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ESTIMATION OF ENERGY EQUATION CORRELATE OF CMES WITH X-RAY FLARES DURING SOLAR CYCLE 23RD

Abstract

The aim of this paper is estimating the energy equation of CMEs with associated X-ray flares. In addition, we studied, when and where X-ray flares can eject CMEs? We are used CMEs data which observed from SOHO/LASCO, during the full solar cycle 23rd (1996- 2006), we have 12433 events. Also we are used the X-Ray flares data observed by Geostationary Operational Environmental Satellite (GEOS), during the same interval (1996-2006) in the 1-8 Ao GEOS Channel, it is recorded 22688 X-ray flare events. We had estimated energy equation between CMEs and associated X-ray flares during solar cycle 23rd (1996-2006). It is found the energy equation between them is polynomial series with correlation coefficient 92