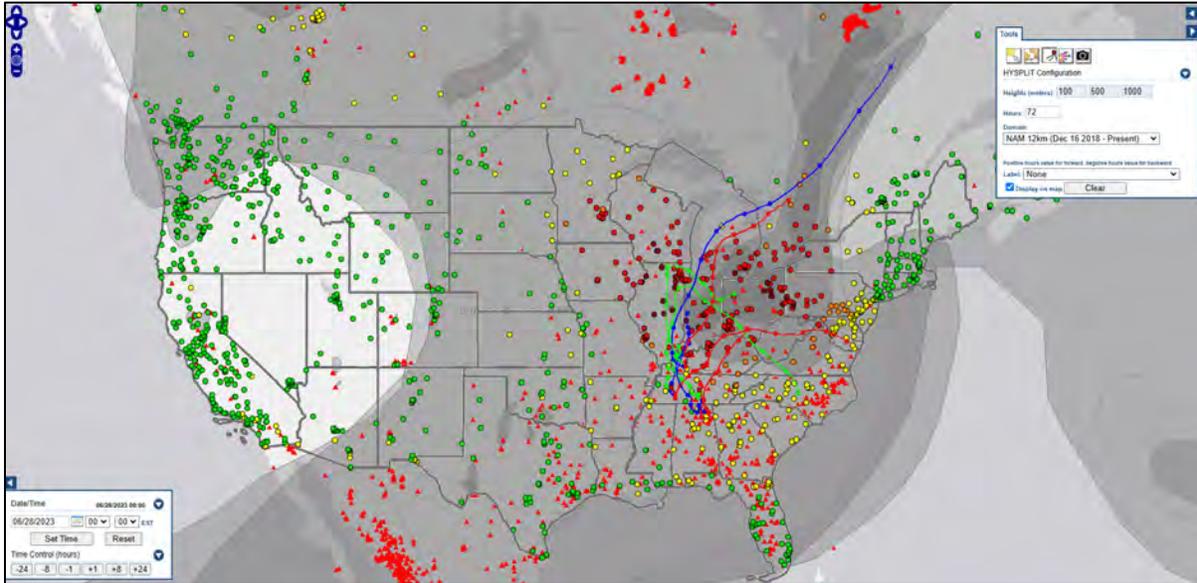


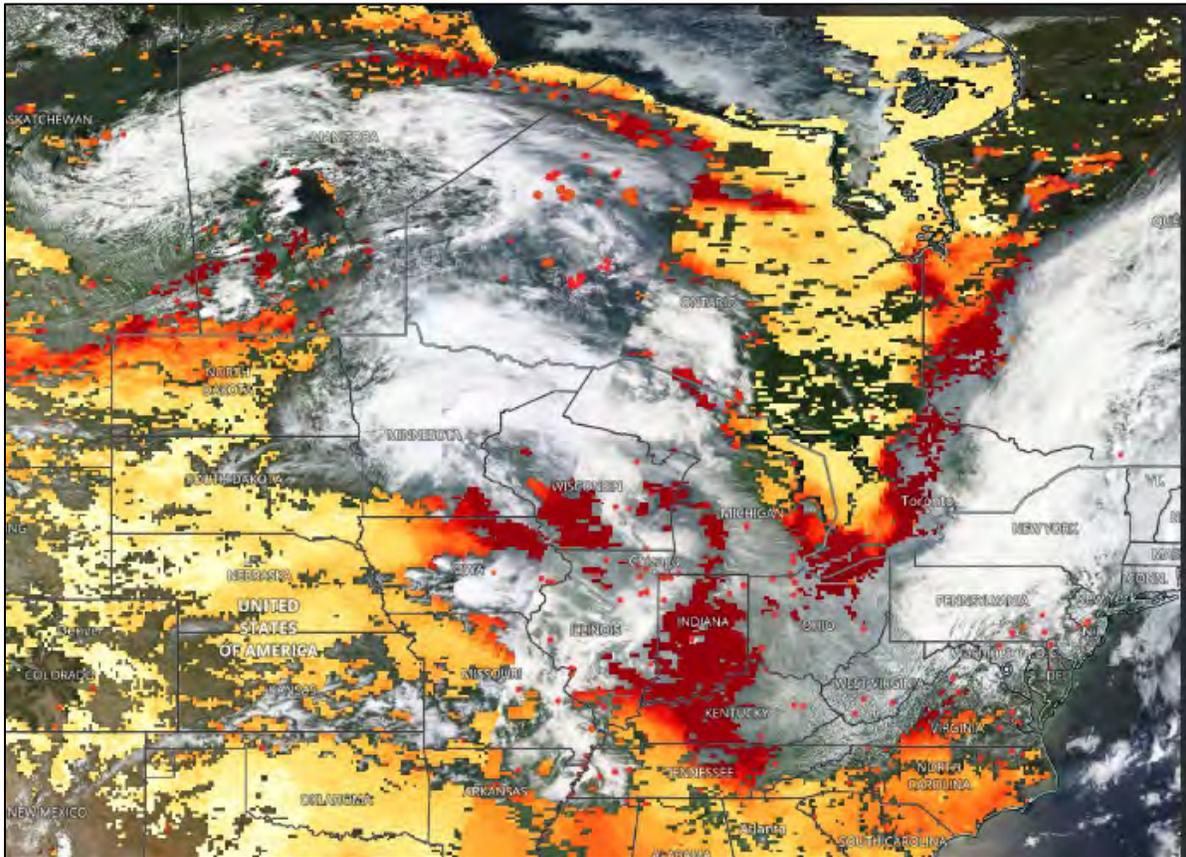
June 28, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average (µg/m³)	Tier 2 Threshold (µg/m³)
Columbus - Rocky Ford Drive	180050008	6/28/2023	139.3	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/28/2023	98.9	17.0
Elkhart - Prairie St	180390008	6/28/2023	84.5	16.3
New Albany	180430008	6/28/2023	75.4	20.9
Plummer	180550001	6/28/2023	140.0	14.7
Fishers	180570007	6/28/2023	111.3	13.8
Mechanicsburg	180650003	6/28/2023	107.1	15.5
Kokomo - E. Vaile Ave	180670004	6/28/2023	119.0	14.7
East Chicago - Marina	180890034	6/28/2023	107.7	18.0
Hammond-167th St	180890036	6/28/2023	110.1	16.3
Anderson - Eastside Elem	180950011	6/28/2023	114.8	15.4
Indianapolis - Washington Park	180970078	6/28/2023	160.7	17.8
Indianapolis - W. 18th St.	180970081	6/28/2023	182.4	20.9
Indianapolis- I-70 E	180970087	6/28/2023	165.3	20.5
Bloomington - Binford	181050003	6/28/2023	153.1	13.9
Ogden Dunes	181270024	6/28/2023	84.8	15.3
South Bend - Shields Dr.	181410015	6/28/2023	114.1	16.9
Lafayette - Greenbush St	181570008	6/28/2023	130.6	15.1
Evansville - Buena Vista	181630021	6/28/2023	94.1	15.1
Terre Haute - Lafayette Ave	181670018	6/28/2023	156.8	18.8
Larwill	181830003	6/28/2023	121.0	15

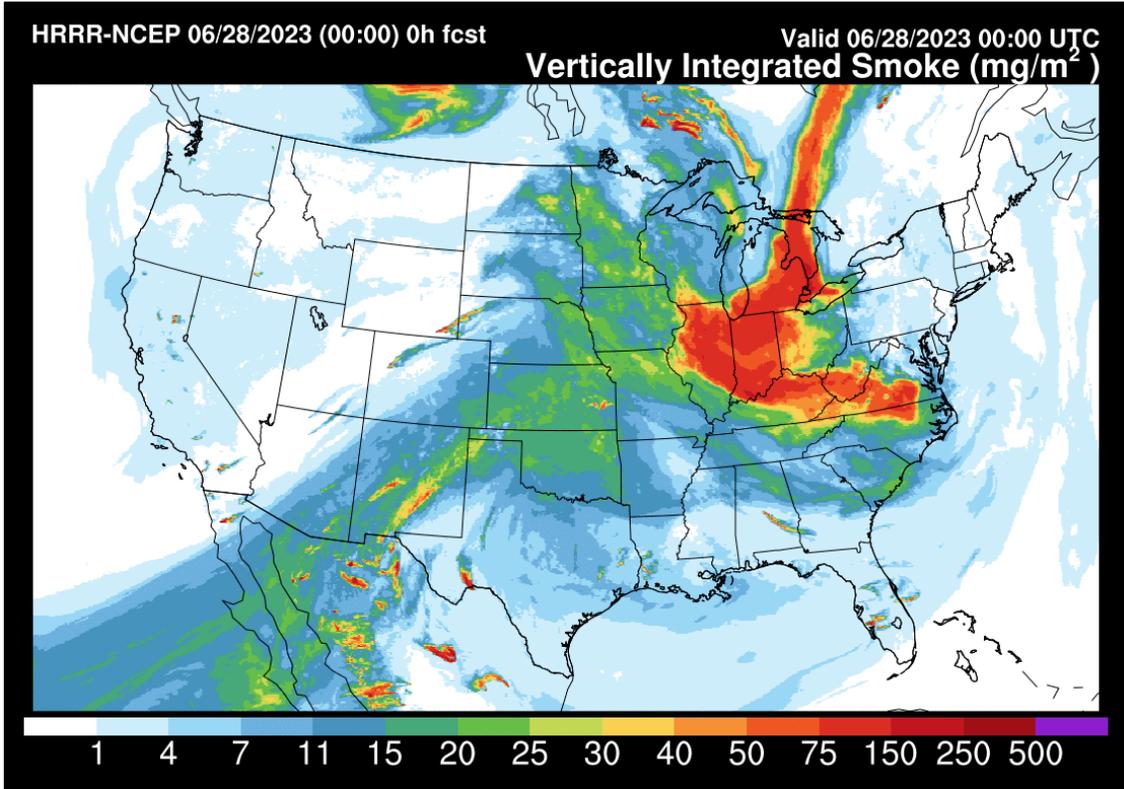
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 28, 2023



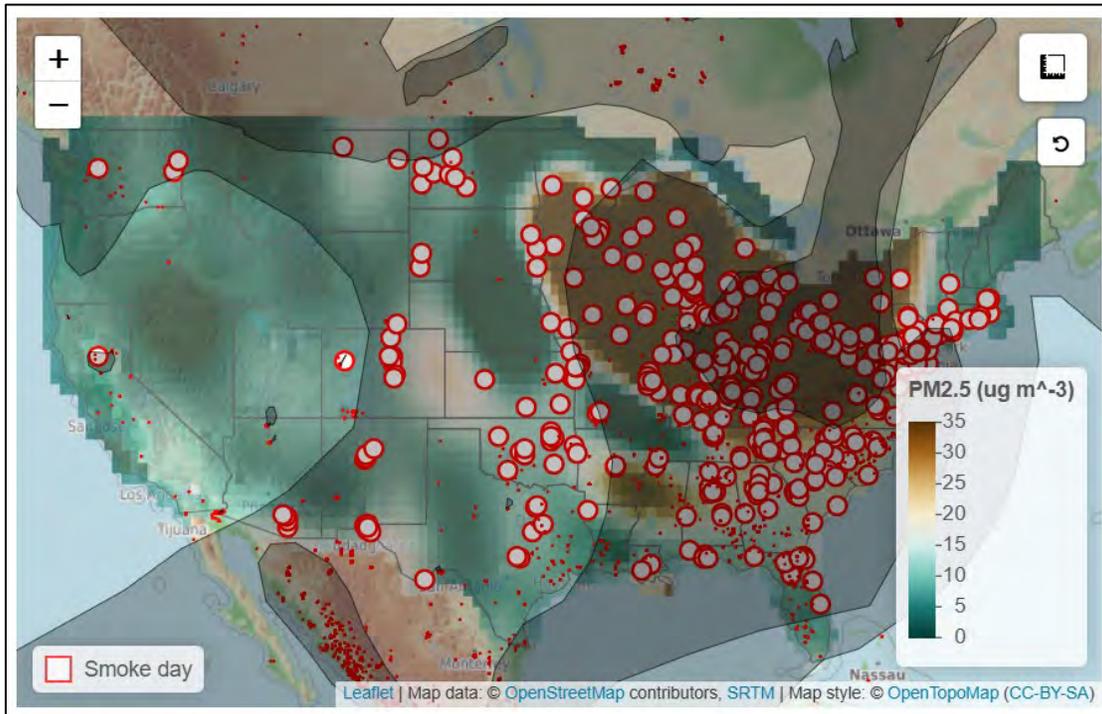
Satellite Imagery with MAIAC AOD – June 28, 2023



HRRR Smoke - Vertically Integrated Smoke – June 28, 2023



GAM PMO3 Smoke Output – June 28, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1550Z June 28, 2023

SMOKE:

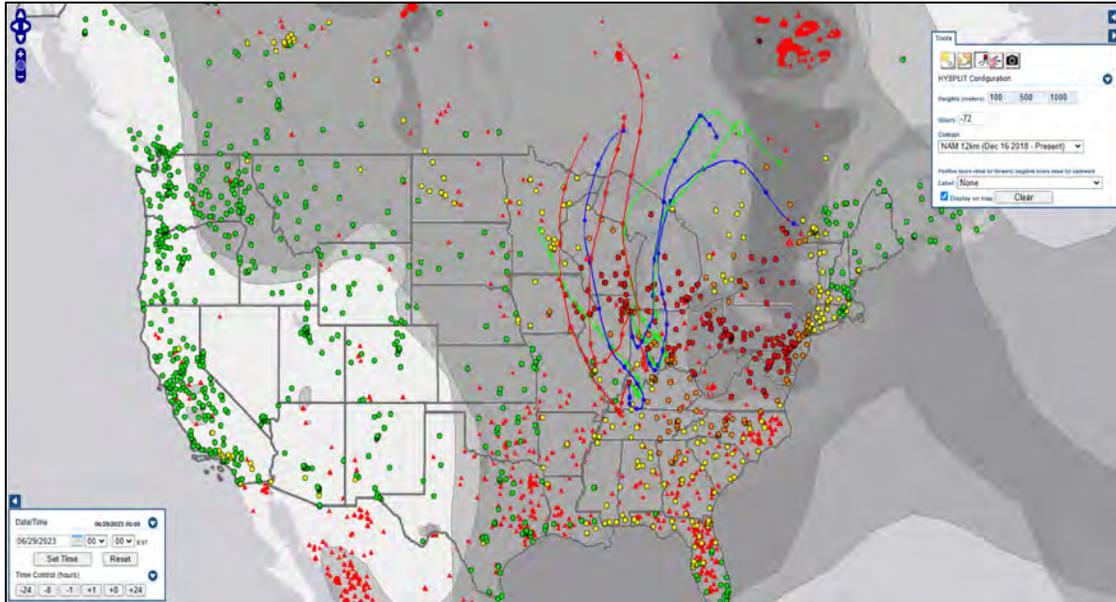
Canada, Eastern and Central United States, Atlantic Ocean...

The major wildfires across portions of Canada continue with a large area of smoke over much of Canada and extending to the south over the Central and Southeastern United States. The smoke also extended well off the east coasts of Canada and the United States over the northern and central Atlantic to western portions of Europe. To the west, some of the thinner density smoke had spread to the west and south to just off the southwestern coast of Canada and the Pacific Northwest United States and into the far northeastern Pacific Ocean. Within this area, the thickest smoke was located from western Quebec through southern Ontario and into portions of the Midwestern and Upper Midwest of the United States and also over northern Alberta, the southern Northwest Territories and northern British Columbia.

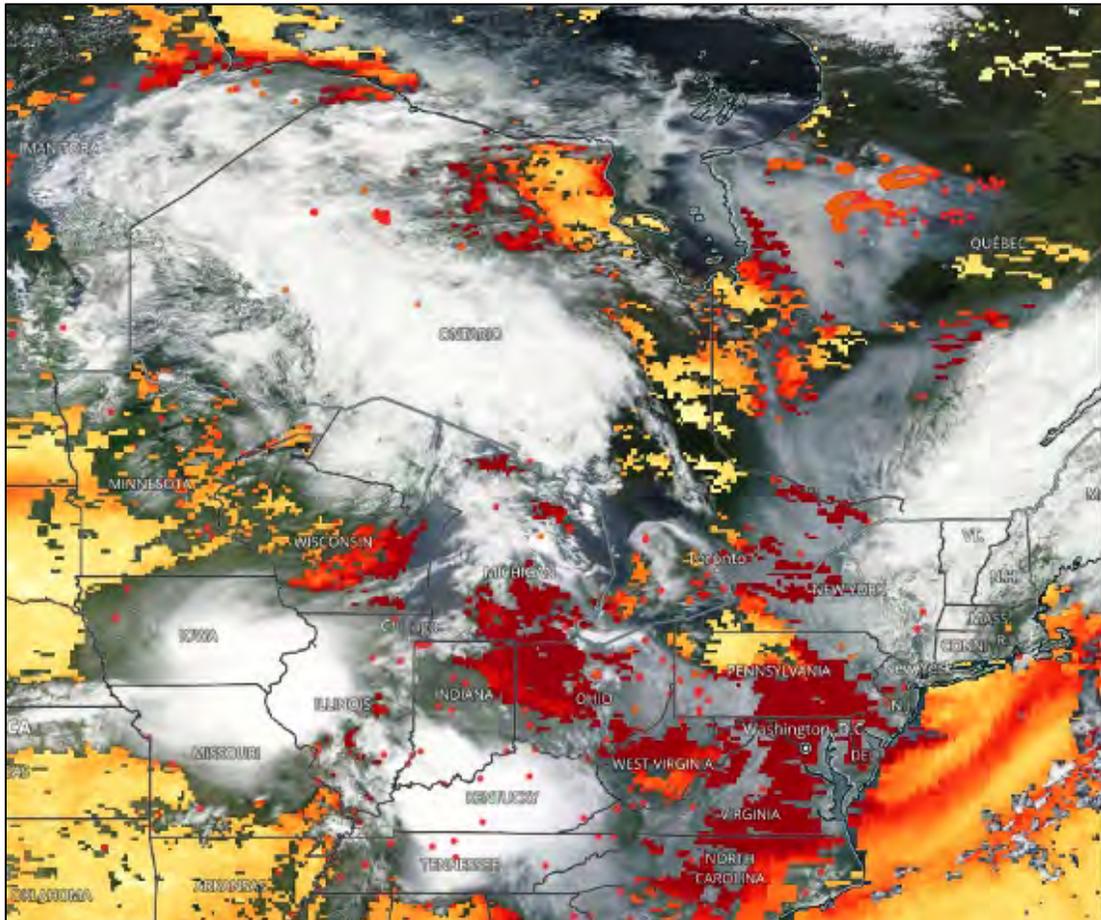
June 29, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/29/2023	43.7	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/29/2023	36.2	17.0
Muncie - Central HS	180350006	6/29/2023	43.7	13.2
Jasper - Post Office	180372001	6/29/2023	22.7	15.7
Elkhart - Prairie St	180390008	6/29/2023	54.8	16.3
New Albany	180430008	6/29/2023	33.8	20.9
Plummer	180550001	6/29/2023	27.7	14.7
Fishers	180570007	6/29/2023	47.3	13.8
Carmel - Hazel Dell Parkway	180570008	6/29/2023	49.7	16.5
Mechanicsburg	180650003	6/29/2023	42.3	15.5
Kokomo - E. Vaile Ave	180670004	6/29/2023	47.0	14.7
East Chicago - Franklin/Washington Sch	180890006	6/29/2023	43.6	16.1
Gary - Madison St	180890031	6/29/2023	44.2	16
East Chicago - Marina	180890034	6/29/2023	43.3	18
Hammond-167th St	180890036	6/29/2023	47.9	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/29/2023	43.5	15.9
Anderson - Eastside Elem	180950011	6/29/2023	51.0	15.4
Indianapolis - Washington Park	180970078	6/29/2023	60.4	17.8
Indianapolis - W. 18th St.	180970081	6/29/2023	53.3	20.9
Indianapolis - School 21	180970084	6/29/2023	48.3	15.5
Indianapolis- I-70 E	180970087	6/29/2023	97.6	20.5
Bloomington - Binford	181050003	6/29/2023	35.7	13.9
Ogden Dunes	181270024	6/29/2023	47.2	15.3
South Bend - Shields Dr.	181410015	6/29/2023	52.2	16.9
Dale	181470009	6/29/2023	19.8	13.9
Lafayette - Greenbush St	181570008	6/29/2023	44.7	15.1
Evansville - Buena Vista	181630021	6/29/2023	27.8	15.1
Terre Haute - Lafayette Ave	181670018	6/29/2023	28.6	18.8
Larwill	181830003	6/29/2023	50.8	15.0

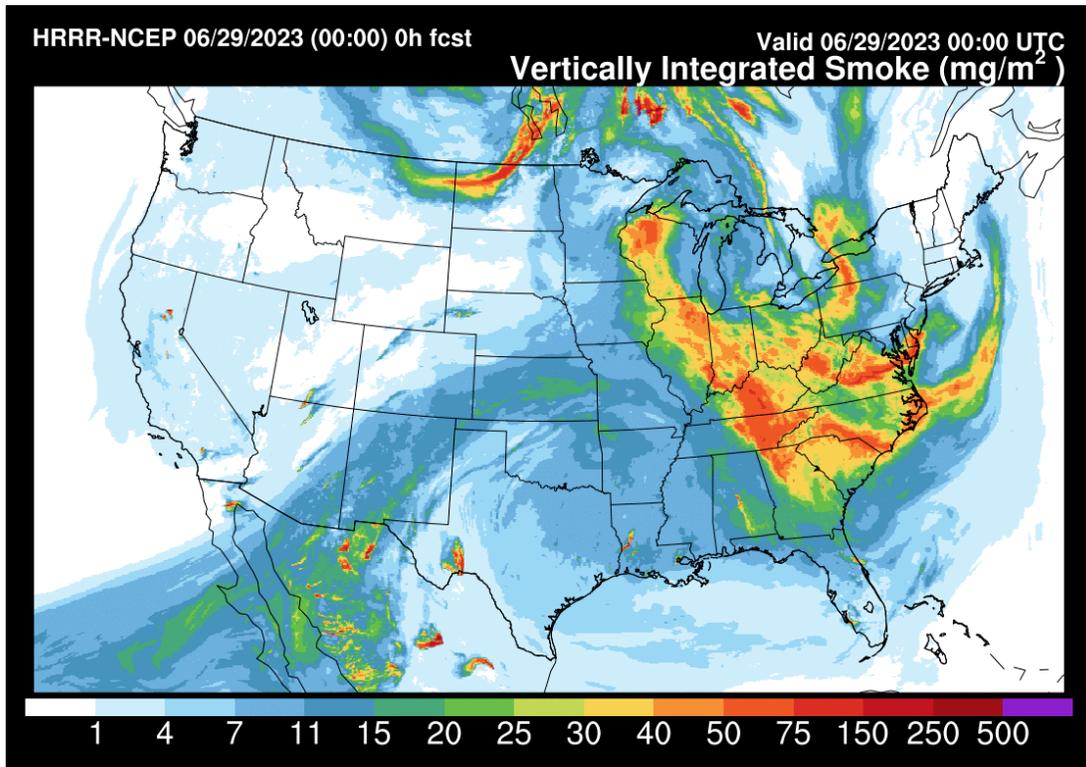
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 29, 2023



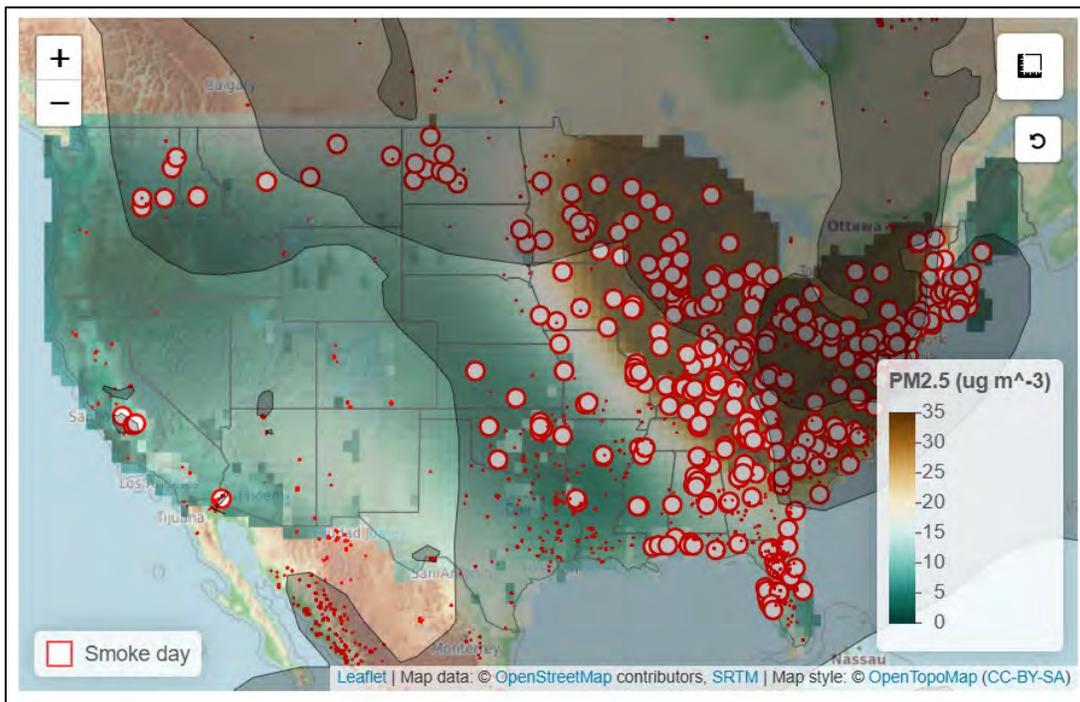
Satellite Imagery with MAIAC AOD – June 29, 2023



HRRR Smoke - Vertically Integrated Smoke – June 29, 2023



GAM PMO3 Smoke Output – June 29, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1640Z June 29, 2023

SMOKE:

Canada, Eastern and Central United States, Atlantic Ocean...

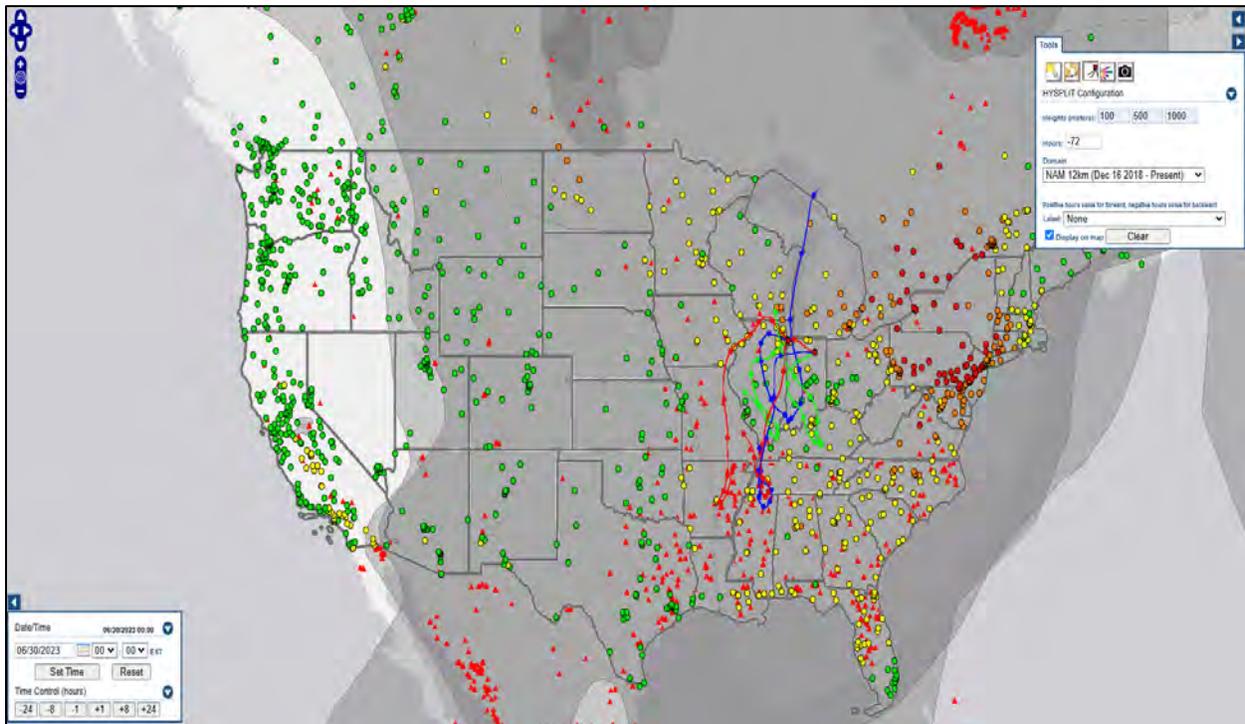
The major wildfires across portions of Canada continue with a large area of smoke over much of Canada and extending to the south over the Central and Southeastern United States. The smoke also extended well off the east coasts of Canada and the United States over the northern and central Atlantic. To the west, some of the thinner density smoke had spread to the west and south to just off parts of the Pacific Northwest United States. Within this area, the thickest smoke was located mostly over western Quebec through southern Ontario and into portions of Northeast U.S while moderate density smoke engulfed most of Canada, Northeast U.S, and parts of northern U.S within Montana and the Dakotas.

June 30, 2023

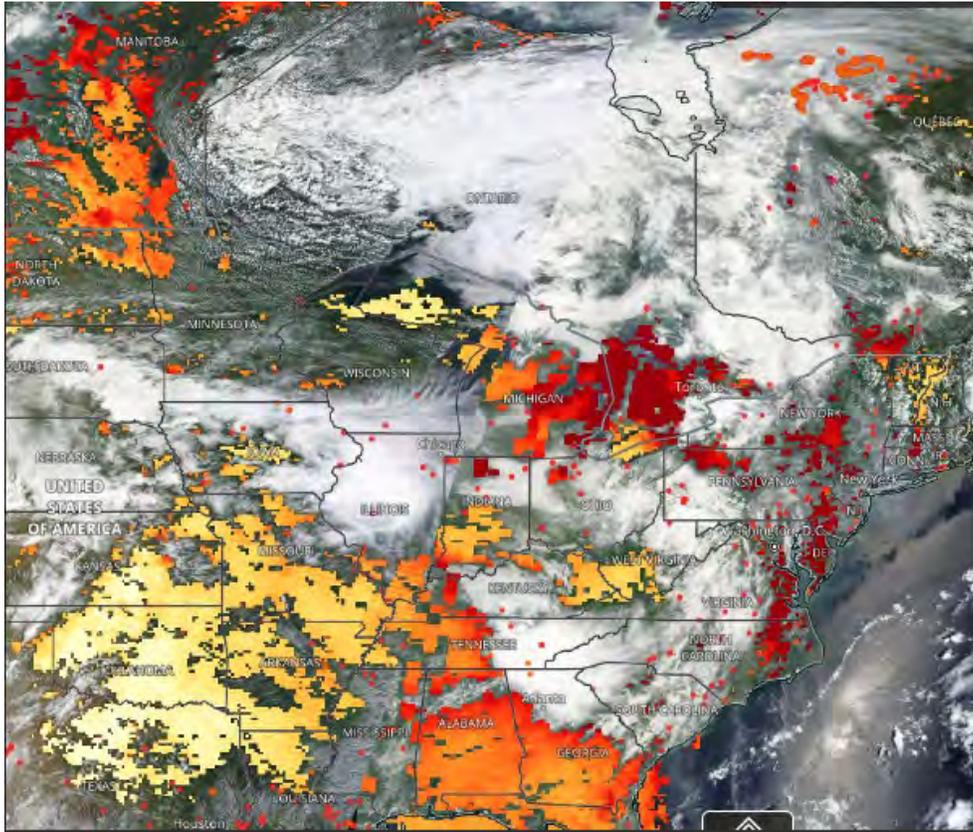
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	6/30/2023	26.1	16.3
Kokomo – E Vaile Ave	180670004	6/30/2023	14.0	13.9
East Chicago - Marina	180890034	6/30/2023	25.9	18.0
Hammond-167th St	180890036	6/30/2023	24.6	16.3
Ogden Dunes	181270024	6/30/2023	30.4	15.3
South Bend - Shields Dr.	181410015	6/30/2023	31.3	16.9
Larwill	181830003	6/30/2023	23.0	15.0

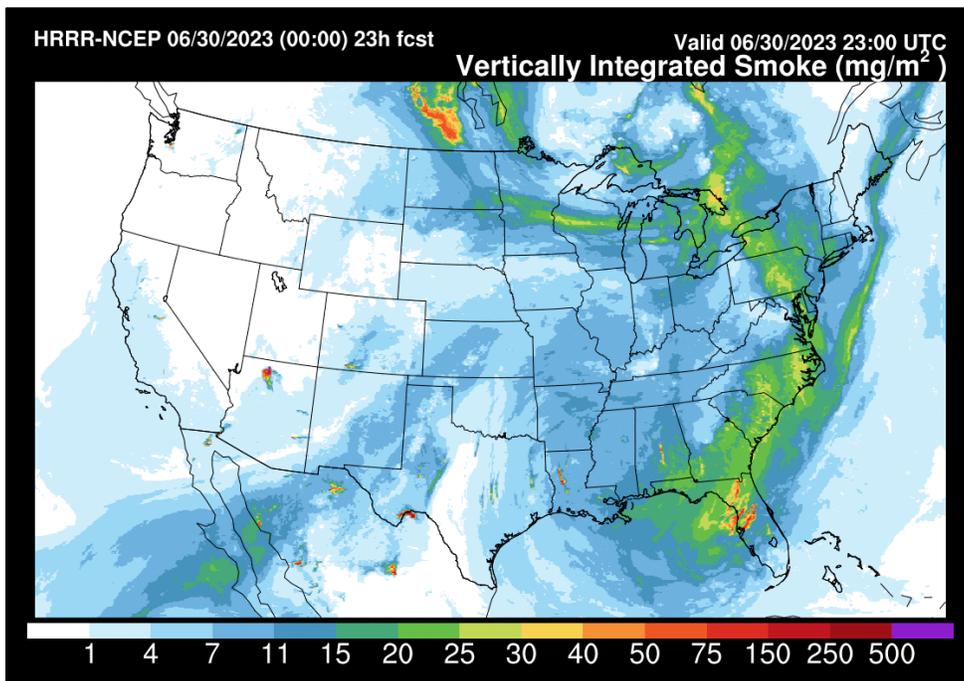
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - June 30, 2023



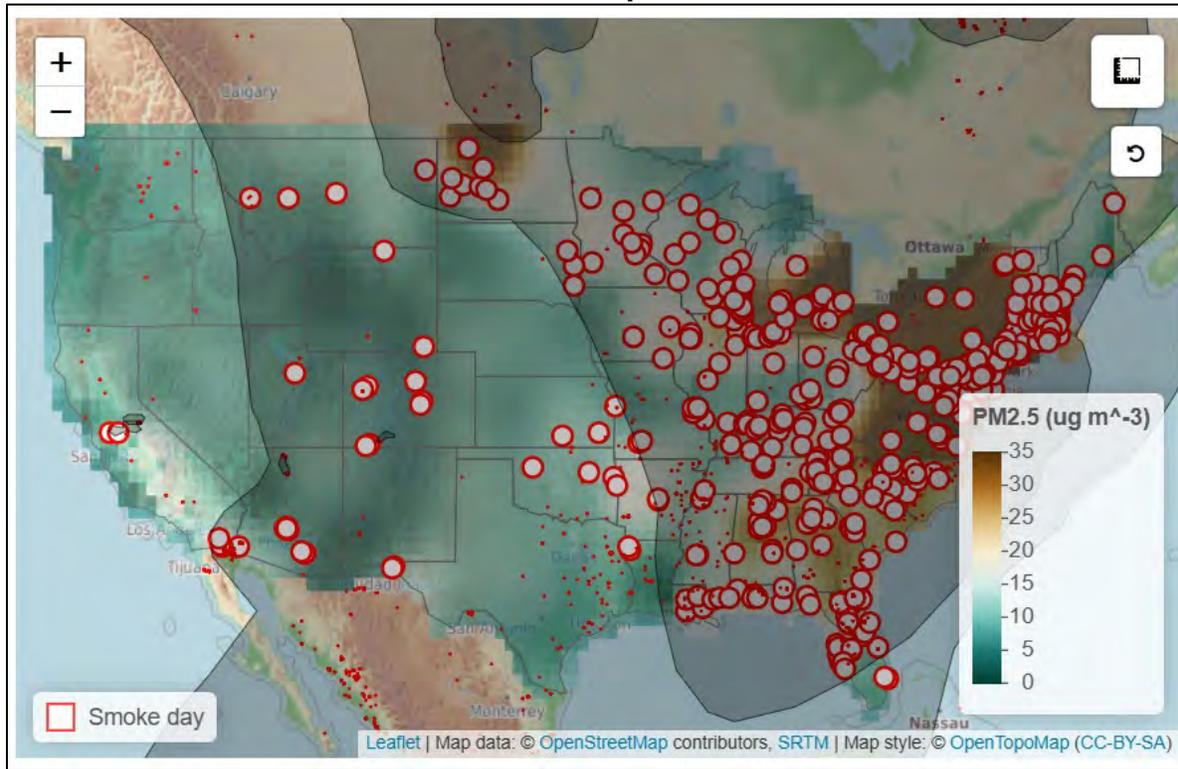
Satellite Imagery with MAIAC AOD – June 30, 2023



HRRR Smoke - Vertically Integrated Smoke – June 30, 2023



GAM PMO3 Smoke Output – June 30, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1635Z June 30, 2023

SMOKE:

Canada, Eastern and Central United States, Atlantic Ocean...

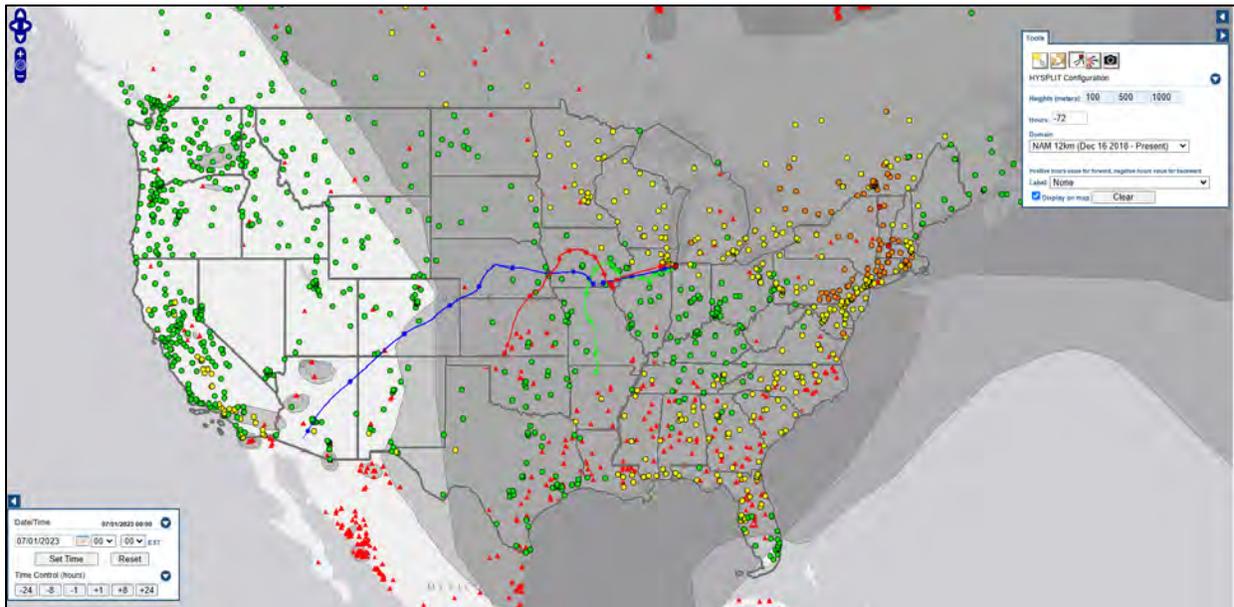
The major wildfires across portions of Canada continue with a large area of smoke over much of Canada and extending to the south over the Central and Southeastern United States. The smoke also extended well off the east coasts of Canada and the United States as well as the Atlantic Ocean along the eastern U.S coast and north-central region. To the west, some of the thinner density smoke had spread to the west and south over parts of the southwestern United States. Within this area, the thickest smoke was located mostly over Western Canada, northern Quebec, and parts of Hudson Bay while moderate density smoke engulfed most of Canada, Northeast U.S, and parts of northern U.S within Montana and the Dakotas. Cloud cover over eastern Canada made it difficult to determine to the full extent of the thick density smoke from the Quebec fires.

July 1, 2023

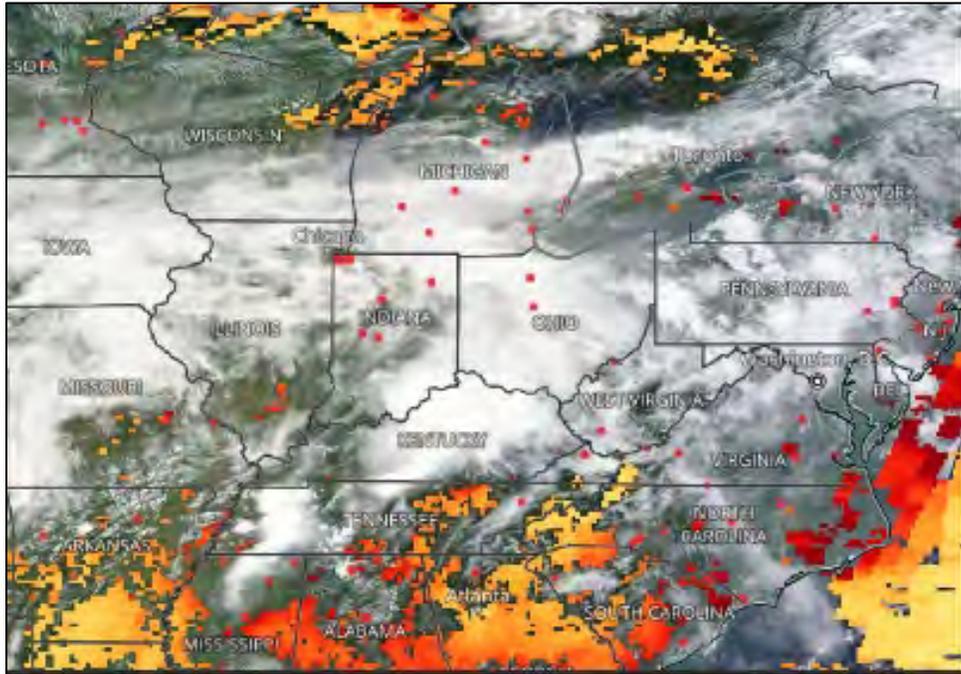
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Ogden Dunes	181270024	7/1/2023	22.3	15.3

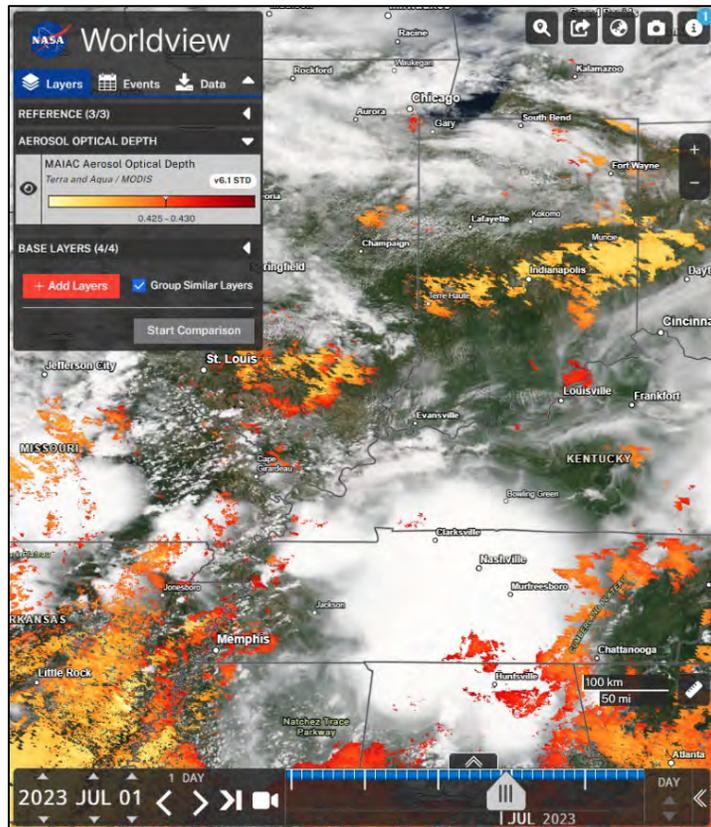
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - July 1, 2023



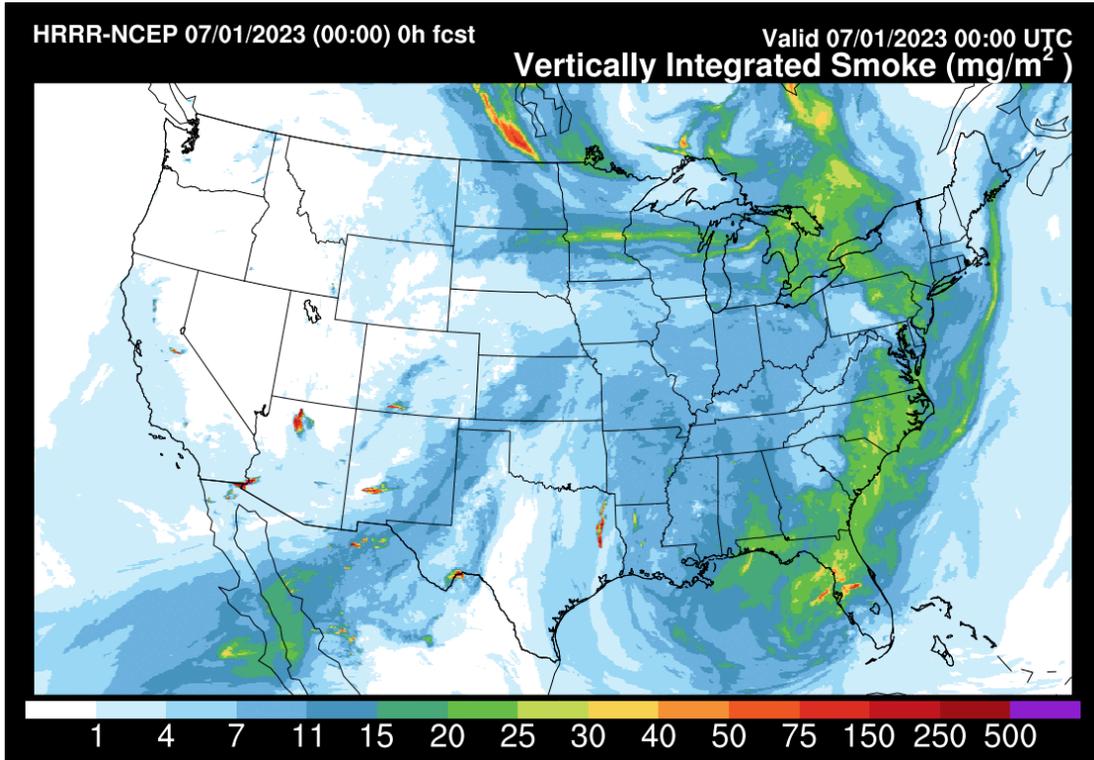
Satellite Imagery with MAIAC AOD – July 1, 2023



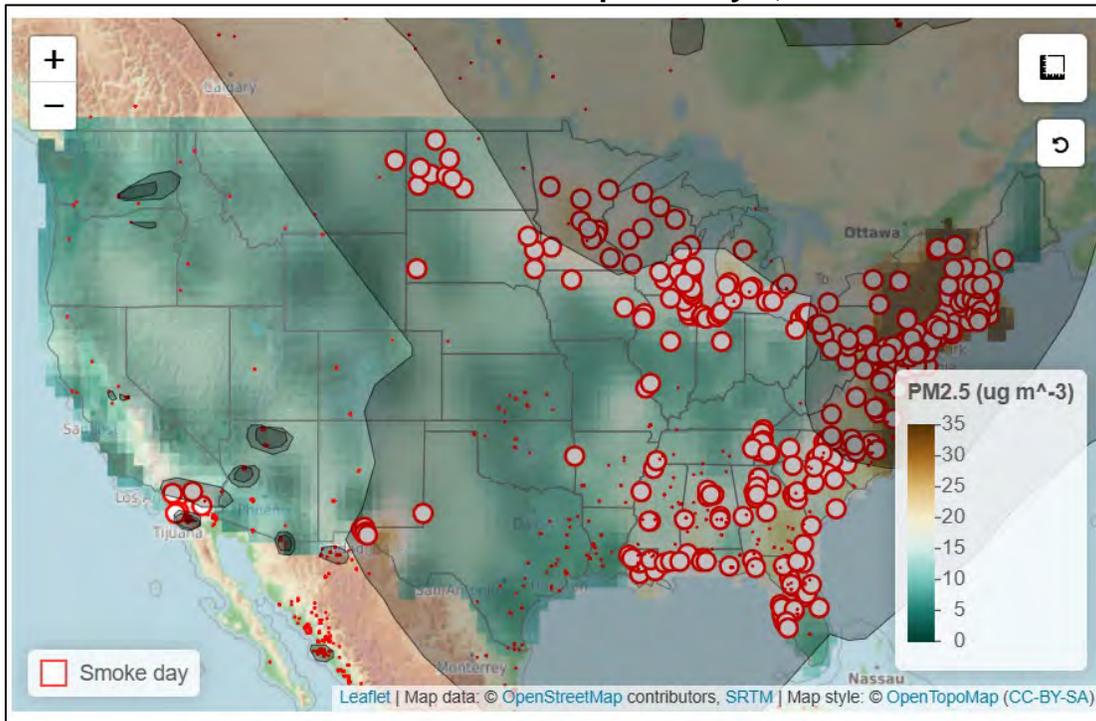
Satellite Imagery with MAIAC AOD – July 1, 2023



HRRR Smoke - Vertically Integrated Smoke – July 1, 2023



GAM PMO3 Smoke Output – July 1, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1648Z July 01, 2023

SMOKE:

Canada, Eastern and Central United States, Atlantic Ocean...

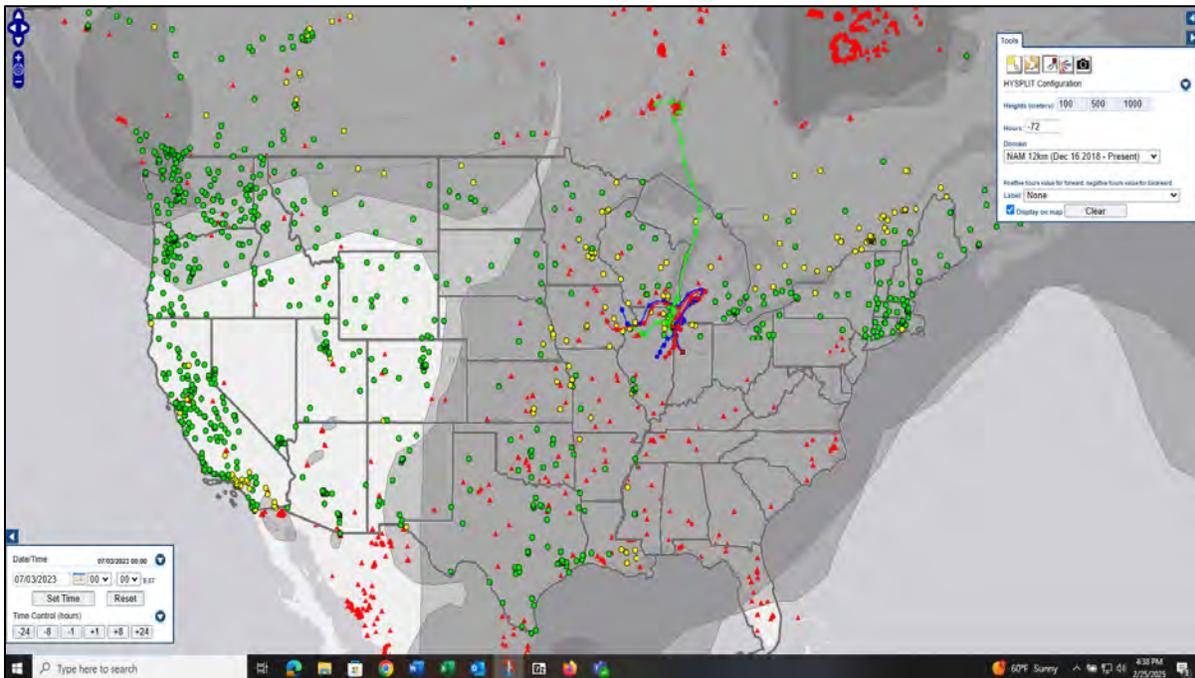
The major wildfires across portions of Canada continue with a large area of smoke over much of Canada and extending to the south over the Central and Southeastern United States. The smoke also extended well off the east coasts of Canada and the United States as well as the Atlantic Ocean along the eastern U.S coast and north-central region.

July 3, 2023

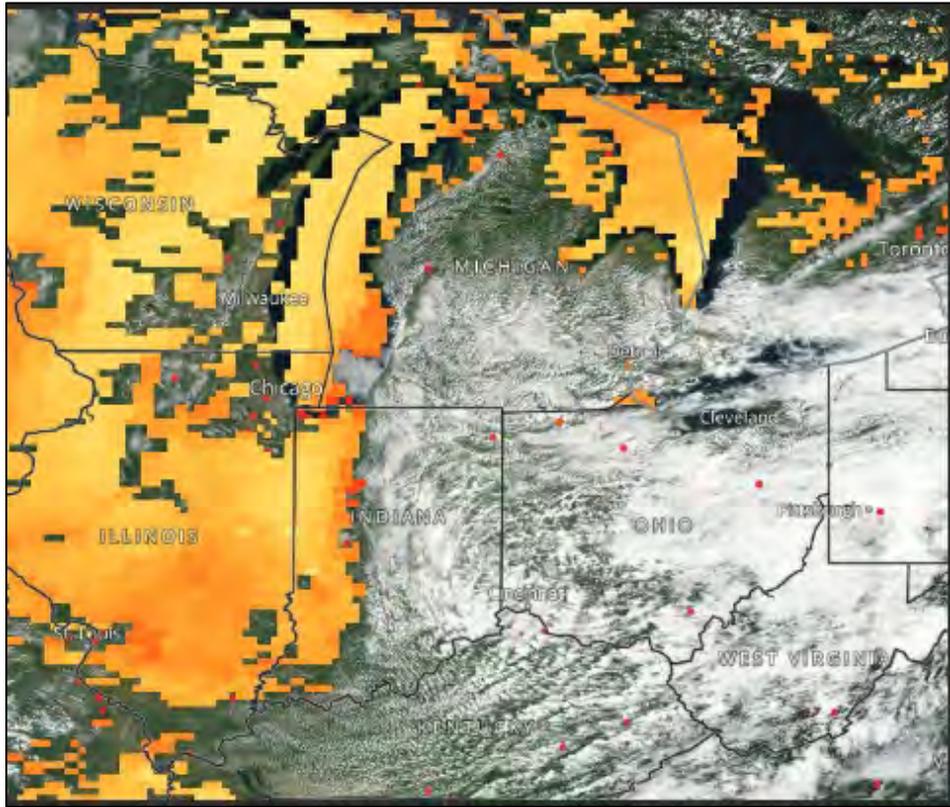
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Hammond-167th St	180890036	7/3/2023	17.3	16.3
Lafayette - Greenbush St	181570008	7/3/2023	19.0	15.1

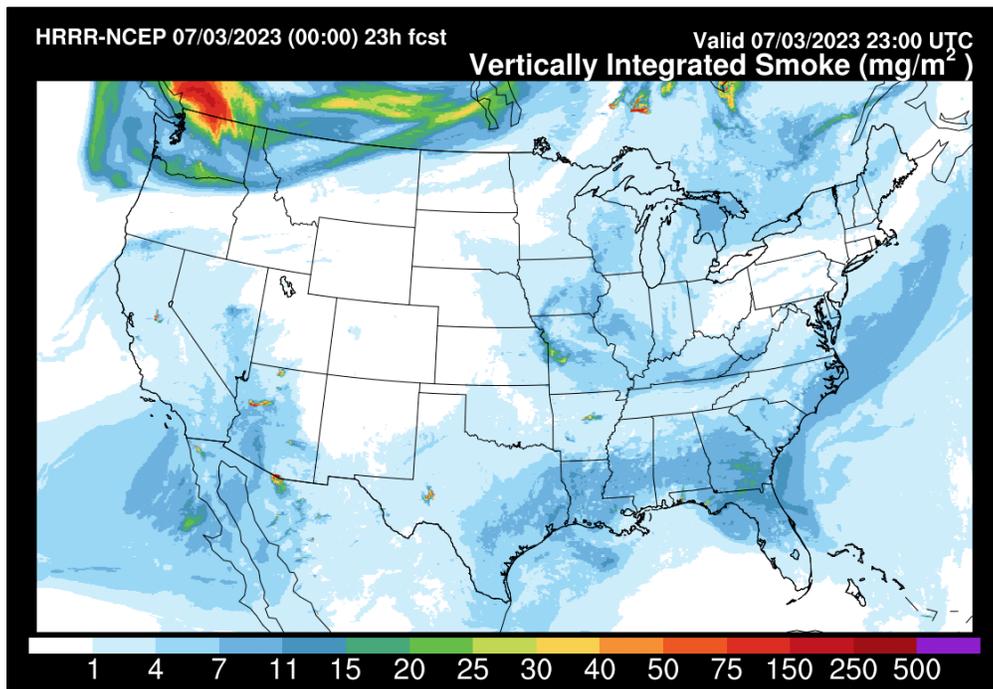
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 3, 2023



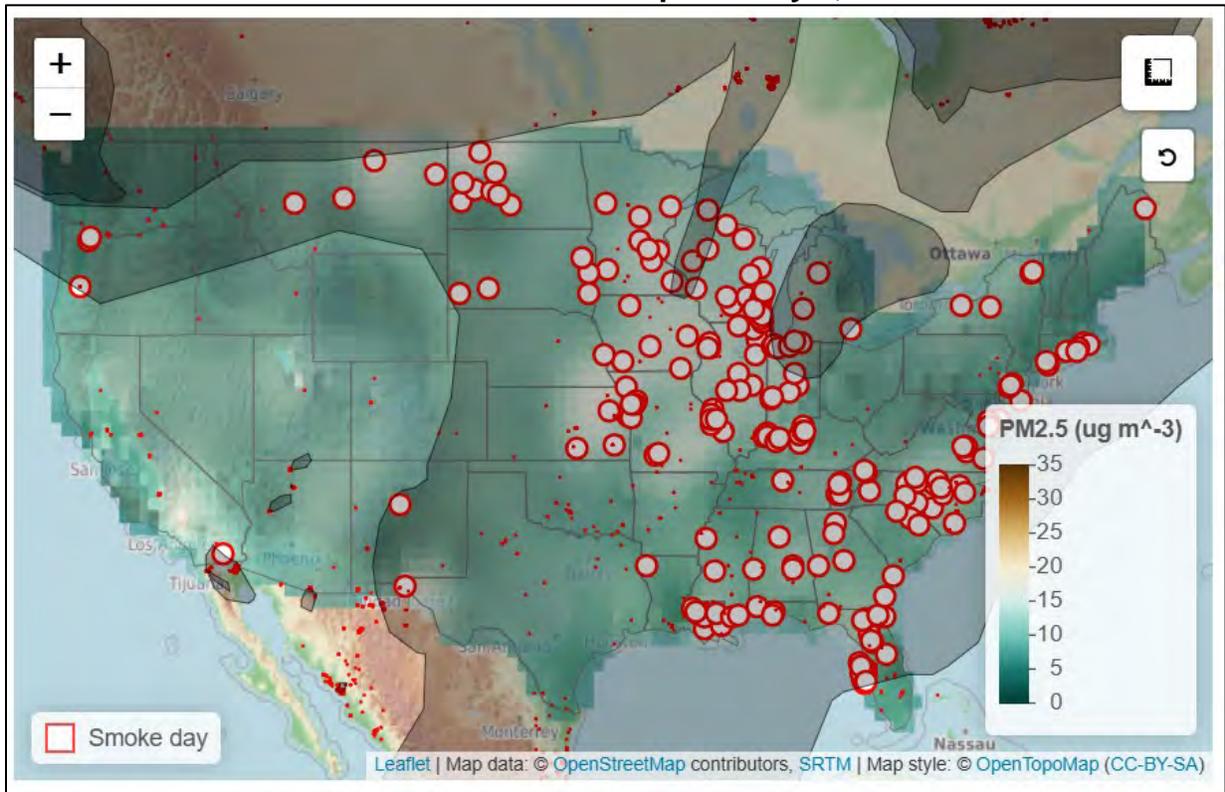
Satellite Imagery with MAIAC AOD – July 3, 2023



HRRR Smoke - Vertically Integrated Smoke – July 3, 2023



GAM PMO3 Smoke Output – July 3, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z July 3, 2023

SMOKE:

Canada/U.S./Atlantic...

Wildfire activity persists across Canada, continuing to feed an expansive area of varying density smoke that blankets an area covering nearly all of Canada, the eastern 3/5 of the CONUS, much of the North Atlantic, and parts of Greenland. Light smoke from a combination of wildfire and agricultural fire sources across Mexico and Central America, perhaps with some minor amounts of industrially produced aerosol included, was also observed across much of Mexico and the Gulf of Mexico and extending out into the tropical Pacific. The smoke from this activity was merging with the Canadian wildfire smoke across the southeastern CONUS.

2023 Major Indiana Fireworks Displays:

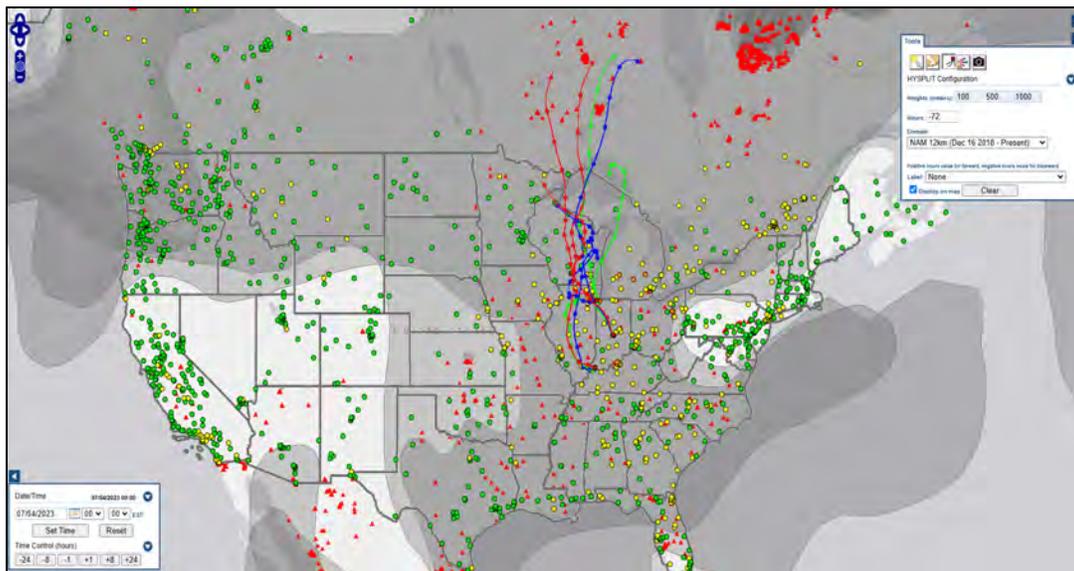
City	Event Name	2023 Date
Indianapolis	Downtown Indy Fourth Fest	July 4
Carmel	CarmelFest	July 3–4
Fishers	Spark!Fishers Fireworks	July 4
Noblesville	July 4th Parade & Fireworks Festival	July 4
Zionsville	Lions Park Fireworks	July 4
Cicero	Lights Over Morse Lake	July 4
Bloomington	Bryan Park Fireworks (canceled 2024)	July 4
Evansville	Fireworks on the Ohio	July 4
Fort Wayne	Downtown Fireworks at I&M Power Center	July 4
South Bend	St. Joseph County Fairgrounds	July 4
Jeffersonville	RiverStage Fireworks	July 4
Westfield	Rocks the 4th	July 4
Lawrence	Lawrence 4th Fest	July 4

July 4, 2023

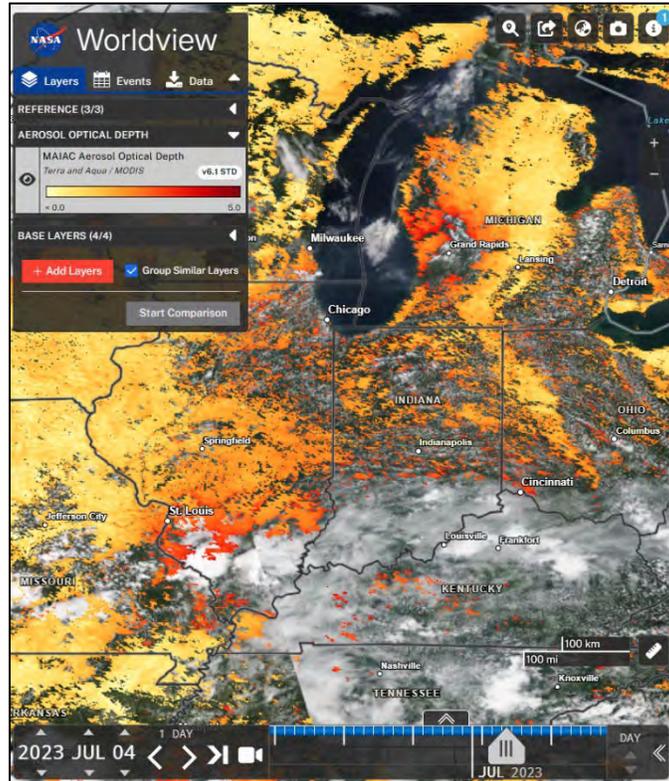
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050009	7/4/2023	14.8	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	7/4/2023	27.1	17.0
Elkhart - Prairie St	180390008	7/4/2023	27.6	16.3
New Albany	180430008	7/4/2023	40.7	20.9
Fishers	180570007	7/4/2023	18.0	13.8
Kokomo - E. Vaile Ave	180670004	7/4/2023	16.6	14.7
East Chicago - Marina	180890034	7/4/2023	31.3	18.0
Hammond-167th St	180890036	7/4/2023	28.7	16.3
Anderson - Eastside Elem	180950011	7/4/2023	15.6	15.4
Indianapolis - Washington Park	180970078	7/4/2023	34.2	17.8
Indianapolis - W. 18th St.	180970081	7/4/2023	43.4	20.9
Indianapolis- I-70 E	180970087	7/4/2023	34.5	20.5
Bloomington - Binford	181050003	7/4/2023	17.3	13.9
Ogden Dunes	181270024	7/4/2023	39.4	15.3
South Bend - Shields Dr.	181410015	7/4/2023	27.9	16.9
Lafayette - Greenbush St	181570008	7/4/2023	19.2	15.1
Evansville - Buena Vista	181630021	7/4/2023	27.2	15.1
Terre Haute - Lafayette Ave	181670018	7/4/2023	33.1	18.8

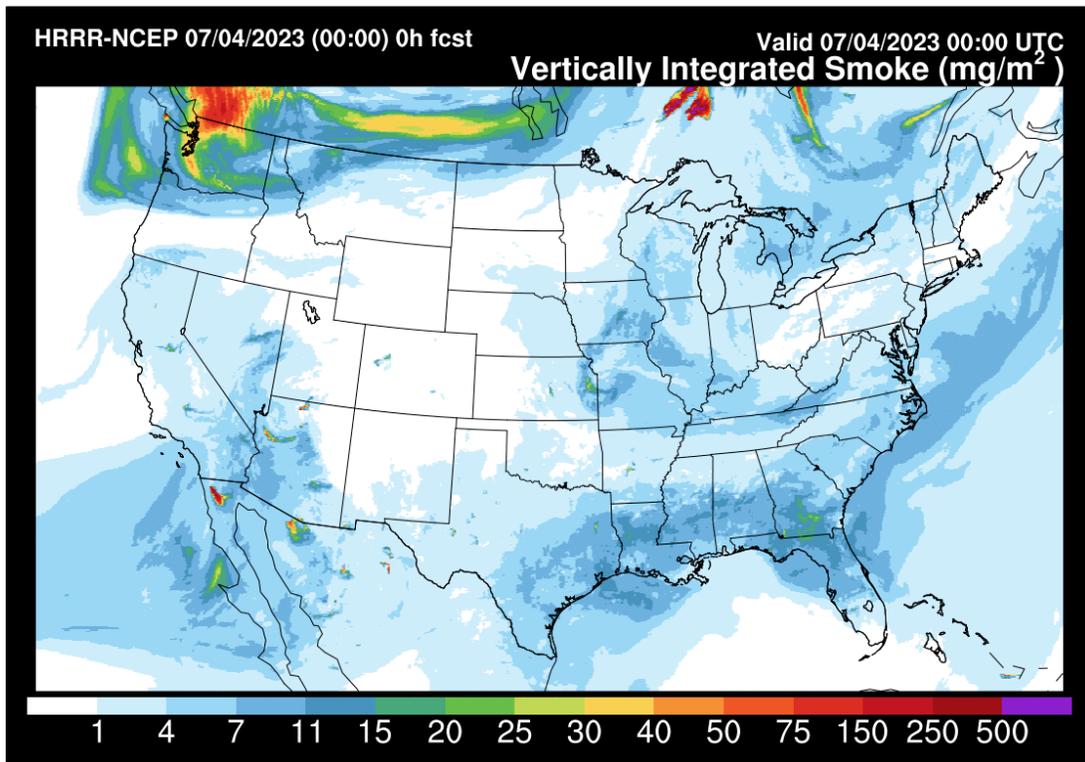
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 4, 2023



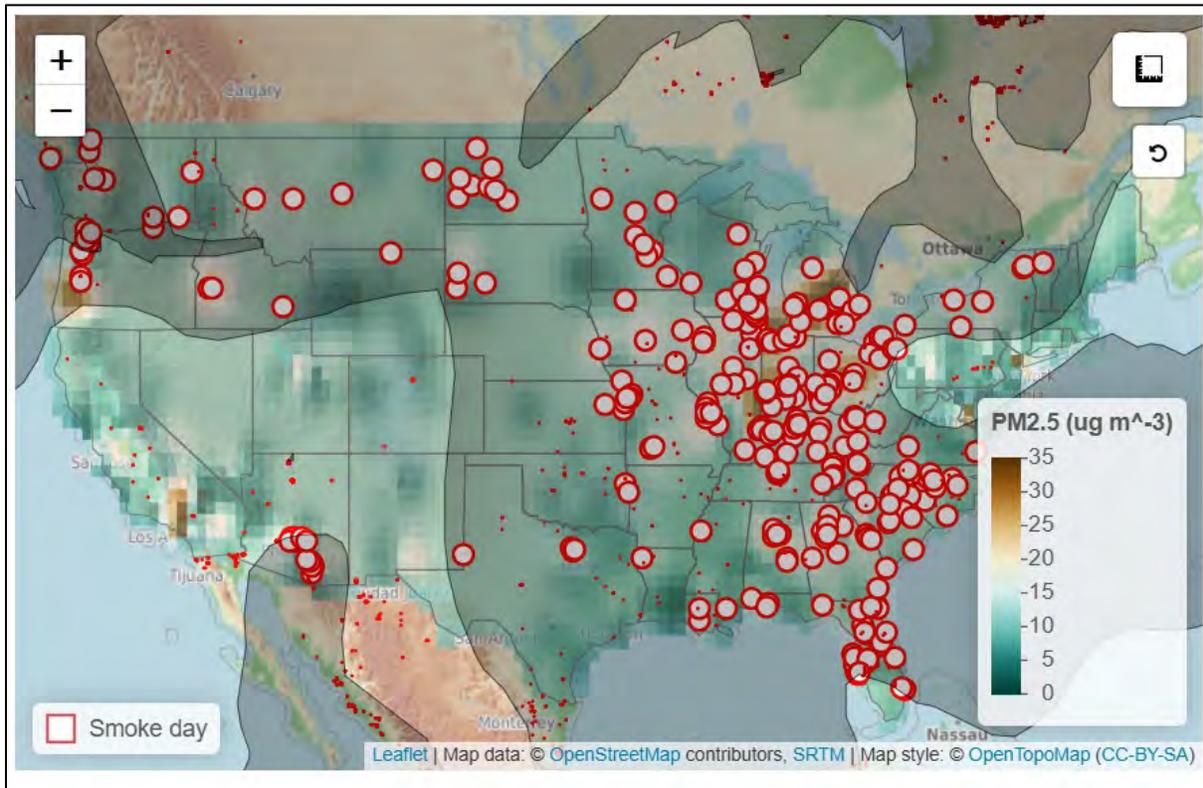
Satellite Imagery with MAIAC AOD – July 4, 2023



HRRR Smoke - Vertically Integrated Smoke – July 4, 2023



GAM PMO3 Smoke Output – July 4, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1545Z July 4, 2023

SMOKE:

Canada/U.S./Atlantic...

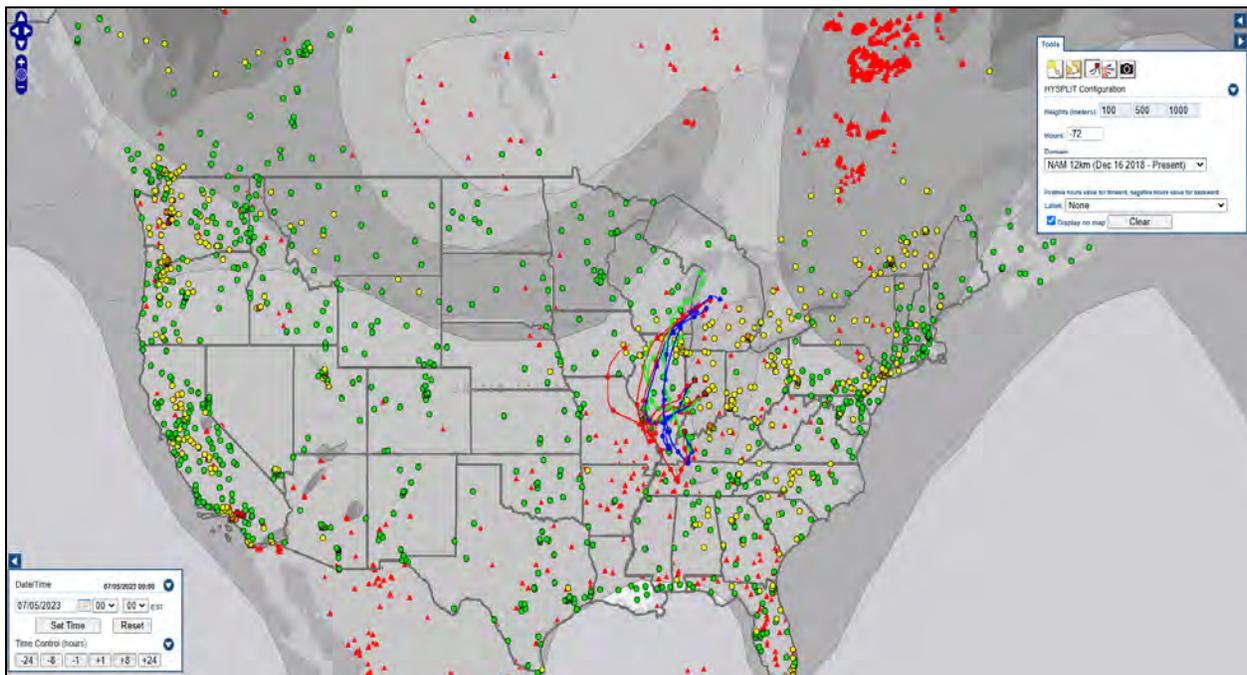
Wildfire activity persists across Canada, especially in central-northern British Columbia, northwestern-northern Alberta, northwestern Ontario, and central Quebec. Emissions from those wildfires continued to feed a large plume of predominantly light density smoke covering nearly all of Canada, the northern and eastern 2/3 of the CONUS, and parts of the northwestern Atlantic.

July 5, 2023

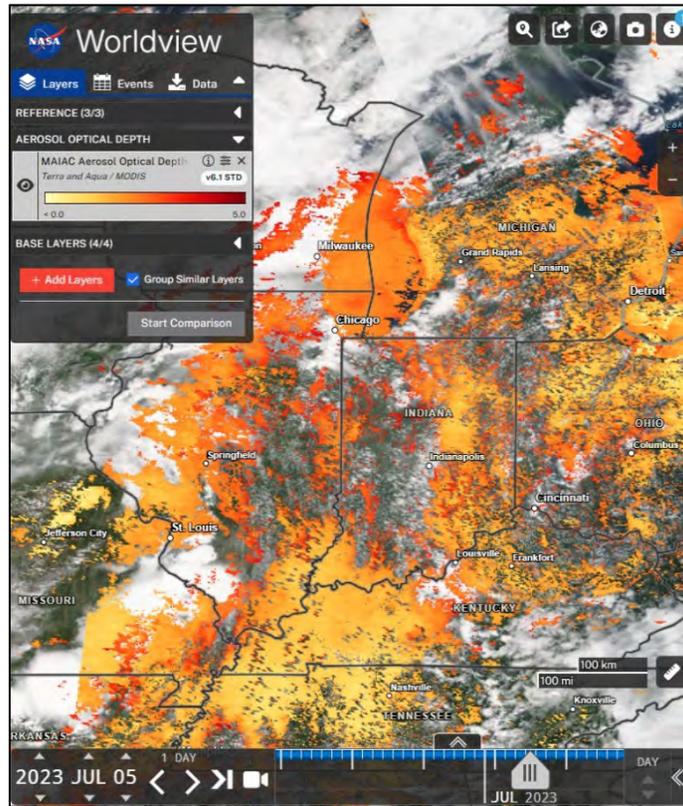
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Jeffersonville - Bates-Bowyer Ave	180190010	7/5/2023	28.9	17.0
Muncie - Central HS	180350006	7/5/2023	15.0	13.2
New Albany	180430008	7/5/2023	32.4	20.9
Fishers	180570007	7/5/2023	17.8	13.8
Carmel - Hazel Dell Parkway	180570008	7/5/2023	35.9	16.5
Kokomo - E. Vaile Ave	180670004	7/5/2023	19.0	14.7
Anderson - Eastside Elem	180950011	7/5/2023	15.4	15.4
Indianapolis - Washington Park	180970078	7/5/2023	28.3	17.8
Indianapolis - W. 18th St.	180970081	7/5/2023	25.2	20.9
Indianapolis - School 21	180970084	7/5/2023	29.2	15.5
Indianapolis- I-70 E	180970087	7/5/2023	29.5	20.5
Bloomington - Binford	181050003	7/5/2023	15.2	13.9
Lafayette - Greenbush St	181570008	7/5/2023	15.1	15.1
Evansville - Buena Vista	181630021	7/5/2023	16.4	15.1

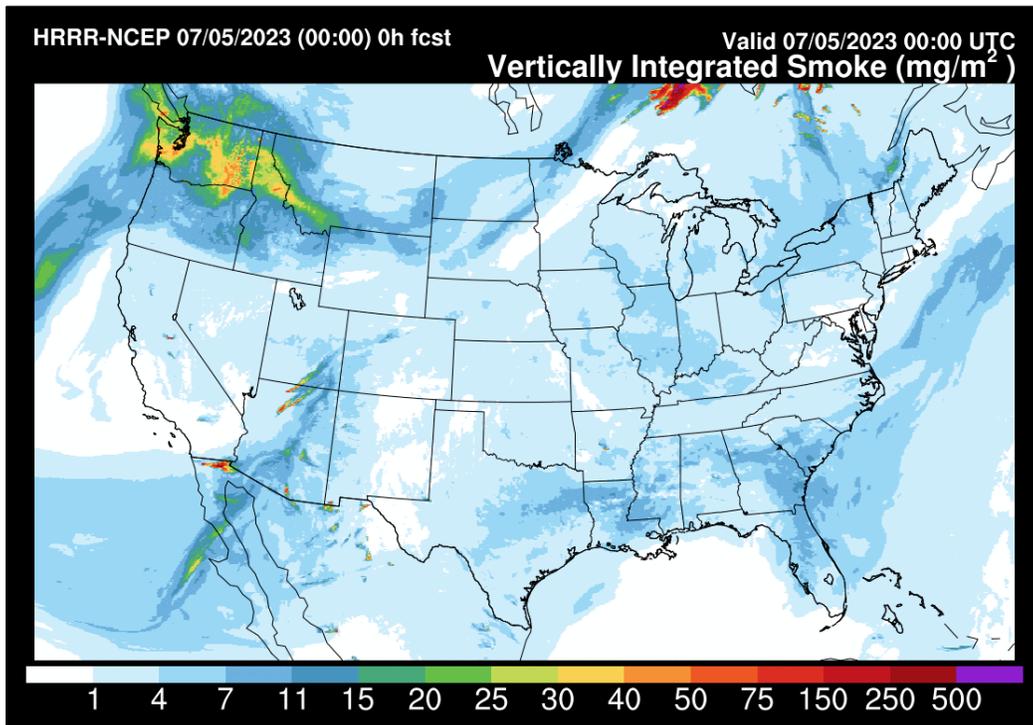
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 5, 2023



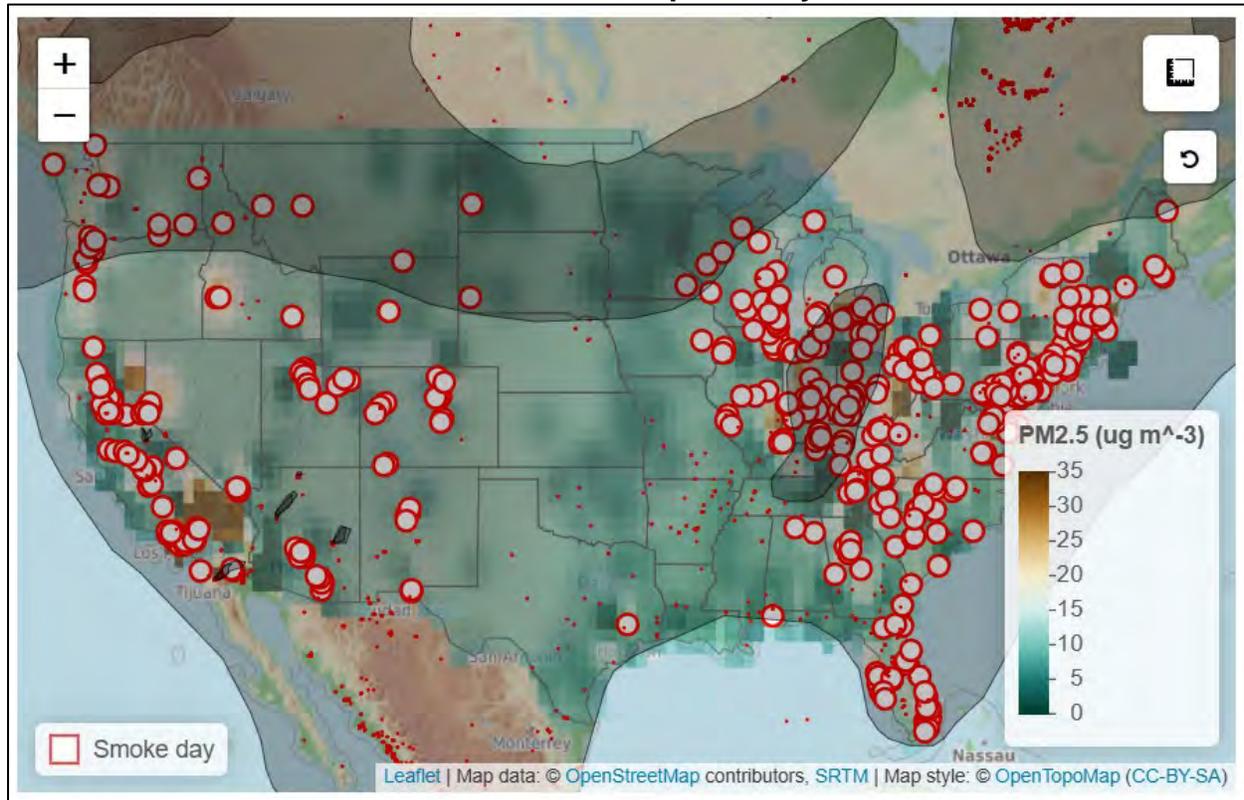
Satellite Imagery with MAIAC AOD – July 5, 2023



HRRR Smoke - Vertically Integrated Smoke – July 5, 2023



GAM PMO3 Smoke Output – July 5, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1500Z July 5, 2023

SMOKE:

Canada/U.S./Atlantic...

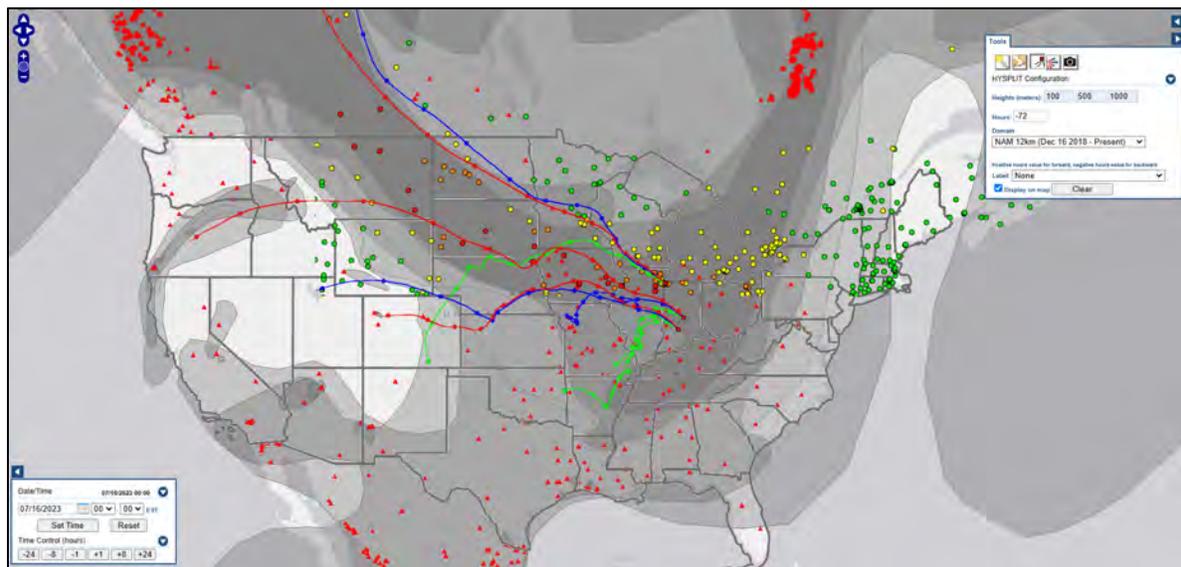
Wildfire activity persists across Canada, with activity throughout west-central and northwestern Canada, northwestern Ontario, and Quebec. The thickest smoke continues to emanate from the wildfire activity in Quebec, where very thick smoke is being drawn northeastward across northern Quebec then east across northern Labrador, Davis Strait, and Labrador Sea. Some of this smoke is then being picked up by a trough over the St. Lawrence River Valley and moved west then southwest across southern Labrador and southern Quebec into southeastern Ontario and into the northeastern CONUS. Smoke emanating from the activity across northwestern Ontario also was moving northeastward across Hudson Bay. Emitted smoke from fire activity throughout western Canada was moving mainly eastward to southeastward, with the exception being smoke from fires across the Northwestern Territory that was moving northwestward. One ribbon of light to moderate smoke was observed over the Yukon/Northwest Territory border across British Columbia and into eastern Washington State and northern Idaho, extending eastward across the Northern Plains and over Ontario.

July 16, 2023

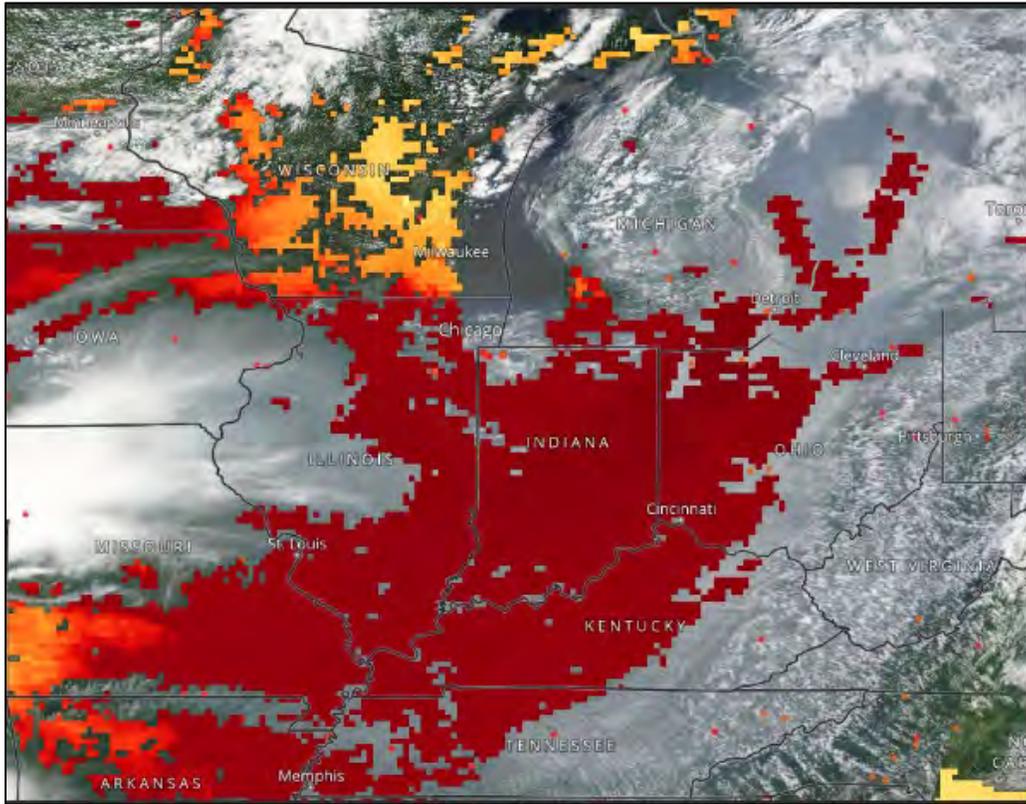
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Jeffersonville - Bates-Bowyer Ave	180190010	7/16/2023	43.9	17.0
Jasper - Post Office	180372001	7/16/2023	47.2	15.7
Elkhart - Prairie St	180390008	7/16/2023	32.0	16.3
Plummer	180550001	7/16/2023	44.7	14.7
Fishers	180570007	7/16/2023	38.7	13.8
Mechanicsburg	180650003	7/16/2023	46.2	15.5
Kokomo - E. Vaile Ave	180670004	7/16/2023	43.4	14.7
East Chicago - Marina	180890034	7/16/2023	51.9	18
Hammond-167th St	180890036	7/16/2023	49.4	16.3
Anderson - Eastside Elem	180950011	7/16/2023	45.5	15.4
Indianapolis - Washington Park	180970078	7/16/2023	43.5	17.8
Indianapolis - W. 18th St.	180970081	7/16/2023	48.9	20.9
Indianapolis- I-70 E	180970087	7/16/2023	46.0	20.5
Bloomington - Binford	181050003	7/16/2023	42.8	13.9
Ogden Dunes	181270024	7/16/2023	39.6	15.3
South Bend - Shields Dr.	181410015	7/16/2023	39.6	16.9
Lafayette - Greenbush St	181570008	7/16/2023	47.9	15.1
Terre Haute - Lafayette Ave	181670018	7/16/2023	42.5	18.8
Larwill	181830003	7/16/2023	55.1	15.0

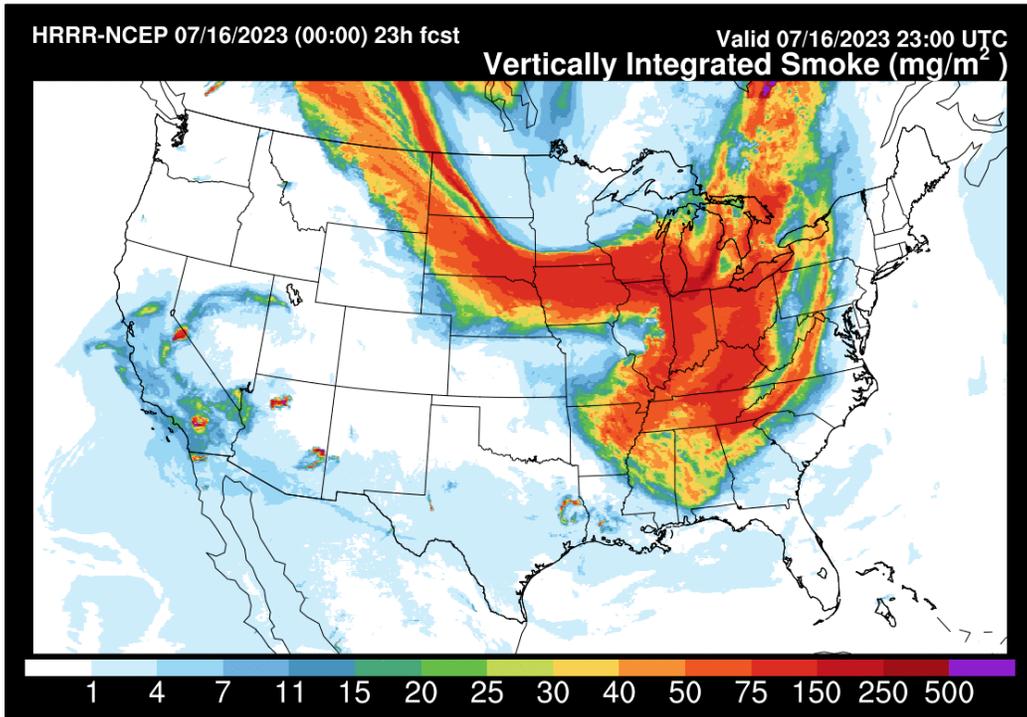
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 16, 2023



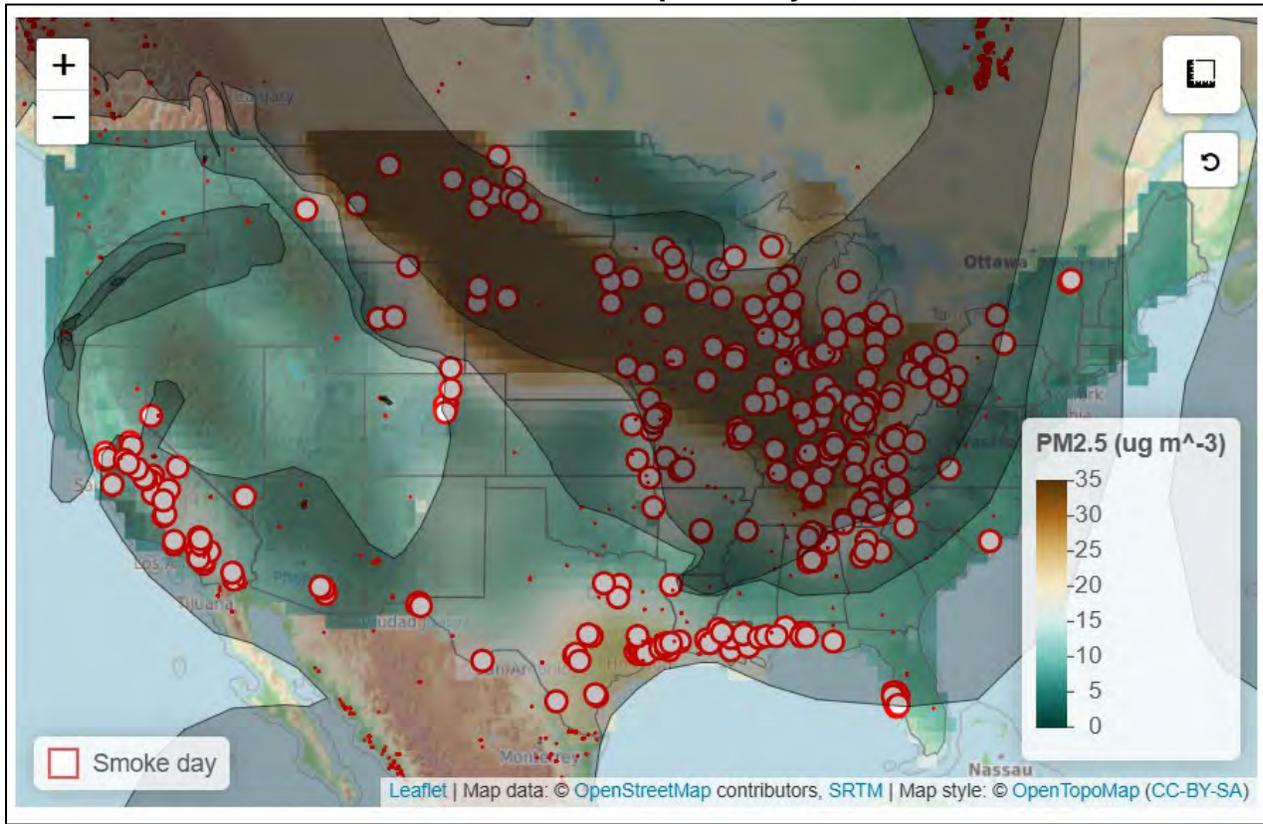
Satellite Imagery with MAIAC AOD – July 16, 2023



HRRR Smoke - Vertically Integrated Smoke – July 16, 2023



GAM PMO3 Smoke Output – July 16, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z July 16, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Eastern Pacific Ocean/Mexico...

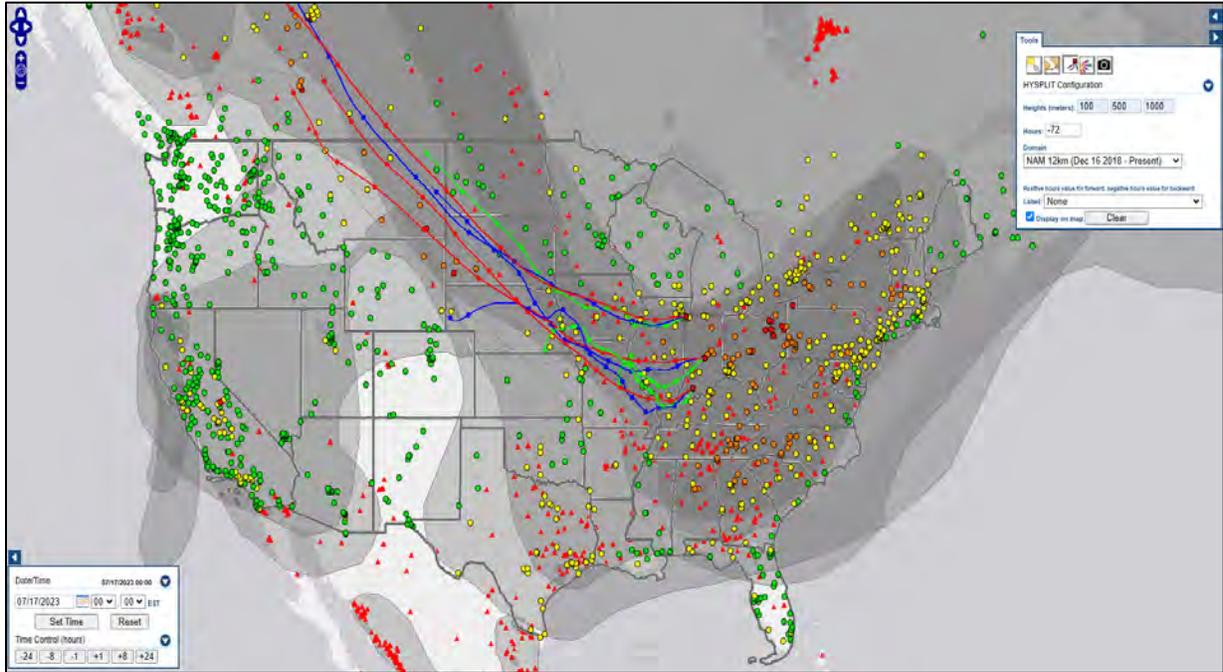
Numerous large wildfires continue to burn especially in portions of western and northwestern Canada as well as in southeastern Canada in western Quebec to the southeast of Hudson Bay. A huge area of thin density smoke primarily from the significant wildfires in Canada continued to be seen this morning covering virtually all of Canada and a sizable portion of the U.S. with the possible exception of some of the western and eastern portions of the U.S. The smoke also extended well offshore of eastern Canada and the eastern U.S. over the Atlantic and off the western coast of Canada over the northeastern Pacific. Large areas of much thicker smoke were present over much of western and northwestern Canada, as well as some of central and eastern Canada and the Labrador Sea. In addition, the batch of thick smoke from the wildfire activity in western and northwestern Canada spread to the southeast and over much of the north central and central U.S., the Ohio Valley region, the central Great Lakes region, and the northern part of the southeastern U.S.

July 17, 2023

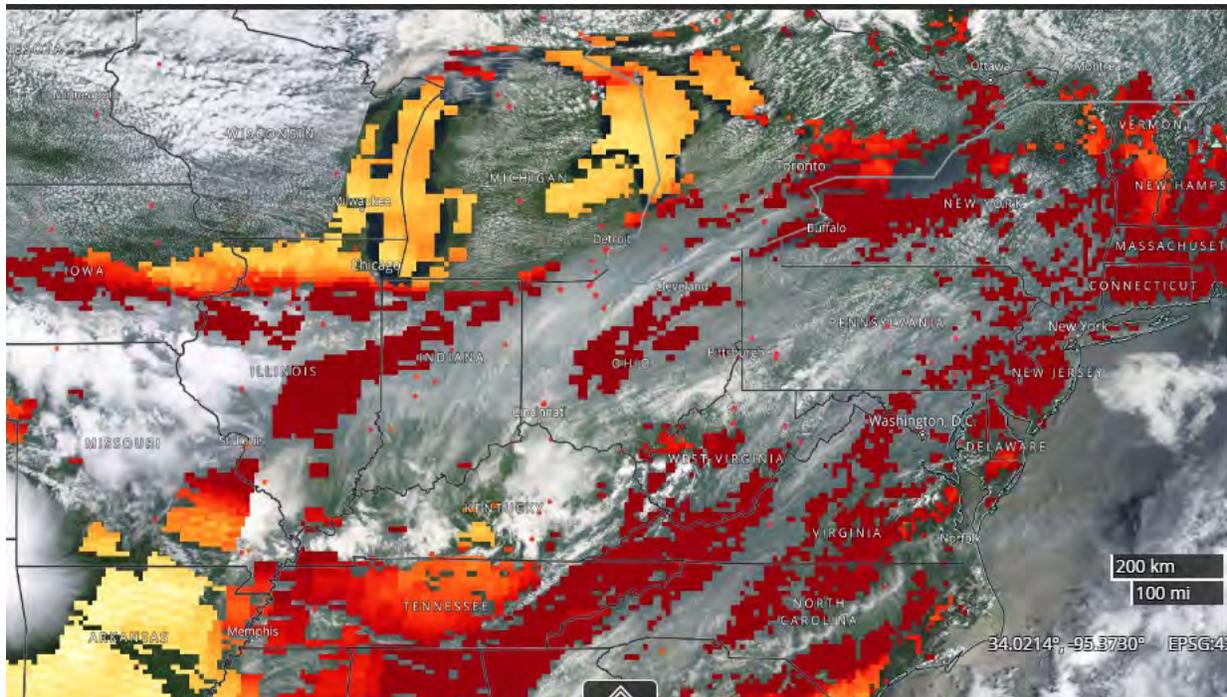
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Jeffersonville - Bates-Bowyer Ave	180190010	7/17/2023	26.1	17.0
Jasper - Post Office	180372001	7/17/2023	18.6	15.7
Elkhart - Prairie St	180390008	7/17/2023	25.1	16.3
New Albany	180430008	7/17/2023	25.8	20.9
Plummer	180550001	7/17/2023	18.4	14.7
Fishers	180570007	7/17/2023	36.5	13.8
Carmel - Hazel Dell Parkway	180570008	7/17/2023	35.2	16.5
Mechanicsburg	180650003	7/17/2023	47.8	15.5
East Chicago - Franklin/Washington Sch	180890006	7/17/2023	19.3	16.1
East Chicago - Marina	180890034	7/17/2023	18.9	18.0
Hammond-167th St	180890036	7/17/2023	23.8	16.3
Michigan City - Marsh Elem. Sch.	180910011	7/17/2023	17.5	15.9
Anderson - Eastside Elem	180950011	7/17/2023	46.7	15.4
Indianapolis - Washington Park	180970078	7/17/2023	36.9	17.8
Indianapolis - W. 18th St.	180970081	7/17/2023	32.0	20.9
Indianapolis- I-70 E	180970087	7/17/2023	38.1	20.5
Bloomington - Binford	181050003	7/17/2023	22.2	13.9
Ogden Dunes	181270024	7/17/2023	21.2	15.3
South Bend - Shields Dr.	181410015	7/17/2023	23.7	16.9
Dale	181470009	7/17/2023	18.3	13.9
Evansville - U of E	181630016	7/17/2023	15.8	15.5
Terre Haute - Lafayette Ave	181670018	7/17/2023	22.0	18.8
Larwill	181830003	7/17/2023	36.2	15.0

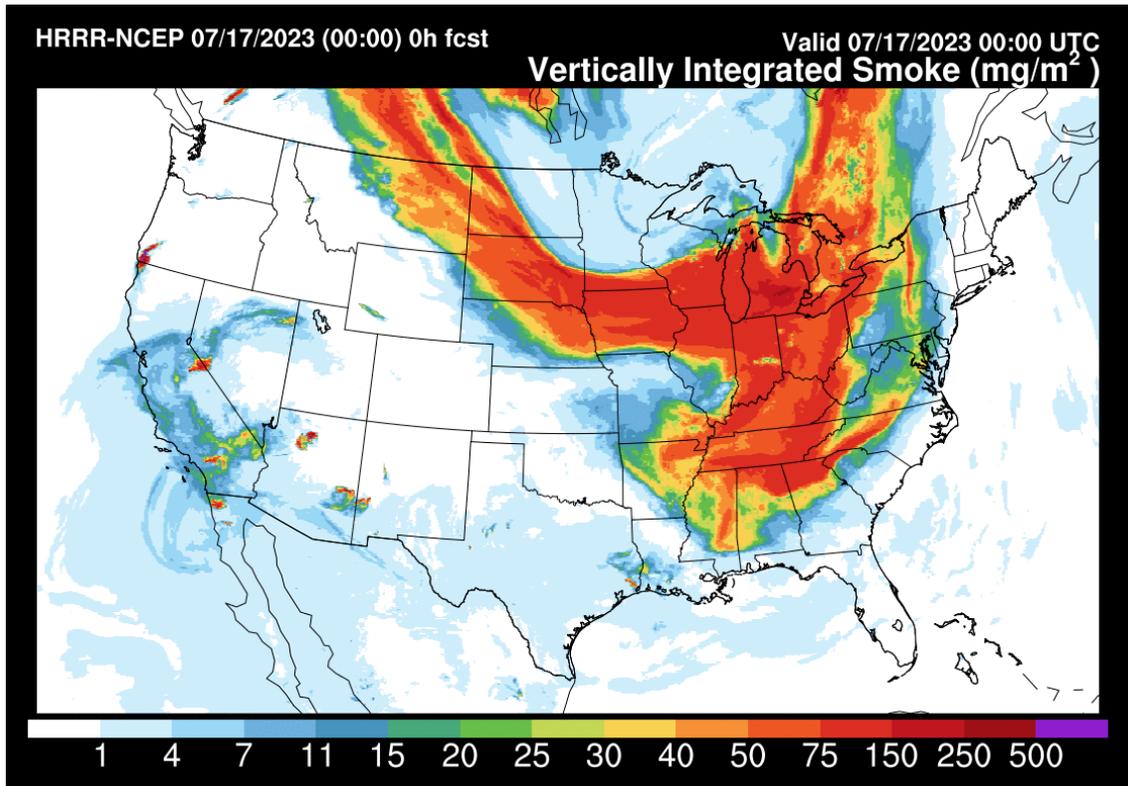
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 17, 2023



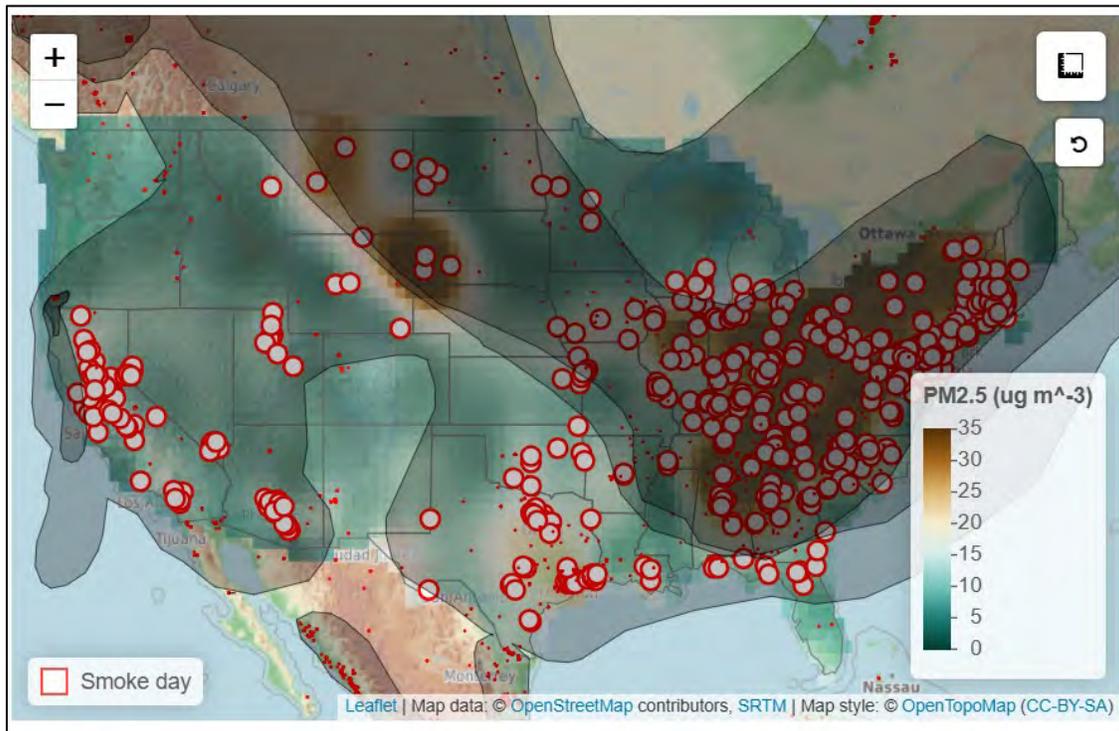
Satellite Imagery with MAIAC AOD – July 17, 2023



HRRR Smoke - Vertically Integrated Smoke – July 17, 2023



GAM PMO3 Smoke Output – July 17, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1720Z July 17, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

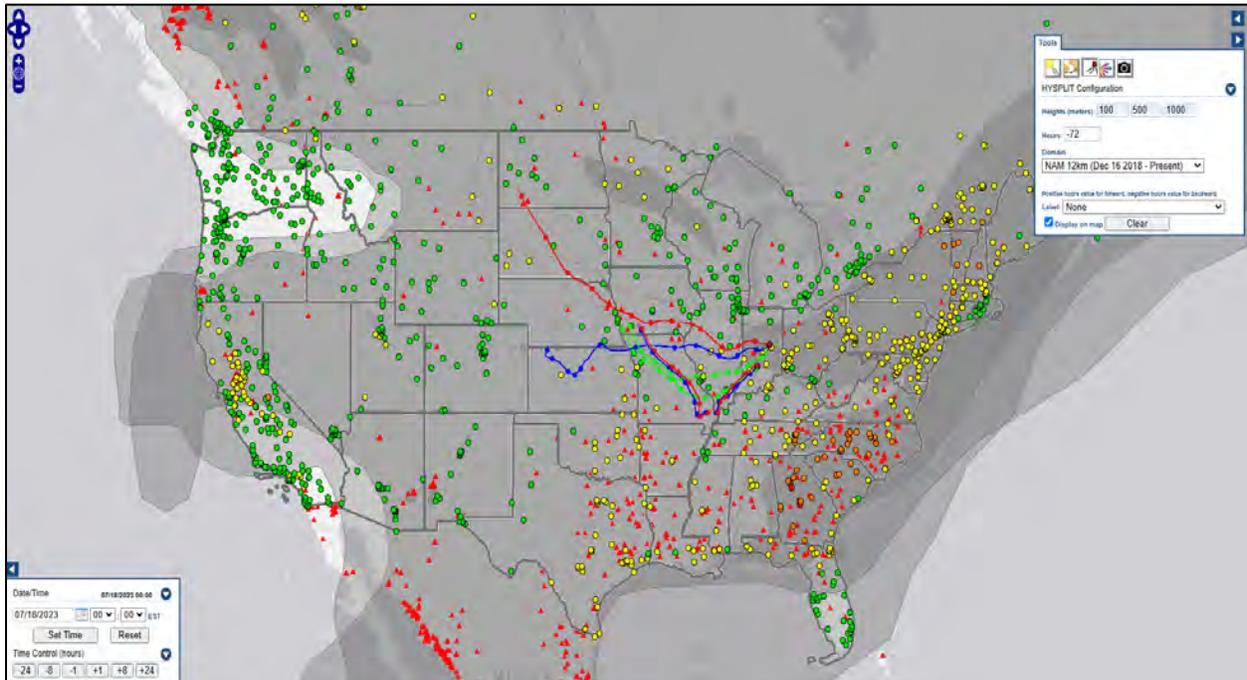
Numerous large wildfires continue to burn especially in portions of western and northwestern Canada as well as in southeastern Canada in western Quebec to the southeast of Hudson Bay. A huge area of thin density smoke primarily from the significant wildfires in Canada was seen covering all of Canada and most of the U.S with the exception of Washington state and portions of the Western U.S. The smoke also extended well offshore of eastern Canada and the eastern U.S. over the Atlantic and northwest into Eastern Alaska. Large areas of much thicker smoke were present over much of western and northwestern Canada, as well as some of central and eastern Canada and the Labrador Sea, though cloud cover over eastern Canada made it difficult to distinguish between moderate and thick density. In addition, the batch of thick smoke from the wildfire activity in western and northwestern Canada extended southeast over much of the north central and eastern U.S.

July 18, 2023

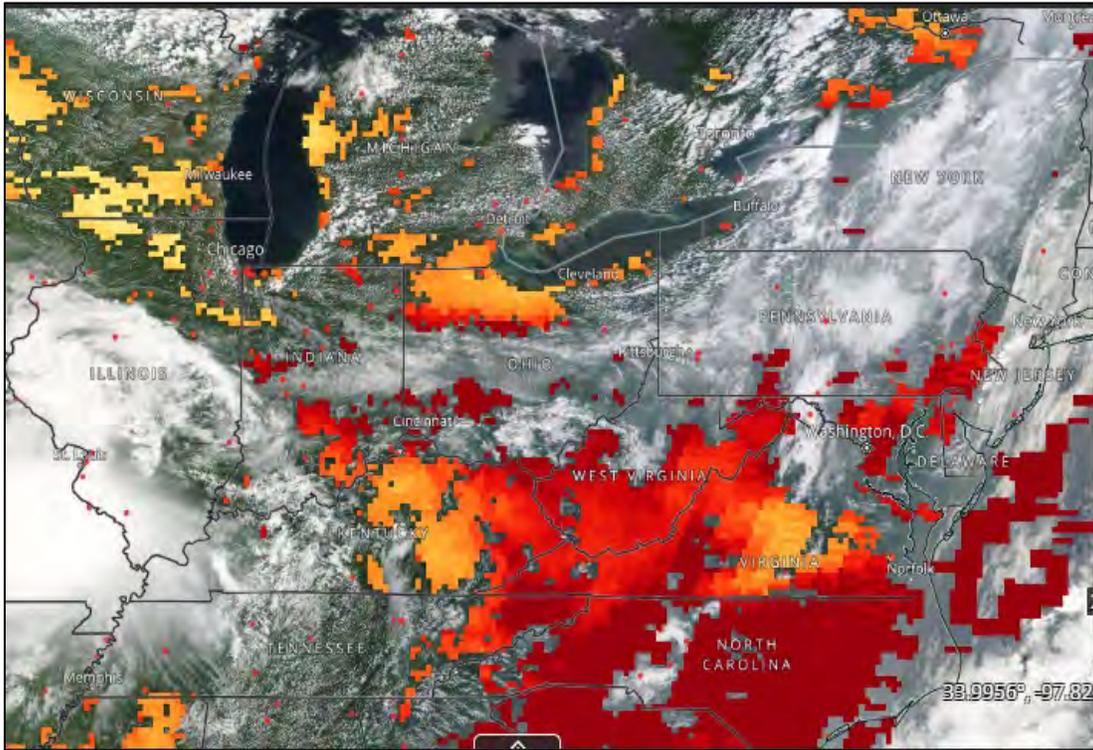
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	7/18/2023	16.6	13.7
Plummer	180550001	7/18/2023	16.4	14.7
Fishers	180570007	7/18/2023	18.2	13.8
Mechanicsburg	180650003	7/18/2023	21.2	15.5
Anderson - Eastside Elem	180950011	7/18/2023	20.3	15.4
Indianapolis - Washington Park	180970078	7/18/2023	21.0	17.8
Indianapolis - W. 18th St.	180970081	7/18/2023	24.3	20.9
Indianapolis- I-70 E	180970087	7/18/2023	21.7	20.5
Bloomington - Binford	181050003	7/18/2023	16.0	13.9
Terre Haute - Lafayette Ave	181670018	7/18/2023	23.7	18.8

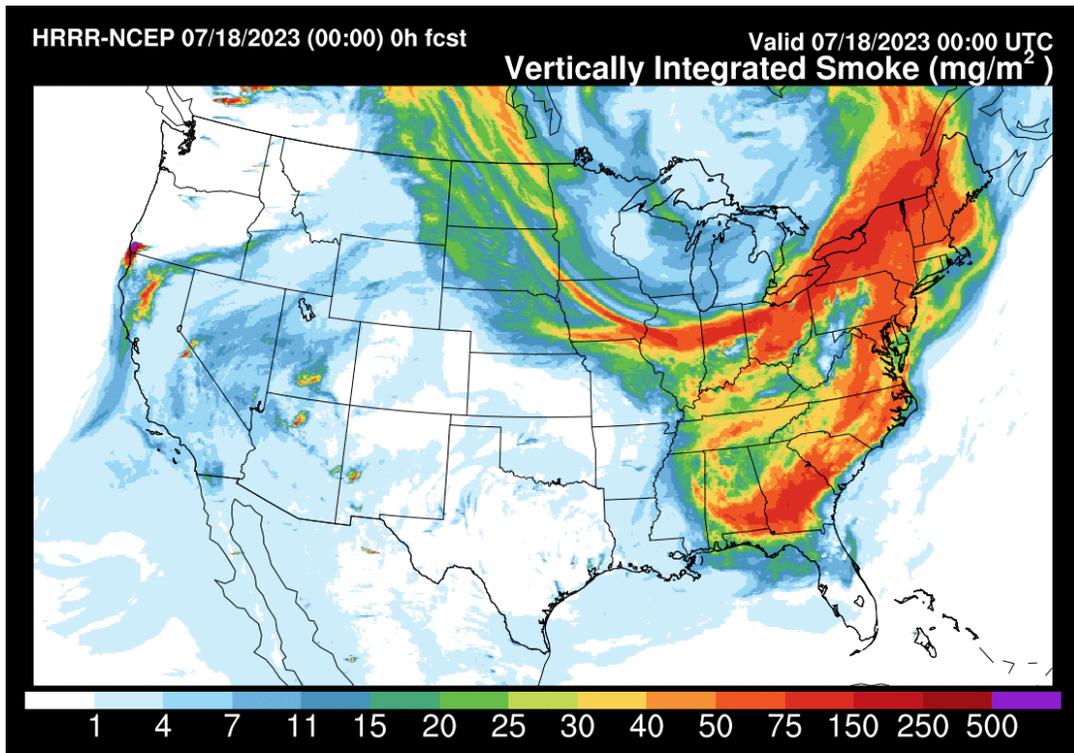
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 18, 2023



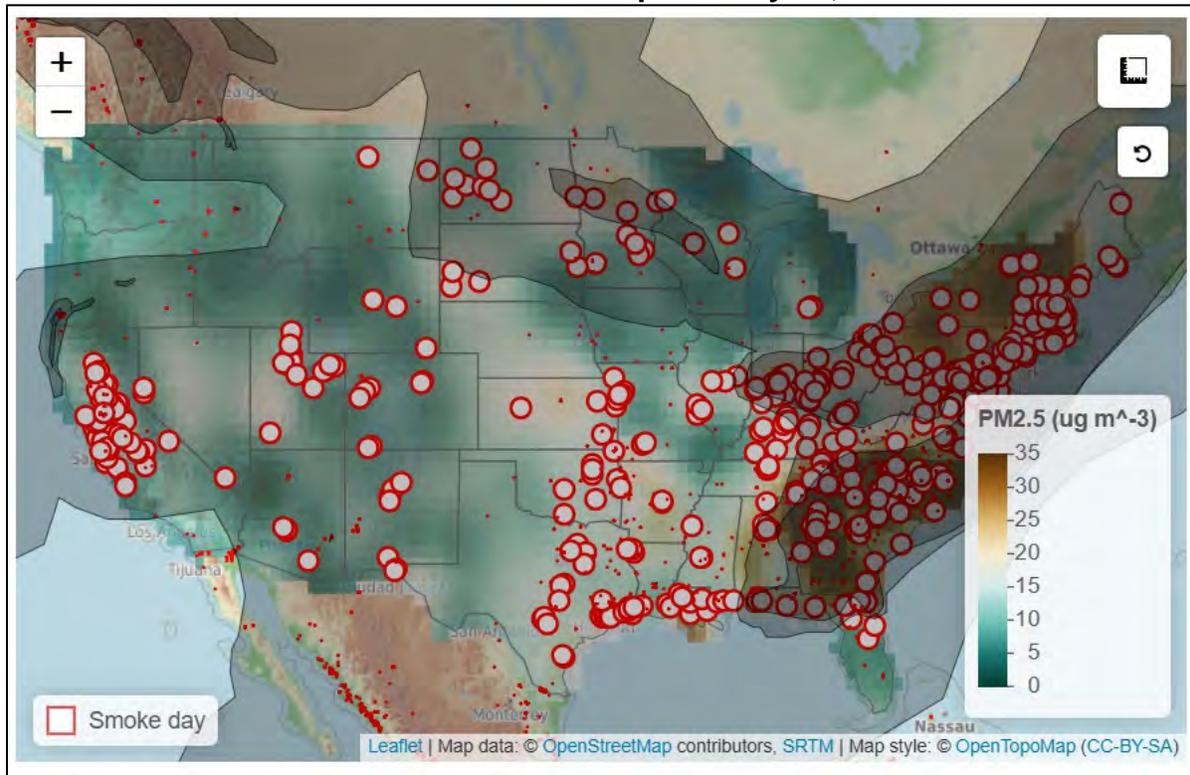
Satellite Imagery with MAIAC AOD – July 18, 2023



HRRR Smoke - Vertically Integrated Smoke – July 18, 2023



GAM PMO3 Smoke Output – July 18, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE
IMAGERY
THROUGH 1645Z July 18, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

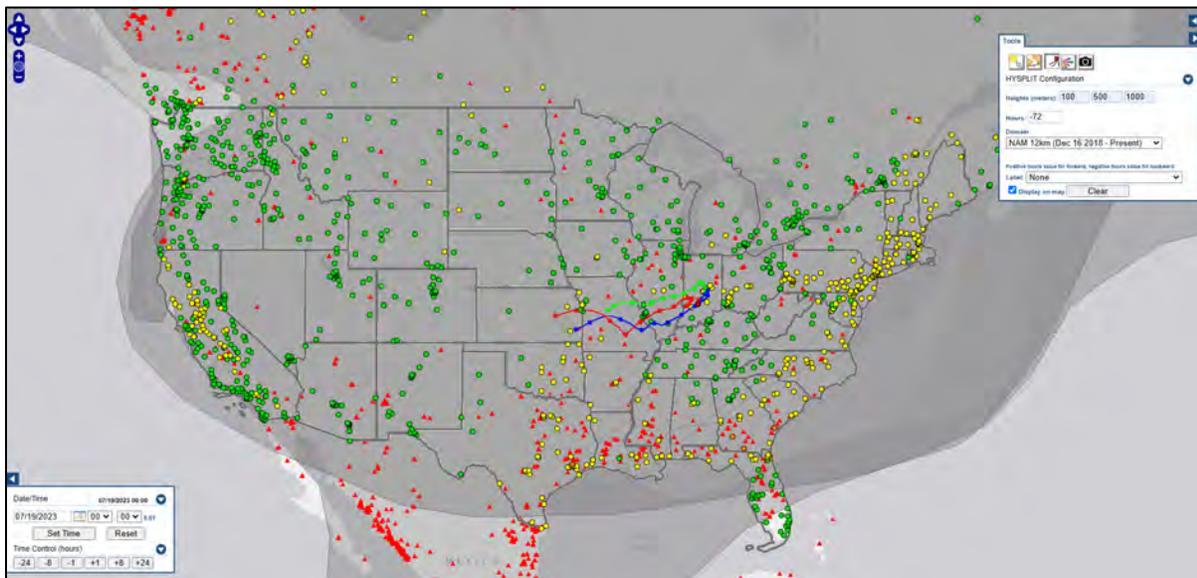
A significant cloud cover was present over western Quebec which prevented the detection of the intense fire activity which had been occurring in that region. Smoke detection also was not possible with satellite imagery due to the cloud cover. A swath of moderately dense smoke was barely visible around the cloud cover across southern Hudson Bay and northern Quebec. Over western and northwestern Canada, major wildfires continue to burn though some cloudiness also was present in that region which prevented the detection of some of the wildfires which had been burning. Dense smoke was visible from northeastern Alaska and extending to the east and southeast over much of northwestern Canada and some of western Canada to central Canada reaching as far east as western Hudson Bay. More moderate to thick density smoke from the western Canadian fires could be seen over the north central U.S. and western Great Lakes region. Farther to the east and southeast, a large batch of moderate to thick density smoke also from the western Canadian wildfires was present over much of the eastern U.S. and extending to the northeast over southeastern Canada and the Canadian Maritimes. The larger surrounding mass of thinner density smoke from the Canadian wildfires covered much of Canada, Alaska and the lower 48, northern and central Mexico, and the northern Atlantic.

July 19, 2023

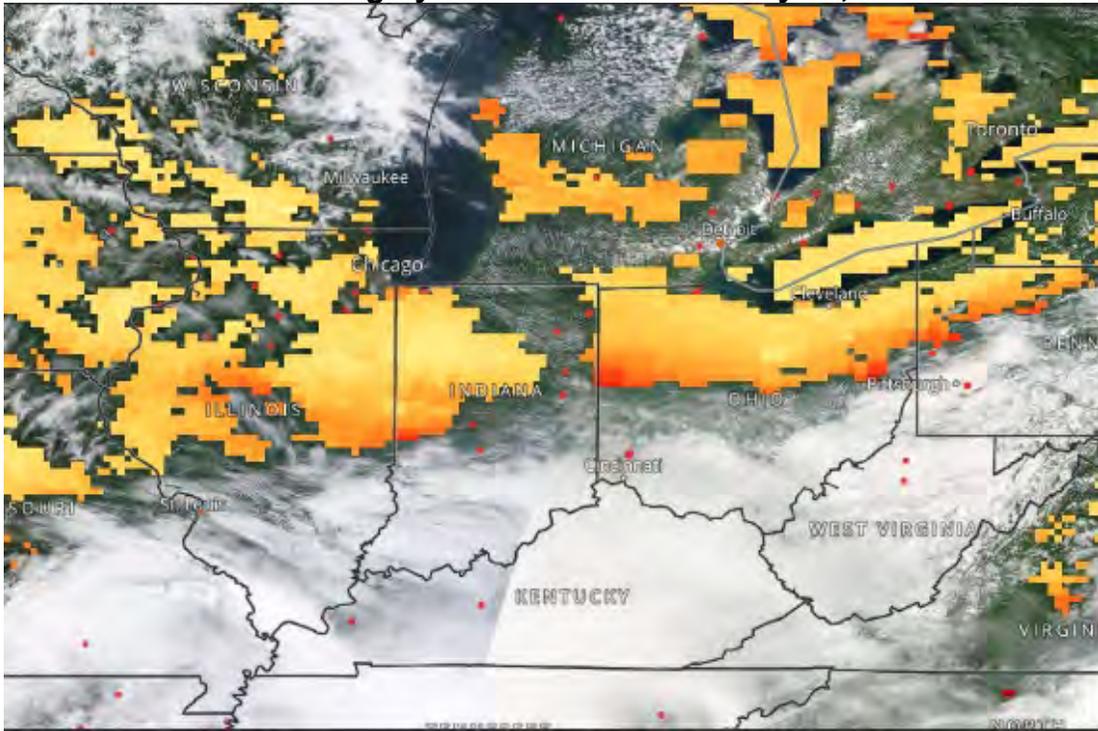
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Bloomington - Binford	181050003	7/19/2023	14.5	13.9

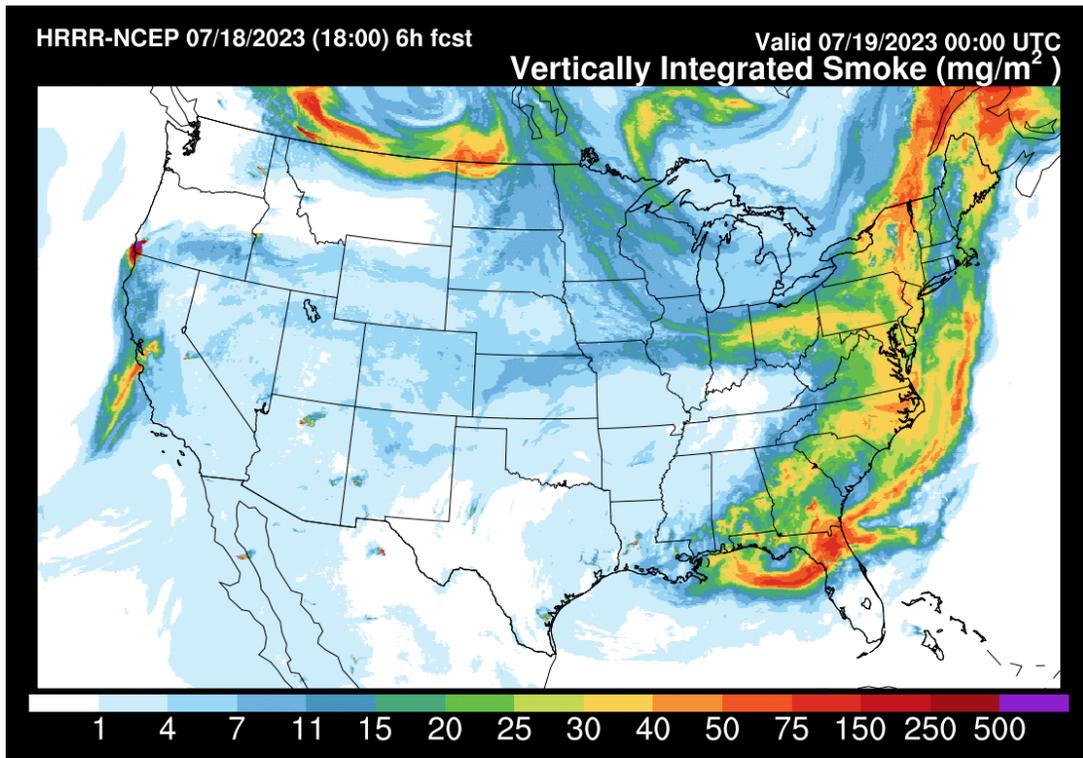
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 19, 2023



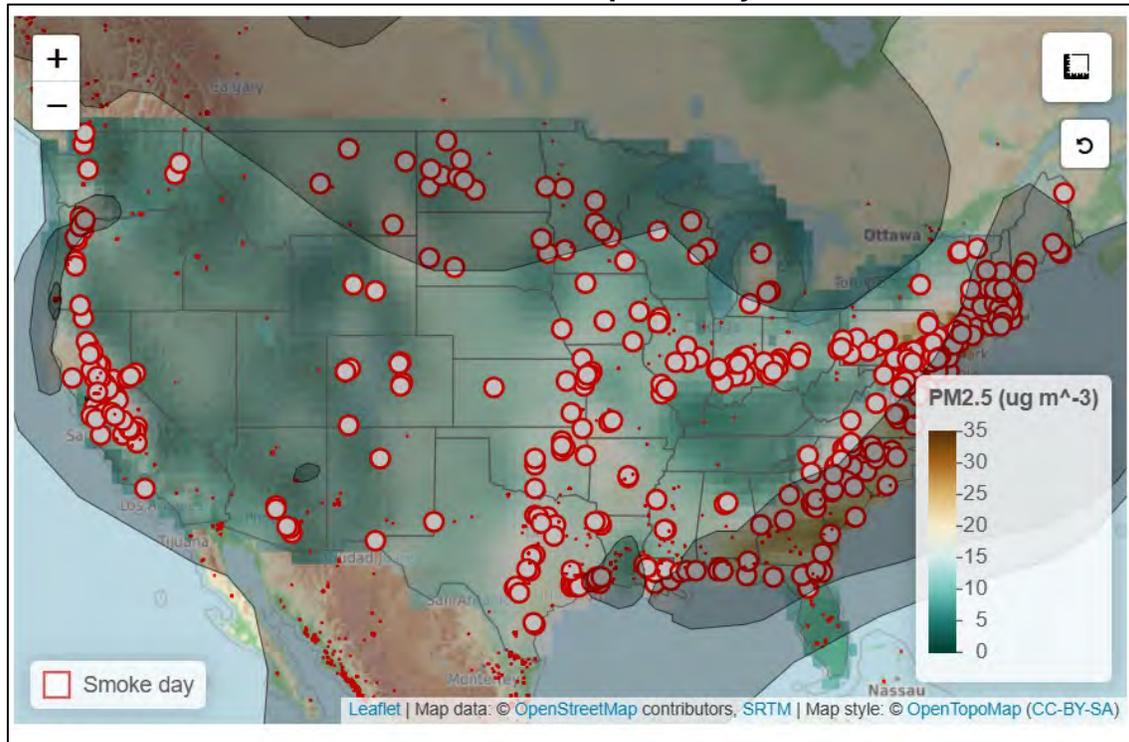
Satellite Imagery with MAIAC AOD – July 19, 2023



HRRR Smoke - Vertically Integrated Smoke – July 19, 2023



GAM PMO3 Smoke Output – July 19, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1750Z July 19, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

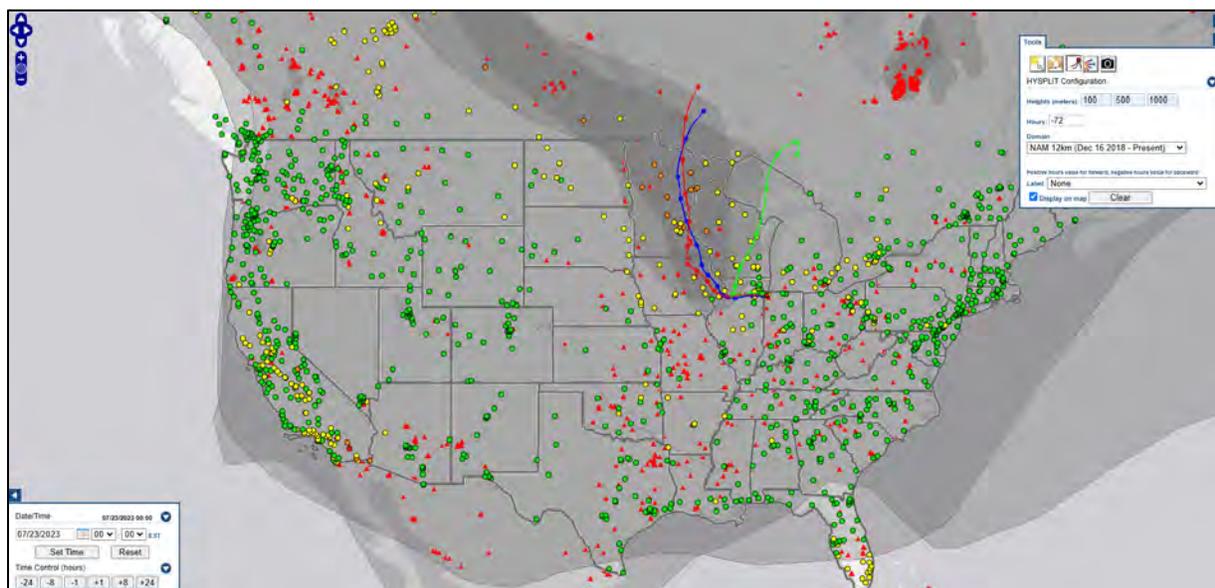
A significant cloud cover was present over western Quebec which prevented the detection of the intense fire and smoke activity which had been occurring in that region. Moderate dense smoke was visible from northeastern Alaska and extending to the east and southeast over much of northwestern Canada and some of western Canada to central Canada reaching as far east as western Hudson Bay. More moderate to thick density smoke from the western Canadian fires could be seen over the north central U.S. and western Great Lakes region. Thick density smoke was visible engulfing most of northern and central Canada, while extending northeast into Eastern Alaska. Farther to the east and southeast, a large batch of moderate density smoke also from the western Canadian wildfires was present over much of the eastern U.S. and the Atlantic Ocean along the coast of the eastern U.S. The larger surrounding mass of thinner density smoke from the Canadian wildfires covered much of Canada, Alaska and the lower 48, and the northern Atlantic.

July 23, 2023

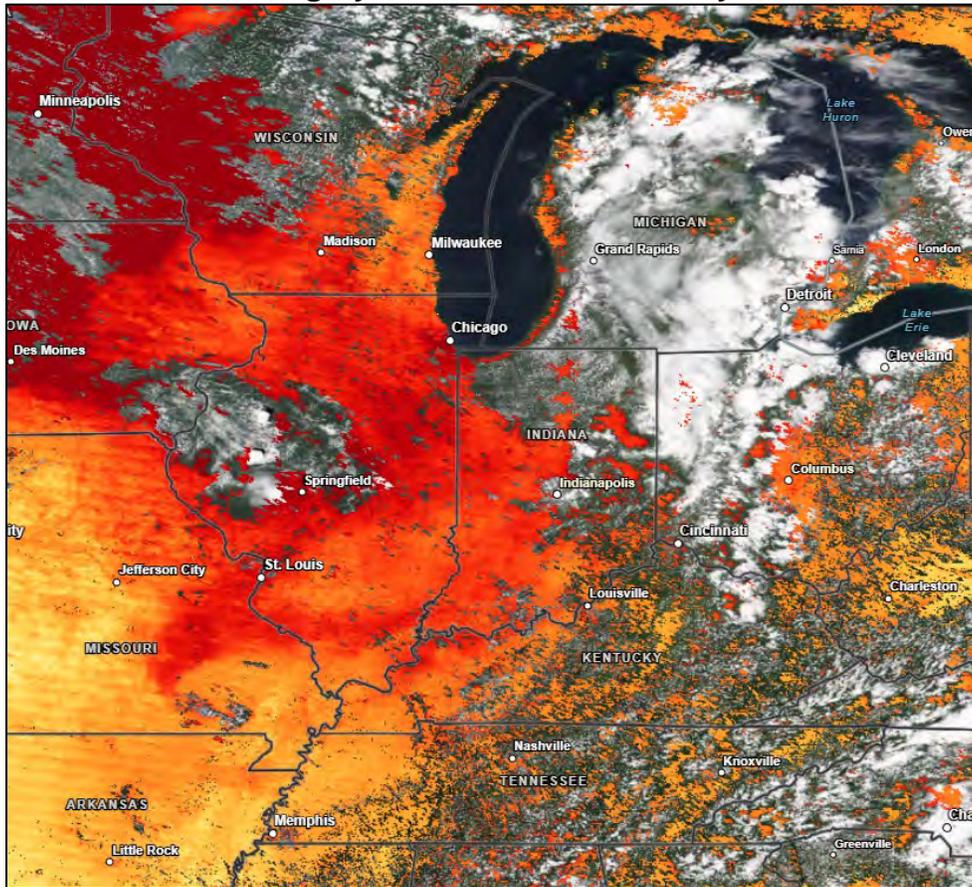
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Gary - Madison St	180890031	7/23/2023	16.3	16.0

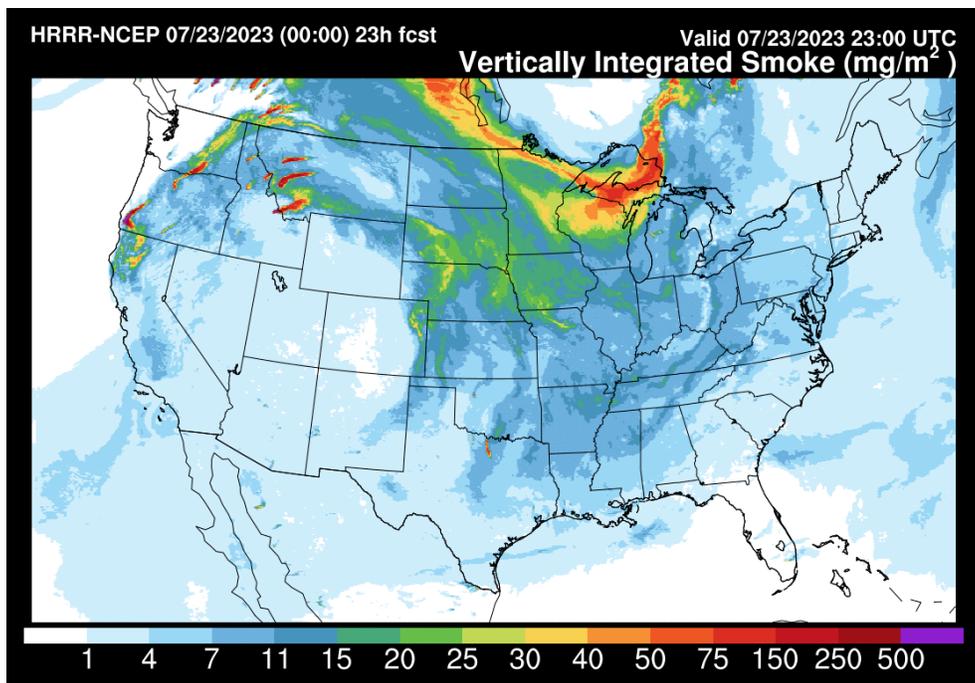
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 23, 2023



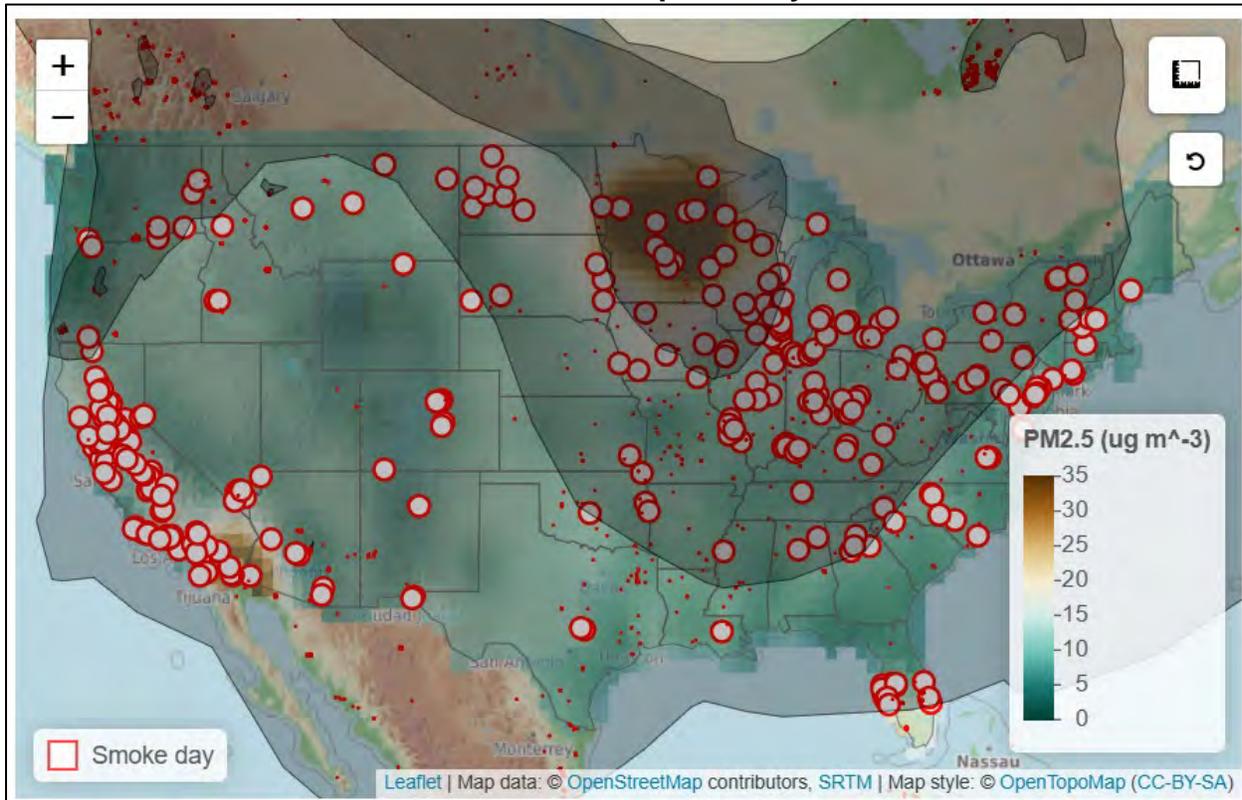
Satellite Imagery with MAIAC AOD – July 23, 2023



HRRR Smoke - Vertically Integrated Smoke – July 23, 2023



GAM PMO3 Smoke Output – July 23, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1600Z July 23, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast and south Mexico/Northern Gulf of Mexico...

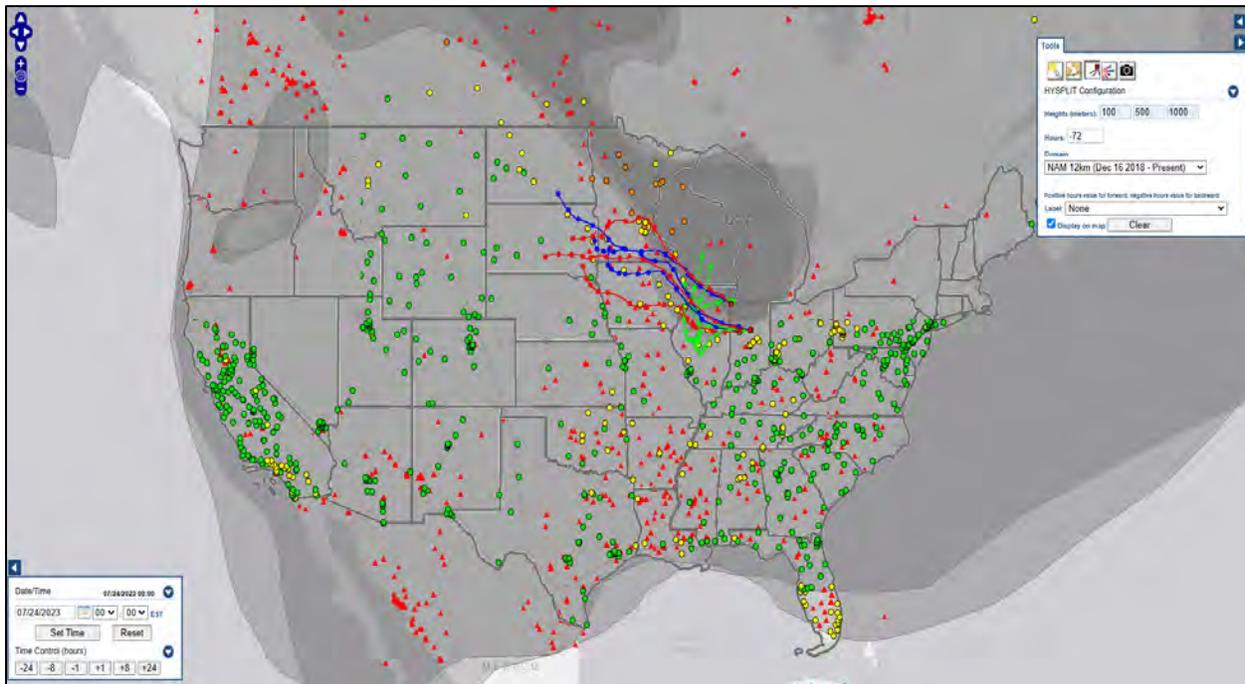
The enormous area of smoke primarily from the Canadian wildfires continues to be seen covering virtually all of Canada and most of the U.S. including the eastern half of Alaska, along with the northern half of Mexico, much of the central and northern Atlantic, and parts of the northeastern Pacific off the southwest coast of Canada. Within this larger area of thin density smoke were batches of moderate to thick density smoke. The thick to very thick smoke that covered much of northern Canada within the Northwestern Territories and extending southeast through central Canada and into the Midwestern states of Minnesota and Wisconsin was associated from numerous wildfires in western and northwestern Canada. Some of this moderate smoke from these fires had moved to the southeast/east over eastern Canada, where fires in Quebec were also seen producing localized moderate to thick smoke, as well the northwestern and north central U.S., covering much of Mid-west and Mississippi valley region. Light smoke also spread into southern and northern Mexico and parts of the northern Gulf of Mexico.

July 24, 2023

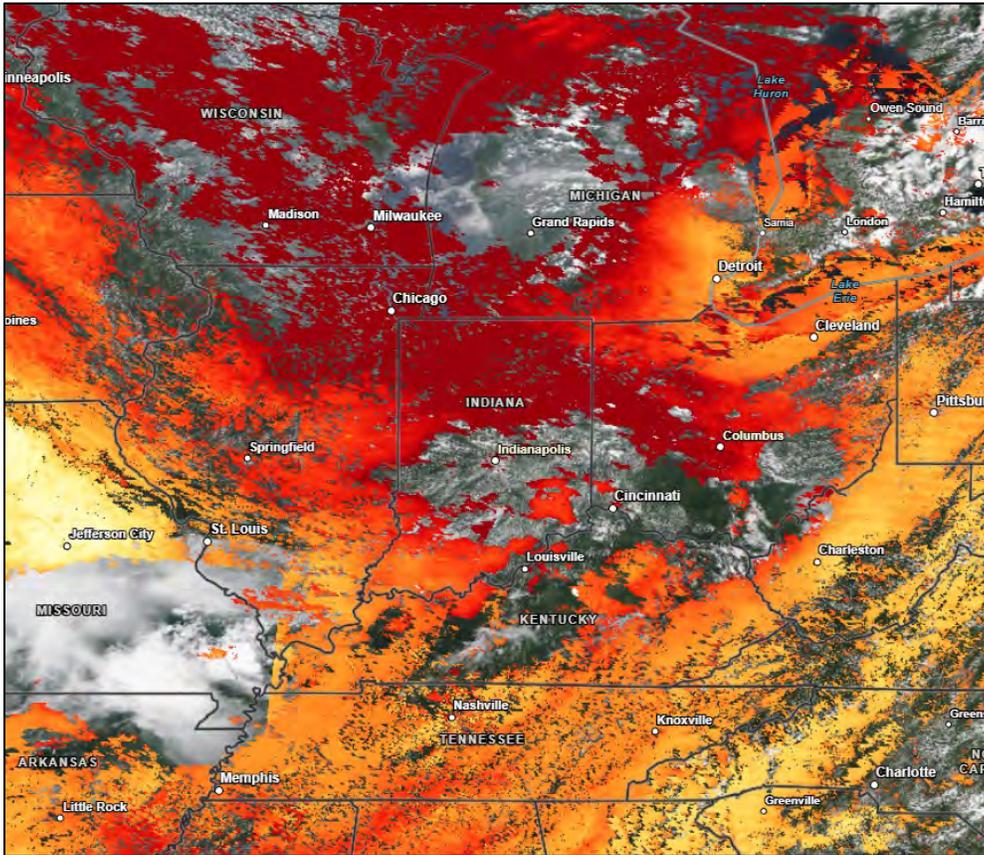
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	7/24/2023	21.2	16.3
Kokomo - E. Vaile Ave	180670004	7/24/2023	15.1	14.7
East Chicago - Marina	180890034	7/24/2023	25.0	18.0
Hammond-167th St	180890036	7/24/2023	26.5	16.3
South Bend - Shields Dr.	181410015	7/24/2023	25.3	16.9
Lafayette - Greenbush St	181570008	7/24/2023	16.2	15.1
Larwill	181830003	7/24/2023	19.7	15.0

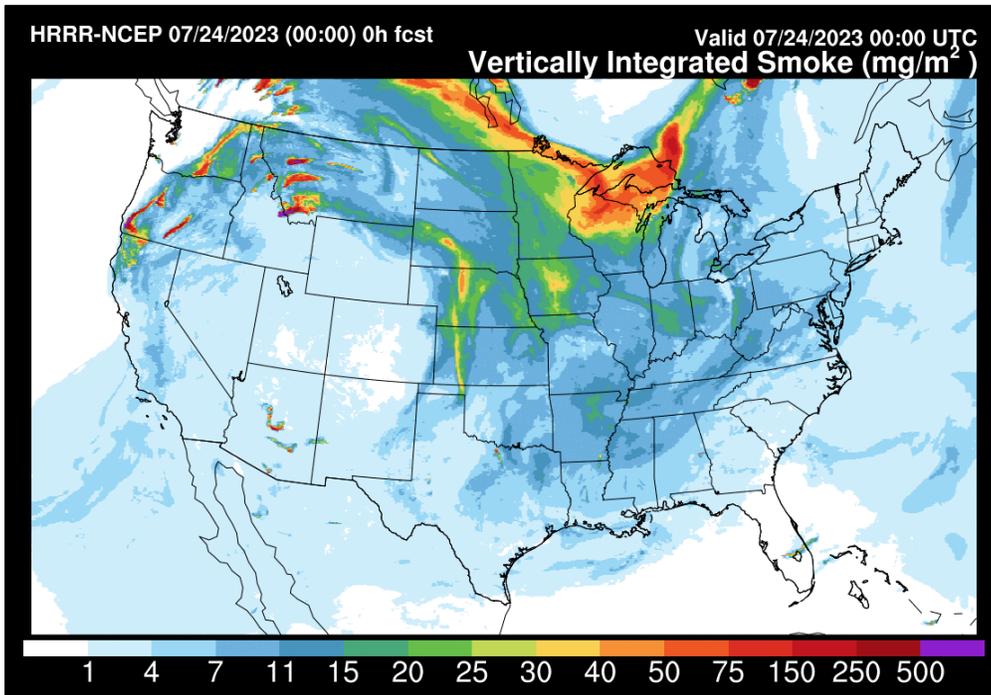
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 24, 2023



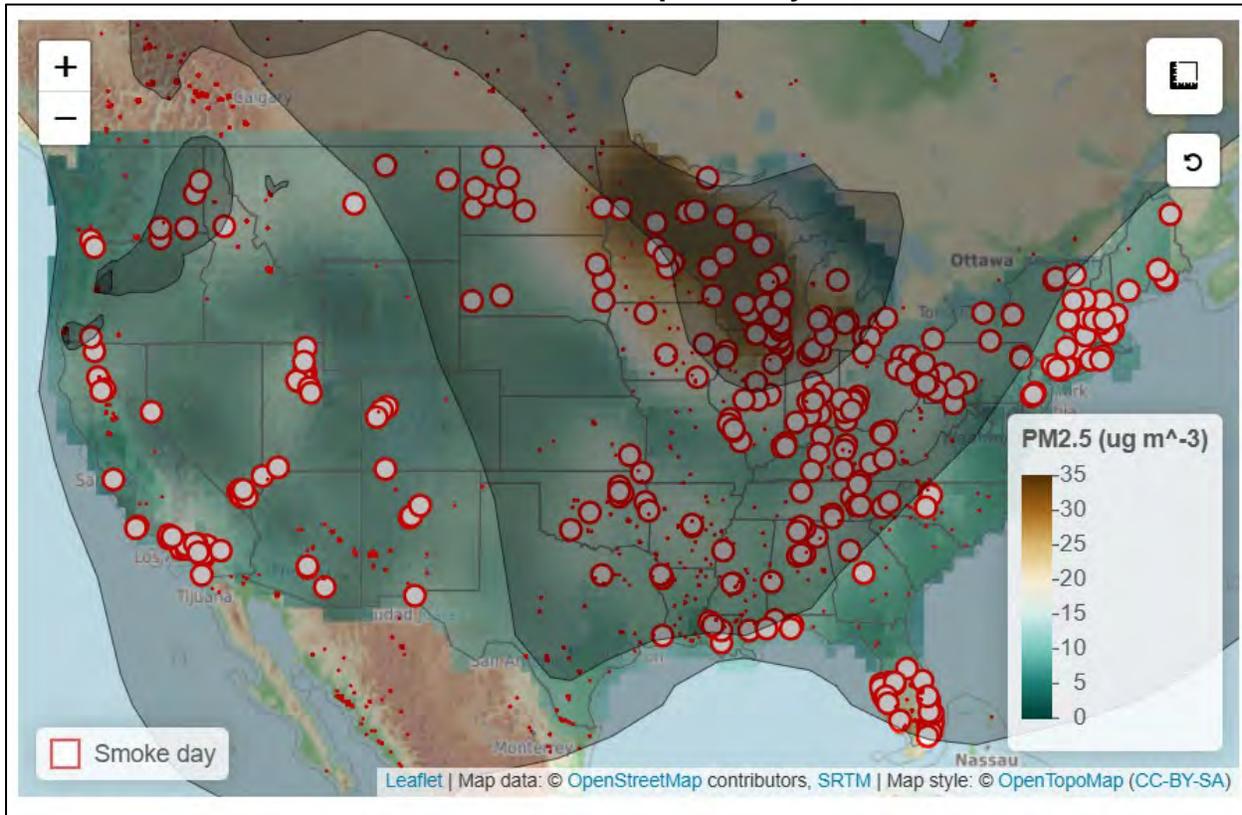
Satellite Imagery with MAIAC AOD – July 24, 2023



HRRR Smoke - Vertically Integrated Smoke – July 24, 2023



GAM PMO3 Smoke Output – July 24, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1600Z July 24, 2023

SMOKE:

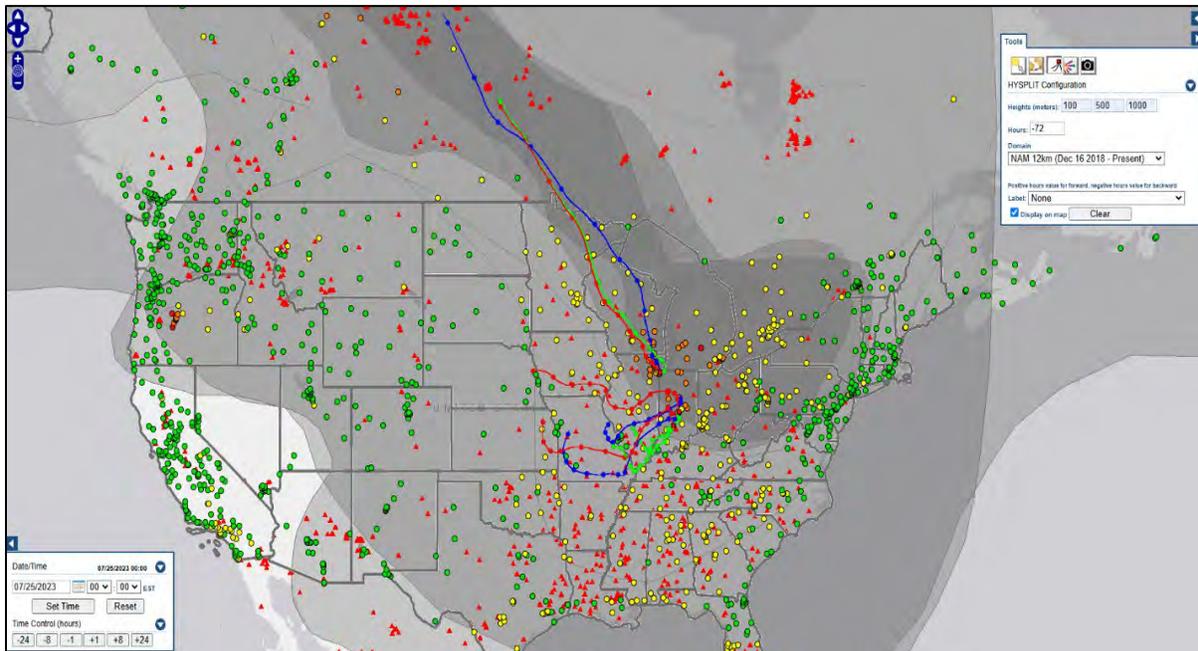
Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast and south Mexico/Northern Gulf of Mexico...
The enormous area of smoke primarily from the Canadian wildfires continues to be seen covering virtually all of Canada and most of the U.S. including most of Alaska, along with the northern half of Mexico, much of the central and northern Atlantic, and the northeastern Pacific
off southern Alaska and northwest coast of Canada. Within this larger area of thin density smoke were batches of moderate to thick density smoke. The thick to very thick smoke that covered eastern Alaska and much of northern Canada within the Northwestern Territories and extending southeast through central Canada and into the Midwestern states of Minnesota and Wisconsin was associated from numerous wildfires in western and northwestern Canada. The moderate smoke from these fires extended from Alaska and Pacific Ocean off of the southern Alaskan coast, through western/central Canada, and moving to the southeast/east where it eventually settled into eastern Canada, where fires in Quebec were previously seen producing localized moderate to thick smoke, but cloud cover precluded today's analysis in the region. This smoke also extended well over the northwestern and north central U.S., covering much of Mid-west and Mississippi valley region.

July 25, 2023

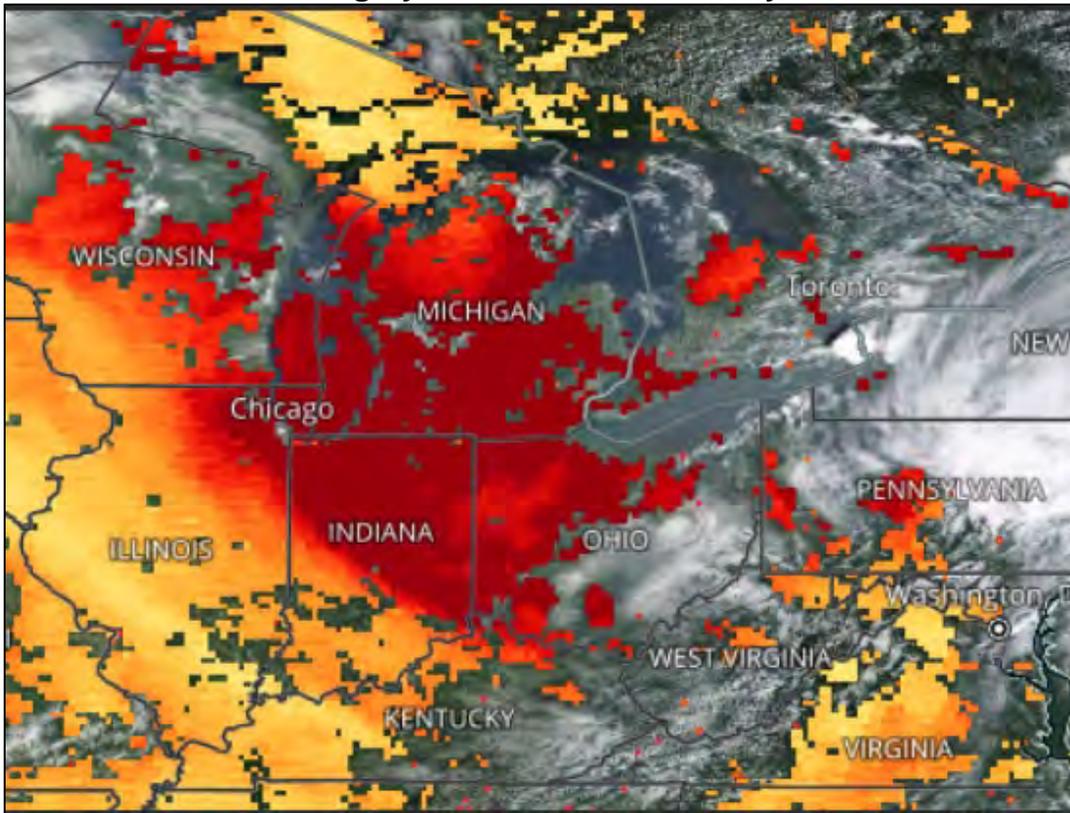
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	7/25/2023	17.4	13.7
Elkhart - Prairie St	180390008	7/25/2023	43.7	16.3
Fishers	180570007	7/25/2023	31.0	13.8
Mechanicsburg	180650003	7/25/2023	30.0	15.5
Kokomo - E. Vaile Ave	180670004	7/25/2023	41.9	14.7
East Chicago - Marina	180890034	7/25/2023	50.5	18.0
Hammond-167th St	180890036	7/25/2023	44.7	16.3
Anderson - Eastside Elem	180950011	7/25/2023	38.8	15.4
Indianapolis - Washington Park	180970078	7/25/2023	33.3	17.8
Indianapolis - W. 18th St.	180970081	7/25/2023	34.9	20.9
Indianapolis- I-70 E	180970087	7/25/2023	33.8	20.5
Bloomington - Binford	181050003	7/25/2023	16.7	13.9
South Bend - Shields Dr.	181410015	7/25/2023	52.9	16.9
Lafayette - Greenbush St	181570008	7/25/2023	35.5	15.1
Terre Haute - Lafayette Ave	181670018	7/25/2023	18.8	18.8
Larwill	181830003	7/25/2023	45.7	15.0

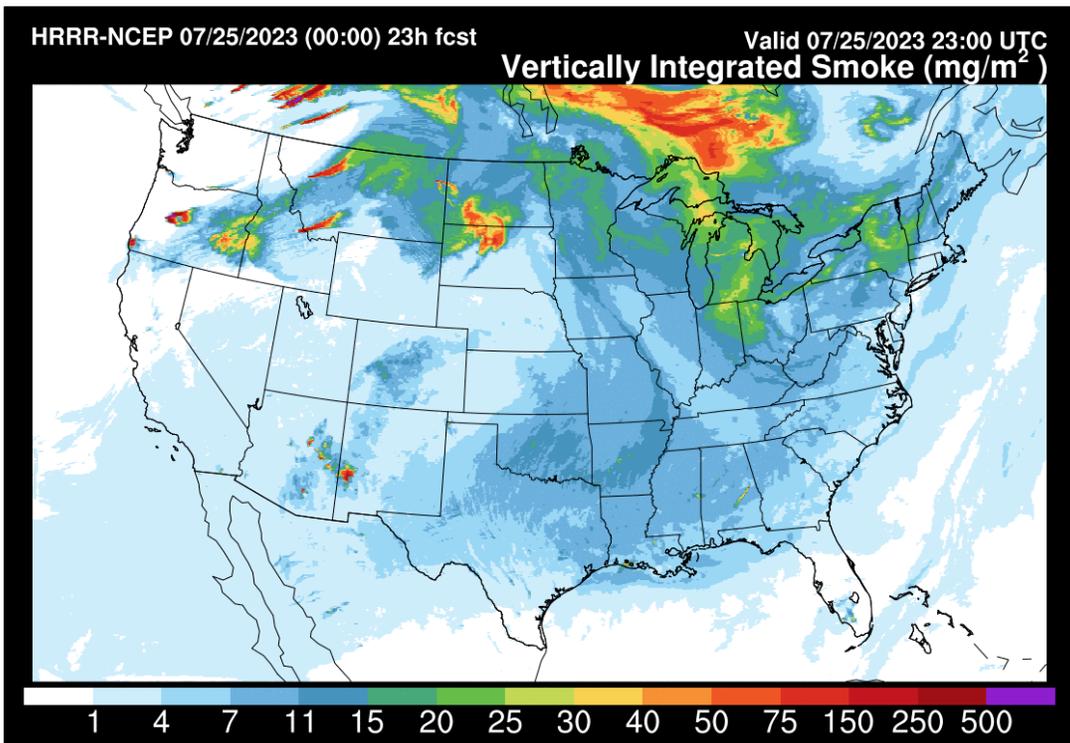
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 25, 2023



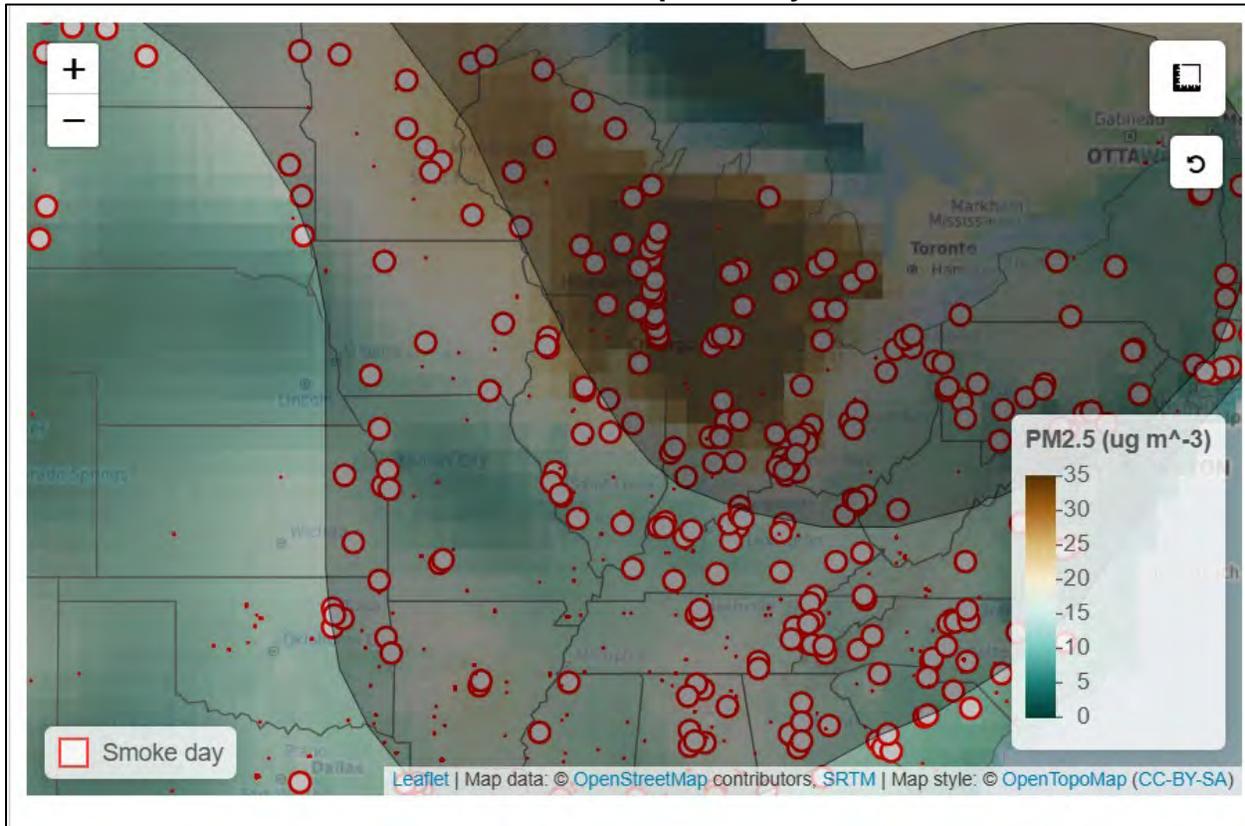
Satellite Imagery with MAIAC AOD – July 25, 2023



HRRR Smoke - Vertically Integrated Smoke – July 25, 2023



GAM PMO3 Smoke Output – July 25, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1600Z July 25, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast and south Mexico/Northern Gulf of Mexico...

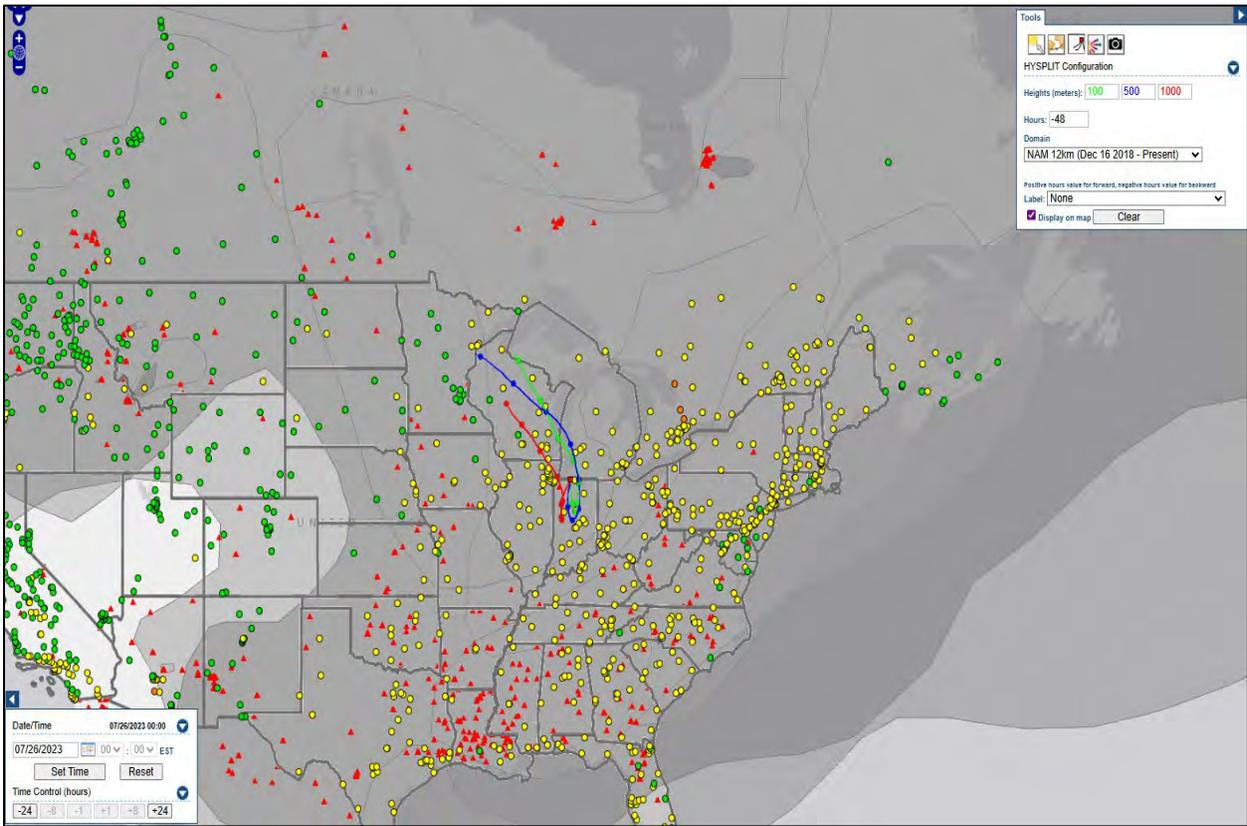
The enormous area of smoke primarily from the Canadian wildfires continues to be seen covering virtually all of Canada and most of the U.S. including most of Alaska, along with the northern half of Mexico and the northeastern Pacific off southern Alaska and southwest coast of Canada. Within this larger area of thin density smoke were batches of moderate to thick density smoke. The thick to very thick smoke that covered much of northern Canada within the Northwestern Territories and extending southeast through central Canada and into the Midwestern states and Great Lakes region was associated from numerous wildfires in western and northwestern Canada. The moderate smoke from these fires extended from Alaska and Pacific Ocean off of the southern Alaskan coast, through central Canada, and moving to the southeast/east where it eventually settled into eastern Canada, where fires in Quebec were previously seen producing localized moderate to thick smoke, but cloud cover precluded today's analysis in the region. This smoke also extended well over the northwestern and north central U.S., covering much of Mid-west, Mississippi valley region and northeastern U.S.

July 26, 2023

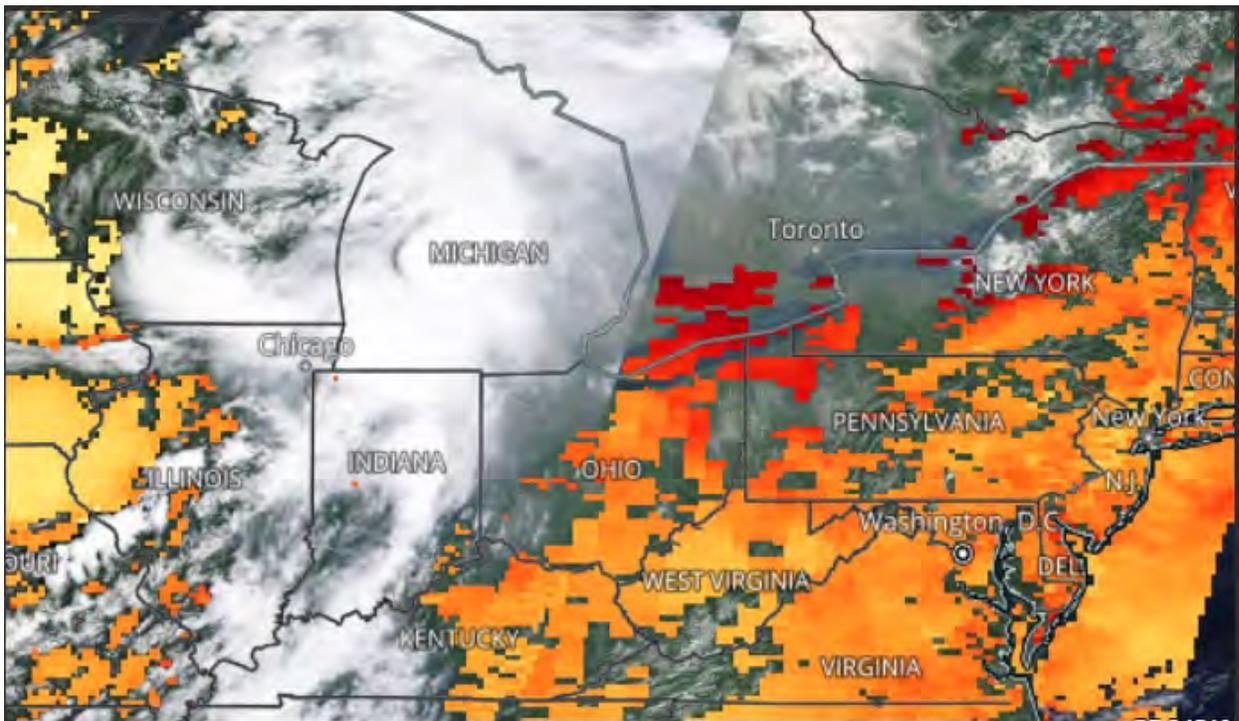
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050009	7/26/2023	16.3	13.7
Muncie - Central HS	180350006	7/26/2023	19.0	13.2
Elkhart - Prairie St	180390008	7/26/2023	20.3	16.3
Plummer	180550001	7/26/2023	15.1	14.7
Fishers	180570007	7/26/2023	18.2	13.8
Mechanicsburg	180650003	7/26/2023	17.3	15.5
Kokomo - E. Vaile Ave	180670004	7/26/2023	18.0	14.7
East Chicago - Franklin/Washington Sch	180890006	7/26/2023	19.2	16.1
Gary - Madison St	180890031	7/26/2023	20.8	16.0
East Chicago - Marina	180890034	7/26/2023	21.3	18.0
Hammond-167th St	180890036	7/26/2023	17.6	16.3
Michigan City - Marsh Elem. Sch.	180910011	7/26/2023	18.3	15.9
Anderson - Eastside Elem	180950011	7/26/2023	17.9	15.4
Bloomington - Binford	181050003	7/26/2023	14.5	13.9
South Bend - Shields Dr.	181410015	7/26/2023	20.3	16.9
Evansville - U of E	181630016	7/26/2023	15.5	15.5
Evansville - Buena Vista	181630021	7/26/2023	17.0	15.1
Larwill	181830003	7/26/2023	24.8	15.0

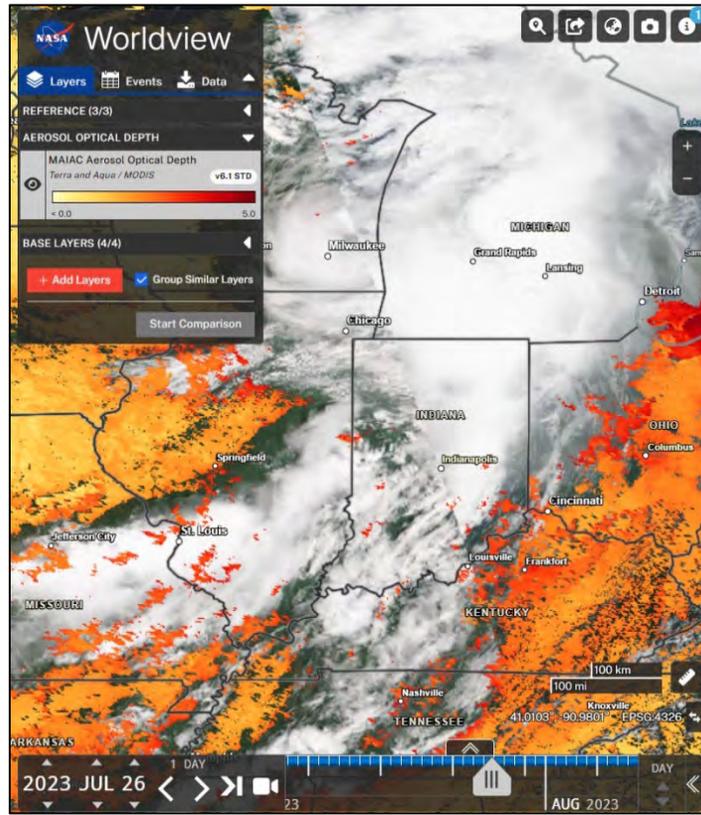
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 26, 2023



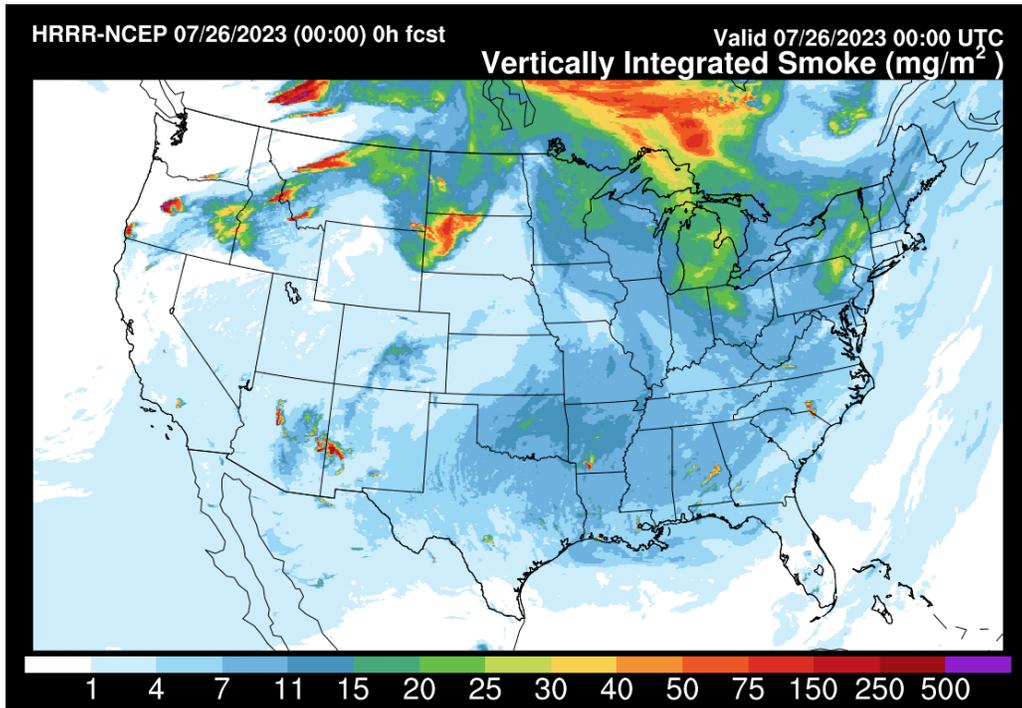
Satellite Imagery with MAIAC AOD – July 26, 2023



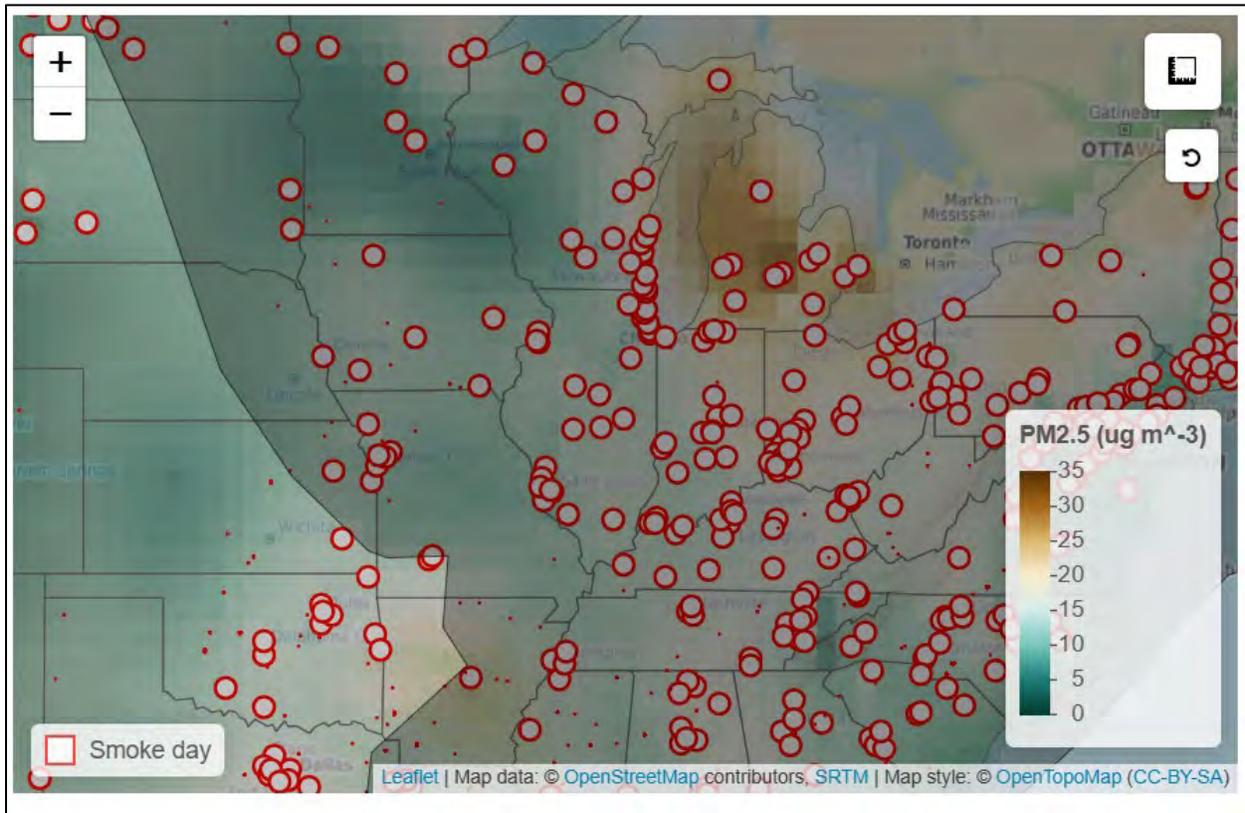
Satellite Imagery with MAIAC AOD – July 26, 2023



HRRR Smoke - Vertically Integrated Smoke – July 26, 2023



GAM PMO3 Smoke Output – July 26, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z July 26, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast/Northern Gulf of Mexico...

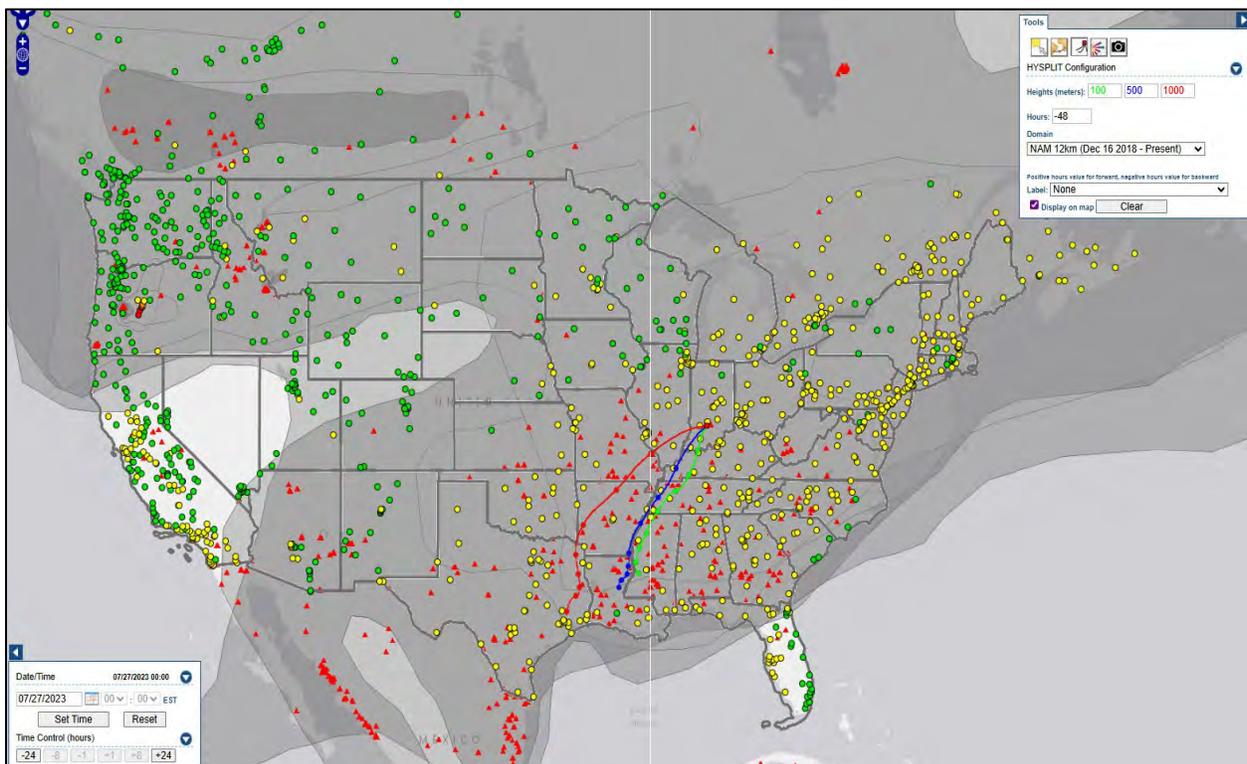
The large area of smoke primarily from the wildfires in western and northwestern Canada continues to be observed today. The light smoke blankets an area including much of Canada, a significant portion of the CONUS, eastern Alaska, the Gulf of Mexico, and the north Atlantic. Thicker smoke exists across northwestern Canada, where moderate to thick smoke emissions were seen emanating from persistent wildfire activity across eastern Northwest Territory and far northern Saskatchewan and moving mainly westward. Moderate density smoke was also noted emanating from the persistent fire activity in west-central Quebec. Remnant moderate density smoke was also observed across northeastern CONUS, Great Lakes, and into the Mid-Atlantic and Carolinas.

July 27, 2023

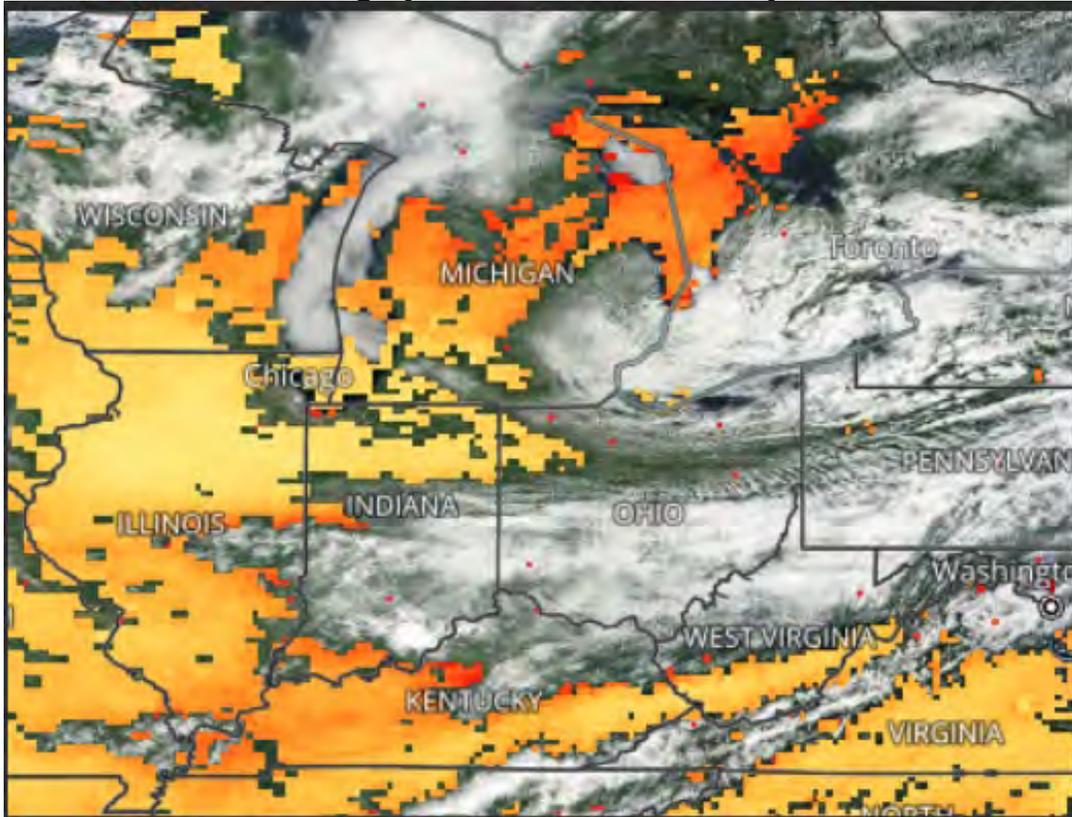
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	7/27/2023	21.1	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	7/27/2023	19.4	17.0
Jasper - Post Office	180372001	7/27/2023	21.9	15.7
Plummer	180550001	7/27/2023	15.3	14.7
Fishers	180570007	7/27/2023	22.6	13.8
Kokomo - E. Vaile Ave	180670004	7/27/2023	18.5	14.7
Anderson - Eastside Elem	180950011	7/27/2023	19.5	15.4
Indianapolis - Washington Park	180970078	7/27/2023	18.9	17.8
Indianapolis - W. 18th St.	180970081	7/27/2023	21.8	20.9
Bloomington - Binford	181050003	7/27/2023	15.4	13.9
Lafayette - Greenbush St	181570008	7/27/2023	17.9	15.1
Evansville - Buena Vista	181630021	7/27/2023	19.3	15.1
Terre Haute - Lafayette Ave	181670018	7/27/2023	20.4	18.8

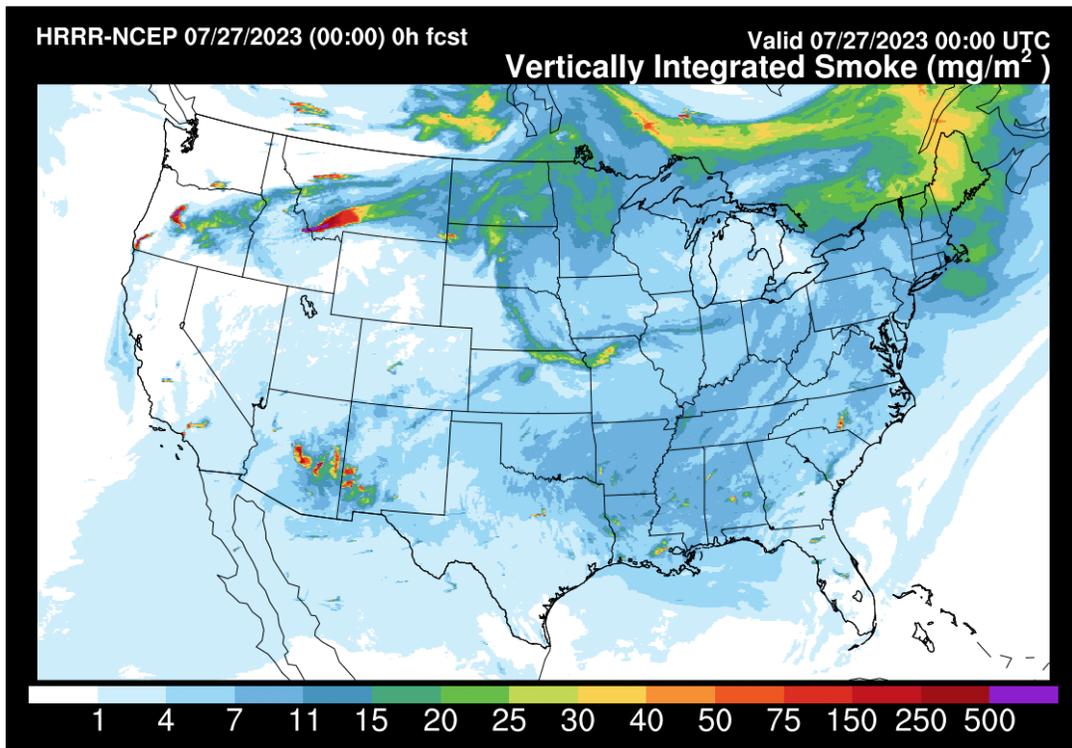
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - July 27, 2023



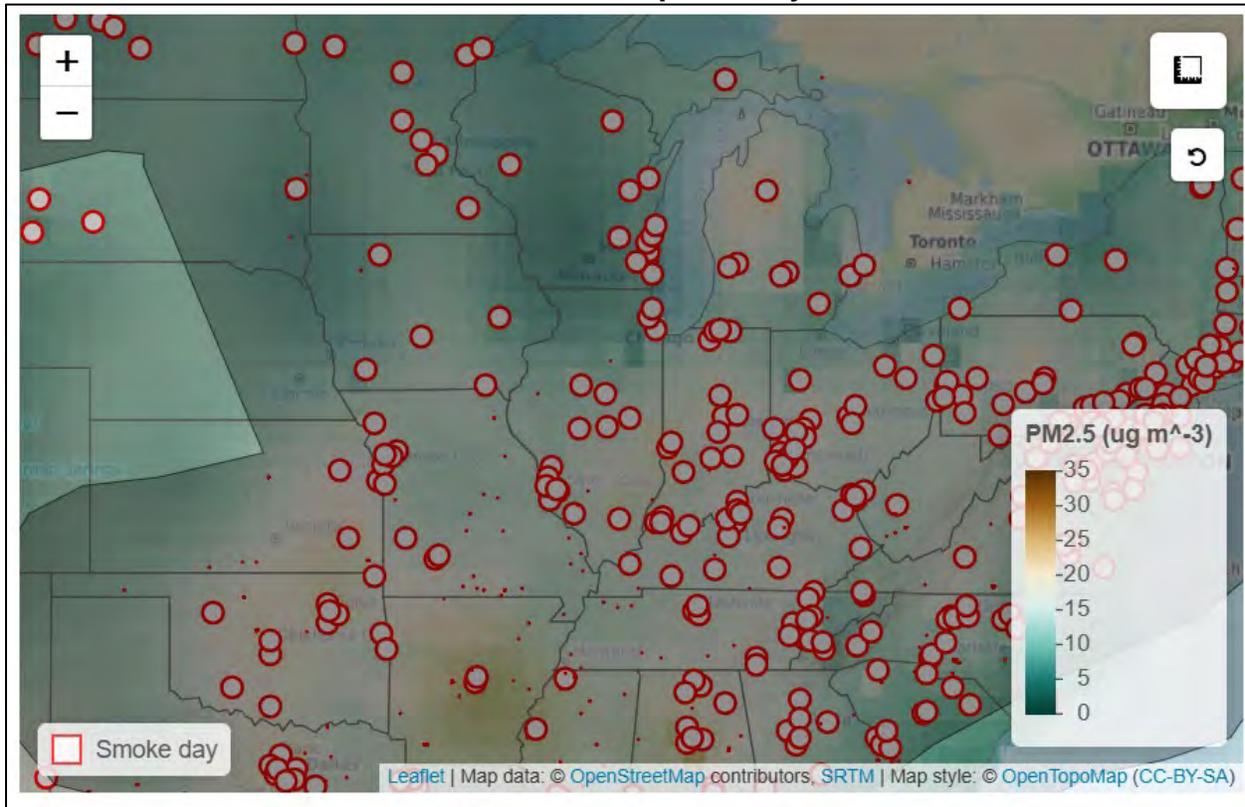
Satellite Imagery with MAIAC AOD – July 27, 2023



HRRR Smoke - Vertically Integrated Smoke – July 27, 2023



GAM PMO3 Smoke Output – July 27, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z July 27, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast/Northern Gulf of Mexico...

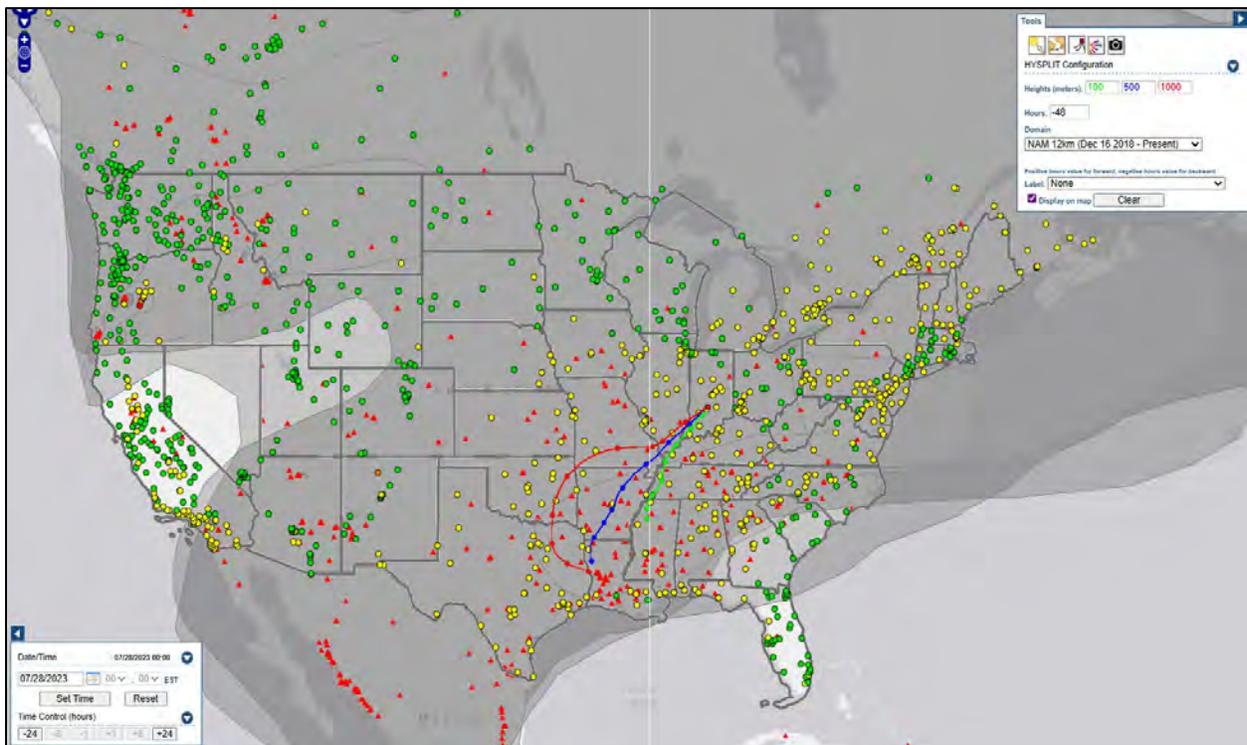
Heavy, dense smoke from fires in northwestern Canada was observed across northern Alberta and British Columbia, as well as much of Northwest Territory and the Yukon. Moderate smoke extended from eastern Alaska to northern Nunavut. Additional moderate smoke, presumed to be mostly from the same fires, also extended across the northwestern U.S. and border regions of Canada, extending eastward and southward across much of the eastern half of the U.S. except for Florida and New England. The area of light smoke extended from Eastern Alaska across the whole of Canada and much of the U.S. except California, Nevada, and smaller portions of the mountain west. This area also extended down across the coastal regions of northern Mexico, where it is presumed that it mixed with remnant smoke from local seasonal burning.

July 28, 2023

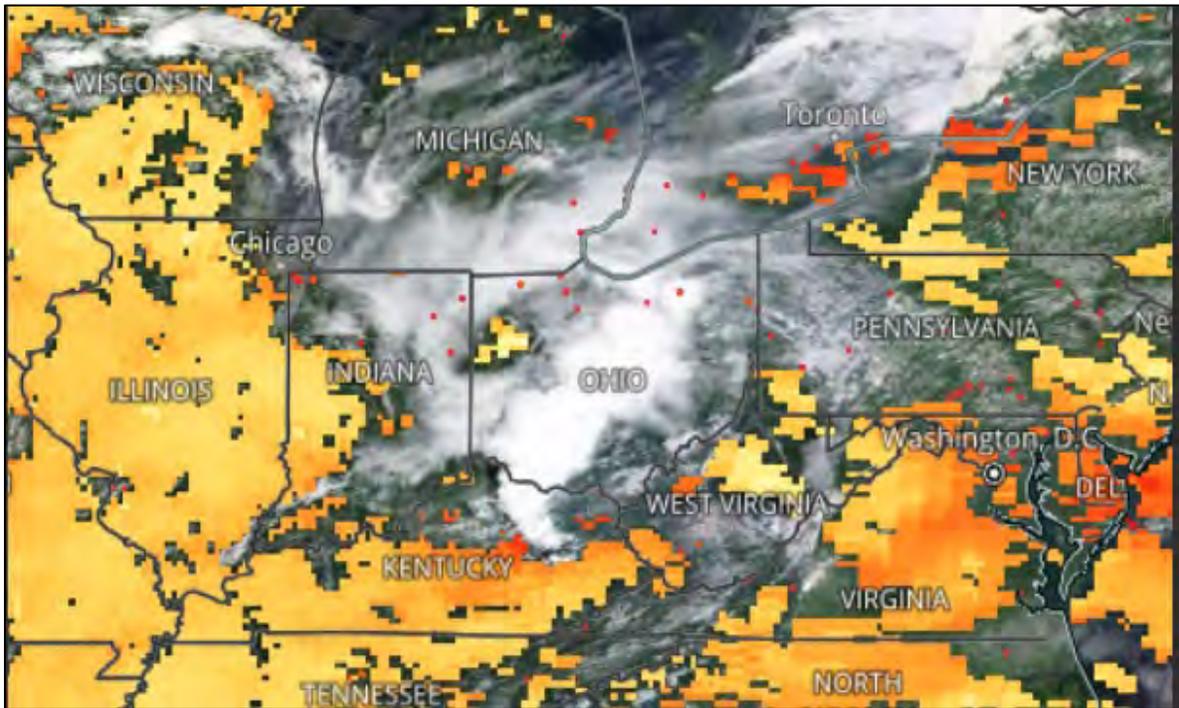
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	7/28/2023	17.4	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	7/28/2023	20.5	17.0
Jasper - Post Office	180372001	7/28/2023	22.5	15.7
Plummer	180550001	7/28/2023	16.1	14.7
Fishers	180570007	7/28/2023	14.6	13.8
Bloomington - Binford	181050003	7/28/2023	13.9	13.9
Evansville - Buena Vista	181630021	7/28/2023	20.6	15.1

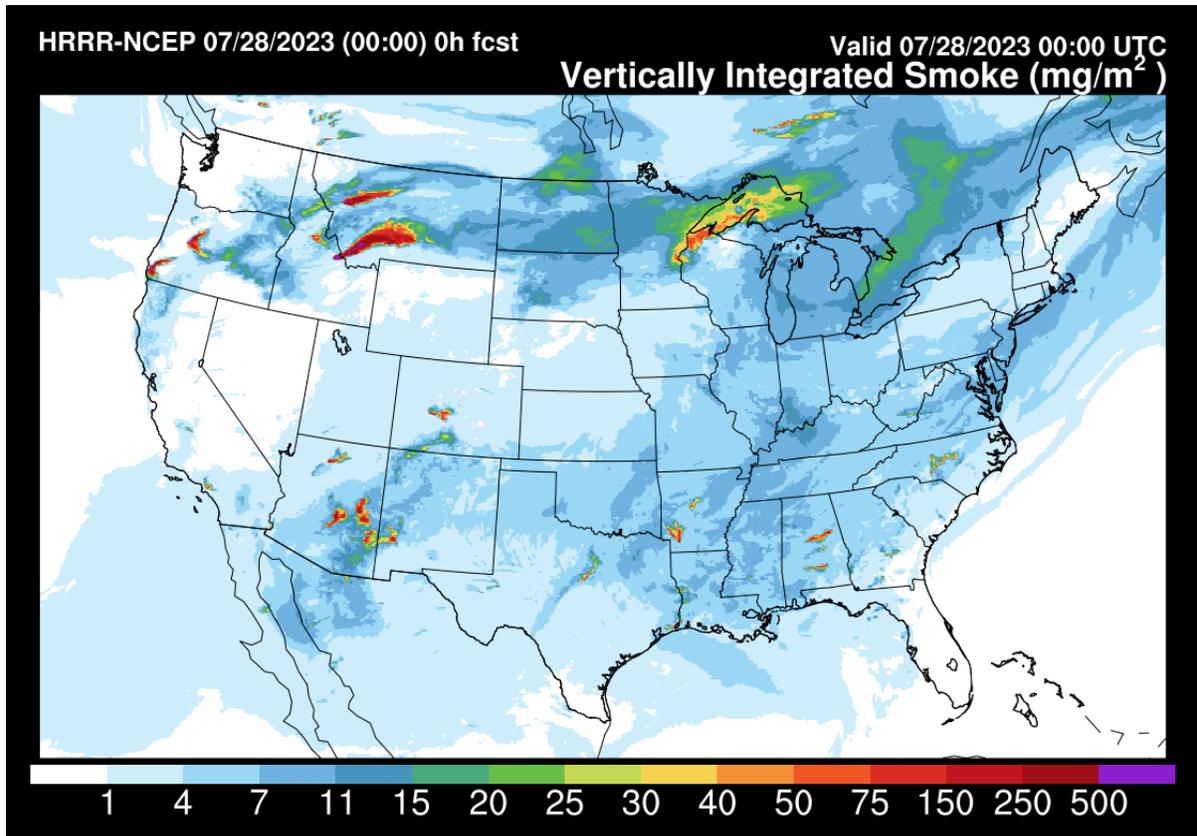
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – July 28, 2023



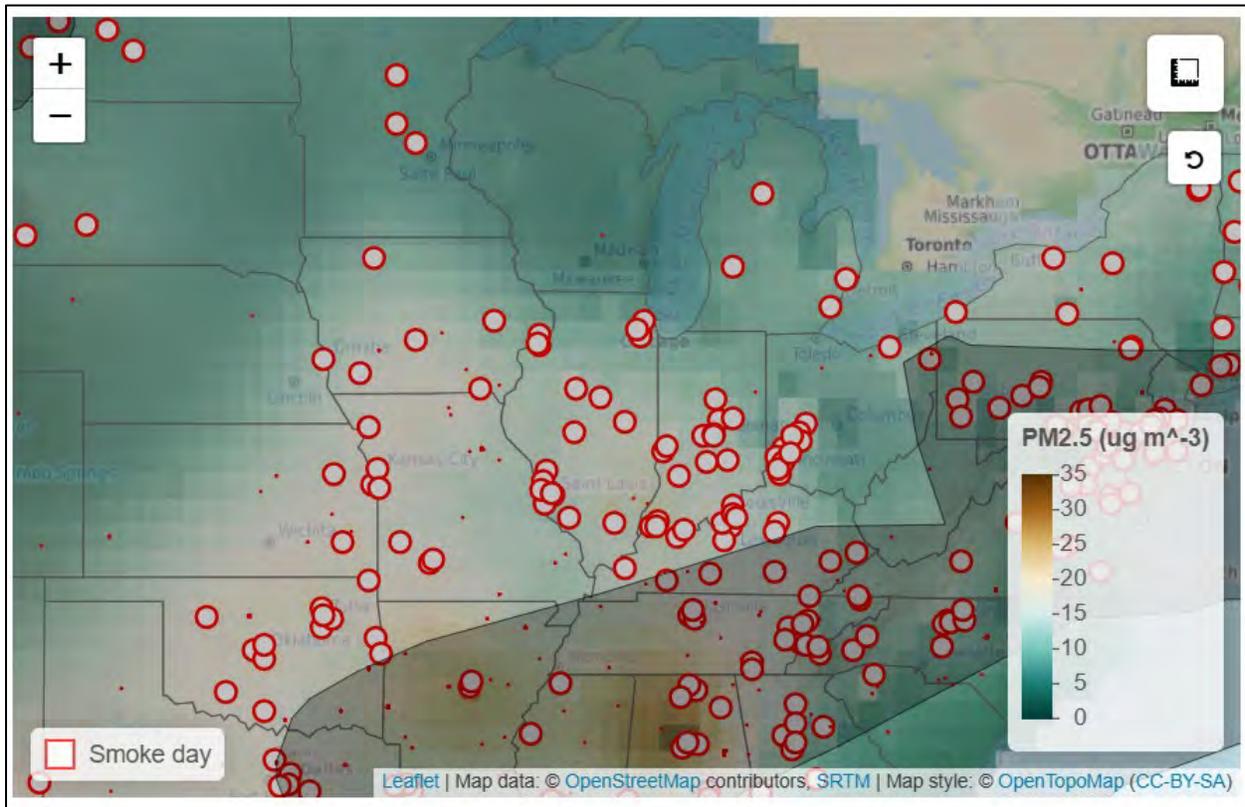
Satellite Imagery with MAIAC AOD – July 28, 2023



HRRR Smoke - Vertically Integrated Smoke – July 28, 2023



GAM PMO3 Smoke Output – July 28, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z July 28, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Northern Mexico/Pacific Ocean off the U.S. West Coast/Northern Gulf of Mexico...

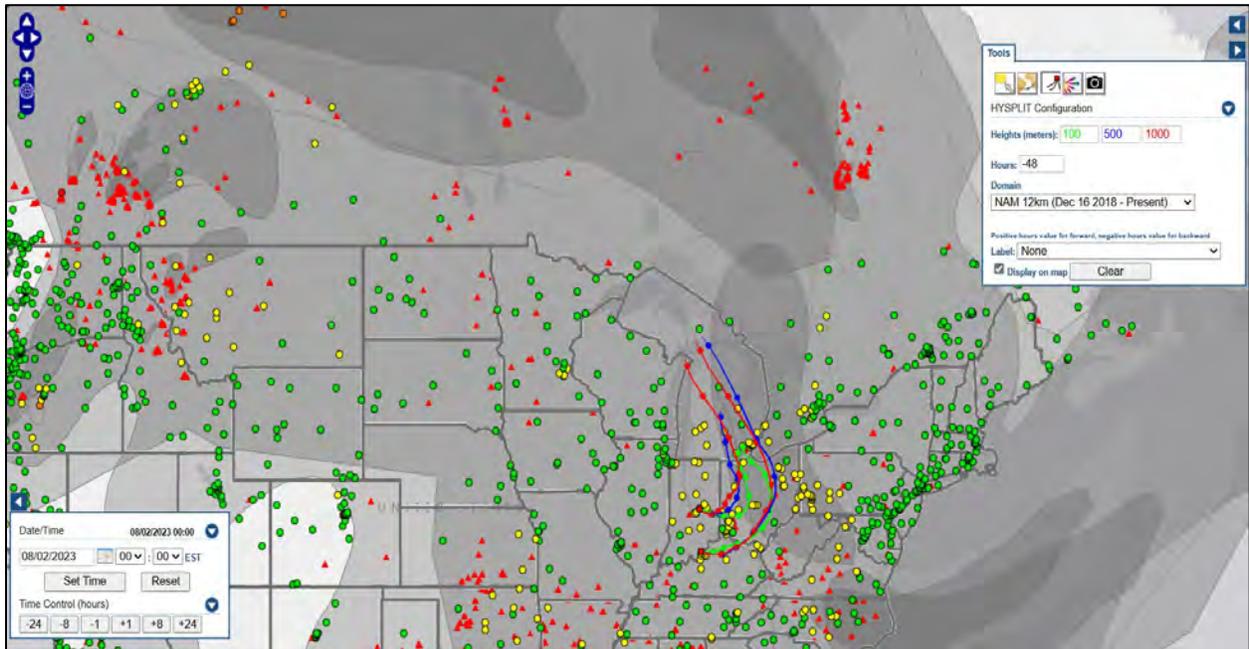
Heavy, dense smoke from fires in northwestern Canada was observed across northern Alberta and British Columbia, as well as much of Northwest Territory and the Yukon. Moderate smoke extended from eastern Alaska to northern Nunavut. Additional moderate smoke, presumed to be mostly from the same fires, was observed across the northwestern U.S. and border regions of Canada, as well as over southeastern U.S. The area of light smoke extended from Eastern Alaska across the whole of Canada and much of the U.S. except California, Nevada, and smaller portions of the mountain west.

August 2, 2023

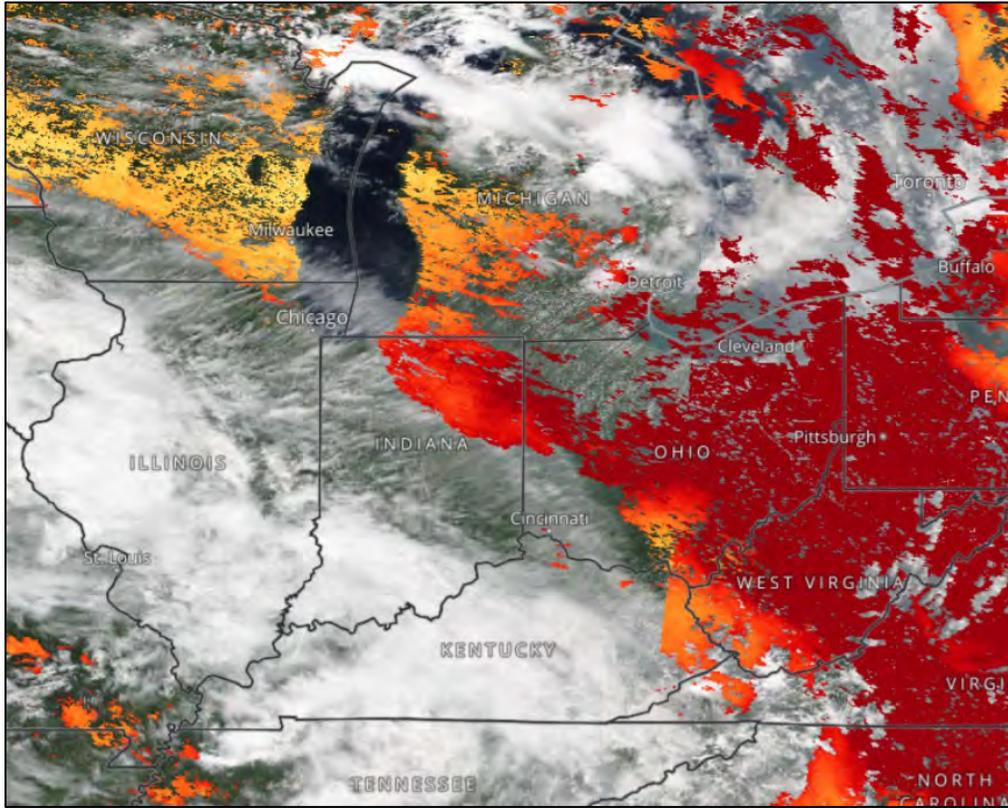
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus – Rocky Ford Drive	180050008	8/2/2023	13.6	13.4
Jeffersonville - Bates-Bowyer Ave	180190010	8/2/2023	17.3	17.0
Fishers	180570007	8/2/2023	14.8	13.8
Mechanicsburg	180650003	8/2/2023	17.4	15.5
Kokomo - E. Vaile Ave	180670004	8/2/2023	14.7	14.7
Anderson - Eastside Elem	180950011	8/2/2023	17.3	15.4
Larwill	181830003	8/2/2023	16.4	15.0

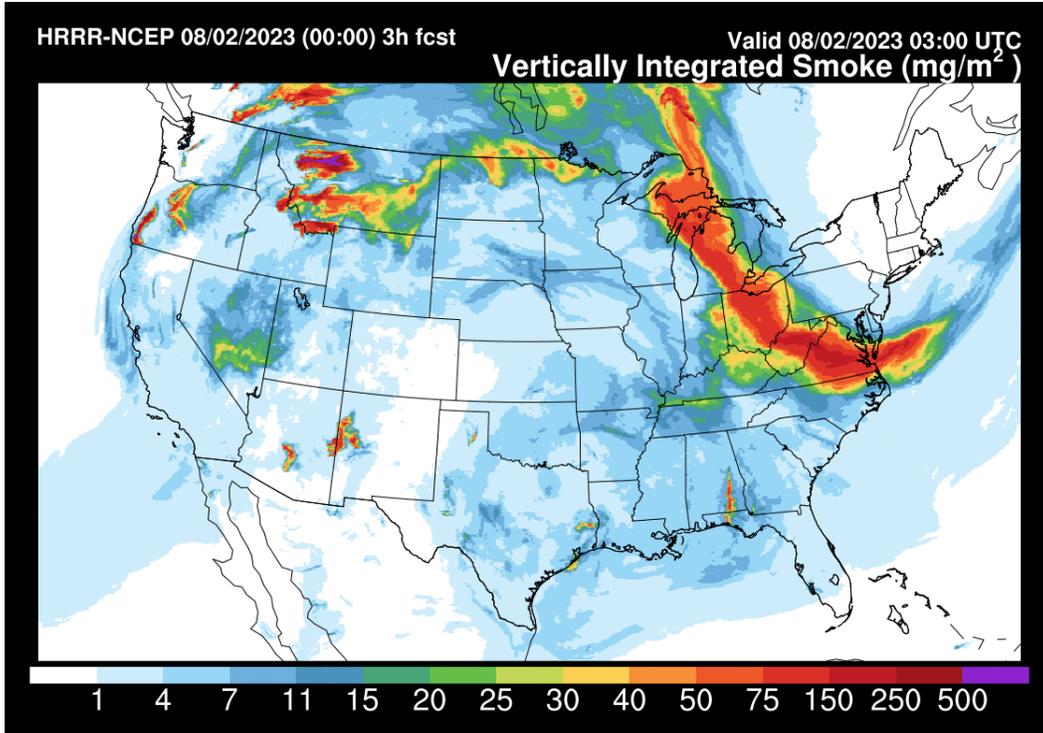
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – August 2, 2023



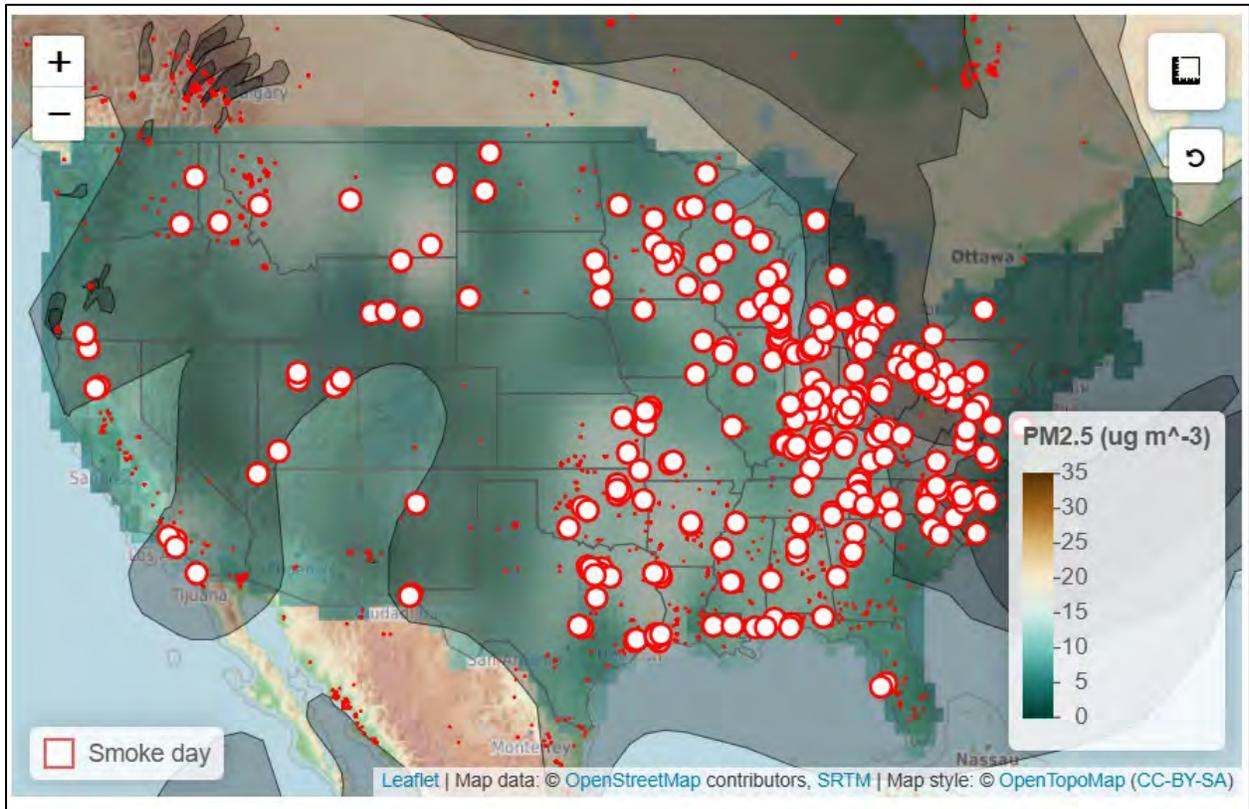
Satellite Imagery with MAIAC AOD – August 2, 2023



HRRR Smoke - Vertically Integrated Smoke – August 2, 2023



GAM PMO3 Smoke Output – August 2, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 0220Z August 2, 2023

SMOKE:

Northern U.S./Canada...

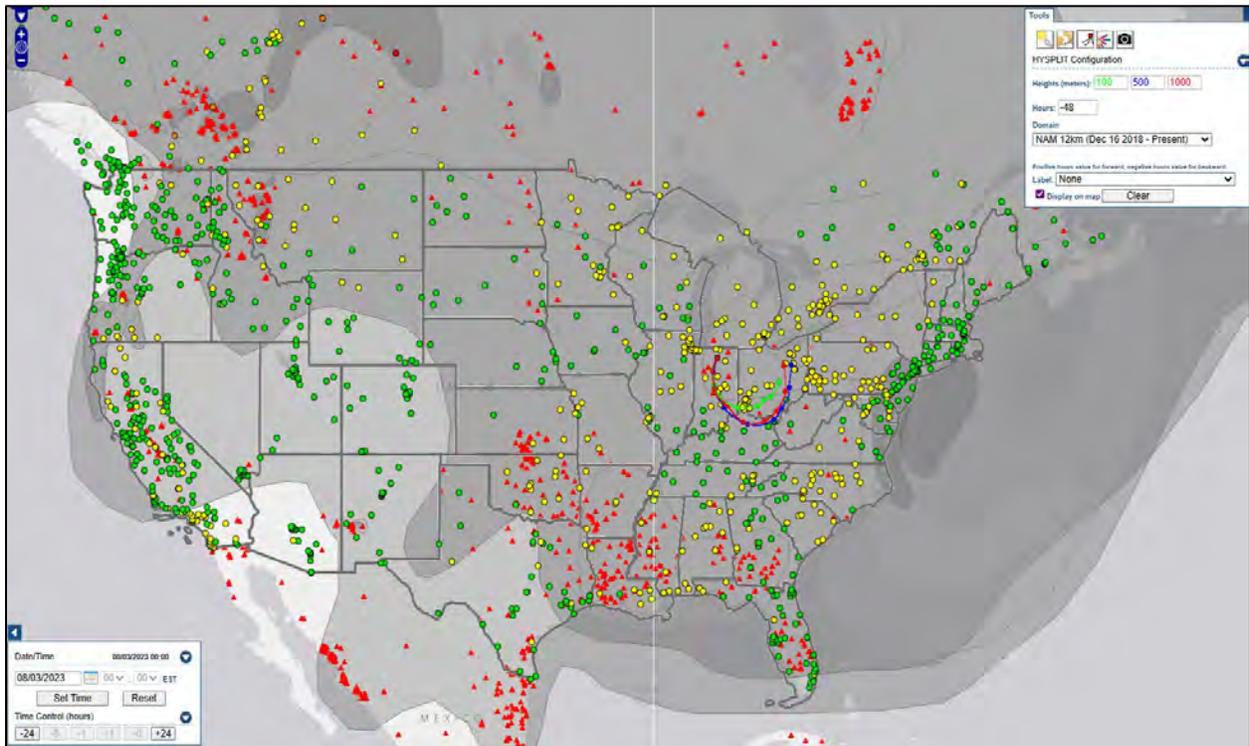
A very large thin density plume from ongoing wildfires over northwestern Canada covers eastern Alaska and large part of Canada from the Yukon southeast to central Ontario. This thin plume continues into the Lower 48 covering the Great Lakes, Ohio Valley, and Mid-Atlantic to offshore over the Atlantic southeast of New England. Within this thin density plume, a moderate density plume was detected over far northeastern British Columbia, northern Alberta/Saskatchewan/Manitoba, and western and central Ontario. This moderate plume continues southeast into parts of the Great Lakes, Ohio Valley, and Mid-Atlantic. A heavy density plume was observed over northeastern Manitoba, western Ontario, and in a narrow band across parts of the Great Lakes, Ohio Valley, and Mid-Atlantic.

August 3, 2023

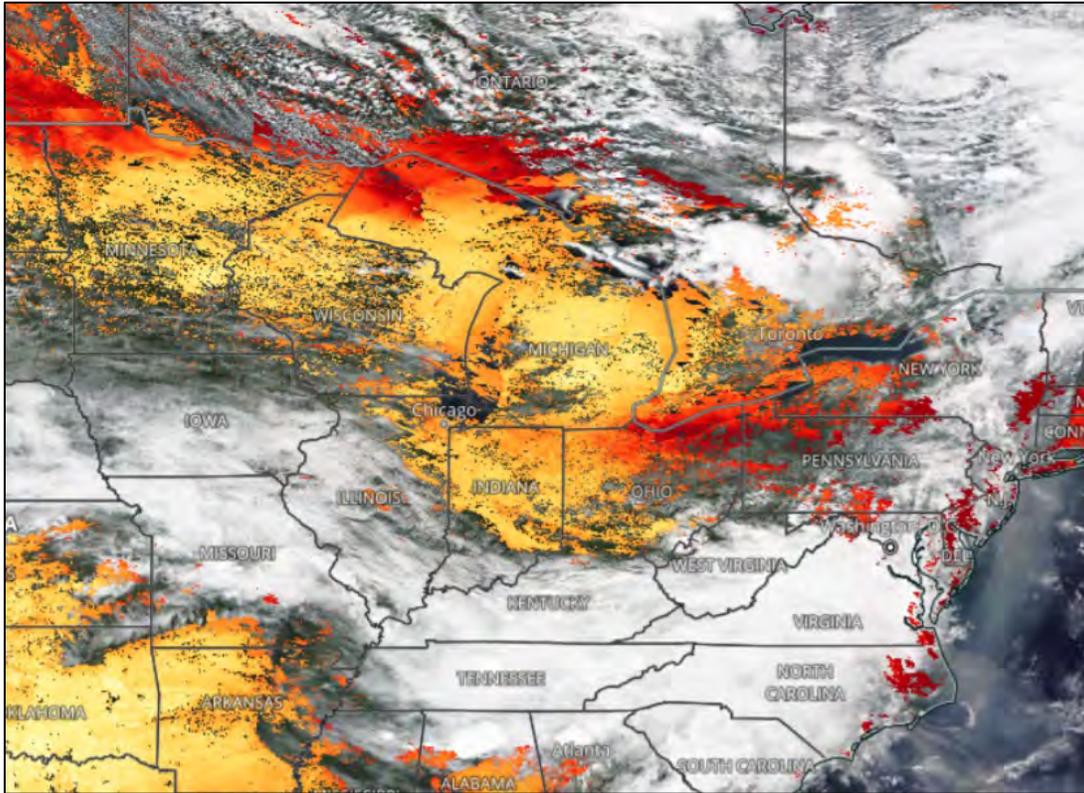
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	8/3/2023	19.0	16.3
Fishers	180570007	8/3/2023	14.2	13.8
Mechanicsburg	180650003	8/3/2023	16.8	15.5
Kokomo – E Vaile Ave	180670004	8/3/2023	14.3	13.9
Anderson - Eastside Elem	180950011	8/3/2023	17.7	15.4
Ogden Dunes	181270024	8/3/2023	20.4	15.3
South Bend - Shields Dr.	181410015	8/3/2023	21.1	16.9
Larwill	181830003	8/3/2023	22.3	15.0

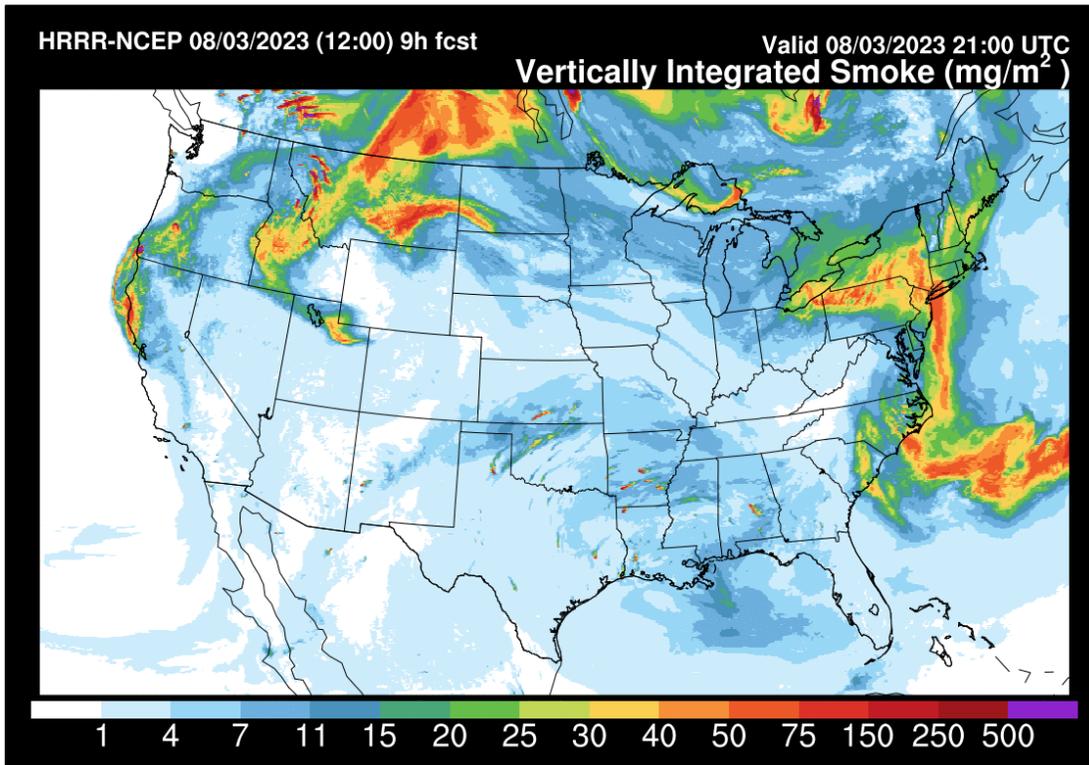
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – August 3, 2023



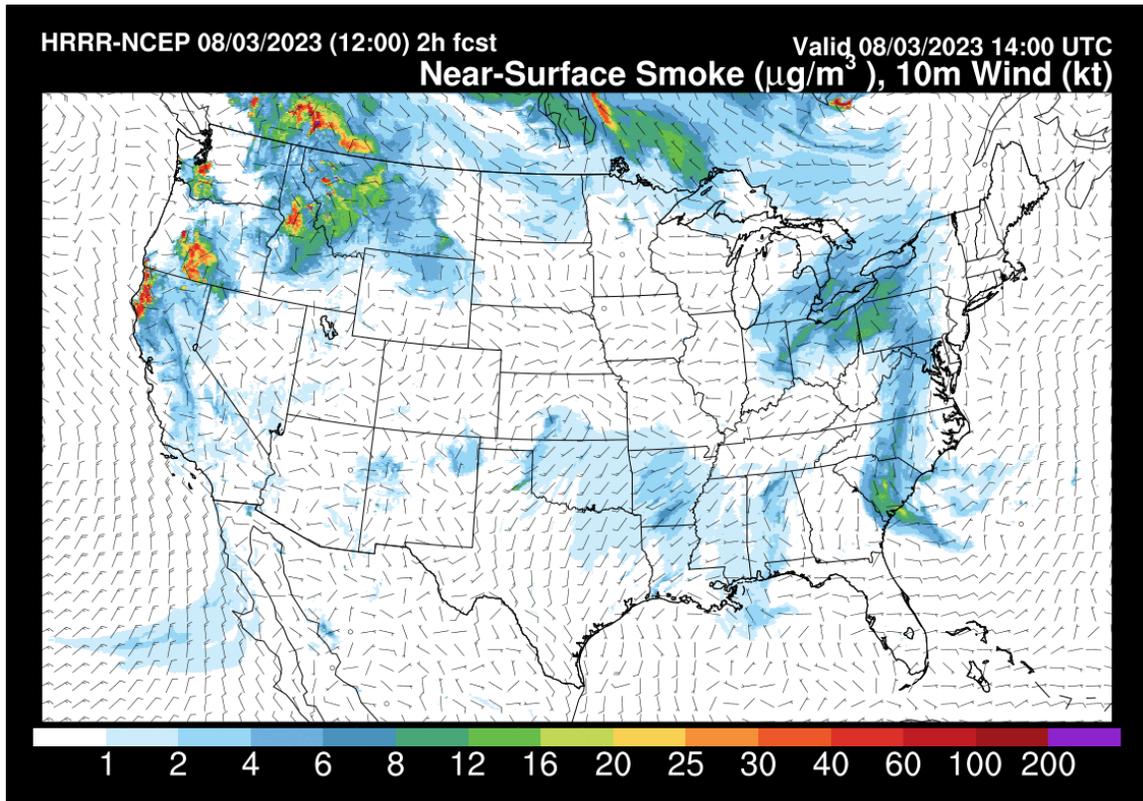
Satellite Imagery with MAIAC AOD – August 3, 2023



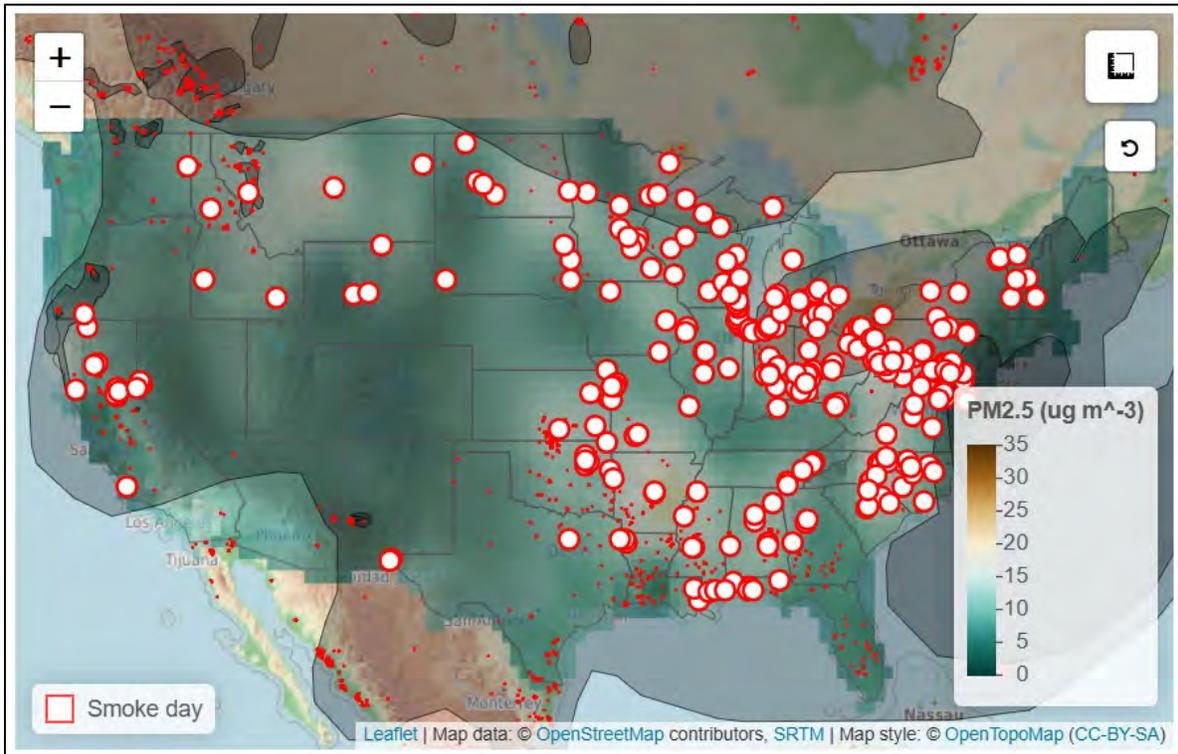
HRRR Smoke - Vertically Integrated Smoke – August 3, 2023



HRRR Smoke – Near-Surface Smoke – August 3, 2023



GAM PMO3 Smoke Output – August 3, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 0145Z August 3, 2023

SMOKE:

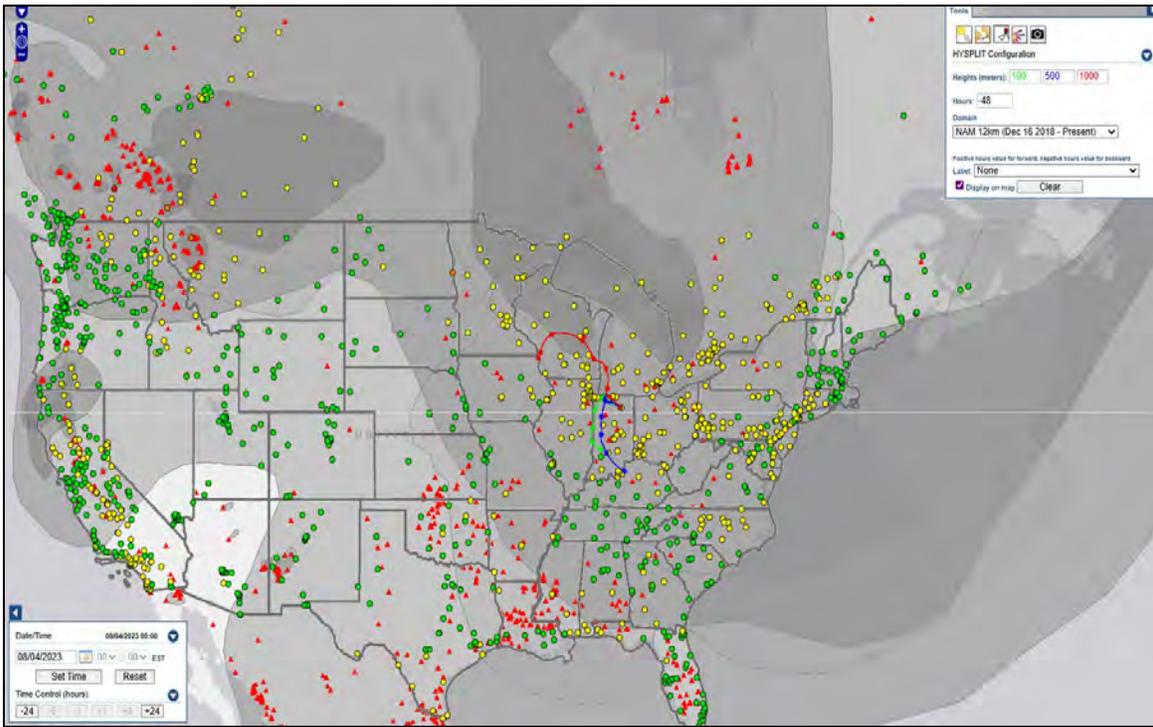
Northern and Eastern U.S./Canada/Atlantic Ocean...

The very large area of light density smoke continued to be seen across southern/central Alaska, most of Canada except for far northeast sections, the central and eastern US, and portions of the western Atlantic. The medium to high density smoke is seen from the western sections of the Yukon Territory through northwest Territory, Nunavut, northern British Columbia, northern/central Alberta and Saskatchewan, most of Manitoba and Ontario, and into western sections of Quebec. Then, the highest density smoke extends south through the Great Lakes region, Ohio Valley and parts of the Mid-Atlantic and central/eastern sections of North Carolina and South Carolina and then into the western Atlantic.

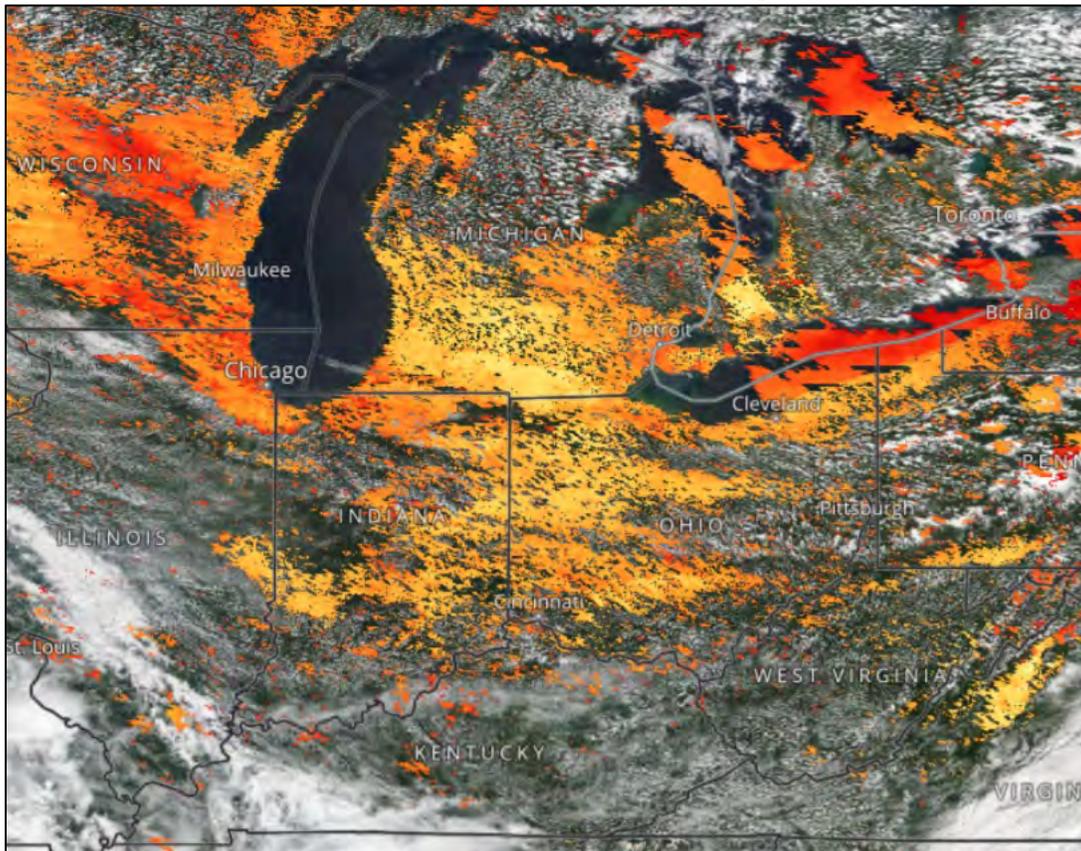
August 4, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average ($\mu\text{g}/\text{m}^3$)	Tier 2 Threshold ($\mu\text{g}/\text{m}^3$)
Columbus - Rocky Ford Drive	180050008	8/4/2023	16.0	13.7
Muncie - Central HS	180350006	8/4/2023	16.2	13.2
Elkhart - Prairie St	180390008	8/4/2023	17.5	16.3
Jeffersonville – Bates-Bowyer Ave	180190010	8/4/2023	16.7	16.6
Fishers	180570007	8/4/2023	14.5	13.8
Carmel - Hazel Dell Parkway	180570008	8/4/2023	16.5	16.5
Kokomo - E. Vaile Ave	180670004	8/4/2023	15.7	14.7
Gary - Madison St	180890031	8/4/2023	23.8	16.0
Michigan City - Marsh Elem. Sch.	180910011	8/4/2023	15.9	15.9
Anderson - Eastside Elem	180950011	8/4/2023	15.5	15.4
Indianapolis - Washington Park	180970078	8/4/2023	18.9	17.8
Indianapolis - School 21	180970084	8/4/2023	19.2	15.5
Indianapolis- I-70 E	180970087	8/4/2023	23.6	20.5
Bloomington - Binford	181050003	8/4/2023	13.9	13.9
South Bend - Shields Dr.	181410015	8/4/2023	18.1	16.9
Larwill	181830003	8/4/2023	16.5	15.0

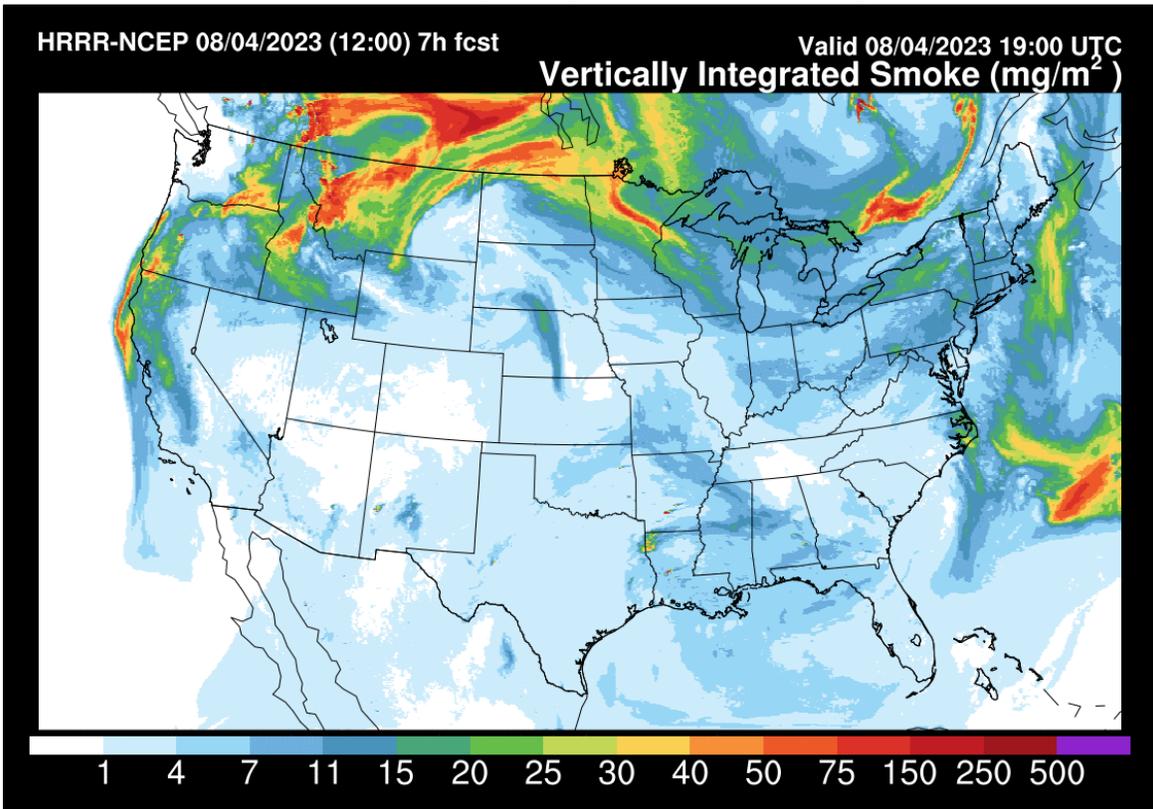
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – August 4, 2023



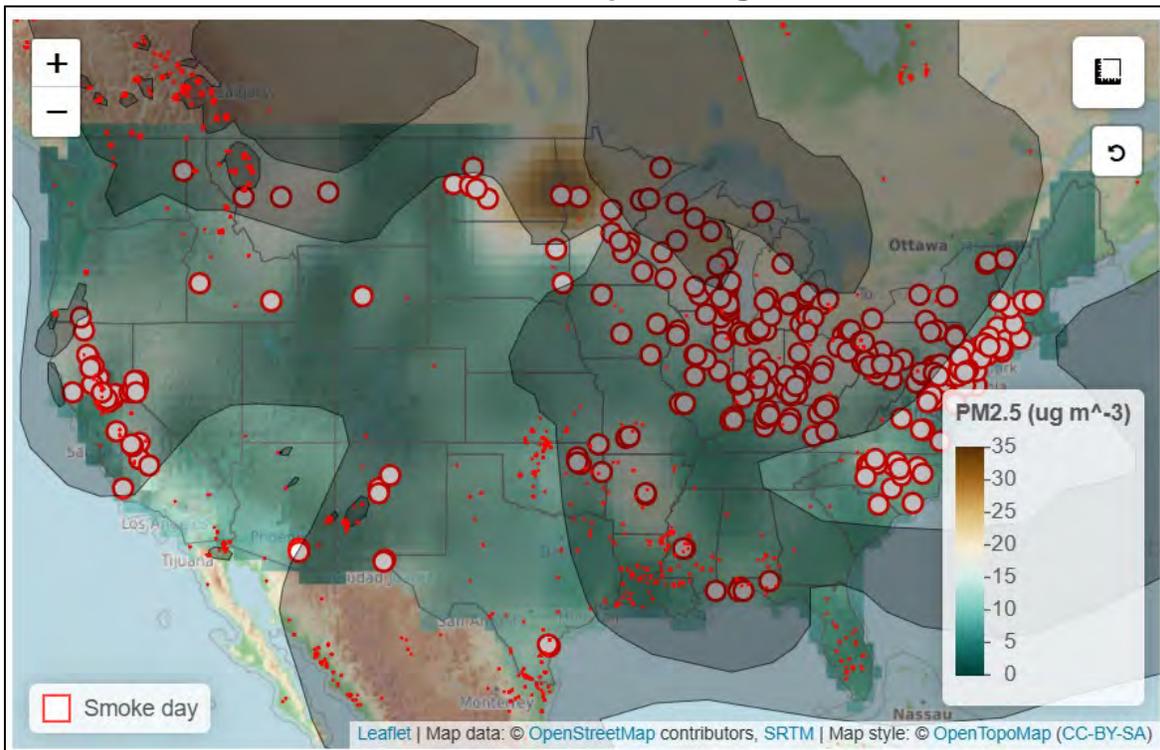
Satellite Imagery with MAIAC AOD – August 4, 2023



HRRR Smoke - Vertically Integrated Smoke – August 4, 2023



GAM PMO3 Smoke Output – August 4, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 0218Z August 4, 2023

SMOKE:

United States, including Alaska, Canada, Atlantic Ocean and North Pacific Ocean...

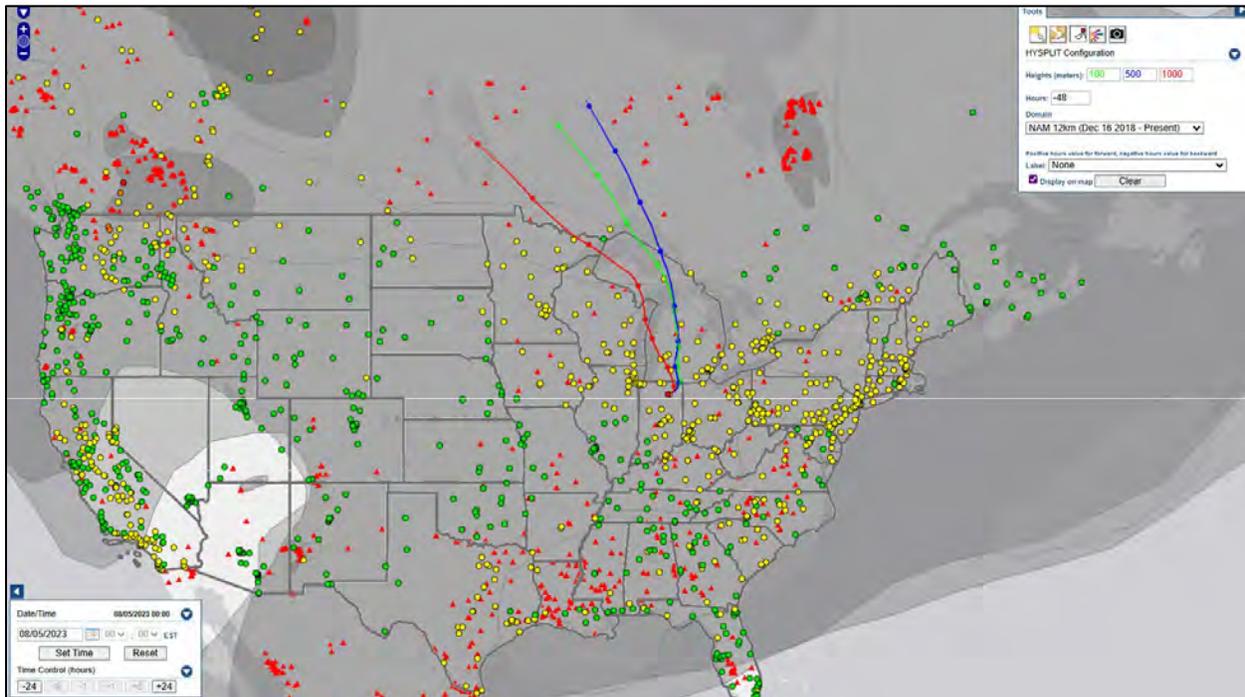
Fires over western Canada, the Pacific Northwest of the United States and Alaska were producing a very large area of smoke that continues to be seen over most of the Eastern, Central and Northwest portions of the United States, most of Canada, eastern Alaska, the Atlantic Ocean, northern Gulf of Mexico and portions of the North Pacific Ocean. Within this area a very large area of moderate density smoke was seen over much of northwestern, southwestern, and central Canada to as far east as western Quebec and the southeastern United States. Areas of the highest density smoke were seen along the coastline of the Eastern United States extending from the New York City area south off the coast of Virginia and North Carolina, over southern Alberta and central Saskatchewan, southwestern British Columbia and also over northern portions of the Northwest Territories.

August 5, 2023

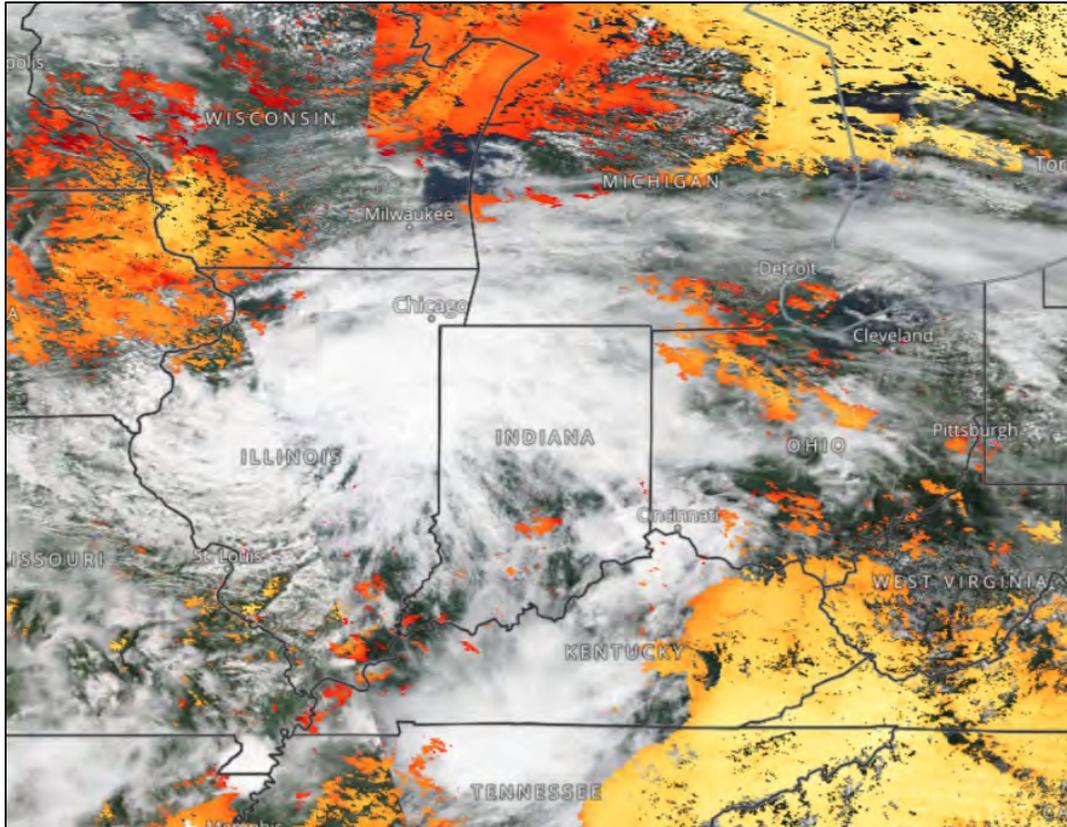
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	8/5/2023	20.4	16.3
Fishers	180570007	8/5/2023	15.7	13.8
Mechanicsburg	180650003	8/5/2023	21.6	15.5
Kokomo - E. Vaile Ave	180670004	8/5/2023	16.8	14.7
Hammond-167th St	180890036	8/5/2023	17.5	16.3
Anderson - Eastside Elem	180950011	8/5/2023	20.4	15.4
Ogden Dunes	181270024	8/5/2023	19.3	15.3
South Bend - Shields Dr.	181410015	8/5/2023	21.1	16.9
Larwill	181830003	8/5/2023	20.8	15.0

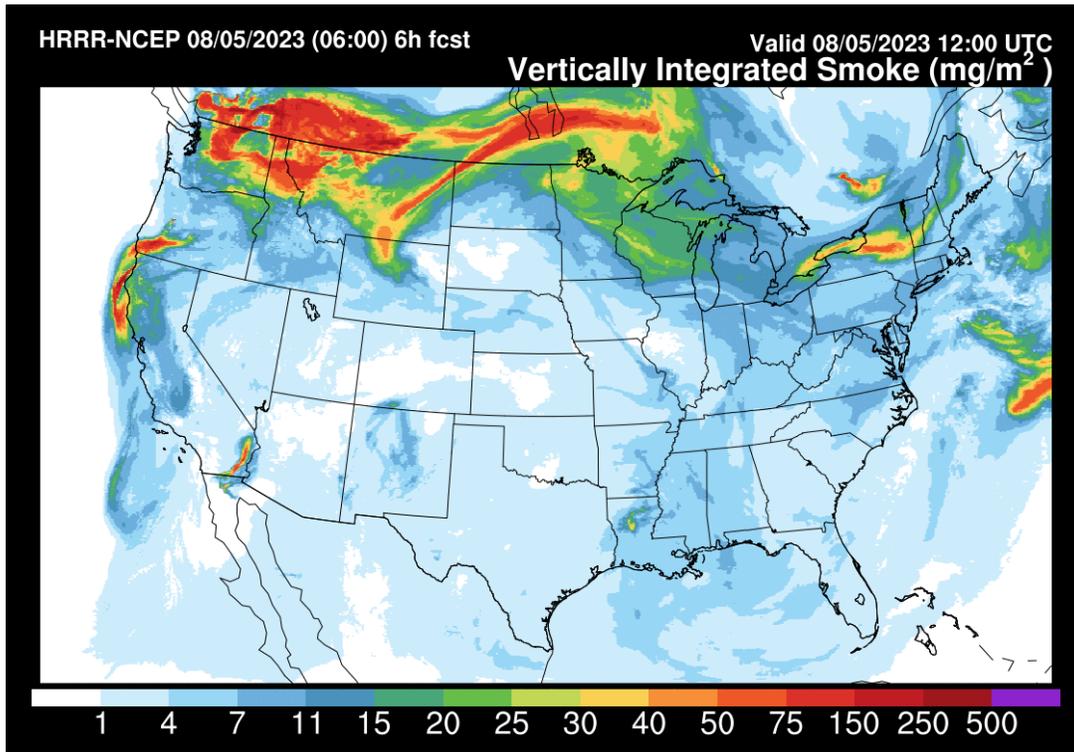
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – August 5, 2023



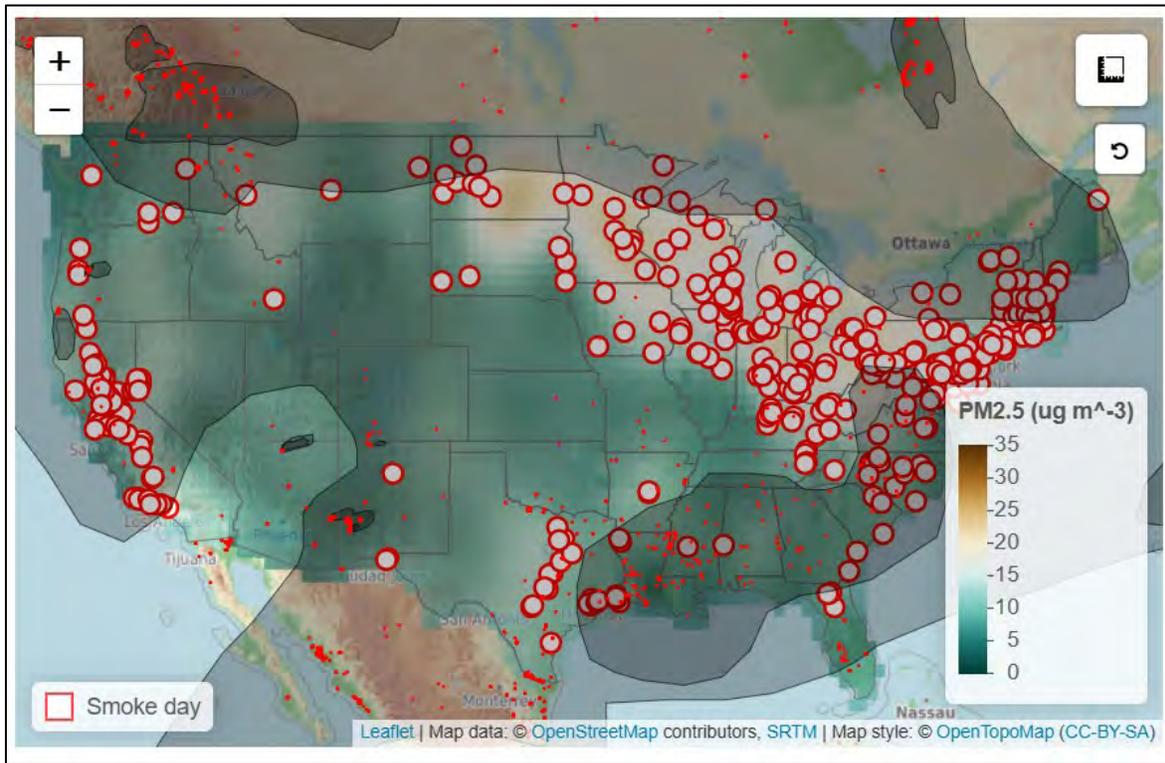
Satellite Imagery with MAIAC AOD – August 5, 2023



HRRR Smoke - Vertically Integrated Smoke – August 5, 2023



GAM PMO3 Smoke Output – August 5, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 0106Z August 5, 2023

SMOKE:

United States, including Alaska, Canada, Atlantic Ocean and North Pacific Ocean...

Wildfires over Alaska, western Canada, the Pacific Northwest of U.S. continued to produce a very large area of smoke that extends from Alaska through Yukon and Northwest Territories and over most of Canada. In the U.S. moderate smoke was seen over sections of northwest California, northern Oregon, most of Washington state, northern/central sections of Montana, Idaho and through parts of the Northern and Central Plains and then to the east coast into the Atlantic ocean, the southeastern U.S. and Gulf of Mexico. Denser smoke is seen from eastern Alaska, through the territories and across most of northern British Columbia, northern/central Alberta, Saskatchewan, Manitoba, Ontario and western Quebec before spreading south into Great Lakes region. This smoke is mostly from the Alaska, northern Canada wildfires.