Abstract Submitted
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Observation of the Moon Shadow in the IceCube 40 string detector configuration LAURA GLADSTONE[1], University of Wisconsin, Madison, ICECUBE COLLABORATION — IceCube is a neutrino detector at the south pole with several components, the largest of which is a kilometer-cube-scale Cherenkov detector array within the deep polar ice. In the absence of an astrophysical standard candle, IceCube can study the deficit of cosmic rays from the direction of the moon. The observation of this "moon shadow" in the downgoing muon flux is an experimental verification of the absolute pointing accuracy and the angular resolution of the detector with respect to energetic muons passing through. The moon shadow has been observed in the 40-string configuration of IceCube, in which half of the detectors are deployed into the ice; the full detector is expected to be completed in 2011. This is the first stage of IceCube in which a moon shadow analysis has been sucessfull. Method, results, and some systematic error studies will be discussed.

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