

Abstract Submitted
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ANITA Neutrino Detector MATTHEW COLLINS¹, VICTOR ARRIAZA², PENG CAO³, Univ of Delaware — The main goal of the ANITA program is to detect cosmogenic neutrinos, with energies $\sim 10^{19}$ eV, produced through the interaction of ultra-high energy cosmic rays ($\sim 10^{20}$ eV) with the cosmic microwave background. The neutrinos are detected by observing “Askaryan” radiation produced as a result of neutrino interactions in the Antarctic ice sheet. During the flight, data from the ANITA payload is constantly being transmitted to the ground and stored in SQL databases for monitoring data acquisition and flight operations. For the ANITA-IV mission this data will be made visible to project scientists through a newly designed web based data distribution system. This involves a series of challenges, from retrieving the data to designing the web layout. The application is being run through the Python package Flask on the server side, but utilizes HTML5 and JavaScript on the client side. These two languages permit the use of open source graphical and statistical libraries and allow us to make meaningful changes to the layout and functionality of the webpage. Finally, the collaborative effort is being achieved through the use of the websites GitHub for the means of sharing code and Heroku for the purpose of live testing the website.

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