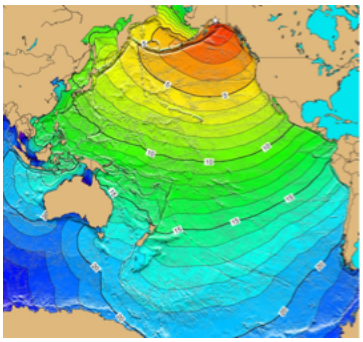
PREDICT: A TSUNAMI DETECTION INITIATIVE FOR BRITISH COLUMBIA



27th and 28th March 2014

Location: Port Alberni Shore Station/Sidney

This is a two-day technical workshop co-sponsored by the Port Alberni community, and Ocean Networks Canada. The workshop will provide a brief overview of tsunami models, tsunami risk for the coast of BC and the technology available for event detection and alerts. Structured discussions among a broad range of sectors will follow with the goal of identifying technological requirements for real-time tsunami forecasting for British Columbia's coastal areas.

AGENDA

26th March 2014

18:00 Shuttle available from Victoria to Port Alberni

27th March 2014 • 8:00 –18:00
Port Alberni Shore Station - 2180 Mallory Drive, Port Alberni

07:00 Shuttle available from Victoria to Port Alberni
08:00 Breakfast
08:30 Welcome (Tseshaht First Nation and Mayor of Port Alberni)
08:45 Personal experience talk about Port Alberni tsunami (Ron Dick)
09:20 Ocean Networks Canada and Smart Oceans Systems™ (Ocean Networks Canada)
10:05 Roundtable Introductions (name, organization, role, interest in this session)
10:20 Assessing the tsunami hazard of the British Columbia coastline (Lucinda Leonard)
10:40 Coffee & tea break
11:00 Uncertainty reduction in near field tsunami early warning - How to combine HF radar-based and conventional sea level monitoring, seismic and GNSS observations with advanced modeling (Jörn Behrens)

11:20 Tsunami wave impact on walls and beaches (Jannette Frandsen)
11:40 GPU-accelerated hydrodynamics for wave impact problems (Christian Janssen)
12:00 Lunch break and quick snapshot presentations
Quick snapshots are short presentations for those of you who want to share with the group a 5 min summary of your work in just a few slides.
13:00 Modelling hazards from seismic and SMF sources (James Kirby)
13:20 Utilizing power of present and future open-ocean tsunami monitoring networks (Elena Tolkova)
13:50 Title to be determined (Vasily Titov)
14:10 Tsunami Modelling and Inundation Mapping in Alaska: Development of the maximum credible tsunami scenarios (Dmitri Nicolsky)
14:30 NOAA Pacific Tsunami Warning Centre Overview (Stuart Weinstein)
14:50 Overview of the Indian Tsunami Early Warning System (T. Srinivasa Kumar)
15:10 Coffee & tea break
15:40 Title to be determined: Japan Early Warning System (Volker Roeber)
16:00 Hydroacoustic waves modeling for enhancement of Tsunami Early Warning Systems (TEWS): Haida Gwaii 2012 earthquake (Ali Abdolali)
16:20 Cascadia megathrust rupture models for tsunami modeling (Kelin Wang)
16:40 Tsunami wave modelling at the Institute of Ocean Sciences (Josef Cherniawsky)
17:00 Closure of the workshop for the day
17:30 Shuttle from Port Alberni back to Victoria available
18:00 Dinner

20:00 Optional: Open Port Alberni activities and public talks (18:00 to 21:00)

28th March 2014 • 08:00 –18:00
Institute of Ocean Sciences - 9860 West Saanich Rd., Sidney

07:00 Breakfast at hotel for those who stayed at Port Alberni
08:00 Shuttle from Port Alberni hotel to Sidney
11:30 Roundtable Introductions (name, organization, role, interest in this session)

Each breakout group, chaired by on ONC staff member, will address questions related to the coordination and implementation of modelling, such as:

- *What requirements should each model fulfill in order to implement it for the BC coast?*
- *What inputs and quality of data (i.e. grid size) are needed for these models?*
- *What software, hardware, or systems would be needed to implement these models?*
- *How could these models be integrated with the existing and future real time sensors from Ocean Networks Canada?*

- *What areas of research require new modelling approaches for the BC case?*
- *What are the technical challenges to developing these new approaches?*
- *What are the challenges to integrating these models into a early warning tsunami system (i.e. real time optimization of the model based on new input from instruments)?*
- *What type of 'modelling studio' could ONC provide for you to develop your models in an ideal world?*

12:00 Lunch break at the Institute of Ocean Sciences
13:00 Breakout group session
15:30 Coffee & tea break
16:00 Breakout group session
17:00 Breakout group reports, conclusions, real time integration and next steps
18:00 End of the workshop

List of attendees and affiliations - March 27th

Ali Abdolali - University of Rome, Italy
Peter Anderson - Simon Fraser University, Vancouver, Canada
Jörn Behrens - University of Hamburg, Germany
Alison Bird - Natural Resources Canada
Josef Cherniawski - Institute of Ocean Sciences, Sidney, Canada
Herb Dragert - Natural Resources Canada
Jannette Frandsen - Institut National de la Recherche Scientifique
Jeffrey C. Harris - University Paris-Est, France
Joe Henton - Natural Resources Canada
Christian Janssen - Hamburg University of Technology, Germany
Martin Heesemann - Ocean Networks Canada
Maia Hoeberechts - Ocean Networks Canada
Tania L. Insua - Ocean Networks Canada
Virginia Keast - Ocean Networks Canada
James T. Kirby - University of Delaware, USA
Tummala Srinivasa Kumar - Indian National Centre for Ocean Information Services
Lucinda Leonard - Natural Resources Canada and University of Victoria
Gwyn Lintern - Natural Resources Canada
José Martí - University of British Columbia, Canada
Roe Markham - Ocean Networks Canada
Mike McDowall - Port Alberni Maritime Heritage Society
Scott McLean - Ocean Networks Canada
Steven Mihaly - Ocean Networks Canada
Teron Moore - Emergency Management BC
Dmitry Nicolsky - University of Alaska Fairbanks, USA
Benoit Pirenne - Ocean Networks Canada

Volker Roeber - Tohoku University, Japan
Garry Rogers - Natural Resources Canada
Andreas Rosenberger - Ocean Networks Canada
Jason Rush - Ocean Networks Canada
Vasily Titov - NOAA/Pacific Marine Environmental Laboratory, USA
Elena Tolkova - NorthWest Research Associates, USA
Carlos E. Ventura - University of British Columbia
Christina Waddle - Ocean Networks Canada
Kelin Wang - Natural Resources Canada
Tim Webb - ESSA Technologies
Stuart Weinstein - NOAA Pacific Tsunami Center, USA
Onat Yazir - University of Victoria, Canada

List of attendees and affiliations - March 28th

Ali Abdolali - University of Rome, Italy
Peter Anderson - Simon Fraser University, Vancouver, Canada
Jörn Behrens - University of Hamburg, Germany
Alison Bird - Natural Resources Canada
Josef Cherniawski - Institute of Ocean Sciences, Sidney, Canada
Herb Dragert - Natural Resources Canada
Jannette Frandsen - Institut National de la Recherche Scientifique
Jeffrey C. Harris - University Paris-Est, France
Joe Henton - Natural Resources Canada
Christian Janssen - Hamburg University of Technology, Germany
Martin Heesemann - Ocean Networks Canada
Maia Hoeberechts - Ocean Networks Canada
Tania L. Insua - Ocean Networks Canada
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Christina Waddle - Ocean Networks Canada
Kelin Wang - Natural Resources Canada
Stuart Weinstein - NOAA Pacific Tsunami Center, USA
Onat Yazir - University of Victoria, Canada

List of webcast attendees and affiliations - March 27th

Annette Grilli - University of Rhode Island
Stephan Grilli - University of Rhode Island