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STUDY OF THE FORBUSH EFFECTS OF GALACTIC COSMIC RAY INTENSITY BASED ON THE NEUTRON MONITORS AND GROUND MESON TELESCOPES EXPERIMENTAL DATA

Abstract content

We use data of neutron monitors and ground meson telescopes to study the daily temporal changes of the rigidity spectrum of the sporadic and recurrent Forbush effects of the galactic cosmic ray intensity. We show that the change of the exponent of the rigidity spectrum of the galactic cosmic ray intensity is generally related with the alternation of the level of the interplanetary magnetic field turbulence during the Forbush effects. For attempting to separate the recurrent Forbush effect and the background 27-day variations of the galactic cosmic ray intensity we compare the time profiles of the temporal changes of the rigidity spectrum and three dimensional anisotropy of cosmic rays based on the experimental data and modeling for the stationary and non stationary cases

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

Summary

Reference

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