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The active Sun and its implication for the heliosphere
oral preferred

STEREO Observations of ICMEs and LET/SEP Events: 2007-2010

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Low Energy Telescope (LET) of IMPACT suite onboard STEREO spacecraft measures H to Ni ions over the energy range of about 3-30 MeV/nucleon. Based on the intensity variations of 1.8-3.6 MeV proton, we have identified solar energetic particle (SEP) events in 2007-2010. Some of these SEP events are observed by both STEREO A and B spacecraft. From the surveys of solar flares, interplanetary CMEs (ICMEs), stream interaction regions, and their associated shocks, we identify the sources of these SEP events. We sort out the events when both spacecraft see ICME and SEP together versus just ICME or SEP, and aim to build the statistics of the various occurrences and find out the conditions of encountering both ICME and SEP.