

データ統合解析システム (DIAS) データアーカイブとアプリケーション Data Integration and Analysis System (DIAS) data archives and applications

玉川勝徳¹, 生駒栄司¹, 山本昭夫¹, 根本利弘³, 絹谷弘子¹, 安川雅紀¹, 大柳美佐¹, 太田哲², 喜連川優³, 小池俊雄²

Katsunori Tamagawa^{1*}, Eiji Ikoma¹, Akio Yamamoto¹, Toshihiro Nemoto³, Hiroko Kinutani¹, Masaki Yasukawa¹, Misa Oyanagi¹, Tetsu Ohta², Masaru Kitsuregawa³, Toshio Koike²

¹東京大学地球観測データ統融合連携研究機構, ²東京大学大学院工学系研究科, ³東京大学生産技術研究所
¹EDITORIA, The University of Tokyo, ²Dept.Civil Eng., The University of Tokyo, ³IIS, The University of Tokyo

Data Integration and Analysis System (DIAS), which was launched in 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. DIAS provides cooperative opportunities for constructing in-situ, model output, and satellite data archive and developing their data integration and analysis functions. A Standardized Metadata Model has been developed in cooperation with the international standardization communities in order to assure full interoperability of the DIAS system.

This poster introduces two types of international data archive and several systems developed on DIAS. The one is Global Earth Observation System of Systems (GEOSS)/Asian Water Cycle Initiative (AWCI), and the other one is World Climate Research Programme (WCRP) Coupled Model Intercomparison Project Phase3 (CMIP3) Multi-Model Dataset Archive.

The objectives of GEOSS/AWCI is to develop an information system of systems for promoting the implementation of integrated water resources management (IWRM) through data integration and sharing and improvement of understanding and prediction of the water cycle variation as a basis for sound decision making of national water policies and management strategies.

WCRP/CMIP3 output from coupled ocean-atmosphere model simulations of 20th - 22nd century climate is collected by the PCMDI in support of research relied on by the 4th Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). CMIP3 has received model output from the pre-industrial climate simulations and 1% per year increasing-CO2 simulations of about 30 coupled GCMs. Through the agreement with PCMDI and DIAS, DIAS archived all the CMIP3 model outputs.

DIAS developed GEOSS/AWCI in-situ data archive application which has data uploading, quality controlling, and meta-data registration system by data provider themselves, and also developed for WCRP/CMIP3 data quantitative evaluation system which has inter comparison between CMIP3 and observation data, and their data subset and download tools.