agweather connection

WEATHER & CLIMATE

- O. WHAT IS WEATHER?
- A. Weather is the day-to-day conditions of a particular place.
- O. WHAT IS CLIMATE?
- A. Climate refers to the average, or typical, weather conditions observed over a long period of time for a given area.
- O. WHO KEEPS TRACK OF OKLAHOMA'S CLIMATE?
- A. The Oklahoma Climatological Survey was established in 1980 to provide climate services to

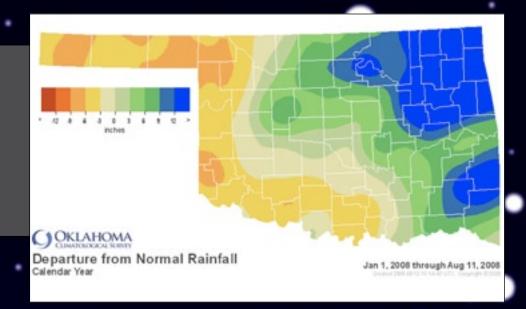
the people of Oklahoma and to conduct research on the impacts of climate on human activities. The Oklahoma Climatological Survey uses the Oklahoma Mesonet to record and archive weather data.

- O. WHY IS CLIMATE IMPORTANT TO AGRICULTURE?
- A. Climate can directly affect agriculture in many ways. Climate can impact planting and harvest dates, crop quality, crop insurance, prescribed burning, etc.



Departure from normal rain

- Start at http://agweather.mesonet.org
- Click on "Weather"
- Then click "RAINFALL"
- Choose "OK Rainfall and Drought Update"
- Select "YEAR TO DATE," which is located in the center tool bar
- Scroll to the bottom of this page and select the "Departure" map from the bottom left corner



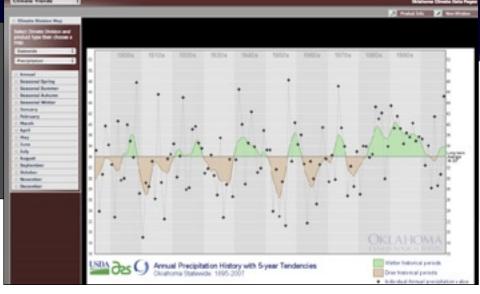
Recent rainfall

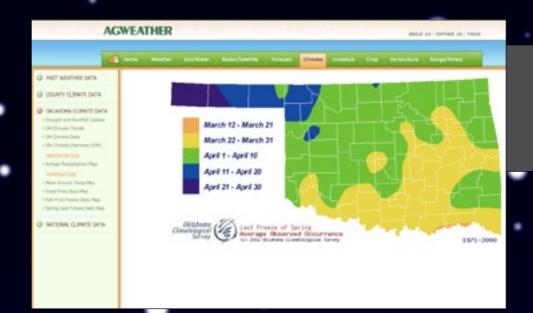
- Go to http://agweather.mesonet.org
- Click on "Weather"
- Then click "RAINFALL"
- Next, click "Recent Mesonet Rainfall Table"

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Rainfall trends

- Go to http://agweather.mesonet.org
- Click "Climate"
- Next, click "OKLAHOMA CLIMATE DATA"
- Then select the "OK Climate Trends"
- Make sure "Statewide" and "Precipitation" are selected in the top two drop-down menus
- Pick "Annual"





Last freeze date

- Start at http://agweather.mesonet.org
- Click "Climate"
- Next, click "OKLAHOMA CLIMATE DATA"
- Now choose "Spring Last Freeze Date Map"



Monthly temperature averages

- Go to http://agweather.mesonet.org
- Click "Climate"
- Next, click "COUNTY CLIMATE DATA"
- Now select "Monthly Temperature Table"



County climate summary

- Go to http://agweather.mesonet.org
- Click "Climate"
- Next, click "COUNTY CLIMATE DATA"
- Select "County Climate Overview"
- Choose a specific county
- Then click on the "Quick Climate Facts" link located near the top of the page

GLOBAL WARMING: IS THIS FOR REAL?

In regards to global warming, the Oklahoma Climatological Survey concludes the following to be true:

- The earth's climate has warmed during the last 100 years.
- The earth's climate will continue to warm in the foreseeable future.
- Most of the global average temperature increases over the last 50 years can be attributed to human activities.
- Oklahoma will be impacted.

Global warming could potentially affect agriculture in the following ways:

- The warm season becomes longer and arrives earlier.
- The cool season warms and shortens, which leads to a longer frost-free period and growing season.
- Earlier maturation of winter wheat and orchard crops will leave the plants more vulnerable to late freeze events.
- Year-round evaporation from the ground and transpiration from green vegetation will increase.
- Drought frequency and severity will increase, especially during the summer.
- Drier and warmer conditions will increase the risk of wildfires.
- Rain-free periods will lengthen, but individual rainfall events will become more intense.
- More runoff and flash flooding will occur.

To learn more about the Oklahoma Climatological Survey's viewpoint on global warming, <u>click here</u>.



