27-DAY VARIATION OF GALACTIC COSMIC RAYS

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Cosmic ray data observed with neutron monitors as well as muon telescopes have been analyzed through the 37-year time interval 1965-2001. These data cover a median primary rigidity ranges from 16 to 60 GV. The amplitude of the 27-day variation is rigidity dependent. The cross correlation functions of cosmic ray amplitude versus the solar plasma parameters have been calculated. The time lag between the amplitude of the 27-day variation and each of these parameters has been studied as well. Cosmic ray amplitude is well correlated to the heliospheric current sheet tilt angle.