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As part of the Whole Heliosphere and Planetary Interactions (WHPI) project, we have produced solar synoptic maps featuring coronal hole boundaries viewed from Earth and from STEREO-A between September 2018 and February 2020 (CR2209-2227) which cover through the fourth Parker Solar Probe Perihelion campaign. We have extended our synoptic maps to cover another two Parker Solar Probe periods for CR2239 and CR2242. We have color-coded the solar wind velocity measured at the Earth and at STEREO-A and plotted it as arrows pointing to the footpoints of the solar wind originating coronal holes as determined by the Potential Field Source Surface (PFSS) model of Mark DeRosa and colleagues at the Lockheed Martin Solar and Astrophysics Laboratory (LMSAL). Of particular interest are the periods of high-speed streams (HSS) in the solar wind velocity which are characteristic of solar minimum periods such as WHPI. We will also compare the solar wind velocity measured at Mars by MAVEN to the STEREO-A and Earth viewpoints.

Presentation file

emery-presentation.pdf

YouTube link

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