

CARTOGRAPHICAL-GEOINFORMATION APPROACH
IN INVESTIGATION OF REGIONAL SYSTEMS

I.A.Bashalkhanov, V.A.Snutko, L.B.Bashalkhanova
Institute of Geography, SB of RAS.
1, Ulanbatorskaya-street, Irkutsk 664033, Russia

The requirement of Cartographical-Geoinformation researches of regional systems is brought about by the appearance of new ecological problems of Siberia. Investigational conception consists in integration on the basis of modern GIS-technologies of geosystem-model and comprehensive cartographical approaches during treatment, analysis and prediction of information massives of data and maps. The materials obtained are important for making management decisions to provide balance and sustainable development of the territory.

The key section of an integration is a spatial-temporal extrapolation of studied processes and phenomena, showed on computer maps (under condition of formal and natural structures coincidence on specially chosen model training grounds). The range of cartographical-geographical tasks are solved, such as: spatial extrapolation of geographical appropriatenesses, exposed on local level, on the region in whole; objectifying the division in to districts and distinguishing integral natural territorial systems. Recreational, environment stabilizing nature conservation and resource restoration roles of landscapes complexes can be determined, as well as quality and biodiversity of the environment can be estimated etc.

An application of cartographical-geoinformation approach to bioclimate investigation in intermountain hollows in Siberia permitted the possibility to expose major natural-climatic factors which determine vital functions of population and the most favourable territories for humans health. Landscape-geochemical analysis in Baikal basin has enabled to reveal the most contrast and liable to technological press districts.