



## Climate Inventory

### Background

Understanding current and historical climate trends is essential for interpreting ecological conditions and changes in national parks, and for determining associated management strategies and actions. Access to climate data, especially in light of climate change, is fundamental to our understanding of the status of ecosystems and species and their response to climate variability. In addition, weather and climate profoundly influence everyday park operations such as fire management, search and rescue, visitor services, and maintenance of park infrastructure.

As one of the 12 basic natural resource inventories, information on climate has been compiled via the inventories of climate observations stations relevant to parks, acquisition of historical climate data, and development of tools that facilitate acquisition, processing, evaluation, and reporting weather and climate data.

### Products and Status

An inventory of climate stations within and adjacent to NPS units has been completed, with results compiled in 32 Inventory and Monitoring Network-specific reports. These reports include information on regional climate drivers, monitoring station locations, data provenance, measurements, periods of record, and other station metadata. Access to these reports is available online via IRMA—Integrated Resource Management Applications (<http://nrinfo.nps.gov>), or by using this [Direct Link](#).

An initial acquisition of a static climate data set for this inventory (NOAA Coop Data) was eventually superseded by multiple on-line data sources that are kept up-to-date and provide a variety of visualization and download capabilities. Climate inventory data needed by NPS are currently managed and stored by outside organizations that specialize in managing climate inventory data. These data sources include:

- PRISM Climate Group (<http://www.prism.oregonstate.edu/>)
- NRCS Snotel Data (<http://www.wcc.nrcs.usda.gov/cgibin/tab.pl>)
- NRCS SnowCourse (<http://www.wcc.nrcs.usda.gov/cgibin/state-site.pl?report=snowcourse>)
- National Climatic Data Center (<http://www7.ncdc.noaa.gov/CDO/dataproduct>)
- Applied Climate Information System (<http://www.rcc-acis.org/>)
- Interagency Remote Automated Weather Stations (RAWS) (<http://raws.fam.nwcg.gov/>)



Weather station at Chiricahua National Monument. Photograph copyrighted by Greg McCurdy.

- Snow Data Assimilation System (SNODAS) (<http://nsidc.org/data/g02158.html>)
- USGS Stream Gaging Data (<http://waterdata.usgs.gov/nwis/>)
- Western Regional Climate Center (<http://www.wrcc.dri.edu/NPS.html>)

The Inventory and Monitoring Division has also developed a stable repository for climate data. This repository provides a means for NPS staff to access, manage, and use climate data in a single and consistent format, thereby averting duplications of effort. Use of this database is documented through a series of standard operating procedures (SOPs) which are available from IRMA via this [Direct Link](#).

### More Information

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