Abstract Submitted
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The Crab Nebula as a Standard Candle for TeV gamma-ray astronomy[1] TREVOR WEEKES, Harvard-Smithsonian Center for Astrophysics, VERITAS COLLABORATION — Since its discovery as a TeV gamma-ray source (Weekes et al., (1989) ApJ,342, 379), the Crab Nebula has been routinely observed with the Whipple 10m gamma-ray telescope in order to calibrate observations on other variable TeV sources. The assumption that the Crab can be regarded as a standard candle has been called in question by recent reports from the AGILE and Fermi groups (Tavani et al. (2010), Science, doi:10.1126/science.1200083; Abdo et al.(2011), 1011-3855, astro-ph.HE) of GeV flaring activity lasting one-two weeks on several occasions. The Whipple observations were taken nightly during the dark moon periods from October through March since 1986. The search for flares of one-two week duration in this rich data archive will be reported.

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