



Solar coronal mass ejections related to Extreme-Ultraviolet Wave and loop Oscillations

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Extreme-ultraviolet (EUV) wave is one of the large scale phenomena, which globally affects the solar surface. Several features are observed with it including: wave, non-wave component, multiple and stationary fronts. In this study, we performed the analysis of EUV wave, which originate from the active region NOAA 12887 on 28 October 2021 and is associated with GOES X1.0 class flare. The event was observed by the Atmospheric Imaging Assembly (AIA) on board the Solar Dynamics Observatory (SDO) satellite at various wavebands and

by the Solar TERrestrial RELations Observatory-Ahead (STEREO-A). We observed the fast-mode component of the EUV wave, creating the oscillations in EUV loops together with the appearance of wave trains. The periods of the oscillating EUV loops range from 230 – 549 s. The computed magnetic field is found in the range of 5.75 – 8.79 G. Finally the comparison of EUV wave with CME shows the EUV wave propagates ahead of the CME leading edge, which confirms the idea that the EUV wave is created by CME shock front.