MONTHLY WEATHER REPORT OF DELHI
OCTOBER 2025

Significant Weather Observations

- Moderate rainfall was recorded on 1st October at most places over Delhi with Ayanagar observatory recording heavy rainfall (72.8 mm). (Table 1 & Figure 1). This rainfall was due to A Well-marked low-pressure area that lay over Gulf of Kutch. A trough ran from this Well-marked low-pressure (WML) area over Gulf of Kutch to Southeast Uttar Pradesh. Another trough ran from this WML to Northwest Rajasthan in lower tropospheric levels. The rainfall may be attributed to these two troughs facilitating moisture supply from both Arabian Sea and the Bay of Bengal.
- Light to moderate rainfall was recorded over Delhi on 3rd, 6th, 7th and 8th October.
- Moderate fog was recorded at Safdarjung on 21st October.
- Shallow fog was recorded on 22nd and 30th October.
- The **mean maximum temperature** for the month was **31.5°C** which is **1.5°C** below the climatological mean of the month, i.e. **33.0°C,** The trend of Maximum temperature is shown in Figure 3 & 7.
- The **mean minimum temperature** for the month was **20.1°C**, which is **0.6°C above** the climatological mean of the month, i.e. **19.5 °C.** The trend of Minimum temperature is shown in Figure 5 & 8.

A total of 89.3 mm of rainfall was recorded at Safdarjung Observatory during October 2025 which is the third highest rainfall recorded in October since 1961.

Rank	Year	Rainfall in October (in mm)
1	2022	128.6
2	2021	122.5
3	2025	89.3

Meteorological Analysis

- On 1 October, a trough extended from a cyclonic circulation associated with a well-marked low-pressure area over the northeast Arabian Sea and adjoining Saurashtra coast to southwest Uttar Pradesh across east Rajasthan, while another upper-air cyclonic circulation persisted over northeast Rajasthan and a fresh Western Disturbance was likely to approach from 4 October.
- On 2 and 3 October, upper-air cyclonic circulations prevailed over central Uttar Pradesh and northwest Rajasthan, and the Western Disturbance appeared as a trough in the middle tropospheric westerlies near Long. 67°E to the north of Lat. 32°N.
- On 4 and 5 October, a well-marked low-pressure area persisted over west Jharkhand and adjoining south Bihar, southeast Uttar Pradesh and north Chhattisgarh with an associated trough extending towards east Vidarbha, while the Western Disturbance lay as a trough near Long. 73°E on the 4th and as a cyclonic circulation over Jammu on the 5th.
- From 6 to 8 October, the Western Disturbance lay as a cyclonic circulation over northeast Afghanistan and adjoining Pakistan with induced circulation features over north Pakistan, later appearing as an induced low-pressure area over north Rajasthan adjoining Haryana on the 7th; on the 8th, an upper-air cyclonic circulation lay over east Haryana and neighbourhood with a trough aloft along Long. 77°E north of Lat. 28°N.
- From 9 to 12 October, a Western Disturbance influenced north India as a cyclonic circulation over Haryana and northwest Uttar Pradesh up to mid-tropospheric levels, gradually weakening after the 12th, while another cyclonic circulation persisted over central and northwest Uttar Pradesh till the 13th.
- On 19 October, an upper-air cyclonic circulation persisted over east Rajasthan and adjoining west Madhya Pradesh and shifted towards northwest Rajasthan on 20 October, accompanied by a trough extending towards central Madhya Pradesh; during this period, a Western Disturbance trough ran near Long. 65°E.
- On 21 October, the cyclonic circulation moved southwestwards over southwest Rajasthan and neighbourhood, with the Western Disturbance trough shifting eastwards near Long. 68°E.
- On 22 October, two cyclonic circulations were observed — one over northeast Rajasthan and another over northwest Uttar Pradesh adjoining Haryana — both near 3.1 km above mean sea level, while the Western Disturbance trough persisted near Long. 72°E.
- On 23 October, a cyclonic circulation lay over northwest Uttar Pradesh and adjoining Haryana along with a Western Disturbance trough near Long. 78°E north of 30°N, and by 24 October the system moved eastwards.
- On 26 October, a fresh Western Disturbance approached with its axis near Long. 61°E north of 28°N; on 27 October, a cyclonic circulation developed over north Haryana and the trough shifted eastwards near Long. 70°E; on 28 and 29 October, a cyclonic circulation persisted over northeast Rajasthan while the Western Disturbance trough remained nearly stationary near Long. 75°E north of 32°N.

Rainfall Summary of the Month

During the month, Safdarjung recorded **89.3 mm** of rainfall against the normal rainfall of **15.1 mm** (based on 1971–2020 climatology), which is **491%** above the long period average (LPA).

Rainfall and its Departures at Observatories of Delhi during the Month

STATION	Actual Rainfall (in mm)	Normal Rainfall (in mm)	Departure (%)
Safdarjung	89.3	15.1	491%
Palam	98.6	12.7	676%
Lodhi Road	72.1	15.1	377%
Ridge	127.9	11.8	984%
Ayanagar	126.0	13.8	813%

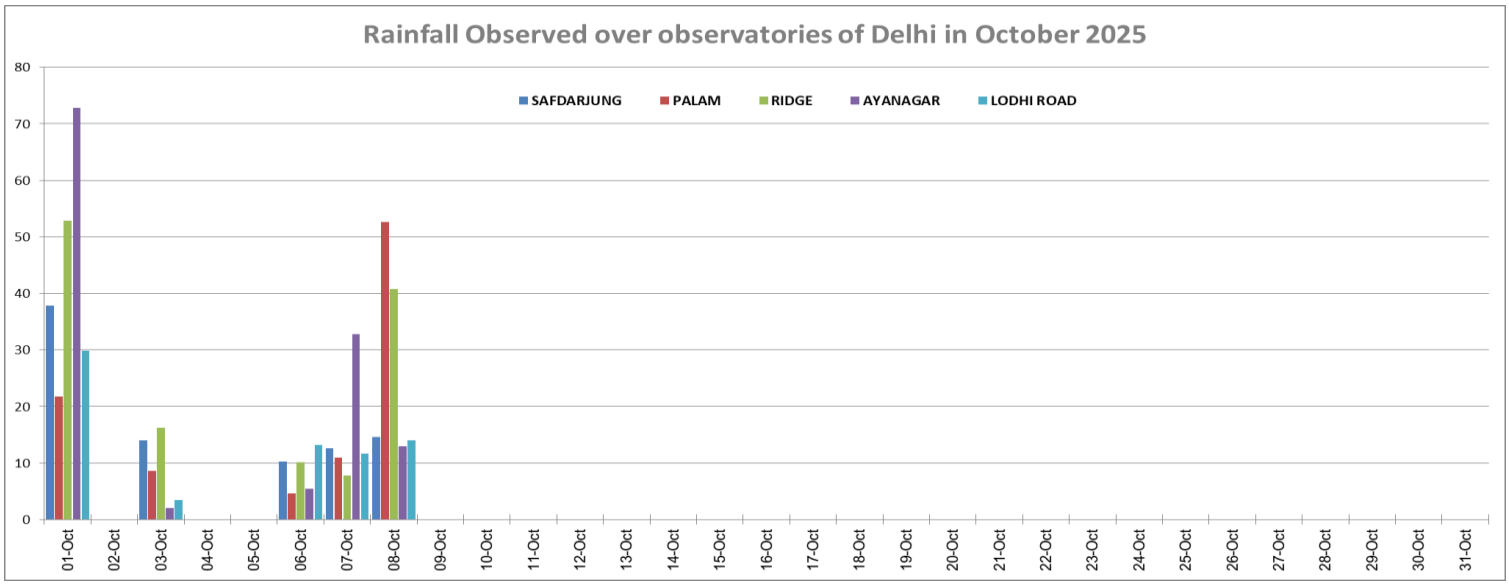

Figure 1. Actual rainfall over Observatories of Delhi

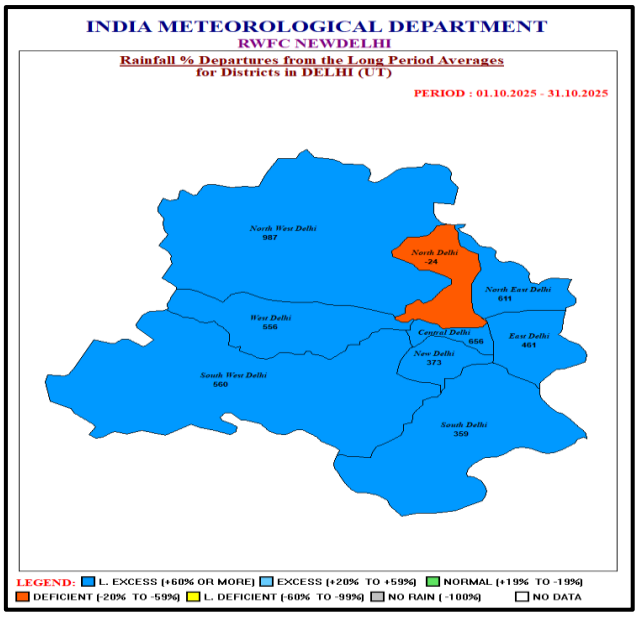

Figure 2. Rainfall % departure from the long period average for districts in Delhi

Temperature Summary of the month

Maximum Temperature

Maximum temperatures were **below normal** for **3 days**, **appreciably below normal** for **6 days**, **markedly below normal** for **2 days**, and **normal** on remaining days of the month. The mean maximum temperature for the month was **31.5°C** which is **1.5°C** below the climatological mean of the month, i.e. **33.0°C**. The highest maximum temperature was **35.7°C** recorded on **2nd October 2025**. The all-time record of maximum temperature for the month is **39.4°C** recorded on **17 October 1951**.

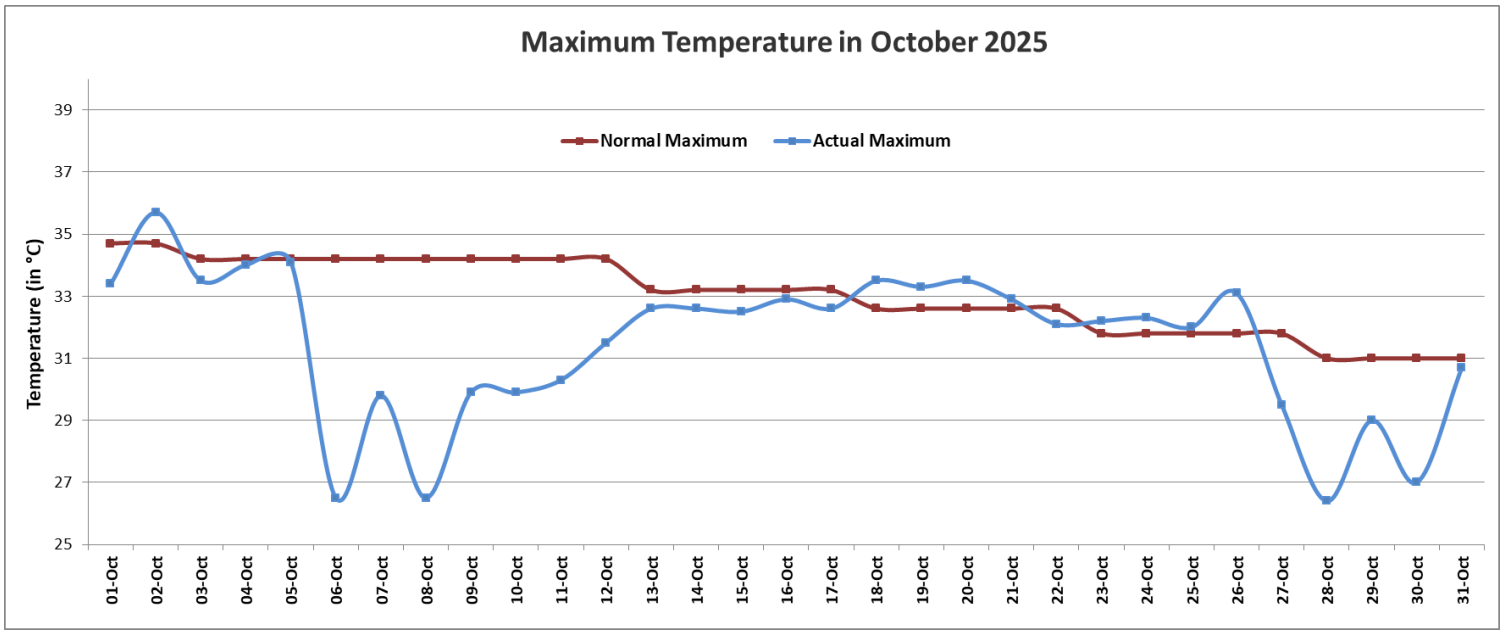

Figure 3. Monthly trend of Maximum temperature as compared to the Normal temperature (Safdarjung)

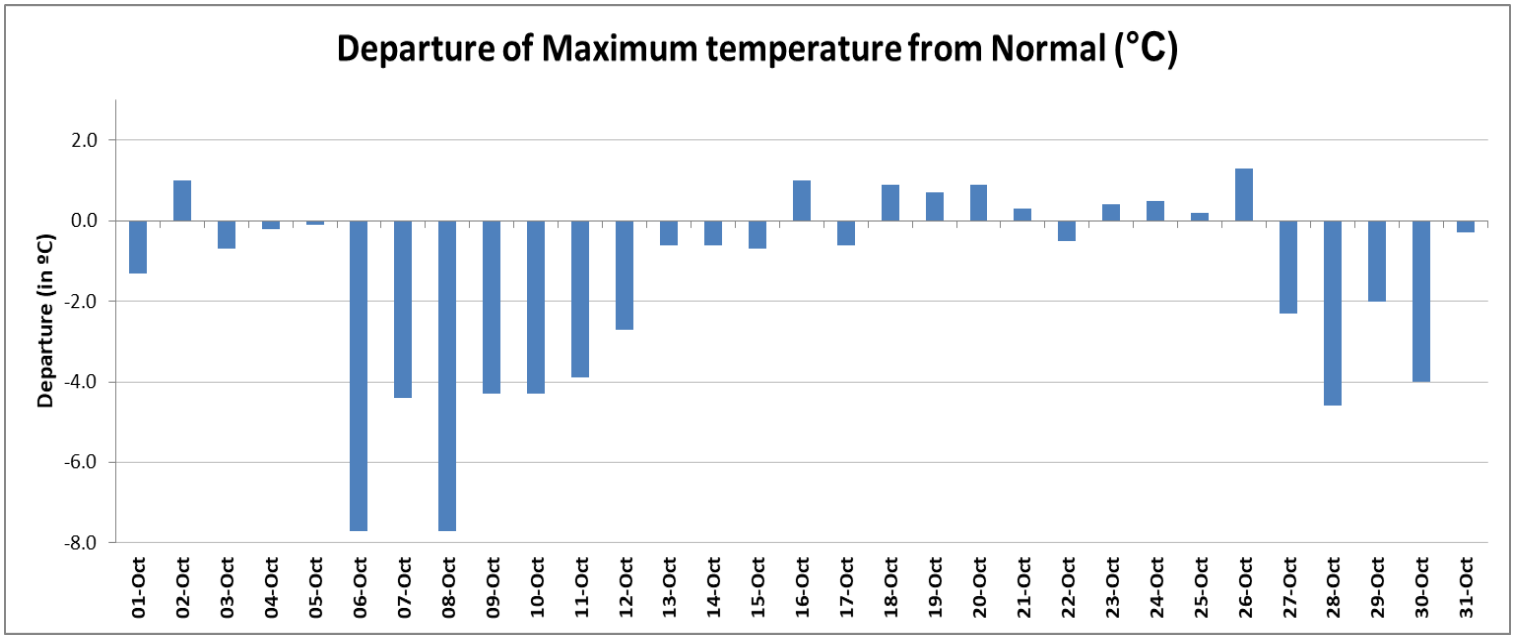

Figure 4. Departure of Maximum temperature from Normal temperature (Safdarjung)

Minimum Temperature

Minimum temperatures were **below normal** for **3 days**, **above normal** for **6 days, appreciably above normal** for **4 days, markedly above normal** for **1 day** and **normal** for remaining days of the month. The mean minimum temperature for the month was **20.1°C**, which is **0.6°C above** the climatological mean of the month, i.e. **19.5 °C**. The lowest minimum temperature was **15.8°C** recorded on **26th October 2025**. The all-time record of minimum temperature for the month is **9.4°C** recorded on **31 October 1937.**

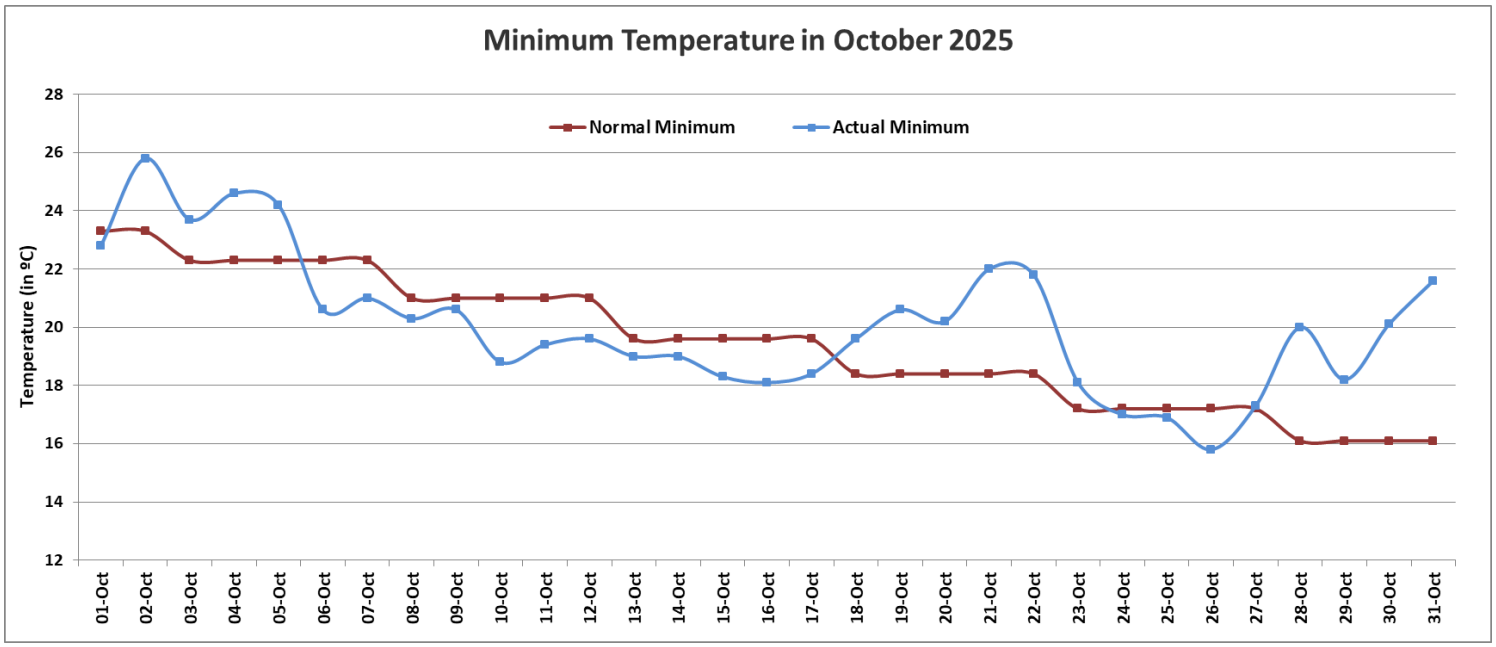

Figure 5. Monthly trend of Minimum temperature as compared to the Normal temperature (at Safdarjung)

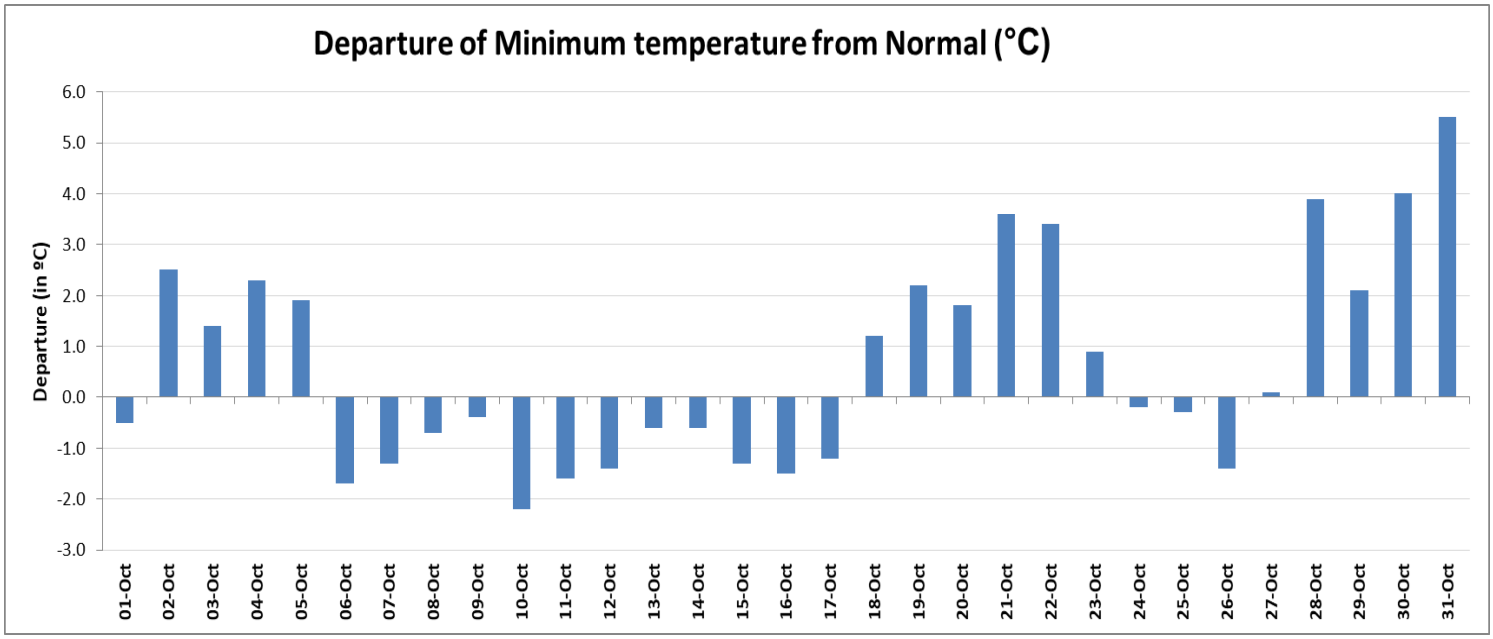

Figure 6. Departure of Minimum temperature from Normal temperature (at Safdarjung)

ACTUAL TEMPERATURE OBSERVED AT MANUAL OBSERVATORIES OF DELHI DURING THE MONTH

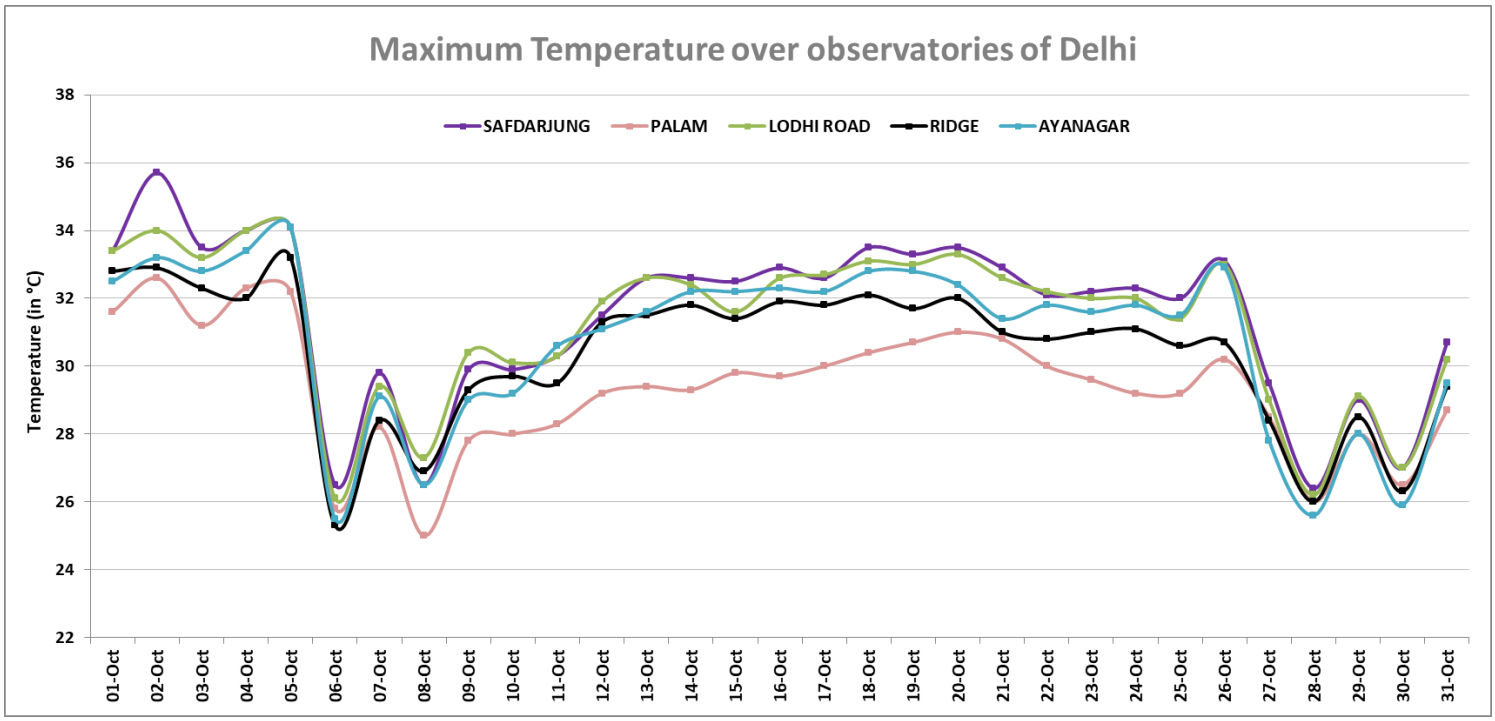

Figure 7. Monthly trend of Maximum temperature over Manual observatories of Delhi

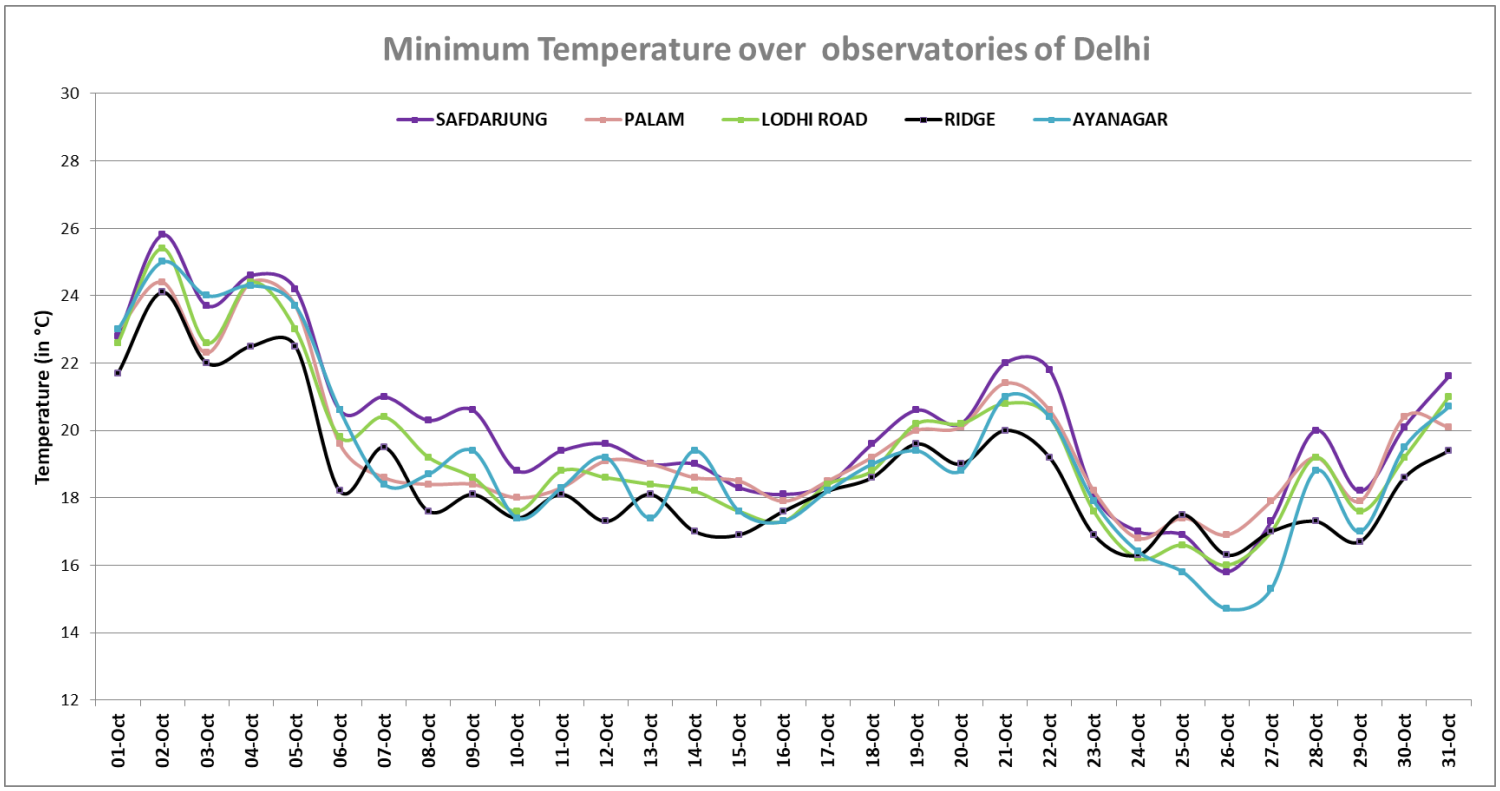

Figure 8. Monthly trend of Minimum temperature over Manual observatories of Delhi

Average Temperature and its Departure during the Month

STATION	Average Actual Temperature over the month (in °C)		Average Normal Temperature over the month (in °C)		Average Departure (in °C)	
	Max	Min	Max	Min	Max	Min
Safdarjung	31.5	20.1	33.0	19.5	-1.5	0.6
Palam	29.3	19.6	33.3	19.9	-4.0	-0.3
Ridge	30.4	18.9	33.4	20.3	-3.0	-1.4
Ayanagar	30.8	19.2	33.4	19.5	-2.6	-0.3

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Legends:

Departure = Observed temperature – Normal Temperature

Markedly above normal	Appreciably above normal	Above normal	Normal	Below normal	Appreciably below normal	Markedly below normal
5.1 and above	3.1 to 5.0	1.6 to 3.0	1.5 to -1.5	-1.6 to -3.0	-3.1 to -5.0	-5.1 and below

Terminology	Rainfall Range (mm)
Light Rainfall	up to 15.5
Moderate Rainfall	15.6 to 64.4
Heavy Rainfall	64.5 to 115.5
Very heavy Rainfall	115.6 to 204.4

Light Spell:	<5 mm/hr
Moderate Spell:	5- 15 mm/hr
Heavy Spell:	>15 mm/hr

FOG CLASSIFICATION	VISIBILITY
SHALLOW FOG	1000 – 500 m
MODERATE FOG	499 – 200 m
DENSE FOG	199 – 50 m
VERY DENSE FOG	Less than 50 m