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First measurements by the DEMETER satellite of ionospheric perturbations associated with earthquakes.

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DEMETER is a French project of a low altitude microsatellite. Its main scientific goals are to study the ionospheric perturbations related to the seismic and volcanic activity and the Earth's electromagnetic environment. The payload of the DEMETER microsatellite allows to measure waves and also some important plasma parameters (ion composition, electron density and temperature, energetic particles).

The launch of the satellite was done by the Ukrainian rocket Dnepr from Baikonour on June 29, 2004. The regular measurements started in the middle of July. Since the beginning of the data gathering some earthquakes with magnitude M>6 were registered. The analysis of the data has been done for selected passes of DEMETER over the epicenters. The results of the measurements for two Earthquakes- one during the pass 5 days before Japanese Earthquake (23.10.2004) and the second one just 3 minutes after Mexico Earthquake (9.09.04) will be shown.