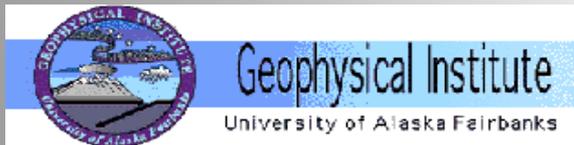


# State of Alaska 2015 Activities



**Division of Homeland Security  
and Emergency Management**



**Geophysical Institute,  
University of Alaska Fairbanks**

**NTHMP Annual Meeting  
Boulder, February 2016**

# Objective 1: Mapping and Modeling



- ***Elfin Cove, Gustavus, Hoonah*** – report is published
- ***Unalaska, Akutan*** – report is published
- ***Sand Point*** – report is in review
- ***Yakutat*** – report is in press

- ***Chignik, Nikolski*** – reports are in review
- ***Cold Bay and King Cove*** – report is accepted
- ***Kodiak Maritime Guidance*** – draft is ready
- ***Kodiak Island, Aleutians, Southcentral Alaska*** - Regional Assessment is in review

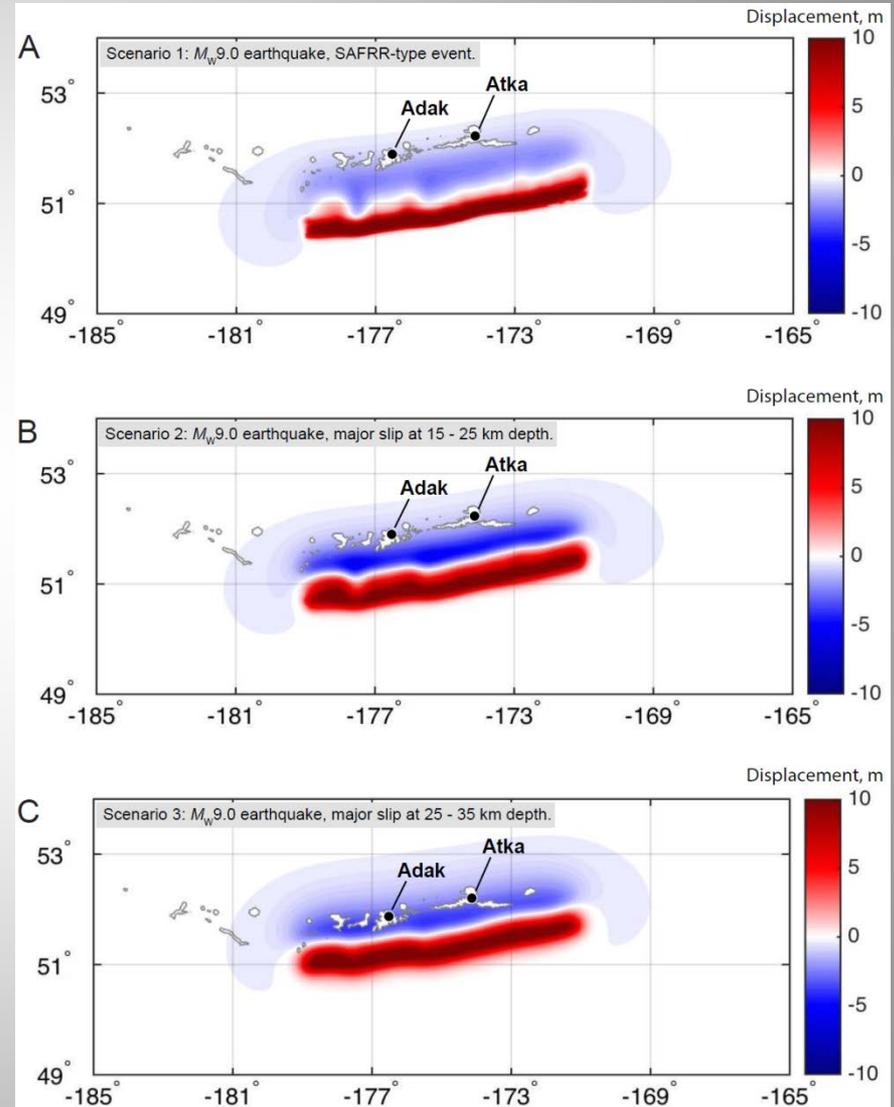
# Objective 1: Mapping and Modeling

1. DEM Verification efforts: *Atka, Adak, and False Pass.*



A very nice day for the DEM verification efforts

2. Development of the methodology to create tsunami inundation maps for areas without high-resolution DEMs: *Adak, Atka, False Pass, Perryville, Shemya, Anchor Point, Port Graham, Nanwalek, and Kodiak communities.*



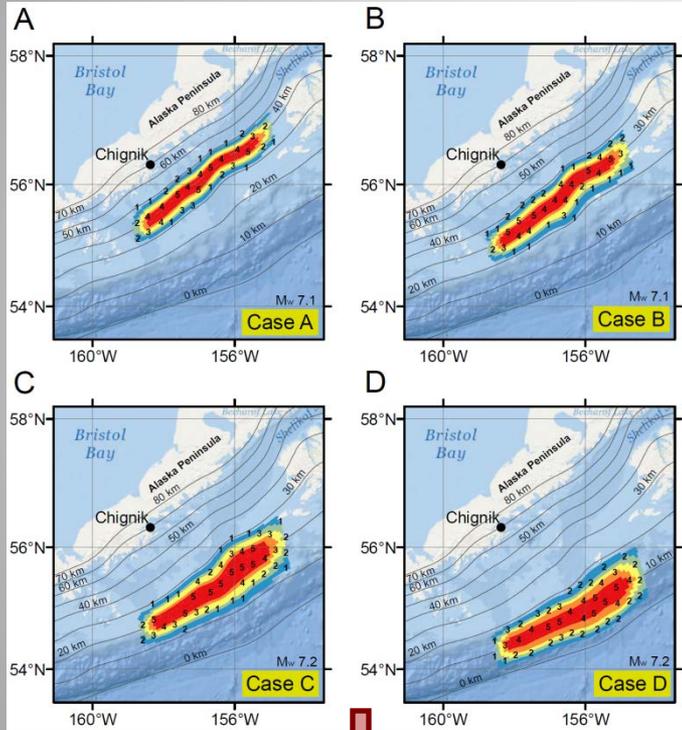
Characteristic tsunami scenarios

# Objective 1: Mapping and Modeling

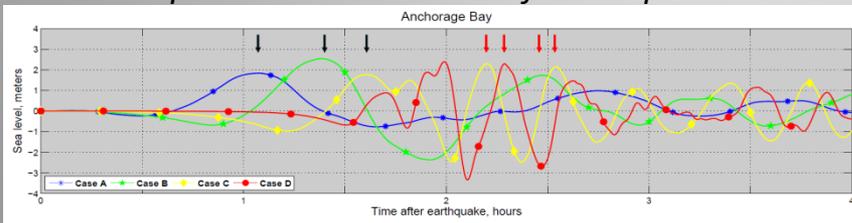
3. Development of the methodology to construct maximum credible scenarios.

Sensitivity Analysis

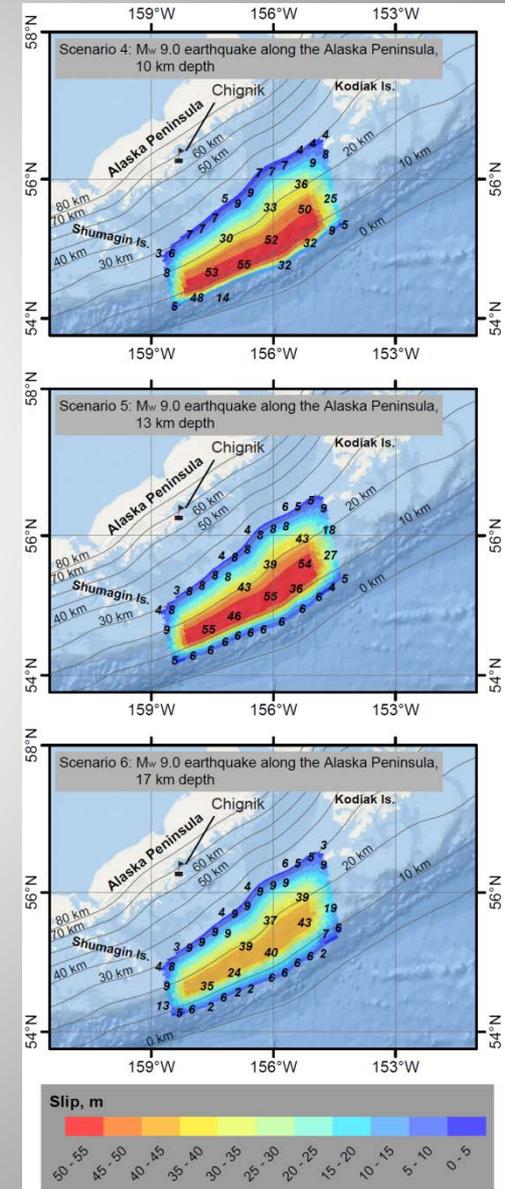
Unit sources for the sensitivity study



Find positive wave interference patterns

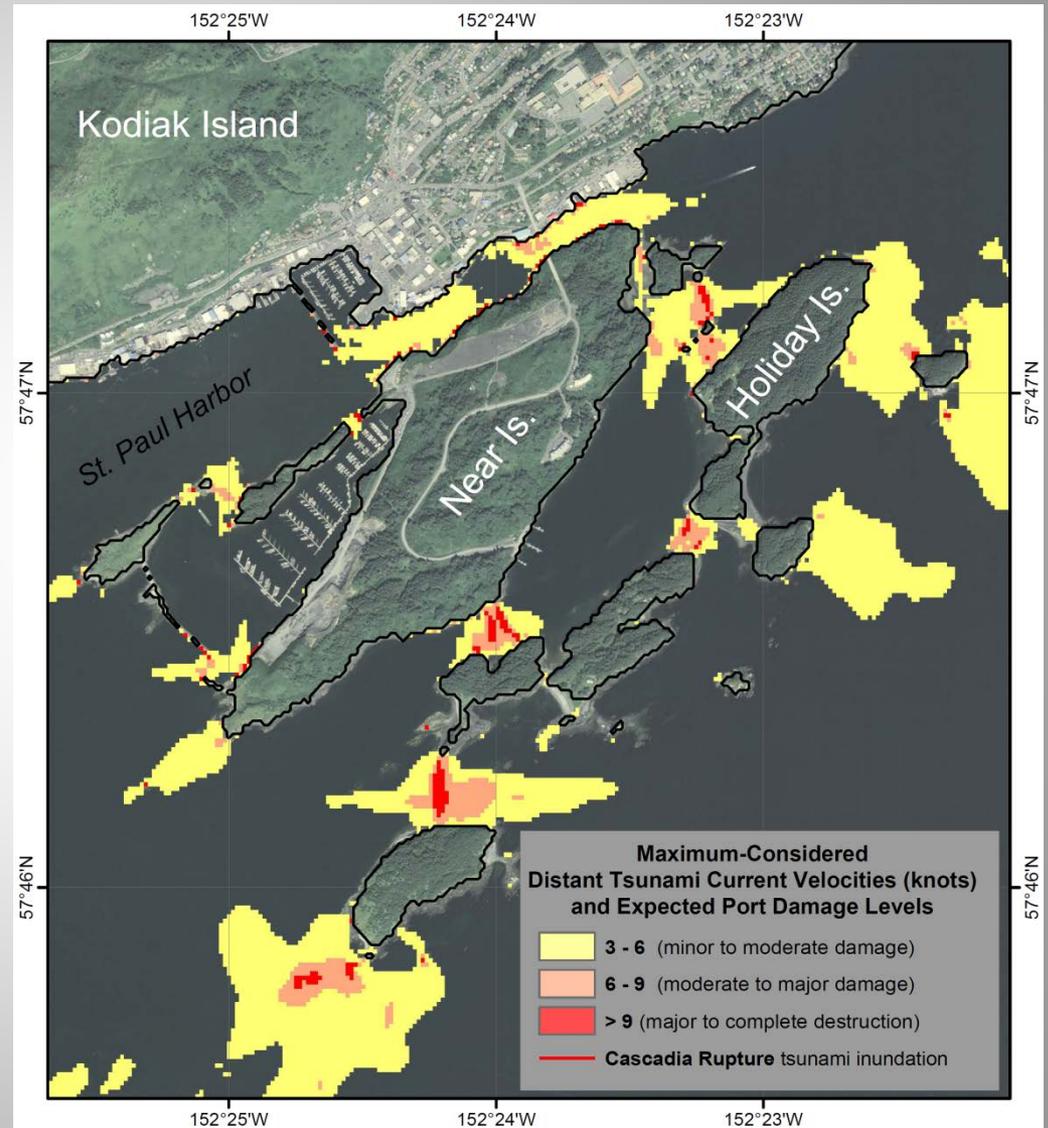


Resultant maximum credible scenarios

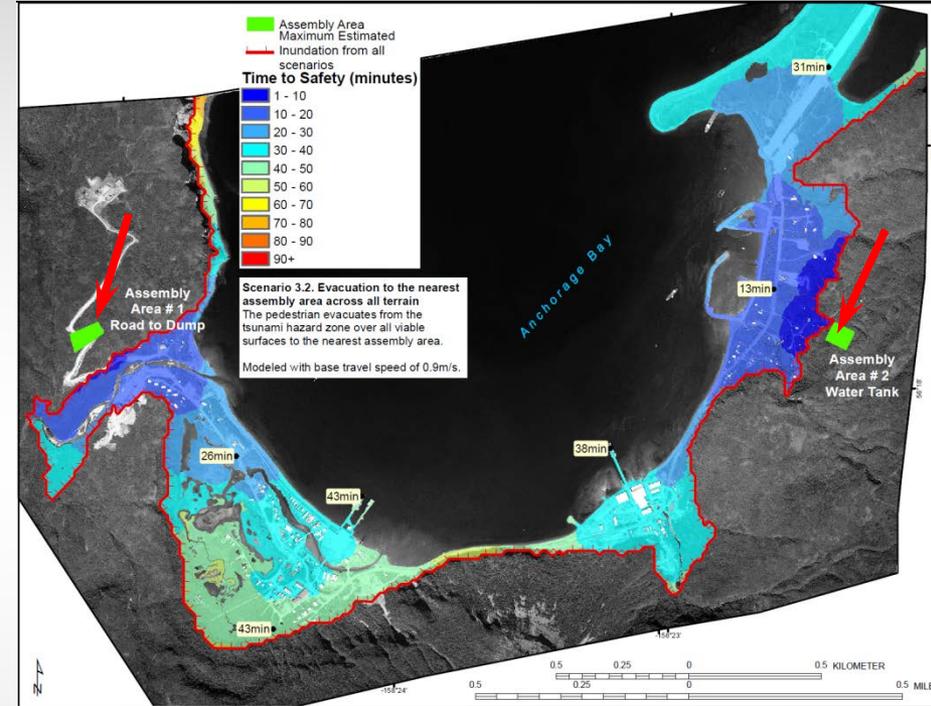
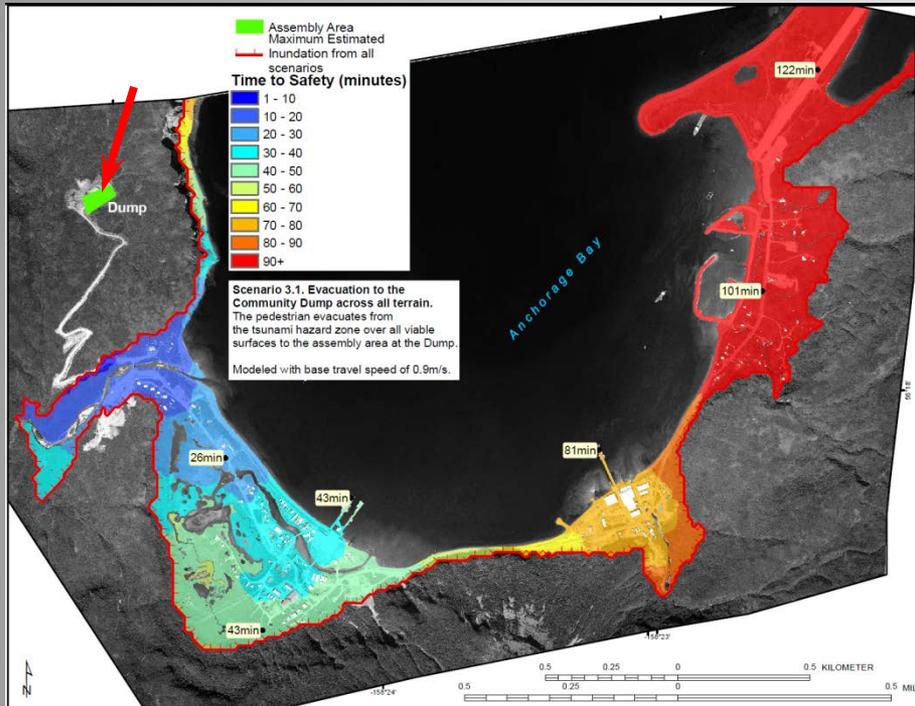


# Objective 1: Mapping and Modeling

4. Modeling of the tsunami currents near the **City of Kodiak** using the Alaska Tsunami Model for the Cascadia source.
5. Results demonstrate hazardous currents in narrow passages and near the tip of the narrow peninsulas.



# Objective 1: Pedestrian Travel Time to Safety



Travel time to ***the designated safe zone*** from the tsunami inundation zone

Travel time to ***the designated safe zone + the proposed assembly point*** from the tsunami inundation zone

# Alaska DHS&EM 2015 Highlights

- **Ketchikan Tsunami Operations Workshop**
  - Over 30 participants from 15 communities
  - School presentations
  - Radio interview
- **The National Disaster Preparedness Center's AWR-217 Tsunami Awareness course**
- delivered in 3 communities of Valdez, Homer and Seward. Approximately 30 persons attended each event and two new Alaska instructors were trained.
- **TSW Live Code Test**
  - Complete community call-down
  - New EOC community contact database

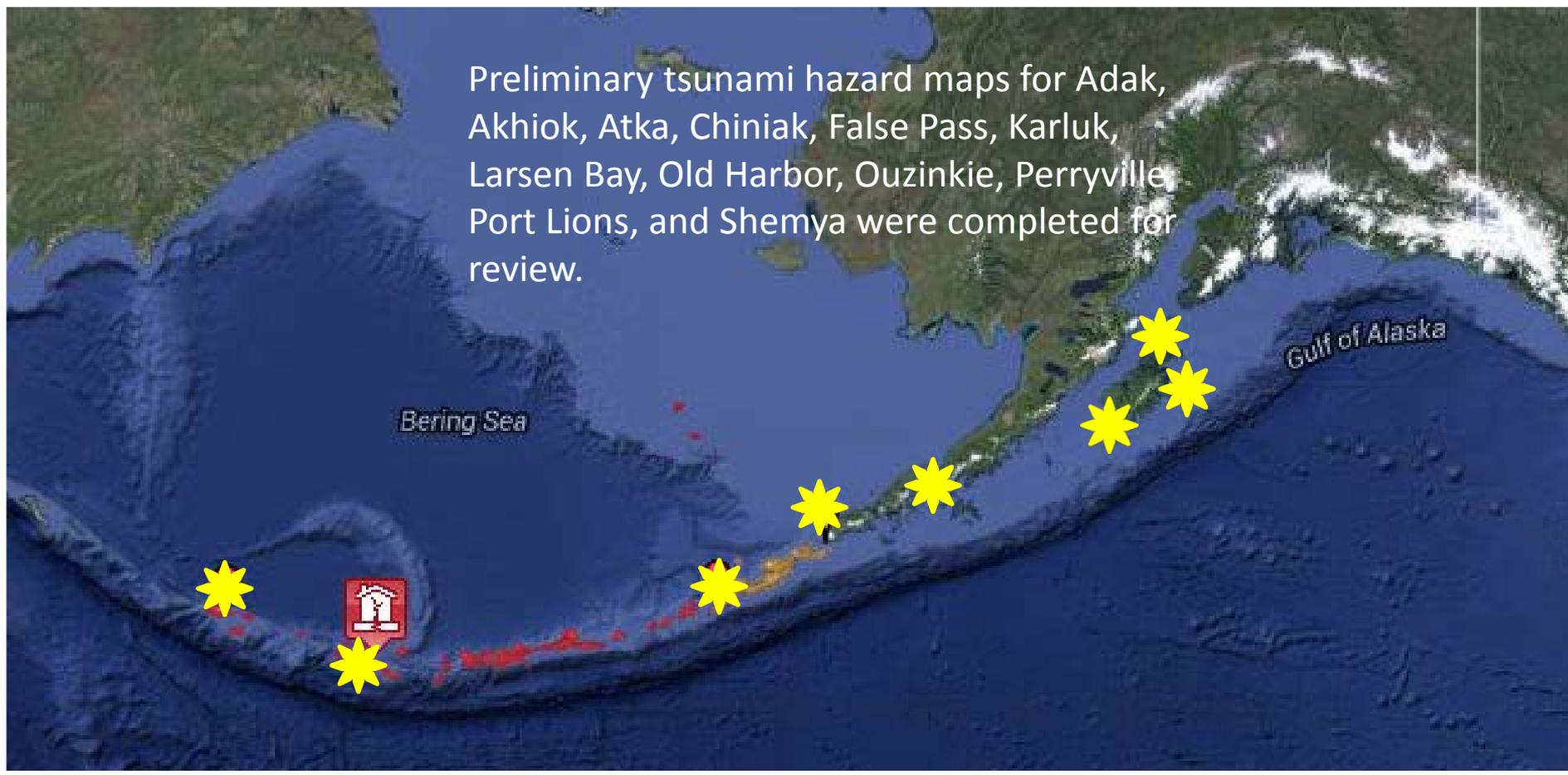
# **Alaska DHS&EM 2015 Highlights**

- **Pedestrian evacuation travel time maps "from the tsunami hazard to safety" were completed for the communities of Chignik Bay, Homer, King Cove and Unalaska.**
- **Siren Installations in South Central Alaska**
  - **Chenega**
  - **Tatitlek**
- **Evacuation Signage to Chenega and Tatitlek**
- **Craig, Ketchikan & Skagway TsunamiReady Recognition**

# Alaska DHS&EM 2015 Highlights

## Tsunami Hazard Maps

Preliminary tsunami hazard maps for Adak, Akhiok, Atka, Chiniak, False Pass, Karluk, Larsen Bay, Old Harbor, Ouzinkie, Perryville, Port Lions, and Shemya were completed for review.



# Alaska DHS&EM 2015 Highlights

Chenega



Skagway



Tatitlek

# Alaska DHS&EM 2015 Highlights

