GANSEKI: Maintaining Accessibility of JAMSTEC Rock Samples and Associated Information

\*Takayuki Tomiyama<sup>1</sup>, Yasumi Toyoda<sup>2</sup>, Hiroki Horikawa<sup>1</sup>, JAMSTEC Data Sample Team

1.Japan Agency for Marine-Earth Science and Technology, 2.Marine Works Japan, Ltd.

Japan Agency for Marine-Earth Science and Technology (JAMSTEC) provides data and samples obtained by research cruises of JAMSTEC vessels for further public uses with research/educational purposes [1]. The GANSEKI database, an online-system which disseminates metadata, collection inventory, and geochemical data of JAMSTEC rock samples, has been operated for years since it was established 2006, though several improvements have been implemented during the period [2]. Not only curating JAMSTEC rock samples and associated information which were obtained by recent cruises, but we also curate those obtained by old cruises; those of down to 1980s are still available on GANSEKI. Some geochemical data of non-JAMSTEC rock samples are also gathered into GANSEKI for researchers' convenience, referring to literatures on ocean geosciences.

Most of rock samples are fairly durable for long-time archiving as a resource for scientific research. Even if decades have passed since a rock sample was collected, one can still utilize it to carry out a research using modern techniques. It is important for utilizing such old samples that there is abundant information, such as sampling date, location, surrounding geometry, geological occurrence, who was the initial user, how samples are collected, for what purpose they have done it, etc. If such information remains abundantly and maintained for easy access, public users, who were not in touch with sampling, can evaluate and utilize samples from a standpoint close to that of initial researcher who sampled them.

One of the strong points of JAMSTEC rock samples is that associated information such as metadata, video/photo data, geophysical observation data, cruise reports and so on were collected simultaneously with rock sampling and many of them are still accessible even for old cruises. These associated information is accessible at databases introduced in "NUUNKUI" data site, in which GANSEKI itself is also included [3].

Individual sample information on GANSEKI is directly linked to online information, which is selected for its importance for rock sample usability. Among NUUNKUI data site, cruise and dive information on DARWIN, video/photo data on J-EDI are especially important for GANSEKI [4, 5]. As for the visualization service of submersible dive tracks which used to be available on previous JDIVES virtual exploration system, JAMSTEC is now implementing similar functions into the J-EDI system.

References: [1] "Basic Policies on the Handling of Data and Samples"

http://www.jamstec.go.jp/e/database/data\_policy.html. [2] "Geochemistry and Archives of Ocean Floor Rocks on Networks for Solid Earth Knowledge Information (GANSEKI)"

http://www.godac.jamstec.go.jp/ganseki/e. [3] "GODAC data site NUUNKUI"

http://www.godac.jamstec.go.jp/jmedia/portal/e/. [4] "Data Research System for Whole Cruise Information in JAMSTEC (DARWIN)" http://www.godac.jamstec.go.jp/darwin/e. [5] "JAMSTEC E-library of Deep-sea Images (J-EDI)" http://www.godac.jamstec.go.jp/jedi/e.

Keywords: Rock sample, On-line database, curation