



## **Information-computational Infrastructure for Siberia Integrated Regional Study: Towards to Harmonization of National and International Efforts**

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Siberia Integrated Regional Study (SIRS, <http://sirs.scert.ru>) is a Northern Eurasia Earth Science Partnership Initiative (NEESPI, <http://neespi.org>) mega project co-ordinating national and international activity in the region in line with Earth System Science Program (ESSP) approach. It is aimed to understand dynamics of dynamics of regional environment under Global Change as well as to determine major feedbacks between regional and global system. That is why comprehensive information-computational infrastructure is required to support national and international monitoring, modeling and assessment activities in the region.

In this paper the state of the art of the infrastructure aimed at support of multidisciplinary and “distributed” teams of specialists performing cooperative work with tools for exchange and sharing of data, models and knowledge optimizing the usage of information-computational resources, services and applications, which is developed in cooperation of Russian Academy of Science (Siberian Branch) specialists with their abroad partners/counterparts is presented. Also discussed are tentative roadmap of the infrastructure development and major challenges.

Among those are management of multidisciplinary environmental data, which will come from SB RAS environmental observatories network under development in Siberia and harmonization of interaction between operating environmental web portals and SB RAS GIS and satellite data storage and processing centers under development. Surely such infrastructure is one of the key elements of each ESSP integrated regional study (IRS) and the SIRS infrastructure under development might be used as a prototype for those. That is why we suggest to initiate a large scale international project aimed at development, implementation and testing in Siberia of a prototype of such IRS infrastructure.

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