

## Unite the Power! DARWIN, GANSEKI & COEDO Get Integrated!

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Japan Agency for Marine-Earth Science and Technology (JAMSTEC) archives data and samples obtained by JAMSTEC research vessels and submersibles as common properties of the human society, and publishes them for further uses with scientific/educational purposes [1]. The NUUNKUI data sites, which consist of several data sites for various data and sample types, perform the central role of JAMSTEC data publication [2].

JAMSTEC applies occasional updates to NUUNKUI data sites for improved usability, emerging datasets, and advanced informatics technologies. In 2016, JAMSTEC decided to reorganize these data sites for effective data publication. Three data sites named DARWIN [3], GANSEKI [4], and COEDO [5], which stand for online databases of cruise/dive information, rock sample information and sediment core sample information, respectively, will be integrated into a single system in the spring 2017.

DARWIN disseminates metadata and observation data of JAMSTEC cruises and submersible dives. Previously, sampling activities and submersible video/photo archives were registered on DARWIN as URLs to different data sites designated for particular data/sample types, and these data sites also provided URLs to DARWIN cruise/dive information as mutual references. Through the data site update described here, geological sample information and browsing functions of GANSEKI and COEDO are incorporated into the new DARWIN and they become seamlessly available on a single interface. In the new DARWIN, users can search geological samples by thumbnail browsing, map area, keyword filtering, and metadata constraints, and handling of associated data become more flexible in respect to the applicable data format and capacity. For rock samples, onboard sample photo and microphotographs of surface texture will be newly publicized, whereas for sediment core samples, searchability of photo images is improved and geochemical data entry becomes newly available.

This data site update also includes implementation of interactive map functions that are similar to those of previous "JAMSTEC Data Site Portal [6]". Using these functions, users can browse JAMSTEC observation activities plotted on a map and search data and samples on an interactive map and obtain URL list for their data sites. However, the previous system has become obsolete after years of services, and security and usability problems have become obvious. This data site update improves usability of map search and visualization of search results, and users can effectively search data and sample information without concerns for particular cruise and dive.

### References

- [1] "Basic Policies on the Handling of Data and Samples by Japan Agency for Marine-Earth Science and Technology" [http://www.jamstec.go.jp/e/database/data\\_policy.html](http://www.jamstec.go.jp/e/database/data_policy.html)
- [2] "GODAC Data Site -NUUNKUI-" <http://www.godac.jamstec.go.jp/jmedia/portal/e/>
- [3] "DARWIN: Data Research System for Whole Cruise Information" <http://www.godac.jamstec.go.jp/darwin/e>
- [4] "GANSEKI: Deep Seafloor Rock Sample Database" <http://www.godac.jamstec.go.jp/ganseki/e> (preexisted URL)
- [5] "COEDO: Sediment Core Sample Database" <http://www.godac.jamstec.go.jp/coedo/e> (preexisted URL)
- [6] "JAMSTEC Data Search Portal" [http://www.godac.jamstec.go.jp/dataportal/index\\_eng.html](http://www.godac.jamstec.go.jp/dataportal/index_eng.html) (preexisted URL)

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