

A joint SCEC/OpenTopography/USGS/UNAVCO research and education workshop

**Using GeoEarthscope and B4 LiDAR data to analyze Southern California's active faults
December 3 and 4, 2009 @ San Diego Supercomputer Center**

Workshop organizers:

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Ken Hudnut, US Geological Survey
Susan Eriksson, UNAVCO

Workshop overview:

As a result of research in the Eastern California Shear Zone, the B4 project, and the recently completed GeoEarthScope data acquisition, most of Southern California's active faults have now been scanned using LiDAR. These exciting new data powerfully depict the effect of repeated slip along these active faults as well as surface processes in a range of climatic regimes. These community datasets are of great interest to the SCEC and greater academic communities, the geologic consulting community, and educators.

We invite participants to a 2 day introductory training on LiDAR technology, data handling, digital elevation model (DEM) production, data analysis including fault trace and geomorphic mapping applications, integration with other geospatial data, and discussion of educational uses of these data. The course will be held at the San Diego Supercomputer Center at UCSD.

This workshop will provide an overview of the hardware and software technologies associated with LiDAR topographic data acquisition and analysis, will highlight recent research results, and provide a forum for dialogue and discussion about anticipated technological and data gathering developments. Participants are welcome to bring their own laptops, but to make for a more satisfying learning experience, we will provide laptop computers with a variety of software pre-installed (ArcGIS, GlobalMapper, Matlab, and others).

How to apply:

Please send the following information ccrosby@sdsc.edu

1. Contact information
2. Brief bio/curriculum vitae (1-2 pages maximum)
3. Short statement about your interests with respect to high-resolution topography, your overall research, and any relevant experience.
4. Brief statement on your computing experience, including preferred operating system, familiarity with GIS software, and comfort with command line-based tools.

There is funding available for partial travel and lodging support for the workshop; preference will be given to students. The application deadline is **October 22, 2009**