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IceAct: Small Imaging Air Cherenkov Telescopes for the IceCube Neutrino Observatory at the South Pole MATTHIAS PLUM, KAREN ANDEEN, Marquette University, THE ICECUBE COLLABORATION — IceAct is a proposed surface upgrade to the IceCube Neutrino Observatory of cost effective and compact (50 cm) Imaging Air Cherenkov Telescopes. In coincidence with the in-ice and surface components of IceCube, IceAct will form a hybrid detector, combining new information from the Cherenkov light image with the surface particle footprint and the in-ice muon tracks of extensive air showers. During January 2019, two new versions of the IceAct telescope demonstrators featuring 61 SiPM pixels and improved optics were installed in the center of the IceTop surface detector at the geographic South Pole. The combination of the data from these two telescopes with the data from IceCube allow for tests of the performance of IceAct in primary particle identification, detector calibration, and veto capabilities. We present the status of the project and our future plans.

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