

## Construction of long-term stability archive System for Ocean observation data of large capacity

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The Ocean observation data obtained from manned/unmanned research submersibles of the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) continue to diversity and increasing for development of new observation technique and improvement of instrument. For example, Multi-Beam Echo Sounder (MBES) for measurement of submarine topography capable of high-resolution measurement by shortening the measuring interval and collecting vertical beam more than ever before. JAMSTEC's Ocean Observation data is particularly high academic value because it was observed under special environment of deep sea that cannot be easily accessed. It is widely used by various fields, it was necessary to keep without losses in the future. Accordingly, it is necessary to construct data archive system combining network and Large Capacity Storage that can be stored long-term and extract data from storage available if need.

The Center for Earth Information Science and Technology (CEIST) of JAMSTEC is possible to a long-term stability archive supposed the disaster recovery by making to increase the size of a storage volume and install the wideband/high speed network. The Ocean observation data is recorded in both of the hard disk and the magnetic tape that because to maintain data access and lower the operation coast. In the magnetic tape storage, by combine Hierarchical Storage Management (HSM) and Linear Tape File System (LTFS), the flexibility of the operation is secured and lower the operation coast about power consumption or the like. Furthermore, we constructed the wideband/high speed network to introduce the data transfer system by User Datagram Protocol (UDP) and install the wideband network between bases in accordance with update the Science Information NETwork (SINET) of National Institute of Informatics (NII).

In this a nnouncement, we report on the activity of data archive system in JAMSTEC.

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