

## **International conference “Electronic Geophysical Year: State of the Art and Results”**

The international conference “Electronic Geophysical Year: State of the Art and Results” was held from 3 to 6 June, 2009 in Pereslavl-Zalessky, Russia. The conference was organized by, Earth Sciences Branch of the Russian Academy of Sciences (RAS), Geophysical Center RAS, Schmidt Institute of Physics of the Earth RAS, Institute of Program Systems RAS and National Geophysical Committee RAS. The International Union of Geodesy and Geophysics (IUGG), International Institute for Applied Systems Analysis (IIASA), CODATA, and the international project “Electronic Geophysical Year” took an active part in organizing the conference.

The conference themes covered the following domains of Earth sciences:

- Electronic Geophysical Year, International Polar Year, International Heliophysical Year, International Year of the Planet Earth, International Year of Astronomy
- GIS, artificial intelligence methods in geoscience. Problems of geoinformatics in seismology and geoecology
- GRID systems
- Transition of World Data Centers into World Data System
- Geomagnetic observations, geoinformatics and virtual observatories
- Global changes, climate and weather of the solar-terrestrial system

Extensive scientific program of the conference aroused great interest among scientific community. About 150 attendees from Russia, Austria, Germany, USA, Iran, Slovakia, Ukraine and France made over 120 presentations at six major sessions. The invited speakers have described the present state of the leading directions of research in geophysics, related to promotion of *eGY*. Among them were: A. Gvishiani, corr. member of RAS, chair of the National Geophysical Committee of Russia, chair of the Russian national committee on international program “Electronic Geophysical Year”, academician A. Gliko, academician D. Rundquist, Russia; M. Zgurovsky, academician of the National Academy of Sciences of Ukraine; A. Ismail-Zadeh, IUGG Secretary General, Germany; professor J. Zlotnicki, CNRS, France; academician A. Kryazhimsky, IIASA, Austria; professor J.-B. Minster, co-chair of WDS Transition Team, USA; professor J. Bonnin, EDNES, France; professor Ch. Fox, director of NGDC/NOAA, USA, D. Clark, secretary of WDS Transition Team, USA. V. Savinykh, twice awarded Hero of the Soviet Union, pilot-cosmonaut of the USSR, corr. member of RAS, made a presentation at the conference titled “Experience of Space-borne Study and Observations of Anomalous Phenomena and Environmental Pollution”

The program was focused on discussing problems related to development of specialized information sources on geophysical data (virtual observatories) in the scale of the global network and elaboration of systems of data accumulation, storing and scientific analysis of data.

Special attention was paid to development and program realization of integrated intellectual geoinformation environment for Earth sciences data; integration of existing and creation of new geoinformation resources on geosciences, comprised in an integrated GIS; application of modern technologies of artificial intelligence to analysis of vast time series of observations and development of databases and scientific knowledge.

Among the most important problems related to transition of WDCs into World Data System were: development of web-portals and service systems; expansion of connections between WDCs of different countries; providing multidisciplinary information at the time of transition to the World Data System given the assumed growth of multidisciplinary projects, expanding data specification and variety of data. The World Data System should form a basis for global virtual library of data, embracing all branches of science.

At the final session on 6 June, 2009 the conference participant have endorsed the “Tsukuba Declaration” , adopted at the “IGY+50” meeting in Tsukuba, Japan, on 10-13th November, 2008, aimed at enhancing cooperation between scientists of the entire world, national academies of science, governments and interstate organizations fostering exchange of scientific data expanding the sphere of knowledge related to geoscience.

On 4 June,2009 a meeting of the Russian National Geophysical Committee of IUGG was held. The meeting was addressed by A. Gvishiani, Chair of NGC of RF. Secretary General of IUGG A. Ismail-Z spoke about collaboration of IUGG and NGC RF. The NGC members reported about their activities in IUGG – in associations, committees and working groups.

More detailed information about the conference can be found at:

<http://elpub.wdcb.ru/ebooks/absegy.pdf>

NGC RF Chair,  
corr. member of RAS

A. Gvishiani

NGC RF Vice-Chair,  
Dr. Sc

Yu. Lubovtseva