

Current Open Science Activities for Research Data at JAMSTEC

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JAMSTEC established basic data policies named "Basic Policies on the Handling of Data and Samples [1]" in 2007 and initiated its operation in 2008. Research data that mainly contains observation data and sample information obtained by JAMSTEC research cruises have been published on the Internet on the basis of the data policies. These activities have achieved a certain level of reuses of data and samples for academic and educational purposes, and been in advance of research data sharing. On the other hand, there are still many issues that need to be addressed in the recent movement of open science. This paper will exhibit current two activities to improve findability and interoperability of research data published at JAMSTEC under open science.

-Findability of research data

Minting data Digital Object Identifier (DOI) to research data has been started to improve its findability. Earlier targets for minting data DOI are research cruise and dive information, observation data, cruise report, and dataset created by researchers published in JAMSTEC database for a long period of time. We are developing a Data DOI Management System and considering a sustainable workflow to mint and maintain DOI metadata.

-Interoperability of research data

Automatic linkage between JAMSTEC Data Catalog [2] and GeossPortal [3] has started to promote reuse data in the global geoscience community. About 50 metadata of JAMSTEC Data Catalog are searchable at GeossPortal by metadata harvesting as of February 2018.

The common key points for the both activities are appropriate metadata management, effective use of existing databases, and efficient linkage between data systems inside/outside the organization with limited manpower and system resources. Based on above our experiences, constrains and future prospects toward open science will be discussed.

References

[1] https://www.jamstec.go.jp/e/database/data_policy.html

[2] http://www.godac.jamstec.go.jp/catalog/data_catalog/e/index.html

[3] <http://www.geoportal.org/>