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# Shock parameters and energetic storm particle events using STEREO spacecraft

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Solar Energetic Particles (SEPs) propagate across the interplanetary space with energies of the order of MeVs. These events can be classified as impulsive or gradual depending mainly on the duration of the enhancement of the flux spectra profile. While impulsive events (with durations of the order of hours) are associated with particle acceleration in flares, gradual events (with durations of the order of various days) are associated with acceleration produced by the Interplanetary Coronal Mass Ejection (ICME) driven shocks. Further the flux spectra signature for the gradual SEPs has been associated with the magnetic connectivity of the CME relative to the spacecraft. In this work we studied the so called Energetic Storm Particle (ESP) events: SEP events with an additional enhancement in the flux spectra near the shock crossing time, interpreted as additional flux due to the diffusive shock acceleration inside the shock region. We use for our analysis the ESP events observed with both STEREO spacecraft during the period 2011-2014 in order to study their characteristics and relate them to the parameters of the shocks that are thought to produce them.