

Abstract Submitted
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Terrestrial Gamma Flashes at Ground and Balloon Level JAMES

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— Terrestrial Gamma Flashes (millisecond-duration bursts of gamma rays produced by electrons and positrons accelerated by the electric fields accompanying lightning) have been observed by satellite detectors since the BATSE era. The TGF and Energetic Thunderstorm Rooftop Array (TETRA) is an array of NaI scintillators located on the campus of Louisiana State University in Baton Rouge, Louisiana. Since July 2010, TETRA has now detected 31 millisecond-scale bursts of gamma rays at ground level with energies 50 keV - 2 MeV associated with nearby (< 8 km) thunderstorms. In addition to the TETRA array, we describe the plans for a balloon-borne instrument and a larger ground array.

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