Using weather data for farm management

1/12/23

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2022 Haves

2022 Have Nots

U.S. Drought Monitor Class Change - Kansas 12 Week

December 27, 2022

December 30, 2021

Kansas Mesonet - Kansas State University, Kansas Research and Extension
Data availability @ mesonet.ksu.edu
Mesonet Menu > Precipitation > Daily Totals
cocorahs.org
Mesonet Menu > Agriculture > Soil Moisture
7 Day VWC Change at 10 cm

This map is representative of grassland vegetation. Mesonet Data - 7 day 10 cm VWC change at Jan 11 2023 20:40 (CST)
McPherson 1S 365 Day Soil Moisture

Volumetric Water Content

Precip  5cm  10cm  20cm  50cm

Kansas Mesonet - Kansas State University, Kansas Research and Extension
Flickner Tech Farm 365 Day Soil Moisture

Volumetric Water Content

Precip

5cm

10cm

20cm

50cm

Precipitation

Apr '22

Jul '22

Oct '22

Jan '23

0 m³/m³

0.2 m³/m³

0.4 m³/m³

0.6 m³/m³

2.4 in

1.6 in

0.8 in

0 in

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We need more drought reports!

Make a CMOR Report: go.unl.edu/CMOR

Some widespread rainfall was received across most of southwest Kansas last week. However, there is little to no subsoil moisture, so although the rain was greatly appreciated and needed, moisture stress is already showing again....
Climate Prediction Center Outlooks

Three Category Temperature Outlook
Normal Maximum Temperature: 49
Normal Minimum Temperature: 26

- Above Normal: 33%
- Normal: 33%
- Below Normal: 33%

Three Category Precipitation Outlook
Normal Precipitation: 4.57

- Above Normal: 30%
- Below Normal: 37%
- Normal: 33%
JFM Temperature During La Nina
Increased Risk of Warm or Cold Extremes

JFM Precipitation During La Nina
Increased Risk of Wet or Dry Extremes

Cold Extreme
+90%  +50%  +50%  +90%
Percent (%) Increase in Risk
NOAA/ESRL/PDQ

Warm Extreme

Dry Extreme
+90%  +50%  +50%  +90%
Percent (%) Increase in Risk
NOAA/ESRL/PDQ

Wet Extreme
Seasonal Forecast (Feb, Mar, Apr)

- Temperatures sneaking below normal again in Feb
- Drier after next week as La Nina impacts return
- Active storm track likely in spring - severe, fire, eventually rain
- Capitalize on the drought (dig out ponds, terracing, etc)
- Long term drought will continue into 2023
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McPherson 1S 4in Soil Growing Degrees

- 2018 GDD
- 2019 GDD
- 2020 GDD
- 2021 GDD
- 2022 GDD
- 2023 GDD
- Past 5 Year Avg