

Abstract Submitted
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Pre-Phase A Results from the ARIANNA Detector from the Antarctic seasons 2009-10 and 2010-11 JORDAN HANSON, UC Irvine, ARIANNA COLLABORATION — The Antarctic Ross Ice-Shelf Antenna Neutrino Array is an experiment designed to detect cosmogenic neutrinos with energies in excess of 10^{17} eV, including neutrinos created as by-products of cosmic-rays which undergo the GZK effect. ARIANNA is sensitive to down-going neutrinos because the GHz radiofrequency pulses they create, via the Askaryan effect, reflect off of the interface between the ocean and the ice-shelf. Here we present results from data collected during the 2009-2010 season. In addition, we discuss measurements describing the depth and attenuation of the ice-shelf, and reflectivity of the ice-ocean interface beneath the detector volume. Finally, we discuss data describing experimental modifications and upgrades being implemented for the upcoming seasons, including a new trigger and waveform digitizer.

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