

## Activities toward research data management at NIES/CGER

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The Center for Global Environmental Research (CGER), National Institute for Environmental Studies (NIES), has been managing and operating the Global Environmental Database (GED) since May 2014 as a platform for publication and search of data focusing on global environmental research including global warming. DOIs have been assigned to research data sets since 2016, and data have been regularly updated. Nowadays, more and more academic publishers ask authors to publish data used in papers online. Inquiries regarding the publication and DOI minting of evidential data and submissions to data journals are increasing at NIES/CGER. In addition, funding agencies are starting to request researchers to submit a research data management plan that contains policies for storing, managing, and sharing of research data and where to store them when they will be opened. There is an increasing demand to develop a persistent system to store and manage research data.

NIES/CGER has developed a research data management system (RDMS) as a data management platform so that researchers and research assistants can efficiently perform routine research data management and preparation for data publication. The RDMS mainly provides functions to support creating metadata which are essential to search and utilize datasets, versioning, DOI minting and licensing. Research data and metadata registered in the RDMS can be promptly released through GED using a back-end database shared by the RDMS and GED. “Public” or “private” can be set for each data file so that users can also manage private datasets in the RDMS. Access users can also be set for each dataset so that multiple members involved in a project can cooperatively manage their datasets and share update histories. When a user logs in to the RDMS, a list of datasets that the user can access is displayed, and the status indicating the work progress is displayed for each dataset. Moreover, users can visualize research data on a quick plot tool, with which they can set graph types, display parameters, display ranges, and axis titles. In this presentation, we introduce the RDMS and GED currently under development.

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