Strong earthquake activity all over the world and strong-moderate earthquake activity within and near China (December 2007~January 2008)

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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
(December 2007~January 2008; $M \geq 4.7$)

December 2007-January 2008, M2.7)

No.	Origin time (UTC)		Geographic coordinates		Focal depth /km	Magnitudes						SD	No. sta. used	Region
	d	h:min:s	$\varphi_N/^{\circ}$	$\lambda_E/^{\circ}$		China			NEIS					
						M_S	M_{S7}	M_L	m_b	M_{SZ}	m_b			
December 2007														
1	4	12:31:18.0	22.05	111.49	22	4.1	4.0	4.6	4.8		2.5	16	Eastern China	
2	5	01:41:42.5	23.24	121.15	10	4.8	4.7	4.8	4.8	5.0	1.6	72	Taiwan	
3	5	04:33:37.2	25.76	124.33	204				5.2	5.1	1.1	77	North-east of Taiwan	
4	8	16:51:58.2	24.00	121.90	10			3.6	4.7	4.5	1.6	6	Taiwan	
5	11	15:56:37.7	35.12	77.41	19	4.7	4.5	4.9	4.8	5.2	1.3	66	Eastern Kashmir	
6	16	08:23:36.2	41.44	131.42	576				5.0	4.5	0.9	22	Sea of Japan	
7	17	07:30:47.5	39.81	75.08	50	4.3	3.9	4.4	4.7	4.6	1.7	41	Southern Xinjiang	
8	30	09:55:32.7	36.50	84.59	42	4.9	4.5	5.0	4.6	4.5	1.8	52	Southern Xinjiang	
January 2008														
9	9	08:26:44.0	32.39	85.27	10	6.8	6.6		5.9	6.4	6.3	1.3	84	Tibet
10	9	09:32:40.3	32.23	84.90	8	4.7	4.6		4.3	4.2	2.1	28	Tibet	
11	14	03:21:43.2	32.54	85.26	22	4.7	4.5		4.5	4.9	1.6	50	Tibet	
12	16	11:54:43.4	32.44	85.18	10	6.2	6.1		5.4	5.8	6.0	1.5	80	Tibet
13	17	06:25:42.9	43.62	84.31	13	4.4	4.1	4.9	4.5	4.1	4.8	1.9	54	Northern Xinjiang
14	17	07:09:56.1	32.34	85.15	16	4.7	4.5		4.6	4.9	1.9	48	Tibet	
15	18	19:18:50.1	38.18	73.22	47	4.4	4.1	4.7	4.8	4.7	1.3	45	Tadzhikistan	
16	22	18:43:32.4	32.49	85.29	13	5.6	5.4		5.1	5.2	5.6	1.2	80	Tibet
17	31	21:06:47.1	28.41	105.01	30	4.6	4.3	4.7	4.5	4.8	1.9	71	Yunnan	

Catalog of earthquakes all over the world
(December 2007~January 2008; $M \geq 6.0$)

December 2007-January 2008, $M \geq 3.0$

No.	Origin time		Geographic		Focal depth	Magnitudes					SD	No. sta. used	Region
	(UTC)		coordinates			China		NEIS					
	d	h:min:s	$\varphi/^{\circ}$	$\lambda/^{\circ}$		M_S	M_{S7}	m_b	M_{SZ}	m_b			
December 2007													
1	9	07:28:20.8	26.00S	177.50W	152			6.6		7.0	2.2	74	South of Fiji
2	13	07:23:45.6	23.14S	70.74W	58	6.2	6.2		5.9	5.4	2.4	62	Off coast of Northern Chile
3	13	15:51:27.0	15.19S	172.42W	17	5.7	5.5	5.7	6.0	6.0	1.0	77	Samoa region
4	16	08:09:17.9	23.00S	70.20W	45	6.8	6.8		6.4	6.2	1.9	75	Near coast of Northern Chile
5	19	09:30:24.6	51.34N	179.52W	29	6.8	6.7	6.2	7.1	6.4	1.0	85	Andreanof Islands
6	19	09:44:19.0	51.10N	179.30W	47	6.0	5.5	5.4		5.4	1.3	52	Andreanof Islands
7	20	07:55:13.3	38.74S	178.64E	22	6.6	6.4	5.8	6.5	6.3	1.3	66	Off east coast of North Islands, N.Z.
8	21	07:23:33.6	51.53N	179.11W	25	6.0	5.8	5.6		5.7	1.1	73	Andreanof Islands
9	21	07:24:32.5	51.17N	179.22W	26	6.1	5.9	6.1		6.1	1.3	69	Andreanof Islands
10	22	07:11:07.3	2.48S	139.29E	37	6.0	5.9	5.6	6.1	6.0	0.9	85	West Irian
11	22	12:26:15.1	1.90N	96.82E	33	6.2	6.0	5.4	5.9	5.6	1.0	84	Off west coast of Northern Sumatera
12	26	22:04:55.6	52.82N	168.79W	34	6.5	6.4	5.8	6.2	6.0	0.9	84	Fox Islands
13	29	22:58:05.4	52.70N	168.78W	36	6.0	5.8	5.6	5.6	5.7	1.0	84	Fox Islands
January 2008													
14	1	18:54:56.0	6.31S	147.39E	54	5.8	5.7	6.0	6.1	6.0	0.8	85	Eastern New Guinea region
15	4	07:29:14.6	3.11S	100.89E	41	6.0	5.9	5.7	5.9	5.9	1.1	81	Southern Sumatera
16	5	11:01:02.3	51.30N	130.80W	10	7.0	6.7	5.5	6.5	6.0	1.5	78	Vancouver Islands region
17	5	11:44:44.6	51.20N	130.50W	10	6.7	6.4	5.6	6.5	6.0	1.6	68	Vancouver Islands region
18	6	05:14:11.5	37.16N	22.25E	54	5.7	5.5	6.2		6.1	0.6	80	Southern Greece
19	9	08:26:44.0	32.39N	85.27E	10	6.8	6.6	5.9	6.4	6.3	1.3	84	Tibet
20	9	14:40:01.2	52.06N	132.13W	10	6.2	6.0	5.0	5.9	5.5	1.3	74	Queen Charlotte Islands region
21	10	01:37:16.5	43.80N	127.30W	10	6.4	6.0	5.3	5.9	5.6	1.8	77	Off coast of Oregon
22	16	11:54:43.4	32.44N	85.18E	10	6.2	6.1	5.4	5.8	6.0	1.5	80	Tibet
23	20	20:26:02.2	2.18N	126.82E	43	5.6	5.5	6.0	5.5	6.0	1.0	85	Molucca Passage
24	22	07:55:48.8	15.30S	175.30W	6	6.1	5.8	5.1	6.0	5.6	2.7	59	Tonga
25	22	10:49:21.6	14.41S	174.65W	10	6.1	5.9	5.1	6.0	5.7	2.0	61	Samoa region
26	22	17:14:47.7	0.66N	97.40E	10	6.5	6.4	5.6		5.4	0.9	66	Off west coast of Northern Sumatera
27	22	17:14:56.9	1.00N	97.40E	20	6.6	6.5	5.7		5.9	2.0	33	Off west coast of Northern Sumatera