30th International Cosmic Ray Conference



Contribution ID: 38 Type: Poster

SEMI-DIURNAL VARIATION OF COSMIC RAY INTENSITYY AND SOLAR ACTIVITY ON LOW AMPLITUDE DAYS

Abstract content

Abstract A detailed study has been conducted on the long-term changes in the semi-diurnal anisotropy of cosmic rays using the ground based Deep River neutron monitor data during significantly low amplitude anisotropic wave train events (LAEs) in cosmic ray intensity for the period 1981-94. It has been observed that the phase of the semi-diurnal anisotropy for majority of the LAE events significantly shifts towards later hours as compared to the annual average anisotropy direction. The long-term behaviour of the amplitude of the semi-diurnal anisotropy can be explained in terms of the occurrence of LAE events. The occurrence of LAE is dominant during solar activity minimum years. The amplitude of the semi-diurnal anisotropy is correlated with the solar cycle but the direction of the anisotropy is not correlated with the solar cycle and shows a systematic shift to later hours.

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

Summary

Reference

Primary author(s): Dr. MISHRA, RAJESH Kumar (TROPICAL FOREST RESEARCH INSTITUTE)

Co-author(s): Dr. MISHRA, REKHA AGARWAL (DEPARTMENT OF PHYSICS, GOVERNMENT SCIENCE COLLEGE, JABALPUR)

Presenter(s): Dr. MISHRA, RAJESH Kumar (TROPICAL FOREST RESEARCH INSTITUTE)

Session Classification : Posters 3 + Coffee

Track Classification: SH.3.4