

Meteorological Services provided by IMD for Disaster Management

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Forecasts and Warnings issued

□ Nowcasting for next 3-6 hours - (Venue/ location specific)-

- It is based on Doppler Weather Radar, Satellite and other inputs.
 - Provides real-time weather activity like Rainfall, thunderstorm, lightening activity, cloud hight.
 - Lightening for past 30 mins can seen from following link http://internal.imd.gov.in/section/satmet/lightning/
- Short Range for next 72 hours (Location/District/ State/Met Subdivision)
- □ Medium Range for next 3-7 days (District)
- Extended range for 10-15 days (Met Subdivision/State/ Homogeneous regions)
- Long range for month/season
 - (Homogeneous regions/country)
- City Forecasts
 Quantitative Precipitation Forecasts for River Sub basins
 - (for Flood Forecasting)
- Agromet Advisories under GKMS Scheme





Meteorological Centre Lucknow -Forecasting Services provided

Meteorological Services provided by IMD-

*5 day Forecast and Warnings upto district level in text as well as graphical format-

- for Rainfall
 - Spatial Distribution-area covered by Rainfall
 - Intensity –24 hrs total Rainfall
 - Probability –in percentage for various intensities
- Thunderstorm and Lightening
 - Spatial Distribution-area covered by Thunderstorm
 - Intensity –based on Wind speed and damage potential i.e. light, moderate, Severe.
- Probability likely (25-50%), very likely (51-75%), Most Likely (76-100%)

Outlook for subsequent two days





Meteorological Centre Lucknow-

 All the above forecasts and Warnings use colour codes.
 Impact based colour codes are used to make decision making easier-





It is based on likelihood of occurrence and likely impact i.e. damage potential of weather event.





Dissemination Mechanism

IMD Website-https://mausam.imd.gov.in/Met. Centre, Lucknow Website-https://mausam.imd.gov.in/lucknow/

- New website for MC Lucknow was launched 28th May 2021.
- State wise and Districtwise Forecast bulletin containing Forecast and warnings as well as realised weather is issued on daily basis.



Uploaded on Website and Disseminated by-

- Email to Relief Commissioner Office, all DMs, Railway Officials, Agriculture department officials, All India Radio, Community Radios, media persons etc.
- In case of any adverse weather, Special Forecast to State Govt. Officials and Press Releases are issued.

Dissemination Mechanism – cont..

IMD Website-https://mausam.imd.gov.in/Met. Centre, Lucknow Website-https://mausam.imd.gov.in/lucknow/

- All Nowcasts and Weather Forecasts are sent to Relief Commissioners Whatsapp group
- Mediapersons Whatsapp group
- Facebook- @mausam.lucknow
- Twitter- @CentreLucknow
- <u>https://www.facebook.com/mausam.luc</u> <u>know</u>
- https://twitter.com/CentreLucknow





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Quantitative Precipitation Forecast for Flood Forecasting

Flood forecasting is a joint operational responsibility of India Meteorological Department (IMD) and Central Water Commission (CWC).

IMD provides sub basin wise Quantitative Precipitation Forecast (QPF) and other weather-related inputs and the same is used by CWC to issue the flood forecast.



Category of QPF (mm)	Colour Code
0.0 - No Rain	
0.1 -10	
11-25	
26-50*	
51-100*	
>100	



Flood Meteorological Office Lucknow

FMO Lucknow consists of 14 sub- basins under it, which include areas of UP, Uttarakhand and Madhya Pradesh & Bihar.

Sub-Basin wise QPF for next 5 days are issued daily with-Hydromet Bulletin contains-

- Basinwise QPF
- Basin wise Probabilistic Rainfall Forecast
- Basin wise Heavy Rainfall Warning
- Realised Rainfall analysis of previous day.
- Outlook for subsequent 4 days

Manifact of the



Observational Network

Departmental Observatories- 12 nos.
Part Time Observatories- 22 nos
Automatic Weather Stations- 52 nos.
Automatic Raingauge Stations- 132 nos.
Most of the districts have AWS/ARG stations
FMO Lucknow collects data from 300 stations from under CWC and other bodies like KVKs, Revenue Department etc.





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Thank You !!!



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