

Abstract Submitted  
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**Search for Blazar Flux-Correlated TeV Neutrinos in IceCube 40-String Data**<sup>1</sup> COLIN TURLEY, DEREK FOX, KOHTA MURASE, Pennsylvania State Univ, THE AMON CORE TEAM TEAM — We present a targeted search for blazar TeV flux-correlated high-energy neutrinos from six bright northern blazars in the IceCube 40-string” sample of TeV neutrinos from 2008-2009. We use VERITAS lightcurves to identify periods of excess and flaring emission and search for an excess of neutrinos during these intervals relative to the atmospheric neutrino background. We make two searches: One for excess neutrinos from Mrk 421, and one for neutrinos associated with the brightest emission periods of five other blazars. We find no significant excess of neutrinos from the blazar directions during the predefined temporal windows, and derive upper limits on the number of blazar-associated neutrinos from each search. These upper limits are sufficiently close to the physically-interesting regime that we anticipate future analyses using already-collected data will either constrain models or yield discovery of the first blazar-associated high-energy neutrinos.

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