

Application Vision: Know when and where to spray



www.dtn.com • 888.350.0972

Table of contents

Managing Upcoming Weather Conditions3
Spring 2020 Crop Weather Outlook4
Localized Weather Network5
Information at Your Fingertips6
Better Planning7



Managing Upcoming Weather Conditions

We know that we cannot physically CHANGE the weather. But, we can change how we MANAGE our work in response to upcoming weather conditions.

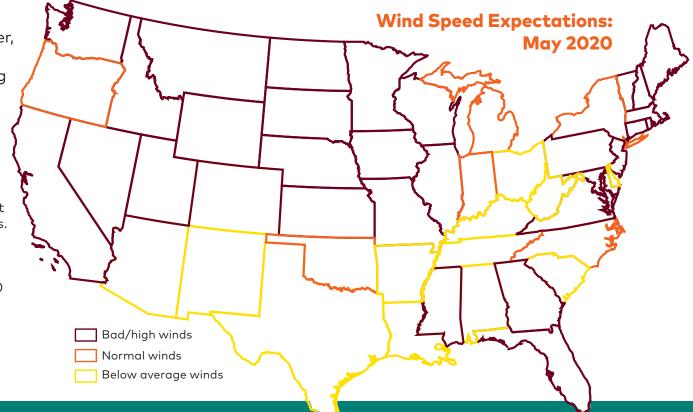
28
States set for aboveaverage wind conditions
6
States set for average wind conditions
14
States set for belowaverage wind

conditions

Spring field work and planting windows continue to get smaller, reducing farmers' ability to get the bulk of acres planted during optimum conditions.

A consequence of that smaller planting window is a lot of crops reaching critical growth stages within a similar period of time. That intensifies the number of acres that need to be covered by post-emergent herbicide and insecticide applications.

DTN meteorologists pulled data from a series of years that have similar weather features as the 2020 season. The maximum and minimum wind speeds were then averaged to create a benchmark for the wind speed farmers should expect to see in 2020. (See map).



3 • Application Vision: Know when and where to spray

Spring 2020 Crop Weather Outlook

Following the wet year of 2019, almost everyone has a story about the impact of heavy rain on their individual area and their production. Going into the spring of 2020, there are still many reasons to be concerned about how conditions will be for field work and planting.

Soils indeed are wet. Soil moisture assessments place the northern and central United States mainly in the 90-99 percentile going into spring. The wet soils give a strong indication that delays in field work and planting are likely. Winter temperatures were much different than a year ago, with above to much above normal values. The warmer temperatures meant that soil profiles were unfrozen, which has allowed some of the excess moisture to drain away. Still, there is a long way to go before wet-ground problems and threats of flooding will ease.

Looking ahead to the spring season, there are some indications that the weather pattern will offer some improvement for portions of the central United States. There are three sectors that seem to be shaping up when it comes to the spring trend.



Chapter 5

Northern Sector – using U.S. Highway 20 from Sioux City, IA to Chicago, IL and north: this sector has the heaviest snow cover and the most consistent cold temperatures during this latter third of the meteorological winter season. This is also the sector where 2019 was a recordwet year; thus, soils are saturated. Also, an active northwestern U.S. storm track continues to send rain and snow across this sector. A threat of renewed flooding is high, and producers at the National Farm Machinery Show said that they expect substantial prevented planting claims to be filed again. "They won't be as slow to do it (filing prevented planting) this year," one producer said. In addition, of course, there are still many, many acres of corn that have yet to be harvested.



Eastern and Southern Sector – east of Interstate 55 from Chicago, IL to St. Louis, MO and southeast: wet conditions have a high probability of delaying field work and planting this year. The temperature pattern does not look like it is going to be as consistently cold in 2020 as in 2019, which offers some benefit. But, wet soils and a high risk of flooding bring thoughts of slow progress.



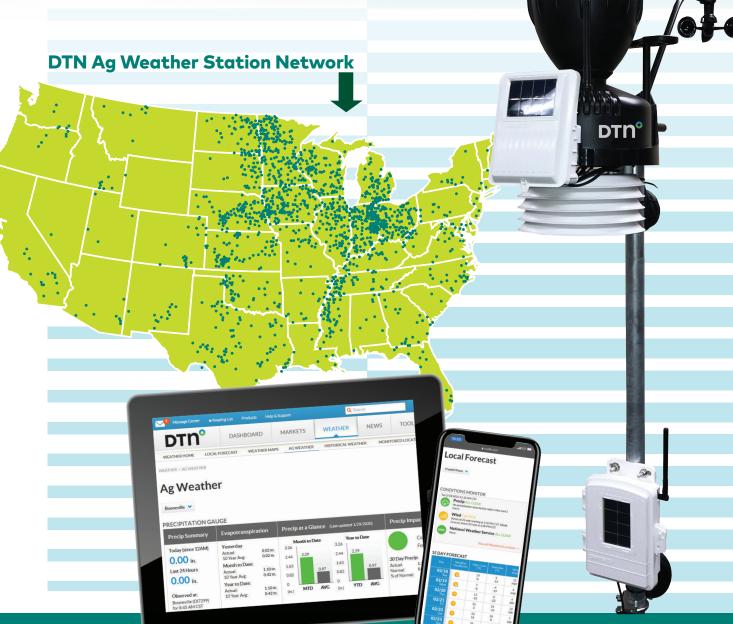
Western Sector – west of Interstate 55 and south of U.S. Highway 20: this sector is drier than a year ago. Producers were able to finish harvest in reasonable time, and in some operations, apply fall fertilizer ahead of the 2020 crop year. There is a big caveat, however — and that is that flood damage in river basins from 2019 is still evident, with many acres still unworkable for 2020.

Localized Weather Network

The DTN Spray Outlook brings a trusted solution to your spraying operations. It factors in multiple weather variables and documents conditions from your local weather station.

And when we say "local weather station," we mean it. DTN has one of the largest private weather station networks in all of agriculture. Thousands of weather stations are located on member farms across North America, reporting highly-local information to the network in real time.

The DTN Ag Weather Station network gathers highly-accurate, field-level weather and agronomic data and incorporates it into actionable forecasts and alerts. That saves time and supports field work.



Information at Your Fingertips

The DTN Spray Outlook incorporates the forecast and analysis output from the weather station network to produce an intuitive red/yellow/green color outlook that indicates the appropriateness of making applications from day to day, hour to hour. All the details on spray risk, wind speed and direction, dew point, and temperature are displayed on a single screen, available either on your desktop computer or mobile device. "The time I used to spend driving to check my fields can be spent doing other things. It's a real time saver."

Keith Regnier, Minnesota producer



With the DTN Spray Outlook, you can accomplish the following:

Create thresholds based on product labels Protect margins and minimize risk

multiple fields

and locations

Compare

Minimize

off-target

movement

Maximize your spraying windows

See hourby-hour outlooks

> "It's especially important to us when it comes to spraying beans. We take the responsibility very seriously. Our DTN solutions help us to prevent drift, which is something no farmer wants to experience."

Erin Holbert, Indiana producer

See byout



Better Planning

You will never buy low or sell high by listening to the crowd. Once again, many did not take advantage of corn's higher prices in June 2019 to make sales because they were hypnotized by predictions of \$6.00 corn.

Review the four previous points, pay attention to DTN Market Strategies and become an informed contrarian. **This year, give yourself a chance to capture a higher price**.



"They really get the timing of a front's arrival and the amount of precipitation we are likely to get. There are other products on the market, but they aren't as good as DTN."

Fred Helms, Illinois producer

Keep these points in mind this spraying season:



Is the sprayer ready to go? Check the tanks, hoses, and especially the sprayer tips. The time to clean and replace is before "go" time in the field.



Are the support resources — trucks, tanks, loading employees — updated and on hand for action? Early morning on the day when conditions are right for spraying is a bad time to find a flat tire or a break in the feeder line.



Familiarize yourself with DTN Spray Outlook. The time to practice and check it out is not when the rig pulls into the field. The app is easy to use; however, a short time given to learning about the information readout display is very useful when it's action time.

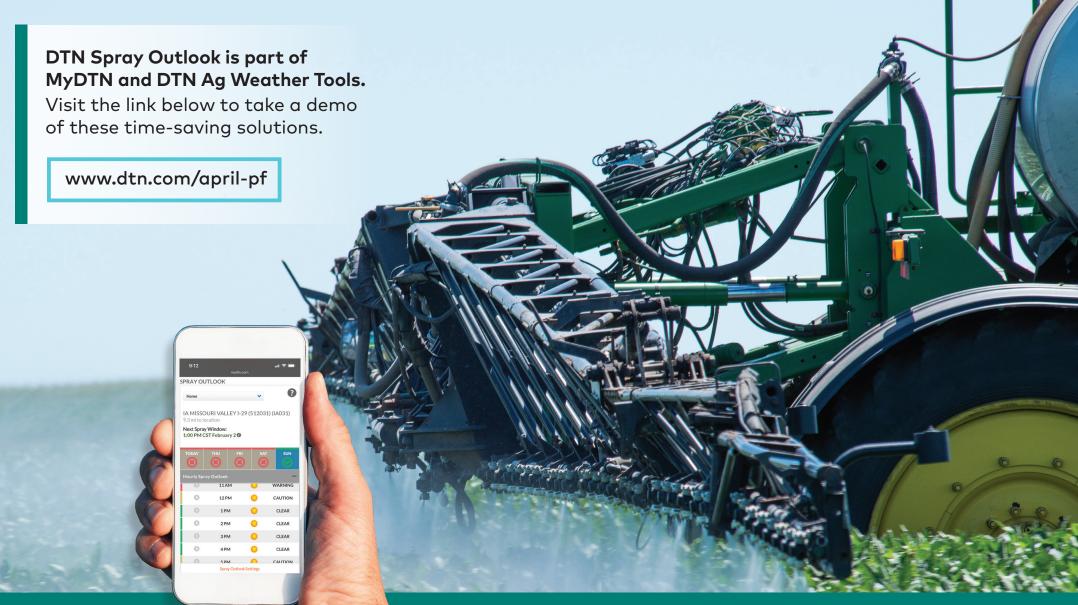


There are two sets of conditions: field conditions, and boom conditions. Even after you've pulled the equipment to the field, it's still important to take the on-site weather readings at sprayer boom height to determine if conditions are correct.



Last, but by no means least — record all information carefully, both online and with a paper printout. Details are your ally when it comes to any question over the conditions at the time of spraying. Defense wins in football; it's a good thing to do in spraying, too.

DTN°



www.dtn.com • 888.350.0972

© 2020 DTN, LLC, all rights reserved. "DTN" and the degree symbol logo are trademarks of DTN, LLC.