



Analysis of SDO/EVE Flares in Relation to Solar Energetic Protons

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Solar energetic proton (SEP) events from SOHO/ERNE instruments and SDO/EVE solar flares in solar cycle 24 are considered. The SEP-associated flare emission is analyzed in multiple wavelength ranges characterizing flare emission. Background subtraction of the pre-event particle flux and flare emission is performed for each event. Finally, a Pearson correlation analysis is completed between the peak values of the SEP events and the UV and EUV flare intensities. Comparison with the results from flare soft X-ray, hard X-ray and radio emission is presented. This work is supported by the Bilateral project Bulgaria–Austria with the National Science Fund of Bulgaria contract No. NTS/AUSTRIA 01/23 (28.02.2017) and Austria OeAD Project No. BG 11/2017.