

Date	Country	Target Region	Magnitude	max. Tsunami Amplitude	> 10m Amplitude de	Victims
11.03.2011	Japan	Japan	9,0	23 m	x	> 10'000
23.06.2001	Peru	Peru	8,4	7,00 m		26
26.11.1999	Vanuatu	Vanuatu, Vanuatu Islands	7,5	6,00 m		5
17.07.1998	Papua New Guinea	Papua New Guinea	7,0	15,00 m		2.182
14.11.1994	Philippines	Philippines, Philippine Islands	7,1	7,30 m		62
04.10.1994	Russia	Russia, Kuril Islands	8,3	11,00 m	x	k. A.
12.07.1993	Japan	Sea of Japan	7,7	31,70 m	x	330
12.12.1992	Indonesia	South Pacific, Indonesia	7,5	26,20 m		1.000
02.09.1992	Nicaragua	Nicaragua	7,4	10,00 m		168
26.05.1983	Japan	Japan, Noshiro	7,7	14,50 m	x	103
12.12.1979	Colombia	Colombia, Colombia-Ecuador	7,7	5,00 m		500
16.08.1976	Philippines	Celebes Sea, Philippines, Moro Gulf	8,1	5,00 m		5.000
29.11.1975	USA	USA, Hawaii	7,2	8,00 m		k. A.
26.07.1971	Papua New Guinea	Papua New Guinea	7,9	10,00 m		k. A.
22.11.1969	Russia	Bering Sea, Russia, Bering Strait	7,7	15,00 m		k. A.
11.08.1965	Vanuatu	South Pacific, Vanuatu, Vanuatu Islands	7,0	7,00 m		k. A.
04.02.1965	USA	USA, Rat Islands, Alaska	8,7	10,70 m		k. A.
28.03.1964	USA	USA, Prince William Sound, Alaska	9,2	70,00 m		123
22.05.1960	Chile	Chile, Central Chile	9,5	25,00 m		1.260
10.07.1958	USA	USA, Se. Alaska	8,3	525,00 m		5
09.03.1957	USA	USA, Fox Islands, Andreanof Islands	9,1	15,00 m		k. A.
04.03.1952	Japan	Japan, Se. Hokkaido Island	8,1	6,50 m		33
23.06.1946	USA	Northeast Pacific, USA, Unimak Island, Alaska	7,3	30,00 m		k. A.
01.04.1946	USA	USA, Unimak Island, Alaska	7,3	35,00 m		165
07.12.1944	Japan	Japan, Off Southeast Coast Kii Peninsula	8,1	10,00 m	x	40
02.03.1933	Japan	Japan, Sanriku	8,4	30,00 m	x	3.000
22.06.1932	Mexico	Eastern Pacific, Mexico	7,0	10,00 m		75
03.10.1931	Pacific	Solomon Islands	7,9	10,00 m		50
02.02.1931	New Zealand	South Pacific, New Zealand	7,7	15,30 m		k. A.
16.11.1925	Mexico	Eastern Pacific, Mexico	7,0	11,00 m		k. A.
01.09.1923	Japan	Japan, Tokaido	7,9	12,00 m	x	2.144
13.04.1923	Russia	Western Pacific, Russia, Kamchatka	7,2	30,00 m		20
03.02.1923	Russia	Western Pacific, Russia, Kamchatka	8,3	8,00 m		3
11.11.1922	Chile	Chile, North Chile	8,5	9,00 m		100
07.09.1918	Russia	Russia, S. Kuril Islands	8,2	12,00 m	x	50

15.08.1918	Pacific	Celebes Sea	8,3	7,00 m		6
26.06.1917	Tonga	South Pacific, Tonga, Tonga Islands	8,3	12,00 m		k. A.
01.05.1917	New Zealand	New Zealand, Kermadec Islands	8,0	12,00 m		k. A.
31.01.1906	Ecuador	South Pacific, Ecuador, Colombia	8,8	5,00 m		1.000
10.09.1899	USA	USA, Yakutat Bay, Alaska	8,2	60,00 m		k. A.
15.06.1896	Japan	Japan, Sanriku	7,6	38,00 m	x	26.360
06.03.1895	Pacific	Solomon Sea	7,5	6,00 m		30
10.05.1877	Peru	Peru	8,3	24,00 m		500
13.08.1868	Chile	Chile, North Chile	8,5	21,00 m		25.000
28.06.1859	Indonesia	Indonesia, N. Moluccas Islands	7,0	9,00 m		k. A.
23.08.1856	Japan	Japan, Se. Hokkaido Island	7,8	6,00 m		26
23.01.1855	New Zealand	South Pacific, New Zealand	8,0	9,00 m		k. A.
24.12.1854	Japan	Japan, Nankaido	8,4	28,00 m	x	3000
21.07.1788	USA	USA, Shumagin Islands, Alaska	8,0	88,00 m		k. A.
29.06.1780	Russia	Russia, S. Kuril Islands	7,5	12,00 m	x	12
24.04.1771	Japan	Japan, Ryukyu Islands	7,4	85,00 m	x	13.500
29.10.1746	Peru	Peru	8,0	24,00 m		3.800
08.07.1730	Chile	Chile, Central Chile	8,7	16,00 m		k. A.
28.10.1707	Japan	Japan	8,4	11,00 m	x	30.000
31.12.1703	Japan	Japan, Tokaido-Kashima	8,2	10,50 m	x	5.200
20.10.1687	Peru	Peru	8,5	8,00 m		500
04.11.1677	Japan	Japan, Kashima	7,4	8,00 m		500
02.12.1611	Japan	Japan, Sanriku	8,0	25,00 m	x	5.000
24.11.1604	Peru	Peru	8,5	16,00 m		80
09.07.1586	Peru	Peru	8,5	24,00 m		k.A.
20.09.1498	Japan	Japan, Nankaido	8,6	17,00 m	x	31.000
12.09.1495	Japan	Sagami Bay, Japan, Tokaido	7,1	5,00 m		200

Reference:

http://www.tsunami-alarm-system.com/phaenomen-tsunami/vorkommen-pazifischer-ozean.html#ce_70¹

Simple Estimation:

--> 16 Tsunamis in Japan & Curiles (Ru) with Amplitudes > 10m und Earthquakes:

7,4>M>9,2 in the time during the last 500 y → (experienced) frequency : 1/30y = 3,2E-2 1/y

First Questions:

- How do these Tsunami frequencies (see list above) (criteria: > 10m, 7,4>M>9,2) match with the event categories according IAEA-SSG-2, page 8?
- What should be the dose acceptance criteria for a 1/30 y -event in japan ? (Switzerland: --> 0.2 mSv/event !)

¹ The National Geophysical Data Center (NGDC), located in Boulder, Colorado, is a part of the US Department of Commerce (USDOC), National Oceanic & Atmospheric Administration (NOAA), National Environmental Satellite, Data and Information Service (NESDIS). We are one of three NOAA National Data Centers.

- Do we have to learn from this data, that this Tsunami-event should be a specific japanese design event for its pacific costal plants?
- Which specific analyses have been relevant? Historical data? Seismologic-tectonic models an their predictions? PSA? DSA? Engineering Judgement?
- What were the Authorities'/operators' measures/modifications since 2001, when the serious japanese and other scientists in the world stated, that japanese EQ and Tsunami risk was estimated to be too low (compared to new scientific findings)?