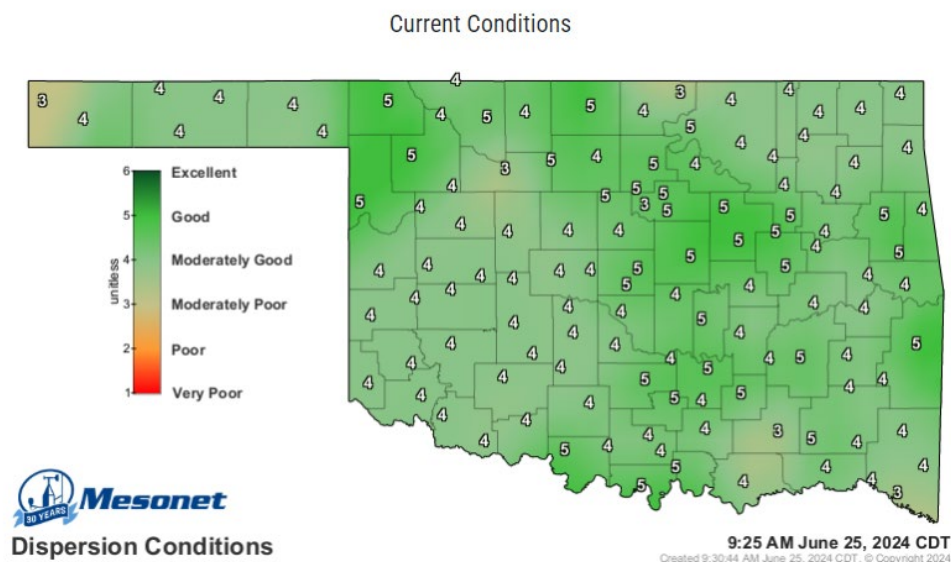# Dispersion

mesonet.org / Agriculture / Livestock / Poultry (or Beef, Dairy, Swine) / Dispersion

The Dispersion conditions advisor map displays the current dispersion conditions at each Mesonet side. Dispersion condition categories indicate the ability of the atmosphere to dilute airborne particles like smoke or animal odors. Atmospheric dispersion includes both horizontal and vertical dilution of released vapor-like particulates. The higher the dispersion number category the faster atmospheric dilution is likely to occur. When dispersion conditions are poor, vapors can stay concentrated close to the ground for long periods of time. Dispersion categories are: Excellent (Category 6); Good (Category 5); Moderately Good (Category 4); Moderately Poor (Category 3); Poor (Category 2); and Very Poor (Category 1). This map is updated every 5 minutes.

Mesonet Site Data

Mesonet Site

Tahlequah

Request Type

◉ Forecast
○ Past Data

Data Range

48 Hours

Interval

1 Hour

[Get Data]

You can obtain information from an individual site from the pull-down menu. The option for both a forecast and past data is available. The data range is for 3 hours to 84 hours. The default for the time interval is 1 hour, but 3 hours is also available. **Forecast** data is obtained from the National Weather Service (NWS) North America Model (NAM). The NAM is updated 4 times a day (12am, 6am, 12pm, and 6pm CST). After filling in the data form, the "Get Data" button will display a site-specific table as shown on the next page.

Dispersion Conditions for Tahlequah

Back to form

Save Print

Dispersion Conditions for Tahlequah

Date/Time (CDT) ↕	TAIR (1.5m) ↕	RELH (1.5m) ↕	WDEG (10m) ↕	WDIR (10m) ↕	WSPD (10m) ↕	RAIN (1h) ↕	CLOUD ↕	DISPERSION ↕
6/25/2024 10:00 AM	85°F	72%	185°	S	8 mph	0 in.	78%	Good (5)
6/25/2024 11:00 AM	87°F	69%	185°	S	9 mph	0 in.	53%	Good (5)
6/25/2024 12:00 PM	89°F	66%	185°	S	10 mph	0 in.	28%	Excellent (6)
6/25/2024 01:00 PM	91°F	63%	186°	S	11 mph	0 in.	3%	Good (5)

The table includes air temperature (TAIR), relative humidity (RELH), wind direction in degrees (WDEG), wind direction (WDIR), wind speed (WSPD), rain, percent cloud cover, and a color-coded column for dispersion category. Navigational buttons at the top and bottom allow the user to scroll through multiple pages. The save or print button creates a PDF file for recordkeeping purposes.

In the **Past Data** section, you have the option of using the "Current Date and Time" or "Use a Custom Date and Time". Using the "Current Date and Time" will create a table for the data range and time interval selected. When you select the "Using Custom Date and Time" option, two additional selection boxes appear. The first is a calendar, and the second is a clock feature. This will be the date and time you want the table to end. You can get the dispersion data back to September 1, 2007. Weather data is available back to the tower installation date (1 January 1994, for most sites). The "Get Data" button displays a table with the historical data.

Mesonet Site Data

Mesonet Site *
Tahlequah   × ▾

Request Type *
○ Forecast
● Past Data

Data Range *
- Select -   ▾

Interval *
- Select -   ▾

Data Range End Date/Time
○ Use Current Date and Time
● Use a Custom Date and Time

mm/dd/yyyy 📅

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Get Data

Dispersion Conditions for Tahlequah

Back to form

Save Print

Dispersion Conditions for Tahlequah

Date/Time (CDT) ↕	TAIR (1.5m) ↕	TDEW (1.5m) ↕	RELH (1.5m) ↕	WDEG (10m) ↕	WDIR (10m) ↕	WSPD (10m) ↕	WMAX (10m) ↕	WS2M (2m) ↕	RAIN ↕	SRAD ↕	DISPERSION ↕
6/23/2024 07:00 AM	78°F	71°F	78%	215°	SW	2 mph	4 mph	0 mph	0 in.	57 W/m²	Poor (2)
6/23/2024 08:00 AM	81°F	70°F	69%	214°	SSW	7 mph	11 mph	5 mph	0 in.	266 W/m²	Moderately Poor (3)
6/23/2024 09:00 AM	84°F	71°F	65%	232°	SW	7 mph	13 mph	5 mph	0 in.	417 W/m²	Good (5)
6/23/2024 10:00 AM	86°F	72°F	63%	226°	SW	8 mph	12 mph	6 mph	0 in.	635 W/m²	Good (5)

For help with this or other Mesonet products, please call 405-325-3231, or email at operator@mesonet.org.

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