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Update on Combined Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC

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Individual observations of the sidereal anisotropy in the arrival direction distribution of Galactic cosmic rays are restricted by limited sky coverage. As a result, the power spectrum of the anisotropy obtained from any one measurement displays a systematic correlation between different multipole modes C_ℓ. We describe the methods used to combine the IceCube and HAWC data, address the individual detector systematics, and study the region of overlapping field of view between the two observatories and we present updated results of the joint anisotropy analysis. The results include a combined sky map and an all-sky angular power spectrum in the overlapping energy range of the two experiments at around 10 TeV on all angular scales using cosmic-ray data collected during 2 years of operation of the High-Altitude Water Cherenkov (HAWC) Observatory (located at 19° N) and 5 years of data taking from the IceCube Neutrino Observatory (located at 90° S).

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