

All-Sky Earth Occultation Observations with the Fermi Gamma Ray Burst Monitor

C.A. Wilson-Hodge, E. Beklen, P.N. Bhat, M. Briggs, A. Camero-Arranz, G. Case, V. Chaplin, M. Cherry, V. Connaughton, M. Finger, P. Jenke, W. Paciesas, R. Preece, J. Rodi, for the GBM Earth Occultation Team

Using the Gamma Ray Burst Monitor (GBM) on-board Fermi, we are monitoring the hard X-ray/soft gamma ray sky using the Earth occultation technique. Each time a source in our catalog is occulted by (or exits occultation by) the Earth, we measure its flux using the change in count rates due to the occultation. Currently we are using CTIME data with 8 energy channels spanning 8 keV to 1 MeV for the GBM NaI detectors and spanning 150 keV to 40 MeV for the GBM BGO detectors. Our preliminary catalog consists of galactic X-ray binaries, the Crab Nebula, and active galactic nuclei. New sources are added to our catalog as they become active or upon request. In addition to Earth occultations, we have observed numerous occultations with Fermi's solar panels. We will present early results. Regularly updated results will be found on our website <http://gammaray.nsstc.nasa.gov/gbm/science/occultation>.