

Project Summary:

Climate Reference Network Installation and Maintenance

Location:

Oak Ridge Associated Universities
(Oak Ridge, TN)

Sponsoring Organization:

National Oceanic and Atmospheric Administration (NOAA)

Project Timetable:

2003 to present

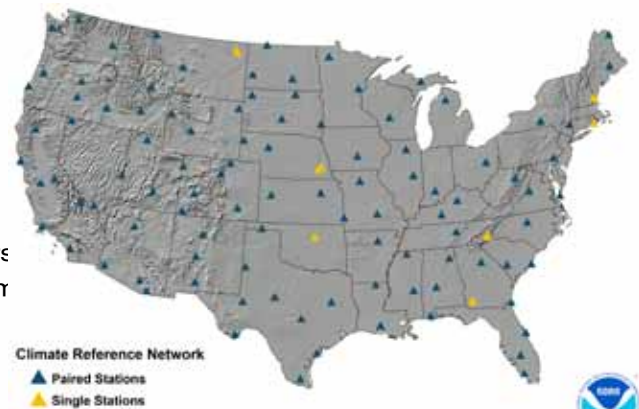
The U.S. Climate Reference Network (USCRN) is a network of climate stations that record real-time temperature, precipitation, wind speed, and solar radiation trends across the United States. Through the Atmospheric Turbulence and Diffusion Division (ATDD), Oak Ridge Associated Universities (ORAU) has worked closely with the National Oceanic and Atmospheric Administration (NOAA) in the development and deployment of the USCRN.

The USCRN consists of 114 stations in the 48 contiguous states, an additional seven stations installed in Alaska and Hawaii, as well as a station for inter-comparison with Canada's network. The stations use highly accurate and reliable equipment, and are strategically located away from urban and suburban influences to avoid any possible misinterpretation of data. The inter-comparable network allows scientists to study the climate of an area over sustained periods, from 50 to 100 years. USCRN data can be compared to past long-term observations for the detection and attribution of present and future climate change.

With an unparalleled 99.9 percent reporting accuracy, the USCRN provides the most accurate and reliable environmental climate data that the U.S. has ever collected.

ATDD contributed to the project by:

- Installing new stations and continuing to provide routine maintenance visits to the USCRN sites and regular calibration of the sensors.
- Providing design and measurement capabilities for the USCRN stations.
- Calibrating instruments, training of site operators and testing each system to reduce instrument failures.



Map courtesy of the National Climatic Data Center.

Partnerships for Innovation

ORAU
OAK RIDGE ASSOCIATED UNIVERSITIES

P.O. Box 117, Oak Ridge, TN 37831 ■ (865) 241-8893 ■ IVsurveys@orau.org
On the Web: www.orau.org/environmental-assessments-health-physics/

Oak Ridge Associated Universities (ORAU) is a university consortium leveraging the scientific strength of major research institutions to advance science and education by partnering with national laboratories, government agencies, and private industry. ORAU manages the Oak Ridge Institute for Science and Education for the U.S. Department of Energy.