Collaborative Research: Late Cenozoic Detachment Faulting in the Western Salton Trough: Strain Partitioning in an Oblique Active-Margin Rift

NSF Org EAR

Latest Amendment Date July 30, 2002
Award Number 0125921
Award Instrument Standard Grant
Program Manager Stephen S. Harlan
EAR DIVISION OF EARTH SCIENCES
GEO DIRECTORATE FOR GEOSCIENCES

Start Date February 1, 2002
Expires January 31, 2005 (Estimated)

Expected Total Amount $83108 (Estimated)

Investigator Rebecca J. Dorsey
rdorsey@darkwing.uoregon.edu
(Principal Investigator current)

Sponsor U of Oregon Eugene
5219 University of Oregon
Eugene, OR 974035219
541/346-5131

NSF Program 1572 TECTONICS
Field Application 0000099 Other Applications NEC
Program Reference Code 0000, OTHR,

Abstract

The process of rifting of continents to produce oceanic lithosphere is a first order phenomenon on Earth. Unfortunately, most rifted margins are buried by thick accumulations of sedimentary rock, hindering direct observation of the structures which formed during rifting. This project will address several significant questions about oblique rifting with a multi-disciplinary study of the Salton Trough in southern California. This region is undergoing active extension and right-lateral strike-slip faulting related to opening of the Gulf of California and the San Andreas fault. Exposures of bedrock are excellent and there is an opportunity to examine a plate margin caught in the process of forming. A combination of geological, sedimentological, geophysical, and geochronological methods will be brought to bear to study the partitioning of strain between strike-slip and normal faults and the accompanying sedimentological response to each.

You may also retrieve a text version of this abstract.

Please report errors in award information by writing to: award-abstracts-info@nsf.gov.

Please use the browser back button to return to the previous screen.