



### Wind Pattern and Ventilation Index Forecast

Air mass inflow forecast in Delhi along with predicted ventilation coefficient and weather forecast is as follows:

- 1. The air quality over Delhi-NCT is likely to remain in Moderate category on 16.06.2021 and Moderate to Satisfactory category on 17.06.2021 and 18.06.2021. The predominant pollutant will be PM10 as strong winds may raise dust locally and transport of dust from nearby regions. The Outlook for subsequent 5 Days: The air quality is likely to remain in Moderate to satisfactory category.
- 2. The predominant surface wind is likely to be coming from East/Northeast direction of Delhi with wind speed of 10-20 kmph and generally cloudy sky with **light** rain/thundershowers accompanied with gusty winds (speed 30-40 kmph) on 16.06.2021. The predominant surface wind is likely to be coming from variable direction of Delhi with wind speed of 10-16 kmph and partly cloudy sky with possibility of very light rain/thundershowers on 17.06.2021. The predominant surface wind is likely to be coming from Southeast direction of Delhi with wind speed of 10-16 kmph and partly cloudy sky mind is likely to be coming from Southeast direction of Delhi with wind speed of 10-16 kmph and partly cloudy sky on 18.06.2021.
- **3.** Predicted maximum mixing depth is likely to be approx. 2000 m on 16.06.2021, 3300 m on 17.06.2021 and 3000 m on 18.06.2021 over Delhi. Maximum Ventilation index is likely to be approx. 4000 m<sup>2</sup>/s on 16.06.2021, 10000 m<sup>2</sup>/s on 17.06.2021 and 7000 m<sup>2</sup>/s on 18.06.2021. The ventilation index lower than 6000 m<sup>2</sup>/s with average wind speed less than 10 kmph is unfavourable or dispersion of pollutants.
- **4.** The strong surface winds are favourable for raising dust locally and transport of dust from nearby region.
- 5. Detailed forecast analysis and verification can be seen at <u>https://ews.tropmet.res.in</u>.
- 6. Air mass inflow in Delhi along with ventilation index is attached.





# Delhi/NCR forecast for next 7 days

|            |                      |      | <u>Da</u>                       | te: 16.06.20           | <u>)21</u>             |   |      |  |
|------------|----------------------|------|---------------------------------|------------------------|------------------------|---|------|--|
|            | TEMPERAT<br>URE (°C) |      | DIRECTION/ WIND SPEED<br>(KMPH) |                        |                        |   |      |  |
| DATE       | MAX MIN              |      | 0530-<br>1130<br>(IST)          | 1130-<br>1730<br>(IST) | 1730-<br>2330<br>(IST) | WEATHER FORECAST  |      |  |
| 16.06.2021 | 36                   | 26.2 | SE/10                           | E/14                   | NE/20                  | GENERALLY CLOUDY SKY WITH<br>LIGHT RAIN/THUNDERSHOWERS<br>ACCOMPANIED WITH GUSTY<br>WINDS (SPEED 30-40 KMPH). | F.K. |  |
| 17.06.2021 | 37                   | 27   | E/10                            | SE/12                  | NE/16                  | PARTLY CLOUDY SKY WITH<br>POSSIBILITY OF VERY LIGHT<br>RAIN/THUNDERSHOWERS.                                   | F.K. |  |
| 18.06.2021 | 38                   | 28   | SE/10                           | SE/14                  | SE/16                  | PARTLY CLOUDY SKY.  |      |  |
| 19.06.2021 | 38                   | 29   | S/18                            | NW/22                  | SE/24                  | PARTLY CLOUDY SKY WITH<br>POSSIBILITY OF VERY LIGHT<br>RAIN/THUNDERSHOWERS.                                   | 9.g. |  |
| 20.06.2021 | 39                   | 29   | SE/18                           | SE/24                  | NE/24                  | GENERALLY CLOUDY SKY WITH<br>LIGHT RAIN/THUNDERSHOWERS<br>ACCOMPANIED WITH GUSTY<br>WINDS (SPEED 30-40 KMPH). | F.K. |  |
| 21.06.2021 | 39                   | 29   | N/18                            | NW/26                  | N/22                   | PARTLY CLOUDY SKY. STRONG<br>SURFACE WINDS (SPEED 20-30<br>KMPH) DURING THE DAY.                              |      |  |
| 22.06.2021 | 40                   | 28   | NW/16                           | NW/30                  | NW/28                  | PARTLY CLOUDY SKY. STRONG<br>SURFACE WINDS (SPEED 20-30<br>KMPH) DURING THE DAY.                              |      |  |

|                 | TEMPERATURE NORMALS |      |
|-----------------|---------------------|------|
| DATE            | MAX                 | MIN  |
| 16 JUNE-19 JUNE | 39.3                | 27.8 |
| 20 JUNE-24 JUNE | 38.6                | 28.2 |

#### LEGEND: RAINFALL INTENSITY

| Terminology         | Rainfall Range in mm | Terminology              | Rainfall Range in mm |
|---------------------|----------------------|--------------------------|----------------------|
| Very Light Rainfall | Trace – 2.4          | Heavy Rainfall           | 64.5 – 115.5         |
| Light rainfall      | 2.5 – 15.5           | Very Heavy Rainfall      | 115.6 – 204.4        |
| Moderate Rainfall   | 15.6 - 64.4          | Extremely Heavy Rainfall | >= 204.5             |

#### CLOUD AMOUNT

#### PROBABILISTIC FORECAST

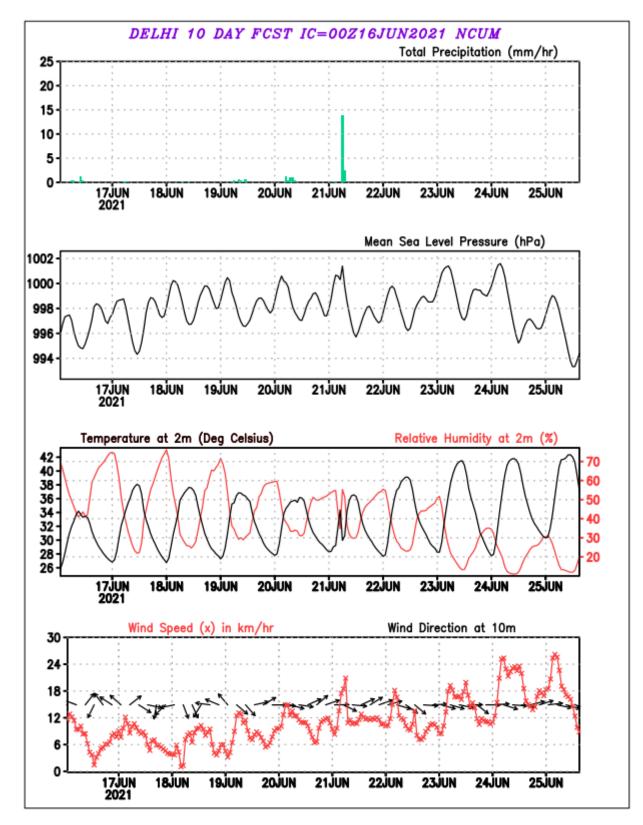
| Terminology          | Amount of Cloud in Octa |
|----------------------|-------------------------|
| Clear Sky            | 0                       |
| Mainly clear sky     | 1 – 2                   |
| Partly cloudy sky    | 3 – 4                   |
| Generally cloudy sky | 5 – 7                   |
| Overcast             | 8                       |

| Terms       | Probability of Occurrence (%) |
|-------------|-------------------------------|
| Unlikely    | <25                           |
| Likely      | 25 - 50                       |
| Very Likely | 50 – 75                       |
| Most Likely | >75                           |
|             |                               |



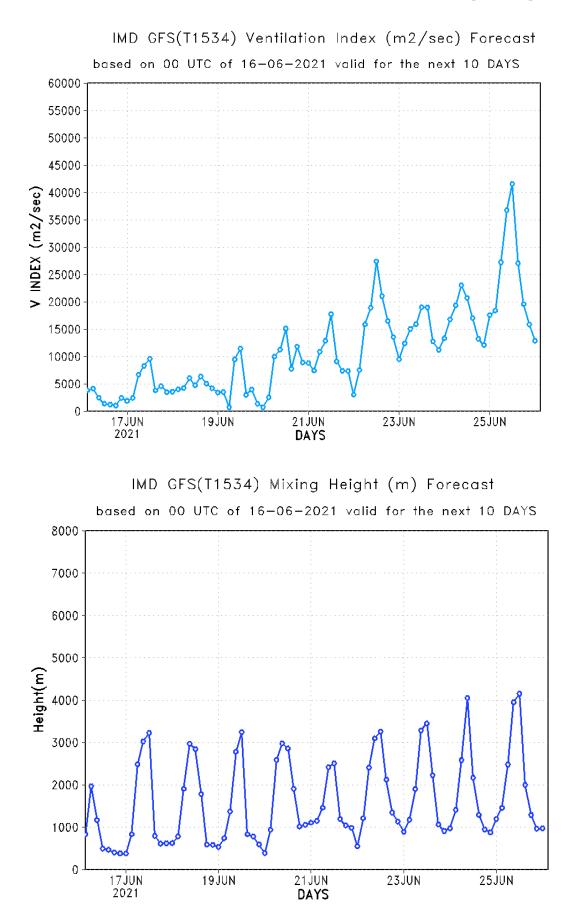


# Meteogram/EPSgram (10 days)







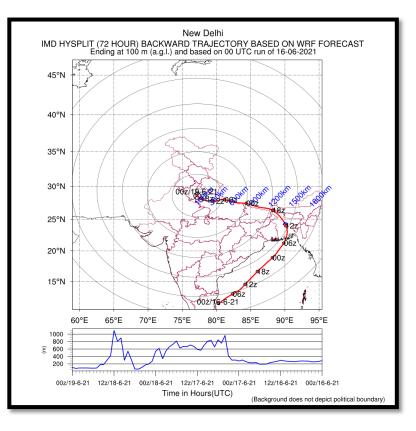




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## Wind Pattern Forecast

## At 100m Height



## At 500m Height

