

DECISION SUPPORTS FOR EMERGENCY PREPAREDNESS OF NATURAL HAZARDS



**Workshop on Scientific Decision Supports for
Emergency Preparedness of Natural Hazards**

27-31 July 2015 Taipei

by

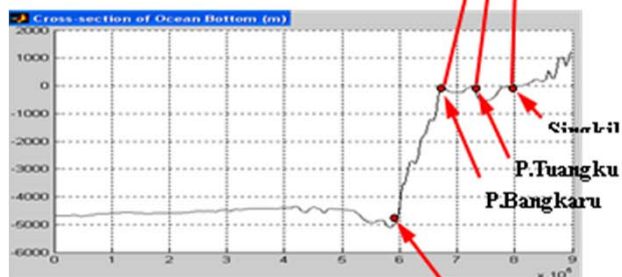
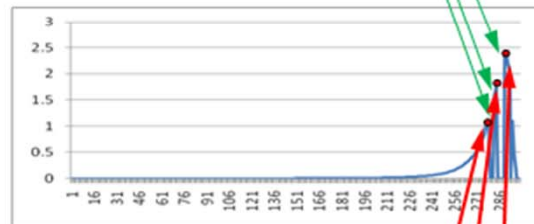
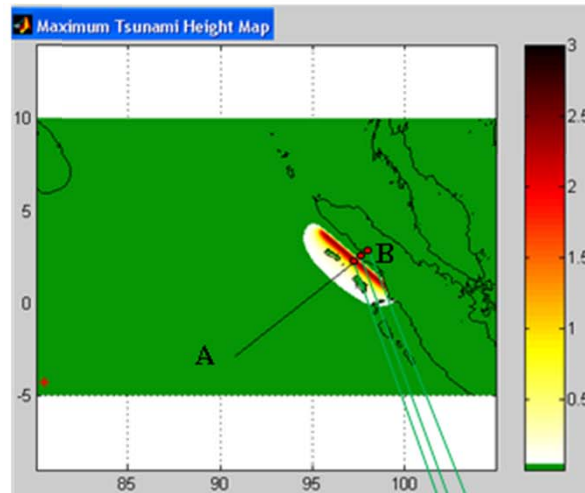
Indonesia, Malaysia and Philippine

INFORMATION INTELLIGENCE

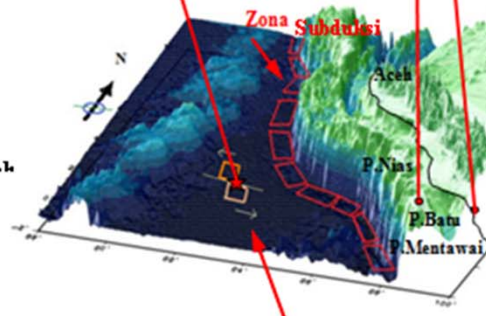
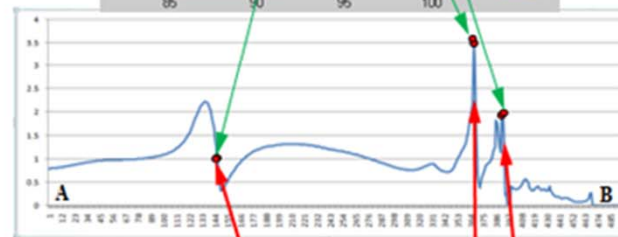
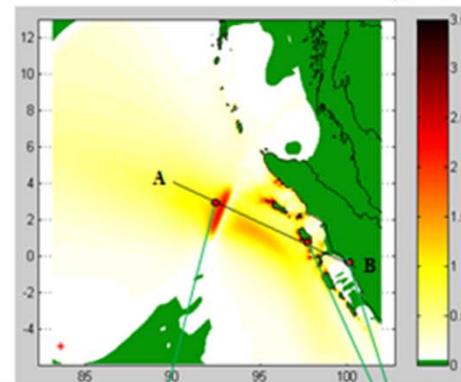
Data type:

1. Static data: bathymetry data
2. Dynamic data: Earthquake parameter (depth, strike, dip, slip, etc)
3. Evolving data: Coast line structure
4. Digital Maps: Geographical Information System
5. Aerial observation: drone, GPS: time, coordinate, tsunami height propagation
6. Social data sets: demography of vulnerable area

TSUNAMI NUMERICAL MODELS



Epicenter of Nias



Epicenter of Aceh

Worst case scenarios

Big data of:

- Bathymetry
- Earthquake parameter
- GPS

INCLUSIVE STAKEHOLDER

- ✓ Big data produce by government with Research Centre support, then producing cloud database.
- ✓ Transformation of data to be understandable information

APPLICATION OF S&T TO TSUNAMI PREPAREDNESS

- ✓ Protection of infrastructure
- ✓ Private Sector's involvement for BCP
- ✓ Making Plan using scenario numerical tsunami

PUBLIC PRIVATE PARTNERSHIP

- ✓ Engage private sector for dissemination information to Public including SME.
- ✓ The telecommunication system support delivery information through “free Cloud System services” to local authority to make a better decision and action to reduce the disaster risk.
- ✓ Protect the Telecommunication BCP infrastructure using tsunami information.

CHALLENGES AND INCENTIVES

- To develop better telecommunication channel for tsunami cloud System Services.
- To maintain supply chain process in telecommunication company.

KEY SUCCESS FACTOR

- Mutual Trust
- Cooperation
- Leadership

TERIMA KASIH
THANK YOU
MARAMING SALAMAT