

## Plan Overview

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*A Data Management Plan created using DMPTool*

**Title:** SSW Amorphous Lab Experiments

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### **Copyright information:**

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## **SSW Amorphous Lab Experiments**

### **Types of data produced**

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**Describe the types of data to be produced in the course of the project. For NASA's Earth Science Program and according to the NASA Earth Science Data & Information Policy, the term "data" includes observation data, metadata, products, information, algorithms, including scientific source code, documentation, models, images, and research results.**

Laboratory analysis data will be generated in this project, including visible/near-infrared spectra, thermal emission spectra, X-ray diffraction patterns, and Scanning Electron Microscope images. Physical samples will be created during the experiments.

### **Data and metadata standards**

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#### **Standards to be used for data and metadata format and content**

A description of each experimental run and the instrument used to generate the data will be included with all laboratory data and physical samples.

### **Policies for access and sharing**

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**Policies for accessing and sharing the data, including provisions for the appropriate protection of privacy, confidentiality, security, intellectual property, and other rights or requirements**

The data will be made available following publication.

### **Policies for reuse, redistribution, and derivatives**

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**Policies and provisions for reuse, redistribution, and the production of derivatives**

Data will be available for free-use and dissemination.

### **Plans for access to data used in publications**

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**Plans for providing access to the data used in any science publication**

All data resulting from this project will be published and made openly available to the research community through the articles and their supplementary materials, and through a website. Science PI Smith will ensure that all solution chemistry results will be made available in the supplementary materials of published articles in the form of data tables. Science PI Smith and Co-I Kraft will publish VNIR spectra and XRD patterns as csv files in the supplementary materials of published articles. Co-I Kraft will ensure that all SEM images and corresponding EDS data will be archived in the published articles and supplementary materials. Science PI Smith will be in charge of archiving TIR spectra and ancillary data (XRD mineralogy, XRF, etc.) for all of the samples on the ASU Spectral Library website (<http://speclib.asu.edu>). This plan enables long-term preservation of data in the ASU Spectral Library website, which has made TIR spectra and ancillary data (i.e., electron microprobe, XRD, bulk chemical analysis) easily accessible to the public for over a decade.

## **Plans for archiving and preservation**

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**Plans for archiving and preserving the data, as appropriate (use of existing databases or public repositories will be strongly encouraged), including how long the data will be preserved and accessible**

All data will be archived with the Purdue University Research Repository, which provides an online, collaborative working space and data-sharing platform to support the data management needs of Purdue researchers and their collaborators.

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