

Monthly Air Quality Report

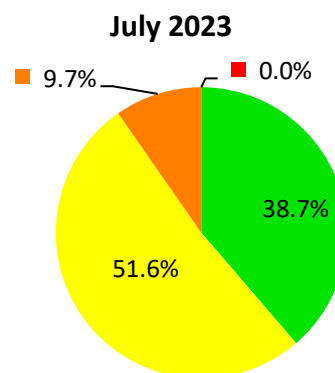
July 2023 · Birmingham, AL



SUMMARY

This report presents daily maximum Air Quality Index (AQI) values and corresponding AQI colors from five different pollutants monitored in the Birmingham area: carbon monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), ozone (O₃), and sulfur dioxide (SO₂). The table and figure below show the number of days and percentage of days in each AQI category, respectfully, for the month.

July 2023	
AQI Category	Number of Days
Good	12
Moderate	16
Unhealthy for Sensitive Groups	3
Unhealthy	0



AQI CHART

AQI Levels of Health Concern	AQI Value	Actions to Take
Good	0-50	None
Moderate	51-100	Unusually sensitive people should consider limiting prolonged outdoor exertion
Unhealthy for Sensitive Groups	101-150	The following groups should limit prolonged outdoor exertion: <ul style="list-style-type: none"> • People with heart or lung disease • Children and older adults • People who are active outdoors
Unhealthy	151-200	The following groups should avoid prolonged outdoor exertion: <ul style="list-style-type: none"> • People with heart or lung disease • Children and older adults • People who are active outdoors Everyone else should limit prolonged outdoor exertion
Very Unhealthy	201-300	The following groups should avoid all outdoor exertion: <ul style="list-style-type: none"> • People with heart or lung disease • Children and older adults • People who are active outdoors Everyone else should limit outdoor exertion

DAILY AQI VALUES

The table below shows this month's daily maximum AQI values and corresponding AQI category for each pollutant.

Date	CO	O ₃	PM ₁₀	PM _{2.5}	SO ₂
1	3	36	31	71	2
2	2	39	25	62	2
3	3	41	21	54	2
4	5	43	38	69	2
5	3	49	24	54	2
6	2	39	18	43	2
7	2	44	14	33	2
8	2	34	15	28	1
9	2	36	11	24	2
10	2	37	14	23	2
11	5	54	25	52	7
12	6	42	23	50	4
13	2	28	15	32	1
14	2	35	21	37	2
15	2	35	15	35	2
16	3	44	21	56	2
17	6	58	59	128	2
18	7	51	54	86	2
19	2	40	25	53	2
20	3	39	39	78	4
21	3	35	32	62	2
22	2	38	18	45	3
23	3	44	19	49	1
24	3	67	30	57	6
25	5	87	42	69	9
26	6	115	42	72	6
27	8	115	44	83	5
28	8	61	36	81	7
29	7	43	28	64	3
30	6	36	22	56	2
31	6	44	19	43	5

All data displayed in this report is preliminary and have not been through quality assured and quality controlled procedures. The AQI is used for forecasting and reporting daily air quality and is not used for compliance purposes. For daily air quality forecasts and real-time monitoring data, go to www.jcdh.org.

AIR QUALITY ALERTS

Air quality alerts are issued for days that are forecast to have AQI values greater than 100 for O₃ and/or PM_{2.5}. O₃ is forecast by the Alabama Department of Environmental Management during the warm season. PM_{2.5} is forecast by the Jefferson County Department of Health year-round.

The table below shows air quality alerts that were issued for this month and includes the date of the alert, the pollutant for which the alert was issued, and the AQI category that was forecast. There have been a total of 8 air quality alerts issued in 2023 through July.

Date of Alert	Pollutant	AQI Category
7/18/2023	PM _{2.5}	Orange
7/25/2023	O ₃	Orange
7/26/2023	O ₃	Orange
7/28/2023	O ₃	Orange

METEOROLOGICAL CONDITIONS

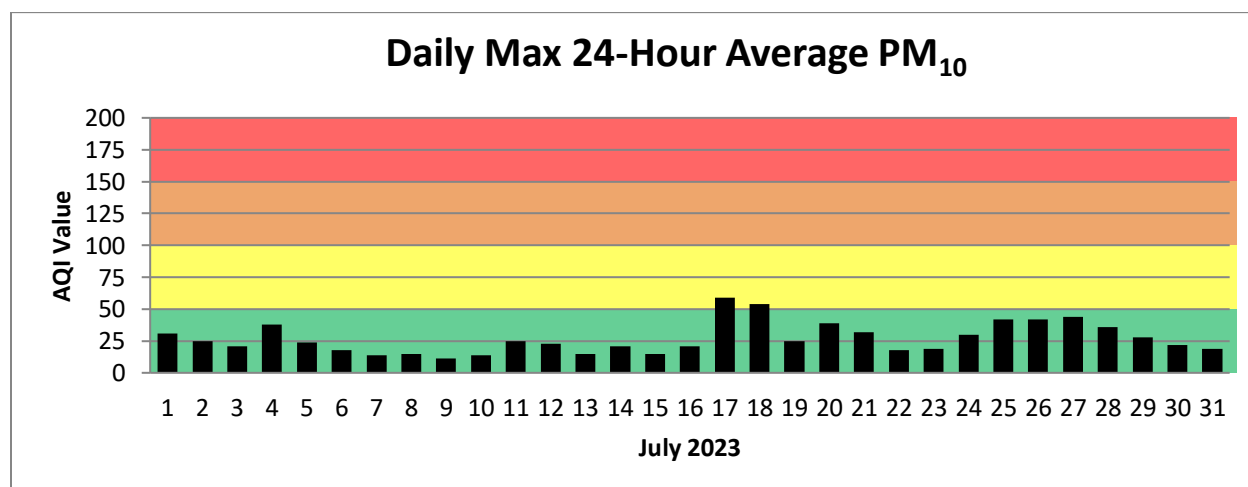
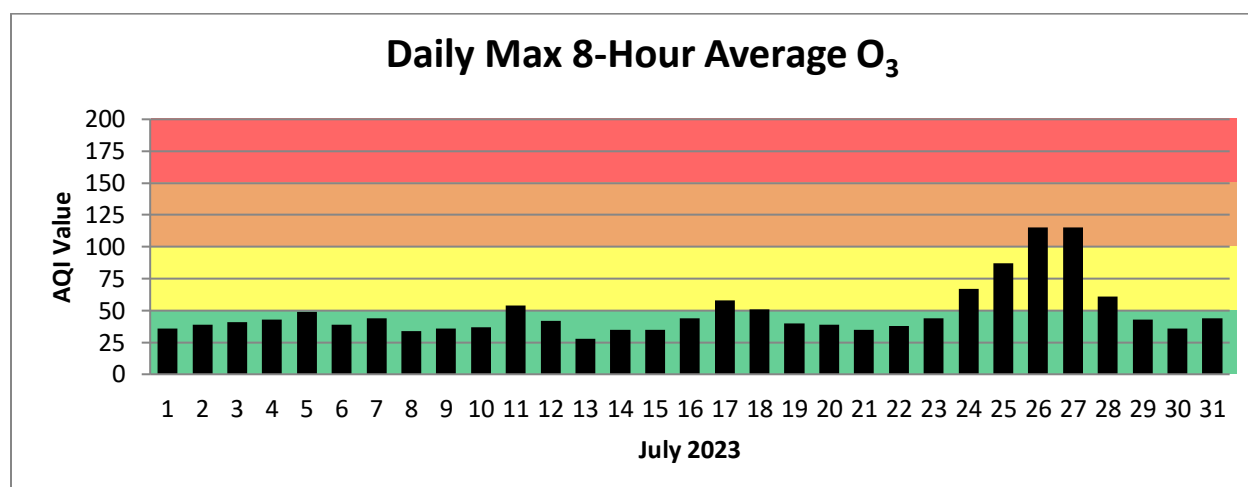
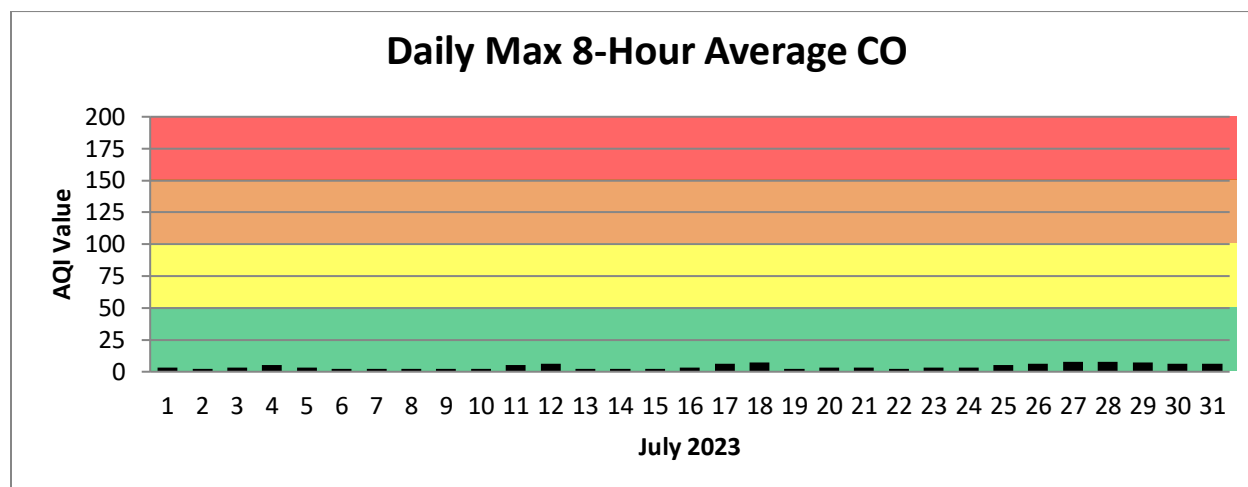
The calendar below shows all reported weather conditions within the hourly weather observations for each day of the month from the National Weather Service's station located at the Birmingham International Airport.

JULY 2023						
SUN	MON	TUE	WED	THU	FRI	SAT
						1 RA, TS
2 RA, TS	3 BR, RA, TS	4 HZ, RA, TS	5 BR	6 RA, TS	7 BR, HZ, TS	8 BR, RA, TS
9 BR, RA, TS	10 BR, RA	11	12 RA, TS	13	14 BR, HZ, TS	15
16 BR, HZ	17 BR, HZ	18 BR, HZ, RA, TS	19	20	21 RA, TS	22 BR, TS
23	24	25	26	27	28 RA, TS	29
30 BR, FG, RA, TS	31 BR, FG					

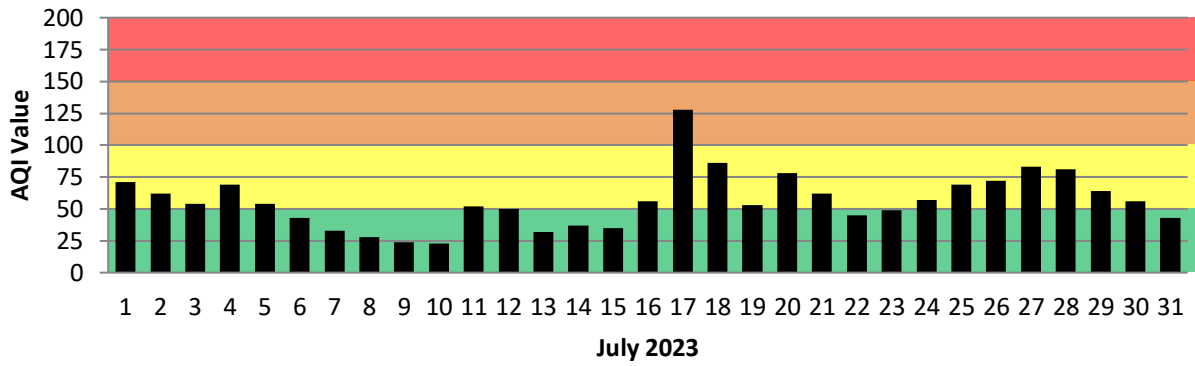
Weather phenomena and obscuration notations as used by the National Weather Service:

Drizzle (DZ)	Fog (FG)	Freezing Drizzle (FZDR)	Freezing Rain (FZRA)
Haze (HZ)	Hail (GR)	Ice Pellets (PL)	Mist (BR)
Rain (RA)	Smoke (FU)	Snow (SN)	Thunderstorms (TS)

GRAPHS OF DAILY AQI VALUES BY POLLUTANT



Daily Max 24-Hour Average PM_{2.5}



Daily Max 1-Hour Average SO₂

