



## Radio signals from Terrestrial Gamma-ray Flashes

Valerie Connaughton and the Fermi GBM TGF Team  
United States (valerie@nasa.gov)

Terrestrial Gamma-ray Flashes (TGFs) have become an unexpectedly rich area of scientific discovery for the Fermi Gamma-ray Space Telescope, an astrophysical space mission launched in June 2008.

The Gamma-ray Burst Monitor (GBM) on-board Fermi observed a modest rate of one TGF per month over its first year of operation. Through a sequence of flight software enhancements and new observing modes, GBM now detects two TGFs on-board every week, with additional, weaker TGFs uncovered on the ground.

I will discuss the population of TGFs observed by GBM, focusing on their temporal properties, and their very close relationship to the associated radio signals detected by the World Wide Lightning Location Network (WWLLN).