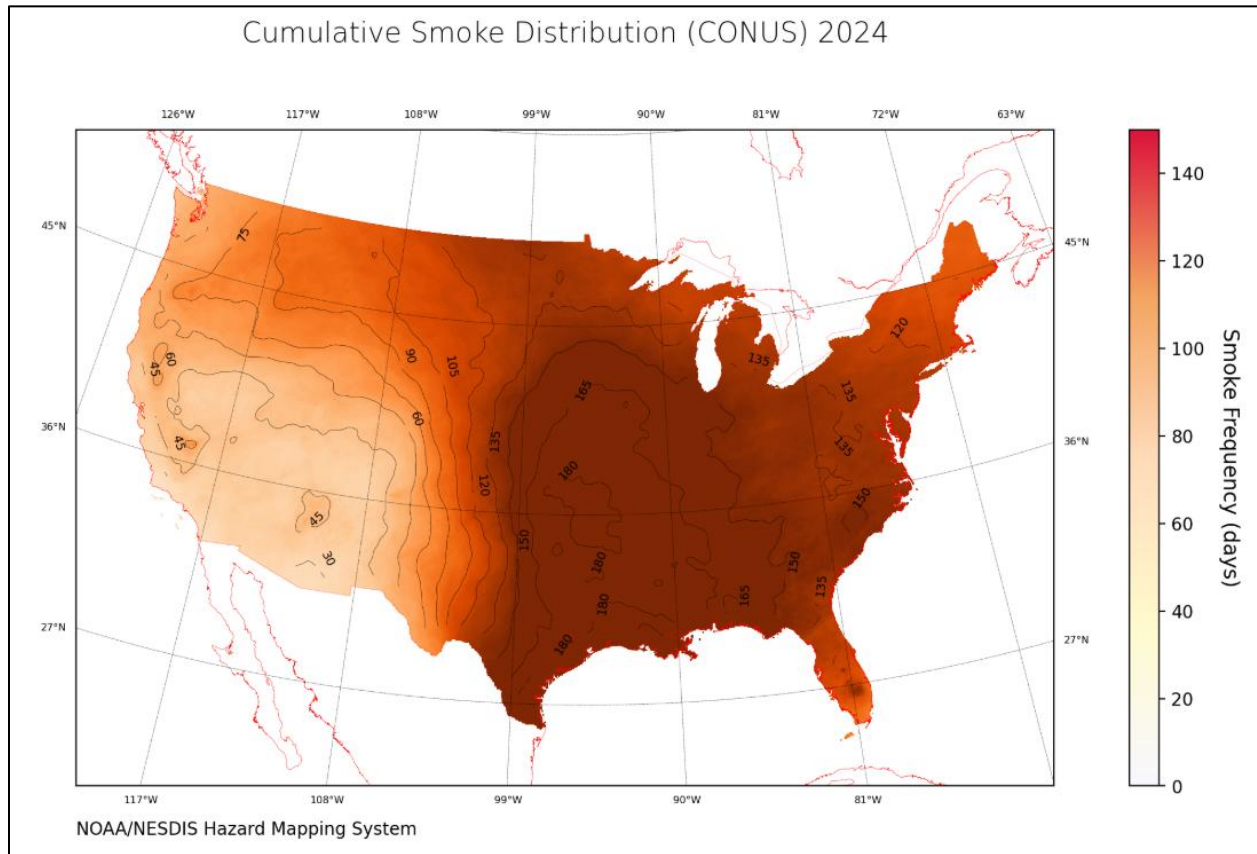


2024

**Major 2024 Wildfires/Incidents:**

Betty's Way – Nebraska

Smokehouse Creek – Texas

Catesby – Oklahoma

Fort Nelson – British Columbia

Fort McMurray – British Columbia

South Fork – New Mexico

Jasper – Alberta

Park Fire – California

Wapiti, Paddock and Middle Fork – Idaho

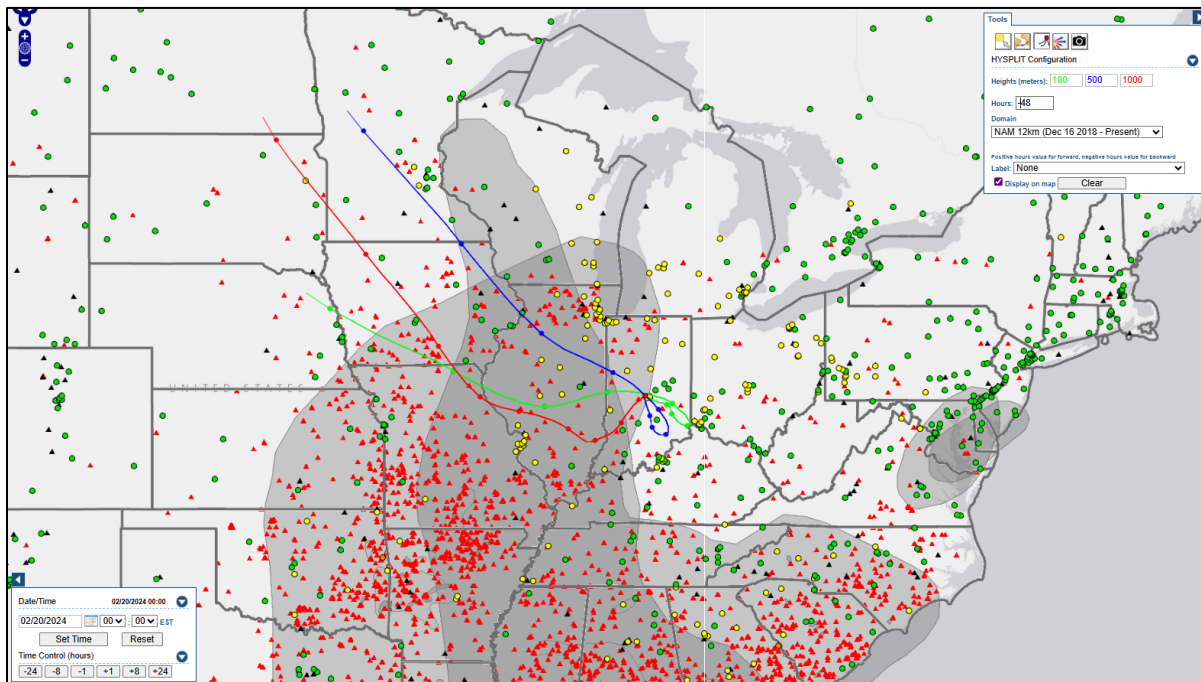
Pack Trail and Elk - Wyoming

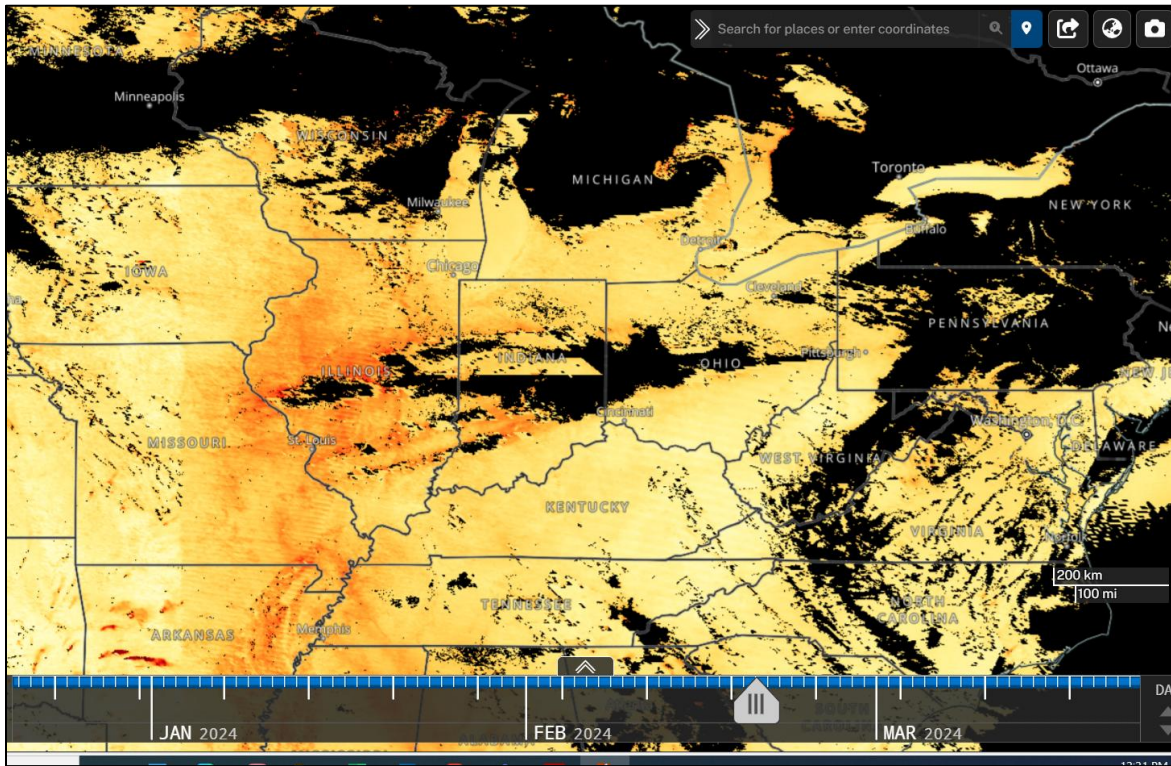
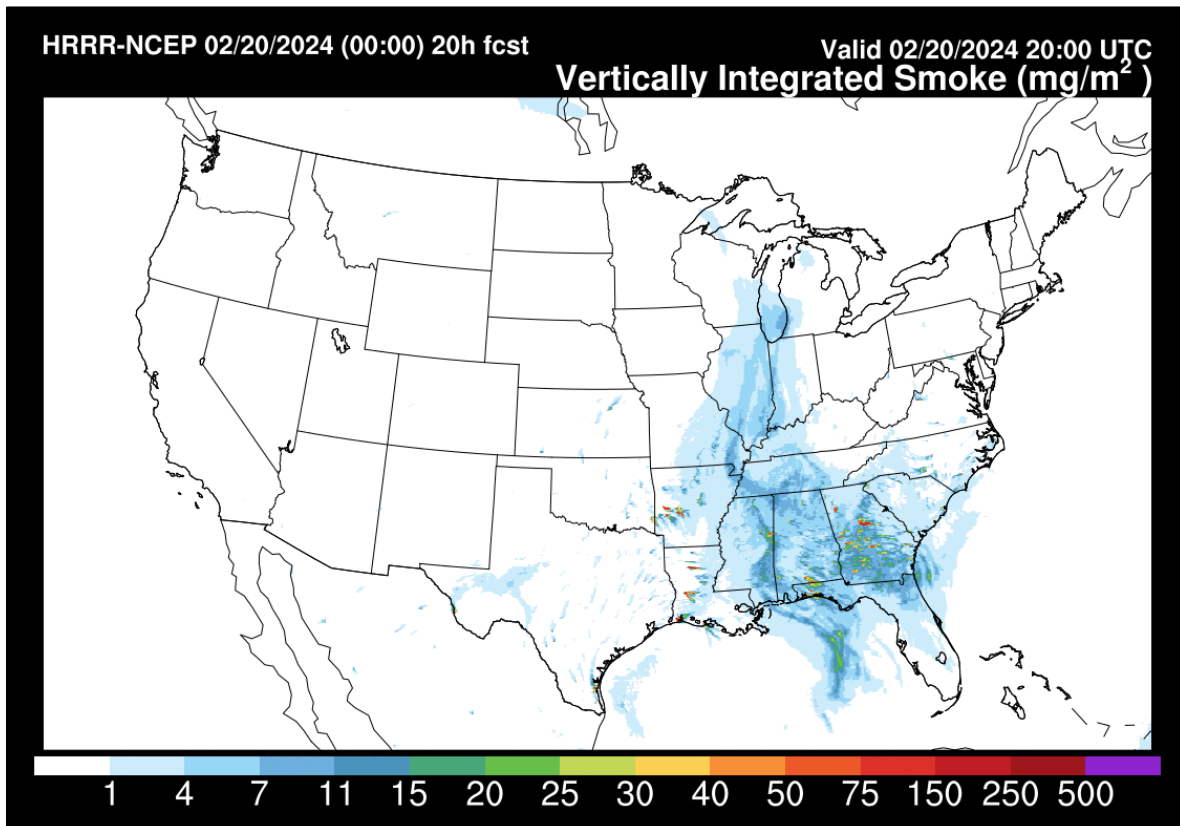
February 20, 2024

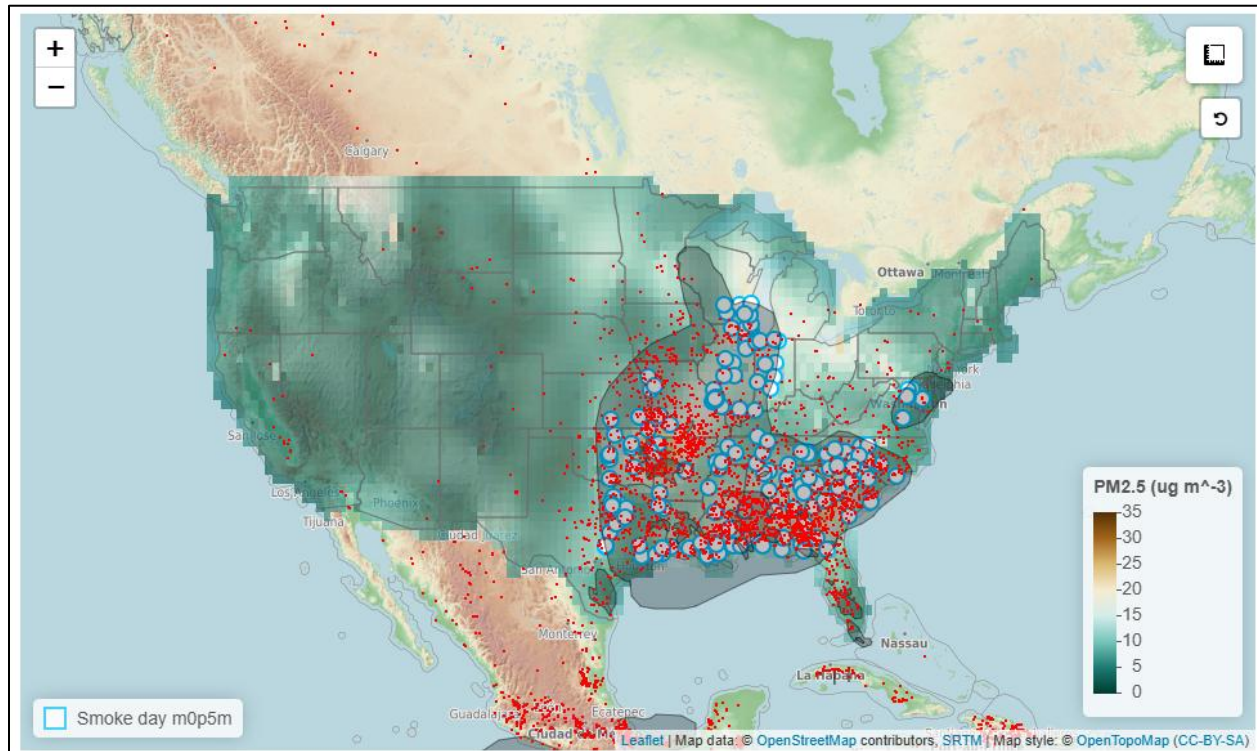
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Kokomo - E. Vaile Ave	180670004	2/20/2024	14.8	14.7
Indianapolis - W. 18th St.	180970081	2/20/2024	30.9	20.9
Lafayette - Greenbush St	181570008	2/20/2024	15.8	15.1

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – February 20, 2024



Satellite Imagery with MAIAC AOD – February 20, 2024**HRRR Smoke - Vertically Integrated Smoke – February 20, 2024**

GAM PMO3 Smoke Output – February 20, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Monday, February 19, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0119Z February 20, 2024

SMOKE:

Southeastern/South-Central U.S./Gulf of Mexico...

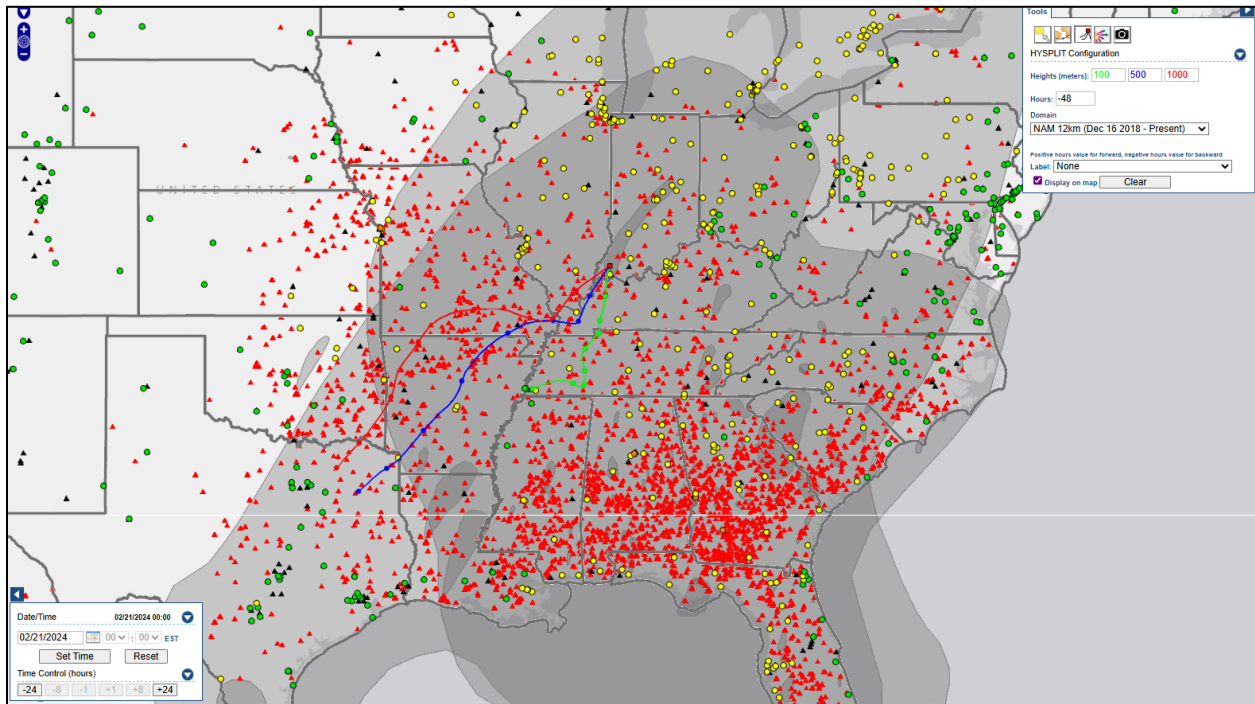
An area of mostly thin density smoke with some moderate plumes of smoke attributed seasonal fire activity from central Texas, Oklahoma, Arkansas continuing east through the southeastern United States. The smoke was visible extending from central Texas eastward through the southeastern U.S. into southern North Carolina. The smoke also extended south over the northern Gulf of Mexico. Moderate density smoke plumes were seen mostly over Arkansas, Louisiana, Alabama, and Georgia. The denser smoke plumes were generally moving north in Arkansas and Louisiana and south/southeast along the Gulf States.

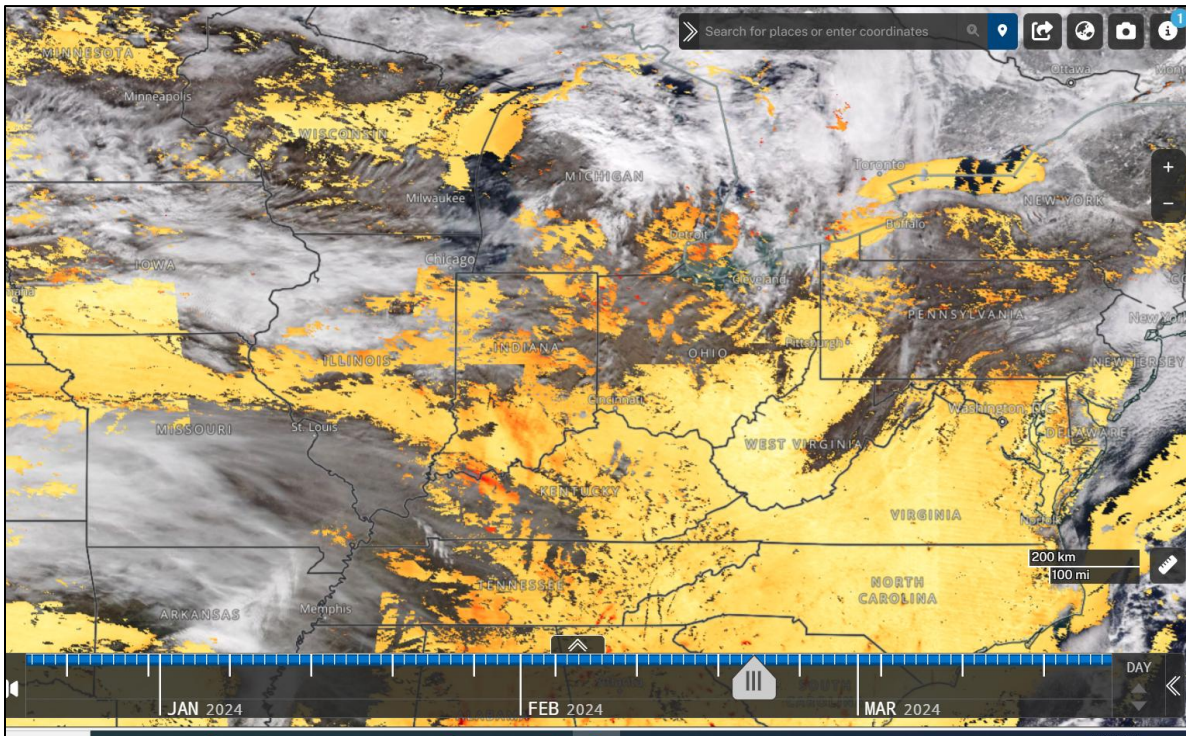
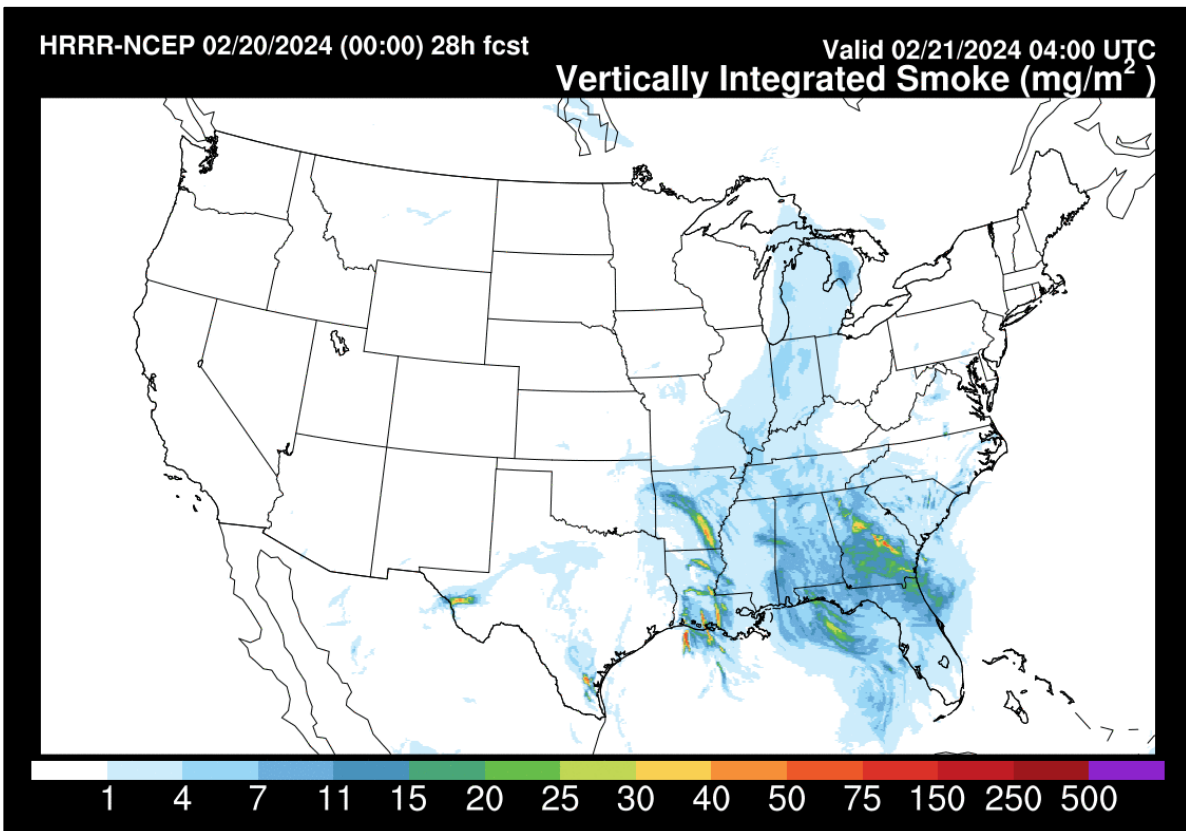
February 21, 2024

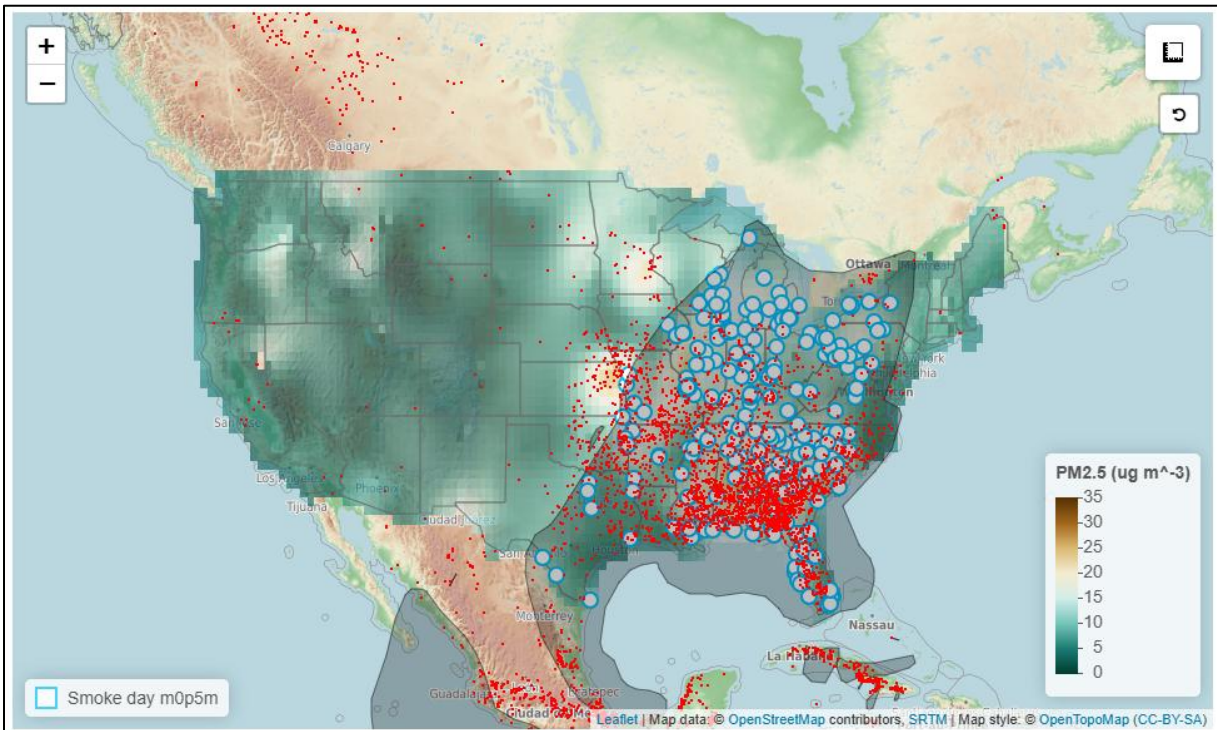
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Jasper - Post Office	180372001	2/21/2024	15.8	15.7
Elkhart - Prairie St	180390008	2/21/2024	17.9	16.3
Carmel - Hazel Dell Parkway	180570008	2/21/2024	21.3	16.5
Kokomo - E. Vaile Ave	180670004	2/21/2024	17.3	14.7
Hammond-167th St	180890036	2/21/2024	16.3	16.3
Indianapolis- I-70 E	180970087	2/21/2024	21.4	20.5
South Bend - Shields Dr.	181410015	2/21/2024	18.6	16.9
Evansville - Buena Vista	181630021	2/21/2024	16.5	15.1
Terre Haute - Lafayette Ave	181670018	2/21/2024	20.2	18.8

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – February 21, 2024



Satellite Imagery with MAIAC AOD – February 21, 2024**HRRR Smoke - Vertically Integrated Smoke – February 21, 2024**

GAM PMO3 Smoke Output – February 21, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Tuesday, February 20, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0216Z February 21, 2024

SMOKE:

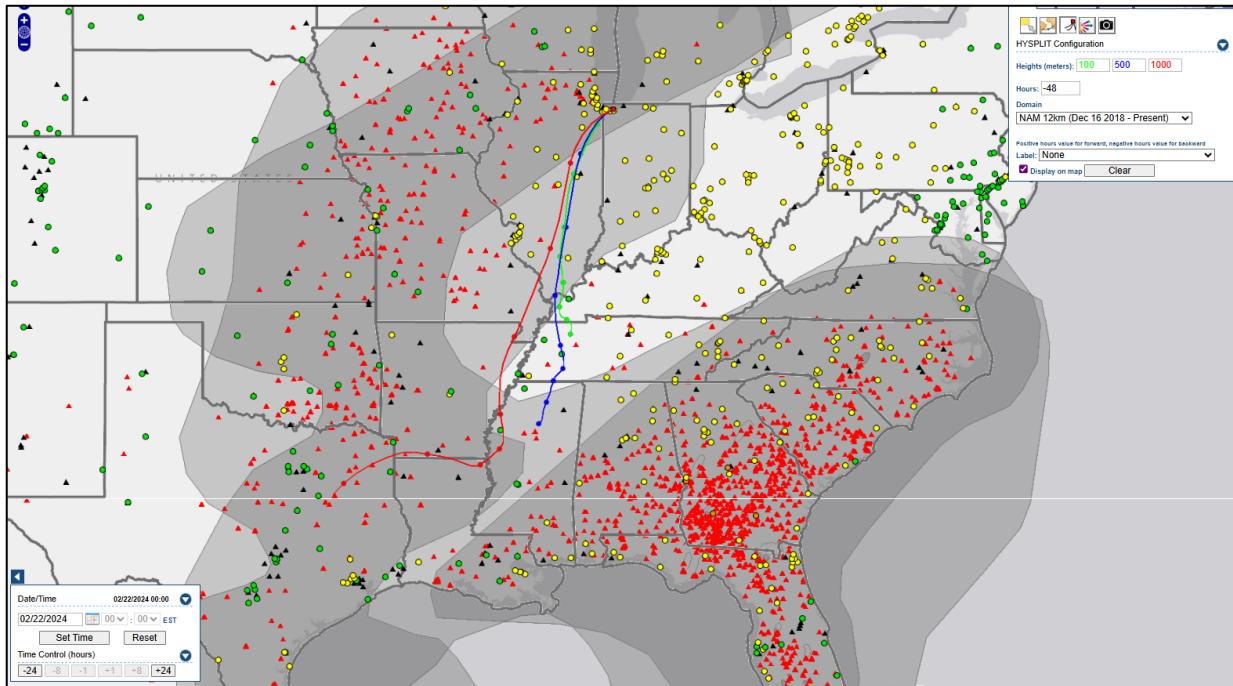
Central U.S./Southeastern U.S./Northern Gulf of Mexico...

An area of thin density smoke with large areas of moderate to even dense smoke attributed heavy seasonal fire activity from central Texas, Oklahoma, Arkansas continuing north into the Midwest U.S. and east through the southeastern United States. The smoke was visible extending from southern Texas north all the way to Lake Michigan and eastward through the southeastern U.S. over North Carolina and just off the coastal Atlantic. The smoke also extended south over the northern Gulf of Mexico. Moderate to even dense smoke was prevalent over the Gulf States, eastern Oklahoma, Arkansas, and southern Missouri.

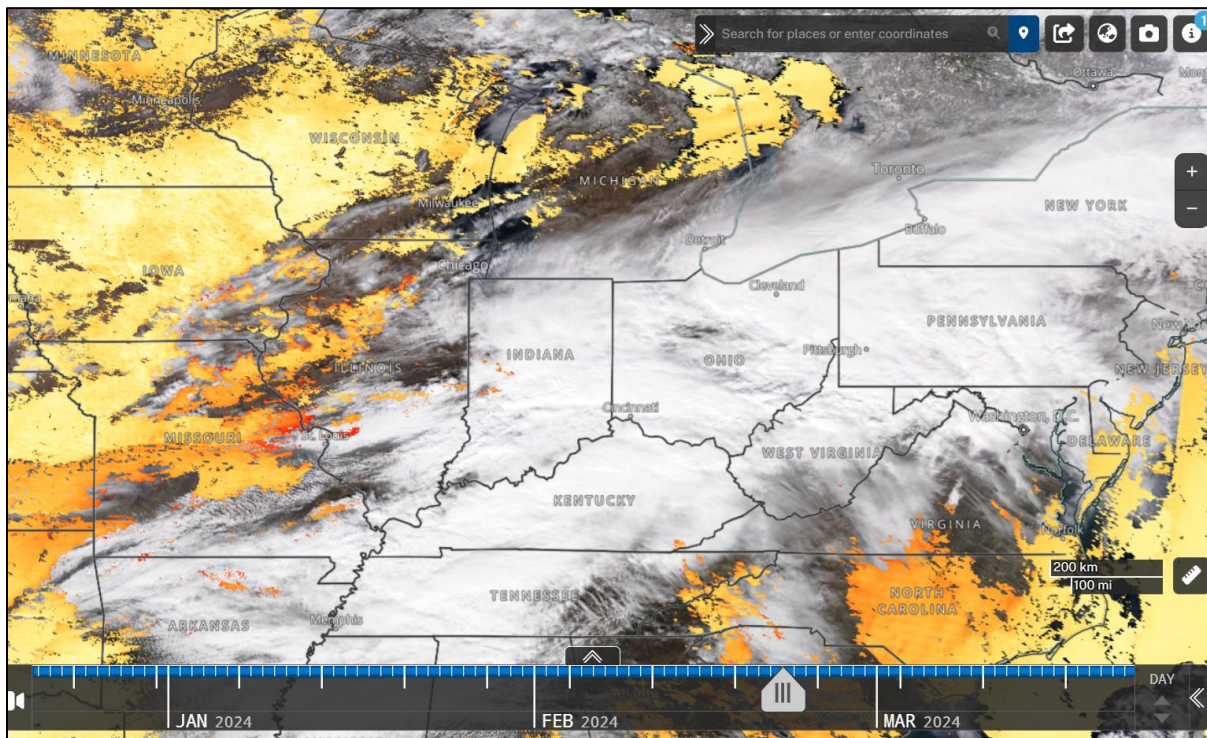
February 22, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

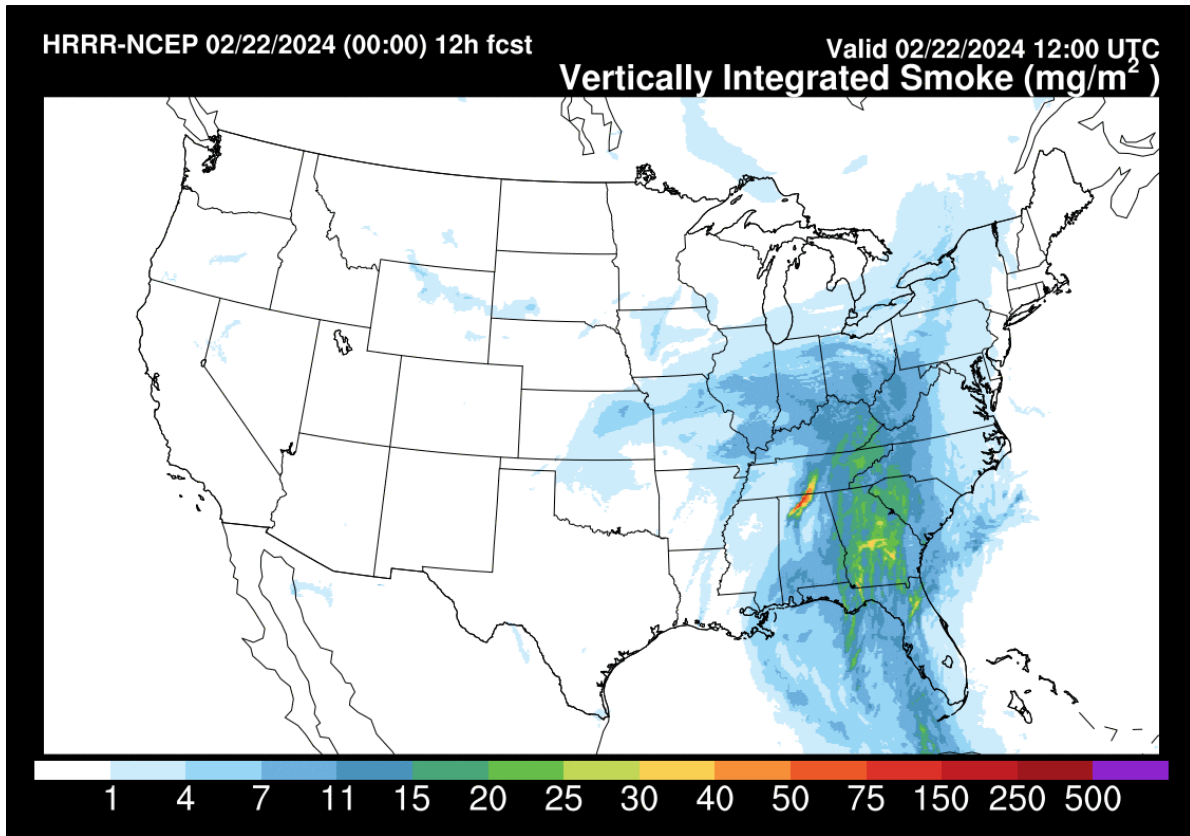
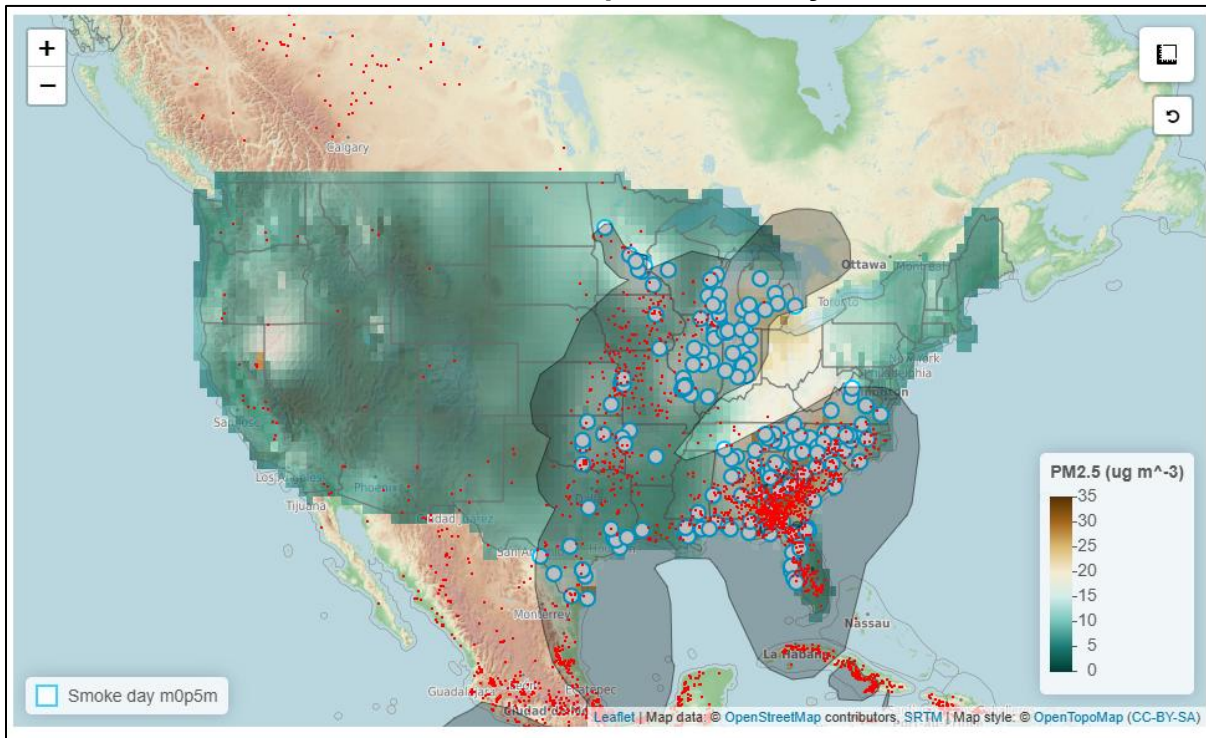
Monitor name	AQS	Date	Daily average (µg/m³)	Tier 2 Threshold (µg/m³)
Columbus - Rocky Ford Drive	180050008	2/22/2024	16.2	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	2/22/2024	21.6	17.0
Muncie - Central HS	180350006	2/22/2024	21.0	13.2
Fishers	180570007	2/22/2024	14.6	13.8
Mechanicsburg	180650003	2/22/2024	22.2	15.5
Kokomo - E. Vaile Ave	180670004	2/22/2024	15.8	14.7
East Chicago - Marina	180890034	2/22/2024	30.4	18
Hammond-167th St	180890036	2/22/2024	23.9	16.3
Anderson - Eastside Elem	180950011	2/22/2024	18.9	15.4
Indianapolis - Washington Park	180970078	2/22/2024	19.6	17.8
Indianapolis - W. 18th St.	180970081	2/22/2024	26.3	20.9
Indianapolis- I-70 E	180970087	2/22/2024	25.1	20.5
Ogden Dunes	181270024	2/22/2024	18.4	15.3
Lafayette - Greenbush St	181570008	2/22/2024	17.4	15.1
Larwill	181830003	2/22/2024	16.8	15

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – February 22, 2024



Satellite Imagery with MAIAC AOD – February 22, 2024



HRRR Smoke - Vertically Integrated Smoke – February 22, 2024**GAM PMO3 Smoke Output – February 22, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**Wednesday, February 21, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0335Z February 22, 2024

SMOKE:

Central U.S./Southeastern U.S./Northern Gulf of Mexico...

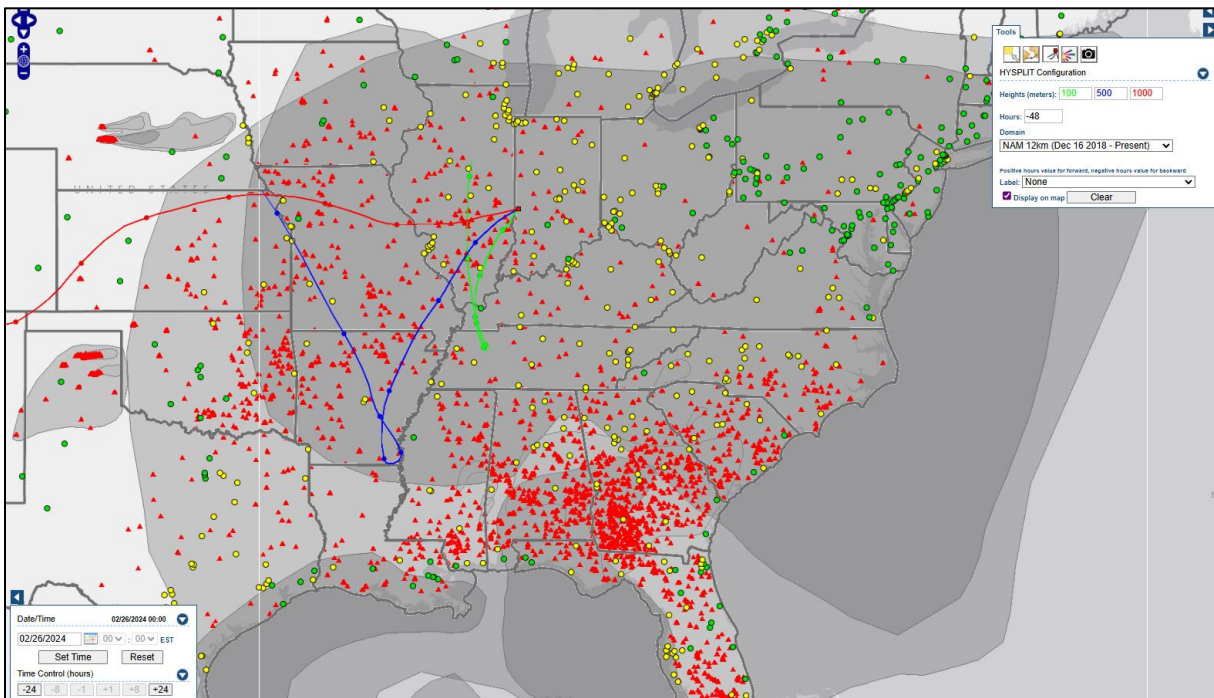
An area of thin density smoke with several areas of moderate smoke due to heavy seasonal fire activity was observed covering an area from central Texas, northeastward through Oklahoma, Arkansas and Missouri continuing north into southern Michigan and the Great Lakes. The smoke was also visible throughout the southeastern U.S into northern Virginia, extending just off the coastal Atlantic, generally moving southwestward. Moderate to even dense smoke was seen in the Gulf States, moving southwest into the northern Gulf of Mexico.

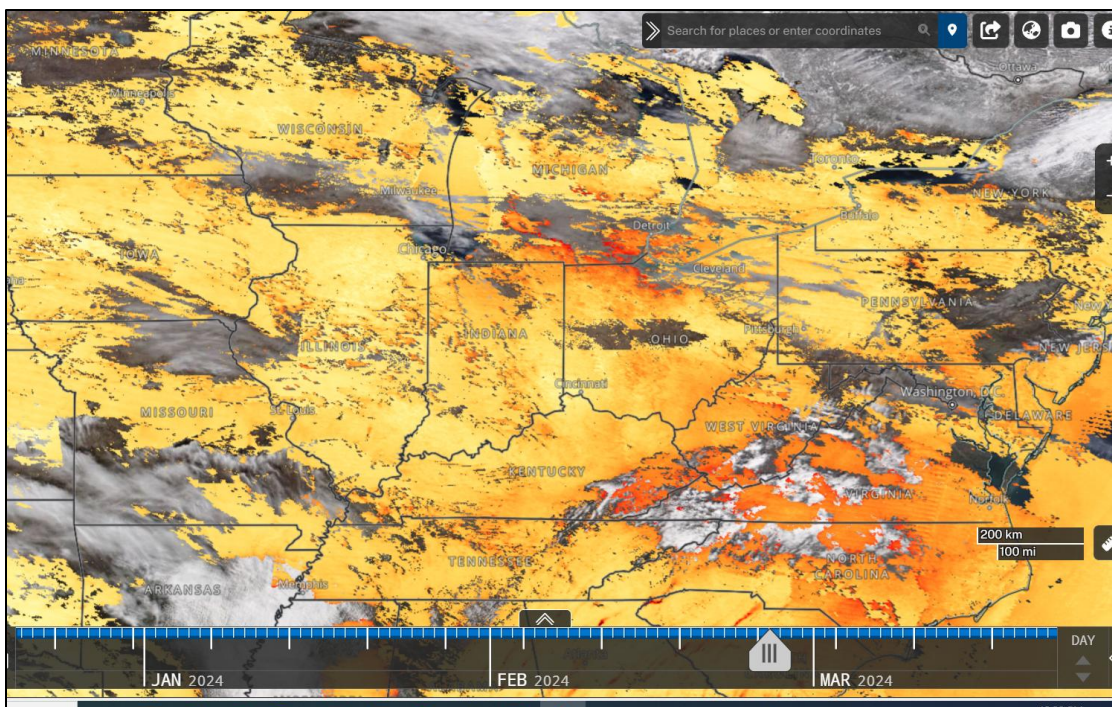
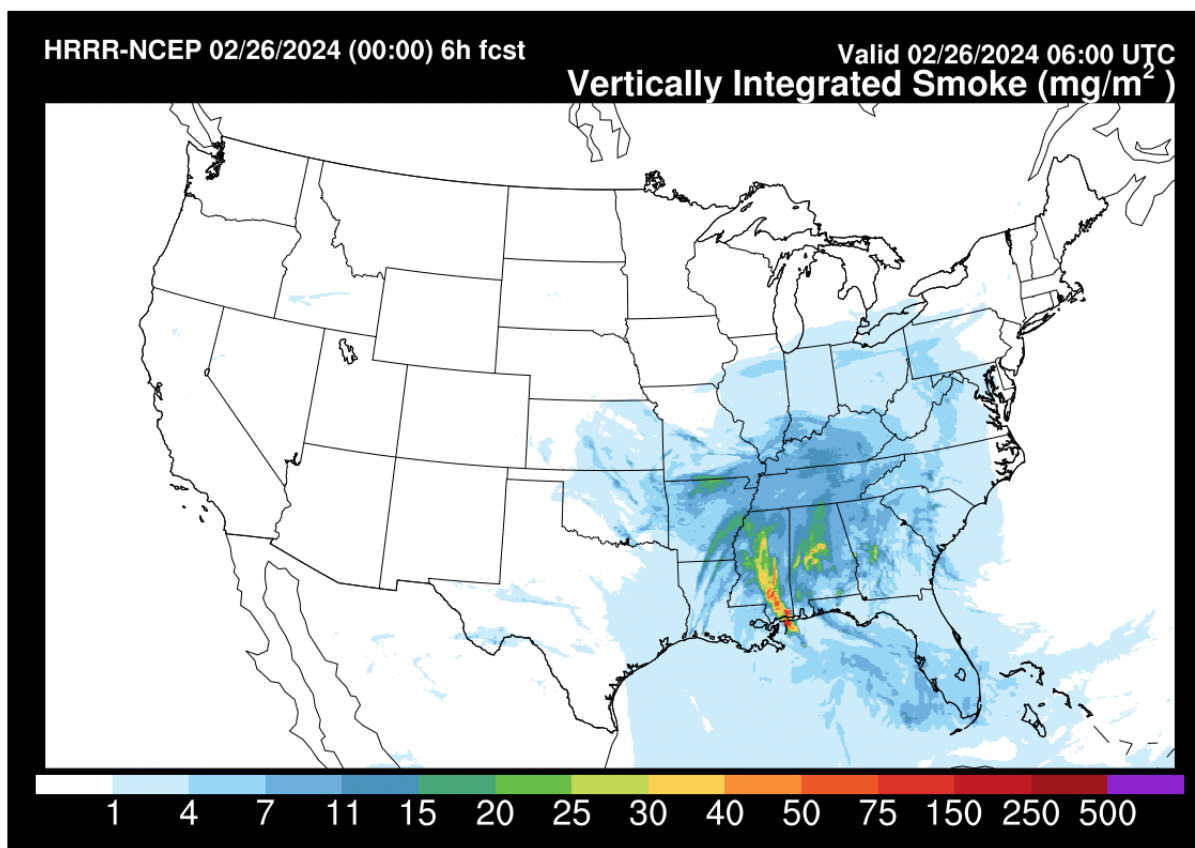
February 26, 2024

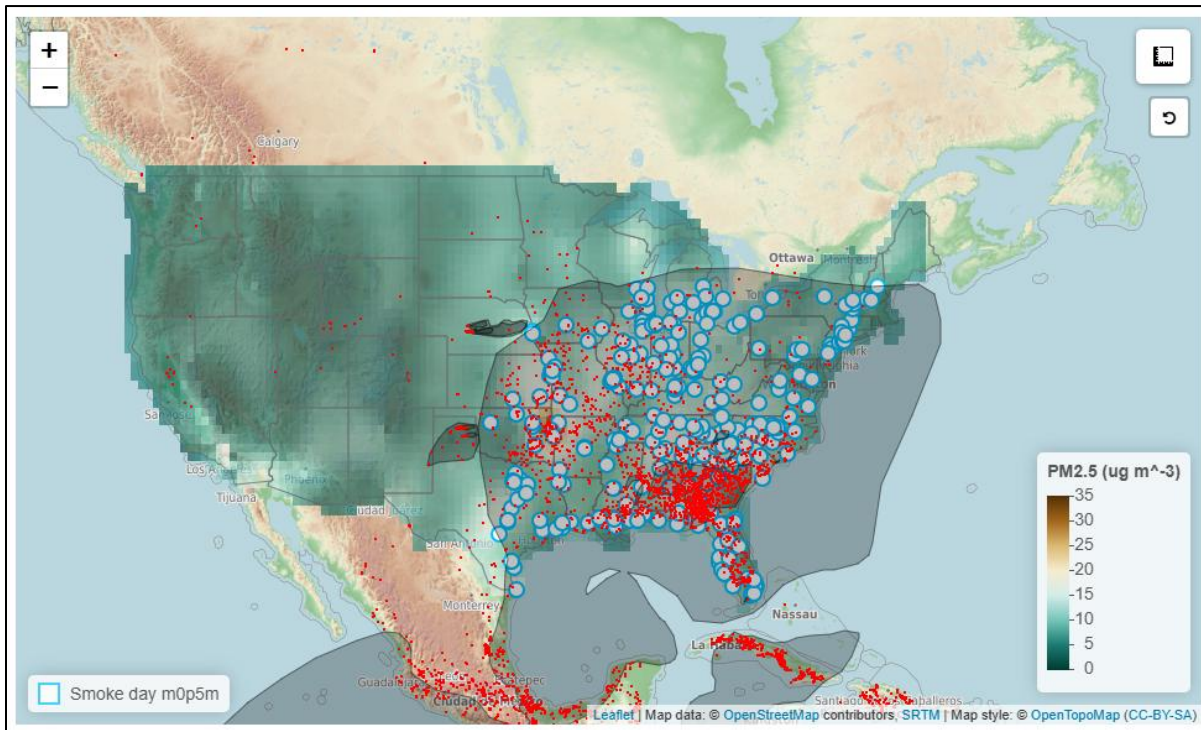
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Terre Haute - Lafayette Ave	181670018	2/26/2024	23.7	18.8

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – February 26, 2024



Satellite Imagery with MAIAC AOD – February 26, 2024**HRRR Smoke - Vertically Integrated Smoke – February 26, 2024**

GAM PMO3 Smoke Output – February 26, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Sunday, February 25, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0000Z February 26, 2024

SMOKE:

Midwest and South U.S. ...

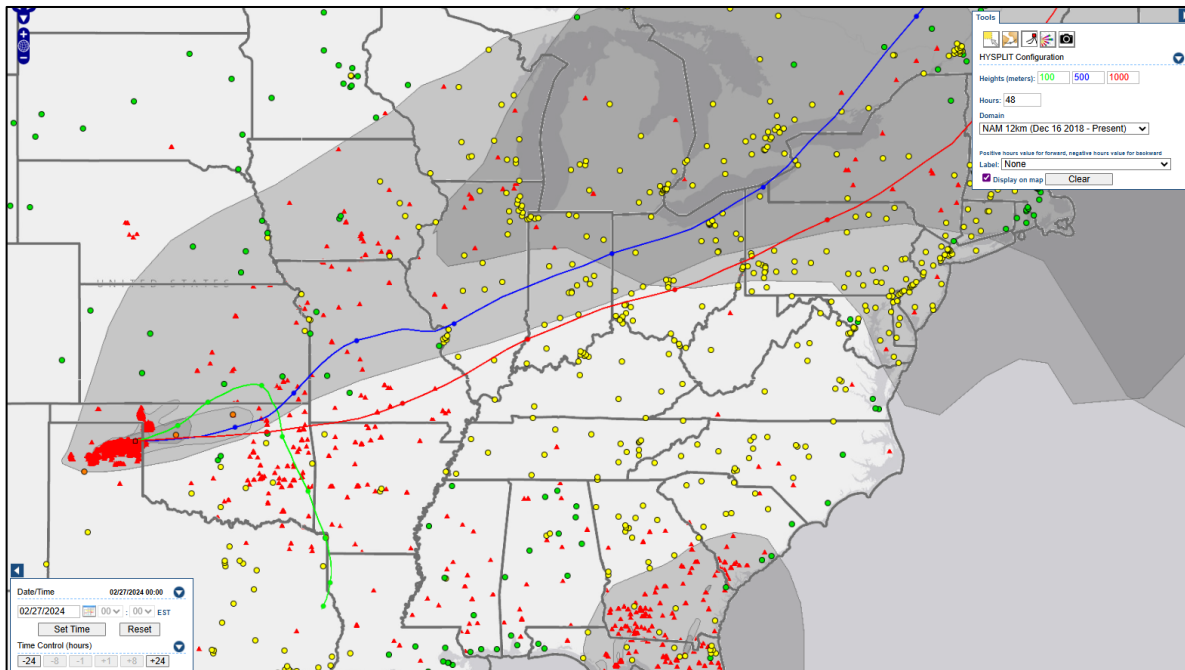
There was heavy fire activity throughout the Midwest and Southern regions of the U.S. this early afternoon and evening. There were various smoke plume densities, from light to heavy, scattered throughout these regions that were emitting mostly towards the north-northeast-east.

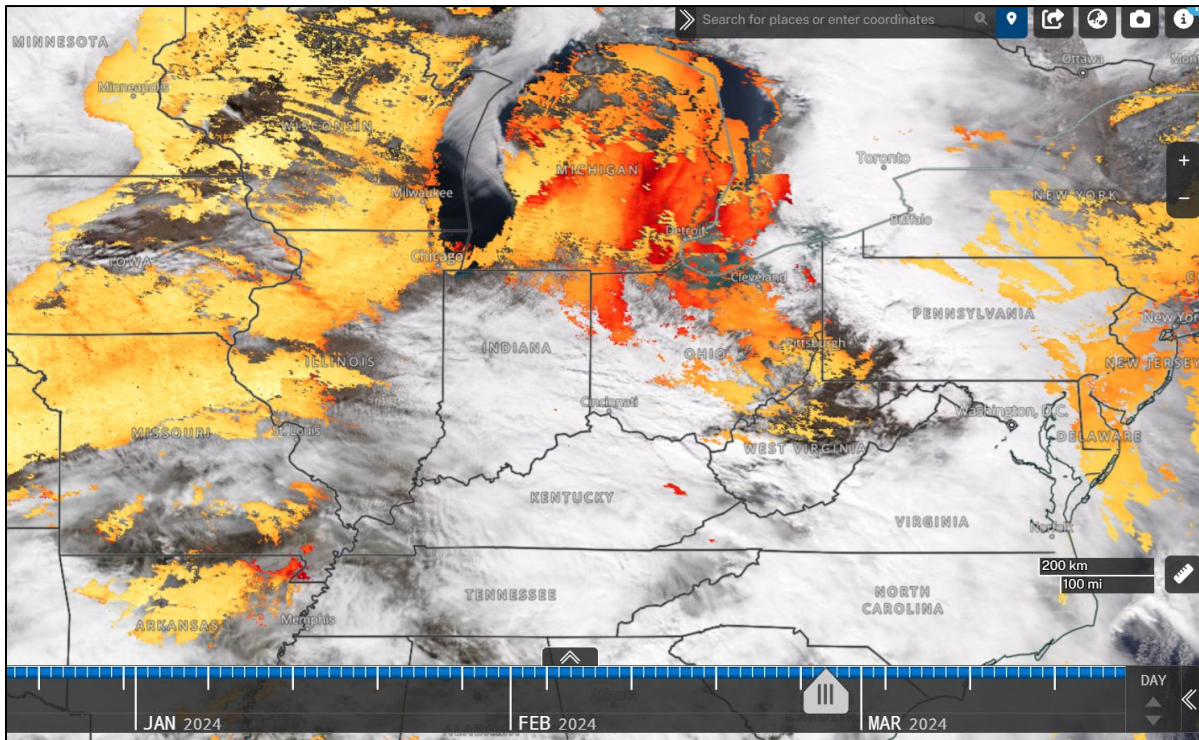
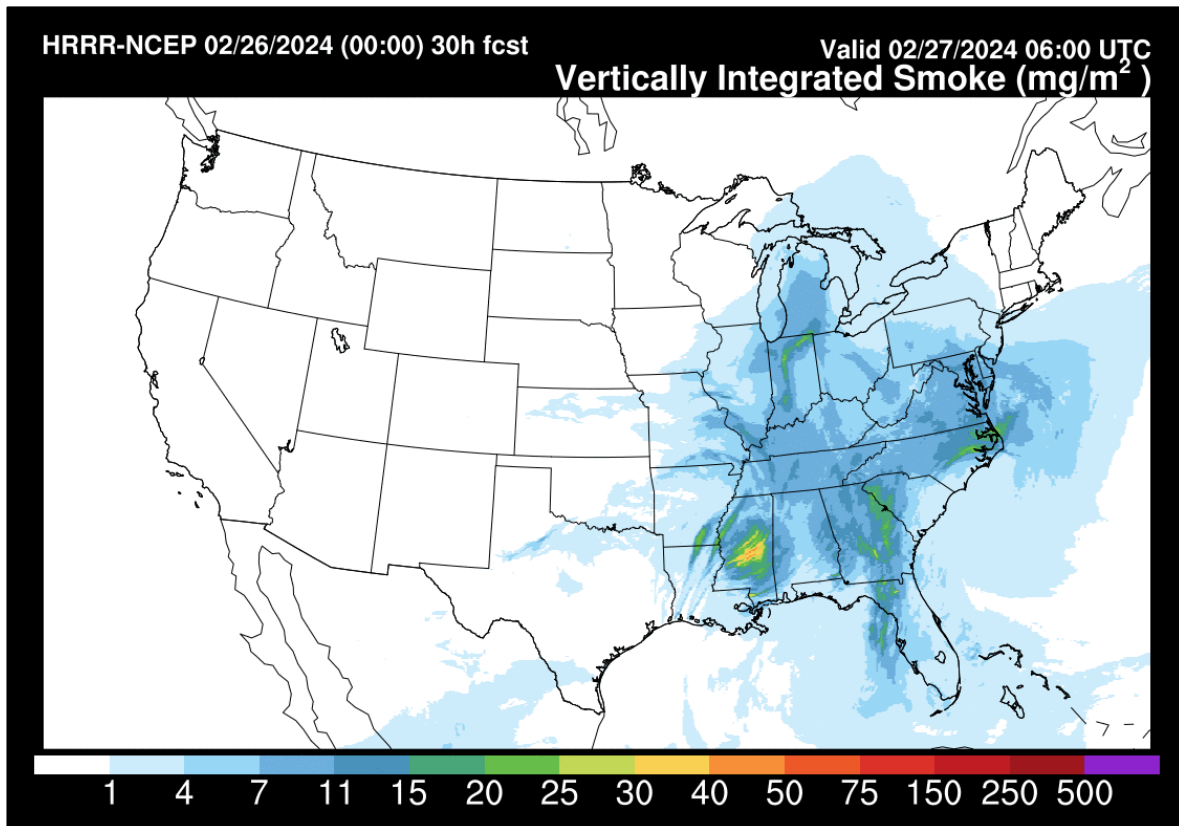
February 27, 2024

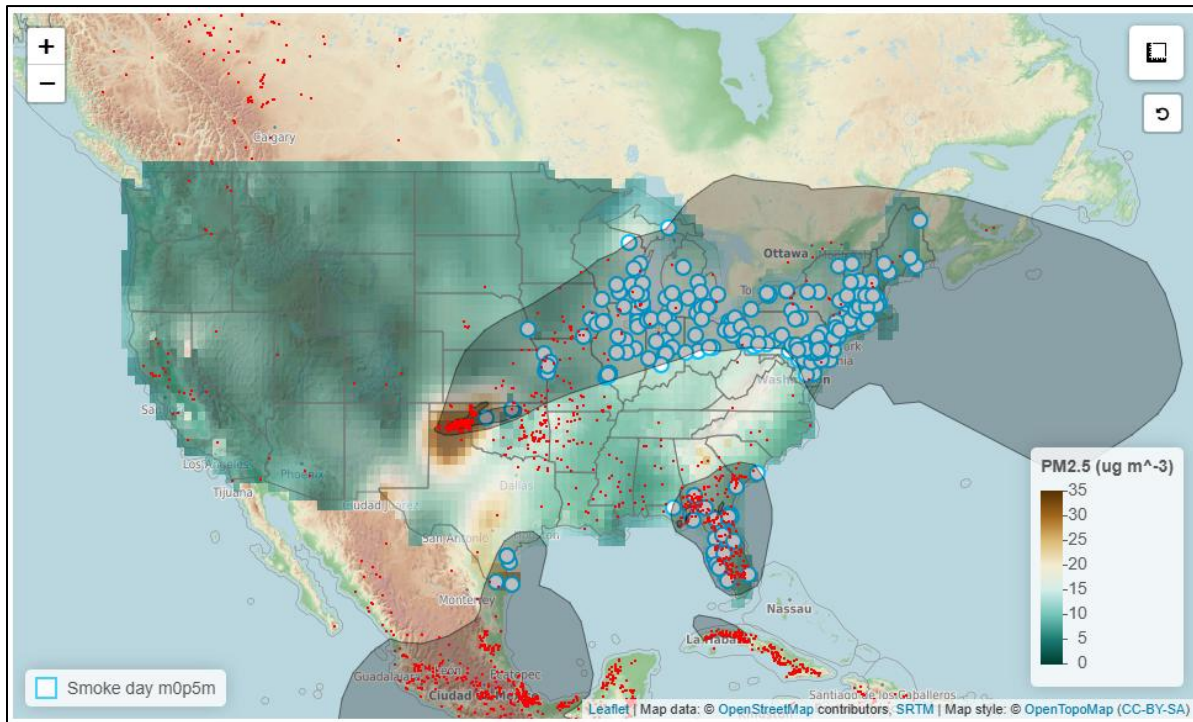
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Kokomo - E. Vaile Ave	180670004	2/27/2024	15.9	14.7
Lafayette - Greenbush St	181570008	2/27/2024	15.4	15.1

AirNow Tech Fire/HMS Smoke Map with Forward Trajectories – February 27, 2024



Satellite Imagery with MAIAC AOD – February 27, 2024**HRRR Smoke - Vertically Integrated Smoke – February 27, 2024**

GAM PMO3 Smoke Output – February 27, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Monday, February 26, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0023Z February 27, 2024

SMOKE:

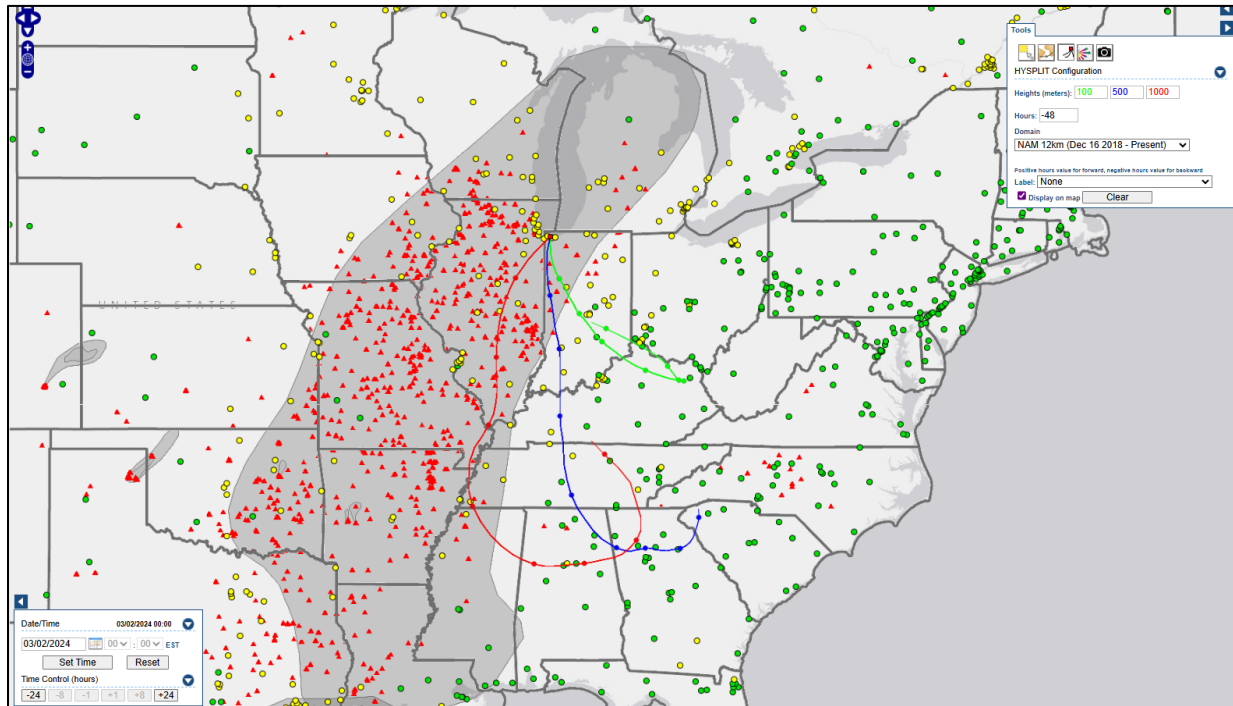
Central U.S./Eastern U.S./Northern Gulf of Mexico...

An area of thin density smoke with large areas of moderate to even dense smoke attributed heavy seasonal fire activity from western/central Texas, Oklahoma, Arkansas continuing north through the Midwest U.S., to the Great Lakes region and southeast through the eastern United States just off the coastal Atlantic. The smoke also extended south over the northern Gulf of Mexico. Moderate to even dense smoke was prevalent over the Gulf States in the southeastern United States where the heaviest burning was detected. West-central Nebraska...

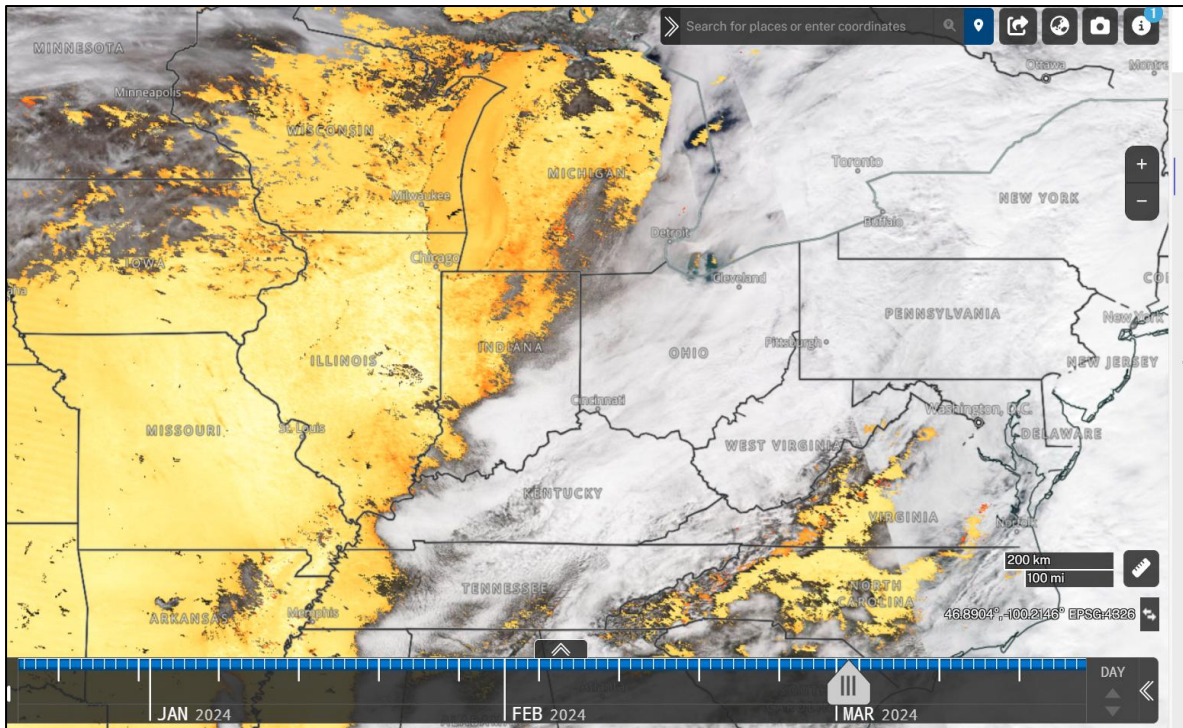
Two possible wildfires in West-central Nebraska were observed releasing mostly moderate to even dense smoke at times. The smoke plumes combined and were moving east almost reaching Iowa as evening approached.

March 2, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

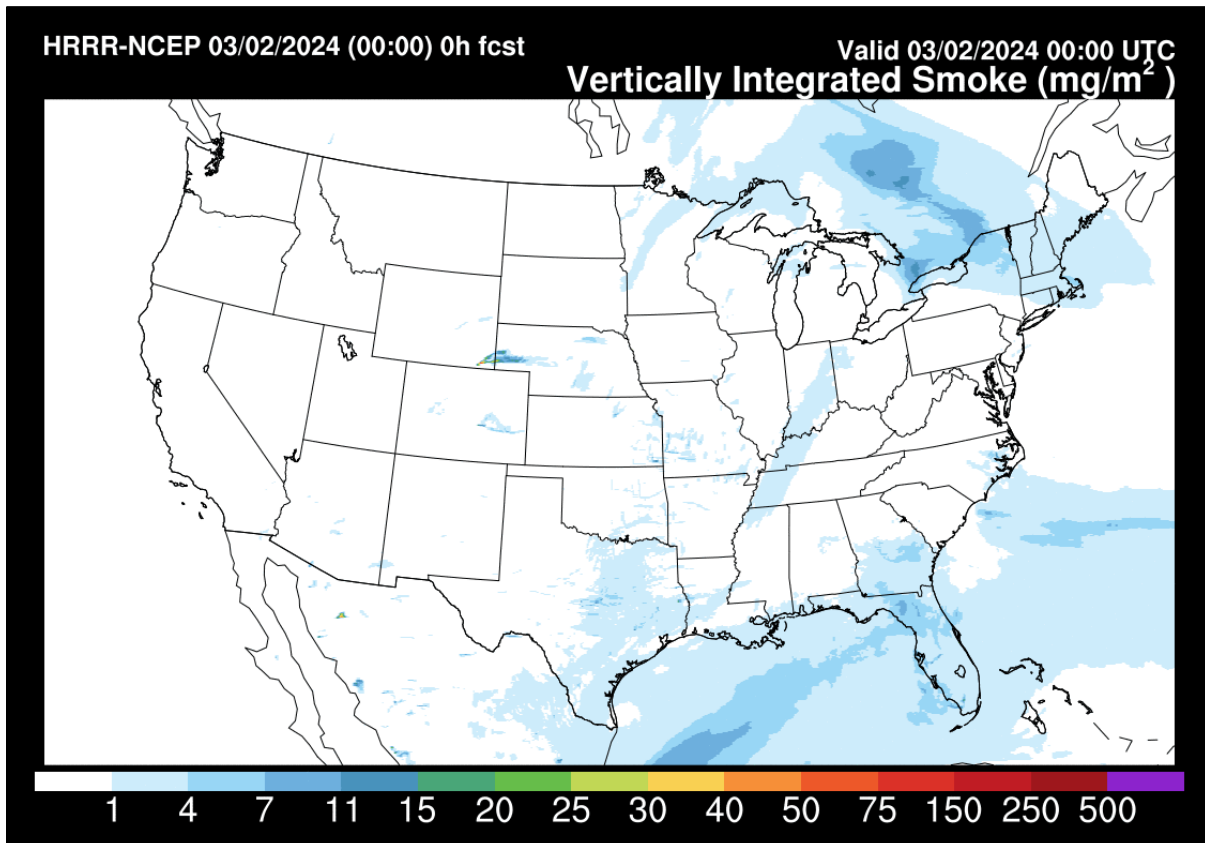
Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Elkhart - Prairie St	180390008	3/2/2024	19.1	16.3
East Chicago - Marina	180890034	3/2/2024	20.8	18
South Bend - Shields Dr.	181410015	3/2/2024	20.0	16.9
Lafayette - Greenbush St	181570008	3/2/2024	15.9	15.1
Evansville - Buena Vista	181630021	3/2/2024	16.4	15.1
Larwill	181830003	3/2/2024	16.9	15

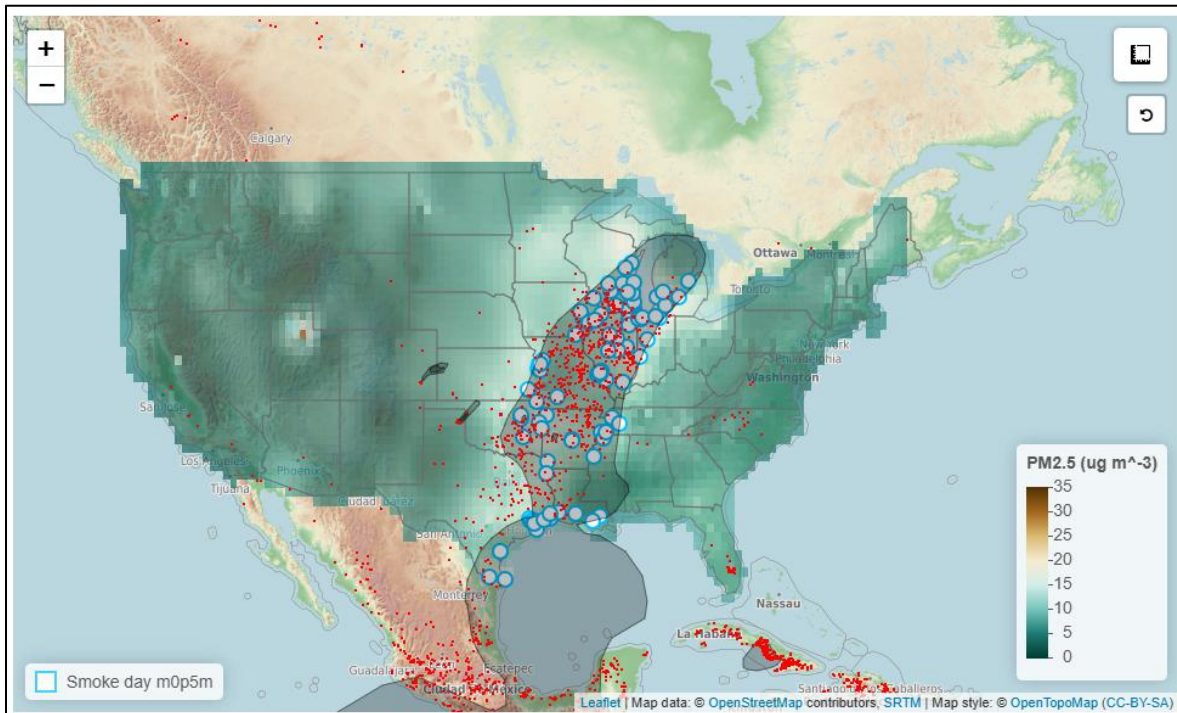
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - March 2, 2024

Satellite Imagery with MAIAC AOD – March 2, 2024



HRRR Smoke - Vertically Integrated Smoke – March 2, 2024



GAM PMO3 Smoke Output – March 2, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Friday, March 1, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0027Z March 2, 2024

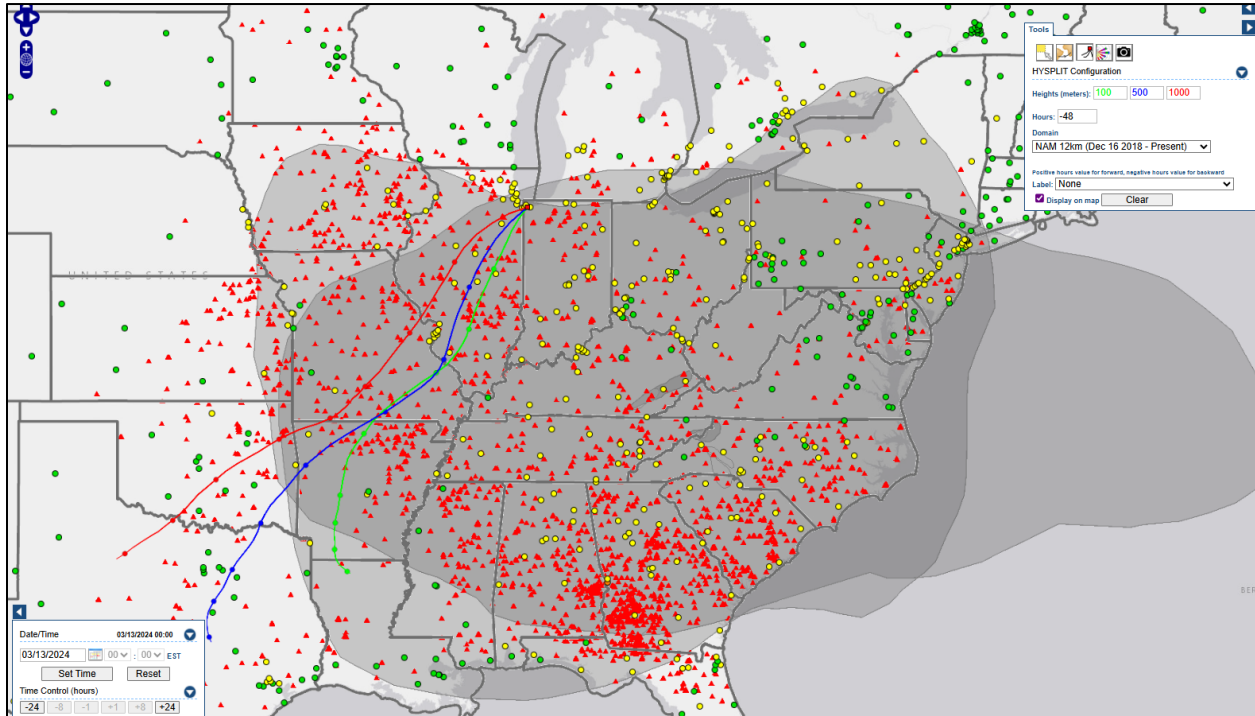
SMOKE:

Central United States...

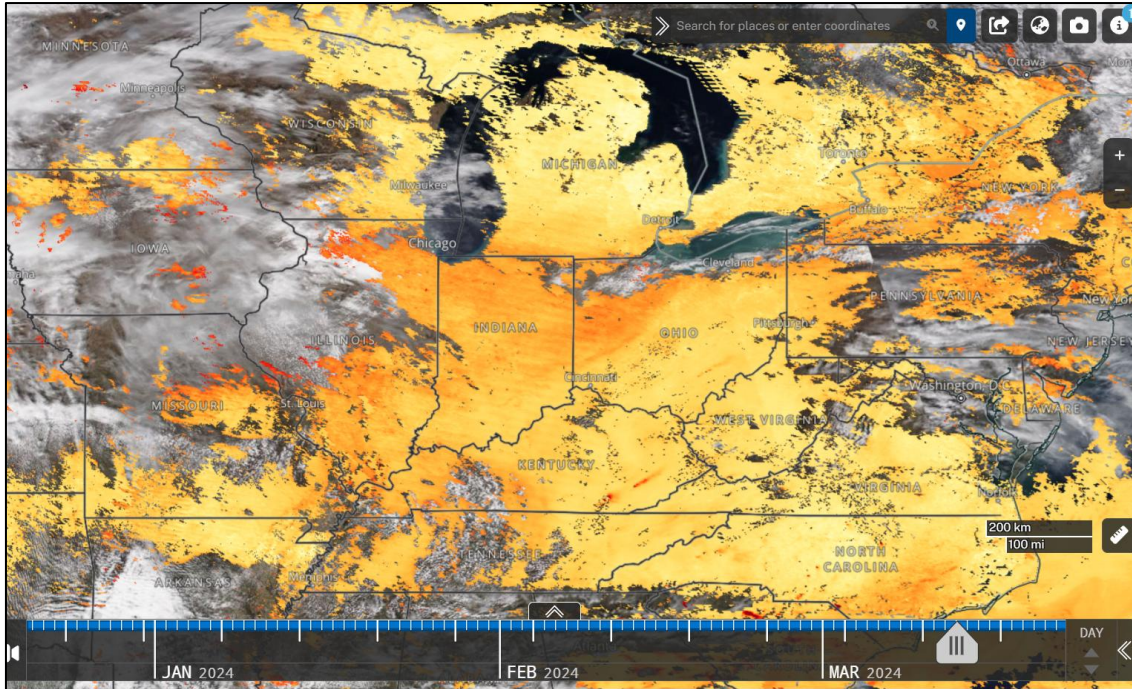
An area of thin density smoke attributed to seasonal burning and the recent Smokehouse Creek Fire in the northeastern Texas panhandle to the north through the central U.S. and then begins to move to the northeast ending over the Great Lakes region. Cloud cover over the eastern part of U.S. obscured the view of any additional smoke that may have been seen due to the wildfires and brush fires in the area.

March 13, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

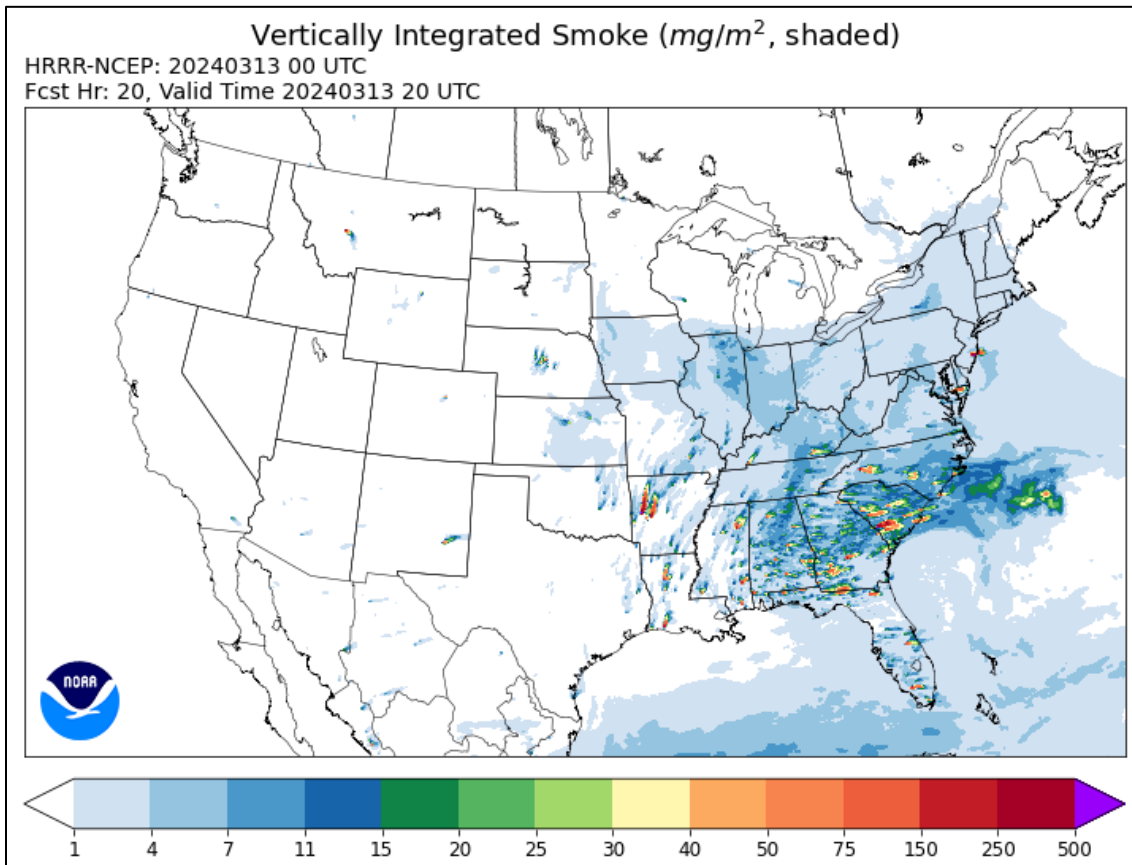
Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
East Chicago - Franklin/Washington Sch	180890006	3/13/2024	17.7	16.1
Gary - Madison St	180890031	3/13/2024	22.5	16
Hammond-167th St	180890036	3/13/2024	18.3	16.3

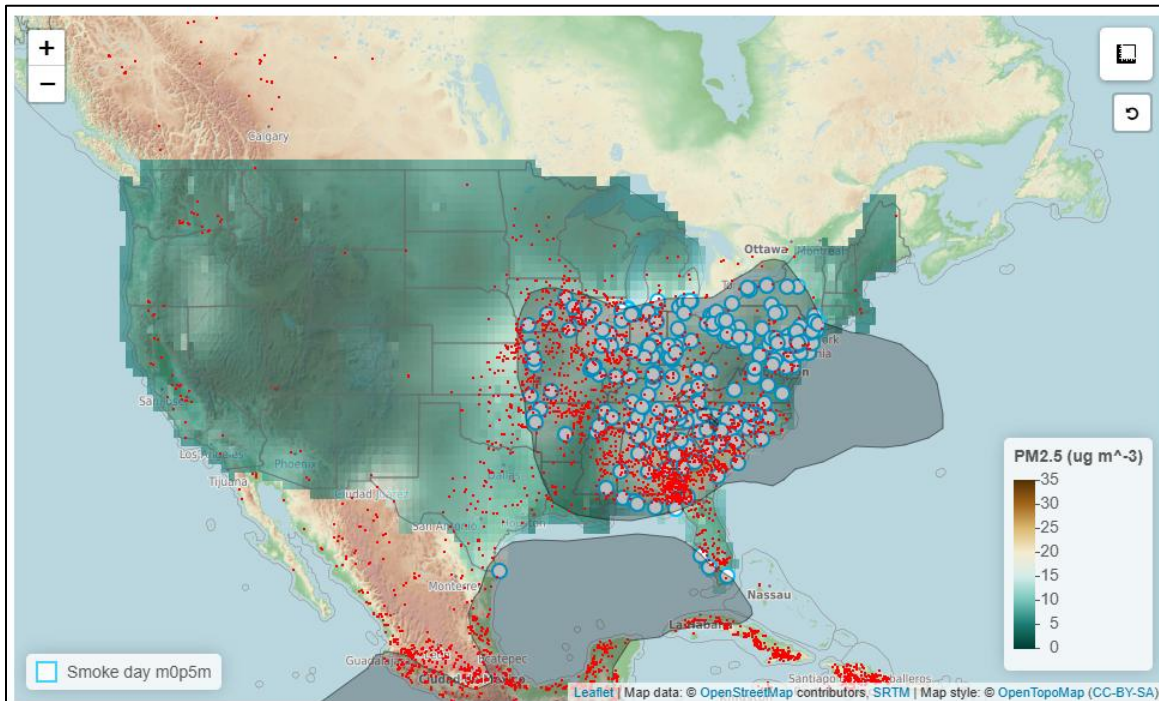
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - March 13, 2024

Satellite Imagery with MAIAC AOD – March 13, 2024



HRRR Smoke - Vertically Integrated Smoke – March 13, 2024



GAM PMO3 Smoke Output – March 13, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Tuesday, March 12, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0019Z March 13, 2024

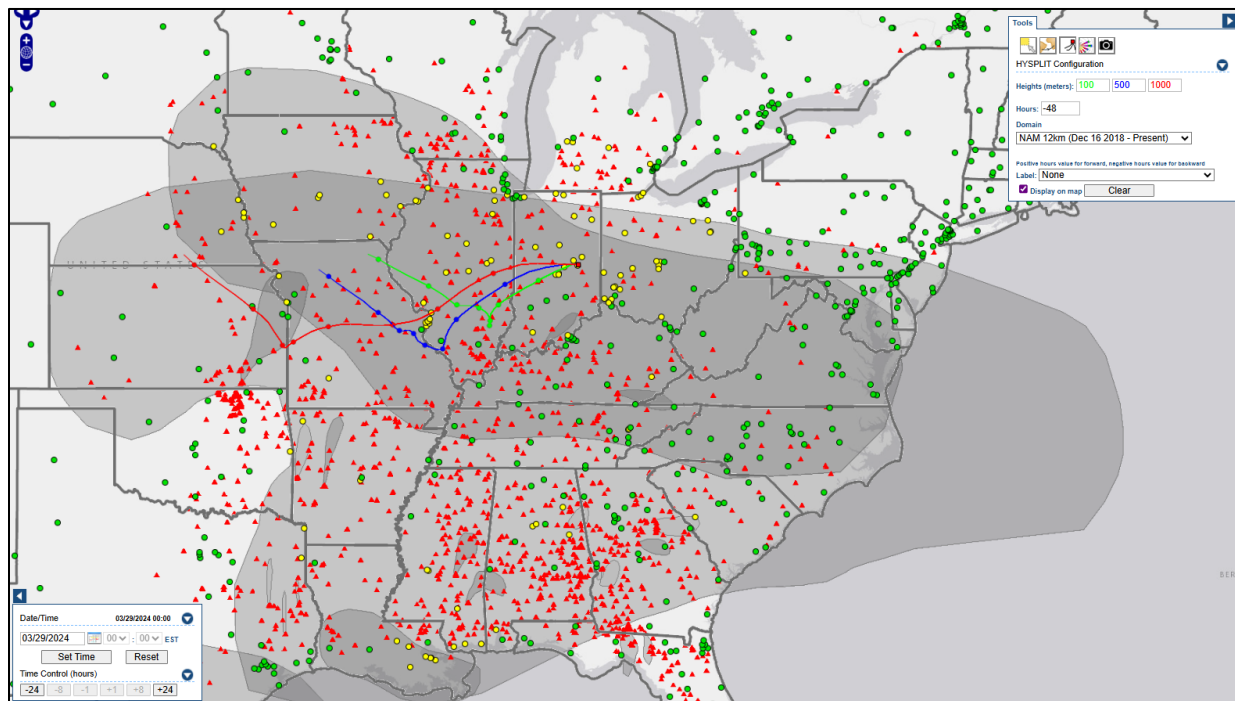
SMOKE:

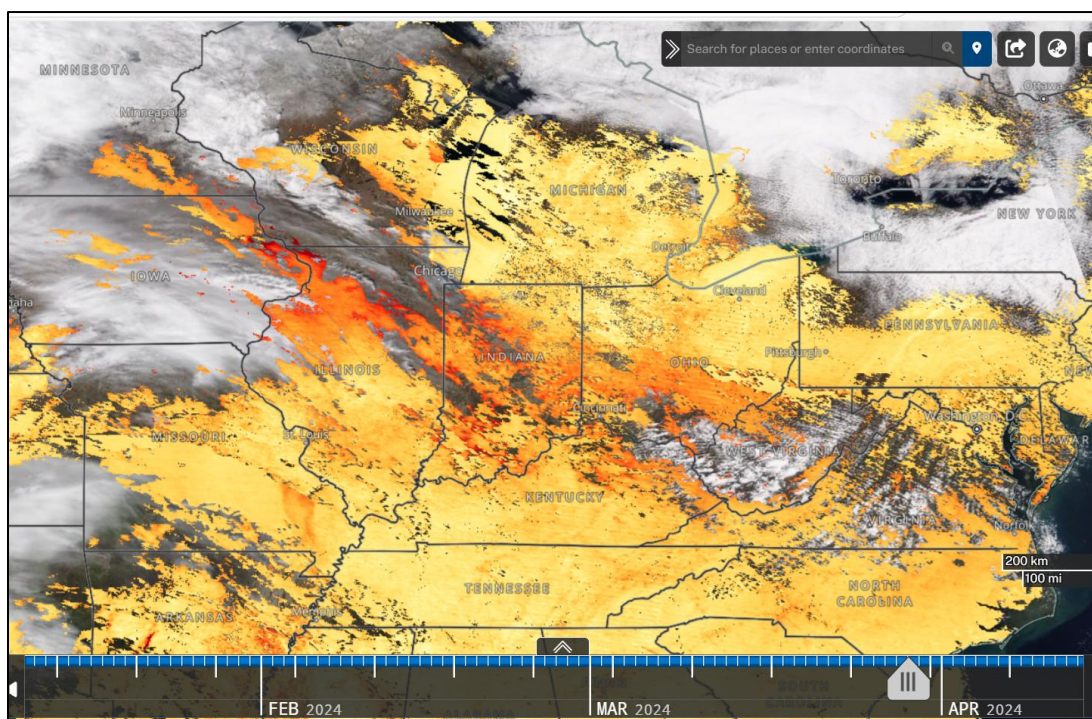
Central/Southeastern United States...

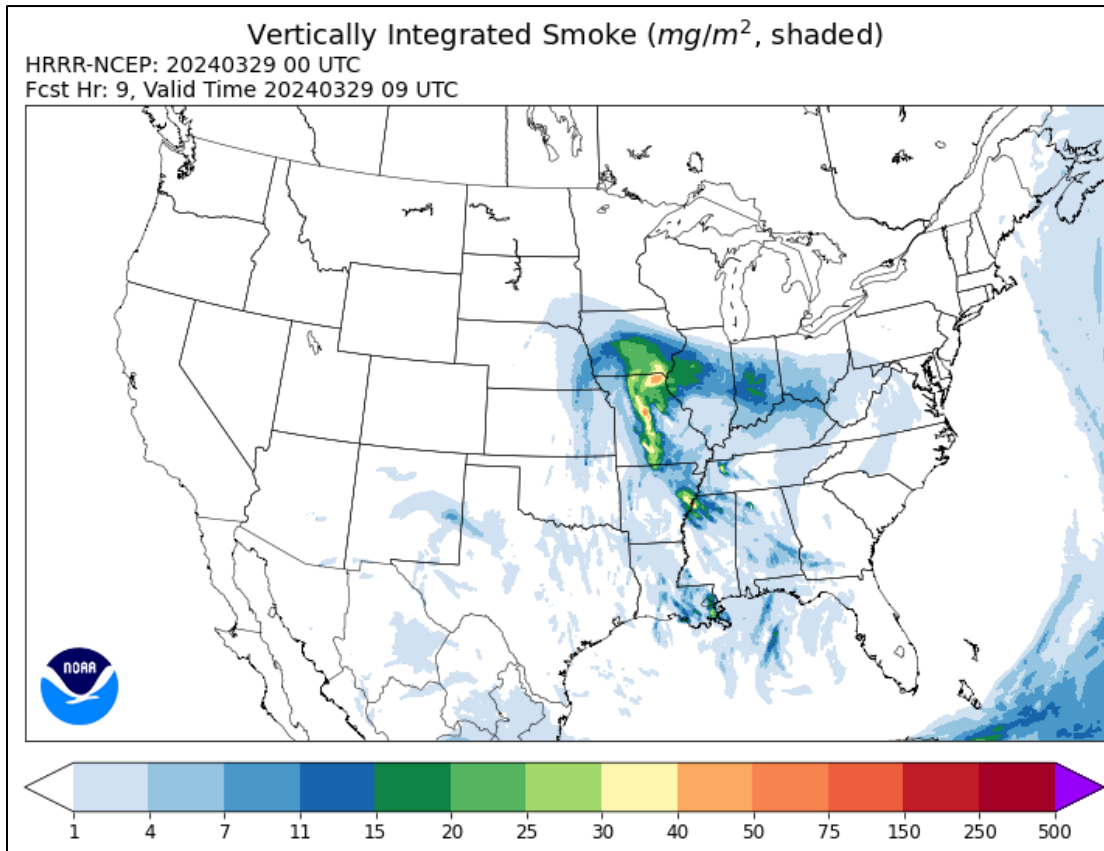
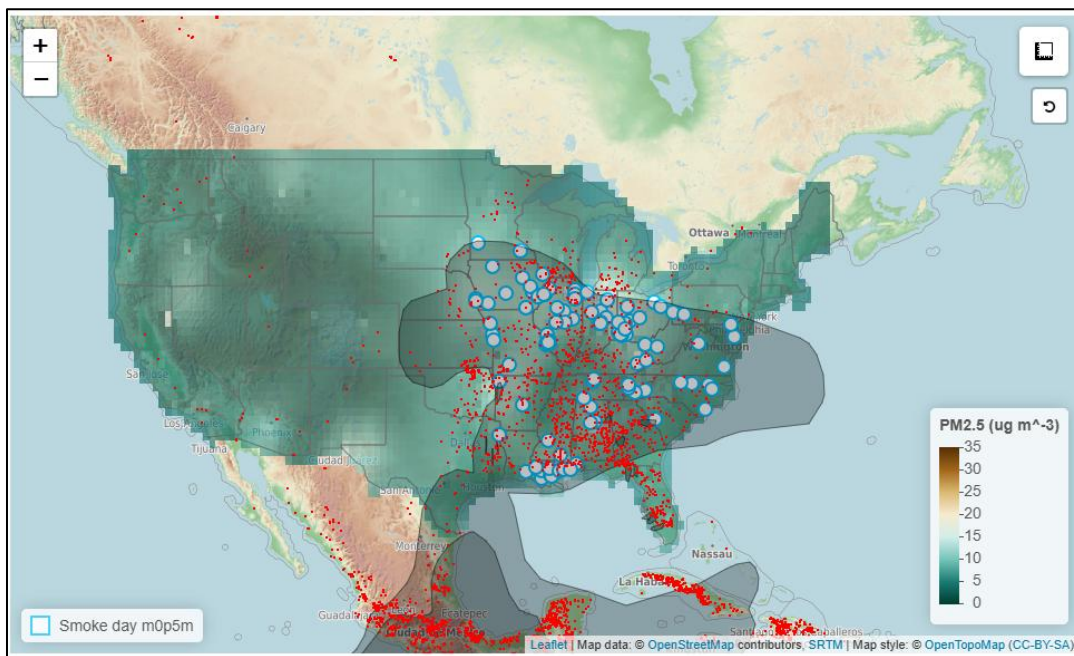
An area of thin to moderate density smoke attributed to moderate to heavy seasonal burning was seen from central Texas to the north and east through the central U.S. ending in the western Great Lakes region near eastern Minnesota and western Michigan. The burning and smoke continued east throughout the southeast US along the coastal Atlantic Ocean. As a mass the smoke was generally moving northeast and east in direction. Some moderate to even heavy density smoke (near the sources) was noted over northern Arkansas and Missouri as evening approached. More moderate smoke plumes were probably around but some cloud cover later today concealed further smoke detection.

March 29, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Muncie - Central HS	180350006	3/29/2024	16.9	13.2
Mechanicsburg	180650003	3/29/2024	18.2	15.5
Anderson - Eastside Elem	180950011	3/29/2024	15.4	15.4

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - March 29, 2024

Satellite Imagery with MAIAC AOD – March 29, 2024

HRRR Smoke - Vertically Integrated Smoke – March 29, 2024**GAM PMO3 Smoke Output – March 29, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**Thursday, March 28, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0125Z March 29, 2024

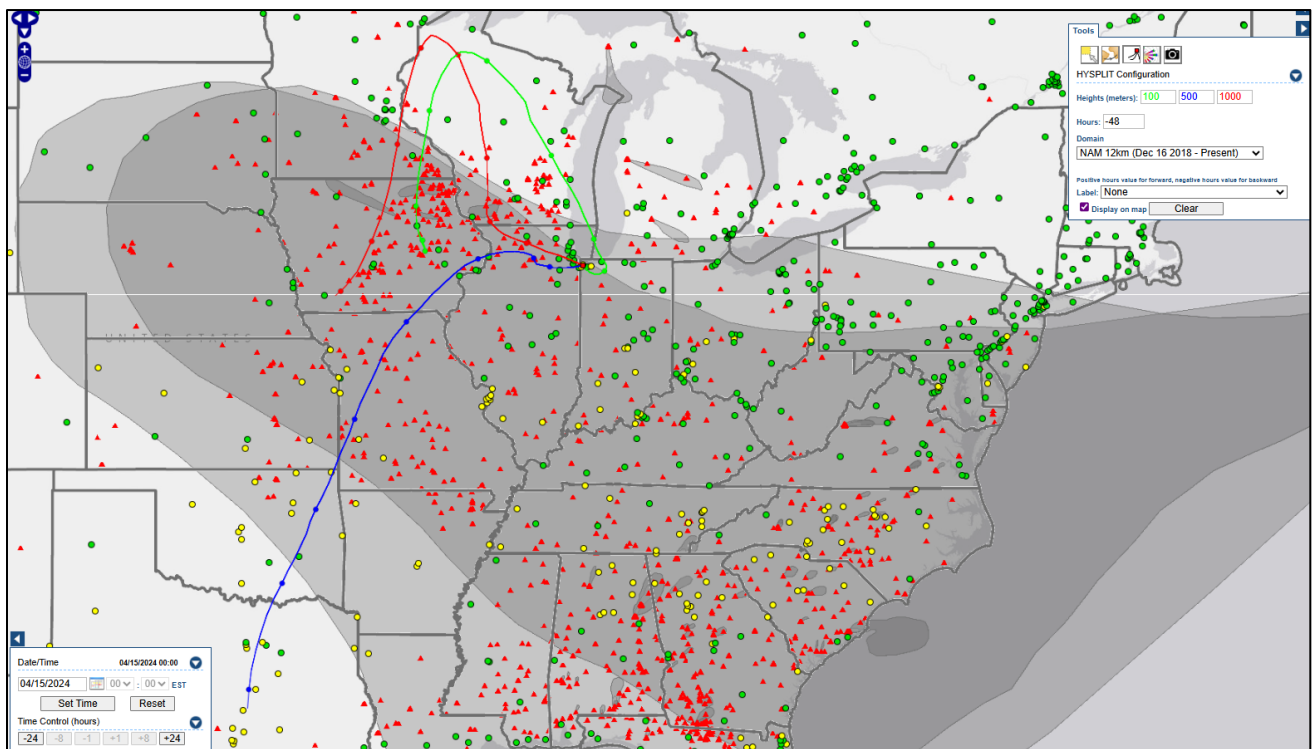
SMOKE:

Midwestern and Southeastern United States...

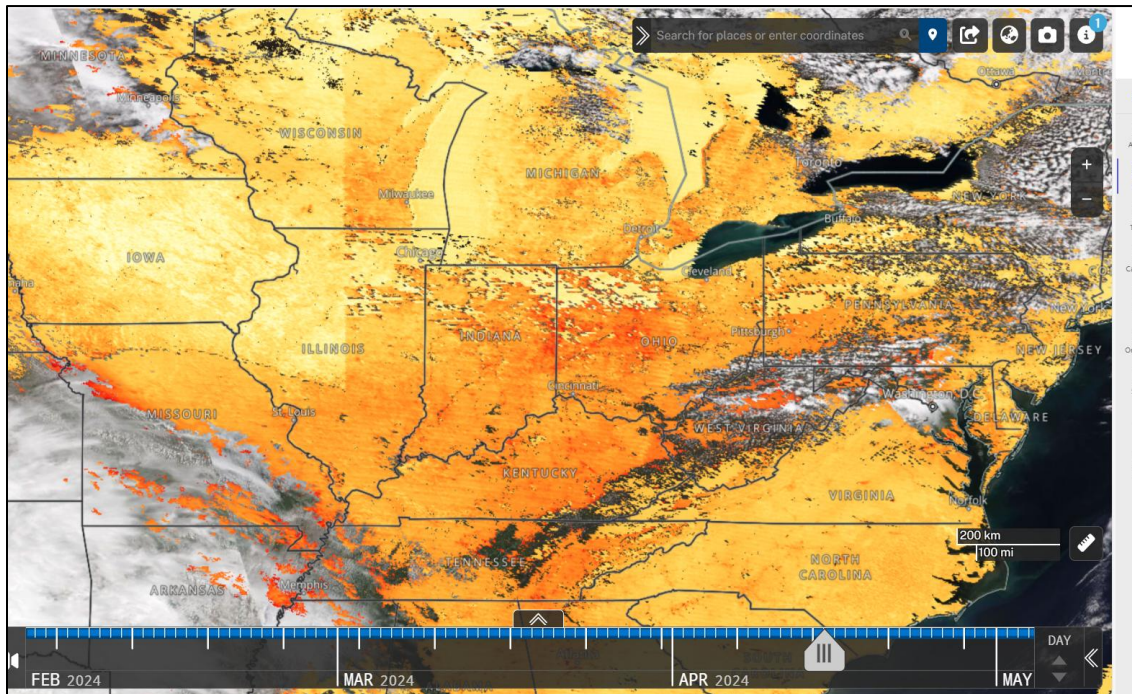
A large area of light density smoke attributed to moderate to heavy seasonal agricultural burning throughout the Midwest was observed in the central Midwest and parts of the southern U.S Gulf states. Some of this smoke is likely remnant smoke from the numerous fires observed yesterday in eastern Arkansas, Kansas and Oklahoma. Within the region, moderate to thick density smoke plumes were observed in Arkansas and eastern Texas, with the plumes in Arkansas moving northeastward while the smoke in Texas was moving in more eastward direction. In addition, the heavy seasonal burning in southeastern Kansas and northeastern Oklahoma formed a moderate patch of density smoke also moving northeast before cloud cover the region.

April 15, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

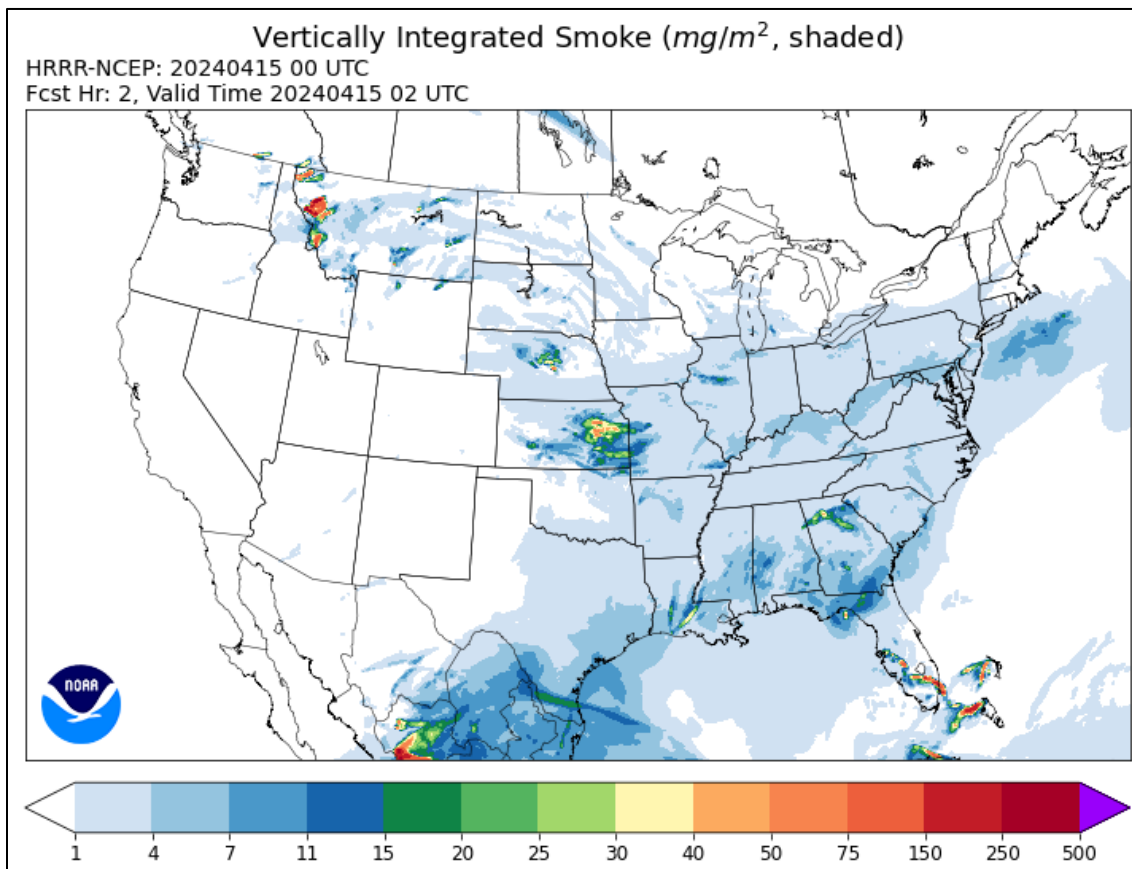
Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Gary - Madison St	180890031	4/15/2024	21.4	16

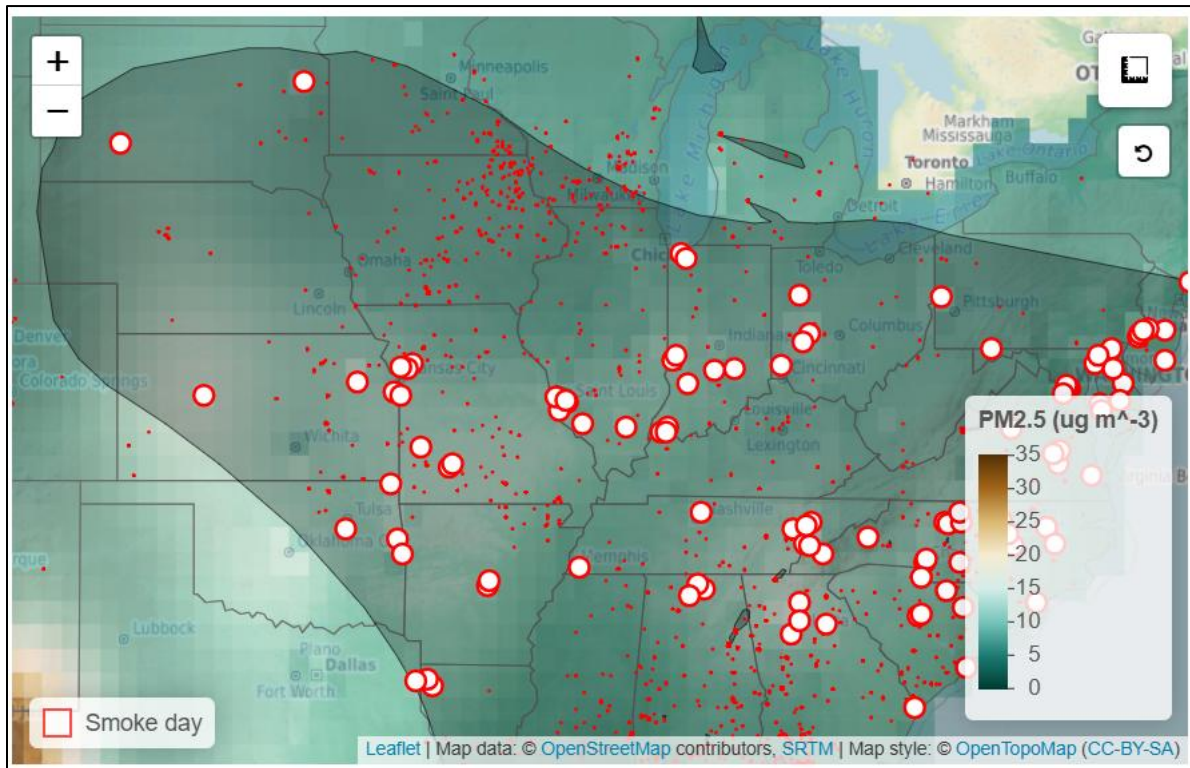
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - April 15, 2024

Satellite Imagery with MAIAC AOD – April 15, 2024



HRRR Smoke - Vertically Integrated Smoke – April 15, 2024



GAM PMO3 Smoke Output – April 15, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Sunday, April 14, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0018Z April 15, 2024

SMOKE:

Central United States/Eastern United States/Manitoba ..

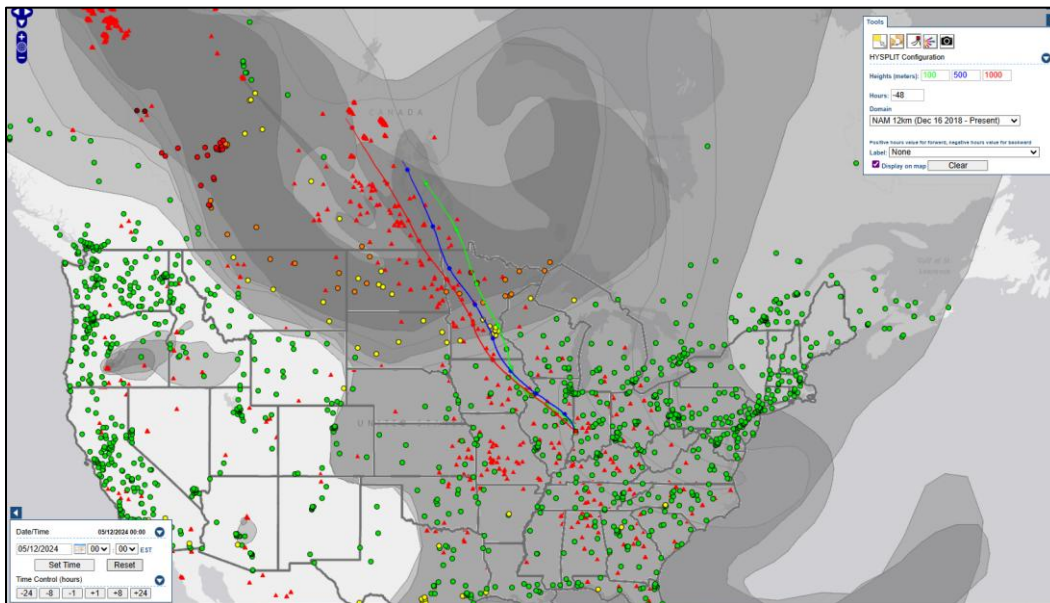
A large area of light to moderate density smoke attributed seasonal fires throughout the Central U.S. was seen from northeastern Texas all the way north onto the eastern Dakotas and Manitoba. The smoke continued over most of the Central Plains and Mississippi Valley, and extending eastward over the eastern United States with the exceptions being the far southeastern and northeastern United States. Heavy burning in eastern Kansas created an area of moderate density smoke.

May 12, 2024

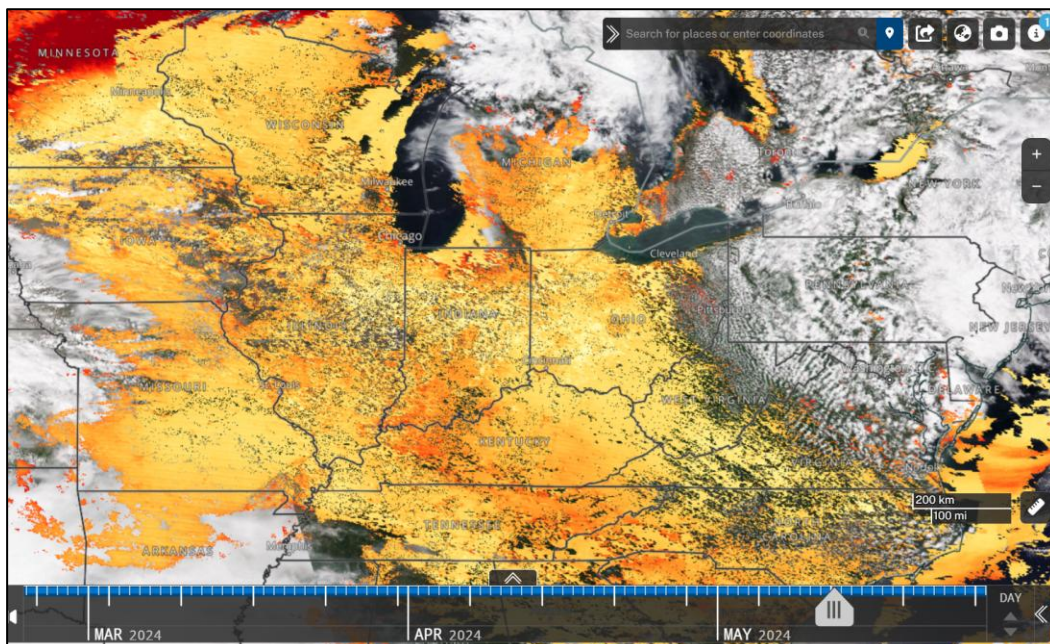
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

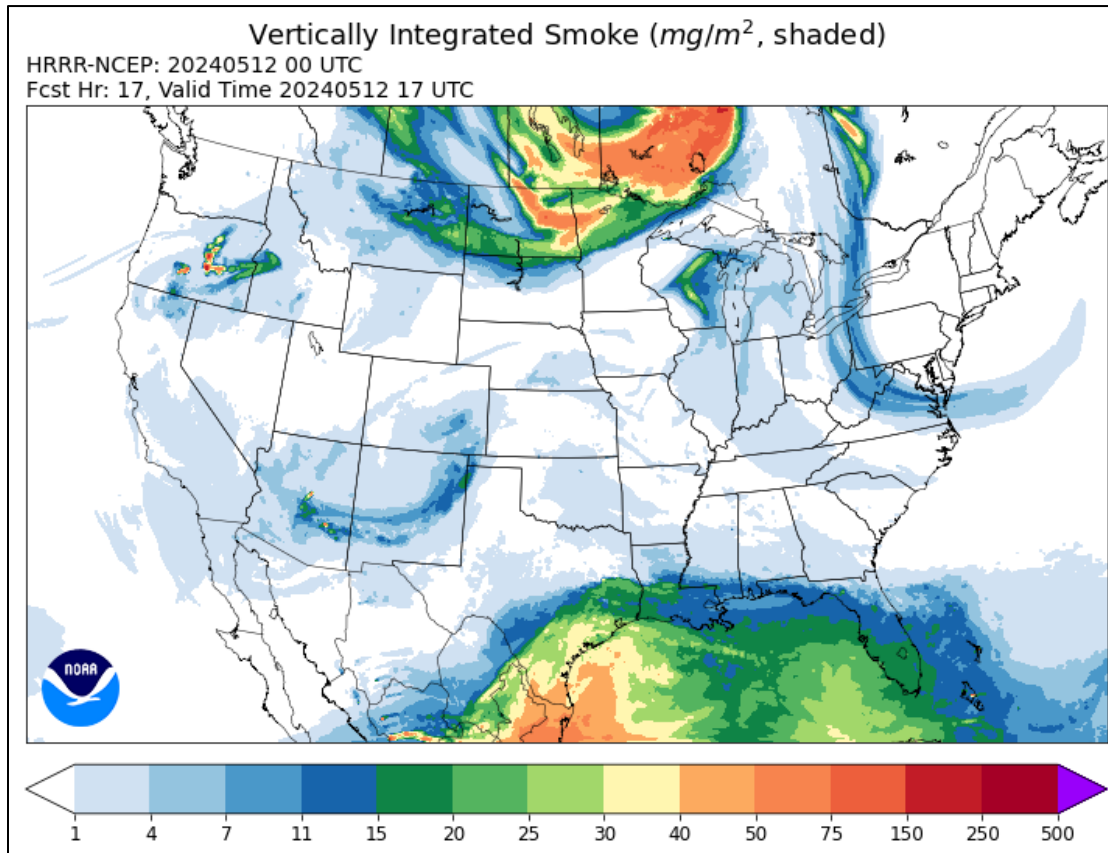
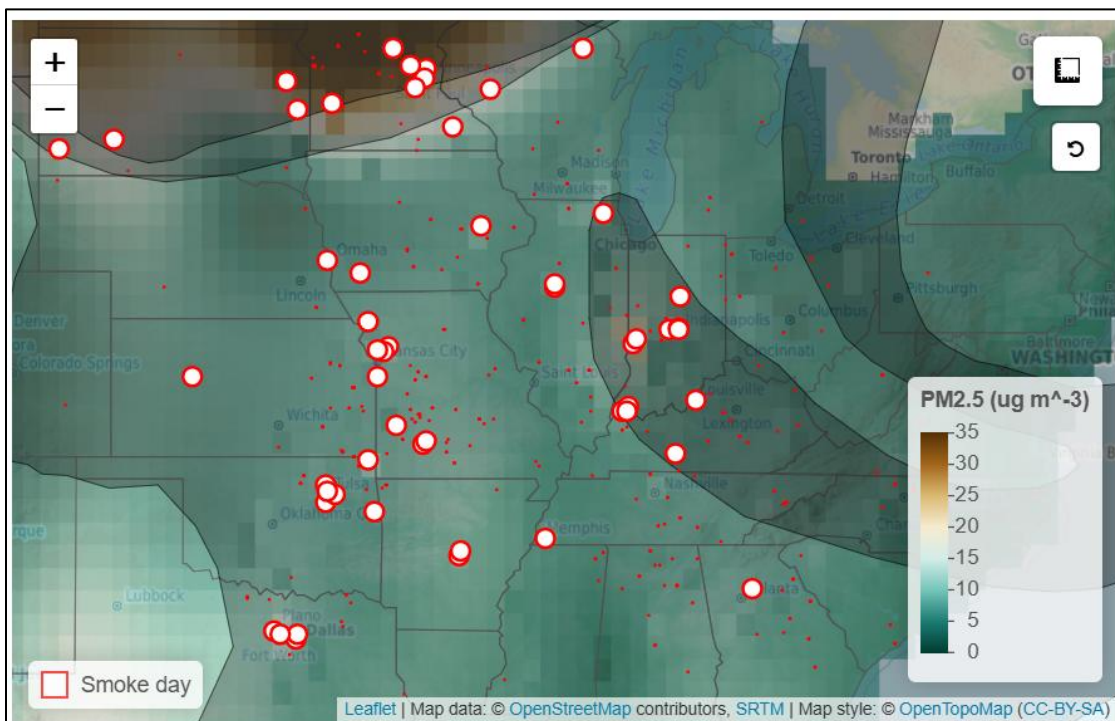
Monitor name	AQS	Date	Daily average (µg/m³)	Tier 2 Threshold (µg/m³)
Terre Haute - Lafayette Ave	181670018	5/12/2024	21.7	18.8

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – May 12, 2024



Satellite Imagery with MAIAC AOD – May 12, 2024



HRRR Smoke - Vertically Integrated Smoke – May 12, 2024**GAM PMO3 Smoke Output – May 12, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**Saturday, May 11, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0100Z May 11, 2024

SMOKE:

British Columbia/Central and Southeastern U.S...

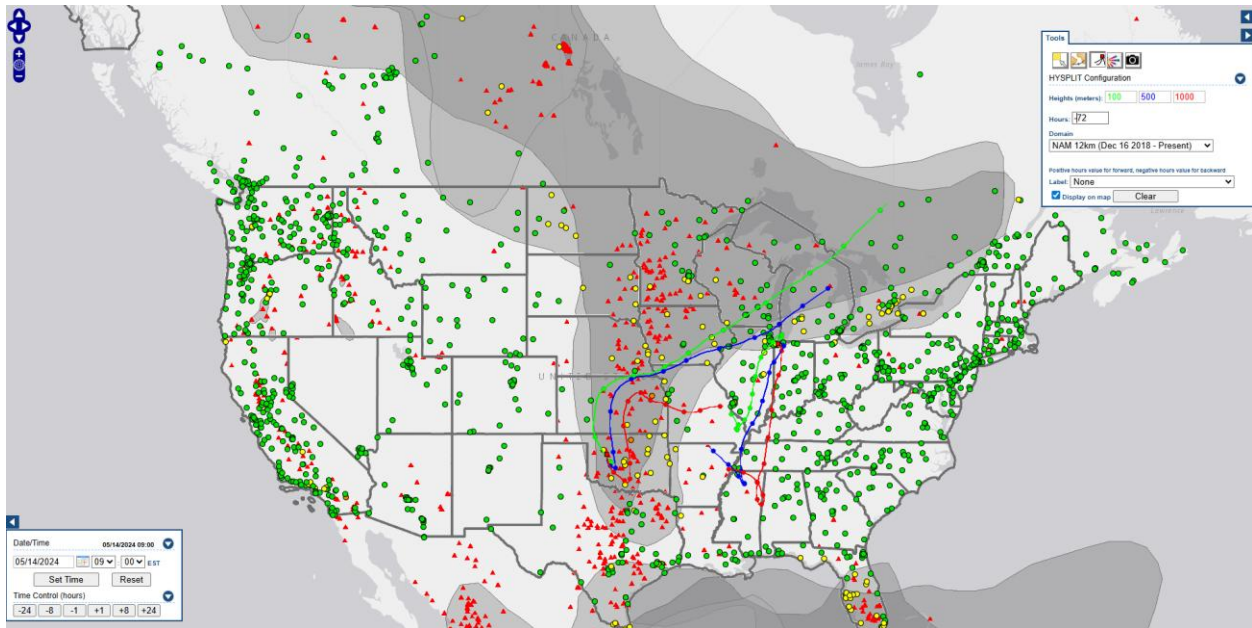
Continuing with the previous report, numerous large wildfires located in northeastern British Columbia and into the Northwest Territories were seen producing large amounts of thick density smoke that extended eastward through Alberta, Saskatchewan, and parts of Manitoba. Moderate density smoke extended further north, where a frontal boundary carried the moderate smoke into parts of the Northwestern Territories, Nunavut, and northern Manitoba. The larger area of smoke extended south into the central U.S, where it combined with smoke attributed from the seasonal burning and fire activity throughout the United States. This overall large smoke engulfed most of the southern U.S. and was seen progressing eastward into the Atlantic Ocean.

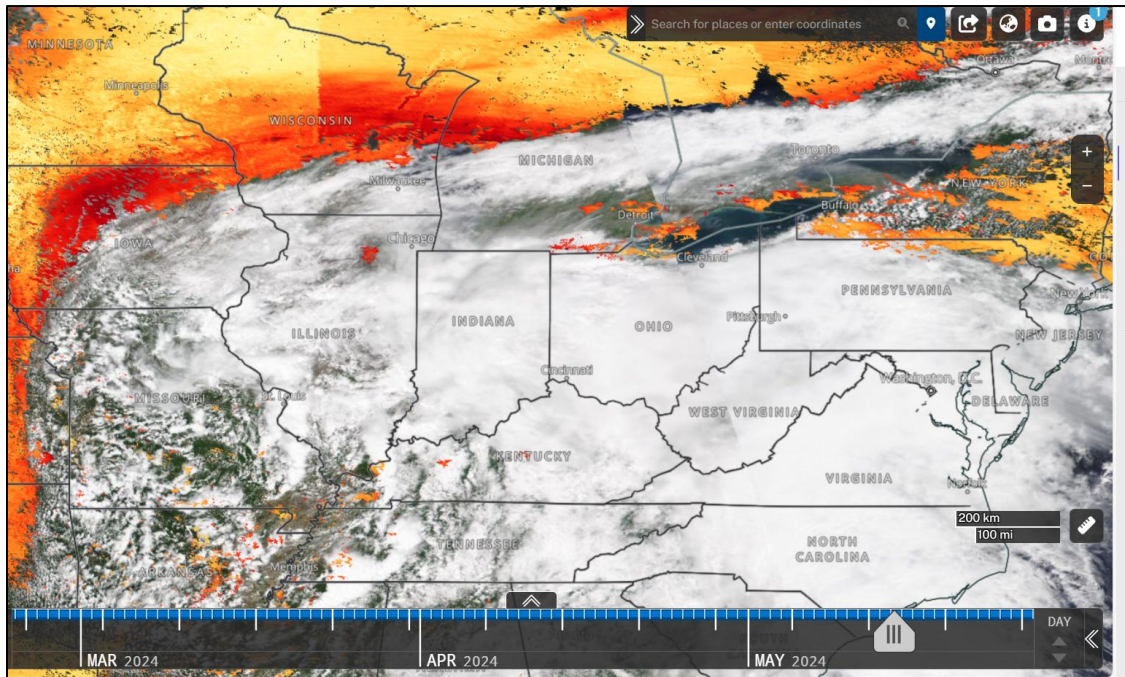
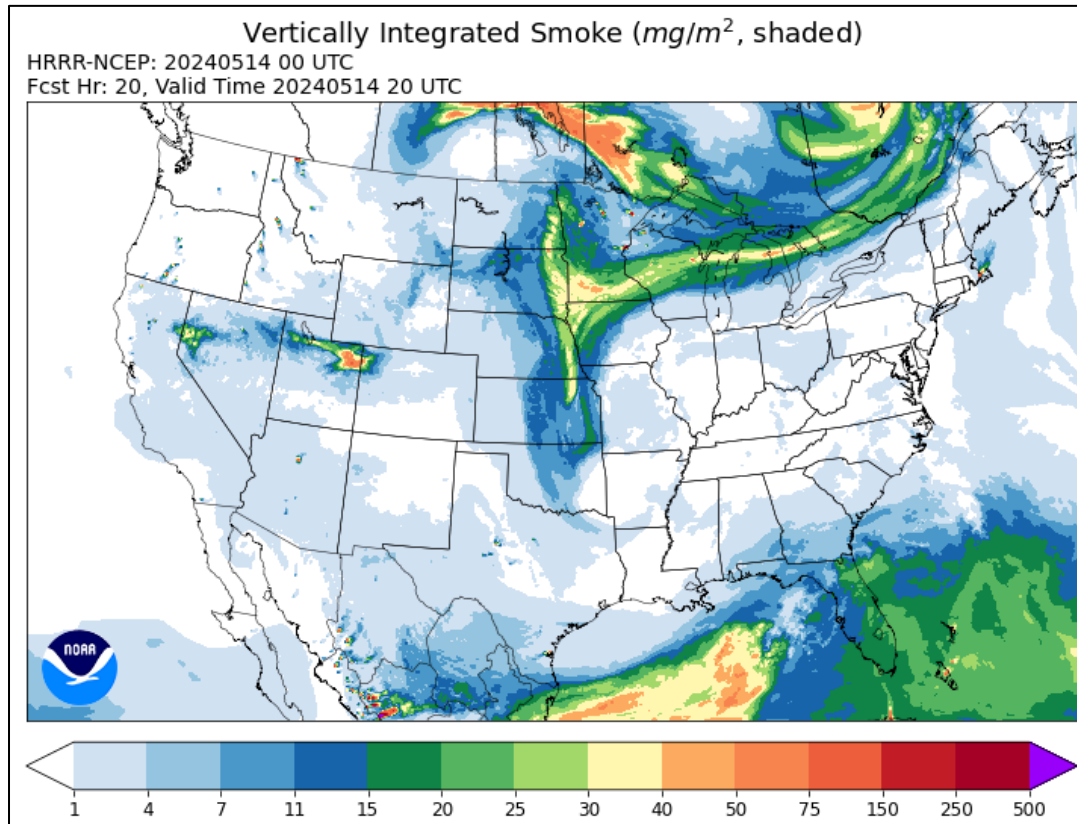
May 14, 2024

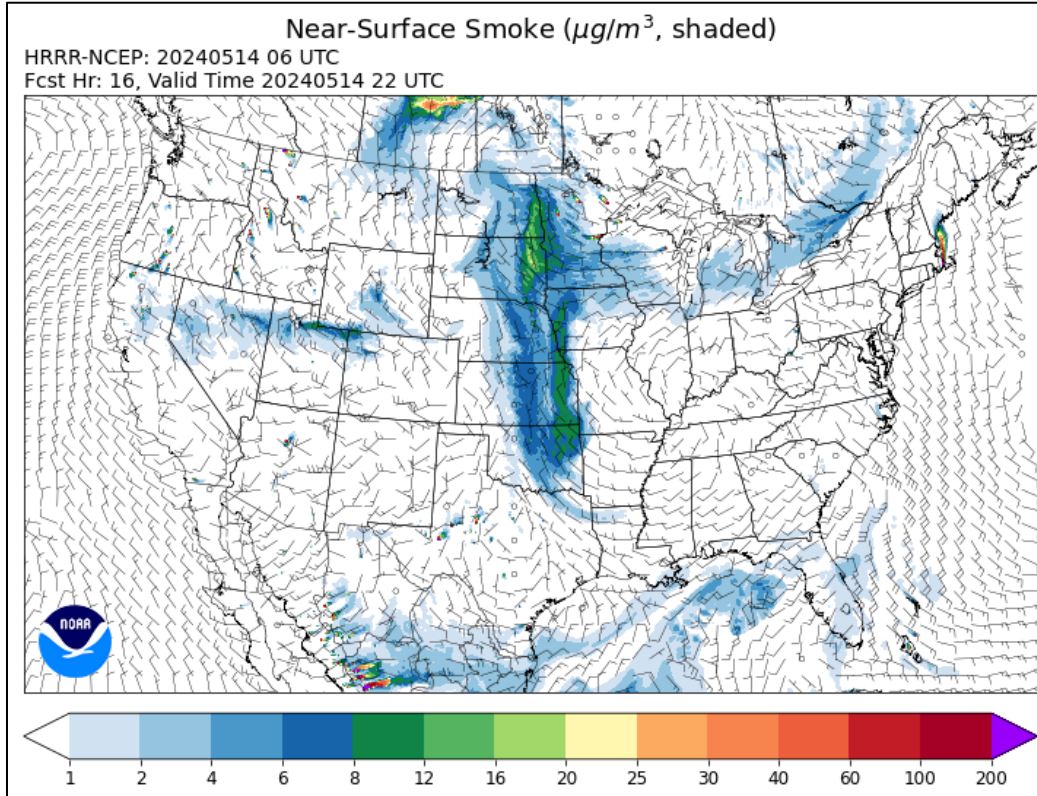
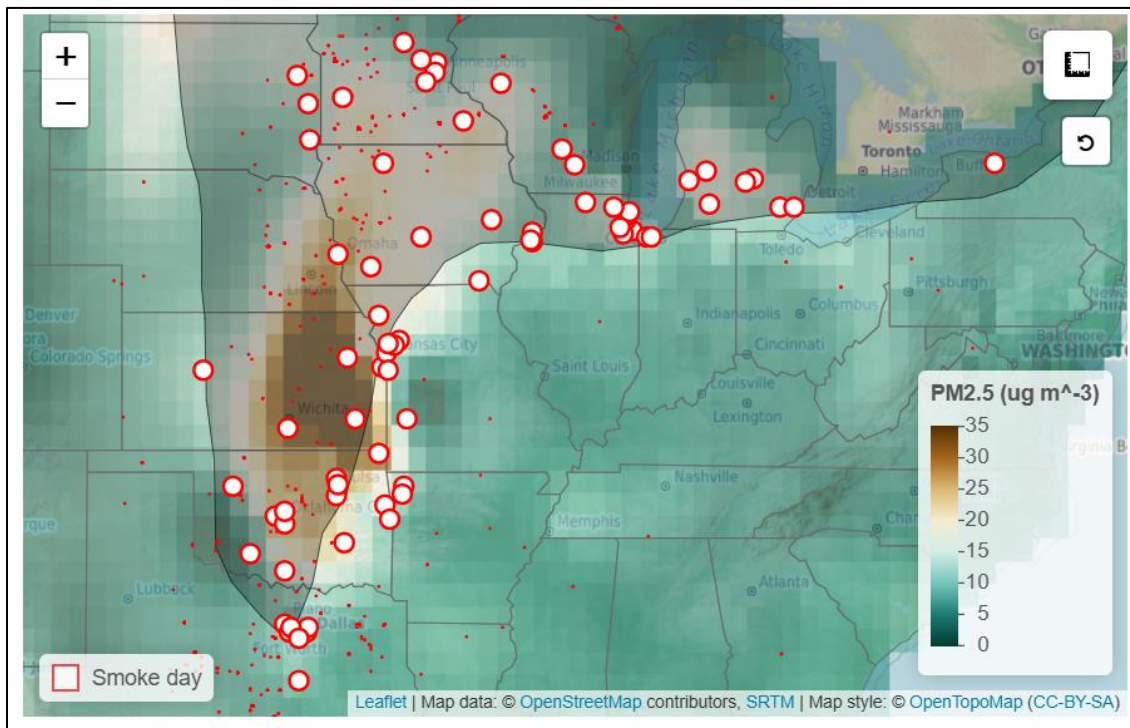
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Michigan City - Marsh Elem. Sch.	180910011	5/14/2024	16.7	15.9

AirNow Tech Fire/HMS Smoke Map with Forward and Back Trajectories - May 14, 2024



Satellite Imagery with MAIAC AOD – May 14, 2024**HRRR Smoke - Vertically Integrated Smoke – May 14, 2024**

HRRR Smoke – Near Surface Smoke – May 14, 2024**GAM PMO3 Smoke Output – May 14, 2024****Monday, May 13, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0136Z May 14, 2024

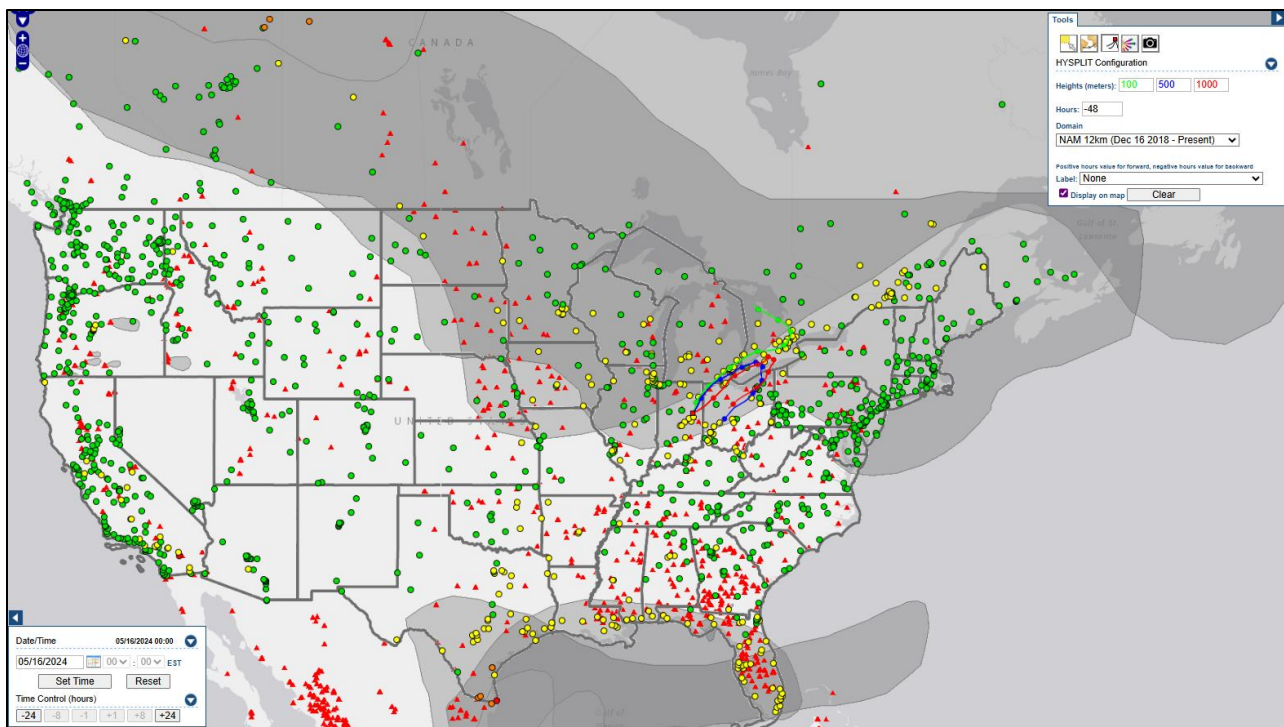
SMOKE:

Canada/North Central and Northeastern U.S./Atlantic Ocean...

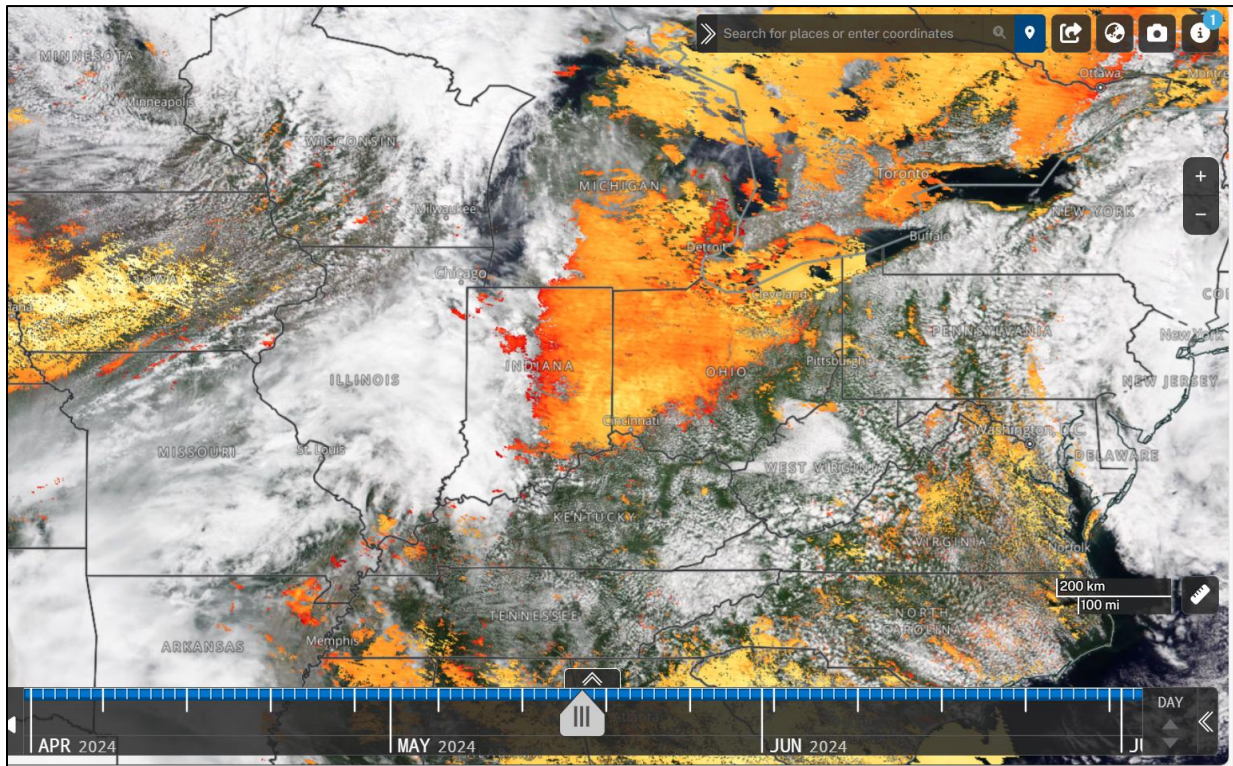
Numerous large wildfires were scattered across portions of the southern half of Canada from northeastern British Columbia and the southern part of the Northwest Territories eastward over the southern tier of Canadian provinces to Manitoba. This resulted in a very large mass of light to thick density smoke which covered a majority of southern Canada and extended into the north-central U.S. and continued over the northeastern United States. The thickest density smoke could be seen in northeastern British Columbia around the larger fires and east into northern Alberta and the southern Northwest Territories. Moderate smoke also covers portions of the north-central U.S. and northeastern United States.

May 16, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

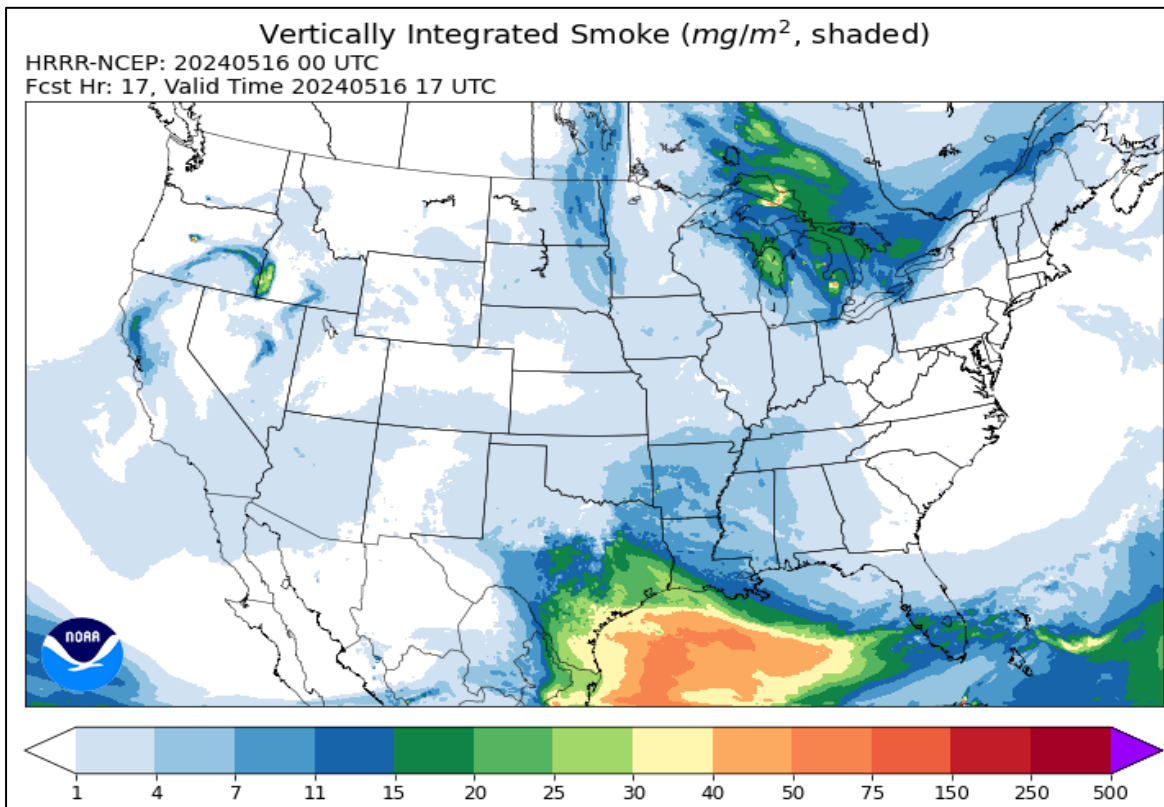
Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Muncie - Central HS	180350006	5/16/2024	13.2	13.2

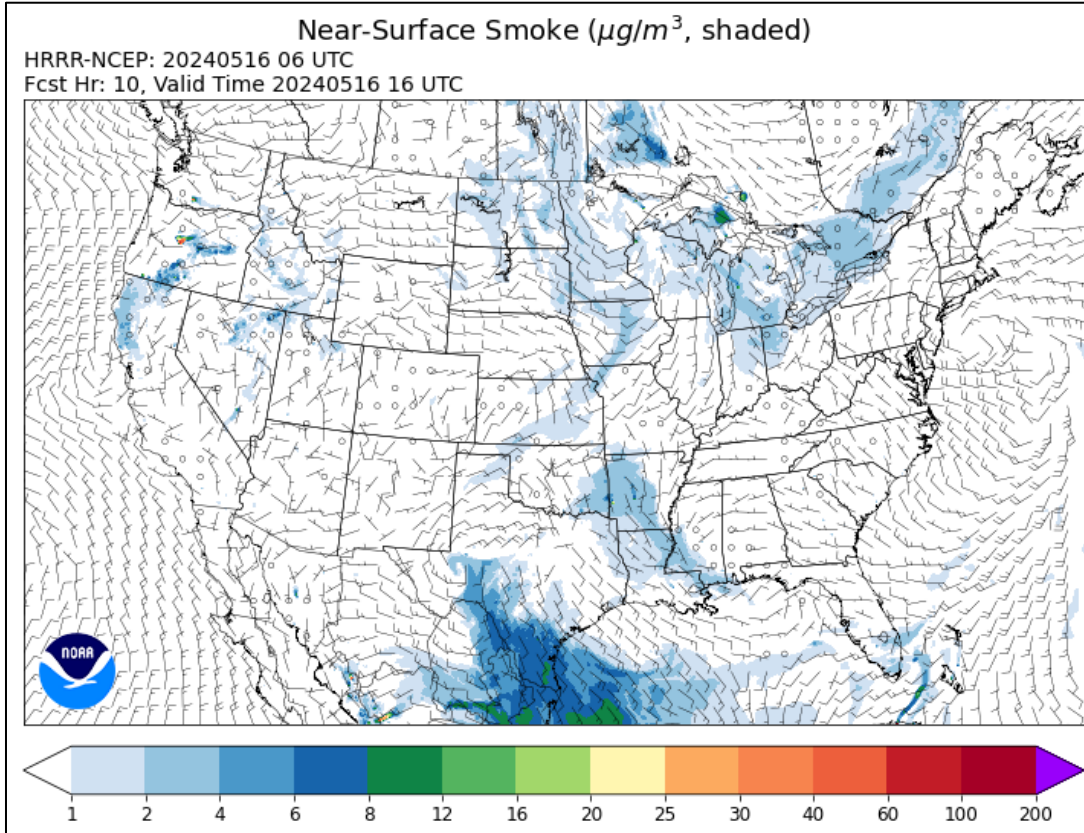
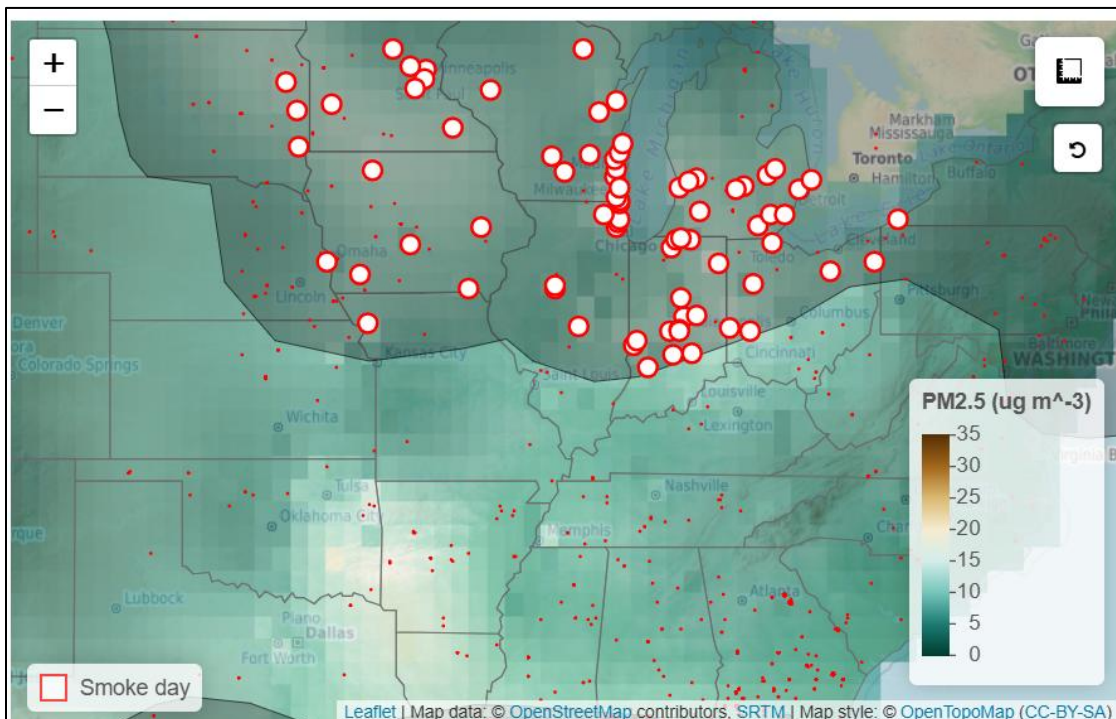
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - May 16, 2024

Satellite Imagery with MAIAC AOD – May 16, 2024



HRRR Smoke - Vertically Integrated Smoke – May 16, 2024



HRRR Smoke – Near Surface Smoke – May 16, 2024**GAM PMO3 Smoke Output – May 16, 2024**

Tuesday, May 15, 2024

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0116Z May 16, 2024

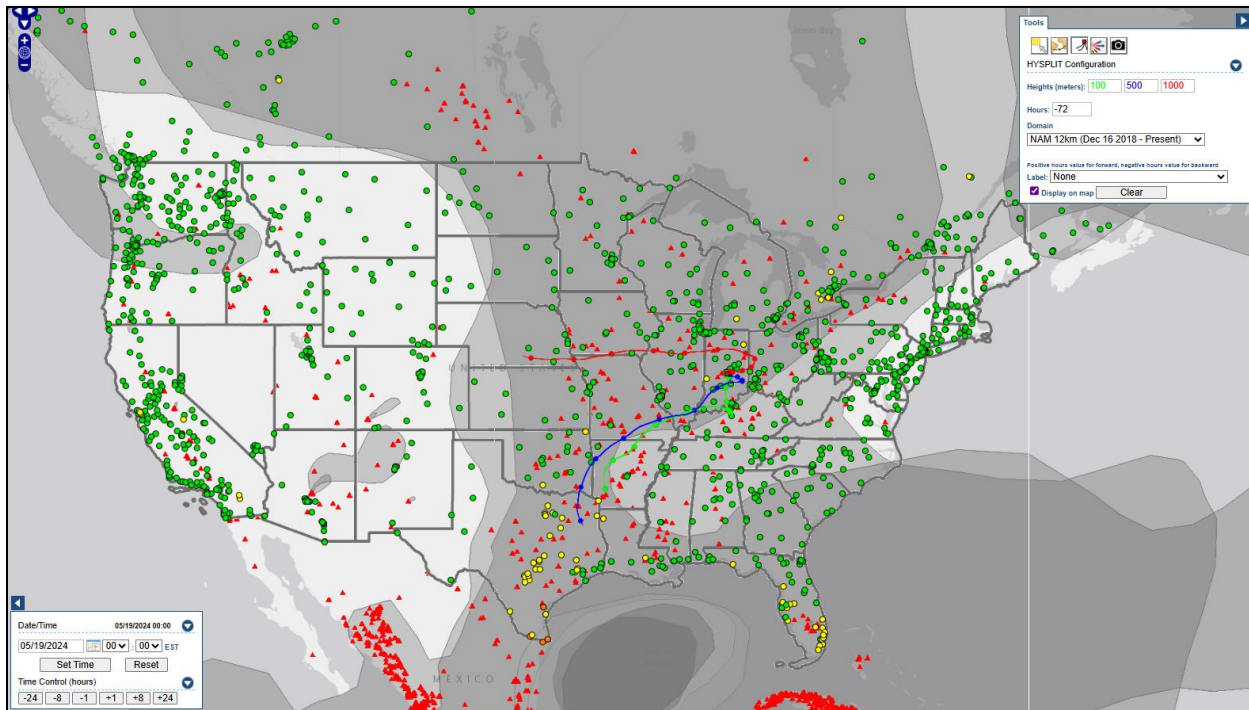
SMOKE:

Canada/North Central and Northeastern United States/Greenland/Atlantic
Ocean...

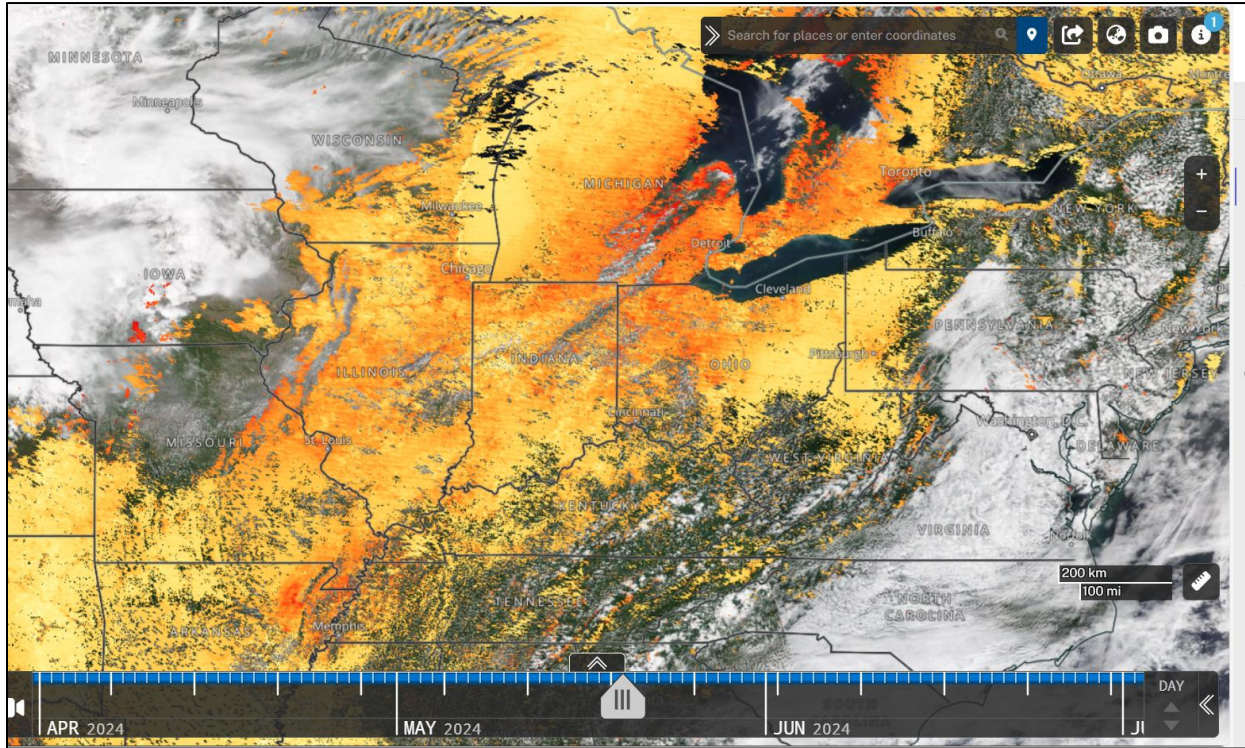
Numerous large wildfires located throughout portions of Canada from the southern regions of the Northwest Territories and northeast British Columbia to the central regions of Alberta, Saskatchewan and Manitoba continued to burn today. Due to the large amount of ongoing wildfires and recently developed ones throughout these areas, a very large mass of smoke ranging from light to thick density covered a majority Canada reaching into northern Nunavut where it continued east and south over most of Quebec, the Labrador sea and through southern Greenland. The smoke extending south and east along the Canadian and U.S. border, the smoke continued moving south and eastward through the north-central and northeastern regions of the United states. The thickest density smoke continues to be seen surrounding the larger fires located in the northeast corner of British Columbia, north-central Alberta, eastern Alberta, east-central Saskatchewan and west-central Manitoba. Areas of moderate smoke were also seen covering portions of north-central Canada, north-central U.S. and the Great Lakes regions, however, a large amount of cloud cover throughout these regions are most likely concealing thicker density smoke.

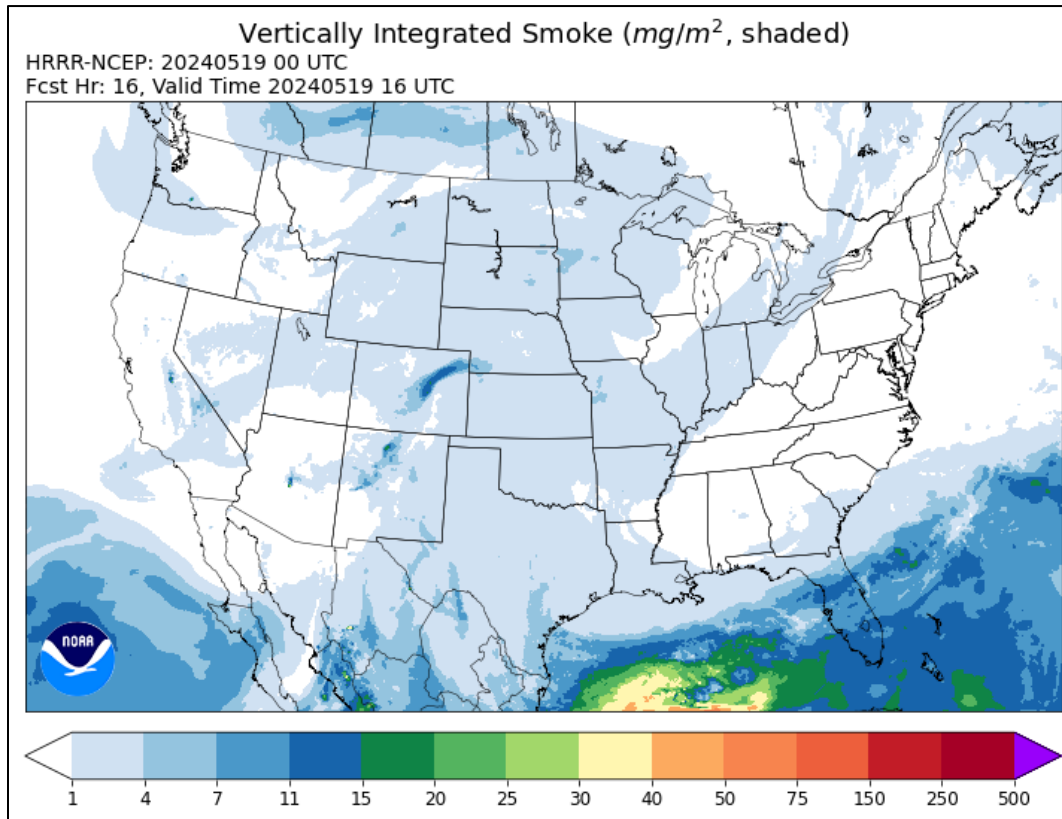
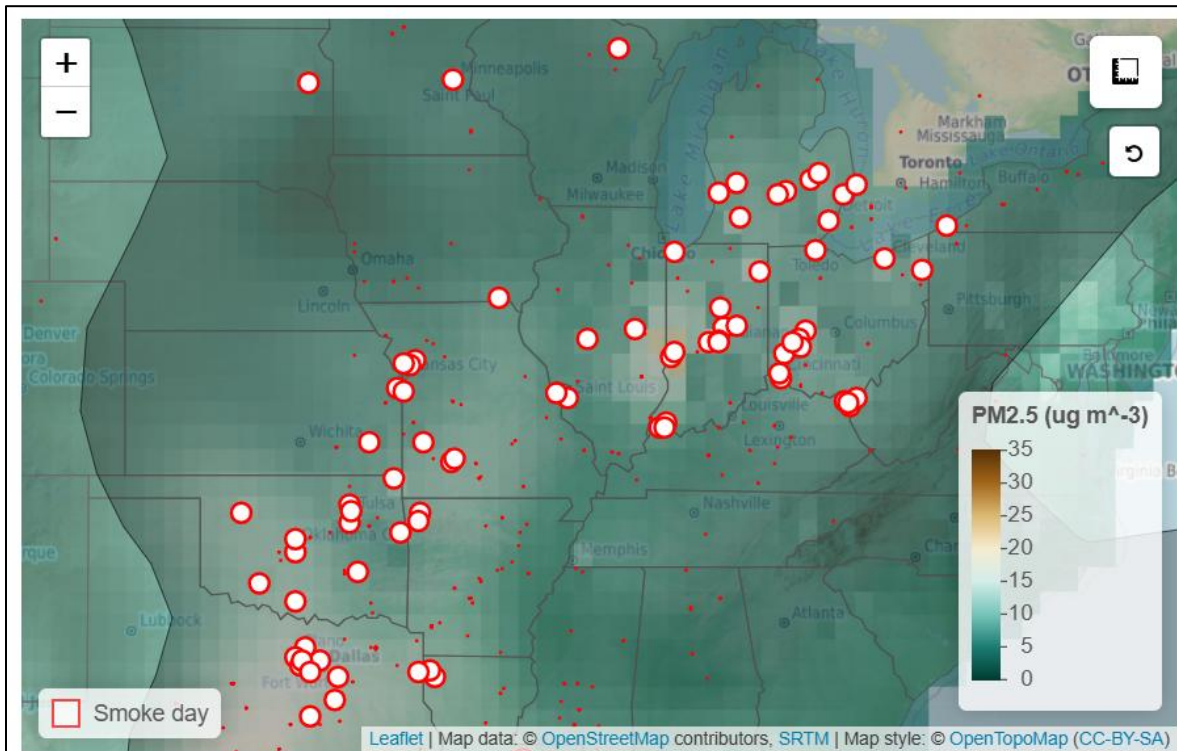
May 19, 2024**PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Indianapolis - W. 18th St.	180970081	5/19/2024	21.1	20.9
Terre Haute - Lafayette Ave	181670018	5/19/2024	22.1	18.8

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - May 19, 2024

Satellite Imagery with MAIAC AOD – May 19, 2024



HRRR Smoke - Vertically Integrated Smoke – May 19, 2024**GAM PMO3 Smoke Output – May 19, 2024**

Saturday, May 18, 2024

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0128Z May 19, 2024

SMOKE:

Canada and the North Atlantic Ocean....

Numerous wildfires located throughout portions of Canada from the western Northwest Territories and northeast British Columbia to the central regions of Alberta, Saskatchewan and Manitoba continued to burn despite being concealed by persistent cloud cover throughout the day.

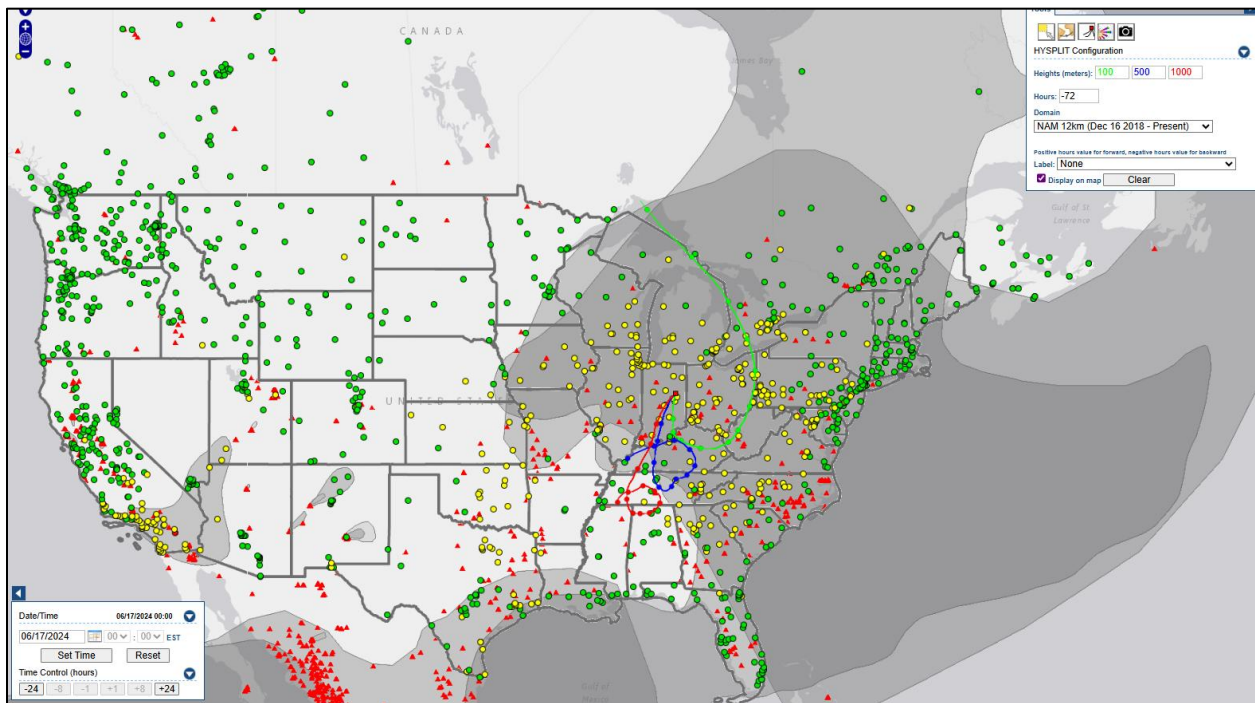
Central United States...

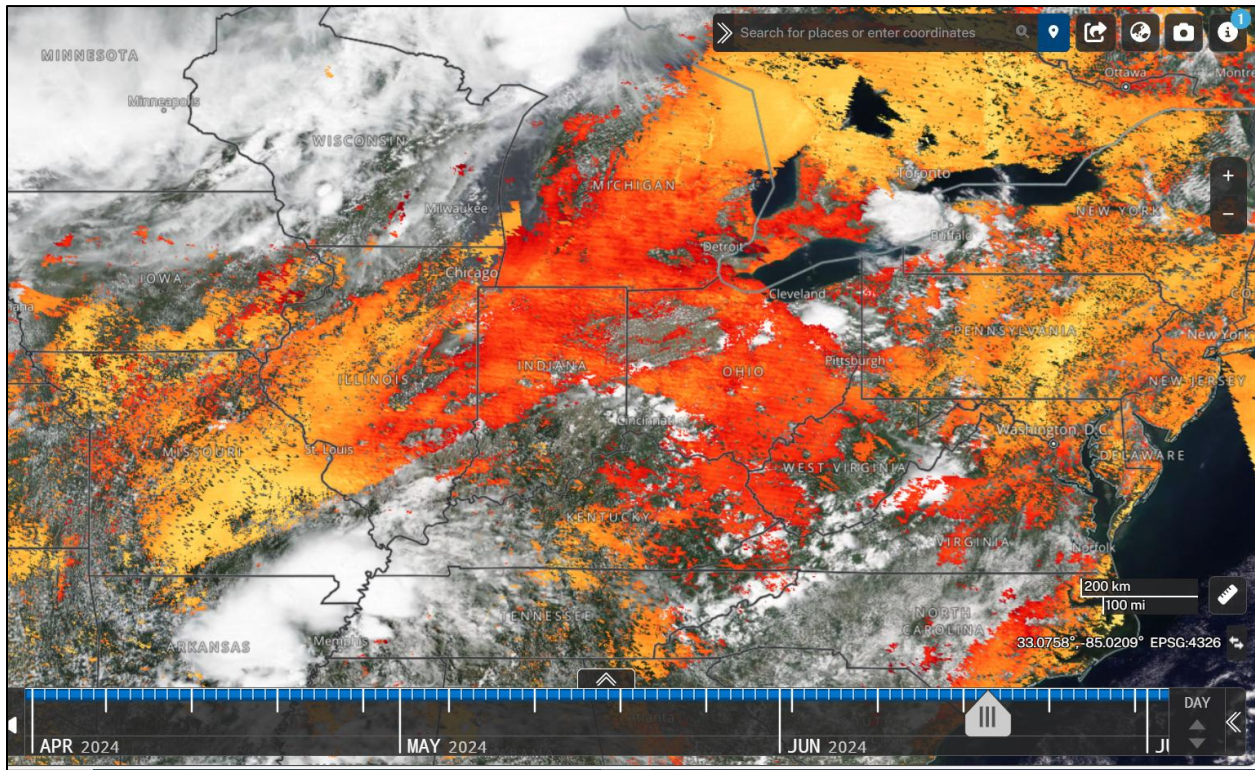
An area of light density smoke was seen over portions of the Upper Midwest of the United States extending southwest into portions of the South Central United States. This smoke is likely a combination of the fire activity over Canada and also with fire activity over the Central United States.

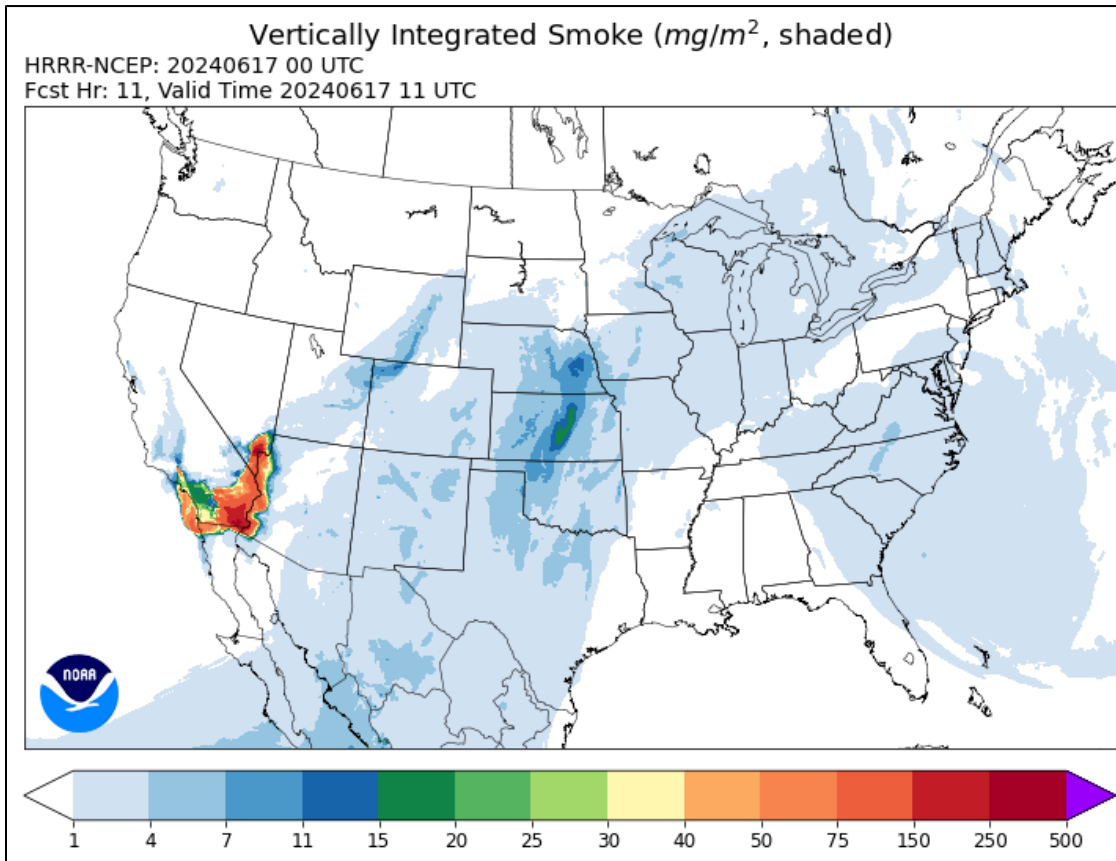
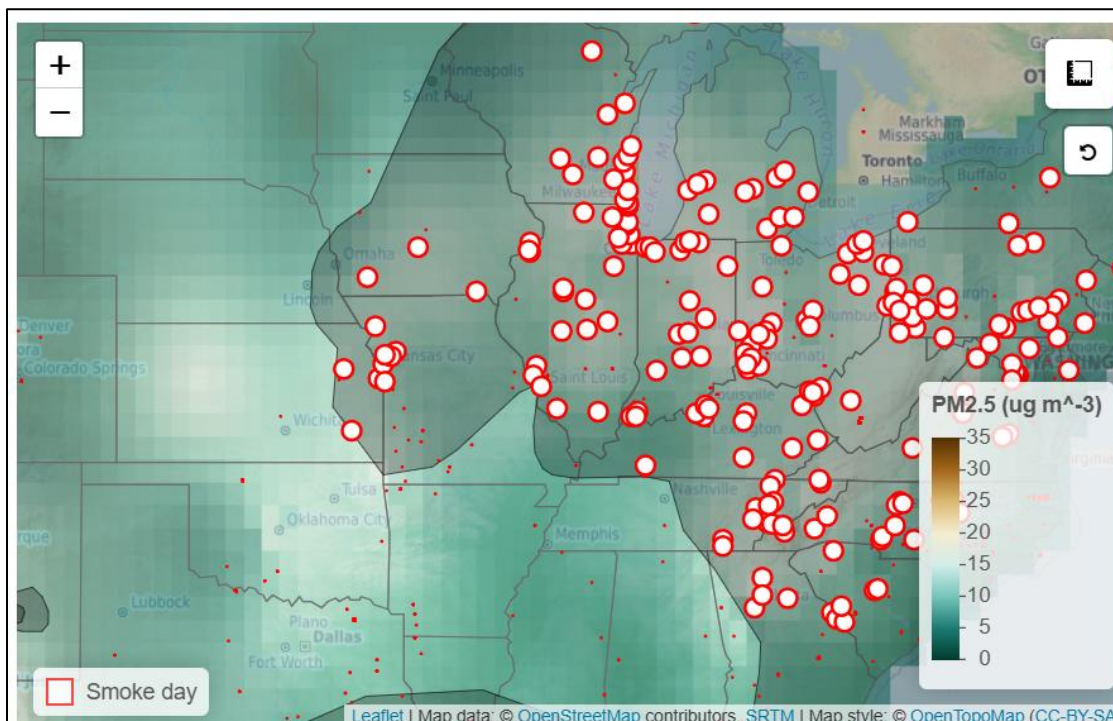
June 17, 2024

PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Muncie - Central HS	180350006	6/17/2024	13.5	13.2

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 17, 2024

Satellite Imagery with MAIAC AOD – June 17, 2024

HRRR Smoke - Vertically Integrated Smoke – June 17, 2024**GAM PMO3 Smoke Output – June 17, 2024**

Sunday, June 16, 2024

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0028Z June 17, 2024

SMOKE: Central US/Southern US/ Atlantic Seaboard...

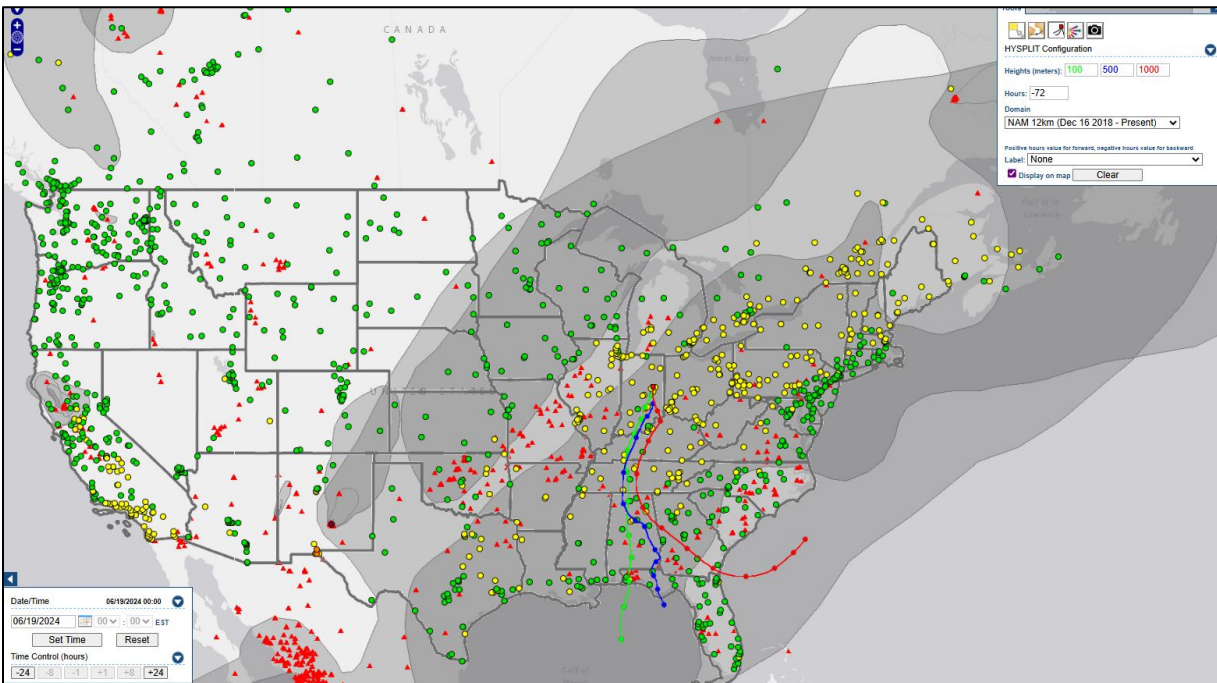
Continued remnant light smoke originating from previous and ongoing wildfires in Canada, has mixed with both current smoke from ongoing fires in the Central United States and continuing smoke/aerosols emanating from the Gulf of Mexico. The smoke was mostly moving eastward within the Central and Eastern United States into the Atlantic Ocean.

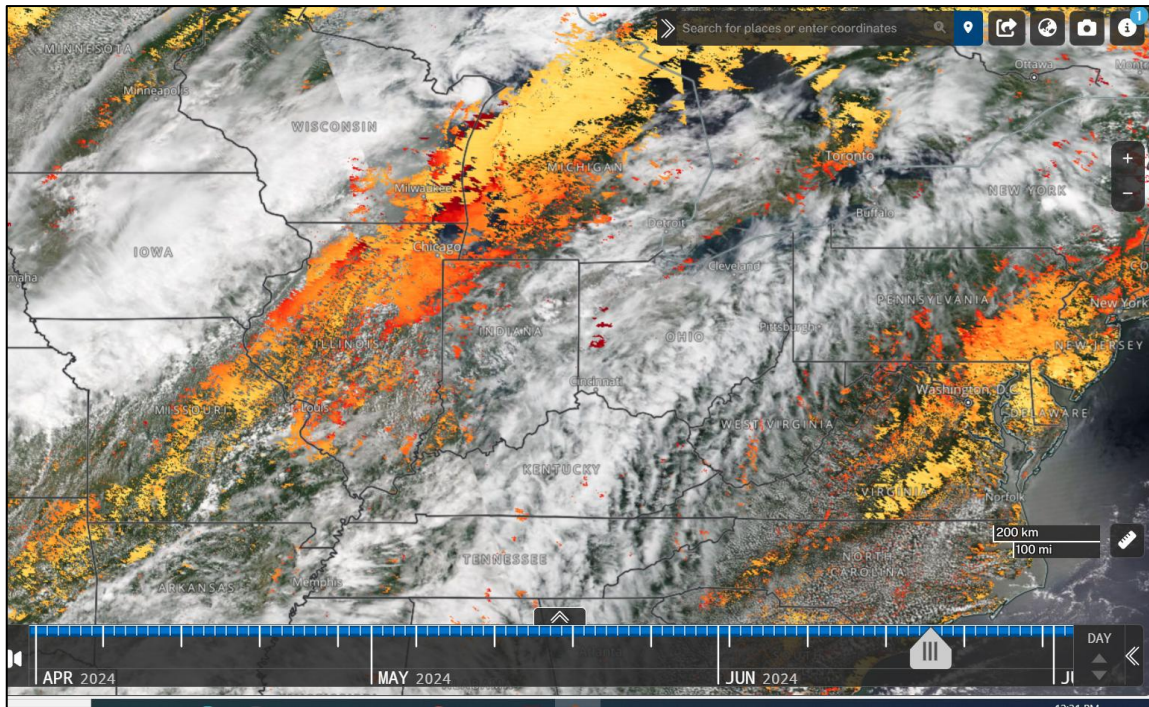
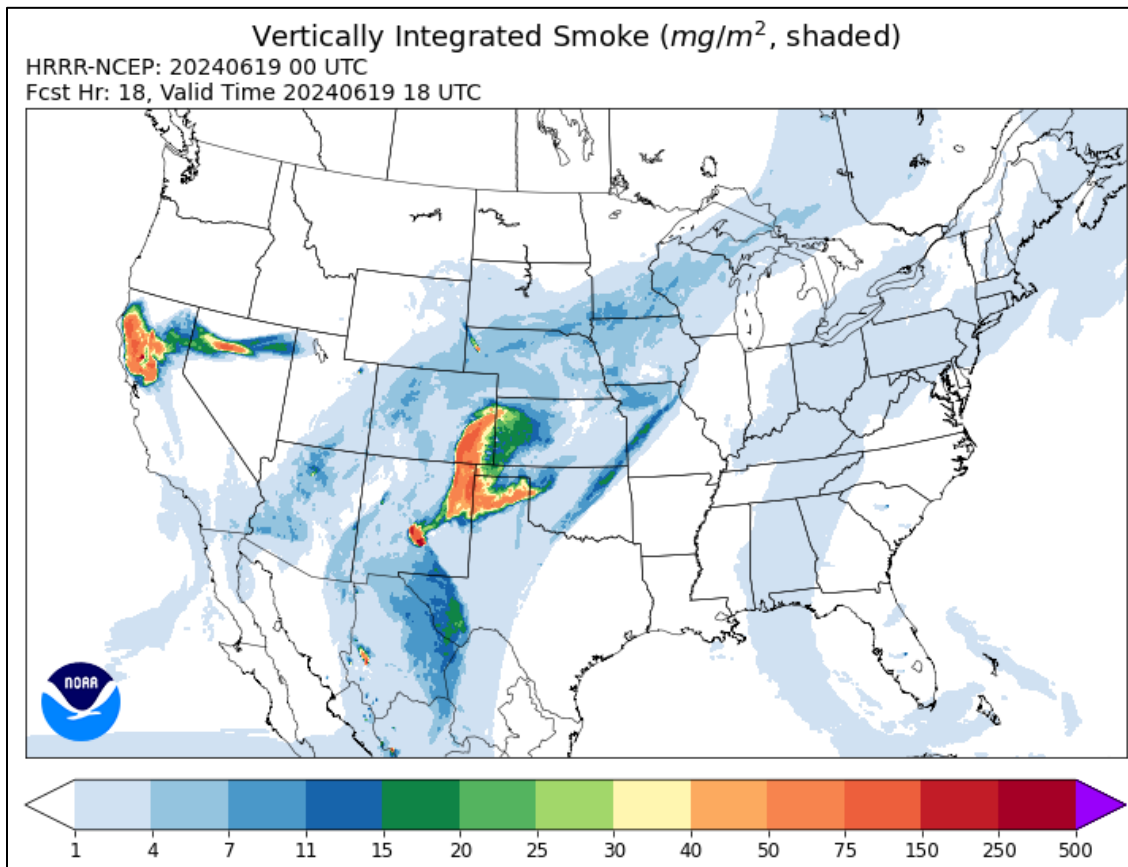
June 19, 2024

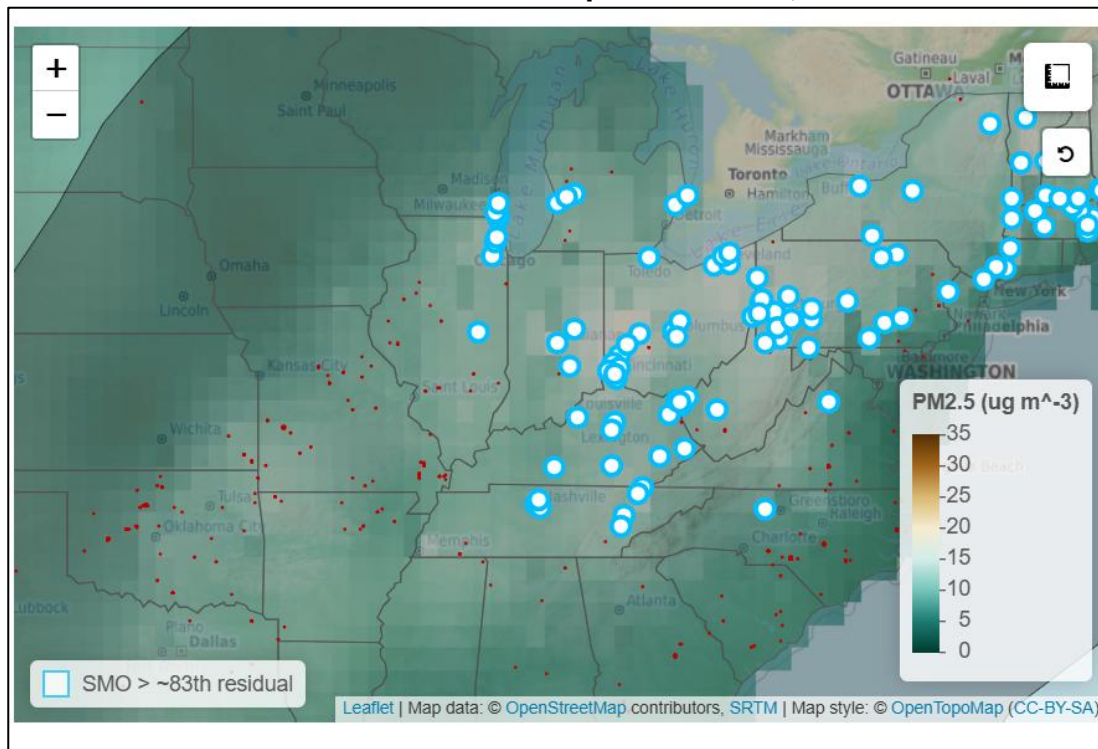
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/19/2024	13.8	13.7
Muncie - Central HS	180350006	6/19/2024	14.4	13.2

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 19, 2024



Satellite Imagery with MAIAC AOD – June 19, 2024**HRRR Smoke - Vertically Integrated Smoke – June 19, 2024**

GAM PMO3 Smoke Output – June 19, 2024**Wednesday, June 19, 2024****NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1725Z June 19, 2024

SMOKE:

Central and Eastern United States...

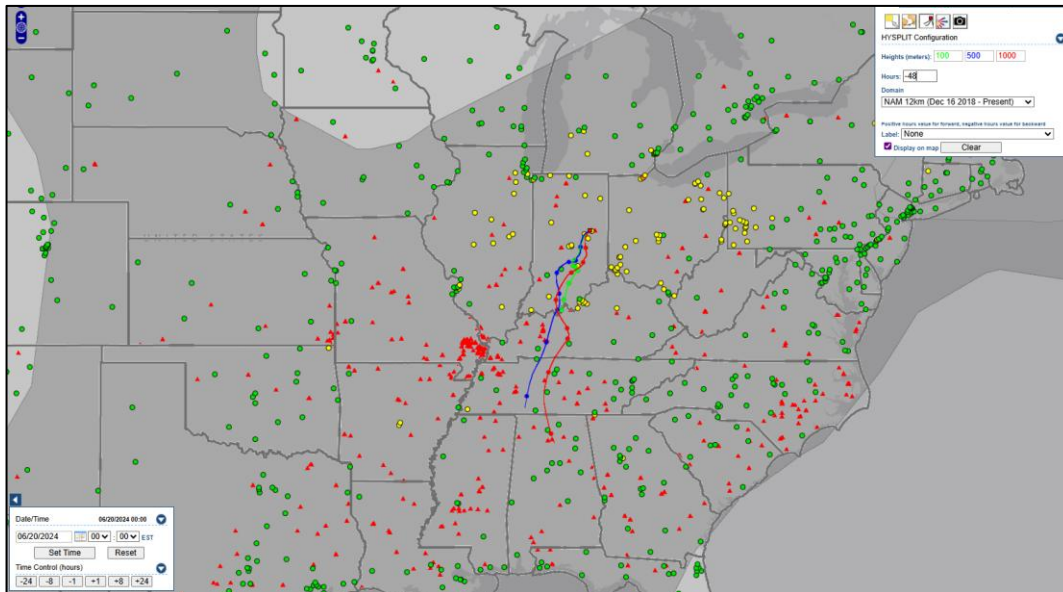
A large area of light density smoke attributed to a combination of smoke from ongoing wildfires throughout Eastern Canada, seasonal fire activity throughout the Central and Atlantic Seaboard regions of the U.S. and the continued combination of smoke and aerosols emanating from the Gulf of Mexico continue to be observed today. Various individual events throughout these regions such as large wildfires and seasonal agricultural burning are contributing elements to the vast combined area of smoke that can be seen covering these regions. As the morning progressed the two large bands of smoke running through the Central and Eastern regions of the United States began separate and disperse in opposite directions, with the band located in the Central U.S. moving west and the band located in the Eastern U.S. moving east.

June 20, 2024

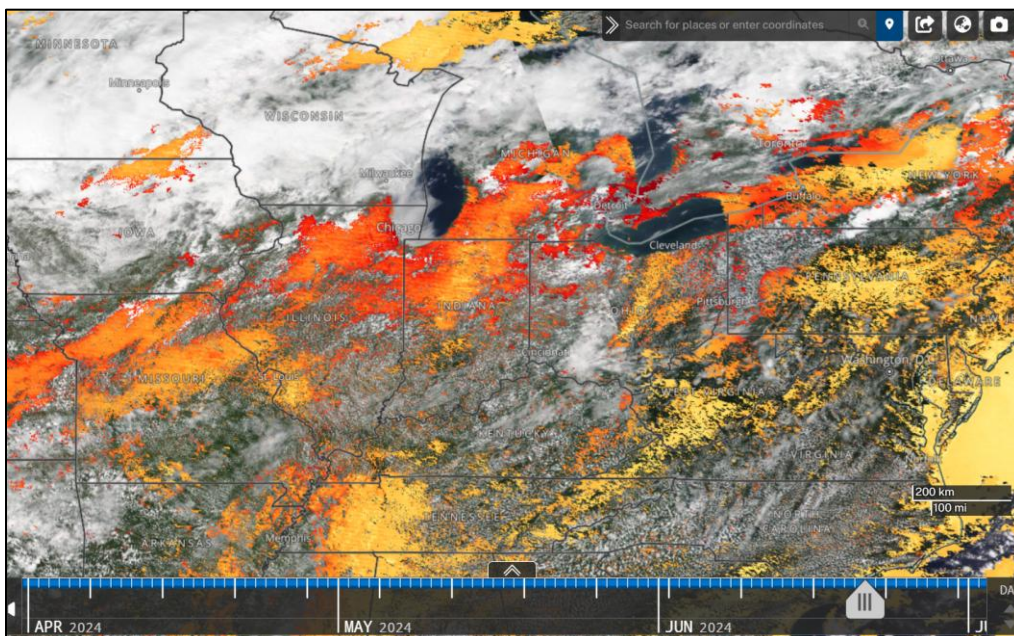
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

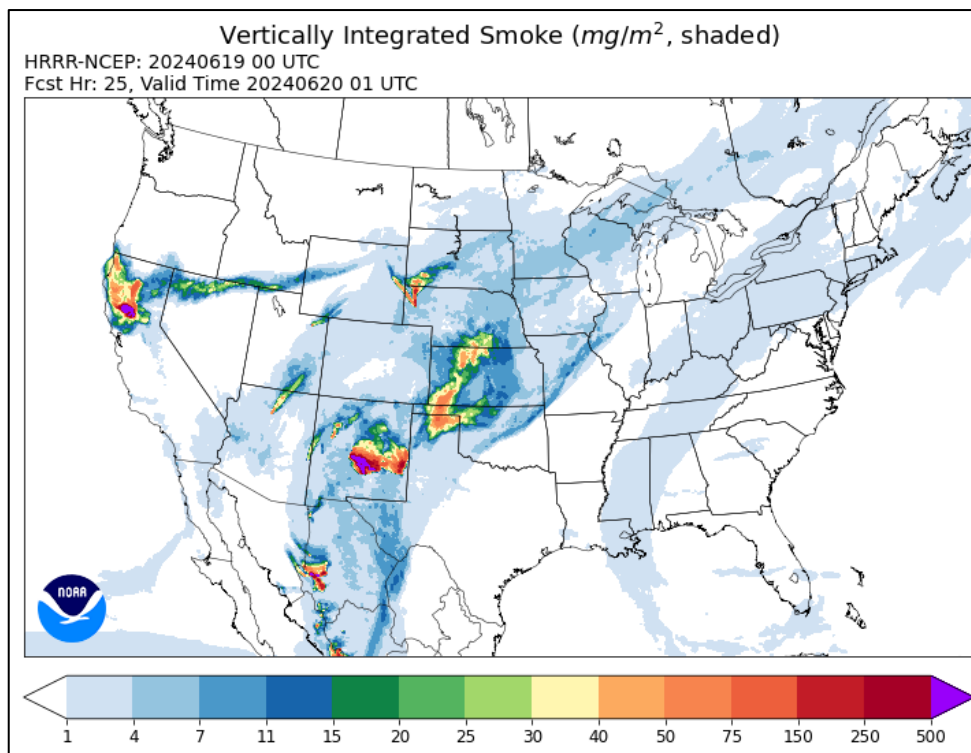
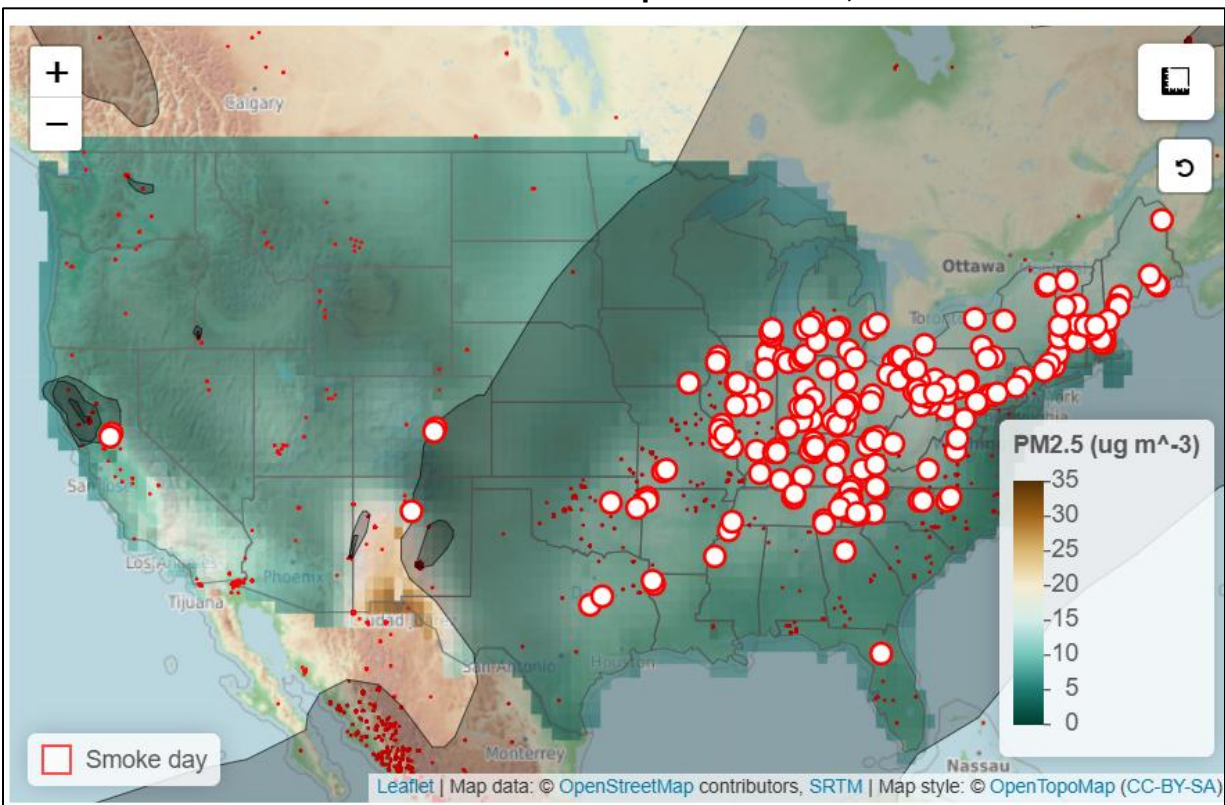
Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Muncie - Central HS	180350006	6/20/2024	14.4	13.2

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 20, 2024



Satellite Imagery with MAIAC AOD – June 20, 2024



HRRR Smoke - Vertically Integrated Smoke – June 20, 2024**GAM PMO3 Smoke Output – June 20, 2024**

Wednesday, June 19, 2024

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0101Z June 20, 2024

SMOKE:

Central and Eastern United States/Southern Canada/Atlantic Ocean. ...

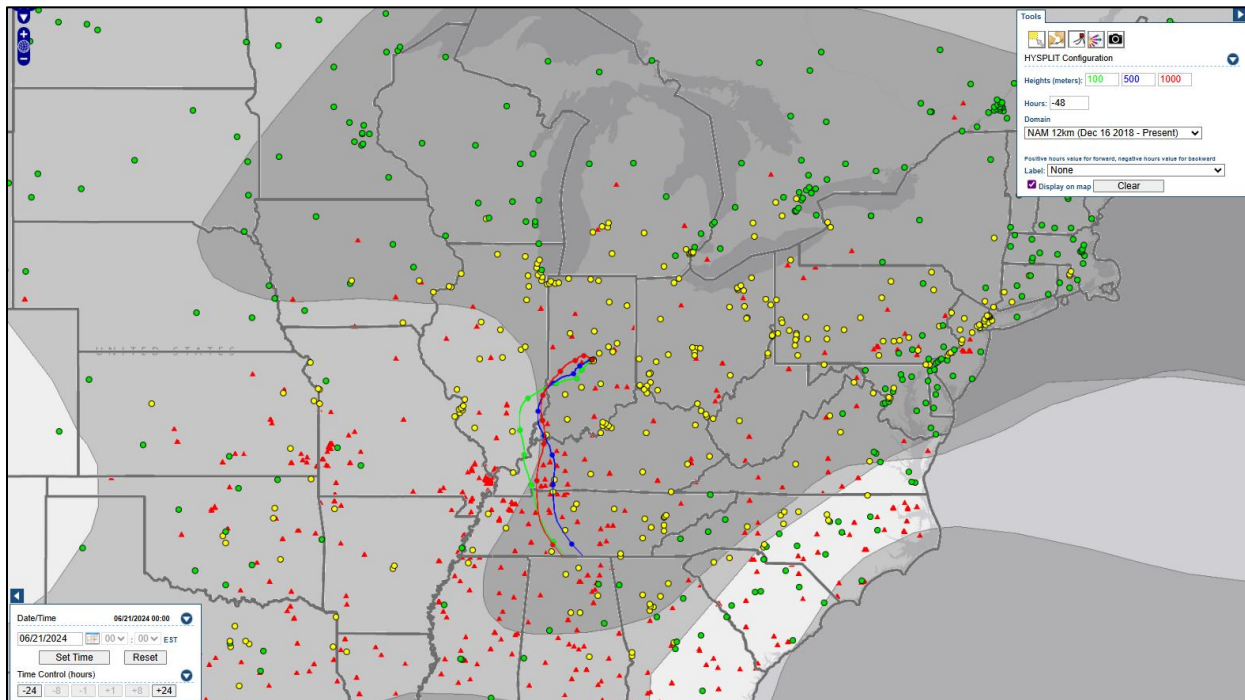
A large area of light density smoke attributed to a combination of smoke from ongoing wildfires throughout Eastern Canada, seasonal fire activity throughout the Central and Atlantic Seaboard regions of the U.S. and the continued combination of smoke and aerosols emanating from the Gulf of Mexico continue to be observed today. Various individual events throughout these regions such as large wildfires and seasonal agricultural burning are contributing elements to the vast combined area of smoke that can be seen covering these regions. An area of smoke was running through the Central and Eastern regions of the United States reaching southern Ontario, southern Quebec and reaching out over the Atlantic coastline. One wildfire in central Quebec could be seen through cloud cover emitting at least moderate density smoke this evening.

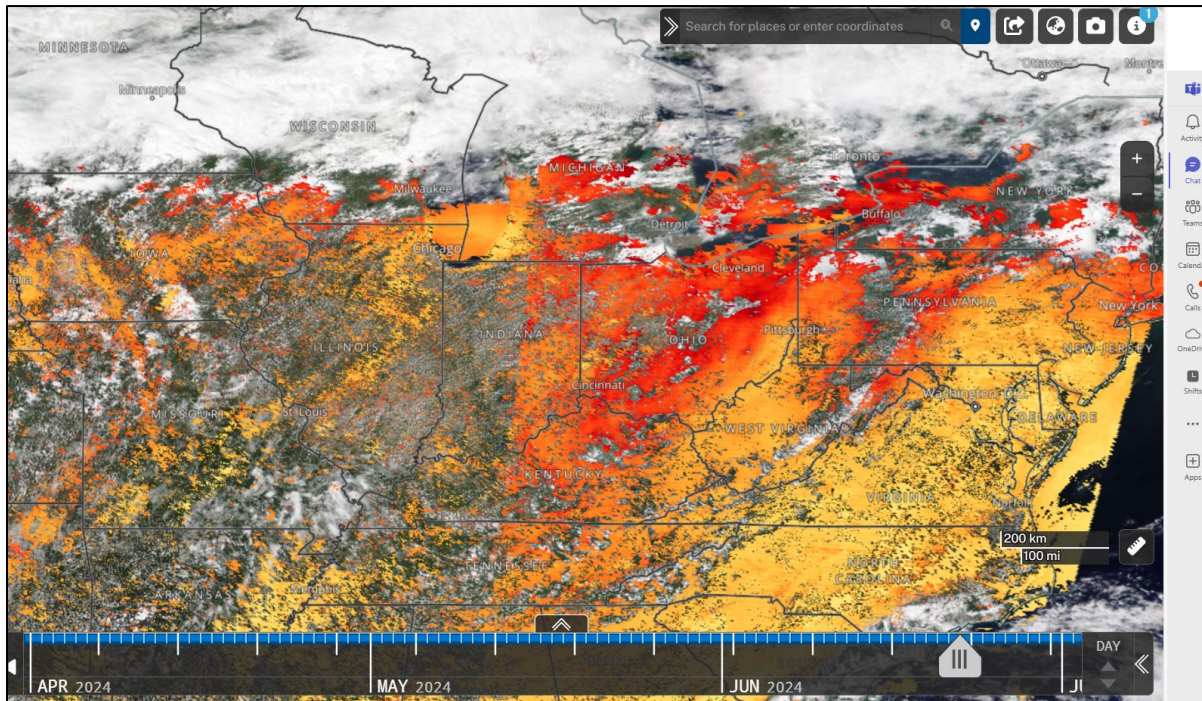
June 21, 2024

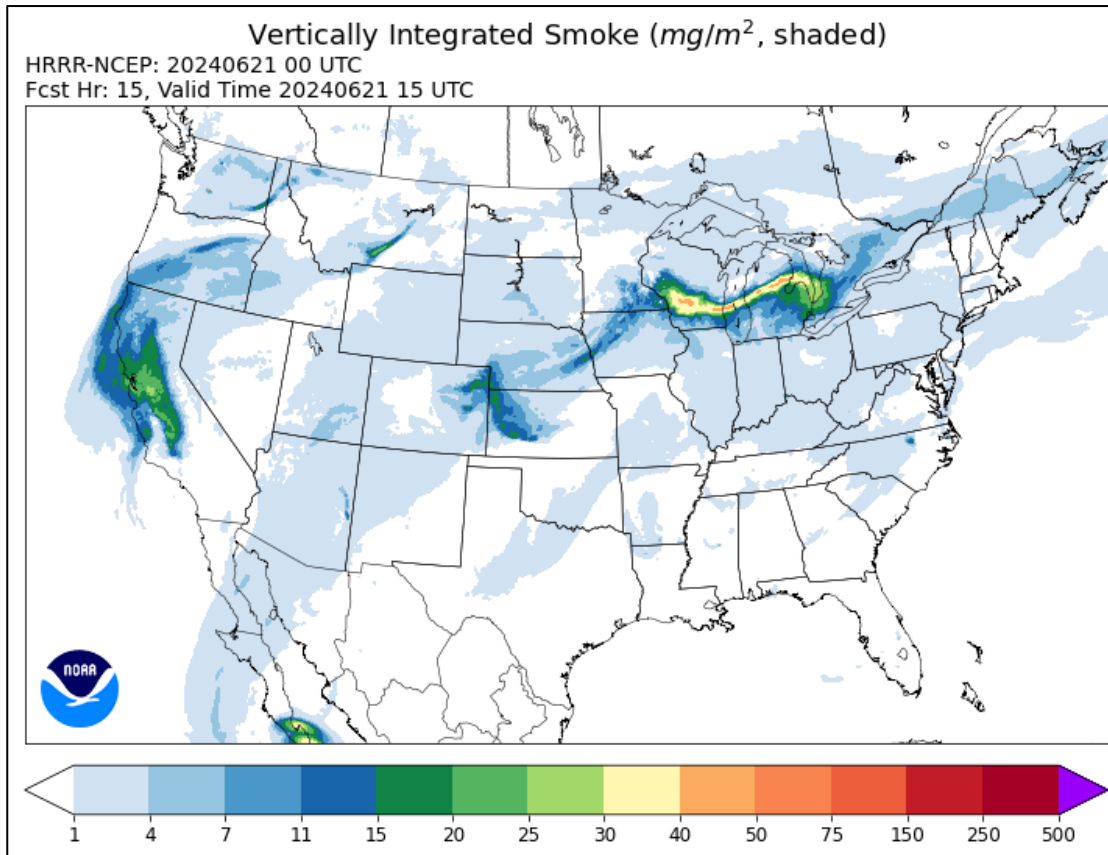
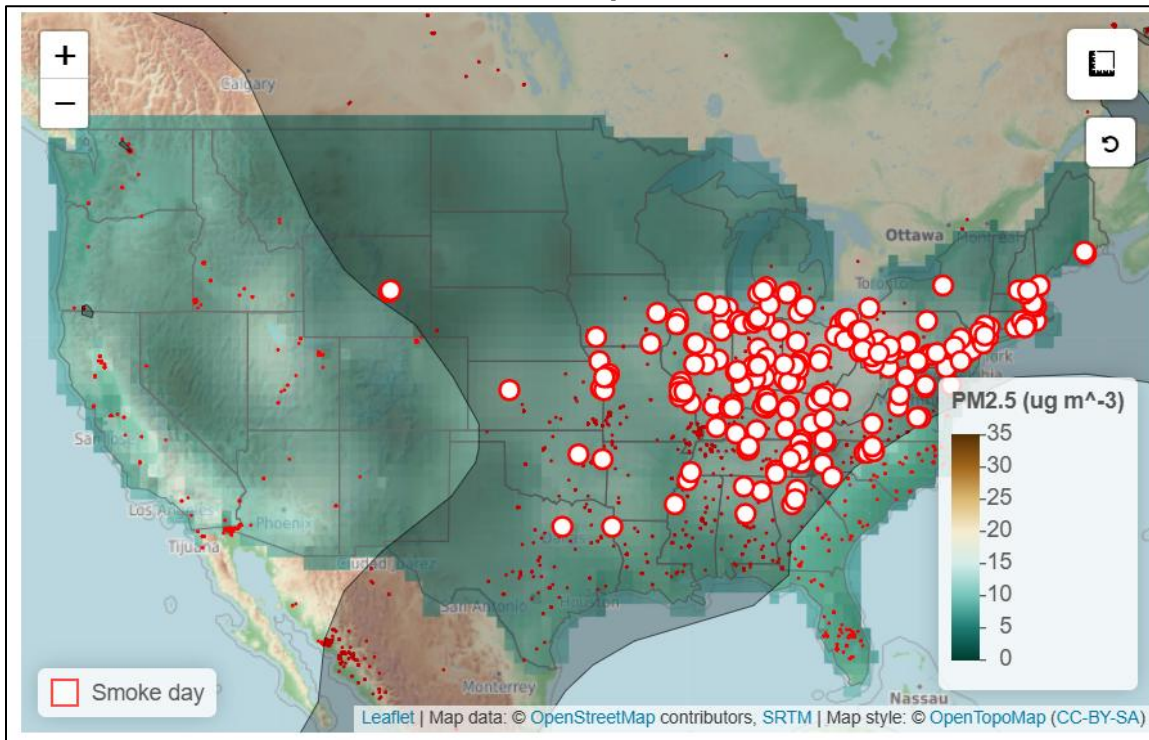
PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/21/2024	17.7	13.7
Muncie - Central HS	180350006	6/21/2024	17.7	13.2
Jasper - Post Office	180372001	6/21/2024	16.8	15.7
Fishers	180570007	6/21/2024	16.6	13.8
Mechanicsburg	180650003	6/21/2024	17.7	15.5
Hammond-167th St	180890036	6/21/2024	19.5	16.3
Anderson - Eastside Elem	180950011	6/21/2024	15.7	15.4
Indianapolis - Washington Park	180970078	6/21/2024	19.1	17.8
Indianapolis - W. 18th St.	180970081	6/21/2024	23.7	20.9

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 21, 2024



Satellite Imagery with MAIAC AOD – June 21, 2024

HRRR Smoke - Vertically Integrated Smoke – June 21, 2024**GAM PMO3 Smoke Output – June 21, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**Thursday, June 21, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0101Z June 21, 2024

SMOKE:

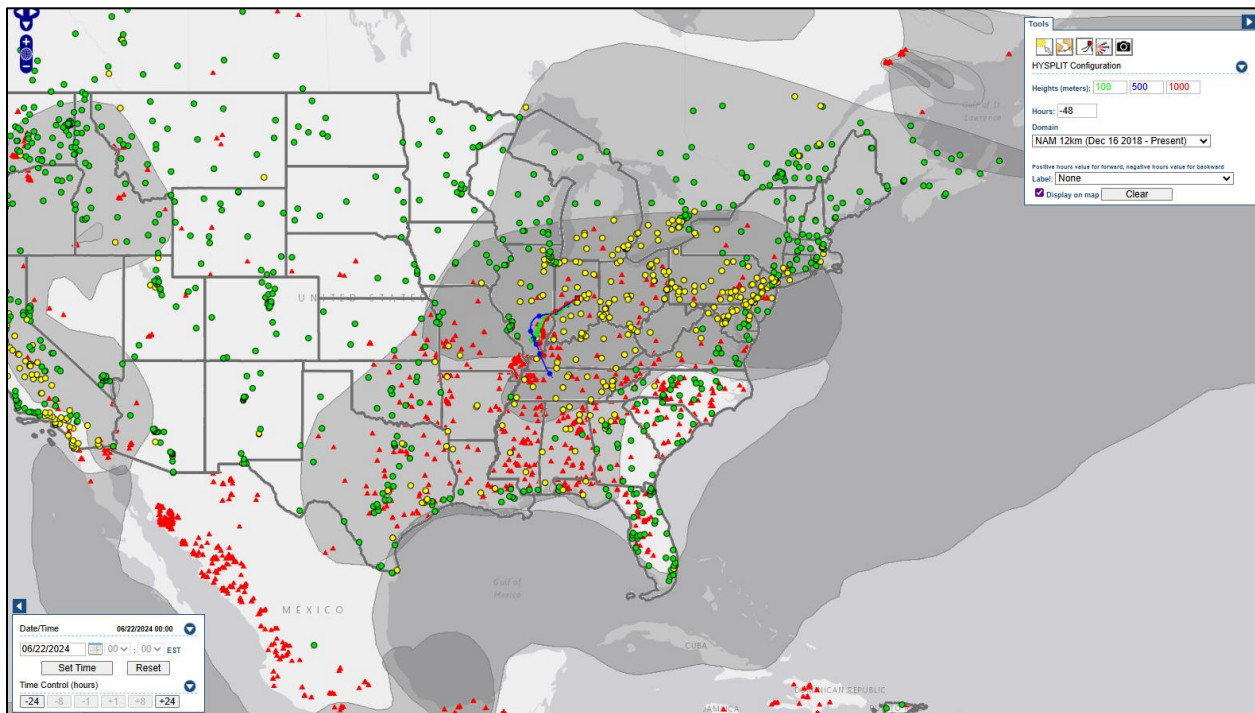
Central and Eastern United States/Alaska/Western Canada/Atlantic Ocean...

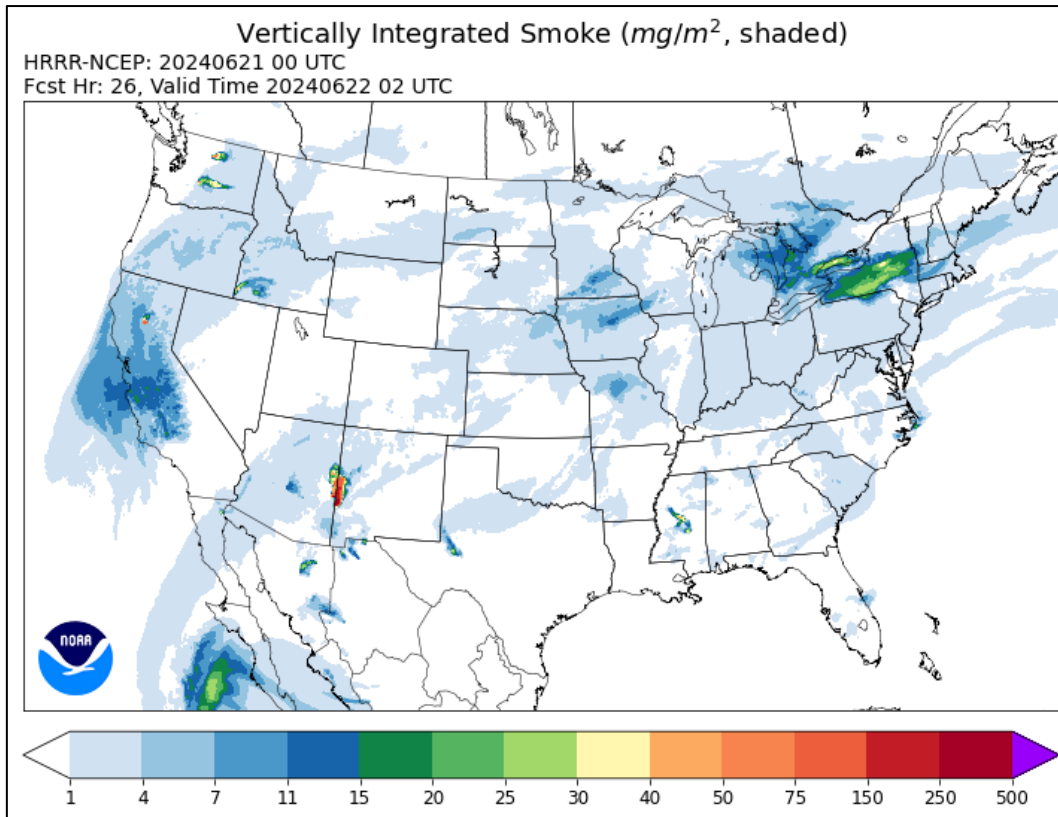
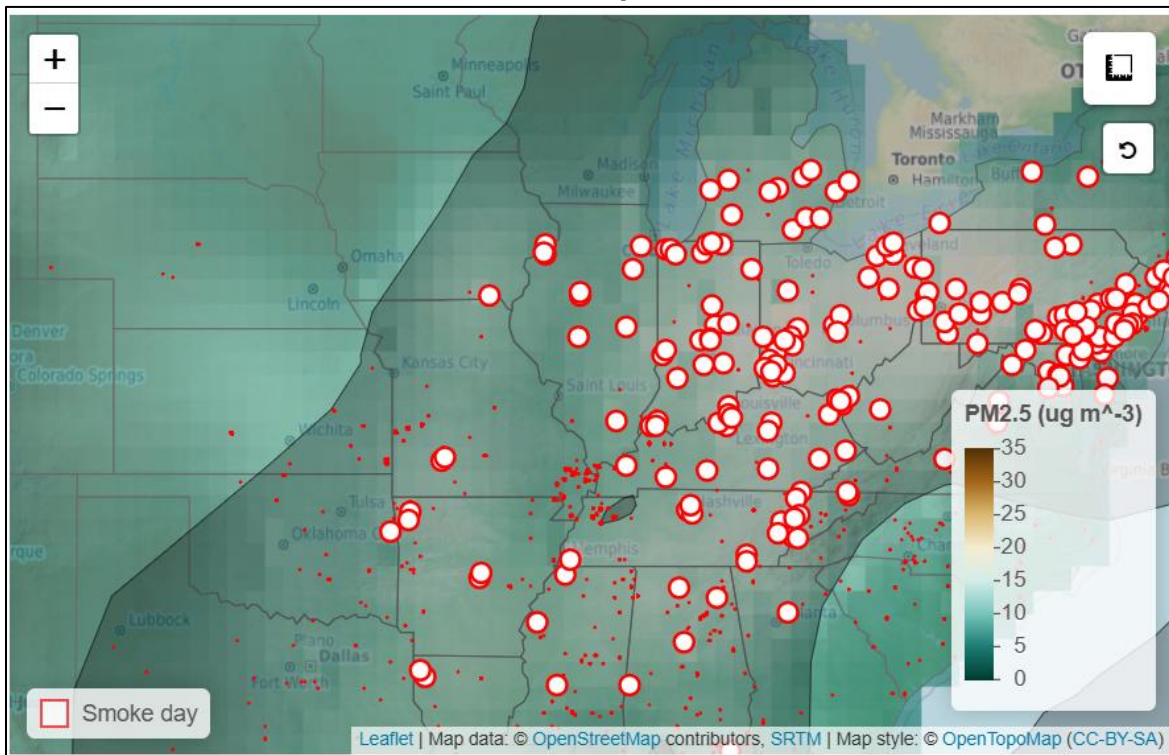
A large area of light density smoke attributed to a combination of smoke from ongoing wildfires throughout Western Canada and Alaska, seasonal fire activity throughout the Central and Atlantic Seaboard regions of the U.S. and the continued combination of smoke and aerosols emanating from the Gulf of Mexico continue to be observed today, beginning in Alaska and starting again through parts of Northwestern Territories and Yukon, southeast through western Canada, and into the United States, where in covered Central and Eastern U.S before ending in the Atlantic Ocean. Various individual events throughout these regions such as large wildfires and seasonal agricultural burning are contributing elements to the vast combined area of smoke that can be seen covering these regions.

June 22, 2024

PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS	Date	Daily average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Columbus - Rocky Ford Drive	180050008	6/22/2024	15.1	13.7
Muncie - Central HS	180350006	6/22/2024	16.8	13.2
Fishers	180570007	6/22/2024	16.1	13.8

AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 22, 2024

HRRR Smoke - Vertically Integrated Smoke – June 22, 2024**GAM PMO3 Smoke Output – June 22, 2024**

NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts**Friday, June 21, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0130Z June 22, 2024

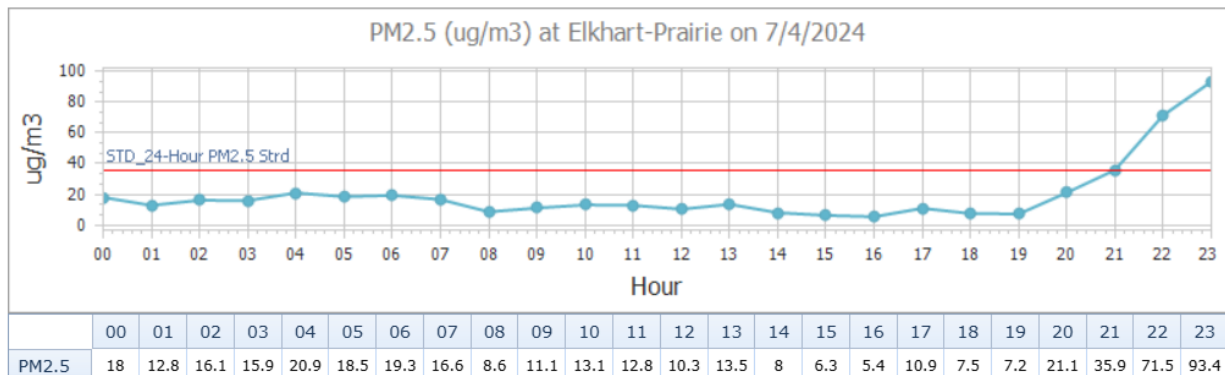
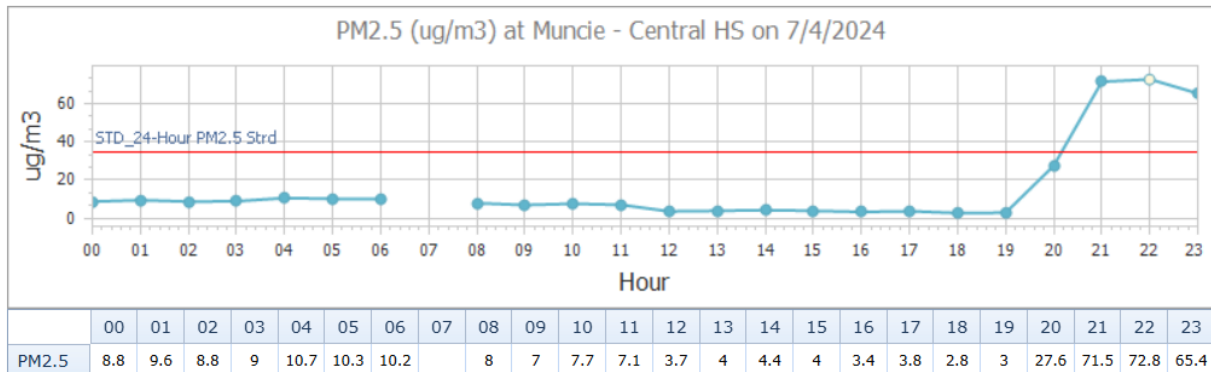
SMOKE:

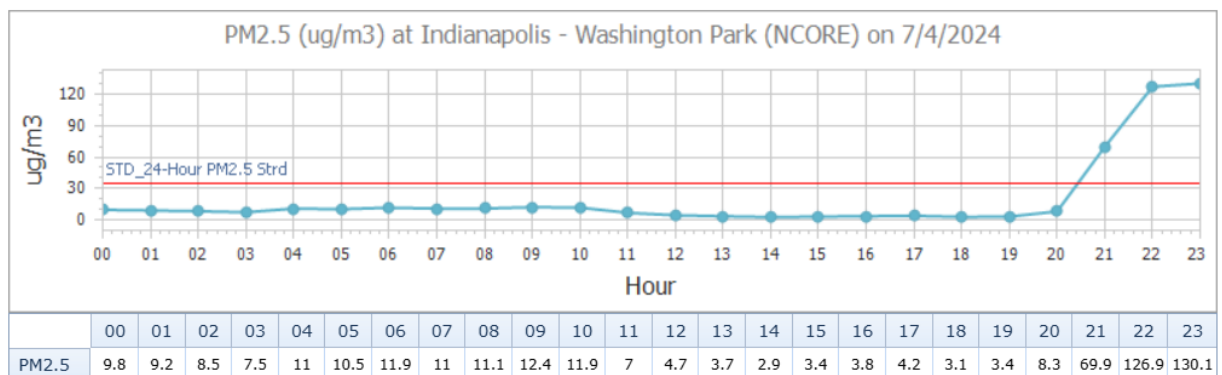
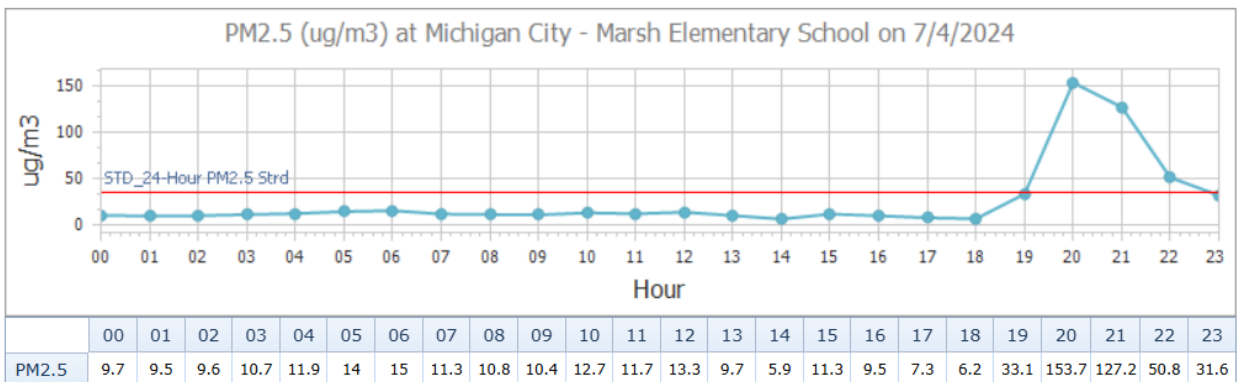
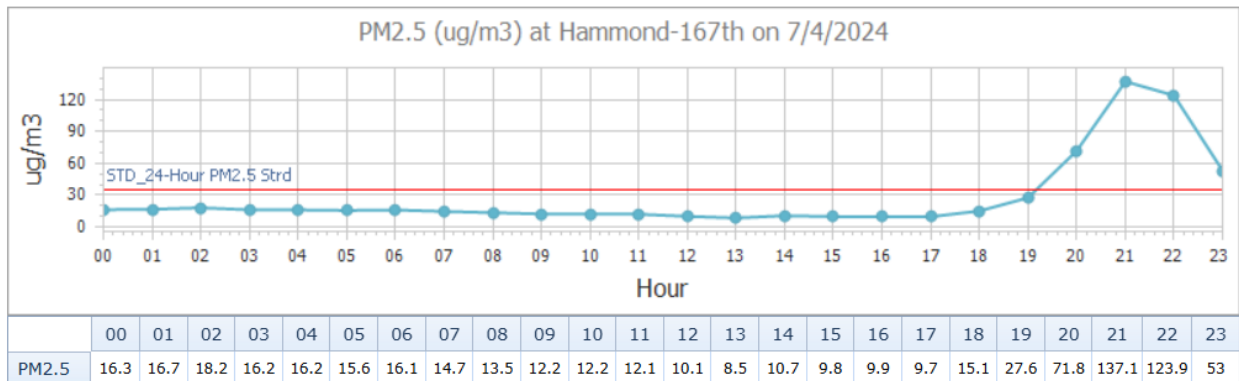
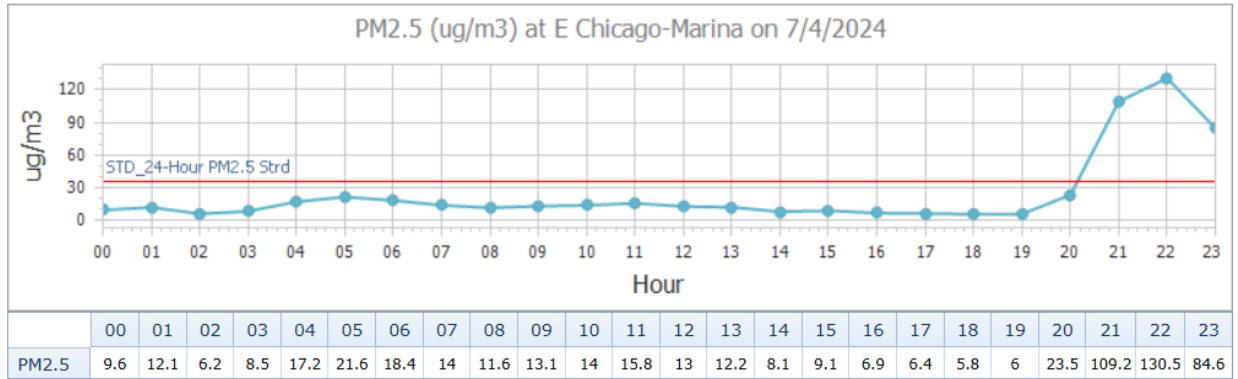
Alaska/Northeastern United States/Atlantic Ocean...

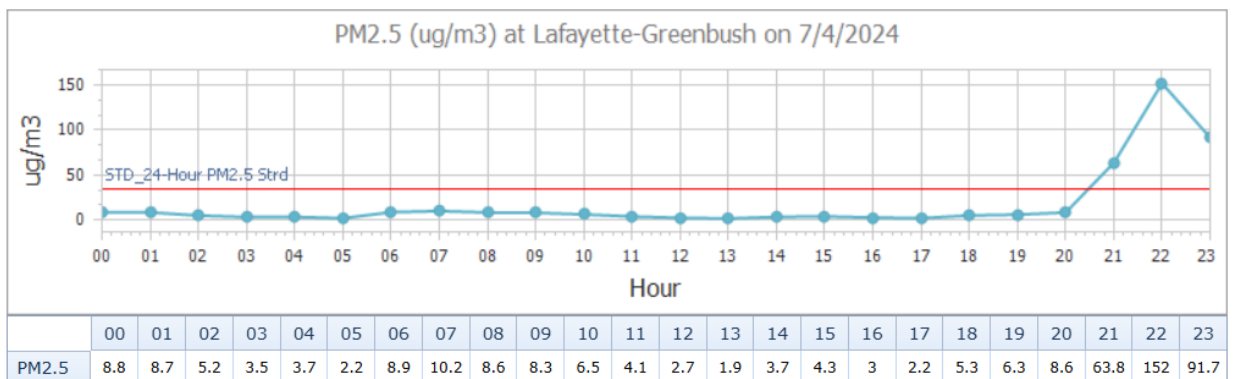
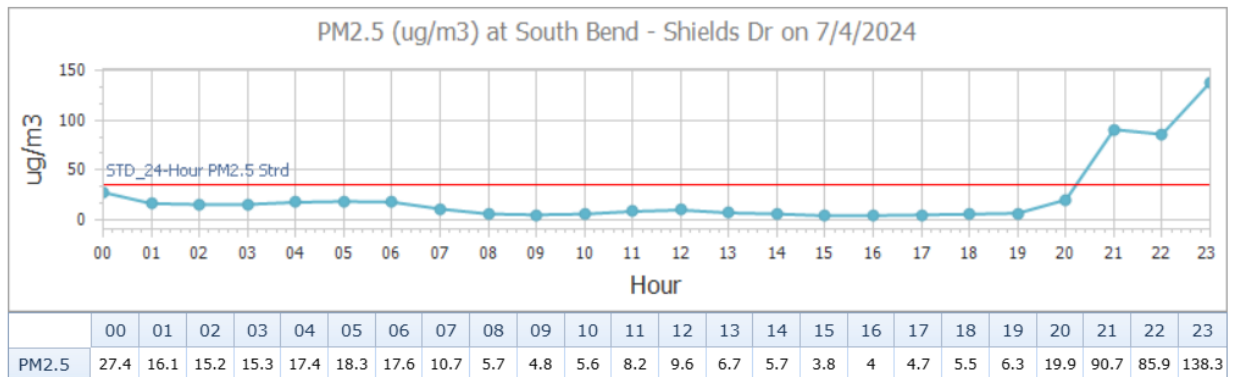
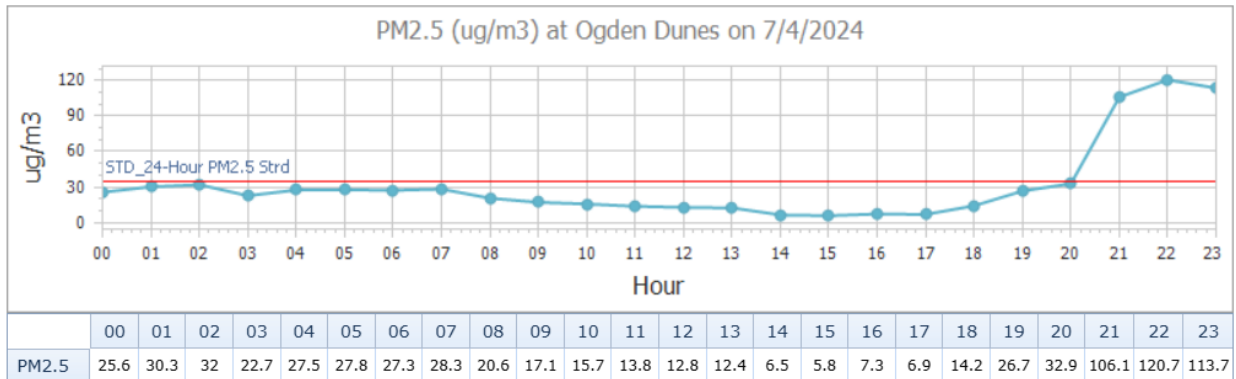
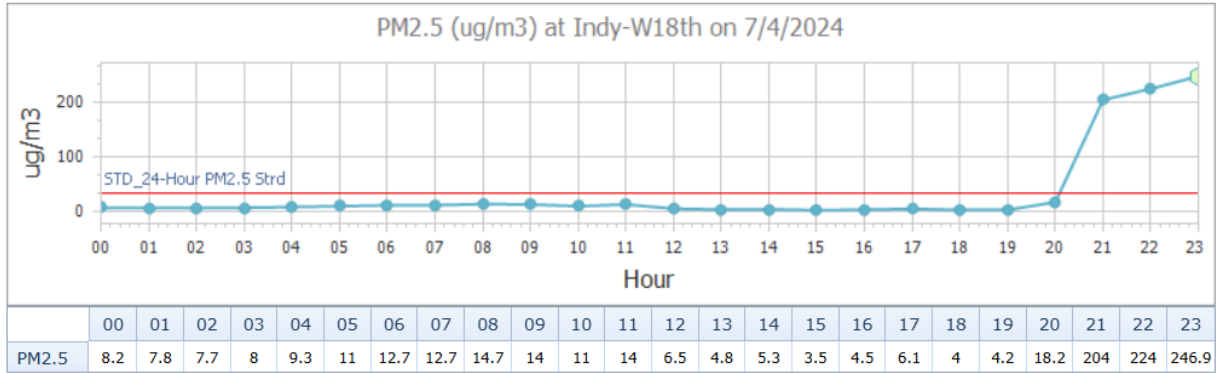
A large area of light density smoke attributed to a combination of smoke from new and ongoing wildfires throughout western and eastern Canada, fires in Alaska, seasonal fire activity throughout the Central U.S. and Atlantic Seaboard, and the continued combination of smoke and aerosols emanating from the Gulf of Mexico continue to be observed today. Although cloud cover in these areas impacts detailed analysis, it can be presumed that various individual events throughout these regions such as numerous wildfires and seasonal agricultural burning are contributing to the vast combined area of smoke covering these regions. Smoke was observed covering the majority of the eastern U.S. and Canada. Moderate to thick smoke was observed coming from multiple wildfires in southeastern Quebec this evening, moving to the southeast.

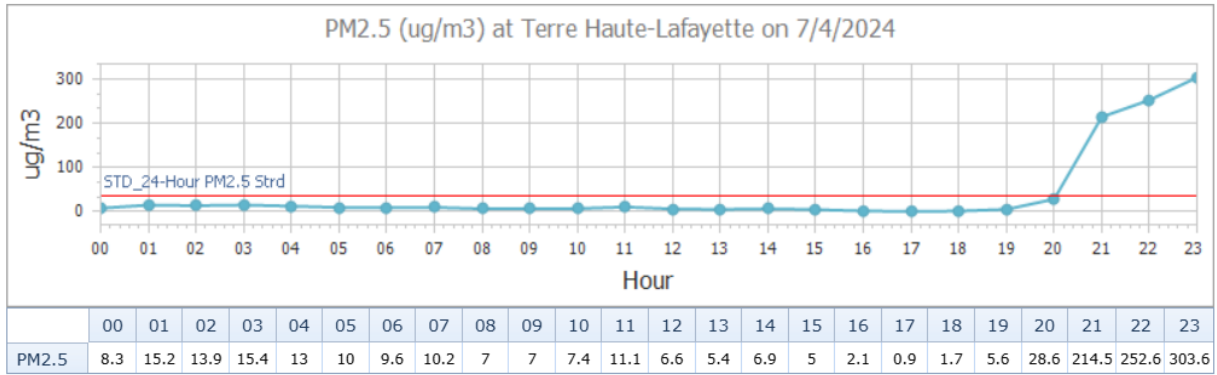
July 4, 2024**PM_{2.5} Monitoring Sites Impacted by Firework Smoke**

Monitor name	AQS	Date	Daily average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Muncie - Central HS	180350006	7/4/2024	15.8	13.2
Elkhart - Prairie St	180390008	7/4/2024	19.7	16.3
East Chicago - Marina	180890034	7/4/2024	24.0	18
Hammond-167th St	180890036	7/4/2024	27.8	16.3
Michigan City - Marsh Elem. Sch.	180910011	7/4/2024	24.8	15.9
Indianapolis - Washington Park	180970078	7/4/2024	20.2	17.8
Indianapolis - W. 18th St.	180970081	7/4/2024	35.9	20.9
Ogden Dunes	181270024	7/4/2024	31.4	15.3
South Bend - Shields Dr.	181410015	7/4/2024	22.6	16.9
Lafayette - Greenbush St	181570008	7/4/2024	17.6	15.1
Terre Haute - Lafayette Ave	181670018	7/4/2024	40.0	18.8

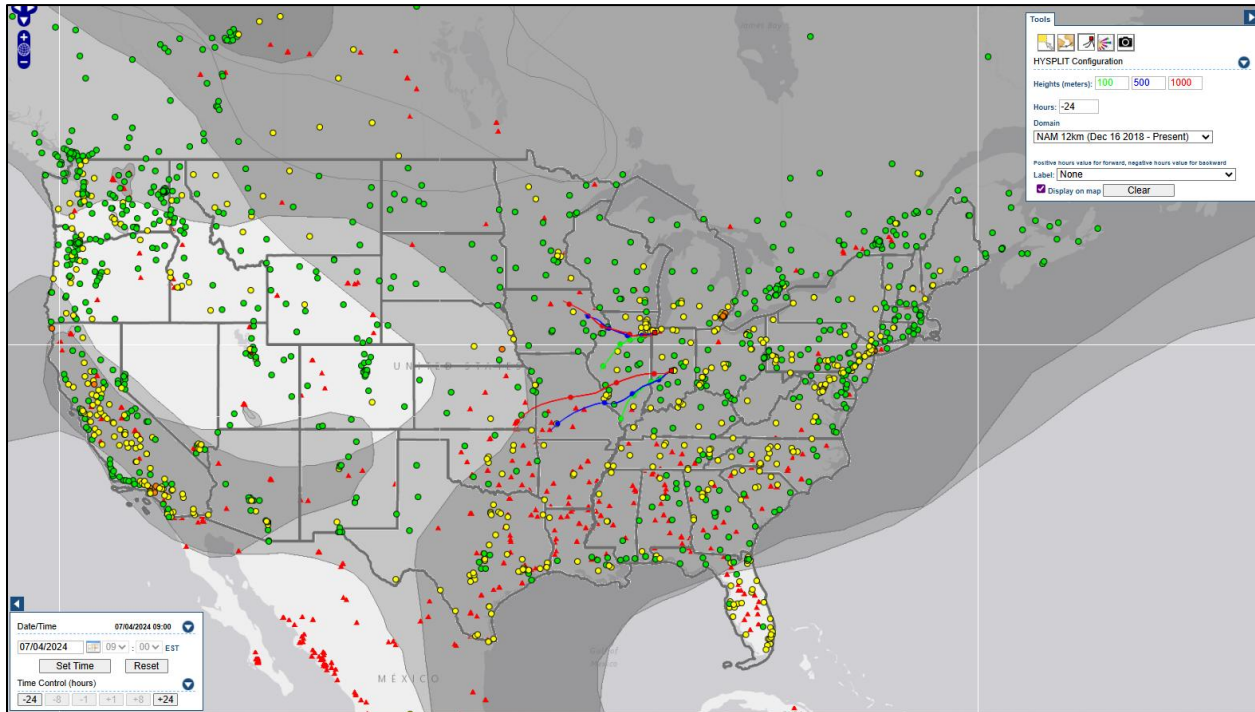
Hourly PM_{2.5} Concentrations for July 4, 2024

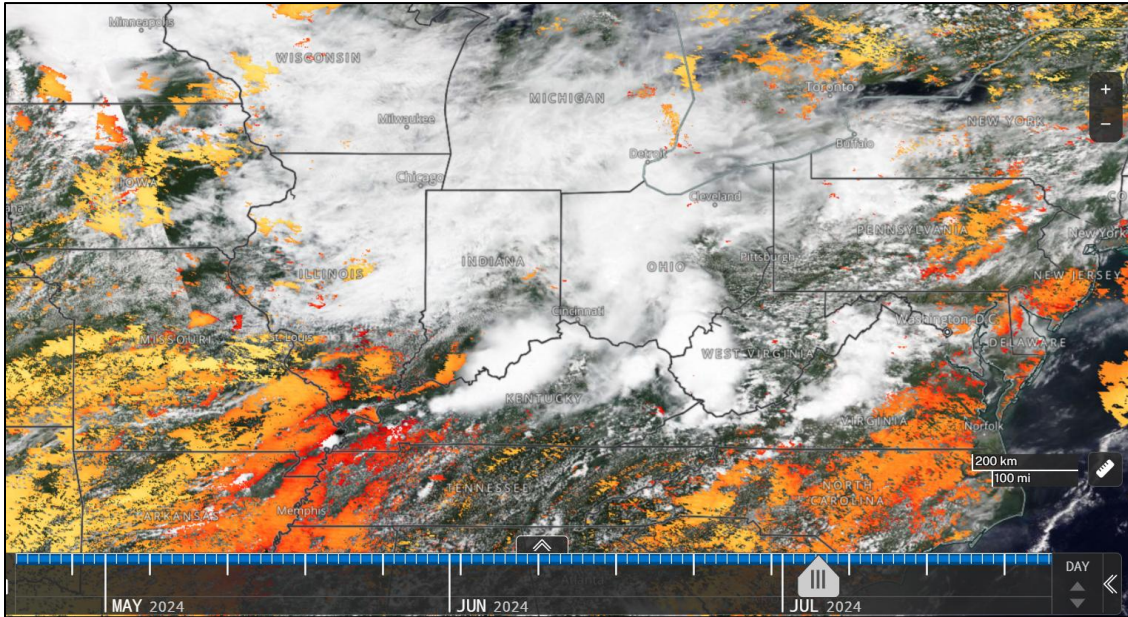
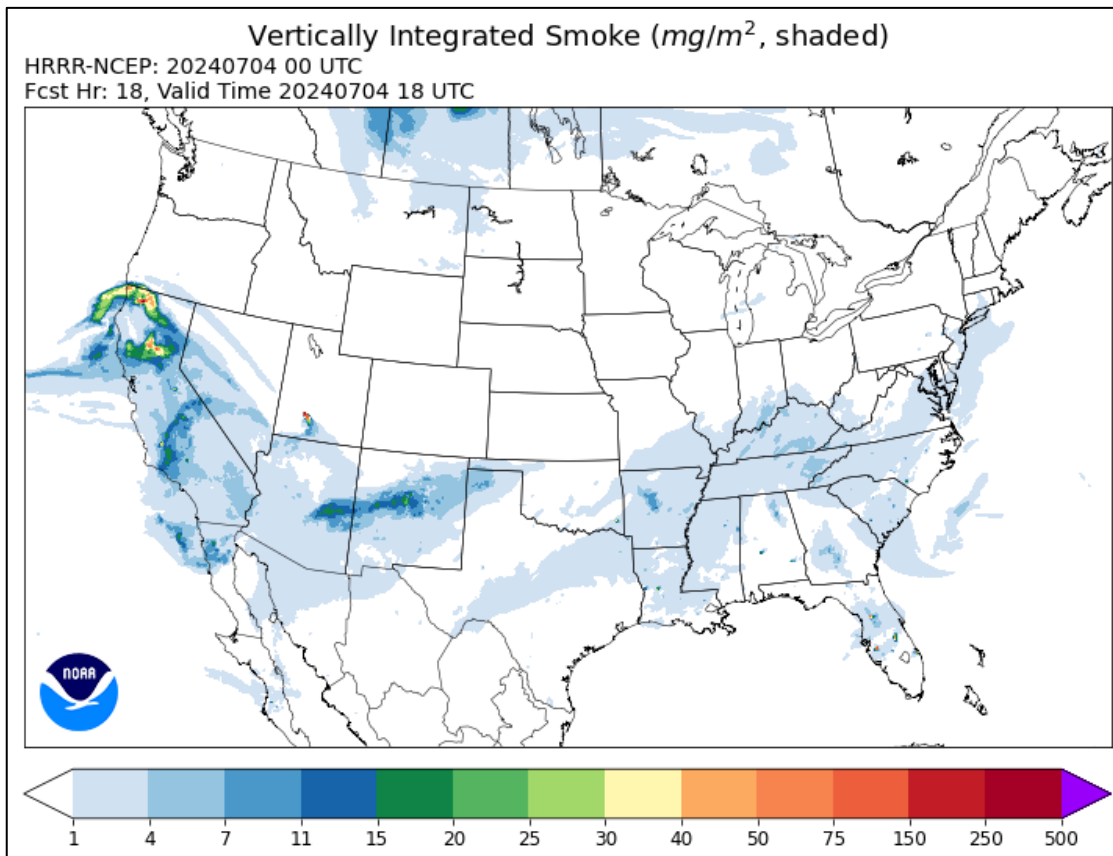


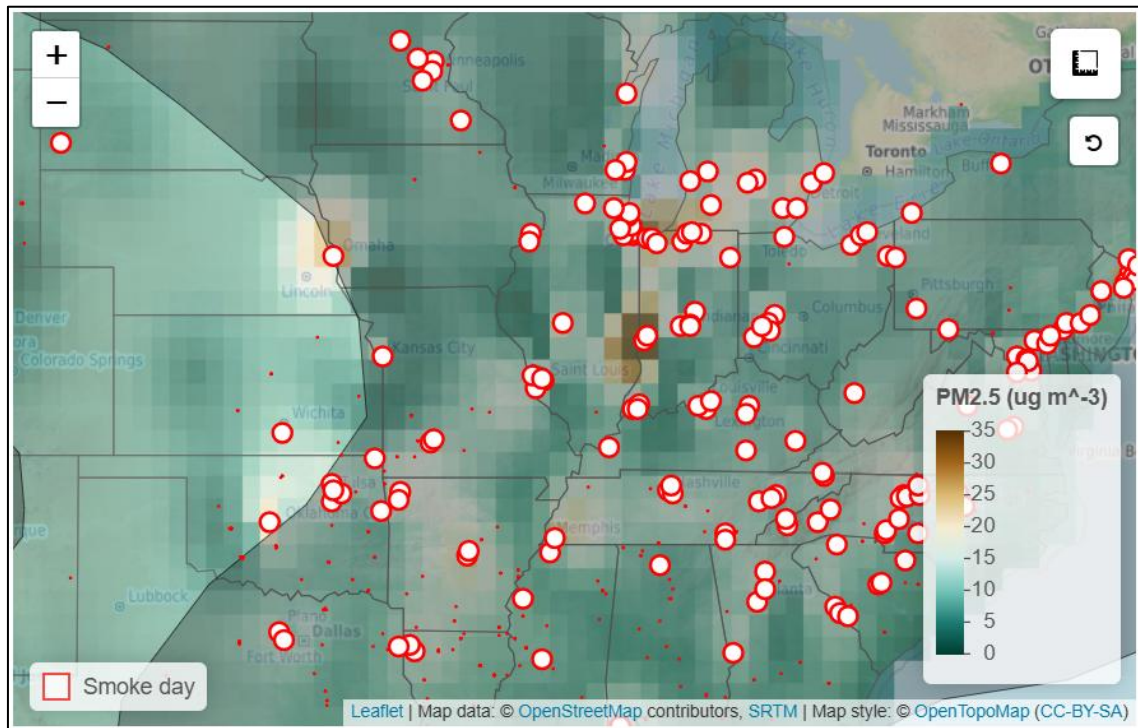




AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 4, 2024



Satellite Imagery with MAIAC AOD – July 4, 2024**HRRR Smoke - Vertically Integrated Smoke – July 4, 2024**

GAM PMO3 Smoke Output – July 4, 2024**NOAA Satellite Smoke – 2024 Satellite Smoke Text Excerpts****Wednesday, July 3, 2024**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 0100Z July 4, 2024

SMOKE:

Alaska/Canada...

A large area of light to moderate density smoke attributed to the numerous amounts of large wildfires throughout Alaska and Northern Canada continues to be seen today covering a widespread area from the Bering Sea and western edge of Alaska, east through the majority of Canada, through the Labrador Sea and past the southeast coast of Greenland...The smoke continued to move south through the Atlantic coast, where it mingled with smoke from the fire activity within the U.S.