



Long-term trend in Pc1 weekend effect according to geomagnetic data collected by the Borok Geophysical Observatory

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The report is devoted to the so-called "weekend effect" (WEEF) in the Pc1 geomagnetic waves in the frequency range 0.2–5 Hz. The initial data have been collected by the continuous recording of the Pc1 waves at the Borok Geophysical Observatory ($\Phi = 54.05^\circ$, $\Lambda = 119.44^\circ$, $L = 2.9$) since 1957. It was discovered the long-term trend in Pc1 WEEF by the synchronous detection method. The result shows an increasing human impact on the Pc1 wave activity. The problems of interpretation of WEEF in Pc1 are considered. The human impact on the seismic activity is briefly discussed as well. In particular, the relation between WEEFs in Pc1 wave activity and in the global seismic activity is considered. This study has been carried out to the celebration of 50th anniversary of the Borok Geophysical Observatory. The work is supported by grant RFBR 06-05-64143.