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Earthquake preferred days in the Lake Baikal and Yunnan-Sichuan Regions

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Understanding the cyclic and other forces governing geodynamics may provide fundamental clues for unraveling characteristics of earthquakes occurrence, which remains spectacular evidence induced by plate tectonics fueled by tidal drag and associated global cooling of the Earth (Riguzzi et al., 2010; Doglioni and Panza, 2015).

To check the hypotheses of earthquake-preferred days the nonparametric Kuiper test statistics for cyclic variations applied to the seismic evidence resulting from the empirical distributions of the earthquake origin time versus solar (Julian Day, JD) or lunar (Moon Phase, MP) cycles. We present the results of the Kuiper test application to seismicity of the Lake Baikal and Yunnan-Sichuan Regions aimed at verification on a solid statistical base the hypotheses of uniform distribution of earthquake origin time JD's and MP's in respect to the earthquake magnitude cut-off.