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

CONTENTS

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Observations by the Network of JMA during August 1965 to December 1966

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

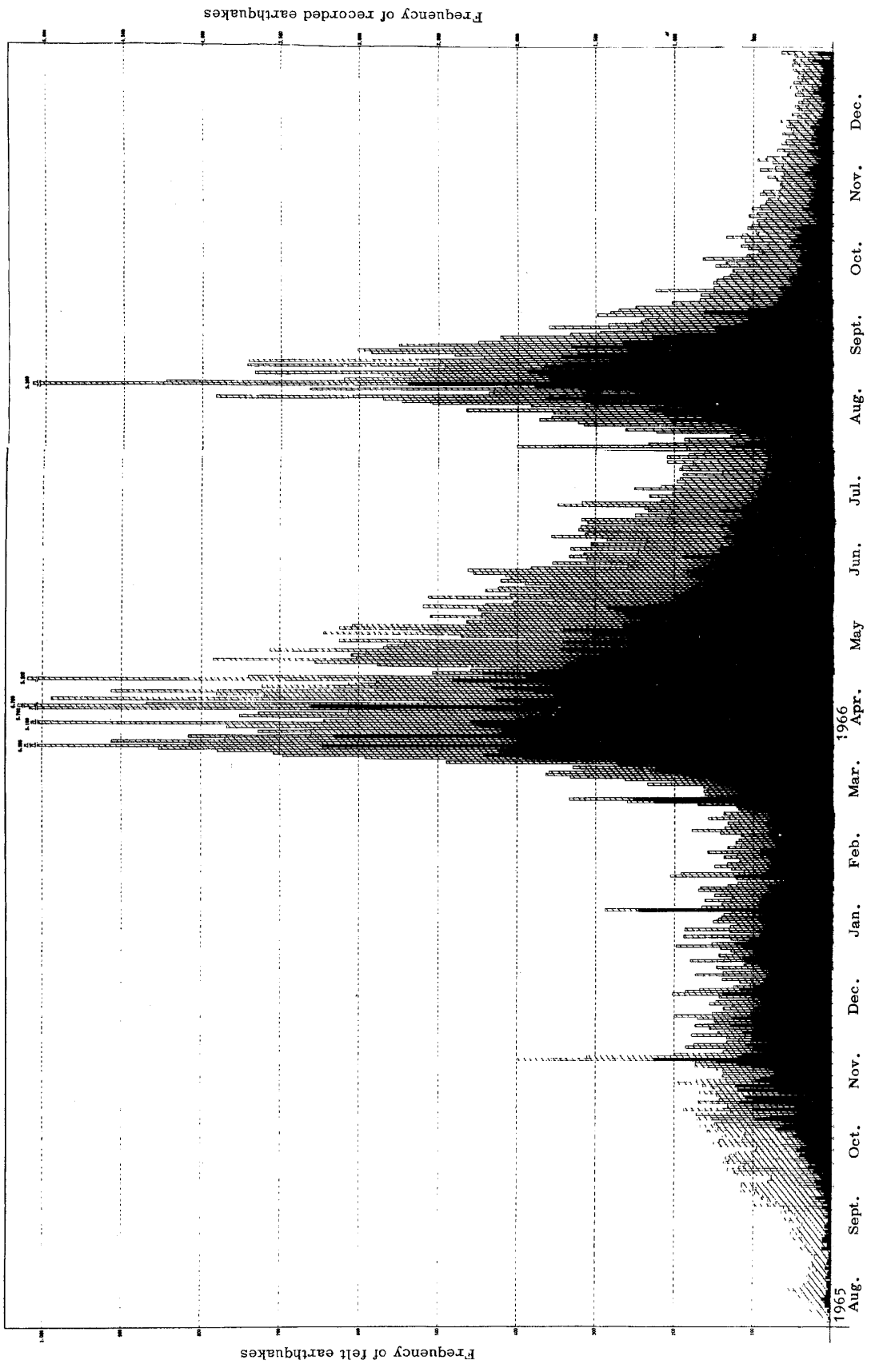

Fig. 1. Daily frequency of earthquakes observed at Matsushiro Seismological Observatory, JMA.

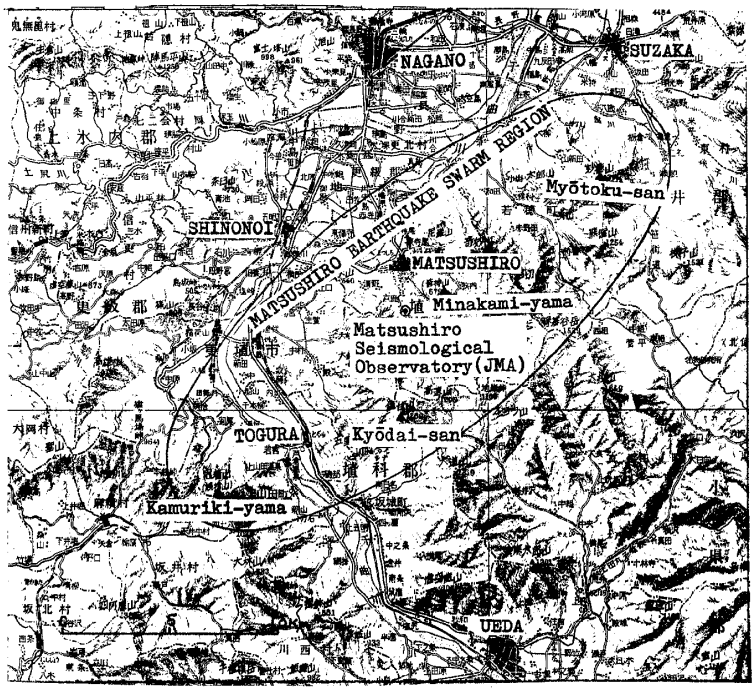

Fig. 2. Matsushiro earthquake swarm region.

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

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.

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.

JMA stations and their seismographs

Station	λ	φ	Seismographs	Station	λ	φ	Seismographs
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	

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.

List of Earthquake Origins

		Date and Time (J.S.T.) d	h	m	C	Origin Time m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	M
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	36	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

		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

	Date and Time (J.S.T.) d	h	m	C	Origin Time m	•s	±•s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	M •
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

		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	37X
		21	12	55	L	55	127	003	138	11	03	36	38	02	20	38X
		22	18	41	L	41	379	002	138	23	02	36	54	01	00	42

Seismological Data of Matsushiro Earthquake Swarm (Report I)

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 μ	P	T S	Z AZ μ	P	T S
MATSUS	3	P	17	27	072															
NAGANO	3	IP	17	27	092	N 60	W 55	U152	IS	27	121	31	1	1	38	1	1	15	1	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		3
TOYAMA	0	EP	17	27	225				S	27	311	21		3	16		3	8		2
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		4
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		1
WAJIMA	0	EX	17	27	319							17		1	15		1			
MISHIM	0	EP	17	27	348				S	27	537	13		1	16		1	7		1
AJIRO	0	P	17	27	361				S	27	579	5		1	8		1	3		1
NAGOYA	0	EP	17	27	372	N 1	E 1	D 1	S	27	596	15		1	13		1	6		1
GIFU	0	EP	17	27	374				S	27	583	17		2	18		2	5		2
MITO	0	EP	17	27	390				ES	28	040	6		1	5		1	2		1
OMAEZA	0	EP	17	27	400				S	28	106	13		2	13		2	9		2
HAMAMA	0	P	17	27	402				S	28	079	10		2	9		2	6		1
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		3
ONAHAM	0	EX	17	27	524							8		1	8		1	3		2
KAKIOK	0	ES	17	28	00							7		1	7		1	2		1
HIKONE	0	S	17	28	102							14		1	12		1	5		2
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		2
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	59			59			40		
NAGANO	1	IP	20	01	590				IS	02	015									
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		1

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									

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	N P	N T S	E AE μ	E P	E T S	Z AZ μ	Z P	Z T S
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	4		0	6		0	1		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.)	Initial Motion	Phase	Maximum Amplitude = A ×10^F μ
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 0 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.)	Initial Motion	Phase	Maximum Amplitude = A ×10^F μ
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.)	Initial Motion	Phase	Maximum Amplitude = A ×10^F μ
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

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

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

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	P	T	S	E AE	P	T	S	Z AZ	P	T	S
MATSUS	3	P	20	15	442				IS	15	468	85				12	1			63			
NAGANO	1	IP	20	15	443				IS	15	549												
MATSUM	0	EP	20	15	493				ES	15	550												
KARUI7	0	EP	20	15	500				ES	16	023												
TAKADA	0	EP	20	15	543																		

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

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	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				IS	04	446												
MATSUM	0	IP	13	04	393		U	2	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								

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	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

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	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	
KARUI7	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	

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A×10^P 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
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							IS	34	053	94			95			62	
NAGANO	2	P	08	34	028							IS	34	118								
MATSUM	0	EP	08	34	066							ES	34	117								
KARUIZ	0	EP	08	34	066							ES	34	206								
TAKADA	0	EP	08	34	114																	

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

MATSUS	3	P	04	07	545	N	24	W	59	U	91	IS	07	588	30	1		20	1		20	1
NAGANO	3	IP	04	07	565							IS	08	060								
MATSUM	0	EP	04	08	005							ES	08	071								
KARUIZ	0	EP	04	08	018							ES	08	132								
TAKADA	0	EP	04	08	051																	
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

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
18	18	14	509	002	138	16	02	36 32 01	00	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	N P	N T	E AE	E P	E T	Z AZ	Z P	Z 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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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	U130	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	58		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	060		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									

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

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

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			
KARUIZ	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												

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

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

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	E P	E T S	Z AZ	Z P	Z 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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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

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)
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													
KUMAMO	0	EX 03 01 32					7		2	5		2			
KAGOSH	0	X 03 02 027					11		3	8		3			

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×10^P μ N: A_N	P	T (S)	E: A_E	P	T (S)	Z: A_Z	P	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	
KARUIZ	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×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 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									
KARUIZ	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

1965
December

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
1	21	54	383	003	138 07	02	36 30	01	00	35

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	21	54	422															
NAGANO	1	IP	21	54	435	N 28	W 41	U 79	IS	54	460	64			95			63		
MATSUM	0	IP	21	54	482			U 2	IS	54	532									
KARUIZ	0	EP	21	54	482				ES	54	542									
TAKADA	0	EP	21	54	523				ES	55	011									
KOFU	0	IP	21	54	584			U 1	IS	55	109	7		0	7		0	3		0

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
8	06	54	026	002	138 13	01	36 32	01	00	41

MATSUS	3	P	06	54	057																			
NAGANO	2	IP	06	54	079	N 11	W 19	U 99	S	54	105	28	1		17	1		41	1	
MATSUM	0	IP	06	54	113	S 1	W 3	U 10	IS	54	166									
KARUIZ	0	IP	06	54	124	N	W	D 3	IS	54	175									
TAKADA	0	EP	06	54	160				ES	54	252									
MAEBAS	0	IP	06	54	180		W 1	D 3	IS	54	287	12		3	9		3	10		3
KOFU	0	IP	06	54	219			U 3	IS	54	345	15		0	18		0	9		0
TOYAMA	0	P	06	54	221			D	S	54	36	12		2	12		2	9		3
IIDA	0	EP	06	54	244				ES	54	396	5		2	3		1	1		1
KUMAGA	0	EP	06	54	260				ES	55	284	10		4	13		5	12		4
FUNATS	0	P	06	54	275				S	54	410									
UTSUNO	0	EP	06	54	301				ES	54	474	7		2	4		1			
AIKAWA	0	IP	06	54	312			U 0	ES	54	510	5		0	10		0			
AJIRO	0	P	06	54	348				ES	54	569	4		1	6		1	1		1
GIFU	0	P	06	54	358				S	54	578	14		2	12		2			
NAGOYA	0	IP	06	54	360	S 1	W 1	D 2	S	54	590	10		1	10		1	4		1
HAMAMA	0	IP	06	54	390				S	55	056	8		1	5		1	4		1
WAJIMA	0	EX	06	54	418							21		1	15		1			
YOKOHA	0	EP	06	54	421				IS	55	030	15		1	10		1			
HIKONE	0	EP	06	54	493				S	55	099	11		1	9		1	4		2
NIIGAT	0	X	06	54	557										40		1			
ONAHAM	0	EX	06	55	141							5		1	7		1	2		0
OMAEZA	0	EP	06	55	434							7		2	7		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
9	23	11	532	002	138 12	01	36 32	01	00	42

MATSUS	4	P	23	11	55																			
NAGANO	2	IP	23	11	567	N 25		U 98	IS	11	587	33	1		36	1		20	1	
AIKAWA	0	EP	23	12					ES	12	428				6		0			
MATSUM	1	IP	23	12	025	S 2	W 5	U 18	IS	12	074	50		3	25		3	50		3
KARUIZ	0	IP	23	12	026	N 2	W	D 8	IS	12	076									
TAKADA	0	P	23	12	073				S	12	168									
MAEBAS	0	IP	23	12	101			D 2	IS	12	201	38		3	11		3	17		3
TOYAMA	0	P	23	12	121			D	S	12	27	19		4	13		3	11		3
KOFU	0	IP	23	12	126	S 4	E 2	U 4	IS	12	242	17		0	20		0	10		1
TAKAYA	0	EP	23	12	126				S	12	232									
CHICHI	0	EP	23	12	133				ES	12	252									
FUNATS	0	P	23	12	145				S	12	311									
KUMAGA	0	EP	23	12	159				S	12	302	21		4	33		4	18		4
IIDA	0	EP	23	12	162				ES	12	310	10		2	7		5	4		1
UTSUNO	0	EP	23	12	199				ES	12	386	6		1	7		2			
KAKIOK	0	EP	23	12	22				ES	12	48	9		1	9		1	2		1
KANAZA	0	EX	23	12	22															
MISHIM	0	EP	23	12	228				S	12	433	15		1	13		1	4		1
SHIZUO	0	EP	23	12	240				ES	12	469	5		1	6		1	4		1
AJIRO	0	IP	23	12	251				S	12	467	5		1	9		1	3		1
WAJIMA	0	EX	23	12	255							26		1	27		1			
TOKYO	0	EP	23	12	26				ES	12	48	27		4	24		5	22		4
GIFU	0	P	23	12	262				S	12	481	18		1	14		1			
NAGOYA	0	P	23	12	264	S 1	W 1	U 1	S	12	486	16		1	17		1	7		1
HAMAMA	0	IP	23	12	297				S	12	576	6		1	10		2	5		1
YOKOHA	0	EP	23	12	307				IS	12	517	26		1	19		1			

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
OMAEZA	0	EP	23	12	312											8		2	9		2	8		2
TSURUG	0	EP	23	12	328							ES	12	588										
HIKONE	0	EP	23	12	354							S	12	598		14		1	12		1	5		1
NIIGAT	0	X	23	12	434														25		1			
ONAHAM	0	EX	23	13	080											9		1	7		1	3		2
OSAKA	0	EX	23	13	198											10		3	15		5	5		3

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

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	A_N	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		S
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									
KARUIZ	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		3
KOFU	0	EP		01	16	287							ES	16	400	6		1	8		1	4		1
TOYAMA	0	P		01	16	306					D		S	16	41	8		3	9		3	9		3
KUMAGA	0	EX		01	16	358										6		4	8		5	12		4
AIKAWA	0	IP		01	16	370	S	0	W	0	U	0	ES	16	564	3		1	5		1	2		0
NAGOYA	0	EP		01	16	424	N		E				S	17	046	7		2	7		1	3		1
GIFU	0	EP		01	16	442							S	17	028	10		1	9		2	5		1
HAMAMA	0	P		01	16	452					U		S	17	097	5		1	5		2	3		1
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		1

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		3
KARUIZ	2	IP		03	59	210			E	8	U	12	IS	59	261	20	1	2	30	1	2	10	1	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		3
KOFU	0	IP		03	59	321	S	9	E	3	U	12	ES	59	443	39		2	50		1	18		1
TOYAMA	0	IP		03	59	325							IS	59	487	60		3	41		4	43		3
IIDA	0	EX		03	59	342																		
KUMAGA	0	EP		03	59	350							S	59	494	60		5	60		4	60		3
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		0
MISHIM	0	P		03	59	433							IS	00	042	32		1	34		1	11		1
KAKIOK	0	EP		03	59	435							S	00	039	29		1	25		1	9		1
TOKYO	0	EP		03	59	436							ES	00	050	68		4	53		4	65		4
AJIRO	0	P		03	59	451							S	00	069	7		0	9		0	4		0
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		2
GIFU	0	P		03	59	468	S	3	W	3	U	3	S	00	081	51		2	53		1	9		2
MITO	1	EP		03	59	472							IS	00	120	72		0	50		0	12		0
NAGOYA	0	P		03	59	474	N	1	E	1	D	1	IS	00	100	42		1	43		1	16		1
YOKOHA	0	EP		03	59	482							IS	00	126	54		4	38		2	17		3
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		2
OSHIMA	0	P		03	59	506							S	00	181	19		1	12			8		2
TSURUG	0	EP		03	59	526							S	00	198									
TOMISA	0	P		03	59	526					D	3				15		2	13		3	70		3
ONAHAM	0	IP		03	59	547					U	4	IS	00	226	19		1	27		1	11		3
FUKUSH	0	IP		03	59	548	N	1	E	1	D	1	S	00	248	8		2	7		1	3		1
HIKONE	0	EP		03	59	558							IS	00	197	36		1	28		1	10		1
KAMEYA	0	EP		03	59	576							IS	00	254	13		2	11		2	8		2
KYOTO	0	EP		03	59	589							IS	00	350	8		2	6		1	2		1
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		2

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
8	22	34	288	002	138 16	01	36 32	01	00	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	4	P	22	34	307															
NAGANO	3	IP	22	34	331	N325	W276	U361	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
KARUIZ	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	1	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	15		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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
15	01	21	111	002	138 19	01	36 34	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 S	E AE	P	T S	Z AZ	P	T S
MATSUS	3	P	01	21	144			D												
NAGANO	3	IP	01	21	153	N 14	W 16	U106	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

Origin Time						Location								Magnitude
						Longitude			Latitude			Depth km		
d	h	m	s	±	s	°	′	±	°	′	±			•
20	23	58	54.2	0	0.3	138	14	02	36	31	01	00		3.9

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	2	P	23	58																				
NAGANO	2	IP	23	58	58.1	N	16	W	28	U	46	IS	59	00.3		14	1		30	1		12	1	
KARUIZ	0	EP	23	59	01.8							ES	59	07.7										
MATSUM	0	IP	23	59	03.5					U	2	IS	59	09.3										
TAKADA	0	P	23	59	08.1							S	59	16.0										
MITO	0	EP	23	59	30.5							IS	59	52.0		7		0	5		0	1		0

Origin Time						Location								Magnitude
						Longitude			Latitude			Depth km		
d	h	m	s	±	s	°	′	±	°	′	±			•
23	20	15	55.3	0	0.1	138	13	01	36	31	01	00		5.1

MATSUS	5	P	20	15	57.5			E																	
NAGANO	4	IP	20	16	00.3	N	37.0	W	25.0	U	78.0	S		16	02.4	20	2		25	2		13	2	
MATSUM	3	IP	20	16	04.3	S	18	W	43	U	14.0	IS		16	09.3	50	1	3	50	1	3	25	1	3
TAKADA	2	P	20	16	07.8	N	11	E	6	U	45	S		16	16.6	30	1	2	35	1	2	10	1	2
MAEBAS	1	IP	20	16	10.6	N	3	W	11	D	35	IS		16	20.3	29	1	3	21	1	5	28	1	4
TAKAYA	0	P	20	16	13.8							IS		16	24.8									
TOYAMA	0	IP	20	16	14.4	N	2	E	12	D	66	IS		16	28.9	20	1	4	15		4	15		5
KOFU	2	IP	20	16	14.6	S	24	E	16	U	10	IS		16	26.6	17	1	0	21	1	0	11	1	
CHICHI	2	IP	20	16	15.9	N	6	W	3			IS		16	27.1	30	1	1	24	1	3	21	1	2
KUMAGA	0	P	20	16	16.5	N	7			U		S		16	30.0	17	1	3	25	1	4	15	1	4
IIDA	1	IP	20	16	17.6	S	19	W	14	U	31	IS		16	32.2	71		2	68		1	29		1
FUNATS	2	IP	20	16	18.0	S	25	E	5			IS		16	30.9									
KANAZA	0	P	20	16	22.0	N		E		D		S		16	37.6									
UTSUNO	0	IP	20	16	22.1	N	5	W	26	D	35	IS		16	41.0	61		2	50		2	54		1
WAJIMA	0	EP	20	16	22.2							ES		16	41.3	20	1	2	15	1	2	70		1
AIKAWA	0	IP	20	16	23.8	N	7	E	3	U	8	IS		16	43.6	30		0	53		0	15		1
MISHIM	0	IP	20	16	25.0	S	4			U	4	IS		16	45.0	14	1	1	11	1	2	54		1
SHIZUO	0	P	20	16	25.7	S	5	E	3	D	3	ES		16	48.2	33		1	44		1	20		3
TOKYO	1	P	20	16	26.4							ES		16	49.6	22	1	4	18	1	4	17	1	5
NIIGAT	0	EP	20	16	26.6					U	46	IS		16	48.3	57		2	90		2	33		
AJIRO	1	IP	20	16	26.9	S	1	E	1	U	2	IS		16	48.7	43		1	97		1	28		1
KAKIOK	0	P	20	16	27.1	S	1	E	2			S		16	50.2	81		1	52		1	23		2
SHIRAK	0	P	20	16	28.0					D	2	S		16	54.1									
GIFU	0	P	20	16	28.2	S	5	W	5			S		16	49.8	16	1	2	19	1	2	41		1
NAGOYA	0	IP	20	16	28.4	S	6	W	5	U	7	IS		16	50.4	13	1	1	11	1	1	58		1
YOKOHA	0	IP	20	16	29.8			W	5	D	10	IS		16	53.0	24	1	1	17	1	1	58		2
MITO	0	IP	20	16	29.9					D	1	ES		16	55.4	40		5	52		2	28		3
OMAEZA	0	IP	20	16	30.4	N	13	E	3	U	5	IS		17	00.4	92		4	12	1	4	50		2
HAMAMA	0	IP	20	16	30.5	S		W		U	1	S		16	56.2	10	1	1	87		2	46		1
TSURUG	0	EP	20	16	31.4							S		17	00.1									
OSHIMA	0	P	20	16	31.8			E	2	U	8	IS		16	58.8	82		1	74			29		2
CHOSHI	0	EX	20	16	31.9							EX		17	02.5									
HIKONE	0	EP	20	16	33.8							S		17	00.5	16	1	1	12	1	1	46		1
FUKUI	0	IP	20	16	34.0	N	10	E	12	D	8	IS		16	54.1									
TOMISA	0	P	20	16	34.5					U	3					48		4	45		2	28		2
FUKUSH	0	EP	20	16	35.2							ES		17	07.5	26		2	17		2	8		5
ONAHAM	0	IP	20	16	36.2					D	5	IS		17	05.4	82		1	60		1	26		2
KAMEYA	0	IP	20	16	38.0					D	5	IS		17	06.9	61		2	42		2	25		2
KYOTO	0	EP	20	16	39.7							IS		17	14.6	37		1	28		2	12		1
TSU	0	IP	20	16	40.0							IS		17	08.0									
NARA	0	EP	20	16	41.6							ES		17	17.6									
SENDAI	0	EX	20	16	43.6							S		17	24.3	20		2	14		2	3		2
OWASE	0	P	20	16	45.3							S		17	22.0	14		2	12		2	10		2
SAKATA	0	IP	20	16	49.1					D	4	ES		17	24.0									
TOYOOK	0	P	20	16	50.8					D		IS		17	31.2	73		1	57		1	25		0
OSAKA	0	EP	20	16	51.8							S		17	31.2	70		3	87		3	41		3
KOBE	0	EP	20	16	55.5							ES		17	34.1									
MIZUSA	0	P	20	16	56.2							X		17	54.2	20		4	16		2	10		2
HACHIJ	0	P	20	16	58.8							X		17	00.0									
TOKUSH	0	EP	20	16	59.0							ES		17	48.2									
HIMEJI	0	EP	20	16	59.8							ES		17	42.7									
WAKAYA	0	X	20	17	00.0							X		17	45.9	30		1	28		1			
SUMOTO	0	IP	20	17	04.0							IX		17	07.0									
										D	1	EX		17	46.4	8		4	10		2	4		4
OKAYAM	0	EP	20	17	07.9							S		18	00.7	9		1	12		1	4		1
AKITA	0	EX	20	17	11											9		3	12		4	6		3
TAKAMA	0	EX	20	17	13.2							EX		18	05.6	12		6	9		6	4		2
KOCHI	0	EX	20	17	29.3							EX		18	30.1	7		3	6		3			
MUROTO	0	EX	20	17	29.6							X		18	33.8	6		2	7		2	3		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	E AE	P	T	Z AZ	P	T
													S			S			S
HIROSH	0	EX	20	17 323				X	18	408	4		2	3		2	4		2
MATSUY	0	E?	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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
7	04	05	117	002	138	13 01	36	30 01	00	49

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

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

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 A_N	P	T	S	E A_E	P	T	S	Z A_Z	P	T	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	EP	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 d	h	m	• s	± • s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude •
12	04	05	55.4	0.02	138	09	01	36	33	01	20	4.2

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	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					

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		•
14	07	32	027	001		138	15	01	36	32	00	00	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	32	058															
KARUIZ	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						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		•
16	17	11	440	002		138	13	01	36	29	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	AN	P	T	AE	P	T	AZ	P	T
												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
KARUIZ	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						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		•
23	13	25											

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	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								
KARUIZ	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						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	• s	±	• s	°	′	± ′	°	′	± ′		•
25	11	05											

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

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	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

Origin Time					Location									Magnitude
					Longitude			Latitude			Depth km			
d	h	m	・s	±・s	°	′	±	°	′	±				•
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	AN μ	P	T S	AE μ	P	T S	AZ μ	P	T 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									
KARUIZ	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 km			
d	h	m	・s	±・s	°	′	±	°	′	±				•
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

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

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	IP	07	03	451																			
NAGANO	3	IP	07	03	470	N	28	W	13	U	103	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						Location							Magnitude
						Longitude			Latitude			Depth	
d	h	m	• s	± • s		°	′	± ′	°	′	± ′	km	•
10	11	15	367	004		138	07	02	36	30	01	00	39

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			

Origin Time					Location					Magnitude
d	h	m	·s	±·s	Longitude ° ′	± ″	Latitude ° ′	± ″	Depth 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
d	h	m	·s	±·s	Longitude ° ′	± ″	Latitude ° ′	± ″	Depth km	·
24	14	03	467	001	138 13 01		36 33 00		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
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
d	h	m	·s	±·s	Longitude ° ′	± ″	Latitude ° ′	± ″	Depth km	·
28	11	10	478	003	138 17 02		36 32 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	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
d	h	m	·s	±·s	Longitude ° ′	± ″	Latitude ° ′	± ″	Depth km	·
30	14	35	190	001	138 14 01		36 31 00		00	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
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

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
GIFU	0	P	14	35	521							S	36	128		12		2	12		2			
NAGOYA	0	P	14	35	522	S	2	W	2	U	2	ES	36	168		9		1	9		1	4		1
MITO	0	IP	14	35	534							IS	36	188		14		1	11		1	4		2
YOKOHA	0	EP	14	35	539							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			

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

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
1	10	40	267	002	138 13	01	36 31	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
															μ		S	μ		S	μ		S
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	
KARUIZ	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		3
KOFU	0	IP	10	40	463	S 5	E	4	U	10					10		1	11		0	7		0
IIDA	0	EP	10	40	500							ES	41	050	8		0	6		0	3		0
UTSUNO	0	IP	10	40	540		W	2	D	3		S	41	205	7		1	7		1	5		1
KANAZA	0	EP	10	40	550							ES	41	124									
MISHIM	0	EX	10	40	57										6		1	7		1	3		1
WAJIMA	0	EX	10	40	570										21		1	25		1			
KAKIOK	0	P	10	40	59							S	41	19	9		1	8		1	3		1
TOYAMA	0	P	10	41	008							S	41	17	9		2	9		2	9		3
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		0
HAMAMA	0	EP	10	41	03							ES	41	29	11		2	9		2	5		2
NAGOYA	0	EP	10	41	034	N 0	E	0	D	0		ES	41	244	9		1	11		1	4		1
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		1
ONAHAM	0	EX	10	41	350										9		2	10		1	3		1

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

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
MATSUS	2	P	12	04																			
NAGANO	2	IP	12	04	526	N 7	W	1	U	34		ES	04	547									
KARUIZ	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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
2	06	02								

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
MATSUS	3	P	06	02	317																		
NAGANO	3	EP	06	02	348							ES	02	369	50	1		50	1		40	1	1
KARUIZ	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		1
KUMAGA	0	EP	06	03	000							ES	03	220	22		3	19		5	18		5
WAJIMA	0	EP	06	03	00.3							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		1
KANAZA	0	EP	06	03	046							S	03	226									
TOYAMA	0	IP	06	03	071							S	03	227	17		4	16		3	12		2
KAKIOK	0	EP	06	03	08							ES	03	29	11		1	8		1	4		1
MISHIM	0	EP	06	03	082							ES	03	283	12		1	10		1	3		1
AJIRO	0	IP	06	03	091				U	1		S	03	316	3		1	5		1	2		1
GIFU	0	EP	06	03	104							S	03	336	23		2	19		1	7		1
MITO	0	EP	06	03	115							IS	03	366	23		0	20		0	3		0
NAGOYA	0	EP	06	03	116							S	03	336	18		1	15		1	7		1
HAMAMA	0	IP	06	03	134							ES	03	38	11		2	10		2	5		1
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		2
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		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
2	06	09	24.5	0.02	138	14	01	36 31 01	00	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	E AE	P	T	Z AZ	P	T
MATSUS	3	P	06	09	26.3															
NAGANO	2	IP	06	09	28.9	N 32	W 1	U 34	ES	09	30.9	20	1		30	1		20	1	
KARUIZ	0	EP	06	09	32.7				ES	09	38.4									
MATSUM	0	P	06	09	33.7			U	IS	09	39.0									
TAKADA	0	P	06	09	37.4				S	09	45.4									
MAEBAS	0	EP	06	09	41.1				S	09	49.3	11		4	7		3			
KOFU	0	IP	06	09	44.1	S 2	E 3		ES	09	58.7	6		1	7		0			
IIDA	0	EP	06	09	47.0				ES	10	02.2	5		0	4		1	1		1
UTSUNO	0	P	06	09	51.4			U 3	S	10	09.5	7		1	5		1	5		1
KANAZA	0	E	06	09	51.6															
TOYAMA	0	IP	06	09	54.2			D 1	ES	10	10.4	8		4	7		3	7		3
WAJIMA	0	EP	06	09	56.6				ES	10	10.6	23		1	21		1			
NAGOYA	0	EP	06	09	59.5				S	10	21.2	7		1	7		1	3		1
MITO	0	EP	06	10	00.6				IS	10	24.6	12		0	10		0	2		0
HAMAMA	0	P	06	10	00.8			U 4	ES	10	27	6		2	8		3	3		1
HIKONE	0	EP	06	10	10.8				S	10	32.1	7		1	7		1	3		1
NIIGAT	0	E	06	10	16.6				S	10	18.2	6		1	8		1			
ONAHAM	0	EX	06	10	35.9							5		1	6		1			

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

MATSUS	3	P	01	59	57.6															
NAGANO	2	P	02	00	00.4				ES	00	02.4									
MATSUM	0	P	02	00	03.2				IS	00	08.4									
KARUIZ	0	P	02	00	03.3				IS	00	08.2									
TAKADA	0	P	02	00	10.3				S	00	17.5									
MAEBAS	0	P	02	00	10.4			D	S	00	20.1	9		3	8		4	10		4
KUMAGA	0	EX	02	00	13.5							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	23.4				S	00	40.2	50		3	50		2			
GIFU	0	EP	02	00	27.8				S	00	49.6	6		2	4		2			
NIIGAT	0	X	02	00	44.5							5		5	6		5			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	07	00	37.2	0.02	138	12	00	36 28 01	00	

MATSUS	2	P	07	00																
NAGANO	2	IP	07	00	42.5	N 3		U 24	S	00	45.0									
KARUIZ	0	P	07	00	45.4				ES	00	50.3									
MATSUM	0	IP	07	00	45.5			U 6	IS	00	50.8									
TAKADA	0	P	07	00	51.5				S	01	00.3									
KOFU	0	EP	07	00	57.2				IS	01	07.6	5		0	10		0			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	13	55	59.3	0.02	138	18	01	36 33 01	00	4.2

MATSUS	3	P	13	56	02.7															
NAGANO	3	P	13	56	03.9				S	56	05.6	80	1		12	2		50	1	
KARUIZ	0	EP	13	56	07.8				IS	56	13.1	10	1	2	10	1	2			
MATSUM	X	P	13	56	09.2				IS	56	14.8									
TAKADA	0	P	13	56	13.1				ES	56	32.9									
MAEBAS	0	IP	13	56	14.3			D 2	S	56	34.9							31		4
KOFU	0	IP	13	56	18.6			U 3	ES	56	31.0	14		3	13		3	7		1
IIDA	0	IP	13	56	22.0	S 1	E 2	U 1	IS	56	37.0	8		2	10		1	5		3

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
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					Location					
					Longitude		Latitude		Depth km	Magnitude
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
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			
KARUIZ	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					Location					
					Longitude		Latitude		Depth km	Magnitude
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		•
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			
KARUIZ	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		

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
KOBE	0	EP	17	52	181							IX	52	255										
TOKUSH	0	EP	17	52	205							ES	53	027		50		6	10	1	5	40		2
HIMEJI	0	EP	17	52	211							ES	53	092										
SHIONO	0	EP	17	52	232							ES	53	081										
												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

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' S	E AE	P	T S	Z AZ	P	T S
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' S	E AE	P	T S	Z AZ	P	T S
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' S	E AE	P	T S	Z AZ	P	T S
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' S	E AE	P	T S	Z AZ	P	T S
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

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
11	02	59	351	003	138	13	02	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 S	E AE	P	T S	Z AZ	P	T S
MATSUS	3	P	02	59	36															
NAGANO	3	IP	02	59	391				S	59	414	10	1		20	1		20	1	
KARUIZ	0	EP	02	59	425				ES	59	479									
MATSUM	0	IP	02	59	426	S	W 2	U 6	IS	59	479									
TAKADA	0	P	02	59	468				S	59	552									
MAEBAS	0	EP	02	59	490				ES	59	596	9		3	7		3	8		3
KOFU	0	IP	02	59	522			U 1	IS	00	042	9		0	21		0	5		0
KUMAGA	0	EX	02	59	545							8		3	6		1	5		4
FUNATS	0	IP	02	59	577				IS	00	138									
KANAZA	0	EP	03	00																
MISHIM	0	EP	03	00	035				ES	00	237			1	6		1	4		1
NAGOYA	0	P	03	00	066	N 1	E 1	D 1	S	00	300	6		1	6		1	3		1
NIIGAT	0	E	03	00	073				ES	00	271	5		1	10		1			
YOKOHA	0	EP	03	00	090				S	00	330	10		1	10		1			
HAMAMA	0	IP	03	00	099			U 2	ES	00	30	5		1	4		1	3		1
GIFU	0	EP	03	00	12				S	00	293	4		1	6		2			
HIKONE	0	EP	03	00	223				S	00	400	8		1	5		1	4		1

Origin Time d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
11	04	57	240	002	138	12	01	36 31 01	00	47

MATSUS	4	P	04	57	263																				
NAGANO	3	IP	04	57	289	N	40	W	6	U	31	ES	57	309	20	2	2	15	2	2	12	2	1
MATSUM	1	IP	04	57	330	S		W	2	U	2	IS	57	388	25	1	3	25	1	3	50		3
KARUIZ	1	IP	04	57	334	S	4	E	8	U	14	S	57	391	50	1	2	50	1	2	10	1	1
TAKADA	1	P	04	57	375	N	5	E	2	U	7	S	57	459	20	1	4	20	1	4	50		4
MAEBAS	2	IP	04	57	406	N	1	W	3	D	10	IS	57	512	14	1	4	10	1	3	12	1	3
TOYAMA	0	IP	04	57	431		0	E	3	D	9	IS	58	001	88		3	62		3	70		3
KOFU	1	IP	04	57	433	S	13	E	6	U	11	ES	57	552	57		1	66		1	23		1
CHICHI	0	EP	04	57	436							S	57	564									
IIDA	0	IP	04	57	468	S	4	W	2	U	4	IS	58	028	30		3	35		4	17		1
KUMAGA	0	IP	04	57	469	N	1	E	5	U	2	S	58	012	11	1	5	10	1	5	57		3
FUNATS	0	P	04	57	469							S	58	032									
WAJIMA	0	EP	04	57	507							S	58	088	70		1	72		1	18		1
KANAZA	0	P	04	57	512	N		E		D		S	58	092									
AIKAWA	0	IP	04	57	518	N	0	E	0	U	0	IS	58	114	11		1	16		1	6		1
UTSUNO	1	IP	04	57	521	N	2	W	7	D	10	IS	58	105	83		1	37		1	33		1
MISHIM	0	IP	04	57	541	S	3			U	4	IS	58	161	58		1	54		4	16		1
NIIGAT	0	EP	04	57	546							S	58	165	41		5	75		5	20		5
AJIRO	0	IP	04	57	564	S	1	E	0	U	1	S	58	192	11		1	18		1	6		1
KAKIOK	0	P	04	57	568	N		E	5	U		S	58	188	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	571							ES	58	201	12		1	16		1			
SHIRAK	0	IP	04	57	576							ES	58	235									
NAGOYA	0	P	04	57	580	S	2	W	2	U	2	S	58	194	50		2	60		2	21		2
YOKOHA	0	IP	04	57	588					D	18	IS	58	238	70		2	59		2	30		3

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

MATSUS	3	P	05	14	32																				
NAGANO	3	EP	05	14	334							ES	14	357	40	1		40	1		90	1			
KARUIZ	0	P	05	14	358							IS	14	414											
MATSUM	X	IP	05	14	375	S		W	2	U	4	S	14	429											
TAKADA	0	P	05	14	407							S	14	487											
KUMAGA	0	EX	05	14	504										6		4	7		5	4		4		
AIKAWA	0	IP	05	14	556	N	0	W	0	U	0	IS	15	152	5		1	6		1	3		1		
NIIGAT	0	X	05	14	570										4		2	4		1					
WAJIMA	0	EX	05	14	575										17		1	15		1					

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	±	s	°	′	±	°	′	±		
11	06	06	13.0	0.02		138	12	01	36	34	01	00	4.7

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
MATSUS	5	P	06	06	17.3																			
NAGANO	3	EP	06	06	17.3							S	06	19.3		24	2	1	22	2	1	10	2	1
MATSUM	2	IP	06	06	22.6	S		W	2	U	8	IS	06	28.1		50	1	3	30	1	3	10	1	3
KARUIZ	1	IP	06	06	22.8	S	2	E	6	U	10	IS	06	28.4		60	1	2	60		1	15	1	2
TAKADA	1	P	06	06	26.3							S	06	34.3		30	1	4	20	1	4	15	1	4
MAEBAS	1	IP	06	06	29.4	N		W	1	D	8	IS	06	39.3		21	1	5	19	1	3	17	1	3
TOYAMA	0	IP	06	06	32.3					D	10	IS	06	47.6		93		4	96		4	99		4
KOFU	0	IP	06	06	32.5	S	11	E	6	U	9	ES	06	45.3		80		2	74		1	25		1
CHICHI	0	EP	06	06	32.8							S	06	47.0										
TAKAYA	0	P	06	06	33.0							S	06	54.0										
KUMAGA	0	P	06	06	36.0	N	2	W	2	D	1	S	06	54.8		18	1	3	15	1	5	10	1	3
IIDA	0	IP	06	06	36.0	S	2	W	1	U	3	IS	06	52.0		32		1	48		3	34		3
FUNATS	0	P	06	06	37.3							S	06	53.4										
WAJIMA	0	EP	06	06	39.4							S	06	58.2		59		1	67		1	21		1
KANAZA	0	P	06	06	39.8			E		D		S	06	59.6										
AIKAWA	0	IP	06	06	40.5	N	1	E	1	U	1	ES	07	00.8		8		1	16		3	7		3
UTSUNO	0	IP	06	06	40.6	N	2	W	7	D	10	S	06	58.3		54		3	27		4	34		1
NIIGAT	0	EP	06	06	40.8							S	07	06.7		48		3	86		5	30		4
MISHIM	0	EP	06	06	42.7							IS	07	04.5		45		1	47		4	14		1
GIFU	0	EP	06	06	44																			
KAKIOK	0	IP	06	06	45.2	N				U	1	S	07	06.0		37		1	21		1	15		1
AJIRO	0	IP	06	06	45.5	S	1	E	0	U	1	ES	07	08.2		12		2	17		2	12		3
FUKUI	0	P	06	06	46.0							S	07	15.3										
SHIRAK	0	EP	06	06	46.8																			
TOKYO	0	EP	06	06	47							ES	07	10		95		3	84		3	10	1	4
NAGOYA	0	P	06	06	47.4	S	3	W	2	U	4	S	07	10.0		60		3	57		3	13		1
MITO	0	IP	06	06	48.1							IS	07	13.7		38		3	37		3	19		3
YOKOHA	0	IP	06	06	48.1					D	13	ES	07	11.7								42		3
SHIZUO	0	EP	06	06	48.7							ES	07	11.4		12		4	17		4			
HAMAMA	0	IP	06	06	50.0							S	07	15.4		48		2	38		3	19		1
TSURUG	0	EP	06	06	50.2							ES	07	17.8										
OMAEZA	0	EP	06	06	51.0							ES	07	19.8		53		4	47		4	22		3
OSHIMA	0	EP	06	06	51.4							S	07	18.4		17		1	15		2	8		2
HIKONE	0	EP	06	06	52.1							S	07	20.4		41		1	23		1	14		2
CHOSHI	0	EP	06	06	52.8							ES	07	23.0										
TOMISA	0	EP	06	06	53.2											34		3	33		4	17		4
FUKUSH	0	EP	06	06	54.0							ES	07	22.0		10		1	8		1	5		2
TSU	0	EP	06	07	00.0							ES	07	20.7										
OSAKA	0	EP	06	07	02.7							ES	07	41.1		55		4	75		4	20		3
KYOTO	0	EP	06	07	03.5	S	1	W	1	U	1	ES	07	38.0		7		3	9		5	6		4
NARA	0	EP	06	07	04.0																			
OWASE	0	P	06	07	04.3											4		2	4		2	3		1
SAKATA	0	EP	06	07	05.3							ES	07	37.9										
SENDAI	0	EP	06	07	05.6							ES	07	42.6		9		4	9		4	6		4
AKITA	0	EX	06	07	06											6		4	7		4	3		3
TOYOOK	0	EP	06	07	09.4							ES	07	49.6		23		1	14		1			
WAKAYA	0	EP	06	07	10.4							ES	07	59.2		6		1	7		1			
MIZUSA	0	EP	06	07	12.7							S	08	03.7		18		2	6		3	6		2
SUMOTO	0	P	06	07	22.5					D		ES	08	07.8		5		3	6		4	3		4
												IX	07	23.8										
KOCHI	0	EP	06	07	47.2							ES	08	51.2					5		3			
OITA	0	EX	06	09	40.4											8		3	15		5			

Origin Time						Location							Magnitude
						Longitude			Latitude			Depth km	
d	h	m	s	±	s	°	′	±	°	′	±		
11	14	50	23.8	0.02		138	16	01	36	32	01	00	4.1

MATSUS	3	P	14	50	26.8																				
NAGANO	3	IP	14	50	29.0	N	30	W	5	U	38	ES	50	31.1		50	1		50	1		30	1		
KARUIZ	0	IP	14	50	33.2	N				D	3	IS	50	37.8											
MATSUM	1	IP	14	50	33.3	S		W	2	U	7	IS	50	39.0											
TAKADA	0	P	14	50	36.2							S	50	44.4											
MAEBAS	0	IP	14	50	38.7	N	1	W	3	D	12	IS	50	48.6		16		4	10		4	11		4
KOFU	0	IP	14	50	42.9	S	4	E	1	U	6	IS	50	55.5		22		0	25		0	8		1
TOYAMA	0	IP	14	50	43.3					D	5	ES	50	58		9		1	6		1	7		1
KUMAGA	0	EP	14	50	44.6							S	51	01.6		13		5	15		4	13		4
CHICHI	0	EP	14	50	44.8							S	50	56.0										
IIDA	0	EP	14	50	46.4							ES	51	01.8		11		0	8		0	2		0
FUNATS	0	IP	14	50	48.2							IS	51	03.7										

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
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						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	± • s		°	′	± ′	°	′	± ′		
12	05	58											

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

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

MATSUS	3	P	07	28	292																			
NAGANO	3	IP	07	28	306	N	2	W	1	U	34	S	28	327		25	1		40	1		26	1	
KARUIZ	0	EP	07	28	350							S	28	400										
MATSUM	X	IP	07	28	362					U		S	28	420										
KOFU	0	IP	07	28	452					U	1	ES	28	574		8		0	6		0	4		1
TOYAMA	0	EP	07	28	46							ES	29	006		6		2	5		3	3		3
KUMAGA	0	EX	07	28	490											12		4	12		4	8		4
GIFU	0	EP	07	29	02							S	29	231		4		2	6		1	2		1
MITO	0	EP	07	29	025							IS	29	252		5		1	5		0	1		0
HAMAMA	0	P	07	29	032					U	1	S	29	286		6		3	4		2	2		1
NAGOYA	0	EP	07	29	039	S	0	W	0	U	0	S	29	236		5		1	5		1	2		1
NIIGAT	0	E	07	29	180											5		2	3		3			
YOKOHA	0	EP	07	29	224											6		0	6		1			
TOKYO	0	EX	07	29	24														7		5			

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

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

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
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											
KARUIZ	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		
KARUIZ	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										
KARUIZ	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		IS 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	

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	·s	Max. Amplitude = A×10P μ, N: AN μ	P	T s	E: AE μ	P	T s	Z: AZ μ	P	T 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 d	h	m	·s	±·s	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude
13	13	44	075	002	138	16	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	AN μ	P	T s	AE μ	P	T s	AZ μ	P	T 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 d	h	m	·s	±·s	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude
13	18	38	332	002	138	11	01	36	31	01	00	43

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

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

Station	Intensity	Phase (J. S. T.)	h	m	·s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	·s	AN μ	P	T s	AE μ	P	T s	AZ μ	P	T 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									

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
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							IS	09	556		23		1	19		1	7		1
AIKAWA	0	EP	09	09	347			E	0	U	1	IS	09	540		9		1	12		1	6		1
WAJIMA	0	EP	09	09	348							S	09	529		47		1	38		1			
NIIGAT	0	EP	09	09	365							S	09	593		9		4	14		5	4		4
KAKIOK	0	EP	09	09	37							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					Depth km	Magnitude •
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
15	13	45	247	001	138	15	01	36	32	01	20	40

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					Depth km	Magnitude •
					Longitude			Latitude			
d	h	m	• s	± • s	°	′	± ′	°	′	± ′		
16	02	03	308	003	138	08	02	36	38	01	00	40

MATSUS	3	P	02	03	350																				
NAGANO	3	IP	02	03	367	N	33	E	10	U	68	ES	03	387		25	1		40	1		30	1		
MATSUM	X	IP	02	03	412					U	4	IS	03	471											
TAKADA	0	EP	02	03	419							S	03	503											

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

MATSUS	4	P	09	07	296											80	1		10	2		90	1	
NAGANO	3	IP	09	07	325	N	46	E	7	U	73													
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					Location					Depth km	Magnitude
					Longitude		Latitude				
d	h	m	• s	± • s	° ′	± ′	° ′	± ′			•
16	15	06	401	001	138 16	01	36 30	01		00	45

MATSUS	4	P	15	06	414																					
NAGANO	3	IP	15	06	458	N	62	W	24	U	74					10	2		80	1		60	1	
KARUI7	1	IP	15	06	477			E	10	U	10	ES	06	529		20	1	2	15	1	2	10	1	1
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

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude $= A \times 10^P \mu$								
						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
IIDA	0	EP	15	07	028							ES	07	168		15		1	13		1	6		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	7		1
KANAZA	0	EP	15	07	098							ES	07	264				1						
MISHIM	0	EP	15	07	102							S	07	310		18		1	21		1	5		1
NIIGAT	0	X	15	07	110							S	07	332		15		4	26		5	6		4
KAKIOK	0	EP	15	07	12							ES	07	32		22		1	14		1	5		1
TOKYO	0	EP	15	07	13							ES	07	33		33		4	25		4	44		4
GIFU	0	P	15	07	140	S	5	W	6	U	4	S	07	363		24		2	26		1	11		2
NAGOYA	0	P	15	07	140	N	1	E	0	D	2	S	07	372		25		1	21		1	13		1
SHIZUO	0	IP	15	07	141	N	4	E	3			S	07	336		9		1	7		1	5		1
MITO	0	IP	15	07	152							IS	07	390		34		0	19		0	7		1
FUKUI	0	P	15	07	153							S	07	419										
HAMAMA	0	EP	15	07	16							S	07	421		29		2	20		2	11		2
YOKOHA	0	EP	15	07	174							IS	07	425		18		1	21		1	13		2
HIKONE	0	EP	15	07	201							S	07	475		26		1	23		1	11		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	4		1
TSU	0	EP	15	07	467																			

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

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		
KARUIZ	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							S	49	377		11		4	8		3	12		4	
TOYAMA	0	IP	18	49	328					D	6	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		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	Depth km •
17	10	21	330	002	138 14	01	36 32	01	00 47

MATSUS	5	P	10	21	31																				
NAGANO	4	P	10	21	366							IS	21	386		70	2		72	2		28	2		
KARUIZ	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	20		1	56		1	

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
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
MITO	0	IS	10	23	086							IX	22	444	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 d	h	m	• s	± • s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude •
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
KARUIZ	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

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
ONAHAM	0	EX	15	47	419							ES	48	061	27		3	30		1	9		3
TSU	0	EP	15	47	435							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 μ	P	T s	E AE μ	P	T s	Z AZ μ	P	T s
NAGANO	2	EP	16	14											45		0						
MATSUS	3	P	1·6	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 μ	P	T s	E AE μ	P	T s	Z AZ μ	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 μ	P	T s	E AE μ	P	T s	Z AZ μ	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									

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			Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′		•
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																			
KARUIZ	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			
YOKOHA	0	EP	20	28	562											16		3	16		3			
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			Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′		•
18	05	44	088	002	138 18	01	36 32	01	00	39

MATSUS	3	P	05	44	120																			
NAGANO	3	IP	05	44	133	S	5	E	1	D		ES	44	151		40	1		70	1		35	1	
KARUIZ	0	EP	05	44	167							S	44	225										
MATSUM	X	IP	05	44	185					D		IS	44	244										
TAKADA	0	EP	05	44	220							S	44	292										
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
GIFU	0	EP	05	44	49							S	45	047		6		2	8		2			
ONAHAM	0	EX	05	45	197											4		1	5		1			

Origin Time					Location				Depth	Magnitude
					Longitude		Latitude			
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
KARUIZ	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										
												IS	36	123		14	1	0	87		0	28		1
NAGOYA	0	P	07	35	480	N	2	E	2	D	2	IS	36	110		59		2	56		2	31		1
FUKUI	0	P	07	35	489							S	36	154										
OMAEZA	0	EP	07	35	493							ES	36	210		46		4	73		4	17		2
YOKOHA	0	IP	07	35	500	N	3	W	4	D	7	IS	36	157		48		1	49		1	37		3
HAMAMA	0	IP	07	35	505	N	3	E	2			S	36	160		60		2	51		2	33		1
OSHIMA	0	IP	07	35	515							IS	35	184		21		1	18		2	9		1
TSURUG	0	EP	07	35	523							IS	36	203										
HIKONE	0	P	07	35	532							S	36	217		59		1	36		1	19		2
TOMISA	0	IP	07	35	535					U	1					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				Depth	Magnitude
					Longitude		Latitude			
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
MISHIM	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

Origin Time						Location						Depth km	Magnitude
d	h	m	• s	±	• s	Longitude ° ′	± ′	Latitude ° ′	± ′				•
21	09	53	275	002		138 13	01	36 31	01			20	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			AN μ	P	T S	AE μ	P	T S	AZ μ	P	T 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																			
KARUIZ	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						Location						Depth km	Magnitude
d	h	m	• s	±	• s	Longitude ° ′	± ′	Latitude ° ′	± ′				•
21	20	25	463	002		138 18	01	36 32	01			00	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			AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
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	
KARUIZ	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						Location						Depth km	Magnitude
d	h	m	• s	±	• s	Longitude ° ′	± ′	Latitude ° ′	± ′				•
22	03	00	093	002		138 18	01	36 32	01			00	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			AN μ	P	T S	AE μ	P	T S	AZ μ	P	T S
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										
KARUIZ	0	EP	03	00	206																			
KUMAGA	0	EX	03	00	210											15		5	12		3	8		5
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			

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
ONAHAM	0	EX 03 01 196					4 1 S	5 1 S	

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

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
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 31 198	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

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
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							

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
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

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
									S	μ		S	μ		S
NIIGAT	0	E 02 00 417				S 00 447	1		1	4		1			

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

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
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				S 49 376	8		1	11		1	5		1
MITO	0	IP 04 49 066			U 1	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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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							
KARUI7	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																								

Origin Time d	h	m	·s	±·s	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	Max. Amplitude = A×10^P μ: N AN μ	P	T s	E AE μ	P	T s	Z AZ μ	P	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	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	AN μ	P	T s	AE μ	P	T s	AZ μ	P	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	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	AN μ	P	T s	AE μ	P	T s	AZ μ	P	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	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude ·
4	10	48	439	001	138	16	01	36	31	00	00	46

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 10 48 458													
NAGANO	4	IP 10 48 485	N 14	W 1	U 68	ES 48 504	15	2		12	2		11	2	
MATSUM	1	P 10 48 530	S	W	U	IS 48 586									
KARUI7	0	P 10 48 533			D	S 48 584	40	1	2	30	1	2	10	1	2
TAKADA	1	P 10 48 574				S 49 053									
MAEBAS	0	IP 10 48 595	N	W 1	D 6	IS 49 107	12	1	4	79		3	70		3
CHICHI	0	EP 10 49 026				ES 49 158									
TOYAMA	0	IP 10 49 039		E 4	D 5	S 49 179	79		4	63		3	72		4
KOFU	0	IP 10 49 039	S 6	E 3	U 9	ES 49 180	31		3	38		3	10		1
IIDA	0	IP 10 49 066	S 2	W 1	U 2	IS 49 220	25		3	29		4	11		4
KUMAGA	0	P 10 49 070			D 1	S 49 250	11	1	3	80		5	25		4
FUNATS	0	IP 10 49 088				S 49 233									
AIKAWA	0	P 10 49 105	S 0	E 1	D 0	IS 49 312	8		1	9		1	5		1
WAJIMA	0	EP 10 49 108					64		1	69		1	20		
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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	

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
KUMAGA	0	EP	12	55	282							ES	55	426		17		5	18		4	10		3
IIDA	0	EP	12	55	292							ES	55	436		7		1	7		1	3		1
UTSUNO	0	P	12	55	322			W	3			S	55	495		7		1	7		1			
KANAZA	0	EP	12	55	336																			
MISHIM	0	EP	12	55	380							ES	55	562		6		1	8		1	2		1
KAKICK	0	EP	12	55	39							S	55	583		12		1	9		1	4		1
GIFU	0	P	12	55	406							S	56	034		10		1	16		2			
NAGOYA	0	EP	12	55	408	S	0	W	0	U	1	S	56	036		12		1	12		1	6		1
MITO	0	EP	12	55	410							IS	56	050		28		0	19		0	6		0
OMAEZA	0	EP	12	55	424											6		3	8		3			
HAMAMA	0	IP	12	55	428	N	1	E	1			S	56	084		13		1	11		1	6		1
YOKOHA	0	EP	12	55	428											9		1	11		1			
WAJIMA	0	EX	12	55	434											17		1	23		1			
TOKYO	0	EP	12	55	452							ES	56	200		12		4	12		4	18		4
HIKONE	0	EP	12	55	495							S	56	145		13		1	8		1	5		1
NIIGAT	0	X	12	55	534							S	55	583		8		2	8		2			
ONAHAM	0	EX	12	56	110											7		1	6		1			

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

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
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
6	16	03	571	002	138 17	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 A_N	P	T	E A_E	P	T	Z A_Z	P	T
															μ		S	μ		S	μ		S
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
6	19	05	590	001	138 17	01	36 31	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 A_N	P	T	E A_E	P	T	Z A_Z	P	T
															μ		S	μ		S	μ		S
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									

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
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					Location					Depth km	Magnitude •
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′			
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				
KARUIZ	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	5	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			

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
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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

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
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				U	S 01 193										
KARUI7	0	P 00 01 141				D 5	IS 01 209										
MATSUM	0	IP 00 01 150		E			S 01 267										
TAKADA	0	P 00 01 185															
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										

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = $A \times 10^P \mu$								
						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
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					Location					Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′			•
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					Location					Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′			•
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										

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
14	23	13	36.2	0.01	138	04	01	36 27	01	00	4.4

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	23	13															
MATSUS	3	P	23	13	40.4														
MATSUM	2	IP	23	13	42.6	S 6	W 6	U 3	IS	13	46.8	10	1 2	50		2	50		2
KARUI7	0	IP	23	13	46.6		W 2	D 10	S	13	51.2	25	1 3	15	1	2			
YOKOHA	0	EP	23	13	50				S	14	14	13	1	17		1			
TAKADA	0	P	23	13	51.8				S	14	08.0								
TOYAMA	0	P	23	13	53				S	14	06.6	54	3	42		4			
MAEBAS	0	IP	23	13	53.8			D 2	ES	14	05.7	61	4	28		4	34		4
KOFU	0	EP	23	13	56.0				IS	14	07.2	16	4	29		4	9		1
IIDA	0	IP	23	13	57.0			U 3	ES	14	10.0	18	2	19		4	5		3
FUNATS	0	P	23	13	58.6				S	14	15.6								
KUMAGA	0	EP	23	14	01.0				S	14	16.0	42	3	45		4	32		4
WAJIMA	0	EP	23	14	04.0				ES	14	22.6	28	1	24		1			
AIKAWA	0	IP	23	14	06.2	N 0	W 0		IS	14	27.2	3	1	5		1			
UTSUNO	0	P	23	14	06.6		W 3		S	14	25.2	12	3	11		1			
MISHIM	0	EP	23	14	07.2				ES	14	30.7	10	1	9		1	3		1
GIFU	0	EP	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	EP	23	14	08.0				S	14	28.0	6	1	8		1	4		1
NIIGAT	0	EP	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	ES	14	32.2	13	1	11		1	5		1
HAMAMA	0	P	23	14	11.5	N 1	E 0		S	14	36.4	12	2	17		3	6		1
TOKYO	0	EP	23	14	12.0				ES	14	35.0	19	3	23		6	20		4
MITO	0	IP	23	14	13.0				ES	14	38.6	8	4	6		4	5		2
OMAEZA	0	EP	23	14	13.8							16	5	20		5			
HIKONE	0	P	23	14	14.6				ES	14	39.2	11	1	11		1	4		2
ONAHAM	0	EX	23	14	20.9				ES	14	52.5	13	1	12		1	4		1
TOYOOK	0	EP	23	14	31.3				ES	15	11	11	1	4		1			
CHICHI	0	EP	23	14	56.5				ES	15	10.6								
OSAKA	0	X	23	15	13.6							12	3	21		4	6		3

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
15	08	01	05.0	0.03	138	12	02	36 35	01	00	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	3	P	08	01															
NAGANO	3	IP	08	01	10.5	N 18	W 4	U	ES	01	12.5	30	1	40	1		25	1	
KARUI7	0	P	08	01	15.6			U	S	01	20.4								
MATSUM	0	P	08	01	15.9				S	01	21.6								
TAKADA	0	EP	08	01	18.4				S	01	27.0								
MAEBAS	0	IP	08	01	20.3			D 2	S	01	30.4	10	4	6		3	12		3
KOFU	0	EP	08	01	25.8				ES	01	38.0	8	1	7		1			
KUMAGA	0	EX	08	01	28.4							9	5	10		4	7		4
KANAZA	0	EP	08	01	29.0				S	01	48.0								
WAJIMA	0	EP	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	EP	08	01	41				S	02	02.8	6	1	9		2			
MITO	0	EP	08	01	41.5				IS	02	04.8	9	0	7		0	3		0
HAMAMA	0	P	08	01	43.0	S 1	W 1	U 1	ES	02	08	6	1	5		2	4		1
WAKAYA	0	P	08	01	51.5				S	01	52.0	26		26					
HIKONE	0	EP	08	01	52.2				S	02	14.2	8	1	5		1	3		2
TOKYO	0	EP	08	02	06.0				ES	02	28.0	5	5	8		5	7		4

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
15	14	21	48.4	0.06	138	18	04	36 33	01	00	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	14	21															
NAGANO	3	IP	14	21	56.4	N 22	W 4	U	S	21	58.4	30	1	45	1		30	1	
KARUI7	0	P	14	21	58.5				S	22	03.6								
MATSUM	0	P	14	21	59.0				IS	22	04.5								
TAKADA	0	P	14	22	01.5				S	22	09.9								

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
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 d h m • s ± • s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude •
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 d h m • s ± • s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude •
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 d h m • s ± • s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude •
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								

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

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						Depth km	Magnitude •
						Longitude			Latitude				
d	h	m	• s	± • s		° ′	± ′		° ′	± ′			
19	23	09	337	003		138	06	01	36	31	01	00	37

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					

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

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
																		S			S			S
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																			
SHIMON	0	EX	09	32	36							EX	34	04										
HIROSH	0	EX	09	33	212											4		4	3		2	5		4

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
OITA	0	EP 09 33 591	N 2	W 2	U		19		5	18		5	9		3
FUKUOK	0	EX 09 34 220					5		2	4		2	2		2
KUMAMO	0	EP 09 34 32					5		2	4		3	1		2

Origin Time d h m · s ± · s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude ·
20 09 50 228 002	138 16 01	36 30 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	P	T S	E AE	P	T S	Z AZ	P	T S
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 0	E 0	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 d h m · s ± · s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude ·
21 10 51 082 002	138 14 01	36 34 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	P	T S	E AE	P	T S	Z AZ	P	T S
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 d h m · s ± · s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude ·
21 22 48 087 002	138 18 01	36 32 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	T S
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									

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	E P	E T S	Z AZ	Z P	Z 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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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								

Station	Intensity	Phase (J. S. T.) h	m	・s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	・s	Max. Amp. N A_N μ	P	T s	E A_E μ	P	T s	Z A_Z μ	P	T 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 d	h	m	・s	±・s	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude
23	09	11	174	002	138	15	01	36	36	01	00	41

Station	Intensity	Phase h	m	・s	N	μ	E	μ	Z	μ	Phase	m	・s	A_N	P	T	A_E	P	T	A_Z	P	T
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 0		1	6		1	3		1
NAGOYA	0	EP 09	11	525							S	12	152	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 d	h	m	・s	±・s	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude
24	23	11	114	002	138	14	01	36	35	01	00	41

Station	Intensity	Phase h	m	・s	N	μ	E	μ	Z	μ	Phase	m	・s	A_N	P	T	A_E	P	T	A_Z	P	T
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 d	h	m	・s	±・s	Longitude °	′	±′	Latitude °	′	±′	Depth km	Magnitude
25	02	55	052	001	138	16	01	36	31	01	00	45

Station	Intensity	Phase h	m	・s	N	μ	E	μ	Z	μ	Phase	m	・s	A_N	P	T	A_E	P	T	A_Z	P	T
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

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = $A \times 10^P$ 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
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					Depth	Magnitude
					Longitude		Latitude				
d	h	m	• s	± • s	° ′	± ′	° ′	± ′		km	•
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																			

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
TOYOOK	0	EP 05 57 556				ES 58 367	18 1	18 1	3 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	9 1
OSAKA	0	X 05 58 358					38 4	50 5	12 3

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

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
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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			

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 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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
27 22 02 500	001	138 16	01	36 34	01	00	44

MATSUS	3	P	22	02	527							ES	02	565	21	2		18	2		12	2
NAGANO	4	IP	22	02	547	N	51	W	13	U	65	IS	03	053								
MATSUM	1	IP	22	02	598			W	1	U	4	S	03	049	15	1	2	15	1	2	50	2
KARUIZ	1	IP	22	02	598					U	2	S	03	115								
TAKADA	1	P	22	03	033	N	4	E	1	U	13											
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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

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
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		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km		•
28	14	21	197	001	138	13	01	36	34	01	00		53

MATSUS	5	P	14	21	220																				
NAGANO	4	IP	14	21	242	N	17	W	1	U	64	S	21	261	10	3	4	70	2	3	29	2	3		
KARUIZ	2	P	14	21	292			E		U		S	21	345	10	2	5	11	2	4	40	1			
MATSUM	3	IP	14	21	296	S	2	W	2	U	6	S	21	352	13	2	3	13	2	4	30	1	3		
TAKADA	2	P	14	21	324	N	3	E	1	U	11	S	21	406	60	1	4	55	1	4	35	1	4		
MAEBAS	1	IP	14	21	357	N		W	3	D	7	S	21	480	51	1	5	52	1	5	24	1	4		
TOYAMA	0	IP	14	21	385		0	E	5	D	13	IS	21	520	40	1	3	35	1	3	50	1	4		
KOFU	0	IP	14	21	391	S	7	E	4	U	5	ES	21	543	21	1	5	22	1	4	67		2		
TAKAYA	0	EP	14	21	393							S	21	598											
CHICHI	2	P	14	21	403	S		E				ES	21	529											
IIDA	0	EP	14	21	422							IS	21	584	10	1	3	14	1	4	95		4		
KUMAGA	1	EP	14	21	422							S	21	579	35	1	7	30	1	5	23	1	4		
FUNATS	0	P	14	21	456							S	22	024											
KANAZA	0	P	14	21	460	N		E				S	22	027	17	3	4	14	3	4	11	3	4		
UTSUNO	1	P	14	21	468	N	1	W	9			S	22	060	21	1	1	11	1	5					
AIKAWA	0	IP	14	21	473	N	1	E	0	U	1	IS	22	068	20		3	49		2	26		4		
NIIGAT	1	IP	14	21	497					U	2	IS	22	114	20	1	5	20	1	5	11	1	5		
WAJIMA	1	IP	14	21	501	N	4	W	4	U	5	S	22	085	20	1	1	21	1	1	96		1		
SHIZUO	0	P	14	21	506	S	8	E	3	U	5	S	22	140	54		8	80		9	37		9		
MISHIM	0	IP	14	21	508	S	10	E	3	U	2	IS	22	137	90		1	17	1	4	36		3		
KAKIOK	0	P	14	21	509	S	1	E	2	U		S	22	150	15	1	1	94		1	44		1		
AJIRO	0	IP	14	21	521					U	0	S	22	168	18		1	23		1	9		1		
GIFU	0	P	14	21	529	N	4	E	4			S	22	139	28	1	5	64		3	37		4		
TOKYO	0	EP	14	21	534							ES	22	174	30	1	3	39	1	5					
SHIRAK	0	EP	14	21	536							ES	22	198											
NAGOYA	0	P	14	21	542	N	2	E	2	D	2	S	22	180	14	1	2	17	1	2	39		1		
MITO	1	IP	14	21	550							IS	22	212	22	1	1	12	1	1	73		5		
FUKUI	0	P	14	21	551	S	5	W	6	U	3	S	22	295											
HAMAMA	0	P	14	21	563							S	22	224	86		3	12	1	6	55		2		
TSURUG	0	P	14	21	583							S	22	264											
OMAEZA	0	P	14	21	591	N	6	E	4			S	22	267	21	1	4	18	1	6					
OSHIMA	0	P	14	21	596							S	22	269	42		4	32		2	21		2		
FUKUSH	0	EP	14	22	001										27		4	30		6	12		4		
HIKONE	0	P	14	22	002							S	22	297	14	1	4	11	1	5	34		5		
TOMISA	0	IP	14	22	010					D	3	S	22	278	62		3	63		5	42		4		
ONAHAM	0	IP	14	22	028			E	9	U	14	IS	22	330	87		2	86		1	26		2		
CHOSHI	0	EP	14	22	030							ES	22	282											
KYOTO	0	EP	14	22	061							ES	22	419	30		6	33		4	22		5		
NARA	0	EP	14	22	066										50		2	50		1	50		1		
SENDAI	0	EP	14	22	090							ES	22	516	23		3	24		7	8		3		
OWASE	0	P	14	22	100							S	22	480	6		3	6		4	40		6		
TOYOOK	0	P	14	22	16							S	22	571							14		4		
TOKUSH	0	EP	14	22	162							ES	23	038											
OSAKA	0	P	14	22	175					D	5	IS	22	566	24	1	5	35	1	5	73		4		
AKITA	0	EX	14	22	178										19		5	25		4	9		3		
KOBE	0	EP	14	22	205							ES	23	055											
SAIGO	0	EP	14	22	232	S	0	W	0	U	0	S	23	361	5		4	5		4	3		3		
HACHIJ	0	EP	14	22	246							S	23	122				12			15				
OFUNAT	0	P	14	22	253	S	1			D	1	S	23	132	9		8	6		5	5		6		
MIZUSA	0	P	14	22	260							S	23	110	23		4	33		5	20		2		
MORIOK	0	EP	14	22	265							S	23	222	6		5	5		6	5		4		
SUMOTO	0	P	14	22	280							S	23	134	17		6	19		6	11		5		
												IX	22	298											
WAKAYA	0	P	14	22	286	N	6	E	8			S	23	086	35		1	13		1	12		1		
SHIONO	0	EP	14	22	317							IS	23	179	14		6	24		7	6		4		
TAKAMA	0	EP	14	22	350							ES	23	294	20		5	16		6	2		5		
SAKATA	0	EX	14	22	37										10	1	4	15	1	5					
TURUGI	0	EP	14	22	380							ES	23	429											
HAMADA	0	EP	14	22	438							ES	23	295	8		5	5		5	6		4		
												IX	24	095											

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 μ	P	T S	A_E μ	P	T S	A_Z 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
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
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
ONAHAM	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
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	•
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

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
30	01	59	294	003	138 16	02	36 32	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 = $\overline{A \times 10^{F}}$ μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
NAGANO	2	IP	01	59																
MATSUS	3	P	01	59	331															
KARUIZ	0	EP	01	59	397				S	59	446									
TAKADA	0	P	01	59	430				S	59	506									
MATSUM	0	IS	01	59	450															
MAEBAS	0	IP	01	59	451			D 2	S	59	546	9		4	7		4	7		4
KOFU	0	EP	01	59	491				ES	00	012	6		1	6		1			
KUMAGA	0	EX	01	59	517							8		2	8		4	6		3
WAJIMA	0	EP	01	59	587				ES	00	154	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	459	002	138 10	01	36 31	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 = $\overline{A \times 10^{F}}$ μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
MATSUS	3	P	13	27	495	N 2	E 2	U 15	IS	27	539	11	2		15	2		10	2	
NAGANO	3	IP	13	27	515	S 3	W 4	U 3	IS	27	599									
MATSUM	1	IP	13	27	547	N	W 6	D 24	S	28	009	10	1	2	10	1	1			
KARUIZ	0	IP	13	27	559				S	28	083									
TAKADA	0	P	13	28	007															
MAEBAS	1	IP	13	28	022	N	W 1	D 4	S	28	127	49		1	18		1	17		4
CHICHI	0	P	13	28	052	S			IS	28	181									
KOFU	0	EP	13	28	058				IS	28	174	24		0	35		0			
IIDA	0	IP	13	28	080	S 1		U 4	IS	28	218	20		0	20		1	8		1
KUMAGA	0	EP	13	28	090				S	28	304	17		5	18		2	8		4
FUNATS	0	P	13	28	113				S	28	247									
KANAZA	0	EP	13	28	118				S	28	312									
WAJIMA	0	EX	13	28	127							20		1	19		1			
AIKAWA	0	IP	13	28	134	S 0	W 0	D 0	IS	28	334	7		1	16		1	5		1
UTSUNO	0	P	13	28	136		W 2		S	28	313	17		1	9		1			
MISHIM	0	EP	13	28	154				ES	28	372	15		1	15		1	5		1
SHIZUO	0	EP	13	28	172				S	28	398	8		1	6		1	5		1
GIFU	0	EP	13	28	173							8		1	6		1			
KAKIOK	0	EP	13	28	18				ES	28	39	9		1	8		1	4		1
NAGOYA	0	EP	13	28	180			D 1	ES	28	412	13		1	13		1	5		1
TOKYO	0	P	13	28	185				S	28	336	13		4	18		4			
MITO	0	IP	13	28	213				IS	28	470	15		1	11		1	5		1
YOKOHA	0	EP	13	28	217				ES	28	463	19		1	17		1			
HAMAMA	0	P	13	28	218				ES	28	47	13		1	16		2	6		1
OMAEZA	0	EP	13	28	231				ES	28	526	13		2	16		2	13		2
NIIGAT	0	E	13	28	395			D 5	IS	28	387	25		1	37		1	9		1
HIKONE	0	ES	13	28	485							8		1	9		1	4		1
ONAHAM	0	EX	13	28	502							14		1	14		1	4		2
TOYOOK	0	ES	13	29	207							8		1	9		1			

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Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
3	03	29	53.7	0.3	138	18.0	36	32.0	0	4.0

Station	Intensity	Phase	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	03	29																			
NAGANO	3	IP	03	29	59.1	N 5	W 3	U 31	IS	30	01.4	60	1			70	1			70	1		
KARUIZ	0	EP	03	30	02.6				S	30	08.3												
MATSUM	0	P	03	30	03.8				IS	30	09.8												
TAKADA	0	EP	03	30	06.3				S	30	14.3												
GIFU	0	EP	03	30	07				S	30	26.8	5		2		8		2					
MAEBAS	0	IP	03	30	08.8			D 2	S	30	18.0	12		3		5		3		7		3	
KUMAGA	0	EX	03	30	18.0							10		4		7		3		11		4	
KANAZA	0	EP	03	30	26				ES	30	42												
NIIGAT	0	X	03	30	27.8							3		1		4		1					
HAMAMA	0	P	03	30	30.9			D	S	30	56.0	5		2		5		2		2		2	
WAJIMA	0	EX	03	30	31.4							10		1		14		1					

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
5	06	56	08.8	0.4	138	20.0	36	33.0	0	4.1

Station	Intensity	Phase	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	56																			
MATSUS	3	IP	06	56	12.6																		
MATSUM	0	EP	06	56	18.3				IS	56	23.8												
KARUIZ	0	IP	06	56	19.8			D 3	S	56	24.9												
TAKADA	0	P	06	56	23.0				S	56	31.0												
MAEBAS	0	IP	06	56	25.9	N	W 1	D 4	S	56	36.1	21		3		15		3		24		3	
TOYAMA	0	IP	06	56	28.5			D 3	S	56	39.5	17		3		18		3		14		3	
KOFU	0	EP	06	56	30.1				IS	56	41.2	12		0		13		0		6		1	
IIDA	0	EX	06	56	31.8																		
UTSUNO	0	P	06	56	32.0	S 2	W 3	D 2	S	56	55.5	14		1		12		1		6		1	
KUMAGA	0	EX	06	56	32.9							21		4		16		4		20		4	
KANAZA	0	EP	06	56	35.9																		
WAJIMA	0	EX	06	56	36.3							14		1		13		1					
NAGOYA	0	EP	06	56	43.2	N 1	E 1	D 1	ES	57	06.0					9		1		3		1	
MITO	0	IP	06	56	44.5			U 1	IS	57	10.3	11		0		7		0		4		0	
HAMAMA	0	P	06	56	46.4			U 2	ES	57	12	5		2		6		2		4		2	
NIIGAT	0	EX	06	56	51.9				S	57	03.1	11		1		13		1					
ONAHAM	0	EX	06	57	21.2							5		1		5		1					

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
6	20	10	32.1	0.1	138	13.0	36	33.0	0	4.5

Station	Intensity	Phase	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	20	10	35.4			D															
NAGANO	3	IP	20	10	36.7	N 36	W 11	U 62	IS	10	38.6	26	2			13	2			13	2		
MATSUM	1	IP	20	10	41.8	S 4	W 8	U 22	IS	10	47.4												
KARUIZ	X	IP	20	10	42.4	N 6	W 5	D 7	S	10	47.8	20	1	1		20	1	2		10	1	2	
TAKADA	0	P	20	10	44.6				S	10	52.8												
MAEBAS	1	IP	20	10	48.4	N 3	W 7	D 28	IS	10	58.3	32		2		35		1		35		3	
CHICHI	0	EP	20	10	51.1				S	11	03.0												
TOYAMA	0	IP	20	10	51.4		E 1	D 13	IS	11	05.6	49		3		29		2		25		2	
TAKAYA	0	EP	20	10	51.5				S	11	03.3												
KOFU	1	IP	20	10	51.7	S 5	E 4	U 11	IS	11	04.3	41		1		44		1		22		1	
KUMAGA	0	EP	20	10	53.3				ES	11	09.9	36		2		38		1		25		4	
IIDA	0	IP	20	10	55.0	S 8		U 9	IS	11	10.6	21		2		16		3		10		0	
FUNATS	1	IP	20	10	56.6				IS	11	11.0												
KANAZA	0	EP	20	10	58.0				ES	11	16.5	18		2		22		2		18		2	
UTSUNO	0	P	20	10	59.3	N 2	W 12	D 15	S	11	17.2	28		1		30		1		19		1	
AIKAWA	0	EP	20	11	00.2	S 1			IS	11	19.2	8		1		12		1		5		0	
WAJIMA	0	EP	20	11	00.5				ES	11	19.1	41		1		55		1					
MISHIM	0	EP	20	11	01.5				IS	11	23.0	34		1		32		1		15		0	
NIIGAT	0	P	20	11	01.7			U 1	S	11	24.0	17		1		28		5		6		4	
SHIZUO	0	EP	20	11	03.2				S	11	26.2	8		1		10		1		5		1	
TOKYO	0	P	20	11	04.1				ES	11	25	31		2		34		4		36		4	
AJIRO	0	IP	20	11	04.8	S	E	U 1	S	11	27.3	9		0		9		0		3		1	
SHIRAK	0	EP	20	11	05.3				ES	11	31.2												
GIFU	0	P	20	11	05.7				S	11	27.7	34		2		31		1		12		1	

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

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

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																

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	Z T
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude M
11	13	17	417	002	138 14	02	36 34	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	N P	N T	E AE	E P	E T	Z AZ	Z P	Z T
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude M
12	09	43	053	001	138 19	01	36 32	01	0	50

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	Z T
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	55		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

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				Depth km	Magnitude
					Longitude		Latitude			
d	h	m	s	± s	° ′	± ′	° ′	± ′		
12	20	27	492	002	138 09	01	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	A_N μ	P	T s	A_E μ	P	T s	A_Z μ	P	T s
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				Depth km	Magnitude
					Longitude		Latitude			
d	h	m	s	± s	° ′	± ′	° ′	± ′		
15	03	54	595	001	138 13	01	36 33	00	20	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	A_N μ	P	T s	A_E μ	P	T s	A_Z μ	P	T s
MATSUS	2	P	03	55																			
NAGANO	2	IP	03	55																			
KARUIZ	0	EP	03	55	074							S	55	128									
MATSUM	0	IP	03	55	082					U	2	S	55	145									
TAKADA	0	EP	03	55	112							S	55	192									
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

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
WAJIMA	0	EX 03 55 326					10		1	10		1			
GIFU	0	EP 03 55 34					4		1	8		2			

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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	38	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	28		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	38		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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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	

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

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

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

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	35	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			

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N μ	E μ	Z μ	Phase m • s	Maximum Amplitude = A×10P μ N AN	P	T S	E AE	P	T S	Z 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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d h m • s	± • s	Location Longitude ° ′	+ ′	Latitude ° ′	± ′	Depth km	Magnitude •
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

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
KARUIZ	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	C	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

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
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					Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′			•
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		
IIOA	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					Depth km	Magnitude
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′			•
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											

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
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						Depth km	Magnitude •
						Longitude			Latitude				
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																			
HIKONE	0	S	17	33	270											24		1	17		1			
AKITA	0	EX	17	34	098											4		4	6		4			

Origin Time						Location						Depth km	Magnitude •
						Longitude			Latitude				
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

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
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

	Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
1966 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									
KARUIZ	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

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	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

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

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										

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
8	15	14	56.7	0.01	138	15	36	36	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	E AE	P	T	Z AZ	P	T
MATSUS	2	P	15	15																
NAGANO	2	IP	15	15																
KARUIZ	0	EP	15	15	06.1				ES	15	11.4									
MATSUM	0	IP	15	15	07.8			U 2	IS	15	14.1									
TAKADA	0	EP	15	15	09.1				S	15	17.1									
KUMAGA	0	EP	15	15	19.0				S	15	31.3	7		0	6		1	2		0
MITO	0	EP	15	15	32.0				IS	15	54.6	8		0	5		0	2		0
WAJIMA	0	EX	15	15	43.1							6		1	7		1			
GIFU	0	EP	15	15	45				S	15	54.2	5		2	7		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
9	16	06	11.0	0.02	138	15	36	31	0	4.1

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	16	06																
NAGANO	3	IP	16	06	15.5	N 14	W 8	U 66	S	06	17.3	35	1		40	1		35	1	
KARUIZ	0	P	16	06	20.0			D	S	06	25.0									
MATSUM	0	IP	16	06	20.4			U 3	IS	06	26.2									
MAEBAS	0	IP	16	06	26.0	N	W 1	D 4	S	06	35.8	13		4	9		4	11		4
KUMAGA	0	EX	16	06	29.6							14		4	11		3	7		4
TOYAMA	0	IP	16	06	30.2			D 2	S	06	44.5	6		1	7		1	4		1
KOFU	0	EP	16	06	30.5				ES	06	41.9	12		0	12		0	7		1
IIDA	0	EP	16	06	33.8				ES	06	49.8	5		1	4		1	2		1
KANAZA	0	EP	16	06	38.0							50		2	70		2	70		2
MISHIM	0	EP	16	06	41.5				ES	07	01.5	10		1	11		1	4		0
GIFU	0	EP	16	06	45.0				S	07	06.5	9		2	16		2			
NAGOYA	0	EP	16	06	45.0				S	07	08.0	10		1	11		1	5		1
WAJIMA	0	EP	16	06	45.6							20		1	19		1			
MITO	0	EP	16	06	46.5				IS	07	09.6	5		0	8		1	3		1
OMAEZA	0	EX	16	06	47							6		2	6		2			
HAMAMA	0	P	16	06	47.8	N		D 2	S	07	12.3	6		3	6		2	4		1
TOKYO	0	EX	16	06	48										10		4			
HIKONE	0	EP	16	06	55.9				S	07	18.8	11		1	9		1	5		1

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
10	15	43	51.3	0.02	138	12	36	32	0	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	P	T	E AE	P	T	Z AZ	P	T
MATSUS	4	P	15	43	55.5			U												
NAGANO	4	IP	15	43	57.2	N 61	W 32	U 74	S	43	59.2	20	2	1	20	2	1	70	1	
MATSUM	1	IP	15	44	00.1		W	U 6	IS	44	05.7	20	1	3	10	1	3			
KARUIZ	1	IP	15	44	01.6	S 5	E 8	U 10	S	44	07.0	30	1	3	40	1	3	20	1	2
TAKADA	0	P	15	44	05.7	N 9	E 4	U 29	S	44	13.3									
MAEBAS	0	IP	15	44	07.1	N 3	W 5	D 19	S	44	16.9	92		4	67		4	13	1	4
TAKAYA	0	P	15	44	10.0				S	44	23.6									
KOFU	0	IP	15	44	11.4	S 12	E 10	U 18	ES	44	22.3	47		1	49		1	27		1
TOYAMA	0	IP	15	44	11.5		E 3	D 12	IX	44	26.5	70		3	57		2	28		2
KUMAGA	0	EP	15	44	13.4				S	44	28.2	96		5	84		3	52		5
IIDA	0	IP	15	44	15.0	S 5	W 3	U 7	IS	44	30.0	29		1	35		1	20		3
FUNATS	0	P	15	44	17.0				S	44	31.6									
WAJIMA	0	EP	15	44	18.8				ES	44	37.3	14	1	1	10	1	1	19		1
UTSUNO	0	IP	15	44	18.9	N 3	W 12		S	44	35.9	27		2	23		1			
AIKAWA	0	EP	15	44	19.3	N 5	W		IS	44	38.4	16		1	13		2			
KANAZA	0	P	15	44	19.4	S 5	W 4	D 16	S	44	38.2	36		2	35		2	35		2
NIIGAT	0	IP	15	44	22.0			U 4	S	44	43.8	25		4	57		6	13		4
MISHIM	0	IP	15	44	22.1	S 1		U 3	S	44	42.4	31		1	32		1	9		2
TOKYO	0	EP	15	44	22.8				ES	44	42.6	45		4	55		4	77		4
AJIRO	0	IP	15	44	25.0	S 1	E	U 1	S	44	46.5	8		0	7		0	3		0
GIFU	0	P	15	44	26.0				S	44	47.2	44		2	78		2	20		1
MITO	0	IP	15	44	26.3				IS	44	50.6	35		1	32		1	17		2
YOKOHA	0	P	15	44	26.8			D 6	IX	44	51.9	48		1	56		1			
FUKUI	0	P	15	44	27.0	S 11	W 12	U 9	S	44	52.4									
NAGOYA	0	P	15	44	27.0	S 2	W 2	U 2	IS	44	50.0	54		1	65		1	27		1

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = A×10^P μ							
			h	m	• s	N	μ	E	μ	Z	μ		m	• s		N AN	P	T S	E AE	P	T S	Z AZ	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																			
OSAKA	0	EP	15	44	477							S	45	275		44		5	31		5	17		2
SUMOTO	0	P	15	44	501					D		ES	45	384		5		5	6		2	2		2
												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
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′		•
10	20	13	211	001	138 16	01	36 32	00	0	39

MATSUS	2	P	20	13																				
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
d	h	m	• s	± • s	Longitude ° ′	± ′	Latitude ° ′	± ′		•
11	11	26	133	002	138 18	01	36 30	01	0	41

NAGANO	2	IP	11	26																				
MATSUS	3	P	11	26	167																			
KARUIZ	0	IP	11	26	216	N	4	W	6	D	8	S	26	271										
MATSUM	0	EP	11	26	223							IS	26	280										
TAKADA	0	EP	11	26	277							S	26	361										
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

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

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

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	

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km		•
18	05	40	078	004	138 18	01	36 30	02	20		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		A_N	P	T	A_E	P	T	A_Z	P	T
											μ		S	μ		S	μ		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					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km		•
18	12	05	342	002	138 15	01	36 30	01	20		38

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

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

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						

Station	Intensity	Phase (J. S. T.)				Initial Motion						Phase				Maximum Amplitude = $A \times 10^P$ 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
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				Depth km	Magnitude
					Longitude		Latitude			
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				Depth km	Magnitude
					Longitude		Latitude			
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	E AE	P	T	Z AZ	P	T
												μ		S	μ		S	μ		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	E AE	P	T	Z AZ	P	T
												μ		S	μ		S	μ		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 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
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		D101		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

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
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				Depth km	Magnitude
					Longitude		Latitude			
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			

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
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

MATSUS	3	IP	21	33	489							IS	33	519	85	1	1	80	1	1	65	1	
NAGANO	3	IP	21	33	499	S	3	E	1	D	58	IS	33	594									
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

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

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

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
									S			S			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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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						

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	s	± s	° ′	± ′	° ′	± ′		
12	04	55	53.1	0.02	138 18	01	36 32	01	0	4.3

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	IP	04	55	56.4	S		W		U													
NAGANO	3	IP	04	55	57.5	S	1	W	6	U	1	IS	55	59.7									
KARUIZ	X	IP	04	56	02.3			E	2			S	56	07.5									
MATSUM	1	IP	04	56	03.2	S		W		U	6	IS	56	09.0									
TAKADA	0	P	04	56	06.0							S	56	14.2									
MAEBAS	1	IP	04	56	08.4	N	1	W	3	D	8	S	56	17.7	25		4	19		4	21		3
KOFU	0	IP	04	56	12.0	S	3	E	1	U	5	ES	56	24.4	20		1	28		0	10		1
TOYAMA	0	IP	04	56	13.1					D	3	S	56	26.9	7		1	10		2	8		1
KUMAGA	0	EP	04	56	15.0							S	56	27.9	21		5	17		6	15		4
IIDA	0	EP	04	56	15.8							ES	56	29.4	8		1	11		0	3		1
FUNATS	0	IP	04	56	16.4							IS	56	31.6									
UTSUNO	0	P	04	56	19.8							S	56	36.0	10		1	10		1	7		1
NIIGAT	0	IP	04	56	21.8					U	2	ES	56	44.0	6		2	9		5	5		1
MISHIM	0	EP	04	56	22.2							S	56	45.3	10		1	14		1	4		1
KAKIOK	0	EP	04	56	22.8							ES	56	44.2	10		1	11		1	5		1
TOKYO	0	EP	04	56	25.0							ES	56	49.2									
MITO	0	IP	04	56	27.1							IS	56	51.0	28		0	28		0	8		0
NAGOYA	0	EP	04	56	27.3			W		U	1	S	56	51.2	13		1	13		1			
YOKOHA	0	EP	04	56	28.6					D	3	IS	56	54.1	15		1	12		1			
GIFU	0	P	04	56	29.3							S	56	49.8	11		1	23		1			
OMAEZA	0	EP	04	56	29.5							ES	57	01.6	7		2	9		5			
HAMAMA	0	P	04	56	30.5	S	1	E	1			S	56	55.5	9		1	7		2	5		1
HIKONE	0	EP	04	56	34.5							IS	57	02.1	21		1	15		1	5		1
ONAHAM	0	EX	04	56	38.6										7		1	7		1	2		1
TOYOOK	0	EP	04	56	51.6							ES	57	32.4	13		1	6		1			
OSAKA	0	X	04	56	54.2										9		4	10		3	3		2

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	s	± s	° ′	± ′	° ′	± ′		
12	20	31	30.5	0.09	138 17	06	36 30	03	0	4.0

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	2	P	20	31																			
NAGANO	0	EP	20	31																			
MATSUM	0	IP	20	31	39.0					D	2	IS	31	44.8									
TAKADA	0	EP	20	31	45.5							ES	31	52.9									
TOYAMA	0	P	20	31	50.5							S	32	02.3	6		3	6		2	6		2
AIKAWA	0	IP	20	31	59.0	S	1	W				IS	32	18.6	5		0	9		0	1		0
WAJIMA	0	EP	20	32	00.7							ES	32	17.1	20		1	17		1			
GIFU	0	P	20	32	04							S	32	26	5		1	8		1			
NIIGAT	0	E	20	32	31.6										5		1	5		1			

Origin Time					Location					Magnitude
					Longitude		Latitude		Depth km	
d	h	m	s	± s	° ′	± ′	° ′	± ′		
14	01	41	38.4	0.02	138 11	01	36 34	01	0	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
															μ		S	μ		S	μ		S
MATSUS	3	IP	01	41	42.4	S		E		U													
NAGANO	3	IP	01	41	44.1	N	18	E	1	U	56	IS	41	46.5	75	1	1	80	1	2	40	1	1
KARUIZ	X	IP	01	41	47.9	N	2	W	2	D	4	S	41	52.9	20	1	1	30	1	2	10	1	1
MATSUM	1	IP	01	41	48.3	S	4	W	5	U	14	IS	41	53.3									
TAKADA	0	P	01	41	50.7							S	41	59.1									
TAKAYA	0	P	01	41	58.3							S	42	08.5									
CHICHI	0	EP	01	41	58.7							IS	42	10.7									
TOYAMA	0	P	01	41	59.1					D	5	S	42	13.0	54		4	44		3	41		4
KOFU	0	IP	01	41	59.2	S	5	E		U	7	ES	42	11.4	27		0	42		0	24		1
IIDA	0	IP	01	42	01.0							IS	42	16.2	16		2	22		4	8		1
FUNATS	1	P	01	42	02.5							S	42	16.4									
KUMAGA	0	EP	01	42	02.6							ES	42	17.4	58		3	50		4	28		3
KANAZA	0	P	01	42	05.8					D		S	42	23.8	16		4	21		2	12		2
AIKAWA	0	IP	01	42	07.5	N		W		U	2	ES	42	28.2	10		0	10					
OMAEZA	0	P	01	42	07.8							ES	42	47.8	24		2	25		2	15		2
UTSUNO	0	P	01	42	08.1			W	8			S	42	25.7	17		3	14		3			
MISHIM	0	EP	01	42	09.2							IS	42	30.2	29		1	25		1	9		1
NIIGAT	0	P	01	42	09.6					U	2	S	42	32.0	15		2	34		4	9		4
AJIRO	0	IP	01	42	11.3					D	1	S	42	34.1	8		1	10		1	3		1

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
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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			

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
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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

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
WAJIMA	0	EX	18	42	39.5											15		1	18		1			
KAKIOK	0	EP	18	42	41							ES	43	02.-		8		1	9		1	5		1
UTSUNO	0	EP	18	42	41.0			W	3	D	2	S	42	57.7		9		2	9		1	6		1
NAGOYA	0	EP	18	42	42.6	N	1	E	1	D	1	ES	43	05.2		13		1	16		1	7		1
TOKYO	0	EX	18	42	43.2											9		4	18	1	3	12	1	4
OMAEZA	0	EP	18	42	43.4											8		4	9		4			
MITO	0	EP	18	42	43.5							IS	43	09.5		12		0	7		1	4		1
YOKOHA	0	EP	18	42	43.9							IS	43	09.0		26		1	12		1			
HAMAMA	0	P	18	42	45.2							ES	43	12		7		1	6		3	5		2
HIKONE	0	EP	18	42	50.5							ES	43	15.6		13		1	13		1	5		1
OSAKA	0	X	18	43	05.2											13		4	13		5			

Origin Time							Location								Depth km	Magnitude M
							Longitude				Latitude					
d	h	m	s	±	s		°	′	±		°	′	±	′		
18	00	38	46.9	0	0.1		138	14	0	1	36	30	0	0	0	4.1

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	IP	00	38	49.4	S		W		U														
NAGANO	3	IP	00	38	51.0											50	1		40	1	1	35	1	
MATSUM	X	IP	00	38	55.9	S		W		U	4	IS	39	01.5										
KARUIZ	0	P	00	38	56.5					U		IS	39	02.4										
TAKADA	1	P	00	39	01.3							S	39	09.3										
MAEBAS	0	IP	00	39	02.7					D	2	S	39	13.1		15		4	15		3	19		3
TOYAMA	0	IP	00	39	06.1					D	3	S	39	19.3		10		2	9		2	10		4
KOFU	0	IP	00	39	06.5	S	3	E	1	U	4	ES	39	19.1		7		1	8		0	3		1
KUMAGA	0	EX	00	39	10.0											15		5	11		4	11		3
KANAZA	0	EP	00	39	12.8							ES	39	31.8		6		5	6		3	4		2
UTSUNO	0	P	00	39	15.0							S	39	33.0		9		1	6		1			
AIKAWA	0	IP	00	39	16.0	S	1	W		U		IS	39	35.7		5		0	10		0	1		0
NIIGAT	0	E	00	39	17.6							S	39	39.0		6		1	8		1	3		3
WAJIMA	0	EP	00	39	18.9							ES	39	36.7		33		1	32		1			
GIFU	0	EP	00	39	21							S	39	42.3		13		2	8		2			
NAGOYA	0	EP	00	39	21.0	N	1	E	1	D	1	S	39	44.0		9		1	9		1	6		1
TOKYO	0	IP	00	39	21.2					U		ES	39	41.0		8		3	17	1	4	12	1	4
MITO	0	IP	00	39	22.0					D		ES	39	46.0		12		0	8		0	3		1
YOKOHA	0	EP	00	39	22.5							ES	39	46.7		12		1	12		1			
HAMAMA	0	P	00	39	24.0					D	2	ES	39	50		7		1	6		2	4		1
OMAEZA	0	EP	00	39	25.4											7		4	7		4			
HIKONE	0	IS	00	39	55.0											10		1	12		1	2		1
ONAHAM	0	EX	00	39	58.9											4		1	6		1			

Origin Time							Location								Depth km	Magnitude M
							Longitude				Latitude					
d	h	m	s	±	s		°	′	±		°	′	±	′		
18	01	08	33.7	0	0.2		138	13	0	1	36	32	0	1	0	4.0

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
NAGANO	2	IP	01	08																				
MATSUS	3	IP	01	08	36.4	S		E		U														
MATSUM	0	EP	01	08	43.1							IS	08	48.5										
KARUIZ	0	P	01	08	43.3					U		S	08	49.2										
TAKADA	0	P	01	08	47.3							S	08	55.5										
MAEBAS	0	P	01	08	49.4					D		IS	08	59.8		8		4	7		3	9		3
TOYAMA	0	P	01	08	52.6							S	09	08.0		4		3	5		3	5		3
KOFU	0	IP	01	08	53.3	S	2	E	1	U	1	ES	09	05.7		4		0	7		0	3		1
KUMAGA	0	EX	01	08	56.0											8		4	6		3	5		3
WAJIMA	0	EP	01	09	00.6							ES	09	19.3		23		1	26		1			
UTSUNO	0	P	01	09	02.1							S	09	19.6		8		1	5		0			
NIIGAT	0	E	01	09	06.0							S	09	26.0		5		1	9		1			
YOKOHA	0	EP	01	09	07.7											6		1						
TOKYO	0	P	01	09	07.8											5		4	11	1	4	8		4
NAGOYA	0	EP	01	09	07.8							S	09	30.8		6		1	6		1	3		1
MITO	0	EP	01	09	09.4							IS	09	34.0		12		0	10		0	4		1
HAMAMA	0	P	01	09	10.7							S	09	37.2		5		2	5		2	3		1
HIKONE	0	S	01	09	41.8											6		1	6		1	2		1

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

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
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 d	h	m	• s	± • s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude •
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 d	h	m	• s	± • s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude •
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																					
FUNATS	0	P	19	50	416							IS	50	566												
UTSUNO	0	P	19	50	435			W	11			ES	51	026	57		4		59		4		23		1	
KANAZA	0	P	19	50	440							ES	51	100	75		4		76		4		32		2	
WAJIMA	0	EP	19	50	447							S	51	036	23	1	1		26	1	1		77		1	
AIKAWA	0	IP	19	50	450	N	1	W		U	3	IS	51	048	31		2		34		2		10		4	
NIIGAT	0	P	19	50	463					U	3				64		5		94		5		44		4	
MISHIM	0	EP	19	50	466							ES	51	171	45		2		81		4		18		1	

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

MATSUS	3	IP	15	29	394																				
NAGANO	3	IP	15	29	399	N	30	E	1	U	67	S	29	422		35	1	1	35	1	1	40	1		
MATSUM	1	IP	15	29	452	S		W	2	U	6	IS	29	509											
KARUIZ	0	EP	15	29	459							IS	29	511											
TAKADA	0	P	15	29	490							S	29	570											
MAEBAS	0	IP	15	29	517			W	1	D	6	IS	30	018		13		4	8		3	9		3
TOYAMA	0	IP	15	29	549					D	6	S	30	112		13		3	11		2	9		1
KOFU	0	IP	15	29	551	S	4	E	1	U	3	ES	30	081		10		1	16		1	6		1
IIDA	0	EP	15	29	586							ES	30	136		6		2	6		2	4		1
FUNATS	0	P	15	29	596							S	30	144										
KUMAGA	0	EP	15	30	000							ES	30	154		12		5	12		5	8		3
KANAZA	0	EP	15	30	002							ES	30	207		6		2	7		2			
AIKAWA	0	IP	15	30	033	S		W		U		IS	30	231		5		0	5		0	2		0
UTSUNO	0	P	15	30	040			W	3			S	30	210		8		1	5		1			
WAJIMA	0	EP	15	30	044							ES	30	209		33		1	58		1			
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

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
25	20	43	41.4	0.02	138	18	01	36 31 01	0	3.8

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
																	S			S			S
NAGANO	2	IP	20	43																			
MATSUS	3	P	20	43	44.8																		
MATSUM	0	IP	20	43	50.9					U	2	IS	43	56.6									
KARUIZ	0	EP	20	43	51.0							S	44	02.8									
TAKADA	0	P	20	43	55.0																		
MAEBAS	0	IP	20	43	56.6	N		W	1	D	4	IS	44	06.5	11		0	4		4	8		4
KOFU	0	IP	20	44	01.1	S	1	E		U	3	IS	44	13.6	5		1	10		0	4		1
KUMAGA	0	EX	20	44	05.0										7		1	6		2	6		4
YOKOHA	0	EP	20	44	14.5										6		1						
MITO	0	IP	20	44	16.0							IS	44	41.3	7		0	7		0	2		1
NAGOYA	0	EP	20	44	16.5							S	44	39.6	6		1	5		1	2		1
HAMAMA	0	P	20	44	18.8	N	1			D	1	S	44	43.1	5		2	4		2	2		1
WAJIMA	0	EX	20	44	19.8										16		1						
NIIGAT	0	E	20	44	33.3										6		1	8		2			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
27	22	29	07.7	0.08	138	07	02	36 36 03	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	P	T	E AE	P	T	Z AZ	P	T
																	S			S			S
MATSUS	1	P	22	29																			
NAGANO	2	IP	22	29																			
MATSUM	0	IP	22	29	16.6					U	2	IS	29	22.3									
KARUIZ	0	EP	22	29	17.4							S	29	23.0									
MAEBAS	0	IP	22	29	23.2	N		W	1	D	2	ES	29	33.9	7		0	7		0	4		3
KOFU	0	IP	22	29	27.5	S	1	E		U	2	IS	29	40.0	4		0	8		0	4		0
KUMAGA	0	EX	22	29	30.0										5		4	4		2	4		3
WAJIMA	0	EX	22	29	41.0										9		1	16		1			
MITO	0	EP	22	29	43.8							IS	30	07.6	12		0	7		0	3		0
NIIGAT	0	E	22	29	52.0										3		1	8		1			

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
28	13	09	20.1	0.01	138	08	01	36 28 00	0	5.3

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 AN	P	T	E AE	P	T	Z AZ	P	T
																	S			S			S
MATSUS	4	P	13	09	23.7																		
NAGANO	4	IP	13	09	25.2	N	26	E	1	U	4	ES	09	27.2	63	2	3	72	2	4	28	2	3
MATSUM	3	IP	13	09	27.8	S	10	W	12	U	48	IS	09	32.9	13	2	2	95	1	3	40	1	2
KARUIZ	3	IP	13	09	30.0	N	6	W	34	D	58	S	09	34.4	20	2	2	21	2	2	90	1	4
TAKADA	2	P	13	09	34.8	N	9	E	2	U	11	S	09	45.0	70	1	4	95	1	4	35	1	4
MAEBAS	1	IP	13	09	37.2	N	4	W	25	D	36	S	09	48.8	15	2	6	60	1	3	65	1	4
TAKAYA	0	EP	13	09	37.5							S	09	47.9									
TOYAMA	0	P	13	09	38.4					D	3	S	09	50.7	35	1	3	35	1	3	37	1	4
KOFU	1	IP	13	09	39.4	S	20	E	8	U	9	ES	09	52.2	12	1	1	22	1	1	65		1
CHICHI	0	P	13	09	39.7	N		W				ES	09	50.5	13	2	8	90	1	7	60	1	3
IIDA	1	IP	13	09	41.2					U	1	ES	09	56.8	16	1	2	11	1	2	18		3
KUMAGA	0	P	13	09	42.5	N	2	W	1	D	7	S	09	58.8	33	1	5	28	1	5	26	1	4
FUNATS	2	P	13	09	43.8							S	10	00.6	1	1	3	0	1	3	0	1	4
KANAZA	0	P	13	09	46.0					D		ES	10	03.0	11		3	13		3	8		3
WAJIMA	0	EP	13	09	47.3							S	10	06.0	23	1	1	18	1	1	86		1
UTSUNO	0	P	13	09	47.8	N	2	W	11	D	8	IS	10	04.9	18	1	4	16	1	4	81		4
TOKYO	0	EP	13	09	49.0							ES	10	11.0	27	1	5	40	1	5	31	1	5
AIKAWA	0	IP	13	09	49.1	N	1	W		U	3	IS	10	10.0	60		1	50		4	26		4
MISHIM	0	P	13	09	50.7	S	7	E	3	U	2	S	10	09.5	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	51.3	S	7	E	3	U	3	ES	10	14.9	49		2	54		3	36		3
NIIGAT	2	IP	13	09	52.0					U	5	IS	10	16.0	13	1	4	32	1	5	90		4
AJIRO	0	P	13	09	52.2							S	10	07.5	33		2	49		1	12		1
GIFU	0	P	13	09	52.3	S	3	W	4	U		S	10	12.9	19	1	4	98		2			
NAGOYA	1	P	13	09	52.6	S	1	W	2	U	4	IS	10	14.0	17	1	1	15	1	1	79		1
FUKUI	0	P	13	09	53.8	S	4	W	6	U	3	S	10	18.0									
SHIRAK	0	EP	13	09	53.9							ES	10	20.5									
YOKOHA	0	EP	13	09	54.9					U	4	IS	10	20.8	31	1	2	30	1	2	11	1	3
HAMAMA	0	P	13	09	55.2					U	1	S	10	23.0	12	1	3	13	1	3	60		2
MITO	1	IP	13	09	55.5			W	4	D	8	IS	10	22.0	14	1	4	12	1	4	11	1	3

Station	Intensity	Phase (J. S. T.)	h	m	s	Initial Motion N	μ	E	μ	Z	μ	Phase	m	s	Maximum Amplitude = A×10P μ N A_N	P	T	E A_E	P	T	Z A_Z	P	T
															μ		S	μ		S	μ		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	48		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
												IX	10	267									
KOBE	0	EX	13	10	20										50		6	50		7			
AKITA	0	EX	13	10	210							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									
KARUIZ	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

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	E P	E T S	Z AZ	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

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									
KARUIZ	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							S	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

NAGANO	2	IP	13	53																			
MATSUS	3	P	13	53	474																		
MATSUM	1	IP	13	53	527					U	4	IS	53	577									
KARUIZ	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			

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
																μ		s	μ		s	μ		s
NAGANO	2	IP	14	04																				
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

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		

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
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
29	10	36	596	002	138 17	01	36 32	01	0	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 s	E AE	P	T s	Z AZ	P	T s
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
30	06	06	043	002	138 09	01	36 27	01	20	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	T s
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			

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 μ	P	T S	Z A_Z 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 d h m • s ± • s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude •
31 07 15 102 003	138 09 01	36 33 01	0	38

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

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			

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	°	′	±	°	′	±		•
1966 September 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

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
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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				U			IS	01	495							
KARUIZ	0	P	10	01	436							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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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			

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

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	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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
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									

Station	Intensity	Phase (J. S. T.)				Initial Motion			Phase				Maximum Amplitude = A×10^P 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
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				IS	40	471					17	1	1	53		1
UTSUNO	0	EP	03	40	287				ES	40	465		30		3	21		4			
MISHIM	0	EP	03	40	303								18		2	31		4	9		3
SHIZUO	0	EP	03	40	314				ES	40	540		8		3	10		3	4		
GIFU	0	EP	03	40	350				ES	40	571		31		3	26		2	7		1
NAGOYA	0	EP	03	40	356				S	40	580		41		3	32		3	11		1
MITO	0	IP	03	40	363				ES	41	015		27		5	22		4	19		4
HAMAMA	0	EP	03	40	38				S	41	052		31		2	29		2	13		2
KUMAGA	0	EP	03	40	380								99		3	75		5	68		3
OITA	0	EX	03	41	041								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				S	41	542		3			6					
ONAHAM	0	EX	03	41	133								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			
d	h	m	• s	± • s	Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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			
d	h	m	• s	± • s	Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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	

Origin Time d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
8	21	23	329	002	138	13	01	36	31	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	P	T S	Z AZ	P	T 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 d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
8	21	32										

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

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	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			

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
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	15	323		14		1	11		1	8		1
TOKYO	0	EP	16	15	092							ES	15	298		41		3	34		4	32		4
												EX	15	123										
AJIRO	0	IP	16	15	103	N	1	E		D	1	S	15	319		9		0	9		0	3		1
GIFU	0	P	16	15	111							S	15	335		38		1	50		1			
FUKUI	0	P	16	15	112							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

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: A_N	P	T	E: A_E	P	T	Z: A_Z	P	T
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
11 02 11 072 002	138 21 01	36 37 01	0	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^F μ N: A_N	P	T	E: A_E	P	T	Z: A_Z	P	T
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
11 19 55 460 001	138 17 01	36 35 00	0	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^F μ N: A_N	P	T	E: A_E	P	T	Z: A_Z	P	T
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									

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)
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
12	03	29	097	003	138 16	02	36 28	02	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: A_N	P	T (S)	E: A_E	P	T (S)	Z: A_Z	P	T (S)
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
13	00	56								

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	0	IP	00	56																
MATSUS	2	P	00	56																
MATSUM	0	IP	00	56	199			U 4	IS	56	243									
KARUI7	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						

Origin Time					Location					Magnitude
d	h	m	s	± s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	M
13	02	00	062	004	138 11	02	36 33	01	0	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 μ	P	T s	A_E μ	P	T s	A_Z μ	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					Location					Magnitude
d	h	m	s	± s	Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	M
13	06	35	484	002	138 12	01	36 33	01	0	38

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

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
IIDA	0	EP	06	27	000							IS	27	154		16		2	25		3	15		3
KUMAGA	0	EP	06	27	000							ES	27	160		20	1	3	11	1	3	90		3
FUNATS	0	P	06	27	005							S	27	173										
UTSUNO	0	P	06	27	032	N	1	W	4	D	2	S	27	215		42		2	24		2	13		1
KANAZA	0	P	06	27	046	N	1	E	3	D	3	S	27	216		35		2	32		2	19		2
AIKAWA	0	IP	06	27	050	N		E		U	2	IS	27	246					15		1	4		4
WAJIMA	0	EP	06	27	063							IS	27	249		11	1	1	16	1	2			
MISHIM	0	P	06	27	072							S	27	283		31		2	30		4			
NIIGAT	0	IP	06	27	072					D	7	S	27	291		60		4	13	1	5	36		4
OMAEZA	0	EX	06	27	076											34		4	47		5	15		4
KAKIOK	0	EP	06	27	083							S	27	286		35		1	19		1	10		1
SHIZUO	0	P	06	27	086							S	27	314		9		1	13		3	9		2
SHIRAK	0	EP	06	27	088							ES	27	346										
AJIRO	0	IP	06	27	097					U	1	ES	27	316		8		2	11		2	4		2
YOKOHA	0	EP	06	27	103					U	2	IX	27	360		51		4	81		3	23		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 AN	P	T	E AE	P	T	Z 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 d	h	m	s	± s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude
14	09	25	383	002	138	10	01	36	28	01	0	40

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

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		

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
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	W	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 d	h	m	• s	± • s	Location Longitude °	′	± ′	Latitude °	′	± ′	Depth km	Magnitude •
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										

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

MATSUS	3	P	06	37	447							IS	37	491	80	1		90	1				
NAGANO	3	IP	06	37	467	N	5	W	2	U	36	IS	37	491									
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			

Station	Intensity	Phase (J. S. T.) h m • s	Initial Motion N ↑	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
OSAKA	0	X 06 38 508					13		4	11		5	5		2

Origin Time d h m • s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
16 20 50 356	002	138 14 01		36 33 01		0	42

MATSUS	2	P	20	50								IS	50	411	50	1		70	1		30	1
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 d h m • s	± • s	Location Longitude ° ′	+ ′	Latitude ° ′	± ′	Depth km	Magnitude •
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

Origin Time						Location								Depth km	Magnitude
						Longitude			Latitude						
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′				・
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	P	T	A_E	P	T	A_Z	P	T
																μ		S	μ		S	μ		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
						Longitude			Latitude						
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′				・
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
						Longitude			Latitude						
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′				・
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
						Longitude			Latitude						
d	h	m	・s	±	・s	°	′	± ′	°	′	± ′				・
24	19	29	188	003		138	17	01	36	34	01			0	41

MATSUS	3	P	19	29	21																			
NAGANO	3	EP	19	29	238							ES	29	258		40	1		70	1		20	1	
KARUIZ	0	EP	19	29	287							S	29	337										
TAKADA	0	EP	19	29	316							S	29	396										
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			

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
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	
d	h	m	• s	± • s	° ′	± ′	° ′	± ′	km	•
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		
KARUIZ	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																				
OSAKA	0	P	04	04	151							S	04	517	70		5	10	1	4	32		3		
TOKUSH	0	EP	04	04	217							ES	05	125											
HACHIJ	0	EX	04	04	238										11										
OKAYAM	0	IP	04	04	280			E				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	39	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		

Station	Intensity	Phase (J. S. T.) h	m	• s	Initial Motion N μ	E μ	Z μ	Phase m	• s	Maximum Amplitude = A×10P μ N A_N	P	T	E A_E	P	T	Z 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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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	455	13	1	3	10	1	3			
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 d	h	m	• s	± • s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude •
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	E AE	P	T	Z AZ	P	T
												μ		S	μ		S	μ		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

MATSUS	2	P	11	32									S	32	578										
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

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				

Origin Time d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
6	11	31	369	003	138	20 02	36	30 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	E AE	P	T	Z AZ	P	T
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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
12	03	35	434	002	138	14 01	36	32 01	0	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	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 d	h	m	s	± s	Location Longitude ° ′	± ′	Latitude ° ′	± ′	Depth km	Magnitude
13	06	01	313	002	138	10 01	36	36 01	0	48

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	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									

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
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										
KARUIZ	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

Origin Time					Location						Magnitude
					Longitude		Latitude		Depth		
d	h	m	s	± s	° ′	± ′	° ′	± ′	km		
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		A_N	P	T	A_E	P	T	A_Z	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			
KARUI7	2	IP	11	14	209			W	14	D	28	S	14	257		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

Origin Time					Location					Depth km	Magnitude
d	h	m	s	± s	Longitude ° ′	± ′	Latitude ° ′	± ′			
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	P	T	AE	P	T	Az	P	T
															μ		S	μ		S	μ		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
KARUIZ	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

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	Z 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 (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	Z T
MATSUS	2	P	03	13					S	13	453									
NAGANO	2	EP	03	13	428				S	13	528									
KARUIZ	0	EP	03	13	473				IS	13	562									
MATSUM	0	EP	03	13	489				S	13	572									
TAKADA	0	EP	03	13	500															
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 (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	Z T
MATSUS	2	P	05	35	051				S	35	071									
NAGANO	2	IP	05	35	061				S	35	085									
KARUIZ	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 (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	Z 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									
KARUIZ	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

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

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			

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

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

MATSUS	1	P	15	02																	
NAGANO	2	IP	15	02	319					S	02	348									
KARUIZ	0	IP	15	02	336	S 2	E	U	4	S	02	389									
TAKADA	0	EP	15	02	381					S	02	463									
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

Origin Time d	h	m	s	± s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude
8	18	09	224	002	138 10 01	36 27 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	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 d	h	m	s	± s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude
9	09	17						

Station	Intensity	Phase	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	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 d	h	m	s	± s	Location Longitude ° ′ ±	Latitude ° ′ ±	Depth km	Magnitude
12	00	04						

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

Station	Intensity	Phase	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	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	

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
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
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

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
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	

1966	Origin Time d h m , • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
December	1 18 34 157 003	138 16 02	36 25 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
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 d h m • s ± • s	Location Longitude ° ′ ± ′	Latitude ° ′ ± ′	Depth km	Magnitude •
1 19 36 360 002	138 18 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: A_N P T	E: A_E P T	Z: A_Z P T
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

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	P	T S	Z AZ	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															
KUMAGA	0	EX	04	25	210							7	4		7	4		8	4	

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		

Origin Time					Location									Magnitude
					Longitude			Latitude			Depth			
d	h	m	s	± s	°	′	±	°	′	+ ′	km			•
22	18	41	37.9	0.02	138	23	02	36	54	01	0			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
																μ		S	μ		S	μ		S
TAKADA	3	P	18	41	45.0	S	14	E	2	D	34	S	41	48.9		60	1	4	45	1	4	20	1	4
NAGANO	1	IP	18	41	46.4							S	41	50.8										
MATSUS	0	P	18	41	47.1							S	41	52.4										
KARUIZ	0	P	18	41	51.5					D		S	42	01.1										
MATSUM	0	EP	18	41	52.9																			
MAEBAS	0	P	18	41	54.3					D						11		2	14		2	10		3
TOYAMA	0	P	18	41	59.5							S	42	12.4		18		3	19		3	14		2
AIKAWA	0	EP	18	41	59.8							IS	42	14.8		17		0	10		0	5		0
KUMAGA	0	EP	18	42	01.8							ES	42	21.6		8		3	10		4	9		5
UTSUNO	0	EP	18	42	03.5							S	42	22.7		9		1	10		1	4		1
KOFU	0	EP	18	42	03.9							ES	42	20.6		9		0	17		0			
NIIGAT	0	E	18	42	04.7							IS	42	19.8		35		5	38		5			
IIDA	0	EP	18	42	06.4							ES	42	25.8		6		1	8		1	3		1
KANAZA	0	EP	18	42	06.4							ES	42	31.0		9		2	8		2	5		2
KAKIOK	0	X	18	42	08.5											9		1	8		1	4		1
MITO	0	IP	18	42	11.0					D	1	S	42	35.6		8		2	18		1	4		1
MISHIM	0	EP	18	42	13.6											6		1	6		1	2		1
TOKYO	0	EX	18	42	13.6											8		4	9		4			
HAMAMA	0	EP	18	42	20							ES	42	49		5		2	5		2	2		2
OMAEZA	0	EP	18	42	27.7											7		2						
ONAHAM	0	EX	18	42	43.6											8		1	12		1	3		2