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Drag-based deformation of a multi-point CME event

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We present first results of a case study on a CME from October 2021 that was in situ detected by BepiColombo, Solar Orbiter, DSCOVR and STEREO-A, whose Heliospheric Imagers (HI) additionally observed the event remotely. The latter observations are used to model the evolution of the CME through the inner heliosphere using the CME propagation model ELLipse Evolution based on HI (ELEvoHI). ELEvoHI assumes a drag-based interaction of the CME-sheath with the solar wind and allows it to deform according to local drag regimes. The ambient solar wind is provided by the time-dependent HelioMAS/HUXt model. Using the arrivals at the four different spacecraft we are able to assess the ability of ELEvoHI to model the evolution of the shape of this CME.