WG1 PTWS
Tsunami Risk Assessment and Reduction

Chair: Vasily Titov
Working Group One:
Tsunami Risk Assessment and Reduction

- Develop relevant methodology and recommend standards for tsunami modeling for hazard assessment

- Define relevant methodology and required data and products for tsunami risk assessment based on existing ones
Define relevant methodology for tsunami risk assessment based on existing work

Rely on Existing Efforts on Risk Assessment

- TOWS-WG Inter-ICG Task Team Meeting on Hazard Assessment Related to Highest Potential Tsunami Source Areas (meeting is planned at IUGG Assembly in June)

- National Hazard Assessment efforts:
  2nd update on US National Tsunami Hazard Assessment
  ASCE hazard maps

- IUGG working groups on defining tsunami sources for hazard assessments
Relevant methodology and recommend standards for tsunami modeling for hazard assessment

IOC/AUSAID/SPC/SOPAC Training: Web-based Community Model (ComMIT)

- Nuku'alofa, Tonga, 22-26 April 2013
  Instructors: Diana Greenslade, Vasily Titov, Christopher Moore, Rajendra Prasad, Herve Damlanian

- Rarotonga, Cook Islands 5-9 August 2013
  Instructors: Diego Arcas, Stewart Allen, Christopher Moore

- Nadi, Fiji 9-14 June 2014
  Instructors: Stewart Allen, Vasily Titov, Christopher Moore, Rajendra Prasad, Herve Damlanian

Over 60 participants from 13 nations of the South West Pacific participated and were trained and certified on tsunami modeling tools use.
ICG/IOTWS-II Recommendations

• Develop inundation for the coastal communities of the Indian Ocean region within 10 years

• Develop inundation maps for different scenarios

• Model standards, scenarios and benchmarks to be available on the website

• Training to include short-term and long-term strategies
ComMIT interface to models for tsunami hazard assessment (flooding hazard)

Build, test and run models

Produce hazard assessment
Community Model Interface for Tsunami (ComMIT) for Indian Ocean region

- Nadi, Fiji: 9-14 June 2014
- Rarotonga, Cook Islands: 5-9 August 2013
- Nuku'alofa, Tonga: 22-26 April 2013
- Sydney, Australia: 6-10 February 2012
- Pointe a Pitre, Guadeloupe: 24-28 October 2011
- Dar es Salaam, Tanzania: 5-11 March 2011
- Moputo, Mozambique: 14-18 February 2011
- Moroni, Comoros: 6-10 December 2010
- Citeko, Indonesia: 4-8 October 2010
- Bangkok, Thailand: 9-13 March 2009
- Valparaiso, Chile: 5-9 May 2008
- Victoria Mahe, Seychelles: 18-29 January 2008
- Jakarta, Indonesia: 23 August - 2 September 2007
- Bangkok, Thailand: 26 June - 7 July 2007
- Melbourne, Australia: 8-20 January 2007
Bathymetry Data?

- Yellow: NOAA forecast models developed during 2005-2015
- Red: ComMIT training grids developed during 2005-2015
ComMIT training grid results

Solomon Islands Tsunami, February 6, 2013

Model comparison with tide gauge at Bairiki, Kiribati
ComMIT use after training
Costa Rica Tsunami, September 5, 2012 (Willington Renteria)