B MELLÉKLET

A VILÁG JELENTŐS FÖLDRENGÉSEI

2008

Forrás:

U.S. Geological Survey National Earthquake Information Center (USGS - NEIC)

APPENDIX B

SIGNIFICANT EARTHQUAKES OF THE WORLD

2008

Source:

U.S. Geological Survey National Earthquake Information Center (USGS - NEIC)

Halálos áldozatot követelő földrengések a világon 2008-ban

Deaths from Earthquakes in 2008

Dátum Date	Ország, terület Region	Magnitúdó Magnitude	Áldozatok száma Number killed
2008 01 09	Northern Algeria	4.6	1
2008 01 22	Nias region, Indonesia	6.2	1
2008 02 03	Dem. Rep. of the Congo	5.9	44
2008 02 06	West Bengal, India	4.3	1
2008 02 14	Rwanda	5.3	1
2008 02 20	Simeulue, Indonesia	7.4	3
2008 05 12	Eastern Sichuan, China	7.9	87.587
2008 05 24	Colombia	5.9	6
2008 05 25	Sichuan-Gansu region, China	6.1	8
2008 06 06	Northern Algeria	5.5	1
2008 06 08	Greece	6.4	2
2008 06 13	Eastern Honshu, Japan	6.9	13
2008 06 17	Sichuan-Gansu region, China	4.8	2
2008 07 08	Southern Peru	6.2	1
2008 07 15	Dodecanese Islands, Greece	6.4	1
2008 07 23	Eastern Honshu, Japan	6.8	1
2008 07 24	Sichuan-Gansu region, China	5.7	1
2008 08 05	Sichuan-Gansu region, China	6.0	4
2008 08 21	Myanmar-China border region	6.0	5
2008 08 30	Sichuan-Yunnan region, China	5.9	43
2008 08 31	Sichuan-Yunnan region, China	5.5	2
2008 09 09	Southern Sumatra, Indonesia	5.4	2
2008 09 10	Southern Iran	6.1	7
2008 09 16	Maharashtra, India	5.0	1
2008 10 05	Kyrgyzstan	6.6	74
2008 10 06	Eastern Xizang	6.3	10
2008 10 11	Caucasus region, Russia	5.8	13
2008 10 28	Pakistan	6.4	166
2008 11 16	Minahasa, Indonesia	7.3	6
2008 11 22	Czech Republic	4.1	2
2008 12 09	Sichuan-Gansu region, China	5.5	2
	Összesen / Total		88.011

A 7.0 vagy annál nagyobb magnitúdójú földrengések a világon 2008-ban Earthquakes of magnitude 7.0 and greater in 2008

	Év Year	Hónap Month	Nap Da <i>y</i>	Idő Time (UTC)	Szélesség Latitude	Hosszúság Longitude	Mélység Depth (km)	Magnitúdó Magnitude	Ország, terület Region
1.	2008	02	20	08:08:30.5	2.768	95.964	26	7.4	Simeulue, Indonesia
2.	2008	02	25	08:36:33.0	-2.486	99.972	25	7.2	Kepulauan region, Indonesia
3.	2008	03	20	22:32:57.9	35.490	81.467	10	7.2	Xinjiang-Xizang border region
4.	2008	04	09	12:46:12.7	-20.071	168.892	33	7.3	Loyalty Islands
5.	2008	04	12	00:30:12.6	-55.664	158.453	16	7.1	Macquarie Island
6.	2008	05	12	06:28:01.5	31.002	103.322	19	7.9	Eastern Sichuan, China
7.	2008	06	30	06:17:43.0	-58.227	-22.099	8	7.0	South Sandwich Islands region
8.	2008	07	05	02:12:04.4	53.882	152.886	633	7.7	Sea of Okhotsk
9.	2008	07	19	02:39:28.7	37.552	142.214	22	7.0	Off East Coast of Honshu, Japan
10.	2008	09	29	15:19:31.5	-29.756	-177.683	36	7.0	Kermadec Islands, New Zealand
11.	2008	11	16	17:02:32.7	1.271	122.091	30	7.3	Minahasa, Sulawesi, Indonesia
12.	2008	11	24	09:02:58.7	54.203	154.322	492	7.3	Sea of Okhotsk

A 6.5 vagy annál nagyobb magnitúdójú, és a jelentősebb károkat okozó földrengések a világon 2008-ban

Earthquakes of magnitude 6.5 or greater or ones that caused fatalities, injuries or substantial damage in 2008

DÁTUM	IDŐ Ó M S	KOORDINÁTA SZÉL HOSSZ	MÉLYSÉG MAG KM	ÁLLO SZÁ	
DATE C	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT LONG	DEPTH MAG	SD NO ST. US	A
JAN 01	06 32 27.9	40.288 N 72.985	E 6 G 5.6	0.9 48	9 KYRGYZSTAN. MW 5.6 (GCMT), 5.5 (GS). mb 5.8 (GS). MS 5.4 (GS). Mo 2.9*10**17 Nm (GCMT), 2.0*10**17 Nm (GS). At least 5,385 buildings damaged or destroyed (V) and about 5,300 people homeless in the Osh area. Felt at Jalal-Abad. Also felt at Kashi, China and at Almaty, Kazakhstan.
JAN 05	11 01 06.1	51.254 N 130.746	W 15 G 6.6	1.3 42	2 QUEEN CHARLOTTE ISLANDS REGION. MW 6.6 (UCMT), 6.6 (GCMT), 6.5 (GS), 6.5 (PGC). mb 6.0 (GS). MS 6.5 (GS). ME 6.9 (GS). Mo 9.8*10**18 Nm (UCMT), 9.6*10**18 Nm (GCMT), 7.5*10**18 Nm (GS), 7.4*10**18 Nm (PGC), 1.6*10**19 Nm (PPT). Es 5.5*10**14 Nm (GS). Felt (III) at Port Hardy, Sandspit and Skidegate, British Columbia. Also felt at Winter Harbour.
JAN 07	03 12 26.8	0.795 S 134.012	E 12 G 5.9	0.9 25	3 NEAR THE NORTH COAST OF PAPUA, INDONESIA. MW 5.9 (GCMT), 5.8 (GS), 5.8 (UCMT). mb 6.0 (GS). MS 5.6 (GS). ME 5.6 (GS). Mo 8.1*10**17 Nm (GCMT), 6.5*10**17 Nm (UCMT), 5.8*10**17 Nm (GS). Es 5.7*10**12 Nm (GS). Six people injured and more than 22 buildings damaged or destroyed (V) at Manokwari. Felt (III) at Nabire, Serui and Sorong.
JAN 09	22 24 03.8	35.616 N 0.570	W 10 G 4.6	1.2 28	6 NORTHERN ALGERIA. mb 4.6 (GS). ML 5.3 (ALG). One person killed and several buildings damaged (V) at Oran.
JAN 15	17 52 15.6	21.984 S 179.535	W 598 D 6.5	1.0 48	4 FIJI REGION. MW 6.5 (GS), 6.5 (UCMT), 6.5 (GCMT). mb 5.8 (GS). ME 5.7 (GS). Mo 7.3*10**18 Nm (GCMT), 6.4*10**18 Nm (GS), 6.3*10**18 Nm (UCMT). Es 7.9*10**12 Nm (GS). Felt at Lami.
JAN 22	17 14 57.9	1.011 N 97.442	E 20 G 6.2	1.1 15	7 NIAS REGION, INDONESIA. MW 6.2 (GS), 6.2 (GCMT), 6.1 (UCMT). mb 5.9 (GS). ME 6.1 (GS). Mo 2.5*10**18 Nm (GCMT), 2.4*10**18 Nm (GS), 1.6*10**18 Nm (UCMT). Es 3.6*10**13 Nm (GS). One person killed and five people injured on Nias. Several buildings damaged (V) at Gunungsitoli. Felt (IV) at Sibolga and Singkil and (II) at Padang, Sumatra.
FEB 01	07 33 40.5	36.825 N 3.473	E 10 G 4.6	1.0 17	6 NORTHERN ALGERIA. mb 4.6 (GS). Three people slightly injured at Boumerdas. Felt (III) at Algiers. Also felt at Bab Ezzouar and Birkhadem.
FEB 03	07 34 12.1	2.296 S 28.900	E 10 G 5.9	0.8 41	5 LAC KIVU REGION, DEM. REP. OF THE CONGO. MW 5.9 (GS), 5.9 (GCMT). mb 6.1 (GS). MS 5.8 (GS). ME 5.8 (GS). Mo 9.9*10**17 Nm (GCMT), 9.0*10**17 Nm (GS). Es 1.1*10**13 Nm (GS). Seven people killed, 447 injured, 1.087 houses destroyed and 2.378 buildings damaged at Bukavu. Power outages occurred in about 50 percent of the city. Thirty-seven people killed, 643 injured, 1,201 houses destroyed and 24 buildings damaged in the Cyangugu-Nyamasheke area, Rwanda. Felt (IV) at Butare and Kigali. Also felt at Bujumbura and Kirundo, Burundi; Kabanga and Rulenge, Tanzania; and Kabale, Uganda.
FEB 06	06 09 40.4	23.433 N 87.111	E 10 G 4.3	1.1 3	4 WEST BENGAL, INDIA. mb 4.3 (GS). One person killed and at least 50 injured in the Bankura area. Many buildings damaged at Andal, Durgapur and Panagarh. Felt strongly at Asansol, Bankura, Barjora, Gangajalghati, Mejia, Puruliya, Raniganj and Siuri. Also felt at Dhanbad, Govindpur, Jharia, Nirsa and Ranchi.
FEB 08	09 38 14.1	10.671 N 41.899	W 9 G 6.9	0.9 60	0 NORTHERN MID-ATLANTIC RIDGE. MW 6.9 (UCMT), 6.9 (GCMT), 6.8 (GS). mb 6.4 (GS). MS 6.9 (GS). ME 7.2 (GS). Mo 3.2*10**19 Nm (GCMT), 2.6*10**19 Nm (UCMT), 2.0*10**19 Nm (GS). Es 1.5*10**15 Nm (GS).
FEB 10	12 22 02.6	60.797 S 25.586	W 8 G 6.6	1.1 26	4 SOUTH SANDWICH ISLANDS REGION. MW 6.6 (UCMT), 6.5 (GS), 6.5 (GCMT), mb 6.4 (GS), MS 6.5 (GS), Mo 8.3*10**18 Nm (GCMT), 6.8*10**18 Nm (GS), 1.1*10**19 Nm (UCMT).

FEB 12 12 50 18.4 16.357 N 94.304 W 83 G 6.5 1.0 521 OAXACA, MEXICO. MW 6.5 (GCMT), 6.4 (GS), 6.4 (UCMT). mb 6.0 (GS). ME 6.2 (GS). MD 6.6 (UNM). Mo 6.3*10**18 Nm (GCMT), 5.9*10**18 Nm (UCMT), 5.1*10**18 Nm (GS), 4.2*10**18 Nm (PPT). Es 4.5*10**13 Nm (GS). Power outages occurred in the Tuxtla Gutierrez area. Felt (V) at Huatulco; (IV) at Jalapa. Oaxaca. San Cristobal de las Casas and Villahermosa: (III) at Huajuapan. Mexico, Puerto Escondido and Tuxtla Gutierrez. Also felt at Arriaga, Cancun, Cintalapa, Coatepec, Comitan, Cozumel, El Espinal, Etla, Mitla, Paraiso, Pochutla, Tapachula, Tehuacan, Tehuantepec, Tierra Blanca, Tuxpan, Tuxtepec, Veracruz and Xico. Felt (II) at Belize City and San Pedro, Belize. Also felt at Orange Walk and San Ignacio. Felt (II) at Guatemala. Guatemala. Also felt at Flores and Quetzaltenango. FFB 13 20 55 31.5% 31.730 N 51.200 F 14 4 5 101 CENTRAL IRAN. <THR>. mb 4.5 (GS). mbLg 4.3 (TEH). ML 4.2 (THR).

Ten people injured and 70 buildings damaged at Nasirabad.

FEB 14 02 07 46.7 2.404 S 28.918 E 10 G 5.3 0.8 274 RWANDA. MW 5.3 (GCMT). mb 5.4 (GS). MS 4.9 (GS). Mo 9.5*10**16 Nm (GCMT). One person killed, 21 injured and homes damaged at Kigali and 5 buildings severely damaged at Ibanda. Felt at Butare and Ruhengeri. Forty-four people injured at Bukavu, Congo. Also felt at Rulenge, Tanzania.

FEB 14 10 09 22.7 36.501 N 21.670 E 29 G 6.9 1.3 645 SOUTHERN GREECE. MW 6.9 (GCMT), 6.7 (UCMT), 6.6 (GS). mb 6.2 (GS). MS 6.6 (GS). ME 6.6 (GS). ML 6.7 (THE), 6.2 (ATH). Mo 8.5*10**18 Nm (GS), 2.4*10**19 Nm (GCMT), 1.5*10**19 Nm (UCMT), 1.2*10**19 Nm (PPT). Es 1.9*10**14 Nm (GS). Felt (IV) at Amarousion, Iraklion, Kalamata, Palaion Faliron, Patrai and Piraeus; (III) at Agia Paraskevi, Athens, Chania, Kallithea, Khalandrion and Krionerion; (II) at Kifisia, Nea Ionia, Paiania and Zografos. Also felt at Agios Dimitrios, Aigaleo, Aigion, Akharnai, Ayios Ioannis, Ayios Stefanos, Corinth, Ekali, Epidavros, Galatsion, Gazion, Glifadha, Itea, Kalivai,

Kapandrition, Kato Achaia, Kerkyra, Kissamos, Koroni, Kounoupidhiana, Lefkimmi, Markopoulon, Megara, Melissia, Metamorfosis, Methoni, Moskhaton, Nea Liosia, Nea Makri, Nea Smirni, Panteleimon, Peristerion, Pirgos, Psikhikon, Rafina, Skaramangas, Spata, Tripolis, Viron, Voula, Vouliagmeni and Zakynthos. Felt (III) at Cairo, Egypt. Also felt at Alexandria. Felt at Brindisi, Catania and Reggio di Calabria, Italy and in the Valletta area, Malta.

FEB 14 12 08 55.7 36.345 N 21.863 E 28 G 6.5 1.2 650 SOUTHERN GREECE. MW 6.5 (GCMT), 6.0 (UCMT). mb 5.9 (GS). MS 6.0

(GS). ME 6.1 (GS). ML 6.0 (ATH). Mo 8.1*10**18 Nm (GCMT), 1.3*10**18 Nm (UCMT). Es 3.7*10**13 Nm (GS). Felt (III) at Amarousion, Athens and Iraklion. Also felt at Agrinion, Ayios Stefanos, Ilioupoli, Kalamakion, Kalamata, Kallithea, Khalandrion, Khania, Kissamos, Metamorfosis, Nea Ionia, Patrai, Pilos, Piraeus, Sparta, Spata, Vlakhiotis, Voula and Yithion. Felt at Brindisi, Italy.

FEB 15 10 36 19.0 33.327 N 35.305 E 10 G 5.1 1.1 253 LEBANON - SYRIA REGION. MW 5.1 (GCMT). mb 5.0 (GS). ML 5.3 (GII), 5.1 (HLW), 4.6 (NIC). MD 5.0 (BHL). Mo 6.6*10**16 Nm (GCMT). Ten people injured in Lebanon. Buildings damaged (IV) and power outages occurred in the Beirut area, Lebanon. Felt at Baabda, Jounie, Nabatiye et Tahta, Tripoli and Tyre. Felt (V) at Rishon LeZiyyon; (IV) at Haifa and Netanya; (III) at Qiryat Shemona, Ramat Gan, Rehovot, Tel Aviv-Yafo and Zefat, Israel. Also felt at `Akko, Bat Yam, Beersheba, Bene Beraq, Bet She`an, Bet Shemesh, Ganne Tigwa, Hadera, Hazor, Kafr Qasim, Karmi`el, Kefar Sava, Nahariyya, Nazareth, Petah Tiqwa, Qadima, Qiryat Bialik, Qiryat Motzkin, Qiryat Ono, Qiryat Tiv`on, Ra`ananna, Tiberias, Yamma, Yogne`am `Illit and Zikhron Ya`agov, Felt (III) at Jerusalem. Felt (III) at Amman and (II) at Al Jubayhah, Jordan. Also felt at Irbid, Tila` al `Ali and Wadi as Sir. Felt (II) at Larnaca, Cyprus. Felt at Darayya and Qatana, Syria and at Jericho, West Bank.

FEB 20 08 08 30.5 2.768 N 95.964 E 26 G 7.4 1.0 607 SIMEULUE, INDONESIA. MW 7.4 (UCMT), 7.3 (GCMT). mb 6.5 (GS). MS 7.5 (GS), ME 7.1 (GS), Mo 1.6*10**20 Nm (UCMT), 1.1*10**20 Nm (GCMT), 1.1*10**20 Nm (PPT). Es 9.9*10**14 Nm (GS). Three people killed and 25 seriously injured in western Aceh Province, Sumatra. Felt (V) at Meulaboh; (IV) at Banda Aceh, Medan and Tapaktuan; (III) at Padang and Sibolga; (II) at Bukittinggi and Payakumbuh. Also felt at Duri and Lhokseumawe. Felt (III) at Gunungsitoli, Nias. Felt (III) at Butterworth, George Town, Kampong Gelugor, Kampung Sungai Ara, Kuala Lumpur, Petaling Jaya and Tanjong Tokong and (II) at Perai, Malaysia. Also felt at Alor Setar, Ayer Itam, Johor Bahru, Juru, Kajang-Sungai Chua,

Kampong Baharu Balakong, Kampung Tanjung Bongor, Kampung Tanjung Karang, Klang, Kuah, Kulim, Nibung Tebal and Shah Alam, Felt (III) in Singapore. Also felt at Kathu, Thailand.

FEB 21 14 16 02.7% 41.153 N 114.867 W 7 6.0 518 NEVADA. <REN>. MW 6.0 (UCMT), 6.0 (GCMT), 5.8 (GS), 5.9 (BRK), 5.9 (SLM). mb 5.7 (GS). MS 5.8 (GS). ME 5.7 (GS). Mo 6.8*10**17 Nm (GS), 1.4*10**18 Nm (GCMT), 1.3*10**18 Nm (UCMT), 8.3*10**17 Nm (SLM), 1.0*10**18 Nm (BRK). Es 8.9*10**12 Nm (GS). Three people injured, more than 20 buildings heavily damaged, almost 700 buildings slightly damaged and a water main broken at Wells. Felt (VI) at Wells, with maximum intensity VIII in the Historic District. Felt (V) at Jackpot; (IV) at Battle Mountain, Carlin, Elko, Mountain City and Spring Creek; (III) at Ely, Eureka, Golconda, Lovelock and Winnemucca. Also felt at Las Vegas and Reno. Felt (V) at Grand View and Rogerson; (IV) at Castleford, Filer, Hansen, Heyburn, Malad City, Malta, Paul, Rupert. Twin Falls and Wendell: (III) at American Falls, Bellevue, Boise, Buhl, Burley, Caldwell, Declo, Dietrich, Emmett, Fairfield, Garden Valley, Glenns Ferry, Gooding, Hagerman, Hailey, Hazelton, Idaho City, Inkom, Jerome, Ketchum, Kimberly Middleton, Murtaugh, Nampa, Oakley, Pocatello and Shoshone, Idaho. Also felt (V) at Wendover: (IV) at Farmington, Garland and Snowville: (III) at American Fork, Brigham City, Clearfield. Corinne, Draper, Dugway, Grantsville, Hill AFB, Honeyville, Hooper, Hyde Park, Hyrum, Layton, Lehi, Logan, Ogden, Plymouth, Provo, Richmond, Roy, Sandy, Salt Lake City, Stockton, Syracuse, Tooele, Tremonton, Vernon and West Jordan, Utah. The earthquake was felt in most of Idaho and Nevada, in southeastern Oregon and northwestern Utah, in parts of California and Wyoming, and at Spokane, Washington. Isolated felt reports were received from as far away as Phoenix and Tucson, Arizona; Oakland and Pasadena, California: Brighton, Colorado: Absarokee and Livingston. Montana; Corvallis and Portland, Oregon; and Albuquerque, New Mexico.

FEB 23 15 57 20.4 57.335 S 23.433 W 14 G 6.8 1.1 338 SOUTH SANDWICH ISLANDS REGION. MW 6.8 (GCMT), 6.7 (UCMT). mb 6.2

(GS). MS 6.7 (GS). ME 6.9 (GS). Mo 1.7*10**19 Nm (GCMT) 1.6*10**19 Nm (UCMT), 2.9*10**19 Nm (PPT). Es 5.7*10**14 Nm (GS).

FEB 24 14 46 21.4 2.405 S 99.931 E 22 G 6.5 1.0 429 KEPULAUAN MENTAWAI REGION, INDONESIA. MW 6.5 (GCMT), 6.2 (GS) 6.2 (UCMT). mb 6.0 (GS). MS 6.4 (GS). ME 6.0 (GS). Mo 6.9*10**18 Nm (GCMT), 2.8*10**18 Nm (GS), 2.6*10**18 Nm (UCMT). Es 2.0*10**13 Nm (GS). Felt (III) at Padang and (II) at Bengkulu, Sumatra. Also felt (II) in Singapore.

FEB 25 08 36 33.0 2.486 S 99.972 E 25 G 7.2 1.2 505 KEPULAUAN MENTAWAI REGION, INDONESIA. MW 7.2 (GCMT), 7.0 (UCMT),

6.9 (GS). mb 6.4 (GS). MS 7.3 (GS). ME 7.1 (GS). Mo 7.8*10**19 Nm (GCMT), 3.9*10**19 Nm (UCMT), 2.5*10**19 Nm (GS), 2.5*10**19Nm (PPT). Es 8.5*10**14 Nm (GS). Felt (III) at Pekanbaru, Sumatra. Also felt at Curup, Duri and Padang. Felt (III) at Johor Bahru, Malaysia. Also felt at George Town, Kuala Lumpur and Petaling Jaya. Felt (III) in Singapore.

FEB 25 18 06 03.9 2.332 S 99.891 E 25 G 6.6 1.0 421 KEPULAUAN MENTAWAI REGION, INDONESIA. MW 6.6 (GCMT), 6.3 (GS), 6.3 (UCMT). mb 6.0 (GS). MS 6.4 (GS). ME 6.4 (GS). Mo 4.0*10**18 Nm (UCMT), 3.2*10**18 Nm (GS), 1.0*10**19 Nm (GCMT). Es 8.9*10**13 Nm (GS). Felt (V) on Pulau Sipura and (IV) on Siberut. Also felt (IV) at Padang and Painan; (II) at Argamakmur, Batusangkar, Bukittinggi, Kapahiang, Mukomuko, Padangpanjang and Solok, Sumatra, Felt (II) in Singapore.

FEB 25 21 02 18.4 2.245 S 99.808 E 25 G 6.7 0.9 543 KEPULAUAN MENTAWAI REGION, INDONESIA. MW 6.7 (GCMT), 6.6 (UCMT), 6.5 (GS). mb 6.2 (GS). MS 6.6 (GS). ME 6.7 (GS). Mo 6.5*10**18 Nm (GS), 1.5*10**19 Nm (GCMT), 1.0*10**19 Nm (UCMT). Es 2.6*10**14 Nm (GS). Several homes damaged at Sikakap. Felt (V) on Mentawai and at Painan; (IV) at Padang; (III) at Pari; (II) at Bukittingi, Kapahiang, Padangpanjang and Payakumbuh, Sumatra. Felt (III) in Singapore.

4.8 FEB 27 00 56 47.8& 53.403 N 0.332 W 18

361 ENGLAND, UNITED KINGDOM. <BGS>. mb 4.8 (GS). ML 5.3 (GRF), 5.3 (STR), 5.2 (BGS). One person injured and buildings damaged in Lincolnshire and South Yorkshire. Felt (V) at Barnsley, Bedworth, Beeston and Stapleford, Bentley, Beverley, Bicester, Boston, Brigg, Brighouse, Chesterfield, Chorley, Doncaster, Droitwich, East Retford, Eaton Socon, Failsworth, Grantham, Grimsby, Heywood, Hinckley, Ilkeston, Kingston upon Hull, Leicester, Lincoln, Long Eaton, Loughborough, Mablethorpe and Sutton, Mansfield, Matlock, Melton Mowbray, Mold, Morley, Newark, Rotherham, Scunthorpe, Sheffield, Skegness, Sleaford,

Spalding-Pinchbeck, Stamford, Whitefield and Worksop. Felt
widely in the United Kingdom, north to Arbroath, southwest to
Falmouth-Penryn and east to Great Yarmouth. Also felt at
Douglas, Isle of Man; Antwerp, Brussels and Gent, Belgium;
Aniche, France; Letterkenny, Ireland and Haarlem, The
Netherlands.

MAR 03 09 31 02.5 46.406 N 153.175 E 10 G 6.5 1.1 556 KURIL ISLANDS. MW 6.5 (UCMT), 6.5 (GCMT), 6.3 (GS). mb 6.2 (GS). MS 6.5 (GS). ME 6.4 (GS). MO 6.5*10**18 Nm (GCMT), 6.4*10**18 Nm (UCMT), 3.5*10**18 Nm (GS), 1.0*10**19 Nm (PPT). Es 1.0*10**14 Nm (GS).

MAR 03 14 11 14.6 13.351 N 125.630 E 24 G 6.9 0.9 544 PHILIPPINE ISLANDS REGION. MW 6.9 (UCMT), 6.9 (GCMT), 6.8 (GS). mb 6.4 (GS). ME 6.8 (GS). Mo 2.6*10**19 Nm (UCMT), 2.6*10**19 Nm (GCMT), 1.8*10**19 Nm (GS), 1.1*10**19 Nm (PPT). Es 3.4*10**14 Nm (GS). Felt (V PIVS) at San Andres and Virac, Catanduanes. Felt (V PIVS) at Catarman and (III PIVS) at Borongan and Can-Avid, Samar. Felt (V PIVS) at Baao, Iriga and Naga; (IV PIVS) at Daet, Legaspi and Sorsogon; (II PIVS) at Baguio and Guinayangan; (I PIVS) at Manila and Taguig, Luzon. Felt (III PIVS) at Palo and Tacloban, Leyte. Felt (III PIVS) at Iloilo and Roxas City, Panay. Felt (II PIVS) at Cebu and at Masbate,

Masbate. Felt at Solano, Luzon.

MAR 20 22 32 57.9 35.490 N 81.467 E 10 G 7.2 1.0 532 XINJIANG-XIZANG BORDER REGION. MW 7.2 (UCMT), 7.1 (GCMT). mb 6.3 (GS). MS 7.3 (GS). ME 6.7 (GS). Mo 8.3*10**19 Nm (UCMT), 5.4*10**19 Nm (GCMT), 1.4*10**20 Nm (PPT). Es 2.6*10**14 Nm (GS). Four houses collapsed at Pulu and about 2.200 houses destroyed or damaged in Lop. Qira and Yutian. A total of 46.594 people were displaced in Xinjiang. Felt at Aqqan and Bostan.

MAR 29 12 51 24.7 12.178 S 77.164 W 51 D 5.3 0.9 283 NEAR THE COAST OF CENTRAL PERU. MW 5.3 (GS), 5.3 (GCMT). mb 5.4 (GS). Mo 9.7*10**16 Nm (GS), 1.1*10**17 Nm (GCMT). Five houses collapsed in Lima and a rockslide caused an injury and vehicle damage along the coastal highway. Felt (V) at Lima: (IV) at Ancon, Callao, Chillca, Chosica, Huaral and Pachacamac; (III) at Calango, Huacho, Ica and San Vicente de Canete: (II) at Chincha Alta. Also felt at Chaclacayo.

APR 09 12 46 12.7 20.071 S 168.892 E 33 G 7.3 1.3 486 LOYALTY ISLANDS. MW 7.3 (UCMT), 7.3 (GCMT), 7.2 (GS). mb 6.3 (GS). MS 7.3 (GS). ME 6.9 (GS). MO 9.9*10**19 Nm (UCMT), 7.6*10**19 Nm (GS), 1.1*10**20 Nm (GCMT), 1.3*10**20 Nm (PPT). Es 5.2*10**14 Nm (GS).

APR 12 00 30 12.6 55.664 S 158.453 E 16 G 7.1 1.0 541 MACQUARIE ISLAND REGION. MW 7.1 (UCMT), 7.1 (GCMT), 6.8 (GS). mb 6.8 (GS). MS 7.1 (GS). ME 6.9 (GS). Mo 6.3*10**19 Nm (UCMT), 5.5*10**19 Nm (GCMT), 1.9*10**19 Nm (GS), 9.7*10**19 Nm (PPT). Es 4.4*10**14 Nm (GS).

APR 16 05 54 19.6 51.878 N 179.165 W 13 G 6.6 0.9 676 ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA. MW 6.6 (UCMT), 6.6 (GCMT), 6.5 (GS). mb 6.1 (GS). MS 6.5 (GS). ME 7.2 (GS). Mo 9.8*10**18 Nm (GCMT), 8.5*10**18 Nm (UCMT), 7.1*10**18 Nm (GS), 1.0*10**19 Nm (PPT). Es 1.5*10**15 Nm (GS). Felt on Adak.

APR 24 12 14 49.9 1.182 S 23.471 W 10 G 6.5 0.9 328 CENTRAL MID-ATLANTIC RIDGE. MW 6.5 (UCMT), 6.5 (GCMT), 6.3 (GS). mb 5.4 (GS). MS 6.0 (GS). Mo 6.3*10**18 Nm (GCMT), 6.1*10**18 Nm (UCMT), 3.7*10**18 Nm (GS).

MAY 01 00 15 27.4% 33.860 N 48.590 E 16 4.5 122 WESTERN IRAN. <TEH>. mb 4.5 (GS). mbLg 4.7 (TEH). ML 4.7 (THR). More than 100 people injured in Lorestan, including at least 70 people injured at Boroujerd.

MAY 02 01 33 37.2 51.864 N 177.528 W 14 G 6.6 1.2 661 ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA. MW 6.6 (UCMT), 6.6 (GCMT), 6.5 (GS). mb 6.3 (GS). MS 6.8 (GS). ME 7.1 (GS). Mo 9.7*10**18 Nm (GCMT), 7.7*10**18 Nm (GS), 1.1*10**19 Nm (UCMT), 1.1*10**19 Nm (PPT). Es 1.0*10**15 Nm (GS). Felt on Adak.

MAY 07 16 45 18.7 36.164 N 141.526 E 27 G 6.9 0.8 519 NEAR THE EAST COAST OF HONSHU, JAPAN. MW 6.9 (GCMT), 6.8 (UCMT), 6.7 (GS), 6.8 (NIED). mb 6.1 (GS). MS 6.7 (GS). ME 6.6 (GS). Mo 2.4*10**19 Nm (GCMT), 2.2*10**19 Nm (UCMT), 1.2*10**19 Nm (GS), 2.3*10**19 Nm (PPT), 2.0*10**19 Nm (NIED). Es 1.7*10**14 Nm (GS). Six people slightly injured in Chiba, Ibaraki, Saitama and Tokyo. Power outages occurred at Tsukuba. Felt (V) at Tsukuba; (IV) at Tokyo and Zushi; (III) at Atsugi, Ayase-shi, Misawa, Narita, Yokohama and Yokosuka. Felt throughout northern and east-central Honshu. Recorded (5L JMA) in Ibaraki and Tochigi; (4 JMA) in Chiba, Fukushima, Miyagi and Saitama; (2 JMA) throughout northern Honshu

MAY 09 21 51 29.7 12.516 N 143.181 E 76 G 6.8 1.0 330 GUAM REGION. MW 6.8 (GCMT), 6.7 (UCMT), 6.6 (GS). mb 6.1 (GS). ME 6.8 (GS). Mo 1.7*10**19 Nm (GCMT). 1.6*10**19 Nm (UCMT). 1.1*10**19 Nm (GS). 1.1*10**19 Nm (PPT). Fs 3.0*10**14 Nm (GS). Felt (IV) at Barrigada, Hagatna, Santa Rita, Tamuning and Yigo. Felt at Agat. Felt (II) on Saipan and also felt on Tinian, Northern Mariana Islands. MAY 12 06 28 01.5 31.002 N 103.322 E 19 G 7.9 1.2 774 EASTERN SICHUAN, CHINA. MW 7.9 (UCMT), 7.9 (GCMT). mb 6.9 (GS) MS 8.1 (GS). ME 7.7 (GS). Mo 9.0*10**20 Nm (GCMT), 7.6*10**20 Nm (UCMT), 1.3*10**21 Nm (PPT). Es 7.7*10**15 Nm (GS). At least 69.195 people killed, 374.177 injured and 18.392 missing and presumed dead in the Chengdu-Lixian-Guangyuan area. More than 45.5 million people in 10 provinces and regions were affected. At least 15 million people were evacuated from their homes and more than 5 million were left homeless. An estimated 5.36 million buildings collapsed and more than 21 million buildings were damaged in Sichuan and in parts of Chongging, Gansu, Hubei, Shaanxi and Yunnan. The total economic loss was estimated at 86 billion US dollars. Beichuan, Dujiangyan, Wuolong and Yingxiu were almost completely destroyed. Landslides and rockfalls damaged or destroyed several mountain roads and railways and buried buildings in the Beichuan-Wenchuan area, cutting off access to the region for several days. At least 700 people were buried by a landslide at Qingchuan. Landslides also dammed several rivers, creating 34 barrier lakes which threatened about 700,000 people downstream. A train was buried by a landslide near Longnan, Gansu. At least 2,473 dams sustained some damage and more than 53,000 km of roads and 48,000 km of tap water pipelines were damaged. About 1.5 km of surface faulting was observed near Qingchuan, surface cracks and fractures occurred on three mountains in the area, and subsidence and street cracks were observed in the city itself. Maximum intensity XI was $\frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n}$ assigned in the Wenchuan area. Felt (VIII) at Deyang and Mianyang; (VII) at Chengdu; (VI) at Luzhou and Xi'an; (V) at Chongqing, Guozhen, Lanzhou, Leshan, Wu'an, Xichang and Ya'an. Felt in much of central, eastern and southern China, including Beijing, Guangzhou, Hefei, Nanjing, Shanghai, Tianjin, Wuhan and in Hong Kong. Also felt in parts of Bangladesh, Taiwan. Thailand and Vietnam. Seiches were observed at Kotalipara, Bangladesh. MAY 23 19 35 34.7 7.313 N 34.897 W 8 G 6.5 0.9 556 CENTRAL MID-ATLANTIC RIDGE. MW 6.5 (UCMT), 6.5 (GCMT), 6.4 (GS). mb 6.0 (GS). MS 6.4 (GS). ME 7.0 (GS). Mo 6.6*10**18 Nm (UCMT), 6.4*10**18 Nm (GCMT), 4.5*10**18 Nm (GS). Es 6.7*10**14 Nm (GS). 5.9 1.0 466 COLOMBIA. MW 5.9 (UCMT), 5.9 (GCMT). mb 5.6 (GS). MS 5.6 (GS). ML 5.7 (RSNC). Mo 8.3*10**17 Nm (UCMT), 8.0*10**17 Nm (GCMT). At 9 MAY 24 19 20 42.4 4.330 N 73.764 W least 6 people killed by a landslide in Meta. Several buildings damaged at Quetame. Felt (V) at Bogota, (IV) at Chia and (III) at Medellin. Felt widely in Colombia. MAY 25 08 21 49.9 32.560 N 105.423 E 18 G 6.1 0.7 397 SICHUAN-GANSU BORDER REGION, CHINA. MW 6.1 (GCMT), 6.0 (GS), 6.0 (UCMT). mb 5.8 (GS). MS 6.0 (GS). Mo 1.6*10**18 Nm (GCMT), 1.1*10**18 Nm (GS), 1.1*10**18 Nm (UCMT). Eight people killed, 927 injured, at least 400,000 homes destroyed and a road blocked by a mudslide in Sichuan. Felt (IV) at Chengdu, Lanzhou and Xi'an; (III) at Chongqing. Also felt at Baoji, Dawan, Jiexiu, Xianyang, Yanan and Zigong. MAY 27 08 37 51.5 32.710 N 105.540 E 10 G 5.7 0.8 366 SICHUAN-GANSU BORDER REGION, CHINA. MW 5.7 (UCMT), 5.5 (GCMT). mb 5.5 (GS). MS 5.2 (GS). Mo 4.3*10**17 Nm (UCMT), 2.1*10**17 Nm (GCMT). About 20,000 additional houses destroyed in Shaanxi and Sichuan. Felt (III) at Chengdu and Xi'an. Also felt at Baoji, Chongqing, Hanzhong, Lanzhou, Pingliang and Xianyang. MAY 29 15 46 00.3 64.005 N 21.013 W 9 G 6.3 1.0 591 ICELAND. MW 6.3 (GCMT), 6.2 (GS), 6.2 (UCMT). mb 5.9 (GS). MS 6.2 (GS). ME 6.7 (GS). ML 6.1 (REY). Mo 3.4*10**18 Nm (GCMT), 2.7*10**18 Nm (UCMT), 2.3*10**18 Nm (GS). Es 2.2*10**14 Nm (GS). About 30 people injured at Selfoss. Some sheep were killed, buildings damaged and utilities cut off in the Hveragerdhi-Selfoss area. The road between Reykjavik and Selfoss was damaged and rockslides occurred in Vestmannaeyjum. A steaming fissure opened in an existing area of geothermal springs. Felt (VIII) at Hveragerdhi and Selfoss; (V) at Keflavik; (IV) at Hafnarfjordhur, Kopavogur and Reykjavik. Felt at Akranes, Akureyri, Alftanes, Borgarnes, Eyrarbakki, Hvammstangi, Isafjordhur, Laugaras, Reykholar, Reykholt, Saudharkrokur and in Mosfellsbaer. Also felt on Seltjarnarnes and Vestmannaeyjar. JUN 01 14 31 03.0 59.384 S 149.660 E 10 G 6.5 1.2 157 WEST OF MACQUARIE ISLAND. MW 6.5 (GS), 6.5 (UCMT), 6.5 (GCMT). mb

			5.8 (GS). MS 6.3 (GS). Mo 7.7*10**18 Nm (UCMT), 6.9*10**18 Nm (GCMT), 6.5*10**18 Nm (GS), 3.6*10**18 Nm (PPT).
JUN 06 20 02 56.8 35.883 N	0.658 W 4 G	5.5 1.1 476	NORTHERN ALGERIA. MW 5.5 (GS), 5.5 (UCMT), 5.5 (GCMT). mb 5.5 (GS). MS 5.3 (GS). ML 5.5 (ALG). Mo 2.5*10**17 Nm (UCMT), 2.2*10**17 Nm (GS), 2.2*10**17 Nm (GCMT). One person killed by a rockfall and more than 30 people injured in the Oran area. Several homes were destroyed at Gambetta. Felt (VI) at Mostaganem and Oran. Felt at Hassi Mameche and Sidi Bel Abbes. Also felt at Huercal-Overa, Lumbreras, Mazarron and Torrevieja, Spain.
JUN 06 21 16 33.8 24.702 N	84.964 E 11 *	3.8 0.8 27	BIHAR-JHARKHAND BORDER REGION, INDIA. mb 3.8 (GS). At least 2 people injured, minor damage and power outages occurred in the Manpur area. Felt at Atri, Gaya, Gararu, Paraiya and Tankuppa.
JUN 08 12 25 29.7 37.963 N	21.525 E 16 G	6.4 1.5 706	SOUTHERN GREECE. MW 6.4 (GCMT), 6.3 (UCMT), 6.2 (GS). mb 6.2 (GS). MS 6.3 (GS). ME 7.0 (GS). ML 6.5 (ATH). Mo 4.6*10**18 Nm (GCMT), 3.1*10**18 Nm (UCMT), 2.5*10**18 Nm (GS). Es 6.3*10**14 Nm (GS). Two people killed, at least 240 injured and at least 1.156 buildings damaged or destroyed in Achaia and Ileia. Felt (VIII) at Kato Achaia: (VII) at Patrai and Rion: (VI) at Agrinion: (V) at Corinth. Tripolis and Zakynthos: (IV) at Agia Paraskevi, Aigina, Argostolion, Athens, Ioannina, Kallithea, Karditsa, Kifisia, Nydri, Preveza, Trikala and Volos: (III) at Amarousion, Galatsion, Glifadha, Kalamakion, Khalandrion, Larisa, Nea Erithraia, Nea Ionia, Nea Smirni, Nikaia, Palaion Faliron and Piraeus: (II) at Aigaleo, Chani, Korydallos and Voula. Felt in most parts of Greece. Also felt at Tirana, Albania: Barletta, Brindisi, Cosenza, Lecce, Matera, Naples and Taranto, Italy; Ohrid, Macedonia.
JUN 13 23 43 45.3& 39.030 N	140.881 E 8	6.9 654	EASTERN HONSHU, JAPAN. <jma>. MW 6.9 (GCMT), 6.8 (GS), 6.8 (UCMT), 6.9 (NIED). mb 6.5 (GS). MS 7.0 (GS). ME 6.7 (GS). Mo 2.6*10**19 Nm (GCMT), 2.3*10**19 Nm (UCMT), 1.9*10**19 Nm (GS), 7.5*10**19 Nm (PPT), 2.7*10**19 Nm (NIED). Es 2.6*10**14 Nm (GS). At least 13 people killed, 357 injured, 614 buildings damaged and landslides occurred in the Furukawa-Kurihara-Morioka area. Felt (VII) at Furukawa; (VI) at Sendai; (IV) at Misawa and Tsukuba; (III) at Tokyo. Felt as far north as Hirosaki and as far south as Yokohama. Recorded (6U JMA) in Iwate and Miyagi; (5U JMA) in Akita; (5L JMA) in Fukushima and Yamagata; (4 JMA) throughout northern Honshu. Recorded (1 JMA) as far south as Aichi. Recorded (3 JMA) in southwestern Hokkaido, (2 JMA) in the Tomakomai-Shizunai area and (1 JMA) throughout southern Hokkaido.</jma>
JUN 17 05 51 43.2 32.761 N	105.554 E 10 G	4.8 1.1 108	SICHUAN-GANSU BORDER REGION, CHINA. mb $4.8\ (GS)$. Two people killed and one injured in Shaanxi.
JUN 27 11 40 13.9 11.005 N	91.824 E 17 G	6.6 0.9 630	ANDAMAN ISLANDS, INDIA REGION. MW 6.6 (UCMT), 6.6 (GCMT), 6.4 (GS). mb 6.4 (GS). MS 6.7 (GS). ME 6.9 (GS). Mo 9.6*10**18 Nm (UCMT), 8.8*10**18 Nm (GCMT), 5.4*10**18 Nm (GS), 2.2*10**19 Nm (PPT). Es 5.3*10**14 Nm (GS). Felt (IV) at Port Blair and (II) at Chennai. Also felt at Bhubaneshwar and Tambaram.
JUN 30 06 17 43.0 58.227 S	22.099 W 8 G	7.0 1.4 309	SOUTH SANDWICH ISLANDS REGION. MW 7.0 (UCMT), 7.0 (GCMT), 6.9 (GS). mb 6.1 (GS). MS 6.7 (GS). ME 7.6 (GS). Mo 3.4*10**19 Nm (UCMT), 3.4*10**19 Nm (GCMT), 2.4*10**19 Nm (GS), 9.2*10**18 Nm (PPT). Es 4.9*10**15 Nm (GS).
JUL 01 00 17 33.2 10.368 S	75.512 W 33	5.5 0.9 362	CENTRAL PERU. MW 5.5 (GCMT). mb 5.4 (GS). MS 5.0 (GS). ML 5.3 (LIM). Mo 1.9*10**17 Nm (GCMT). Forty-five people injured in Oxapampa. About 60 houses destroyed and 25 damaged in Huancabamba. Landslides destroyed roads between Huancabamba and Pozuzo. Felt (VI) at Espiritu Pata, Huancabamba, Jatunpata, Lanturache, Tingo and Torrebamba; (III) at Chotabanda, Oxapampa, Palcazu and Pozuzo; (II) at Puerto Bermudez and Villa Rica.
JUL 05 02 12 04.4 53.882 N	152.886 E 633	7.7 0.8 777	SEA OF OKHOTSK. MW 7.7 (GS), 7.7 (UCMT), 7.7 (GCMT). mb 6.8 (GS). Mo 4.3*10**20 Nm (GS), 4.2*10**20 Nm (GCMT), 4.0*10**20 Nm (UCMT), 2.0*10**20 Nm (PPT). Felt at Klyuchi, Petropavlovsk-Kamchatskiy and Yuzhno-Sakhalinsk, Russia. Recorded (2 JMA) in eastern and northern Hokkaido, Japan. Also recorded (2 JMA) in Miyagi and (1 JMA) in Akita, Aomori, Iwate and Yamagata, Honshu.
JUL 08 09 13 07.4 15.986 S	71.748 W 123 G	6.2 0.9 467	SOUTHERN PERU. MW 6.2 (GS), 6.2 (UCMT), 6.2 (GCMT). mb 5.8 (GS). ME 6.0 (GS). Mo 2.5*10**18 Nm (GCMT), 2.2*10**18 Nm (GS), 2.2*10**18 Nm (UCMT). Es 2.2*10**13 Nm (GS). One person killed and several buildings damaged (V) at Arequipa. Felt (V) at Aplao

and Sihuas; (IV) at Chivay, Chuquibamba and Pampacolca. Felt at Ilo. Also felt (IV) at Arica and Putre: (III) at Alcerreca and Tacora: (II) at Alto Hospicio, Camina, Huara, Iguique, Pica and Pozo Almonte, Chile.

JUL 15 03 26 34.7 35.800 N 27.860 E 52 G 6.4 1.4 774 DODECANESE ISLANDS, GREECE. MW 6.4 (UCMT), 6.4 (GCMT), 6.3 (GS).

mb 6.5 (GS). ME 6.5 (GS). Mo 4.5*10**18 Nm (GCMT), 4.4*10**18 Nm (UCMT), 3.2*10**18 Nm (GS). Es 1.3*10**14 Nm (GS). One person killed on Rhodes. Felt (VII) at Trianta, (VI) at Lardos, (V) at Rodos and (III) at Iraklion and Kos. Also felt at Afantou, Antimacheia, Ayios Nikolaos, Chania, Gazion, Ierapetra, Kallithea, Karpathos, Kissamos, Kolimvarion, Masari, Neapolis, Oia, Rethymnon, Soroni, Thira and on Simi, Felt (V) at Marmaris, (IV) at Alanya and Bodrum and (III) at Fethiye, Turkey. Also felt at Antalya, Aydin, Izmir, Kusadasi, Milas, Mugla, Soke and Urla. Felt (III) at Paphos and (II) at Limassol, Cyprus. Also felt at Kyrenia, Nicosia and Polis. Felt (III) at Alexandria, Al Jizah and Cairo, Egypt. Also felt at Az Zaqaziq, Damanhur, Fa'id and Tanta. Felt at Kefar Sava and Haifa, Israel; at Beirut, Lebanon; at Ramallah, West Bank and at Damascus, Syria.

JUL 19 02 39 28.7 37.552 N 142.214 E 22 G 7.0 0.8 577 OFF THE EAST COAST OF HONSHU, JAPAN. MW 7.0 (UCMT), 6.9 (GCMT), 6.8 (GS). mb 6.2 (GS). MS 7.0 (GS). ME 6.6 (GS). Mo 3.8*10**19 Nm (UCMT), 3.1*10**19 Nm (GCMT), 2.2*10**19 Nm (GS), 2.9*10**19 Nm (PPT). Es 1.9*10**14 Nm (GS). Felt (III) at Misawa, Tokyo and Yokohama; (II) at Yamato. Felt as far west as Niigata and as far south as Mishima. A small tsunami was observed along the coast of Fukushima and Miyagi. Recorded (4 JMA) in Fukushima, Iwate, Miyagi and Tochigi; (3 JMA) in Akita, Aomori, Chiba, Gumma, Ibaraki, Kanagawa, Nagano, Niigata, Saitama, Tokyo, Yamagata and Yamanashi: (2 JMA) in Aichi and Shizuoka: (1 JMA) in Gifu. Ishikawa and Shiga. Also recorded (2 JMA) in southern Hokkaido and (1 JMA) on $\mathsf{Nii}\text{-}\mathsf{jima}$.

JUL 19 09 27 01.4 11.041 S 164.493 E 11 G 6.6 0.9 452 SANTA CRUZ ISLANDS REGION. MW 6.6 (GS), 6.6 (UCMT), 6.6 (GCMT). mb 6.1 (GS). MS 6.4 (GS). ME 6.4 (GS). Mo 8.9*10**18 Nm (GCMT), 8.8*10**18 Nm (UCMT), 8.7*10**18 Nm (GS), 2.4*10**19 Nm (PPT). Es 7.9*10**13 Nm (GS).

JUL 23 15 26 19.9 39.802 N 141.464 E 108 G 6.8 0.9 633 EASTERN HONSHU, JAPAN. MW 6.8 (GS), 6.8 (UCMT), 6.8 (GCMT). mb

6.6 (GS). ME 6.7 (GS). Mo 2.0*10**19 Nm (GS), 1.9*10**19 Nm (UCMT), 1.8*10**19 Nm (GCMT), 9.8*10**18 Nm (PPT). Es 2.8*10**14 Nm (GS). One person killed, about 200 injured, 90 buildings damaged, landslides occurred, roads closed, train service and power disrupted in northern Honshu. Felt (VII) at Misawa: (IV) in Ayase-shi and at Tsukuba; (III) at Narita, Ome, Tokyo, Yokohama and Yokosuka. Also felt (III) at Sapporo, Hokkaido. Felt widely in southwestern Hokkaido and in Honshu as far south as the Tokyo area. Recorded (6U JMA) in Iwate; (6L JMA) in Aomori; (5U JMA) in Miyagi; (4 JMA) in Akita, Fukushima, Ibaraki and Yamagata; (3 JMA) in Chiba, Gumma, Kanagawa, Niigata, Saitama, Tochigi and Tokyo; (2 JMA) in Ishikawa, Nagano, Shizuoka and Yamanashi; (1 JMA) in Aichi, Fukui and Shiga. Also recorded (4 JMA) in eastern and southern Hokkaido; (2 JMA) on Hachijo-jima, Miyake-jima and O-shima; (1 JMA) on Aogo-shima, Kozu-shima and Mikura-jima.

JUL 23 19 54 45.1 32.748 N 105.497 E 10 G 5.5 0.9 370 SICHUAN-GANSU BORDER REGION, CHINA. MW 5.5 (UCMT), 5.5 (GCMT). mb 5.7 (GS). MS 5.2 (GS). Mo 2.5*10**17 Nm (UCMT), 2.1*10**17 Nm (GCMT). Casualties and damage are included with the event on July 24 at 07:09 UTC. Felt (IV) at Baoji and Hanzhong; (III) at Xi'an. Felt at Ankang, Chengdu, Deyang, Guangyuan, Leshan, Mianyang and Nanchong.

JUL 24 07 09 30.0 32.747 N 105.542 E 10 G 5.7 1.0 395 SICHUAN-GANSU BORDER REGION, CHINA. MW 5.7 (UCMT), 5.6 (GCMT). mb

5.6 (GS). MS 5.4 (GS). Mo 5.1*10**17 Nm (UCMT), 2.8*10**17 Nm (GCMT). One person killed, 17 injured and 1,200 houses destroyed in Sichuan. Felt (IV) at Chengdu and (II) at Xi'an. Also felt at Baoji, Beidao, Chongqing, Deyang, Hanzhong, Mianyang, Nanchong, Xianyang and Yanliang.

JUL 26 18 51 50.9 24.788 N 90.536 E 18

4.8 0.7 185 BANGLADESH. mb 4.8 (GS). MS 4.1 (GS). At least 25 people injured at Dhaka. Felt (IV) at Dhaka. Felt at Maimansingh. Also felt at Agartala, India.

JUL 29 18 42 15.7% 33.953 N 117.761 W 15 5.4 392 GREATER LOS ANGELES AREA, CALIFORNIA. <PAS>. MW 5.4 (UCMT), 5.4 (GCMT), 5.3 (GS), 5.4 (PAS). mb 5.5 (GS). MS 5.5 (GS). ME 5.4 (GS). Mo 1.7*10**17 Nm (GCMT), 1.6*10**17 Nm (UCMT), 1.3*10**17 Nm (GS), 1.5*10**17 Nm (PAS). Es 2.7*10**12 Nm (GS). Three

people injured at $\ensuremath{\mathsf{Brea}}$ and five people injured in the Wilshire District of Los Angeles. Minor damage to windows and brick walls at Los Angeles and Topanga. Felt (VI) at Anaheim, Artesia, Brea, Chino, Chino Hills, Covina, Diamond Bar, Fullerton, La Puente, Los Alamitos, Montclair, Pomona, Placentia, San Dimas, Walnut, West Covina, Whittier and Yorba Linda: (V) at Alhambra, Azusa, Baldwin Park, Bell, Bellflower, Buena Park, Canoga Park, Cerritos, Claremont, Cypress, Downey, El Monte, Garden Grove, Glendora, Hacienda Heights, Hawaiian Gardens, Lakewood, La Mirada, La Palma, La Verne, Lynwood, May Wood, Mira Loma, Montrose, Mount Baldy, North Hollywood, Northridge, Norwalk, Ontario, Panorama City, Paramount, Pico Rivera, Rancho Cucamonga, Reseda, Rosemead, Rowland Heights, San Gabriel, Santa Fe Springs, Seal Beach, South El Monte, Southgate, South Pasadena, Stanton, Upland, Winnetka and Woodland Hills. Felt (IV) in much of the surrounding Los Angeles basin and in much of southern California. Felt (III) at Las Vegas and (II) at North Las Vegas and Pahrump, Nevada. Felt at Henderson, Nevada and at Bullhead City, Flagstaff, Kingman, Mesa, Phoenix and Yuma, Arizona. Also felt at Tijuana, Baja California.

AUG 01 08 32 43.0 32.036 N 104.722 E 7 G 5.7 0.7 516 SICHUAN-GANSU BORDER REGION, CHINA. MW 5.7 (GS), 5.7 (GCMT). mb 5.9 (GS). MS 5.6 (GS). Mo 4.9*10**17 Nm (GS), 4.1*10**17 Nm (GCMT). At least 231 people injured, 540 houses destroyed and 2,450 houses damaged in Beichuan and Pingwu. Several landslides and rockfalls blocked roads in Pingwu. Cellular phone service interrupted in Beichuan. Felt (V) at Mianyang; (III) at Chengdu and Chongqing; (II) at Xi'an. Also felt at Ankang, Baoji, Daxian, Deyang, Fuling, Guangyuan, Hanzhong, Jiangyou, Lanzhou, Leshan, Luzhou, Nanchong, Nanlong, Tianshui, Ya'an, Yanliang and Yibin.

AUG 05 09 49 17.2 32.756 N 105.494 E 6 G 6.0 1.0 449 SICHUAN-GANSU BORDER REGION, CHINA. MW 6.0 (GCMT), 5.9 (UCMT). mb 5.9 (GS). MS 6.0 (GS). ME 6.0 (GS). Mo 1.1*10**18 Nm (GCMT) 1.0*10**18 Nm (UCMT). Es 2.3*10**13 Nm (GS). Four people killed, 29 injured, and several buildings and roads damaged in the Qingchuan area. Felt (III) at Chengdu and Xi'an. Also felt at Beibei, Chongqing, Daxian, Guangyuan, Luoyang, Mianyang, Nanchong and Xianyang.

AUG 09 06 01 48.5* 60.648 S 153.771 E 10 G 6.5 1.6 99 WEST OF MACQUARIE ISLAND. MW 6.5 (UCMT), 6.4 (GCMT), mb 5.6 (GS). MS 5.9 (GS). Mo 6.1*10**18 Nm (UCMT), 5.1*10**18 Nm (GCMT).

AUG 21 12 24 29.5 25.044 N 97.684 E 1 G 6.0 0.9 234 MYANMAR-CHINA BORDER REGION. MW 6.0 (GS), 6.0 (UCMT), 6.0 (GCMT). mb 5.6 (GS). MS 5.9 (GS). Mo 1.3*10**18 Nm (UCMT), 1.2*10**18 Nm (GCMT), 1.1*10**18 Nm (GS). Five people killed, 127 injured and severe damage at Yingjiang, China. Felt (II) at Bangkok, Thailand.

AUG 25 13 21 58.8 30.901 N 83.520 E 12 G 6.7 1.1 325 WESTERN XIZANG. MW 6.7 (UCMT), 6.7 (GCMT), 6.6 (GS). mb 6.2 (GS).

MS 6.5 (GS). ME 6.2 (GS). Mo 8.6*10**18 Nm (GS), 1.4*10**19 Nm (GCMT), 1.2*10**19 Nm (UCMT), 2.5*10**19 Nm (PPT). Es 4.5*10**13 Nm (GS). About 700 rooms damaged (VIII) in Zhongba County. Ten km of surface faulting with sandblows along 4.2 km of the fracture zone observed in the epicentral area. Felt strongly at Bahraich and Lucknow and (III) at Delhi. India. Felt in parts of Haryana, Himachal Pradesh, Uttar Pradesh and Uttarakhand. Also felt at Kathmandu, Nepalganj and in the Tarai region, Nepal.

AUG 30 08 30 54.0 26.272 N 101.937 E 17 G 5.9 0.9 363 SICHUAN-YUNNAN BORDER REGION, CHINA. MW 5.9 (GCMT), 5.8 (GS). mb

5.7 (GS). MS 5.8 (GS). Mo 9.4*10**17 Nm (GCMT), 6.7*10**17 Nm (GS). At least 32 people killed and 321 injured at Huili; 6 people killed and 132 injured at Chuxiong; 5 people killed and 132 injured at Panzhihua; 4 people injured at Kunming. At least 392,000 houses damaged or destroyed in the Sichuan-Yunnan area. At least 66 schools, 22 bridges, 131 roads and 19 reservoirs damaged at Panzhihua. Chengdu-Kunming railroad service interrupted. Strongly felt at Panzhihua and Xichang. Felt (III) at Kunming. Also felt at Chengdu, Dali and Yibin.

AUG 31 08 31 10.7 26.232 N 101.970 E 10 G 5.5 0.8 306 SICHUAN-YUNNAN BORDER REGION, CHINA. MW 5.5 (GCMT), 5.3 (GS). mb

5.5 (GS). MS 5.2 (GS). Mo 2.5*10**17 Nm (GCMT), 1.3*10**17 Nm (GS). Two people killed in the Panzhihua area. Felt (III) at Kunming. Also felt at Xichang.

SEP 08 18 52 06.9 13.501 S 166.967 E 110 G 6.9 0.9 531 VANUATU. MW 6.9 (GS), 6.9 (UCMT), 6.9 (GCMT). mb 6.4 (GS). ME 7.0 (GS). Mo 3.1*10**19 Nm (GS), 3.0*10**19 Nm (GCMT), 2.9*10**19 Nm (UCMT), 3.5*10**19 Nm (PPT). Es 8.2*10**14 Nm (GS). Felt at Honiara, Solomon Islands.

SEP 09	03 07 27.5	3.935 S	103.058 E	25	5.4	1.2	235	SOUTHERN SUMATRA, INDONESIA. mb 5.4 (GS). Two people killed and 113 homes severely damaged (VI) at Lahat. Several buildings also damaged at Jarai. Felt (IV) at Kapahiang and Pagaralam and (III) at Bengkulu.
SEP 10	11 00 34.0	26.743 N	55.828 E	12 G	6.1	1.0	500	SOUTHERN IRAN. MW 6.1 (GCMT), 6.0 (UCMT), 5.8 (GS). mb 6.1 (GS). MS 6.0 (GS). ME 6.5 (GS). mbLg 6.0 (TEH). Mo 7.1*10**17 Nm (GS), 1.5*10**18 Nm (GCMT), 1.1*10**18 Nm (UCMT). Es 1.2*10**14 Nm (GS). Seven people killed and at least 30 injured in the Bandar `Abbas area. Fifteen people injured on Jazireh-ye Qeshm. Many villages damaged in Hormozgan. Felt (IV) at Ajman and Ra's al Khaymah; (III) at Abu Dhabi, Dubai and Sharjah, United Arab Emirates. Also felt at Al `Ayn and Al Fujayrah. Felt (II) at Doha, Qatar.
SEP 10	13 08 14.9	8.092 N	38.718 W	10 G	6.6	0.9	623	CENTRAL MID-ATLANTIC RIDGE. MW 6.6 (UCMT), 6.6 (GCMT), 6.5 (GS). mb 6.3 (GS). MS 6.5 (GS). Mo $8.8*10**18$ Nm (UCMT), $7.2*10**18$ Nm (GS), $1.0*10**19$ Nm (GCMT).
SEP 11	00 00 02.7	1.885 N	127.363 E	96 G	6.6	1.0	463	HALMAHERA, INDONESIA. MW 6.6 (UCMT), 6.6 (GCMT), 6.5 (GS). mb 6.2 (GS). ME 6.5 (GS). Mo $9.0*10**18$ Nm (GCMT), $8.7*10**18$ Nm (UCMT), $8.1*10**18$ Nm (GS). Es $1.1*10**14$ Nm (GS). Felt (V) at Galela and Loloda. Felt (IV) at Bitung and on Ternate; (III) at Gorontalo and Manado, Sulawesi. Felt (III PIVS) at Davao and Tagum; (II PIVS) at General Santos and Zamboanga, Philippines.
SEP 11	00 20 50.9	41.892 N	143.754 E	25 G	6.8	1.1	500	HOKKAIDO, JAPAN REGION. MW 6.8 (GS), 6.8 (UCMT), 6.8 (GCMT). mb 6.1 (GS). MS 7.0 (GS). ME 6.7 (GS). Mo 1.9*10**19 Nm (GS), 1.8*10**19 Nm (UCMT), 1.8*10**19 Nm (GCMT), 1.7*10**19 Nm (PPT). Es 2.3*10**14 Nm (GS). Felt (IV) at Sapporo. Felt at Hakodate and Otofuke. Also felt (IV) at Misawa, Honshu. Recorded (5L JMA) in southern Hokkaido. Recorded (3 JMA) in Aomori and Iwate; (2 JMA) in Akita, Miyagi and Yamagata; (1 JMA) in Fukushima, Gumma, Ibaraki and Tochigi, Honshu. A small tsunami was recorded at Hanasaki, Hokkaido.
SEP 16	21 47 14.5	17.438 N	73.915 E	10 G	5.0	1.2	116	MAHARASHTRA, INDIA. mb 5.0 (GS). One person killed in the Daund area. At least 20 people injured, over 1.500 buildings damaged and several roads damaged by rockfalls in Satara. Buildings also damaged at Bombay. Felt (V) at Dabhol and Pune; (IV) at Bombay. Candolim, Karad, Madgaon, Mahabaleshwar, Panchgani, Pilerne, Ratnagiri and Vasco da Gama. Felt (II) in Panaji. Felt in most of western Maharashtra. Also felt in Goa and northern Karnataka.
SEP 29	15 19 31.5	29.756 S	177.683 W	36 G	7.0	1.2	524	KERMADEC ISLANDS. NEW ZEALAND. MW 7.0 (UCMT), 7.0 (GCMT), 6.9 (GS). mb 6.5 (GS). MS 6.7 (GS). ME 6.7 (GS). Mo 4.6*10**19 Nm (UCMT), 4.4*10**19 Nm (GCMT), 2.7*10**19 Nm (GS), 4.3*10**19 Nm (PPT). Es 2.6*10**14 Nm (GS). Felt in parts of the North Island.
OCT 05	15 52 49.4	39.533 N	73.824 E	27 D	6.6	0.8	529	KYRGYZSTAN. MW 6.6 (UCMT), 6.6 (GCMT), 6.4 (GS). mb 6.4 (GS). MS 6.9 (GS). ME 6.4 (GS). Mo 4.7*10**18 Nm (GS), 1.1*10**19 Nm (GCMT), 1.0*10**19 Nm (UCMT). Es 9.7*10**13 Nm (GS). At least 74 people killed, 140 injured and dozens of buildings destroyed at Nura. Felt (II) at Bishkek. Also felt at Osh. Some buildings damaged in Wuqia Xian, China. Felt at Kashi. Felt (IV) at Dushanbe, Tajikistan. Also felt at Gharm and Khorugh. Felt (IV) at Taraz and (III) at Almaty, Kazakhstan. Also felt at Shymkent. Felt at Islamabad, Pakistan and Tashkent, Uzbekistan.
OCT 06	08 30 45.5	29.807 N	90.350 E	12 G	6.3	1.0	434	EASTERN XIZANG. MW 6.3 (UCMT), 6.3 (GCMT), 6.1 (GS). mb 6.0 (GS). MS 6.2 (GS). ME 6.0 (GS). Mo 4.2*10**18 Nm (GCMT), 3.4*10**18 Nm (UCMT), 1.9*10**18 Nm (GS). Es $2.3*10**13$ Nm (GS). Ten people killed, at least 25 injured and many structures damaged in Damxung, Doilungdeqen and Nyemo. Felt (IV) at Lhasa. Also felt at Thimphu, Bhutan.
OCT 11	09 06 10.7	43.372 N	46.254 E	16 G	5.8	1.0	472	CAUCASUS REGION, RUSSIA. MW 5.8 (GCMT), 5.7 (UCMT), 5.6 (GS). mb 5.6 (GS). MS 5.5 (GS). ME 5.6 (GS). Mo 6.6*10**17 Nm (GCMT), 4.9*10**17 Nm (UCMT), 3.7*10**17 Nm (GS). Es 5.4*10**12 Nm (GS). Thirteen people killed, more than 100 injured and 1.027 buildings damaged in Chechnya. Felt in Dagestan, Ingushetiya, Severnaya Osetiya-Alaniya and Stavropol'skiy Kray. Also felt at Krasnodar. Felt (IV) at Tbilisi, Georgia.
OCT 16	19 41 25.7	14.423 N	92.364 W	24 G	6.7	1.2	481	OFFSHORE CHIAPAS, MEXICO. MW 6.7 (UCMT), 6.6 (GCMT), 6.4 (GS). mb 6.1 (GS). MS 6.6 (GS). ME 6.0 (GS). MD 6.6 (UNM). Mo $5.7*10**18$ Nm (GS), $1.2*10**19$ Nm (UCMT), $1.1*10**19$ Nm (GCMT), $1.7*10**19$ Nm (PPT). Es $1.9*10**13$ Nm (GS). Felt (IV) at Antigua Guatemala,

							Guatemala, Mixco and Quetzaltenango; (III) at Panajachel, Guatemala. Felt at Ayutla, Chichicastenango, Cuidad Vieja, Huehuetenango, Mazatenango, Retalhuleu, Salcaja, San Marcos la Laguna, San Pedro la Laguna, Santa Catarina Pinula and Villa Nueva. Felt (III) at San Salvador, El Salvador. Felt at Antiguo Cuscatlan and Ilopango. Felt (II) at Mexico and San Cristobal de las Casas, Mexico. Felt at Tapachula and Tuxtla Gutierrez.
OCT 19	05 10 33.9 21.863 S	173.819 W	29 G	6.9	0.9	518	TONGA. MW 6.9 (UCMT), 6.9 (GCMT), 6.8 (GS). mb 6.8 (GS). MS 7.0 (GS). ME 6.9 (GS). Mo $3.1*10**19$ Nm (UCMT), $2.8*10**19$ Nm (GCMT), $2.2*10**19$ Nm (GS), $4.3*10**19$ Nm (PPT). Es $5.9*10**14$ Nm (GS). Felt (IV) at Nuku`alofa. Also felt at Ohonua, Tofoa-Koloua and Vaini.
OCT 25	20 17 20.2& 26.533 N	54.985 E	29	5.2		210	SOUTHERN IRAN. <teh>. mb 5.2 (GS). MS 4.8 (GS). ML 5.1 (THR). mbLg 5.0 (TEH). Nine people injured in the Bandar-e Kong area. Felt at Dubai, United Arab Emirates.</teh>
OCT 28	23 09 57.6 30.639 N	67.351 E	15 G	6.4	0.8	365	PAKISTAN. MW 6.4 (UCMT), 6.4 (GCMT), 6.3 (GS). mb 6.3 (GS). MS 6.6 (GS). Mo 4.8*10**18 Nm (GCMT), 4.3*10**18 Nm (UCMT), 3.4*10**18 Nm (GS). One hundred sixty-six people killed, 370 injured and several villages destroyed in Balochistan. Several villages destroyed by landslides in the Ziarat area. A total of 3.487 homes destroyed and an additional 4,125 homes damaged in the Harnai area, Pishin and Ziarat. Felt (VI) at Quetta. Felt strongly in Bolan, Kalat and Qila Saifullah; and at Loralai, Mach, Mastung, Muslimbagh, and Surab. Felt (III) at Kandahar, Afghanistan.
OCT 29	11 32 43.1 30.598 N	67.455 E	14 G	6.4	1.4	277	PAKISTAN. MW 6.4 (UCMT), 6.4 (GCMT), 6.2 (GS). mb 6.2 (GS). MS 6.6 (GS). Mo 5.1*10**18 Nm (GCMT), 4.5*10**18 Nm (UCMT), 2.6*10**18 Nm (GS). Several buildings collapsed in the Ziarat district. Cracked plaster and building damage at Quetta. One injury from a wall collapse at Shehdadkot. Felt (V) at Quetta. Also felt at Chaman, Dadhar, Dadu, Jacobabad, Jafarabad, Kawas, Khairu, Larkana, Loralai, Nasirabad, Pishin, Qambar, Qila Abdullah, Shoran, Sibi and Zhob. Felt (IV) at Kandahar, Afghanistan. Also felt at Gurgaon and Jaipur, India.
NOV 10	01 22 02.5 37.565 N	95.833 E	19 G	6.3	0.9	432	NORTHERN QINGHAI, CHINA. MW 6.3 (UCMT), 6.3 (GCMT), 6.1 (GS). mb 6.4 (GS). MS 6.4 (GS). ME 6.4 (GS). Mo $4.0*10**18$ Nm (UCMT), $3.6*10**18$ Nm (GCMT), $1.6*10**18$ Nm (GS). Es $8.8*10**13$ Nm (GS). Three people injured, several buildings damaged and utilities disrupted at the Dameigou Coal Mine. Damage at the mine was estimated at 4 million US dollars. Several homes collapsed at Golmud. About 20 homes damaged and utilities disrupted at Da Qaidam.
NOV 16	17 02 32.7 1.271 N	122.091 E	30 G	7.3	1.1	365	MINAHASA, SULAWESI, INDONESIA. MW 7.3 (UCMT), 7.3 (GCMT). mb 6.5 (GS). MS 7.0 (GS). ME 7.2 (GS). Mo 1.2*10**20 Nm (UCMT), 1.2*10**20 Nm (GCMT), 4.3*10**19 Nm (PPT). Es 1.2*10**15 Nm (GS). At least six people killed, 77 injured, 10.000 people displaced, 1.000 buildings damaged and communications disrupted in the Buol area and in Gorontalo. Felt (VII) at Baolan; (VI) at Gorontalo and Tolitoli; (IV) at Manado and Poso; (III) at Luwuk. Also felt at Kolaka, Kuta, Makasar, Palu and Ujung Bulu. Felt (IV) at Bandar Seri Begawan, Brunei and (II) at Darwin, Australia. Felt at Kunak and Sandakan, Malaysia and at General Santos and Koronadal, Philippines.
NOV 22	22 27 55.1& 49.914 N	18.455 E	2 G	4.1		56	CZECH REPUBLIC. <csem>. ML $4.1~(\mathrm{GRF})$, $3.7~(\mathrm{CSEM})$. Two miners killed and 3 injured due to a mine collapse near Karvina. Felt at Orlova and Ostrava.</csem>
NOV 24	09 02 58.7 54.203 N	154.322 E	492	7.3	0.8	531	SEA OF OKHOTSK. MW 7.3 (GS), 7.3 (UCMT), 7.3 (GCMT). mb 6.5 (GS). ME 7.0 (GS). Mo $1.1*10**20$ Nm (GS), $1.1*10**20$ Nm (GCMT), $1.0*10**20$ Nm (UCMT), $8.0*10**19$ Nm (PPT). Es $7.7*10**14$ Nm (GS). Felt at Petropavlovsk-Kamchatskiy. Recorded (1 JMA) in eastern and southwestern Hokkaido. Also recorded (1 JMA) in Aomori, Iwate and Miyagi, Honshu.
DEC 07	13 36 21.3& 26.990 N	55.800 E	15	5.4		219	SOUTHERN IRAN. <thr>. MW 5.4 (GS), 5.4 (GCMT). mb 5.7 (GS). MS 5.2 (GS). ML 5.2 (THR). Mo $1.6*10**17$ Nm (GCMT), $1.5*10**17$ Nm (GS). Five people injured and buildings damaged on Jazireh-ye Qeshm. Felt at Dubai, United Arab Emirates.</thr>
DEC 09	06 23 59.7 31.232 S	176.924 W	18 G	6.8	1.1	414	KERMADEC ISLANDS REGION. MW 6.8 (UCMT), 6.7 (GCMT), 6.6 (GS). mb 6.2 (GS). MS 6.7 (GS). ME 6.6 (GS). Mo 9.1*10**18 Nm (GS), 1.9*10**19 Nm (UCMT), 1.5*10**19 Nm (GCMT), 2.8*10**19 Nm (PPT).

Es 1.5*10**14 Nm (GS).

DEC 09 18 53 11.1 32.518 N 105.395 E 25 5.5 0.8 207 SICHUAN-GANSU BORDER REGION, CHINA. mb 5.5 (GS). MS 4.5 (GS). At least two people killed at Guangyuan and three injured in Lizhou.

DEC 25 $20\ 20\ 51.5$ $23.970\ N$ $97.569\ E$ $35\ G$ 4.7 1.1 67 MYANMAR-CHINA BORDER REGION. mb 4.7 (GS). Nineteen people injured, 30 houses collapsed and more than 5.400 buildings damaged in Ruili, China.

Compiled by Pamela J. Benfield and NEIC Operations Staff.



Significant Earthquakes of the World