7. TEXTBOOKS AND TEACHERS

GUIDEBOOKS (in English and Spanish)

Pre-elementary school: Earthquakes and tsunamis Chile: SHOA/IOC/ITIC, 1996. Revised 2003 in Spanish.

2-4 Grade: I invite you to know the earth I. Chile: SHOA/IOC/ITIC, 1997.

5-8 Grade: I invite you to know the earth II. Chile: SHOA/IOC/ITIC, 1997.

High School: Earthquakes and tsunamis. Chile: SHOA/IOC/ITIC, 1997.

8. INDEX

Tsunami Glossary 2016 errata

Tsunami Glossary 2016 update

Regional and local tsunamis causing 2,000 or more deaths

Date				Estimated Dead or Missing
Year	Mon	Day	Source Location	
365	7	21	Crete, Greece	5,000
887	8	2	Niigata, Japan	2,000
1341	10	31	Aomori Prefecture, Japan	2,600
1498	9	20	Enshunada Sea, Japan	5,000
1570	2	8	Central Chile	2,000
1605	2	3	Nankaido, Japan	5,000
1611	12	2	Sanriku, Japan	5,000
1674	2	17	Banda Sea, Indonesia	2,244
1687	10	20	Southern Peru	*5,000
1692	6	7	Port Royal, Jamaica	2,000
1703	12	30	Boso Peninsula, Japan	*5,233
1707	10	28	Enshunada Sea, Japan	2,000
1707	10	28	Nankaido, Japan	*5,000
1741	8	29	Hokkaido, Japan	2,000
1746	10	29	Central Peru	4,800
1751	5	20	Northwest Honshu, Japan	2,100
1755	11	1	Lisbon, Portugal	*50,000
1771	4	24	Ryukyu Islands, Japan	13,486
1792	5	21	Kyushu Island, Japan**	14,524
1854	12	24	Nankaido, Japan	*3,000
1868	8	13	Northern Chile*	25,000
1877	5	10	Northern Chile	2,282
1883	8	27	Krakatau, Indonesia**	34,417
1896	6	15	Sanriku, Japan	*27,122
1899	9	29	Banda Sea, Indonesia	*2,460
1908	12	28	Messina Strait, Italy	2,000
1923	9	1	Sagami Bay, Japan	2,144
1933	3	2	Sanriku, Japan	3,022
1945	11	27	Makran Coast, Pakistan	*4,000
1952	11	4	Kamchatka, Russia	10,000
1960	5	22	Southern Chile	2,223
1976	8	16	Moro Gulf, Philippines	6,800
1998	7	17	Papua New Guinea	2,205
2004	12	26	Banda Aceh, Indonesia	*^227,899
2011	3	11	Tohoku, Japan	*^18,453
			Total	508,014

*May include earthquake deaths
**Tsunami generated by volcanic eruption
^Includes dead/mising near and outside source region
^^Indirect deaths from evacuation

Regional and local tsunamis causing deaths since 1975

Date				Estimated Dead or Missing
Year	Mon	Day	Source Location	
1975	10	31	Philippine Trench	1
1975	11	29	Hawaii, USA	2
1976	8	16	Moro Bay, Philippines	6,800
1977	8	19	Sumbawa, Indonesia	189
1979	7	18	Lebata Island, Indonesia**	1,239
1979	9	12	Irian Jaya, Indonesia	100
1979	10	16	French Riveria**	9
1979	12	12	Narino, Colombia	*600
1981	9	1	Samoa Islands	2
1983	5	26	Noshiro, Japan	100
1988	8	10	Solomon Islands	1
1991	4	22	Limon, Costa Rica	2
1992	9	2	Off coast Nicaragua	170
1992	12	12	Flores Sea, Indonesia	1,169
1993	7	12	Sea of Japan	208
1994	6	2	Java, Indonesia	238
1994	10	8	Halmahera, Indonesia	1
1994	11	4	Skagway Alaska, USA**	1
1994	11	14	Philippine Islands	*81
1995	5	14	Timor, Indonesia	11
1995	10	9	Manzanillo, Mexico	1
1996	1	1	Sulawesi, Indonesia	9
1996	2	17	Irian Jaya, Indonesia	110
1996	2	21	Northern Peru	12
1998	7	17	Papua New Guinea	2,205
1999	8	17	Izmit Bay, Turkey	155
1999	11	26	Vanuatu Islands	5
2001	6	23	Southern Peru	26
2004	12	26	Banda Aceh, Indonesia	*^^227,8989
2005	3	28	Sumatra, Indonesia	^10
2006	3	14	Seram Island, Indonesia	4
2006	7	17	Java, Indonesia	802
2007	4	1	Solomon Islands	*52
2007	4	21	Southern Chile	10
2007	8	15	Southern Peru	3
2009	9	29	Samoa Islands	192
2010	1	12	Haiti	7
2010	2	27	Southern Chile	156
2010	10	25	Mentawai, Indonesia	431
2011	3	11	Tohoku, Japan	*^^18,453
2012	10	28	Haida Gwaii, Canada	^1
2013	2	6	Solomon Islands	10
2015	9	16	Central Chile	8
			Total	261,485

*May include earthquake deaths
**Tsunami generated by landslide
^Indirect deaths from evacuation
^^Includes dead/missing near and outside source region

Tsunamis causing deaths greater than 1000 km from the source location

Date				Dead or		
Year	Mon	Day	Source Location	Local	Distant	Distant locations that reported casualties
1700	1	27	Cascadia Subduction Zone, USA		2	Japan
1755	11	1	Lisbon, Portugal	50,000	3	Brazil
1837	11	7	Southern Chile	0	16	USA (Hawaii)
1868	8	13	Northern Chile**	*25,000	7	New Zealand, Samoa, Southern Chile
1877	5	10	Northern Chile	277	2,005	Fiji, Japan, Peru, USA (Hawaii)
1883	8	27	Krakatau, Indonesia	34,417	1	Sri Lanka
1899	1	15	Papua New Guinea	0	Hundreds	Caroline Islands, Solomon Islands
1901	8	9	Loyalty Islands, New Caledonia	0	Several	Santa Cruz Islands
1923	2	3	Kamchatka, Russia	2	1	USA (Hawaii)
1945	11	27	Makran coast, Pakistan	*4,000	11	India
1946	4	1	Unimak Island, Alaska, USA	5	162	Marquesas Is, Peru, USA (California, Hawaii)
1957	3	9	Andreanof Islands, Alaska, USA	0	2	USA (Hawaii, indirect deaths from plane crash doing tsunami reconnaissance)
1960	5	22	Central Chile	2,000	223	Japan, Philippines, USA (California, Hawaii)
1964	3	28	Prince William Sound, Alaska, USA	106	18	USA (California, Oregon)
2004	12	26	Banda Aceh, Indonesia***	*175,827	52,072	Bangladesh, India, Kenya, Madagascar, Maldives, Myanmar, Seychelles, Somalia, South Africa, Sri Lanka, Tanzania, Yemen
2005	3	28	Sumatra, Indonesia	0	10	Sri Lanka (deaths during evacuation)
2011	3	11	Tohoku, Japan	*18,451	2	Indonesia, USA (California)
2012	10	28	Haida Gwaii, Canada	0	1	USA (Hawaii, death during evacuation)

*May include earthquake deaths **Local and regional deaths in Chile and Peru ***Local and regional deaths in Indonesia, Malaysia, and Thailand