The Plate Boundary Observatory (PBO), operated by UNAVCO, is the geodetic component of the US National Science Foundation-funded EarthScope Facility. A primary scientific objective of EarthScope is quantifying the three-dimensional deformation and its temporal variability across the active boundary zone between the Pacific and North American plates. To achieve this goal, UNAVCO has installed GNSS, strain, and seismic instrumentation at over 1,200 sites in the western U.S. and manages processing, analysis and distribution of PBO data and products under EarthScope’s open data policy.

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Activities in 2013-2014

Archives (GSAC) Activities:
- Completed first phase of web services
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  https://facility.unavco.org/data/gsacws/gsac-repositories.html
- Instituto Nazionale di Geofisica e Vulcanologia (Italy) GSAC software installed at INGV Archive Grottaimadura, Italy in March, 2013.
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- Dionyros Satellite Observatory, Higher Geodesy Laboratory (DSO-HGL/NTUA), National Technical University of Athens, Greece
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- Chris Crosby attended the July 2014 COOPEUS Hands-on Data Registration workshop.
- UNAVCO is working with Stefano Nativi and the ESSI-Lab to construct an “Accessor” connecting UNAVCO data services to the GEOSS Portal.

Activities planned for 2014-2015

- Continue to refine and expand web services
- Finish GEOSS/GEO Accessor
- Attend 2015 GSAC meeting in Europe
- Help EPOS build a GSAC Federated Query capability
- Integrate GSAC into new “dataWorks” regional archive software for Caribbean network
- Leverage and integrate with EarthScope, EarthCube, Supersites, and NASA ROSES ACCESS projects

Eventual target for the EPOS/GSAC is nearly 2,500 GNSS Stations at more than 25 institutions. Currently about ~250 are shared for EUREF. The European meteorological community shares amongst themselves GPS tropospheric estimates but only products - not raw GPS/GNSS data that could be used for other purposes.

UNAVCO and COOPEUS

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