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GLE event of December 13, 2006 in muon hodoscopes TEMP and URAGAN

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Abstract content

The latest GLE event (70th since 1942) was registered using neutron monitor net on December 13, 2006. The response of neutron monitors shows a sharp anisotropy of solar particle flux with direction close to the acceptance cone of MEPhI muon hodoscopes (Moscow). Analysis of the enhancement in muon ground level intensity measured by means of muon hodoscope URAGAN (MEPhI, Moscow) is presented. Time profiles and zenith angle dependences of the enhancement amplitude have been obtained. For the first time, a 2D-angular dynamics of particle flux during GLE event has been directly observed. Preliminary results on pitch-angle distribution of solar particle flux are also presented. No effect has been found in TEMP hodoscope. This is probably explained by the difference of registration energy threshold for muon hodoscopes URAGAN (200 MeV) and TEMP (about 500 MeV).

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 1 (SH), pages 209-212

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