

| Year | Month | Day | Name | Region | Mw | Longitude | Latitude | Depth | Reference | Focal mechanism | Provider | Available in SURE | |
|------|-------|-----|--------------------------|--------------|-----|-----------|----------|-------|-----------|-----------------|--|-----------------------------------|--------------------|
| | | | | | | | | | | | | Geo-referenced Measurement Points | Segment Shapefiles |
| 1995 | 01 | 16 | Hyogo Pref. (Kobe) | Japan | 6.9 | 135.0409 | 34.554 | 19 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1995 | 01 | 16 | Hyogo Pref. (Kobe) | Japan | 6.9 | 135.0409 | 34.554 | 19 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1984 | 09 | 13 | Nagano Prefecture West. | Japan | 6.2 | 137.4871 | 35.7824 | 17.9 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1891 | 10 | 28 | Nobi | Japan | 7.4 | 136.6 | 35.6 | 10 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1896 | 08 | 31 | Rikuu | Japan | 6.7 | 140.7 | 39.5 | 10 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 1918 | 11 | 11 | Omachi | Japan | 6.4 | 137.3 | 36.1 | 10 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 1927 | 03 | 07 | North Tango | Japan | 7.1 | 135.0129 | 35.6317 | 10 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1930 | 11 | 25 | North Izu | Japan | 6.9 | 139.1295 | 35.0497 | 15 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1938 | 05 | 29 | Kussharo | Japan | 5.8 | 145.0109 | 42.9999 | 0 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1939 | 05 | 01 | Oga | Japan | 7 | 139.771 | 39.979 | 10 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1943 | 09 | 10 | Tottori | Japan | 7 | 133.9932 | 35.4481 | 15 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1945 | 01 | 12 | Mikawa | Japan | 6.7 | 137.0638 | 34.6123 | 10 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 1959 | 01 | 30 | Deshibori | Japan | 6 | 144.5088 | 43.3708 | 25 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1974 | 05 | 08 | Izu Peninsula Bay | Japan | 6.4 | 138.753 | 34.5719 | 10.3 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1978 | 01 | 14 | Izu Oshima Offshore | Japan | 6.6 | 139.2254 | 34.8023 | 24.4 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 1998 | 09 | 03 | Iwate Pref. Inland North | Japan | 5.8 | 140.7555 | 39.743 | 7.6 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 2000 | 10 | 06 | Tottori Pref. West. | Japan | 6.7 | 133.157 | 35.38 | 0.6 | ISC-GEM | Strike-slip | M. Takao (TEPCO)* | Y | N |
| 2004 | 10 | 23 | Niigata Pref. Chuetsu | Japan | 6.6 | 138.7706 | 37.3032 | 8.5 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 2008 | 06 | 13 | Iwate-Miyagi Inland | Japan | 6.9 | 140.7365 | 39.1514 | 11.6 | ISC-GEM | Reverse | M. Takao (TEPCO)* | Y | N |
| 1968 | 04 | 09 | Borrego Mountains | USA | 6.6 | -116.234 | 33.058 | 10 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1987 | 11 | 24 | Superstion Hills | USA | 6.5 | -115.886 | 33.011 | 10 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1979 | 10 | 15 | Imperial Valley | USA | 6.5 | -115.374 | 32.752 | 10 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1992 | 06 | 28 | Landers | USA | 7.3 | -116.557 | 34.188 | 10 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1999 | 10 | 07 | Hector Mine | USA | 7.1 | -116.387 | 34.539 | 20 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1999 | 8 | 17 | Izmit | Turkey | 7.6 | 29.979 | 40.807 | 15 | ISC-GEM | Strike-slip | T. Dawson (CGS) | Y | Y |
| 1987 | 03 | 02 | Edgecumbe | New Zealand | 6.5 | 176.771 | -37.926 | 20 | ISC-GEM | Normal | P. Villamor (GNS Science) | Y | Y |
| 2009 | 04 | 06 | L'Aquila | Italy | 6.3 | 13.353 | 42.368 | 10 | ISC-GEM | Normal | F. Cinti (INGV) & L. Guerrieri (ISPRA) | Y | Y |
| 2010 | 03 | 26 | Pisayambo | Ecuador | 5 | -78.32 | -1.24 | 10 | GCMT | Strike-slip | Champanois (IPGP) | Y | Y |
| 2010 | 4 | 4 | El-Mayor Cucapah | Mexico | 7.2 | -115.266 | 32.348 | 10 | ISC-GEM | Oblique | Fletcher et al. 2014 | Y | Y |
| 1944 | 1 | 15 | La Laja | Argentina | 7.2 | -68.491 | -31.496 | 15 | ISC-GEM | Reverse | C. Costa (U. San Luis) | Y | N |
| 2002 | 11 | 3 | Denali | USA - Alaska | 7.9 | -147.597 | 63.512 | 12.5 | ISC-GEM | Strike-Slip | Hauessler et al. 2002 | N | Y |
| 1911 | 1 | 3 | Kebin | Kyrgystan | 7.7 | 78.53 | 43.013 | 20 | ISC-GEM | Reverse | R. Arrowsmith et al. 2017 | N | Y |
| 1968 | 8 | 31 | Dasht-e Bayaz | Iran | 7.1 | 59.083 | 34.158 | 10 | ISC-GEM | Strike-slip | R. Walker (COMET) | | |
| 2014 | 8 | 24 | Napa | USA | 6 | -122.312 | 38.215 | 11.1 | USGS | Strike-Slip | ? | | |
| 1983 | 10 | 28 | Borah Peak | USA | 6.9 | -113.796 | 44.092 | 10 | ISC-GEM | Normal | J. McCalpin | | |
| 1959 | 08 | 18 | Hebgen Lake | USA | 7.2 | -110.891 | 44.63 | 10 | ISC-GEM | Normal | J. McCalpin | | |
| 2014 | 11 | 22 | Nagano | Japan | 6.2 | 137.888 | 36.641 | 9 | USGS | Reverse | ? | | |
| 2016 | 04 | 15 | Kumamoto | Japan | 7 | 130.754 | 32.791 | 10 | USGS | Strike-Slip | - | | |
| 2016 | 8 | 24 | Amatrice | Italy | 6 | 13.23 | 42.7 | 8 | INGV-CNT | Normal | Pucci et al. (2017) | | |
| 2016 | 10 | 30 | Norcia | Italy | 6.5 | 13.11 | 42.83 | 9 | INGV-CNT | Normal | De Martini et al. in prep. | | |

In grey, cases under implementation; in white, future cases