

X-Ray Energy Release in the Solar Eruptive Flare from 6th of September 2012

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Abstract : The M 1.6 class flare occurred on 6th of September 2012. Our observations correspond to the active region NOAA 11560 with the heliographic coordinates N04W71. The event took place between 04:00 UT and 04:45 UT, and was close to the solar limb at the western region. The flare temperature correlates with flux peak, increases for a short period (between 04:08 UT and 04:12 UT), rises impulsively, attains a maximum value of about 17 MK at 04:12 UT and gradually decreases after peak value. Around the peak we observe significant emissions of X-ray sources. Flux profiles of the X-ray emission exhibit a progressively faster raise and decline as the higher energy channels are considered.

Keywords : magnetic reconnection, solar atmosphere, solar flare, X-ray emission

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