30th International Cosmic Ray Conference



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The Study of Cosmic Ray Periodic Modulation with the Tibet III Air Shower

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Abstract content

The periodicities of cosmic ray space intensity variation are analyzed using Lomb-Scargle Fourier transformation method with about 37 billion cosmic ray events recorded by Tibet III Air Shower Array during the period from November 1999 to November 2005. To eliminate meteorological effect, we adopt East- West subtraction method. According to our analysis, except the well known solar diurnal, sidereal diurnal and sidereal semi-diurnal periodic modulations at a level of 10⁻³, no other directional anisotropy periodicity is found with large enough significance in a periodicities range from 1 hour to 2 years and in energy range from 3.0 TeV to 12.0 TeV.

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

for As gamma cllaboration

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 609-612

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