

Abstract Submitted
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Anisotropy energy dependence of the cosmic ray arrival direction with IceCube¹ RASHA ABBASI, PAOLO DESIATI, University of Wisconsin, ICECUBE COLLABORATION — In this work we present an update on the previously reported anisotropy in the arrival direction of cosmic rays using data from the IceCube detector. The data used in this analysis were collected from May 2009 to May 2010 with 59 deployed strings. We also report on the energy dependence of this anisotropy at median energies per cosmic ray particle of 20 TeV and 400 TeV. The results are supported by the observation of the solar diurnal anisotropy measurement expected from the revolution of the Earth around the Sun. It is also supported by the absence of the signal in the anti-sidereal time. Study of the anisotropy evolution in the energy region greater than 100 TeV can provide us an insight to the origin and propagation of cosmic rays.

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