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INTELLIGENT REAL-TIME SPATIAL DATA MANAGEMENT SYSTEM BASED ON SATELLITE
INFORMATION

Abstract

The modern development of information and communication technologies has contributed to the comprehensive development of the country, as well as to the creation of the space industry, which is of great importance for national security and economic benefits. The introduction of satellite systems requires the use of accurate information obtained from remote sensing satellites of the Republic of Azerbaijan in economic, energy and other areas of regional importance. This, in turn, leads to the creation of a unified integrated system for the study of space technology in the oil and gas complex of the territory of the Republic of Azerbaijan. The creation of a space cadastre and space surfaces in Azerbaijan, regular information on oil and gas reserves and the collection of existing information require the modernization of a data-based ground system and the integration of existing information systems into the global world. The creation of an integrated data systems for satellite data of oil and gas fields is one of the modern requirements for Azerbaijan, which is part of the space segment. The elements included in the integrated complexes are data from various earth satellite systems. It is also important to transfer regional data and technology to international knowledge for integration into the global system. In the modern world the scale of environmental pollution by oil products is approaching a critical level. There are numerous domestic, transport and agricultural facilities operating in the Caspian Sea and on its shores, which may repeatedly cause emergencies when pollutants are released into the sea. Application of intellegent technologies allows us to systematically study the transformation of oil pollution in the aquatic environment. The study of the process is considered as an analysis of the system with internal and external factors affecting it. System-aerospace methods of studying natural resources combine traditional surveys and their modern types.