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## 1 On distinction of the rigidity spectrum of the 27–day variation of the galactic cosmic ray intensity for different polarity periods of solar magnetic cycle

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We study the features of the power rigidity spectrum of the 27–day variation of the galactic cosmic ray (GCR) intensity by neutron monitors experimental data in the minima epoch for different polarity periods of solar magnetic cycles. We found that the rigidity R power law spectrum of the amplitudes (A27) of the 27-day variation of the GCR intensity (A27  $\propto R^{-\gamma}$ ) is hard ( $\gamma \approx 0.54 \pm 0.11$ ) in the A>0 polarity period (1996-97) and is soft ( $\gamma \approx 0.95 \pm 0.12$ ) in the A<0 period (1986-87). We believe that this distinction is related with the extended well ordered regular structure of the heliolongitudinal asymmetry of the solar wind velocity in the interplanetary space for positive A>0 polarity period (1996-97) than in the A<0 period (1986-87), when this structure is reasonably disordered; also, we do not exclude an influence of the interplanetary magnetic field (IMF) turbulence on the formation of the rigidity spectrum of the 27–day variation of the GCR intensity in different polarity periods of solar magnetic cycle.