

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date:29<sup>th</sup> December, 2025 Time of Issue: 1400 hours IST

Subject: (i)Dense to Very dense fog conditions likely to continue during night/morning hours over Punjab, Haryana Chandigarh and West Uttar Pradesh till 31st Dec; East Uttar Pradesh till 01st Jan 2026 with reduction thereafter. Dense fog conditions also likely at isolated pockets over Jammu and north Madhya Pradesh till 30th and Himachal Pradesh, Uttarakhand, and Bihar till 5th Jan; Arunachal Pradesh till 31st Dec and Assam & Meghalaya & Nagaland, Manipur, till 3rd Jan; Sub-Himalayan West Bengal & Sikkim; Odisha till 3rd Jan and Gangetic West Bengal during 31st Dec- 03rd Jan and Jharkhand till 31st December 2025.

- (ii) cold day to Severe cold day conditions very likely at some pockets over Uttar Pradesh on till 31st Dec and Cold day conditions very likely at isolated pockets over Himachal Pradesh on 31st Dec & 01st Jan; Uttarakhand on 29th & 30th; Bihar during 29th -31st; Jharkhand on 29th Dec.
- (iii)Cold wave conditions very likely in isolated pockets of Punjab, Haryana Chandigarh, West Madhya Pradesh, Jharkhand and Chhattisgarh till 30th; Odisha till 31st Dec.
- (iv) A Western Disturbance is likely to impact Western Himalayan Region from 30<sup>th</sup> December and adjoining Plains from 31<sup>st</sup> December.

## Realised weather during past 24 hours ending at 0830 hours IST of today, the 29th December, 2025:

- Dense to very Dense fog (visibility <50 m) prevailed in isolated/ some parts of Jammu region, Himachal Pradesh, Uttarakhand, Punjab, Uttar Pradesh, East Madhya Pradesh and Chandigarh dense fog (visibility 50-199 m): reported in most places over Delhi, isolated pockets of Assam & Meghalaya, Gangetic West Bengal, Odisha and East Madhya Pradesh.</p>
- ❖ Visibility in meter reported (≤200 m): Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad: Jammu(50),Udampur(Awantipora(200); Himachal Pradesh: Bilaspur(40m), Mandi(100m); Uttarakhand: Roshanabad(30m), Dehradun (50m), Khatima (75 M), Jollygrant (100 M); Punjab: Amritsar(0 M), Adampur(0 M), Halwara(0 M), Gurdaspur(10 M), Ludhiana(10 M), Pathankot(0 M), Patiala (20 M), Bathinda(<50mtr), Ballowal(20M), Saunkri (30M); Haryana Chandigarh & Delhi: Chandigarh (30 M), Chandigarh IAF (0 M), Hisar(40 M), Ambala(50 M), Safdarjung and Palam: (50 M) West Bengal & Sikkim: Dum Dum (100M);Odisha: Rourkela (50M); West Uttar Pradesh: Saharanpur IAF & Agra IAF-(00M), Agra Taj-(30M), Aligarh & Meerut-(40M), Najibabad-(80M); East Uttar Pradesh: Kanpur(IAF)-(00M), Hardoi-(60M), Fatehgarh-(70M); West Madhya Pradesh: Gwalior-(00M), Datia (50 M); East Madhya Pradesh: Damoh- (50 M), Khajuraho- (100M), Nowgong (200M), Umaria (200M)</p>
- Cold day to severe cold day conditions observed at isolated/some places over Uttarakhand and Uttar Pradesh; cold day conditions in isolated pockets of Jharkhand and Bihar.
- **Cold wave conditions** observed at isolated places over Punjab, Chandigarh, Chhattisgarh, Jharkhand, North Interior Karnataka and Madhya Pradesh.

# Weather Systems, Forecast and Warnings (refer to ANNEXURE I & II):

- ❖ A fresh **Western Disturbance** as a trough in middle tropospheric westerlies with its axis in middle tropospheric level runs roughly along Long. 52°E to the north of Lat. 30°N.
- ❖ **Subtropical westerly Jet Stream** with core winds of the order of 155 knots at 12.6 km above mean sea level prevails over south Rajasthan.
- ❖ A **trough** in easterlies runs south of 10°N along 87°E over the southeast Bay of Bengal in lower tropospheric level.

#### Under the influence of these systems, the following weather is likely:

Scattered to fairly widespread light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 30<sup>th</sup> December-02<sup>nd</sup> January and Isolated to scattered light/moderate rainfall/snowfall over Himachal Pradesh and Uttarakhand during 30<sup>th</sup> December-02<sup>nd</sup> January.

- ❖ Isolated light to moderate rainfall likely over Punjab Haryana-Chandigarh and West Rajasthan on 29<sup>th</sup> & 30<sup>th</sup>, west Uttar Pradesh on 01<sup>st</sup> Jan.
- **❖ Isolated Thunderstorm and lightning** with gusty wind speed (30-40kmph) likely to prevail over Andaman & Nicobar Islands during 29<sup>th</sup> -31<sup>st</sup> December.

# Temperature Conditions during past 24 hours till 0830 hours IST of today:

- ❖ Minimum temperatures were below 5°C at many places over Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Himachal Pradesh; in the range of 5°-10°C at many places over Uttarakhand, Madhya Pradesh, north Rajasthan, at a few places over Odisha, Uttar Pradesh, Marathawada and Chhattisgarh; at isolated places over Bihar, Gangetic West Bengal, Vidarbha, Meghalaya and Sub-Himalayan West Bengal & Sikkim.
- Minimum Temperatures departures were **appreciably below normal** (-5.0°C to -3.1°C) at isolated places over Central parts of East Madhya Pradesh; isolated in North Interior Odisha, Telangana. (**refer to ANNEXURE IV**)
- The **lowest minimum temperature** of 2.1°C was observed over **Hisar (Haryana)** over the plains of India.

## **Forecast of minimum temperatures:**

- Gradual rise in minimum temperature over northwest India by 3-4°C during next 3 days and thereafter fall by 3-4°C for subsequent 4 days.
- ❖ Gradual rise in minimum temperature very likely over Central India by 2-3°C during next 5 days and thereafter no significant change.
- No significant change in minimum temperature likely over East India for next 2 days thereafter gradual rise by 2-3°C for subsequent 3 days and no significant change over Jharkhand for next 24 hours thereafter rise by 2-3°C for subsequent 6 days.
- No significant change in minimum temperature likely over Gujarat State for next 3 days and thereafter decrease by 2-3°C for subsequent 4 days and no significant change in minimum temperature likely over north Maharashtra for next 2 days and thereafter fall by 2-3°C for subsequent 5 days.
- No significant change in minimum temperature likely over remaining parts of the country during next 7days.

#### Dense Fog, Cold wave & Cold day Warnings:

- ❖ **Very dense** fog conditions very likely to continue during night/morning hours over Haryana Chandigarh, West Uttar Pradesh and Punjab till 31st Dec; East Uttar Pradesh till 01st Jan; Odisha during 31st Dec− 02nd January 2026.
- ❖ Dense fog conditions also likely during night/morning hours at isolated pockets over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Madhya Pradesh till 30<sup>th</sup>; Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh, Uttar Pradesh and Bihar till 5<sup>th</sup> Jan; Delhi till 31<sup>st</sup> Dec; Arunachal Pradesh till 31<sup>st</sup> Dec and Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura till 3<sup>rd</sup> Jan; Sub-Himalayan West Bengal & Sikkim; Odisha till 3<sup>rd</sup> Jan and Gangetic West Bengal during 31<sup>st</sup> Dec- 03<sup>rd</sup> Jan and Jharkhand till 31<sup>st</sup> December 2025.
- ❖ Severe cold day conditions very likely at some pockets over Uttar Pradesh on 29<sup>th</sup> Dec and Cold day conditions very likely at isolated pockets over Himachal Pradesh on 31<sup>st</sup> Dec & 01<sup>st</sup> Jan; Uttarakhand on 29<sup>th</sup> & 30<sup>th</sup>; Bihar during 29<sup>th</sup> -31<sup>st</sup>; Jharkhand on 29<sup>th</sup>; West Uttar Pradesh on 29<sup>th</sup> & 30<sup>th</sup> and East Uttar Pradesh during 29<sup>th</sup> -31<sup>st</sup> December 2025.
- ❖ Cold wave conditions very likely in isolated pockets of Punjab, Haryana Chandigarh, West Madhya Pradesh, Jharkhand and Chhattisgarh till 30th; Odisha till 31st and Himachal Pradesh during 01st − 03rd January 2026.

#### **Fisherman Warning:**

Fishermen are advised not to venture into the following areas during 29th December to 03rd January, 2026:

❖ Bay of Bengal: Over Gulf of Mannar adjoining Comorin area during 29 th to 30<sup>th</sup> December.

Weather conditions and forecast over Delhi/NCR during 29th December-01 January, 2025 (ANNEXURE III)

## For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all india forcast bulletin.php

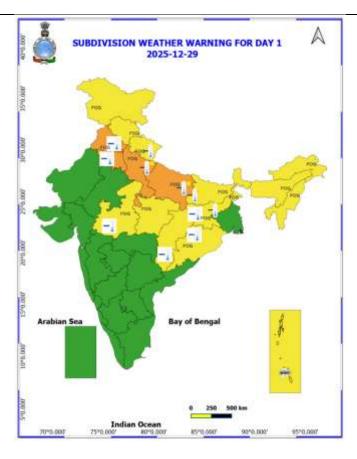
 $\textbf{For District wise warnings refer: } \underline{\texttt{https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php} \\$ 

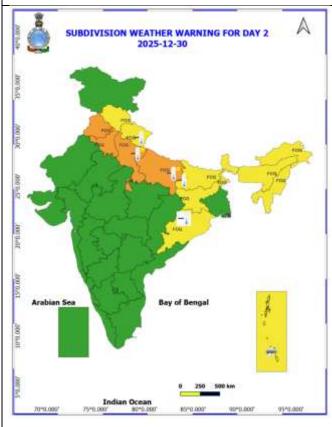
For Fishermen warning refer <a href="https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php">https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php</a>

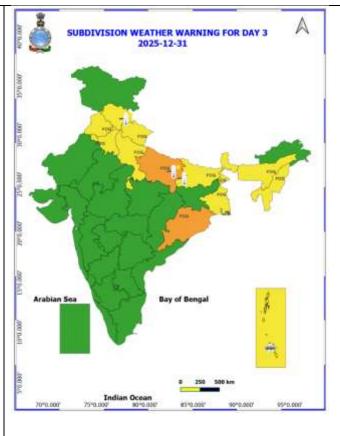
	Table-1							
	7 Days Rainfa	all Forec	ast					
S.No.	Subdivision	29- Dec	30- Dec	31- Dec	1- Jan	2- Jan	3- Jan	4- Jan
2000 1000	PARTITION AND THE PARTITION AN	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 1
1	ANDAMAN & NICOBAR ISLANDS	FWS			ISOL		DRY	DRY
2	ARUNACHAL PRADESH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	DR1
3	ASSAM & MEHGHALAYA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
5	SUB HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	ISOL	SCT	ISOL	ISO
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	ISOL	DRY	DRY	DRY
12	UTTARAKHAND	DRY	ISOL	ISOL	ISOL	ISOL	DRY	DRY
13	HARYANA, CHANDIGARH & DELHI	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY		FWS		ISOL	DRY	DRY
16	JAMMU AND KASHMIR AND LADAKH	ISOL	SCT	FWS	FWS	SCT	ISOL	DRY
17		DRY	DRY	ISOL		DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	THE PROPERTY OF THE PROPERTY O	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22		DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	DOMESTIC CONTROL OF THE STATE O	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24		DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27		DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TOTAL SECTION OF THE PROPERTY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
_	RAYALASEEMA	DRY		DRY	DRY	DRY	DRY	DRY
31	TAMILNADU & PUDUCHERRY	ISOL		ISOL	ISOL	ISOL	ISOL	ISO
32		DRY		DRY	DRY	A STATE OF THE PARTY OF THE PAR	DRY	DRY
33		DRY	DRY	- Contract of the Contract of	DRY		DRY	DRY
34		DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
-	KERALA AND MAHE	ISOL	ISOL	SCT	SCT	SCT	SCT	SC
	LAKSHADWEEP	DRY		SCT	SCT	SCT	SCT	SCI

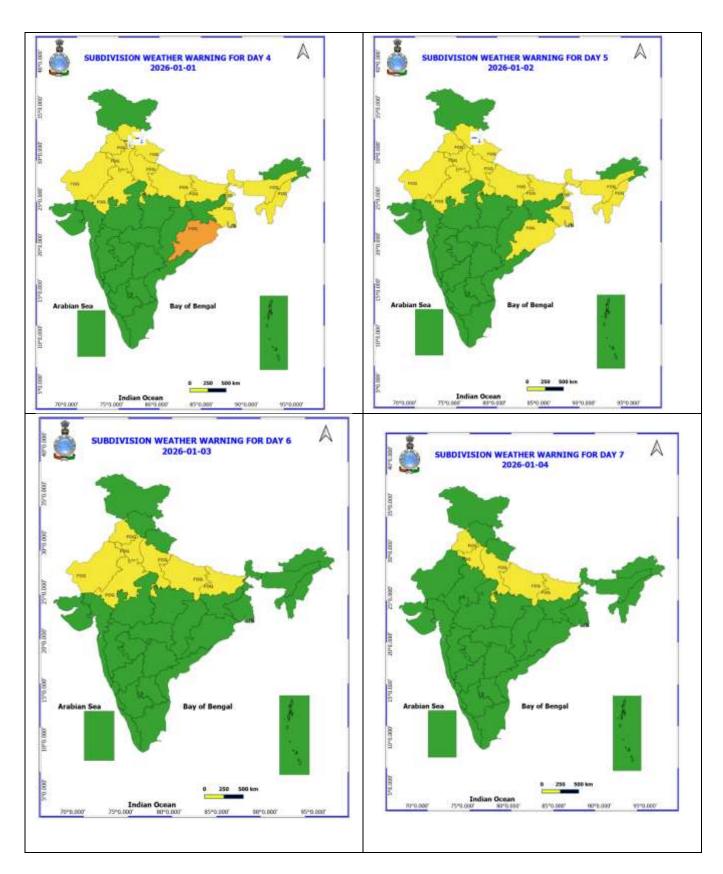
• As the lead period increases forecast accuracy decrease

# **ANNEXURE II**









- Action may be taken based on ORANGE AND REDCOLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

## Weather forecast over Delhi/NCR during 29th December- 01 January 2025

#### **Past Weather:**

There has been significant rise in minimum temperature up to 01-04°C and no change in maximum temperatures during the past 24 hours over Delhi. The maximum and minimum temperatures over Delhi were around 19°C to 23°C and 08°C to 10°C, respectively. The minimum temperatures are above normal (1.6 to 3.0°C) at most places over Delhi. The maximum temperatures were above normal (1.6 to 3.0°C) at many places and normal (-1.5°C to 1.5°C) over remaining places of Delhi. Safdarjung reported lowest visibility 050m from 0330 to 0830 IST, which thereafter improved to 100m at 0900 IST of today, 29.12.2025. Palam reported lowest visibility 050m from 0230 to 0800 IST, which thereafter improved to 100m at 0830 IST of today, 29.12.2025. Mainly clear sky with moderate to dense fog, predominant surface wind from the westerly direction with a wind speed up to 10kmph prevailed during the past 24 hours. Partly cloudy sky with moderate to dense fog conditions and wind reaching up to 15kmph from the northwest direction prevailed over the region in the forenoon today.

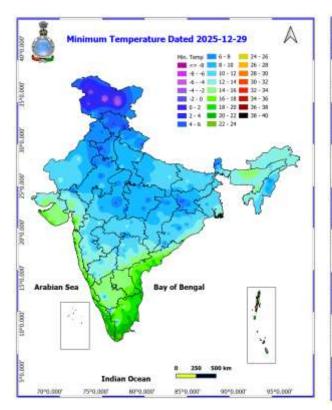
#### **Weather Forecast:**

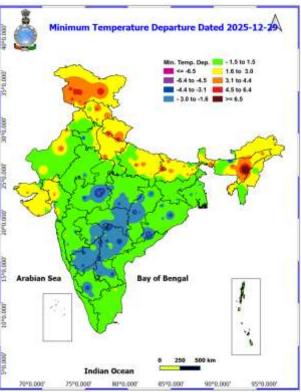
**29.12.2025**: Partly cloudy sky. Smog/Shallow fog during the night. The maximum temperatures are likely to be in the range of 19°C to 21°C. Maximum temperatures will be near normal over Delhi. The predominant surface wind is likely to be from the northwest direction with wind speeds less than 16kmph during the afternoon hours. The wind speed will decrease, becoming less than 10 kmph from the northwest direction during the evening and night. Cold day likely at isolated pockets over the region.

**30.12.2025**: Partly cloudy sky. Moderate fog at many places with dense fog at a few places during the morning hours. The maximum and minimum temperatures in Delhi are likely to be in the ranges of  $21^{\circ}$ C to  $23^{\circ}$ C and  $7^{\circ}$ C to  $9^{\circ}$ C, respectively. The minimum temperature will be above normal (0.2°C to  $2.2^{\circ}$ C) and the maximum temperatures will be above normal (0.6°C to  $2.6^{\circ}$ C) over Delhi. The predominant surface wind is likely to be from the west-northwest direction with wind speed less than 15kmph during the morning hours. The wind speed will remain the same from the west-northwest direction in the afternoon hours. The wind speed will decrease, becoming less than 10kmph from the west direction during the evening and night.

**31.12.2025**: Partly cloudy sky. Moderate fog at many places with dense fog at isolated places during the morning hours. The maximum and minimum temperatures in Delhi are likely to be in the ranges of 23°C to 25°C and 7°C to 9°C, respectively. The minimum temperatures will be above normal (0.2°C to 2.2°C), and the maximum temperatures will be above normal (2.2°C to 4.2°C) over Delhi. The predominant surface wind is likely to be from the west direction with wind speeds less than 12kmph during the morning hours. The wind speed will remain the same from the north direction in the afternoon. The wind speed will remain the same with a northeast direction during the evening/night.

**01.01.2026**: Partly Cloudy sky. Possibility of very light to light rain at a few places. Shallow to moderate fog during morning hours. The maximum and minimum temperatures in Delhi are likely to be in the ranges of 18°C to 20°C and 10°C to 12°C, respectively. The minimum temperatures will be above normal (3.1°C to 5.1°C), and the maximum temperatures will be near normal over Delhi. The predominant surface wind is likely to be from the northeast direction with wind speeds gradually increasing, reaching up to 05kmph during the morning hours. The wind speed will remain the same from the northeast direction in the afternoon and become less than 05kmph from the north direction during the evening/night.





#### Impact expected due to dense/very dense fog in the night/morning hours:

- ❖ Very dense fog conditions very likely to continue during night/morning hours over Haryana Chandigarh, West Uttar Pradesh and Punjab till 31st Dec; East Uttar Pradesh till 01st Jan; Odisha during 31st Dec− 02nd Jan.
- ❖ Dense fog conditions also likely during night/morning hours at isolated pockets over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Madhya Pradesh till 30<sup>th</sup>; Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh, Uttar Pradesh and Bihar till 5<sup>th</sup> Jan; Delhi till 31<sup>st</sup> Dec; Arunachal Pradesh till 31<sup>st</sup> Dec and Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura till 3<sup>rd</sup> Jan; Sub-Himalayan West Bengal & Sikkim; Odisha till 3<sup>rd</sup> Jan and Gangetic West Bengal during 31<sup>st</sup> Dec- 03<sup>rd</sup> Jan and Jharkhand till 31<sup>st</sup> Dec 2025.

# \* Transport and Aviation:

- May affect some airports, highways and railway routes in the areas of met-sub-division.
- Difficult driving conditions with slower journey times.
- Unless taken precautionary measures, it may lead to some road traffic collisions.

#### **❖** Power Sector:

• Chances of Tripping of Power lines in the very dense fog routes.

## **♦** Human Health:

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath.
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

## **Action suggested:**

- Transport and Aviation:
  - Be careful while driving or outing through any transport.
  - Use fog lights during driving.
  - Be in touch with airlines, railways and state transport for schedule of your journey.

#### Power Sector:

- To keep ready Maintenance Team.
- Human Health: To avoid outing until unless emergency and to cover the face.

## **Impact expected due to Cold Wave conditions**

- **❖ Cold wave** conditions very likely in isolated pockets of Punjab, Haryana Chandigarh, West Madhya Pradesh, Jharkhand and Chhattisgarh till 30th; Odisha till 31st and Himachal Pradesh during 01st − 03rd January 2026.
  - An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
  - ❖ Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
  - ❖ Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
  - Impact on agriculture, crop, livestock, water supply, transport and power sector at some places.

#### **Action suggested:**

- ❖ Wear several layers of loose fitting, light weight; warm woollen clothing.
- Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm woollen clothing rather than one layer of heavy cloth.
- ❖ Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- ❖ Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- ❖ If the affected skin area turns black, immediately consult a doctor.
- ❖ Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- ❖ Take safety measures while using electrical and gas heating devices.
- **\*** Extreme care needed for vulnerable people.
- Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- Protect livestock from cold weather.

## **Impact expected due to Cold Day conditions:**

❖ Severe cold day conditions very likely at some pockets over Uttar Pradesh on 29<sup>th</sup> Dec and Cold day conditions very likely at isolated pockets over Himachal Pradesh on 31<sup>st</sup> Dec & 01<sup>st</sup> Jan; Uttarakhand on 29<sup>th</sup> & 30<sup>th</sup>; Bihar during 29<sup>th</sup> -31<sup>st</sup>; Jharkhand on 29<sup>th</sup>; West Uttar Pradesh on 29<sup>th</sup> & 30<sup>th</sup> and East Uttar Pradesh during 29<sup>th</sup> -31<sup>st</sup> December 2025.

\*

- An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- ❖ Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- ❖ Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture, crop, livestock, water supply, transport and power sector at some places.

## **Action suggested:**

- ❖ Wear several layers of loose fitting, light weight; warm woollen clothing.
- Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm Woolen clothing rather than one layer of heavy cloth.
- ❖ Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- ❖ Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes
- ❖ Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- ❖ If the affected skin area turns black, immediately consult a doctor.
- ❖ Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- ❖ Take safety measures while using electrical and gas heating devices.
- Extreme care needed for vulnerable people.
- Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- Protect livestock from cold weather.

## Agromet advisories for likely impact of Cold Waves / Low Temperatures

In Punjab, Haryana, West Madhya Pradesh, Chhattisgarh, Odisha and Jharkhand, apply light and frequent irrigation to the standing crops in the evening to protect the crops from low temperature stress. Use mulching and cover vegetable nurseries and young fruit plants with straw / polythene sheets to maintain optimum soil temperature.

## **Livestock / Poultry**

- > Keep cattle inside the sheds during night and provide dry bedding to protect them from cold.
- ➤ Keep the chicks warm by providing artificial light in the poultry sheds.

## Agromet advisories for likely impact of Thunderstorm / Gusty Winds

Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

## **Legends & abbreviations:**

- ♦ Heavy Rain:64.5-115.5mm; Very Heavy Rain:115.6-204.4mm; Extremely Heavy Rain: >204.4mm.
- ❖ Obsy: Observatory; Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- \* Region wise classification of meteorological Sub-Divisions:
  - Northwest India: Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
  - Central India: West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
  - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
  - Northeast India: Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
  - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
  - South India: Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



## राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



#### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

# **LEGENDS**



# SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	ons Category		% Stations	Cate	gory		
76-100	Widespread (WS/Most Places)		26-50	Scattered (SCT/A Few Places)			
51-75	Fairly Widesp	read (FWS/Many Places)	1-25	isolated (ISOL)			
Fog		Heavy Snow	Cold Wave	COLOUR CO	DED WARNING		
			#	No Warni	No Warning (No Action)		
Heavy Rain		<b>⊜</b> Dust Storm	Cold Day	Watch (B	Watch (Be Aware)		
Very Heavy Rain		+ Heat Wave	Ground Fro	Alert (Be	Alert (Be Prepared To Take Action)		
Extremely	Heavy Rain	+ Warm Night	Warning (Take Action)				
<b>.</b>	0 1:-ba-:	+ Hot Day		-	bilistic Forecast		
Thunder & Lightning		* in		Terms	Probability of Occurrence (%		
Hailstorm PHot & Humid				Unlikely Likely Very Likely	< 25 25 - 50 50 - 75		
Dust Raising Winds Strong Surface Wind			ds	Most Likely	> 75		





	Heavy: 64.5 to 115.5 mm/cm *
Rain/ Snow *	Very Heavy: 115.8 to 204.4 mm/cm*
rain anow	Extremely Heavy: > 204.4 mm/cm *
	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal
	Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.
	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C
Heat Wave	(b). Based on Actual maximum temperature
	Heat Wave: When actual maximum temperature ≥45°C.  Severe Heat Wave: When actual maximum temperature ≥47°C
	( c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C
	When maximum temperature remains 40°C
Warm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.
	Severe Warm Night: When minimum temperature departure >6.4 °C.
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions.  (a). Based on departure  Cold Wave: Minimum Temperature Departure from normal ≤ 4.5 °C to -6.4 °C.  Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C
Cold Wave	
CONTRACTOR (	(b) Based on actual Minimum Temperature (for Plains only)
	Cold Wave : When Minimum Temperature is ≤ 4.0 °C Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C
	( c) For Coastal Stations When Minimum Temperature departure is ≤ -4.5 °C & actual Minimum Temperature is ≤ 15 °C
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure
Cold Day	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.
	Severe Cold Day: Maximum Temperature Departure from normal s -6.5 °C
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km   Moderate Fog: When the visibility_between 500-200 metres
Fog	Dense Fog: when the visibility between 50- 200 metres
	Very Dense Fog: when the visibility < 50 metres
Thunderstorm	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)
Dust/Sand Storm	An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.
Frost	Ice deposits on ground
riost	Air temperature ≤4°C ( over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
Constant II	Moderate: Wind speed 52-61 kmph
Squall	Severe: Wind speed 62-87 kmph
	Very Severe: Wind speed >87 kmph
	Effect of various waves in the sea over specific area
Sea State	Rough to very rough: Wind speed 41-82 kmph (22-33 knots) & Wave height 2,5-6 metre  High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre
,	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
	The first of the control of the cont
Cyclone	Severe Cyclonic Storm: Wind speed 62-67 kmph (34-47 kmph) (48-63 knots)  Very Severe Cyclonic Storm: Wind speed 81-17 kmph (48-63 knots)  Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Cyclone	Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)