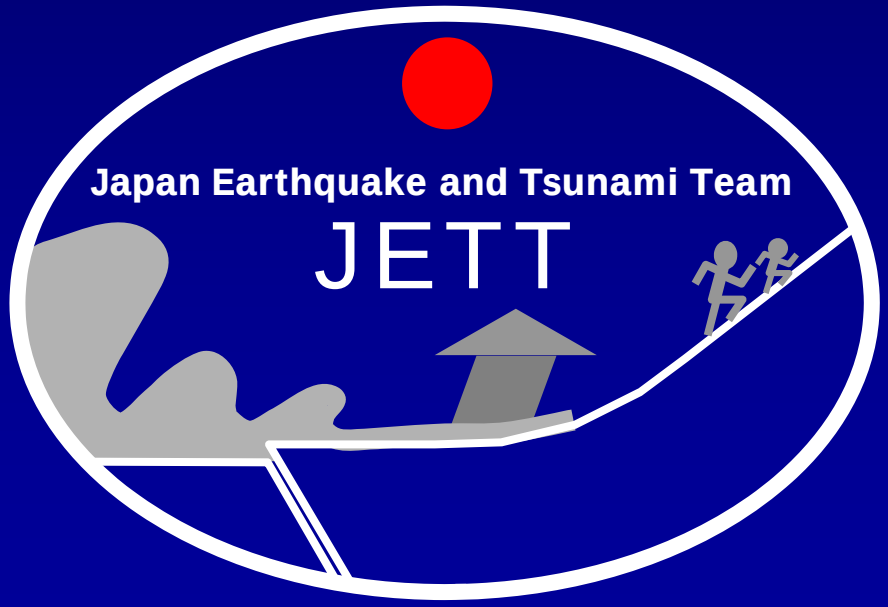
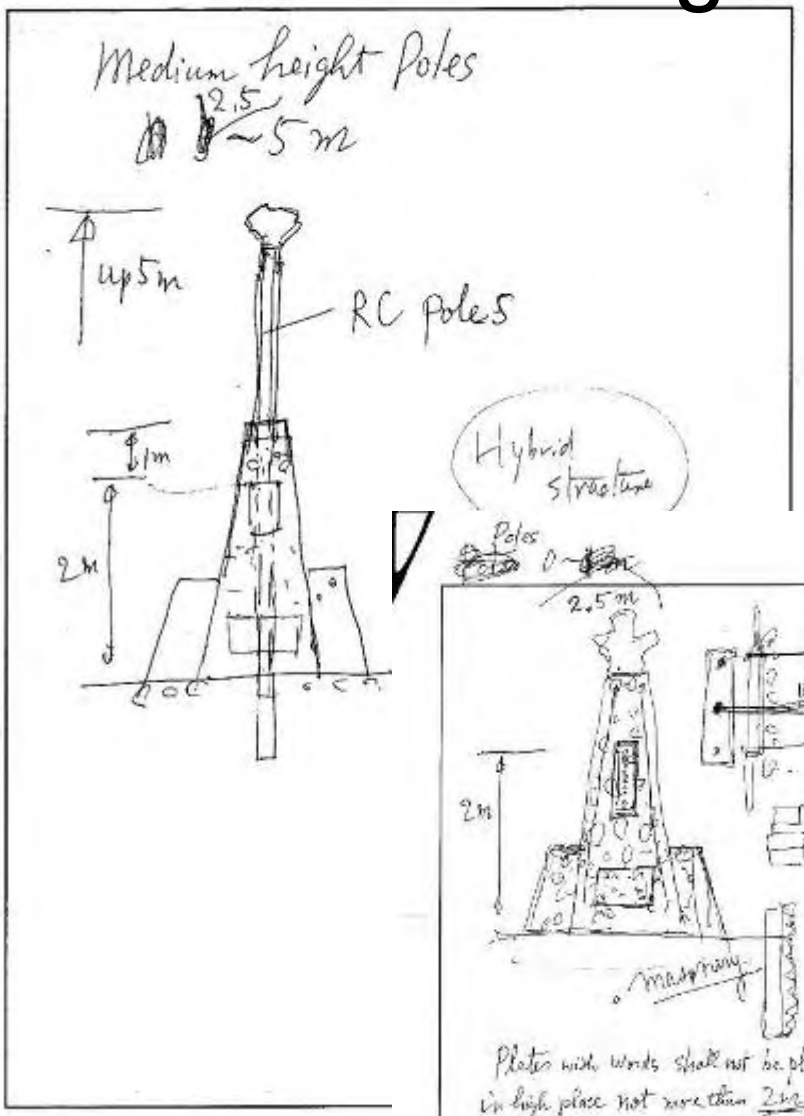
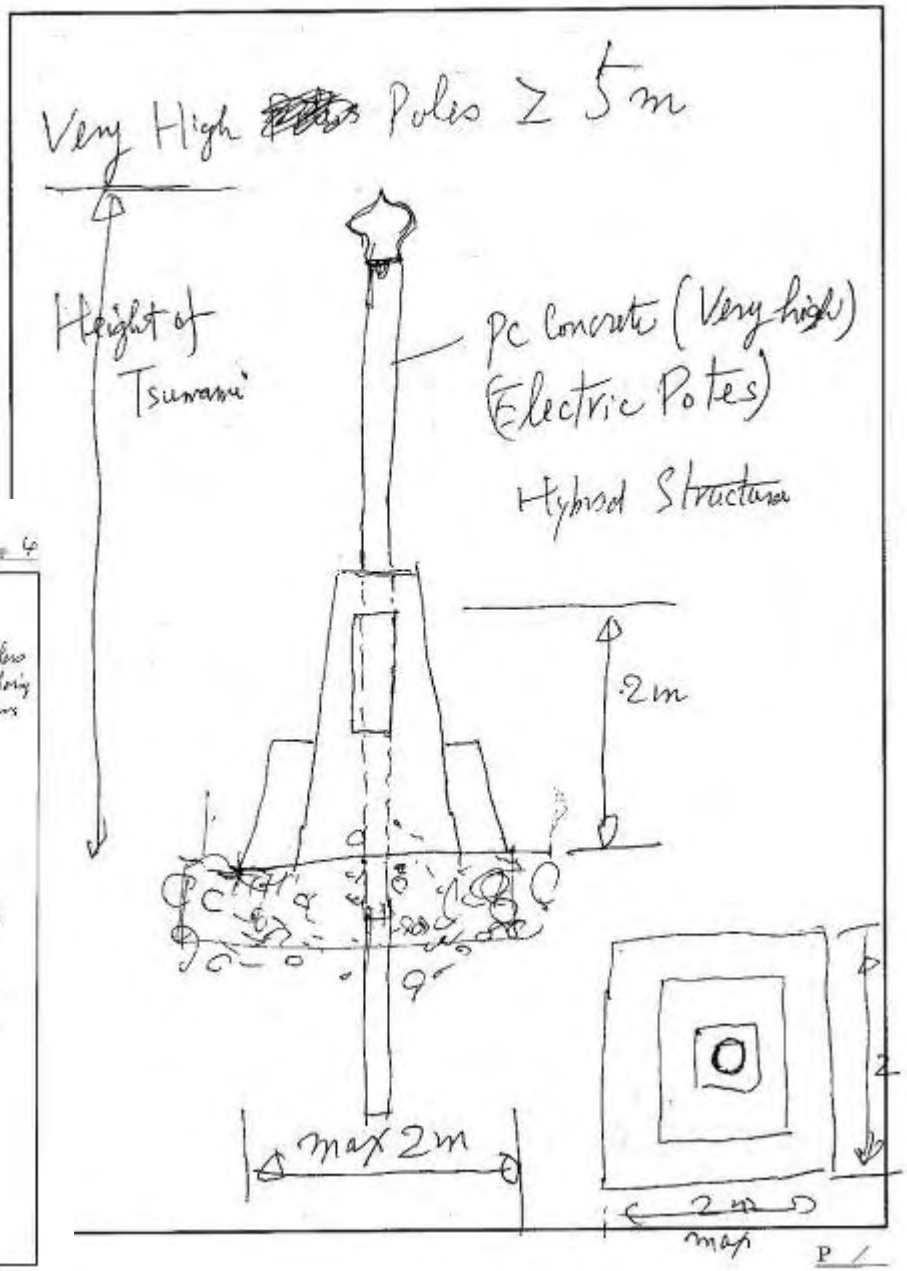
Tsunami Height Memorial Poles



Tsunami Height Memorial Poles

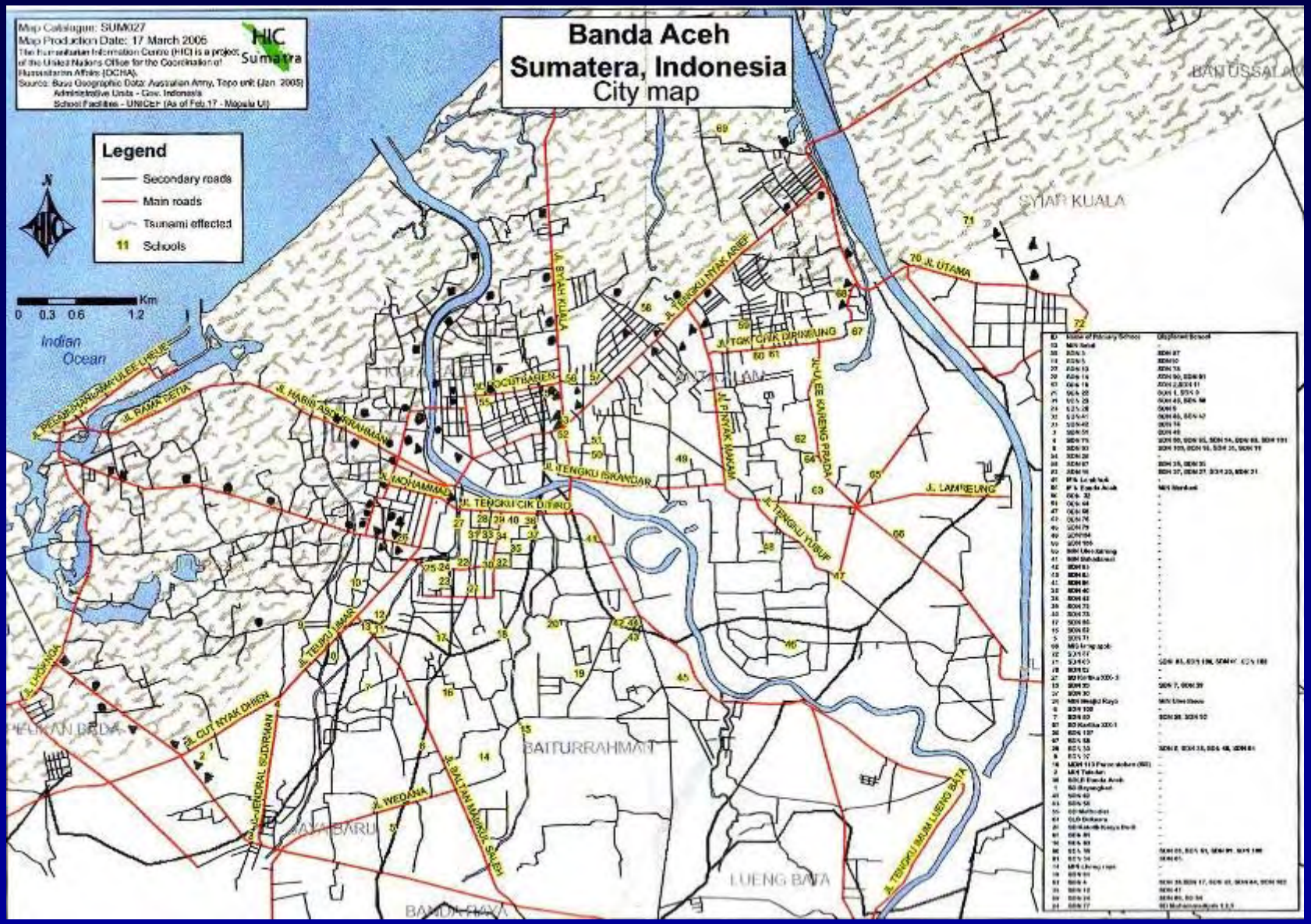




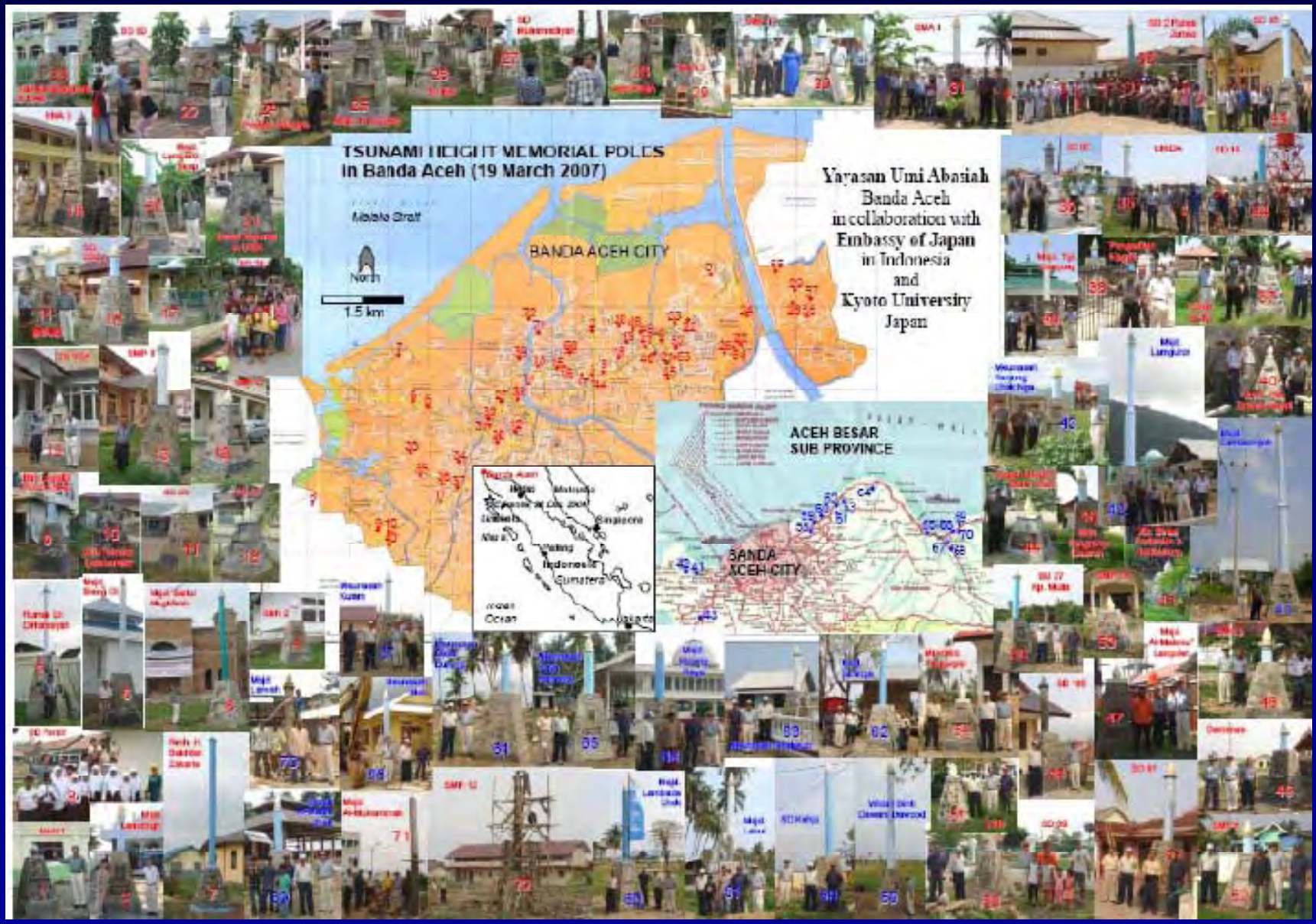
Discussions with locals and authorities


AIR SIAP MI
MASYA
USLIM

Tsunami Height Memorial Poles



Proposed Locations in Banda Aceh


TSUNAMI HEIGHT MEMORIAL POLES
in Banda Aceh (19 March 2007)
Yayasan Umi Abasiah
Banda Aceh
in collaboration with
Embassy of Japan
in Indonesia
and
Kyoto University
Japan
Malaka Strait
BANDA ACEH CITY
North
1.5 km
ACEH BESAR
SUB PROVINCE
BANDA
ACEH CITY
Singapore
Malaysia
Indonesia
Sumatera
Indian
Ocean

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

Message on the Memorial Pole (Pole No.2 on the map)

Mr. Sanusi Wahab, Head of Yayasan Umi Abasiah

Mr. Satoru Satoh, DCM/ Minister of Embassy of Japan in Indonesia

Reading the message on the Memorial Pole

Head of Masjid Lamdingin

Public Lecture by Prof. Hirokazu Iemura of Kyoto University

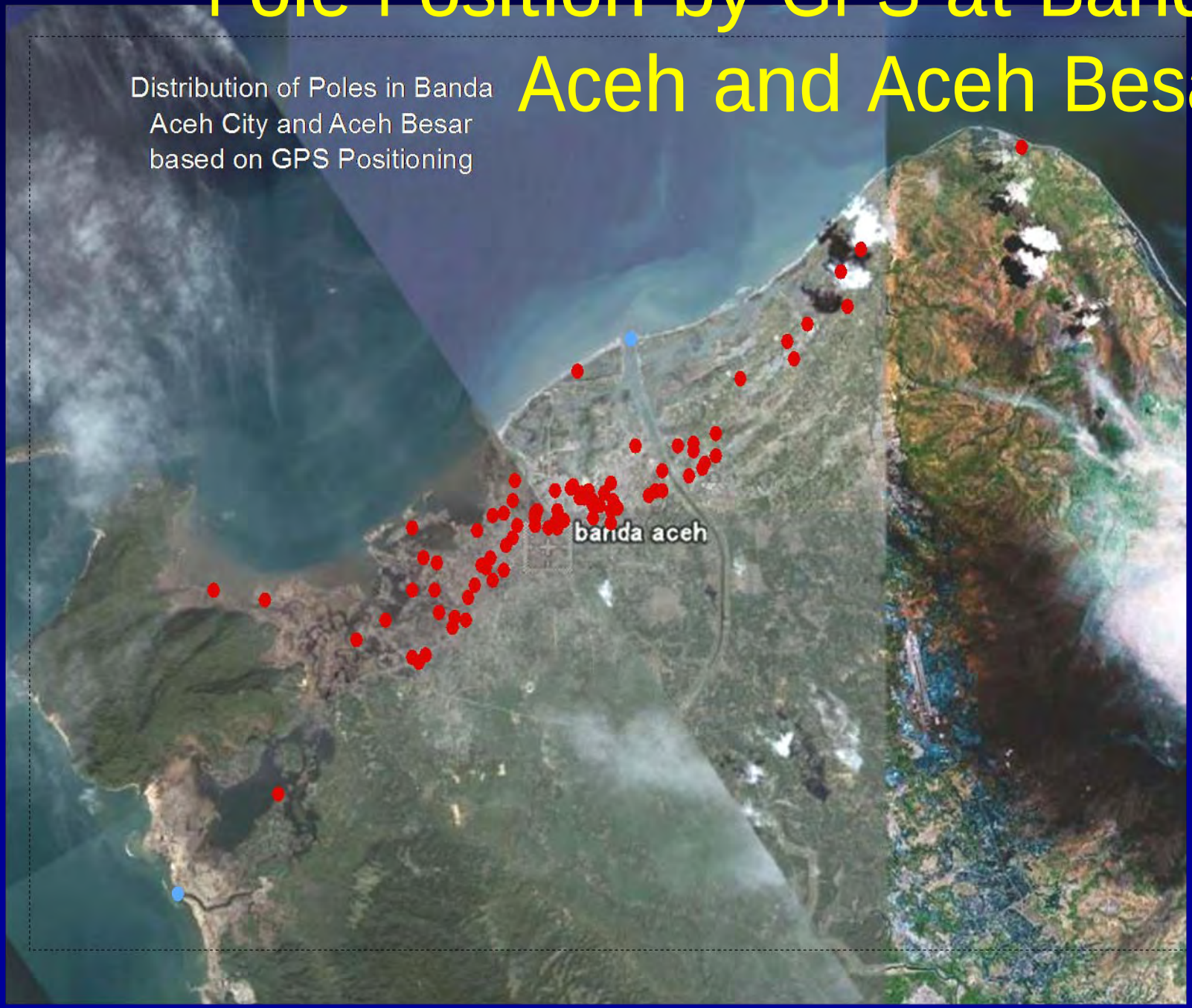
Message written on the Pole

Pole Number 67
Upper and Lower Plates

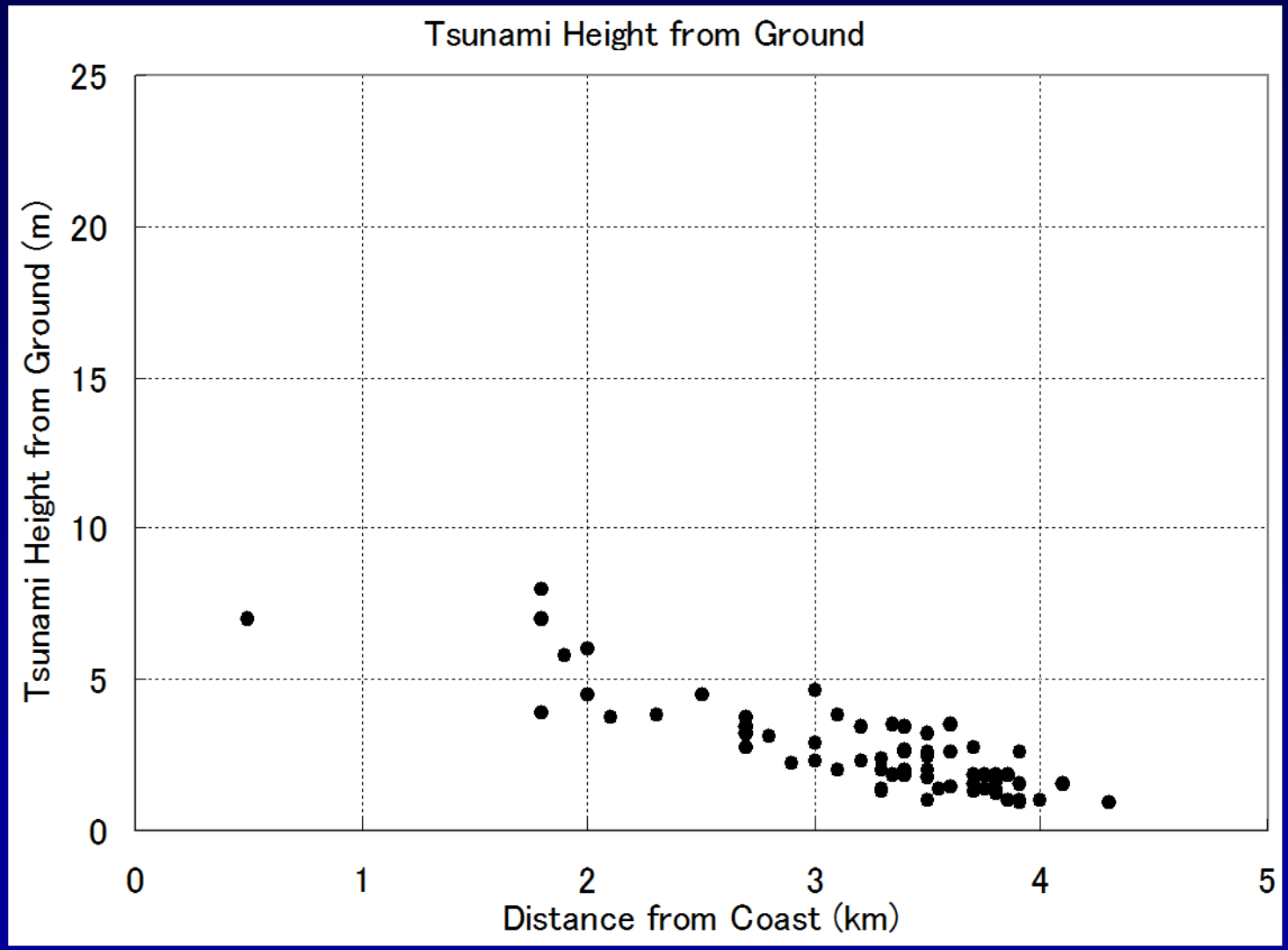
Measuring Ground Height and Position by Barometer and GPS device

Pole Positions by GPS at Banda Aceh City

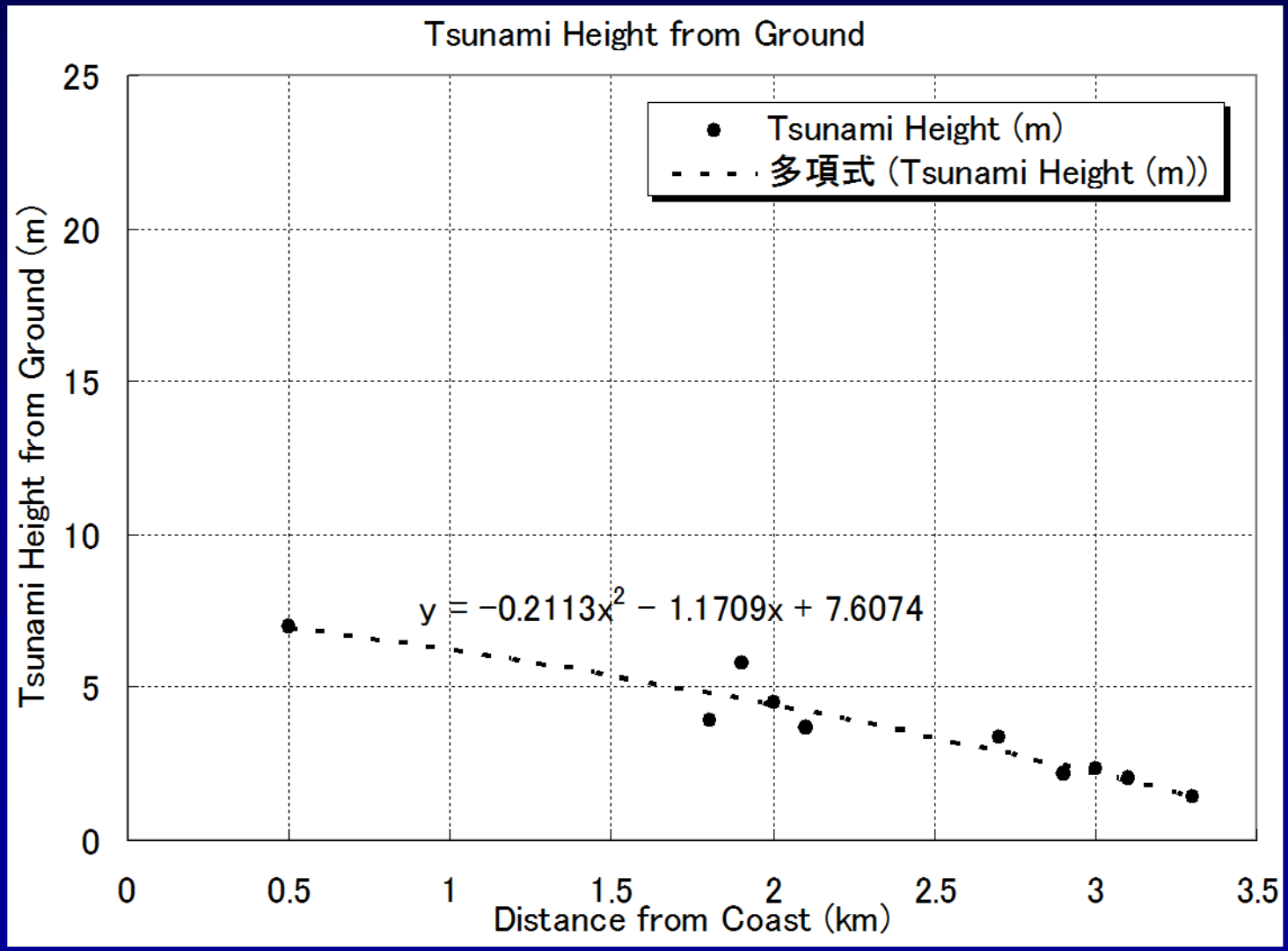
Pole Position by GPS at Banda Aceh and Aceh Besar



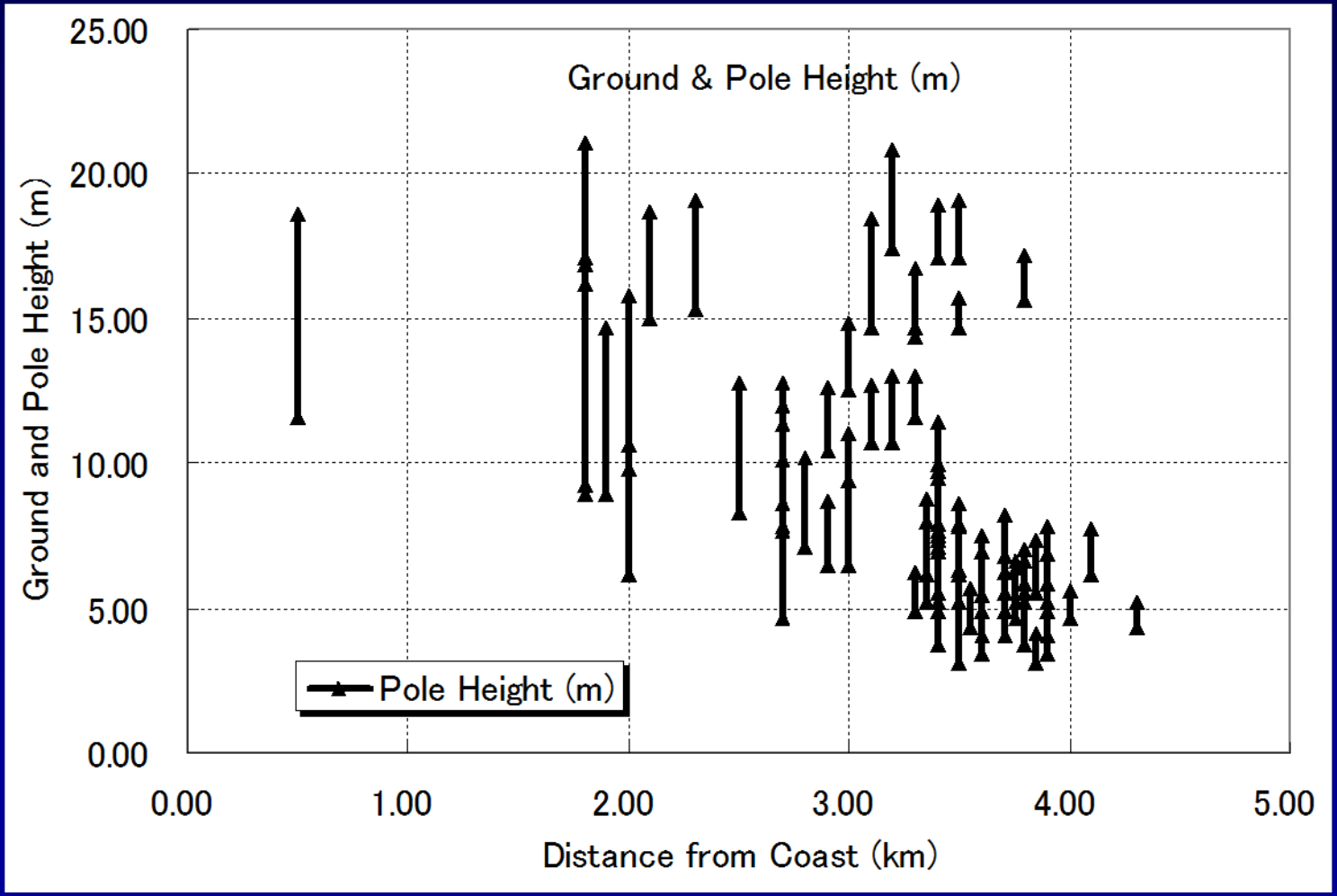
Pole Height from Ground



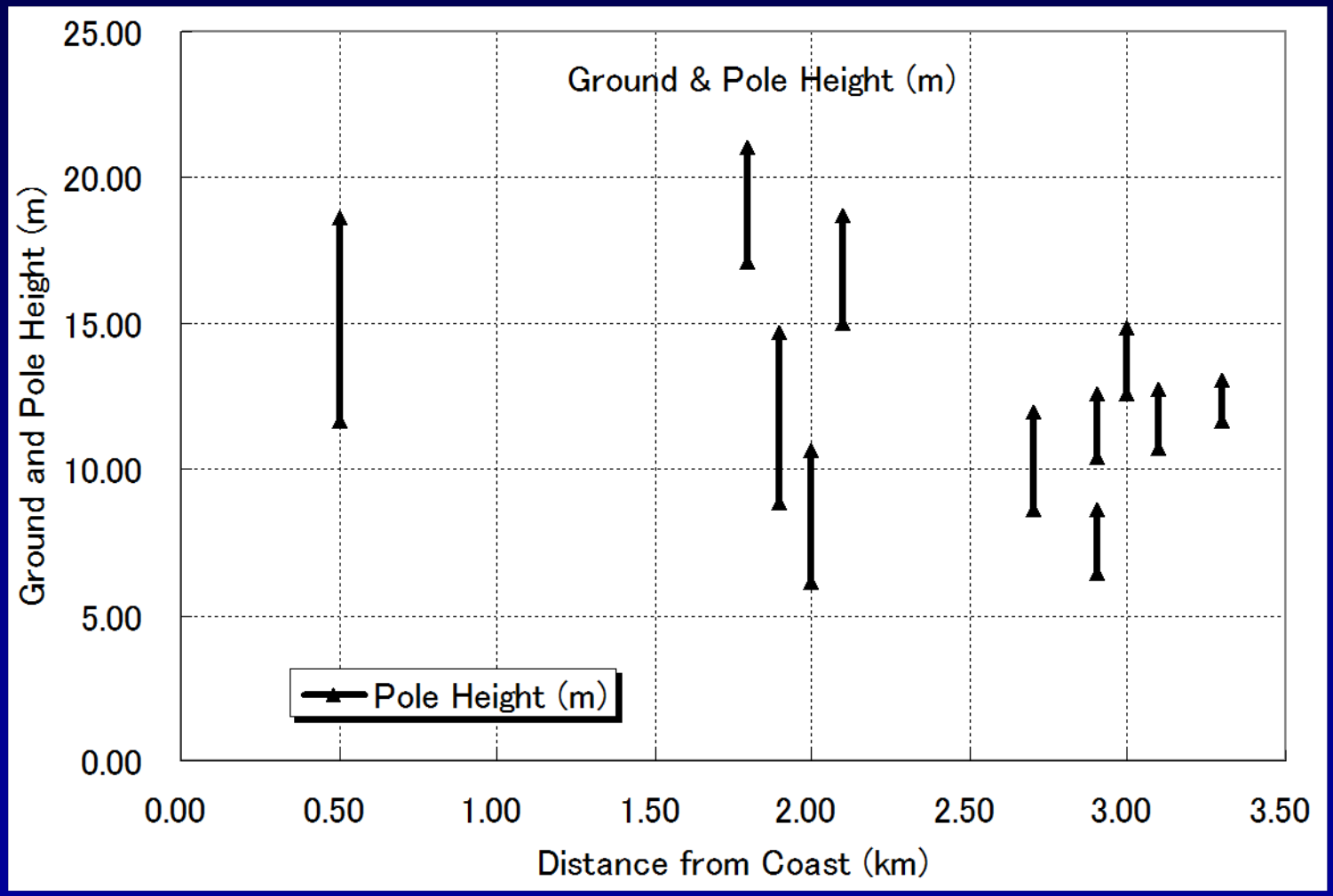
Pole Height from Ground at Meuraxa only



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.

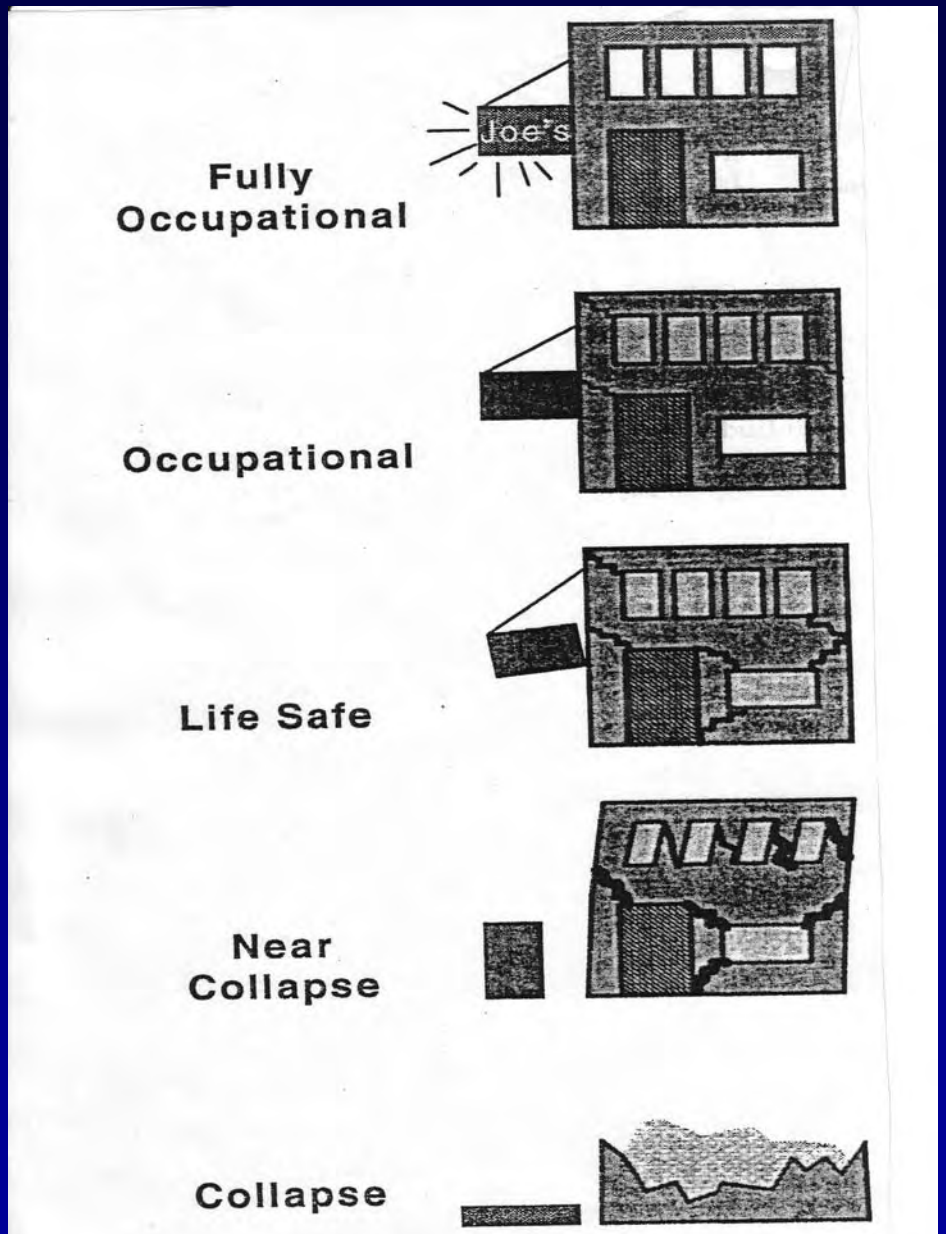
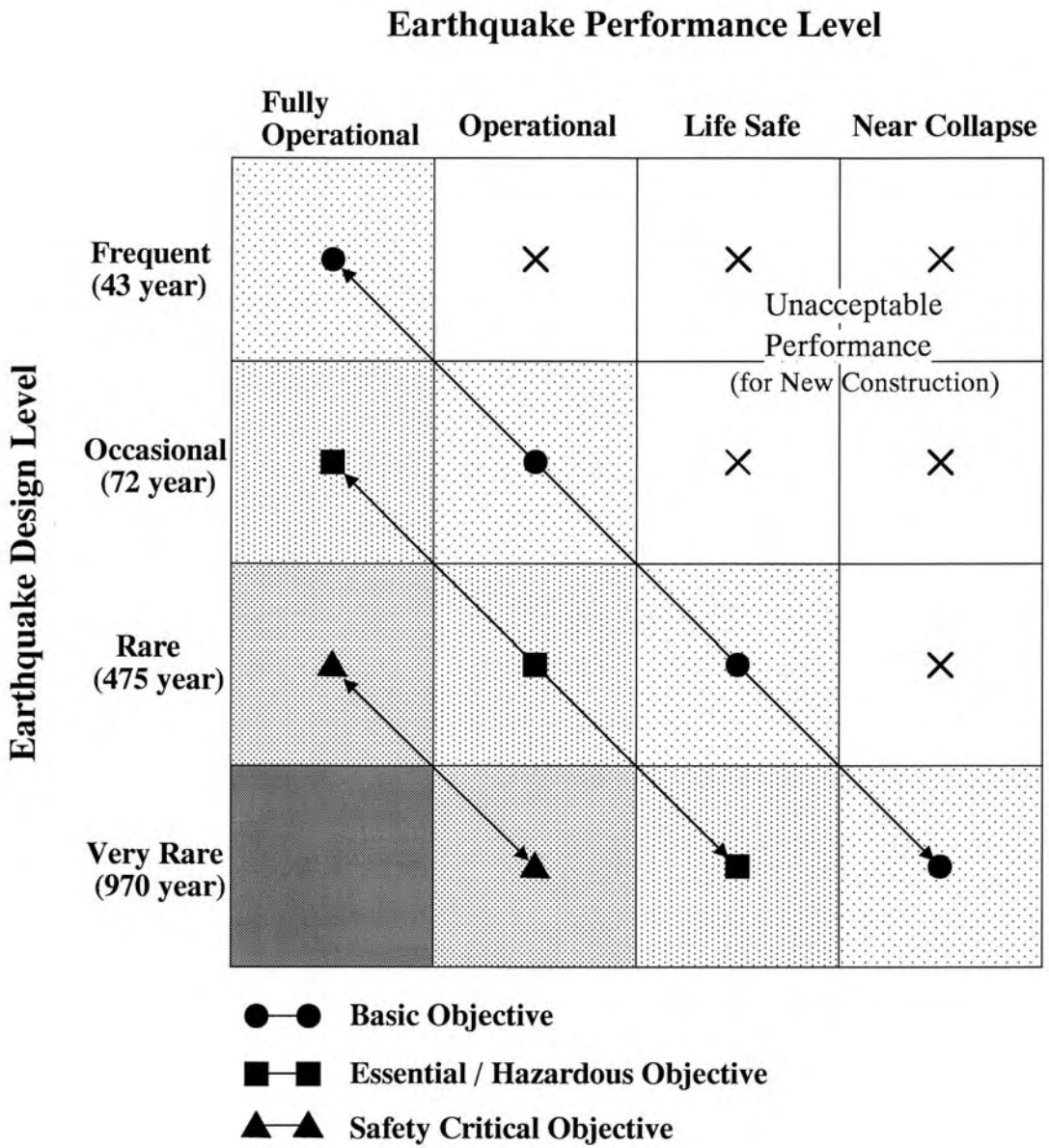


Figure 1: Joe's Tavern - Overview of Vision 2000 Performance Levels



Vision 2000 Performance Objectives for Buildings