

74

consecutive days worse than the same days last year, weather removed

Since 30 May, PM10 has not spent one day at or below last year's level once the weather's help is stripped out. Level with last year on the observed index; corrected for weather, 9.9 points worse. 6 of 6 pollutants show no real improvement.

150 / 223

DAYS WORSE THIS YEAR
of all days measured in 2026,
weather removed.

+14.3

AVERAGE EXCESS, $\mu\text{g}/\text{m}^3$
PM10 above last year over the run,
weather removed.

224

THE WORST STATION
Anand Vihar, Poor, today.

The air record

12 August 2026 · Delhi, on the CPCB record and
the weather-corrected truth

The negatives, the demands, the danger

What this record finds today

- Weather removed, PM10 has been worse than last year for 74 consecutive days, since 30 May; 150 of 223 measured days this year sat above last year.
- 6 of 6 pollutants show no real improvement on last year once the weather is removed.
- The index reads level with last year only because the weather is helping; corrected, it is 9.9 points worse.
- Anand Vihar read 224, Poor, while the city average read Satisfactory; an average is not an experience.
- Even monsoon-washed, PM2.5 is $40.7 \mu\text{g}/\text{m}^3$, about 8 times the WHO annual guideline.

What we ask of the Government

- Publish the weather-corrected series beside the raw index, every day, so the monsoon can never again be dressed up as policy.
- Explain the 74-day run on the floor of the House: which source cut, which enforcement

action, is supposed to have worked?

- Name and fix the worst stations daily; a city average must never bury a neighbourhood.
- Keep the full monitoring network up: every gas channel, every hour; a meter that cannot measure is not a clean-air policy.
- State the health cost in the terms the WHO uses, not in category euphemisms.

The health hazard

- Today's category, Satisfactory, means: Minor breathing discomfort to sensitive people.
- There is no safe level of PM2.5; the WHO guideline exists because risk rises from the first microgram.
- The fine particles pass from the lungs into the blood; the burden falls first on children, the elderly, and those who work outdoors and cannot choose their air.

Ajay Maken

Member of Parliament, Rajya Sabha

What this record holds, page by page

CONTENTS

05	The day at the stations	the spread the average hides
06	The 30-day path	the index, day by day
07	Against yesterday	the one-day move
08	Against last year, observed	before weather correction
09	The weather-corrected verdict	the page the Government must answer
10	The weather's hand	six drivers, and the fairness gate
11	PM2.5 against the WHO	the health benchmark
12	The pollutant board	all tracked species, role-labelled
13	The worst station	one neighbourhood's day
14	The year, weather removed	the sign counts that are the finding
15	PM2.5, month by month	the certified monthly verdicts
16	PM10, month by month	the certified monthly verdicts
17	Every station	the full network table
18	Every station, contd.	the full network table
19	Levels: PM2.5 and PM10	thirty days, observed vs corrected
20	Levels: NO2 and NOx	thirty days, observed vs corrected
21	Levels: SO2 and CO	thirty days, observed vs corrected
22	Levels: Ozone	thirty days, observed vs corrected
23	The weather evidence	climatology, envelope and verdicts
24	The published context	what pollutes it, what delay costs, and the year
25	The method	plain English, no jargon
26	Sources	every feed, dated and tiered

One fact per page, provable at a glance

Four ways in, depending on the minute you are in



The verdict in one pass

01

The cover, the summary, and the weather-corrected verdict.

Pages 01, 02 and 09.

Today at the stations

02

The spread, the worst station, and the full network table.

Pages 05 onward; the full table at 17.

The year, weather removed

03

The residual pages: the streak, the sign counts, the monthly verdicts.

Pages 14 onward.

The method and the sources

04

How the numbers are made, the fairness check, and every dated feed.

Pages 25 onward.

What de-weathering means. Rain and wind wash or carry pollution away; calm weather traps it. A model removes that effect from the numbers. What remains is the city's own pollution. That is why the Government cannot blame the monsoon for the figures in this record.

What a residual is. One day's level minus the same days of last year. Above zero means worse than last year. It is a difference, never a level.

What the margin is. The band inside which a figure is too close to call. Where a change sits inside its margin, this record says so and rests no claim on it.

The tab

It names the data and the exact window.

The banner

It states the finding, ready to be read out.

The three zones

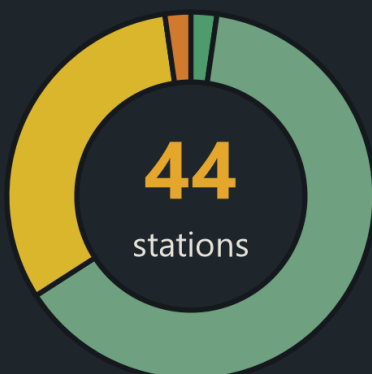
Reading, caution and a dated source under every chart.

The point

The dark band restates the page's sharpest fact.

One average, and the spread it hides

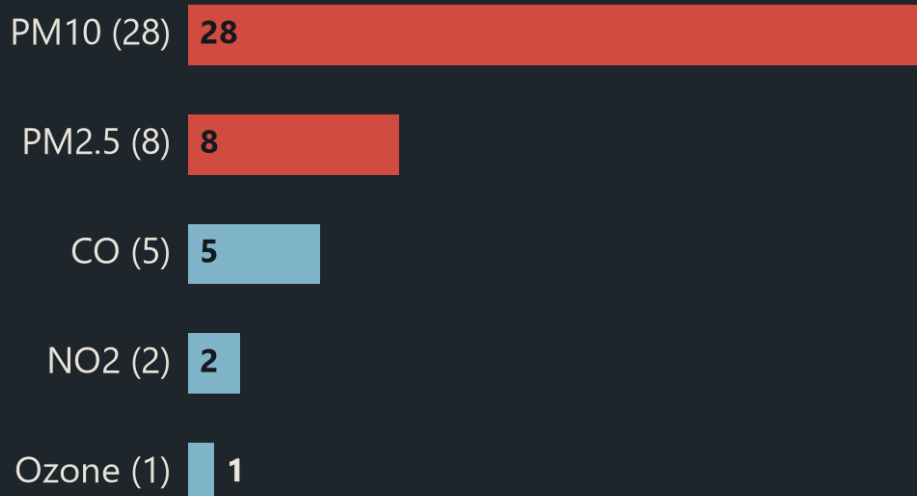
All 44 stations, by category



The same count, category by category



Which pollutant set each station's figure today



READING

Reading: each station reports its own AQI; the wheel and the bars are the same 44 stations counted by category. The lower panel counts the same stations by the pollutant that set each one's figure. Zero counts are printed as zeros.

CAUTION

Caution: the city headline is the mean of station AQIs, so one bad station can sit inside a Satisfactory average. A station's leading pollutant is the worst of its own sub-indices, not a ranking of how much of each was in the air.

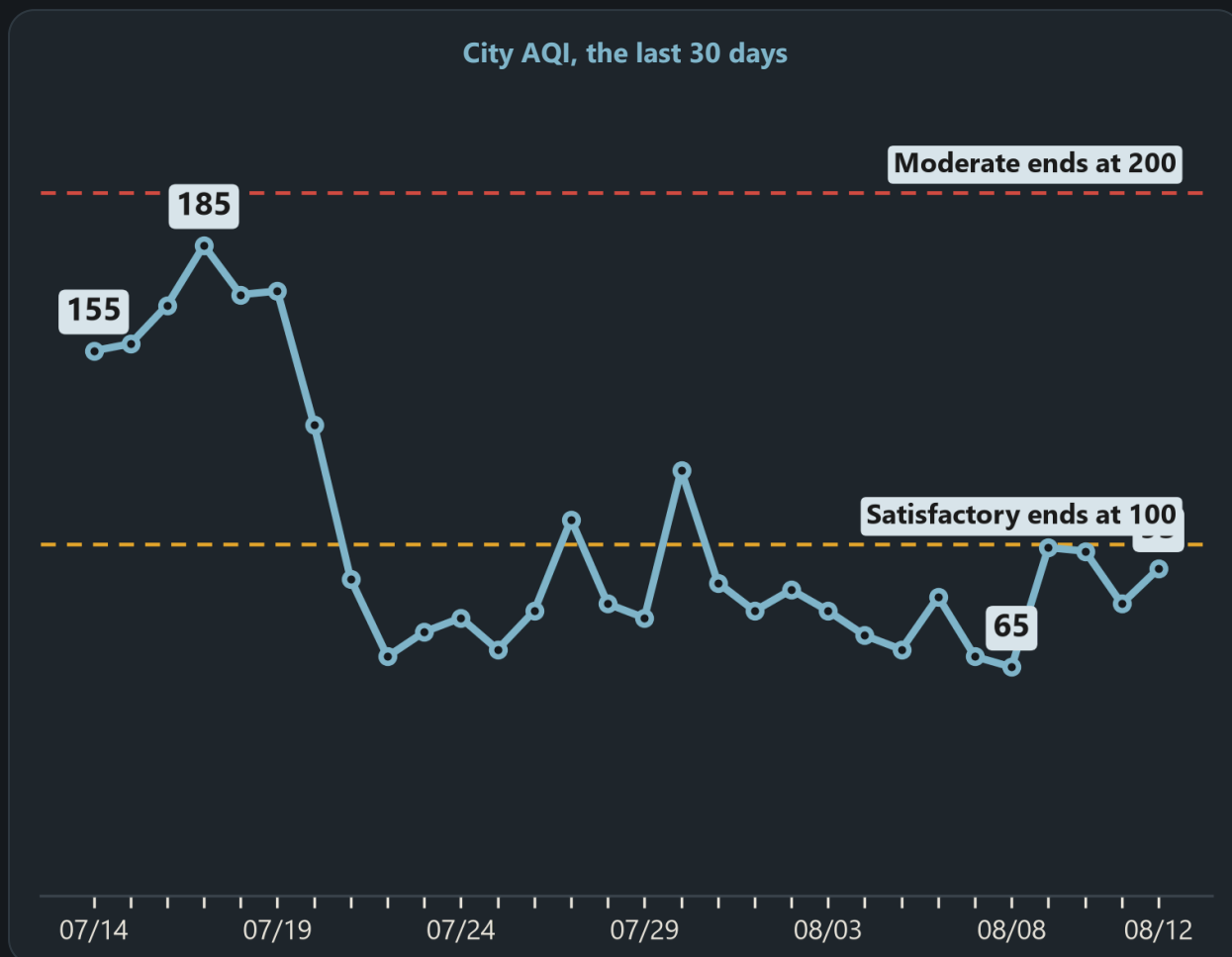
SOURCE

CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

Anand Vihar, Delhi - DPCC read 224, Poor, on PM10, on a day the city average read Satisfactory.

Thirty days of the monsoon-washed index



The same thirty days, counted by category

Satisfactory (21)	21
Moderate (9)	9

READING

Reading: the line is the city mean of station AQIs, one point per day. The dashed lines are the CPCB category boundaries. The lower panel counts the same thirty days by the category each one fell in.

CAUTION

Caution: the window is 24h ending 10 AM IST (aligned to daily $\mu\text{g}/\text{m}^3$ + de-weather); NOT CPCB's published calendar-day AQI, not the calendar day, so this line and a midnight series will differ.

SOURCE

CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

Thirty days ago the city read 155. Today it reads 93. The monsoon is doing the cleaning it does every year.

Against yesterday: the one-day move

9.9

points on yesterday

From 83 to 93. The 95 per cent interval runs 3.8 to 19.2 points, on 41 matched stations.

Yesterday to today

Yesterday (grey) to today (colour).

City AQI

83 ● ——— ● 93

Which way each matched station moved since yesterday

Worse than yesterday (30) **30**

Better than yesterday (9) **9**

No change (2) **2**

READING

Reading: the grey dot is yesterday, the coloured dot today; red marks a worsening. The lower panel splits the same matched stations by which way each one moved.

CAUTION

Caution: a one-day move is weather before it is policy. The year pages carry the argument.

SOURCE

CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

One day proves nothing on its own; the year-on-year and weather-corrected pages carry the argument.

Against last year: the observed reading

-6.1

points on last year, observed

Today 93 against 101 on the same date last year, matched stations. The interval runs -15.7 to 3.8 points, so the honest reading is level, not better.

The station split behind the average

Stations worse than last year (12) 12

Stations better (24) 24

How the 36 matched stations moved vs last year, in AQI points

Better, fell (24) 24

Up 0 to 100 points (12) 12

Up 100 to 200 points (0) 0

Up 200 points or more (0) 0

READING

Reading: the observed year-on-year change, on the feed's own canonical figure. The lower panel sizes the moves behind that one number, station by station.

CAUTION

Caution: the median worsening is 14.1 points and the median improvement -16.7, so the average hides both. Weighted by population, today reads 95 against 106 last year.

SOURCE

CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

On the raw figures the year reads level inside its interval. The next page corrects it for weather.

The weather-corrected verdict

+9.9

points on last year, weather-corrected

Observed, the year reads -3.3 points, level. Corrected for weather it reads +9.9. 6 of 6 pollutants show no real improvement.

Pollutants with no real improvement on last year



Last year to today, both ways of counting

Last year (grey) to today (colour).

Observed

96 ● 93

Weather-corrected

85 ● 95

READING

Reading: the top row is the raw index, the bottom row the same comparison after the model removes the weather's hand. The weather flag is down today: the observed and corrected numbers are close enough that neither claims the other's story.

CAUTION

Caution: de-weathering pipeline window (24h ending 10AM IST); not the calendar-day headline window, so this page's observed figure (93) can differ from the headline (93) by window alone. The two are never mixed.

SOURCE

De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

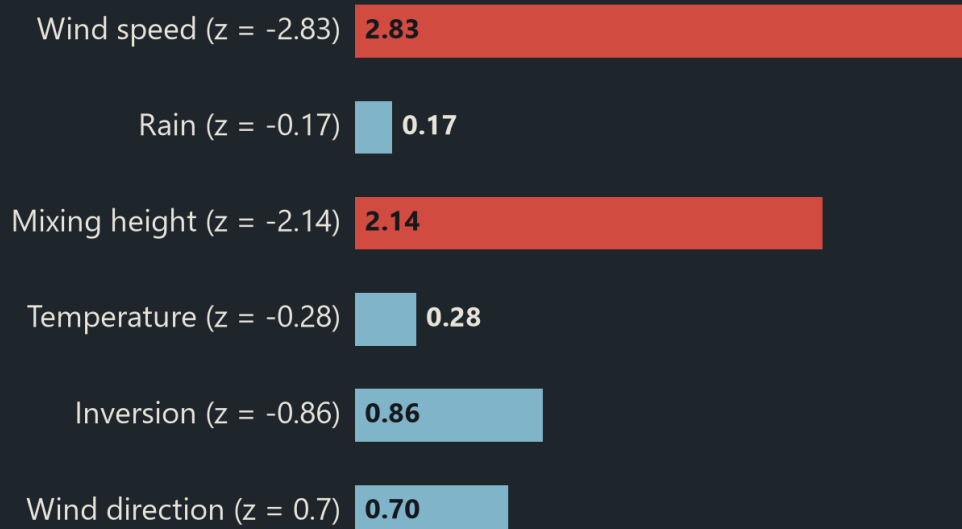
THE POINT

Same date, same stations, weather removed: the air is 9.9 points worse than last year. The monsoon is not a clean-air policy.

The weather's hand, driver by driver



How far last year's baseline sat from normal, in standard deviations



READING

Reading: each tile is one weather driver, today against the same date last year. The z value is how far last year's baseline sat from the 2021 to 2024 normal. The chart draws those same z values as distances, so the gated drivers can be seen rather than counted.

CAUTION

Caution: a driver whose baseline was itself abnormal is greyed and marked. Last year's baseline was abnormal for wind speed, mixing height, so no argument rests on them. The bars carry no threshold line: the gate is the feed's own verdict, printed on each bar, not a cut-off this page invents.

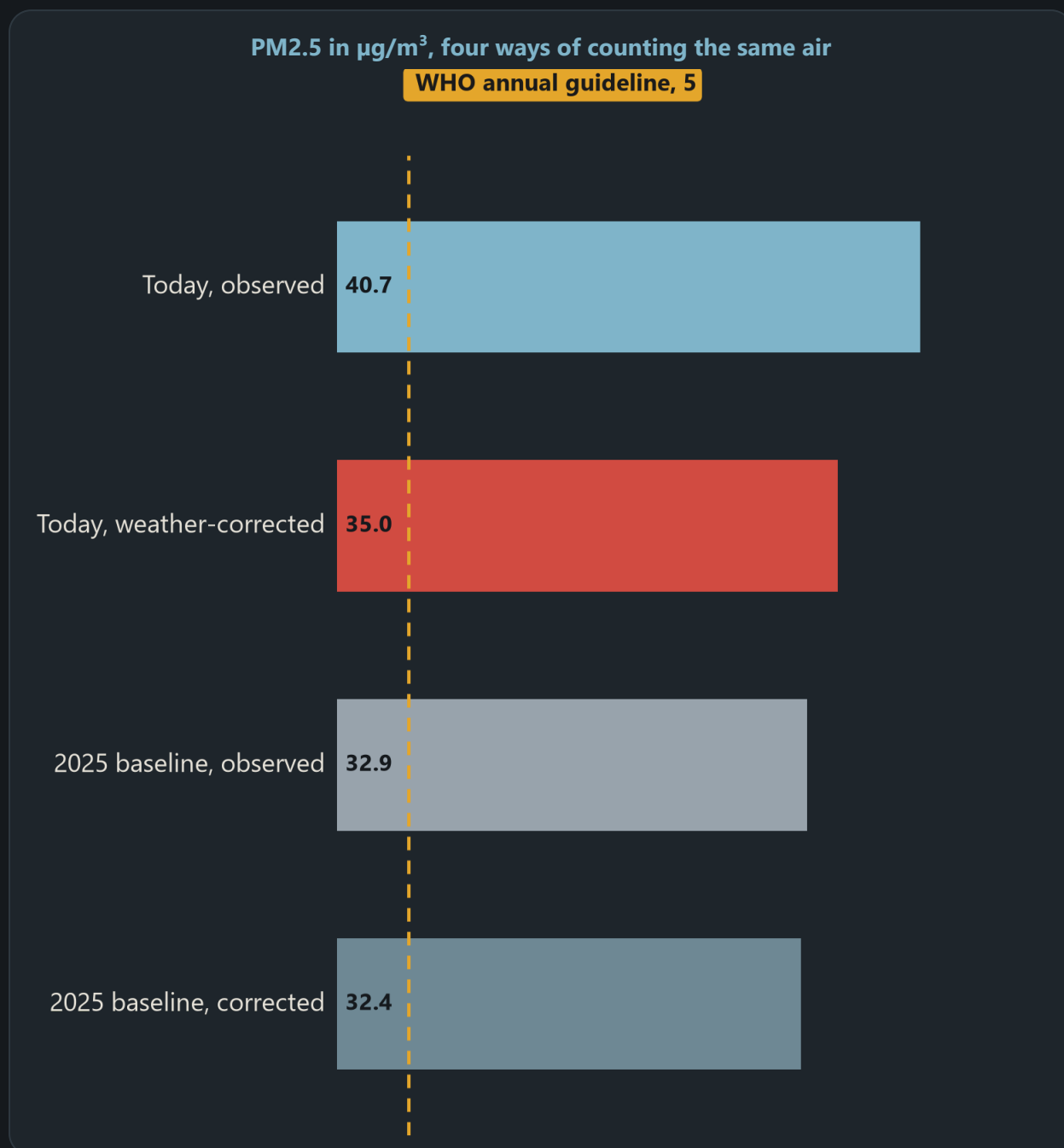
SOURCE

De-weathering pipeline, `dw_multipollutant_daily`, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

Wind today is 6.7 km/h against 6 on the same date last year. Ventilation, not policy, is moving the raw numbers.

PM2.5 against the only health benchmark



READING

Reading: the two upper bars are today, observed and corrected; the grey pair is the same date last year. The dashed line is the WHO annual guideline of $5 \mu\text{g}/\text{m}^3$.

CAUTION

Caution: On days it has never seen, the weather model explains about 38 per cent of the variation, so corrected figures are estimates, not exact points.

SOURCE

De-weathering pipeline, `dw_multipollutant_daily`, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

Even on a monsoon-washed day, Delhi's PM2.5 of $40.7 \mu\text{g}/\text{m}^3$ runs about 8 times the WHO annual guideline. There is no safe level of PM2.5.

Every pollutant, observed and corrected

Pollutant	Today obs	Corrected	Obs YoY	Corrected YoY [range]	Skill	Role in claims
PM2.5	40.7	35	+25.7%	+8.4% [7.9 to 9]	38%	Claims-eligible
PM10	87.8	95.5	-6%	+13% [12.3 to 13.9]	36%	Claims-eligible
NO2	23.5	26.3	-22.9%	-4.5% [-15 to 9]	26%	Claims-eligible
NOx	21.9	22.3	-18.1%	-5.4% [-14.3 to 6.5] (not usable)	35%	Observed context only
SO2	11.4	10.6	+21%	+1.4% [-4.8 to 8.3] (not usable)	8%	Observed context only
CO	1160.8	1011.2	+21.4%	+6% [-2.4 to 20.3] (not usable)	25%	Observed context only
Ozone	21.7	32.4	-43.1%	+2.5% [-1.1 to 5.8] (not usable)	36%	Observed only, never a claim

44 of 44

Stations still above the WHO 24-hour limit for PM2.5 (15 µg/m³) after weather correction.

44 of 44

Stations still above the WHO 24-hour limit for PM10 (45 µg/m³) after weather correction.

2.1x

Delhi's weather-corrected PM10 against the same WHO 24-hour limit.

How much of each pollutant's day-to-day swing the weather model explains



READING

Reading: every pollutant we track, observed AND corrected, including the ones we deliberately never build claims on. Concentrations are µg/m³, except NOx, which the monitors report in ppb. A range spanning zero is too close to call. The bars draw the Skill column, red where a de-weathered claim is allowed and grey where it is not.

CAUTION

Caution: skill is the share of variation the model explains on days it has never seen. Ozone is permanently excluded from claims: it rises when traffic NO2 falls, so citing it could be spun as transport improved. Weak-model gases carry observed facts only, and Ozone's high skill is why the bars alone do not decide the roster.

SOURCE

De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

6 of 6 pollutants show no real improvement on last year once the weather is removed.

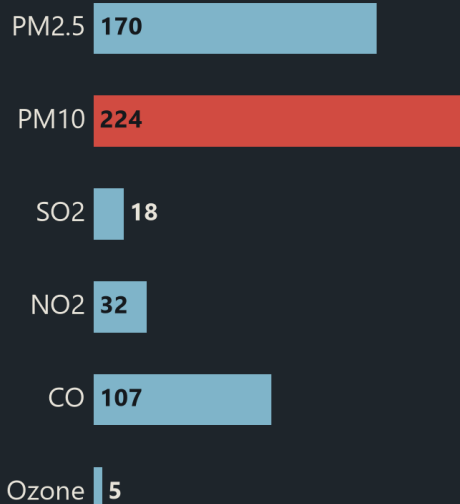
The worst station in the city today

224

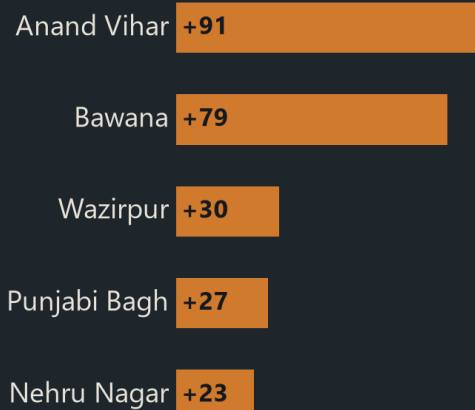
Anand Vihar, Delhi - DPCC

Poor, on PM10. Last year this station read 133 on the same date; the change is 90.9 points. Within 500 m of the monitor, 84% of the land is built up and 14% is under vegetation, so this reading describes a densely built neighbourhood.

The station's six sub-indices



Stations that worsened most vs last year



READING

Reading: a station's AQI is its WORST pollutant's sub-index; the red bar set today's figure. The lower panel lists the stations most above last year, in points.

CAUTION

Caution: one station is one neighbourhood, and a single-pollutant spike can be an instrument artefact; the sub-indices are printed so the claim can be checked. The land around a monitor decides how far its reading travels, which is why it is stated below the figure.

SOURCE

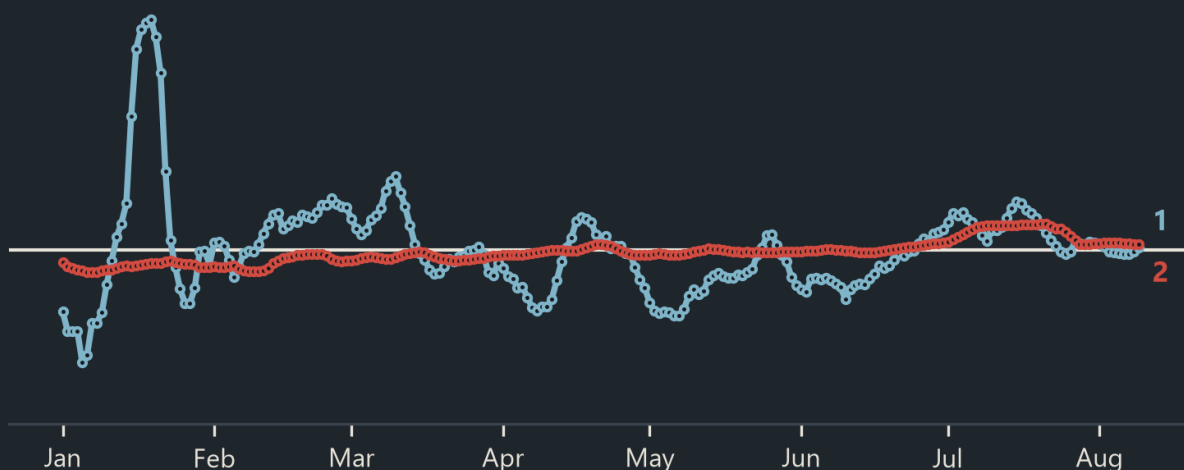
CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1]. Land cover from ESA WorldCover 2021 v200, 10 m, CC BY 4.0.

THE POINT

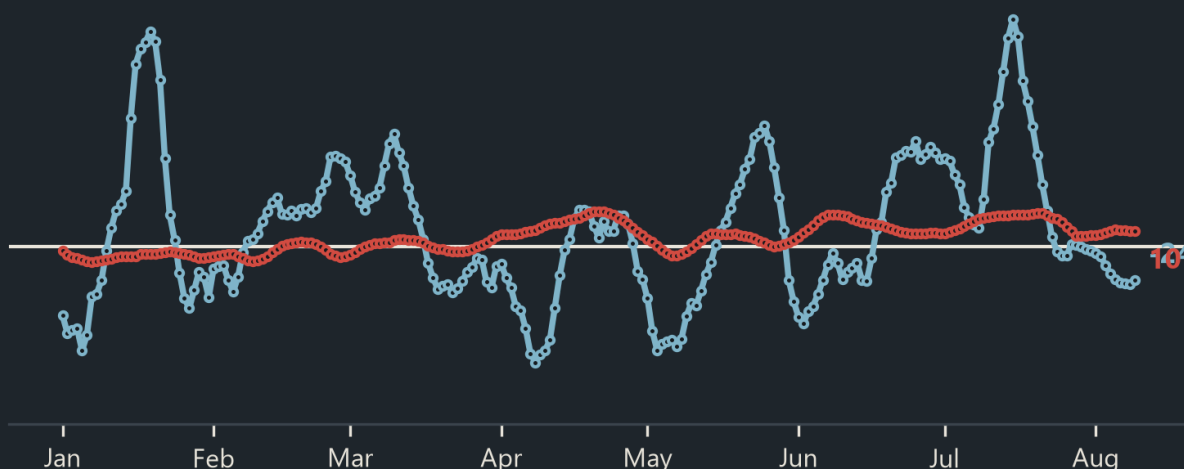
While the city averaged Satisfactory, Anand Vihar, Delhi - DPCC sat at 224. An average is not an experience.

Weather aside, PM10 sat above last year on 150 of 223 days, PM2.5 on 80

PM2.5 residual, 2026



PM10 residual, 2026

**READING**

Reading: a residual is this year's level minus the same ± 7 days of 2025. The pale line is the observed residual, weather included. The red line is the de-weathered residual, the change the city's own pollution produced. Above the zero line means worse than last year.

CAUTION

Caution: single-vintage reconstruction with live-archive fallback; 7-day centered average, so the last 3 days are suppressed; days under 30 stations or 15 matched are dropped (223 usable). The model is refit weekly, trained through 2026-08-08.

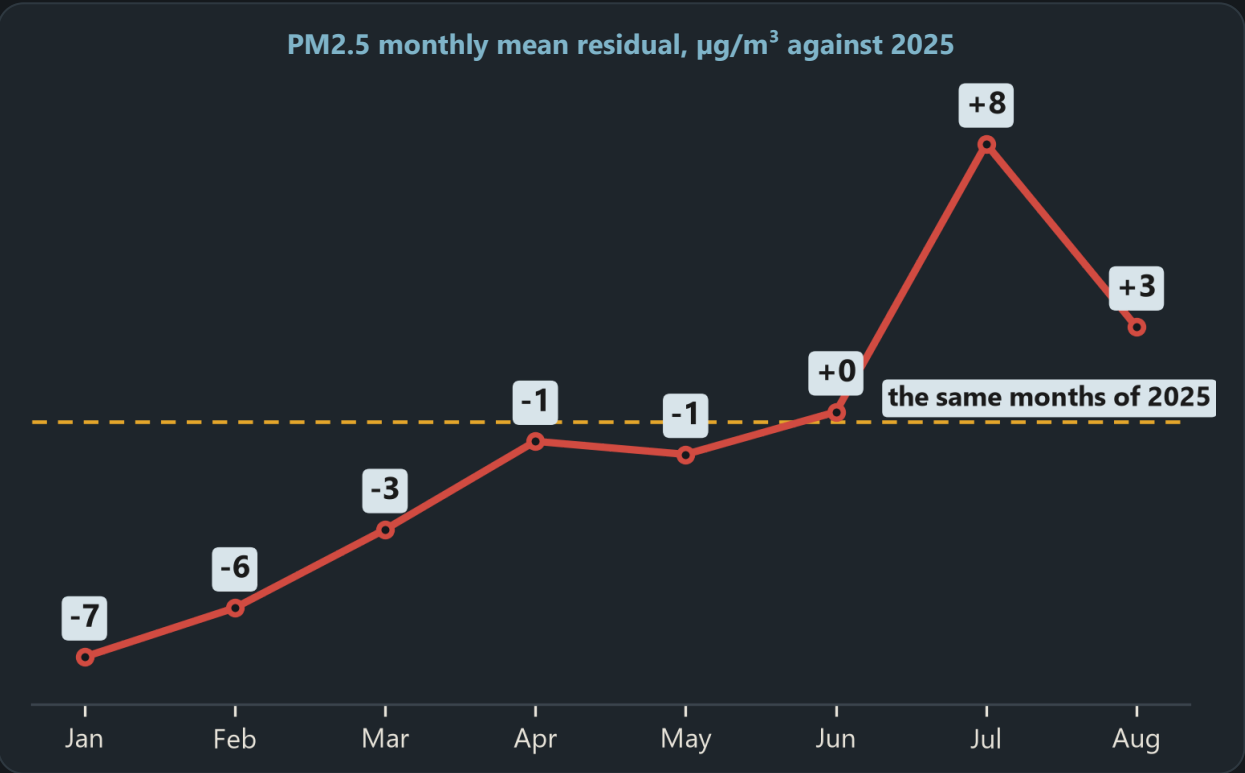
SOURCE

De-weathering pipeline, `dw_multipollutant_daily`, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

The sign counts are the finding: PM10 above last year on 150 of 223 days, PM2.5 on 80 of 223. A sign does not depend on the margin.

PM2.5, month by month, weather removed



READING

Reading: each tile is one month's MEAN of the raw daily de-weathered residuals for PM2.5, in $\mu\text{g}/\text{m}^3$ above or below the same days of 2025. Red is worse than last year, green better, grey within the margin. The chart is the same twelve figures in order, so the year's shape can be seen rather than assembled from tiles.

CAUTION

Caution: the margin divides an hourly model error by a station count, and the statistician panel has struck that construction in both directions. It is quoted, never load-bearing; the sign counts do not depend on it.

SOURCE

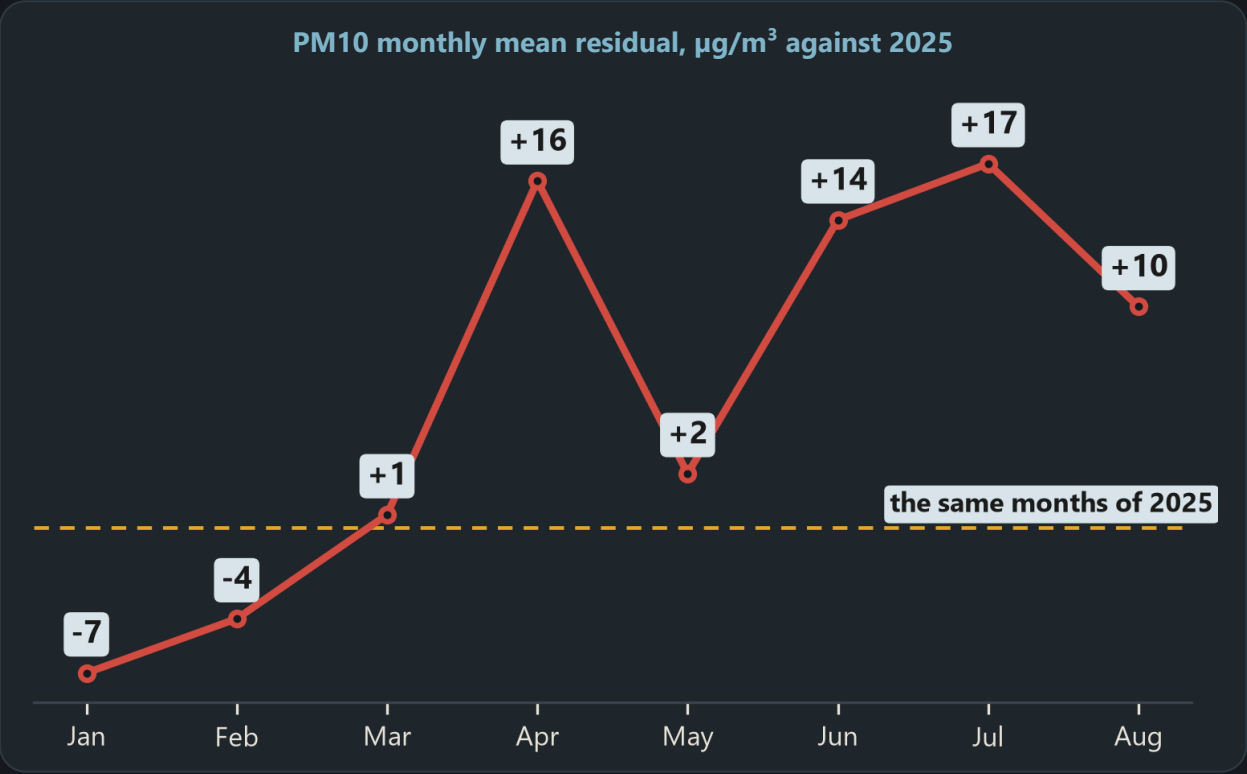
De-weathering pipeline, `dw_multipollutant_daily`, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

PM2.5: 3 of 8 months sat above last year on the de-weathered residual, 5 below.

PM10, month by month, weather removed

-7 January: within the margin; margin ± 18 , 31 days.	-4 February: within the margin; margin ± 18 , 28 days.	+1 March: within the margin; margin ± 16 , 31 days.	+16 April: directional; margin ± 16 , 30 days.
+2 May: within the margin; margin ± 15 , 31 days.	+14 June: directional; margin ± 15 , 30 days.	+17 July: clears the margin; margin ± 15 , 30 days.	+10 August so far: directional; margin ± 15 , 12 days.



READING Reading: each tile is one month's MEAN of the raw daily de-weathered residuals for PM10, in $\mu\text{g}/\text{m}^3$ above or below the same days of 2025. Red is worse than last year, green better, grey within the margin. The chart is the same twelve figures in order, so the year's shape can be seen rather than assembled from tiles.

CAUTION Caution: the margin divides an hourly model error by a station count, and the statistician panel has struck that construction in both directions. It is quoted, never load-bearing; the sign counts do not depend on it.

SOURCE De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT
PM10: 6 of 8 months sat above last year on the de-weathered residual, 2 below.

Every reporting station

#	Station	AQI	Category	Main pollutant
1	Anand Vihar	224	Poor	PM10
2	Wazirpur	166	Moderate	PM2.5
3	Bawana	164	Moderate	PM2.5
4	Punjabi Bagh	128	Moderate	PM10
5	IIT Delhi	116	Moderate	PM10
6	Nehru Nagar	111	Moderate	PM10
7	Dwarka-Sector 8	108	Moderate	PM10
8	Ashok Vihar	106	Moderate	CO
9	Cantonment Area	106	Moderate	CO
10	Sirifort	104	Moderate	PM2.5
11	Rohini	104	Moderate	PM10
12	North Campus	103	Moderate	NO2
13	Mandir Marg	103	Moderate	CO
14	Chandni Chowk	102	Moderate	PM10
15	Mundka	101	Moderate	PM10
16	Jahangirpuri	100	Satisfactory	PM10
17	Sonia Vihar	100	Satisfactory	CO
18	IGI Airport (T3)	99	Satisfactory	PM10
19	Jawaharlal Nehru Stadium	95	Satisfactory	PM2.5
20	NSUT Jaffarpur	92	Satisfactory	PM2.5
21	ITO	91	Satisfactory	PM10
22	Pusa	91	Satisfactory	PM10

READING

Reading: all 44 stations that reported in today's window, worst first. A station's AQI is the CPCB bulletin method, the worst pollutant sub-index at that station.

CAUTION

Caution: a monitor speaks for its own neighbourhood, not for the city. The network is not identical from day to day, because stations report on different schedules.

SOURCE

CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

Not one of the 22 stations on this page was rated Good. The worst here is Anand Vihar at 224.

Every reporting station, continued

#	Station	AQI	Category	Main pollutant
23	Vivek Vihar	85	Satisfactory	PM10
24	Pusa	84	Satisfactory	Ozone
25	Aya Nagar	84	Satisfactory	PM10
26	Najafgarh	84	Satisfactory	PM10
27	Okhla Phase-2	84	Satisfactory	PM10
28	Dr. Karni Singh Shooting Range	83	Satisfactory	PM10
29	Sri Aurobindo Marg	81	Satisfactory	PM10
30	Commonwealth Sports Complex	78	Satisfactory	PM10
31	IMD Lodhi Road	75	Satisfactory	PM10
32	Patparganj	74	Satisfactory	PM10
33	NSIT Dwarka	72	Satisfactory	CO
34	Talkatora Garden	71	Satisfactory	PM2.5
35	Major Dhyan Chand National Stadium	69	Satisfactory	PM10
36	JNU	69	Satisfactory	PM2.5
37	IGNOU_Maidan Garhi	68	Satisfactory	PM10
38	Burari Crossing	67	Satisfactory	PM10
39	CRRI Mathura Road	66	Satisfactory	PM10
40	DTU	66	Satisfactory	PM2.5
41	Narela	64	Satisfactory	PM10
42	Alipur	62	Satisfactory	NO2
43	IHBAS	52	Satisfactory	PM10
44	Shadipur	49	Good	PM10

READING

Reading: the table continues, same window, same method, worst first.

CAUTION

Caution: a monitor speaks for its own neighbourhood, not for the city. The network is not identical from day to day, because stations report on different schedules.

SOURCE

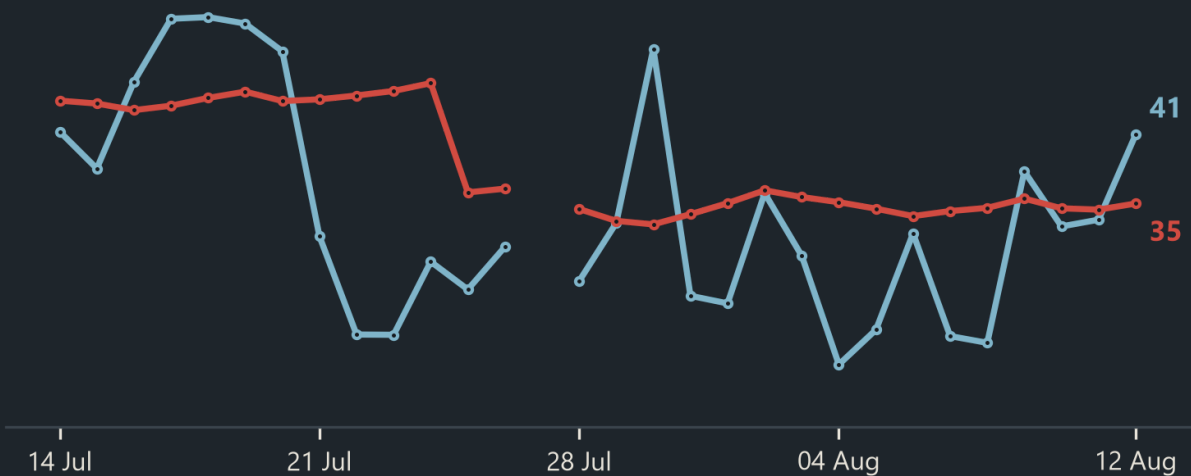
CPCB station data via the daily narration feed, generated 2026-08-12; CPCB 2014 sub-index formula, city figure the mean of station AQIs [1].

THE POINT

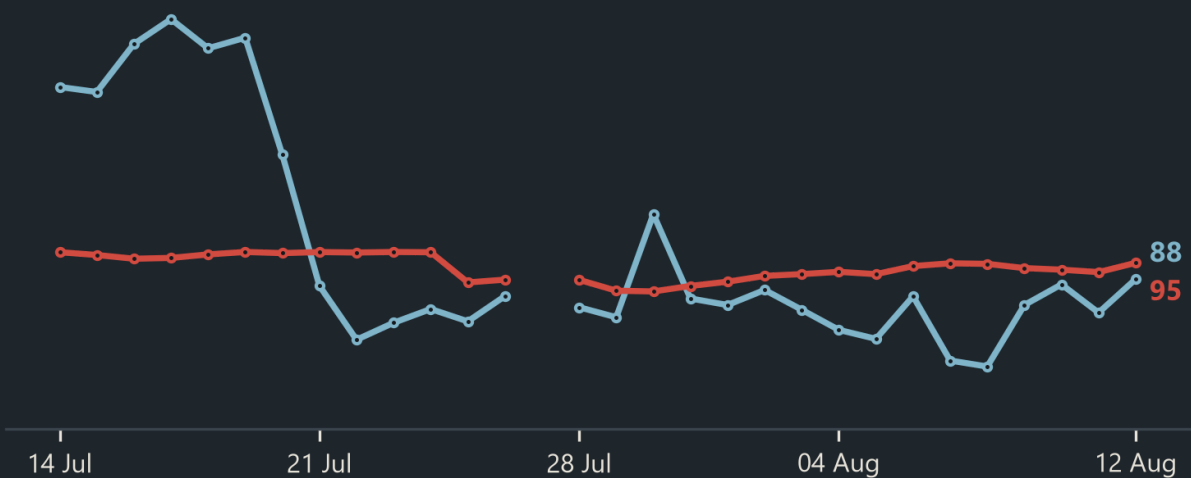
21 of the 22 stations on this page were not rated Good.

Thirty days of levels: PM2.5 and PM10

PM2.5, daily level, not a residual (µg/m³)



PM10, daily level, not a residual (µg/m³)



READING

Reading: these are LEVELS, not residuals; higher means more pollution that day. The pale line is the observed level, weather included. Red is the de-weathered level, what the city's own emissions justify. Gaps are days without a model run.

CAUTION

Caution: 24-hour city means to 10 AM, except CO and Ozone, which are 8-hour maxima; NOx is in ppb.

SOURCE

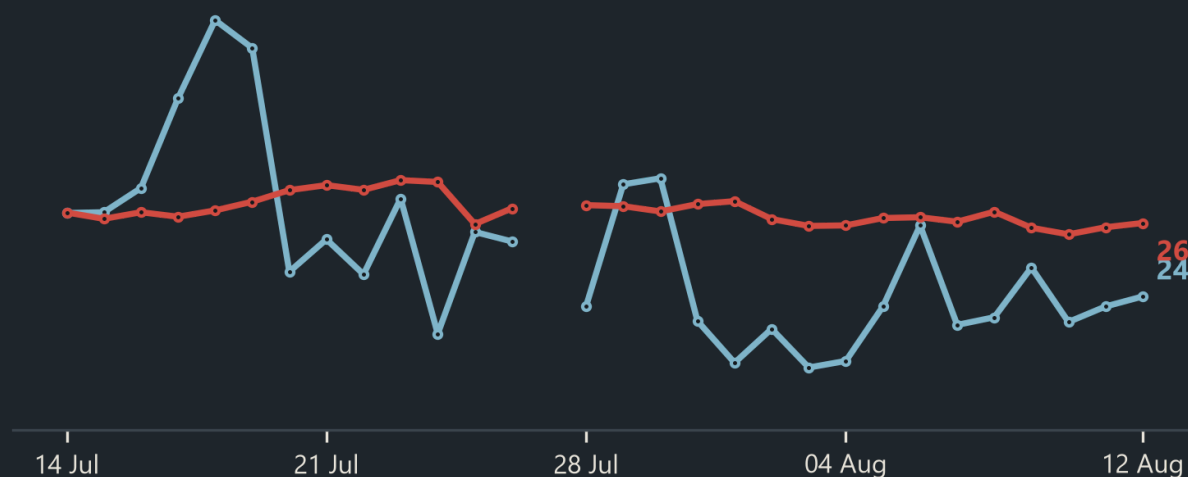
De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

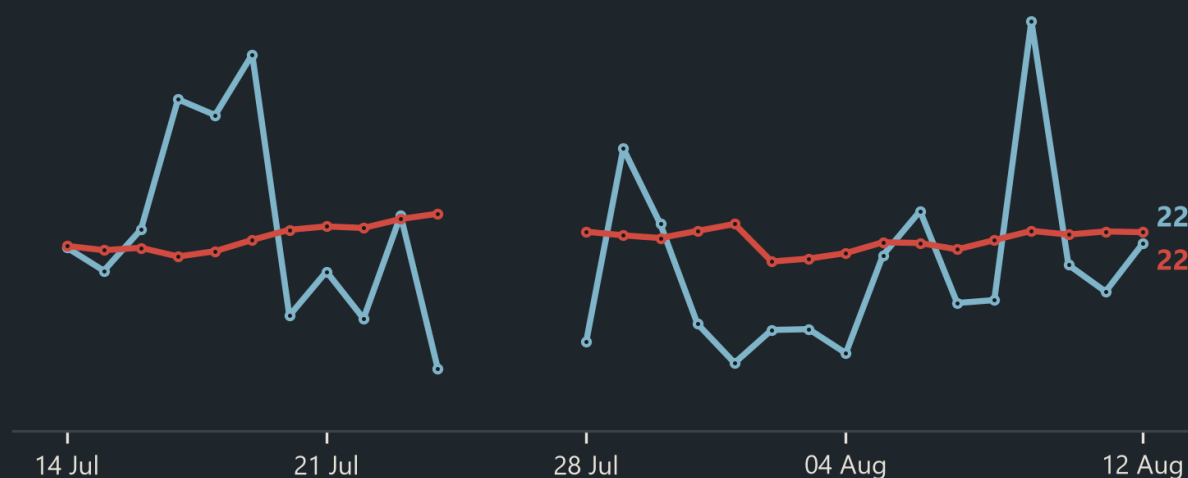
The corrected line sat above the measured line on PM2.5 for 21 of 29 days. On PM10 it did so on 21 of 29. On those days the weather was flattering the city.

Thirty days of levels: NO₂ and NO_x

NO₂, daily level, not a residual (µg/m³)



NO_x, daily level, not a residual (ppb)



READING

Reading: these are LEVELS, not residuals; higher means more pollution that day. The pale line is the observed level, weather included. Red is the de-weathered level, what the city's own emissions justify. Gaps are days without a model run.

CAUTION

Caution: 24-hour city means to 10 AM, except CO and Ozone, which are 8-hour maxima; NO_x is in ppb.

SOURCE

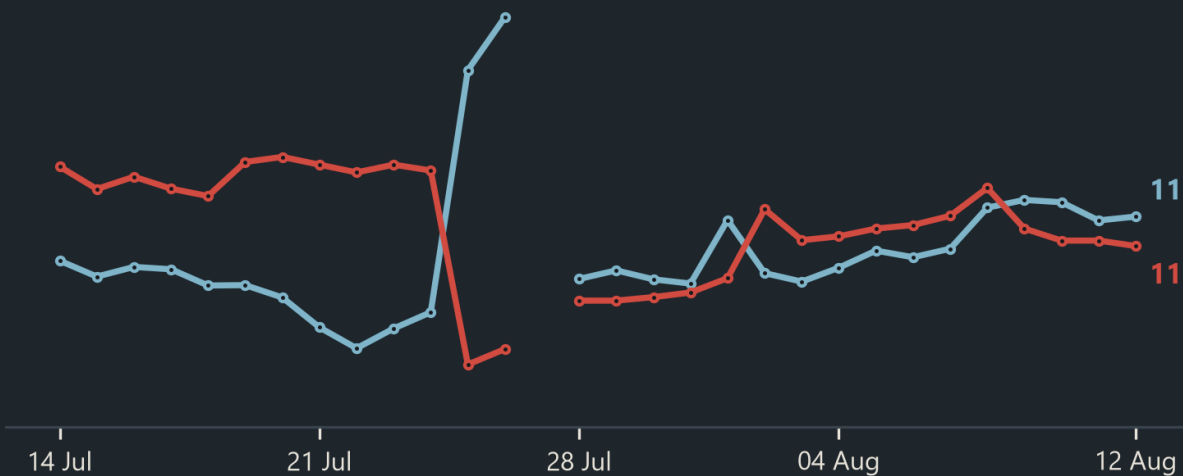
De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

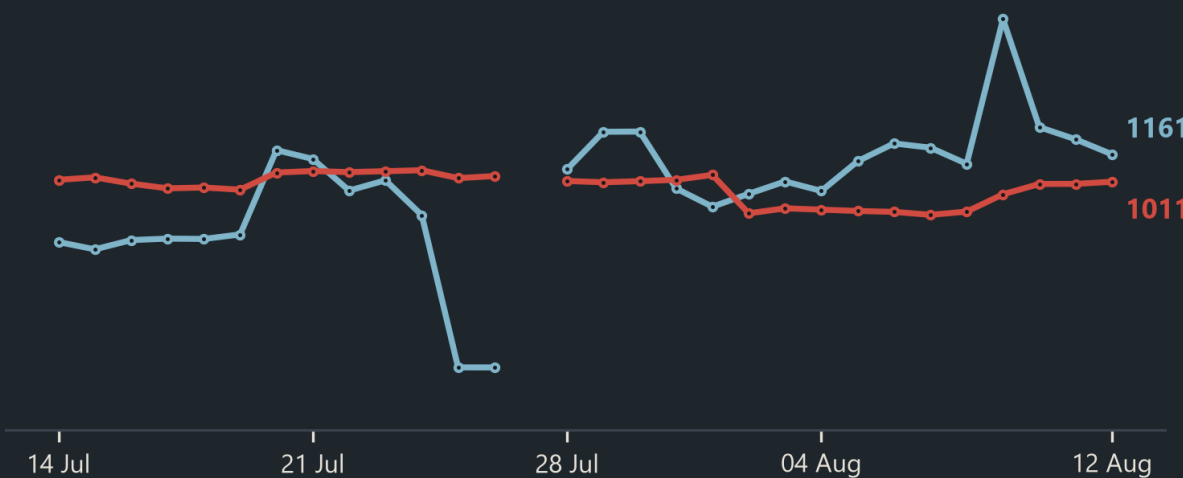
The corrected line sat above the measured line on NO₂ for 22 of 29 days. On NO_x it did so on 18 of 27. On those days the weather was flattering the city.

Thirty days of levels: SO2 and CO

SO2, daily level, not a residual ($\mu\text{g}/\text{m}^3$)



CO, daily level, not a residual ($\mu\text{g}/\text{m}^3$)



READING

Reading: these are LEVELS, not residuals; higher means more pollution that day. The pale line is the observed level, weather included. Red is the de-weathered level, what the city's own emissions justify. Gaps are days without a model run.

CAUTION

Caution: 24-hour city means to 10 AM, except CO and Ozone, which are 8-hour maxima; NOx is in ppb.

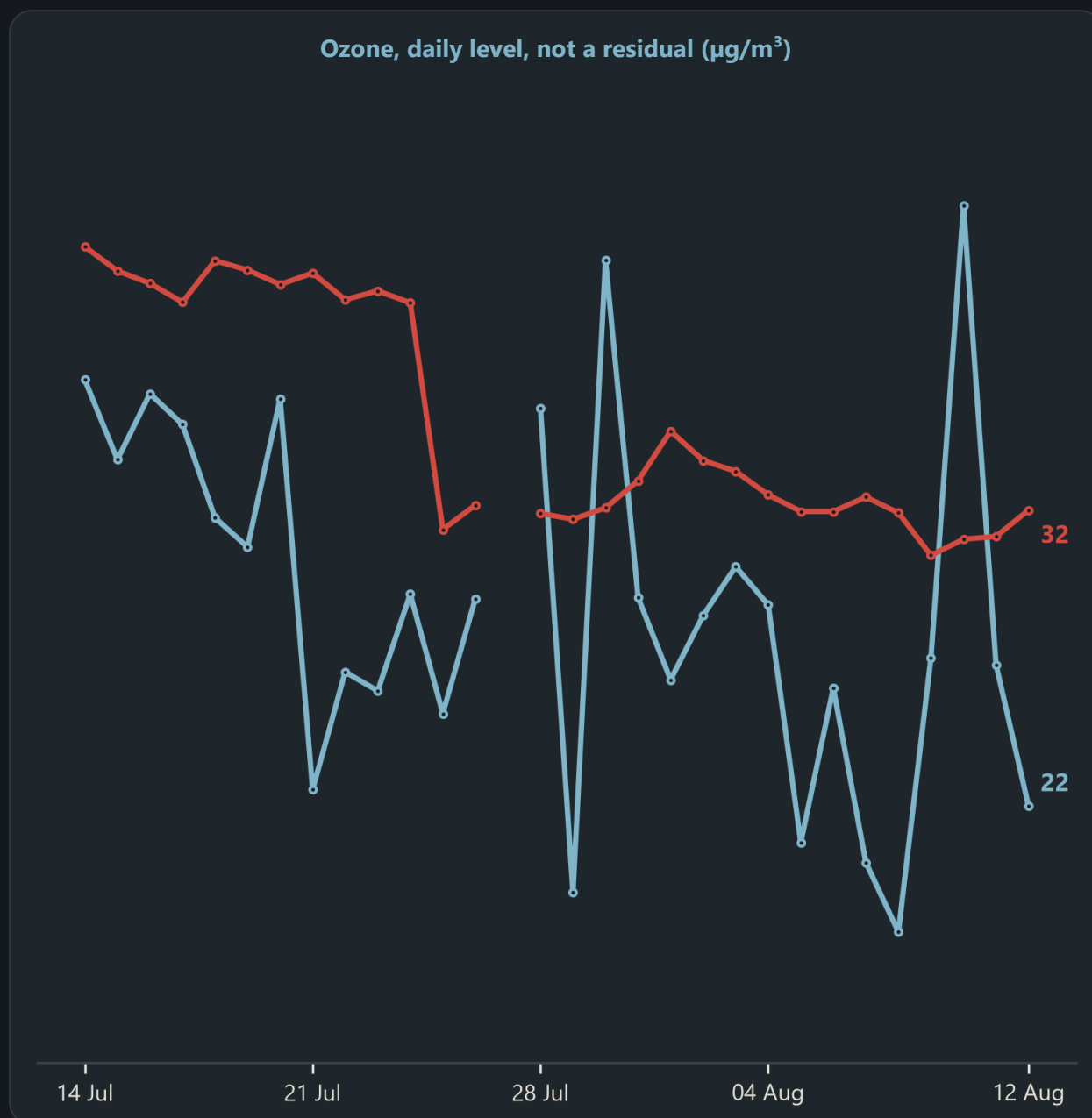
SOURCE

De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

The corrected line sat above the measured line on SO2 for 18 of 29 days. On CO it did so on 13 of 29. On those days the weather was flattering the city.

Thirty days of levels: Ozone



READING

Reading: these are LEVELS, not residuals; higher means more pollution that day. The pale line is the observed level, weather included. Red is the de-weathered level, what the city's own emissions justify. Gaps are days without a model run.

CAUTION

Caution: 24-hour city means to 10 AM, except CO and Ozone, which are 8-hour maxima; NO_x is in ppb.

SOURCE

De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

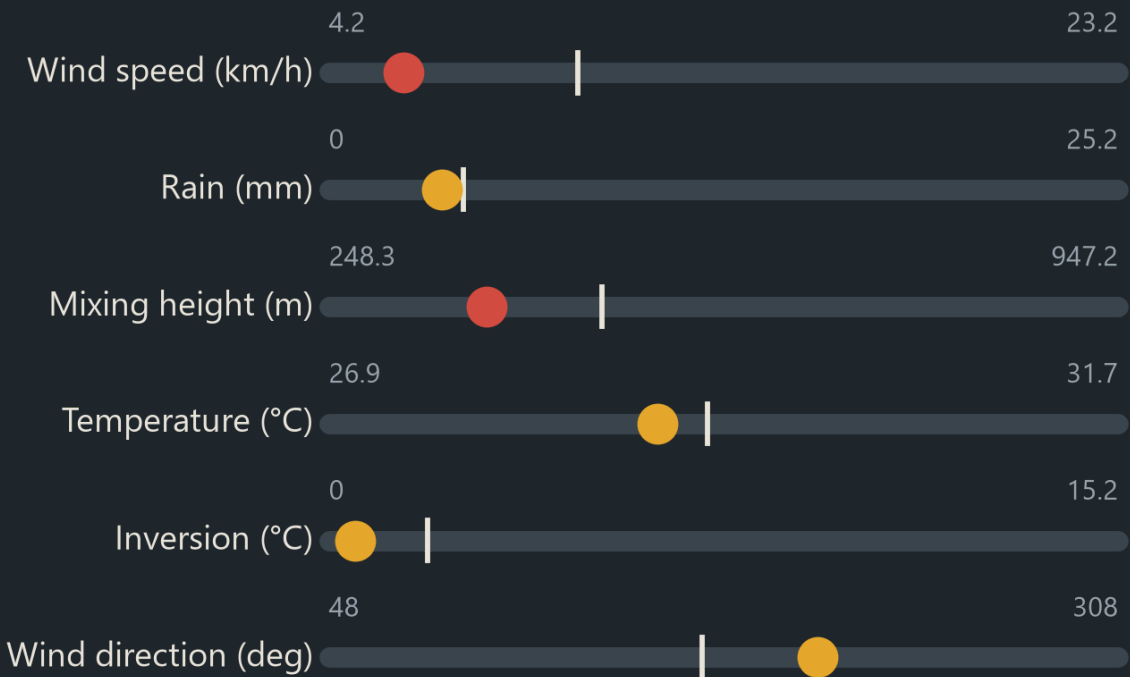
THE POINT

The corrected line sat above the measured line on Ozone for 26 of 29 days. On those days the weather was flattering the city.

The full weather evidence, with its climatology

Driver	Today	Last yr	Normal	SD	p1	p99	z	Verdict
Wind speed (km/h)	6.7	6	10.2	1.5	4.2	23.2	-2.83	abnormal, gated out
Rain (mm)	0	3.6	4.3	3.9	0	25.2	-0.17	normal
Mixing height (m)	248.3	388.2	490.3	47.6	248.3	947.2	-2.14	abnormal, gated out
Temperature (°C)	28.9	28.9	29.2	1.1	26.9	31.7	-0.28	normal
Inversion (°C)	no data	0.5	1.9	1.6	0	15.2	-0.86	normal
Wind direction (deg)	63	209	171	53	48	308	0.7	normal

Where last year's baseline sat inside four years of history



READING Reading: the full fairness evidence behind the driver tiles. Normal, SD and the p1 to p99 envelope come from the 2021 to 2024 history for these same calendar days. Each bar below is one driver's own envelope, from p1 at the left to p99 at the right, with a tick at the normal and a dot where last year's baseline sat. A red dot is a baseline the check ruled abnormal.

CAUTION Caution: the check runs in either direction. A driver ruled abnormal is gated out whether it would help our argument or hurt it. Each bar has its own scale and its own unit, so a dot's position compares a driver with its own history and never with another driver.

SOURCE De-weathering pipeline, dw_multipollutant_daily, computed 2026-08-12; weather ERA5 and Open-Meteo [2].

THE POINT

Before any weather driver is cited, last year's baseline is checked against four years of history. A freakish baseline is refused.

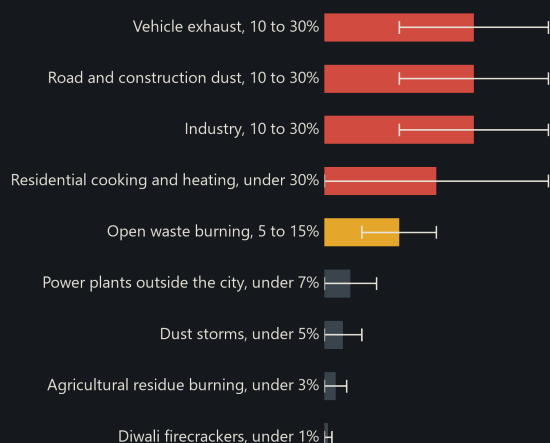
What the daily figures cannot say alone

The year behind today

Over the twelve months to 12 August 2026, Delhi's mean PM_{2.5} was 96 micrograms per cubic metre, which is 19 times the WHO guideline and 2.4 times India's annual standard, computed over 14,893 complete station-days at 47 reference stations. This is a station-day mean over reference-grade monitors, not the population-weighted city average the daily headline uses, so the two will differ slightly and are not interchangeable. For comparison, the published record gives 2021: 106, 2022: 100, 2023: 103, 2024: 102 micrograms per cubic metre, from UrbanEmissions.Info, What Is Polluting Delhi's Air, 2023-24 update, from a 40 station network. A single day is the wrong unit for a policy verdict, which is why this page carries the year beside it.

What is actually polluting this air

Across studies from 1990 to 2022, vehicle exhaust, road and construction dust and industry, including power plants each account for 10 to 30 per cent of Delhi's annual PM_{2.5}, so no single sector explains the level and no single remedy can fix it. Agricultural residue burning is under 3 per cent of Delhi's ANNUAL average PM_{2.5}, though its share in a smoke episode is far higher. Diwali firecrackers are under 1 per cent of the annual average, as a two day extreme event. These are annual shares. In winter the residential heating share rises sharply, and the seasonal sources rise with it. Source: Guttikunda and colleagues, What Is Polluting Delhi's Air? A Review from 1990 to 2022, Sustainability, 2023, Table 5.



Each bar is the midpoint and the whisker is the published range, so the width of a whisker is how much the studies disagree. The top three overlap completely, which is the finding: no one sector can be named the villain.

What the delay costs

Holding at 96 micrograms per cubic metre instead of reaching the 40 target by 2040 costs Delhi about 33 per cent more exposure and estimated mortality, and the delay since 2019 has already added about 23 per cent. The cost of delay has at least doubled since the National Clean Air Programme began, with little to no change in concentrations between 2019 and 2025. Reaching 40 micrograms per cubic metre by 2040 needs at least 10 to 15 years of systematic implementation across every sector at regional scale. These are increases in exposure and estimated mortality against reaching the target, not sums of money. Source: Guttikunda and colleagues, 40 by 2040: Cost of inaction and delays in reaching Delhi's air quality target, SIM-air working paper 63-2025, Tables 3 and 4.

What kinds of place the monitors sit in

Network composition: 8 traffic, 5 industrial, 13 residential, 1 commercial, 17 background. All five land uses required for a representative city average are covered. A city average means little unless the network covers a roadside, an industrial, a residential, a commercial and a background site, which is the published test of whether a network represents its city. Source: Site types read from each locality's character; the land use requirement is from SIM-48-2024 p. 5 and SIM-47-2024 p. 3.

None of the figures on this page are ours. They are published work, cited so the reader can check them, and they answer the questions the rest of this report raises but cannot settle.

The method, in plain English

Where the numbers come from

Every figure is read from the day's two machine-made feeds, never retyped. The window is 24 hours to 10 AM IST. A station's AQI is the CPCB bulletin method, the worst single-pollutant sub-index at that station. The city figure is the mean of station AQIs, 44 stations today.

How we compare with last year, and why the window is 15 days

Last year is never a single day. It is the average of the same date ± 7 days of 2025, using only stations present in both years (36 matched today). Delhi's air is driven by weather systems that come and go every three to seven days. A 15-day window spans two to three of those cycles, so no single storm or calm night can define normal. Neighbouring days are correlated, so the 15 days act like about seven independent readings. That cuts the baseline's one-day noise roughly two-and-a-half-fold. A wider window would blur the monsoon's arrival and the crop-burning surge. One honest limit: festival emissions are real pollution and stay in by design. A moving festival like Diwali can sit inside one year's window and not the other's, so October and November carry that caveat.

What population-weighted means

Delhi's monitors are not spread evenly over its people. The leafy centre has many stations covering few residents; single outer stations stand for lakhs. The weighted figure divides the city into zones, one per station, by a Voronoi map of the active monitors clipped to the NCT boundary. Each zone's population comes from the 70 Assembly Constituencies: the 2025 electoral rolls, about 15.61 million electors from ECI turnout data, scaled to the Registrar General's 2025 projection of 20.94 million. A station's weight is its zone's share of the population, re-scaled daily over the stations that reported. Honest limits: residents without voter registration are under-counted; stations added after

March 2026 are not yet in the zone map; and no weighting fixes a monitor's siting or calibration.

What weather-corrected means

A random-forest model, trained on five years of hourly data, learns how wind, rain, temperature and mixing height move pollution. Subtracting that effect shows what the city's own emissions justify. On days it has never seen, the model explains about 38 per cent of the variation. We therefore treat outputs as estimates, quote ranges, and never claim precision the model does not have.

The fairness check

Before we cite any weather driver, last year's baseline weather is compared with the 2021 to 2024 history for the same calendar days. If last year was freakish for that driver, we do not build an argument on it. That holds in either direction.

The rules we bind ourselves with

The headline always states the WORSE of the observed and weather-corrected numbers, never the flattering one. One number, one engine: the same quantity is never quoted from two sources. A change whose range spans zero is too close to call, whether it helps us or hurts us. Gas levels are never the basis of a claim; gas directions may be cited when statistically clear. Ozone is the standing exception: it rises when traffic emissions fall, so it is permanently excluded from our claims.

Words used

AQI: the air-quality index, 0 to 500, higher is worse; 0 to 50 is Good, 301 to 400 Very Poor, over 400 Severe.
 $\mu\text{g}/\text{m}^3$: micrograms of pollutant per cubic metre of air.
 Range: the span within which the true value very likely lies.

Report auto-generated daily from the same data files as the video, so the two can never disagree.

Every figure traces to a dated feed

- 01 CPCB station data, read through the daily narration feed `CPCB_AQI_narration_2026-08-12.json`, generated 2026-08-12. The window is 24h ending 10 AM IST (aligned to daily $\mu\text{g}/\text{m}^3$ + de-weather); NOT CPCB's published calendar-day AQI. City figure is the mean of station AQIs; each station's AQI is its worst sub-index under the CPCB 2014 formula. Tier 1, the regulator's own published station data.
- 02 De-weathering pipeline, `dw_multipollutant_daily_20260812.json`, computed 2026-08-12. A random-forest weather model on ERA5 and Open-Meteo hourly data; its out-of-sample skill is printed on the page that uses it. Our own computation, stated as such and reproducible from the held code and data.
- 03 Weather comparison: ERA5 and Open-Meteo hourly observations, aggregated over the same 24h-to-10AM window as the AQI, with a 2021 to 2024 climatological normal for the anomaly check. Tier 1 as data, dated in the feed.
- 04 Population weighting: how many people each constituency holds comes from the 2025 Delhi electoral rolls, about 15.61 million electors in Election Commission of India turnout data, scaled to the Registrar General of India's 2025 projection for the National Capital Territory of 20.94 million. Where they sit inside a constituency comes from the WorldPop 2020 population grid at 100 m, adopted 12 August 2026 in place of an even spread over area, because that spread credited outer monitors with the residents of surrounding farmland. Station zones are a Voronoi map of the active monitors. Tier 1 as data, all series dated.
- 05 Year residual series and the cover cascade: the single-vintage reconstruction `dw_reconstruction_2026` with live-archive fallback; strict filename census; model refit weekly, trained through 2026-08-08; the same definitions as `hawakahisab.in`'s daily figures. Our own computation, stated as such.
- 06 Health characterisation: the CPCB category health descriptors as published with the index, and the WHO Global Air Quality Guidelines, 2021, for the PM2.5 and PM10 limits. Tier 1.

THE POINT

Both feeds are produced before this report and are never edited by it. What the feed does not carry, the page says is unavailable.