



NTHMP Progress Report for the State of Alaska

**Alaska Division of Homeland Security and Emergency Management
Geophysical Institute, University of Alaska Fairbanks**

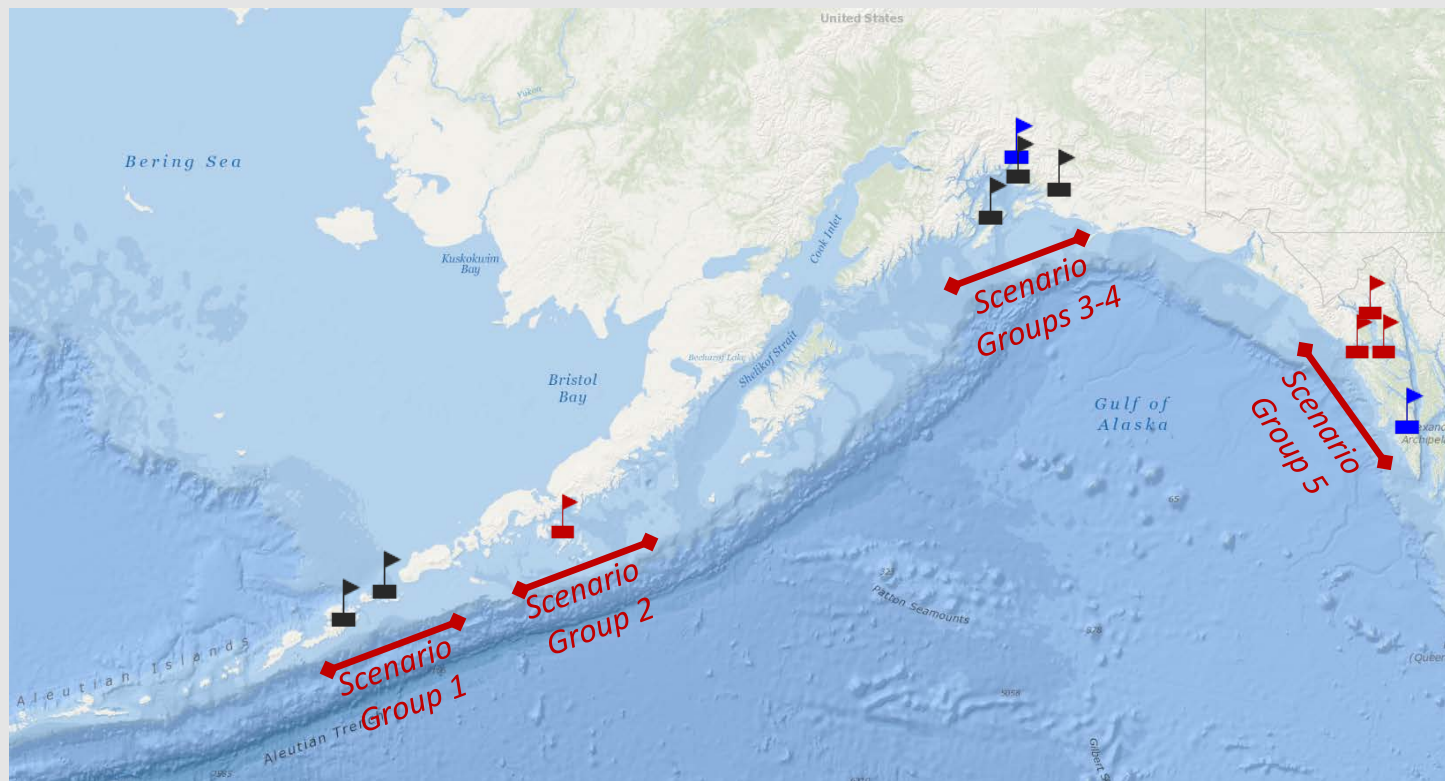
January 1, 2013 to December 31, 2013

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Dr. Dmitry Nicolsky, GI/UAF

Menlo Park, January 2014

Objective 1: Mapping and Modeling



- **Valdez** – report is published
- **Sitka** – report is published
- **Cordova, Tatitlek** - report is accepted
- **Chenega** – report is in review

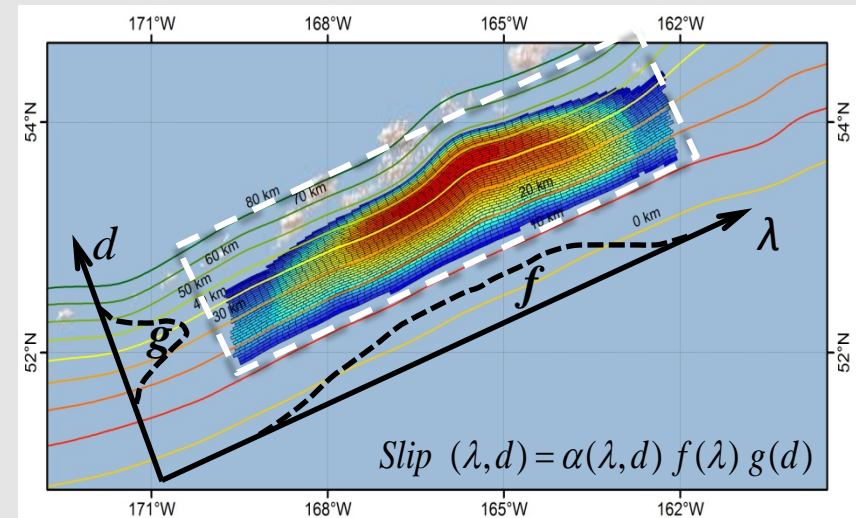
- **Unalaska/Akutan** – report is submitted
- **Elfin Cove, Gustavus, Hoonah** – report is in preparation
- **Sand Point** – report is in preparation

Objective 1: Mapping and Modeling

1. DEM Verification efforts: *Chignik Bay, Chignik Lagoon, Skagway, and Haines.* All these DEMs are currently being developed by NGDC. DEMs for *Cold Bay and King Cove* are already developed.
2. Development of the methodology to construct maximum credible scenarios for various communities. Application of this technique to define tectonic sources for *Sand Point, Unalaska/Dutch Harbor, Akutan* and landslide-sources for communities in glacial fjords such as *Elfin Cove, Gustavus, Hoonah.*

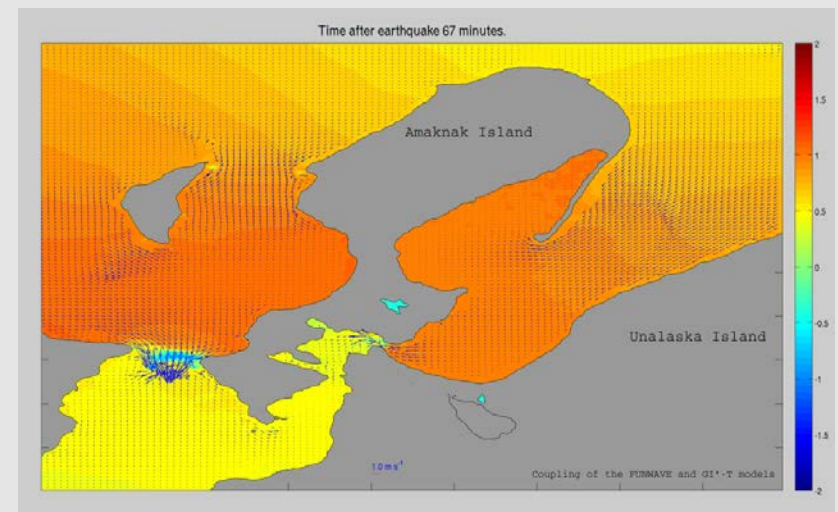
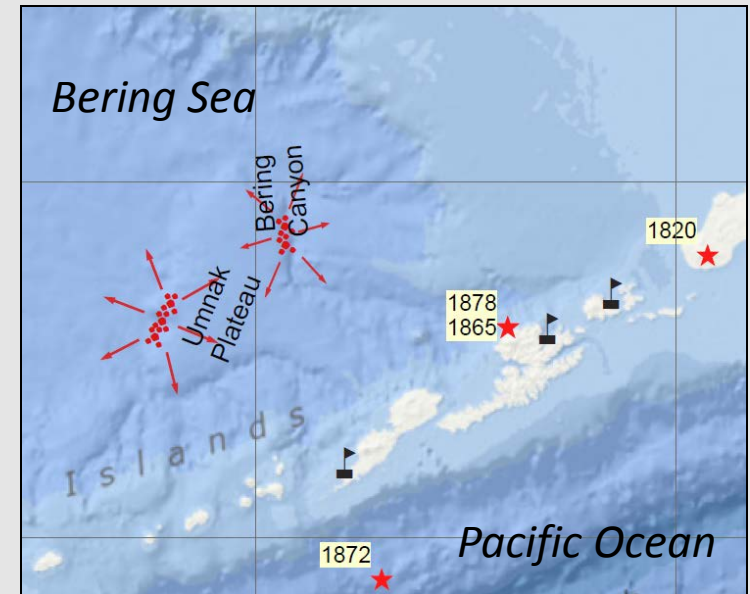


A very nice day for the DEM verification efforts



Objective 1: Mapping and Modeling

3. Assessment of the landslide-generated tsunami hazard in Bering Sea. Communities at risk are **Dutch Harbor, Akutan, Nikolski, St. Paul and St. George**. Collaboration with University of Delaware on development of the coupled model.
4. Preliminary modeling of the tsunami using FUNWAVE in **Dutch Harbor/Unalaska** with a spatial resolution of 4-5m reveals some hazardous currents forming in narrow passages and near the tip of the narrow peninsulas. We plan to use NHWAVE model to simulate landslide-generated tsunamis in Alaska fjords in the future.



Coupling of FUNWAVE to the Alaska GI'-T Model.
Arrows show the direction of water flow.

Objective 2: Mitigation & Preparedness

1. **Community Presentations & Outreach:**
Craig, Klawock City, Klawock Tribal Council, Homer (Schools, USFWS, Preparedness Fair), DHSEM Preparedness Conference. Kiosk installed in *Seward*. Earthquake Simulator at numerous events.
2. **Media Coverage:** Radio talk shows (KBBI and NPR). *TsunamiReady* news segment for CBN.
3. **AWR 217 Tsunami Awareness Course**
(2 classes >50 attendees)
4. **Tsunami Preparedness Week:** Governor Proclamation, live code tsunami warning test, 100% community call-down by SEOC, NTWC Open House
5. **Preparation for the 50th Anniversary of Great Alaska Earthquake** (March 2014)



School Presentations



DHSEM's New Earthquake Simulator

Objective 2: Mitigation & Preparedness



Tsunami/Earthquake Kiosk in Seward Museum



TsunamiReady News segment for CBN



Tsunami survivor interview in Seward Museum



Mapping Modeling Report - Sitka Public Meeting

Objective 3: Promote TsunamiReady Program

1. Siren installation: *Saint George*
2. NOAA Weather Radios: *Seward, Whittier* and *Valdez*. Placed in critical facilities.
3. Evacuation Signage: installed in *Cordova* and *Whittier* (next TR Communities). Planning stage for *Craig* and *Ketchikan*.

