

STUDY OF THE BRIGHTNESS SPREADING IN SOLAR ERUPTIVE PROMINENCE IMAGES

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We study an interesting case of solar prominence eruption (EP). The EP was observed on 2012 August 31. We describe the brightness evolution of the event, seen from two different points of view. For the purpose of our study we used EUV data from the Atmospheric Imaging Assembly (AIA) onboard the Solar Dynamic Observatory and from EUVI/ STEREO.

The test points in the images are localized after alignment and full overlapping of the sun disc. A field of gradient calculated between two images is used to enclose the slices with minimal changes of the luminosity. Since the image processing is provided over fts file format, the initial data are restricted to 12 digital bits. A special software module is prepared for the aim of the study.

We discuss some possible trigger mechanisms of the observed eruptive sequence.

References

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