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Neutron multiplicity changes during the GLE December 13, 2006 at Barentsburg

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Abstract content

The neutron multiplicity changes on the neutron monitor in Barentsburg (Spitsbergen) during the GLE December 13, 2006 has been studied. The neutron monitor in Barentsburg was put into operation on April, 2003. In 2006 it has found the complete configuration 18-NM-64. The new data collecting system based on a digital ADLINK 7233 card allows to register both pulses, and intervals between them. On the basis of this device the multiplicity recorder is realized to register the count rates on multiplicities (2-10). During the GLE a significant increase of the count rates of multiplicities from 2 up to 4 was detected. The multiplicity spectrum changes are compared with the solar proton spectrum dynamics during event. The spectra of relativistic solar protons was derived by modeling technique from the worldwide neutron monitor network.

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 257-260

Primary author(s) : Dr. BALABIN, Yury (Polar Geophysical Institute of RAS)

Co-author(s) : Dr. GVOZDEVSKY, Boris (Polar Geophysical Institute of RAS); Mr. SCHUR, Leonid (Polar Geophysical Institute of RAS); Prof. VASHENYUK, Eduard (Polar Geophysical Institute of RAS)

Presenter(s) : Prof. VASHENYUK, Eduard (Polar Geophysical Institute of RAS)

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