TexMesonet.org

An interactive mapping application for viewing a network of selected weather stations and rain gages throughout the state of Texas. The application displays current weather conditions, radar and 24 hour time series graphs.
What is a mesonet?

A **mesonet** is a network of weather stations created to collect mesoscale meteorological information. **Mesoscale** is defined, for weather purposes, as systems between 3 and 60 square miles lasting for a few hours to a few days. Examples include tornadoes, thunderstorms, and hurricane eyewalls.
Why a mesonet?

• Improve weather forecasts, drought monitoring, and flood forecasting
• Provide validation for radar/satellite observations
• Enhance agricultural productivity and water conservation
• Support the wind/solar energy sectors
- Goals

• Collect hydrological monitoring data for Texas
  • The TWDB already monitors surface water & groundwater; atmospheric and soil monitoring complete the hydrological cycle

• Network of networks through integrating existing national, regional, and local networks

• Develop a statewide mesonet
  • Manage QA/QC and metadata for partner networks
  • Deliver near-real time, quality data to forecasters, modelers, and the general public
3,045 Weather stations in Texas
from backyard enthusiasts, to university, state, and federal agencies
Mesowest sites in Texas
1,057 TexMesonet Texas sites

2016 Viewer:
- Multiple map layers
- Tracking station data and status
- Updated station symbol look and labeling
Assembly and testing at the Lab
Site preparation
Installation...
Capturing the beautiful Texas weather
Additional enhancements will expand the site to include:

- Data and chart downloading and printing directly from the map
- Additional data availability through download for bulk data access
- Statewide maps showing a variety of monthly or annual averages of earth observations such as soil moisture, rainfall, and temperature.
Display and radar choices

- 24 Hour Precipitation
- 48 Hour Precipitation
- 72 Hour Precipitation
- Current Temperature
- Wind Chill
- Heat Index
- Humidity
- Dew Point
- Air Pressure
- Wind
- Wind Gust
- Solar Radiation
- Station

Radar Data
Display Choices:
- Current Radar
- Animated Radar
- 1 Hour Precipitation
- 24 Hour Precipitation
- 48 Hour Precipitation
- 72 Hour Precipitation
Viewer: Baseline map layers
Viewer: Map displays

- Imagery
- Imagery with Labels
- Streets
- Topographic
- Dark Gray Canvas
- Light Gray Canvas
- National Geographic
- Oceans
- Terrain with Labels
- OpenStreetMap
- USA Topo Maps
- USGS National Map
- Google Imagery
Weather dashboard
Cell phone screens

- Apple 6-7 Plus
- LG G3-5
- Moto RAZR 3-8