RHESSI Results Analyzed in Seasonal Quadrants

CAROLYNN CONLEY\textsuperscript{1}, SAMINA MASOOD\textsuperscript{2}, University of Houston Clear Lake — The Reuven Ramaty High Energy Solar Spectroscopic Imager (RHESSI) Small Explorer Mission was launched on Feb. 5, 2002. For over a decade, in addition to collecting the intended solar flare and coronal mass ejection data, RHESSI has also observed lightening generated energetic eruptive events. These Terrestrial Gamma rays Flashes (TGFs) have been observed since 2002. TGFs have an apparent random spread in occurrences of the latitudes and longitudes observed. We investigate the seasonal variation in the RHESSI data. The TGFs since the start of 2002 to 2012 suggest that a distribution of activity may be observed. We compare the TGF weekly rates at the four seasons, spring, summer, fall, and winter, in the northern and southern hemispheres. The data suggests that the TGF rate varies according to the relative position of the earth to the sun and the earth’s geographic and magnetic poles.

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