30th International Cosmic Ray Conference



Contribution ID : 44

Type : Poster

COSMIC RAY INTENSITY VARIATION UPTO RECENT SOLAR CYCLE 23

Abstract content

Systematic correlative studies have been performed since long to establish a significant relationship between cosmic ray intensity and different solar/heliospheric activity parameters and study is extended to recent solar cycle 23. In the present work yearly average of sunspot number (Rz), interplanetary magnetic field (B) have been used to correlate with yearly average cosmic ray intensity derived from the data of Moscow neutron monitor. It is noticed 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 B shows a good positive correlation with Rz for four different solar cycles. The IMF, B shows a weak negative correlation (-.35) with cosmic rays for the solar cycle 20, whereas show a good anti-correlation for the solar cycles 21-23 (- 0.76, -.69).

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

Summary

Reference

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Session Classification : Posters 3 + Coffee

Track Classification : SH.3.2