

Global Data Framework and Japanese Contribution Global Data Framework and Japanese Contribution

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Open data is not only the subject discussed in the last G8 meeting 2013, but also can be a wide-spread argument and can become substantially important factor in conducting science. Of course we cannot make all the research data publicly open immediately after its creation. But also data and paper are important in the modern science scheme, for validating results of a scientific research, e.g., its reproduction or statistical significance particularly in fields such as physics, earth science, or so. Recently there are found scientific results in certain percentage of original papers which are not necessarily reproducible in life science fields. Today's society has increasingly big concern with climate change and huge earthquake etc., where scientific research may directly affect real worlds like political and people's decision making. Validation of scientific papers is important since it may affect mutual trust between science and society. Here electronic data which can be linked to scientific papers in data citation scheme, are part of evidence of our scientific truth. In comparison to the history for a couple of hundred year of the printing culture in scholarly communications, the modern technology like Internet, hard disk drives, etc., have only the tens-of-years history. Human beings are now challenging this new system of electronic way to conduct science with society, seeking the right strategy for management of scholarly information. International data management activity like ICSU-WDS from the academic side, and RDA related to governmental arrangement are part of such big challenges of the international community. Furthermore Future Earth, the international 10-year transdisciplinary research programme are promoted by ICSU, UN bodies, Belmont Forum, etc. for future of the planetary earth and human beings, where ICSU-WDS and CODATA are required to support Future Earth's international scientific data management. We need careful discussions to promote those activities, but with a bright hope for the human society who has the indispensable intellectual infrastructure called "science".

Keywords: Scientific data, World Data System, open data, data management, data science, geophysics