

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 12<sup>th</sup> February, 2025 Time of Issue: 1400 hours IST

Subject:(i) Day temperature continues to be appreciably to markedly above normal by about 3-6°C over many parts of Northwest and Central India.

(ii)Isolated Heavy Rainfall/Snowfall likely over Arunachal Pradesh on 12th & 13th February, 2025.

## i. Realised weather during past 24 hours till 0830 hours IST of today (Annexure I) Temperature:

- ❖ During Past 24 hours Day temperature has risen by 1-2°C at many parts of Delhi; at some places of Uttar Pradesh, north Bihar and fallen by about 1-4°C at many places over Gujarat States.
- ❖ Day temperature continues to be markedly above normal (5°C or more) over some parts of north Rajasthan, north Madhya Pradesh, West Uttar Pradesh, north Chhattisgarh and Jharkhand and appreciably above normal (3°C to 5°C) over remaining parts of Northwest, Central India and adjoining East India; and above normal (1°C to 3°C) over north Peninsular India.
- During Past 24 hours, Night temperature has increased by 1-3°C over many parts of West Uttar Pradesh, Haryana, East Rajasthan, Gujarat Region, northeast Uttar Pradesh, Bihar, Odisha, Chhattisgarh and decreased by 1-3° over most parts of Madhya Pradesh, Vidarbha, interior Maharashtra, Interior Karnataka, Rayalaseema.
- ❖ Night temperature were **appreciably above normal (3°C to 5°C)** over many parts of Interior Maharashtra, Odisha; some parts of Haryana, north Punjab, West Uttar Pradesh, West Madhya Pradesh, Gangetic West Bengal and Gujarat Region and they were **above normal (1°C to 3°C)** over remaining parts of North, central and adjoining East and Northeast India.
- ❖ Further detailed temperature observations during past 24 hours till 0830 hours IST of today are provided in **Annexure II**.

#### Rainfall

- Light Rainfall/Snowfall at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh; at isolated places over Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya.
- **❖ Dense fog (visibility 50-199 m)** reported in isolated pockets of Gangetic West Bengal.
- ❖ Visibility reported (≤200 m) (in meter): Gangetic West Bengal: Dum Dum 50

#### ii. Weather Systems, Forecast and warning (Annexure III & IV):

- ❖ A **Western Disturbance** is seen as a cyclonic circulation over Jammu-Kashmir & neighbourhood in lower tropospheric levels. Subtropical **westerly Jet Stream** with core winds of the order of 130 knots at 12.6 km above mean sea level is prevailing over the plains of northwest & northeast India. A **cyclonic circulation** lies over northeast Assam & neighbourhood in lower tropospheric levels. Under their influence,
  - ✓ Scattered to Fairly widespread light rainfall/snowfall accompanied with thunderstorm & lightning activity likely over Arunachal Pradesh and isolated over Assam & Meghalaya during 12<sup>th</sup>-14<sup>th</sup> February with isolated **heavy rainfall** on Arunachal Pradesh on 12<sup>th</sup> & 13<sup>th</sup> February.
  - ✓ Isolated light rainfall activity likely over Nagaland, Manipur, Mizoram & Tripura & Sub-Himalayan West Bengal & Sikkim during 12<sup>th</sup>-14<sup>th</sup> February with isolated **heavy rainfall** on Sub-Himalayan West Bengal & Sikkim on 12<sup>th</sup> February.
  - ✓ Isolated light rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 12<sup>th</sup> February, 2025.

#### **Temperature and Fog Forecast:**

#### **Forecast of temperature:**

#### **Minimum Temperature:**

- Gradual fall in minimum temperatures by about 1-2°C likely over Northwest and adjoining Central India and by 2-3°C likely over East India during next 2 days; gradual rise by about 2-3°C over these regions thereafter.
- Gradual fall in minimum temperatures by 1-3°C likely over Maharashtra during next 2 days and gradual rise by 1-2°C thereafter.
- No significant change in minimum temperature over remaining parts of the country during next 5 days.

#### Maximum temperature:

- ❖ Gradual fall in maximum temperature by about 1-2°C likely over Northwest India during next 1-2 days and gradual rise by about 2-3°C thereafter.
- No significant change in maximum temperature likely over Central India during next 3 days and gradual fall by 2-3°C during subsequent 3 days.
- Gradual fall in maximum temperatures by 2-3°C likely over East India during next 3 days and gradual rise by 2-3°C thereafter.

#### **Dense Fog Warnings:**

**♦ Dense fog conditions** very likely to continue to prevail during early morning hours in isolated pockets of Sub-Himalayan West Bengal & Sikkim till 15<sup>th</sup> and Gangetic West Bengal till 13<sup>th</sup> February.

#### iii. Weather conditions and forecast over Delhi/NCR during 12th Feb. to 15th Feb. 2025 (Annexure V)

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

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

For District wise warnings refer: https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php

**ANNEXURE I** 

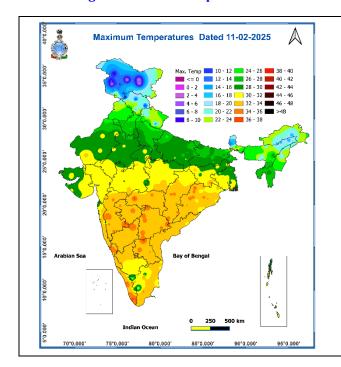
#### Significant rainfall recorded during past 24 hours till 0830 hours IST of today 12.02.2025 (in cm):

- Arunachal Pradesh: Kabu Basti (dist West Siang) 2, Daparijo (dist Upper Subansiri) 1;
- Assam & Meghalaya: Sivasagar (dist Sibsagar) 2, Hazuah (dist Barpeta) 2, Dhemaji (dist Dhemaji) 2;
- ❖ Jammu-Kashmir-Ladakh: Kupwara Kvk Aws (dist Kupwara) 1.

- ❖ Minimum temperatures are in the range of 9-18°C over many parts of plains of Northwest India, West India, Madhya Pradesh, Bihar and Jharkhand. Today, the lowest minimum temperature of 6.1°C is reported at Fatehpur (Rajasthan) over the plains of the country.
- During the past 24 hours, **minimum temperatures** has increased by 1-3°C over many parts of West Uttar Pradesh, Haryana, East Rajasthan, Gujarat Region, northeast Uttar Pradesh, Bihar, Odisha, Chhattisgarh and decreased by 1-3° over most parts of Madhya Pradesh, Vidarbha, interior Maharashtra, Interior Karnataka, Rayalaseema.
- Minimum temperatures are markedly above normal (5°C or more) over some parts of north Rajasthan, north Madhya Pradesh, West Uttar Pradesh, north Chhattisgarh and Jharkhand and appreciably above normal (3°C to 5°C) over remaining parts of Northwest, Central India and adjoining East India; and above normal (1°C to 3°C) over north Peninsular India.
- Maximum temperatures are in the range of 33-36°C over most parts of Kerala & Mahe; at many places over Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamilnadu Puducherry & Karaikal; at some places over North Interior Karnataka. Yesterday, the highest maximum temperature of 37.3°C was reported at Kurnool (Rayalaseema) over the plains of the country.
- ❖ Maximum temperatures were **appreciably above normal (3°C to 5°C)** over many parts of Interior Maharashtra, Odisha; some parts of Haryana, north Punjab, West Uttar Pradesh, West Madhya Pradesh, Gangetic West Bengal and Gujarat Region and they were **above normal (1°C to 3°C)** over remaining parts of North, central and adjoining East and Northeast India.

Fig. 1: Maximum Temperatures

### Fig. 2: Departure of Maximum Temperatures



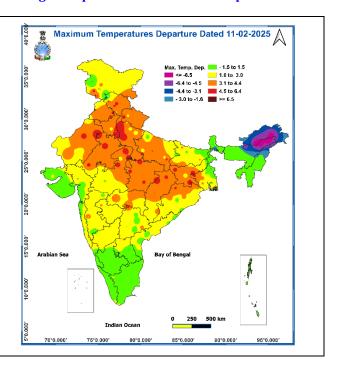
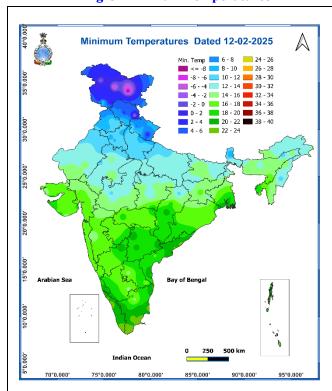
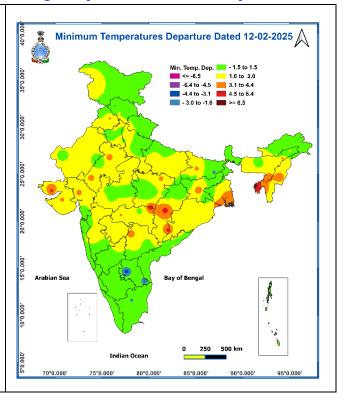


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures





#### Agromet advisories for likely impact of Heavy Rainfall

- ➤ In **Arunachal Pradesh**, postpone harvesting of rice during rainfall period and shift the already harvested produce to a well-covered storage facilities to prevent damage. Provide extensive drainage in the fields of rice, mustard, other standing crops, vegetables and horticultural crops.
- Provide mechanical support to horticultural crops and staking to vegetables.

#### Livestock

> Keep the animals inside the shed during heavy rainfall period and provide them with balanced feed. Store feed and fodder in a safe place to prevent spoilage.

#### Likely impact of prevailing above-normal temperatures on Agriculture

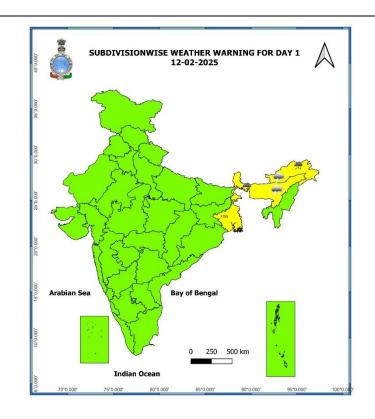
- Above normal temperatures in Northwest and Central India may lead to forced maturity, sterile spikelets, and chaffy grains, reducing yields during critical growth stages like flowering and grain filling in crops like wheat and barley. Crops like mustard and chickpea may also experience early harvest.
- Vegetables like onions, garlic, and tomatoes may be affected during bulb formation or flowering, resulting in tip burning, bolting, and mismatched pollination, reducing their quality and yield. Horticultural crops like apples and stone fruits may experience early blooming due to warmer temperatures, resulting in poor fruit setting and quality.
- Livestock may experience heat stress, requiring adjustments in care and feeding practices, while fisheries face challenges in maintaining water quality.

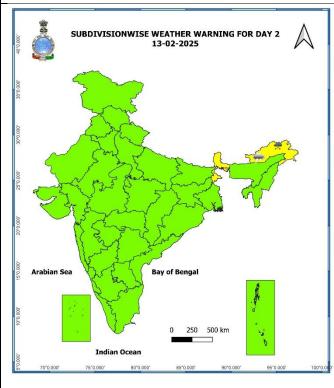
#### **Agromet Advisories**

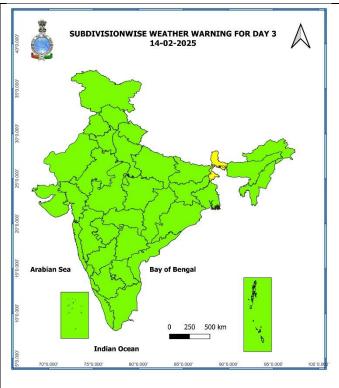
- Provide light and life-saving irrigation during sensitive growth stages such as grain filling, flowering, and tuber formation.
- Apply mulching to retain optimum soil moisture and regulate temperature.
- Chemical sprays like potassium chloride and mineral nutrients are recommended to manage heat stress.

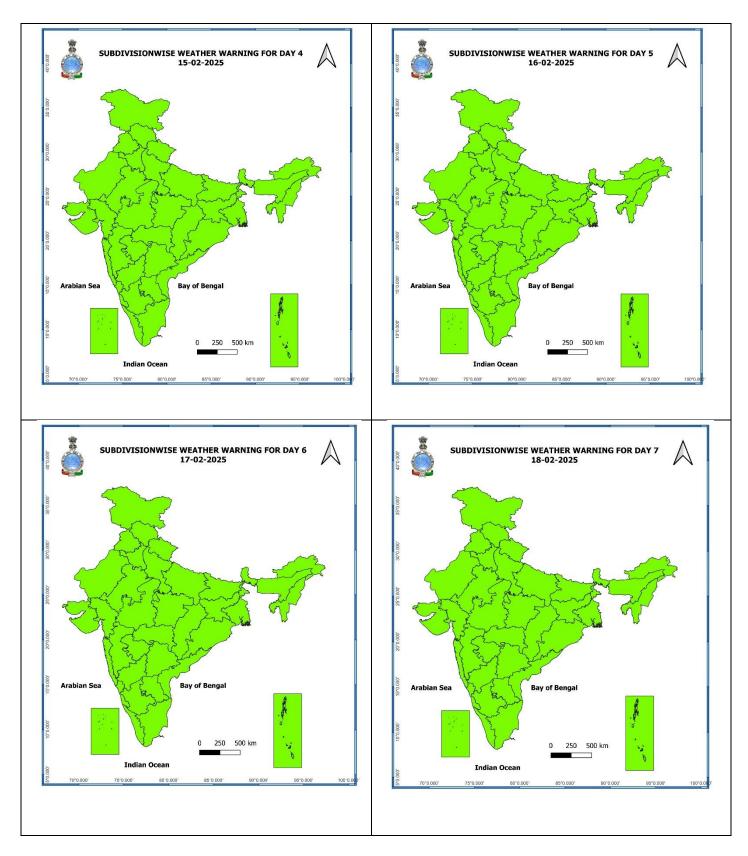
	7 Days Rai	nfall Fo	recast					
		12-	13-	14-	15-	16-	17-	18-
S.	Subdivision	Feb	Feb	Feb	Feb	Feb	Feb	Feb
No.		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	DRY	DRY	DRY	ISOL	ISOL
2	ARUNACHAL PRADESH	FWS	FWS	SCT	SCT	SCT	SCT	SCT
3	ASSAM & MEGHALAYA	ISOL	ISOL	ISOL	DRY	DRY	ISOL	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	ISOL	DRY	DRY	DRY	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
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	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	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	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA & MAHE	DRY	DRY	DRY	DRY	DRY	DRY	DRY
36	LAKSHADWEEP	SCT	DRY	DRY	DRY	DRY	DRY	DRY

• As the lead period increases forecast accuracy decreases.









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

Detailed district wise Multi Hazard weather warning for next five days available at <a href="https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php">https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</a>

#### Past Weather:

There has been a rise in minimum and maximum temperatures upto 02°C over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 27 to 30°C and 11 to 12°C respectively. The minimum temperature was above normal upto 02°C and maximum temperature was above normal upto 06°C over most places. Mainly clear sky conditions with predominant surface wind from the northwest direction with wind speed reaching 08 to 10 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 12 kmph northwest direction prevailed over the region in the forenoon today.

#### Weather Forecast:

**12.02.2025:** Mainly clear sky. Strong surface wind (speed 20-30 kmph) likely during the day. The maximum temperature over Delhi is likely to be in the range of 27 to 29°C. The predominant surface wind will likely to be from northwest direction with a wind speed of less than 20 kmph till evening. It would decrease thereafter becoming less than 12 kmph from the northwest direction during the night.

**13.02.2025:** Mainly clear sky. Strong surface wind (speed 20-30 kmph) likely during the day. The maximum and minimum temperatures over Delhi are likely to be in the range of 26 to 28°C and 09 to 11°C respectively. The predominant surface wind is likely to be from the northwest direction with a wind speed less than 12 kmph during morning hours. The wind speed will gradually increase thereafter becoming 18-20 kmph from the northwest direction during the afternoon. It will decrease further becoming less than 12 kmph from the northwest direction during evening and night.

**14.02.2025:** Mainly clear sky. Strong surface wind (speed 20-30 kmph) likely during the day. The maximum and minimum temperatures over Delhi are likely to be in the range of 26 to 28°C and 09 to 11°C respectively. The predominant surface wind will likely to be from the northwest direction with a wind speed of less than 12 kmph during morning hours. The wind speed will gradually increase thereafter becoming 18-20 kmph from the northwest direction during the afternoon. It will decrease becoming less than 10 kmph from northwest direction during evening and night.

**15.02.2025:** Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 27 to 29°C and 10 to 12°C respectively. The predominant surface wind will likely to be from west direction with a wind speed of less than 08 kmph during morning hours. The wind speed will gradually increase thereafter becoming 10-12 kmph from the northwest direction during the afternoon. It will decrease becoming less than 06 kmph from north direction during evening and night.

#### Legends & abbreviations:

- ♦ Heavy Rain:64.5-115.5mm; Very Heavy Rain:115.6-204.4mm; Extremely Heavy Rain: >204.4mm.
- Obsy: Observatory; AWS: 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**

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4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा 5. उप-हिमालयी पश्चिम बंगाल और सिक्किम

6. गंगीय पश्चिम बंगाल



8. झारखंड

9. बिहार

10. पूर्वी उत्तर प्रदेश

11. पश्चिम उत्तर प्रदेश

12. उत्तराखंड

13. हरियाणा, चंडीगढ़ और दिल्ली

14. पंजाब

15. हिमाचल प्रदेश

16. जम्मू और कश्मीर और लद्दाख

17. पश्चिम राजस्थान

18. पूर्वी राजस्थान

19. पश्चिम मध्य प्रदेश

20. पूर्वी मध्य प्रदेश

21. गुजरात

22. सौराष्ट्र

23. कोंकण और गोवा

24. मध्य महाराष्ट्र

25. मराठवाड़ा

26. विदर्भ

27. छत्तीसगढ़

28. तटीय आंध्र प्रदेश और यनम

29. तेलंगाना

30. रायलसीमा

31. तमिलनाडु, पुडुचेरी और कराईकल

32. तटीय कर्नाटक

33. आतंरिक उत्तरी कर्नाटक

Sust Raising Winds

34. आतंरिक दक्षिणी कर्नाटक

35. केरल और माहे

36. लक्षद्वीप



2. Arunachal Pradesh

3. Assam & Meghalaya

4. Nagaland, Manipur, Mizoram & Tripura

5. Sub-Himalayan West Bengal & Sikkim

6. Gangetic West Bengal

7. Odisha

8. Jharkhand

9. Bihar

10. East Uttar Pradesh

11. West Uttar Pradesh

12. Uttarakhand

13. Haryana, Chandigarh & Delhi

14. Puniab

15. Himachal Pradesh

16. Jammu & Kashmir and Ladakh

17. West Rajasthan

18. East Rajasthan

19. West Madhya Pradesh

20. East Madhya Pradesh

21. Gujarat

22. Saurashtra

23. Konkan & Goa

24. Madhya Maharashtra

25. Marathwada

26. Vidarbha

27. Chhattisgarh

28. Coastal Andhra Pradesh & Yanam

29. Telangana

30. Rayalaseema

31. Tamilnadu, Puducherry & Karaikal

32. Coastal Karnataka

33. North Interior Karnataka

34. South Interior Karnataka

35. Kerala & Mahe

36. Lakshadweep

## SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75	Fairly Widespread (FWS/Many Places)	1-25	Isolated (ISOL)



Strong Surface Winds

#### Probability of Occurrence (%) Very Likely 50 - 75 Most Likely > 75





## DEFINITION/CRITERIA

	DEFINITION/CRITERIA
	Heavy: 64.5 to 115.5 mm/cm *
Rain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm*
	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	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
	(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 Mayor Minimum Temperature Departure from person 4.45 °C to 6.4 °C
	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	
Joid Wave	(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 ≤ -6.5 °C
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km
Fog	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres
Fog	Moderate Fog: When the visibility between 500-200 metres
Fog	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres
	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres
Thunderstorm  Dust/Sand Storm	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and
Thunderstorm  Dust/Sand	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.
Thunderstorm  Dust/Sand Storm	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground
Thunderstorm  Dust/Sand Storm	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground
Thunderstorm  Dust/Sand Storm  Frost	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)
Thunderstorm  Dust/Sand Storm	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.
Thunderstorm  Dust/Sand Storm  Frost	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph
Thunderstorm  Dust/Sand Storm  Frost	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph  Severe: Wind speed 52-87 kmph  Very Severe: Wind speed >87 kmph
Thunderstorm  Dust/Sand Storm  Frost	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph  Very Severe: Wind speed >87 kmph  Effect of various waves in the sea over specific area
Thunderstorm  Dust/Sand Storm  Frost	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph  Very Severe: Wind speed >87 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
Thunderstorm  Dust/Sand Storm  Frost  Squall	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C (over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph  Very Severe: Wind speed >87 kmph  Effect of various waves in the sea over specific area
Thunderstorm  Dust/Sand Storm  Frost  Squall	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph  Severe: Wind speed 52-87 kmph  Very Severe: Wind speed 587 kmph  Very Severe: Wind speed 587 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 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
Thunderstorm  Dust/Sand Storm  Frost  Squall	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph  Severe: Wind speed 52-87 kmph  Very Severe: Wind speed 587 kmph  Very Severe: Wind speed 587 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 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
Thunderstorm  Dust/Sand Storm  Frost  Squall	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph  Very Severe: Wind speed >87 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre High to very high: Wind speed 63-117 kmph (>63 knots) & Wave height >14 metre  Phenomenal: Wind speed 62-87 kmph (34-47 knots)  Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Thunderstorm  Dust/Sand Storm  Frost  Squall	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 52-61 kmph Very Severe: Wind speed 587 kmph  Very Severe: Wind speed 587 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre  High to very high: Wind speed 53-117 kmph ( 34-63 knots) & Wave height 6-14 metre  Phenomenal: Wind speed >117 kmph ( 34-63 knots) & Wave height >14 metre  Cyclonic Storm: Wind speed 88-87 kmph (34-47 knots)  Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)  Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Thunderstorm  Dust/Sand Storm  Frost  Squall  Sea State	Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres  Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)  An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.  Ice deposits on ground  Air temperature ≤4°C ( over Plains)  A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph  Very Severe: Wind speed >87 kmph  Effect of various waves in the sea over specific area  Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre High to very high: Wind speed 63-117 kmph (>63 knots) & Wave height >14 metre  Phenomenal: Wind speed 62-87 kmph (34-47 knots)  Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)