

# **GEOINFORMATION METHODS IN STUDYING OF THE EARTH GEODYNAMIC SYSTEM (SUMMARY)**

Sections: Geographical information system  
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In the early of the 21-t century there is no doubt in the determinacy of geodynamic processes. Quantity of disastrous phenomena in the nature grows steadily. Besides there is the tendency of superposition of different natural phenomena against each other and their acting in the definite terrains of the globe is synchronous.

Thus the Earth behavior in the four-dimensional space is rather difficult for forecasting without the new concept in analysis of the similar phenomena. We tender to esteem the cause of interaction of typhoons, floods, hurricanes and other natural disasters in instability of a geodynamic system of the Earth.

The geodynamic system of the Earth is a system of influencing of the Earth's physical fields on the earth crust moving. From geographical point of view the geodynamic system can be shown as enclosed fields. Each of these fields has the functional value. The field of gravity provides the static character of the other fields' position in the near-surface layer of the Earth and the field reacts on the instability of all system in the most sensitive way, in particular, on the disturbance of the planet's magnetosphere.

The dynamic processes have changed qualitatively, that is expressed in a hierarchy's reallocating of the most influential risk factors of the Earth behavior. The risk factors, having the local impact at the growth of the disturbing potential, are taking on a regional value.

At all the complexity in analysis of the Earth geodynamic system at the present moment there are means that allow to combine such sciences, as land-surveying, geology, geophysics and mapmaking, so called geographic information methods. In the report submitted below the technique of Geodynamics design is considered on the example of the certain Siberian regions and the local man-caused polygons.



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