Request to Archive
With The National Centers for Environmental Information
For U.S. Climate Reference Network Experimental Datasets
Provided by NCEI

2016-11-22

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

DOC/NOAA/NESDIS/NCEI > National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

On-going:
- Tiksi, Sakha, Russia
28 lines of output daily (4 lines header and 24 lines hourly climate data - subset of standard USCRN station observations of air temperture, precipitation gauge depth, wetness sensor, surface IR temperature, solar radiation, wind speed, and engineering variables); data are hourly and 5-minute values.
- Marshall Field, Boulder, CO
Replicates of three different types of weighing gauge, one type of tipping-bucket gauge, and three types of wind shields yielding gauge depth and precipitation data, in addition to one set of standard USCRN station observations in support); data are 1-minute values. Instrument and variables types are located in the header of each file.

Previous Testbed Data:
- Johnstown, PA
- Sterling, VA
various precipitation gauges and shields in support of the USCRN network from 1 November 2003 to 31 March 2008 at the National Weather Service (NWS) research sites at Sterling, Virginia, and at Johnstown, Pennsylvania. Precipitation gauges evaluated include the automated Geonor, Frise, Ott AWPAG, and TB3, along with non-recording standard 8-inch gauges. The Geonor and Ott gauges are weighing gauges, while the Frise and TB3 are tipping bucket gauges. The Geonor weighing gauge and TB3 tipping gauge have been installed at all USCRN sites. Various gauge shields were evaluated and included the Single Alter, Double Alter, Tretyakov, SDFIR (Small Double Fence Inter-Comparison Reference) and the Large DFIR. The SDFIR shield is used at most USCRN sites, along with about 18 Double Alter (15 in Alaska) and 2 Single Alter shields. Packaged as a single tar file, with metadata included.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2003

Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:
N/A

6. Approximate date when the dataset was or will be released to the public:
2099-01-01

7. Who are the expected users of the archived data? How will the archived data be used?
Data are for U.S. Climate Reference Network (USCRN) research and engineer personnel only.

No public release is necessary at this time (or anticipated in the future).

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
USCRN Program is the originator and designed the experiments and data formats with regards to these data sets. Partner institutions (NOAA ARL Atmospheric Turbulence and Diffusion Division, NOAA ESRL, NCAR, and the National Weather Service) participated in these experiments and reviewed these data and formats.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
N/A

10. List the input datasets and ancillary information used to produce the data.
These data are from experimental configurations of USCRN standard equipment and equipment under consideration for adoption being evaluated for precipitation catch efficiency at Marshall, CO, Sterling, VA, and Johnstown, PA: the Marshall_readme.doc and JohnstownSterling_readme.doc describe the experiments and their output. The data from Tiksi, SA, Russia, are from an experimental subset of USCRN standard equipment being tested in a severely cold environment; the Tiksi_readme.doc describes the experiments and their output.

11. List web pages and other links that provide information on the data.
USCRN Program Overview: https://www.ncdc.noaa.gov/crn/overview.html
USCRN Program Documentation: https://www.ncdc.noaa.gov/crn/documentation.html

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. A README document with metadata, column header, and additional useful information is provided with each dataset as a separate file. The Johnstown/Sterling is a special case and contains additional supporting documentation within its tar file.

13. Indicate the data file format(s).
1. CSV

14. Are the data files compressed?
gzip

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

Tiksi: uscrn-experimental_tiksi_dYYYYMM_cYYYYMMDD.tar.gz in monthly aggregations

Marshall: uscrn-experimental_marshall_dYYYYMM_cYYYYMMDD.tar.gz in monthly aggregations

Johnstown/Sterling: uscrn-experimental_johnstown-sterling_d20031101-20080331_cYYYYMMDD.tar.gz for entire period of record

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

N/A Not Available to Public

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 3.9GB

Number of Data Files: 146

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 12.2MB per Month

Data File Frequency: 2 per Month

Data Production Start: 2016-12-01

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: NCEI-NC 151 Patton Ave. Asheville, NC 28801

System Name: crn-prod.ncdc.noaa.gov

System Owner: Juanita Sandidge

Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. SFTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

Constraint Type	Description
Access	No public access

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

This dataset consists of original climate observations and ancillary data collected by the USCRN Program and is required to be preserved by NCEI as a permanent record. Benefits have already been derived from previous testing,

and continuing testing will be important for future program equipment decisions. The risk associated with not archiving the dataset at NCEI is eventual loss of data.

24. Are the data archived at another facility or are there plans to do so? Please explain.
No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?
No

26. Do you have a data management plan for your data?
No

27. Have funds been allocated to archive the data at NCEI?
No

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.
U.S. Climate Reference Network Program, NOAA NESDIS NCEI & NOAA OAR ARL ATDD
Sponsor: Climate Program Office, NOAA/OAR

29. Is there a desired deadline for NCEI to archive and provide access to the data?
No deadlines for archive or access.

30. Add any other pertinent information for this request.
1) Document used for planning purposes:
https://docs.google.com/a/noaa.gov/document/d/1EcQIDHA0KdY_3SGlVy1-9kqyCaJqcXvoZqor4Q5CZEI/edit?usp=sharing

2) All datasets in this request have historical data associated with them. Below are the entries for #17 above:

For Tiksi:
Total Volume = 14 MB
Number of Files = 66 monthly tar files (containing daily files) from 2011-04 to 2016-09

For Marshall:
Total Volume = 900 MB
Number of Files = 77 monthly files from 2010-04 to 2016-09

For Johnstown/Sterling:
Total Volume = 2.8 GB
Number of Files = 1 (tar archive file includes all raw/converted daily data files for 2003-11-01 to 2008-03-31 plus documents = 35,124 files)

For continuous data:
Tiksi: 200 KB data (1 data file) per month
Marshall: 12 MB data (1 data file) per month
Start Date: 2016-11-01