Very High Energy Observations of Gamma-ray Bursts with VERITAS and Whipple

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Tuesday, 10 July 2007
Last Updated Thursday, 29 November 2007

Contribution to the 30th International Cosmic Ray Conference, Merida, Mexico, July 2007

abs/0709.3830v1

Many authors have predicted very-high-energy (VHE; E > 100 GeV) emission from gamma-ray bursts (GRBs) both during the prompt phase and during the multi-component afterglow. To date, however, there has been no definitive detection of such emission. Recently, the Swift Satellite made the exciting discovery that almost 50% of GRBs are accompanied by one or more X-ray flares, which are found to occur from several seconds to many hours after the prompt emission. The discovery of this phenomenon and the many predictions that VHE emission should accompany these flares increases the already strong motivation for making immediate follow-up VHE observations of GRBs. Observations of GRBs have high priority at VERITAS, preempting any observations that may be in progress. GRB alerts are received from the GCN via a socket connection. This is interfaced to the VERITAS Tracking Software to minimize the time between a notification arriving and the telescope being slewed to the GRB. We report here on GRB observations with VERITAS and with the Whipple Telescope from 2005 through 2007.