



Cycling changes in the amplitudes of the 27-day variation of the galactic cosmic rays intensity

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We study the 27-day variation of the galactic cosmic ray intensity (GCR) in different epochs of solar activity. Analysing a long period changes (1958-2009) of the 27-day variation of the galactic cosmic rays intensity, solar activity, solar wind and geomagnetic activity parameters we found a clear recurrence in the temporal changes of the amplitudes of the 27-day variation of the GCR and in some parameters of solar activity and solar wind. For being precise, we recognize noticeably established recurrence (cycling) with duration of three Carrington rotations period (3-CRP). We assume that a creation of the 3-CRP could be related with the Sun's differential rotation causing a conversion of the Sun's poloidal magnetic field into the toroidal.