

The TerraNorte Information System: New Terrestrial Ecosystem Dynamics Facility for Northern Eurasia

Sergey Bartalev, Evgeny Loupian, Ivan Uvarov
Space Research Institute of Russian Academy of Sciences

beml@smis.iki.rssi.ru

Northern Eurasia's terrestrial ecosystem is a major component of the Earth System, which dynamics are highly connected to the global biogeochemical, water and energy cycles. The information concerning the state and processes in the terrestrial ecosystems of Northern Eurasia is strongly required as an input for the sustainable development indications assessment and global change modelling. The Earth Observation techniques provide today the possibility to collect such regularly updated information at continental scale. The Russian Academy of Sciences' Space Research Institute is working on development of remote sensing applications and operational monitoring systems, which are resulted in number of thematic products and databases concerning different aspects of the terrestrial ecosystem dynamics within the region. This information is of great value for global changes science and sustainable natural resources management and its availability for wide range of scientific and experts' communities is critical issue of the day. The TerraNorte information system is a new terrestrial ecosystem dynamics facility for Northern Eurasia, which aims at providing access to this information through the Internet and consists of a number of components such as data bank, GIS and spatial modelling components.