

Plan Overview

A Data Management Plan created using DMP Tool

Title: RF-SciDAC

Creator: David Green - **ORCID:** [0000-0003-3107-1170](https://orcid.org/0000-0003-3107-1170)

Affiliation: Oak Ridge National Laboratory (ornl.gov)

Principal Investigator: David Green

Data Manager: David Green

Funder: United States Department of Energy (DOE) (energy.gov)

Funding opportunity number: DE-FOA-0001204

Template: Department of Energy (DOE): Office of Science

Last modified: 07-08-2024

Copyright information:

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

RF-SciDAC

Data types and sources

The sections in the template outline are based on Suggested Elements of a DMP (see Links tab) provided by DOE, but DMPs are not required to follow this template. For the data types and sources suggested element, a brief, high-level description of the data to be generated or used through the course of the proposed research and which of these are considered digital research data necessary to validate the research findings may be included.

Data types and sources for this project include the following ...

- Digital input deck to code runs referenced in publications.
- Output files from code runs referenced in publications.
- Experimental data presented in validation studies.

Content and format

A statement of plans for data and metadata content and format including, where applicable, a description of documentation plans, annotation of relevant software, and the rationale for the selection of appropriate standards. (Existing, accepted community standards should be used where possible. Where community standards are missing or inadequate, the DMP could propose alternate strategies that facilitate sharing, and should advise the sponsoring program of any need to develop or generalize standards.)

Data to be made within this project contain (but are not limited to) the following ...

- Experimentally determined background profiles (in community accepted formats like EQDSK, or self-describing binary : netCDF, HDF5)
- Simulation outputs will also be made available using self describing binary formats.

Sharing and preservation

A description of the plans for data sharing and preservation.

Data from this project will be made available using NERSC's data archive in a web-accessible location, which is linked to a particular person or project. NERSC already has a data management strategy in place (<http://www.nersc.gov/users/data-and-file-systems/policies/>) to help users comply with the new OSTP rules. URLs will be provided in publications.

Protection

A statement of plans, where appropriate and necessary, to protect confidentiality, personal privacy, Personally Identifiable Information, and U.S. national, homeland, and

economic security; recognize proprietary interests, business confidential information, and intellectual property rights; and avoid significant negative impact on innovation, and U.S. competitiveness.

This project will not make available any PII, export controlled, or confidential data.

Rationale

A discussion of the rationale or justification for the proposed data management plan including, for example, the potential impact of the data within the immediate field and in other fields, and any broader societal impact.

All data related to publications resulting from this project will be made available enabling benchmarking activities across the larger fusion community.

Software & Codes

Both the Advanced Scientific Computing Research and Fusion Energy Sciences program areas address software and codes. Program specifics are listed below.

Our data management plans for codes addresses the following elements ...

- Several of the projects codes are open source and freely available and can be downloaded via GitHub or provided by the codes authors upon request.
 - We also rely on commercial codes that are publically available but require a license purchase.
 - Data resulting from the use of such commercial codes will still be made available.
-