

Highlights of Capacity Building Initiatives

NEES@Buffalo

Q4: Hybrid: During this 4th quarter, UB-NEES IT, has finished work on developing a second hybrid testing ring for the laboratory that allows for two simultaneous hybrid tests to run at the same time. During the fourth quarter we've made several successful tests on the new ring consisting of three nodes, an MTS FlexTest controller, an xPC Target machine and National Instruments PXI chassis. Ring is now fully functional and ready for any future deployment.

CrackTrack: The development work was completed in third quarter, as previously reported. During this quarter, we have added some more functionality and made tweaks to the code based on the reviewers input during the fourth quarter. We are now in process of packaging and uploading the code to NEEShub.

NEES@Reno

Q4: the site improved on the reference frames that were part of site CBI in FY13. Enhancements to these frames were essential to complete Stanton and Sritharan projects. The site did not acquire the spreader beam.

NEES@Oregon State

Q4: Tim Maddux implemented and optimized the second-order nonlinear wave maker theory for regular and random wave generation to enhance capacity. Adam Ryan installed additional HD video systems and they are fully operational.

NEES@UC San Diego

Q4: We purchased an I/O card for the FlexTest controller. This will give us the option to use an external source for input motion.

NEES@UC Santa Barbara

Q4: Continued to make software improvements to the data portal based on user feedback. For the fiscal year 2014, an additional 1,881 events were added to the data portal from both the NEES sites and from other geotechnical array stations.