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Investigation of muon flux anisotropy during CME

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According to CACTus catalog, during periods of high solar activity every day up to tens of coronal mass ejections are observed. Such ejections have an impact on the flux of cosmic rays that permeate the space around us. Unlike most ground cosmic ray detectors, muon hodoscope URAGAN (MEPhI) allows to investigate not only the integrated counting rate of registered particles, but also the spatial and angular characteristics of the muon flux at ground level. This approach to particle detection allows fixing changes in the flux of cosmic rays not only for geoeffective CMEs, but also for the ejections, the front of which is directed to the opposite side of the Sun. The results of the study of different types of CMEs at different stages of the solar activity from 2008 to 2015 are presented.

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