

SOLAR ACTIVITY DEPENDANCE OF THE COSMIC RAY 27-DAY VARIATION

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We use neutron monitor data as well as muon telescope data, during the last four solar cycles to examine the solar activity dependence of the 27-day variation of galactic cosmic rays. These detectors cover the median rigidity range 16-46 GV. The amplitude of the 27-day variation is rigidity dependent. It is linearly correlated with the level of solar activity. It shows obvious solar activity cycle as well as magnetic cycle variations. The 27-day variation of cosmic rays is also negatively correlated with the solar activity, it lag the solar activity by 5 years. It is linearly correlated with the geomagnetic activity.