



CME -CME interaction: Kinematics & Consequences

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The launch of STEREO spacecraft with the capability of heliospheric imaging alongwith in-situ observations have provided us an opportunity to track and understand the propagation of CMEs from the Sun to the Earth and beyond. We present the results of a study based on several cases of CME-CME interaction observed by STEREO/HI instruments. These CMEs were launched in quick succession and interacted as they propagated in the inner heliosphere. We estimate the 3D kinematics of these interacting CMEs using stereoscopic observations and examine the nature of their collision /interaction and exchange of momentum during interaction. We also compare the actual arrival times of these CMEs with that estimated from the 3D kinematics. This would help us to understand the role of the post-collision kinematics dependence on the actual arrival time of these CMEs at the in-situ spacecraft. Further, we examine the signatures of collision/interaction of CMEs in in-situ observations. The consequences of interaction in strengthening the geoeffectiveness of CMEs will also be presented.