

Flint Hills Wildland Fire Update

April 30, 2021

The following information on the Flint Hills wildland fires is sent weekly to keep stakeholders up to date on fires and related smoke.

**This will be the final weekly update for the 2021 period.
A final summary for 2021 will be issued in the coming weeks.**

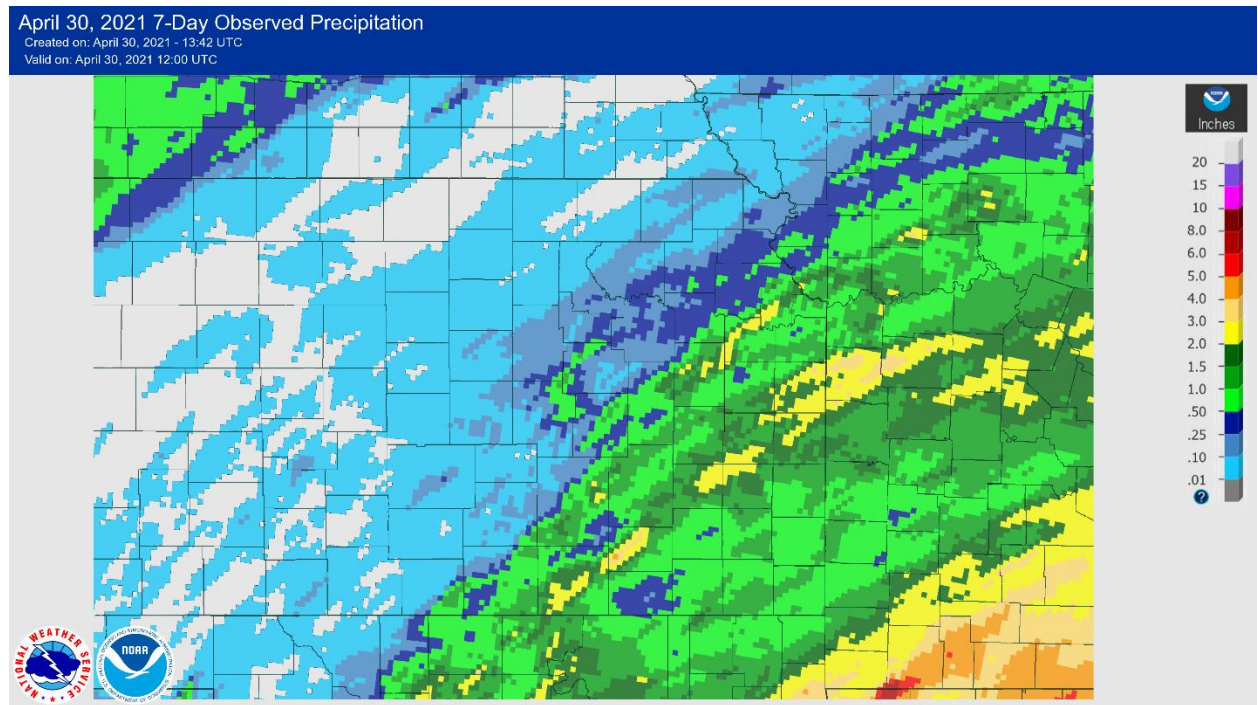




Meteorology

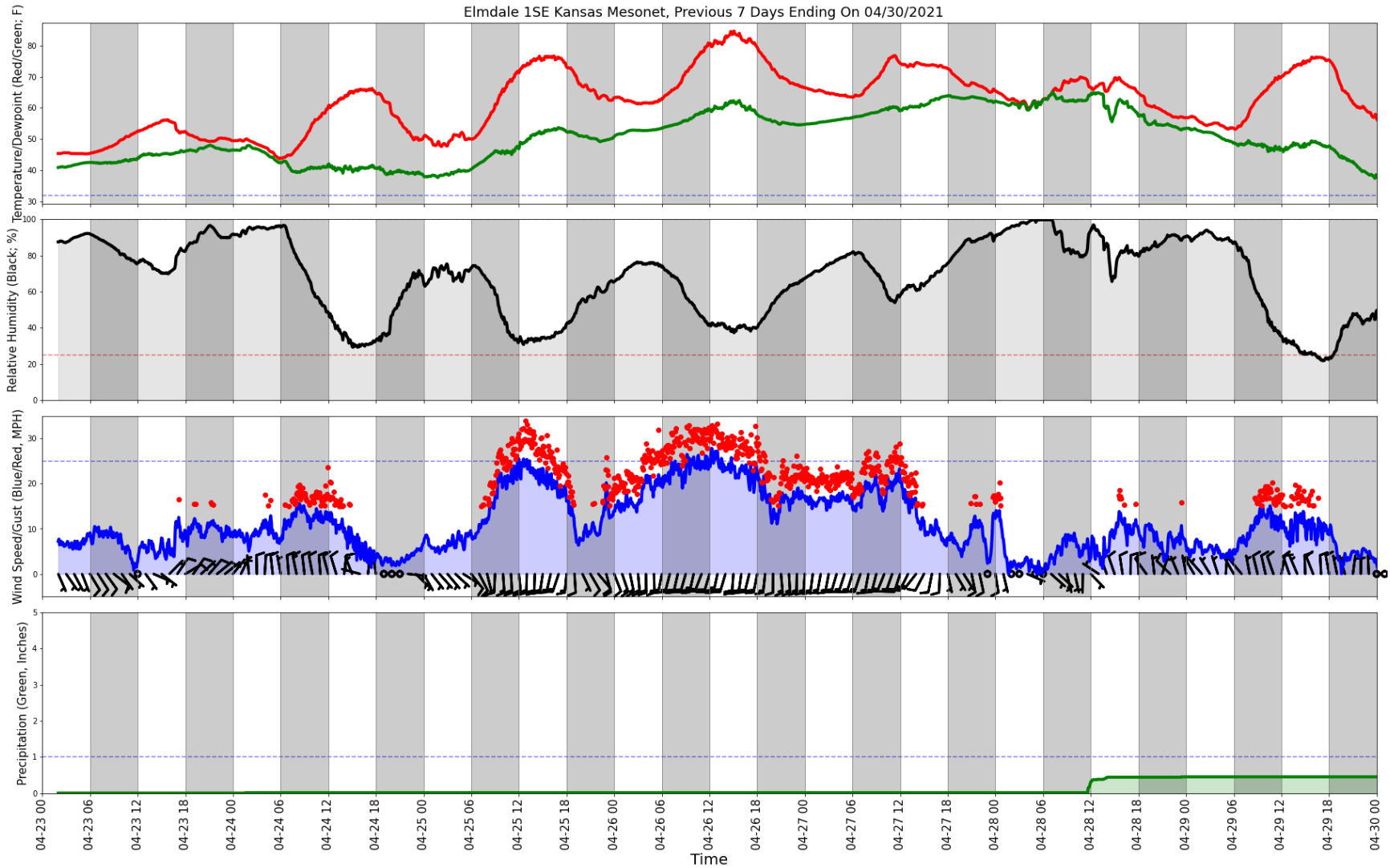
Showers and thunderstorms last Friday (April 23) brought light precipitation totals for most of the Flint Hills region. Temperatures were quick to rebound with clear skies and dry conditions last weekend with light winds Saturday (April 24) and then breezy south wind on Sunday (April 25). Strong south winds continued Monday (April 26) and led to the warmest day of the prior week with highs well into the 80s. Clouds returned to the region on Tuesday (April 27) with occasional light rain with showers and thunderstorms arriving late Tuesday through Wednesday (April 28) which brought heavier precipitation to some parts of the Flint Hills with some localized amounts greater than two inches. Clear skies, light winds, and seasonably warm temperatures returned for Thursday (April 29) with highs in the 70s to 80s.

Precipitation



NOAA/NWS Observed Total Precipitation for April 23-29, 2021.

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7-day (April 23-29, 2021) Observed Weather from Kansas Mesonet station near Elmdale, Kansas
[\(https://mesonet.k-state.edu/\)](https://mesonet.k-state.edu/)



Air Quality Data

Air quality data for the period of April 23-29, 2021:

Ozone: Preliminary data indicates **no** exceedances of the NAAQS daily 8-hour average maximum of 70 ppb.

PM_{2.5}: Preliminary data indicates **no** exceedances of the NAAQS daily 24-hour average maximum of 35 $\mu\text{g}/\text{m}^3$.

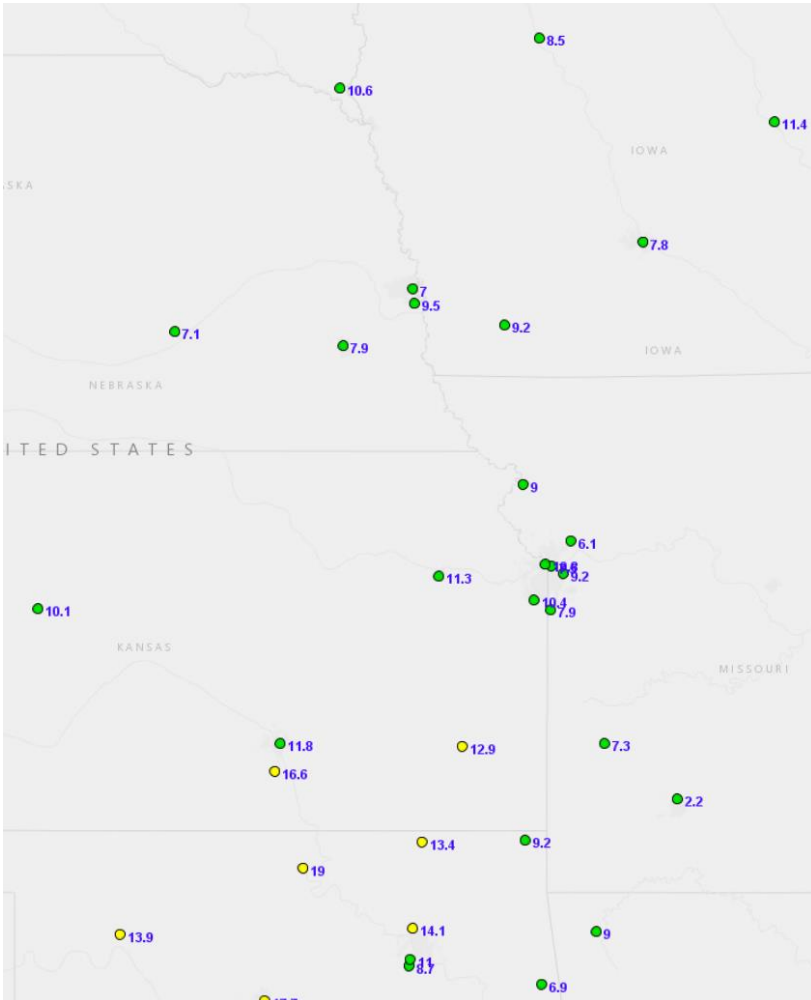
Air quality images on the following pages for each day show preliminary data, courtesy Air Now Tech.

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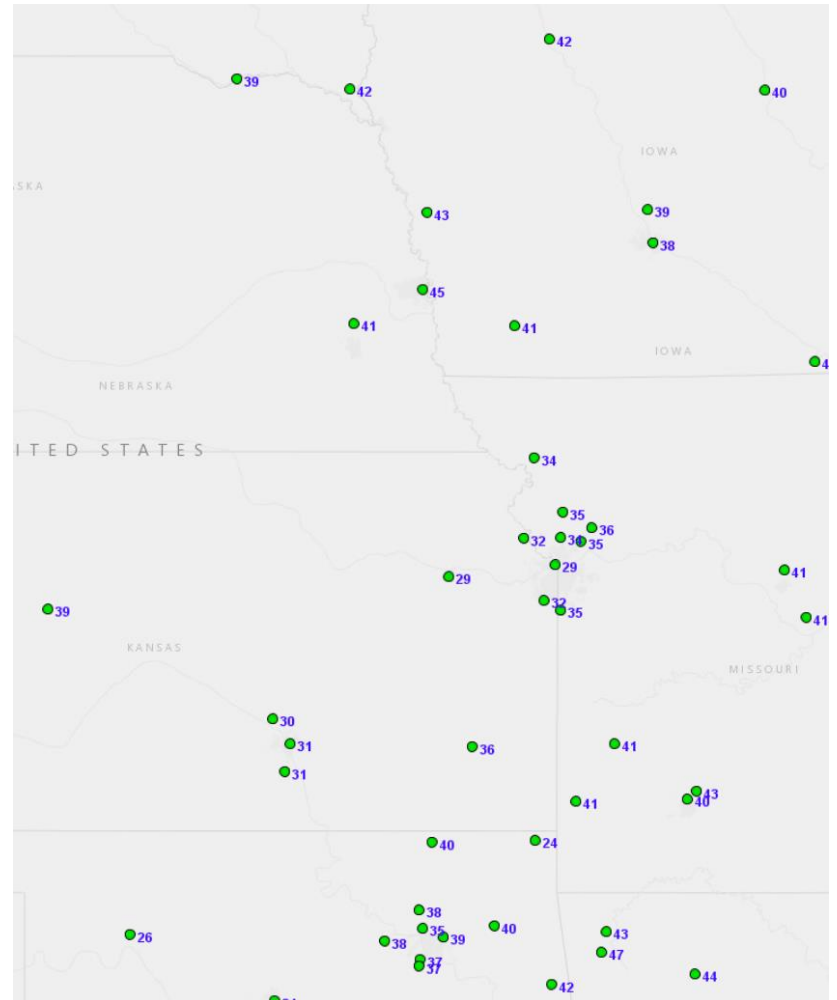


Friday, April 23, 2021

PM2.5 (24-hour average)



Ozone (8-hour average maximum)



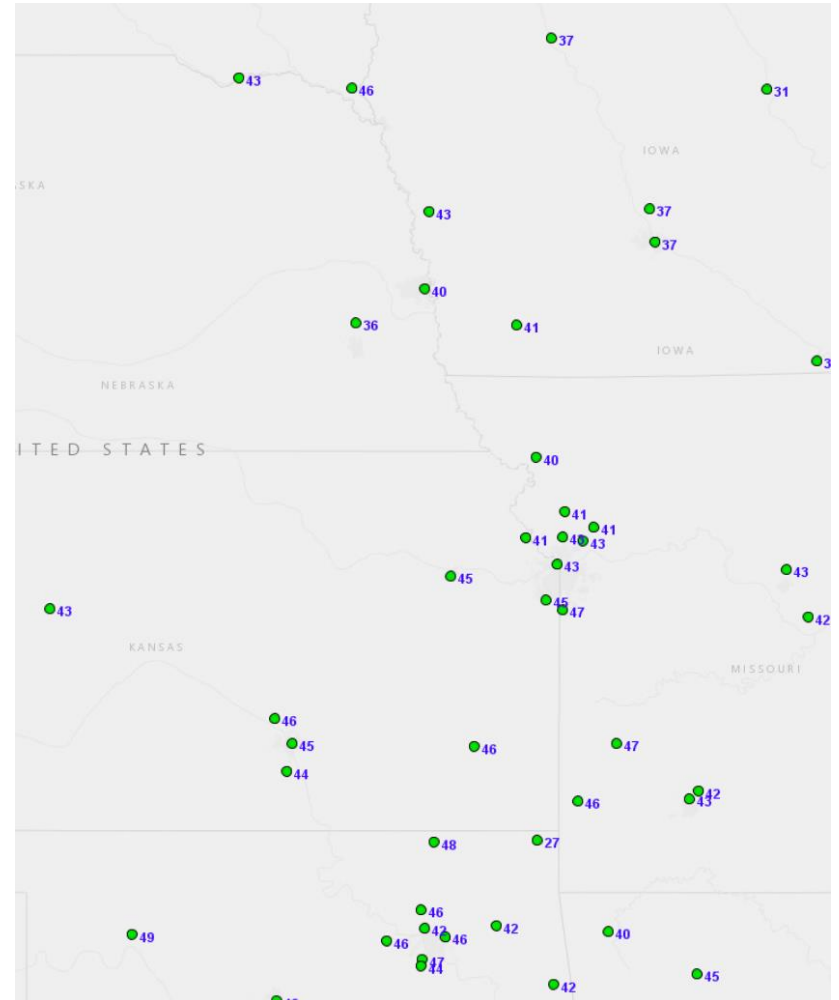
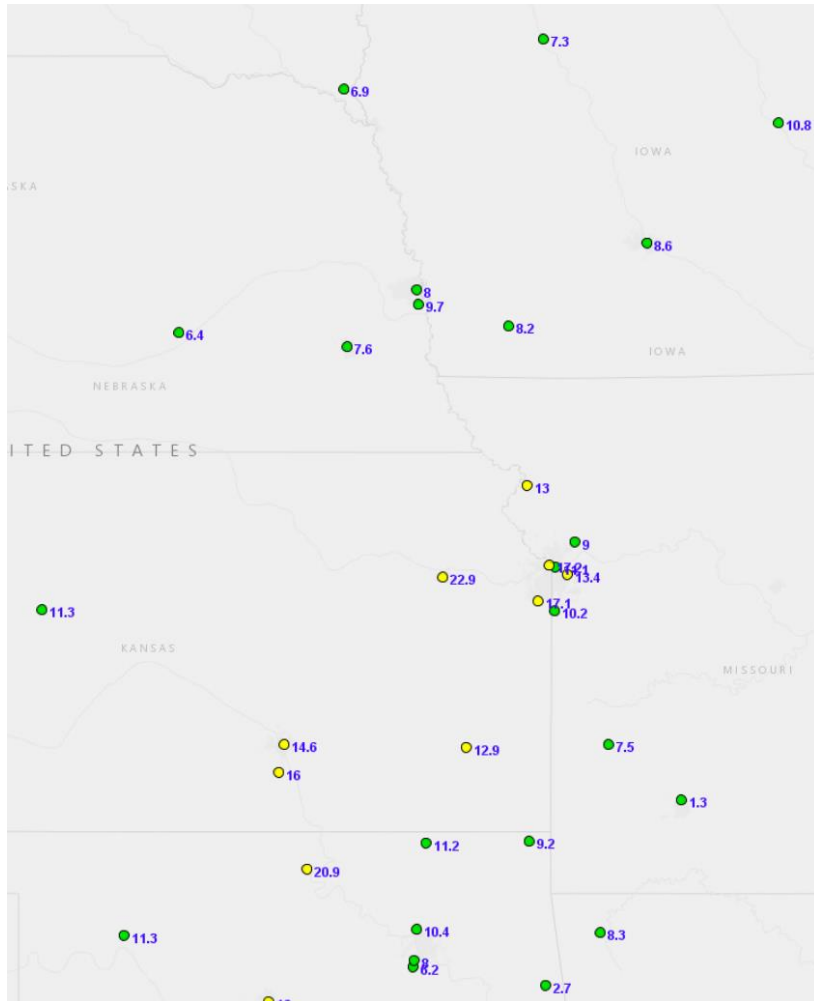
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Saturday, April 24, 2021

PM2.5 (24-hour average)

Ozone (8-hour average maximum)



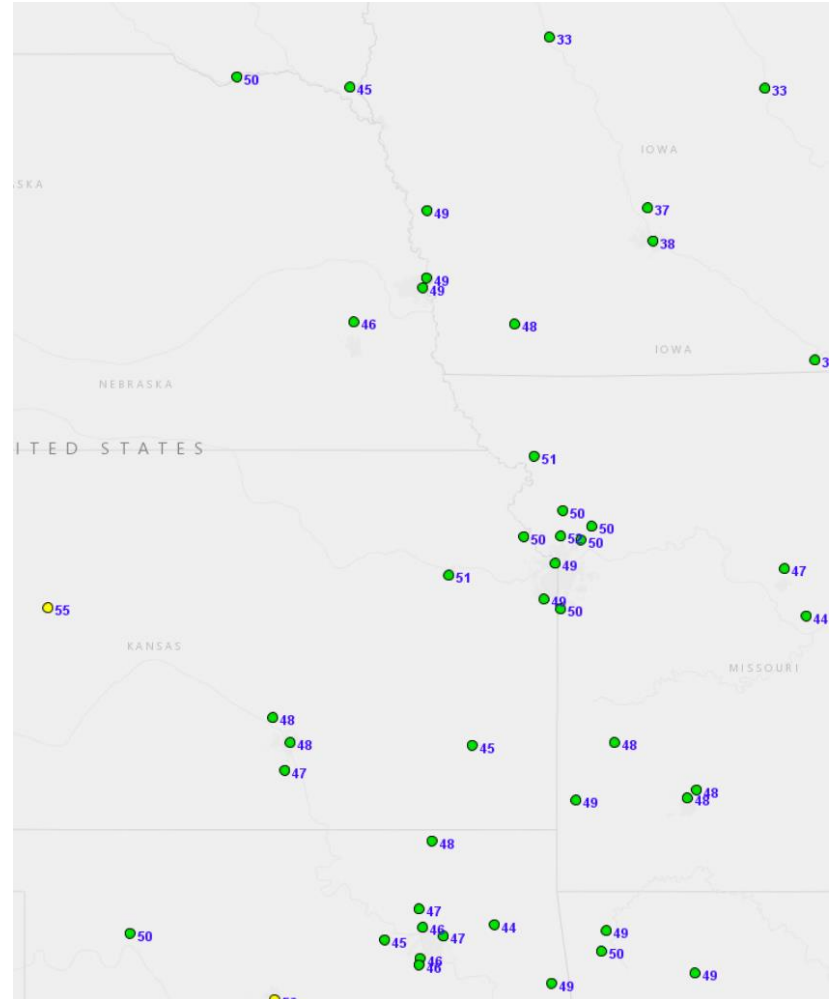
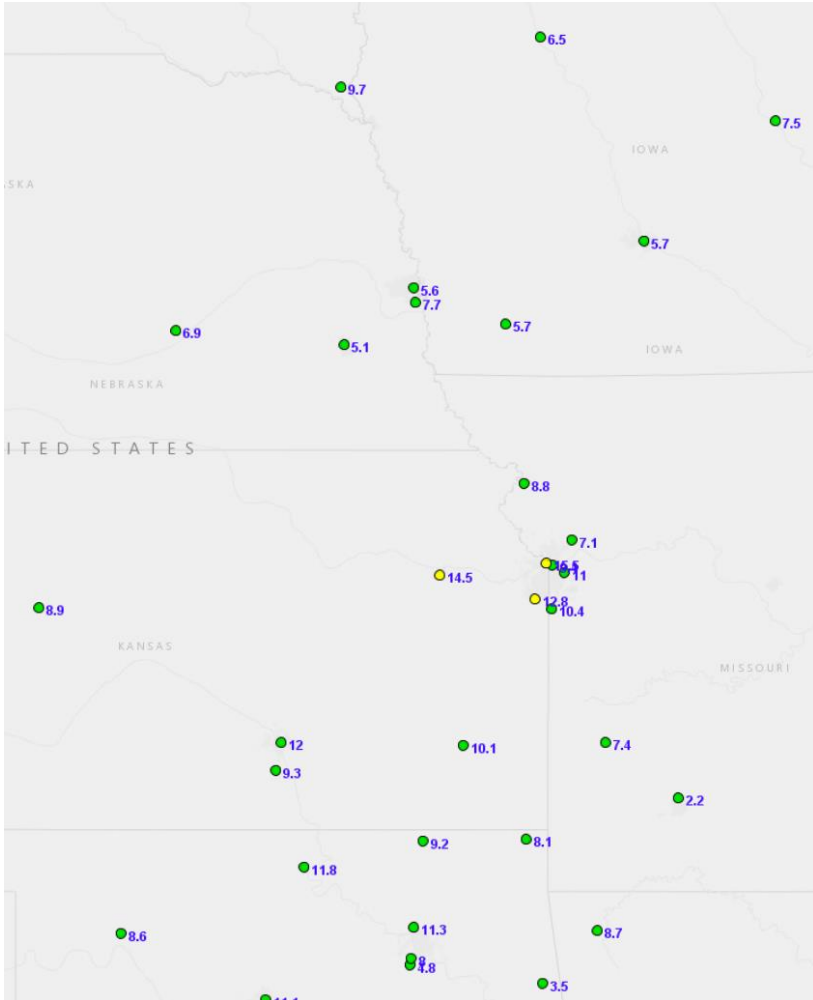
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Sunday, April 25, 2021

PM2.5 (24-hour average)

Ozone (8-hour average maximum)

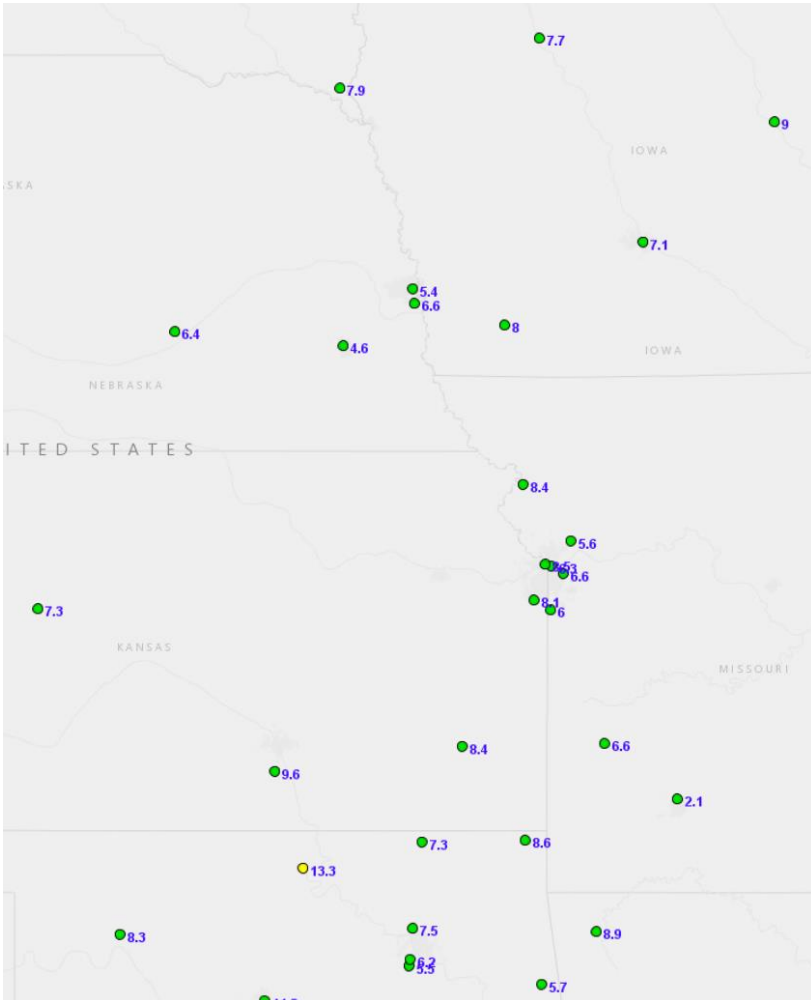


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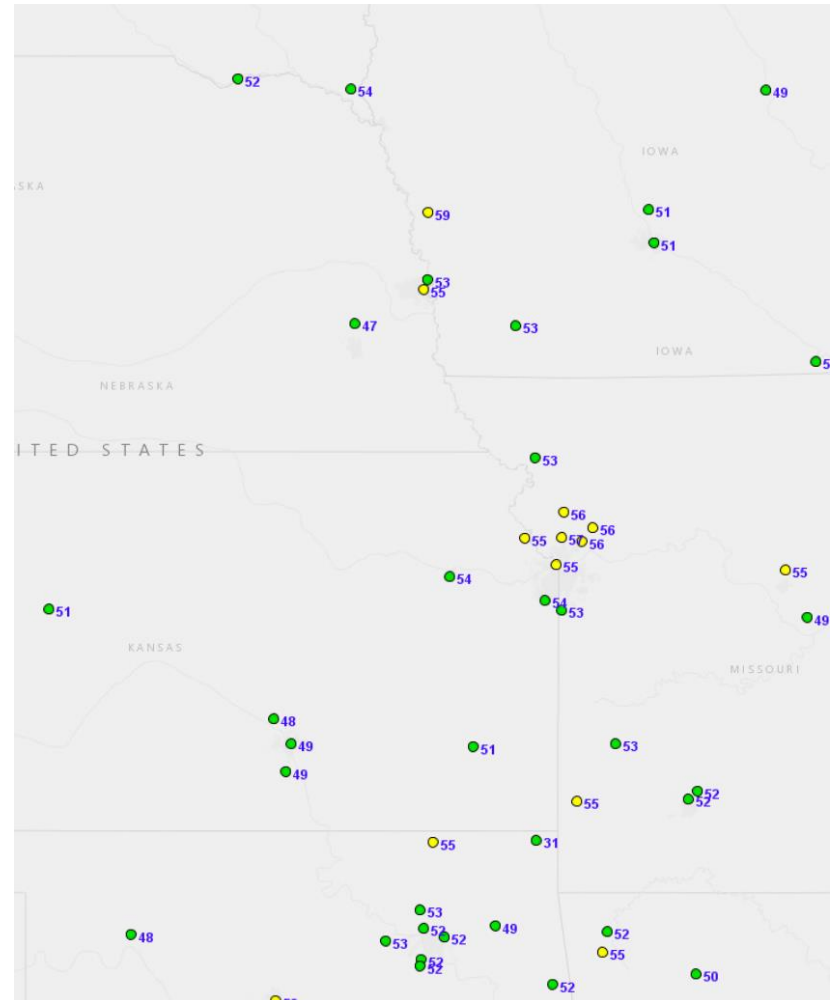


Monday, April 26, 2021

PM2.5 (24-hour average)



Ozone (8-hour average maximum)

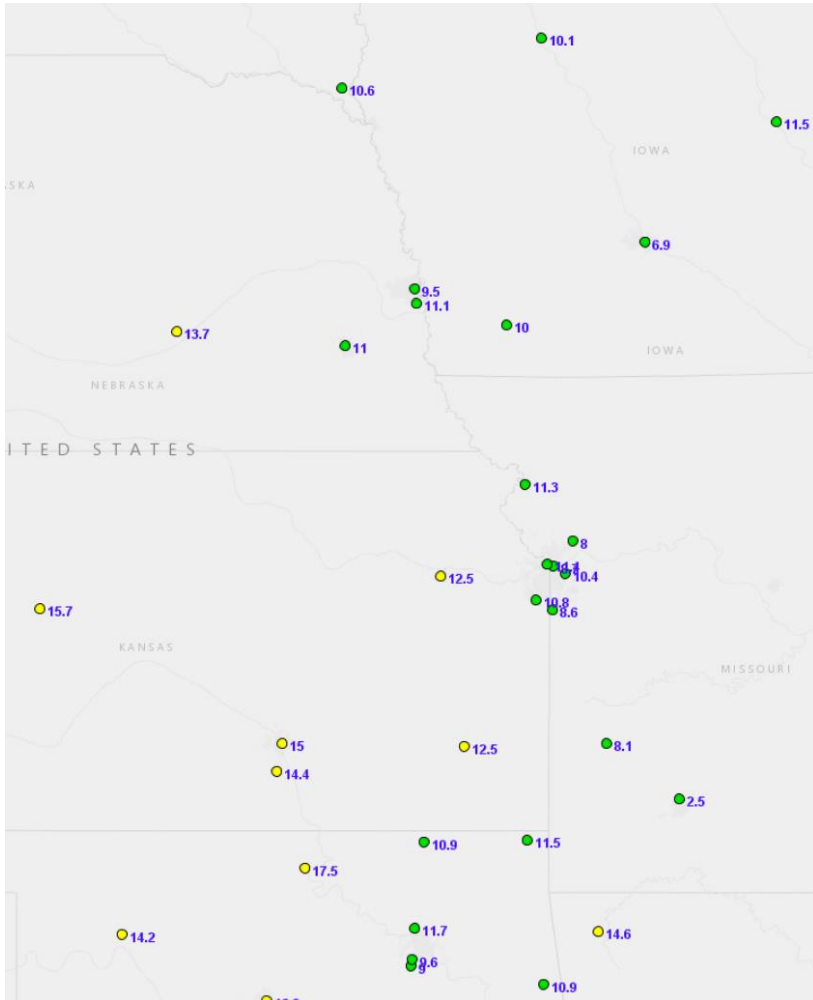


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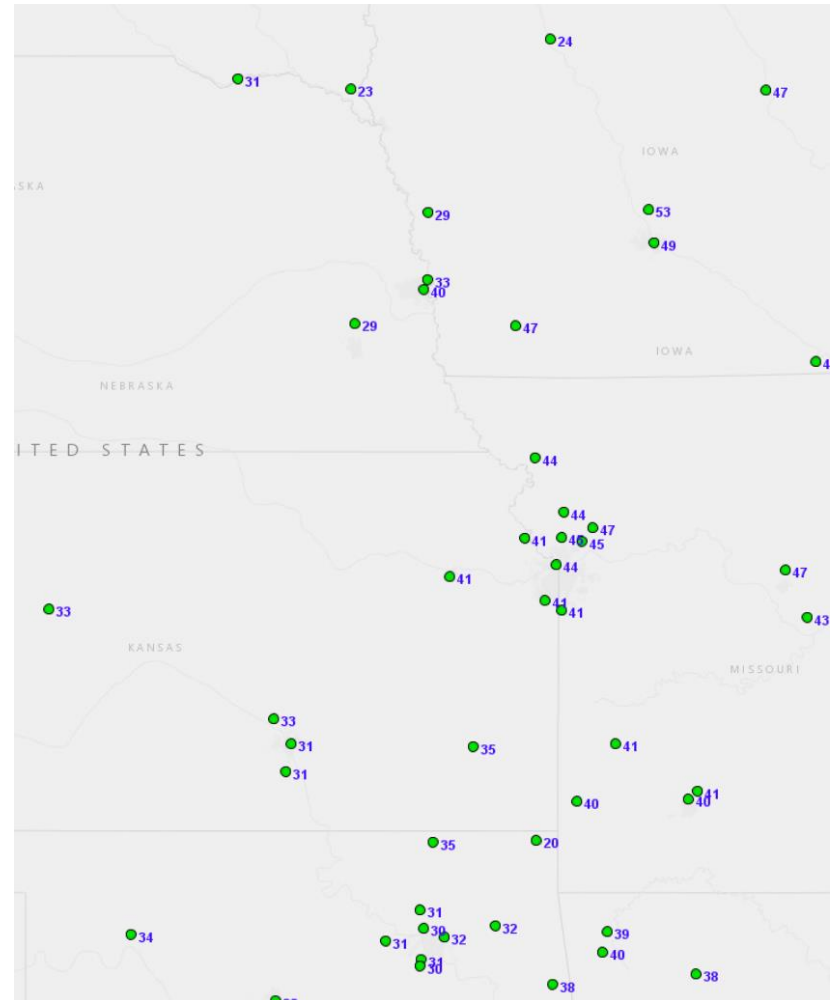


Tuesday, April 27, 2021

PM2.5 (24-hour average)



Ozone (8-hour average maximum)

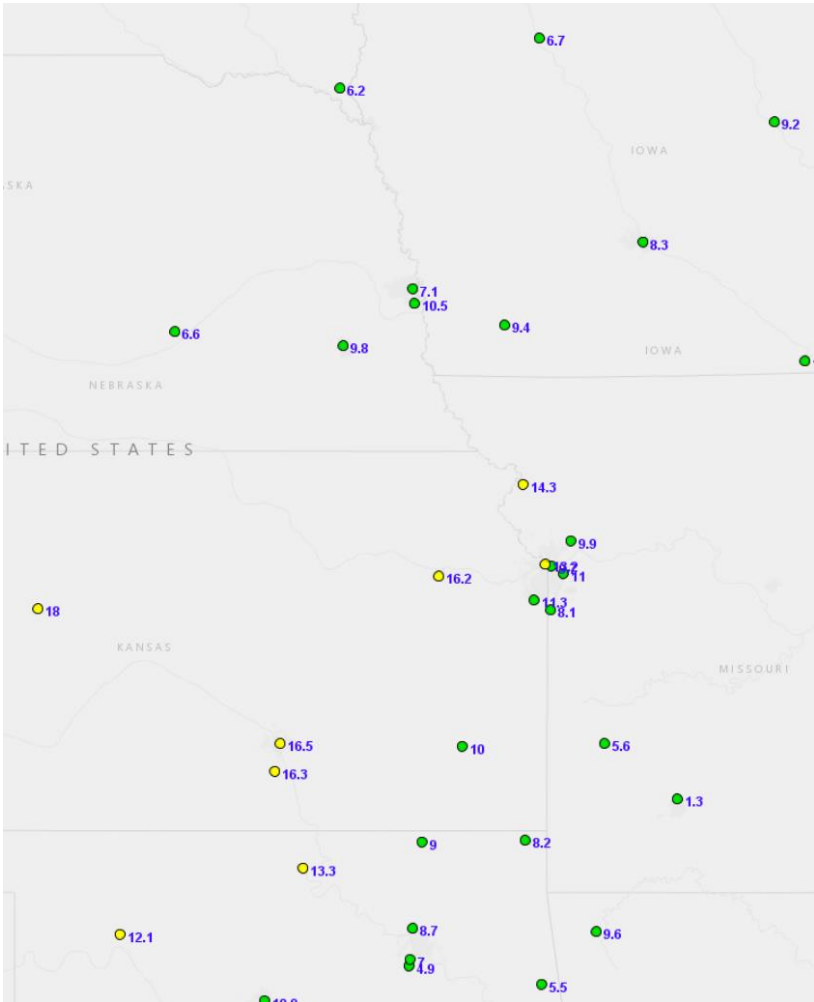


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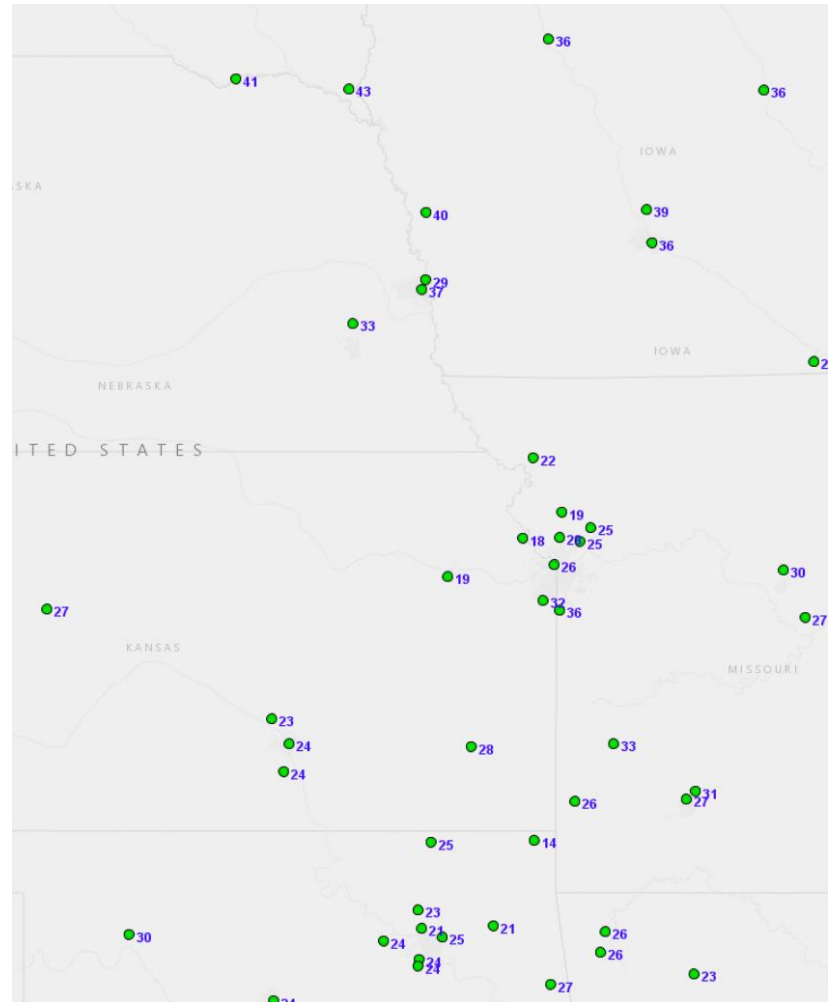


Wednesday, April 28, 2021

PM2.5 (24-hour average)

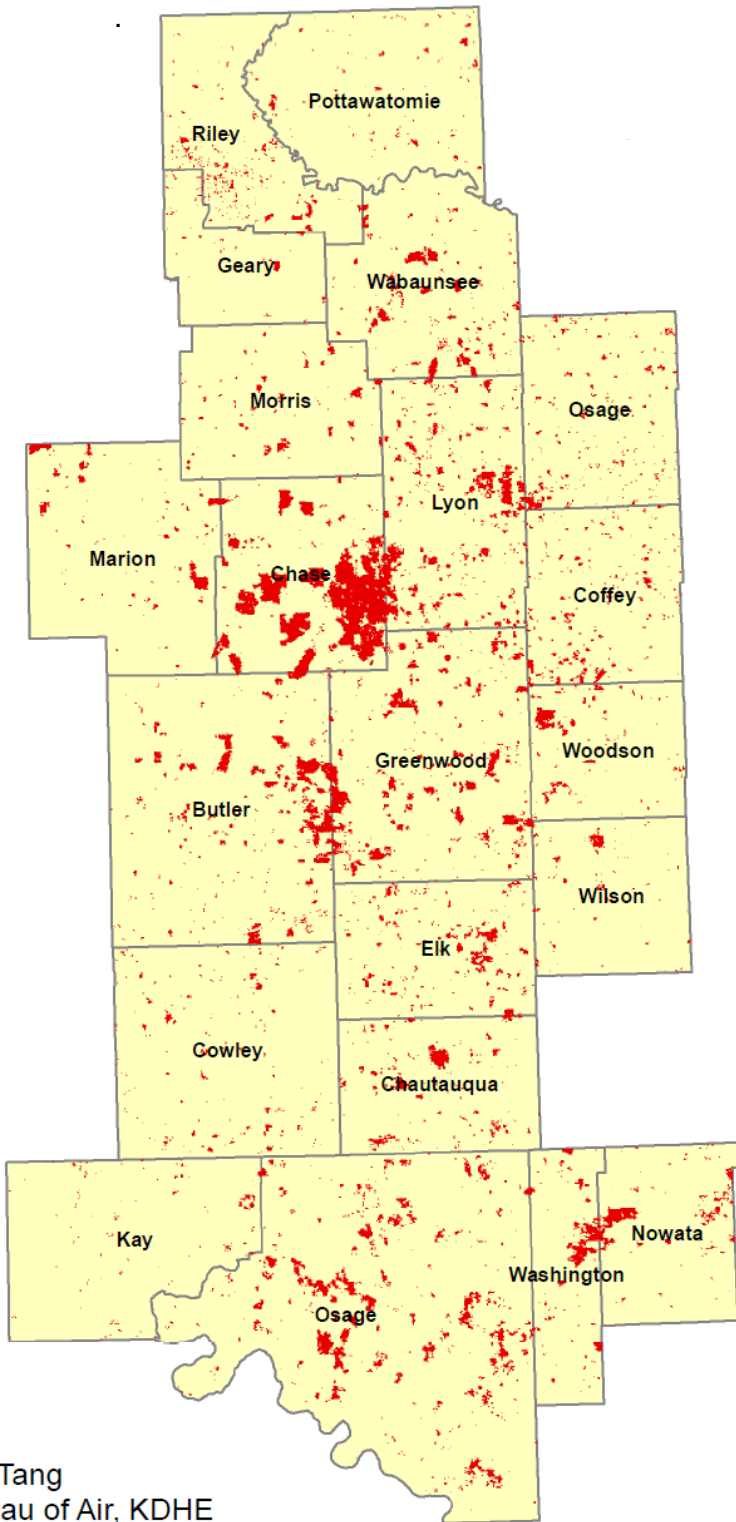


Ozone (8-hour average maximum)





Flint Hills Acreage Burned (February 23 – April 1, 2021)



<u>Counties</u>	<u>Acres Burned</u>
Butler	50,240
Chase	117,717
Chautauqua	17,437
Coffey	16,572
Cowley	19,734
Elk	21,112
Geary	3,290
Greenwood	55,600
Lyon	49,206
Marion	15,182
Morris	11,213
Osage (KS)	14,085
Pottawatomie	7,074
Riley	12,711
Wabaunsee	25,159
Wilson	6,626
Woodson	12,170
Nowata (OK)	15,614
Osage (OK)	73,315
Washington (OK)	15,800
Kay (OK)	4,803
Total	555,660
* Denotes county was partly or completely covered by clouds during latest analysis.	

Yao Tang
Bureau of Air, KDHE



Fires and Smoke

Minimal fire activity was seen last Friday (April 23). Clear skies and lighter winds led to Saturday (April 24) and Sunday (April 25) being the busiest days in the prior week for fire activity. Moderate smoke impacts were seen throughout the eastern half of Kansas, parts of northern Oklahoma, and northwest Missouri during this period.

Breezy conditions limited fire activity on Monday (April 26) with the large smoke plume analyzed being from a wildfire near the Cedar Bluff Reservoir. The continued breezy conditions and areas of light rain on Tuesday (April 27) led to minimal fire activity locally. The large smoke plume analyzed over the region was due to a new wildfire start in central New Mexico, the Three Rivers Fire.

Rain showers and thunderstorms across the region on Wednesday (April 28) alongside the cloudy skies led to no fires or smoke being analyzed. A return to warm, dry, and clear conditions for Thursday (April 29) led to a return for some prescribed fire activity across the region.

KSFIRE.ORG

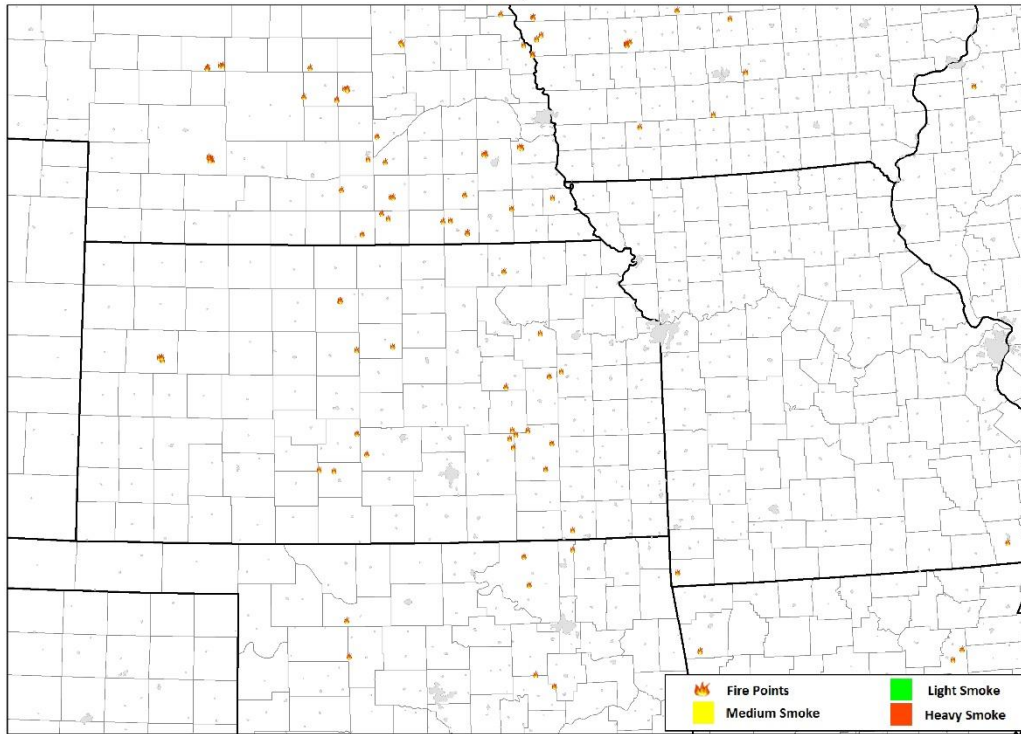


This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications, a modeling tool and other links to guide people looking for information on smoke management. The development of the Flint Hills Smoke Management Plan is an attempt to balance the need for prescribed fire in the Flint Hills with the need for clean air in downwind areas.

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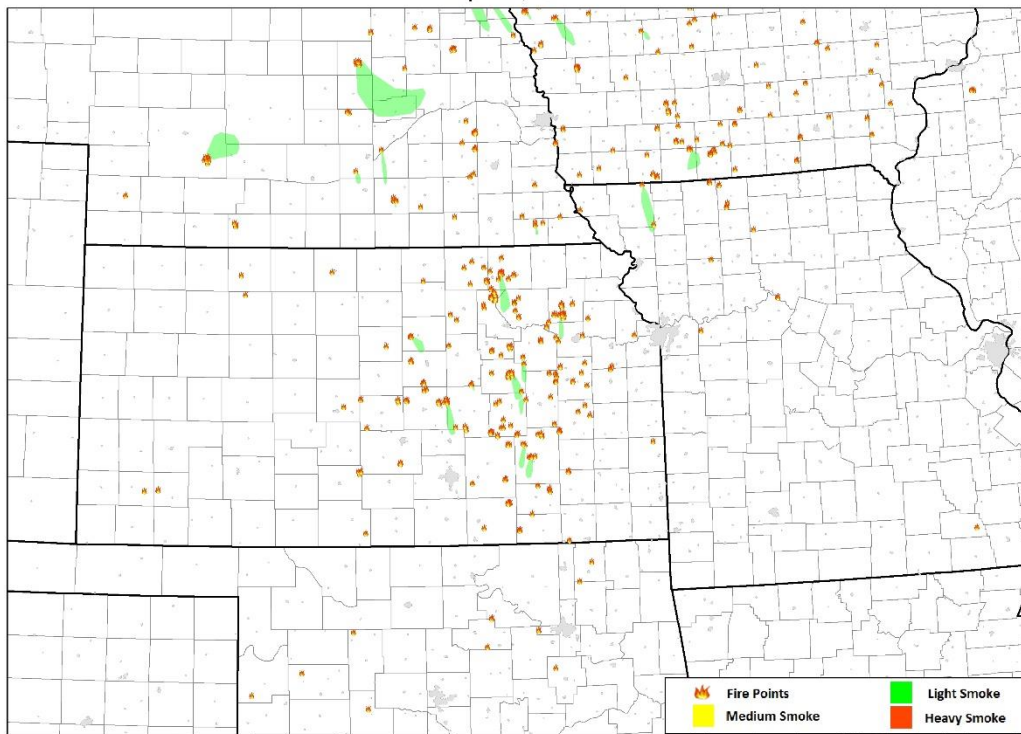
Satellite Fire & Smoke Analysis April 23, 2021



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

Satellite Fire & Smoke Analysis April 24, 2021



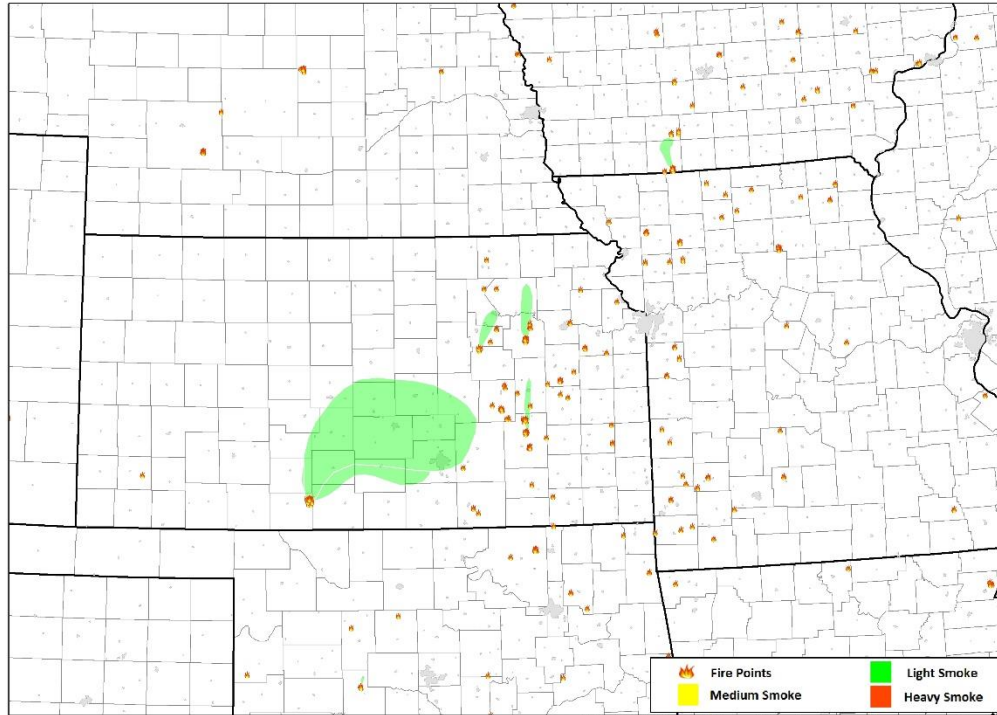
Map: Jayson Prentice, KDHE Bureau of Air

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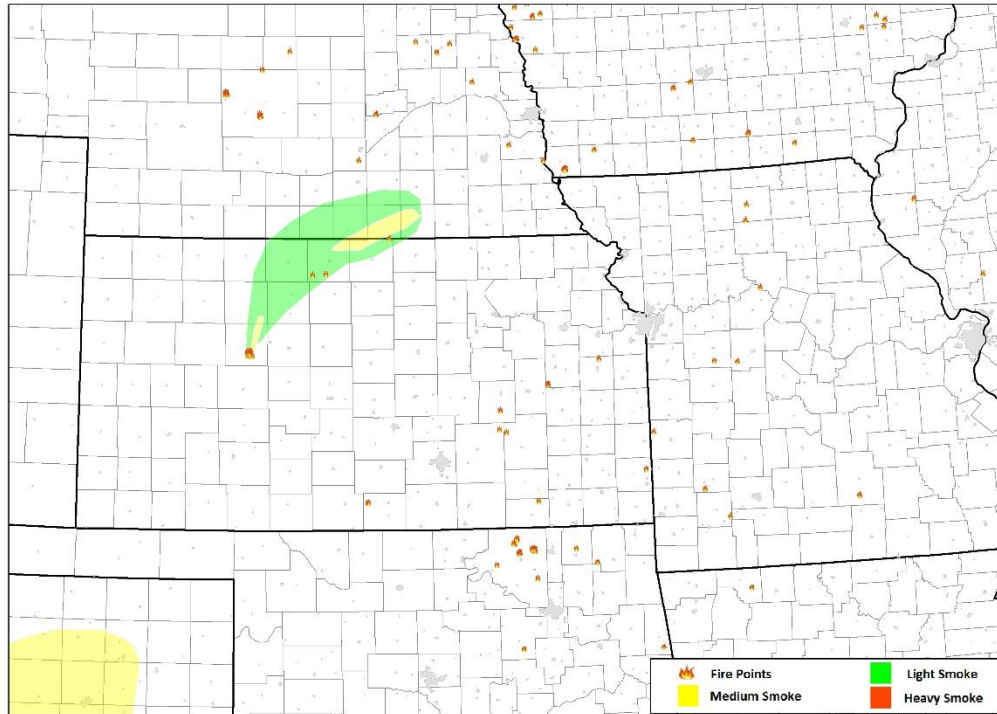
Satellite Fire & Smoke Analysis April 25, 2021



Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

Satellite Fire & Smoke Analysis April 26, 2021



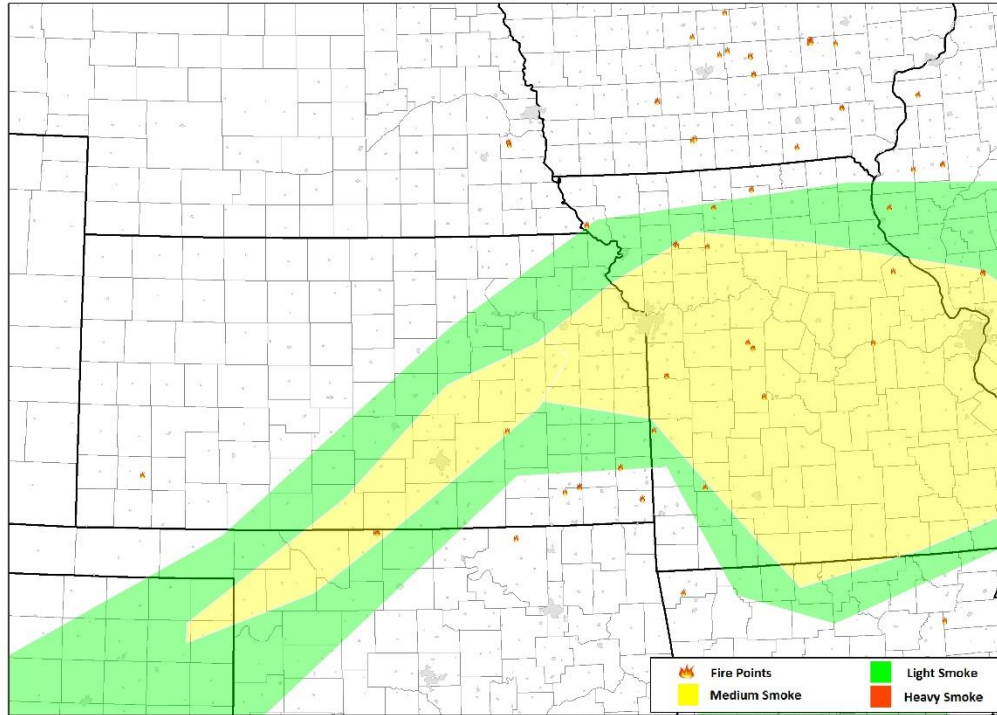
Map: Jayson Prentice, KDHE Bureau of Air

Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product

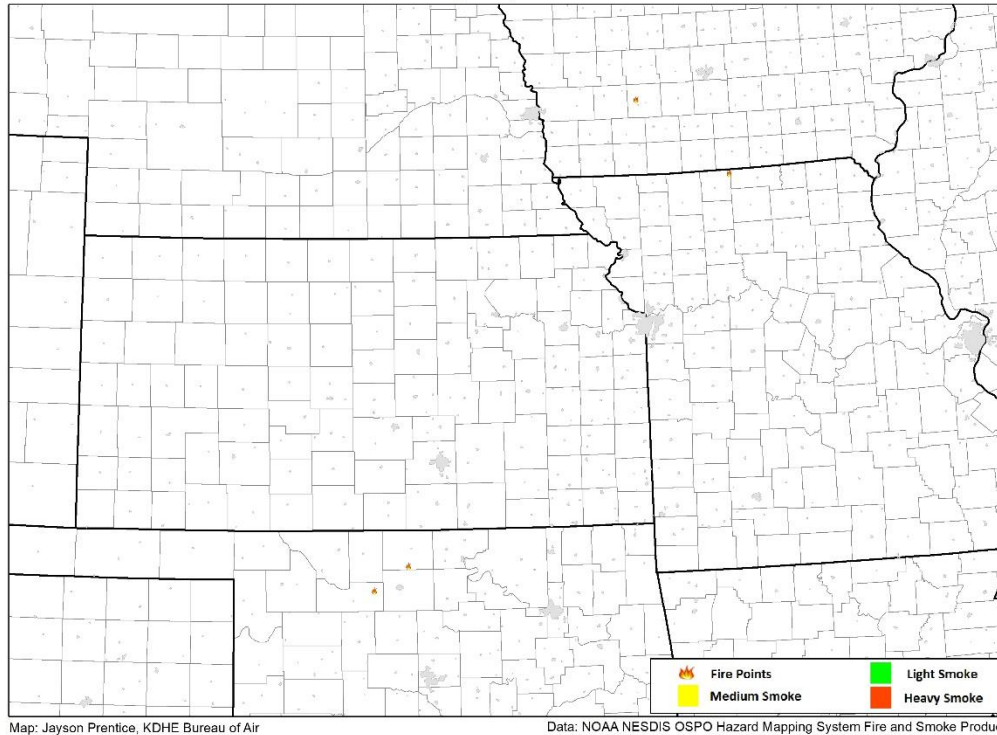
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Satellite Fire & Smoke Analysis April 27, 2021



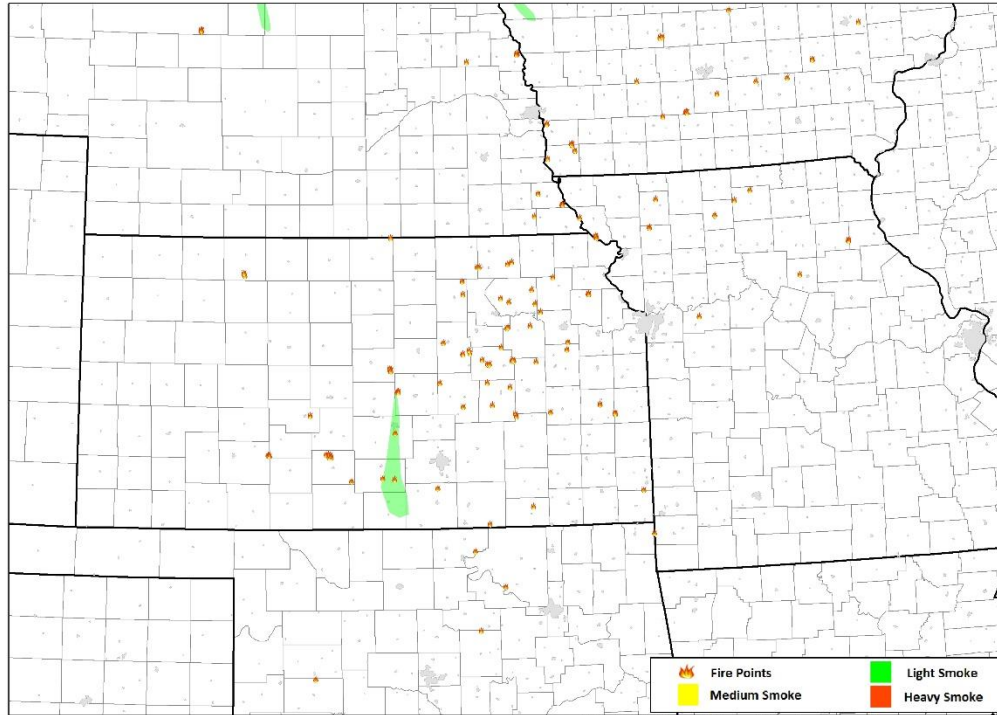
Satellite Fire & Smoke Analysis April 28, 2021



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Satellite Fire & Smoke Analysis April 29, 2021



Map: Jayson Prentice, KDHE Bureau of Air

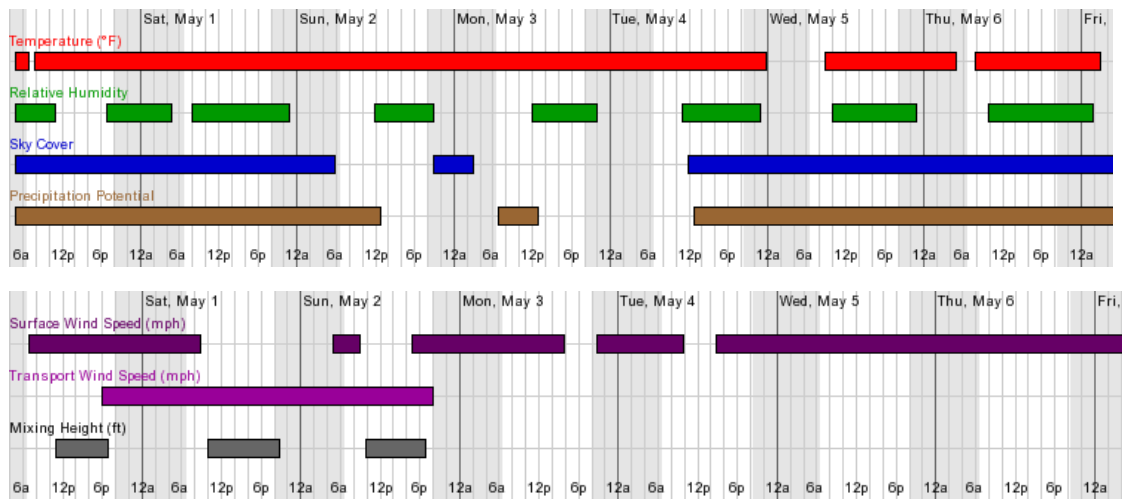
Data: NOAA NESDIS OSPO Hazard Mapping System Fire and Smoke Product



Upcoming Look at Fires and Smoke

Green vegetation has become dominant for most areas throughout the region and prescribed fire activity has been reduced dramatically. Dry conditions and lighter winds will still be conducive for any prescribed fire activity for Friday (Apr 30). Winds become breezy on Saturday (May 1) which will increase fire danger. Periods of rain showers are expected Sunday (May 2) and again late Monday (May 3) into Tuesday (May 4) which will inhibit any fire activity. Dry conditions return alongside reasonable wind speeds and seasonable temperatures for Wednesday (May 5) and Thursday (May 6) to finish up the first week of May.

Ideal Weather Conditions for Prescribed Burning



Current National Weather Service forecast for the approximate center of the Flint Hills showing when conditions may be most favorable for wildland burning as described at KSFire.org. Conditions are most favorable when each parameter has a colored boxplot displayed.

*Note: Forecast for mixing height and transport winds are only out to 2 days.
Forecast valid: 7am April 30, 2021.*

For more information, contact:

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