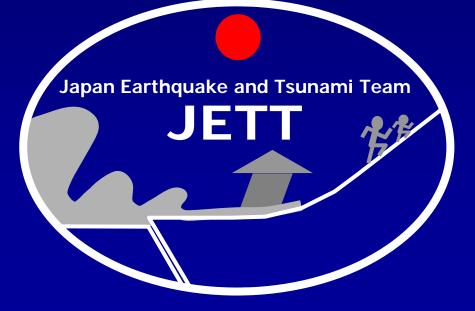
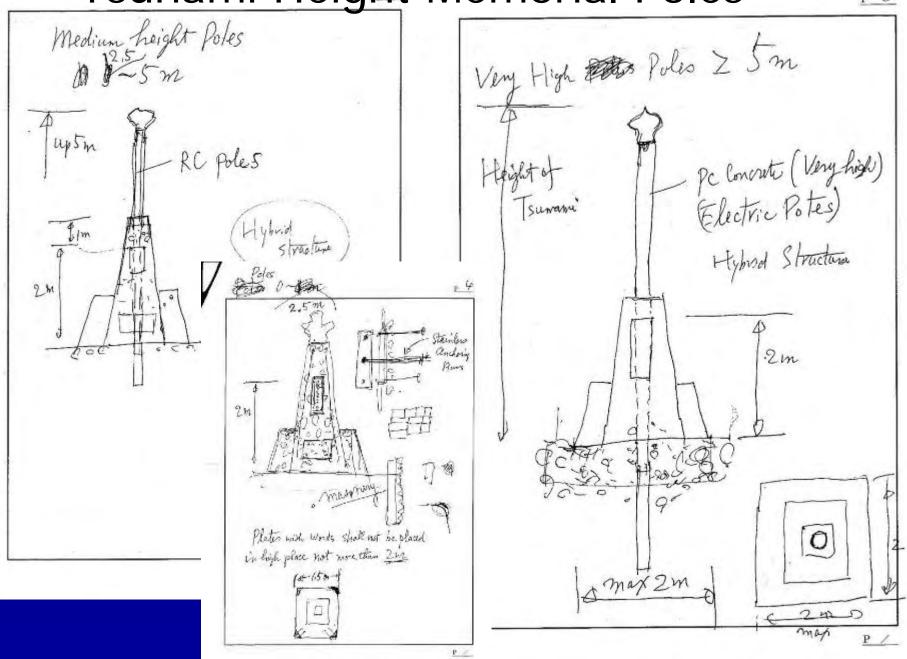
Tsunami Height Memorial Poles



Tsunami Height Memorial Poles



P 6



Discussions with locals and authorities









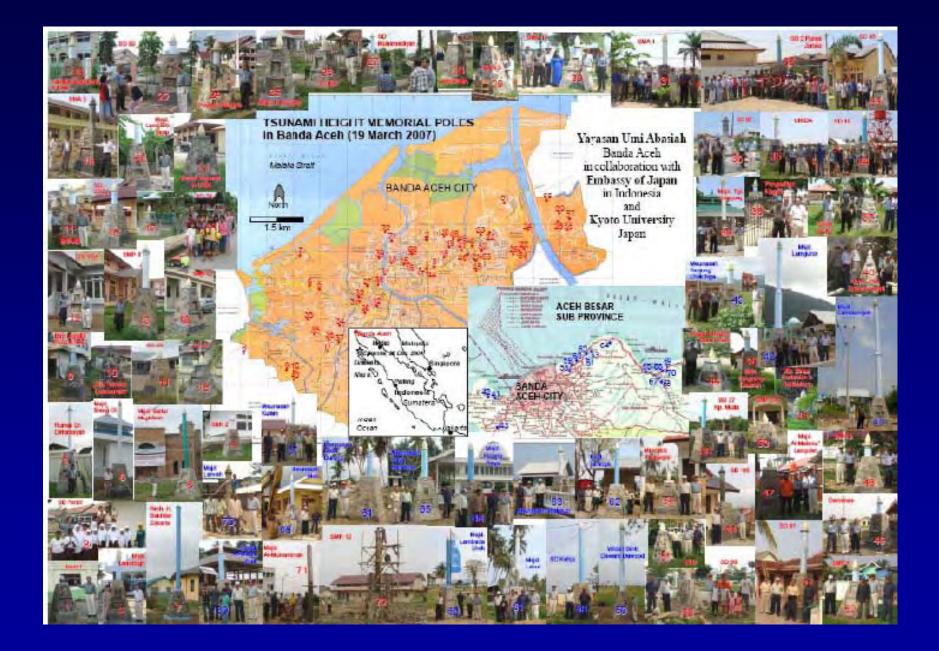




Tsunami Height Memorial Poles



Proposed Locations in Banda Aceh



Launching Ceremony for Marking the One Year Construction of the Tsunami Height Memorial Poles and Hazard Education Masjid Lamdingin, Banda Aceh, by Yayasan Umi Abasiah, Embassy of Japan, Kyoto University, and local people, 26 December 2006

Opening the Ceremony by reading verses from the Holy Quran

Mr. Satoru Satoh, DCM/ Minister of Embassy of Japan in Indonesia TSIAM 26 ASHER 204 TINGG GENANGAN AR 3.15 m Jarak Dari Pantai 2.80 km Vaktu tea gelombang Seditar 8.39 MB

Message GRG LAMDINGIN on the KEC.KUTA ALAM Memorial

Pole (Pole No.2 on the map)

S ALLAH DANGANLAH ERAKUM TEBANI KANT DENGAN PERJAWANNI BERA Tergainanna engi ati terancia tepana otang-otang-otang-itera 13 Allah Jangan atengkat protikan pepua kang liyi teng-terak 13 Negrup kani menikulaya, ya ali ah-matakkan at kano meninti ah kani teri terinati dar kami

TUGUNYOE GEUSINBANG LE RAKYAT JEUDANG kerjasama : kerutaan desar jeunng jakar ta dengan yayasan uni abasiah banda aceh Mr. Sanusi Wahab, Head of Yayasan Umi Abasiah

LMINCE

10

Public Lecture by Prof. Hirokazu lemura of Kyoto University

Reading the message on the Memorial Pole

Head of Masjid Lamdingin

ETA H AND COLEMA

8006 kg 26

Message written on the Pole

TUGU NO. 67 SUNAMI 26 DESEMBER 2004 TINGGI GENANGAN AIR 1.30 m (Les Biru) JARAK DARI PANTAI 3.30 km WAKTU TIBA GELOMBANG SEKITAR 8.40 WIB

40 MENIT SETELAH TERJADI GEMPA, M=8 9 SR)

Pole Number 67 Upper and Lower Plates

TUBU INI DIBANGUN UNTUK MENGENANG MEREKA Yang meninggal dunia akibat tsunami dan sebagai Peringatan bagi masyarakat khususnya generasi Penerus agar selalu waspada dan siaga guna Menghadapi bencana gempa/tsunami yang mungkin terjadi lagi di masa mendatang

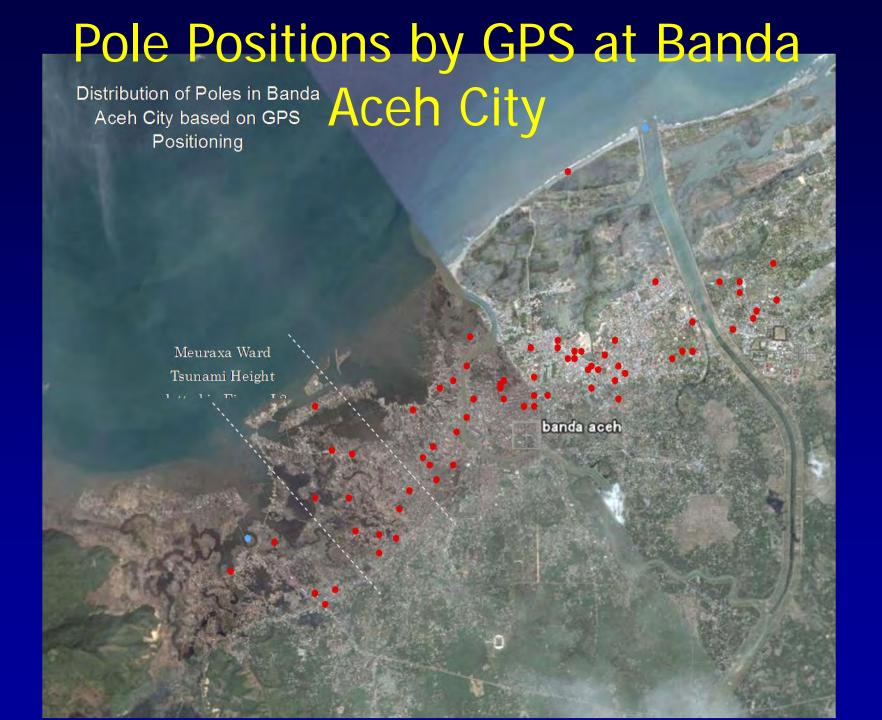
RUMAH BP. ALAMSYAH UMAR JALAN SYIAH KUALA BANDA ACEH TUGUNYOE GEUSUMBANG LE RAKYAT JEUPANG kerjasama dengan yayasan umi abasiah banda aceh

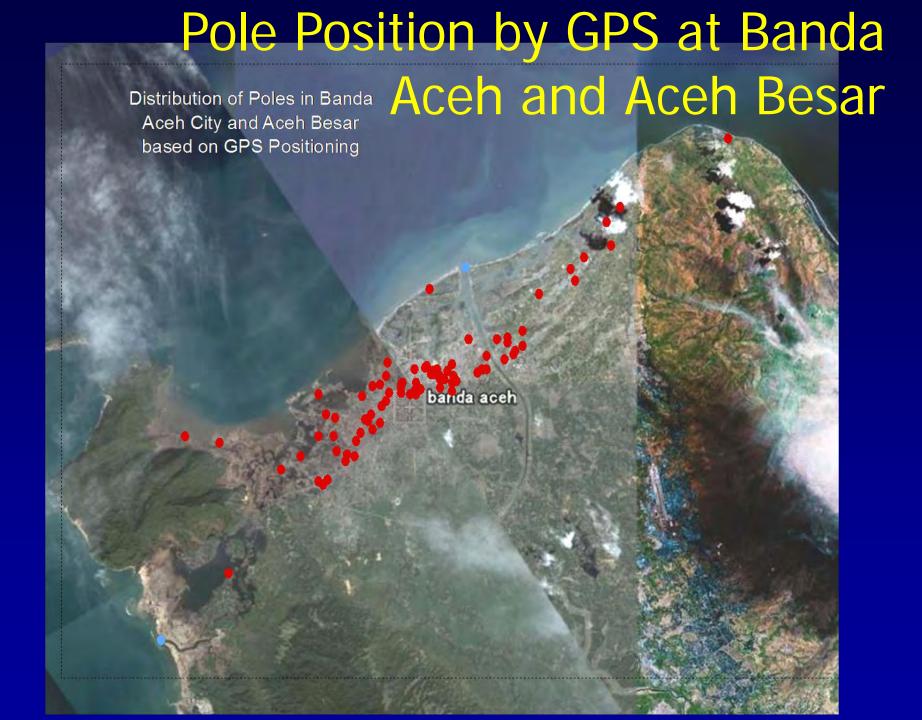
Measuring Ground Height and Position by Barometer and GPS device

0 00 0

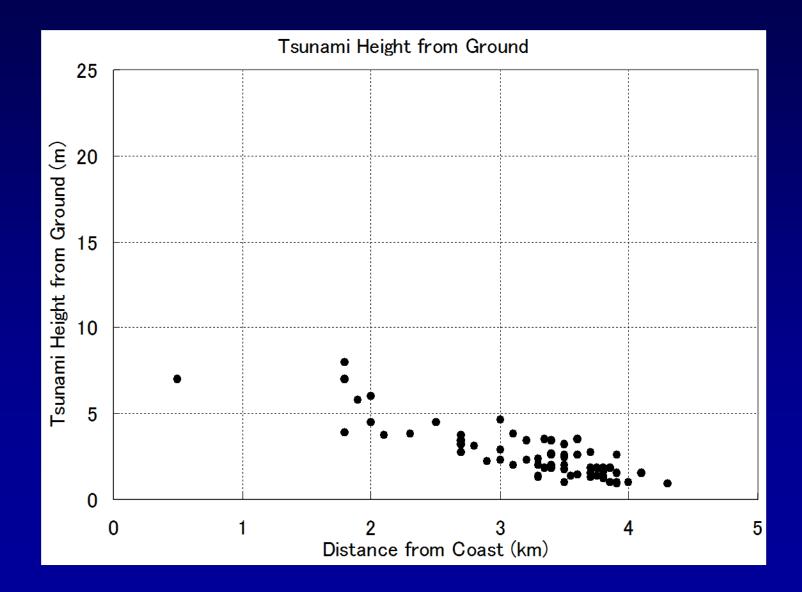
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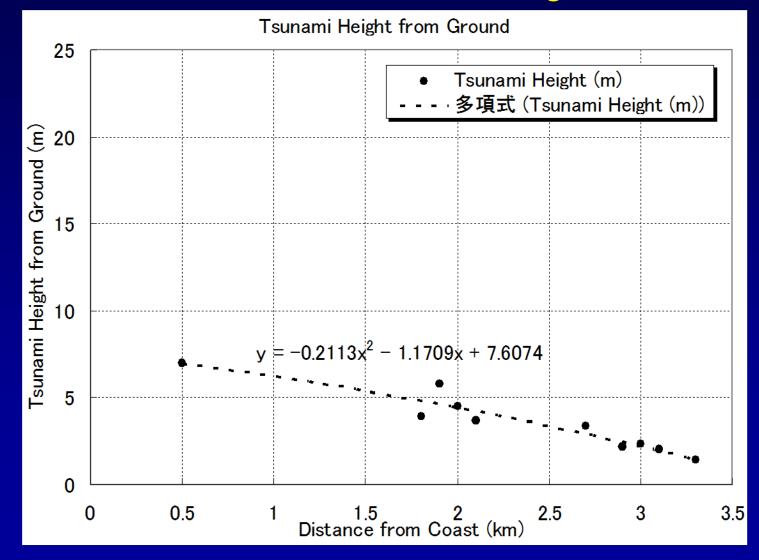




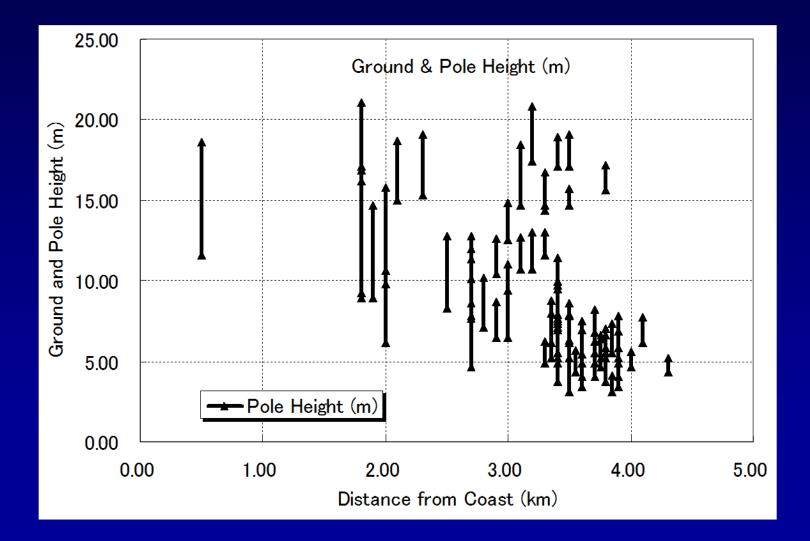
Pole Height from Ground



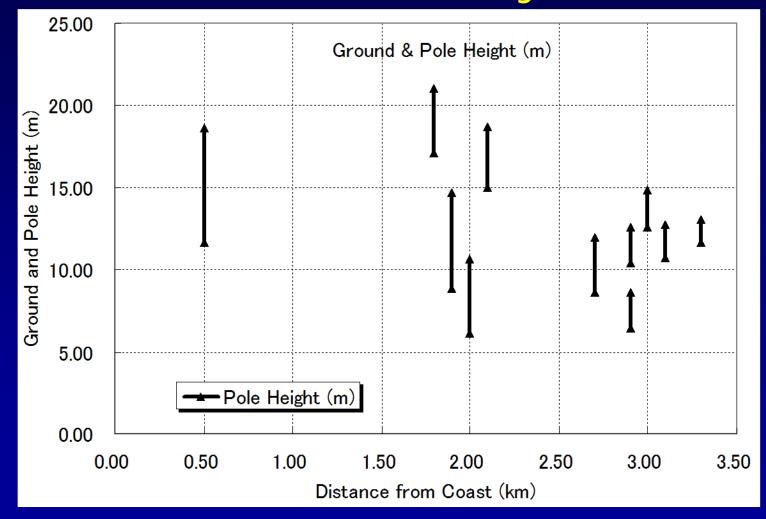
Pole Height from Ground at Meuraxa only



Pole Height + Ground Height



Pole Height + Ground Height at Meuraxa only



Recommendations from Our Investigation Team (1)

- Tsunami Disaster Prevention Measures (Warning, Wave break, Mangrove, Land use, Evacuation)
- Institute or Center for Earthquake and Tsunami Research
- Tsunami and Earthquake Museum (Monuments, Facts, Data, Education Materials, etc.)

Recommendations from Our Investigation Team (2)

- International Collaborations among Research Institution
- Tsunami and Earthquake Safe Structural Design (Technologies and Codes)
- Tsunami Poles and Disaster Education (Not Forget but Understand)

Recommendation(1) from the Recent Myanmar Cyclone and China Earthquake

✓ International Global Hazard Monitoring System

Tools; High sensitivity seismographs GPS data Satellite Monitoring

Use;

Early Warning for Tsunami and Cyclone Early Damage estimation and quick action of countermeasures Recommendation(2) from the Recent Myanmar Cyclone and China Earthquake

✓ Calculation and Plotting of Hazard Maps

With use of Local and regional historical data, calculate the expected level (intensity, energy, magnitude) of natural hazard, depending on the given return period.

and plot them on the maps, to show the local people.

Recommendation(3) from the Recent Myanmar Cyclone and China Earthquake

✓ Calculation and Plotting of Risk Maps

With use of hazard data and vulnerability of structures, buildings, facilities, society, etc, calculate the expected risk depending of the levels of the hazard and plot them on the maps to show the local people.

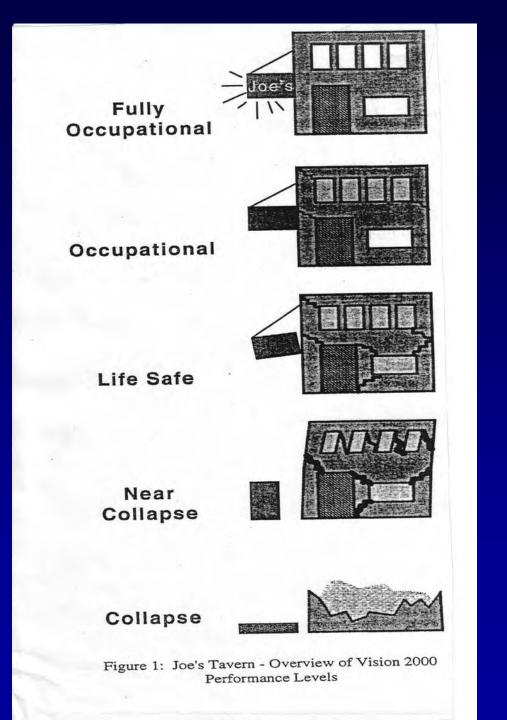
Recommendation(4) from the Recent Myanmar Cyclone and China Earthquake

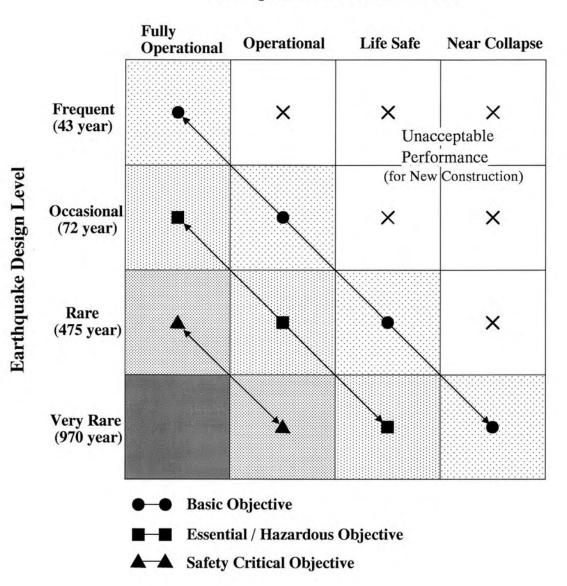
✓ Acceptable Performance Based Design approach

With the concept of the performance based design methods, determine the acceptable performance level of structures, facilities, and society, data.

This level might be different from the level with the cost effective approach.

Try to achieve the performance with the reasonable and applicable technologies to be developed.





Earthquake Performance Level

Vision 2000 Performance Objectives for Buildings