Binal
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Poster
The Association of Spacecraft for Polarimetric and Imaging Investigation of the Corona of the Sun (ASPIICS) coronagraph aboard the Proba-3 observes the solar corona from 1.099 R? to 3R?, with a high spatial resolution (2.8 arcsec/pixel) and high temporal cadence (up to 30 s for typical coronal mass ejection observation programs). These unique observations provide a crucial dataset for probing the early evolution and acceleration of coronal mass ejections (CMEs). We present an analysis of the CME observed on 21 September 2025, which reveals a well-defined prominence eruption within the ASPIICS field of view. Our results indicate that the main acceleration phase is characterized by a rapid and nonlinear increase, with the CME speed reaching up to ~400 km/s within the ASPIICS FOV. Complementary Graduated Cylindrical Shell (GCS) reconstruction, using multi-vantage observations from the Metis and COR1 coronagraphs aboard Solar Orbiter and STEREO, respectively, suggests a self-similar expansion in the inner corona, with the CME speed reaching ~515 km/s at a true height of ~4 Rs. These observations highlight the capability of ASPIICS to bridge the long-standing observational gap between EUV imagers and traditional coronagraphs, providing continuous coverage of CME evolution in the low-coronal region.
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