30th International Cosmic Ray Conference



Contribution ID : 43

Type : Poster

SOLAR CYCLE VARIATION OF COSMIC RAY INTENSITY ALONGWITH INTERPLANETARY AND SOLAR WIND PLASMA PARAMETERS

Abstract content

Abstract Galactic cosmic rays are modulated through their propagation in the heliosphere by the effect of the large scale structure of the interplanetary medium. A comparison of the variations of the cosmic neutron monitor intensity with variation of geomagnetic disturbance Dst, solar wind velocity (V), interplanetary magnetic field (B), their product (VxB) near the Earth for the period 1964-2004 has been presented so as to establish a possible correlation between them. We used the hourly averaged cosmic ray counts observed with neutron monitor at Moscow. It is noteworthy that for four different solar cycles (20-23) the cosmic ray intensity is found to anti-correlated with sunspot numbers (Rz) and interplanetary magnetic field (B) with some discrepancy. However, the interplanetary magnetic field shows a good positive correlation with Rz for four different solar cycles

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

Summary

Reference

Primary author(s): Dr. TIWARI, SHARAD (COMPUTER AND IT SECTION, TFRI, JABALPUR)

Co-author(s): Dr. MISHRA, RAJESH KUMAR (Computer and IT Section, Tropical Forest Research Institute, P.O.: RFRC, Mandla Road, Jabalpur (M.P.) 482 021, India); Dr. MISHRA, REKHA AGARWAL (DEPARTMENT OF PHYSICS, GOVERNMENT SCIENCE COLLEGE, JABALPUR); Mr. SAMSON, ISSAC (Computer and IT Section, Tropical Forest Research Institute, P.O.: RFRC, Mandla Road, Jabalpur (M.P.) 482 021, India)

Presenter(s) : Dr. TIWARI, SHARAD (COMPUTER AND IT SECTION, TFRI, JABALPUR)

Session Classification : Posters 1 + Coffee

Track Classification : SH.2.1