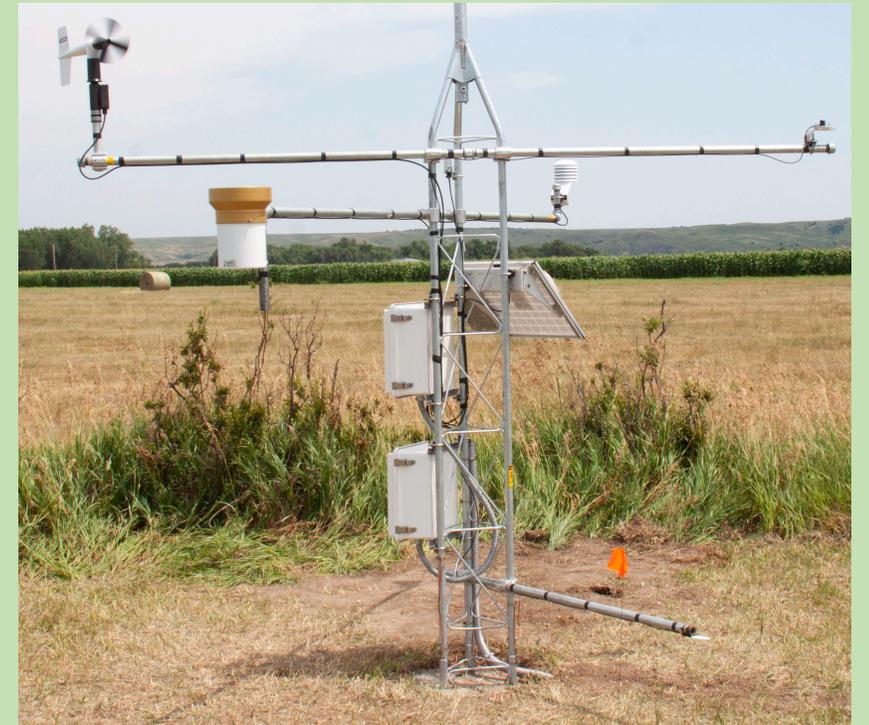


# Tribal Soil Climate Analysis Network

**Michael A. Wilson**  
**NRCS, Lincoln, NE**

- Provide *improved soil and climate data* to selected tribes for agricultural and forestry management decisions
- *Strengthen outreach* for improving production management as well as Ag and STEM education
- *Connecting the tribe* with local support (BIA, universities, NRCS, NOAA, Climate Hubs) and generate *more partnerships*



## General Location of TSCAN Stations



TSCAN units collect data every hour and transmits it via a cellular service to the **NRCS National Water Climate Center:**  
<https://www.wcc.nrcs.usda.gov/tribalscan/index.html>

The website contains:

- **current and historic data for each site**
- **soil pedon information**
- **site photo**
- **link to the KSSL database for soil characterization data**

- **23 stations deployed; 16 installed**
- **2020 Plan: Complete installation of remaining 7 stations; and purchase and install 5 additional stations**

## Decision Tools for the Soil Climate Analysis Network

Powered by ACIS, the Applied Climate Information System

- Second website: <https://scantools.rcc-acis.org/>
- Developed with NOAA Northeast Regional Climate Center and Cornell University
- Improves utility of data of both SCAN and TSCAN networks
- Links data to useful agricultural production tools
- Possible forum for tribal students to enhance scientific understanding of climate, land use and other STEM topics

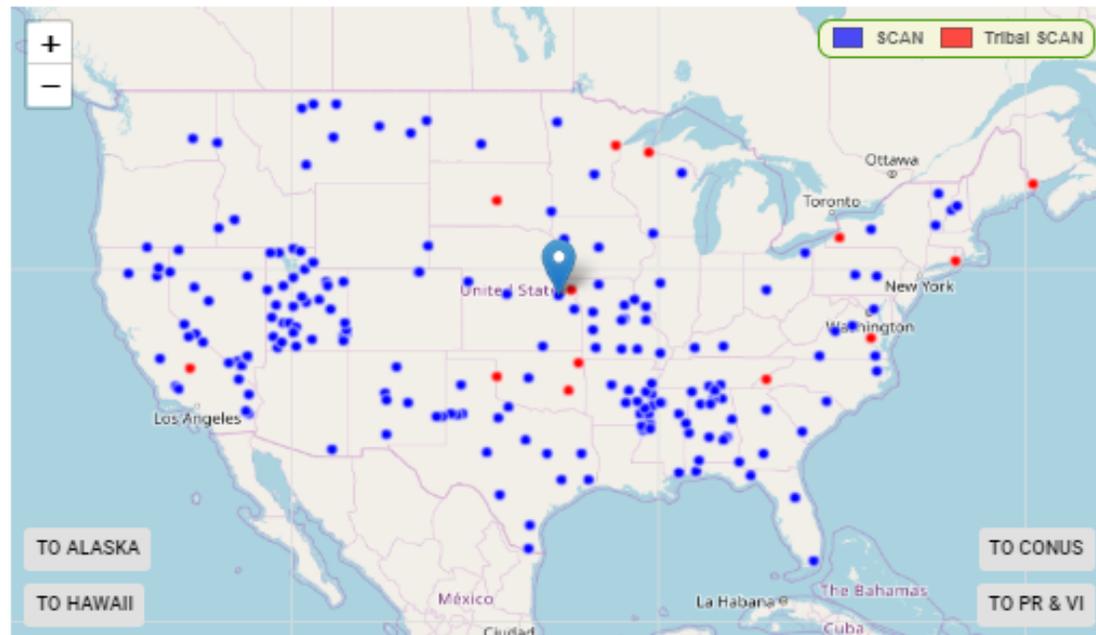


# Decision Tools for the Soil Climate Analysis Network

Powered by ACIS, the Applied Climate Information System

ABOUT

SCAN 4 STEM



Centralia Lake, KS

## Station Information

Name: Centralia Lake, KS

Network: SCAN

Latitude, Longitude: 39.70045, -96.1629

Elevation: 1302 feet

Period of Record: 2004-06-24 to present

Soil Characterization: [View reports from the NSSC](#)

LATEST CONDITIONS

CLIMATE SUMMARY

## Latest conditions

Date/Time: 2019-10-17 10:00

Air Temp: 59.0°F

Humidity: 52%

Precipitation (last hour): M

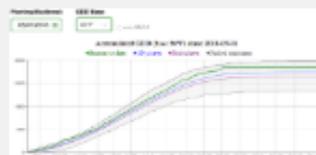
Solar Radiation: M

Wind Speed / Direction: M / M

Soil Temp: 53°F(2"), 54°F(4"), 56°F(8"), 60°F(20"), 64°F(40")

Soil Moist: 34%(2"), 40%(4"), M(8"), 41%(20"), 41%(40")

## Growing Degree Day Calculator

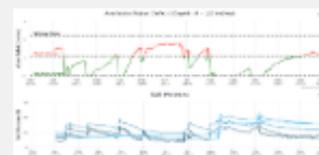


Monitor heat accumulation throughout the growing season.

GO

DOCS

## Water Deficit Calculator



Track changes in the available soil water content.

GO

DOCS

## Weather Grapher

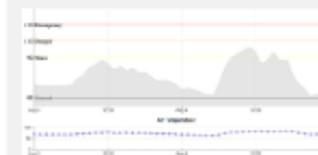


View data for multiple variables and timescales.

GO

DOCS

## Livestock Heat Index



Assess dangerous conditions for livestock by the hour.

GO

DOCS



United States  
Department of  
Agriculture

**THANKS**  
**[mike.wilson2@usda.gov](mailto:mike.wilson2@usda.gov)**



Natural Resources  
Conservation Service