

## THE RESEARCH DATA ARCHIVE AT NCAR

The [Research Data Archive \(RDA\)](#) at the [National Center for Atmospheric Research \(NCAR\)](#) is an open access, [community certified](#) archive containing a large and diverse collection of meteorological and oceanographic data collections to support atmospheric and geoscience research.

### Data Discovery

[Tools enabling search and discovery](#) of data in the RDA are supported by a database of rich metadata, which is collected and validated at the time of data ingest. [Dataset DOIs](#) are assigned to all data collections using DataCite to facilitate reproducible science.

### Data Access

Access to the RDA's data content is frequently improved with new tools, web services, and high performance computing (HPC)-driven workflows that extract data specified by users from multi-terabyte data sets. The RDA provides easy data access pathways, including via the web through dedicated user interfaces, [Globus transfers](#), remote data access via a [THREDDS data server](#), and [standard APIs](#) that support machine-to-machine interoperability.

### Data Metrics

The RDA maintains a metrics database of [dataset usage and DOI citations](#), which serves as a measurement of science impact our data holdings have on the research community. Dataset metrics tools on the RDA website help users find popular datasets, and citation metrics are intended to help researchers understand how the data can benefit their own research interests.

The most popular datasets among our users include:

- National Center for Environmental Prediction (NCEP) operational products
- Climate reanalyses including the ECMWF ERA5, Japanese 55-year reanalysis (JRA-55), NOAA 20th Century Reanalysis, NCEP Climate Forecast System Reanalysis (CFSR), and Arctic System Reanalysis.
- Historical observational datasets such as the International Comprehensive Ocean Atmosphere Data Set (ICOADS) are foundational resources for studying past climate trends and improving the global historical observational data record.

For more information, browse our data holdings at <https://rda.ucar.edu> or email us at [rdahelp@ucar.edu](mailto:rdahelp@ucar.edu).

