

Government of India Ministry of Earth Sciences India Meteorological Department

Press Release Date: 31st May, 2022 Time of Issue: 1800 hrs IST

Subject: Squall Line over Delhi on 30th May 2022

1. Description of the Event:

A short lived squall line in the form of a bow echo developed and moved across Delhi and adjoining NOIDA between 1612 IST and 1712 IST on 30th May, 2022. In association with that, maximum squall wind speed of 100 kmph was recorded by IMD Safdarjung observatory at 1640 IST and 70 kmph squall wind speed was recorded by IMD Palam observatory at about 1630 IST.



2. Meteorological Analysis of the Event:

Weather analysis of 30th May indicated the presence of a Western Disturbance as a cyclonic circulation over north Pakistan and neighbourhood in lower/middle tropospheric levels, an induced cyclonic circulation over northwest Rajasthan in lower levels and an east-west trough from the cyclonic circulation over northwest Rajasthan to north Bangladesh across south Uttar Pradesh, Bihar in the lower tropospheric levels. The severe weather mentioned above occurred under the influence of these systems.

3. Forecast and warnings:

The event was covered in both in short range and nowcast scales by IMD.

- In short range, isolated rainfall was given along with **"Yellow warning"** for thunderstorms accompanied by lightning and strong gusty winds for Haryana, Chandigarh and Delhi for 30th May 2022 in the National Bulletin issued on the day.
- In nowcast scale, "Orange alert" for thunderstorm and gusty winds was issued for Delhi at 1530 IST. It was subsequently upgraded with increased wind speed of 50-60 kmph and hailstorms within half an hour.
- In addition to above, nowcast bulletins based on Radar observations were issued at 1535 IST, 1615 IST and 1640 IST, clearly mentioning the intensity of the event and the areas likely to be affected.