

CHARTER

User Working Group

Oak Ridge National Laboratory Distributed Active Archive Center for Biogeochemical Dynamics

Revised February 2024

Preface

The Oak Ridge National Laboratory (ORNL) has been designated as the site for the NASA Distributed Active Archive Center (DAAC) for Biogeochemical Dynamics, one of several DAACs established as a part of the Earth Observing System Data and Information System (EOSDIS). The Earth Sciences Data and Information System (ESDIS) Project in collaboration with the NASA Earth Science Division (ESD) and NASA Earth Science Data Systems (ESDS) Program, has directed each DAAC to establish and sponsor a DAAC User Working Group (UWG). This document defines the responsibilities and authority of the ORNL DAAC UWG and establishes the guidelines to be followed in organizing and operating this UWG. The ORNL DAAC management, the ESDIS Project Office, and the NASA Terrestrial Ecology Program leadership are responsible for carefully considering all UWG suggestions.

ORNL DAAC for Biogeochemical Dynamics Mission and Objectives

The mission of the ORNL DAAC is to assemble, distribute, and provide data services for a comprehensive archive of terrestrial biogeochemistry and ecological dynamics observations and models to facilitate research, education, and decision-making in support of NASA's Earth Science. The anticipated kinds of data include both in situ and remote-sensing measurements related to biogeochemical and ecosystem processes. Sources of data include NASA funded field campaigns, flux towers, airborne measurements, selected relevant measurements from NASA Earth observing satellites, relevant model inputs, outputs, and model source code, as well as other biogeochemical dynamics data useful to the global change research community. In addition, the ORNL DAAC should acquire, archive, and distribute data related to biogeochemical cycling that facilitates interpretation, processing, and validation of NASA remote-sensing measurements and data products.

To fulfill its mission, the ORNL DAAC has the following goals: (1) serve as the primary active archive for biogeochemical dynamics data derived from NASA's field campaigns; (2) provide field data to assess the accuracy and uncertainty of NASA's remote sensing products; (3) develop best practices, tools, and training for data providers to generate terrestrial ecology and biogeochemical dynamics data for sharing and archival; (4) archive and disseminate regional and global data products for modeling and analysis; (5) archive and disseminate model source code to enable synthesis of results across modeling studies; (6) develop and use the best available technology to organize and present data to users; and (7) facilitate interdisciplinary synthesis by

providing and integrating diverse data required to address common hypothesis (across multiple scales, model - data intercomparison, etc.)

ORNL DAAC User Working Group Responsibilities

The ORNL DAAC UWG is responsible for providing suggestions and consultation on a broad range of topics and issues related to the definition, design, development, implementation, and operation of the ORNL DAAC for Biogeochemical Dynamics. The UWG is responsible for representing the scientific interests of the user community in this process. The UWG facilitates the two-way flow of information between the ORNL DAAC and the user community. Topics appropriate for UWG suggestions include, but are not limited to:

- Defining the ORNL DAAC's science goals
- Prioritizing ORNL DAAC activities, including dataset acquisition, generation of value-added products, user support, development activities, and operational functions
- Providing suggestions on annual work plans and long-range planning
- Providing a user perspective on data accession requests originating from projects and missions not specifically assigned to the ORNL DAAC
- Providing suggestions on interactions and agreements on data management between the ORNL DAAC and the projects/missions assigned to it

The ORNL DAAC UWG serves in an advisory capacity only and is not responsible for making decisions or for implementing suggestions.

User Working Group Membership

Voting members of the UWG are generally drawn from the community of scientists representing past and current NASA research projects in biogeochemical dynamics, NASA terrestrial ecology and interdisciplinary science projects, biogeochemical dynamics projects sponsored by other agencies, and other groups (e.g., policy, assessment, communications, and education). Members are invited to participate on the UWG for a three-year term and may be invited to a second three-year term. Nominations for membership are received from current UWG members, NASA Terrestrial Ecology personnel, and the broader community. Invitations to participate are made by the ORNL DAAC Lead Scientist, in close collaboration with the NASA Terrestrial Ecology Program leadership and the ESDIS Project Representative.

The ORNL DAAC Manager, the ORNL DAAC Lead Scientist, the NASA Terrestrial Ecology Program Scientist, and the ESDIS Project Representative serve as *ex officio* (non-voting) members of the UWG. Additional ESDIS and NASA Headquarters personnel may also serve in *Ex officio* roles at the discretion of the ORNL DAAC Manager and ORNL DAAC Lead Scientist.

The UWG Chair will be nominated for a one-year, renewable term by the ORNL DAAC Lead Scientist. The ORNL DAAC Lead Scientist will serve as Vice-Chair. To facilitate continuity, the ORNL DAAC Lead Scientist may also nominate a Chair-Elect, to serve as the UWG Chair in the following year.

The ORNL DAAC Manager and Lead Scientist may appoint ORNL DAAC staff as UWG Associates as needed. UWG Associates are non-voting members who provide information to the

UWG to assist their deliberations. UWG Associates may also assist the Chair and Vice Chair in meeting- and report-related tasks. UWG Associates are typically included in UWG communications and invited to UWG meetings.

Meetings and Communications

Meetings of the ORNL DAAC User Working Group will be scheduled, planned, and led by the UWG Chair, or an alternate voting member of the UWG, and Vice-Chair. The UWG will meet at least once per year and as required to address relevant issues in a timely fashion. Discussions on relevant topics may be held by email, in person, or through web meetings.

The Chair will lead the UWG in developing suggestions for the ORNL DAAC. The Chair will collaborate with the ORNL DAAC Lead Scientist to prepare formal reports, summarizing the suggestions to the ORNL DAAC, ESDIS management, and broader NASA programs, as appropriate.

The Vice-Chair will be responsible for assisting the Chair, keeping the UWG informed about the activities of the ORNL DAAC and for communicating with the UWG, the ESDIS Project Office, Earth Science Division, and other DAAC User Working Groups on all relevant topics and issues, including UWG activities, suggestions, and the actions taken on those suggestions.

The UWG may convene subgroups to discuss specific issues as necessary to accomplish its objectives; such subgroups will report to the full UWG at meetings, via email, and through written reports.

Funding and Administration

The ORNL DAAC will reimburse UWG members for expenses incurred as part of their UWG participation. There is no honorarium or other remuneration for UWG participation.

Funds to support the UWG will be provided through the ORNL DAAC budget and will be administered by the ORNL DAAC Lead Scientist through that budget. Funding for specific activities undertaken by UWG members on behalf of the ORNL DAAC may be made available through the ORNL DAAC and/or other NASA sources as appropriate.

Implementation

The ORNL DAAC UWG will be implemented according to the terms and conditions outlined in this document. This document will be updated as needed by the UWG Chair and Vice Chair in consultation with other UWG members, the ESIDS Project Office, and the NASA Terrestrial Ecology Program leadership.