

Access code: conf  
Portofino Conference



# Theoretical and Experimental Institute Student Symposium

Portofino Hotel & Marina, Redondo Beach, CA  
Oct 11-14, 2015



Korovin, Korin, Kliuchef volcanoes - Atka Island. Photo courtesy of Giamc McJimsey and Gene Yogodzinski

***Geodynamic Processes at Rifting and Subducting Margins***



# What is GeoPRISMS?

## **Studies of origin & evolution of continental margins**

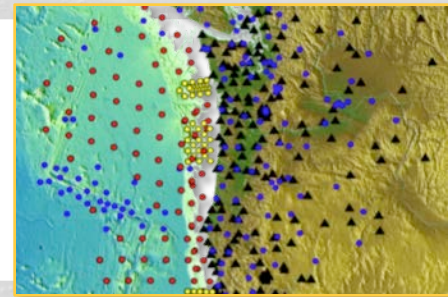
Community-driven, interdisciplinary, cross-divisional NSF-funded  
Integrating field, theory, experiment, and modeling

## **Focus on rifts and subduction zones**

With active geodynamics and where geology and society intersect

## **Shoreline-crossing, i.e., “amphibious”**

Where most rifts and subduction zones occur



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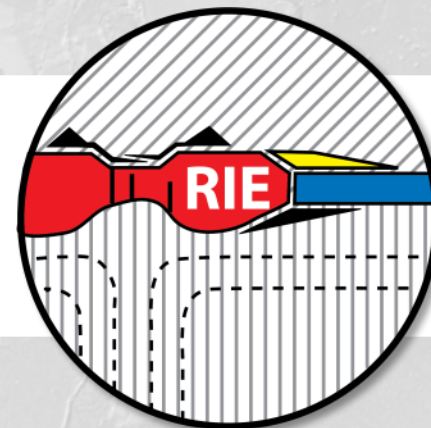
With active geodynamics and where geology and society intersect

## Shoreline-crossing, i.e., “amphibious”

Where most rifts and subduction zones occur

## Two broadly integrated initiatives

Subduction  
Cycles &  
Deformation



Rift  
Initiation &  
Evolution

# What is GeoPRISMS?

**Research at primary sites & through thematic studies**

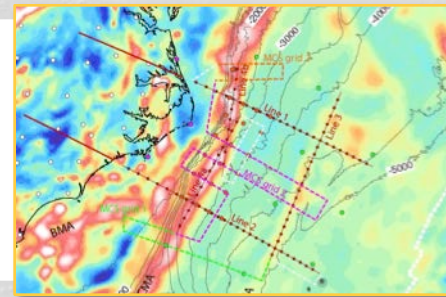
**NSF Funding opportunity with GEO bridging EAR & OCE**

**Community effort**

GeoPRISMS Office and Steering Committee

Organization of meetings & activities at AGU

Coordination and collaboration with domestic & international partners



# GeoPRISMS Science is planned by the Community

**Community planning at workshops**

**Science Plans with research objectives**

**Proposals guided by Science Plan**

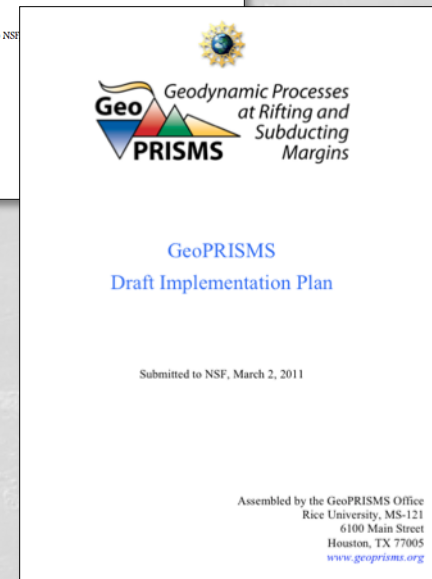
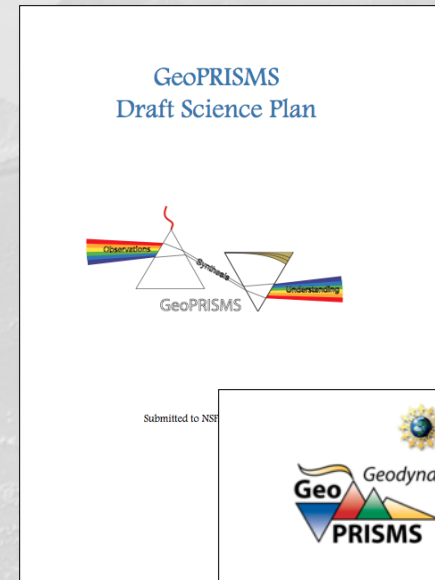
PI-driven proposals

Community-driven proposals

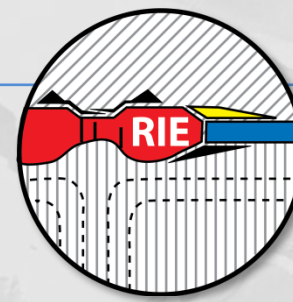
Workshop proposals

Deadline early July

**GeoPRISMS is open, all can participate!!**



*“A Living Document”*



## Rift Initiation and Evolution

Where and why do continental rifts initiate

Fundamental rifting processes and their feedbacks

Controls on the architecture of rifted continental margins

Mechanisms & consequences of fluid & volatile exchange

## Subduction Cycles and Deformation

Controls on size, frequency & slip behavior of subduction plate boundaries

Spatial-temporal deformation patterns during seismic cycle

Linkages between volatiles & plate boundary rheology

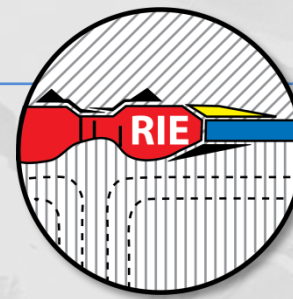
Volatile storage, transfer, & release in subduction systems

Geochemical products of subduction; continent creation

Subduction zone initiation and arc system formation

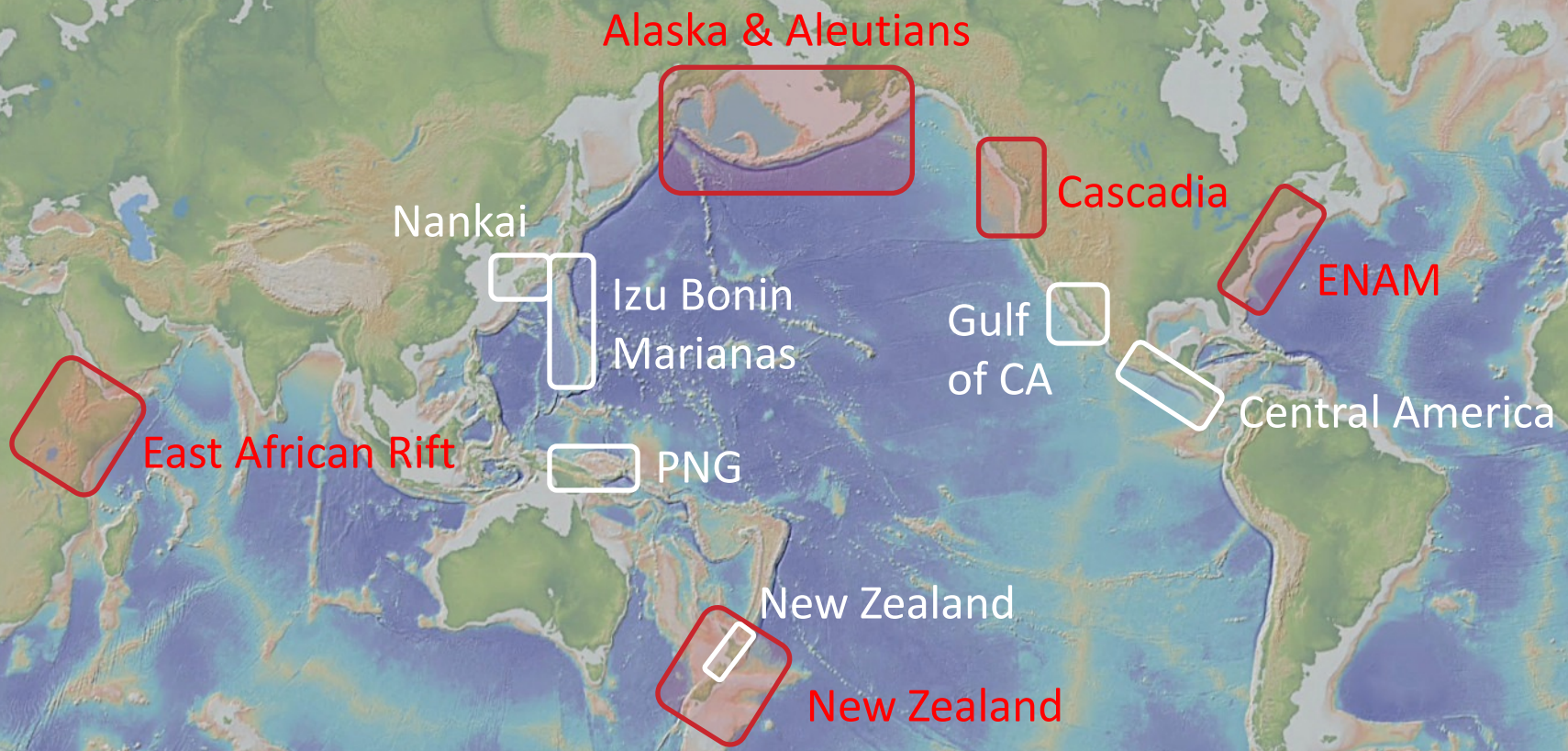
Feedbacks between surface processes & subduction dynamics

# Where GeoPRISMS works



## GeoPRISMS Primary Sites

## MARGINS Focus Sites



# GeoPRISMS Office

Peter van Keken  
GeoPRISMS Chair



Anaïs Férot  
Science Coordinator



Jeanne Bisanz  
Project coordinator





## Steering Committee (GSOC)

Peter van Keken, Estella Atekwana, Brandon Dugan, Jeff Freymueller, Liz Hajek, Kerry Key, Maureen Long, Sarah Penniston-Dorland, Tyrone Rooney, Harold Tobin, Harm van Avendonk, Paul Wallace, Tony Watts, Gene Yogodzinski

## Education advisory committee (GEAC)

Cathy Manduca, Jeff Marshall, Rosemary Hickey-Vargas, Sarah Penniston-Dorland, Peter van Keken, Andrew Goodwillie

With Participation in Amphibious Array Steering Committee



# Opportunities for Students & Postdocs



AGU Best Student Presentation prizes

Postdoctoral fellowships

Symposia & field trips at workshops

