

Overview and Features on Each Earthquake

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Target Earthquakes

- Great East Japan Earthquake 2011
- Haiti Earthquake 2010
- Wenchuan Earthquake 2008
- Indian Ocean Earthquake and Tsunami 2004
- Great Hanshin-Awaji Earthquake 1995

Seismic Information

Date (UT)	Name	Mw	Length of Fault	Maximum Displacement	Type	Mechanism
1995/01/16	Great Hanshin-Awaji (Kobe , Japan)	6.9	50 km	2 m	Inland 内陸	Strike Slip 横ずれ 
2004/12/26	Indian Ocean (Sumatra - Andaman)	<u>9.1</u>	1300 km	19 m	Subduction → Tsunami	Thrust 逆断層 
2008/05/12	Wenchuan (Sichuan , China)	7.9	250 km	13 m	Inland 内陸	Thrust 逆断層 
2010/01/12	Haiti	7.0	50 km	4 m	Inland 内陸	Strike Slip 横ずれ 
2011/03/11	Great East Japan (Tohoku)	<u>9.0</u>	500 km	50 m	Subduction → Tsunami	Thrust 逆断層 

*Mw: Moment Magnitude

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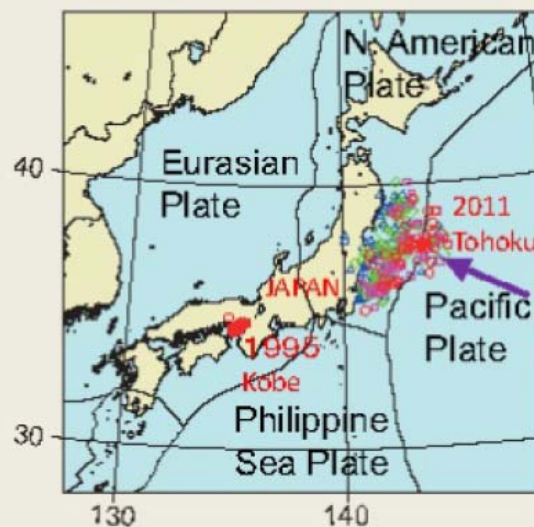
Deadliest Earthquakes since 1990

	Date (UTC)	M	Region	Fatalities	Type
1	2010/01/12	7.0	Haiti	316,000	Inland
2	2004/12/26	<u>9.1</u>	Sumatra - Andaman	227,898	Subduction
3	2008/05/12	7.9	Sichuan, China	87,587	Inland
4	2005/10/08	7.6	Pakistan	80,361	Inland
5	1990/06/20	7.4	Iran	50,000	Inland
6	2003/12/26	6.6	Southeastern Iran	31,000	Inland
7	2011/03/11	<u>9.0</u>	Tohoku, Japan	20,896	Subduction
8	2001/01/26	7.7	India	20,023	Inland
9	1999/08/17	7.6	Turkey	17,118	Inland
10	1993/09/29	6.2	India	9,748	Inland
11	2006/05/26	6.3	Java, Indonesia	5,749	Inland
12	1995/01/16	6.9	Kobe, Japan	5,530	Inland

US Geological Survey

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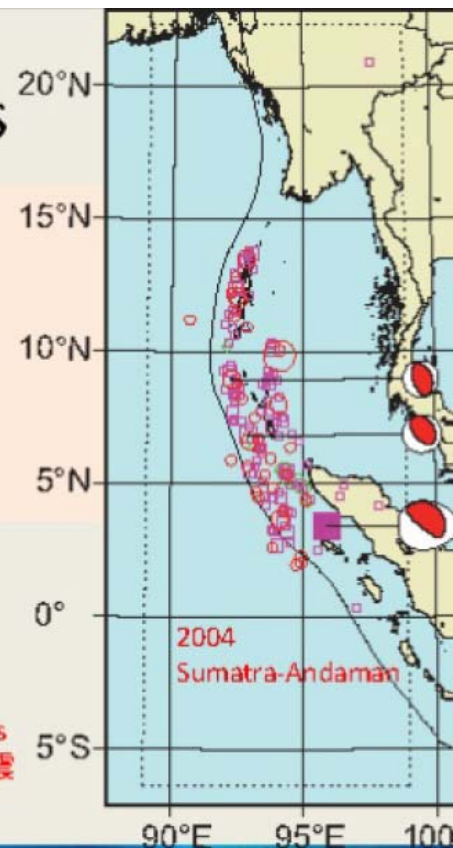
Comparison of Sizes



2010
Haiti

2008
Sichuan

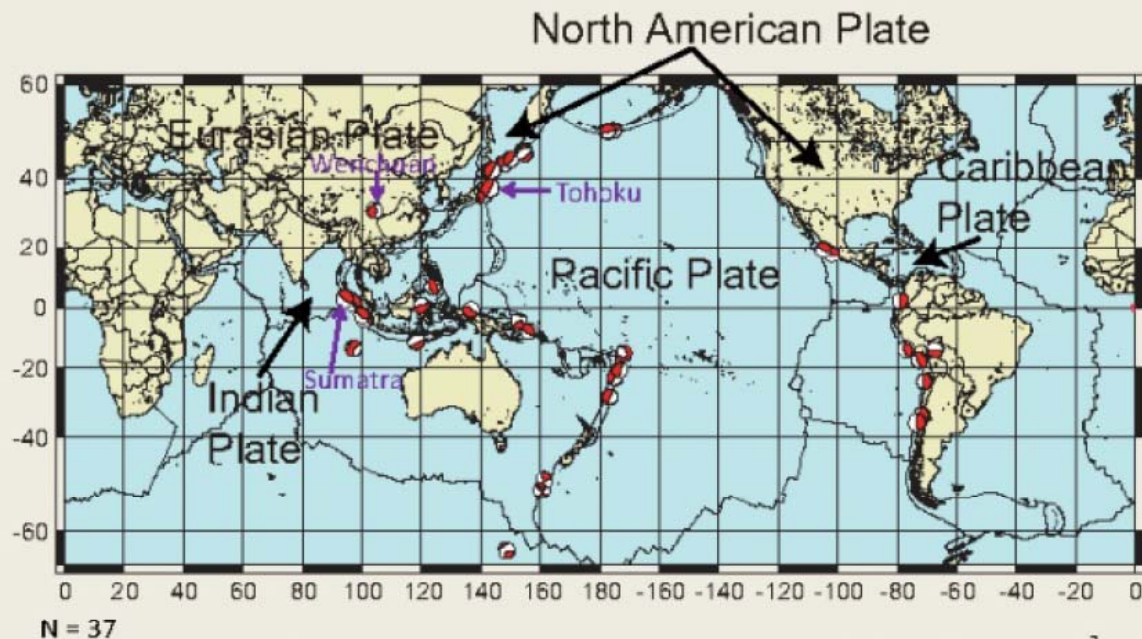
One Day Aftershocks
本震後1日間の余震



Greatest Earthquakes since 1900

	Date (UTC)	M	Region
1	1960/05/22	9.5	Chile
2	1964/03/28	9.2	Prince William Sound, Alaska
3	2004/12/26	9.1	off the west coast of northern Sumatra
4	1952/11/04	9.0	Kamchatka, Russia
4	2011/03/11	9.0	Near the East Coast of Honshu, Japan
6	1906/01/31	8.8	Colombia-Ecuador
6	2010/02/27	8.8	Offshore Maule, Chile
8	1965/02/04	8.7	Rat Islands, Alaska
9	1950/08/15	8.6	Assam-Tibet
9	1957/03/09	8.6	Andreanof Islands, Alaska
9	2005/03/28	8.6	Northern Sumatra, Indonesia

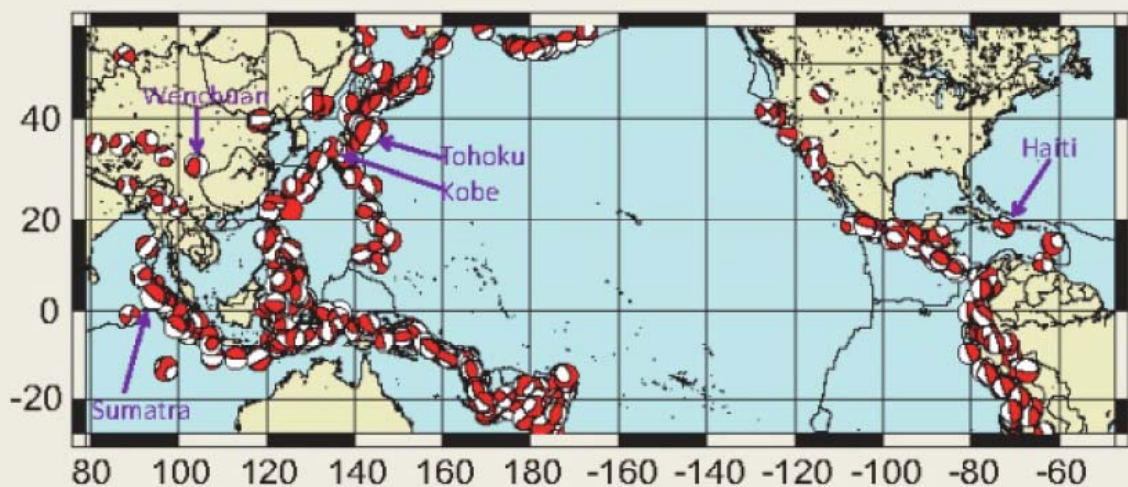
Large Earthquakes in the World 1976-2011, $M_w \geq 7.9$



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Large Earthquakes in the World 1976-2011, $M_w \geq 6.9$

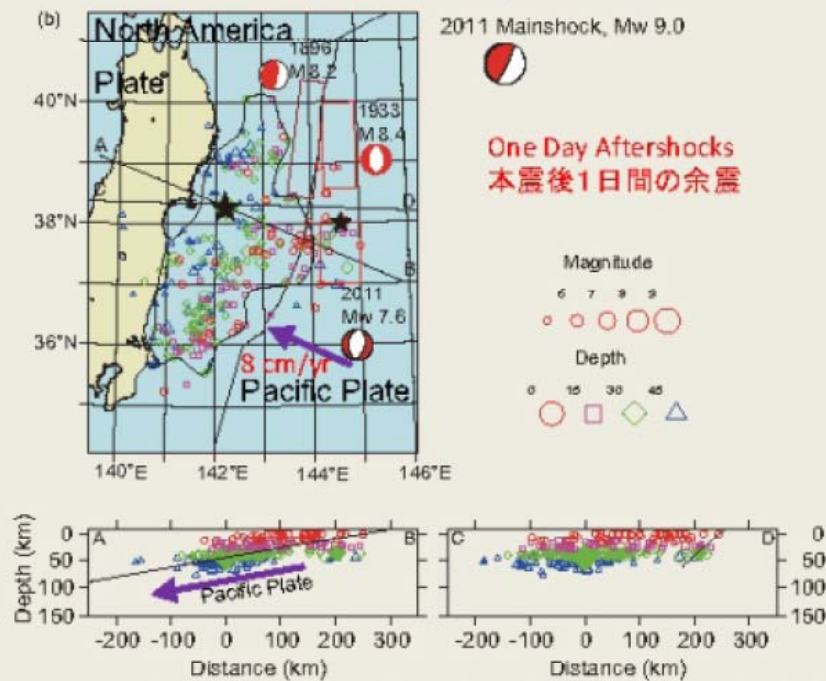


N = 603

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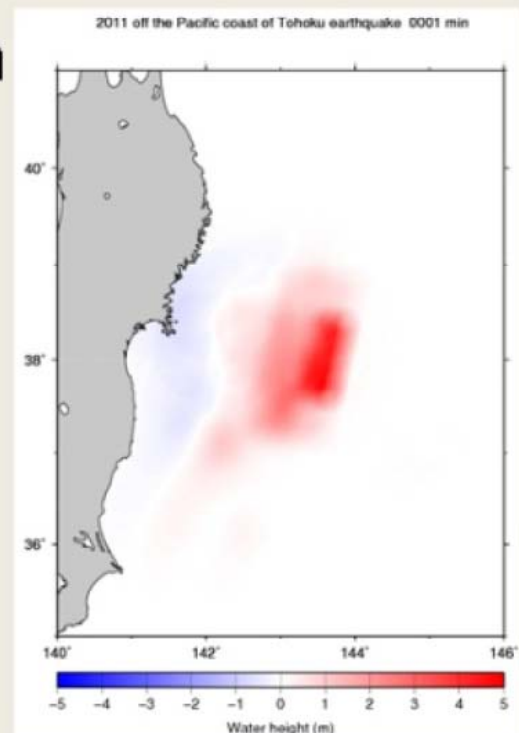
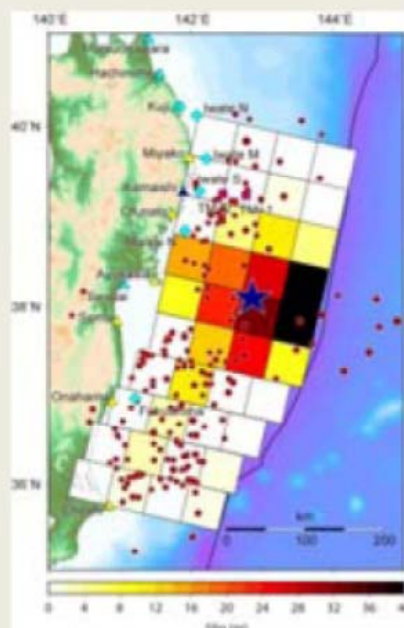
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1. Tohoku Earthquake 2011



1. Tohoku Earthquake

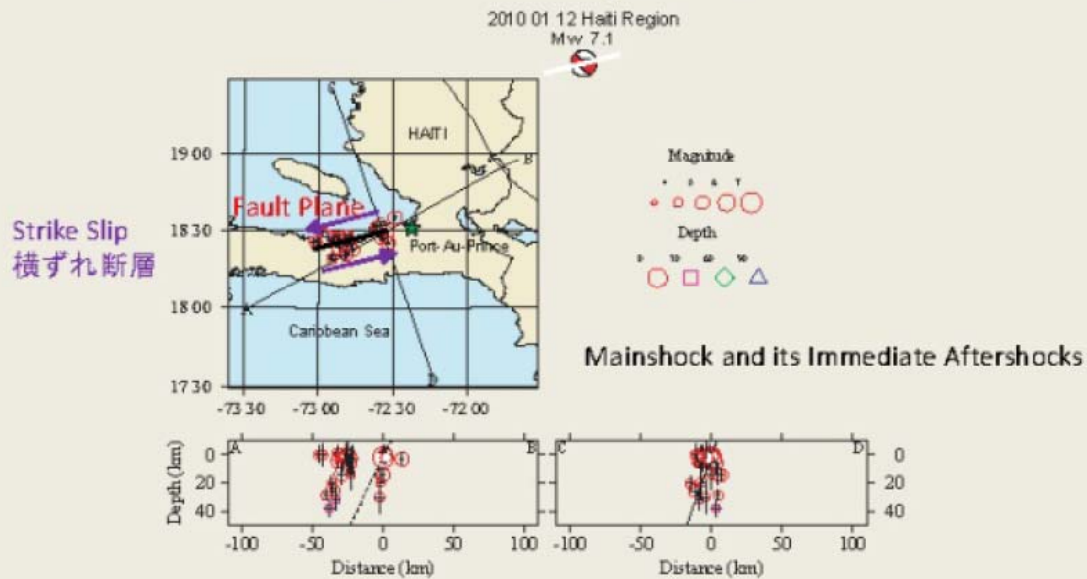
Tsunami Simulation



Recent Tsunamis by Dr. Fujii

<http://iisee.kenken.go.jp/staff/fujii/TsunamiTop.html>

2. Haiti Earthquake 2010



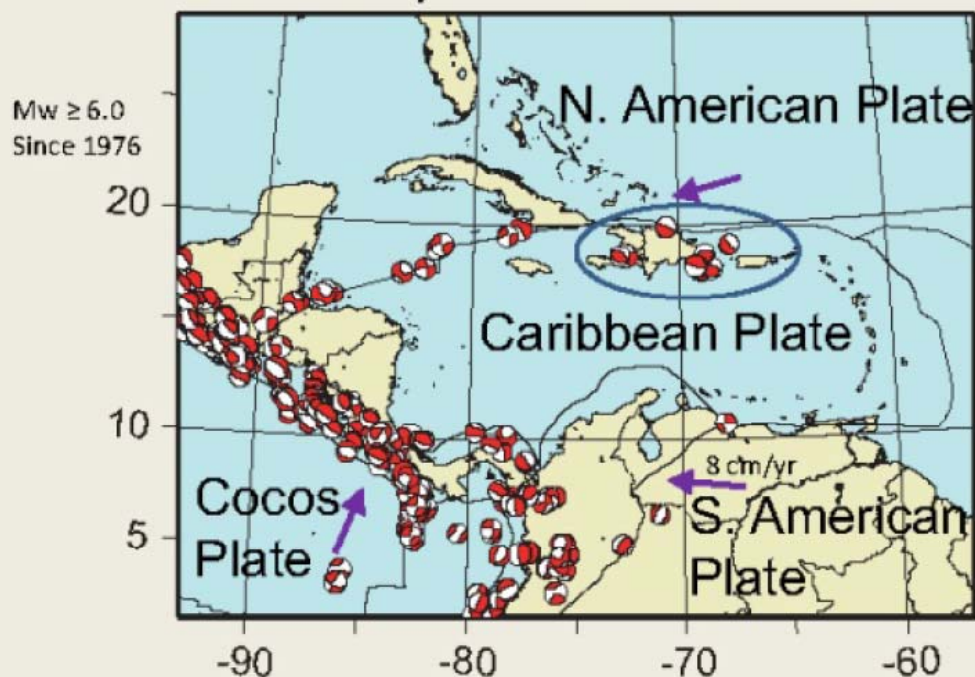
IISSE Quick Report on Earthquakes

<http://iissee.kenken.go.jp/special2/20100112haiti/20100112Haiti-MJHD.pdf>

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2. Haiti Earthquake

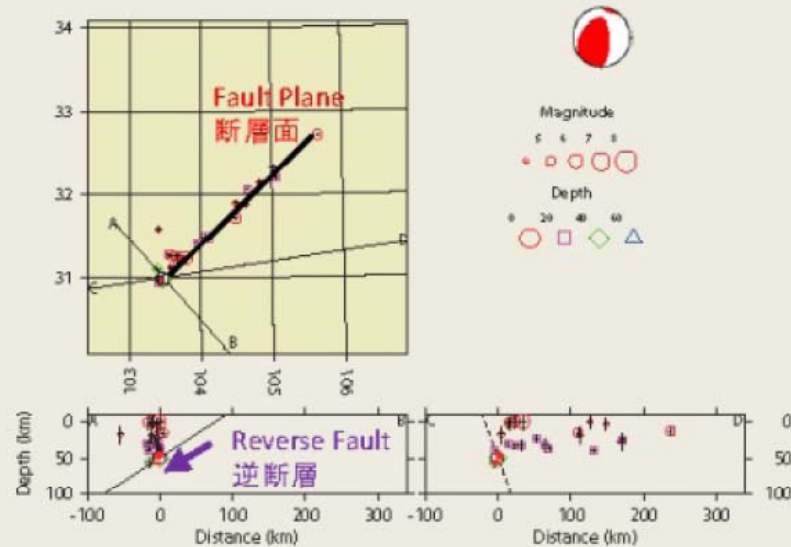
Seismicity in Caribbean Sea



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3. Sichuan Earthquake 2008

2008 5 12 Sichuan, China

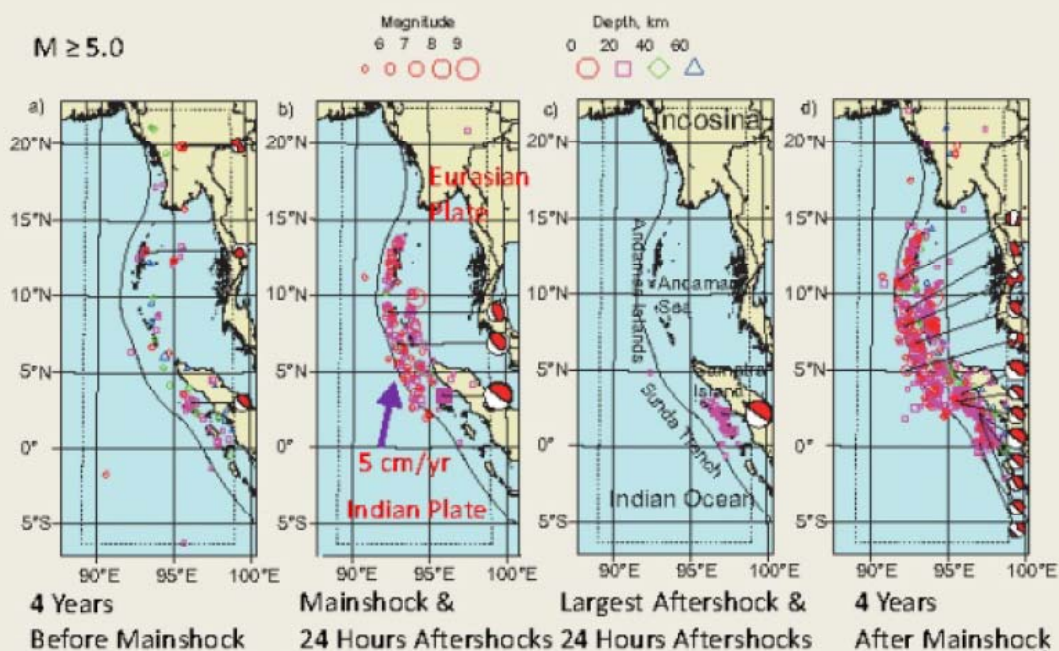


IISSE Quick Report on Earthquakes

<http://iissee.kenken.go.jp/special2/20080512china-MJHD.pdf>

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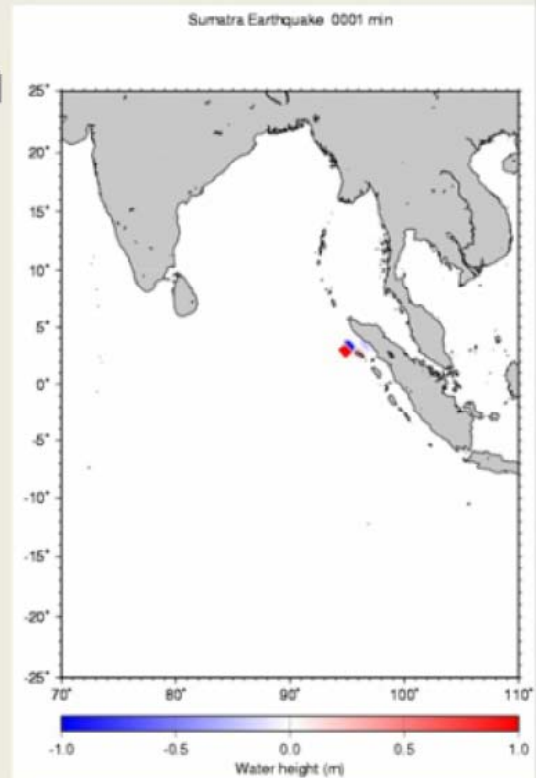
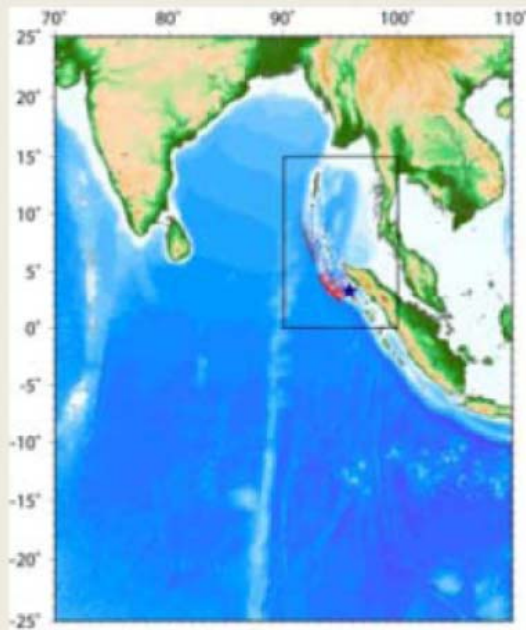
4. Sumatra-Andaman Earthquake 2004



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4. Sumatra-Andaman Earthquake

Tsunami Simulation



Recent Tsunamis by Dr. Fujii

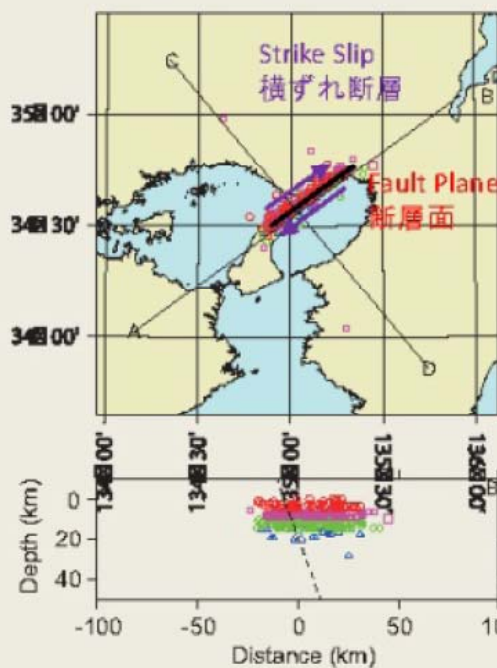
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5. Kobe Earthquake 1995



1995/1/16 Kobe, Japan

Mw 6.9

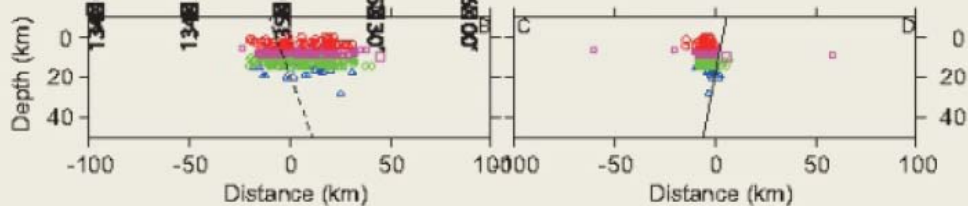


One Day Aftershocks
本震後1日間の余震
by International Seismological
Centre (ISC)

Magnitude



Depth



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