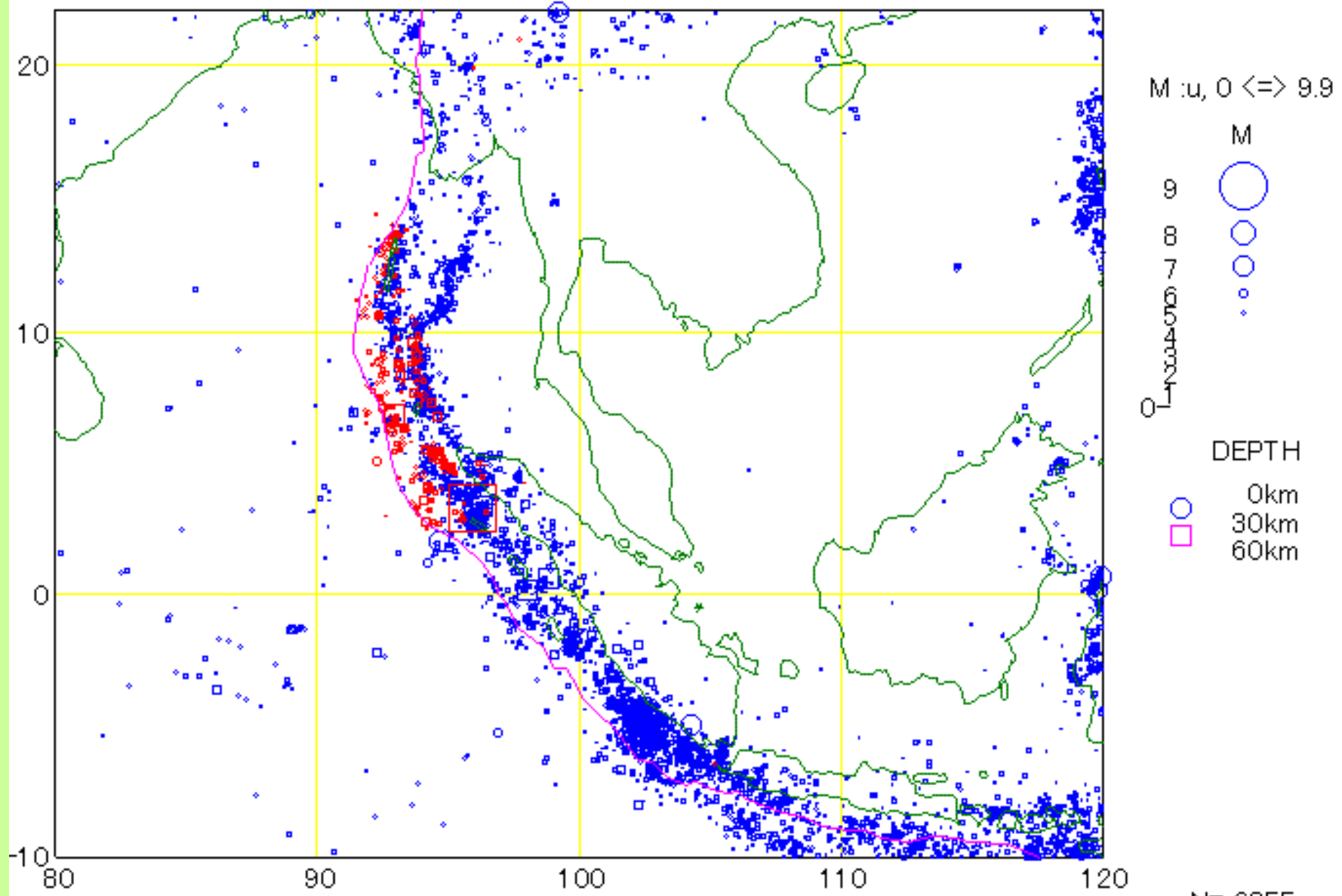


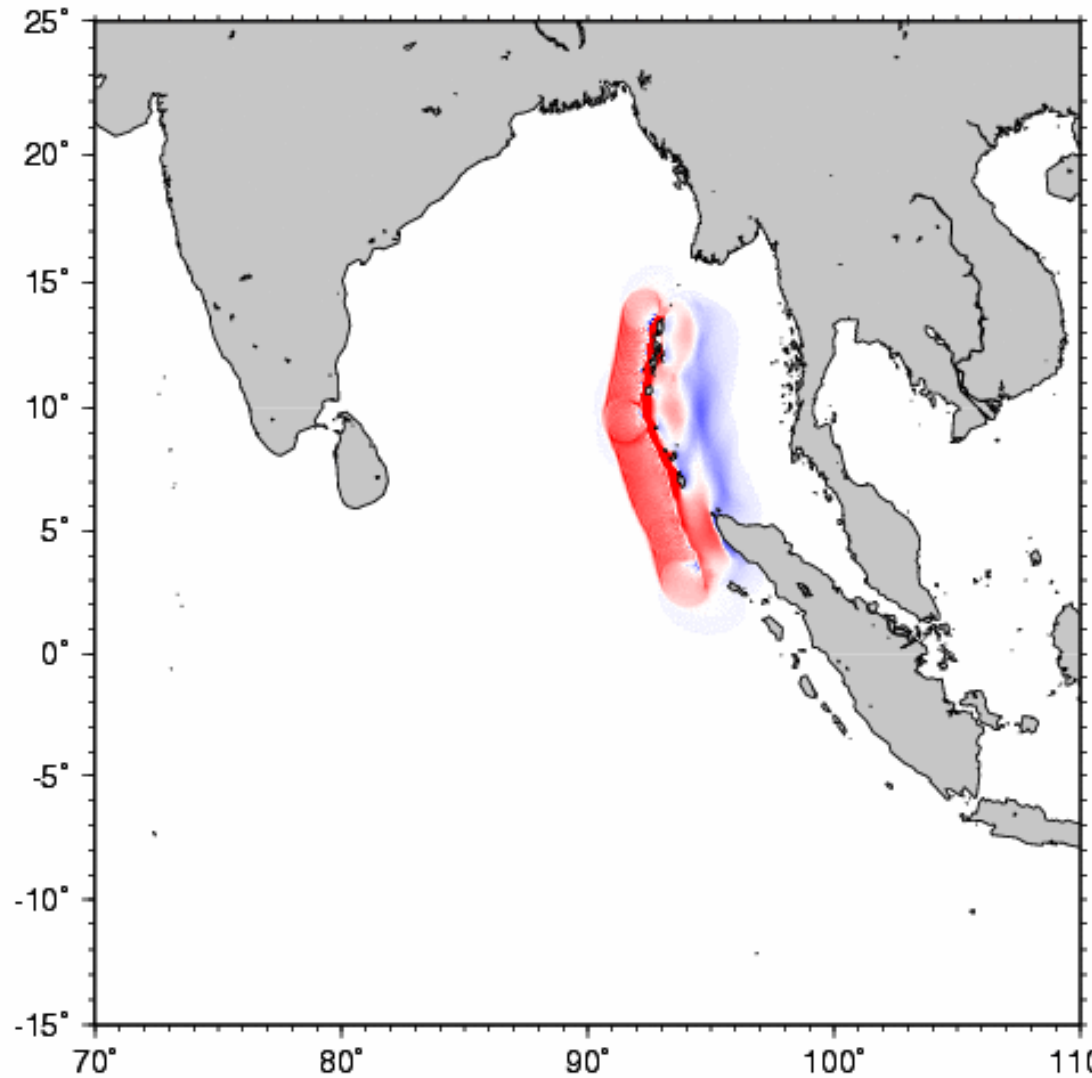
1964 1/1 0:0 — 2004 12/25 23:59 2004 12/26 0:0 — 2005 1/15 24:0



by Yuzo Ishikawa

// SEIS-PC //

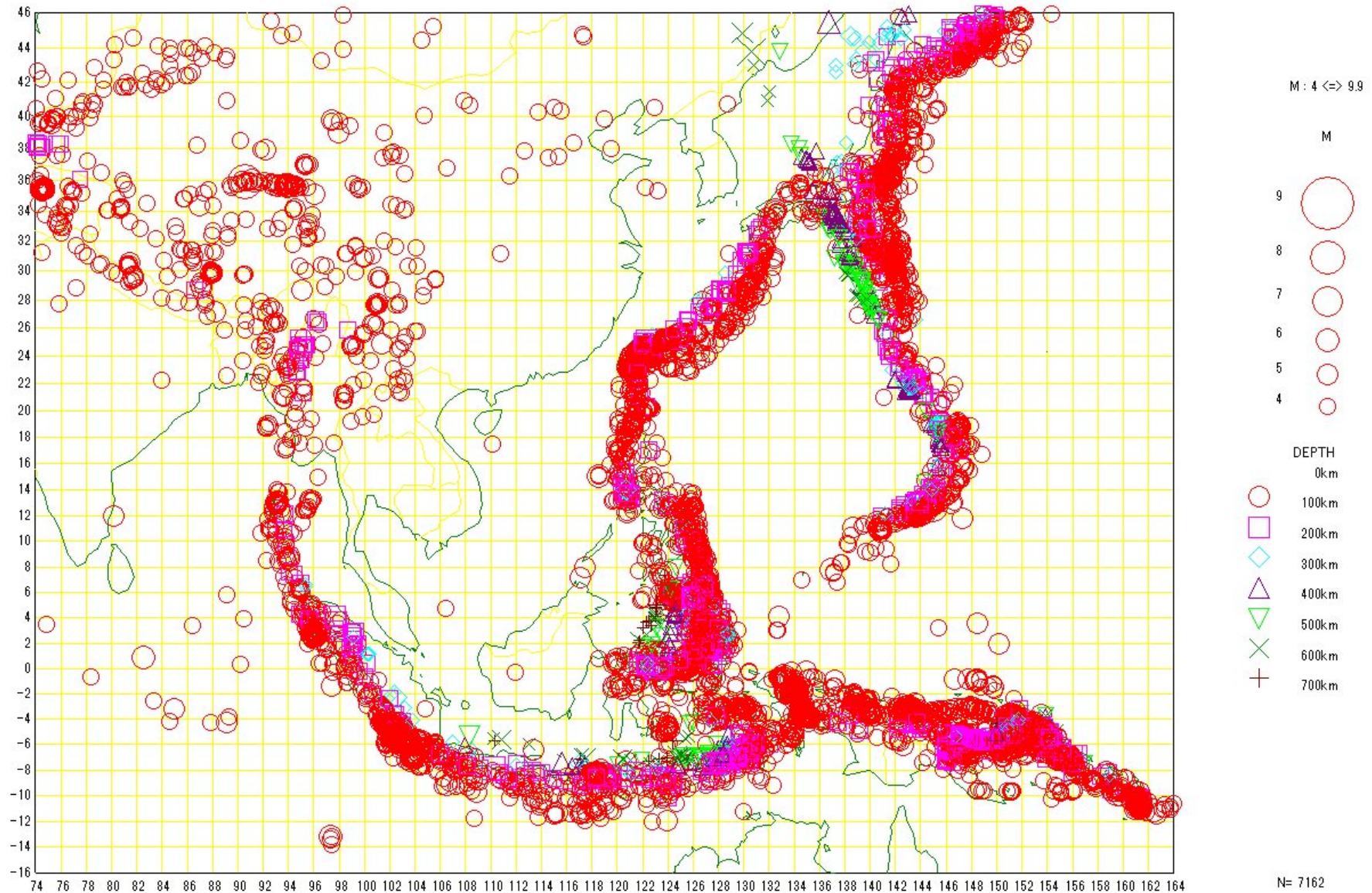
2004 Sumatra Earthquake 010 min



Dec. 26, 2004
By Kenji Satake

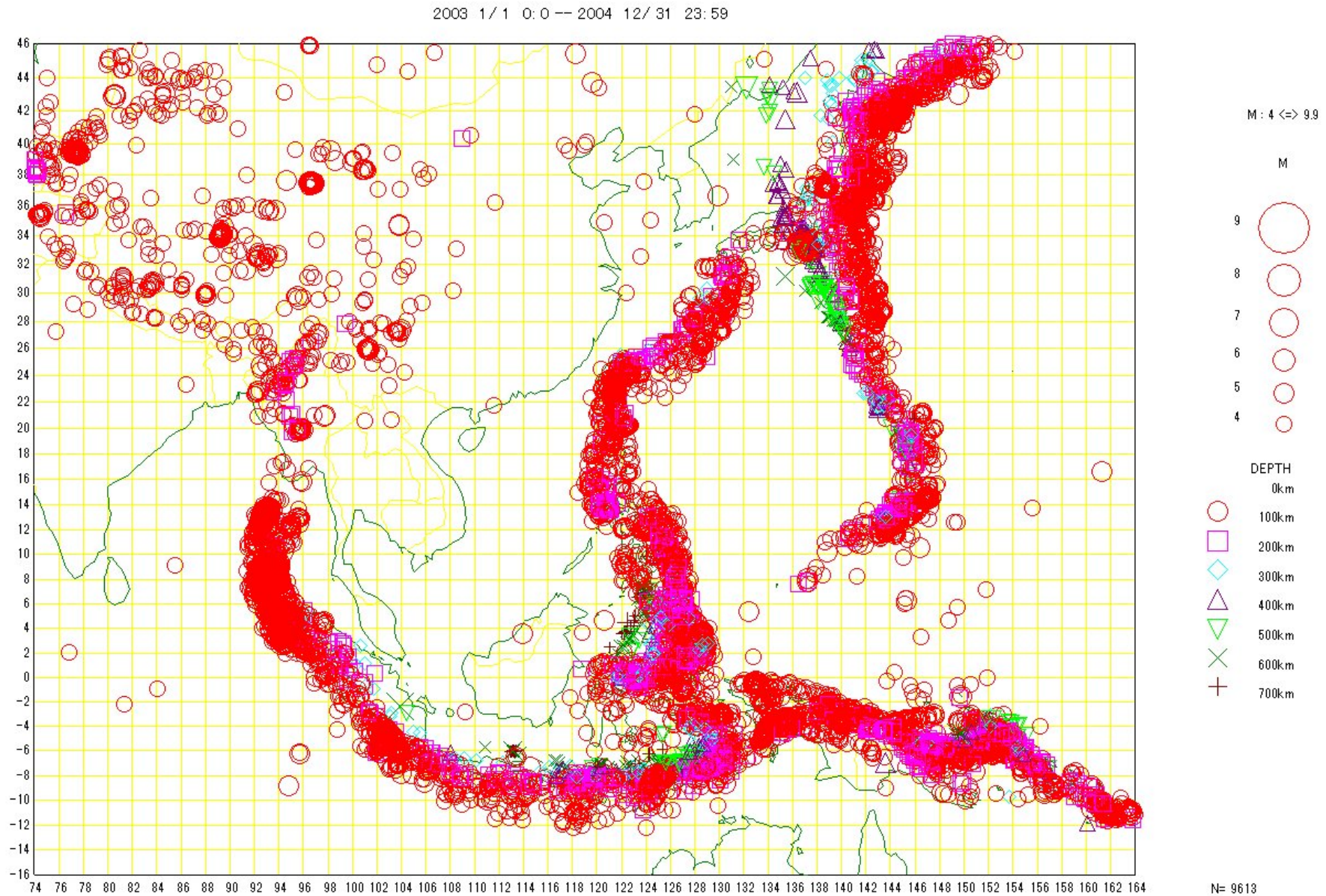
Distribution of earthquakes, $M \geq 4.0$, 2001-2002

2001 1/1 0:0 -- 2002 12/31 23:59

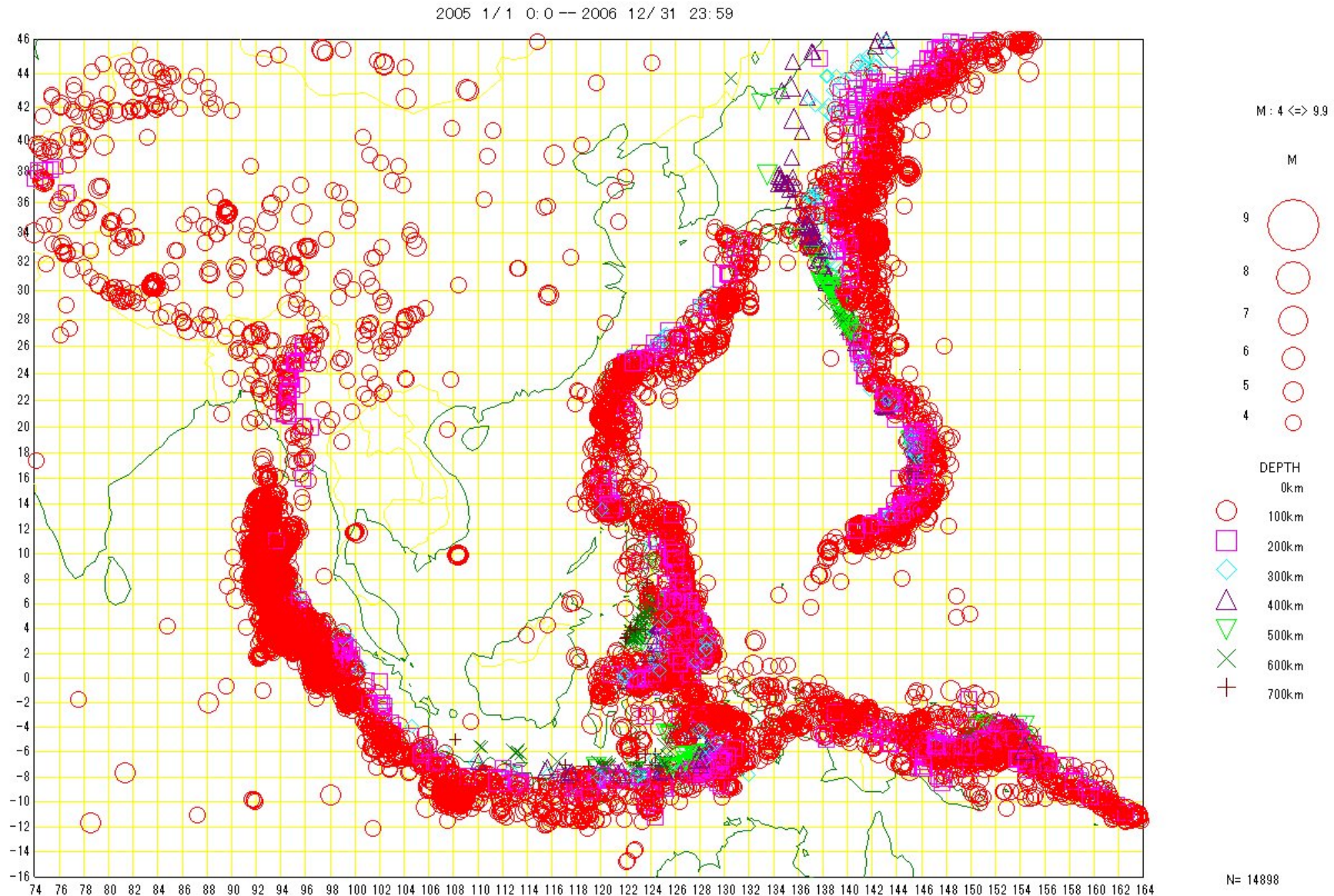


FILE:engdah1900-1963.seis.vhyp19642006pde.all

Distribution of earthquakes, $M \geq 4.0$, 2003-2004



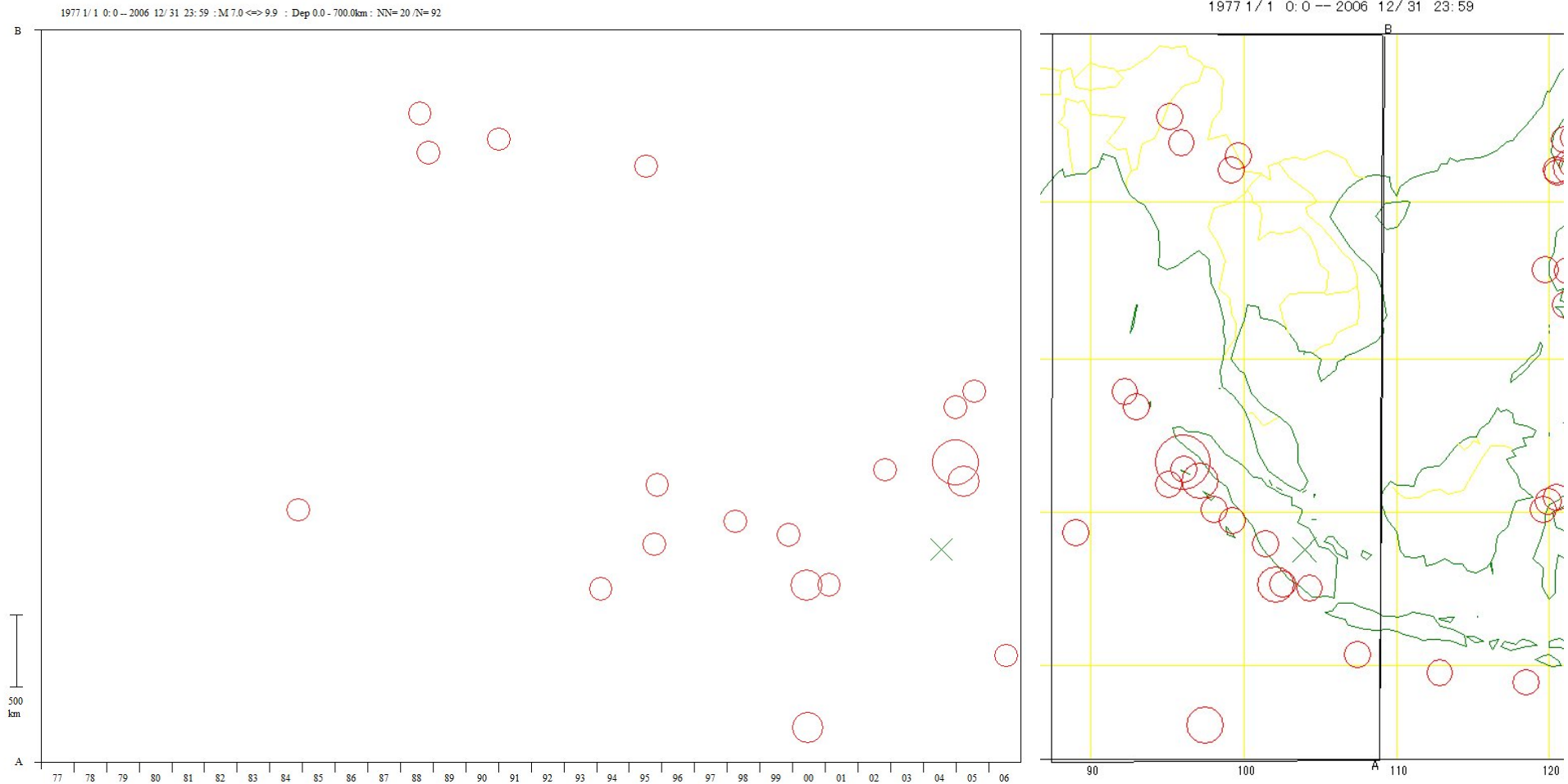
Distribution of earthquakes, $M \geq 4.0$, 2005-2006



FILE:engdahl1900-1963.seis.vhvp19642006pde.all

Time-space distribution in the Sunda arc region

1980-2006 $M \geq 7$



Earthquakes $M \geq 7$ in Indonesia (USGS)

Number of earthquakes $M \geq 7$ / 4 years

1989-1992	1
1993-1996	0
1997-2000	1
2001-2004	9(20010200222003120045+1)

2004 12 26 - Sumatra-Andaman Islands - M 9.1 Fatalities 227,898

2005-2008 11

2009-2012 8 (- end of 2010)

2009 01 03 - Near the North Coast of Papua, Indonesia - M 7.6 Fatalities 2

2009 01 03 - Near the North Coast of Papua, Indonesia - M 7.4

2009 01 03 - Near the North Coast of Papua, Indonesia - M 7.7 Fatalities 5

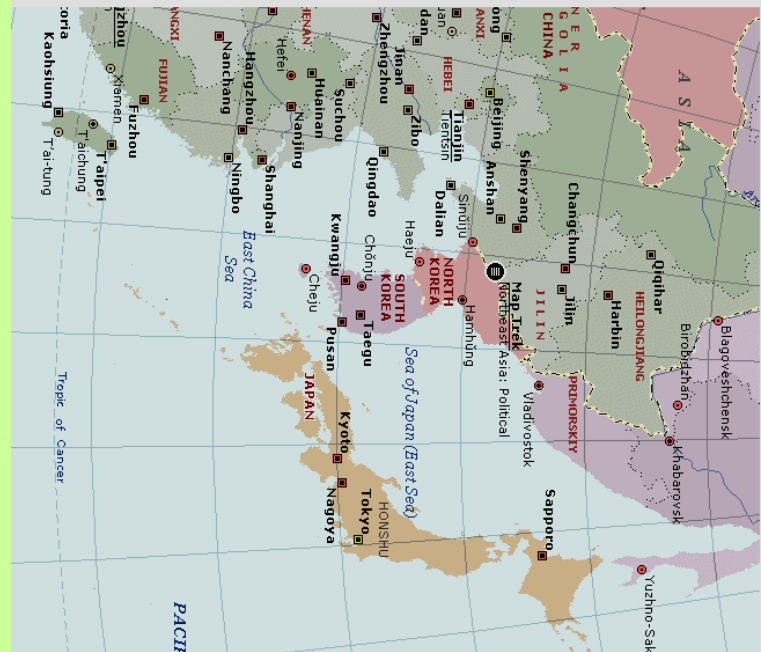
2009 01 03 - Near the North Coast of Papua, Indonesia - M 7.4

2009 02 11 - Kepulauan Talaud, Indonesia - M 7.2

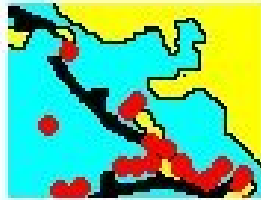
2009 09 02 - Java, Indonesia - M 7.0 Fatalities 81

2009 09 30 - Southern Sumatra, Indonesia - M 7.5 Fatalities 1,117

2010 05 09 - Northern Sumatra, Indonesia - M 7.2



Compare Sunda arc



With Japan islands

Tsunami by Tokai/Tonankai/Nankai Earthquakes

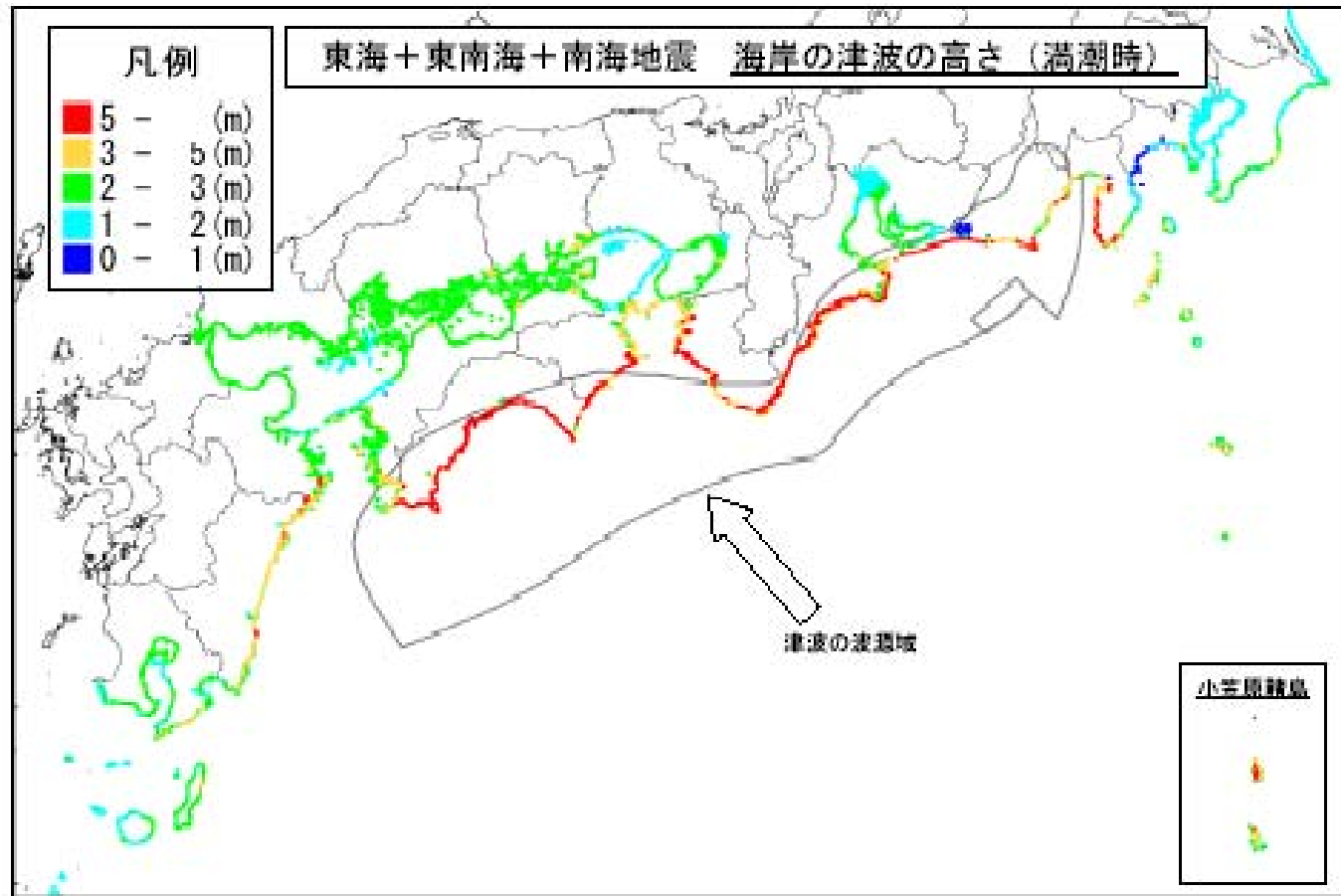
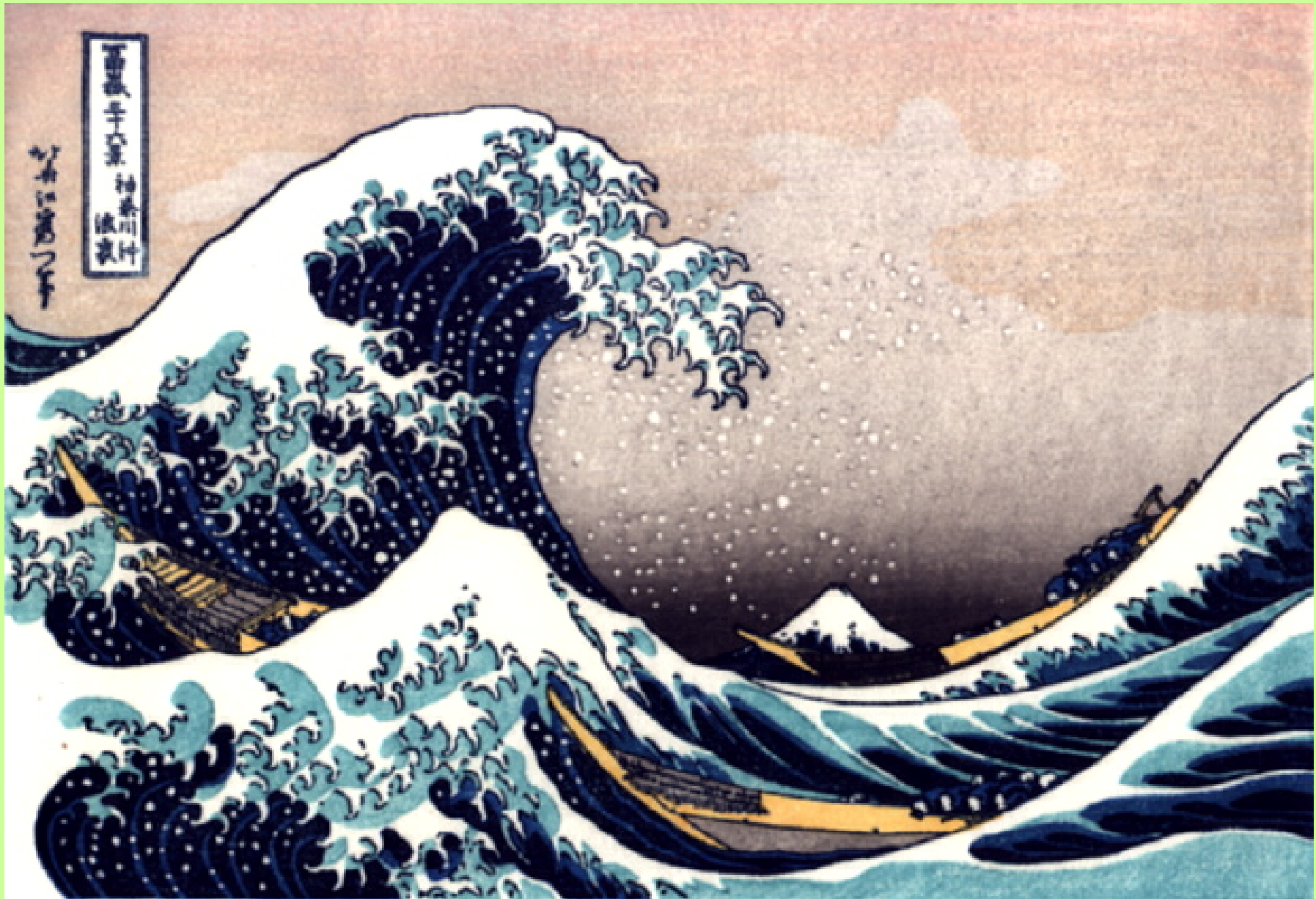


図6 東海+東南海+南海地震による海岸の津波の高さ（満潮時）

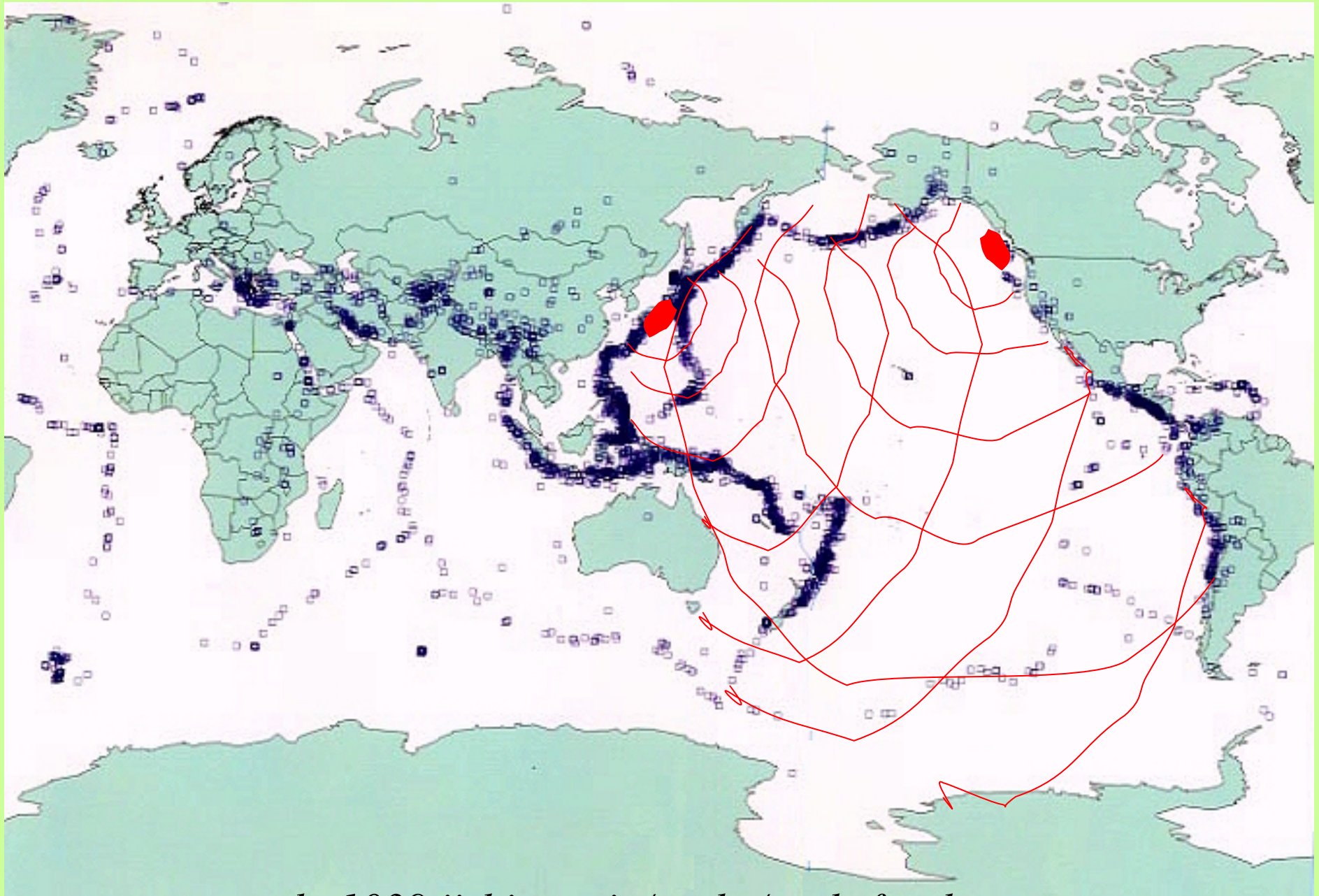
For the next great earthquakes

- *Big tsunami*
- *Sunda arc and Japan arc*
- *Until from 2030 to 2040*
- *What shall we do?*
- *For the next generation*

Great Wave off the Coast of Kanagawa, by Hokusai



Tsunami Disasters around the Pacific Rim

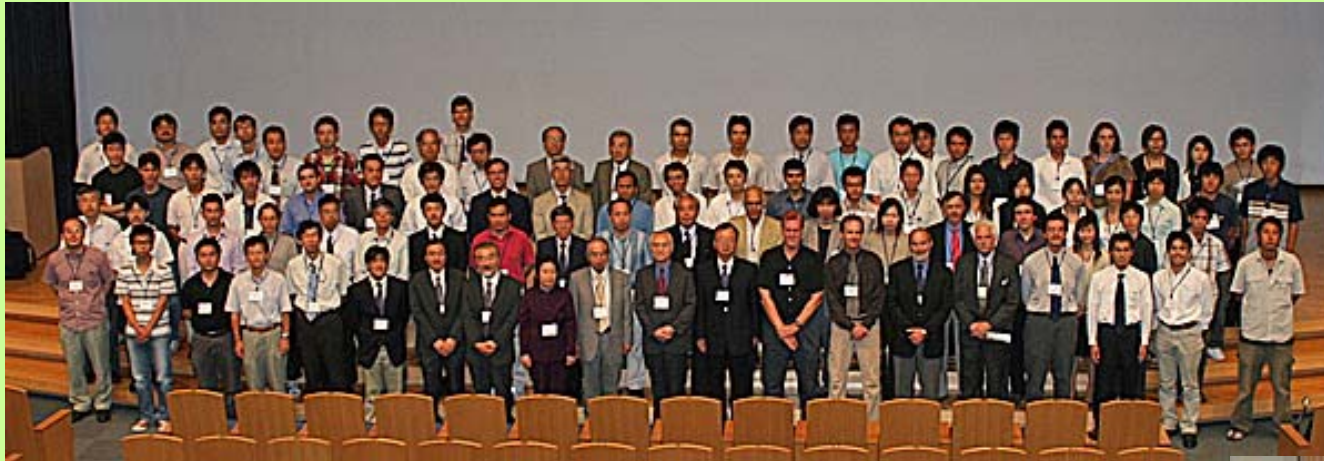


www.hp1039.jishin.go.jp/eqchr/eqchrfrm.htm

What should we do?

- *Regional Tsunami Disaster Risk Assessment*
- *Local Tsunami Disaster Risk Assessment*
- *Participatory Strategic Planning for Tsunami Disaster Reduction*
- *Regional Seismic Risk Assessment*
- *Implementation of Countermeasures for Tsunami Disaster Mitigation and Preparedness*
 - *Structural Measures*
 - *Informational Measures*
 - *Educational Measures*

*APRU/AEARU Research Symposium on "Earthquakes
Hazards around the Pacific Rim - Prediction and Disaster
Prevention - "
- August 31, 2005 -*



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ขอบคุณ มาก ครับ

Thank you very much.



감사합니다