HAWA KA HISAB / THE HOURLY RECORD

Diwali night, 2025

Delhi PM2.5 monitoring coverage | Hourly labels from noon on 20 October to 11:00 on 21 October, IST.

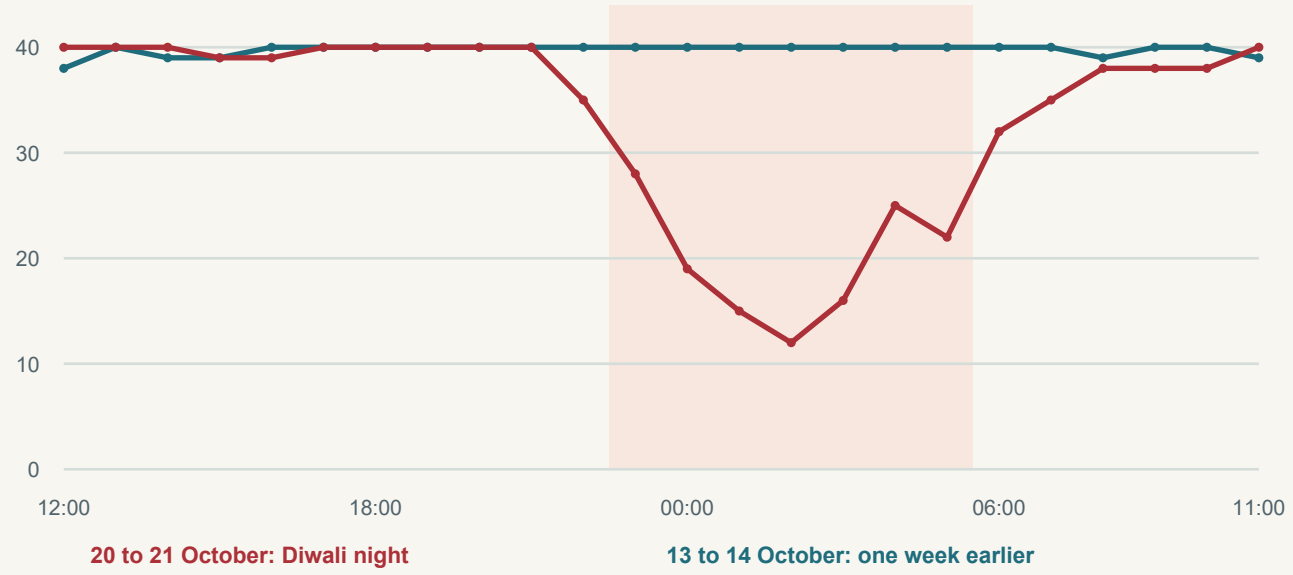
The saved hourly record thinned overnight. Delhi needs an explanation for each missing station-hour.

12
stations at 02:00 on 21 October

40
stations at 02:00 one week earlier

7
consecutive hourly labels with fewer than 30 stations

Stations with a numeric PM2.5 observation



Each point counts distinct station identifiers with a numeric PM2.5 observation in the saved archive. Shading marks the seven hourly labels from 23:00 through 05:00 that each had fewer than 30 stations on Diwali night.

At 02:00 the archive had readings from 12 stations, compared with 40 at 21:00 the previous evening and 40 at the matched hour one week earlier. The fall from 40 to 12 was 70%.

The gap is in the archived observations. It does not establish whether instruments stopped, transmission failed or records were omitted. The missing concentrations, and any effect on a city average, cannot be inferred from these counts.

The record needs reconciliation. The responsible agencies should account for the absent station-hours and provide the underlying station records. A complete hourly record is essential for public scrutiny.

The hour-by-hour record

Counts of distinct station identifiers with a numeric PM2.5 observation. All hourly labels are IST.

Hour IST	20 October	13 October
12:00	40	38
13:00	40	40
14:00	40	39
15:00	39	39
16:00	39	40
17:00	40	40
18:00	40	40
19:00	40	40
20:00	40	40
21:00	40	40
22:00	35	40
23:00	28	40

Hour IST	21 October	14 October
00:00	19	40
01:00	15	40
02:00	12	40
03:00	16	40
04:00	25	40
05:00	22	40
06:00	32	40
07:00	35	40
08:00	38	39
09:00	38	40
10:00	38	40
11:00	40	39

The two 24-label windows contain 791 and 954 station-hours respectively. A station-hour here means one distinct station with a numeric observation at one hourly label. It is not a concentration or a measure of exposure.

How the counts were checked

The source is CREA's saved compilation of CPCB station observations for Delhi. The audit selects PM2.5, raw observed records, station level and the canonical micrograms-per-cubic-metre unit. It groups by location identifier and timestamp, rather than by station-name spelling. The selected dates contain no conflicting duplicate station-hours.

Counts of raw numeric observations and counts passing the existing PM2.5 analysis filter, above 0 and below 1,000 micrograms per cubic metre, are identical in these windows. This is an hourly coverage comparison. No daily AQI, daily mean, weather adjustment or emissions estimate is calculated here.

What the record can establish

It establishes the coverage of this saved archive. It cannot identify the reason for an absence, reveal an unobserved concentration, or establish the direction or size of any effect on an air-quality statistic. The comparison night is a matched weekday one week earlier, not a claim about every ordinary night.

Sources and reproducibility

Saved 2025 raw archive, independently audited on 18 October 2026. Its full SHA256 fingerprint is:

4b84a34fb001539199e36b8783d934652f6cd620d801a1d7f96f3b4f32991c60

CREA data API and documentation | Download the 48 checked hourly counts

CREA has no involvement in this analysis. Responsibility for its interpretation rests with the publisher.