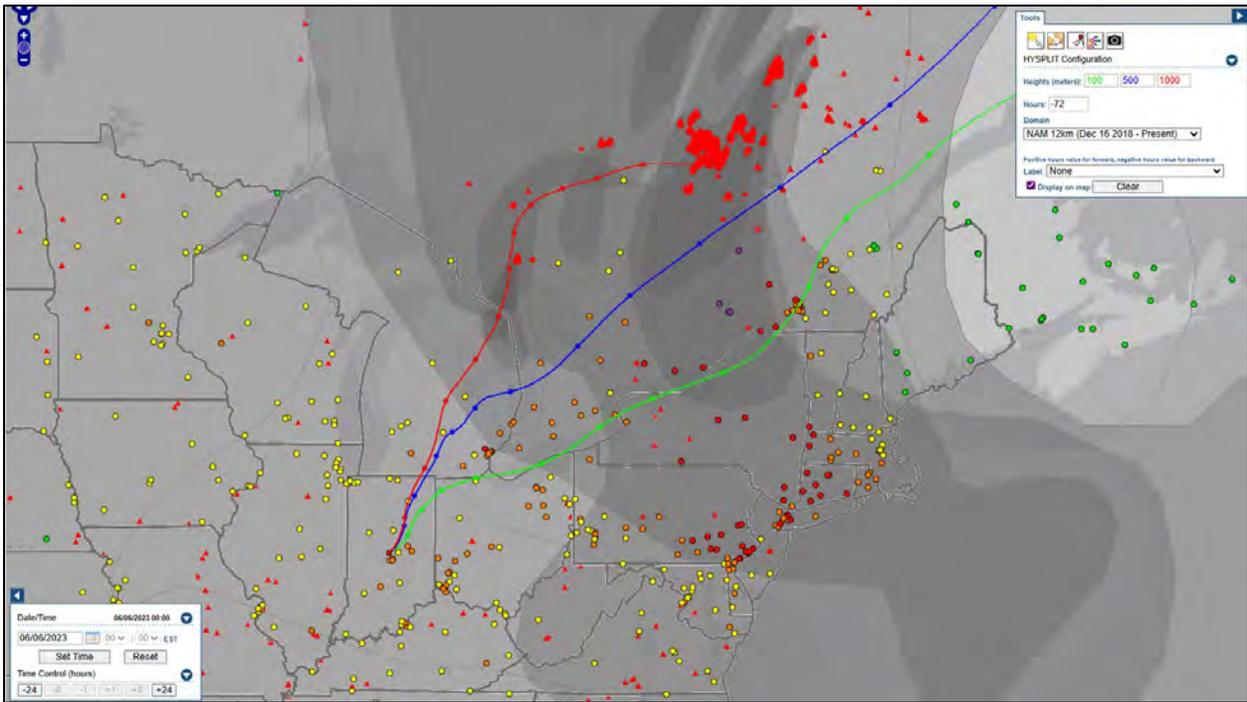


June 6, 2023

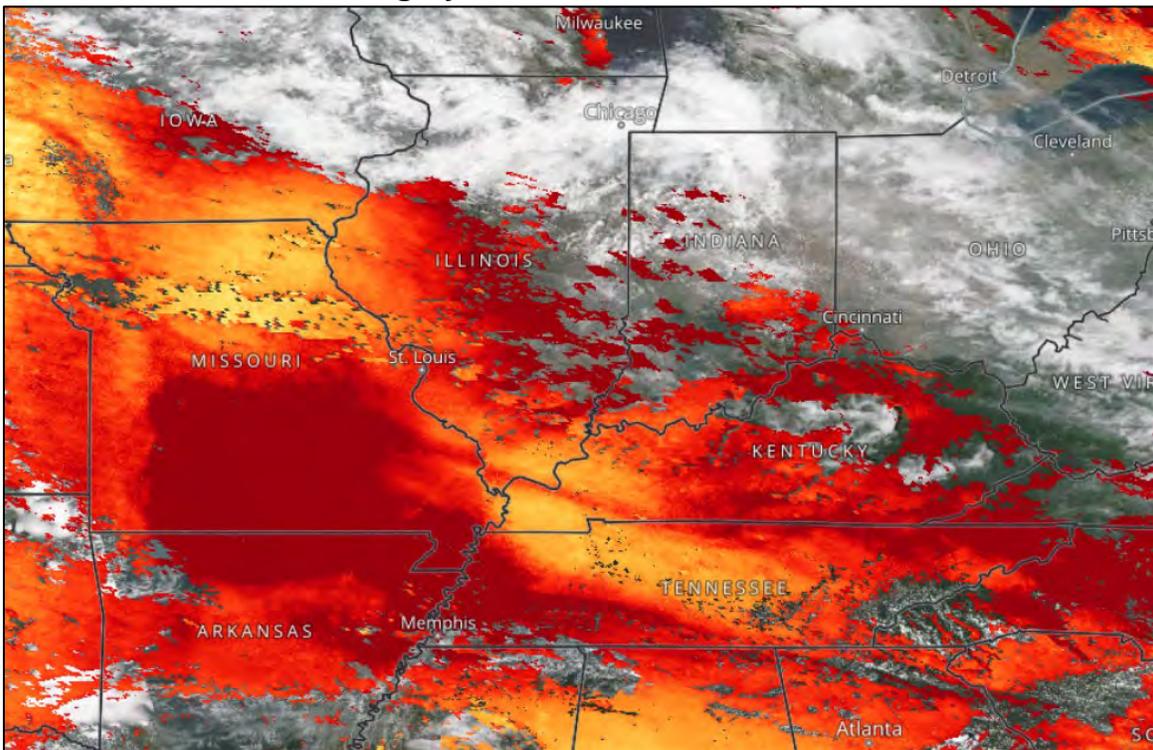
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/6/2023	34.0	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/6/2023	30.1	17.0
Elkhart - Prairie St	180390008	6/6/2023	28.1	16.3
New Albany	180430008	6/6/2023	26.3	20.9
Plummer	180550001	6/6/2023	33.8	14.7
Fishers	180570007	6/6/2023	24.2	13.8
Mechanicsburg	180650003	6/6/2023	34.5	15.5
East Chicago - Marina	180890034	6/6/2023	22.8	18.0
Hammond-167th St	180890036	6/6/2023	26.1	16.3
Anderson - Eastside Elem	180950011	6/6/2023	34.8	15.4
Indianapolis - Washington Park	180970078	6/6/2023	38.8	17.8
Indianapolis - W. 18th St.	180970081	6/6/2023	42.8	20.9
Indianapolis - I-70 E	180970087	6/6/2023	38.6	20.5
Bloomington - Binford	181050003	6/6/2023	40.9	13.9
Ogden Dunes	181270024	6/6/2023	22.9	15.3
South Bend - Shields Dr.	181410015	6/6/2023	31.2	16.9
Lafayette - Greenbush St	181570008	6/6/2023	26.9	15.1
Evansville - Buena Vista	181630021	6/6/2023	27.5	15.1
Terre Haute - Lafayette Ave	181670018	6/6/2023	27.7	18.8
Larwill	181830003	6/6/2023	31.1	15.0

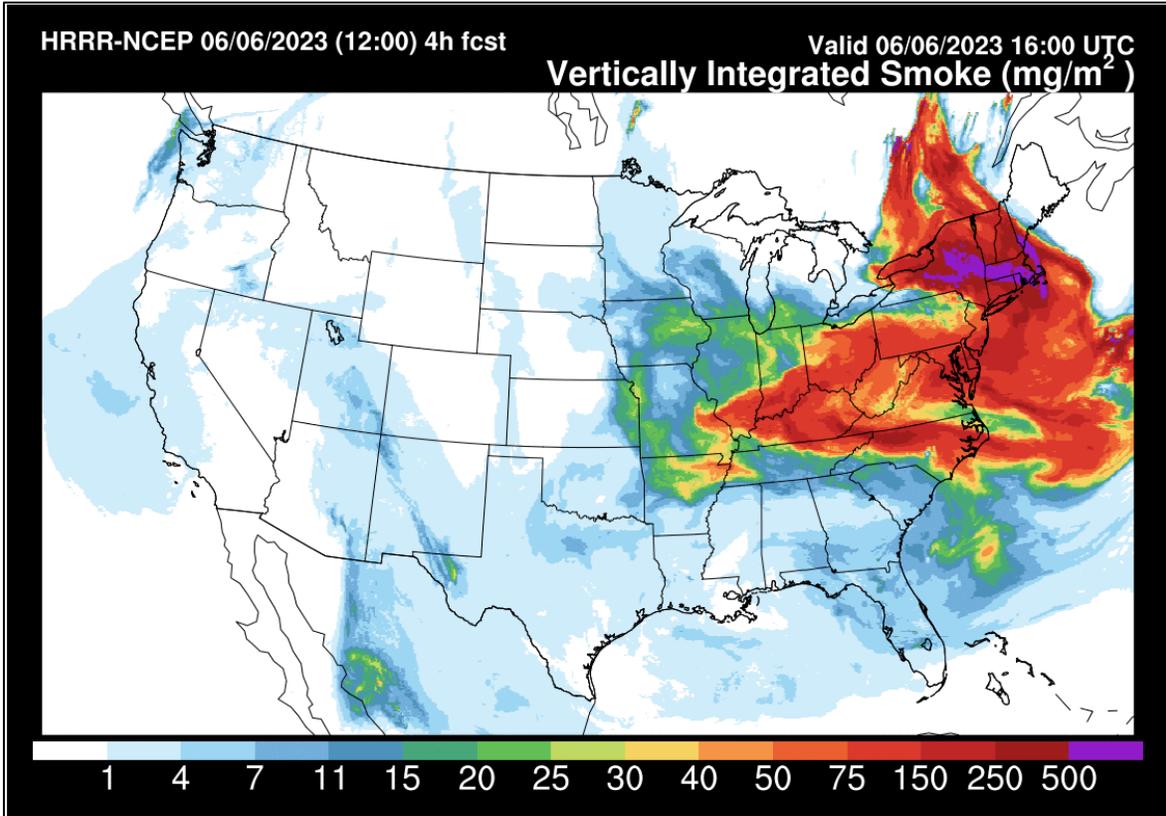
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 6, 2023



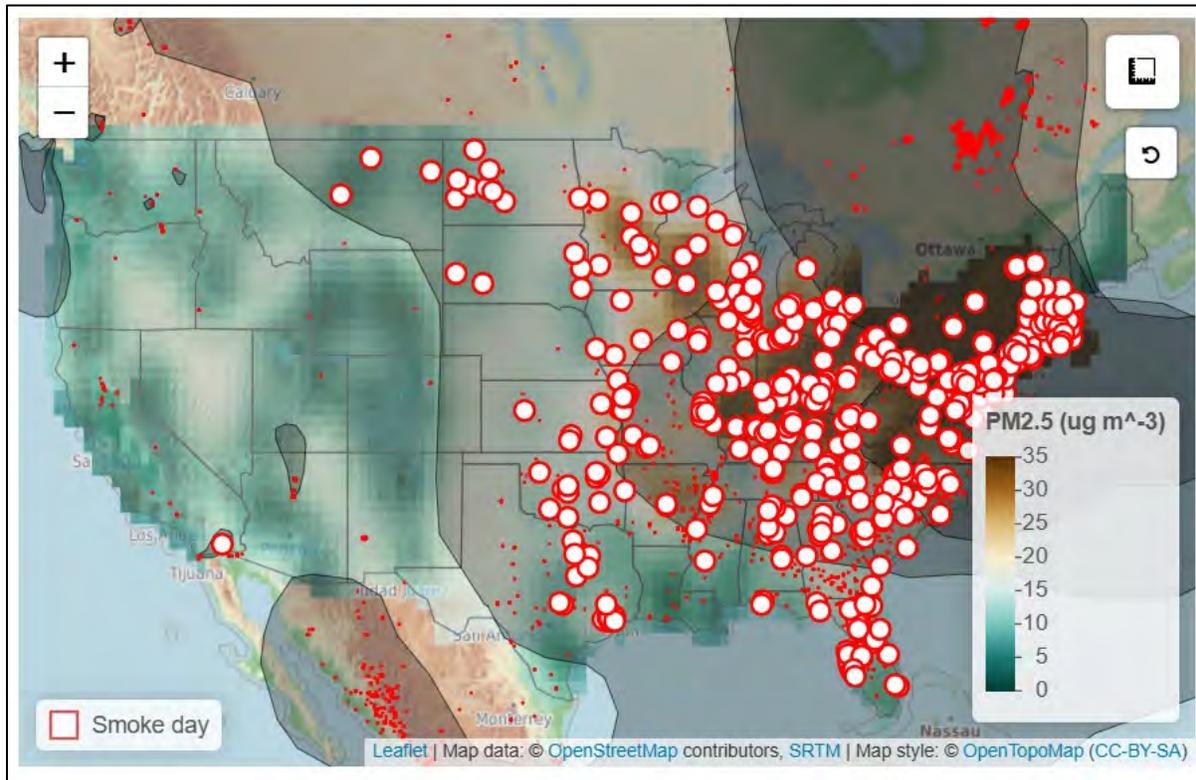
Satellite Imagery with MAIAC AOD – June 6, 2023



HRRR Smoke - Vertically Integrated Smoke – June 6, 2023



GAM PMO3 Smoke Output – June 6, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

Tuesday, June 6, 2023

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1550Z June 6, 2023

SMOKE:

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

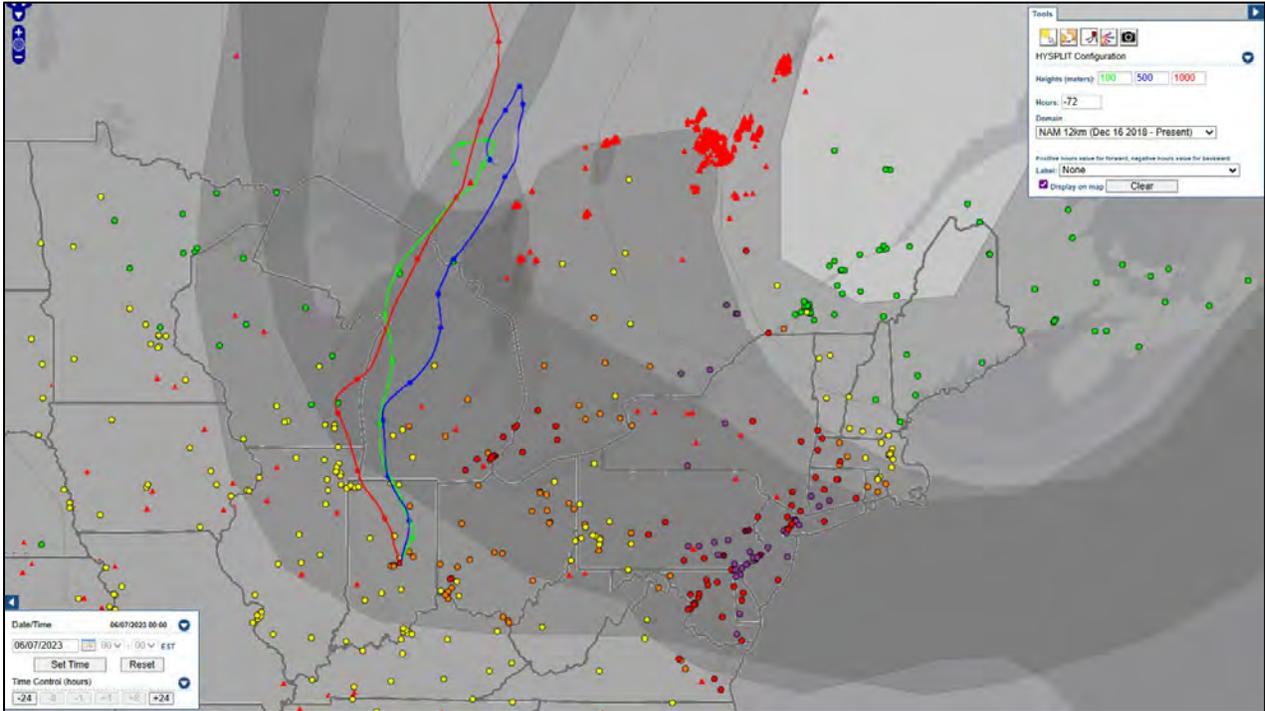
Wildfire activity in northern British Columbia and the Northwest Territories continued to produce high-density smoke, contributing to a lengthy plume of moderate to high-density remnant smoke extending eastward over northern Canada and southward over Ontario and Quebec. Over southern Quebec, wildfire activity was producing a large area of high density smoke extending southwestward and southward, adding to the smoke from the western fires. This area of moderate to high density smoke was extending south and southwestward over much of the Eastern United States to as far south and west as portions of the Southeastern United States and Midwestern United States.

June 7, 2023

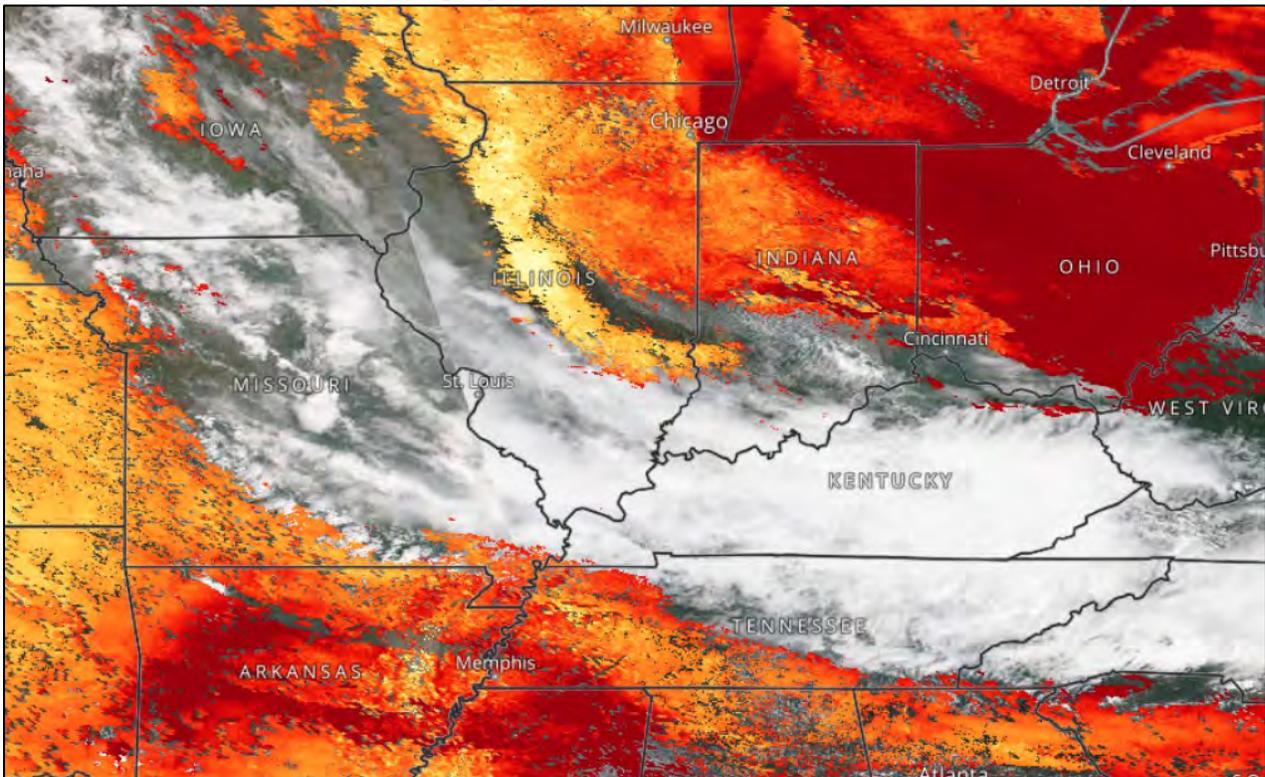
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/7/2023	25.7	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/7/2023	23.3	17.0
Elkhart - Prairie St	180390008	6/7/2023	21.7	16.3
New Albany	180430008	6/7/2023	23.5	20.9
Plummer	180550001	6/7/2023	30.8	14.7
Fishers	180570007	6/7/2023	28.8	13.8
Mechanicsburg	180650003	6/7/2023	44.9	15.5
East Chicago - Marina	180890034	6/7/2023	19.7	18.0
Hammond-167th St	180890036	6/7/2023	18.9	16.3
Anderson - Eastside Elem	180950011	6/7/2023	42.8	15.4
Indianapolis - Washington Park	180970078	6/7/2023	42.5	17.8
Indianapolis - W. 18th St.	180970081	6/7/2023	43.5	20.9
Indianapolis - I-70 E	180970087	6/7/2023	43.7	20.5
Bloomington - Binford	181050003	6/7/2023	32.1	13.9
Ogden Dunes	181270024	6/7/2023	16.5	15.3
South Bend - Shields Dr.	181410015	6/7/2023	27.6	16.9
Lafayette - Greenbush St	181570008	6/7/2023	23.2	15.1
Evansville - Buena Vista	181630021	6/7/2023	30.2	15.1
Terre Haute - Lafayette Ave	181670018	6/7/2023	27.2	18.8
Larwill	181830003	6/7/2023	37.3	15.0

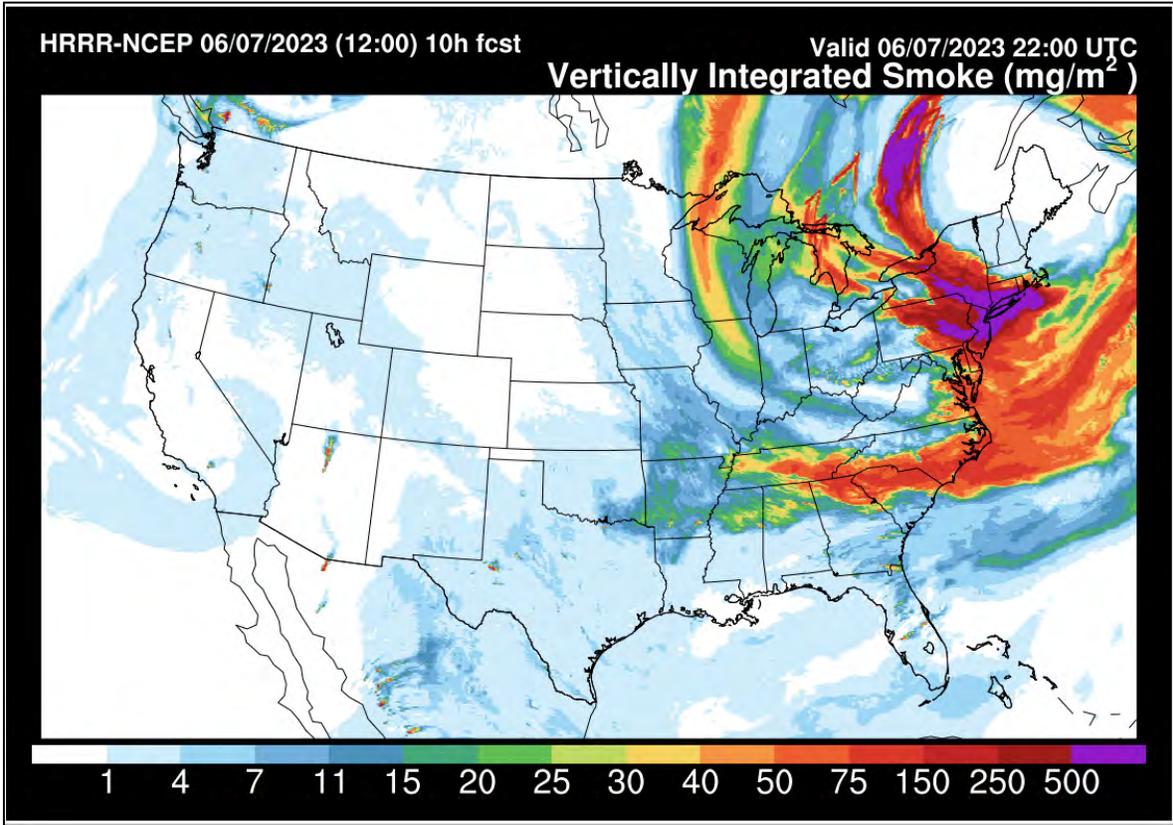
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 7, 2023



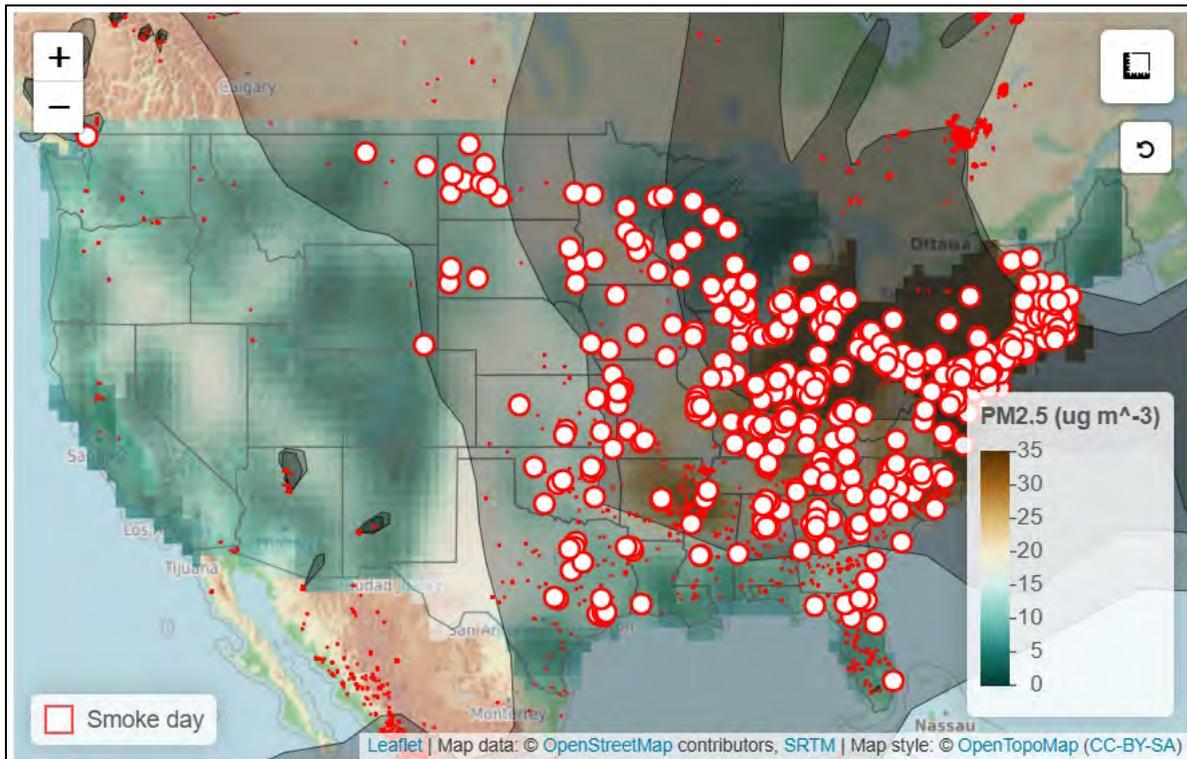
Satellite Imagery with MAIAC AOD – June 7, 2023



HRRR Smoke - Vertically Integrated Smoke – June 7, 2023



GAM PMO3 Smoke Output – June 7, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

Wednesday, June 7, 2023

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1550Z June 7, 2023

SMOKE:

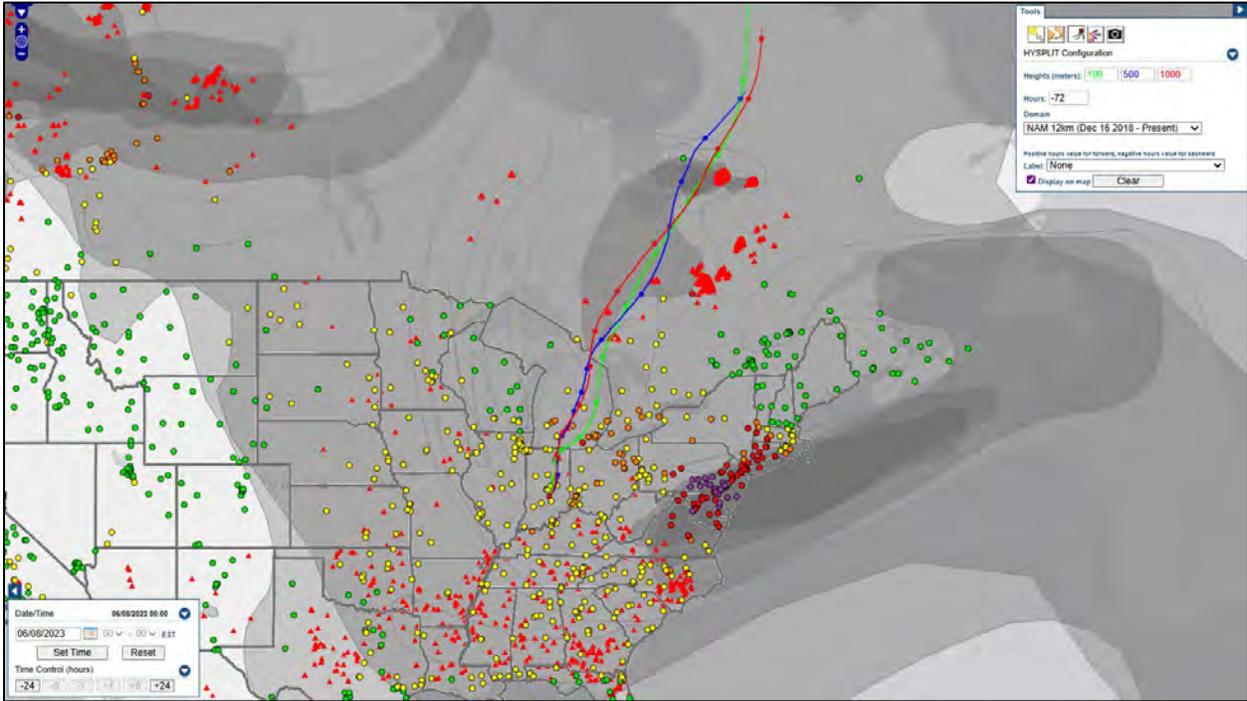
Canada, Central United States and Eastern United States...

Wildfire activity in northern British Columbia and the Northwest Territories continued to produce an area of moderate to high-density smoke that was extending east and northeastward across much of northern Canada and southward through portions of Ontario and Quebec. In southern Quebec, wildfire activity was producing a large area of high density smoke extending southward and southeastward, adding to the smoke from the western fires. This area of moderate to high density smoke was extending southward and southeastward over much of the Upper Midwest and Eastern United States to as far south as the Southeastern United States and also over the northwestern Atlantic Ocean. The highest density smoke within this large area appeared to be over portions of New York and northern Pennsylvania and was moving southeast and should overspread portions of New York City, Long Island, southern Connecticut, southern Rhode Island, New Jersey and Eastern Pennsylvania throughout the day.

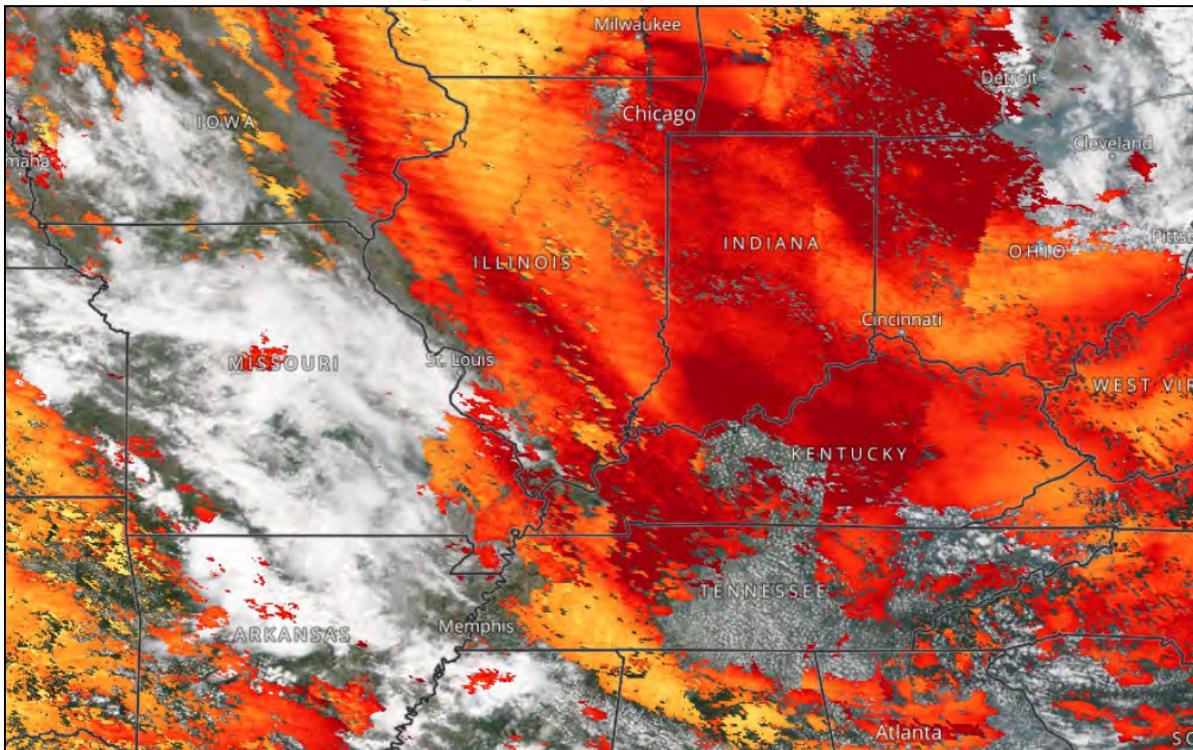
June 8, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average (µg/m³)	Tier 2 Threshold (µg/m³)
Columbus - Rocky Ford Drive	180050008	6/8/2023	25.9	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/8/2023	27.9	17.0
Muncie - Central HS	180350006	6/8/2023	19.3	13.2
Jasper - Post Office	180372001	6/8/2023	26.0	15.7
Elkhart - Prairie St	180390008	6/8/2023	17.4	16.3
New Albany	180430008	6/8/2023	22.4	20.9
Plummer	180550001	6/8/2023	21.4	14.7
Fishers	180570007	6/8/2023	20.1	13.8
Carmel - Hazel Dell Parkway	180570008	6/8/2023	20.0	16.5
Mechanicsburg	180650003	6/8/2023	19.5	15.5
East Chicago - Franklin/Washington Sch	180890006	6/8/2023	19.8	16.1
Gary - Madison St	180890031	6/8/2023	27.4	16.0
East Chicago - Marina	180890034	6/8/2023	19.7	18.0
Hammond-167th St	180890036	6/8/2023	24.7	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/8/2023	16.9	15.9
Anderson - Eastside Elem	180950011	6/8/2023	27.9	15.4
Indianapolis - Washington Park	180970078	6/8/2023	28.6	17.8
Indianapolis - W. 18th St.	180970081	6/8/2023	21.0	20.9
Indianapolis - School 21	180970084	6/8/2023	21.8	15.5
Indianapolis- I-70 E	180970087	6/8/2023	30.7	20.5
Bloomington - Binford	181050003	6/8/2023	21.3	13.9
Ogden Dunes	181270024	6/8/2023	15.7	15.3
Dale	181470009	6/8/2023	27.9	13.9
Lafayette - Greenbush St	181570008	6/8/2023	18.8	15.1
Evansville - U of E	181630016	6/8/2023	24.6	15.5
Evansville - Buena Vista	181630021	6/8/2023	29.7	15.1
Terre Haute - Lafayette Ave	181670018	6/8/2023	19.1	18.8
Larwill	181830003	6/8/2023	21.7	15.0

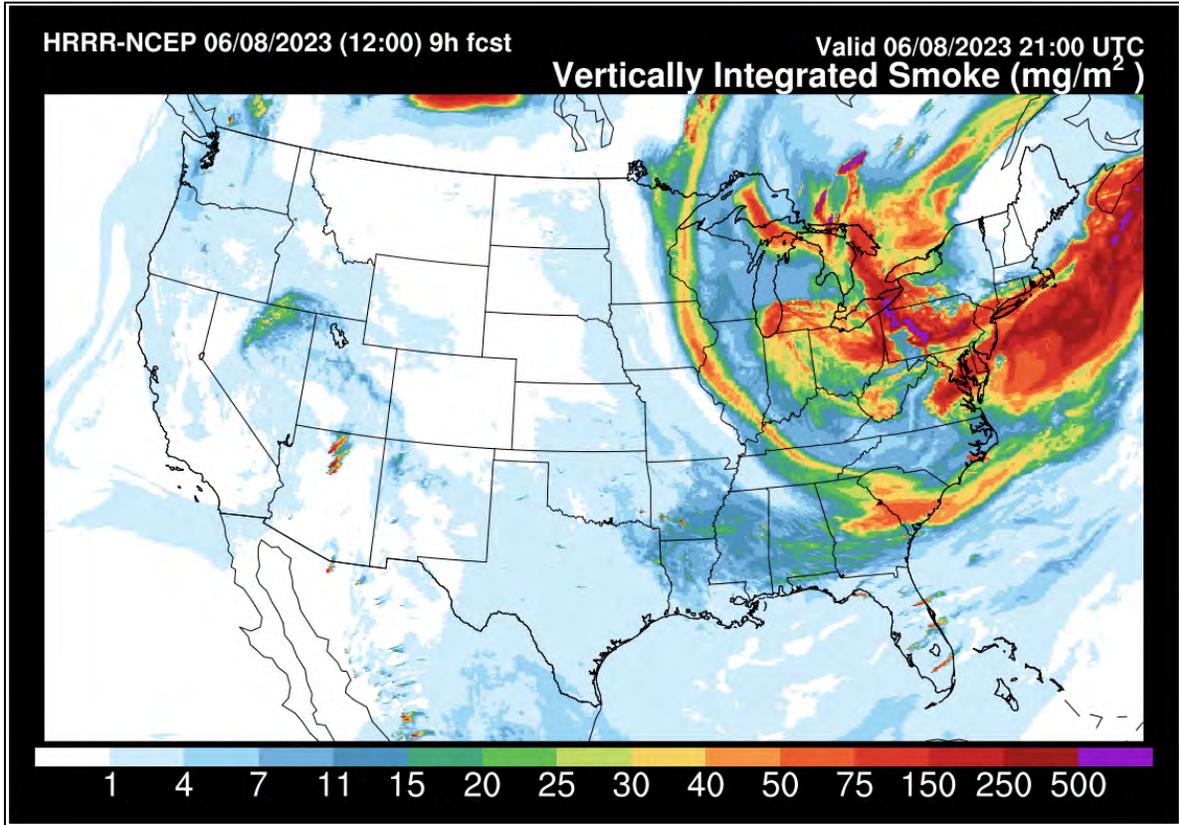
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 8, 2023



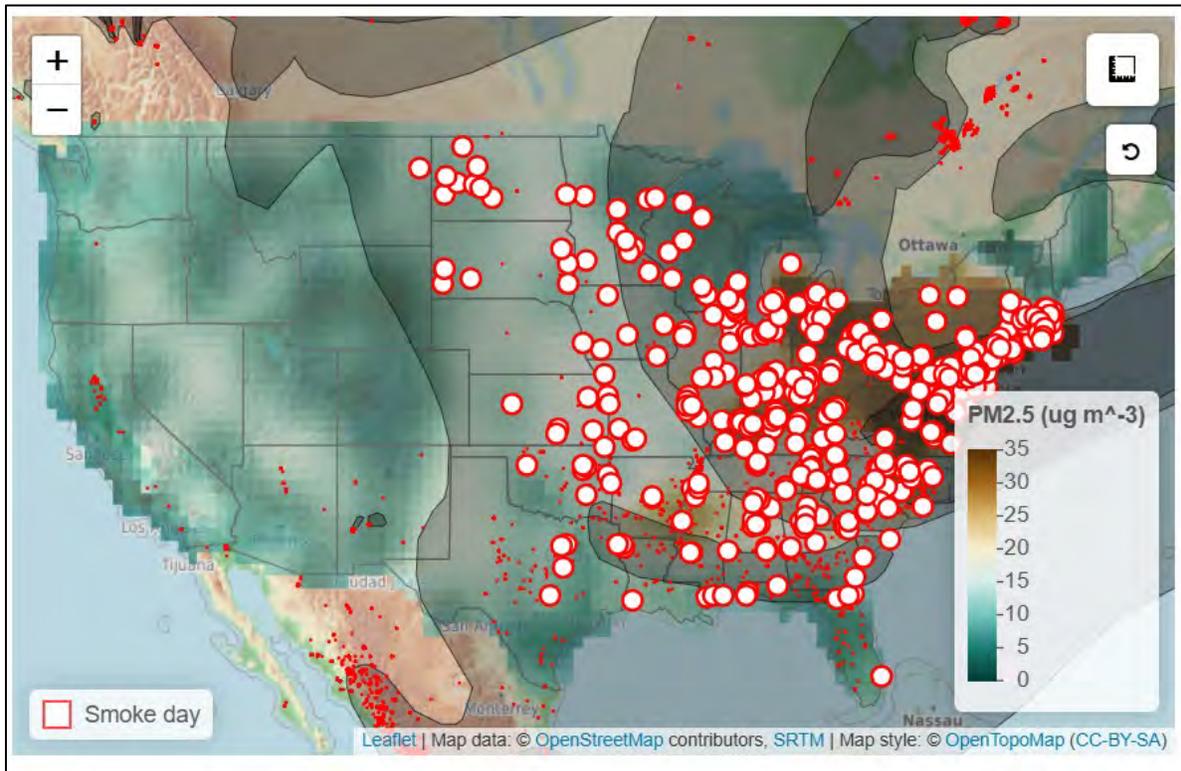
Satellite Imagery with MAIAC AOD – June 8, 2023



HRRR Smoke - Vertically Integrated Smoke – June 8, 2023



GAM PMO3 Smoke Output – June 8, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z June 8, 2023

SMOKE:

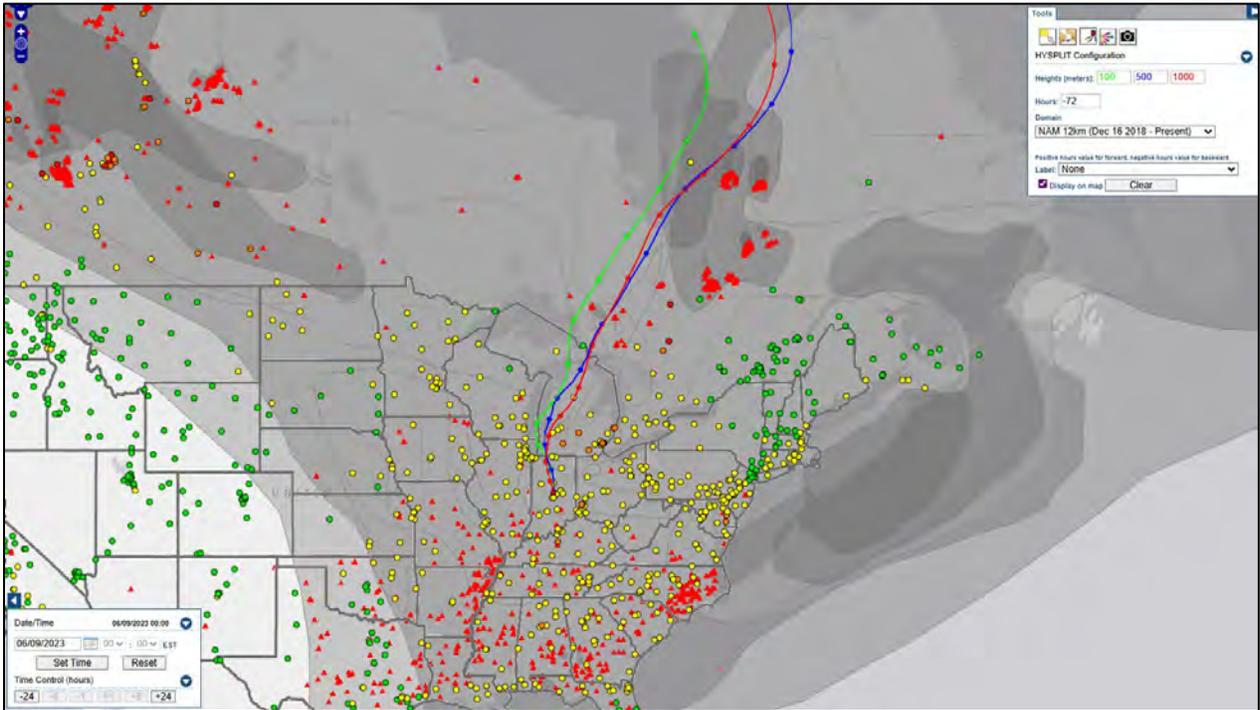
Canada, Central and Eastern United States and the northwestern Atlantic Ocean...

Multiple large wildfires across western and central Canada continued to produce large amounts of dense smoke in a plume stretching from northeastern British Columbia to the Saskatchewan/Manitoba border. Moderate-density smoke extended from the eastern Yukon and British Columbia to Hudson Bay and Nunavut, with some smoke continuing southward. Additional fires in Quebec and Ontario were adding moderate to high density smoke emanating westward before joining the main plumes moving southward over the western Great Lakes and eastward across the Ohio River Valley, the Mid-Atlantic, southern New York, Connecticut, Rhode Island, and southeastern Massachusetts, extending over the Atlantic Ocean south of Nova Scotia and as far as Newfoundland. An additional region of moderate-density smoke was drifting generally southward and extended from the Ark-La-Tex region to southern Georgia and South Carolina.

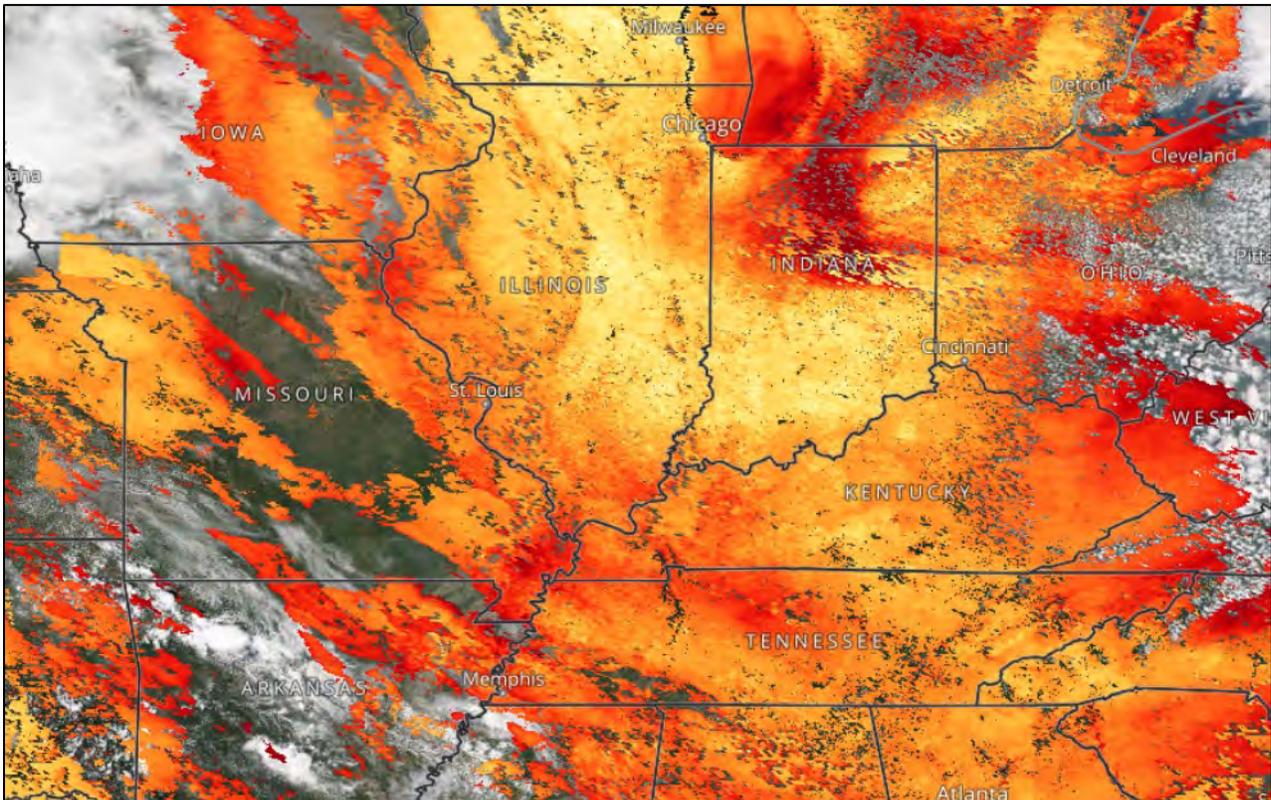
June 9, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average (µg/m³)	Tier 2 Threshold (µg/m³)
Columbus - Rocky Ford Dr	180050008	6/9/2023	14.4	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/9/2023	25.1	17.0
Elkhart - Prairie St	180390008	6/9/2023	28.5	16.3
Plummer	180550001	6/9/2023	18.0	14.7
Fishers	180570007	6/9/2023	21.5	13.8
Mechanicsburg	180650003	6/9/2023	31.4	15.5
East Chicago - Marina	180890034	6/9/2023	20.3	18.0
Hammond-167th St	180890036	6/9/2023	18.7	16.3
Anderson - Eastside Elem	180950011	6/9/2023	33.9	15.4
Indianapolis - Washington Park	180970078	6/9/2023	27.2	17.8
Indianapolis - W. 18th St.	180970081	6/9/2023	27.7	20.9
Indianapolis - I-70 E	180970087	6/9/2023	27.8	20.5
Bloomington - Binford	181050003	6/9/2023	16.7	13.9
Ogden Dunes	181270024	6/9/2023	16.4	15.3
South Bend - Shields Dr.	181410015	6/9/2023	30.8	16.9
Lafayette - Greenbush St	181570008	6/9/2023	20.1	15.1
Evansville - Buena Vista	181630021	6/9/2023	25.7	15.1
Larwill	181830003	6/9/2023	32.0	15.0

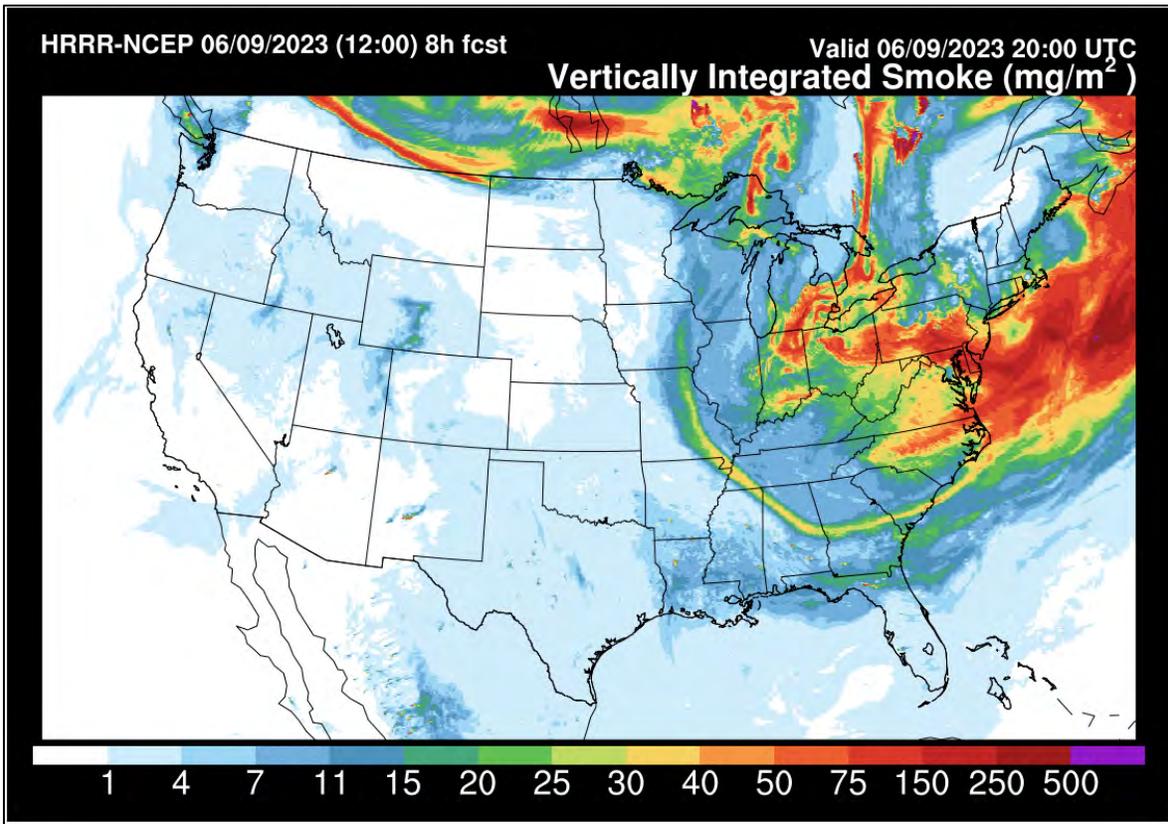
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 9, 2023



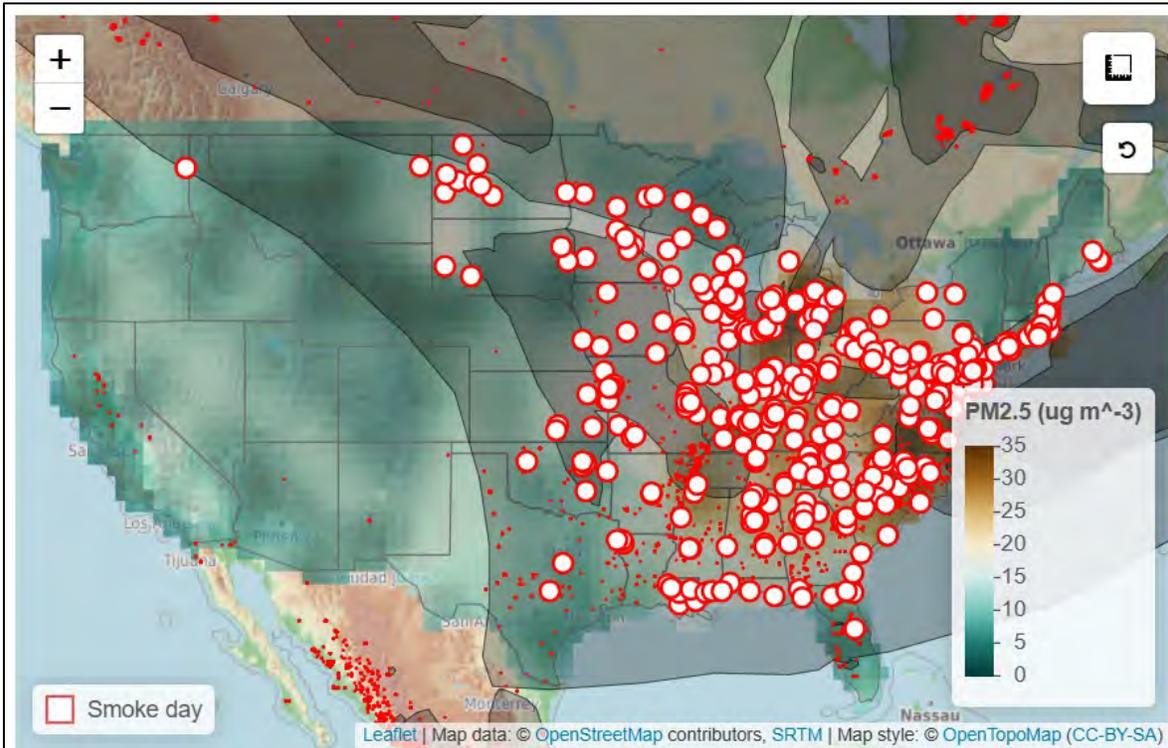
Satellite Imagery with MAIAC AOD – June 9, 2023



HRRR Smoke - Vertically Integrated Smoke – June 9, 2023



GAM PMO3 Smoke Output – June 9, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1530Z June 9, 2023

SMOKE:

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

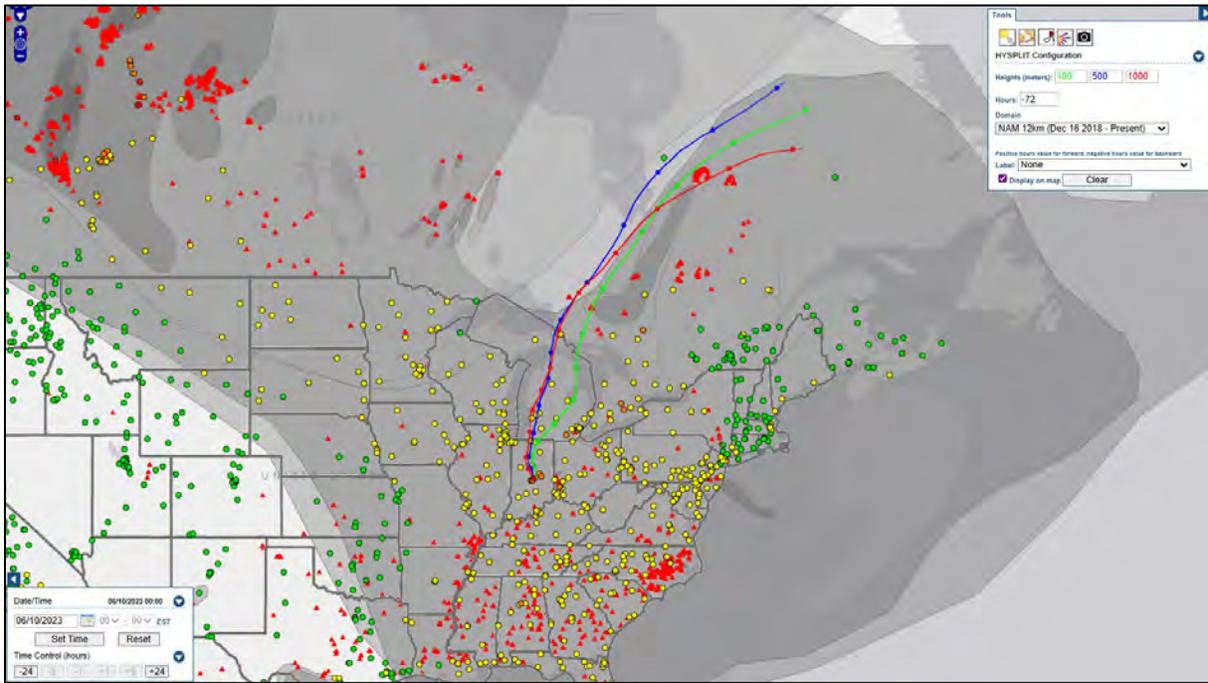
Multiple large wildfires continued burning across British Columbia, Alberta, Saskatchewan, Ontario, and Quebec. They continued to produce large amounts of moderate to high density smoke in an area stretching from southern Yukon Territory, northern/central British Columbia east through most of Alberta, southern/central Saskatchewan and Manitoba and east central Ontario. The area of smoke extended east and northeast through northeastern Canada and into the north Atlantic Ocean where areas of moderate density smoke was seen over northern Quebec and another area in the north Atlantic Ocean. Wildfires in Quebec and Ontario have continued to spread smoke over the last few days across central/southern Ontario/Quebec and the eastern U.S. with moderate to high density smoke seen across southeast Virginia, eastern North Carolina and northeast into the Atlantic ocean and off the Canadian coast. Lighter smoke has spread as far south as northern sections of the Gulf of Mexico and Central Florida and off the southeast coast. Other moderate density smoke from the wildfires in Canada were seen stretching from central South Dakota south to eastern Oklahoma, from south central Minnesota to eastern Missouri, and through northern Indiana and Ohio into Michigan and southern Ontario. Light smoke is also seen as far west as central Montana south to central Texas and the northeast region of the Gulf of Mexico.

June 10, 2023

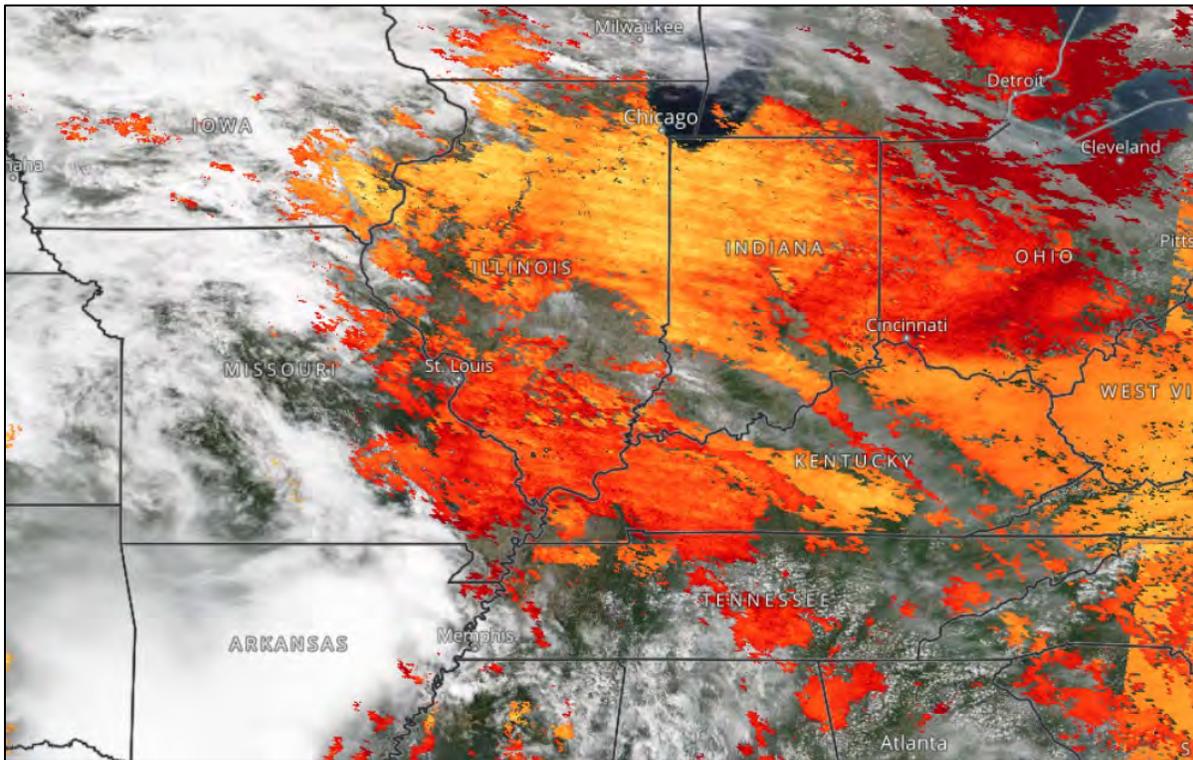
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus – Rocky Ford Drive	180050008	6/10/2023	13.5	13.4
Jeffersonville - Bates-Bowyer Ave	180190010	6/10/2023	26.6	17.0
Elkhart - Prairie St	180390008	6/10/2023	19.0	16.3
Fishers	180570007	6/10/2023	26.8	13.8
Mechanicsburg	180650003	6/10/2023	38.4	15.5
Kokomo - E. Vaile Ave	180670004	6/10/2023	23.9	14.7
Anderson - Eastside Elem	180950011	6/10/2023	38.1	15.4
Indianapolis - Washington Park	180970078	6/10/2023	41.0	17.8
Indianapolis - W. 18th St.	180970081	6/10/2023	36.1	20.9
Indianapolis - I-70 E	180970087	6/10/2023	38.1	20.5
South Bend - Shields Dr.	181410015	6/10/2023	21.4	16.9
Lafayette - Greenbush St	181570008	6/10/2023	20.6	15.1
Evansville – U of E	181630016	6/10/2023	15.0	15.0
Evansville - Buena Vista	181630021	6/10/2023	22.4	15.1
Larwill	181830003	6/10/2023	22.6	15.0

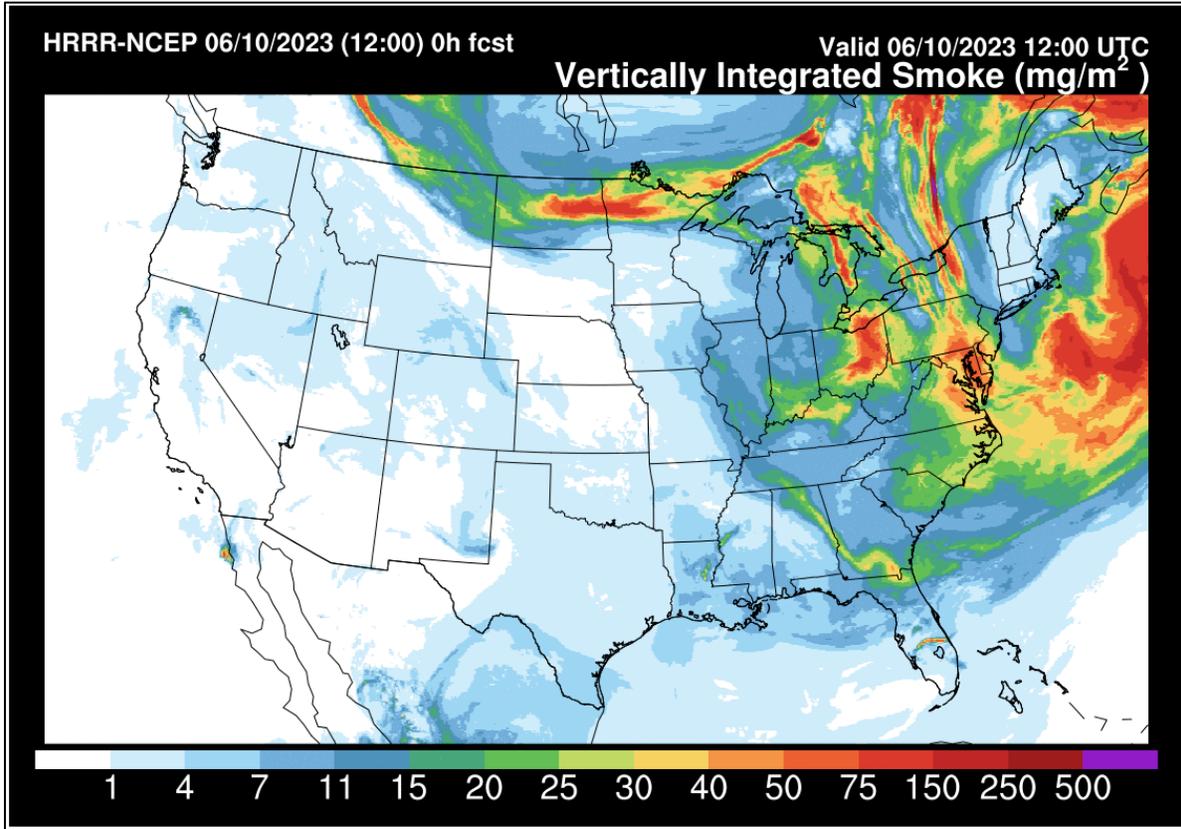
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories - June 10, 2023



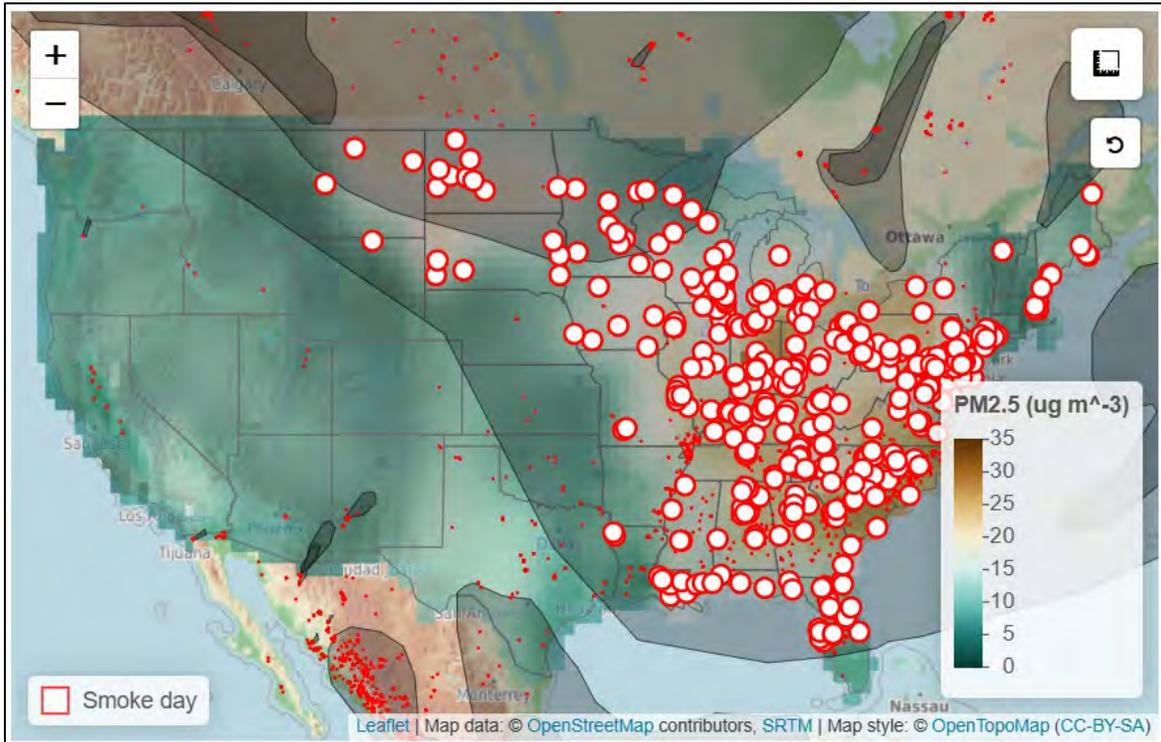
Satellite Imagery with MAIAC AOD – June 10, 2023



HRRR Smoke - Vertically Integrated Smoke – June 10, 2023



GAM PMO3 Smoke Output – June 10, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1500Z June 10, 2023

SMOKE:

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

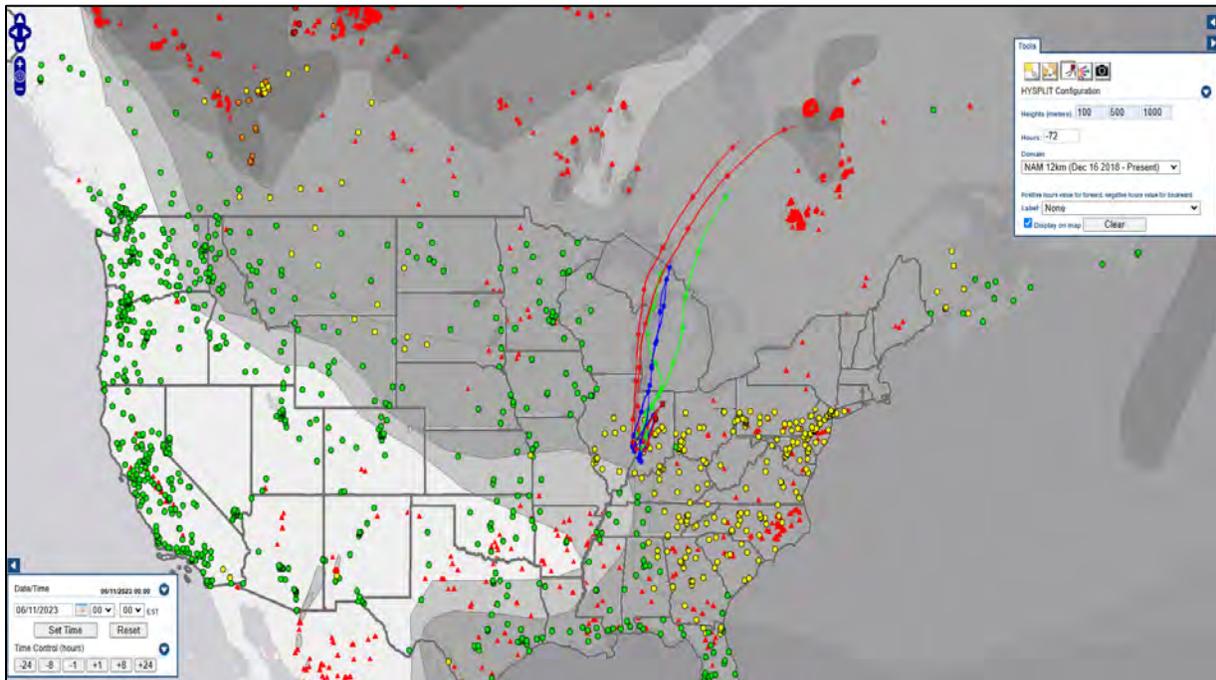
Wildfires throughout Saskatchewan, Alberta, British Columbia, and the southern Northwest Territories continued to produce large amounts of light to medium-density smoke extending from southeastern Yukon to northern Montana, the Dakotas, and Minnesota and southern Ontario. Heavy density smoke was concentrated over the NW Territories, British Columbia, Alberta, and Saskatchewan. Due to heavy cloud coverage, it was difficult to the full extent of smoke over most of Ontario and Quebec. Light smoke from these fires also extended across all of the Canadian territories and over Hudson Bay, and additional areas of the central, southern and eastern U.S. This smoke then became combined with smoke mainly emitted from fires in Ontario and Quebec, with light to moderate-density smoke extending from the over the Atlantic Ocean southeast of New England and Nova Scotia.

June 11, 2023

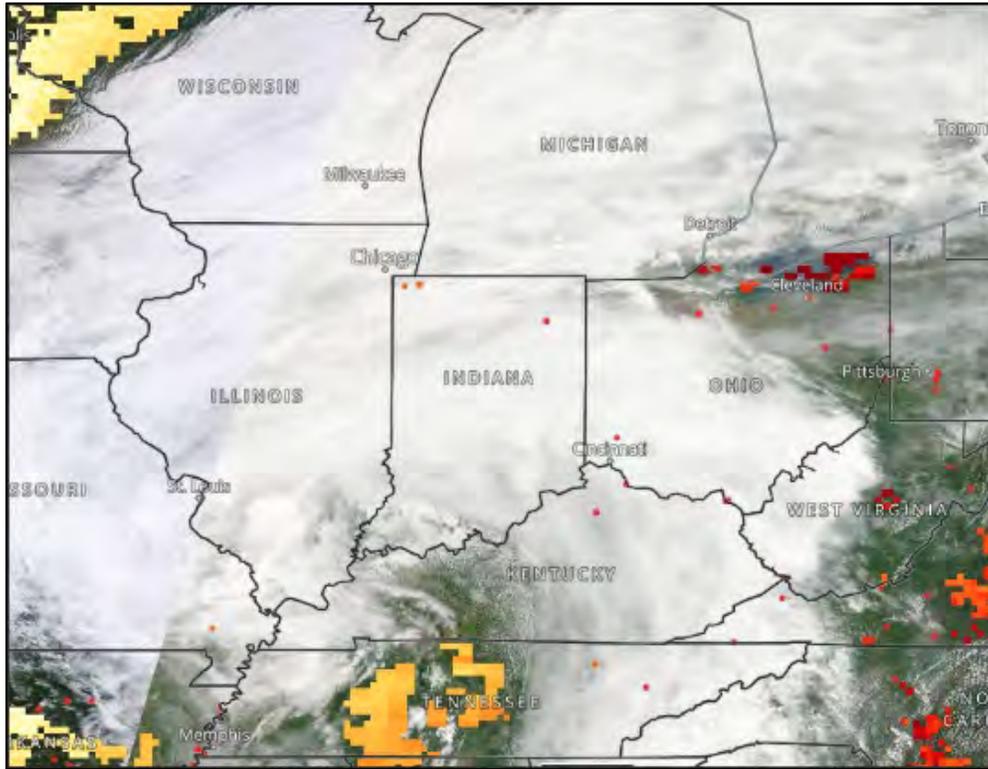
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/11/2023	14.1	13.7
Muncie - Central HS	180350006	6/11/2023	17.4	13.2
Elkhart - Prairie St	180390008	6/11/2023	17.5	16.3
Plummer	180550001	6/11/2023	14.9	14.7
Carmel - Hazel Dell Parkway	180570008	6/11/2023	17.5	16.5
Mechanicsburg	180650003	6/11/2023	16.1	15.5
Kokomo - E. Vaile Ave	180670004	6/11/2023 </td <td>15.1</td> <td>14.7</td>	15.1	14.7
Anderson - Eastside Elem	180950011	6/11/2023	18.6	15.4
Indianapolis - Washington Park	180970078	6/11/2023	18.0	17.8
Indianapolis - School 21	180970084	6/11/2023	16.8	15.5
Larwill	181830003	6/11/2023	15.1	15.0

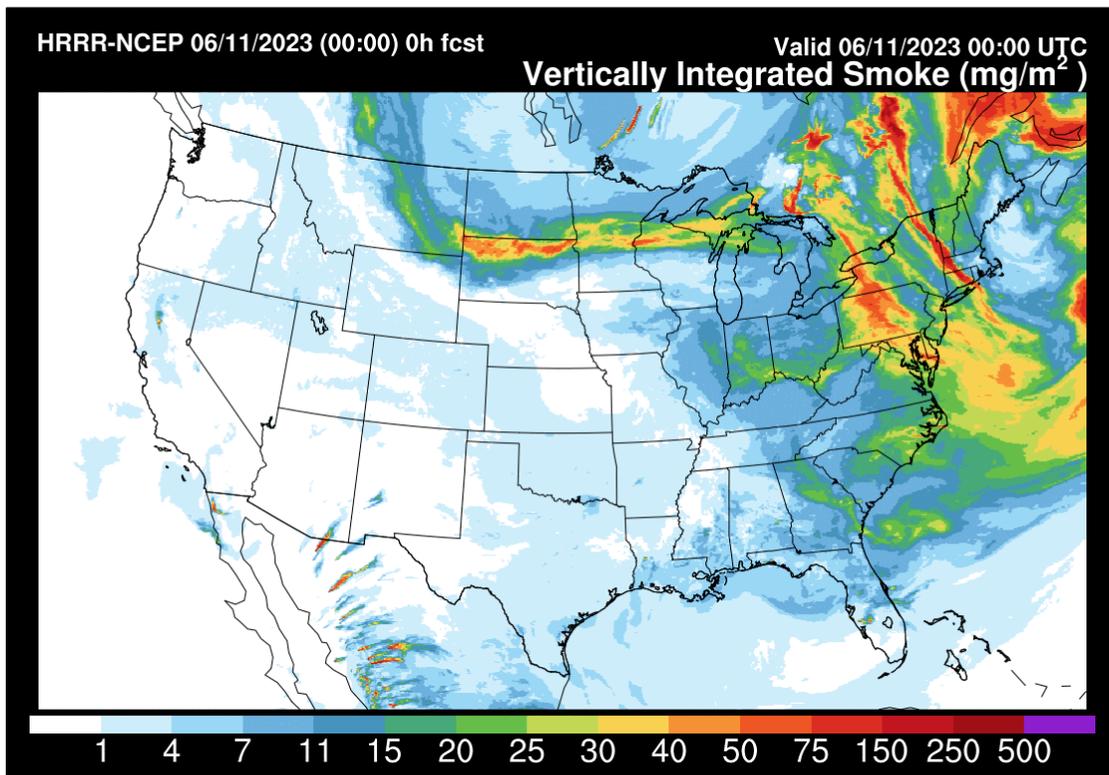
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 11, 2023



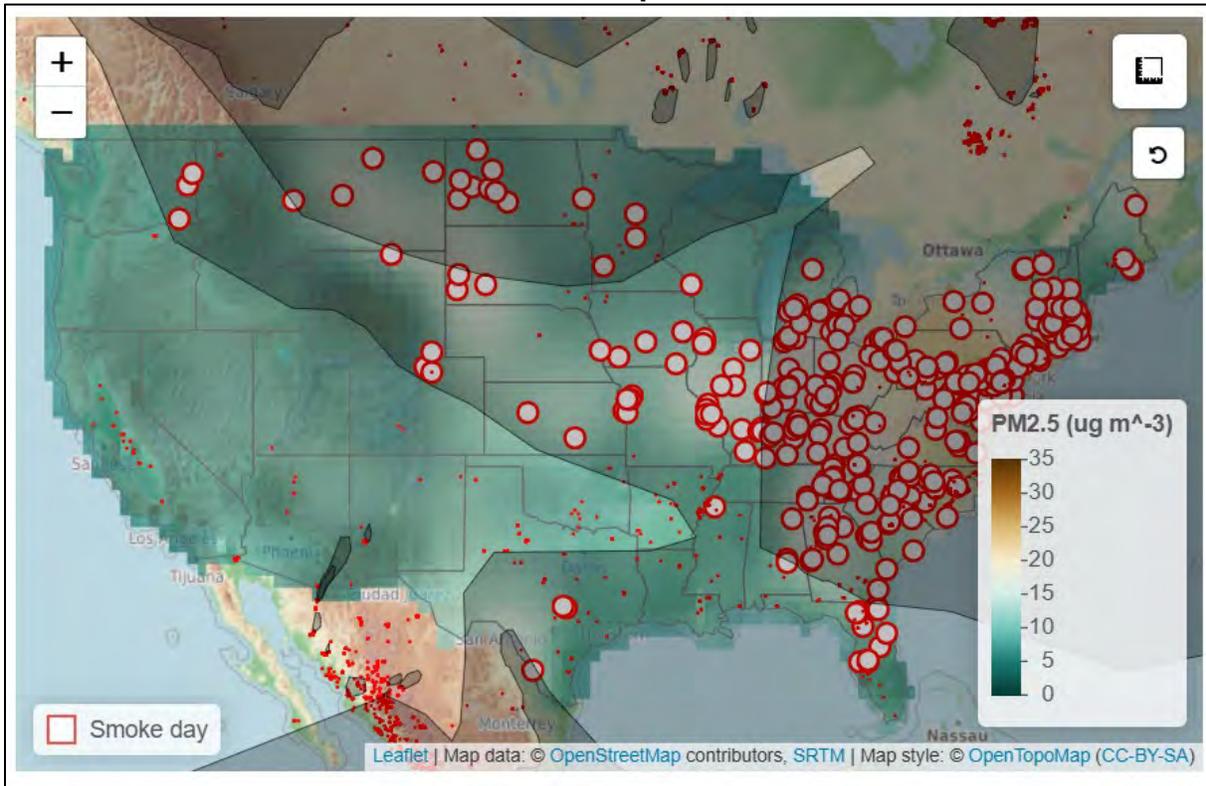
Satellite Imagery with MAIAC AOD – June 11, 2023



HRRR Smoke - Vertically Integrated Smoke – June 11, 2023



GAM PMO3 Smoke Output – June 11, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1700Z June 11, 2023

SMOKE:

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

Wildfires continue to burn across far southwestern Northwest Territory, northeastern British Columbia, northern and central Alberta, and northern Saskatchewan. This fire activity is emitting thick smoke that initially extends east to southeast from fires in BC and central Alberta and northeast from activity in central Saskatchewan. As the thick smoke lofts, the thick smoke begins to move east northeastward over southern NW Territory, northern Alberta, and far northern Saskatchewan and into southern Nunavut. From here, a portion becomes incorporated into an upper-level high over the central Saskatchewan/Manitoba border moving south then southwest across far northwestern Ontario, northern and central Manitoba and central Saskatchewan. The rest is drawn eastward across Hudson Bay into northern Quebec. Wildfires also continue to burn across southern Quebec. The smoke from this ongoing activity is getting forced in multiple directions, with one system across central Quebec into Greenland drawing smoke east-northeastward...a second system over the southern Labrador Sea and Newfoundland drawing smoke southeastward across the St. Lawrence River Valley and Maine across the Atlantic then incorporating the smoke into the circulation system with smoke seen wrapping around and moving south across the Gulf of St. Lawrence...and

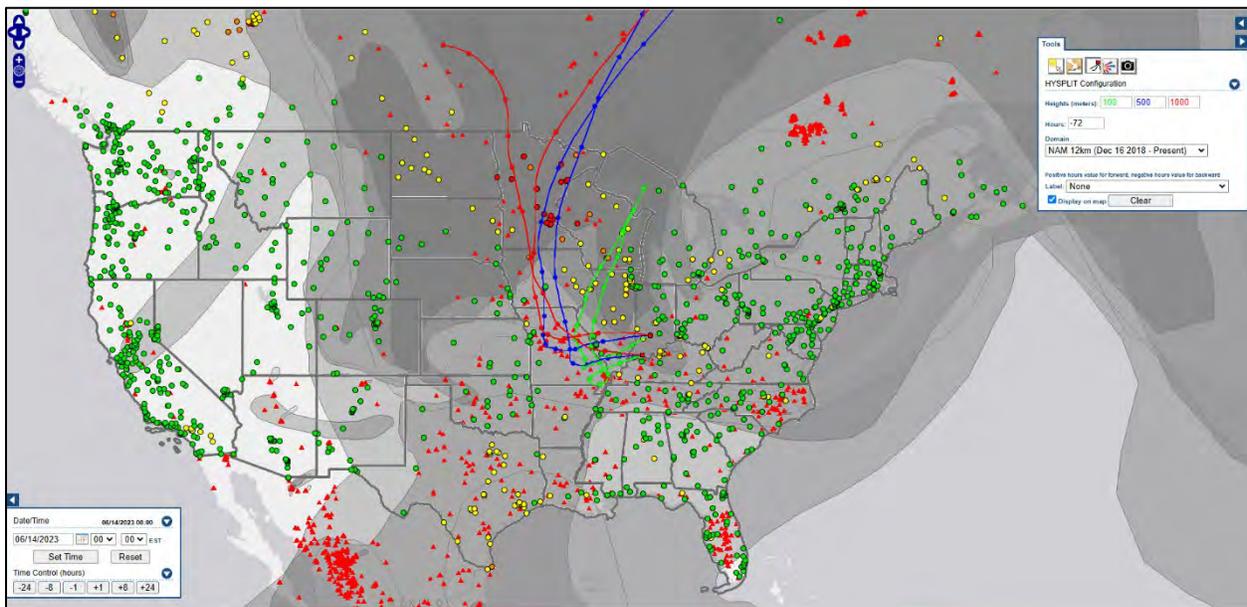
some smoke moving slowly southwestward with some of this smoke also then getting drawn east-southeast from the Great Lakes after the smoke reaches there. Light remnant smoke from a combination of the fire activity in Canada is seen as far east as the eastern Atlantic and into Europe.

June 14, 2023

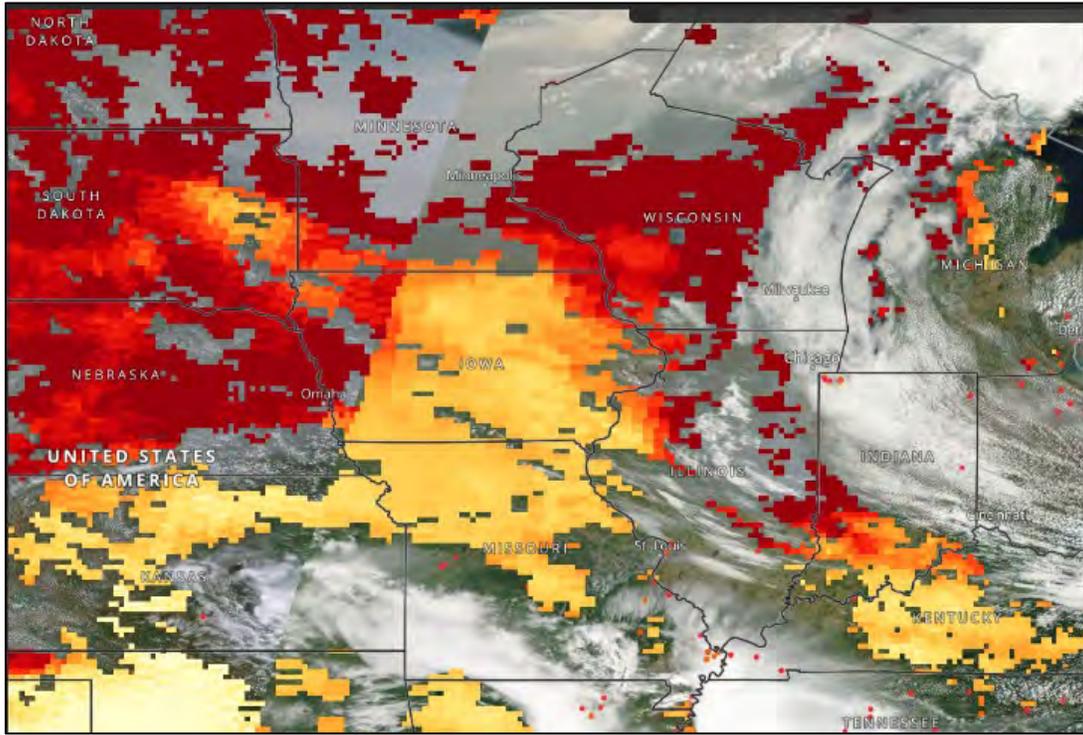
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Bloomington - Binford	181050003	6/14/2023	14.2	13.9
Dale	181470009	6/14/2023	19.9	13.9

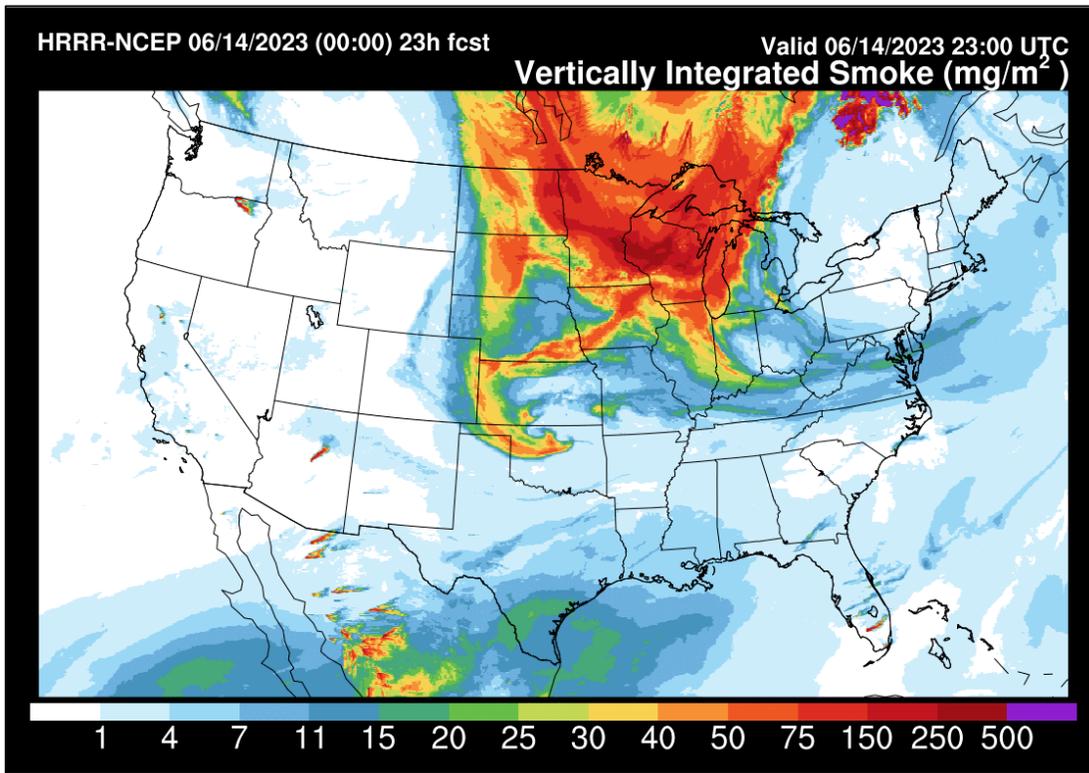
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 14, 2023

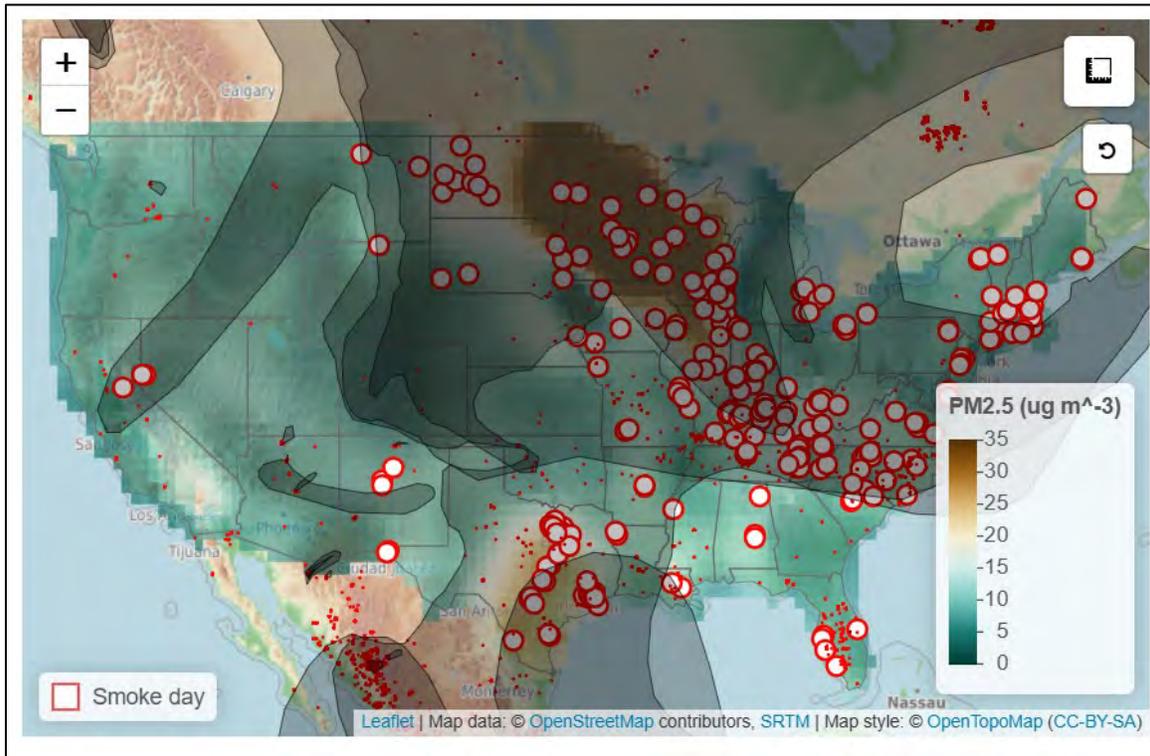


Satellite Imagery with MAIAC AOD – June 14, 2023



HRRR Smoke - Vertically Integrated Smoke – June 14, 2023



GAM PMO3 Smoke Output – June 14, 2023**NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z June 14, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

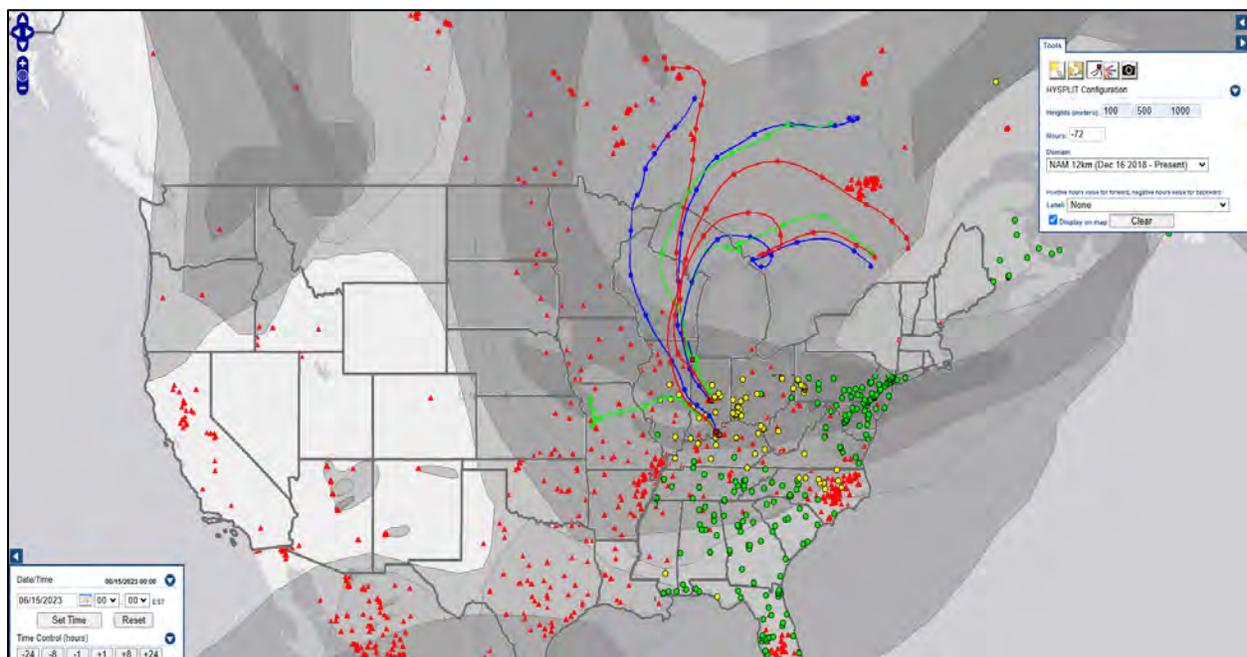
Numerous large wildfires scattered across portions of the southern half of Canada from northern British Columbia and the southwestern part of the Northwest Territories eastward over the southern tier of Canadian provinces to Quebec continued to result in a very large area of moderate to thick density smoke which covered a good part of southern and central Canada and extended off the east and southeast coast of Canada over the north Atlantic. The southern part of the thicker area of smoke also extended to the south across the region extending from the Northern and Central High Plains to the western Great Lakes. In addition, a narrow curving band of moderate density smoke stretched from the Middle Mississippi Valley eastward to North Carolina and northeastward from there off the Mid-Atlantic and Northeast coast. Thinner density smoke from these fires covered a sizable part of the Atlantic reaching as far east as Europe.

June 15, 2023

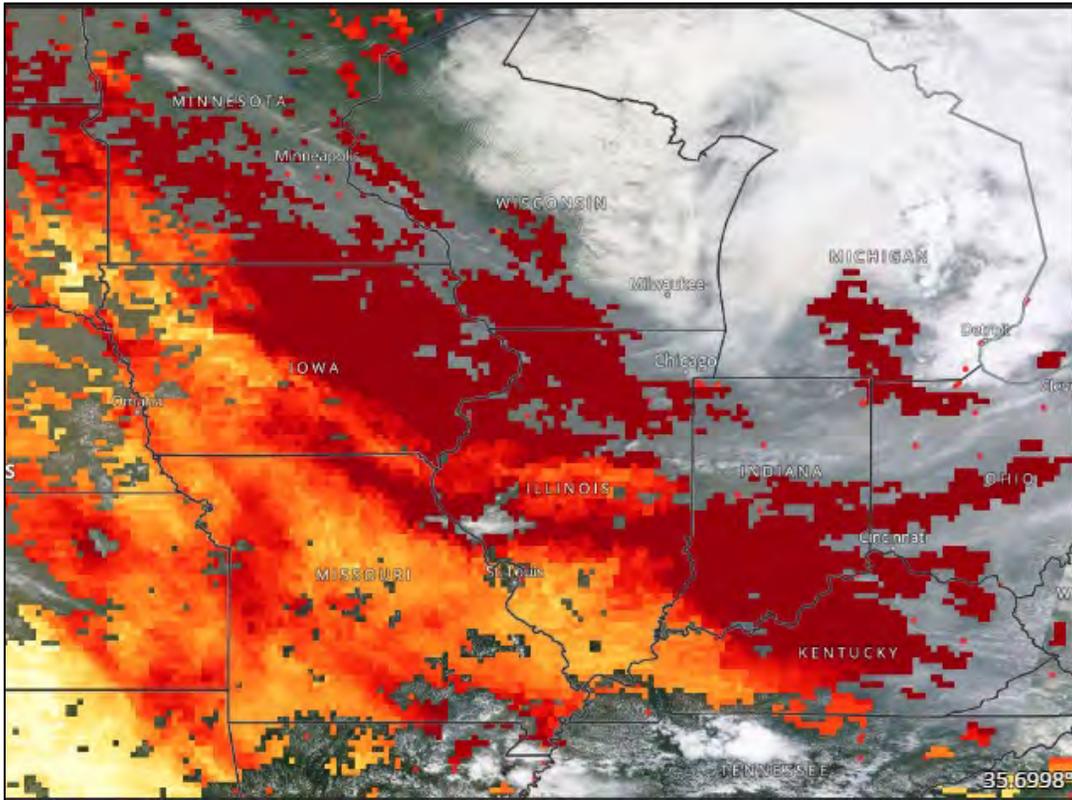
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/15/2023	19.0	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/15/2023	43.5	17.0
New Albany	180430008	6/15/2023	29.0	20.9
Plummer	180550001	6/15/2023	23.2	14.7
Fishers	180570007	6/15/2023	15.8	13.8
Mechanicsburg	180650003	6/15/2023	19.4	15.5
Kokomo - E. Vaile Ave	180670004	6/15/2023	17.5	14.7
East Chicago - Marina	180890034	6/15/2023	19.8	18.0
Hammond-167th St	180890036	6/15/2023	17.7	16.3
Anderson - Eastside Elem	180950011	6/15/2023	20.1	15.4
Indianapolis - Washington Park	180970078	6/15/2023	23.6	17.8
Indianapolis - W. 18th St.	180970081	6/15/2023	29.0	20.9
Indianapolis- I-70 E	180970087	6/15/2023	27.3	20.5
Bloomington - Binford	181050003	6/15/2023	28.5	13.9
South Bend - Shields Dr.	181410015	6/15/2023	17.8	16.9
Terre Haute - Lafayette Ave	181670018	6/15/2023	22.4	18.8
Larwill	181830003	6/15/2023	18.7	15.0

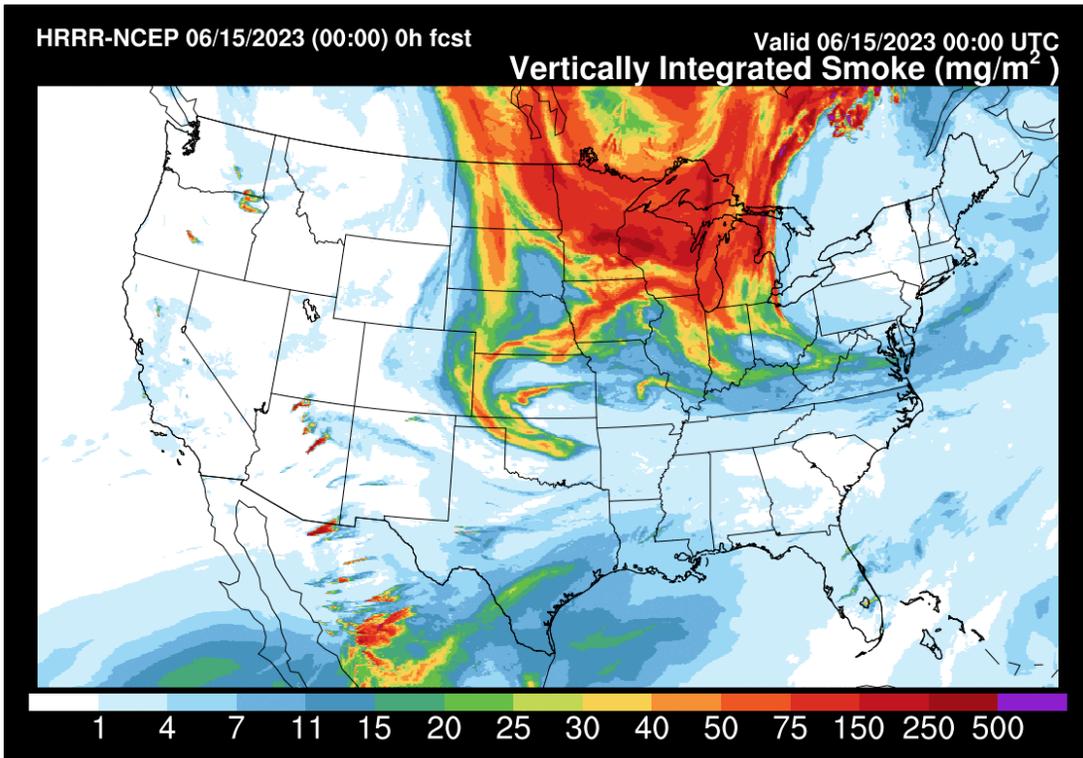
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 15, 2023

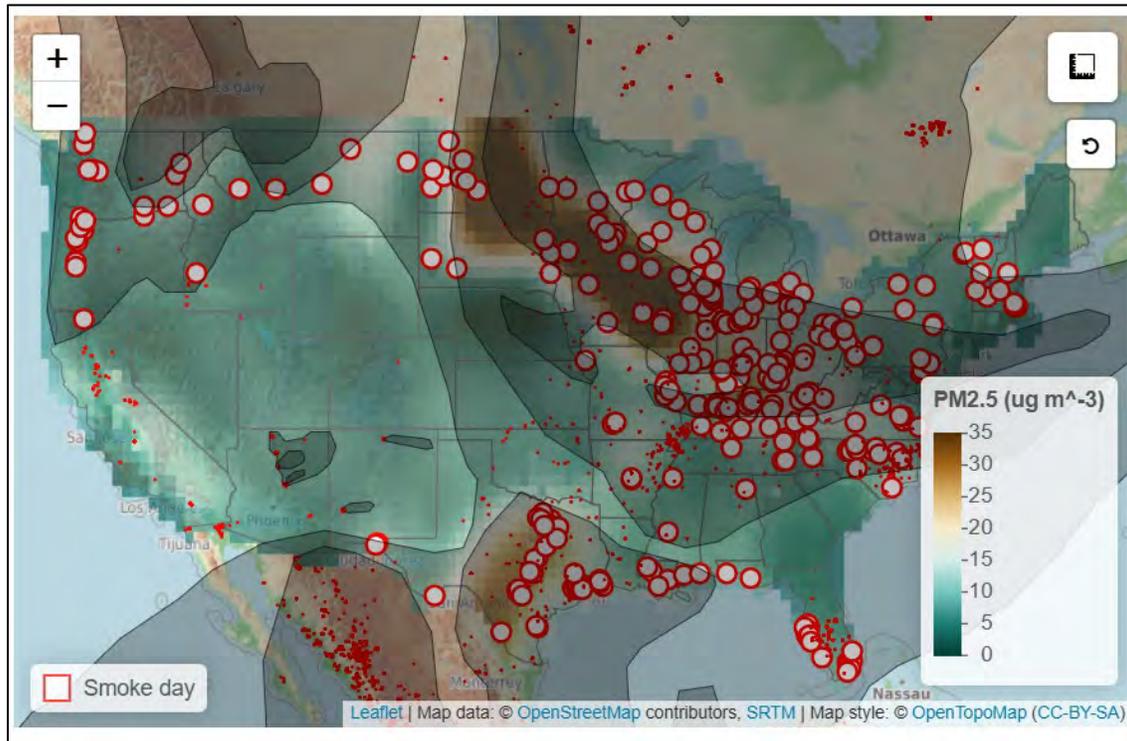


Satellite Imagery with MAIAC AOD – June 15, 2023



HRRR Smoke - Vertically Integrated Smoke – June 15, 2023



GAM PM03 Smoke Output – June 15, 2023**NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1710Z June 15, 2023

SMOKE:

Canada/United States/Atlantic...

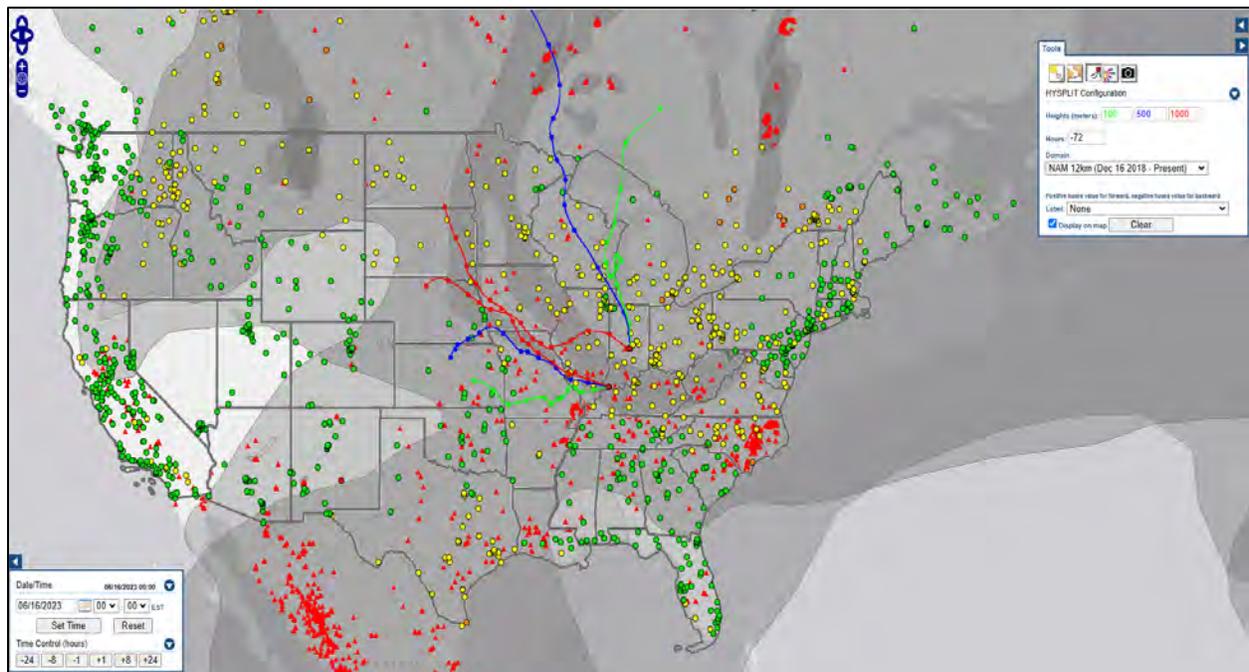
Ongoing wildfires across northeastern British Columbia, northern Alberta/Saskatchewan, western Ontario, and central Quebec were spreading a very large plume of light density smoke over a large part of southern and central Canada, parts of the Pacific Northwest, a large part of the central and eastern U.S., and portions of the western Atlantic. Within this area of thin density smoke, moderate density smoke was found over parts of British Columbia and Alberta, northeastern Saskatchewan, most of Manitoba/Ontario, and western Quebec. Over the U.S., moderate density smoke was detected over most the Northern and Central Plains, the Upper and Mid-Mississippi Valley, the Great Lakes, the Ohio/Tennessee Valleys, and most of the Mid Atlantic. Small areas of heavy density smoke were detected near the large wildfires over northeastern British Columbia and far northwestern Alberta.

June 16, 2023

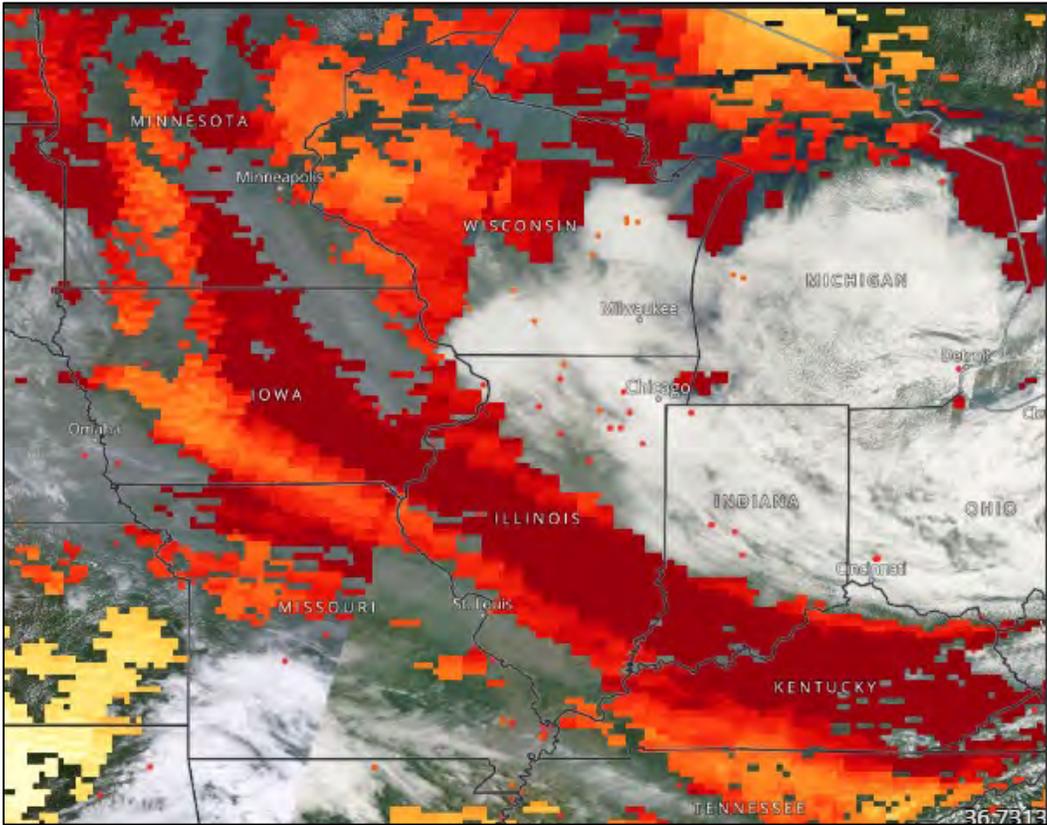
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/16/2023	14.9	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/16/2023	24.1	17.0
Plummer	180550001	6/16/2023	17.4	14.7
Mechanicsburg	180650003	6/16/2023	16.0	15.5
Anderson - Eastside Elem	180950011	6/16/2023	17.9	15.4
Indianapolis- I-70 E	180970087	6/16/2023	21.2	20.5
Bloomington - Binford	181050003	6/16/2023	18.0	13.9
Evansville - Buena Vista	181630021	6/16/2023	23.3	15.1
Larwill	181830003	6/16/2023	17.7	15.0

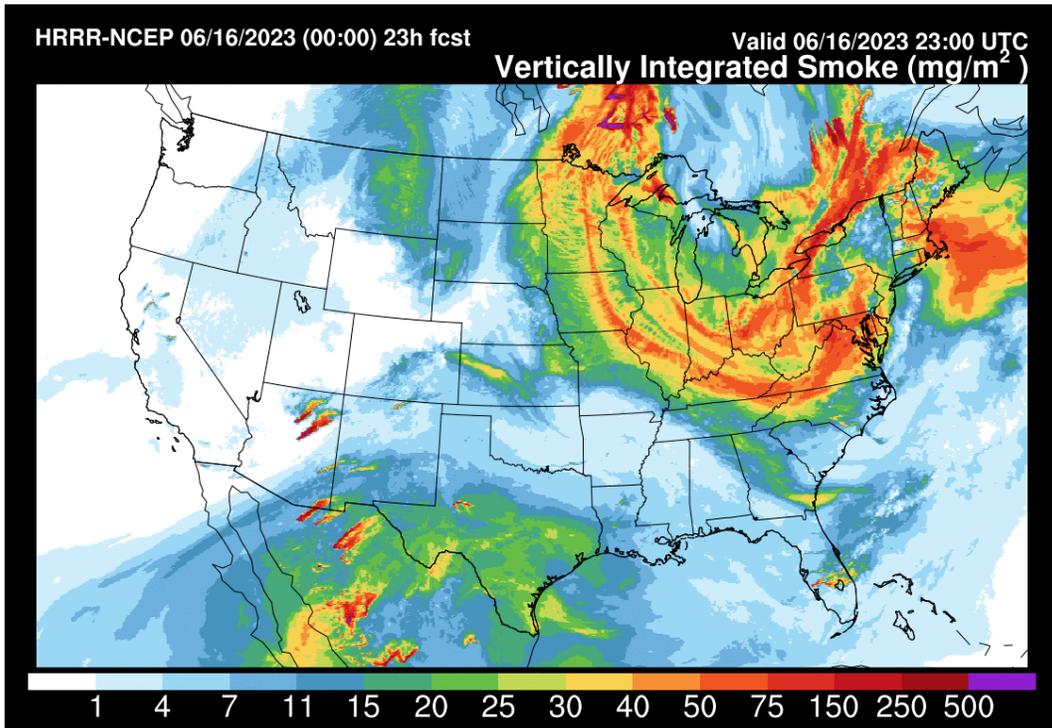
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 16, 2023



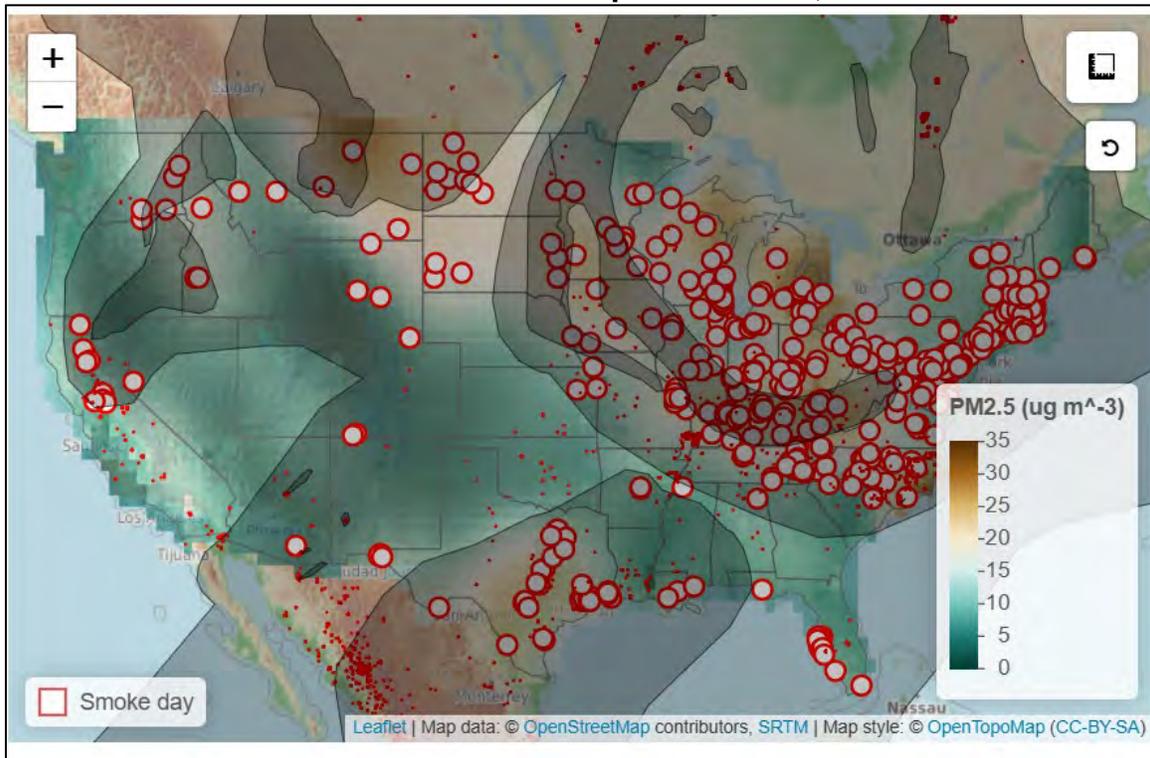
Satellite Imagery with MAIAC AOD – June 16, 2023



HRRR Smoke - Vertically Integrated Smoke – June 16, 2023



GAM PMO3 Smoke Output – June 16, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

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

SMOKE :

Canada/United States/Atlantic Ocean...

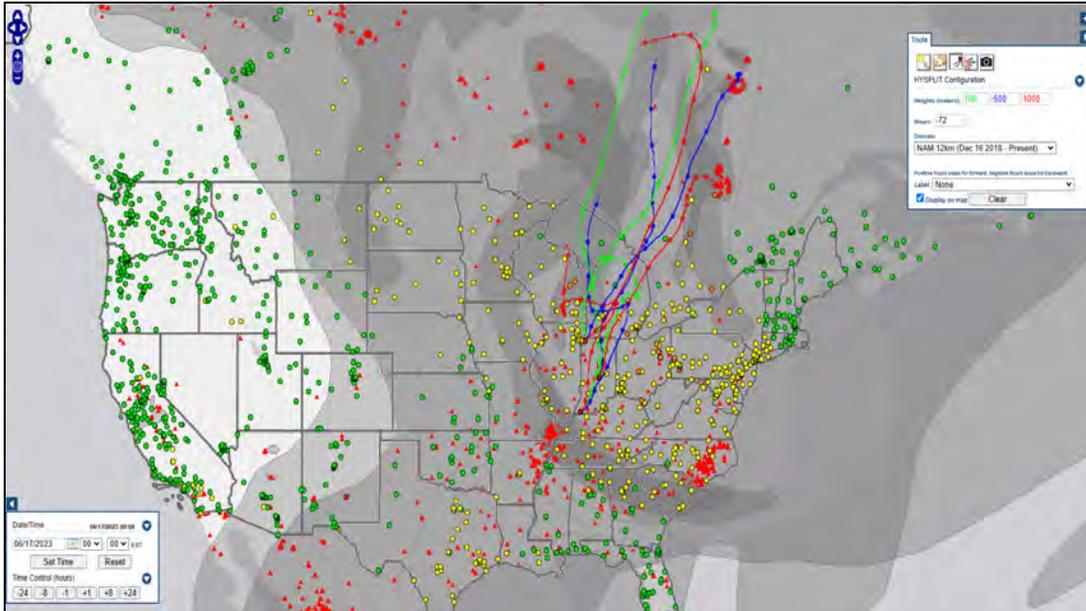
Numerous large wildfires scattered across portions of the southern half of Canada from northern British Columbia and the southwestern part of the Northwest Territories eastward over the southern tier of Canadian provinces to Quebec continued to result in a very large area of moderate to thick density smoke which covered parts of southern and central Canada. The southern part of the moderate to thick area of smoke also extended to the south over some of the northwestern U.S. and a sizable portion of the eastern half of the U.S. Thinner density smoke from these fires covered a sizable part of the Atlantic reaching as far east as Europe. Across the south-central United States, it is likely that the Canadian wildfire smoke merged with smoke spreading to the north from the ongoing widespread seasonal fire activity occurring in Mexico and Central America. Cloud cover over the southeastern U.S. prevented smoke detection in satellite imagery.

June 17, 2023

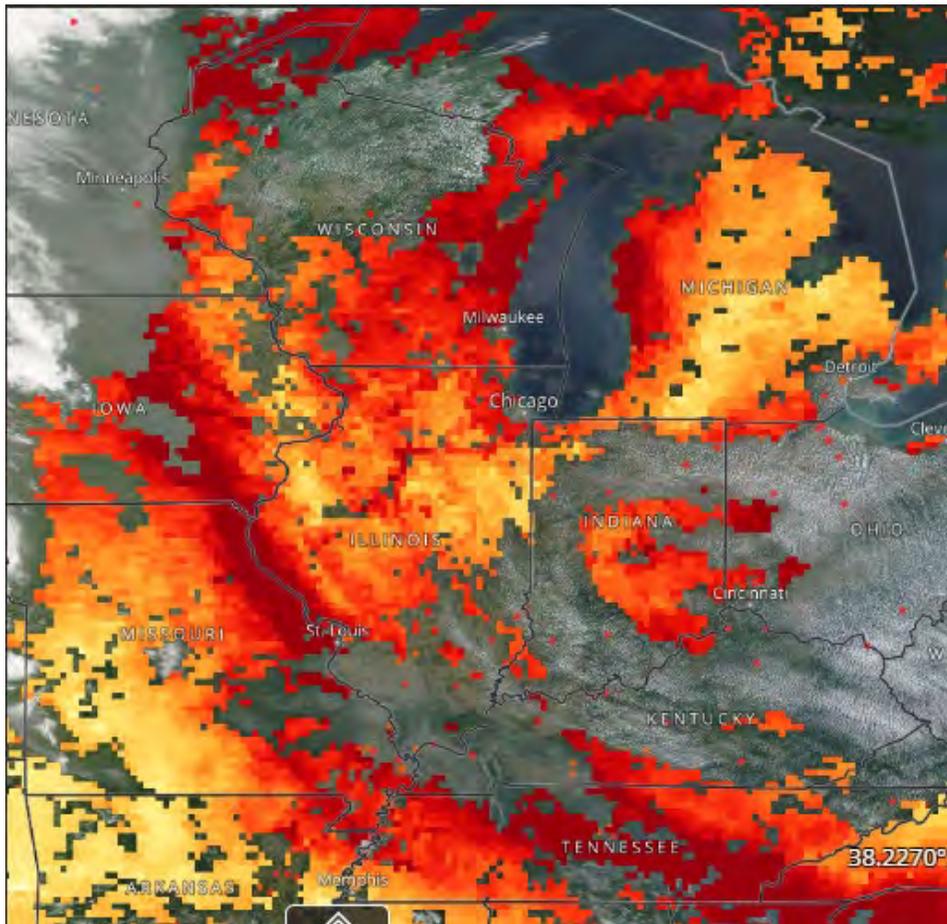
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/17/2023	24.0	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/17/2023	25.4	17.0
Muncie - Central HS	180350006	6/17/2023	25.2	13.2
Jasper - Post Office	180372001	6/17/2023	19.0	15.7
Elkhart - Prairie St	180390008	6/17/2023	23.8	16.3
New Albany	180430008	6/17/2023	24.6	20.9
Plummer	180550001	6/17/2023	18.9	14.7
Fishers	180570007	6/17/2023	21.7	13.8
Carmel - Hazel Dell Parkway	180570008	6/17/2023	22.0	16.5
Mechanicsburg	180650003	6/17/2023	22.7	15.5
Kokomo - E. Vaile Ave	180670004	6/17/2023	22.8	14.7
East Chicago - Franklin/Washington Sch	180890006	6/17/2023	20.0	16.1
Gary - Madison St	180890031	6/17/2023	28.8	16.0
East Chicago - Marina	180890034	6/17/2023	19.7	18.0
Hammond-167th St	180890036	6/17/2023	29.0	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/17/2023	18.6	15.9
Anderson - Eastside Elem	180950011	6/17/2023	29.1	15.4
Indianapolis - Washington Park	180970078	6/17/2023	32.2	17.8
Indianapolis - W. 18th St.	180970081	6/17/2023	25.3	20.9
Indianapolis - School 21	180970084	6/17/2023	24.2	15.5
Indianapolis- I-70 E	180970087	6/17/2023	33.2	20.5
Bloomington - Binford	181050003	6/17/2023	27.1	13.9
Ogden Dunes	181270024	6/17/2023	22.3	15.3
South Bend - Shields Dr.	181410015	6/17/2023	23.4	16.9
Evansville - U of E	181630016	6/17/2023	18.1	15.5
Evansville - Buena Vista	181630021	6/17/2023	21.1	15.1
Terre Haute - Lafayette Ave	181670018	6/17/2023	27.1	18.8
Larwill	181830003	6/17/2023	21.7	15.0

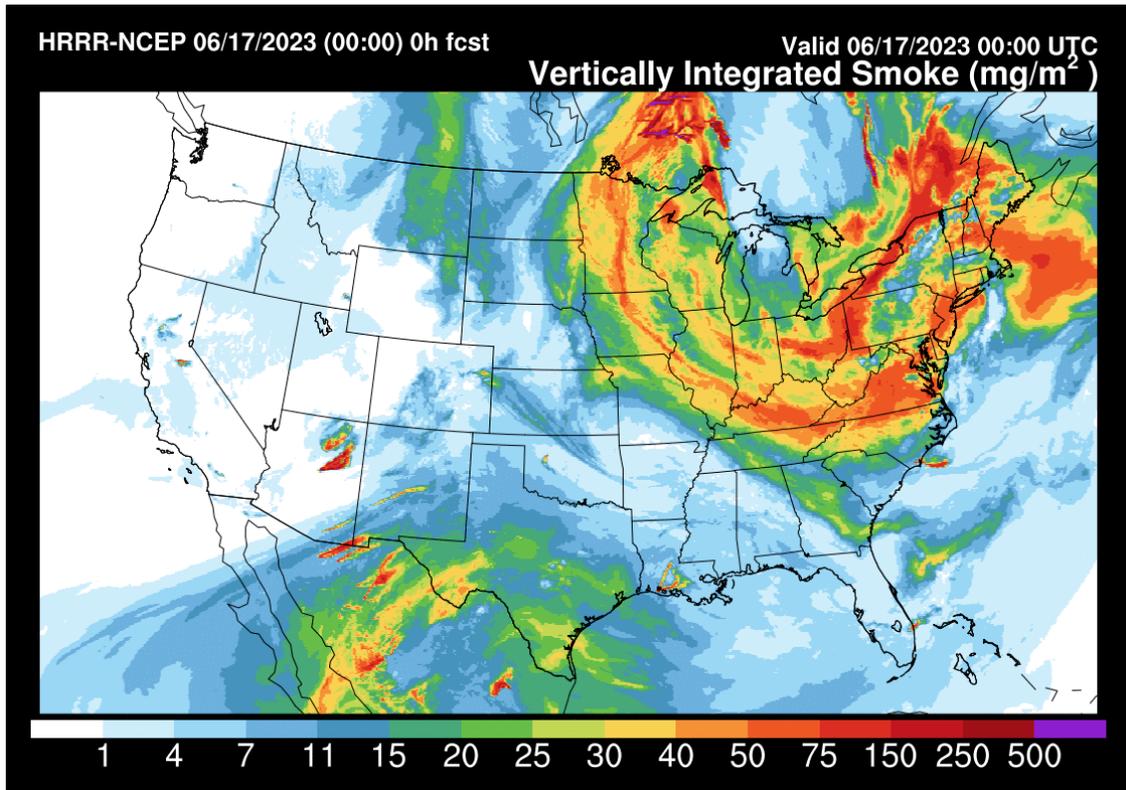
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 17, 2023



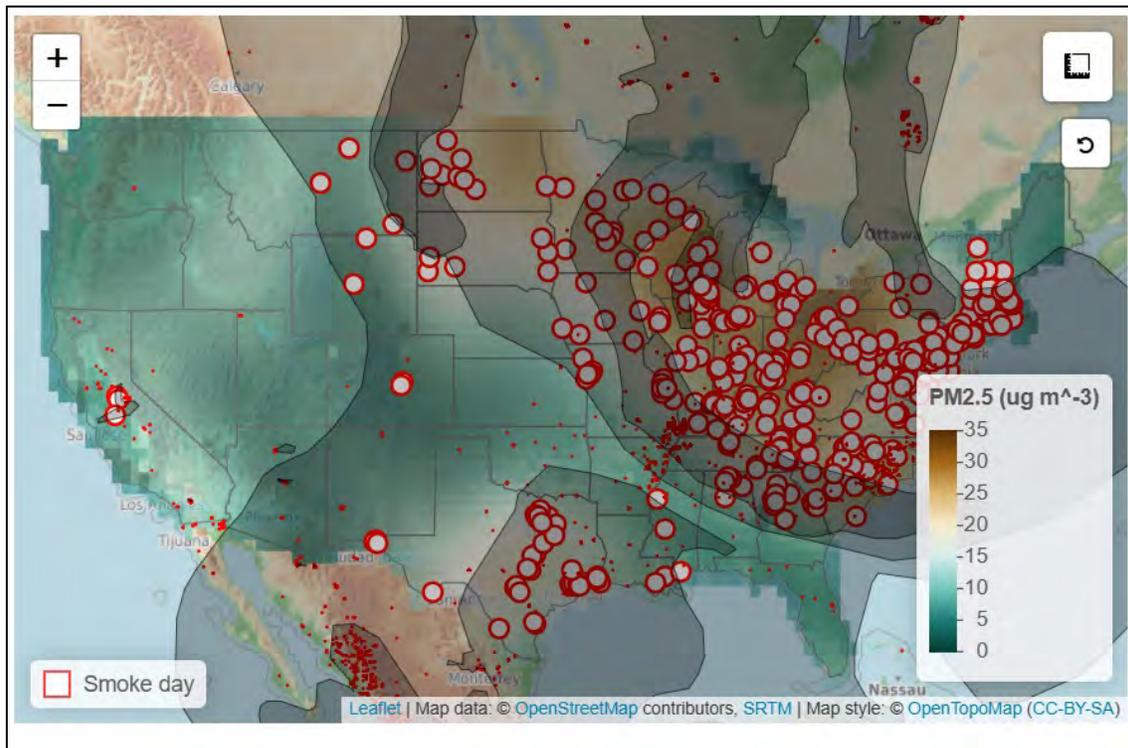
Satellite Imagery with MAIAC AOD – June 17, 2023



HRRR Smoke - Vertically Integrated Smoke – June 17, 2023



GAM PMO3 Smoke Output – June 17, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1645Z June 17, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

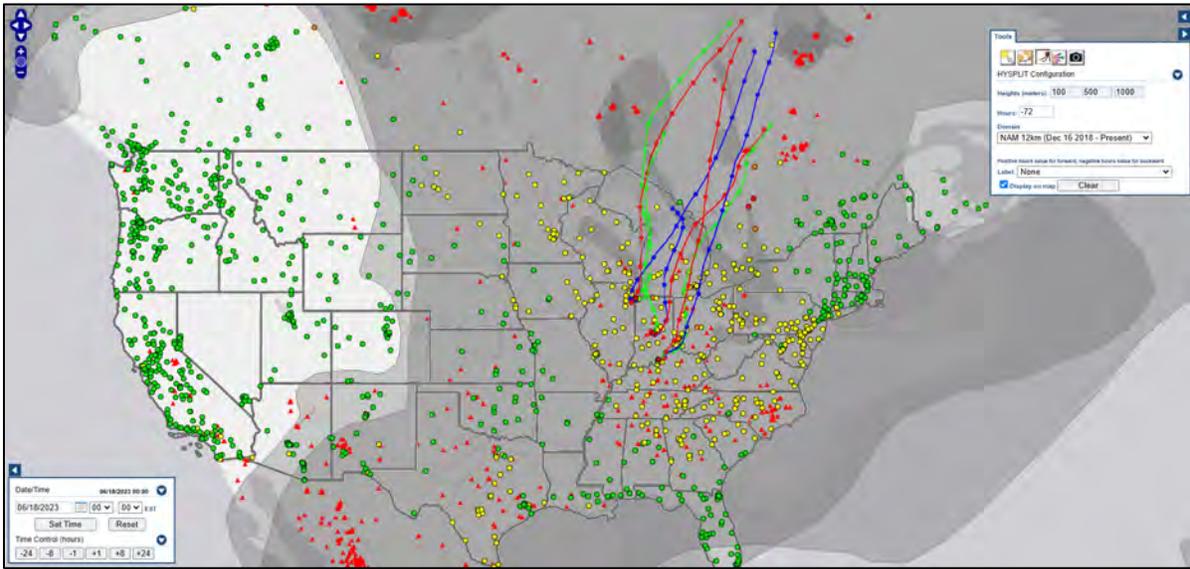
Numerous large wildfires scattered across portions of the southern half of Canada generally from northern British Columbia and the southwestern part of the Northwest Territories eastward over the southern tier of Canadian provinces to Quebec continued to result in a very large area of moderate to thick density smoke which covered parts of southern and central Canada. The southern part of the moderate to thick area of smoke also extended to the south into eastern Montana and the western Dakotas, and over the region from the Upper and Middle Mississippi Valley regions eastward to the Eastern U.S. Thinner density smoke from these fires covered a sizable part of the Atlantic reaching as far east as Europe though an embedded area of moderate to thick density smoke was also seen over the northern Atlantic from the southern tip Greenland to Iceland. Across the south-central United States, it is likely that the Canadian wildfire smoke merged with smoke spreading to the north from the ongoing widespread seasonal fire activity occurring in Mexico and Central America.

June 18, 2023

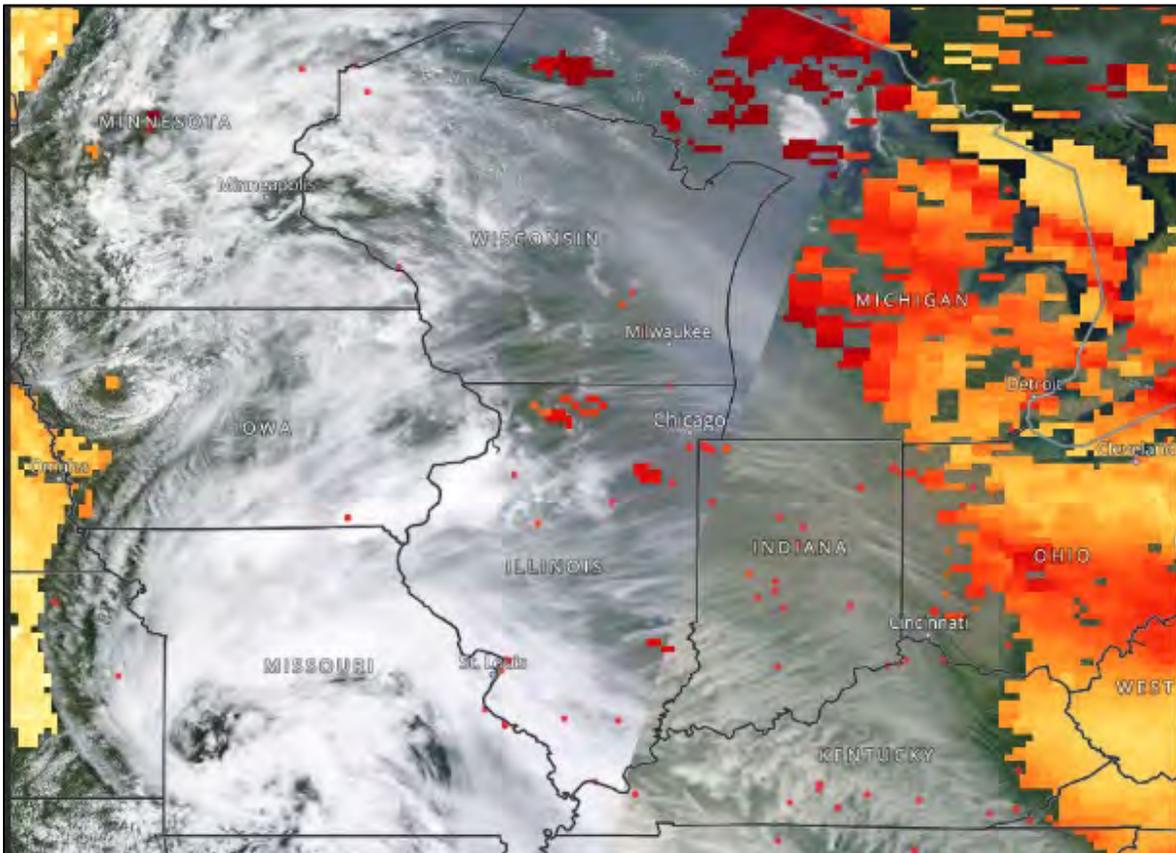
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/18/2023	22.8	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/18/2023	31.8	17.0
Elkhart - Prairie St	180390008	6/18/2023	30.2	16.3
New Albany	180430008	6/18/2023	27.0	20.9
Plummer	180550001	6/18/2023	27.4	14.7
Fishers	180570007	6/18/2023	23.8	13.8
Mechanicsburg	180650003	6/18/2023	29.0	15.5
Kokomo - E. Vaile Ave	180670004	6/18/2023	24.7	14.7
East Chicago - Marina	180890034	6/18/2023	29.6	18.0
Hammond-167th St	180890036	6/18/2023	29.6	16.3
Anderson - Eastside Elem	180950011	6/18/2023	30.9	15.4
Indianapolis - Washington Park	180970078	6/18/2023	33.5	17.8
Indianapolis - W. 18th St.	180970081	6/18/2023	39.3	20.9
Indianapolis- I-70 E	180970087	6/18/2023	36.2	20.5
Bloomington - Binford	181050003	6/18/2023	26.7	13.9
Ogden Dunes	181270024	6/18/2023	29.4	15.3
South Bend - Shields Dr.	181410015	6/18/2023	35.7	16.9
Lafayette - Greenbush St	181570008	6/18/2023	26.3	15.1
Evansville - Buena Vista	181630021	6/18/2023	23.7	15.1
Terre Haute - Lafayette Ave	181670018	6/18/2023	30.1	18.8
Larwill	181830003	6/18/2023	29.8	15.0

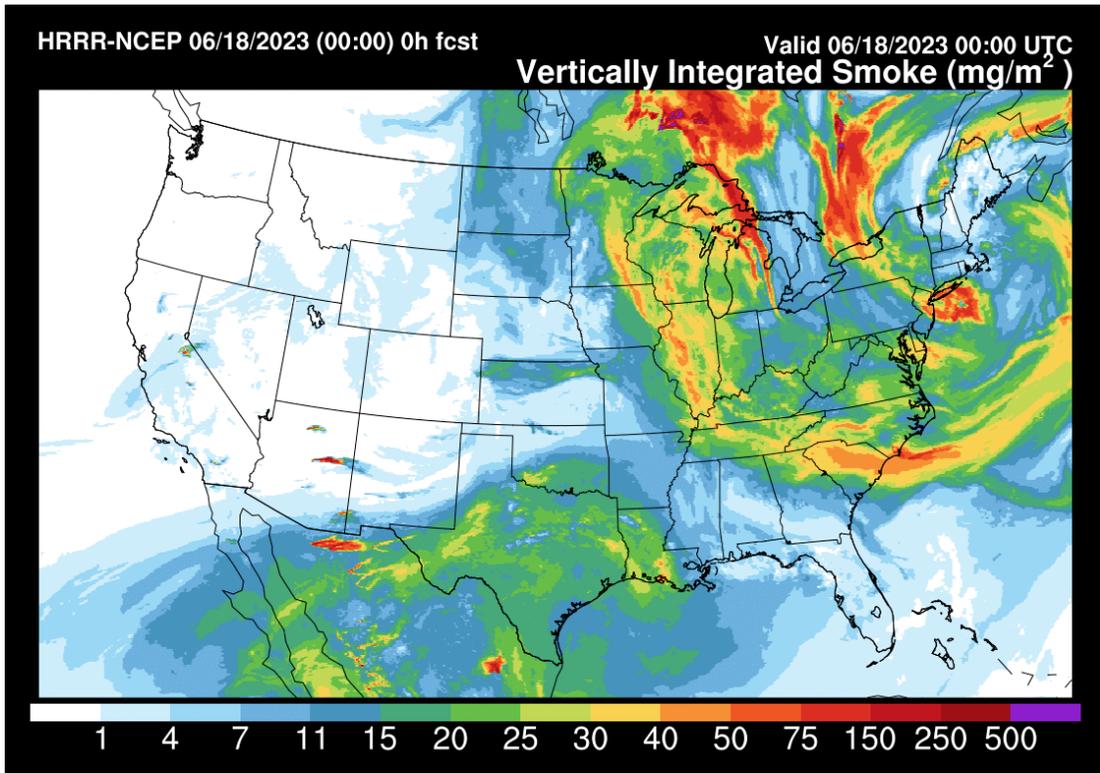
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 18, 2023



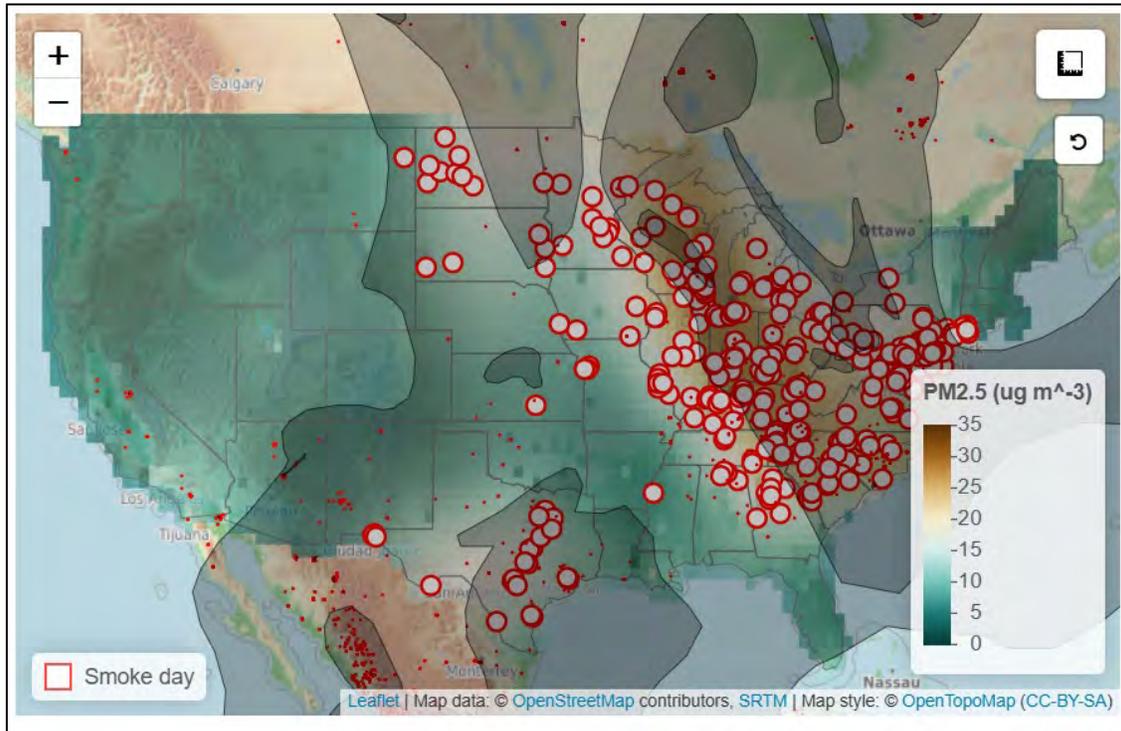
Satellite Imagery with MAIAC AOD – June 18, 2023



HRRR Smoke - Vertically Integrated Smoke – June 18, 2023



GAM PMO3 Smoke Output – June 18, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

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

SMOKE:

Canada/United States/Atlantic Ocean...

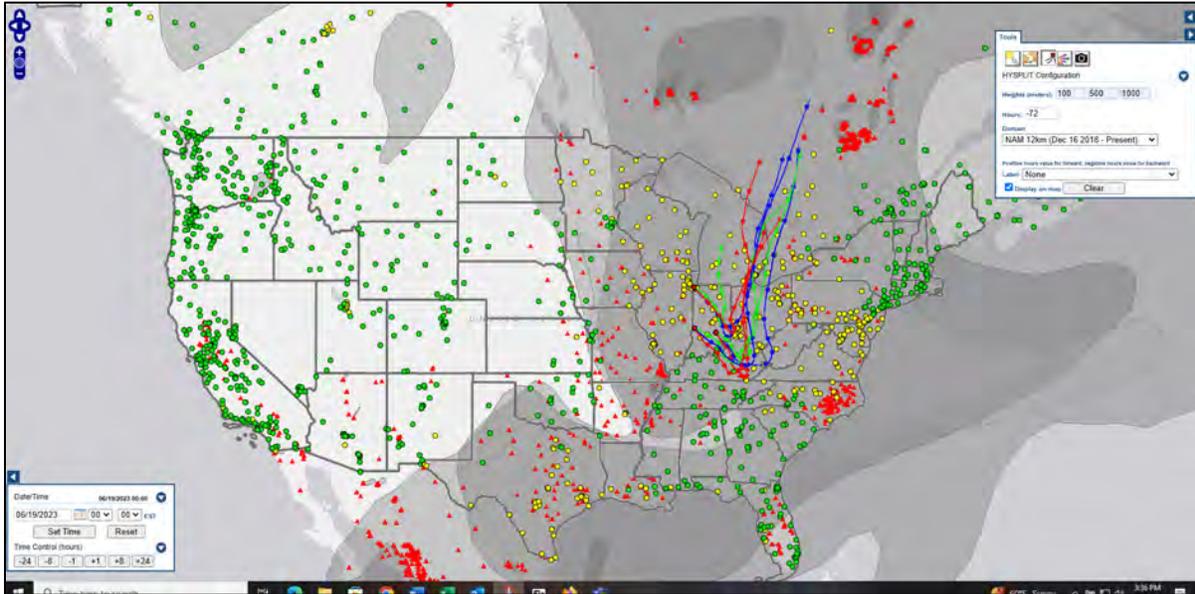
Cloudiness has spread over some of the wildfires in various spots across Canada which has affected both fire and smoke detection in satellite imagery. This was especially true over western and central Canada. The numerous large wildfires (some of which are still visible in satellite imagery), which have been scattered across portions of the southern half of Canada generally from northern British Columbia and the southwestern part of the Northwest Territories eastward over the southern tier of Canadian provinces to Quebec over the past number of weeks, continued to result in patches of moderate to thick density smoke which covered parts of Canada. Moderate to thick smoke also spread to the south and southeast from the Upper Mississippi Valley and Great Lakes regions to and off the Mid-Atlantic and southeastern U.S. coast. Thinner density smoke from these fires covered a sizable part of the Atlantic reaching as far east as Europe. Embedded relatively smaller areas of moderate to thick density smoke were also seen over the northern Atlantic. In addition, it is likely that the southern portion of the smoke from Canada merged with smoke spreading northward from Mexico somewhere over the south central and southeastern U.S.

June 19, 2023

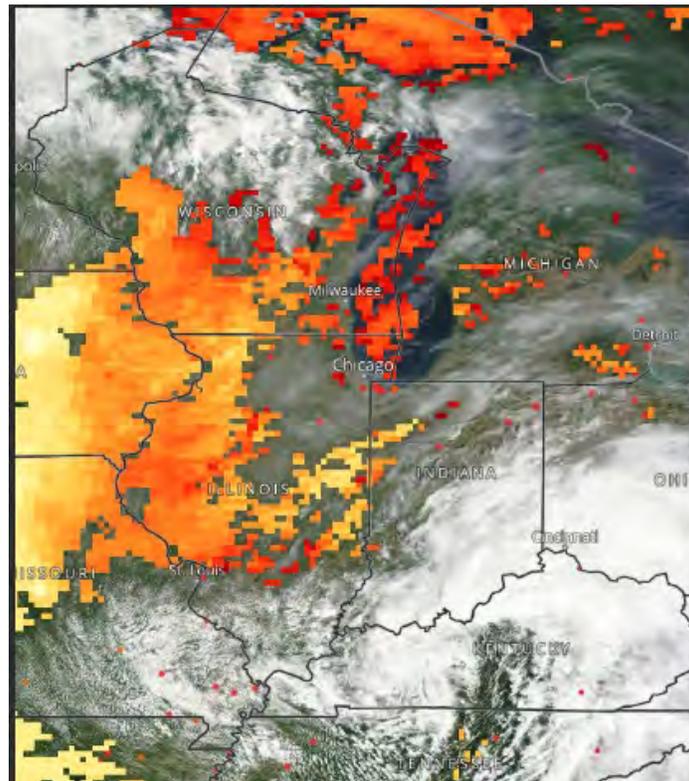
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/19/2023	16.2	13.7
Elkhart - Prairie St	180390008	6/19/2023	17.1	16.3
Plummer	180550001	6/19/2023	15.0	14.7
Fishers	180570007	6/19/2023	19.4	13.8
Mechanicsburg	180650003	6/19/2023	23.6	15.5
Kokomo - E. Vaile Ave	180670004	6/19/2023	20.7	14.7
East Chicago - Marina	180890034	6/19/2023	19.9	18.0
Hammond-167th St	180890036	6/19/2023	23.4	16.3
Anderson - Eastside Elem	180950011	6/19/2023	23.4	15.4
Indianapolis - Washington Park	180970078	6/19/2023	22.7	17.8
Indianapolis - W. 18th St.	180970081	6/19/2023	24.6	20.9
Indianapolis- I-70 E	180970087	6/19/2023	23.5	20.5
Bloomington - Binford	181050003	6/19/2023	14.1	13.9
Ogden Dunes	181270024	6/19/2023	19.1	15.3
South Bend - Shields Dr.	181410015	6/19/2023	18.9	16.9
Lafayette - Greenbush St	181570008	6/19/2023	21.6	15.1
Terre Haute - Lafayette Ave	181670018	6/19/2023	20.4	18.8
Larwill	181830003	6/19/2023	17.2	15.0

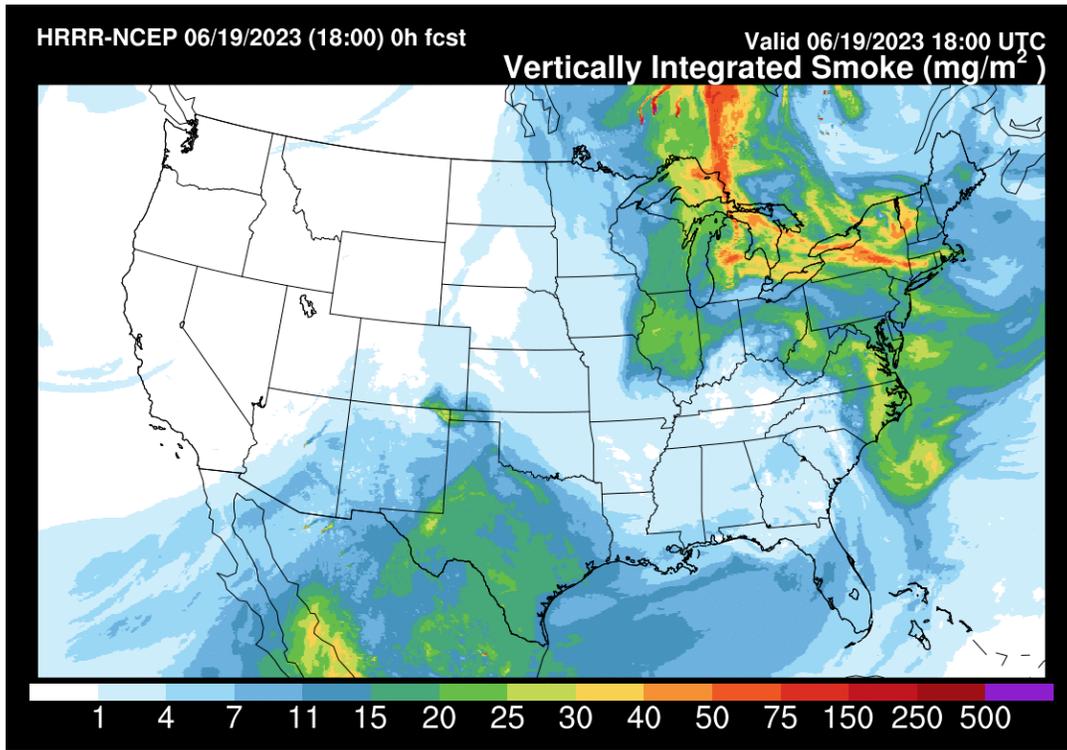
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 19, 2023



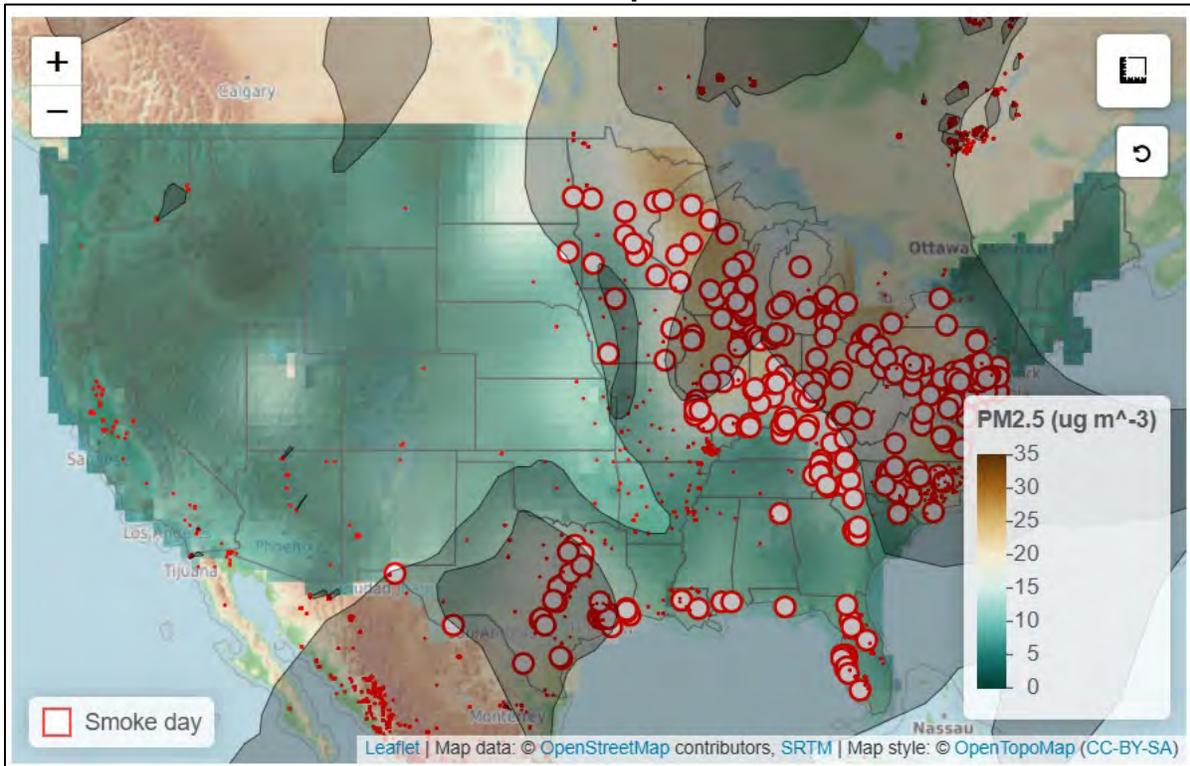
Satellite Imagery with MAIAC AOD – June 19, 2023



HRRR Smoke - Vertically Integrated Smoke – June 19, 2023



GAM PMO3 Smoke Output – June 19, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1555Z June 19, 2023

SMOKE:

Canada/United States/Atlantic Ocean...

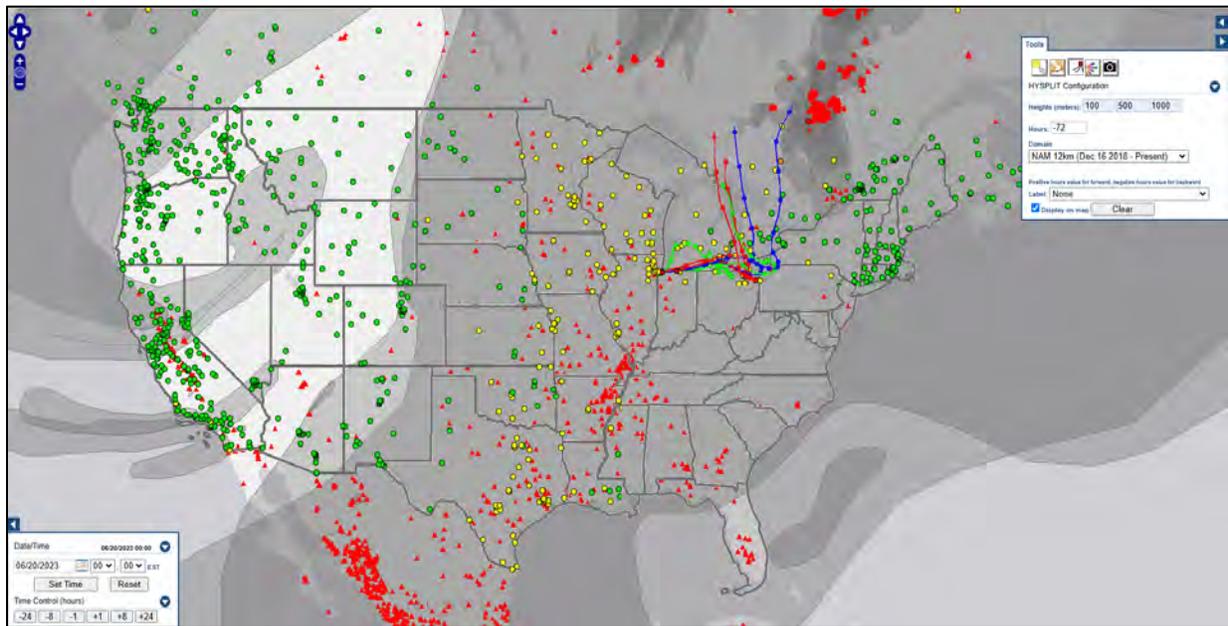
Wildfire activity in Canada was relatively less pronounced earlier this morning with large active clusters limited to central Quebec and central Ontario. Those areas coincide with the highest concentration of smoke in the satellite imagery. Despite the reduction in fire activity, moderate-density smoke continued to impact a large area extending from northeastern Manitoba, covering much of Ontario, western Quebec, descending into the Great Lakes and adjacent areas, and further into the Mid-Atlantic U.S. and over the Atlantic Ocean waters to the east. Lighter density smoke was observed over the areas above, and extended into most of northern Canada from the Northwestern Territories all the way to Newfoundland and the Labrador Sea, and over the eastern half and the U.S. Changes to the prevailing weather pattern are likely to help improve air quality conditions across the Mid-West and Mid-Atlantic U.S. states since the bulk of the smoke can now be seen moving away from those areas and towards the northeast and over the Atlantic Ocean.

June 20, 2023

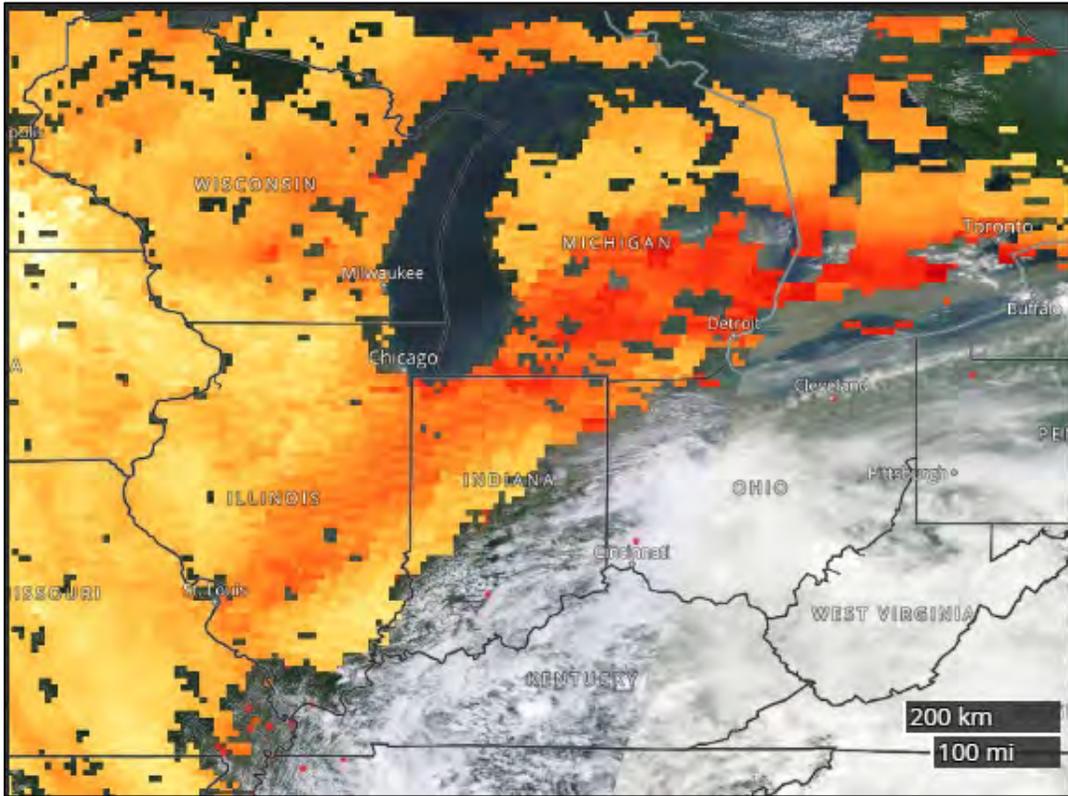
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	6/20/2023	16.8	16.3
East Chicago - Franklin/Washington Sch	180890006	6/20/2023	19.9	16.1
East Chicago - Marina	180890034	6/20/2023	21.5	18.0
Hammond-167th St	180890036	6/20/2023	22.4	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/20/2023	18.1	15.9
Ogden Dunes	181270024	6/20/2023	20.3	15.3
South Bend - Shields Dr.	181410015	6/20/2023	18.4	16.9

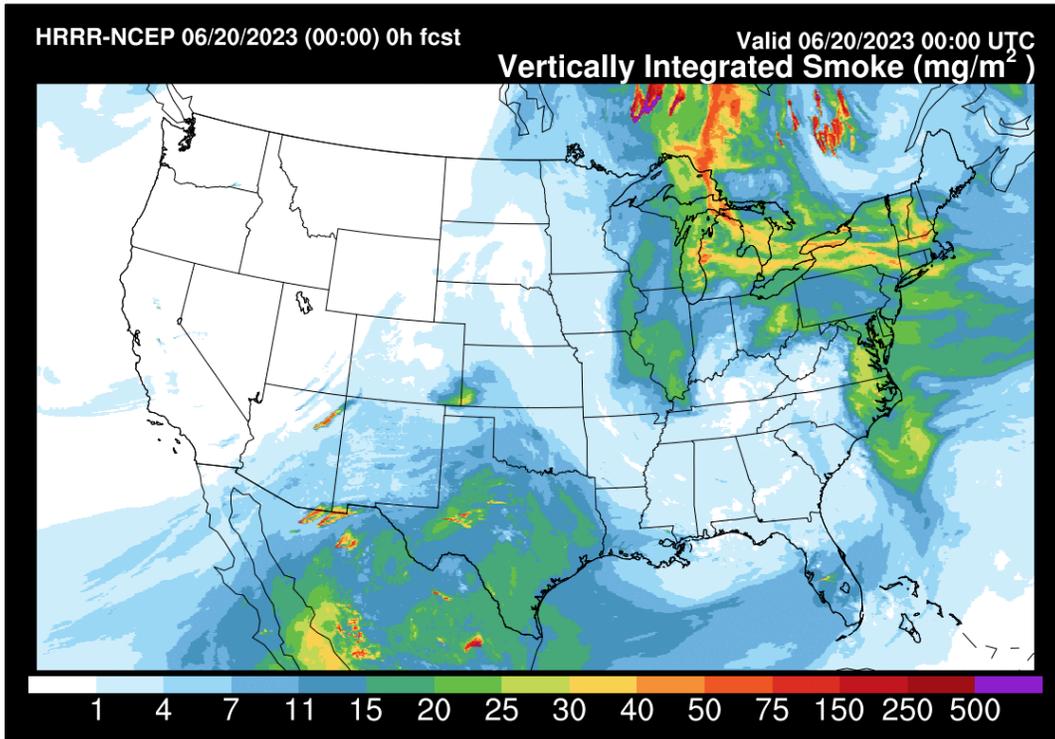
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 20, 2023

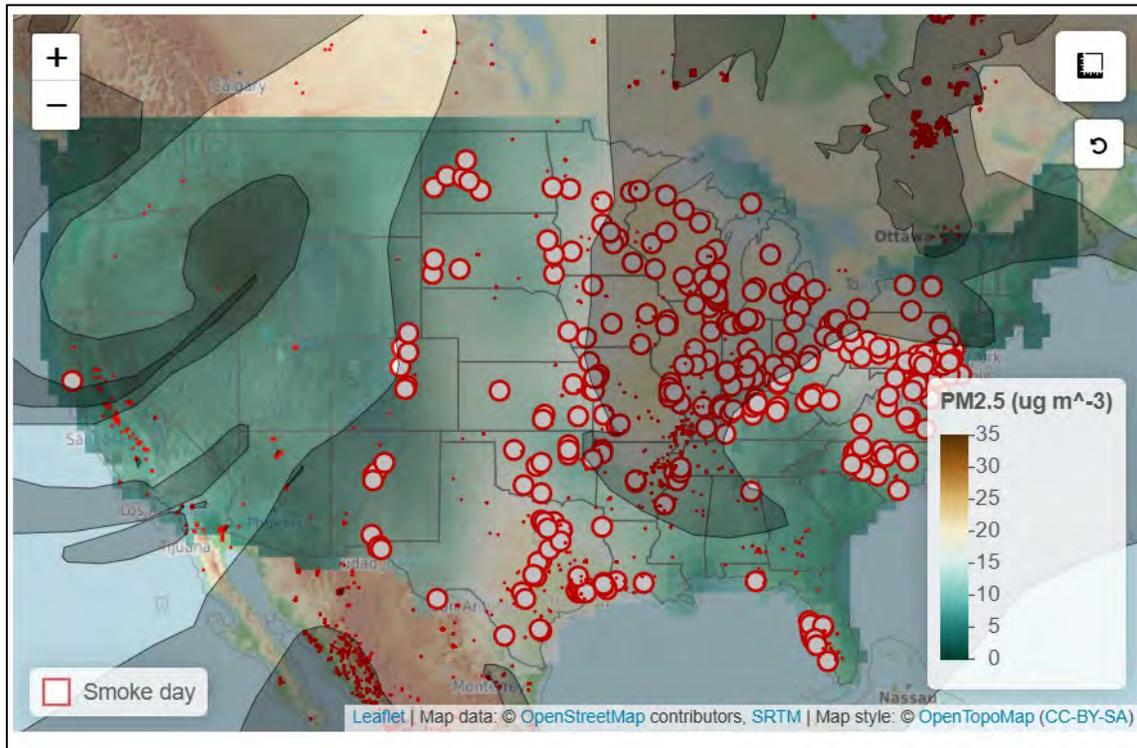


Satellite Imagery with MAIAC AOD – June 20, 2023



HRRR Smoke - Vertically Integrated Smoke – June 20, 2023



GAM PM03 Smoke Output – June 20, 2023**NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts****DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z June 20, 2023****SMOKE :**

Canada/United States/Atlantic Ocean/Pacific Ocean off the West Coast of Southwestern Canada and the Western U.S...

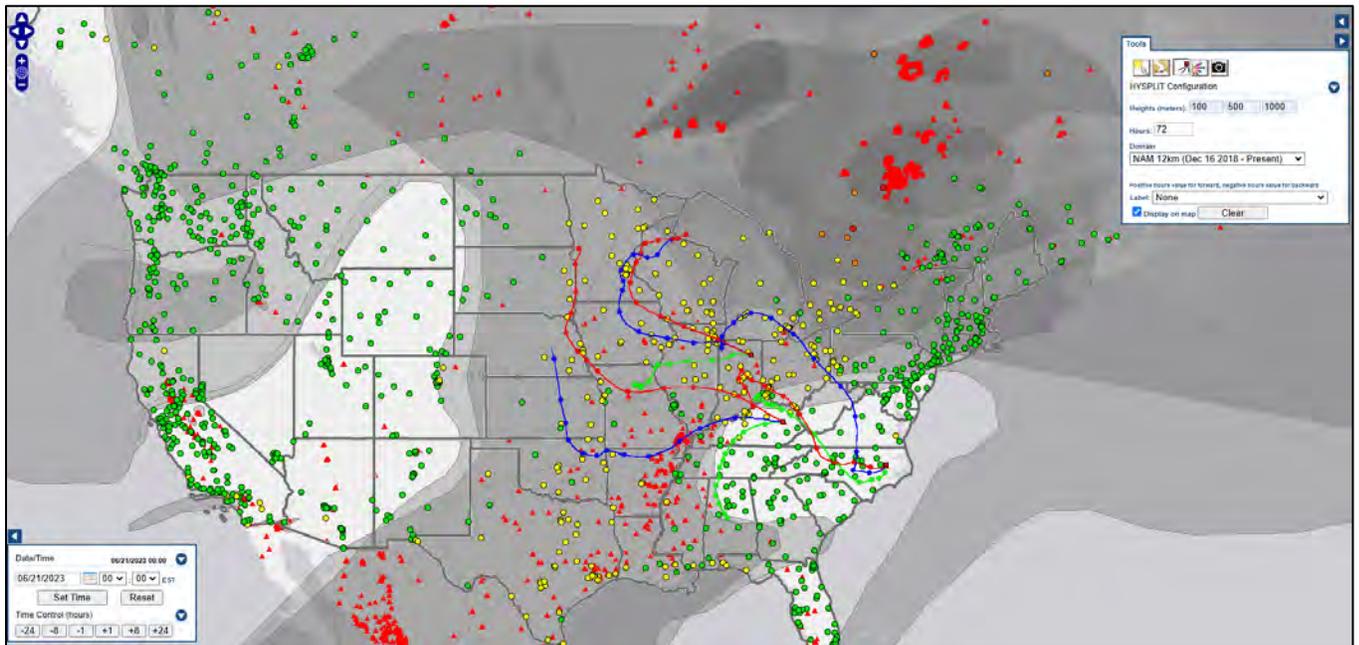
Despite some areas of cloud cover, significant wildfire activity was still noted scattered across the area stretching from the southwest part of the Northwest Territories and northeastern British Columbia eastward to central and southern Quebec. Visible smoke was also prevalent over a good portion of Canada and extending southward into much of the U.S. east of the Rockies. Additionally, the smoke stretched well offshore of eastern Canada and the eastern U.S. over the Atlantic likely reaching Europe. More smoke from these fires appeared to spread to the southwest and south from western Canada offshore over the Pacific Ocean and then back inland over portions of California. The thickest smoke was seen over central and southern Quebec as well as central and northern Ontario and the southern part of Hudson Bay. Smaller patches of thicker smoke were also seen across parts of British Columbia. Moderate smoke was visible across some of the central U.S. and extending to the east over the Great Lakes region and Northeast though significant cloud cover over the eastern and southeastern U.S. limited additional information on the extent and density of smoke in these regions from satellite imagery. It is also likely that the smoke from the Canadian fires merged with smoke from fires in Mexico somewhere over the south central and southeastern U.S.

June 21, 2023

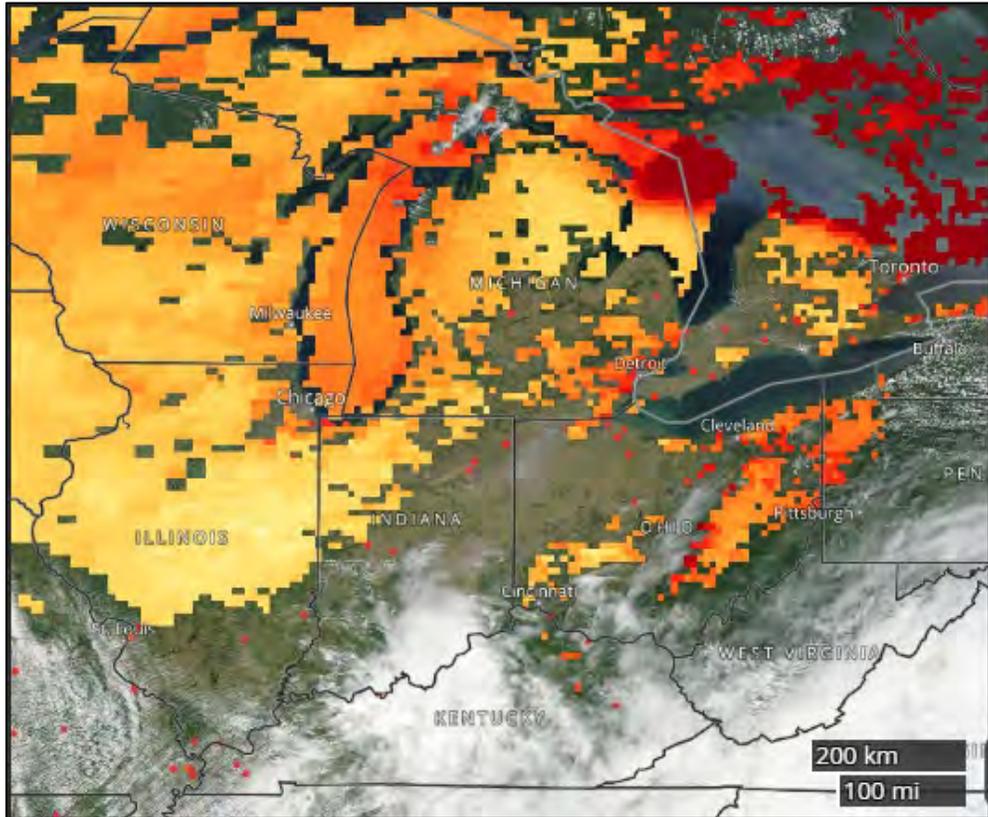
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	6/21/2023	16.3	16.3
Mechanicsburg	180650004	6/21/2023	16.6	15.5
Kokomo - E Vaile Ave	180670004	6/21/2023	13.9	13.9
East Chicago - Marina	180890034	6/21/2023	19.2	18.0
Hammond-167th St	180890036	6/21/2023	22.6	16.3
Anderson - Eastside Elem	180950011	6/21/2023	16.3	15.4
Bloomington - Binford	181050003	6/21/2023	14.0	13.9
Ogden Dunes	181270024	6/21/2023	21.0	15.3
South Bend - Shields Dr.	181410015	6/21/2023	20.3	16.9
Larwill	181830003	6/21/2023	18.9	15.0

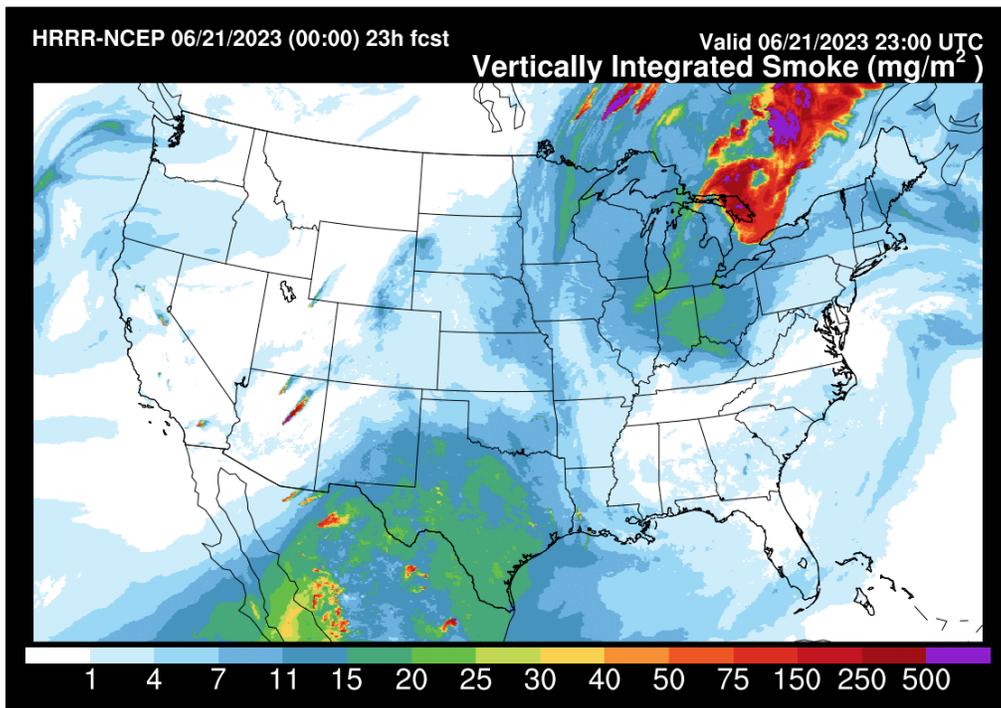
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 21, 2023



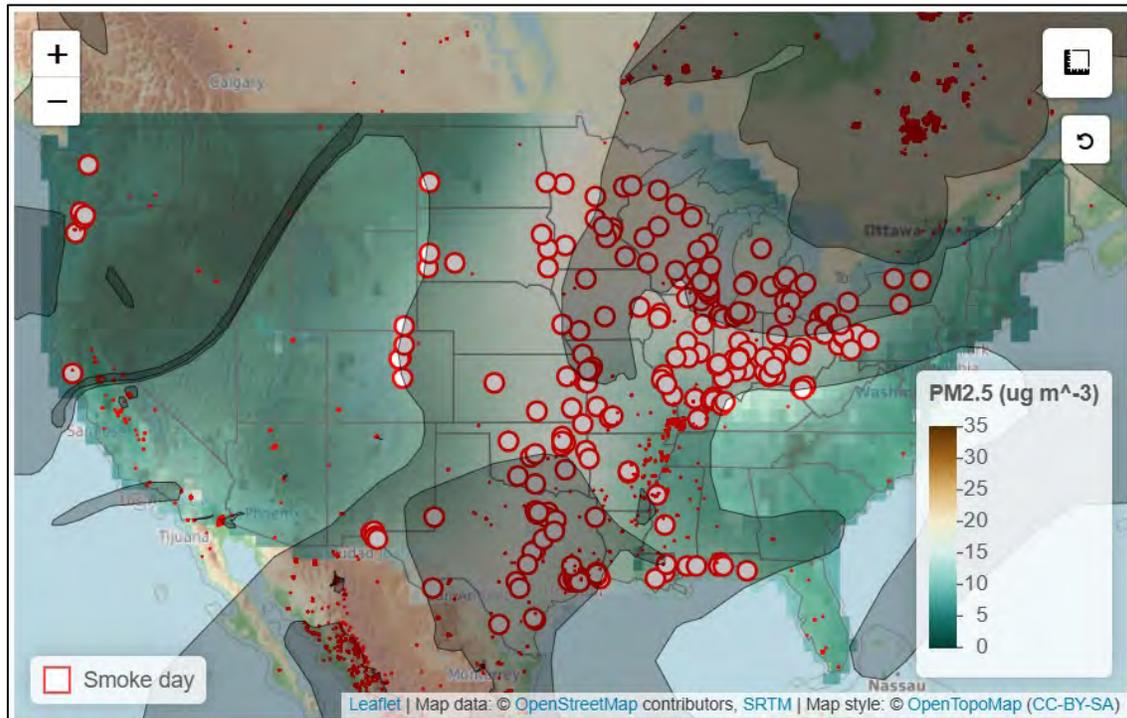
Satellite Imagery with MAIAC AOD – June 21, 2023



HRRR Smoke - Vertically Integrated Smoke – June 21, 2023



GAM PMO3 Smoke Output – June 21, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z June 21, 2023

SMOKE:

Canada/United States/Atlantic Ocean/Pacific Ocean off the West Coast of Southwestern Canada and the Western U.S...

Significant wildfire activity continued especially over western Canada including northern and northeastern British Columbia, northern Alberta, and the southwest part of the northwest Territories as well as central and eastern Canada including west central Ontario and central and southern Quebec. Smoke from these fires covered virtually all of Canada and extended southward into some of the northwestern and western U.S. and the Pacific off the southwest coast of Canada and the U.S. west coast as well as most of the U.S. from the front range of the Rockies eastward to the east coast. The smoke also had spread out across much of the northern and central Atlantic, likely reaching Europe. The thickest smoke linked to the fires in Ontario and Quebec was seen over central and eastern Ontario and the central and southwestern part of Quebec with the edge of the thick smoke appearing to brush some of Lake Huron and the northern portion of New York state. A much larger surrounding area of moderate smoke mainly from the Ontario and Quebec fires affected a larger part of south central and southeastern Canada and the north central U.S. including the Great Lakes region. Farther to the west, patches of thicker density smoke were noted over central and eastern British Columbia, northern Alberta, and the southwest part of the Northwest

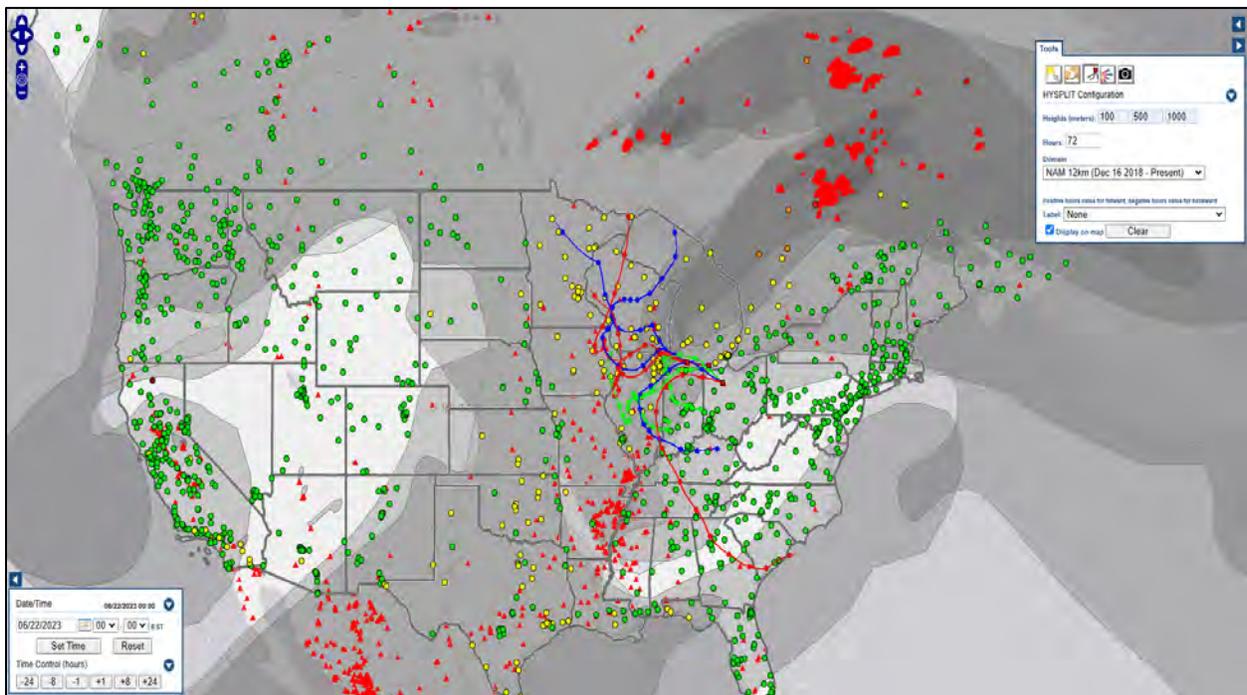
Territories. Also, a very narrow curving band of possible moderate density smoke, attributed to the western Canada fires, was spreading from the far eastern Pacific inland over central California and extending to the northeast from there to central Montana. It is likely that the smoke from the Canadian fires merged with smoke from the fires in Mexico somewhere over the south central and southeastern U.S.

June 22, 2023

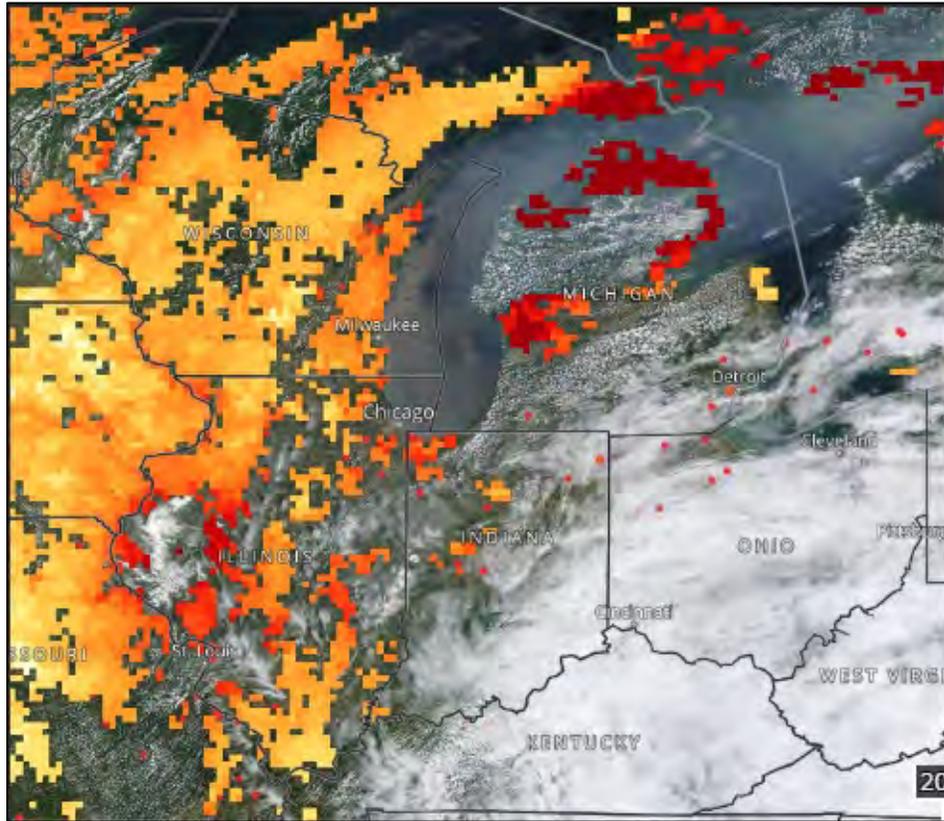
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
East Chicago - Marina	180890034	6/22/2023	20.5	18.0
Hammond-167th St	180890036	6/22/2023	23.3	16.3
Ogden Dunes	181270024	6/22/2023	18.9	15.3

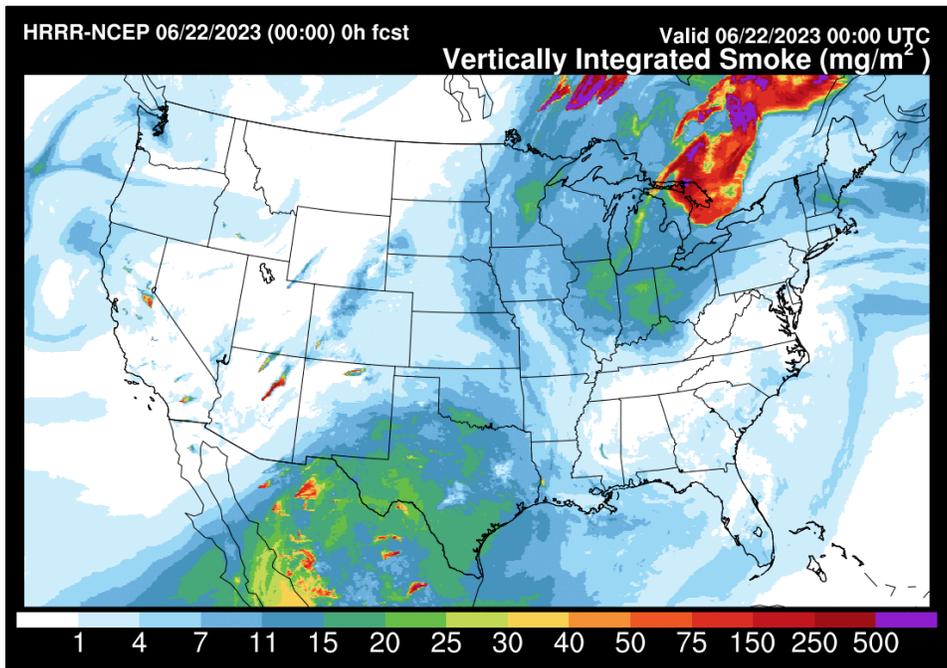
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 22, 2023



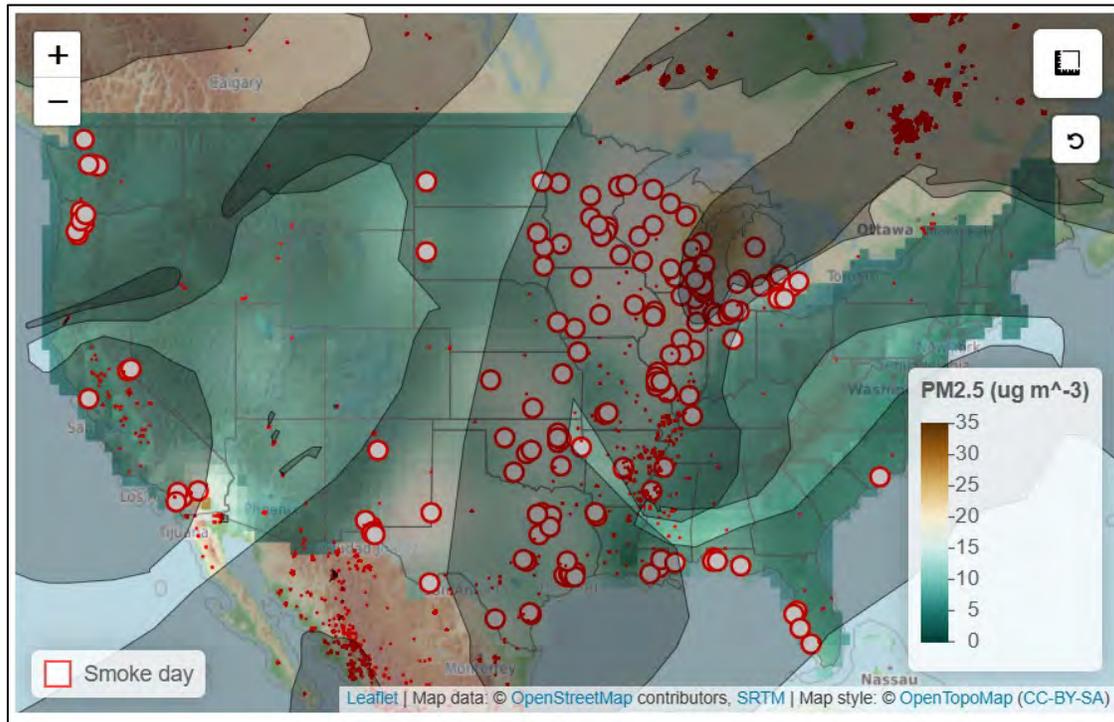
Satellite Imagery with MAIAC AOD – June 22, 2023



HRRR Smoke - Vertically Integrated Smoke – June 22, 2023



GAM PM03 Smoke Output – June 22, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z June 22, 2023

SMOKE:

Canada/U.S./Atlantic/Pacific...

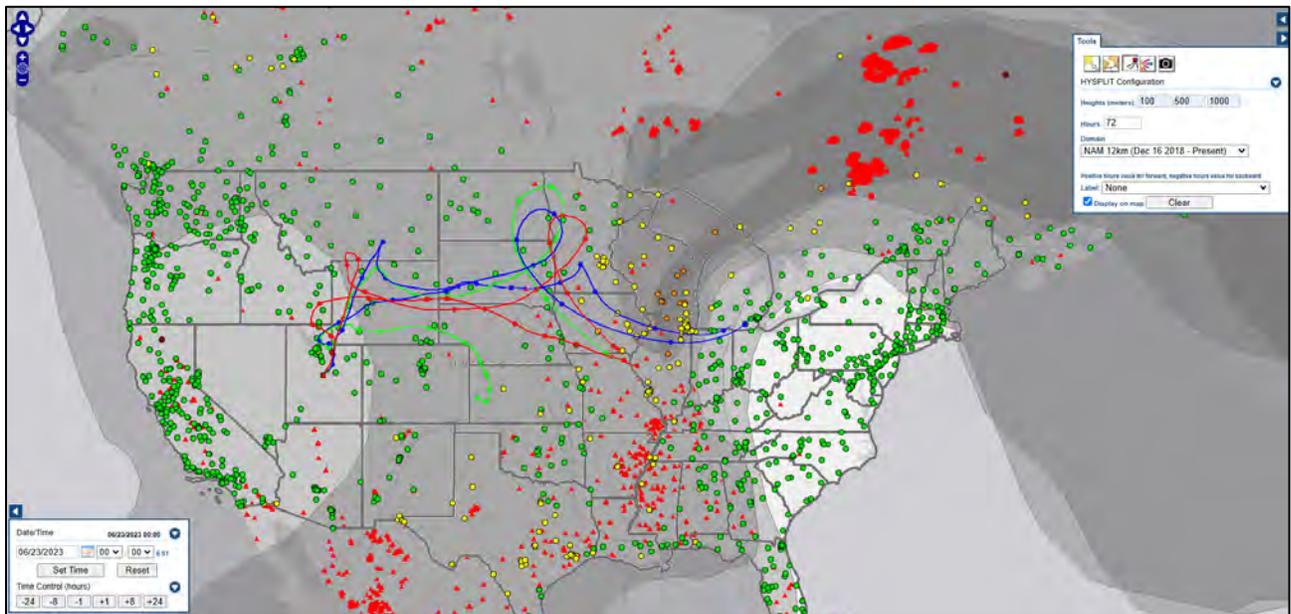
Significant wildfire activity continued especially over western Canada including northern and northeastern British Columbia, northern Alberta, and the southwest part of the Northwest Territories as well as central and eastern Canada including west-central Ontario and central and southern Quebec. Smoke from these fires covered a large part of Canada and extended southward into parts northwestern, central, and northeastern U.S. The smoke also had spread eastward across parts of the northern and central Atlantic likely reaching Europe. The thickest smoke linked to the wildfires in Ontario and Quebec was observed spreading to the east over central and eastern Ontario, the southern tip of Hudson Bay, and central and southern Quebec. A portion of the thicker smoke also appeared to impact the lower peninsula of Michigan and some of Lake Michigan and Lake Huron and far northern Maine. A larger surrounding area of moderate smoke mainly from the Ontario and Quebec fires affected parts of the north central and central U.S.

June 23, 2023

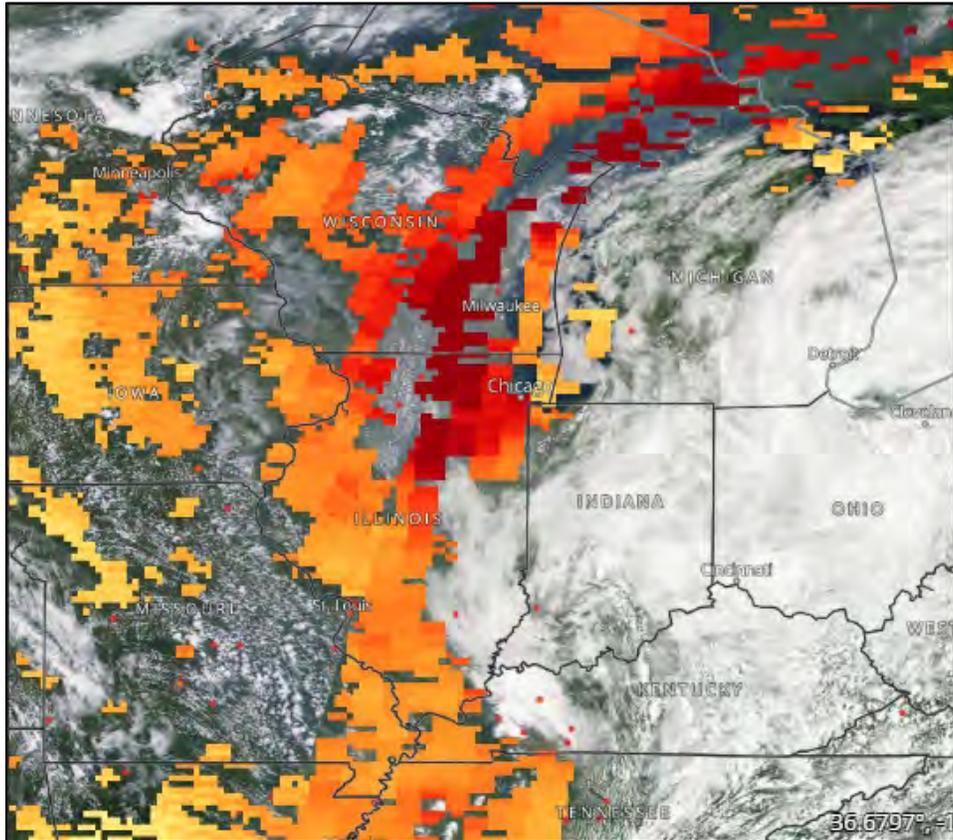
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
East Chicago - Franklin/Washington Sch	180890006	6/23/2023	23.2	16.1
Gary - Madison St	180890031	6/23/2023	31.9	16.0
East Chicago - Marina	180890034	6/23/2023	24.4	18.0
Hammond-167th St	180890036	6/23/2023	24.8	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/23/2023	20.2	15.9
Ogden Dunes	181270024	6/23/2023	23.1	15.3

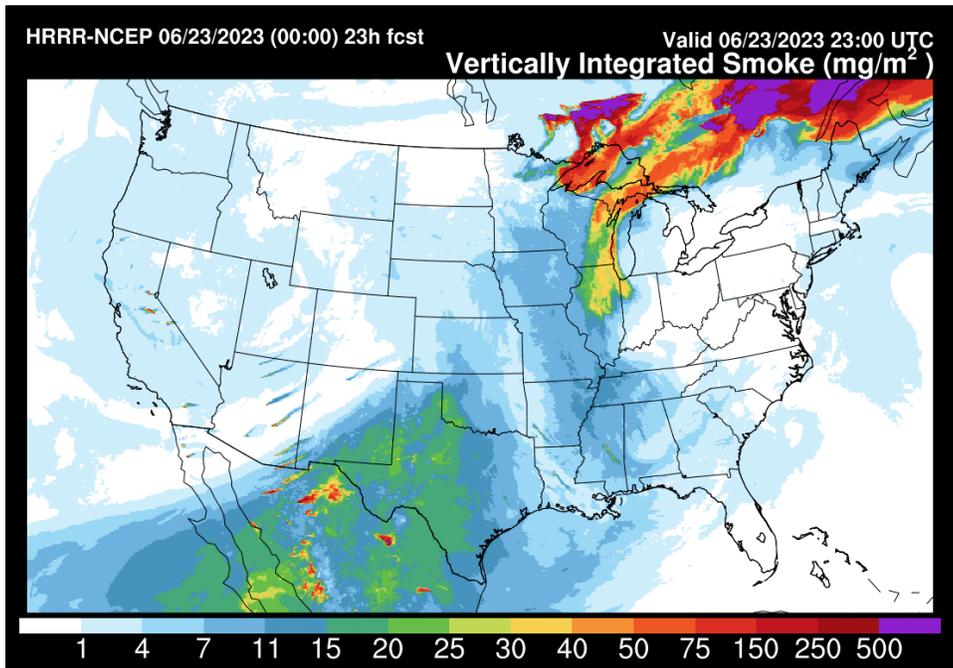
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 23, 2023



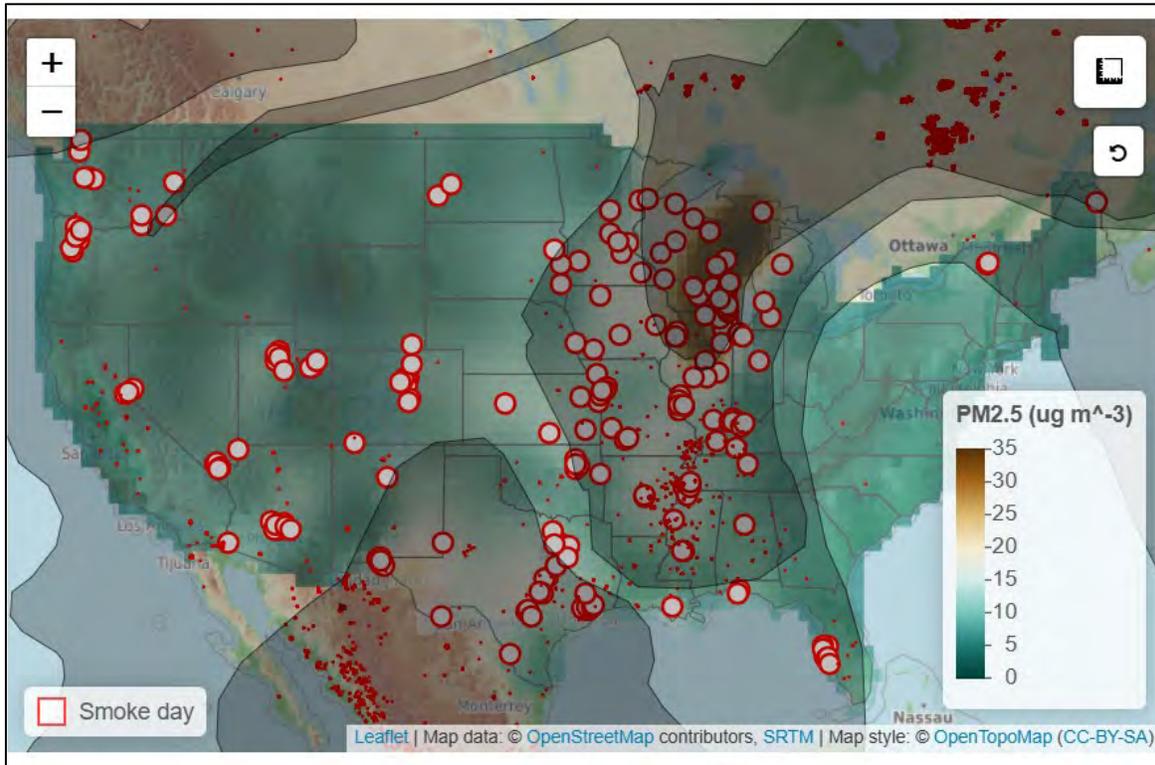
Satellite Imagery with MAIAC AOD – June 23, 2023



HRRR Smoke - Vertically Integrated Smoke – June 23, 2023



GAM PMO3 Smoke Output – June 23, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1645Z June 23, 2023

SMOKE:

Canada/U.S./Atlantic Ocean/Pacific Ocean off the West Coast of Canada and the U.S...

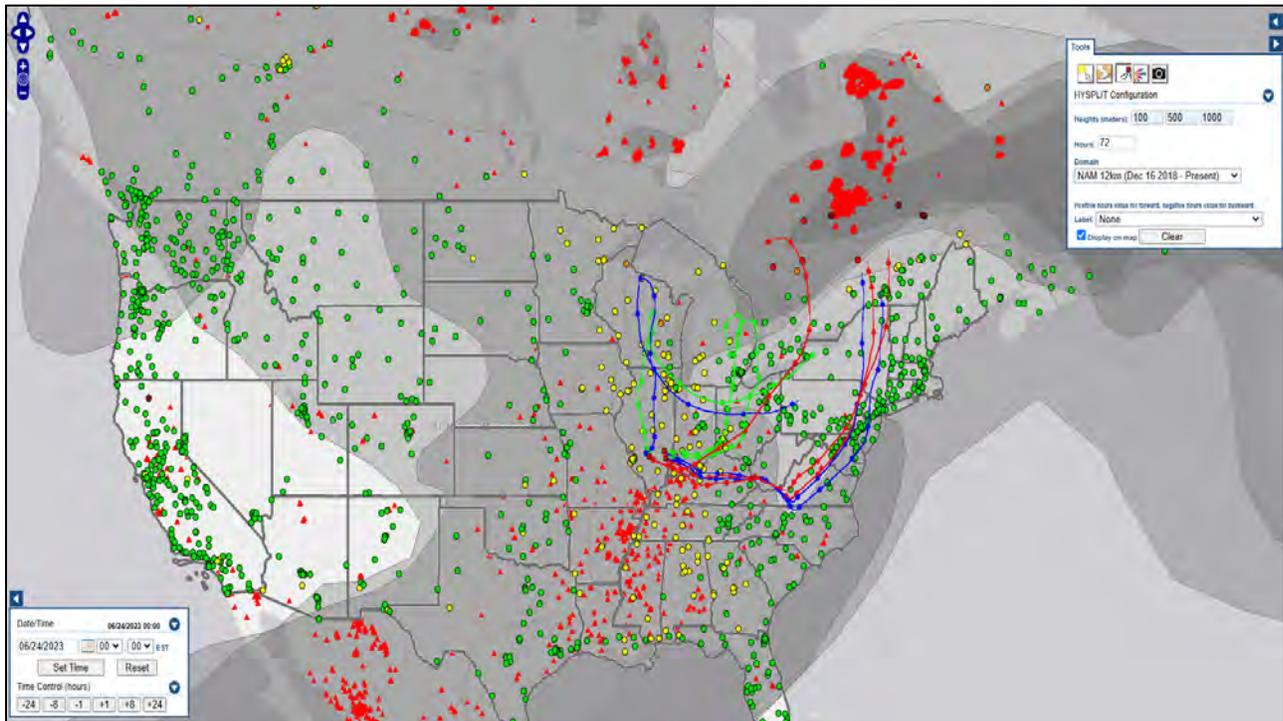
The major wildfire outbreak across portions of Canada continues with extensive smoke blanketing much of Canada and extending to the south over roughly the western two-thirds of the U.S. and the far northeastern part of the U.S. The smoke also stretched way off the east coasts of Canada and the U.S. over the northern and central Atlantic reaching Europe. To the west, some of the thinner density smoke had spread to the west and south off the southwestern coast of Canada over the far eastern Pacific and then moved to the east and northeast from there and back inland over the western U.S. The thickest smoke was emanating from massive wildfires in central and southern Quebec and moving to the east over southeastern Canada and far northern Maine before curving to the southeast as it moved well off the coast over the Atlantic. Other areas of thick smoke attributed to the Quebec fires as well as large fires in south central Ontario spread to the south and southwest reaching some of the western Great Lake's region..

June 24, 2023

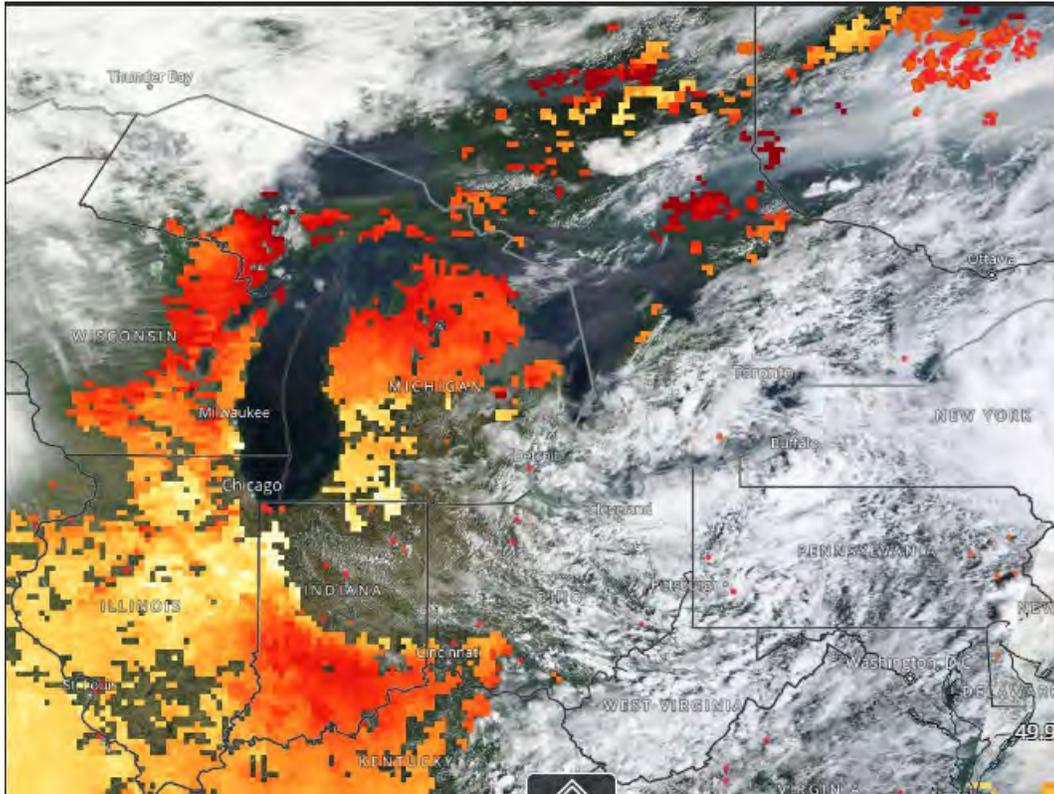
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Columbus - Rocky Ford Drive	180050008	6/24/2023	18.9	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/24/2023	22.6	17.0
Plummer	180550001	6/24/2023	20.2	14.7
Hammond-167th St	180890036	6/24/2023	17.1	16.3
Bloomington - Binford	181050003	6/24/2023	20.1	13.9
Ogden Dunes	181270024	6/24/2023	15.3	15.3
Lafayette - Greenbush St	181570008	6/24/2023	18.9	15.1
Evansville - Buena Vista	181630021	6/24/2023	17.7	15.1
Terre Haute - Lafayette Ave	181670018	6/24/2023	20.5	18.8

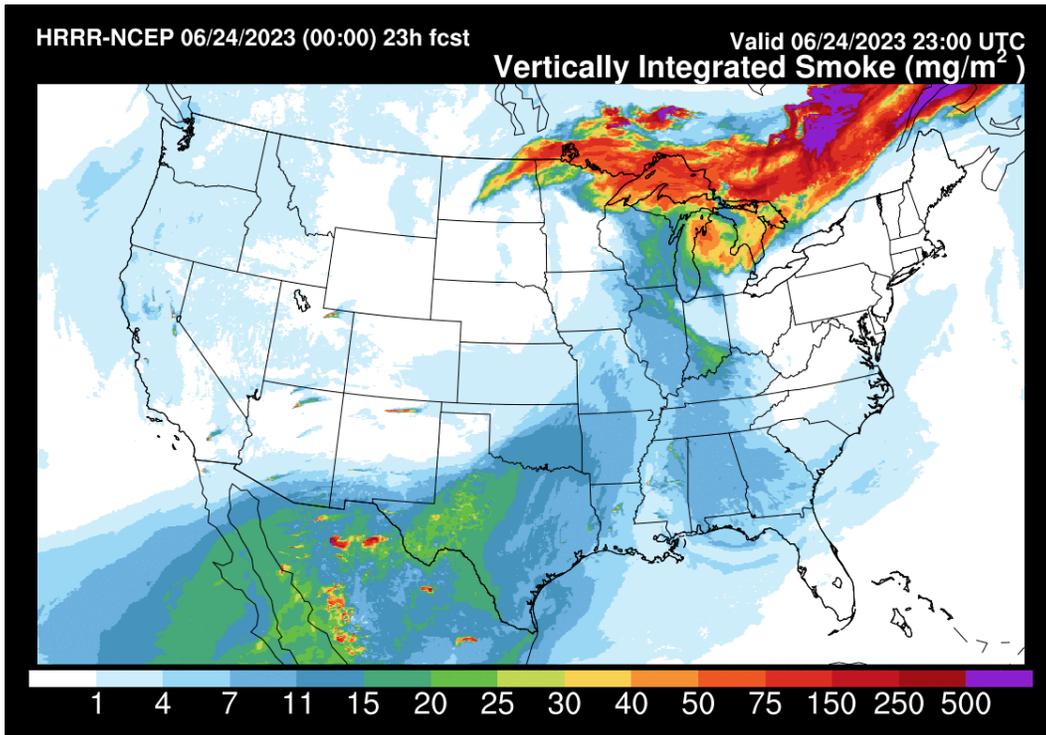
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 24, 2023



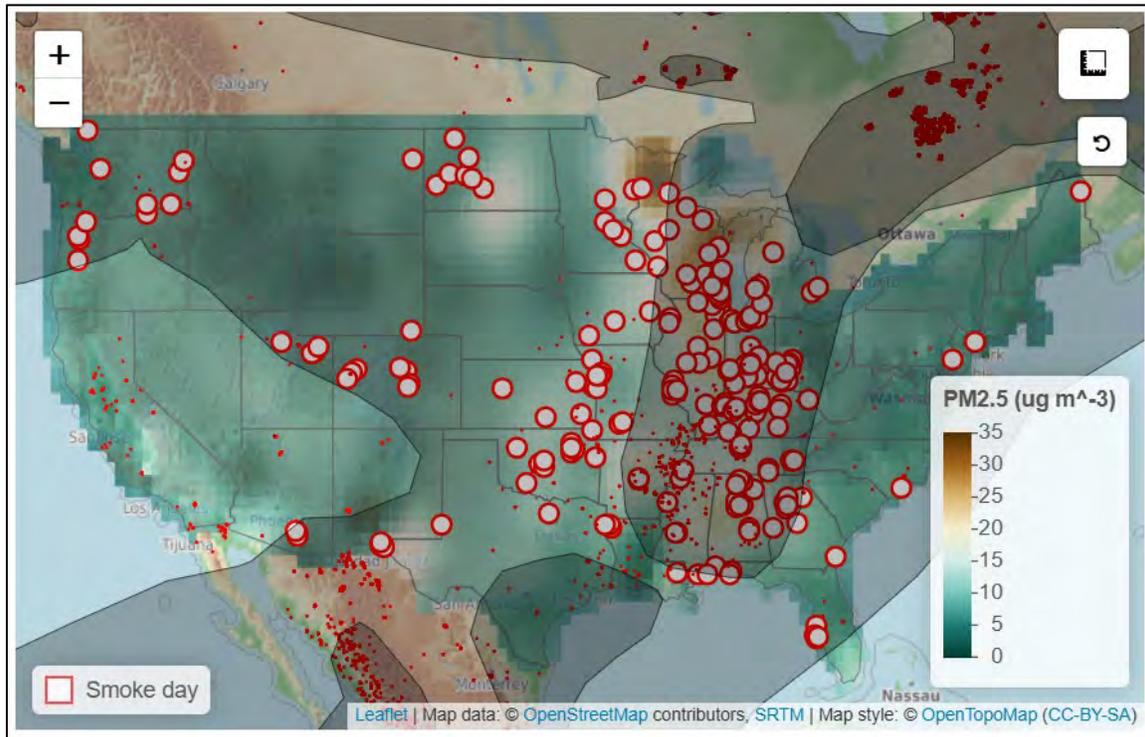
Satellite Imagery with MAIAC AOD – June 24, 2023



HRRR Smoke - Vertically Integrated Smoke – June 24, 2023



GAM PMO3 Smoke Output – June 24, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1550Z June 24, 2023

SMOKE:

Canada, United States, Atlantic Ocean, Pacific Ocean off the Pacific Northwest Coast of the United States...

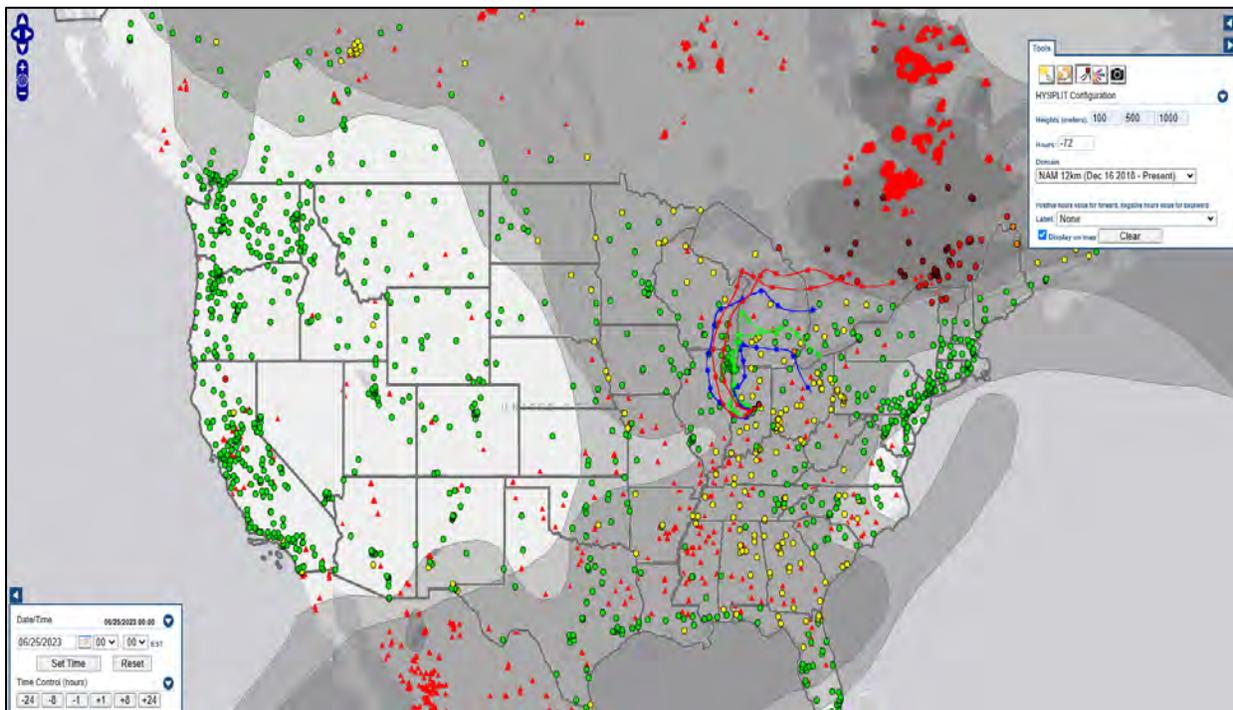
The major wildfires across portions of Canada continues with extensive smoke blanketing much of Canada and extending to the south over roughly the Central and Southeastern United States. The smoke also stretched way off the east coasts of Canada and the United States over the northern and central Atlantic to just off the west coast of Europe. To the west, some of the thinner density smoke had spread to the west and south off the southwestern coast of Canada and Pacific Northwest United States over the far northeastern Pacific. The thickest smoke was from wildfires in central and southern Quebec and moving to the east over southeastern Canada before extending to the southeast as it moved well off the coast over the Atlantic. Other areas of moderate density smoke attributed to the Quebec fires as well as large fires in south central Ontario spread to the south and southwest reaching the Upper Midwest and Midwestern United States.

June 25, 2023

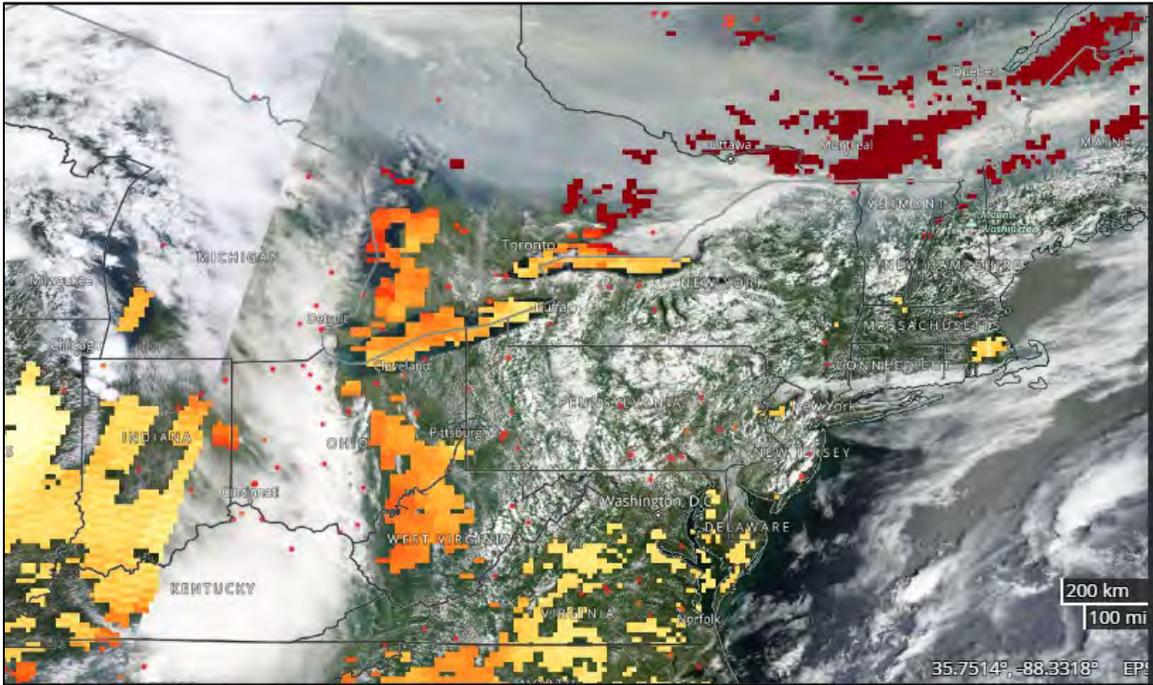
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Fishers	180570007	6/25/2023	16.8	13.8
Kokomo – E Vaile Ave	180670004	6/25/2023	14.5	13.9
Anderson - Eastside Elem	180950011	6/25/2023	15.6	15.4

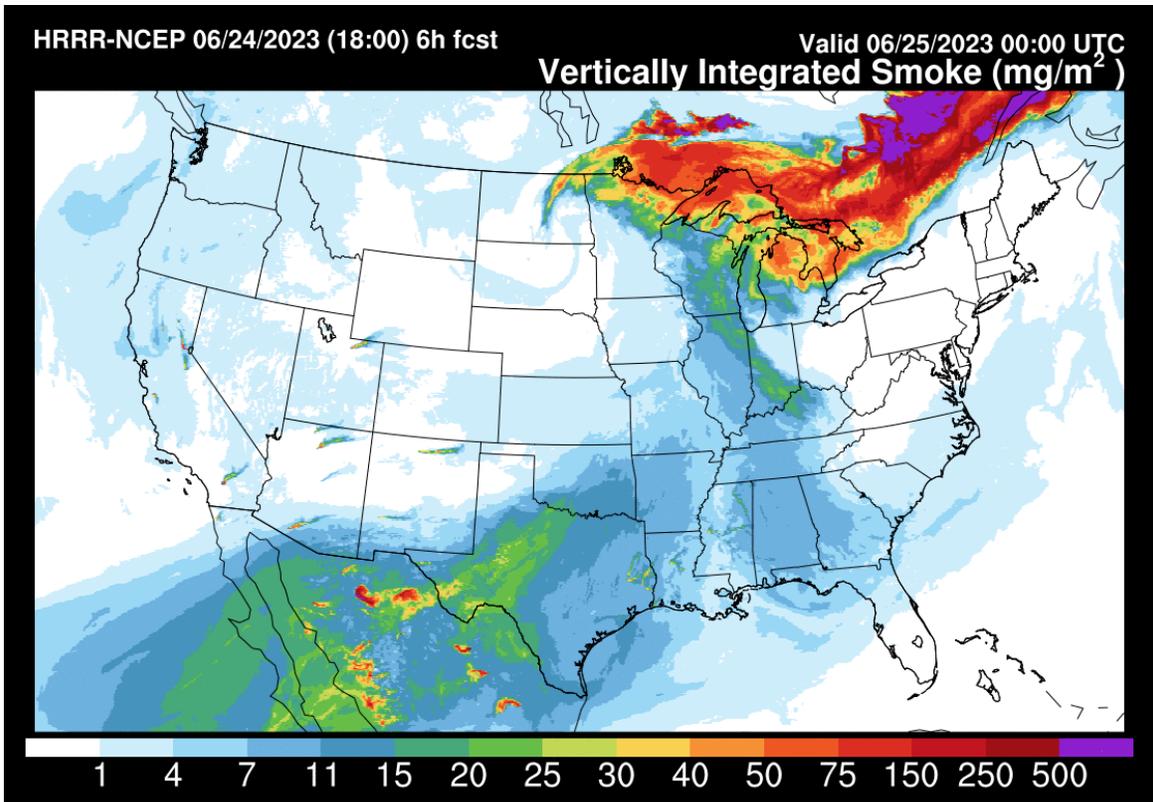
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 25, 2023



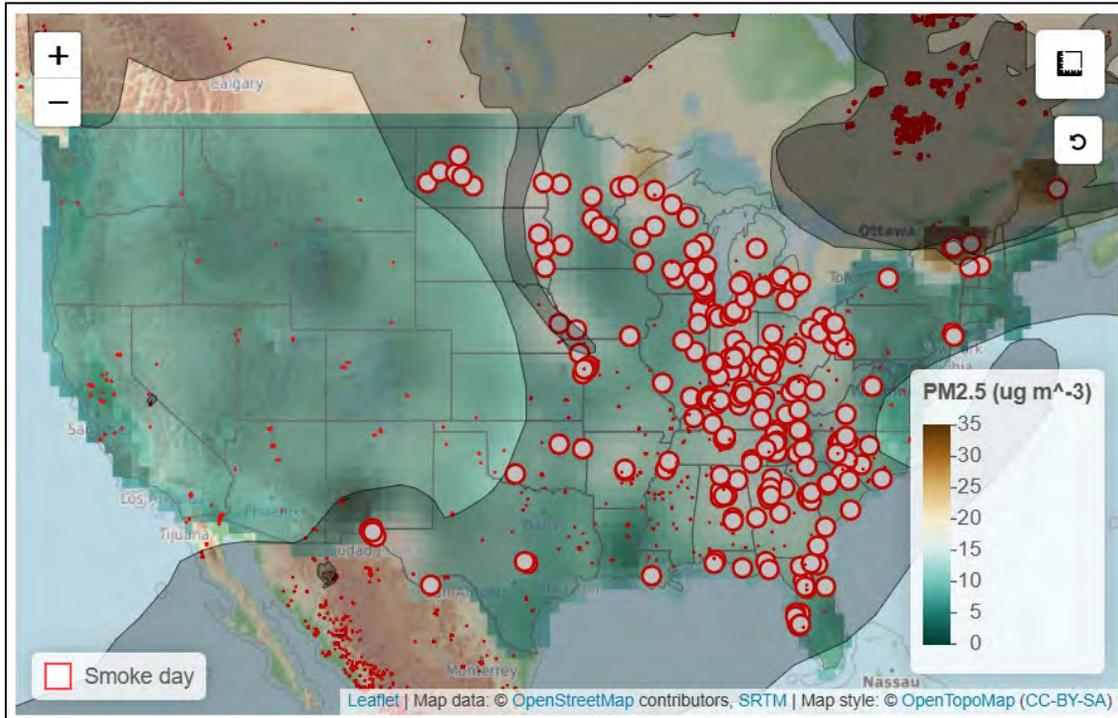
Satellite Imagery with MAIAC AOD – June 25, 2023



HRRR Smoke - Vertically Integrated Smoke – June 25, 2023



GAM PM03 Smoke Output – June 25, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1650Z June 25, 2023

SMOKE:

Canada, Eastern United States, Atlantic Ocean...

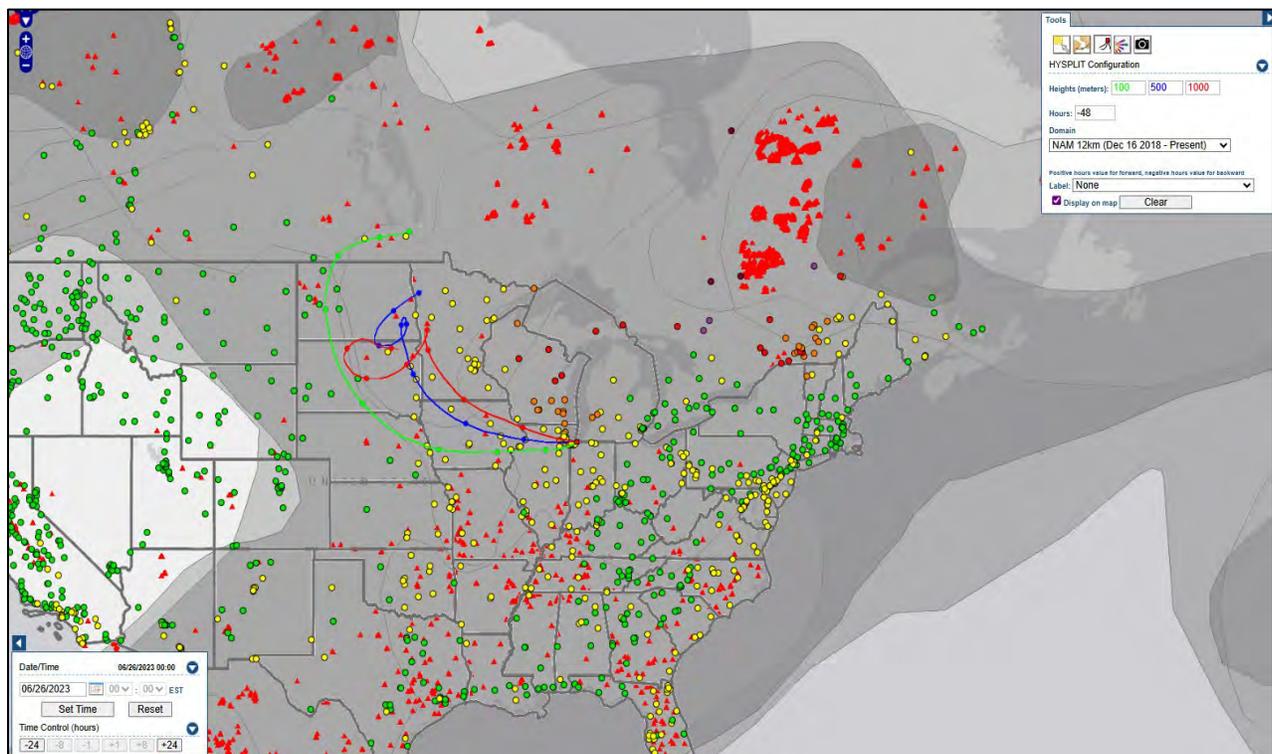
The major wildfires across portions of Canada continues with extensive smoke blanketing much of Canada and extending to the south over roughly the Central and Southeastern United States. The smoke also stretched way off the east coasts of Canada and the United States over the northern and central Atlantic to just off the west coast of Europe. Large areas of moderate density smoke were seen over in central Canada, most of Quebec, and extending throughout the northern Atlantic Ocean just off the coast of Europe

June 26, 2023

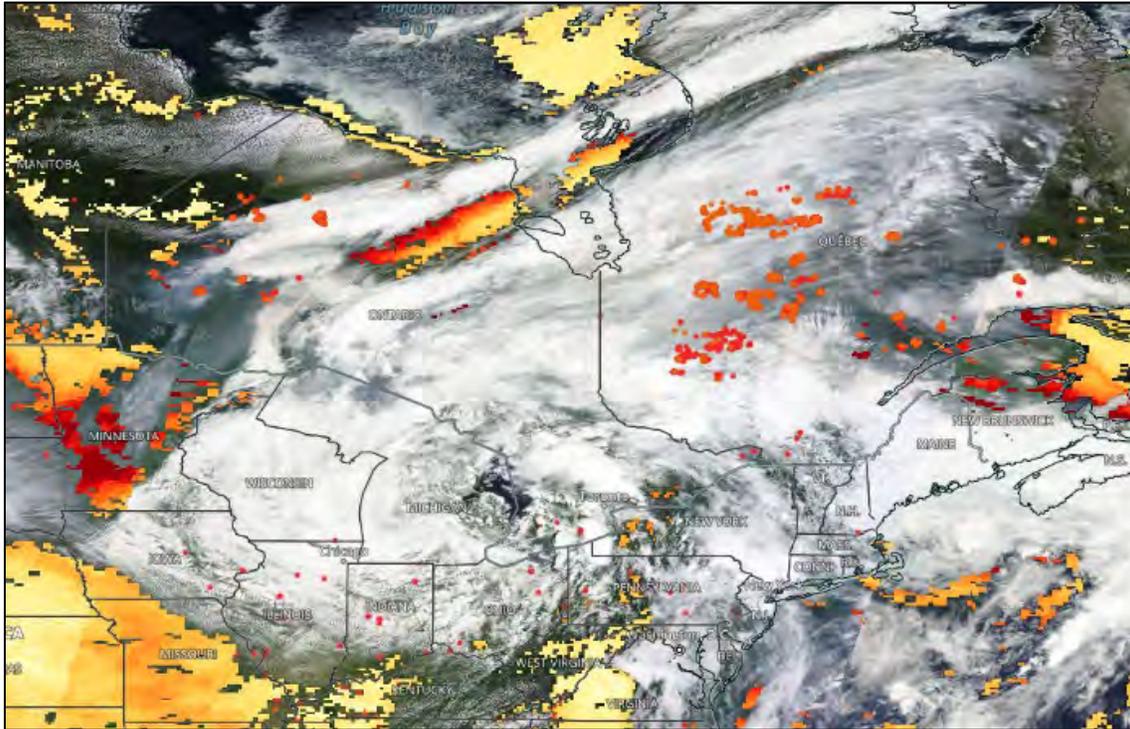
List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke

Monitor name	AQS ID	Date	Daily Average (µg/m ³)	Tier 2 Threshold (µg/m ³)
Elkhart - Prairie St	180390008	6/26/2023	21.7	16.3
Kokomo - E. Vaile Ave	180670004	6/26/2023	17.3	14.7
East Chicago - Franklin/Washington Sch	180890006	6/26/2023	28.9	16.1
Gary - Madison St	180890031	6/26/2023	30.9	16.0
East Chicago - Marina	180890034	6/26/2023	32.3	18
Hammond-167th St	180890036	6/26/2023	33.6	16.3
Michigan City - Marsh Elem. Sch.	180910011	6/26/2023	27.5	15.9
Ogden Dunes	181270024	6/26/2023	30.6	15.3
South Bend - Shields Dr.	181410015	6/26/2023	21.1	16.9
Lafayette - Greenbush St	181570008	6/26/2023	18.5	15.1
Larwill	181830003	6/26/2023	15.0	15.0

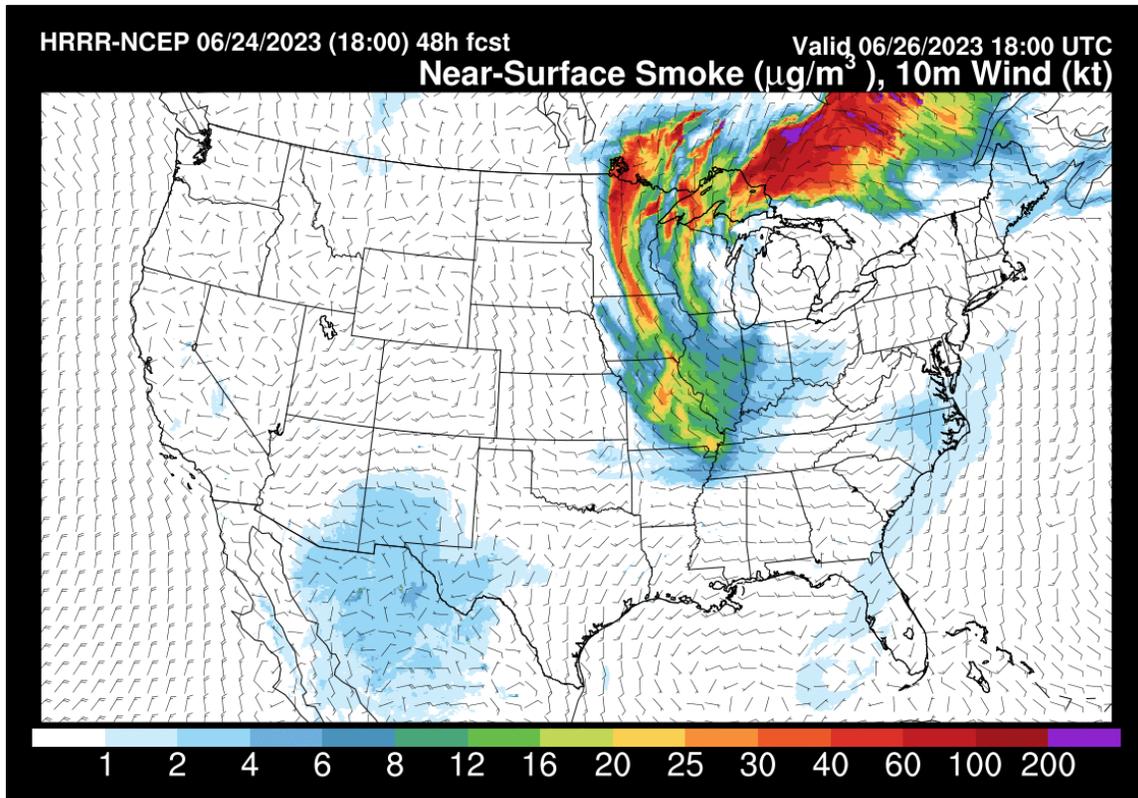
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 26, 2023



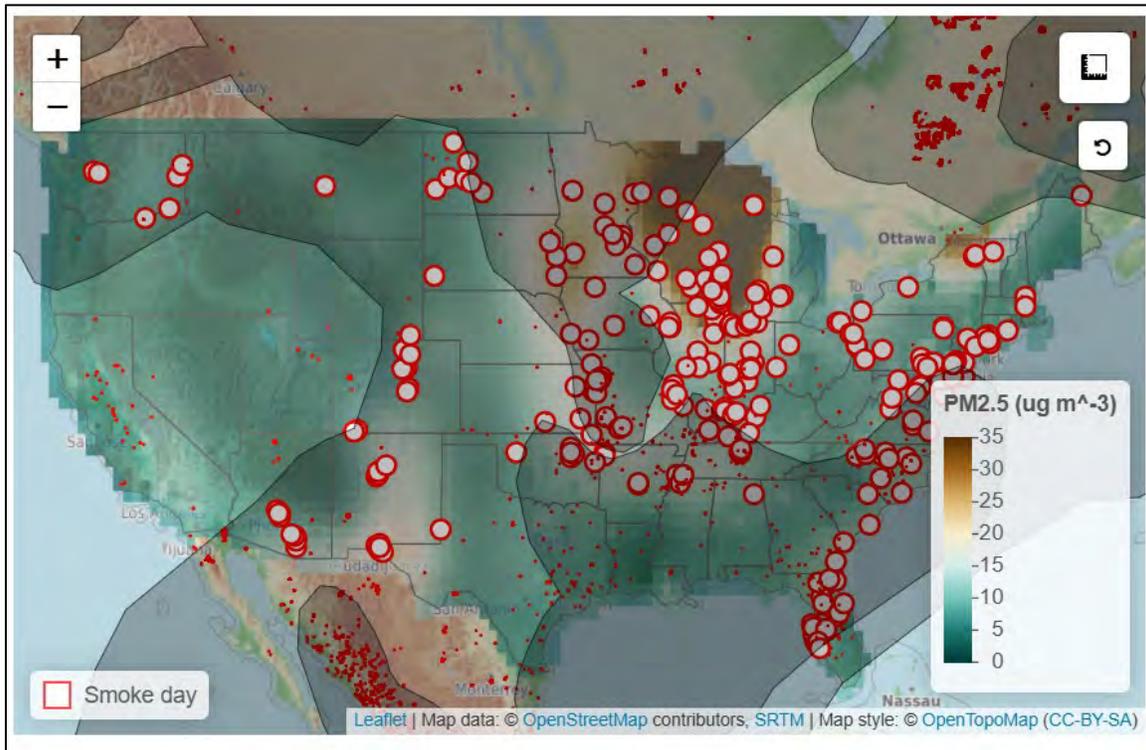
Satellite Imagery with MAIAC AOD – June 26, 2023



HRRR Smoke - Vertically Integrated Smoke – June 26, 2023



GAM PMO3 Smoke Output – June 26, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 1654Z June 26, 2023

SMOKE:

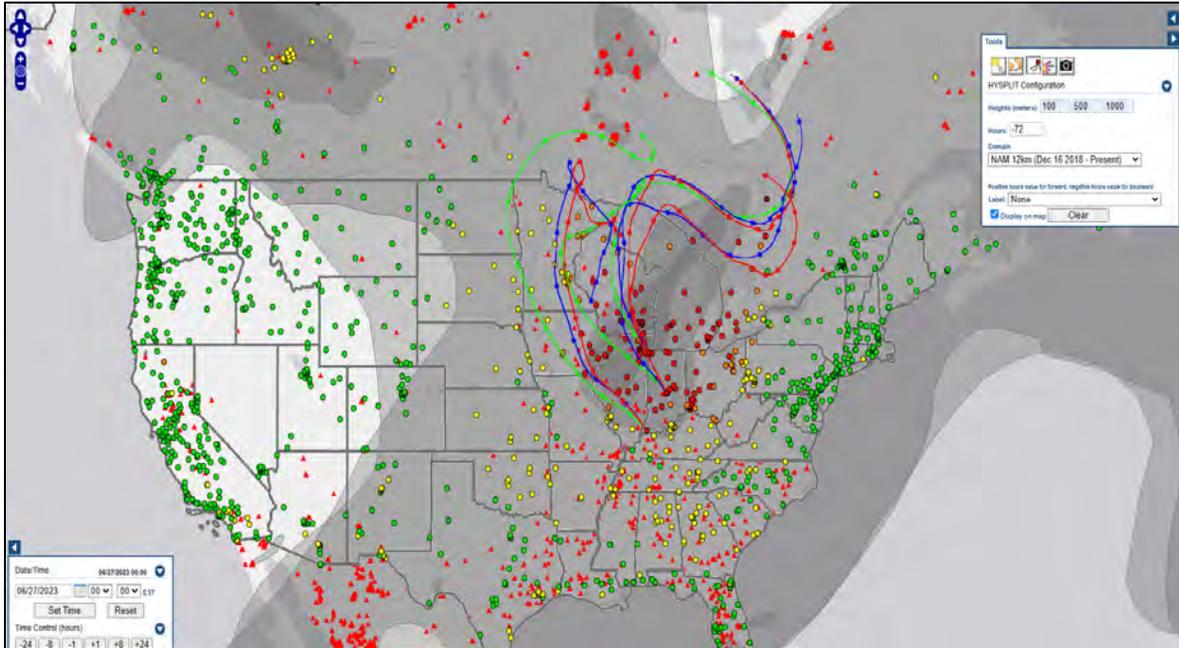
Canada, Eastern and Central United States, Atlantic Ocean...

Numerous wildfires continue to burn across Canada with smoke extending from British Columbia to Eastern Canada. Very large wildfires accompanied by medium density smoke could be seen northern and southern British Columbia, western Alberta, central Saskatchewan, parts of western Manitoba, northwestern Ontario extending south through the northern region of Central Plains U.S. and into Missouri, and across most of central Quebec. Quebec in particular, where the extreme wildfires are located, likely has thick density smoke closer to the source of the fires, but cloud cover over the region made it difficult to analyze for this morning's analysis... Additional light smoke was also found across most of the eastern U.S., extending southward over the northern Gulf of Mexico where it blended with light smoke originating from Mexico and Central America.

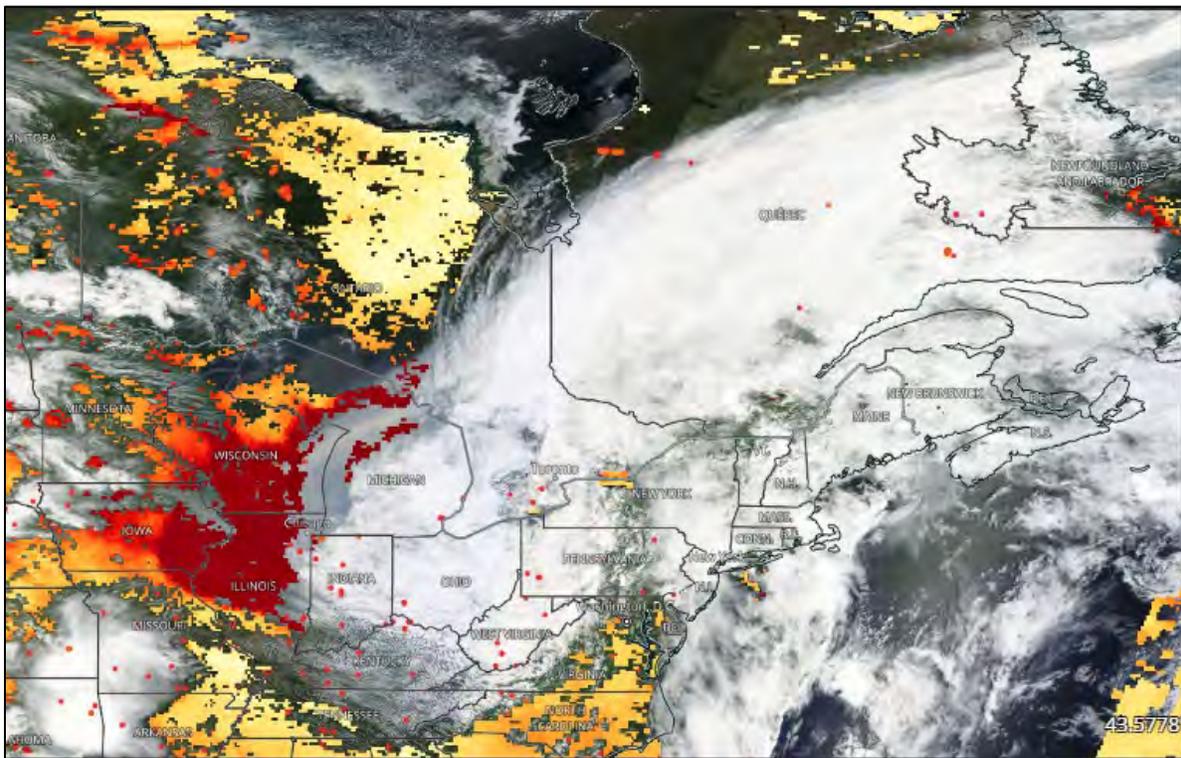
June 27, 2023**List of PM_{2.5} Monitoring Sites Impacted by Wildfire Smoke**

Monitor name	AQS ID	Date	Daily Average (µg/m³)	Tier 2 Threshold (µg/m³)
Columbus - Rocky Ford Drive	180050008	6/27/2023	53.2	13.7
Jeffersonville - Bates-Bowyer Ave	180190010	6/27/2023	35.8	17.0
Elkhart - Prairie St	180390008	6/27/2023	115.9	16.3
New Albany	180430008	6/27/2023	25.1	20.9
Plummer	180550001	6/27/2023	59.1	14.7
Fishers	180570007	6/27/2023	90.8	13.8
Mechanicsburg	180650003	6/27/2023	112.2	15.5
Kokomo - E. Vaile Ave	180670004	6/27/2023	114.6	14.7
East Chicago - Marina	180890034	6/27/2023	121.1	18.0
Hammond-167th St	180890036	6/27/2023	125.9	16.3
Anderson - Eastside Elem	180950011	6/27/2023	153.2	15.4
Indianapolis - Washington Park	180970078	6/27/2023	104.6	17.8
Indianapolis - W. 18th St.	180970081	6/27/2023	111.2	20.9
Indianapolis- I-70 E	180970087	6/27/2023	106.8	20.5
Bloomington - Binford	181050003	6/27/2023	62.1	13.9
Ogden Dunes	181270024	6/27/2023	97.0	15.3
South Bend - Shields Dr.	181410015	6/27/2023	145.4	16.9
Lafayette - Greenbush St	181570008	6/27/2023	117.5	15.1
Evansville - Buena Vista	181630021	6/27/2023	35.4	15.1
Terre Haute - Lafayette Ave	181670018	6/27/2023	74.3	18.8
Larwill	181830003	6/27/2023	146.3	15.0

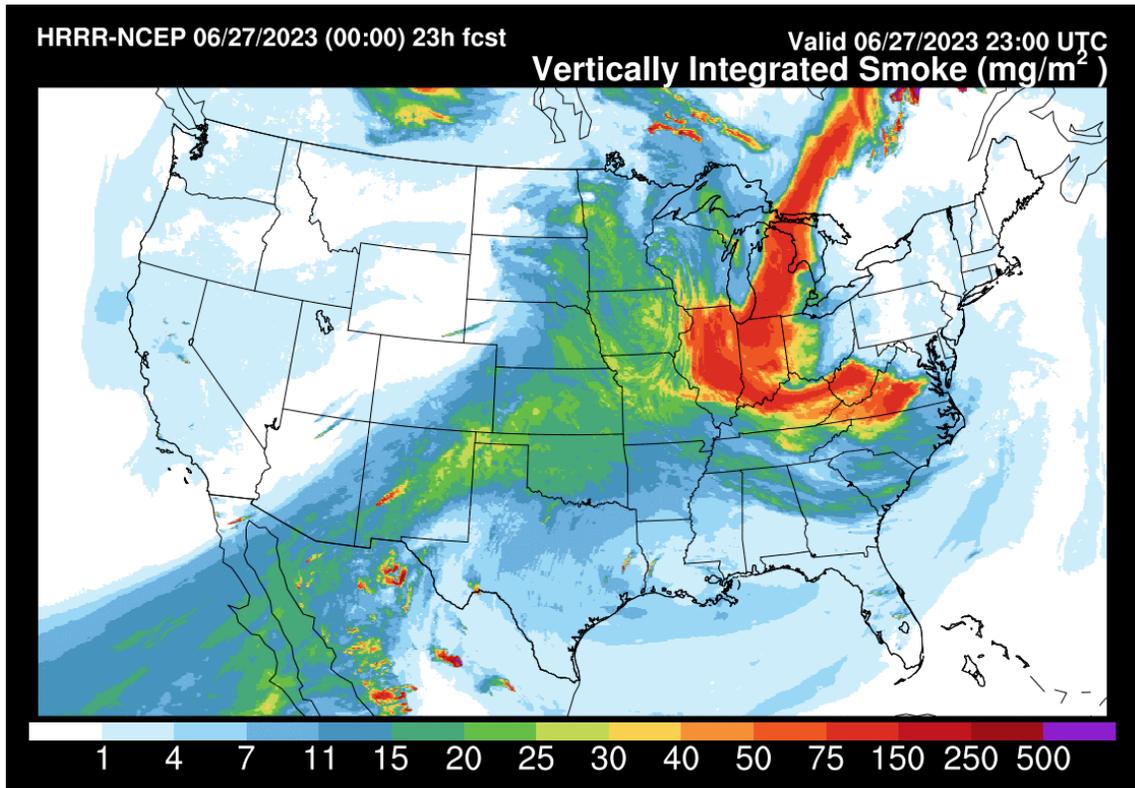
AirNow Tech Fire/HMS Smoke Map with Backward Trajectories – June 27, 2023



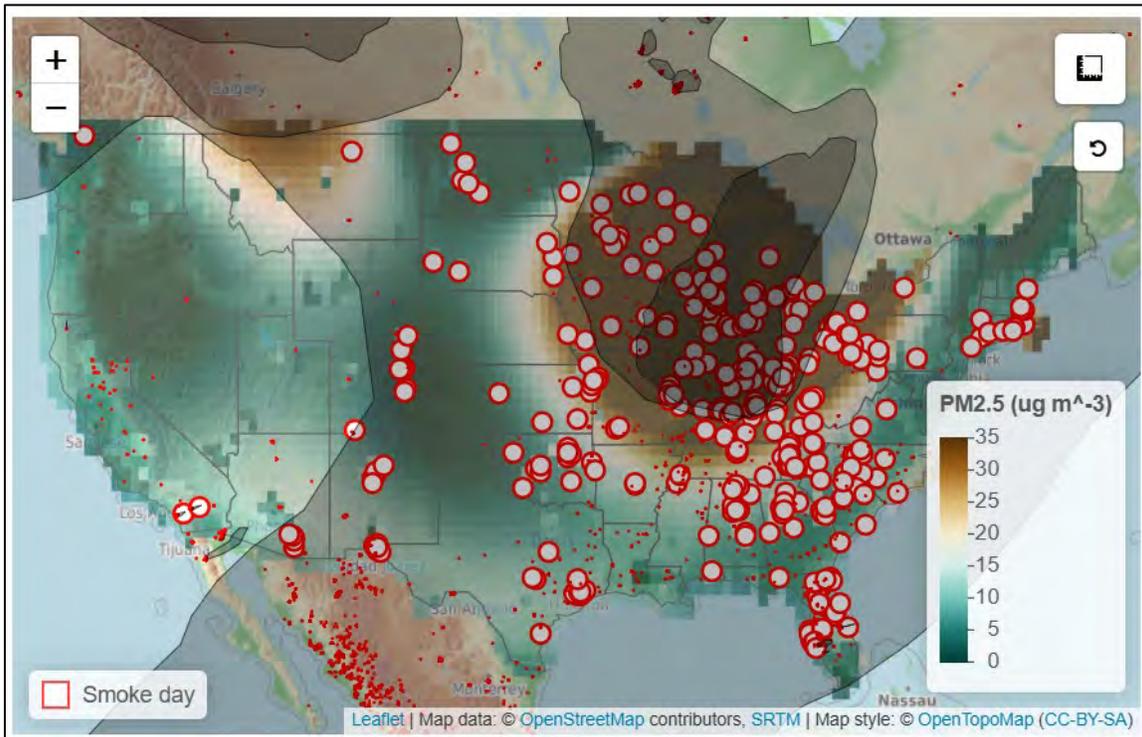
Satellite Imagery with MAIAC AOD – June 27, 2023



HRRR Smoke - Vertically Integrated Smoke – June 27, 2023



GAM PMO3 Smoke Output – June 27, 2023



NOAA Satellite Smoke – 2023 Satellite Smoke Text Excerpts

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1550Z June 27, 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 over portions of Spain and Portugal and offshore in the far northeastern Atlantic Ocean, over the portions of the Midwestern and Upper Midwest of the United States and also over much of northern and central Alberta and extending into western Saskatchewan.