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Rare case of the three-part structure of coronal mass ejection observed in low coronal signatures

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We present a rare case of a three-part solar coronal mass ejection (CME) observed in the low corona on March 28, 2022. We observe a bright core/prominence, dark cavity, and a bright CME leading edge in *Solo/EUI* and *STEREO-A/EUVI*. We perform 3D reconstructions of the filament eruption from three vantage points: *Solo*, *STEREO-A*, and *SDO*. The filament height increased from 28 to 616 Mm over 30 minutes, with a peak velocity of 648 ± 51 km/s and a peak acceleration of 1624 ± 332 m/s². At 11:45 UT, the filament deflected by ~ 12 degrees, reaching a height of 841 Mm. The bright CME leading edge, a quasi-spherical CME shock, grows from 383 Mm to 837 Mm between 11:25 and 11:35 UT. The distance between the filament apex and the CME leading edge doubled from 93 to 212 Mm over 10 minutes. Using the *DIRECD* method, we studied the expansion of coronal dimming as an indicator of early CME propagation. This method uses a cone model to approximate an expanding CME at the end of the dimming's impulsive phase, estimating parameters such as direction (inclined 6 degrees from the radial expansion), half-width (21 degrees), and cone height (1.12 Rs), where the CME remains connected to the dimming and leaves footprints in the low corona. The reconstructed cone aligns closely with the observed filament shape. Extrapolating filament and CME outer edge heights to *LASCO/COR2* times, we found the cone matched the CME shape, with fainter CME parts corresponding to far-side cone projections.

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