

Abstract Submitted  
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**Reuven Ramaty High Energy Solar Spectroscope Imager (Rhessi) Results Analyzed In Seasonal Quadrants** CAROLYNN CONLEY, UHCL Physics Grad — The Reuven Ramaty High Energy Solar Spectroscopic Imager (RHESSI) Small Explorer Mission was launched on Feb. 5, 2002. RHESSI was designed to collect solar flare and coronal mass ejection data. In addition, for over a decade, RHESSI has also observed lightning generated energetic eruptive events. These were named Terrestrial Gamma Ray Flashes (TGFs) and have been observed since 2002. Data collected shows a distribution of TGFs randomly spread in the latitudes and longitudes that satellites observed. This study investigates the seasonal variation in the RHESSI data. RHESSI TGF data is available since the start of data collection in 2002 to 2012. Observation of this data suggests that a distribution of activity may be observed. The TGF weekly rates are compared at the four seasons, spring, summer, fall, and winter, in the northern and southern hemispheres. The TGF rate may be a function of the relative position of the earth to the sun and relative to the earth's geographic and magnetic poles. The spectra of original interest to RHESSI and other investigations produced by the heliosphere environment are being distinguished from TGFs in the Earth's atmosphere.

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