

INTEGRATED INFORMATION-SPACE SYSTEMS FOR STUDIES OF ENVIRONMENTAL PROBLEMS

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ABSTRACT

The principles and methodology of designing integrated information-space systems for analysis problems of natural climatic and environmental state of territory. A basis of this methodology is conceptual analysis of environment and problem media based on combination of system analysis and classification methods. Generalized structure of integrated information-space systems realized on base of geoinformation technologies is determined. The problems of integration of mathematical models and heterogeneous data on environmental state are considered. The questions of practical application of the information-space technology for problems of environmental analysis and prediction are discussed. Methodic problems of structure analysis of forest-swamp complexes of West-Siberian plane using remote sensing data and field observations are considered. Results of geoinformation analysis of natural climatic state in central and southern parts of West Siberia are given.