International Session (Oral) | Symbol U (Union) | Union

[U-01_1PM1]Forum for Global Data Sciences in Earth and Planetary Research

Convener:*Yasuhiro Murayama(National Institute of Information and Communications Technology), Toshio Koike(Department of Civil Engineering, The University of Tokyo), Masatoshi Ohishi(Astronomy Data Center, National Astronomical Observatory of Japan), Masaru Kitsuregawa(Institute of Industrial Science, the University of Tokyo), Ryosuke Shibasaki(Center for Spatial Information Science, the University of Tokyo), Takashi Watanabe(Solar-Terrestrial Environment Laboratory, Nagoya University), Chair:Masatoshi Ohishi(Astronomy Data Center, National Astronomical Observatory of Japan), Takashi Watanabe(Solar-Terrestrial Environment Laboratory, Nagoya University)

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The international society is increasingly agreeing with the idea of sharing scientific data openly between society and scientists, as stated in "The Future We Want" at RIO+20 2012, and the Open Data Charter agreed by G8 in UK June 2013. Data is also one of the most important multidisciplinary issues for JpGU. Significant research areas in The Union stand on research data which are substantially important in its sciences and cannot be obtained and/or be produced again. In international context, ICSU-WDS (World Data System) is proceeding for goals of open data sharing and long term preservation. DIAS (Data Integration and Analysis System) is under development as Japanese contribution to GEO/GEOSS. New actions are starting including Future Earth, re-forming global environmental science enterprises, and also Belmont Forum's discussion of e-infrastructure development whose targets include a support of Future Earth's data activity. Furthermore academic publishers like Thomson-Reuters and WDS started collaboration for data publication and data citation (use e.g. DOI or Digital Object Identifiers attached to datasets for citation in scientific articles). Discussions and exchanges of ideas, difficulties and challenges will be covered for future international data framework.

3:25 PM - 3:30 PM

△[U01-P02_PG]Basic Technologies, Integrated Systems and Applications of the NICT Science Cloud

3-min talk in an oral session

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This paper is to propose a cloud system for science, which has been developed at NICT (National Institute of Information and Communications Technology), Japan. The NICT science cloud is an open cloud system for scientists who are going to carry out their informatics studies for their own science. The NICT science cloud is not for simple uses. Many functions are expected to the science cloud; such as data standardization, data collection and crawling, large and distributed data storage system, security and reliability, database and meta-database, data stewardship, long-term data preservation, data rescue and preservation, data mining, parallel processing, data publication and provision, semantic web, 3D and 4D visualization, out-reach and in-reach, and capacity buildings.

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