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Muon flux in the atmosphere at solar activity minimum

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Abstract content

Measurements of muon flux in the atmosphere have been performed by Lebedev Physical Institute during sea expeditions in November, 1975 - March, 1976 period. This survey covered a wide range of latitudes with geomagnetic cutoff rigidities Rc from 0.8 up to 14.2 GV. The data on muon flux as a function of atmospheric depth (X˜ 10-1000 g/cm2) were obtained. On the other hand based on GEANT4 facilities we have calculated the secondary muon fluxes produced by galactic cosmic rays in the atmosphere at different Rc during solar activity minimum epoch. The experimental and calculation results as well as their comparison are presented in the paper.

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 689-692

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