

Strong earthquake activity all over the world and strong-moderate earthquake activity within and near China (October 2007~November 2007)

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Illustration

All the data in this catalog are chosen from the "Preliminary Seismological Report of Chinese Seismic Stations" (Its abbreviation is "Monthly Report"). The catalog includes the events of $M \geq 4.7$ in and near China and $M \geq 6$ all over the world. The "Monthly Report" is monthly compiled by the Ninth Section of Institute of Geophysics, China Earthquake Administration.

The origin times of earthquakes in the catalog adopt coordinated universal time (UTC) in accordance with international convention. The location of every epicenter is expressed by its latitude and longitude, at the same time by the corresponding geographical region proposed by Flinn and Engdahl. The regional names are only for references and do not imply any political significance. The number of stations used and standard deviation are also given in order to illustrate the precision of location.

The surface wave magnitude M_S is measured from the records of intermediate period broad band SK seismographs and adopting the surface wave magnitude formula of Beijing Station of 1965: $M_S = \lg(A_H/T) + 1.66 \lg \Delta + 3.5$ ($1^\circ < \Delta < 130^\circ$), in which A_H is the resultant displacement amplitude of the maximum surface wave of horizontal components. M_{S7} is measured from records of the long-period seismographs of 763 type and adopting the surface wave magnitude formula recommended by IASPEI in 1967. $M_{S7} = \lg(A_V/T) + 1.66 \lg \Delta + 3.3$ ($20^\circ < \Delta < 160^\circ$), in which A_V is the maximum ground displacement of surface wave in vertical component, m_b is short-period body-wave magnitude. M_L is local magnitude. In order to avoid confusion, no conversion is made among the various magnitudes. For convenience of use and comparison, the surface wave magnitude M_{SZ} (NEIS) and m_b (NEIS) measured by NEIS recorded on short period seismographs are also listed.

Catalog of earthquakes within and near China
(October 2007~November 2007; $M \geq 4.7$)

No.	Origin time (UTC)		Geographic coordinates		Focal depth /km	Magnitudes					SD	No. sta. used	Region	
	d	h:min:s	$\varphi_N / ^\circ$	$\lambda_E / ^\circ$		M_S	M_{S7}	M_L	m_b	M_{SZ}				m_b
October 2007														
1	5	14:24:45.7	43.88	130.88	571				4.8	4.3	0.7	45	E.Russia-N.E.China border region	
2	9	16:00:43.4	43.01	77.94	28	4.5	4.3	4.9	4.7	5.0	1.6	52	Alma-Ata region	
3	14	01:05:33.7	37.74	76.15	21	4.0	3.7	4.8	4.8	4.3	2.4	24	Tadzhikistan-Xinjiang border region	
4	16	06:46:57.3	20.31	100.87	30	4.7	4.3	4.8	4.5	4.6	1.7	33	Indo-Pacific Peninsula	
5	17	14:40:0.2	23.68	121.58	41	4.6	4.4	5.0	4.6	4.5	1.5	75	Taiwan	
6	26	06:50:05.7	35.30	76.80	10	5.1	4.9	5.6	5.1	4.8	5.3	1.3	73	Eastern Kashmir
7	29	09:49:12.6	27.34	85.00	10	4.7	4.4		4.6	4.7	1.9	26	Nepal-India border region	
8	30	09:20:03.6	33.21	90.36	25	4.3	3.8		4.7	3.7	3.4	13	Tibet	
November 2007														
9	6	02:15:47.2	38.54	73.25	121				4.9	5.0	1.5	58	Tadzhikistan	
10	7	22:54:14.3	25.08	122.37	16	4.6	4.4	4.8	4.3	4.6	2.2	36	Taiwan	
11	10	19:36:23.1	29.48	95.42	25	4.3	4.1	4.5	4.9	4.0	5.0	2.2	65	India-China border region
12	13	05:57:35.1	37.13	80.35	15	4.4	4.2	4.8	4.3	4.2	4.9	2.8	25	Southern Xinjiang Province
13	17	10:08:14.5	39.29	119.12	18	3.6	3.6	3.7	4.7		2.2	15	North-Eastern China	
14	23	11:17:11.6	25.06	122.40	18	4.9	4.6		4.4	4.5	2.5	9	Taiwan	
15	23	11:20:09.1	24.80	122.50	35	4.7	4.6		4.3	4.5	3.9	8	Taiwan region	
16	24	19:33:50.5	25.31	124.82	120				4.7	4.5	0.7	8	South-western Ryukyu Islands	
17	28	21:05:11.9	24.85	122.06	62	4.1	4.1	4.7	4.4	4.6	1.6	45	Taiwan	

Catalog of earthquakes all over the world
(October 2007~November 2007; $M \geq 6.0$)

No.	Origin time (UTC)		Geographic coordinates		Focal depth /km	Magnitudes					SD	No. sta. used	Region
	d	h:min:s	$\varphi / ^\circ$	$\lambda / ^\circ$		M_S	M_{S7}	m_b	M_{SZ}	m_b			
October 2007													
1	2	03:43:32.0	4.96S	101.13E	30	6.2	6.0	5.6	5.9	5.7	1.2	80	South-west of Sumatera
2	2	18:00:05.8	54.70N	162.32W	28	6.5	6.3	6.0	6.2	6.2	0.8	84	Alaska Peninsula
3	2	18:03:51.7	54.64N	162.10W	29	6.2	6.1	5.5		5.6	0.8	47	Alaska Peninsula
4	4	12:40:26.1	2.15N	92.76E	35	6.4	6.1	5.6	6.1	5.7	1.1	79	Off west coast of Northern Sumatera
5	6	12:38:50.0	18.95N	146.99E	16	5.8	5.6	6.1	5.9	6.0	1.1	82	Marianas
6	10	00:19:15.2	2.10S	99.45E	48	6.2	6.1	5.3	5.9	5.6	1.5	79	South-west of Sumatera
7	15	12:29:33.7	44.67S	167.88E	19	6.7	6.5	5.7	6.8	6.0	1.4	78	South Island, New Zealand
8	15	21:28:24.1	44.80S	167.51E	24	5.8	5.5	5.6	6.0	5.6	1.4	67	South Island, New Zealand
9	23	19:56:45.7	2.23S	99.84E	37	6.0	5.9	5.5	5.8	5.7	1.5	85	Southern Sumatera
10	24	21:02:42.4	4.61S	100.94E	20	7.1	6.9	5.9	6.9	6.1	1.1	86	South-west of Sumatera
11	31	13:44:16.0	51.53N	177.97W	30	5.9	5.7	6.0	5.7	5.8	1.1	82	Andreanof Islands
November 2007													
12	2	22:31:43.8	55.50S	129.00W	20	5.9	5.8		6.0	5.5	2.4	44	South Pacific Cordillera
13	10	01:13:31.0	51.95S	160.96E	9	6.3	6.0	5.6	6.4	5.4	2.4	27	Macquarie Island region
14	10	23:19:41.5	3.44S	100.43E	23	6.0	5.9	5.8	5.7	5.6	1.3	82	South-west of Sumatera
15	14	15:40:52.3	22.03S	70.20W	60	7.9	7.9		7.4	6.7	2.5	83	Near coast of Northern Chile
16	14	17:44:03.0	23.08S	71.21W	32	6.1	5.9			5.7	1.9	55	Off coast of Northern Chile
17	15	15:03:08.8	22.07S	70.98W	27	6.7	6.6			5.8	2.2	69	Off coast of Northern Chile
18	15	15:05:57.6	23.61S	70.82W	26	7.0	7.0		6.6	6.1	2.4	56	Off coast of Northern Chile
19	15	15:15:49.5	22.80S	70.20W	29	6.5	6.2			5.6	2.6	32	Near coast of Northern Chile
20	19	00:52:11.1	20.59S	178.26W	548			6.0		6.2	1.2	77	Fiji region
21	20	17:55:54.7	22.22S	70.54W	33	6.1	6.0		5.7	5.6	2.3	63	Off coast of Northern Chile
22	22	08:48:23.3	6.32S	147.51E	73	6.3	6.3	5.5		6.0	0.9	82	Eastern New Guinea region
23	22	23:02:07.5	4.54N	94.97E	35	5.6	5.6	6.1	5.6	5.9	1.3	86	Off west coast of Northern Sumatera
24	25	02:51:48.9	3.19S	100.97E	25	5.8	5.7	6.0	5.6	5.9	1.2	81	Southern Sumatera
25	25	16:02:17.6	8.30S	118.30E	35	6.5	6.4	6.0	6.3	6.2	1.9	80	Sumbawa region
26	25	19:53:07.9	8.20S	118.50E	35	6.4	6.2	5.9	6.2	6.2	1.8	82	Sumbawa region
27	27	10:13:47.4	1.55S	13.16W	9	5.6	5.2	6.1	5.2	5.7	1.9	27	North of Ascension Island
28	27	11:49:58.0	10.90S	162.10E	16	6.6	6.5	5.3	6.7	5.9	2.0	76	Solomon Islands
29	29	03:26:22.6	36.80S	97.40W	10	6.1	6.1		5.6	5.6	3.3	37	Southern Pacific Ocean