

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



MGI031-10

会場:201A

時間:5月25日 15:30-15:45

NICTサイエンスクラウド実験 Examinations on NICT Science Cloud

村田 健史^{1*}, 亘 慎一¹, 深沢 圭一郎¹, 山本 和憲¹, 森川 靖大¹

Ken T. Murata^{1*}, Shinichi Watari¹, Keiichiro Fukazawa¹, Kazunori Yamamoto¹, Yasuhiro MORIKAWA¹

¹ 情報通信研究機構

¹NICT

Main methodologies of Solar-Terrestrial Physics (STP) so far are theoretical, experimental and observational, and computer simulation approaches. Recently "informatics" is expected as a new (fourth) approach to the STP studies. Informatics is a methodology to analyze large-scale data (observation data and computer simulation data) to obtain new findings using a variety of data processing techniques.

At NICT (National Institute of Information and Communications Technology) we are now developing a new research environment named "OneSpaceNet". The OneSpaceNet is a cloud-computing environment, which connects many researchers with high-speed network (JGN: Japan Gigabit Network). It also provides the researchers rich resources for research studies, such as super-computer, large-scale disk area, licensed applications, database and communication devices. What is amazing is that a user simply prepares a terminal (low-cost PC). After connecting the PC to JGN2plus, the user can make full use of the rich resources via L2 network. Using communication devices, such as video-conference system, streaming and reflector servers, and media-players, the users on the OneSpaceNet can make research communications as if they belong to a same (one) laboratory: they are members of a virtual laboratory.

We present two initial results using the OneSpaceNet for large-scale computer simulation data transfer and virtual observation data transfer system.