



## Properties of AGILE Terrestrial Gamma-ray Flashes

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We present the characteristics of 300 Terrestrial Gamma-ray Flashes (TGFs) detected by the AGILE satellite in the latitude belt  $\pm 2.5$  deg in the period March 2009 - July 2012. Event selection is a two-steps strategy consisting in an onboard trigger logic acting on millisecond time scales followed by a ground selection algorithm based on spectral hardness and simple topology rules. The sample longitude, local time, duration, intensity distributions and cumulative spectrum are presented and compared to TGF samples detected by RHESSI and Fermi-GBM. An overall good consistency between the AGILE and RHESSI samples concerning longitude distribution and cumulative spectrum is evident. The main difference is in the duration distribution, whose median for AGILE is about a factor 2 larger than that for the other spacecrafts. The correlation with WWLLN sferics is presented as well, showing a statistically evident correlation between AGILE TGFs and lightning activity within 600 km from the satellite footprint, although a small number of one-to-one sferics TGF correlations is observed. In the frame of recent results by Fermi-GBM, this can be explained by the larger average duration of the AGILE TGF sample.