

Role of the Department of Disaster Management, Cabinet Office

- About 70 staff members.
- They support following issues;
 - National basic policy on disaster making and planning.
 - Coordinating the activities of all Ministries and Agencies on disaster.
 - Governance of each ministry's disaster preparedness and management.
 - Deciding national activities to large-scale disasters.
 - Masterplanning of post-disaster recovery and reconstruction.
 - Executing disaster drill with each ministries.

Disaster Management Operation



Disaster management drill at the operation room of the Ministry of Land, Infrastructure and Transport. (Cabinet Office also execute such kind of drill.)

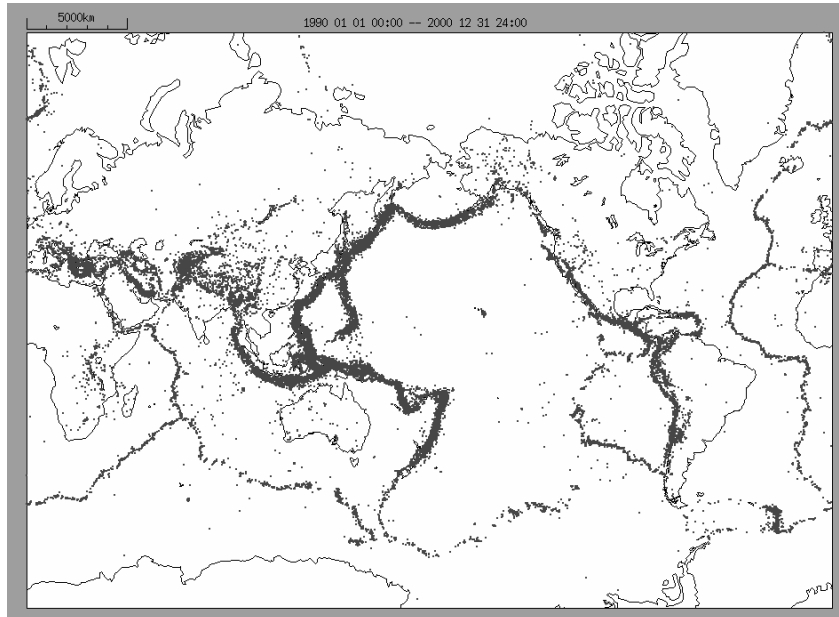
Countermeasures against Tsunami in Japan

January 2005
Tomoaki OZAKI
Cabinet Office, Japan

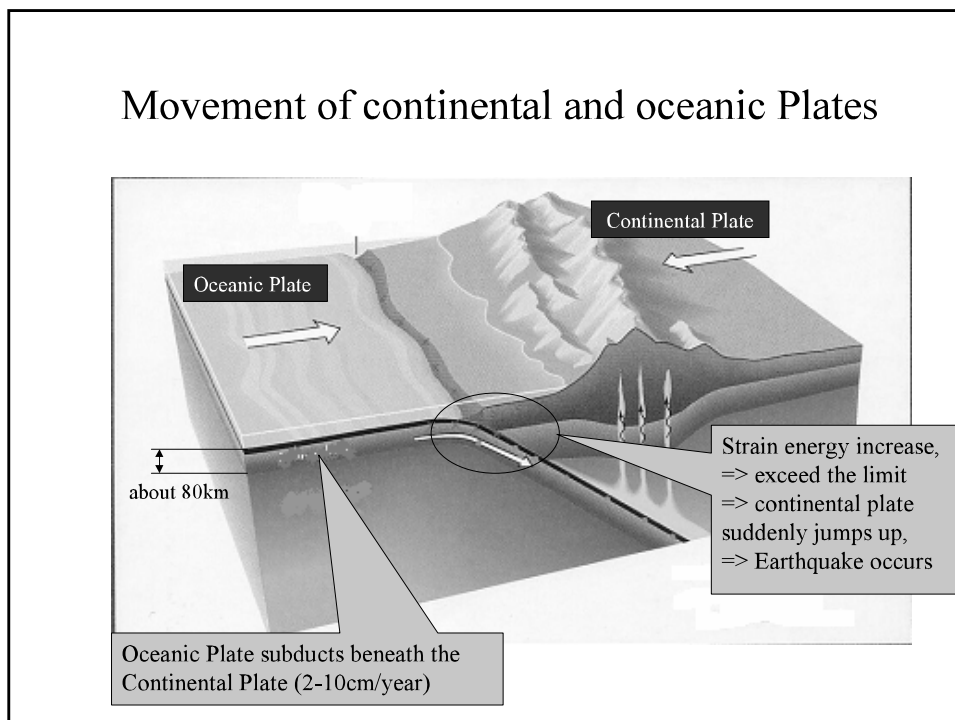
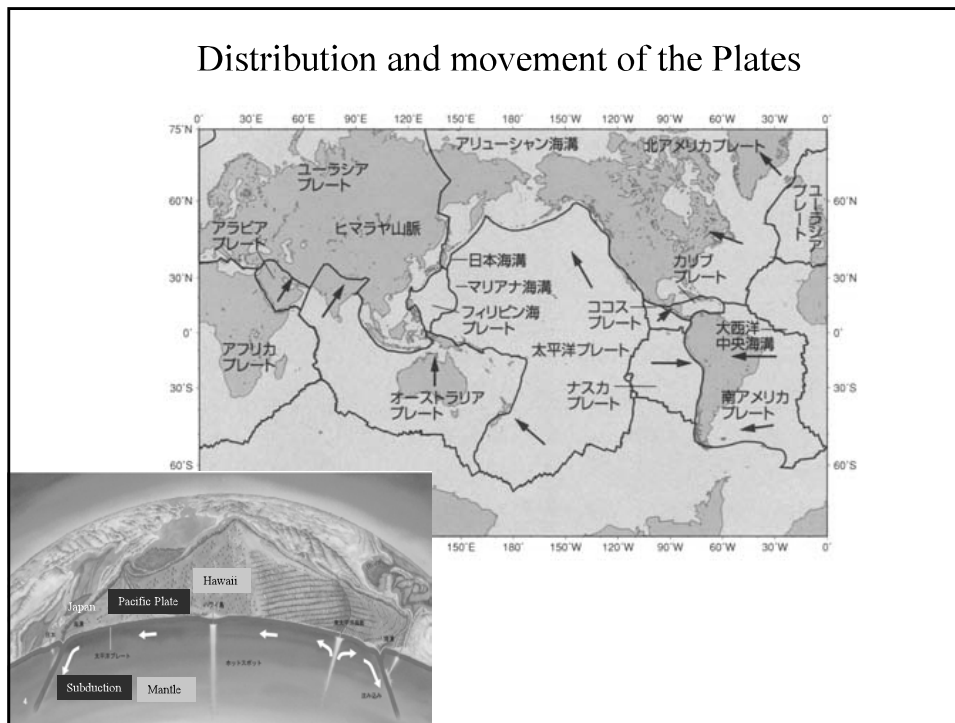
- 1. Outline of Tsunami**
- 2. Tsunamis of Indian Ocean**
- 3. Historical Damaging Tsunamis in Japan**
- 4. Countermeasures against Tsunami in Japan**
 - 1) Evacuation from Tsunamis**
 - 2) Spreading the knowledge of Tsunami to the public**
 - 3) Equipments against Tsunamis**
 - 4) Transmitting Tsunami Warnings quickly and accurately**

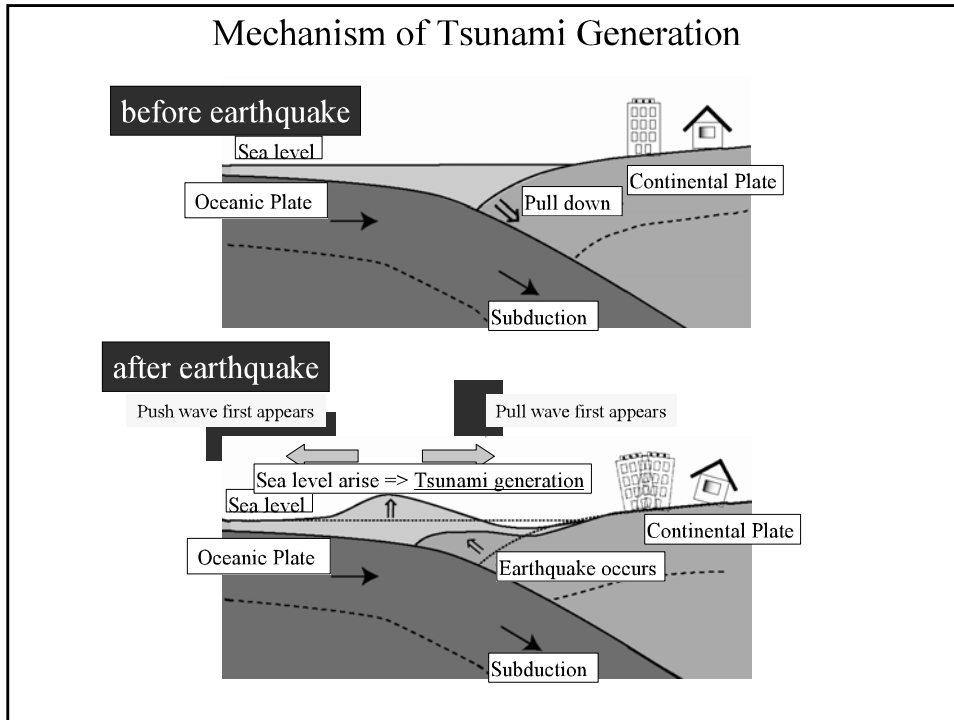
1. Outline of Tsunami

Distribution of the Earthquakes in the World



防災行政にかかるセミナー資料(内閣府)

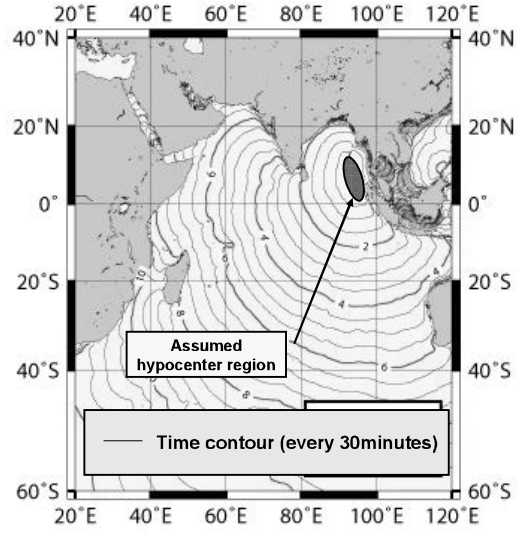




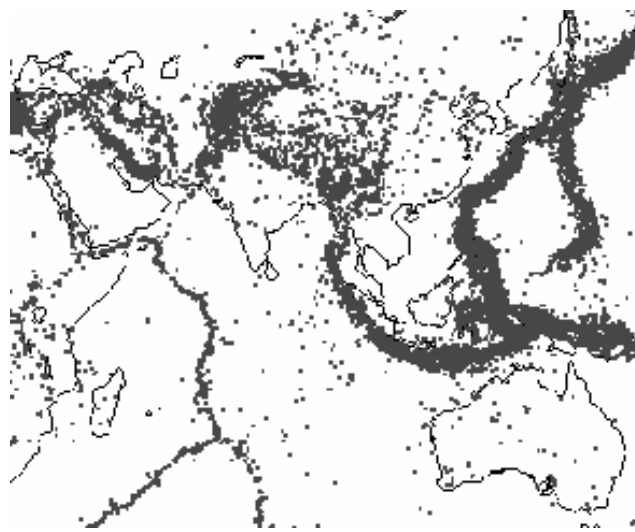
2. Tsunamis of Indian Ocean

防災行政にかかるセミナー資料(内閣府)

Arrival time of Indian Ocean Earthquake-Tsunami

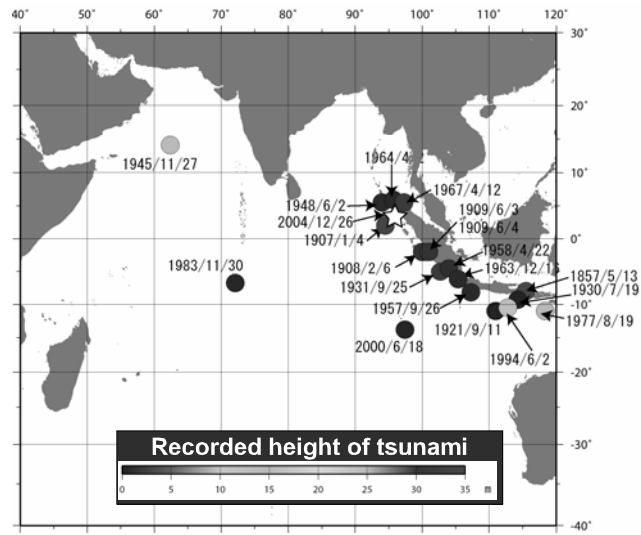


Seismicity around the Indian Ocean



1990.1.1-2000.12.31

Earthquakes generated tsunami in the Indian Ocean in the past



3. Historical Damaging Tsunamis in Japan

防災行政にかかるセミナー資料(内閣府)

Historical Damaging Tsunamis along Japanese Coast (since 1868)

Name (Magnitude)	Year	Dead or Missing
Meiji-Sanriku Earthquake and Tsunami (M8.5)	1896	22,000
Showa-Sanriku Earthquake and Tsunami (M8.1)	1933	3,064
Tonankai Earthquake (M7.9)	1944	1,251 ※
Nankai Earthquake (M8.0)	1946	1,443 ※
Chile Earthquake (Mw9.5)	1960	139
Tokachi-Oki Earthquake (M7.9)	1968	52
Nihonkai-Cyubu Earthquake (M7.7)	1983	104 ※
Hokkaido-Nansei-oki Earthquake (M7.8)	1993	230 ※

Propagation of Chilean Tsunami wave (1960)



Each contour represents one hour of travel time.
(http://www.prh.noaa.gov/itic/tsunami_events/historical_summaries/1960.pdf)

Dead or Missing: 139 in Japan

This event was triggered to the establishment of International Coordination Group for the Tsunami Warning System in the Pacific (ICG/ITSU).

4. Countermeasures against Tsunami in Japan


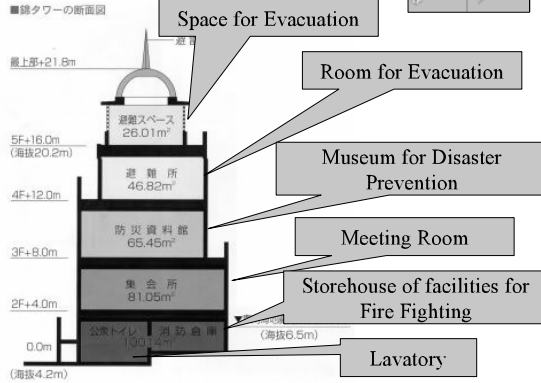

1) Evacuation from Tsunamis

(1) Tsunami Evacuation Places

(2) Tsunami Signboards

(3) Tsunami Hazard Map

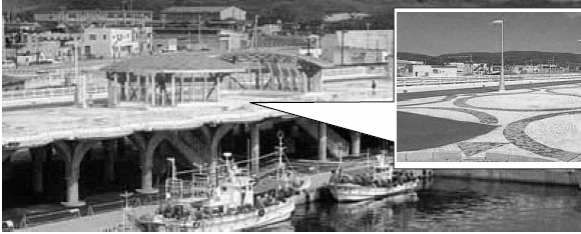


Tsunami Evacuation Places (1) Shelter for Tsunami Evacuation

This shelter was constructed for the purpose of tsunami evacuation. It is hard to keep evacuation route to high ground in this area. This building is used as a museum or an exhibition when not in an emergency. (Kisei Town, Mie Prefecture)

<http://www.webmie.or.jp>

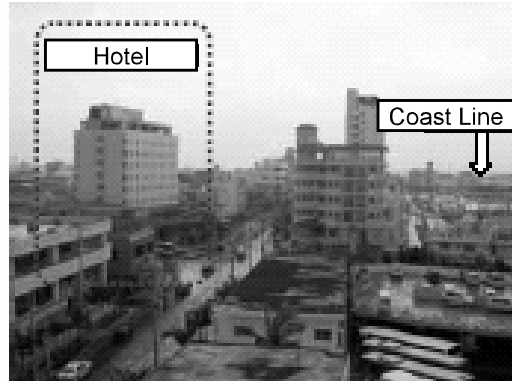
Tsunami Evacuation Places (2) Artificial Hill for Tsunami Evacuation

Artificial hill for tsunami evacuation was constructed nearby a fishing port after this area was heavily attacked by large tsunami in 1993. (Okushiri-island, Hokkaido Prefecture).

Tsunami Evacuation Places (3)

Building designated as Tsunami Evacuation Place



This hotel building, located near the coastline, is designated as a temporary evacuation place in case of tsunami (Ishigaki City, Okinawa Prefecture).

Tsunami Evacuation Places (4)



Inhabitants' effort to keep escape route



As railway crossed the evacuation route, it took long time for inhabitants to evacuate to the high ground in case of Tsunami. Inhabitants constructed a part of wooden evacuation route and the local government completed the rest part of it. New route shortened the time to evacuate. (Kushimoto-Town, Wakayama Prefecture)

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Tsunami Signboard

This Tsunami Signboard guides the way to the evacuation place. This design representing tsunami evacuation is unified in this prefecture. Unified design is important for inhabitants, visitors or tourists.
(Kochi Prefecture)

(<http://www.pref.kochi.jp/>)

Tsunami Hazard Map

Reorganization of Dangerous Area and Increasing Understanding of Tsunamis

Support of Making Tsunami Hazard Map


- Showing information on the level of disaster risk, evacuation routes, etc.

Support of Having Information in Common

- Letting residents in coastal area and visitors know the hazard map through various opportunity
- Tsunami drill

Promoting People's Understanding

National Government made manual for supporting respective administrators to make and apply hazard maps.



Tsunami Hazard Map (Susaki City)

