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## Long-Term Modulation Of Cosmic Ray Intensity In Different Energy Range

### Abstract content

Galactic cosmic rays in the energy range from several hundred MeV to tens of GeV are subjected to heliospheric modulation, which changes their intensity and spectrum during 11-year cycle. Since the drift modulation processes are charge/polarity dependent, the 22-year solar magnetic field cycle is visible in cosmic ray data, e.g. in the different shapes of maxima of galactic cosmic rays intensity cycles. In this work, we have calculated the cross correlation function for three stations with different geomagnetic cut-off rigidities ( $R$ ) for the last three solar cycles. We have calculated the running cross correlation function for high latitude Oulu ( $R < 1$  Gv), mid latitude climax ( $R \sim 3$  Gv) and equatorial Huancayo ( $R \sim 3$  Gv) neutron monitors. It is found that all three curves coincide fairly well with each other within 95% confidence interval, for the most of period of study. This good overall coincidence means that the general behaviour of CR modulation is similar for particles with different energies (within the energy range of neutron monitor sensitivity), even if the depth of modulation changes with particle energy.

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

### Summary

### Reference

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