

Table 1. Magnitude ≥ 8.2 earthquakes versus syzygies in 1938–2017

Date, time, magnitude	Pertinent lunar events	Other pertinent data	ν	Source
2017/9/8 4:49 M=8.2	2017/9/6 7:05 Full Moon	2017/9/6 X9.3 solar flare	2	u, n
2015/9/16 22:55 M=8.3	2015/9/13 6:43 New Moon 12 days before 2015/9/28 2:52 Full Moon-2nd closest perigee		0	u, n
2014/4/1 23:46 M=8.2	2 days 5 hours after 2014/3/30 18:48 New Moon		2	u, n
2013/5/24 5:45 M=8.3	23 hours before 2013/5/25 4:27 Full Moon 30.3 days before 2013/6/23 11:11 Full Moon-closest perigee		1	u, n
2012/4/11 8:39 M=8.6	25 days before 2012/5/6 3:36 Full Moon-closest perigee		0	u, n
2011/3/11 5:46 M=9.1	7 days before 2011/3/19 18:11 Full Moon-closest perigee		0	u, n
2010/2/27 6:34 M=8.8	2010/2/28 16:39 Full Moon, 2010/2/27 perigee 28 days after 2010/1/30 6:19 Full Moon-closest perigee		0	u, n
2007/9/12 11:10 M=8.4	22.5 hours after 2007/9/11 12:45 New Moon		1	u, n
2006/11/15 11:14 M=8.3	Kuril Islands, 10 km deep, 2005/9/7 X17.0 and	2006/12/5 X9.0 solar flares	≥ 4	u, n
2005/3/28 16:10 M=8.6	2 days 19 hours after 2005/3/25 21:01 Full Moon	2005/1/20 X7.1 solar flare	3	u, n
2004/12/26 0:59 M=9.1	2004/12/26 21:31 Full Moon 15 days before 2005/1/10 12:04 New Moon-closest perigee		0	u, n
2003/9/25 19:50 M=8.3	9 hours before 2003/9/26 3:09 New Moon		0	u, n
2001/6/23 20:33 M=8.4	2 days 9 hours after 2001/6/21 11:59 New Moon		2	u, n
1996/2/17 6:00 M=8.2	1 day 18 hours before 1996/2/18 23:32 New Moon		2	u, n
1994/10/4 13:23 M=8.3	15 hours before 1994/10/5 3:55 New Moon 30 days before 1994/11/3 13:36 New Moon-2nd closest perigee		0	u, n
1994/6/9 0:33 M=8.2	1994/6/9 8:28 New Moon		0	u, n
1989/5/23 10:55 M=8.2	2 days 17 hours after 1989/5/20 18:18 Full Moon	1989/3/6 X15.0 solar flare -1989/3/7 New Moon	3	u, n
1977/8/19 6:09 M=8.3 (M=8.0 by NOAA)	1977/8/14 21:30 New Moon	1 day short of $\nu = 3$	≥ 4	u
1969/8/11 21:26 M=8.2 (M=7.5 by USGS)	1 day 7 hours before 1969/8/13 5:16 New Moon		1	n
1968/5/16 10:49 M=8.2	4 days after 1968/5/12 13:05 Full Moon-2nd closest perigee		0	u, n
1965/2/4 5:01 M=8.7	1965/2/1 16:37 New Moon 18 days after 1965/1/17 13:38 Full Moon-closest perigee		0	u, n
1965/1/24 0:11 M=8.2 (M=7.6 by NOAA)	7 days after 1965/1/17 Full Moon-closest perigee		0	u
1964/3/28 3:36 M=9.2	1964/3/28 2:49 Full Moon		0	u, n
1963/11/4 1:17 M=8.3	2 days after 1963/11/1 13:57 Full Moon-2nd closest perigee		0	u, n
1963/10/13 5:18 M=8.5	20 days before 1963/11/1 13:57 Full Moon-2nd closest perigee		0	u, n
1960/5/22 19:11 M=9.5	1960/5/25 12:27 New Moon, 1960/6/9-10 Full Moon-perigee	VEI=3 1960/5/24 eruption of Puyehue	3	u, n
1959/5/4 7:16 M=8.2 (M=7.9 by USGS)	1959/5/7 20:13 New Moon 19 days before 1959/5/22 12:55 Full Moon-2nd closest perigee		0	n
1958/11/6 22:58 M=8.3	24 days after 1958/10/12 20:52 New Moon-2nd closest perigee		0	u, n
1957/3/9 14:23 M=8.6	23 days after 1957/2/14 16:38 Full Moon-closest perigee	VEI=2 1957/3/11 eruption of Vsevidof	0	u, n
1952/11/4 16:58 M=9.0	2 days 16 hours after 1952/11/1 23:09 Full Moon		3	u, n
1950/12/9 21:39 M=8.2 (M=8.0 by NOAA)	1950/12/9 9:29 New Moon-closest perigee		0	u
1950/8/15 14:10 M=8.6	2 days after 1950/8/13 16:47 New Moon		2	u, n
1949/8/22 4:01 M=8.2 (M=8.1 by NOAA)	2 days before 1949/8/24 3:59 New Moon, 1949/8/25 perigee		2	u
1948/1/24 17:46 M=8.3 (M=7.8 by USGS)	1948/1/26 11:17 Full Moon-closest perigee		0	n
1946/4/1 12:29 M=8.6	16 hours before 1946/4/2 4:39 New Moon		1	u, n
1943/4/6 16:07 M=8.2 (M=8.1 by USGS)	1 day 19 hours after 1943/4/4 21:55 New Moon		2	n
1942/8/24 22:50 M=8.2 (M=8.1 by USGS)	1 day 5 hours before 1942/8/26 3:45 Full Moon		1	n
1941/11/25 18:03 M=8.3 (M=8.0 by USGS)	1941/11/19 0:04 New Moon-closest perigee		0	n
1940/5/24 16:34 M=8.2	3 days 3 hours after 1940/5/21 13:32 Full Moon		3	u, n
1939/1/25 3:32 M=8.3 (M=7.8 by USGS)	10 days before 1939/2/4 7:55 Full Moon-closest perigee		0	n
1938/11/20 20:19 M=8.3	28 hours before 1938/11/22 0:05 New Moon		1	u, n
1938/2/1 19:04 M=8.5	1 day 6 hours after 1938/1/31 13:35 New Moon		1	u, n

Note: The table was compiled by combining earthquakes listed as magnitude ≥ 8.2 either in USGS' data base <https://earthquake.usgs.gov/earthquakes/search/> or in NOAA's data base <https://www.ngdc.noaa.gov/ndbc/struts/form?t=101650&s=1&d=1>; the former are indicated by letter "u" in the last column, the latter by letter "n". Only the main shocks are listed, foreshocks and aftershocks are not. Lunar phases and perigees are due to <https://www.fourmilab.ch/earthview/pacalc.html>, while the information about solar flares and geomagnetic storms is due to <http://adsabs.harvard.edu/full/19600bs...80..149E>, <http://www.solarstorms.org/SRefStorms.html>, <https://www.nature.com/articles/187926a0>, <https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/JZ065i012p04200>.