



Contacts:

Janis Cortese, CENIC  
jcortese@cenic.org  
(714) 220-3454

Krista Barbour, UNAVCO  
barbour@unavco.org  
(303) 381-7551

## UNAVCO to Use CENIC's California Research & Education Network for EarthScope Seismic Observatory Project

Cypress, CA – May 15, 2006 – The Corporation for Education Network Initiatives in California (CENIC) and UNAVCO announced today that the California Research and Education Network (CalREN) is being employed to transmit data generated by the EarthScope project, a multi-state network of diverse geophysical instruments that will significantly expand capabilities to observe the structure and ongoing deformation of the North American continent.

One of the components of the NSF-funded EarthScope project is the Plate Boundary Observatory (PBO), a geodetic observatory designed to study the three-dimensional strain field resulting from deformation across the active boundary zone between the Pacific and North American plates in the western United States. The observatory consists of arrays of Global Positioning System (GPS) receivers and strainmeters which will be used to deduce the strain field on timescales of days to decades and geologic and paleoseismic investigations to examine the strain field over longer time scales.

A total of 103 strainmeters and 853 GPS stations are slated to be installed as part of the PBO by September 2008, over half of which will be located in California. As a result of an agreement between UNAVCO and CENIC, some of the strainmeters and GPS stations in California will connect through various CalREN K-12 node sites and their data transmitted over CalREN to the UNAVCO data archives in Boulder, CO.

“California is a recognized nexus for seismic research and innovation throughout the world, and CENIC is delighted when researchers find new ways to support exciting projects using CalREN,” said Dave Reese, Chief Technology Officer for CENIC. “The data harvested by the EarthScope project will doubtless play a significant role in furthering seismic and geological understanding, and we’re proud that our network will advance that.”

Kyle Bohnenstiehl, PBO Site Permit Coordinator, comments that “EarthScope and UNAVCO are very excited about being able to use local California K-12 schools, which are home to 4 sites so far, to not only host the station but relay this important data back to scientists using the CENIC Internet2 connection. As part of the EarthScope mission of working with schools, we are actively looking for other schools that may wish host a strainmeter or GPS instrument.”

Technical specifications for the strainmeters such as address space, access, and connectivity must be taken into account at each site chosen for equipment placement. After the instruments’ data has been collected at UNAVCO’s Boulder site, UNAVCO will work with a peer organization of CENIC, the FrontRange GigaPoP in Colorado, to achieve connectivity with Internet2 by June 2006.



#### About CENIC

California's higher education and research communities leverage their networking resources under the umbrella of a nonprofit corporation known as CENIC, the Corporation for Education Network Initiatives in California, in order to obtain cost-effective, high-bandwidth networking to support their missions and answer the needs of their faculty, staff, and students. CENIC designs, implements, and operates CalREN, the California Research and Education Network, a high-bandwidth, high-capacity Internet network specially designed to meet the unique requirements of these communities, and to which the vast majority of the state's K-20 educational institutions are connected. In order to facilitate collaboration in education and research, CENIC also provides connectivity to non-California institutions and industry research organizations with which CENIC's Associate researchers and educators are engaged.

CENIC is governed by its member institutions. Representatives from these institutions also donate expertise through their participation in various committees designed to ensure that CENIC is managed effectively and efficiently, and to support the continued evolution of the network as technology advances. To learn more, visit <http://www.cenic.org/>.

#### About UNAVCO

UNAVCO is a consortium of research institutions, and its mission is to support and promote Earth science by advancing high-precision techniques for the measurement and understanding of deformation. UNAVCO has staff and facilities in 6 locations with the majority of the staff located in Boulder, CO. With funding from the National Science Foundation, UNAVCO is constructing the EarthScope Plate Boundary Observatory (PBO), installing GPS receivers and strainmeters and providing data and processed results that will be used to observe and measure the strain field on timescales of seconds to decades.

UNAVCO is funded by the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA). To learn more, visit <http://www.unavco.org/>.