



## **Homologous halo CMEs of a flower-like morphology**

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We present first results on the study of two homologous CME/flare events. The events were originating on the far side of the Sun as seen from the Earth, and observed by the coronagraphs onboard SOHO, STEREO A, and STEREO B. They originated from the same complex active region numbered as NOAA AR 1574 when it was on the visible side of the solar disc. The particularity of the studied events is their flower-like morphology with three clearly distinguishable petals, as seen by the SOHO/LASCO C2 and SOHO/LASCO C3 coronagraphs.

The first halo CME was first seen in the SOHO/LASCO C2 field of view at 10:36 UT (and at 10:25 UT in the STEREO A/COR 1 field of view) on September 28, 2012. The plane-of-the-sky projected CME speed was about 770 km/s. The peak of the associated flare was observed at 10:15 UT (STEREO A, 195 A images).

The second, somewhat weaker flower-shaped halo CME was first observed by the SOHO/LASCO C2 coronagraphs at 00:12 UT on September 29, 2012 (and at 23:55 UT on September 28, in the STEREO A/COR 1 field of view) and had speed of about 750 km/s. The peak of the associated flare was at about 00:05 UT, as observed in the STEREO A, 195 A images.

Both CMEs have associated EIT waves, in particularly well defined for the first event, and also white light shock waves quite clearly observed along the petals.

The STEREO B COR 1 observations show pancaking/flattening of the CME front, in particular for the first CME, at unusually low heights. We focus the study on the low coronal signatures of the CMEs trying to understand the reason for the peculiar morphology of the two CMEs.