White-Light Blobs: Tracers of the Solar Wind, Deprojected Aspect-Ratio Evolution, and Their 3D-Shape

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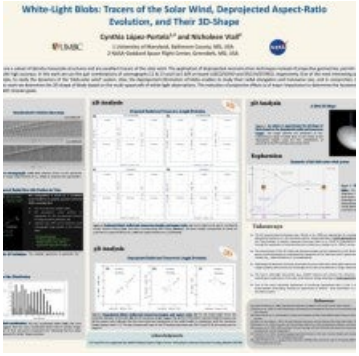
Poster

Blobs, detected in white-light data, are a subset of density mesoscale structures and are excellent tracers of the solar wind. The application of deprojected-reconstruction-techniques instead of projective geometries (e.g., Mierla et al., 2008), permits to determine the position of blobs in the 3D-space with high accuracy. In this work we use the pair combinations of coronagraphs C2 & C3 and Cor2 A/B on board LASCO/SOHO and SECCHI/STEREO, respectively. One of the most interesting applications of the 'real' position of blobs is, for example, to study the dynamics of the 'blob-solar wind' system (López-Portela et al., submitted). Also, the deprojected information of blobs enables to study their radial elongation and transverse size, and in conjunction, their deprojected aspect-ratio evolution. Finally, in this work we determine the 3D-shape of blobs based on the multi-spacecraft of white-light observations. The reduction of projective effects is of major importance to determine the locations of tracers of the solar wind, which is one of the PUNCH mission scientific goals.



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