

Abstract Submitted
for the APR13 Meeting of
The American Physical Society

Noise calibration and the development of remote receiver stations for TARA SAMRIDHA KUNWAR, The University of Kansas, TELESCOPE ARRAY RADAR (TARA) COLLABORATION — The Telescope Array RADar (TARA) detector is based on a remote sensing technique known as bi-static radar that aims to achieve remote coverage over large portions of the Earth's surface in search of cosmic ray induced radio echoes. In conjunction with North America's largest cosmic ray observatory (The Telescope Array) in radio quiet western Utah, the radar project's pilot receiver and transmitter stations have been functional for just over a year and a half, giving insight into the detect-ability of air shower radar echoes. Currently the receiver stations comprise an array of Log Periodic Dipole Antennas with an oscilloscope-based data acquisition system implemented for noise calibration including tracking galactic noise as the galactic plane migrates through the sky. Our experiences thus far have given impetus for upgrades, including the deployment of additional remote receiver stations. We discuss some of the results of this oscilloscope-based DAQ system and the development of these remote stations.

Samridha Kunwar
The University of Kansas

Date submitted: 10 Jan 2013

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