

The goal of the nEDM data management plan is to ensure reliable access to raw experimental and simulated data within the collaboration in order to enable broad participation in scientific analyses and the publication of scientific results in peer-reviewed journals, and to preserve data necessary for validation of results.

Research data generally fall into categories of experimental data, simulation data, and computational analysis results. Research data do not include: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues.

Experimental data include instrument-specific output that will be stored in raw form or in compressed formats using appropriate data compression algorithms, along with instrument metadata which define experimental conditions and descriptions of algorithms and processing used to transform the raw data. ORNL will take primary responsibility for archiving the raw experimental data.

Simulation/analysis data include output from computational software, including (but not limited to) Monte Carlo simulations as well as tools that process and analyze simulation results.

Data analyses will be documented as research reports or research articles, which include information on the background, description of the experimental or computational procedures, data generated from experiments and simulations, and summaries of the results.

Data and metadata (descriptions of the data, including format, processing from raw data, software used to generate data, and other relevant information) presented in publications will be made publicly accessible in digital, machine-readable format, along with necessary documentation. This will be provided in digital supplemental information for the journal, or through other public repositories where appropriate. Where no such repository exists, we will use institutional repositories where available that provide long-term preservation and sharing. In the absence of institutional options we will preserve the information locally and make it available via the project web site, as well as upon request to the project team member responsible for the data.

Displayed data will be made as accessible as soon as possible to the public in accordance with the principles stated in the Office of Science Statement on Digital Data Management (<http://science.energy.gov/funding-opportunities/digital-data-management/>).

In addition to the above measures, the project will establish a public-facing web site. This web site will contain a list of experimental publications, with links to their archival sources (usually the journals in which they were published) and copies of any publication data not otherwise available from an archival repository. While we cannot guarantee how long this web site will be maintained after the end of this project, and therefore we do not consider it an archival repository, we use it as a convenient alternative to requiring that the data be requested from the corresponding author.