

The global changes, influencing factors

B.Kapochkin, N.Kucherenko, V.Dolia, I.Dolia

Odesa state ecological university

In opinion of the majority of scientists non-uniformity receipt of the Solar energy on a surface of the Earth and circulation arising at it in an atmosphere and ocean, form a climate of our planet. Experience of studying a problem of climate changes, shows on existence of objective discrepancies between changes of analyzed streams of the heat and actual changes of the climate. We offer to consider a climate as function of wider spectrum of influencing factors. Climate forming factors and existential heterogeneity of receipt on a day time surface of the Sunlight energy and geothermal energy, it is necessary to consider energy gravitational interactions between mobile internal spheres of the Earth and external environments - hydrosphere and an atmosphere. Energy of such interaction as well as thermal energy can form latitude area of climatic zone of the Earth. In view of known processes of change of the form and the sizes and probably volume of the Earth, processes of weights redistribution inside the Earth, its nucleus connected to displacement, processes convection in a cloak, in a wide range of frequencies the movements of tectonic plates are fixed the changes of a gravitational field of the Earth. Such changes for processes of a geological time scale demand the account of the geoid's form at calculations of the common circulation of an atmosphere and ocean. For fast changes inclusion of acceleration of free falling in the equations prognosing models are required as a variable changing in time and in space. Fast changes of the gravitational field of the Earth can influence the form of a presence of moisture in an atmosphere, on radiating balance, etc. Forming a field of atmospheric pressure this factor appears influencing on trajectories of movement of cyclonic formations - directly influences dynamics of an atmosphere. The attendant effect of fast changes of a gravitational field of the Earth, formed processes in internal spheres of the Earth (that is accompanied by activation of seismicity and vulcanism) is variability of geothermal streams of heat, variability of intensity of water allocation and gases from lithosphere. As prognosing factors in climatic researches, it is expedient to use direct geodetic changes of the form and the sizes of the Earth, direct measurements of a gravitational field of the Earth. It is possible to use supervision over parameters of the Earth rotation that reflect changes of its geometry. According to the results of the researches executed by us it is possible to expect, that measurements of variations of the gravitational field of the Earth in units of crossing zones of critical parallels (0, 35, 62, 90) with critical meridians, will allow to make use of all positive experience of studying indexes ENSO, NAO, NPO etc., for the forecast of climatic changes not on statistical, but on the deterministic level.