



## Projection effects in coronal dimmings and associated EUV wave event

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We investigate the high-speed ( $v > 1000 \text{ km s}^{-1}$ ) extreme-ultraviolet (EUV) wave associated with an X1.2 flare and coronal mass ejection (CME) from NOAA active region 11283. This EUV wave features peculiar on-disk signatures, in particular we observe an intermittent “disappearance” of the front for 120 s in SDO/AIA 171, 193, 211 Å data, whereas the 335 Å filter, sensitive to hotter plasmas ( $T \sim 2.5 \text{ MK}$ ), shows a continuous evolution of the wave front. We exploit the multi-point quadrature position of SDO and STEREO-A, to make a thorough analysis of the EUV wave evolution, with respect to its kinematics and amplitude evolution. We identify on-disk coronal dimming regions in SDO/AIA, reminiscent of core dimmings, that have no corresponding on-disk dimming signatures in STEREO-A/EUVI. Reconstructing the SDO line-of-sight (LOS) direction in STEREO-A clearly shows that the observed SDO on-disk dimming areas are not the footprints of the erupting fluxrope but result from decreased emission from the expanding CME body integrated along the LOS. In this context, we conclude that the intermittent disappearance of the EUV wave in the AIA 171, 193, 211 Å filters, which are channels sensitive to plasma with temperatures below  $\sim 2 \text{ MK}$  is also caused by such LOS integration effects. These observations clearly demonstrate that single-view image data provide us with limited insight to correctly interpret coronal features.