PERiLS Field Data Archive

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NCAR/EOL PERiLS Web Site - https://www.eol.ucar.edu/field_projects/perils

EOL recently updated to the latest version of Drupal

- Project Description

- Data Archive Access

- Field Catalog Access

- Dataset Submission Instructions

- Dataset Documentation Requirements

- Publications

- Related Web Pages

NCAR/EOL PERiLS Field Data Archive

PERiLS_2022 Data Sets

Data Set Name (Responsible Group/PIs shown in parentheses)	Date Posted	Info
Aircraft		
Aircraft Meteorological Data Reports (AMDAR) and Aircraft Communications Addressing and Reporting System (ACARS) Data [NOAA/ESRL]	2021-10-21	
Aircraft: UAV		
UAS Damage Survey Data [Wagner]		
Hydrology		
Hydrology: Precipitation		
NCEP/EMC U.S. Gage Only Daily Precipitation Data [NOAA/NCEP]	2021-10-21	
NCEP/EMC U.S. Gage Only Hourly Precipitation Data [NOAA/NCEP]	2021-10-21	

PERiLS_2023 Data Sets

Data Set Name (Responsible Group/PIs shown in parentheses)	Date Posted	Info
Aircraft		
Aircraft Meteorological Data Reports (AMDAR) and Aircraft Communications Addressing and Reporting System (ACARS) Data [NOAA/ESRL]	2023-01-26	
Aircraft: UAV		
CopterSonde UAS Data [Smith, E. (NOAA/NSSL)]		
UAS Damage Survey Data [Wagner, M. (NOAA/NSSL)]		
Hydrology		
Hydrology: Precipitation		
NCEP/EMC U.S. Gage Only Daily Precipitation Data [Du, J. (NOAA/NCEP)]	2023-01-26	
NCEP/EMC U.S. Gage Only Hourly Precipitation Data [Du, J. (NOAA/NCEP)]	2023-01-26	
NCEP/EMC U.S. Stage IV imagery [Du, J. (NOAA/NCEP)]	2023-01-26	
Portable In Situ Precipitation Stations (PIPS) Data [Dawson, D. (Purdue University)]		
PSL Parsivel Disdrometer Data [Wilczak, J. (NOAA/PSL)]		
UAH MAPNet Parsivel Disdrometer Data [Pangle, P. (UAH)]		
UI FARM Disdrometer Data [Wurman, J. (University of Illinois)]	New 2023-10-20	READ ME
Land Based		
Land Based: Mesonet		
ASOS 1 Minute Data [NOAA/NCEI]	2023-01-26	

Lists all PERiLS 2022 and 2023 datasets whether housed in the NCAR/EOL FDA or elsewhere

Includes research as well as supporting operational datasets

Datasets organized by Categories

If a new version of a dataset is released, users are notified via email.

Access credentials for PERiLS datasets within the FDA:

User: perils
Password: qcls-t0rn

A new FDA interface is coming soon™

https://data.eol.ucar.edu/master_lists/generated/perils_2022
https://data.eol.ucar.edu/master_lists/generated/perils_2023

NCAR/EOL Field Data Archive Interface Updates

- Updated look and feel
- Substantially improved search capabilities (platforms, instruments, science keywords, map search, etc)
- Dataset pages will include listing of publications that referenced the dataset DOI

NCAR/EOL PERiLS Data Archive Research Datasets

2022 Archive nearly complete, just a few of outstanding datasets. Final SMART-R data was just submitted and will be available soon.

2023 Archive already contains:

CLAMPS2 Doppler Lidar Vertical Stare and VAD
CLAMPS2 MWR TROPoe Retreivals
FARM COW and DOWs
FARM Disdrometers
FARM Mobile Mesonet
FARM PODs
NOAA PSL ASSIST Radiances
NOAA PSL Ceilometers
NOAA PSL MWR Brightness Temperatures and Surface Met
NOAA PSL RWP, RASS and Surface Met
NOXP Radar
NSSL Deployable LMA
NSSL Mobile Mesonet
SMART-R Preliminary Data (just submitted will be available soon)
TTU StickNet

https://data.eol.ucar.edu/master_lists/generated/perils_2022
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NCAR/EOL PERiLS Data Archive Supporting Operational Datasets

MADIS Mesonet Data

ASOS Data (1 and 5 minute resolution)

Global METAR observations (in NetCDF, ASCII, and GEMPAK formats)

Full resolution (1 second) NWS radiosonde data (BUFR format)

Mandatory/significant level NWS radiosonde data (GEMPAK format)

NLDN and NAPLN Lightning Data (password protected separately from PERiLS datasets, PI access only)

MRMS and GOES Data (via links to AWS)

NCEP Gage and Gridded Precipitation Data

ACARS/AMDAR

https://data.eol.ucar.edu/master_lists/generated/perils_2022
https://data.eol.ucar.edu/master_lists/generated/perils_2023

Submitting Datasets to the PERiLS Field Data Archive

Datasets can be submitted to our PERiLS ftp site via linux command line or your favorite FTP client (e.g. FileZilla). The credentials are:

Server: ftp.eol.ucar.edu
User: anonymous
Directory: /pub/data/incoming/perils

A documentation file **MUST** be included with your submission. This is to help ensure the long-term useability of the data.

Datasets can be submitted via other methods (e.g. Globus, Dropbox, Google Drive, email (if small), etc). If you need to use another method please send me an email (loehrer@ucar.edu) when ready to submit.

Whatever method, once your submission is completed, send me an email (loehrer@ucar.edu) so that it can be moved into the FDA.

If you develop an updated version of a dataset you've already submitted to the archive, you should send the revised dataset along with an updated documentation file that includes information on what has changed in the new version. We send an email to users who ordered the previous version to let them know that a new version is available.

Unless otherwise requested DOIs are issued for datasets in their final (publication-ready) form.

These instructions are also available here: https://www.eol.ucar.edu/node/31199

Dataset Documentation Requirement

NCAR/EOL requires the inclusion of a documentation file with all datasets submitted to the archive.

This is to help ensure the long-term usability of datasets included in the Archive.

You should try to include as much information in the documentation file itself (or include them as separate PDF file(s) rather than pointing to websites. Websites tend to move or disappear over time and unless they were specific to a campaign their contents tend to change to reflect current instrumentation rather than the instrumentation at the time of the campaign.

Some of the information that should be included:
- Authors and contact information (if you have an ORCID ID please include it)
- Instrumentation descriptions including specifications
- Data collection and processing procedures including QA/QC
- Data file description including file naming conventions, format description, parameters and units, description and definition of any codes or flags
- An assessment of the data including any disclaimers, instrument problems, quality issues
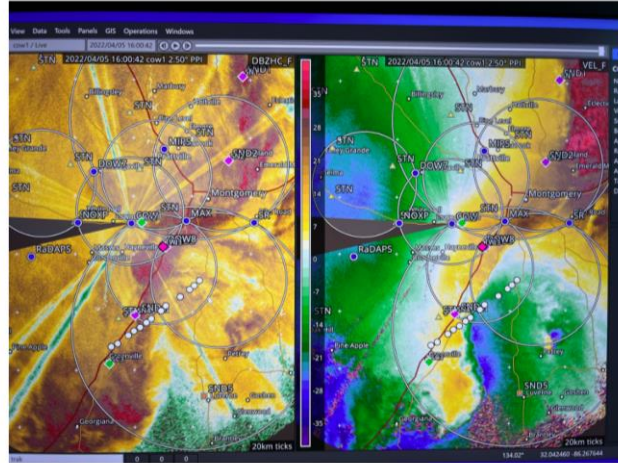- Software compatibility
- References

A sample layout with the expected contents: https://www.eol.ucar.edu/node/4871

PERiLS Field Catalogs

University of Illinois FARM COW radar imagery of the Quasi-Linear Convective System (QLCS) passing through the PERiLS_2022
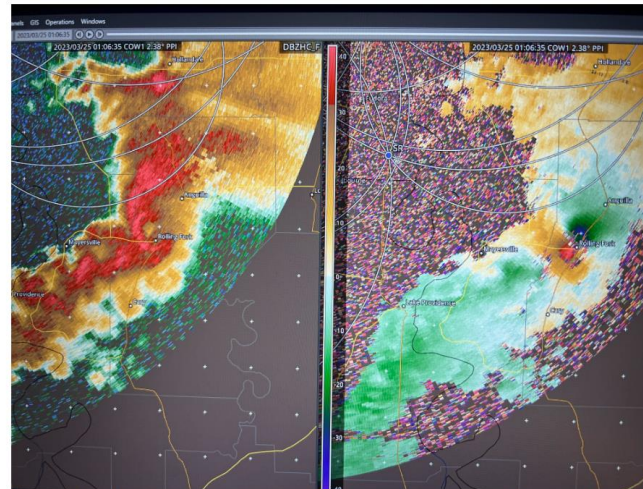

University of Illinois FARM COW radar imagery of the Quasi-Linear Convective System (QLCS) passing through the PERiLS_2023

The PERiLS Field Catalogs are part of the EOL FDA and remain available. They contain the full compliment of reports and imagery gathered during the campaigns. Note that all imagery is based on preliminary real time data. The Missions tabs contain summaries of the IOPs with links to the relevant reports and imagery.

The PERiLS_2022 and PERiLS_2023 Field Catalogs contain a total of ~4 million products and 1.13TB of disk space.

PERiLS_2022 Field Catalog - http://catalog.eol.ucar.edu/perils_2022
PERiLS_2023 Field Catalog - http://catalog.eol.ucar.edu/perils_2023

PERiLS Publications

Will contain links to PERiLS publications including journal articles, theses, conference proceedings, and reports.

Updated via occasional publication searches and if you would like to make sure your publications are included there is a submission form linked at the top of the page.

https://www.eol.ucar.edu/node/17229/publications

Thank you!
Please submit your datasets when they are ready for archival.
loehrer@ucar.edu