

CHARTER

User Working Group

Oak Ridge National Laboratory Distributed Active Archive Center for Biogeochemical Dynamics

Revised March 2025

Charter approved until November 2026 by Frank Lindsay, 03/26/2025

Preface

The Oak Ridge National Laboratory (ORNL) is the site designated for the NASA Distributed Active Archive Center (DAAC) for Biogeochemical Dynamics, one of several DAACs established and managed by 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, ESDIS has directed each DAAC to establish a User Working Group (UWG). This document defines the responsibilities and authority of the ORNL DAAC UWG and establishes the guidelines to organizing and operating this UWG, in compliance with applicable laws, Executive Orders, and NASA Policy. 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 varieties of data include both *in situ* and remote-sensing measurements related to biogeochemical and ecosystem processes. Sources of data include NASA funded field and airborne campaigns, airborne facility instruments, flux towers, 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 NASA's Earth science mission and strategic plan.

To fulfill its mission, the ORNL DAAC has the following goals:

- Serve as the primary data repository for data derived from NASA's [Terrestrial Ecology](#) program and [Carbon Cycle Science and Ecosystems](#) focus area.
- Provide ground- and aircraft-based data to assess the accuracy and uncertainty of NASA's [Earth Science](#) missions.
- Work with NASA to develop best practices, tools, and training for scientists who generate and use NASA Earth-observing data.

- Facilitate synthesis and analysis by providing and integrating the diverse data required to address critical questions.

ORNL DAAC User Working Group Responsibilities

The ORNL DAAC UWG is responsible for providing suggestions and ideas on a broad range of topics and issues related to the definition, design, development, implementation, and operation of the ORNL DAAC. The UWG is responsible for representing the scientific interests of the user community and facilitating the two-way flow of information between the ORNL DAAC and the broader science community. The UWG members serve as subject matter experts in their particular science domains, providing end user perspectives for consideration by ESDIS and the ORNL DAAC. Topics appropriate for UWG suggestions include, but are not limited to:

- Defining the ORNL DAAC's science goals.
- Conceptualizing ORNL DAAC activities, including dataset acquisition, generation of value-added products, user support, development activities, and operational functions.
- Improving the data publication and communication processes for projects and missions assigned to the ORNL DAAC.
- Improving the findability, accessibility, interoperability, and reusability of NASA Earth science data.
- Assessing data accession requests originating from projects and missions not specifically assigned to the ORNL DAAC.

The UWG is not involved in making decisions about priorities, which UWG suggestions will be accepted, or how accepted suggestions are implemented.

User Working Group Membership

Voting members of the UWG will be selected by ESDIS 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 additional groups (e.g., policy, assessment, communications, and education). Nominations for membership are received from current UWG members, NASA Terrestrial Ecology personnel, and the broader science community. The ORNL DAAC Lead Scientist reviews these nominations, in close collaboration with the NASA Terrestrial Ecology Program leadership, and proposes a list of new member candidates and alternates to the ESDIS Project Representative. Once the ESDIS Project Representative approves a list of new members and alternates, the ORNL DAAC Lead Scientist will extend invitations to the approved candidate(s). If a candidate declines the invitation, invitations will be sent to alternates, in accordance with the ESDIS-approved list.

Members are invited to participate on the UWG for a three-year term and may be invited to a second three-year term.

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 ESDIS Project Office.

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 the UWG Vice-Chair. To facilitate continuity, the ORNL DAAC Lead Scientist may also nominate a Chair-Elect to assist the UWG Chair in the current year and 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 UWG will be scheduled, planned, and led by the UWG Chair or an alternate voting member of the UWG, and Vice-Chair. Prior to meetings, all agendas will be reviewed and approved by the ESDIS Project Representative or a civil servant they designate. 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 UWG 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 available to the ORNL DAAC, ESDIS Project Office, and broader NASA programs. The UWG Chair may also be invited by ESDIS to participate in selected cross-DAAC meetings (e.g. ESDIS DAAC UWG Summit), representing voting members of the UWG.

The UWG Vice-Chair will assist the Chair with informing the UWG about the activities of the ORNL DAAC and with communicating to the ESDIS Project Office, ESD, and other DAAC's User Working Groups all relevant UWG topics and issues, including activities, suggestions, and actions taken on suggestions.

The UWG may convene subgroups to discuss specific issues as necessary to accomplish its objectives. 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 reasonable expenses incurred for travel to UWG meetings, in accordance with federal travel reimbursement policies. There is no honorarium or other remuneration for UWG participation.

Funds to support the UWG will be provided by ESDIS through the ORNL DAAC core funding and will be administered by the ORNL DAAC Lead Scientist. Funding for specific activities undertaken by UWG members on behalf of the ORNL DAAC may be 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. All updates will be approved by the ESDIS Project Representative or a cognizant civil servant they designate prior to publication. This document will also be reviewed each year after the annual UWG meeting by ORNL DAAC Leadership and re-authorized by the ESDIS Project Representative or a cognizant civil servant they designate, no later than one year after the current version of publication.