

CONSTRAINTS ON CME INITIATION AND EARLY EVOLUTION FROM SECCHI ON STEREO

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The availability of EUV and White Light observations of the solar disk and of the inner corona from the SECCHI instrument suite onboard the twin STEREO spacecraft added new dimensions and assets into the study of transient coronal phenomena like flares and CMEs. This includes multi-viewpoint 3D imaging of the solar corona, simultaneous multi-temperature coverage of the atmosphere, high temp and of the inner coronal cadence and comprehensive coverage of the solar disk and lower atmosphere. We report here on a sample of the most important SECCHI findings regarding CME initiation and early propagation. This includes: (1) impulsively accelerated CMEs and flares, (2) EUV waves and dimmings, (3) EUV cavities and flux ropes and (4) slow CMEs. We will show how all the unique features of the SECCHI data largely enhance our understanding in all those important domains and how they place tighter constraints on the corresponding physical mechanisms. Solar Physics

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