34	12		3	20		2	8		2
OMAEZA	0	EP	19	23	105										17		3	14		3			
TOMISA	0	EP	19	23	132										11		4	8		4	6		3
ONAHAM	0	EX	19	23	141										12		2	14		1	4		1
TOYOOK	0	EP	19	23	291							ES	24	074	13		1	7		1			
HIKONE	0	IS	19	23	394										14		1	21		1	7		1
OSAKA	0	X	19	24	040										26		4	38		5	7		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
30	04	28	479	003	138 17	01	36 33	01	0	39

NAGANO	2	IP	04	28																	
MATSUS	2	P	04	28																	
KARUIZ	0	IP	04	28	566					U	3	S	29	020							
MATSUM	0	IP	04	28	580					D	3	IS	29	039							
TAKADA	0	EP	04	29	010							S	29	084							
KOFU	0	IP	04	29	072	S	1			U	1	ES	29	198	6		1	7		3	4		1
TOYAMA	0	P	04	29	081					D	1	S	29	217	9		2	12		2	5		2
KUMAGA	0	EP	04	29	120							ES	29	270	9		4	7		3	5		3
MITO	0	EP	04	29	206							IS	29	456	7		0	4		1	2		1
TOKYO	0	EX	04	29	210										6		4	9		4	8		4
KANAZA	0	EP	04	29	220							ES	29	34	4		2	6		2			
NAGOYA	0	EP	04	29	225					U	1	S	29	465	6		1	6		1	2		1
GIFU	0	EP	04	29	23							S	29	451	4		1	9		1			
HAMAMA	0	EP	04	29	25							S	29	500	7		1	6		1	4		1

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	07	25	235	002	138	18	01	36 30	01	0	38

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
MATSUS	2	P	07	25	268				S	25	280									
NAGANO	2	P	07	25	290				S	25	316									
KARUIZ	0	P	07	25	313			D	S	25	361									
MATSUM	0	IP	07	25	326			D 2	IS	25	383									
TAKADA	0	EP	07	25	373				S	25	455									
MAEBAS	0	IP	07	25	380			D 2	ES	25	486	13		3	11		3	10		3
TOYAMA	0	EP	07	25	44				S	25	542	7		3	9		3			
KUMAGA	0	EX	07	25	440							13		3	9		3	11		3
MISHIM	0	EP	07	25	539				ES	26	125	6		1	7		1	1		0
GIFU	0	EP	07	25	581				ES	26	188	5		1	8		1			
NIIGAT	0	EX	07	26	166							5		2	5		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	11	32	490	002	138	09	01	36 29	01	0	43

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
MATSUS	2	P	11	32																
NAGANO	2	IP	11	32	548				S	32	578									
MATSUM	1	IP	11	32	565	S 2	W 3	U 16	IS	33	011									
KARUIZ	1	IP	11	32	588	N 1	W 4	D 10	IS	33	043	30	1	3	30	1	2	10	1	2
TAKADA	0	P	11	33	033				S	33	117									
MAEBAS	0	IP	11	33	057		E	D 2				76		4	64		3	54		4
CHICHI	0	EP	11	33	087				S	33	357									
TOYAMA	0	EP	11	33	09				S	33	217	34		4	46		4	47		4
IIDA	0	EP	11	33	100				ES	33	248	12		4	11		1	9		4
KUMAGA	0	EP	11	33	120				ES	33	276	43		3	40		3	32		4
KOFU	0	EP	11	33	122				ES	33	264	15		2	18		3	7		1
KANAZA	0	P	11	33	148			D 2	ES	33	300	13		4	11		3	9		2
AIKAWA	0	IP	11	33	182	S 1	E	D	ES	33	424	4		2	6		0			
TOKYO	0	EP	11	33	19				ES	33	41	32		4	43		4	28		4
YOKOHA	0	EP	11	33	195				S	33	488	24		2	21		2			
SHIZUO	0	EP	11	33	209				ES	33	441	7		1	6		2			
NAGOYA	0	EP	11	33	210				ES	33	428	19		1	16		1	11		1
GIFU	0	EP	11	33	213				ES	33	416	20		2	14		2	9		1
MISHIM	0	EP	11	33	233							10		1	13		1	4		1
NIIGAT	0	EP	11	33	240				S	33	450	29		2	66		5	13		4
KAKIOK	0	EP	11	33	246				ES	33	468	12		1	10		1	4		1
HAMAMA	0	P	11	33	250			U 2	ES	33	52	11		3	11		4	6		2
FUNATS	0	IP	11	33	264				IS	33	320									
MITO	0	EP	11	33	268				ES	33	540	5		1	7		1	3		1
OMAEZA	0	EP	11	33	272							20		3	20		4			
TSURUG	0	EP	11	33	274															
HIKONE	0	EP	11	33	288				ES	33	541	16		2	14		1	8		1
ONAHAM	0	EX	11	33	319							14		1	10		1	4		1
TOMISA	0	EP	11	33	320							9		4	7		4	6		4
KYOTO	0	EP	11	33	368				ES	34	032	6		3	4		1	3		4
OSAKA	0	P	11	33	500				ES	34	240	23		4	29		5	10		4

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	14	57	508	004	138	13	02	36 28	02	0	40

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
NAGANO	1	EP	14	57																
MATSUS	2	P	14	57																
MATSUM	X	IP	14	57	576			U 6	IS	58	023									
TAKADA	0	EP	14	58	049				S	58	133									
MAEBAS	0	EP	14	58	067				S	58	175	27		3	17		3	18		3
TOYAMA	0	EP	14	58	11				ES	58	24	12		4	12		3	16		4
KUMAGA	0	EX	14	58	130							17		3	12		3	9		3
KANAZA	0	EP	14	58	158							6		3	5		4			
NAGOYA	0	EP	14	58	237				S	58	440	5		1	8		1	3		1
GIFU	0	EP	14	58	24				S	58	428	5		1	4		1			
NIIGAT	0	EP	14	58	240				ES	58	450	8		4	21		5			
HAMAMA	0	P	14	58	258	S 1			ES	58	52	5		2	5		3	2		2
YOKOHA	0	IX	14	58	504							10		1	6		1			
OSAKA	0	EX	14	59	372							9		5	10		5			

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Origin Time						Location									Depth km	Magnitude •
d	h	m	• s	± • s		Longitude ° ′	± ′		Latitude ° ′	± ′						
6	11	31	369	003		138	20	02	36	30	01				0	40

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	2	P	11	31	403							S	31	411										
NAGANO	1	IP	11	31	430							S	31	452										
KARUIZ	0	IP	11	31	464					D	4	S	31	518										
MATSUM	1	IP	11	31	467			E		D	8	IS	31	525										
KOFU	0	EP	11	31	503							ES	32	008		9		0	13		1	6		1
MAEBAS	0	EP	11	31	527							ES	32	022		18		3	17		3	15		3
TOYAMA	0	EP	11	31	59							ES	32	10		14		3	14		3	15		4
KUMAGA	0	EX	11	31	590											17		3	14		4	7		2
IIDA	0	EP	11	32	000							ES	32	140		6		0	2		1	2		0
FUNATS	0	IP	11	32	029							IS	32	156										
AIKAWA	0	IP	11	32	057	N		W		U		IS	32	252		5		1	5		0			
MISHIM	0	EP	11	32	091							ES	32	268		9		1	9		1	4		1
TOKYO	0	EX	11	32	097											8		4	14		4	8		3
KANAZA	0	EP	11	32	100											6		2	8		2	6		2
NAGOYA	0	EP	11	32	114							ES	32	356		6		1	5		1	3		1
GIFU	0	EP	11	32	114							ES	32	332		8		1	13		1			
MITO	0	EP	11	32	116							ES	32	356		6		0	5		0	2		0
YOKOHA	0	EP	11	32	142							S	32	360		12		1	7		1			
HAMAMA	0	P	11	32	145							ES	32	40		5		2	6		2	4		1
NIIGAT	0	ES	11	32	300											11		1	10		1			
ONAHAM	0	EX	11	32	481											9		1	8		1	2		1

Origin Time						Location									Depth km	Magnitude •
d	h	m	• s	± • s		Longitude ° ′	± ′		Latitude ° ′	± ′						
12	03	35	434	002		138	14	01	36	32	01				0	41

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	2	P	03	35	458							S	35	468										
NAGANO	2	IP	03	35	475							S	35	495										
MATSUM	0	P	03	35	530					U	2	IS	35	586										
KARUIZ	0	EP	03	35	531							S	35	580										
TAKADA	0	P	03	35	566							S	36	042										
MAEBAS	0	IP	03	35	587	N		W	2	D	4	IS	36	085		8		1	6		2	6		3
KOFU	0	IP	03	36	027	S	2	E		U	4	ES	36	162		8		1	13		1	6		1
KUMAGA	0	EX	03	36	064											9		1	8		1	6		3
KAKIOK	0	EP	03	36	14							ES	36	34		8		1	5		1	3		1
MISHIM	0	EP	03	36	148							ES	36	365		6		1	8		1	3		1
TOKYO	0	EP	03	36	150							ES	36	394		7		3	8		4	5		5
NAGOYA	0	EP	03	36	177					D	1	S	36	404		12		1	8		1	4		1
MITO	0	IP	03	36	184					D		IS	36	434		9		1	10		0	2		1
GIFU	0	EP	03	36	19							S	36	396		6		1	8		1	3		1
HAMAMA	0	P	03	36	205	N	1			D	2	ES	36	46		5		1	5		2	3		1
HIKONE	0	EP	03	36	258							S	36	521		7		1	6		1	3		1

Origin Time						Location									Depth km	Magnitude •
d	h	m	• s	± • s		Longitude ° ′	± ′		Latitude ° ′	± ′						
13	06	01	313	002		138	10	01	36	36	01				0	48

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	06	01	349																			
NAGANO	4	IP	06	01	354	N	13	E	3	U	55	ES	01	372		25	2		39	2		16	2	
KARUIZ	1	IP	06	01	422	N				D	7	S	01	481		30	1	2	40	1	2	10	1	1
TAKADA	1	P	06	01	440							S	01	518		25	1	3	25	1	3	10	1	3
MAEBAS	2	IP	06	01	480	N	3	W	6	D	18	S	01	582		94		4	59		4	12	1	4
TOYAMA	0	IP	06	01	494	S	4	E	6	D	46	S	02	020		76		3	11	1	3	82		4
CHICHI	0	EP	06	01	501							ES	02	143										
TAKAYA	0	P	06	01	508							IS	02	023										
KOFU	1	IP	06	01	516	S	10	E	8	U	16	IS	02	047		49		0	90		0	29		1
KUMAGA	0	EP	06	01	536							ES	02	100		61		4	63		3	50		3
IIDA	1	IP	06	01	548	S	10	W	5	U	23	IS	02	104		46		2	28		2	23		0
KANAZA	0	P	06	01	568					D	8	ES	02	156		31		2	25		2	19		2
FUNATS	0	IP	06	01	578							IS	02	127										
AIKAWA	0	IP	06	01	592			E		D		IS	02	180		15		1	17		1	7		3
UTSUNO	0	P	06	01	594	N	1	W	6			S	02	170		55		2	39		2	18		2
NIIGAT	0	P	06	02	004							IS	02	232		66		4	15	1	5	34		5
MISHIM	0	IP	06	02	017					U		IS	02	224		52		1	52		1	18		1
KAKIOK	0	EP	06	02	03							ES	02	25		38		1	23		1	10		1
OMAEZA	0	EP	06	02	030							S	02	412		53		3	33		3	29		3
TOKYO	0	IP	06	02	036							ES	02	248		58		3	86		3	97		4
SHIRAK	0	EP	06	02	045							ES	02	315										

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	• s		μ		μ		μ		m	• s		A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
SHIZUO	0	IP	06	02	045	S	4	E	3	D	8	S	02	308		20		1	19		1	13		2
AJIRO	0	IP	06	02	046	S	1			U	1	S	02	275		10		0	10		0	3		0
GIFU	0	P	06	02	048							S	02	274		62		1	66		1	28		1
FUKUI	0	P	06	02	050	S	6	W	8	U	2	S	02	297										
NAGOYA	0	P	06	02	060	N	4	E	2	D	3	IS	02	284		78		1	69		1	29		1
YOKOHA	0	IP	06	02	060	N	2	W	3	D	5	IS	02	300		87		3	10	1	4	26		4
MITO	0	IP	06	02	065					D	2	IS	02	326		39		0	44		0	17		2
HAMAMA	0	P	06	02	080					U	1	S	02	350		26		1	37		1	14		1
TSURUG	0	EP	06	02	082							ES	02	538										
OSHIMA	0	EP	06	02	104					U	7	IS	02	369		18		1	22		2	10		1
HIKONE	0	EP	06	02	106							S	02	387		60		1	76		1			
TOMISA	0	IP	06	02	114					D	1	S	02	302		23		4	14		4	14		3
ONAHAM	0	IP	06	02	131					U	4	ES	02	435		55		1	43		1	18		3
FUKUSH	0	EX	06	02	139											5		1	7		1	2		1
TSU	0	EP	06	02	170							IS	02	470										
KYOTO	0	EP	06	02	195							IS	02	537					10		1	5		1
NARA	0	EP	06	02	197																			
OWASE	0	P	06	02	230											4		1	6		1	5		2
SENDAI	0	EP	06	02	250							ES	03	020		7		3	7		4	3		2
SAKATA	0	EP	06	02	252							ES	03	007										
SUMOTO	0	EP	06	02	291							ES	03	200		4		4	7		3	3		4
												IX	02	415										
												IX	03	268										
OSAKA	0	IP	06	02	319					U	3	IS	03	099		43		4	62		5	17		2
SHIONO	0	EP	06	02	395							ES	03	258		7		2	6		2	5		1
WAKAYA	0	EP	06	02	397							S	03	210		14			10					
MIZUSA	0	EP	06	02	443							S	03	188		8		2	9		1	4		1
OKAYAM	0	EP	06	02	446							IS	03	376		15		2	10		2	5		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
19	00	04	452	001	138 10	01	36 30	01	0	46

MATSUS	3	P	00	04	491																			
NAGANO	4	IP	00	04	507	N	18	E	2	U	57	IS	04	527		21	2		10	2		15	2	
MATSUM	1	IP	00	04	540					D	22	IS	04	591										
KARUI7	2	IP	00	04	548	N		W	6	D	58	S	04	595		25	1	2	35	1	2	15	1	1
TAKADA	0	P	00	04	586							S	05	064										
MAEBAS	1	IP	00	05	013	N		W	3	D	6	IS	05	113		59		4	30		4	28		3
TAKAYA	0	P	00	05	030							S	05	141										
TOYAMA	0	P	00	05	036	S		E	2	D	7	IS	05	164		60		3	88		2	48		2
KOFU	0	IP	00	05	047	N	7	W	7	D	13	IS	05	170		30		1	41		0	14		1
CHICHI	1	EP	00	05	050							IS	05	178										
IIDA	0	IP	00	05	072							IS	05	210		45		0	47		0	31		0
FUNATS	0	IP	00	05	074							IS	05	217										
KUMAGA	0	EP	00	05	076							ES	05	250		35		3	28		2	27		4
KANAZA	0	EP	00	05	118							ES	05	280		30		2	30		2	20		2
TSURUG	0	EP	00	05	135							ES	05	494										
MISHIM	0	P	00	05	151	N	1			D		S	05	377		27		1	31		1	9		1
NIIGAT	0	EP	00	05	156							ES	05	380		40		0	79		1	14		2
TOKYO	0	P	00	05	159							ES	05	367		24		1	31		4	24		4
KAKIOK	0	EP	00	05	16							S	05	389		23		1				8		1
GIFU	0	P	00	05	165							S	05	383		31		1	29		1	16		1
SHIZUO	0	EP	00	05	170											28		0	18		1	18		1
AJIRO	0	IP	00	05	172	N		W		D	1	ES	05	400		6		0	6		0	2		0
NAGOYA	0	P	00	05	177	N	2	E	2	D	3	IS	05	404		39		1	49		1	20		1
FUKUI	0	P	00	05	185	N	8	E	8	D	8	S	05	435										
YOKOHA	0	IP	00	05	191							ES	05	431		39		1	37		1			
MITO	0	P	00	05	201							S	05	465		18		5	19		1	7		2
HAMAMA	0	P	00	05	206	S	1			U	1	S	05	453		34		1	45		2	13		1
HIKONE	0	EP	00	05	229							S	05	506		26		1	28		1	10		1
OSHIMA	0	P	00	05	235					D	3	S	05	502		15		1	9		1	3		0
TOMISA	0	IP	00	05	238					U	1					10		2	11		2	8		3
OMAEZA	0	EP	00	05	251							ES	05	484		55		1	45		1	17		1
KYOTO	0	EP	00	05	282							IS	06	042		5		1	9		1	3		1
ONAHAM	0	EX	00	05	287							ES	05	574		18		2	20		1	3		1
NARA	0	EP	00	05	314																			
OWASE	0	EP	00	05	350							S	06	275		5		1	3		1	4		1
TOYOOK	0	P	00	05	414					D		ES	06	202		14		1	18		1	4		1

Seismological Data of Matsushiro Earthquake Swarm (Report I)

International Seismological Centre

Origin Time						Location						Depth km	Magnitude
						Longitude			Latitude				
d	h	m	s	±	s	°	′	± ′	°	′	± ′		
23	11	14	109	002		138	10	01	36	30	01	0	47

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A × 10^P μ								
						N		E		Z						N			E			Z		
			h	m	s	μ		μ		μ			m	s		AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
MATSUS	3	P	11	14	143																			
NAGANO	3	IP	11	14	173	N	37	E	18	U	70	IS	14	194		10	2		80	1		70	1	
MATSUM	1	IP	11	14	197	S	12	W	20	U	68	IS	14	246					75		3			
KARUI 7	2	IP	11	14	209			W	14	D	28	S	14	267		45	1	3	40	1	2	15	1	1
TAKADA	0	P	11	14	247							S	14	301										
MAEBAS	1	IP	11	14	282	N	1	W	4	D	12	S	14	390		96		4	47		4	29		3
KOFU	1	IP	11	14	291	S	5	E	6	U	7	IS	14	412		34		1	70		1	35		1
TOYAMA	0	P	11	14	297	S	2	E	5			S	14	425		81		3	70		3			
CHICHI	1	EP	11	14	310							IS	14	425										
KUMAGA	0	EP	11	14	326							ES	14	490		56		3	50		5	39		3
IIDA	0	IP	11	14	330	S	8	W	1	U	24	IS	14	488		28		2	20		2	24		1
FUNATS	0	IP	11	14	349							IS	14	492										
UTSUNO	0	IP	11	14	388	N	2	W	5	D	10	S	14	583		26		2	12		3	12		1
KANAZA	0	P	11	14	390					D	12	ES	14	540		26		2	30		2	21		2
AIKAWA	0	IP	11	14	394	N	5	W		U	2	IS	14	594		14		1	17		1			
SHIZUO	0	P	11	14	403							S	15	023		10		1	15		4	11		3
MISHIM	0	P	11	14	412	N						IS	15	005		32		1	43		2	18		1
KAKIOK	0	X	11	14	42											27		1	21		1	5		1
NIIGAT	0	EP	11	14	420							ES	15	050		55		1	11	1	1	29		1
TOKYO	0	P	11	14	426							S	15	045		37		2	46		3	37		4
OMAEZA	0	EP	11	14	431							ES	15	179		33		3	37		3	23		2
AJIRO	0	IP	11	14	431					U		S	15	049		10		0	16		0	4		0
FUKUI	0	P	11	14	438	S	7	W	10	U	4	S	15	109										
GIFU	0	P	11	14	438							S	15	057		58		1	52		2			
NAGOYA	0	P	11	14	442	S	2	W	2	U	3	S	15	060		38		2	40		1	21		1
YOKOHA	0	EP	11	14	454					U	6	IS	15	103		17	1	2	71		2	22		2
MITO	0	IP	11	14	458					D	2	IS	15	125		18		4	17		2	10		3
HAMAMA	0	IP	11	14	470							ES	15	12		23		2	30		2	11		1
OSHIMA	0	P	11	14	503							IS	15	154		18		2	16		2	8		2
HIKONE	0	EP	11	14	512							S	15	176		50		1	50		1	22		1
TOMISA	0	P	11	14	515											21		3	15		2	10		2
FUKUSH	0	EP	11	14	520							ES	15	250		9		1	9		1	2		1
ONAHAM	0	IP	11	14	526					D	3	ES	15	228		30		1	26		1	11		3
TSU	0	EP	11	14	555							ES	15	235										
KYOTO	0	EP	11	14	572							IS	15	300		10		1	10		0	3		1
TSURUG	0	EP	11	14	578							S	15	245										
TOYOOK	0	EP	11	15								S	15	467		34		1	32		1			
NARA	0	EP	11	15	007																			
SENDAI	0	EX	11	15	024							EX	15	45		7		2	5		2	1		2
SAKATA	0	EX	11	15	065																			
OSAKA	0	X	11	15	090							X	15	480		26		5	36		5	12		2
OKAYAM	0	EP	11	15	135							ES	16	065		15		1	10		1	6		2
WAKAYA	0	X	11	15	178							X	16	033		7			6					
SHIONO	0	EP	11	15	216							ES	16	084		7		2	7		2	3		1

International Seismological Centre

Origin Time					Location						Depth km	Magnitude •
					Longitude			Latitude				
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
26	03	04	067	002	138	22	01	36	33	01	0	53

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^P μ								
						N		E		Z					N			E			Z		
			h	m	• s	μ		μ		μ		m	• s		AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
MATSUS	3	P	03	04	118																		
NAGANO	4	IP	03	04	123	S	20	E	16	D	64	IS	04	144	57	2	2	84	2	3	45	2	2
KARUI7	2	IP	03	04	165	S	74	E	30	U	84	S	04	216	30	2	2	33	2	2	10	2	2
MATSUM	3	IP	03	04	184	N	20	E	20	D	34	IS	04	251	14	2	3	70	1	3	30	1	3
TAKADA	2	P	03	04	194	N	37	E	10	U	95	S	04	258	14	2	4	14	2	4	80	1	3
MAEBAS	2	IP	03	04	212	N	1	W	1	D	4	ES	04	309	70	1	3	75		3	12	2	3
CHICHI	2	IP	03	04	251	S	8	E	5			IS	04	376	50	1	4	50	1	4	40	1	3
TAKAYA	0	P	03	04	264							S	04	416									
KUMAGA	1	P	03	04	274					U	2	ES	04	414	31	1	5	28	1	3	26	1	4
KOFU	1	IP	03	04	285	S	16	E	7	U	23	IS	04	419	31	1	4	62	1	4	11	1	3
TOYAMA	0	IP	03	04	309	S	2	E	6	D	36	S	04	413	34	1	4	36	1	4	39	1	4
FUNATS	0	P	03	04	312							S	04	523									
IIDA	1	IP	03	04	314	N	9	E	3	D	3	IS	04	474	14	1	1	14	1	3	14	1	3
UTSUNO	1	P	03	04	323	N	1	W	6	D	4	IS	04	506	97		3	80		4	83		4
AJIRO	0	IP	03	04	339	S	2	W	2	U	2	ES	05	024	43		3	53		4	43		4
AIKAWA	0	IP	03	04	344	N	43	W	6	U	48	IS	04	562	68		1	70		2	51		2
KANAZA	0	P	03	04	352	N	7	E	7	D	17	S	04	550	16	1	3	14	1	3	12	1	3
NIIGAT	1	IP	03	04	361	N	6	E	2	U	70	IS	04	570	41	1	5	58	1	4	24	1	5
KAKIOK	0	IP	03	04	366	N	2	E	5	U	1	S	04	556	98		1	69		1	65		5
TOKYO	0	EP	03	04	370							S	04	583	31	1	3	31	1	3	21	1	4
MISHIM	0	IP	03	04	381	S	13			U		IS	04	589	16	1	4	31	1	3	58		2
SHIRAK	0	IP	03	04	387			E	5	U	10	IS	05	037									
SHIZUO	0	P	03	04	395							S	05	029	11	1	6	16	1	5	52		3
YOKOHA	0	IP	03	04	399	N	4	W	4	D	3	IS	05	052	63	1	4	40	1	4	13	1	3
MITO	1	IP	03	04	400					D	1	IS	05	036	16	1	4				92		2
TSURUG	0	EP	03	04	413							ES	05	118									
FUKUI	0	P	03	04	416	N	2	E	4	D	3	S	05	068									
GIFU	0	P	03	04	420	N	9	E	9	D	9	S	05	055	19	1	1	13	1	1	11	1	2
NAGOYA	0	IP	03	04	424	N	12	E	8	D	11	S	05	064	20	1	1	19	1	1	10	1	1
FUKUSH	0	IP	03	04	441	N	6	E	10	U	9	S	05	152	54		1	37		5	33		5
OSHIMA	0	IP	03	04	456	S	7	E	2	U	10	IS	05	133	64		2	65		5	37		1
HAMAMA	0	IP	03	04	458							S	05	115	13	1	3	16	1	3	74		2
OMAEZA	0	EP	03	04	460							ES	05	152	28	1	4	37	1	4	16	1	4
ONAHAM	0	IP	03	04	472			W	8	D	32	ES	05	165	12	1	3	12	1	1	63		4
CHOSHI	0	EP	03	04	472							S	05	168									
YAMAGA	0	P	03	04	482					U	2	ES	05	224									
TOMISA	0	IP	03	04	482					U	2	ES	05	070	98		4	97		4	68		4
HIKONE	0	P	03	04	482							S	05	178	16	1	1	11	1	1	52		1
SAKATA	0	EP	03	04	523							ES	05	287	20	1	5	25	1	6	10	1	3
MAIZUR	0	EP	03	04	532							ES	05	362									
SENDAI	0	P	03	04	535	N	2			U	2	S	05	322	43		6	53		4	26		6
KYOTO	0	IP	03	04	538	N	2	E	2	D	2	ES	05	306	41		1	30		2	15		5
TSU	0	EP	03	04	544							IS	05	246									
NARA	0	EP	03	04	564							ES	05	332									
KOBE	0	EP	03	04	594							ES	05	547									
OSAKA	0	P	03	04	599							S	05	369	19	1	3	22	1	4	74		3
OWASE	0	P	03	05	000							S	05	400	15		1				14		4
AKITA	0	EP	03	05	038					U		EX	05	578	28		3	28		4	22		4
WAKAYA	0	P	03	05	054							S	05	506	26			36					
TOYOOK	0	P	03	05	057					D		S	05	472	95		1	11	1	1	29		3
SUMOTO	0	P	03	05	075	S				D		ES	05	484	21		4	18		4	12		4
												IX	05	198									
OFUNAT	0	EP	03	05	076							ES	05	568	13		5	11		6	13		6
MIZUSA	0	P	03	05	095							S	05	555	30		3	45		4	20		2
MORIOK	0	P	03	05	097	N		E		U		S	06	072	8		5	5		3	8		5
												X	05	176									
HACHIJ	0	EP	03	05	118							IS	05	580	14			10					
SAIGO	0	P	03	05	130	S		W		D		X	06	089	7		2	8		1	4		2
MIYAKO	0	EP	03	05	16							ES	06	13	6		6	9		6	7		5
TAKAMA	0	EP	03	05	169							ES	06	241	24		5	19		5	3		1
SHIONO	0	EP	03	05	178							ES	06	050	21		3	26		3	11		1
HACHIN	0	EP	03	05	221							S	06	220	5		8	6		6	5		5

International Seismological Centre

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A/T N: An P T	E: AE P T	Z: AZ P T
MUROTO	0	P 03 05 235				IS 06 470		4	
OKAYAM	0	EP 03 05 258				ES 06 178	30 3	30 4	18 4
TURUGI	0	EX 03 05 276							
AOMORI	0	EP 03 05 28				EX 06 33	11 3	15 3	
HAMADA	0	P 03 05 320		E	U	S 06 490	8 4	7 4	5 4
MATSUY	0	EP 03 05 368				ES 06 436	15 5	8 6	3 2
SHIMON	0	EP 03 05 49				ES 07 30	12 2	4 3	6 3
OITA	0	EP 03 05 503				S 07 390	49 5	37 5	
KUMAMO	0	EP 03 06 019				IS 08 038	13 2	8 2	6 4
ASHIZU	0	EP 03 06 060				ES 07 160	9 4	8 4	5 4
MIYAZA	0	EP 03 06 114				ES 08 040	6 4	6 5	5 4
SAGA	0	EP 03 06 211				S 07 532			
NAGASA	0	P 03 06 342				S 08 188			
FUKUOK	0	EP 03 06 360				ES 07 560	10 2	4 3	3 5
KAGOSH	0	EX 03 08 341						12 3	

Origin Time d h m • s	± • s	Location Longitude ° ′ +	Latitude ° ′ ±	Depth km	Magnitude •
26 03 13 392	002	138 17 02	36 37 01	20	39

Station	Intensity	Phase				Initial Motion			Phase				Maximum Amplitude = A/T N: An P T	E: AE P T	Z: AZ P T
MATSUS	2	P	03	13											
NAGANO	2	EP	03	13	428				S	13	453				
KARUI7	0	EP	03	13	473				S	13	528				
MATSUM	0	EP	03	13	489				IS	13	562				
TAKADA	0	EP	03	13	500				S	13	572				
MAEBAS	0	EP	03	13	527				S	14	027	10 3	16 4	19 3
TOYAMA	0	EP	03	13	59				ES	14	12	10 4	10 4	7 2
KOFU	0	EP	03	14	003				ES	14	126	9 3	10 4	3 1
MITO	0	IP	03	14	130			D 1	IS	14	356	6 1	7 1	3 1
NAGOYA	0	EP	03	14	150				ES	14	392	6 1	6 1	2 1

Origin Time d h m • s	± • s	Location Longitude ° ′ +	Latitude ° ′ ±	Depth km	Magnitude •
26 05 35 009	003	138 23 01	36 38 01	0	37

Station	Intensity	Phase				Initial Motion			Phase				Maximum Amplitude = A/T N: An P T	E: AE P T	Z: AZ P T
MATSUS	2	P	05	35	051				S	35	071				
NAGANO	2	IP	05	35	061				S	35	085				
KARUI7	0	EP	05	35	106				S	35	160				
MAEBAS	0	P	05	35	149			U	ES	35	242	11 3	7 2	8 2
TOYAMA	0	P	05	35	219			D	ES	35	34	6 4	5 4	4 4
KUMAGA	0	EX	05	35	230							6 4	7 3	5 3
NIIGAT	0	EP	05	35	280				ES	35	512	4 5	6 4	
MITO	0	EP	05	35	373				S	35	590	7 0	4 0	2 1
YOKOHA	0	EP	05	35	447							6 1		

Origin Time d h m • s	± • s	Location Longitude ° ′ +	Latitude ° ′ ±	Depth km	Magnitude •
28 20 03 292	003	138 13 02	36 24 01	20	43

Station	Intensity	Phase				Initial Motion						Phase				Maximum Amplitude = A/T N: An P T	E: AE P T	Z: AZ P T
MATSUS	2	P	20	03	339							S	03	359				
MATSUM	2	IP	20	03	352	S	9	W	12	U	62	IS	03	388				
NAGANO	1	IP	20	03	365							S	03	400				
KARUI7	X	IP	20	03	385					D	13	IS	03	447	20 1 2	20 1 2	10 1 1
TAKADA	0	EP	20	03	430							S	03	492			
KUMAGA	0	EP	20	03	444							S	04	070	45 1	38 1	17 1
MAEBAS	0	IP	20	03	453					D	2	X	04	028	48 4	27 4	29 4
KOFU	0	EP	20	03	457							ES	03	593	17 1	23 1	8 1
TOYAMA	0	EP	20	03	47							ES	04	00	23 4	26 4	
IIDA	0	IP	20	03	486	S	5			U	11	IS	04	018	21 0	15 0	13 0
FUNATS	0	P	20	03	523							S	04	058			
MISHIM	0	EP	20	03	566							ES	04	208	13 1	13 1	5 1
UTSUNO	0	P	20	03	571					U	4	S	04	185	10 1	6 2	5 1
AIKAWA	0	EP	20	03	580					D		IS	04	204	5 1	6 1	2 0
OMAEZA	0	EP	20	03	588										17 3	14 3	
SHIZUO	0	P	20	03	597							S	04	221	7 1	11 1	4 1

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Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A × 10^P μ								
						N	E	Z				N			E			Z		
			h	m	s	μ	μ	μ		m	s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
GIFU	0	P	20	03	598				S	04	191	20		1	14		2	10		1
NAGOYA	0	EP	20	04	000				S	04	204	32		1	23		1	15		1
KAKIOK	0	P	20	04	015		E 2 U 1		IS	04	237	18		1	13		1	5		1
TOKYO	0	P	20	04	020				S	04	222	24		2	28		1	16		4
HAMAMA	0	P	20	04	025							10		1	14		2	5		1
TSURUG	0	EP	20	04	044				EX	04	326									
MITO	0	EP	20	04	051				ES	04	318	10		1	7		1	4		1
HIKONE	0	EP	20	04	074				S	04	316	35		1	31		1	10		1
TOMISA	0	EP	20	04	095							8		2	8		2	5		3

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	s	± s	° ′	± ′	° ′	± ′	Depth km	•
31	14	01	117	002	138 22	01	36 35	01	0	40

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A × 10^P μ								
						N	E	Z				N			E			Z		
			h	m	s	μ	μ	μ		m	s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	1	P		14	01 162				S	01	187									
NAGANO	2	P		14	01 168				S	01	196									
KARUIZ	0	IP		14	01 198		U 2		S	01	248									
MATSUM	0	EP		14	01 233				IS	01	302									
TAKADA	0	EP		14	01 236				S	01	320									
KOFU	0	EP		14	01 317				ES	01	443	6		3	17		3	3		1
KUMAGA	0	EX		14	01 330							15		3				15		4
TOYAMA	0	EP		14	01 34				ES	01	47	7		4	8		3	7		4
MITO	0	EP		14	01 452				S	02	080	9		0	8		0	4		0
HAMAMA	0	EP		14	01 52				ES	02	16	3		1	6		3	2		1
TOKYO	0	EP		14	01 532							10		4	8		3	7		4
YOKOHA	0	EP		14	02 464				IX	03	126	7		1	9		3			

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	s	± s	° ′	± ′	° ′	± ′	Depth km	•
6	02	43								

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A × 10^P μ								
						N	E	Z				N			E			Z		
			h	m	s	μ	μ	μ		m	s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
NAGANO	1	IP	02	43	325				S	43	358									
KARUIZ	0	EP	02	43	351				S	43	392									
TAKADA	0	EP	02	43	382				S	43	444									
MATSUM	0	IP	02	43	387		U 2		IS	43	462									
MAEBAS	0	IP	02	43	402		D 2		ES	43	501	7		3	7		4	10		3
KUMAGA	0	EP	02	43	458				ES	44	136	6		3	5		4	6		4
NIIGAT	0	EX	02	44	030							4		4	11		4			

Origin Time					Location				Magnitude
					Longitude		Latitude		
d	h	m	s	± s	° ′	± ′	° ′	± ′	Depth km	•
7	15	02	267	003	138 19	03	36 33	02	20	37

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase			Maximum Amplitude = A × 10^P μ								
						N	E	Z				N			E			Z		
			h	m	s	μ	μ	μ		m	s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
MATSUS	1	P		15	02				S	02	348									
NAGANO	2	IP		15	02 319				S	02	389									
KARUIZ	0	IP		15	02 336	S 2	E	U 4	S	02	463									
TAKADA	0	EP		15	02 381															
MAEBAS	0	IP		15	02 394		E 1	U 2	IS	02	485	10		4	7		3	13		2
KUMAGA	0	EX		15	02 456							5		3	5		3	7		3
NIIGAT	0	EX		15	02 500							7		4	7		1			
TOYAMA	0	EP		15	02 52				ES	03	08	8		4	6		4	4		2
MITO	0	EP		15	03 029				S	03	220	7		1	6		0	2		0

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Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	s	±	s	°	′ ± ′	°	′ ± ′	km			•
8	18	09	224	002		138	10 01	36	27 01	0			39

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A × 10^P μ							
						N	E	Z					N			E			Z	
			h	m	s	μ	μ	μ		m	s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
MATSUS	2	P	18	09																
NAGANO	1	IP	18	09	281				S	09	314									
MATSUM	X	EP	18	09	297			U 3	IS	09	340									
KARUIZ	0	IP	18	09	315			D 12	S	09	363									
NAGOYA	0	EP	18	09	339				S	10	156		7		1	6		1	5	1
HAMAMA	0	EP	18	09	38				ES	10	20		4		2	6		3	2	2
MAEBAS	0	IP	18	09	384				IS	09	491		14		3	11		3	15	3
KOFU	0	EP	18	09	422				IS	09	524		6		0	8		0	3	0
IIDA	0	EP	18	09	428				ES	09	560		4		0	5		1	3	4
TOYAMA	0	EP	18	09	43				ES	09	54		13		1	13		1	12	2
KANAZA	0	EP	18	09	480				ES	10	060		9		2	6		2	5	2
GIFU	0	EP	18	09	55				S	10	142		8		1	5		0		
YOKOHA	0	EP	18	09	561								11		1	6		1		
TOKYO	0	EX	18	10	000											8		3	8	3
NIIGAT	0	IS	18	10	165								13		1	25		1		
ONAHAM	0	EX	18	10	361								4		1	5		1		

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	s	±	s	°	′ ± ′	°	′ ± ′	km			•
9	09	17											

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A × 10^P μ							
						N	E	Z					N			E			Z	
			h	m	s	μ	μ	μ		m	s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
MATSUS	1	P	09	17	438				S	17	461									
NAGANO	1	IP	09	17	444				S	17	476									
KARUIZ	0	P	09	17	479	S		U	S	17	522									
MATSUM	X	IP	09	17	503			D	IS	17	579									
MAEBAS	0	EP	09	17	529				ES	18	025		11		3	7		3	12	3
TOYAMA	0	IP	09	17	596			D 2	S	18	126		6		3	7		3	7	2
KOFU	0	EP	09	18	005				ES	18	133		4		1	7		4	3	1
KUMAGA	0	EX	09	18	012								8		3	9		4	7	4
GIFU	0	EP	09	18	13				ES	18	381		6		1	4		1		
MITO	0	S	09	18	356								5		1	5		1	2	1

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	s	±	s	°	′ ± ′	°	′ ± ′	km			•
12	00	04											

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A × 10^P μ							
						N	E	Z					N			E			Z	
			h	m	s	μ	μ	μ		m	s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
MATSUS	2	P	00	04	161				S	04	185									
NAGANO	2	IP	00	04	167				S	04	191									
KARUIZ	0	P	00	04	215			U	S	04	265									
MATSUM	X	P	00	04	232			D	IS	04	297									
MAEBAS	0	P	00	04	259			D	S	04	357		8		3	6		3	10	3
KUMAGA	0	EX	00	04	350								5		3	7		4	4	4
KAKIOK	0	EP	00	04	44				ES	05	03		8		1	5		1	3	0
MITO	0	P	00	04	464				IS	05	096		8		1	7		1	2	0

Origin Time						Location							Magnitude
						Longitude		Latitude		Depth			
d	h	m	s	±	s	°	′ ± ′	°	′ ± ′	km			•
16	08	02	148	002		138	20 01	36	32 01	0			40

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A × 10^P μ							
						N	E	Z					N			E			Z	
			h	m	s	μ	μ	μ		m	s		AN	P	T	AE	P	T	AZ	P	T
													μ		S	μ		S	μ		S
MATSUS	2	P	08	02	185				S	02	197									
NAGANO	2	IP	08	02	200				S	02	219									
MATSUM	0	EP	08	02	248				IS	02	310									
KARUIZ	0	EP	08	02	250				S	02	295									
TAKADA	0	EP	08	02	281				S	02	353									
MAEBAS	0	IP	08	02	295			D 2	S	02	391		12		3	7		4	15	2
TOYAMA	0	P	08	02	347			D 3	ES	02	49		9		3	8		2	7	2
KOFU	0	EP	08	02	347				ES	02	462		8		1	7		1	5	1
KUMAGA	0	EX	08	02	390								9		4	8		3	7	3

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A × 10^B μ								
						N		E		Z					N			E			Z		
			h	m	• s		μ		μ		μ		m	• s	AN	P	T	AE	P	T	AZ	P	T
															μ		S	μ		S	μ		S
GIFU	0	EP	08	02	49							S	03	117	8		1	14		1			
NAGOYA	0	EP	08	02	495							S	03	128	8		1	9		1	4		1
HIKONE	0	EP	08	03	020							IS	03	243	10		1	8		1			
NIIGAT	0	S	08	03	060										11		0	13		1			
ONAHAM	0	EX	08	03	207										6		1	5		1			
HAMAMA	0	P	08	03	520							ES	04	17	7		1	6		2	3		2

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		
19	02	15											

MATSUS	2	P	02	15	180							S	02	210										
MATSUM	1	IP	02	15	198	S	2	W	4	U	10	IS	15	232										
NAGANO	2	IP	02	15	208								02	247										
KARUIZ	0	IP	02	15	241	N		W		D	4	S	15	300										
TAKADA	0	P	02	15	287							S	15	387										
MAEBAS	0	IP	02	15	301					D	2				14	4	7	3	9	4				
IIDA	0	EP	02	15	338							ES	15	462	5	0	5	2	2	1				
KUMAGA	0	EP	02	15	350							S	15	524	12	1	9	1	7	3				
KANAZA	0	EP	02	15	386							ES	15	550	7	2	5	2	5	2				
HAMAMA	0	P	02	15	485					U	1	ES	16	10	4	1	5	2	3	1				
TOKYO	0	EX	02	15	495										6	0	7	3	7	3				
HIKONE	0	EP	02	15	528							S	16	166	9	1	8	1	3	1				
YOKOHA	0	EP	02	15	549						1	IX	16	131	9	1	60	1						
NIIGAT	0	EP	02	16	505							ES	17	107	8	1	16	1						

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		
20	17	23	049	003		138	19	01	36	33	01	0	38

MATSUS	2	P	17	23	079							S	23	090										
NAGANO	2	IP	17	23	098							S	23	120										
KARUIZ	0	IP	17	23	138					U	3	S	23	187										
MATSUM	0	IP	17	23	154					D		IS	23	215										
TAKADA	0	P	17	23	172							S	23	248										
MAEBAS	0	EP	17	23	197							S	23	289	8	3	7	3	13	3				
KOFU	0	IP	17	23	244					U	2	ES	23	366	7	1	6	1	4	1				
KUMAGA	0	EX	17	23	266										8	1	5	1	3	1				
TOYAMA	0	EP	17	23	30							ES	23	44	7	2	7	2	5	2				
UTSUNO	0	P	17	23	310							S	23	476	7	1	6	0	3	1				
MITO	0	EP	17	23	401							IS	24	021	16	0	8	0	3	1				
NAGOYA	0	EP	17	23	404	S		W		U		ES	24	028	6	1	6	1	2	1				
GIFU	0	EP	17	23	406							ES	24	015	4	1	9	2						
HAMAMA	0	P	17	23	420							S	24	065	6	1	5	2	2	1				

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		
25	02	04	147	002		138	14	01	36	30	01	0	42

NAGANO	2	IP	02	04																				
MATSUS	2	P	02	04																				
MATSUM	X	IP	02	04	233	S		W	2	U	10	IS	04	281										
KARUIZ	0	EP	02	04	250							ES	04	295										
TAKADA	0	P	02	04	288							S	04	368										
MAEBAS	0	IP	02	04	302			W		D	2	S	04	414	25	3	9	3	9	3				
KUMAGA	0	EP	02	04	330							ES	04	526	12	4	12	4	11	4				
TOYAMA	0	EP	02	04	34							ES	04	44	18	2	15	2	13	2				
KOFU	0	IP	02	04	342	S	2	E	1	U	3	ES	04	463	8	1	11	1	7	1				
IIDA	0	EP	02	04	364							ES	04	510	6	1	6	1	5	0				

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Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10P μ								
						N		E		Z						N			E			Z		
			h	m	• s	μ		μ		μ		m	• s			AN	P	T	AE	P	T	AZ	P	T
																μ		S	μ		S	μ		S
FUNATS	0	IP	02	04	375							IS	04	518										
KANAZA	0	EP	02	04	412							ES	05	020		6		2	7		2	6		3
MISHIM	0	EP	02	04	463							ES	05	049		7		1	13		1	4		1
TOKYO	0	P	02	04	465							S	05	082		11		1	12		3	12		4
NIIGAT	0	IP	02	04	466					U	5	IS	05	097		28		0	53		0	8		0
NAGOYA	0	EP	02	04	477	N	1	E	1	D	1	S	05	096		9		1	14		1	6		1
GIFU	0	EP	02	04	484							S	05	087		13		1	13		1	4		1
YOKOHA	0	EP	02	04	487					D	3	IS	05	126		17		1	13		2			
HAMAMA	0	EP	02	04	505							S	05	145		6		2	8		2	4		1
OMAEZA	0	EP	02	04	548											6		3	6		2			
HIKONE	0	EP	02	04	553							S	05	203		15		1	13		1	5		1
ONAHAM	0	EX	02	05	274											7		1	7		1	2		1
OSAKA	0	EP	02	05	285							X	05	525		6		5	9		4			
TOYOOK	0	IS	02	05	503											8		1	7		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
1966 December 1	18	34	157	003	138 16	02	36 25	01	0	40

MATSUS	2	P	18	34	201							S	34	219											
NAGANO	2	IP	18	34	222							S	34	255											
MATSUM	1	IP	18	34	240	S	5	W	3	U	5	IS	34	285											
KARUIZ	0	IP	18	34	258	N	2	W	2	D	6	S	34	317											
MAEBAS	0	IP	18	34	329					D	2	ES	34	441		16		4	8		3	9		4
KUMAGA	0	EP	18	34	346							S	34	550		10		1	9		1	5		1
KOFU	0	IP	18	34	347					U	1	IS	34	471		7		1	11		1	6		1
TOYAMA	0	EP	18	34	35							ES	34	46		13		2	10		2	5		2
IIDA	0	IP	18	34	370					U	3	ES	34	508		6		2	5		2	3		1
FUNATS	1	IP	18	34	397							IS	34	545		0	1	0	0	1	0	0	1	0
OMAEZA	0	IX	18	34	4(											6		3	6		3			
NAGOYA	0	EP	18	34	50)	S	1	W	1	U	1	S	35	100		11		1	11		1	5		1
GIFU	0	EP	18	34	503							ES	35	087		8		1	8		1	4		1
HAMAMA	0	EP	18	34	514							S	35	150		6		1	6		2	3		2
YOKOHA	0	EP	18	34	549							IS	35	127		21		1	9		1			
HIKONE	0	ES	18	35	194											11		1	11		1	3		1
ONAHAM	0	EX	18	35	304											5		1	5		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
1	19	36	360	002	138 18	01	36 33	01	0	39

MATSUS	2	IP	19	36	393							IS	36	402											
NAGANO	3	IP	19	36	403	N	26	W	7	U	73	IS	36	422		50	1		40	1		20	1		
KARUIZ	0	EP	19	36	456							S	36	513											
MATSUM	X	EP	19	36	462							IS	36	518											
TAKADA	0	P	19	36	488							S	36	568											
MAEBAS	0	IP	19	36	519					D	2	S	37	015		12		5	8		4	9		4
KOFU	0	IP	19	36	560	S	1	E	1	U	3	ES	37	085		9		0	8		1	5		1
IIDA	0	EP	19	36	586							ES	37	140		3		1	3		1	1		1
KUMAGA	0	EX	19	36	598											10		4	6		4	9		4
MITO	0	EP	19	37	101							IS	37	362		7		0	11		0	2		0
GIFU	0	EP	19	37	12							S	37	323		6		2	9		2	4		2
HAMAMA	0	P	19	37	130					D	1	ES	37	38		6		2	5		2	4		1
NAGOYA	0	EP	19	37	150							ES	37	332		9		1	8		1	3		1

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
5	04	24	586	001	138	13	01	36 30 00		0	36

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N μ	E μ	Z μ	Phase	m	s	Maximum Amplitude = A×10^P μ N AN	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
MATSUS	3	IP	04	25	000	S	E	U												
NAGANO	1	IP	04	25	029				IS	25	053									
MATSUM	0	IP	04	25	071			U	IS	25	122									
KARUIZ	0	IP	04	25	075	N		D 2	ES	25	134									
MAEBAS	0	IP	04	25	143			D 2	S	25	247	7		3	7		3	13		4
TOYAMA	0	EP	04	25	18				ES	25	31	6		3	8		3	6		3
KOFU	0	EP	04	25	182				ES	25	301	6		0	6		0			
TAKADA	0	ES	04	25	200							7		4	7		4	8		4
KUMAGA	0	EX	04	25	210															

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
12	05	13	489	002	138	19	01	36 31 01		0	38

MATSUS	2	IP	05	13	524				IS	13	536									
NAGANO	2	IP	05	13	537				IS	13	561									
KARUIZ	0	P	05	13	579			U	S	14	036									
MATSUM	0	IP	05	13	593			D	IS	14	050									
TAKADA	0	EP	05	14	017				S	14	095									
MAEBAS	0	P	05	14	037			D	S	14	130	11		3	9		3	12		3
KUMAGA	0	EX	05	14	070							7		4	7		4	7		4
KOFU	0	IP	05	14	079			U 2	ES	14	202	6		1	4		0	3		1
TOYAMA	0	EP	05	14	15				ES	14	30	7		2	7		2	5		2
NAGOYA	0	EP	05	14	240				S	14	468				6		1	3		1
HAMAMA	0	EP	05	14	252				ES	14	51	5		2	5		2	2		2
ONAHAM	0	EX	05	14	576							4		1	5		1	2		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude	
14	12	39	095	003	138	18	01	36 33 01		0	37 X

MATSUS	1	P	12	39	127				S	39	140									
NAGANO	2	IP	12	39	134				S	39	148									
KARUIZ	0	EP	12	39	180				S	39	230									
MATSUM	0	EP	12	39	199				IS	39	256									
KOFU	0	EP	12	39	290				ES	39	411	8		1	10		1	5		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude	
21	12	55	127	003	138	11	03	36 38 02		20	38 X

MATSUS	2	IP	12	55	161				IS	55	173									
NAGANO	2	IP	12	55	172				S	55	191									
KARUIZ	0	EP	12	55	225				S	55	275									
MATSUM	0	P	12	55	227				IS	55	289									
TAKADA	0	EX	12	55	314				14											
KOFU	0	IP	12	55	323			U 3	ES	55	449	6		1	10		1	4		1
KUMAGA	0	EX	12	55	376							6		4	8		5	4		4

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Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	・s	± ・s	° ′	± ′	° ′	± ′		・
22	18	41	379	002	138 23	02	36 54	01	0	42

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase			Maximum Amplitude = A×10^P μ								
						N		E		Z					N			E			Z		
			h	m	・s		μ		μ		μ		m	・s	A_N μ	P	T S	A_E μ	P	T S	A_Z μ	P	T S
TAKADA	3	P	18	41	450	S	14	E 2	D	34		S	41	489	60	1	4	45	1	4	20	1	4
NAGANO	1	IP	18	41	464							S	41	508									
MATSUS	0	P	18	41	471							S	41	524									
KARUIZ	0	P	18	41	515					D		S	42	011									
MATSUM	0	EP	18	41	529																		
MAEBAS	0	P	18	41	543					D					11		2	14		2	10		3
TOYAMA	0	P	18	41	595							S	42	124	18		3	19		3	14		2
AIKAWA	0	EP	18	41	598							IS	42	148	17		0	10		0	5		0
KUMAGA	0	EP	18	42	018							ES	42	216	8		3	10		4	9		5
UTSUNO	0	EP	18	42	035							S	42	227	9		1	10		1	4		1
KOFU	0	EP	18	42	039							ES	42	206	9		0	17		0			
NIIGAT	0	E	18	42	047							IS	42	198	35		5	38		5			
IIDA	0	EP	18	42	064							ES	42	258	6		1	8		1	3		1
KANAZA	0	EP	18	42	064							ES	42	310	9		2	8		2	5		2
KAKIOK	0	X	18	42	085										9		1	8		1	4		1
MITO	0	IP	18	42	110				D	1		S	42	356	8		2	18		1	4		1
MISHIM	0	EP	18	42	136										6		1	6		1	2		1
TOKYO	0	EX	18	42	136										8		4	9		4			
HAMAMA	0	EP	18	42	20							ES	42	49	5		2	5		2	2		2
OMAEZA	0	EP	18	42	277										7		2						
ONAHAM	0	EX	18	42	436										8		1	12		1	3		2

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昭和42年3月6日　印刷
昭和42年3月10日　発行

編集兼
発行者　国立防災科学技術センター
東京都中央区銀座東6の1

印刷所　有限会社　宝　文　社
東京都足立区千住大川町10

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Centre

NATIONAL RESEARCH CENTER FOR DISASTER PREVENTION

No. 1, GINZAHIGASHI 6-CHOME, CHUO-KU, TOKYO

TEL (541) 4721