

Publication on Using Space Images

By the request of ScanEx R&D Center, the Irkutsk East Siberian R&D Institute of Geology and Mineral Resources has developed and published a reference manual on using space images for the governmental and local authorities.

Data received from space is being used wider from year to year in day-to-day practice of the governmental and local authorities. Nowadays the main sources of regular digital imagery of middle and high resolution (Spot-2/4, IRS-1C/1D, IRS-P6, IRS-P5, RADARSAT-1, ENVISAT, EROS-Å, EROS-B and others) are available to the customers in the best cost-efficient and operational mode of direct image reception on the territory of Russia. This opens new possibilities to resolve tasks of environmental monitoring and control. At the same time until recently there was no analysis of regulatory structure whatsoever in terms of space data use possibilities for territorial management in Russia.

A new reference manual entitled "Responsibilities of the governmental and local authorities for monitoring, control and development of environmental management, supported by space images" is to be used during the creation of regional and industrial programs of environmental management space monitoring. The reference manual contains characteristics of modern remote sensing systems, as well as the analysis results of federal laws and of governmental resolutions of the Russian Federation (as of 1st April 2006) with respect to relevant powers of governmental and local authorities, as well as documents containing requirements to use RS data in exercising these authorities.

The effect of obtained assessments of RS data use efficiency for environmental management monitoring, control and development can be measured in billions of rubles. The principal efficiency factors are: reduced damage from environmental management violations; reduced damage caused by natural calamities; prevention of damage due to technological impacts; cheaper geological, forest survey and mapping activities and their potential increase in volume.

It can be stated today that all the preconditions have been created and an independent background is available for the development and implementation of territorial programs of environmental management space monitoring for specific regions in order to increase the efficiency of the decision-making in this sphere. Requirements to space monitoring methods and techniques, as well as the list of data product users, taking the Baikal natural territory space monitoring as an example, are cited in the previously published document "Classifier of thematic tasks of natural resources and environment assessment, resolved using the Earth remote sensing data" (East Siberian R&D Institute of Geology and Mineral Resources and ScanEx R&D Center, 2002). The classifier contains 209 thematic tasks, resolved using RS data, including 88 tasks on geology and subsoil use, 47 " on surface water, 25 " on forest resources, 49 " on environmental protection. The new reference manual ought to be used together with this classifier.

The authors of the reference manual are the specialists from the East Siberian R&D Institute of Geology and Mineral Resources. The 50-page brochure with color space images is distributed via the Information Technology Development Center. For more details please feel free to contact us at the following phone number: (495) 246-25-93, e-mail: office@scanex.ru.