



# How to use the Drift Risk Advisor

## INTRODUCTION

The Mesonet Agweather Drift Risk Advisor is a weather-based tool that identifies times of high and low spray application drift risk. It uses the National Weather Service (NWS) North American Model (NAM) forecast to identify times when it is best to avoid applications due to forecasted weather variables and/or dispersion conditions.

The Drift Risk Advisor is a guidance tool based on forecast weather data and user entered weather variables and conditions. Pesticide labels should be consulted for application limitations based on weather variables or conditions.

Spray drift risk is a combination of weather conditions, application equipment, material applied and spray adjuvant included in the spray mixture. The final judgment and responsibility of whether to make a spray application rests with the applicator and/or application supervisor.

## Finding the Drift Risk Advisor

The Oklahoma Mesonet Drift Risk Advisor is located on the Mesonet website, mesonet.org, under the Agriculture tab at the top. From the main Agriculture page, select “Drift Risk Advisor” from the left menu under Agriculture Essentials.

## Drift Risk Advisor Weather Variables

Select “Upper” and “Lower Limits” or weather variables that are appropriate for the application material. Upper and/or Lower limits can be entered for one, all, or any combination of Drift Risk Advisor weather variables. Drift Risk Advisor weather variables include:

- Air Temperature (Fahrenheit)
- Relative Humidity (percent)
- Wind Speed (miles per hour)
- 1-hour Rainfall (inches per hour)
- Wind Direction

**Drift Risk Advisor**

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Variable	Lower Limit	Upper Limit
Air Temperature (F):	<input type="text"/>	<input type="text"/>
Relative Humidity (%):	<input type="text"/>	<input type="text"/>
Wind Speed Avg (mph):	<input type="text"/>	<input type="text"/>
1hr Rainfall (inches):	<input type="text"/>	<input type="text"/>

Norman Show: Next 84 Hours Show Non-Prescribed Variables Get Data

# Drift Risk Advisor

Forecast based on 1 am CDT NAM; NEXT forecast update expected 11 am CDT

Watonga

[Print Table](#)

Date and Time	Criteria Met?	Wind Direction (10m)	Wind Direction (° at 10m)	Wind Speed (10m)	Relative Humidity (1.5m)	Air Temperature (1.5m)	Rainfall per Hour	Dispersion Conditions
Apr 26, 2022 10:00 am CDT	Yes	ESE	119	8 mph	36%	57°F	0.00 in.	5 (G)
Apr 26, 2022 11:00 am CDT	Yes	SE	124	8 mph	31%	61°F	0.00 in.	6 (EX)
Apr 26, 2022 12:00 pm CDT	No	SE	128	9 mph	26%	65°F	0.00 in.	6 (EX)
Apr 26, 2022 1:00 pm CDT	No	SE	131	10 mph	21%	68°F	0.00 in.	6 (EX)
Apr 26, 2022 2:00 pm CDT	No	SE	132	11 mph	21%	69°F	0.00 in.	5 (G)
Apr 26, 2022 3:00 pm CDT	No	SE	134	13 mph	21%	71°F	0.00 in.	5 (G)
Apr 26, 2022 4:00 pm CDT	No	SE	135	14 mph	21%	72°F	0.00 in.	4 (MG)
Apr 26, 2022 5:00 pm CDT	No	SE	140	14 mph	24%	70°F	0.00 in.	4 (MG)
Apr 26, 2022 6:00 pm CDT	No	SE	144	15 mph	27%	69°F	0.00 in.	4 (MG)
Apr 26, 2022 7:00 pm CDT	No	SSE	148	16 mph	30%	67°F	0.00 in.	4 (MG)
Apr 26, 2022 8:00 pm CDT	No	SSE	150	14 mph	40%	62°F	0.00 in.	4 (MG)
Apr 26, 2022 9:00 pm CDT	No	SSE	153	12 mph	50%	57°F	0.00 in.	3 (MP)
Apr 26, 2022 10:00 pm CDT	No	SSE	158	9 mph	60%	51°F	0.00 in.	3 (MP)
Apr 26, 2022 11:00 pm CDT	No	SSE	160	9 mph	66%	50°F	0.00 in.	3 (MP)

## Drift Risk Advisor Output Table

Forecast weather variable boxes are colored green when they fall within the weather parameter ranges entered. Weather variables with forecast values outside the entered ranges are colored red. Values for weather variables not included in the comparison are in gray and white boxes.

When forecast variables **all** fall within the entered weather parameter ranges a green colored “Yes” box is shown in the “Criteria Met?” column. A red “No” box means that not all of the forecasted weather variables were within the entered ranges. A “Yes” or “No” is not a yes or no to spray. It is strictly addressing if the forecast values fall within the variable parameters entered.

## Examples of Drift Caution Statements on Pesticide Labels

Wind	Temperature Inversions
Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops.	Do not make applications into areas of temperature inversions or stable atmospheric conditions.
Apply only when the wind is less than or equal to 10 mph.	Application should not occur during an inversion because drift potential is high.
Do not apply when wind velocity exceeds 15 mph.	

## Our Story

The Oklahoma Mesonet is a world-class network of environmental monitoring stations. The network was designed and implemented by scientists at the University of Oklahoma (OU) and at Oklahoma State University (OSU).

The Oklahoma Mesonet consists of 120 automated stations covering Oklahoma. There is at least one Mesonet station in each of Oklahoma’s 77 counties.

At each site, the environment is measured by a set of instruments located on or near a 10-meter-tall tower. The measurements are packaged into “observations every 5 minutes, then the observations are transmitted to our central facility every 5 minutes, 24 hours per day year-round.

For help with this or other Mesonet products, please call 405-325-3231, or email us at [operator@mesonet.org](mailto:operator@mesonet.org).



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