

Government of India Ministry of Earth Sciences India Meteorological Department



Date: 03rd February, 2025 Time of Issue: 1315 hours IST

Subject: (i) Wet Spell likely over Western Himalayan Region and adjoining plains of Northwest India till 05th February, 2025.

- (ii) Dense fog very likely to continue over Northwest India during next 24 hours and reduce in intensity thereafter.
- i. Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)
- Dense to very dense fog conditions (visibility < 50 m) reported in isolated pockets of Punjab, Haryana, West Uttar Pradesh, Assam & Meghalaya, South Interior Karnataka. and dense fog (visibility 50-199 m) reported in isolated pockets of East Uttar Pradesh, West Bengal & Sikkim, Odisha.</p>
- ❖ **Ground Frost conditions** reported in isolated pockets of Uttarakhand.

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

- ❖ A Western Disturbance is seen as a cyclonic circulation over West Afghanistan & adjoining Iran in lower & middle tropospheric levels and another fresh Western Disturbance is likely to affect Northwest India from 08th February, 2025.
- Under the influence of the first system,
 - ✓ Scattered to Fairly widespread light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Western Himalayan Region; and light rainfall likely over adjoining plains of Northwest India during 03rd 05th February, 2025.
- Under the influence of the second system,
 - ✓ Isolated to scattered light rainfall/snowfall activity likely over Western Himalayan Region on 08th & 09th February, 2025.

Temperature and Fog Forecast:

(Temperature Conditions during past 24 hours till 0830 hours IST of today is provided in **Annexure IV**)

Forecast of temperature:

- Gradual rise in minimum temperatures by 2-3°C likely over Northwest India during next 2 days and gradual fall by 2-3°C during subsequent 3 days.
- No significant change in minimum temperatures likely over West India during next 24 hours and fall by 2-4°C during subsequent 3 days.
- No significant change in minimum temperatures likely over Central India during next 2 days and fall by 2-3°C thereafter.

Dense Fog Warnings:

❖ Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Punjab, Haryana, West Uttar Pradesh, Bihar till 04th; Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura till 05th and over Odisha till 06th February.

iii. Weather conditions and forecast over Delhi/NCR during 03rd Feb. to 06th 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

Rainfall recorded during past 24 hours till 0830 hours IST of today 03.02.2025 (in cm):

❖ Jammu-Kashmir: Kulgam (dist Kulgam) 1.

Visibility reported (≤200 m) (in meter):

* South Interior Karnataka: Bangalore 0; West Uttar Pradesh: Aligarh 30; Meghalaya: Barapani 30; Punjab: Bathinda, Ballowal Saunkri 20 each, Patiala, Faridkot 40 each, Gurdaspur 80, Amritsar 100; Haryana: Chandigarh, Hissar 40; Sub-Himalayan West Bengal & Sikkim: Pakyong 50; Gangetic West Bengal: Dum-Dum 50; East Uttar Pradesh: Kushinagar 100; Odisha: Bhubaneshwar 150.

Impact expected due to dense fog in the night /morning hours over Northwest, East and Northeast India:

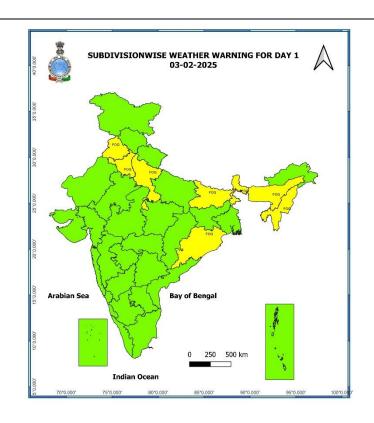
- **❖** Transport and Aviation:
 - May affect some airports, highways and railway routes in the areas of met-sub-division.
 - Difficult driving conditions with slower journey times.
 - Unless taken precautionary measures, it may lead to some road traffic collisions.
- Power Sector:
 - Chances of Tripping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

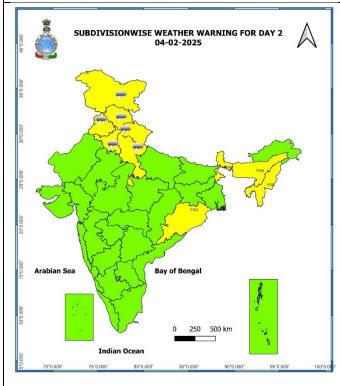
Action suggested:

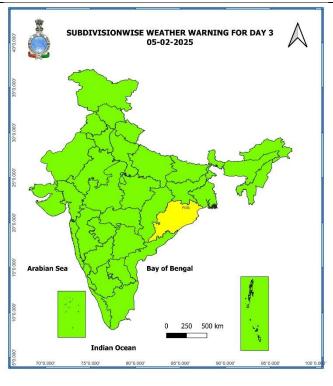
- Transport and Aviation:
- Be careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines, railways and state transport for schedule of your journey.
- Power Sector:
 - To keep ready Maintenance Team.
 - Human Health: To avoid outing until unless emergency and to cover the face.

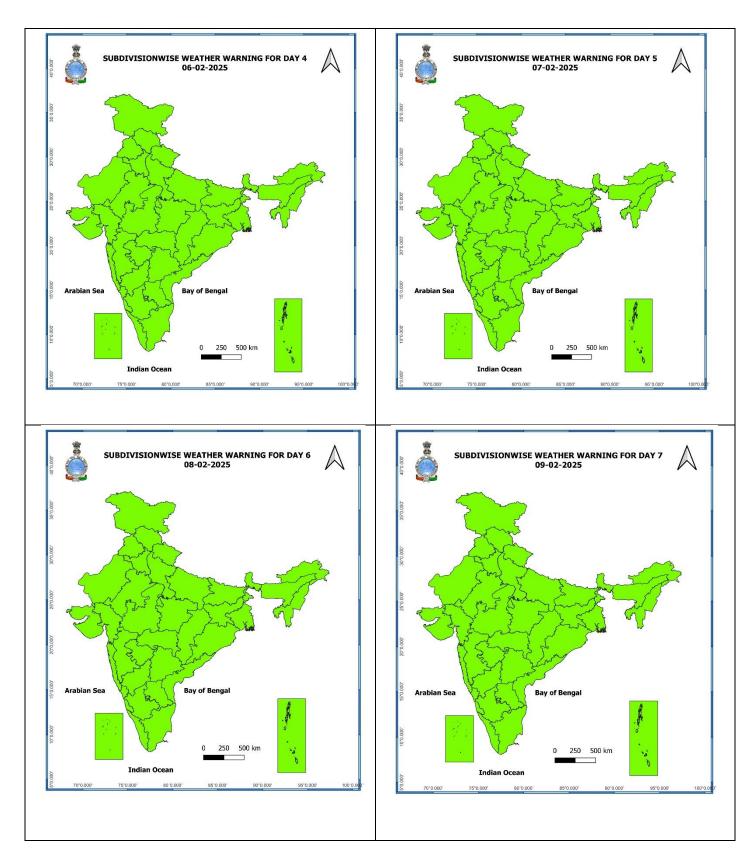
7 Days Rainfall Forecast								
S.		03-	04-	05-	06-	07-	08-	09-
No.	Subdivision	Feb						
NO.		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	DRY	DRY	ISOL	SCT	SCT	ISOL	ISOL
3	ASSAM & MEGHALAYA	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY						
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
6	GANGETIC WEST BENGAL	DRY						
7	ODISHA	DRY						
8	JHARKHAND	DRY						
9	BIHAR	DRY						
10	EAST UTTAR PRADESH	DRY						
11	WEST UTTAR PRADESH	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL	FWS	ISOL	DRY	DRY	DRY	ISOL
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
14	PUNJAB	ISOL	SCT	ISOL	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	FWS	ISOL	DRY	DRY	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	ISOL	FWS	SCT	DRY	DRY	SCT	SCT
17	WEST RAJASTHAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY						
20	EAST MADHYA PRADESH	DRY						
21	GUJARAT REGION	DRY						
22	SAURASHTRA & KUTCH	DRY						
23	KONKAN & GOA	DRY						
24	MADHYA MAHARASHTRA	DRY						
25	MARATHAWADA	DRY						
26	VIDARBHA	DRY						
27	CHHATTISGARH	DRY						
28	COASTAL ANDHRA PRADESH & YANAM	DRY						
29	TELANGANA	DRY						
30	RAYALASEEMA	DRY						
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY						
32	COASTAL KARNATAKA	DRY						
33	NORTH INTERIOR KARNATAKA	DRY						
34	SOUTH INTERIOR KARNATAKA	DRY						
35	KERALA & MAHE	ISOL	ISOL	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.

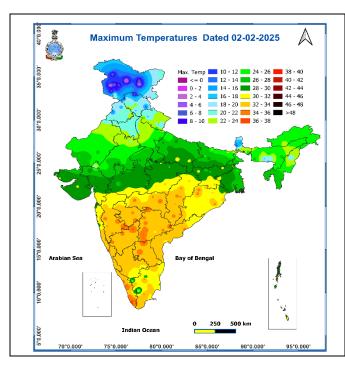
Detailed district wise warning for next five days available at

 $\underline{https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php}$

- Minimum temperatures are in the range of 6-13°C in some parts over plains of Northwest India; 13-20°C over Central, East & West India. Today, the lowest minimum temperature of 4.0°C is reported at Ganganagar (West Rajasthan) over the plains of the country.
- During the past 24 hours, minimum temperatures has fallen by 0-2°C at some places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Gangetic West Bengal, West Uttar Pradesh and parts of south Peninsular India and **rise** by 0-2°C in many parts of West Madhya Pradesh, Gujarat Region, Maharashtra; at some places over East Uttar Pradesh, Assam & Meghalaya and Odisha.
- Minimum temperatures are markedly above normal (5°C or above) at isolated places over West Madhya Pradesh, Madhya Maharashtra and Gangetic West Bengal; appreciably above normal (3°C to **5°C)** at a few over Chhattisgarh, Marathwada and Vidarbha; at isolated places over Bihar, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, East Madhya Pradesh and Konkan & Goa; above normal (1°C to 3°C) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over East Rajasthan, East Uttar Pradesh, Arunachal Pradesh and Assam & Meghalaya; at a few places Kutch; over Saurashtra isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal & at Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, North Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1°C to -3°C) at isolated places over Rayalaseema and near normal over rest parts of the country.

Fig. 1: Maximum Temperatures





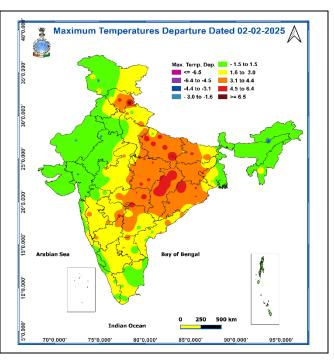


Fig. 3: Minimum Temperatures

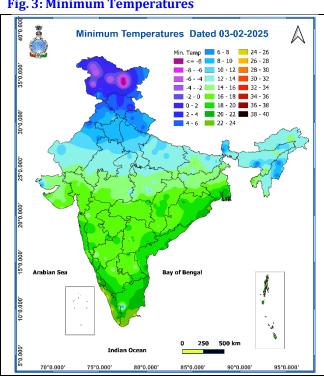
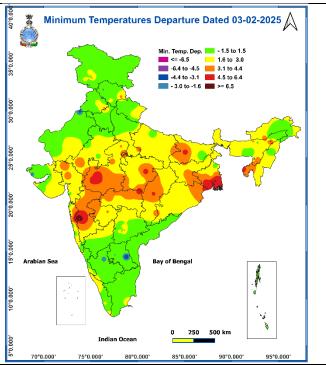


Fig. 4: Departure of Minimum Temperatures



Weather forecast over Delhi/NCR during 03rd Feb. to 06th Feb. 2025

Past Weather:

There has been a fall in minimum temperatures upto 01 °C over Delhi/NCR during the past 24 hours. The Maximum and Minimum temperatures over Delhi are in the range of 20 to 22°C and 9 to 10°C respectively. The minimum and maximum temperatures were near normal over most places. Dense fog was reported at Safdarjung and Palam airport. Safdarjung airport recorded the lowest visibility 50m at 0630 hours IST which improved thereafter becoming 150 m at 0700 hours. Palam airport recorded the lowest visibility 50 m from 0430 hours to 0530 hours IST which improved thereafter becoming 100 m at 0600 hours IST. Mainly smog/mist conditions with predominant surface wind from the west direction with wind speed reaching 10 to 12 kmph prevailed during the past 24 hours. Mainly Smog/mist conditions with wind speed less than 08 kmph west direction prevailed over the region in the forenoon today.

Weather Forecast:

03.02.2025: Mainly clear sky becoming partly cloudy sky from evening. Possibility of a spell of very light to light rain/drizzle during night. The predominant surface wind will likely be in the northwest direction with a wind speed of less than 08 kmph till evening. It would decrease thereafter becoming less than 06 kmph from the southeast direction during the night. Smog/mist is likely in the night.

04.02.2025: Generally cloudy sky becoming partly cloudy sky towards evening. Possibility of one or two spells of very light to light rain with thunderstorm upto forenoon. The predominant surface wind is likely to be from the southeast direction with a wind speed less than 08 kmph during morning hours. Shallow fog likely in the morning. The wind speed will gradually increase thereafter becoming 10-12 kmph from the southeast direction during the afternoon. It will decrease further becoming less than 06 kmph from the southeast direction during evening and night. Smog/mist is likely in the night.

05.02.2025: Mainly clear sky. The predominant surface wind will likely to be from the southeast direction with a wind speed of less than 06 kmph during morning hours. Smog/ moderate fog in most places is very likely to commence during the early morning hours with dense fog in isolated places during the 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 08 kmph from northwest direction during evening and night.

06.02.2025: Mainly clear sky. The predominant surface wind will likely to be from northwest direction with a wind speed of less than 10 kmph during morning hours. Smog/ moderate fog likely in the morning. The wind speed will gradually increase thereafter becoming 12-14 kmph from the northwest direction during the afternoon. It will increase becoming less than 10 kmph from northwest 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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- 1. अंडमान और निकोबार द्वीपसमूह
- 2. अरुणाचल प्रदेश
- 3. असम और मेघालय
- 4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
- 6. गंगीय पश्चिम बंगाल
- 7. ओडिशा
- 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
- 34. आतंरिक दक्षिणी कर्नाटक
- 35. केरल और माहे

Hailstorm

Sust Raising Winds

36. लक्षद्वीप

- 1. Andaman & Nicobar Islands
- 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)



Hot & Humid

Strong Surface Winds

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





DEFINITION/CRITERIA

	DET INTITION OF CRITERIA				
1	Harry CA F to 14F F moreov #	7			
Dein/Com *	Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm*				
Rain/ Snow "	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	7			
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	(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				
L	When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C	-			
Cold Day	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure 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				
Fog	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km 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	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.				
	Ice deposits on ground				
Frost	Air temperature ≤4°C (over Plains)				
	The state of the s				
	A strong wind that rises suddenly, lasts for atleast 1 minute.	7			
	Moderate: Wind speed 52-61 kmph				
Squall	Severe: Wind speed 62-87 kmph				
_	Very Severe: Wind speed >87 kmph	1			
		=(
	Effect of various waves in the sea over specific area				
Sea State	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				
	Phenomenal: Wind speed 35-117 kmph (2-63 knots) & Wave height >14 metre				
E Heriometia. With speed > 117 kiliph (>55 kilots) & Wave Height > 14 Herio					
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)	-			
1 0.001 1.00	Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)				
Cyclone	Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)				
	Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)				
5	Super Cyclone Strom: Wind speed >220 kmph (>119 knots)	-			
1		_			