Short Course: Imaging and Analyzing Southern California’s Active Faults with Lidar

November 4-6, 2013
San Diego Supercomputer Center, La Jolla, CA

Supported by:
Southern California Earthquake Center (SCEC), OpenTopography, UNAVCO, EarthScope, and SDSC

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Overview:
Lidar data has become an important tool for earthquake scientists to make detailed observations and model surface evolution. Within the last 7 years, several efforts have been made to collect high resolution topographic data for active faults (e.g. The B4 project, EarthScope and NCALM projects). These datasets are available freely online through OpenTopography, a NSF funded lidar data distribution portal. The active tectonics community has taken great interest in these exciting datasets and given important insights on earthquake processes in Southern California.

OpenTopography in partnership with SCEC, UNAVCO, and EarthScope will host a short course at the San Diego Supercomputer Center from November 4-6, 2013. This 3-day course will highlight recent research results and provide beginner to intermediate training on airborne and terrestrial lidar technology, point cloud and raster-based data processing, and active fault-oriented analysis. We will emphasize fault trace and geomorphic mapping applications, topographic differencing, integration with other geospatial data, data visualization and analysis approaches.

There will be some funding available for partial travel and lodging support for the workshop with preference given to students.