

INVESTIGATING THE ORIGINS OF A MYSTERIOUS STRUCTURE IN THE SOLAR  
CORONA

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## ABSTRACT

White light images of the solar corona, captured during the July 11, 2010 total solar eclipse, revealed a unique structure present within the corona at the time of the eclipse. We investigated the origin and evolution of this structure and examined a possible relation to a coronal mass ejection (CME) event. We used satellite data, including full disk images from AIA and SWAP and coronagraph images from LASCO, to develop a time sequence of events prior to and following the eclipse. We found that this structure did not appear to be tied to a CME, but appeared to be material lifted and suspended at a height of approximately two solar radii. This unexpected result demonstrates the continued necessity of eclipse observations as a means of observing a region of space not currently covered by satellites.