

Statistical study of flare spectrum and GPS-TEC variation II

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Solar flare is one of most explosive phenomena on the Sun. Flare makes high energy paticles and energetic electrons emit various energetic photons, e.g., X-rays and EUV. These photons reach ionosphere and increase TEC value observed by the GPS. We study a relation between flare emission and GPS-TEC variation in many solar flares showing various spectum. In each flare, flare spectrum and total energy are different and therefore the corresponding TEC value should be influenced by these data. We use GOES X-ray data, EUV data from TIMED Satellite, and GPS data for our analysis.