EARTH-SPACE MONITORING AND PREDICTION OF THE JAPAN MEGA EARTHQUAKE OF MARCH 11, 2011

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Abstract. Predictive indicators of the catastrophic earthquake in Japan of March 11, 2011 are considered on the basis of seismotectogenesis (STG) concept and earthquake precursors analysis algorithm, developed in the Research Centre for Earth Operative Monitoring (RC EOM). Special attention was given to the cloud seismotectonic indicators of this mega earthquake. It has been drawn a conclusion about a possibility of calculation of expected parameters of such events using regularities of the STG concept and emphasized the necessity of international cooperation in the area of the Earth space monitoring of precursors and exchange of geophysical data with seismic-predictive indicators.

Keywords: earthquake, precursor, prediction, cloud seismotectonic indicators, earth-space monitoring, gravity field measurements, Earth orientation parameters, geomagnetic variations, Japan mega earthquake.