

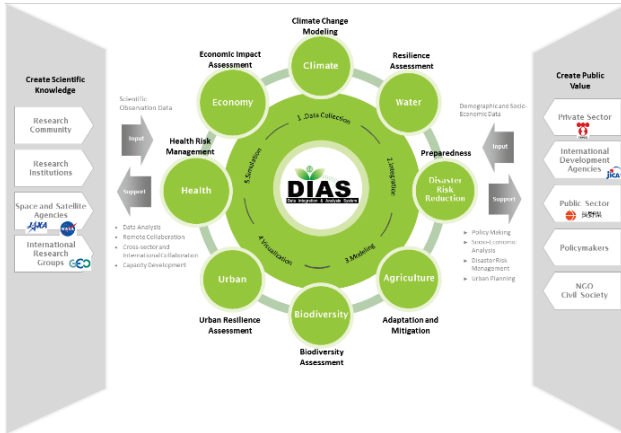
# Data Integration and Analysis System (DIAS) : Data and community infrastructure for solving societal issues on earth environment

<http://www.diasjp.net/>

## 1. Overview

DIAS (Data Integration and Analysis System) aims at delivering relevant information within Japan and to the world for solving societal issues on earth environment based on the integration of massive and diverse earth observation data with other types of data such as socio-economic data.

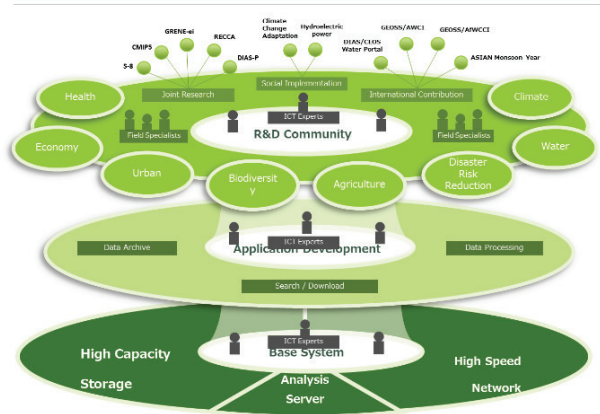
Data Integration and Analysis System (DIAS): Overview



## 2. Unique Structure

DIAS is unique in the establishment of a community to support application development on data infrastructure, in addition to the construction of data infrastructure. Conceptually, DIAS consists of three systems, namely infrastructure system, application development, and R&D community.

DIAS: Structure



## 3. Fact Sheet

**Infrastructure:** data storage and analysis infrastructure with 25PB of disks / tapes and 120 nodes with 16 cores (as of September 2014); network infrastructure with connection to SINET, having max 40Gbps links across academic institutions in Japan, and also to the US, Europe, and Asia.

**Community:** 90 project members from 14 organizations.

**Datasets:** 230 datasets (as of June 2015) with metadata in an extended schema of ISO 19115.

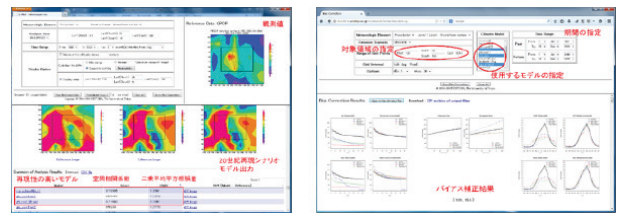
**Users:** 900 users (as of June 2015); 80% are from universities, and 25% are from outside of Japan.

**Collaboration:** operational metadata exchange with three external data centers worldwide.

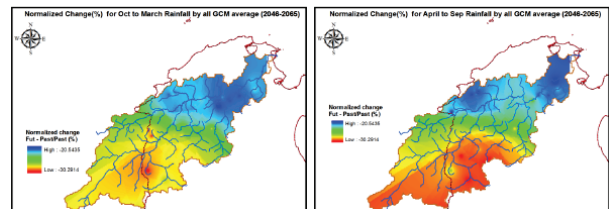
**License:** a data policy defined by data providers is respected. To motivate them toward openness, we need to standardize licenses for research data, in addition to Creative Commons (CC), to respect data provider's contribution to science and society.

## 4. Case Study

DIAS contributes to solving international societal issues. A good example is flood management planning in Tunisia based on data analysis and integration on climate change projection data.



An analytical tool for climate change data



Estimated seasonal change of rainfall in the future