

# SUMMARY OF EARTHQUAKES

reported by tsunami warning centres\*

1 JANUARY- 31 DECEMBER 2008

With surface wave or moment magnitude ( $M_w$ ) greater than or equal to 6.5 and a depth no greater than 100 km, or an event for which an international warning centre issues a message. Pacific Tsunami Warning Center (P) issues; Tsunami Information Bulletins (TIB), Expanding Regional Warnings (ERW), Regional Watch/Warnings (RWW) or Indian Ocean Watch Bulletins (IO), or Local Tsunami Watch Bulletins (LTWB) or Tsunami Information Statements (TIS). Japan Meteorological Agency (J), issues Tsunami Advisory Messages for the North Pacific (NWPTA), or Indian Ocean Tsunami Watch Information Bulletins (TWI). When the West Coast/Alaska Tsunami Warning Center (A) issues a message it is also included. Epicenter, depth (from GCMT solution) and  $M_w$  from USGS (G), and  $M_w$  from PTWC (P) at action time. Height measurements from tide gauges peak to trough or half peak to trough as indicated, otherwise measurement is the greatest value for either inundation or runup depending on the event.

\*Compiled by The International Tsunami Information Centre, ITIC

DATE	TIME (UTC)	LOCATION	EPICENTER	DEPTH (km)	$M_w$	PTWC (P) JMA (J), or WC/ATWC (A) ACTION	ACTION TIME (UTC)	TSUNAMI? DAMAGING?	MAXIMUM MEASUREMENT and LOCATION
05 Jan	11:01	Queen Charlotte Islands Region	51.260° N 130.752° W	12	6.6 (GCMT, P) 6.5 (G)	TIB (P)	11:11	NO	
05 Jan	11:45	Queen Charlotte Islands Region	51.163° N 130.542° W	12	6.5 (P) 6.4 (GCMT)	TIB (P)	11:53	NO	
08 Feb	09:38	Northern Mid-Atlantic Ridge	10.671° N 41.899° W	19	6.9 (A, GCMT, P) 6.8 (G)	TIS (A) TIB (P)	09:48 09:50	NO	
10 Feb	12:22	South Sandwich Islands Region	60.797° S 25.586° W	12	6.5 (G, GCMT, A, P)	TIS (A) TIB (P)	12:39 12:40	NO	
12 Feb	12:50	Oaxaca Mexico	16.357° N 94.304° W	85	6.5 (P) 6.4 (G, GCMT)	TIB (P)	13:00	NO	
20 Feb	08:09	Off West Coast of Sumatra, Indonesia	2.768° N 95.964° E	15	7.5 (G) 7.4 (GCMT) 7.2 (P)	(IO-P) LTWB 01 TWI (J) LTWB 02 (P) LTWB 03 (P) (Cancellation)	08:22 08:29 09:26 09:47	NO	
23 Feb	15:57	South Sandwich Islands Region	57.326° S 23.421° W	12	6.9 (A, P) 6.7 (G, GCMT)	TIB (P) TIS (A)	16:12 16:12	NO	
25 Feb	08:37	Southern Sumatra, Indonesia	2.486° S 99.972° E	23	7.1 (P) 6.9 (G, GCMT)	(IO-P) LTWB 01 TWI (J) LTWB 01 (P) (IO-P) LTWB 02 (Cancellation)	08:50 08:59 08:50 10:09	YES NO	0.12 m Padang, Indonesia
25 Feb	18:06	Southern Sumatra, Indonesia	2.332° S 99.891° E	23	6.5 (P) 6.4 (GCMT) 6.3 (G)	(IO) TIS TWI (J)	18:17 18:23	NO	
25 Feb	21:02	Southern Sumatra, Indonesia	2.245° S 99.808° E	23	6.6 (P) 6.5 (G, GCMT)	(IO) TIS (P) TIS TWI (J)	21:13 21:13 21:17	NO	
03 March	14:11	Philippine Island Region	13.351° N 125.630° E	18	6.9 (P) 6.8 (G, GCMT)	TIB (P) TWI (J) TIS (A)	14:27 14:34 14:27	NO	

2008 Earthquake List, *continued*

DATE	TIME (UTC)	LOCATION	EPICENTER	DEPTH (km)	M <sub>w</sub>	PTWC (P) JMA (J), or WC/ATWC (A) ACTION	ACTION TIME (UTC)	TSUNAMI? DAMAGING?	MAXIMUM MEASUREMENT and LOCATION
12 March	11:24	Vanuatu Islands	16.567° S 167.335° E	12	6.5 (P) 6.4 (G, GCMT)	TIB (P) TIS (A) TWI (J)	11:38 11:41 11:42	NO	
22 Mar	21:24	South of Aleutian Islands	52.176° N 178.716° W	134	6.5 (A*, P) 6.2 (GCMT) 6.1 ( G, P002) *later revised to 6.1	TIS (A) TIB 001 (P) TIB 002 (P)	21:28 21:37 21:43	NO	
29 Mar	17:31	Off West Coast of Northern Sumatra	2.855° N 95.296° E	12	6.5 (P) 6.3 (G, GCMT)	TIB TWI (J)	17:41 17:49	NO	
09 Apr	12:46	Loyalty Islands	20.071° S 168.892° E	36	7.3 (GCMT) 7.2 (A, G, P)	TIB (P) TIS (A)	13:00 13:01	NO	
12 Apr	00:30	Macquarie Island Region	55.664° S 158.453° E	21	7.2 (A, P) 7.1 (GCMT) 6.8 (G)	TIS (A) TIB (P)	00:42 00:44	NO	
15 Apr	23:00	Andreanof Islands, Aleutian Islands	51.854° N 179.358° W	12	6.9 (P) 6.5 (A) 6.4 (G, GCMT)	TIS (A) TIB (P)	23:04 23:08	NO	
16 Apr	05:54	Andreanof Islands, Aleutian Islands	51.878° N 179.165° W	12	6.6 (GCMT) 6.5 (A, G, P)	TIS (A) TIB (P)	6:01 6:08	NO	
28 Apr	18:34	Vanuatu Region	19.941° S 168.953° E	48	6.7 (A, P) 6.4 (GCMT) 6.3 (G)	TIB (P) TIS (A)	18:47 18:47	NO	
02 May	01:34	Andreanof Islands, Aleutian Islands	51.864° N 177.528° W	12	7.0 (A, P) 6.6 (GCMT) 6.5 (G)	TIS (A) TIB (P)	01:40 01:45	NO	
07 May	16:45	Near East Coast of Honshu, Japan	36.158° N 141.521° E	26	6.8 (GCMT) 6.7 (A, G, J, P)	NWPTA (J) TIS (A) TIB (P)	16:55 16:56 16:57	NO	
09 May	21:51	South of Mariana Islands	12.516° N 143.181° E	83	6.5 (A, J, P) 6.6 (G) 6.7 (GCMT ) 6.9 (J 002, P 002)	TIB 001 TIS NWPTA TIB 002 NWPTA 002	22:05 22:05 22:10 22:19 22:39	NO	
13 June	23:44	Eastern Honshu Japan	39.030° N 140.881° E	12	7.0 (P) 6.9 (GCMT) 6.8 (G)	NWPTA TIB TIS	23:51 23:52 23:53	NO	
27 June	11:40	Andaman Islands, India	11.005° N 91.824° E	17	6.7 (P) 6.6 (GCMT) 6.4 (G)	(IO) TIB TWI (J)	11:50 11:59	NO	
30 June	06:18	South Sandwich Islands Region	58.220° S 22.100° W	24	6.9 (G, GCMT) 6.7 (A, P)	TIS (A) TIS (P)	06:33 06:36	NO	

2008 Earthquake List, *continued*

DATE	TIME (UTC)	LOCATION	EPICENTER	DEPTH (km)	M <sub>w</sub>	PTWC (P) JMA (J), or WC/ATWC (A) ACTION	ACTION TIME (UTC)	TSUNAMI? DAMAGING?	MAXIMUM MEASUREMENT and LOCATION
05 July	02:12	Sea of Okhotsk	53.882° N 152.886° E	615	7.7 (G, GCMT) 7.6 (A, P)	TIB (P) TIS (A)	02:22 02:23	NO	
19 July	02:39	Off East Coast of Honshu, Japan	37.552° N 142.214° E	20	6.9 (GCMT) 6.8 (G) 6.6 (A, P)	NWPTA (J) TIB TIS	02:46 02:49 02:49	NO	
19 July	09:27	Santa Cruz Island Region	11.041° S 164.493° E	13	6.7 (A, P) 6.6 (G, GCMT)	TIB TIS NWPTA	09:40 09:40 09:46	NO	
23 July	15:26	Eastern Honshu	39.802° N 141.464° E	102	6.8 (all)	NWPTA TIB TIS	15:31 15:37 15:39	NO	
08 Sept	18:52	Vanuatu	13.501° S 166.967° E	125	7.1 (A, P, J) 6.9 (G) 6.8* revised to 7.1 (A, P, J)	TIB 001* TIS 001* NWPTA 001* TIB 002 TIS 002 NWPTA 002	19:05 19:06 19:11 19:35 19:41 19:47	NO	
10 Sept	13:08	Central Mid-Atlantic Range	8.092° N 38.718° W	17	6.6 (all)	TSN (P) TBN (A)	13:25 13:27	NO	
11 Sept	00:00	Halmahera, Indonesia	1.885° N 127.636° E	120	6.7 (A, P, J) 6.6 (G, GCMT)	TIS TIB NWPTA	00:11 00:12 00:18	NO	
11 Sept	00:21	Hokkaido, Japan	41.892° N 143.754° E	24	7.0 (A, P, MJMA) 6.8 (G, GCMT)	TIS NWPTA TIB	00:21 00:24 00:35	YES NO	0.2m Urakawa tide gauge (peak to trough)
24 Sept	02:33	Off Coast of Jalisco, Mexico	17.635° N 105.520° W	17	6.5 (A, P) 6.4 (G, GCMT)	TIB TIS	02:46 02:46	NO	
29 Sept	15:19	Kermadec Islands Region	29.860° S 177.653° W	50	7.0 (G, GCMT) 6.9 (A, P)	TIS TIB	15:32 15:34	NO	
11 Oct	10:40	Virgin Islands Region	19.161° N 64.833° W	29	6.1 (G, GCMT) 6.0 (A, P)	TIS TIB	10:43 10:51	NO	
16 Oct	19:41	Near Coast Chiapas, Mexico	14.423° N 92.364° W	32	6.7 (A, P) 6.6 (G, GCMT)	TIB TIS	19:51 19:51	NO	
19 Oct	05:11	Tonga Islands	21.863° S 173.819° W	44	7.0 (A, P ) 6.9 (G, GCMT)	TIB TIS	05:21 05:23	NO	
07 Nov	07:20	Vanuatu Islands	14.829° S 168.032° E	12	6.5 (A, P) 6.4 (G, GCMT)	TIB TIS	07:32 07:32	NO	
16 Nov	17:03	Minahasa Peninsula Sulawesi, Indonesia	1.271° N 122.097° E	32	7.6 (A, P) 7.3 (G, GCMT)	(IO) TIB TIS TWI (J)	17:13 17:16 17:17	YES NO	0.255 m Toli-Toli tide gauge (peak to trough)
22 Nov	16:01	Southern Sumatera	4.348° S 101.259° E	12	6.5 (A, P, J) 6.4 (G, GCMT)	(IO) TIB TIS TWI (J)	16:10 16:25 16:19	NO	
24 Nov	09:03	Sea of Okhotsk	54.203° N 154.322° E	505	7.3 (G, GCMT) 7.0 (A, P )	TIB TIS	09:12 09:11	NO	
09 Dec	06:24	Kermadec Islands Region	31.232° S 176.924° W	19	6.8 (A, P) 6.7 (G, GCMT)	TIB TIS	06:34 06:36	NO	
20 Dec	10:29	Off East Coast of Hokkaido, Japan	36.541° N 142.425° E	12	6.5 (A, P, J) 6.3 (G, GCMT)	NWPTA TIB TIS	10:36 10:38 10:38	NO	