



Group Discussion: Earthquake and Volcanic Disaster

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Talks

- Shoichi Yoshioka (Kobe University)

Tsunami survey report on the 2011 great East Japan earthquake by Kobe Univ. team

Difference in amplification factor of tsunami among events

- Naoshi Hirata (Earthquake Research Institute, University of Tokyo)

Special Project for Earthquake Disaster Mitigation in Tokyo Metropolitan Area

Fine structure beneath Tokyo
Shake-out

Talks

- Takeshi Sagiya (Nagoya University)

Overview of the Disaster Mitigation Research Center of Nagoya University

Non-characteristic behavior of great EQ along the Nankai trough

- Zhongliang Wu (China Earthquake Administration)

The Beijing Understanding - seeking your comments and suggestions

CEA-JMA-KMA collaboration

“Citizen Seismology” using monitoring cameras

Seed Questions

- In the next decade, we will face complex disasters triggered by extreme events.
- To mitigate these disasters,
 - What are the scientific/technological issues for your institute/country?
 - New paradigm?
 - How can your institute/country collaborate with others?

What are the scientific/technological issues?

- Scientific Estimates/Evaluation
 - Difficulty due to little data -> less reliable estimates
 - How to quantify rare events?
 - Very high losses though rare
 - How to evaluate uncertainty?
 - Update long-term probabilistic forecast
 - Need to look at rare events globally
 - Global impacts (economy, specific plants etc.)
 - Focus to more practical cases

What are the scientific/technological issues?

- Importance of man-made triggering events
 - Indonesia mud volcano, reservoir triggered earthquakes, earthquakes triggered by pumping)
- Importance of social studies
- Collaboration with economists

What are the scientific/technological issues?

- Communication is important but difficult.
 - To public
 - Continuous education is vital!
 - Speak frankly
 - To media
 - Consistent information to media is important
 - Foreign researchers need to be careful about making comments to media
 - To specific users (decision makers etc.)
 - Involve more people
 - Language is important!
 - Need common language between countries, between disciplines

How can your institute/country collaborate?

- Information Exchange
 - data
 - products
 - Opening national data to international users is important to boost research.
 - Minimum standard of monitoring
- Assistance from other countries in case of emergency