



Relativistic Electrons In Outer ERB During 2009 As Space Weather Factor - "Electron-M-PESCA" Measurements On Board CORONAS-PHOTON Satellite

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One of the main goals of the experiment with the help of Electron-M-Pesca instrument on board space solar observatory CORONAS-Photon is the investigation of the relativistic electron flux dynamics in the Earth's magnetosphere and the outer radiation belt of the Earth's behavior as an important factor of space weather. Electron-M-Pesca is the semiconductor telescope, it is intended in particular for the detection of electrons with the energy 200 keV- 1 MeV, 1-4 MeV and > 4 MeV. During 2009 the significant increase of the relativistic electron (1-4 MeV) fluxes after the small magnetic storm on 13 March 2009 ($Dst=-28$ nT) has been detected. This high enhancement of the electron flux was caused by high-speed stream incoming to the Earth's orbit. The next enhancement of the relativistic electron flux was observed on April, 9, after the next high-speed stream's coming to the Earth. During the beginning of September, 2009 the similar electron flux enhancement was observed also, but its amplitude was significantly lower. These observations show that near-Earth's environment is strongly caused by the Sun even during solar minimum