



Effects of the background solar wind speed on the propagation behavior of CMEs

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The propagation behavior of coronal mass ejections (CMEs) in the interplanetary (IP) space is mainly influenced by the ambient solar wind flow. The interaction of CMEs with the solar wind can be expressed as drag force and manifests itself to decelerate CMEs that are faster than the ambient solar wind, whereas slower ones are accelerated until the CME speed is finally adjusted to the solar wind speed. With the SECCHI instrument suite aboard STEREO, CMEs can be observed during their entire propagation way from Sun to 1AU. In combination with in-situ measurements we are able to derive the direction and speed of a CME. From this we compare the kinematical behavior of well observed CME events in the IP distance regime with output from ENLIL (NASA/CCMC) MHD model runs of the background solar wind speed and to the drag force as expressed in analytical models. We give first results of the effect of the background solar wind speed on the propagation behavior of CMEs.