

USGS/NTHMP Partnership Update

- Two USGS representatives to the NTHMP:
Nate Wood and Stephanie Ross
- Focus of this presentation: tsunami sources

Stephanie Ross, USGS

Geophysicist, Pacific Coastal and Marine Science Center

Tsunami Scenarios Project Manager, Science Application for Risk Reduction (SAFRR)

From the U.S. Geological Survey Natural Hazards Science Strategy

Official USGS priorities in tsunami hazards are:

- (1) identify and quantify tsunami sources, such as earthquake faults, volcanoes, and landslides,
- (2) assess tsunami sources and hazards and model tsunami generation,
- (3) improve understanding of how tsunamis are generated and determine probabilities of tsunami hazards in different areas,
- (4) assess tsunami inundations by interpreting tsunami effects.

Data from USGS national and global seismic networks feed directly to the tsunami warning centers of NOAA.

Tsunami investigations by the USGS span five different USGS Programs and six different Science Centers.



Improved collaboration between the USGS and the NTHMP has been desired by the NTHMP and the USGS and was a recommendation in the 2011 National Academy of Science report on “Tsunami Warning and Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts.”

Helped lead to 2016 USGS-NTHMP Workshop on tsunami sources

57 participants, 24 from USGS (Anchorage, Golden, Woods Hole, Seattle, Menlo Park, Santa Cruz)

Workshop Goals:

review existing activities

identify needs and discuss how to meet them

identify existing collaborations

improve collaborations

build consensus on work

set an agenda for future work, without dictating work for any group or individual.

USGS Powell Center for Analysis and Synthesis

Offering the opportunity for collaborative synthesis and analysis opportunities in Earth system science



Located in Fort Collins, CO

Working Groups that meet a few times over 2 years.

4 day Meetings of 15 to 20 people.

Some informal interaction (often hiking).



Powell Center provides:

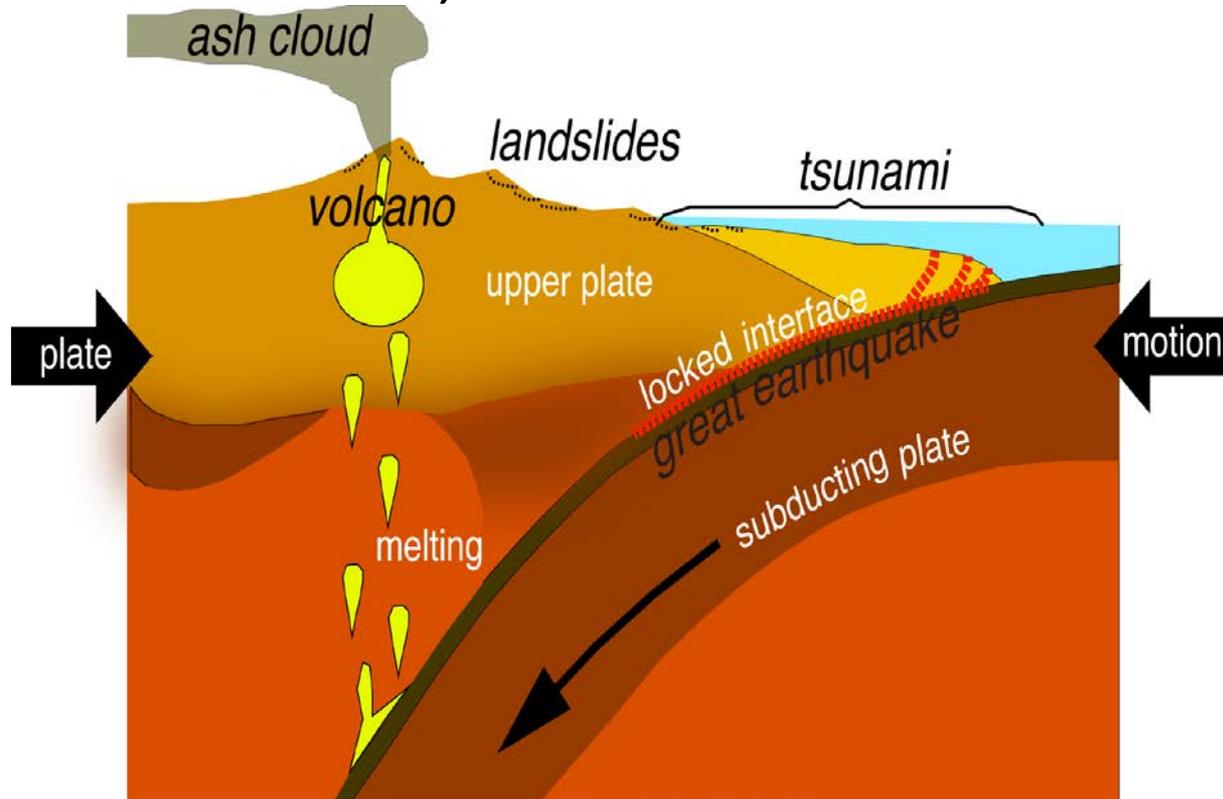
- excellent meeting space and logistical support*
- travel support for up to 15 people per workshop*
- database, GIS, and other computer support*
- support for Powell Center Fellow*



About 4 new working groups are funded per year but there are many proposals.

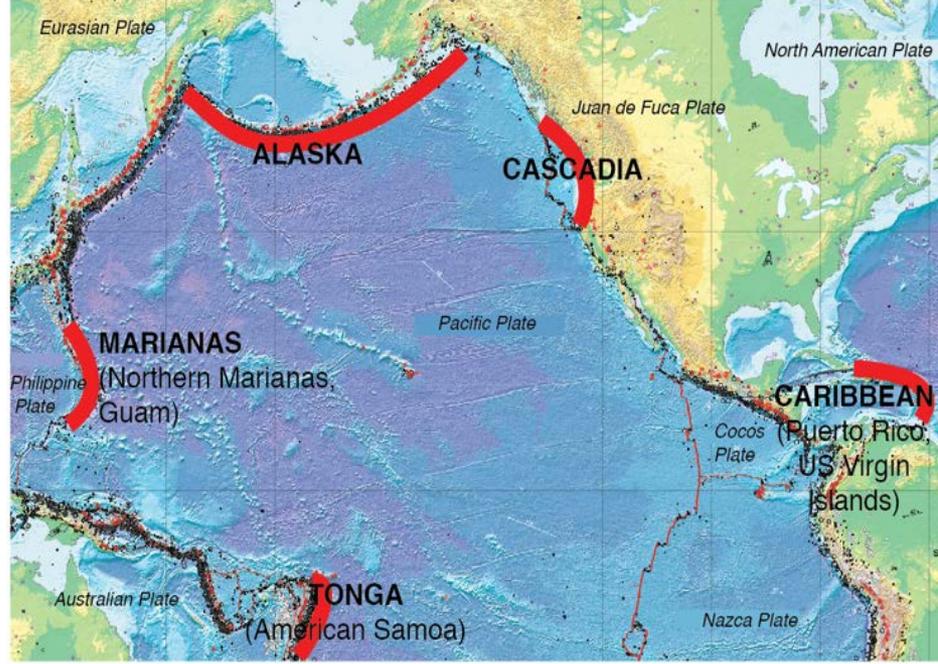
Advancing USGS Subduction Zone Science – A Quick Update

A 'blueprint' (Science Plan) will be published by March, 2017, with a focus on tsunami, earthquake, landslide, and volcano hazards.



Written by a multi-disciplinary USGS team, & reviewed by 21 USGS scientists and managers and 3 external partners.

INTERNAL DISCUSSION DRAFT



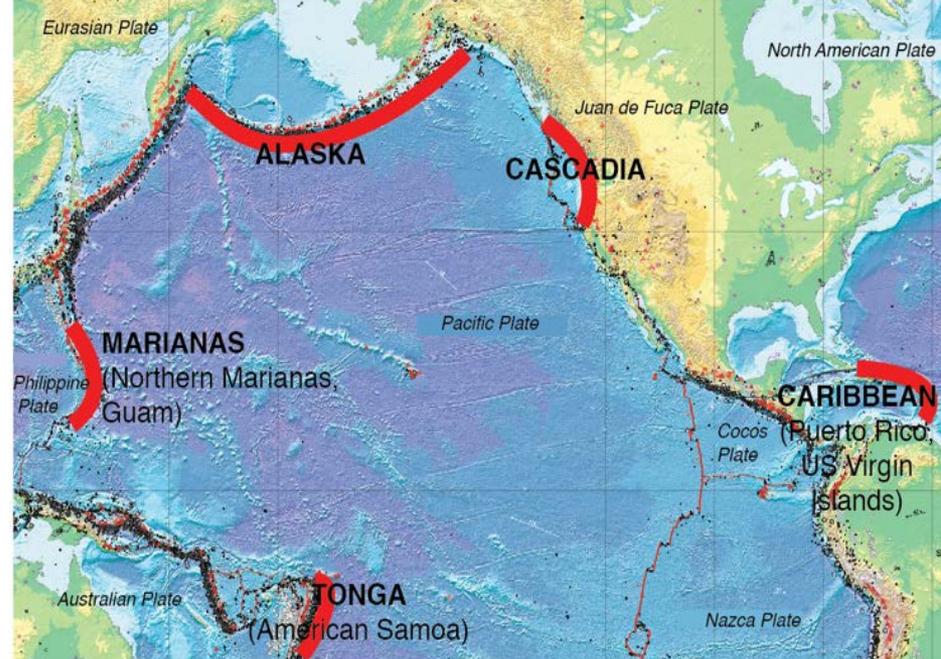
Reducing Risk where Tectonic Plates Collide - U.S. Geological Survey Subduction Zone Science Plan

By Joan Gomberg, Kristin A. Ludwig, Barbara A. Bekins, Thomas M. Brocher, John C. Brock, Daniel Brothers, Jason Chaytor, Arthur D. Frankel, Eric L. Geist, Matthew Haney, Stephen H. Hickman, William S. Leith, Evelyn A. Roeloffs, William Schulz, Thomas W. Sisson, Kristi Wallace, Janet T. Watt, Anne Wein

Report Series #####-####

Emphasizes stakeholders' needs, necessity and benefits of partnering.

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