



Ionospheric response to EUV emission from post-eruptive arcades

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Commonly, an arcade of post-eruptive loops is formed beneath the trailing edge of a coronal mass ejection (CME). The loop system emits EUV radiation for several hours after the CME lift-off, in addition to the commonly associated, classical X-ray flare.

We present results of a systematic study of the ionospheric response to the EUV emission from these post-eruptive arcades, taking into account their position on the solar disk, size, lifetime and underlying photospheric field.

The solar observations are provided by telescopes on board the Solar Dynamics Observatory and the Proba2 satellite, the ionospheric data is derived from analysis of GNSS and radio wave data.