Example of influence of geodynamic processes on the common circulation of the atmosphere

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On November, 24-27, 2005 in West Europe the abnormal cold snap was observed, strong winds, snowfalls. In a number of the countries it has been anaunced extreme position. These adverse weather conditions are caused by fast occurrence and cvasistationarity of a cyclone, with big baricg radients, above Northern sea which has led to reorganization of baric fields in the region and trickle of cold Arctic air on significant territory of West Europe. Describing the features of evolution thermobaric fields of troposphere and character of circulation at various stages of development of cyclones and anticyclones, and also the role of the thermal and dynamic factor in their evolution, it is considered, that dynamic change of pressure occurs under influence of forces which result to increase or to reduction of weight in a column of air. It is considered, that one of the main factors of dynamic change of pressure is divergence (convergence) of air streams. We had investigated geophysical conditions of occurrence of this phenomenon. During this period was observed activization of geodynamic processes as a whole on a planet and in the given region in particular . In Northern Atlantic is fixed amplification of spreading , that has caused fast horizontal displacement of tectonic plates that provoked the change of vertical position of the lifted megablock on which British Isles and Northern sea are located. Occurrence of local gravitational anomalies results in occurrence of anomalies of atmospheric pressure. In this case on November, 26 is fixed fast downturn of a level of Atlantic on the large area. Such change of a level corresponds to negative anomaly of a gravity and accordingly provokes formation of depression in a field of atmospheric pressure. There has ben given an assumption that these changes of a gravitational field have provoked amplification and catastrophical developments of a cyclone in Northern Atlantic on November, 24-27 2005. So considering development of thermobaric fields of troposphere, by origin and evolution of cyclones, and anticyclones it is expedient to take into account local anomalies of a gravitational field of the Earth, as one of the factors of dynamic change of atmospheric pressure.