

Abstract Submitted
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Updates on IceCube's Radio Frequency extension HAGAR LANDSMAN, University of Wisconsin, Madison — A variety of radio frequency (RF) detectors were deployed in the Antarctic ice as an enhancement to the optically-based IceCube Neutrino Observatory, and as a step towards a large-scale high-energy neutrino detector. This RF addition includes a set of 5 deep-deployed (300m-1400m) digitizing detectors, a shallow array (~ 35 m) of transient detectors and a set of transmitters. All are sensitive to frequencies between 200MHz to 1GHz. We will review the hardware deployed, and present studies performed with it including ice characteristics (attenuation and index of refraction), environmental noise and event reconstruction.

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