

**DYNAMICS OF CLOUD AND THERMAL ANOMALIES
IN THE REGION OF THE $M_w=9$ TOHOKU MEGA EARTHQUAKE,
11.03.2011, JAPAN**

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Abstract. The linear cloud anomalies at the epicenter region of the 11.03 2011 $M_w=9$ Japan earthquake were found during period from March 8 to 31, 2011. The major portion of anomalies contoured aftershock area. Similar anomalies were observed at other regions of the West Pacific subduction zones also, for example, near Island Kyushu and southern coast of Kamchatka. One month after start of seismic process the thermic anomaly with strong temperature gradient on ocean water surface was occurred at a region of deep-water trench near Island Honshu. This anomaly was connected with ejection of heated deep fluids from broken zone of tectonic plates contact possibly.

Keywords: earthquake forecasting, the litho-atmosphere coupling, the linear cloud anomalies, satellite images, satellite geodynamic monitoring, thermal anomaly, the 2011 Japan earthquake, aftershock process.