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# Investigation of Forbush effects in muon flux measured in integral and hodoscopic modes

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## Abstract content

Muon rate variations during Forbush decreases registered by means of muon detectors DECOR, TEMP and URAGAN operated in the experimental complex NEVOD (MEPhI, Moscow) have been studied. Analysis of data of these setups and also of Moscow neutron monitor (IZMIRAN) has been performed using a special technique that reduces as statistical as systematic uncertainties. Preliminary muon energy and zenith-angular dependences of Forbush decrease amplitude have been obtained (for 2.4 GV cut-off rigidity). Results of analysis of data from the new unique muon hodoscope URAGAN allow to study the dynamics of muon flux anisotropy during Forbush effect. The “loss cone” anisotropy was also observed, the wide aperture and excellent angular resolution of URAGAN hodoscope give a possibility to detect shocks tens hours before approaching to the Earth.

## 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 315-318

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