ASU and CAP LTER research data solutions

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getting started

overview

The Arizona State University (ASU) Research Data Management (RDM) office, ASU Library, and the CAP LTER Information Manager offer research data management services and technology solutions for ASU research projects. This research data management team can assist with the preparation of data management plans, undertake technology needs assessments, provide subsidized computing resources and data storage, and assist with data publication.

data management planning

- Many funding agencies now require proposals to include information regarding how research data will be collected, managed, published, and preserved. The RDM office can help you create a data management plan (DMP), and provide boilerplate DMP text that you can copy, paste, and modify for inclusion in your proposal.
- ASU recommends and supports DMPTool, a web-based authoring tool with funder-specific templates that will guide you through the process of creating a DMP.

DMPTool — Build your Data Management Plan

- Regardless of whether a DMP is required, investigators should think critically about how to manage their research data. The RDM office can offer advice in this space.
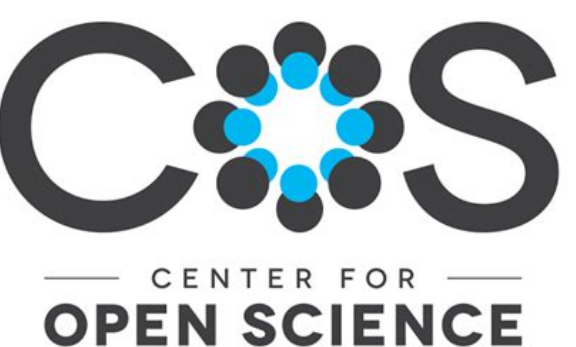
ORCiD

- ORCiD is an independent, non-profit organization that provides a persistent identifier (an ORCiD ID) that distinguishes you from other researchers and a mechanism for linking your research outputs and activities to your ORCiD. ORCiD is integrated into many systems used by publishers, funders, institutions, and other research-related services. If you already have an ORCiD, you can affiliate your account with ASU, which will allow you to access your ORCiD profile using single sign-on.
- Registering for an ORCiD is a simple process that provides benefits. Use your ORCiD when you publish articles and datasets; register for meetings; perform peer reviews; apply for grants; create email signatures, web pages, CVs, and more.
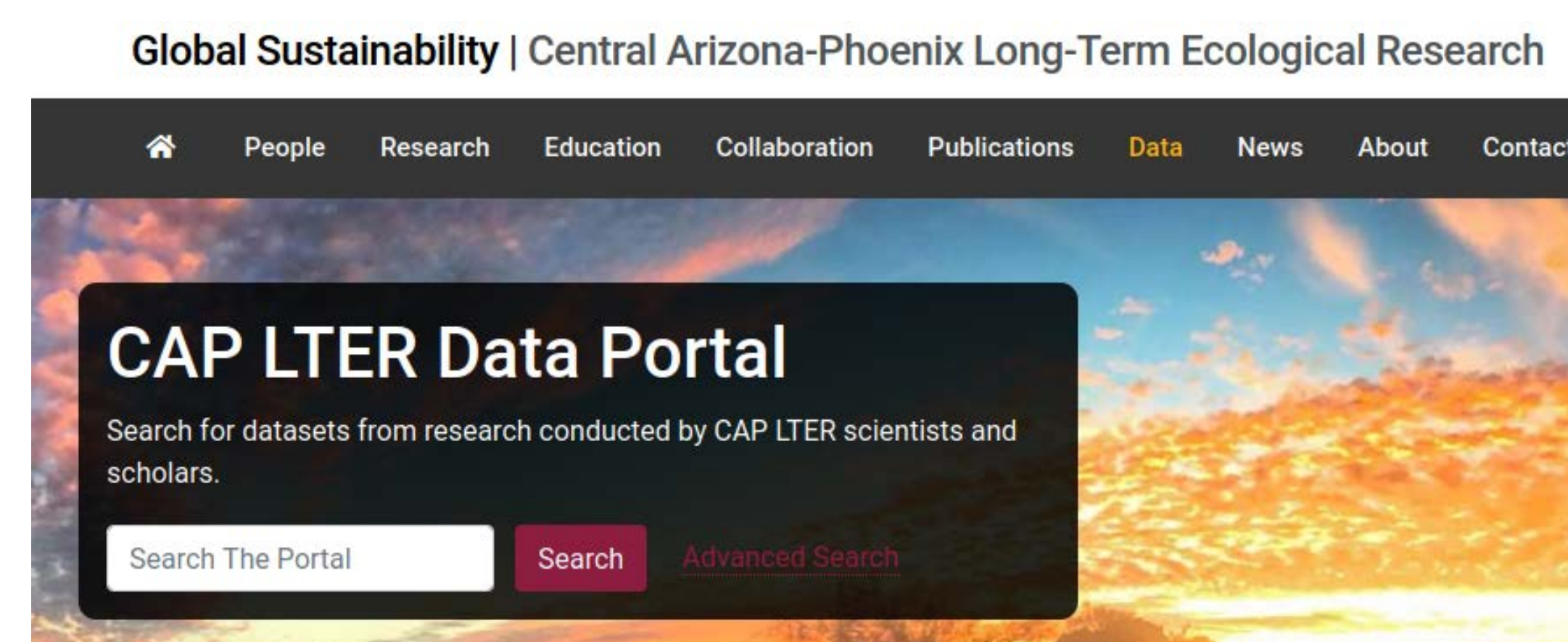
research support

get organized

Sound project organization is essential to successful research.

- Version control tools, such as Git coupled with GitHub or GitLab, are immensely valuable for managing projects.
- The Open Science Framework is a free, open platform from the Center for Open Science to manage research projects and enable collaboration.
- Electronic Research Notebook (ERN), often referred to as an electronic laboratory notebook, provides a multi-functional data manager that can quickly and accurately import protocols, notes, observations, and other research data to organize information in one place while embedded links to data files and other information help ensure that resources are not lost or misplaced. ASU has licensed LabArchives as our ERN solution, making the product available to faculty, staff, and students at no cost.

labarchives — Better Science

finding data

The RDM office can help investigators to find data, such as through the CAP LTER data portal that houses CAP LTER project data from long-term monitoring programs and experiments, and investigator-provided data.

Global Sustainability | Central Arizona-Phoenix Long-Term Ecological Research — CAP LTER Data Portal. Search for datasets from research conducted by CAP LTER scientists and scholars.

storing data

The RDM office provides a Storage Selector to help identify the most appropriate storage option for research data. Optimal storage solutions are identified based on project needs and preferences with the tool presenting a synopsis of options to help guide the researcher.
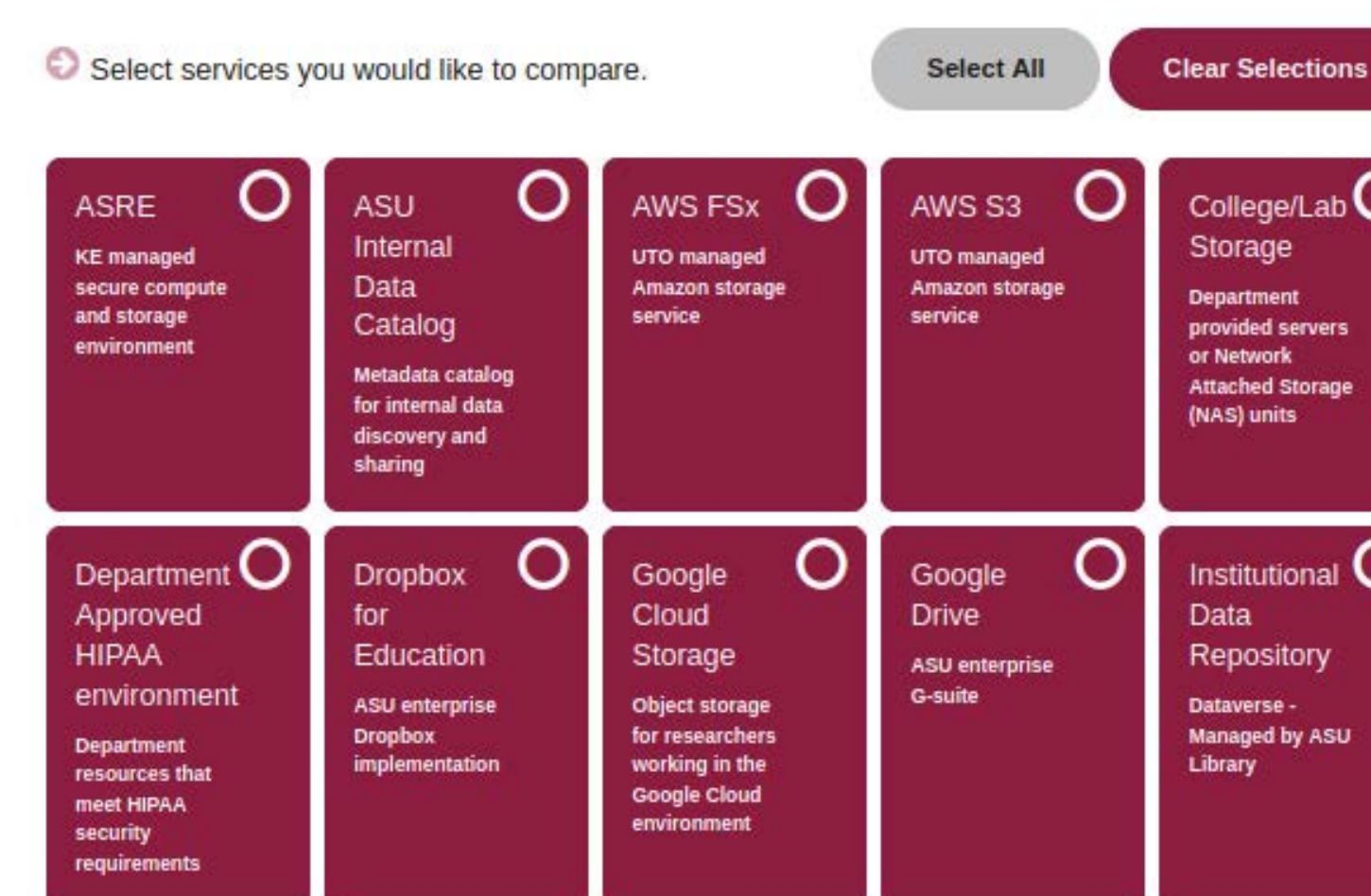
completing your project

publishing research data

Making primary research data publicly accessible is a growing expectation within the scientific communities, and is enforced increasingly by funding agencies and publishers.

- Publishing research data is a cornerstone of the LTER, and project participants are expected to publish research data within a reasonable time after the research concludes.
- Data products may include raw data, models, classified or processed images, or any other research-generated data entity.
- ASU recommends follow the FAIR data principles (Findable, Accessible, Interoperable, Reusable) to maximize reusability.
- Rich metadata (data about the data) should accompany data to facilitate reuse.
- Most LTER data are published in the Environmental Data Initiative (EDI) data repository, which meets publishing requirements.
- The RDM office can help investigators to publish their data to the EDI, ASU library, or other domain-relevant data repository.

resources

- scan the barcode in the upper-right corner for a link to this poster
- resources highlighted in this poster
  - DMPTool https://dmptool.org/
  - ORCiD https://orcid.gios.asu.edu
  - LabArchives https://researchdata.asu.edu/electronic-research-notebook/
  - CAP LTER data catalog https://data.sustainability-innovation.asu.edu/cap-portal/home.jsp
  - ASU RDM https://rto.asu.edu/research-data-management/
  - ASU library RDM https://lib.asu.edu/research/datamanagement
  - ASU data science https://lib.asu.edu/data
  - EDI data portal https://portal.edirepository.org/nis/home.jsp
- contacts
  - CAP LTER Informatics caplter.data@asu.edu
  - Research Data Management Office research.data@asu.edu