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CME-CME interaction during the 2010 August 1 events

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We study a CME-CME interaction that occurred during the 2010 August 1 events using STEREO/SECCHI data (COR and HI). The CMEs were Earth directed where clear signatures of magnetic flux ropes could be measured from in situ Wind data. To give evidence of the actual interaction we derive the direction of motion for both CMEs applying several independent methods. From this we obtain that both CMEs head into similar directions enabling us to actually observe the merging in the HI1 field-of-view (and rule out the possibility that this is just a line of sight effect). The full de-projected kinematics of the faster CME from Sun to Earth is derived when combining data points from remote observations with in situ parameters of the ICME measured at 1 AU. We study the evolution of the kinematical profile of the faster CME by applying a drag based model.