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A search for PeV gamma-ray point sources with five years of data from the IceCube Observatory[1] ZACHARY GRIFFITH, Wisconsin IceCube Particle Astrophysics Center (WIPAC) and Department of Physics, University of Wisconsin-Madison, Madison, WI 53706, USA., HERSHAL PANDYA, Dept. of Physics and Astronomy, University of Delaware, Newark, DE 19711, USA., ICECUBE COLLABORATION — We present results of a search for PeV gamma-ray point sources using the IceCube Observatory, presently the most sensitive facility for PeV gamma-ray emission in the southern hemisphere. The surface component of the observatory, IceTop, makes possible the detection of gamma rays, while the in-ice component IceCube provides complementary information for hadronic background suppression. An unbiased scan for point sources was performed over the entire field of view of the analysis. Additionally, known TeV sources with no evidence of a cut-off in their energy spectra were used as a source catalog. Each was tested under a single source hypothesis in addition to a stacking test using the entire catalog. No evidence of signal was found, allowing for the most stringent limits for PeV gamma-ray emission from point sources to be set.

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