Instrumental observations of induced geomagnetic disturbances prior to seismic events in China

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Abstract. The results are presented of instrumental observations of seismic processes and variations in Earth's magnetic field in the course of nucleation and development of earthquakes in the Chinese provinces of Qinghai, Sichuan and Yunnan. The data on manifestations of all the strong seismic events are presented. The paper is based on the data acquired at the Northern Caucasus Geophysical Observatory, IPE RAS and the collaborative observational points (IZMIRAN). The experimental results allow us to formulate an idea of the structure of the induced anomalous geomagnetic disturbances, which can be associated with the development of related geodynamic processes in the geological medium of the seismic source zone.

Keywords: variations of the Earth's magnetic field, earthquake prediction, short-term earthquake prediction, tiltmeter, fault, epicenter, earthquake, seismic source, offset, focal mechanism.

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