Development of Data Integration and Analysis System (DIAS)
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1. Outline of DIAS System
We have been developing DIAS system since 2006 as part of the Earth Observation and Ocean Exploration System, which is one of five National Key Technologies defined by the 3rd Basic Program for Science and Technology of Japan. In this talk, we introduce the outline of DIAS and the system structure of DIAS core system.

2. Introduction of Data Upload, Meta-Data Registration, and Quality Control System
On DIAS core system, we are preparing lots of tools to manage huge, various kind of data. Data Upload system enables users to upload observation data on reference site with Web-Based Graphical User Interface.
Meta-Data Registration system can reduce the labor to input metadata by using our smart and helpful interface. Quality Control System also reduces the time for observers to check the quality of each data. We introduce these 3 Systems with User Interface.

3. Introduction of CEOP Satellite Data Gateway system
CEOP Satellite Data Gateway system provides CEOP satellite data to the public. We will report the outline of this system and introduce how to register, how to access and download these data.

4. Applications on DIAS System
On our system, lots of user applications are running using DIAS data. We will report following examples of Data Integration and Analysis:
1) Analysis of Bai-u front in the Japanese Islands
   - Moisture flow analysis using a powered visualizer for three-dimensional data set
   - Data integration between reanalysis data (NCEP) and satellite data (AIRS)
2) Climate model analysis
   - Using extra-large volume IPCC climate model output and reanalysis data, an integrated analysis for the effect of global warming on Bai-u front in Japan has been carried out.