

## JMA seismic intensity and acceleration file (96 bytes)

Data for each earthquake event consist of the following:

- Hypocenter record

Each event has more than one record.

The top record is adopted as the best result.

- Seismic intensity and acceleration data record (one or more after 1961; sometimes none before)

Col.	Item	Type	Description
1	Record type identifier	A1	Codes: A: Hypocenter record B: Hypocenter record (for two or more spatio-temporally close earthquakes whose seismic intensity data cannot be separated) D: Hypocenter record (for two or more temporally close earthquakes whose seismic intensity data cannot be separated)
2 - 5	Year	I4	Year of origin time (Japan Standard Time = UTC + 9 h; the same applies below.)
6 - 7	Month	I2	Month of origin time
8 - 9	Day	I2	Day of origin time
10 - 11	Hour	I2	Hour of origin time
12 - 13	Minute	I2	Minute of origin time
14 - 17	Second	F4.2	Second of origin time
18 - 21	Standard error (seconds)	F4.2	Standard error for origin time (seconds)
22 - 24	Latitude (degrees)	I3	Latitude of hypocenter (degrees)
25 - 28	Latitude (minutes)	F4.2	Latitude of hypocenter (minutes)
29 - 32	Standard error (minutes)	F4.2	Standard error for latitude (minutes)
33 - 36	Longitude (degrees)	I4	Longitude of hypocenter (degrees)
37 - 40	Longitude (minutes)	F4.2	Longitude of hypocenter (minutes)
41 - 44	Standard error (minutes)	F4.2	Standard error for longitude (minutes)
45 - 49	Depth (kilometers)	F5.2	Depth in kilometers (depth-free method) The depth of focus is treated as an unknown variable.
		I3,2X	Depth in kilometers (depth-slice method) The optimal solution is sought with different source depths. Width of change: 10 km (1926 - 1960, 1967 - 1982) Width of change: 20 km (1961 - 1966) Width of change: 1 km (1983 - ) Hypocenters from before 1982 are being re-examined and relocated based on calculation using the depth-free method or the 1 km-width depth-slice method.
50 - 52	Standard error (kilometers)	F3.2	Standard error for depth (kilometers)
53 - 54	Magnitude 1	F2.1	See magnitude type 1 When the magnitude is less than 0, this column is denoted as follows: -0.1:-1;-0.9:-9;-1.0:A0;-1.9:A9;-2.0:B0;-3.0:C0
55	Magnitude type 1	A1	JMA magnitudes J: MJ - Local Meteorological Office magnitude D: MD - Displacement magnitude d: Md - As per MD, but for two stations V: MV - Velocity magnitude v: Mv - As per MV, but for two or three stations Moment magnitudes W: MW - Moment magnitude based on JMA's centroid moment tensor solution Other organizations' magnitudes B: mb - USGS body wave magnitude S: MS - USGS surface wave magnitude
56 - 57	Magnitude 2	F2.1	See magnitude 1
58	Magnitude	A1	See magnitude type 1

59	type 2 Travel time table	A1	Travel time table type 1: Standard table (83A or other) 2: Table for far east of the Sanriku district 3: Table for east of the Hokkaido district 4: Table for regions of southern parts of the Kurile Islands  5: Standard table (JMA2001) 6: Table for regions of southern parts of the Kurile Islands  blank : Determined by other agency
	(with 83A or other)		
	(with JMA2001)		
60	Hypocenter location precision	A1	Hypocenter location precision 1: Depth-free method 2: Depth-slice method 3: Fixed depth 4: Based on depth phase 5: Based on S-P time 7: Poor solution 8: Undetermined or not accepted
61	Subsidiary information	A1	Subsidiary information on event 1: Natural earthquake 2: Insufficient number of JMA stations 3: Artificial event 4: Noise 5: Low-frequency earthquake
62	Maximum intensity	A1	1: One 2: Two 3: Three 4: Four 5: Five (until September 1996) 6: Six (until September 1996) 7: Seven A: Five lower B: Five upper C: Six lower D: Six upper R: Remarkable earthquake (shock felt over 300 km away) (until 1977) M: Moderate earthquake (shock felt over 200 km away but not over 300 km away) (until 1977) S: Small earthquake (shock felt over 100 km away but not over 200 km away) (until 1977) L: Local earthquake (shock felt less than 100 km away) (until 1977) F: Felt earthquake (until 1984) X: Shock felt by some people but not by JMA observers (until September 1996)
63	Damage class	A1	Damage class (after Utsu) 1: Slight damage (cracks on walls and ground) 2: Light damaged (broken houses, roads, etc.) 3: 2 - 19 fatalities or 2 - 999 houses destroyed 4: 20 - 199 fatalities or 1,000 - 9,999 houses destroyed 5: 200 - 1,999 fatalities or 10,000 - 99,999 houses destroyed 6: 2,000 - 19,999 fatalities or 100,000 - 999,999 houses destroyed 7: 20,000+ fatalities or 1,000,000+ houses destroyed X: Injury or damage of unclear scale (until 1988) Y: Injury and damage included in the grade for the preceding or following event (until 1988)
64	Tsunami class	A1	1929-1988 Tsunami class (after Utsu) 1: Tsunami recorded by tidal gage but no damage caused T: Tsunami generated 1989 - Tsunami class (after Imamura and Iida, 1958) Height/damage 1: 50 cm/none 2: 1 m/very slight damage 3: 2 m/slight damage to coastal areas and vessels 4: 4 - 6 m/human injury 5: 10 - 20 m/damage along more than 400 km of coastline 6: 30 m+/damage along more than 500 km of coastline
65	District number	I1	Number of epicenter location district

66 - 68	Region number	I3	Number of epicenter location region
69 - 90	Region name	A22	Name of epicenter location region
91 - 95	Number of stations	I5	Number of shocks felt
96	Identifiers	A1	K: JMA hypocenter identified with high precision S: JMA hypocenter identified with low precision N: Hypocenter unknown (first observation point used) U: USGS hypocenter I: ISC hypocenter R: Preliminary hypocenter (included only in district

observatory databases)

H,D,M: Exact observation time unknown

#### JMA seismic intensity and acceleration data record (96 bytes)

Col.	Type	Item	Description
01 - 07	I7	Seismic intensity station number	Seismic intensity station number Numbers are provided in the code_p.dat file.
08	A1	Blank	Blank
09 - 10	I2	Day	Day of observation time (Japan Standard Time = UT + 9h; the same applies below.)
11 - 12	I2	Hour	Hour of observation time
13 - 14	I2	Minute	Minute of observation time
15 - 17	F3.2	Second	Second of observation time
18	A1	Blank	Blank
19	A1	Seismic intensity	Seismic intensity on the JMA scale (1 - 7 A, B, C, D) 9: Felt but intensity unknown
20	A1	Blank	Blank
21 - 22	I2	Instrumental seismic intensity	Seismic intensity as observed using seismic intensity meters (rounded off to one decimal place) '///' indicates no observation; the same applies below.
23	A1	Blank	Blank
24 - 25	I2	Minute	Minute of maximum acceleration observation time
26 - 28	F3.1	Second	Second of maximum acceleration observation time
29	A1	Blank	Blank
30 - 34	I5	Maximum acceleration	in composition of three components (unit: 0.1 cm/sec <sup>2</sup> ) rounded off to one decimal place
35	A1	Blank	Blank
36	A1	Identifier	N
37 - 41	I5	Maximum acceleration	in N-S component (unit: 0.1 cm/sec <sup>2</sup> ) rounded off to one decimal place
42	A1	Blank	Blank
43	A1	Identifier	E
44 - 48	I5	Maximum acceleration	in E-W component (unit: 0.1 cm/sec <sup>2</sup> ) rounded off to one decimal place
49	A1	Blank	Blank
50	A1	Identifier	Z
51 - 55	I5	Maximum acceleration	in U-D component (unit: 0.1 cm/sec <sup>2</sup> ) rounded off to one decimal place
56	A1	Blank	Blank
1 Oct. 2000.			Note: Columns 57 to 60 are blank for the period before
57	A1	Identifier	F (frequency) or P (period)
58 - 60	I3	Period of maximum acceleration	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.
61	A1	(N-S component) Identifier	F (frequency) or P (period)
62 - 64	I3	Predominant period (N-S component)	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.
65	A1	Identifier	F (frequency) or P (period)
66 - 68	I3	Period of maximum acceleration	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.

(E-W component)			
69	A1	Identifier	F (frequency) or P (period)
70 - 72	I3	Predominant period (E-W component)	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.
73	A1	Identifier	F (frequency) or P (period)
74 - 76	I3	Period of maximum acceleration	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.
(U-D component)			
77	A1	Identifier	F (frequency) or P (period)
78 - 80	I3	Predominant period (U-D component)	0.1 Hz or 0.1 sec Frequencies are applied for periods shorter than 0.1 seconds.
81 - 96	A16	Blank	Blank

#### Seismic intensity station list file(code\_p.dat)

The data file is in TSV(Tab Separated Values) format.  
Each record includes six items.

item	Type	Item Name	Description
01	I7	Seismic intensity station number	The first five figures denote the municipality code.
02	-	Seismic intensity station name	Station name used in JMA's earthquake information (JIS code)
03	I4	Latitude	Latitude north in degrees and minutes (Japanese Geodetic Datum 2000)
04	I5	Longitude	Longitude eastern in degrees and minutes (Japanese Geodetic Datum 2000)
05	I4,4I2	Observation start time	I4:Year(Japan Standard Time = UT + 9h; the same applies below.) I2:Month I2:Day I2:Hour I2:Minute If the time is unknown, [99] or [9999] is indicated.
06	I4,4I2	Observation end time	I4:Year I2:Month I2:Day I2:Hour I2:Minute if the time is unknown, [99] or [9999] is indicated. If the station remains operational, this is blank.