

Monday, December 04, 2023  
Time of Issue: 2100 hours IST  
(NIGHT)

## All India Impact Based Weather Warning Bulletin

### 04 December (Day 1):

- ❖ **Heavy to very heavy rainfall** at a few places **with isolated extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam. Exceptionally Heavy rainfall at one or two places over South coastal Andhra Pradesh.
- ❖ **Heavy to very heavy rainfall with isolated extremely heavy rainfall** very likely over Rayalaseema and North coastal Tamil Nadu, Puducherry & Karaikal; **Heavy rainfall** at isolated places over Odisha and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Kerala & Mahe and **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Dense Fog** very likely in isolated pockets over Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and East Rajasthan.
- ❖ **Gale Wind speed reaching 85-95 kmph gusting to 105 kmph** is very likely over; **Gale Wind speed reaching 90-100 kmph gusting to 110 kmph** over Westcentral Bay of Bengal along & off south Andhra Pradesh coast; **Gale Wind speed reaching 80-90 kmph gusting to 100 kmph** over Nellore district; **Gale Wind speed reaching 60-70 kmph gusting to 80 kmph** over Southwest Bay of Bengal along & off north Tamil Nadu-Puducherry coasts, along and off remaining districts of south Andhra Pradesh coast; **Squally wind speed reaching 50-60 kmph gusting to 65 kmph** over north Andhra Pradesh coast; **Squally wind speed reaching 35-45 kmph gusting to 55 kmph** over Odisha coast. **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Northeast Arabian Sea along and off Gujarat coast. Fishermen are advised not to venture into these areas.

### 05 December (Day 2):

- ❖ **Heavy to very heavy rainfall** at a few places **with isolated extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam. Exceptionally Heavy rainfall at one or two places over North coastal & adjoining South coastal Andhra Pradesh & Yanam.
- ❖ **Heavy to very heavy rainfall with isolated extremely heavy rainfall** very likely over Telangana; **Heavy to very heavy rainfall** at **isolated places likely** over South coastal Odisha; **Heavy rainfall** at isolated places over north Tamil Nadu & Puducherry and Rayalaseema.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Vidarbha, Chhattisgarh and Kerala & Mahe and **with lightning** at isolated places over Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Gale Wind speed reaching 90-100 kmph gusting to 110 kmph** over Westcentral Bay of Bengal along & off south Andhra Pradesh coast, along and off Nellore district; **Squally weather with wind speed reaching 55-65 kmph gusting to 75 kmph** over along and off North Andhra Pradesh coast; **Squally weather with wind speed reaching 45-55 kmph gusting to 65 kmph** over Northeast Arabian Sea along and off Gujarat coast. **Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph** over along and off Odisha coast. Fishermen are advised not to venture into these areas.

### 06 December (Day 3):

- ❖ **Heavy rainfall** likely at isolated places over Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph)** likely at isolated places over Chhattisgarh and **with lightning** at isolated places over Vidarbha, Marathwada and Kerala & Mahe.

### 07 December (Day 4):

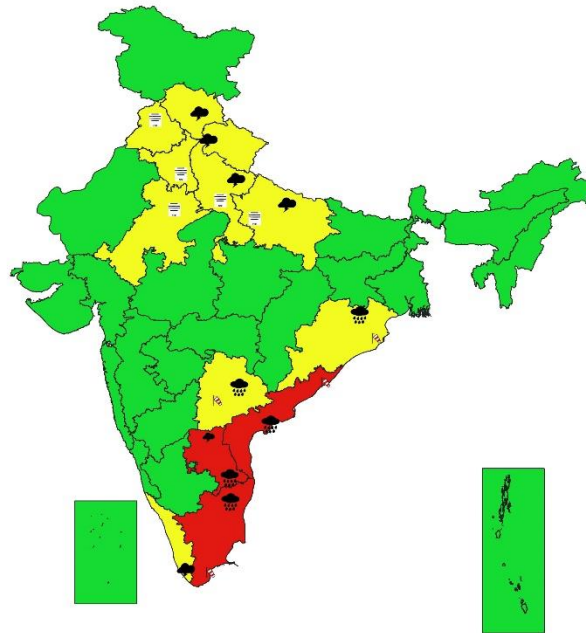
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Jharkhand and Kerala & Mahe.

### 08 December (Day 5):

- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Kerala & Mahe.



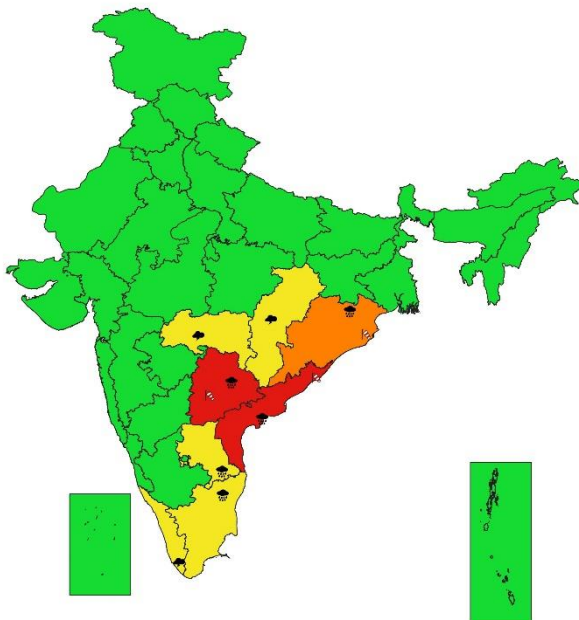
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
( 4-12-2023 )



Subdivision Warning	Dust Storm	WATCH (BE UPDATED)
Heavy Rain	Strong Surface Winds	ALERT (BE PREPARED)
Heavy Snow	Heat Wave	WARNING (TAKE ACTION)
Thunderstorms & Lightning	Cold wave	
Hailstorm	Fog	
	Subdivision color	



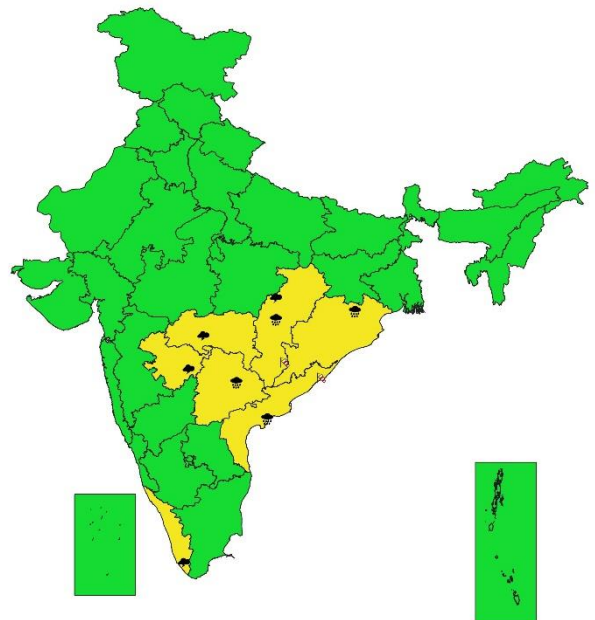
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
( 5-12-2023 )



Subdivision Warning	Dust Storm	Subdivision color
Heavy Rain	Strong Surface Winds	NO WARNING
Heavy Snow	Heat Wave	WATCH (BE UPDATED)
Thunderstorms & Lightning	Cold wave	ALERT (BE PREPARED)
Hailstorm	Fog	WARNING (TAKE ACTION)

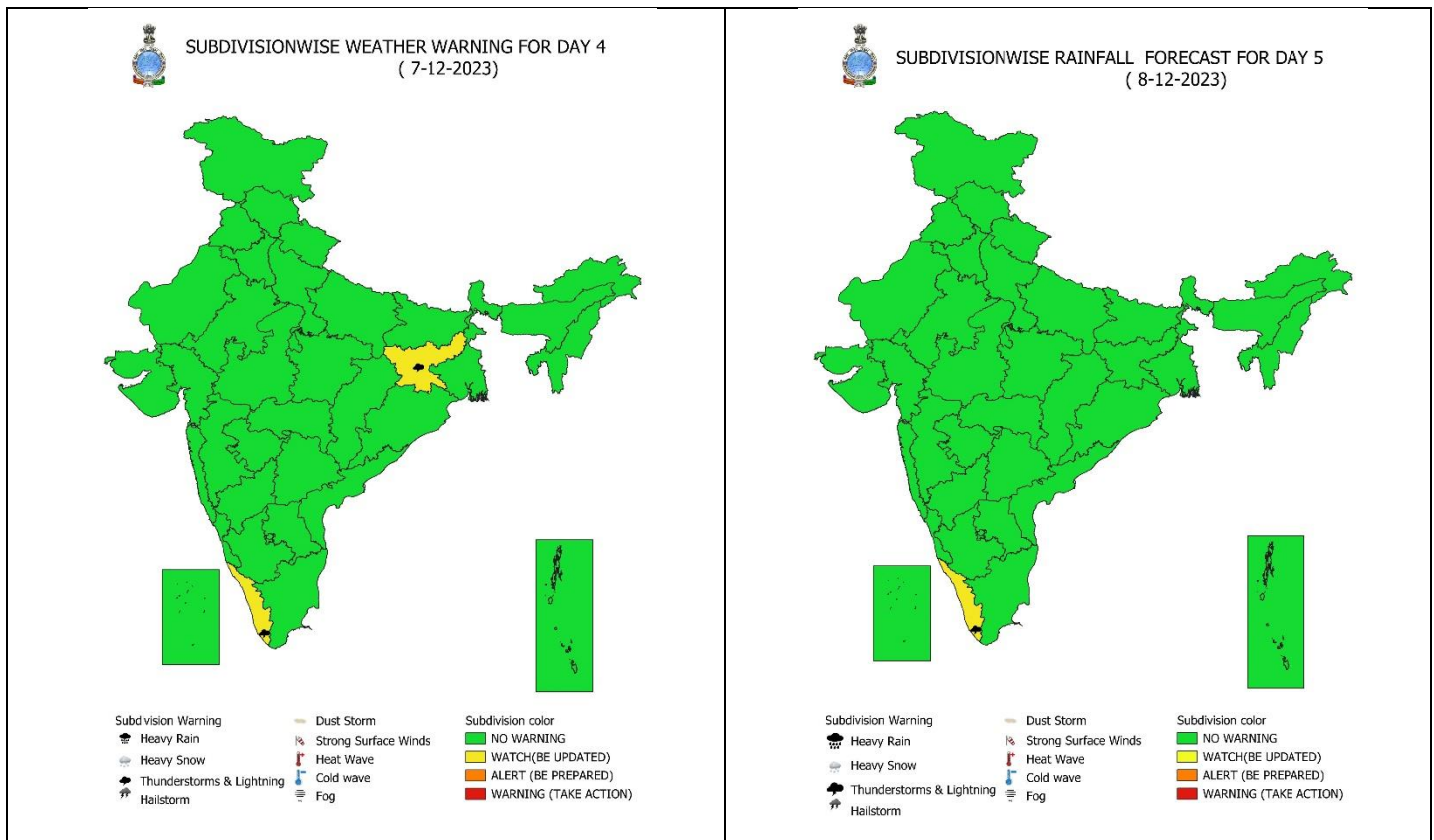


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
( 6-12-2023 )



Subdivision Warning	Dust Storm	Subdivision color
Heavy Rain	Strong Surface Winds	NO WARNING
Heavy Snow	Heat Wave	WATCH (BE UPDATED)
Thunderstorms & Lightning	Cold wave	ALERT (BE PREPARED)
Hailstorm	Fog	WARNING (TAKE ACTION)

**\* Red color warning does not mean "Red Alert" Red color warning means "Take Action".**  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day  
For more details kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation since 1875)



**i) Damage Expected over coastal districts of South Andhra Pradesh (Nellore, Tirupati Prakasam, Bapatla, Guntur, Krishna and West Godavari) and adjoining coastal districts of North Tamil Nadu-Puducherry:**

- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- Possibilities of damage to vulnerable structure.
- Breaking of tree branches, uprooting of large avenue trees. Major damage to banana and papaya trees. Large dead limbs blown from trees.
- Minor damage to power and communication lines due to breaking of branches and uprooting of trees.
- Major damage to Kutchha and minor damage to Pucca roads due to heavy rain.
- Damage to paddy crops, horticultural crops and orchards.
- Sea water inundation in low lying areas after erosion of Kutchha embankments
- Inundation of low lying areas in coastal districts due to heavy rainfall and flash flood
- Localized Flooding of roads and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic due to water logging and squally winds
- Localized Landslides/Mudslides
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

**(ii) Action Suggested for coastal districts of South Andhra Pradesh and adjoining coastal districts of North Tamil Nadu-Puducherry:**

- Total suspension of fishing operations.
- Surface transport and shipping operations need to be regulated
- Onshore & Offshore operation need to be regulated as per guidelines
- Coastal hutment dwellers to be in safer places.
- People in affected areas to remain indoors.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.



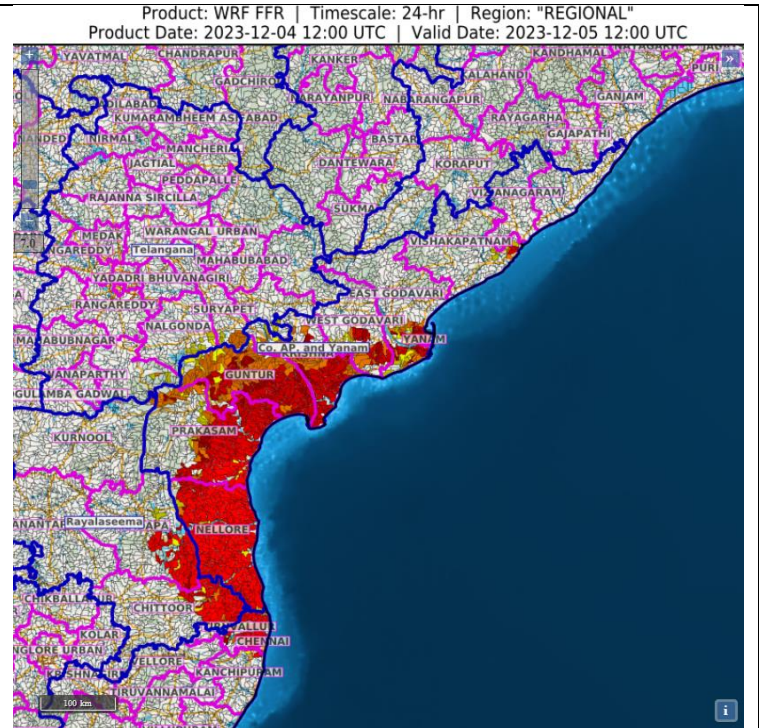
**Fishermen Warning:** Fishermen are advised not to venture into:

- Southwest Bay of Bengal and along & off North Tamil Nadu-Puducherry Coasts till 5th December.
- Westcentral Bay of Bengal and along & off Andhra Pradesh Coast till 6th December.
- Northwest Bay of Bengal and along & off Odisha coast till 6th December.

### **Flash Flood Guidance**

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 05-12-2023 : High flash flood risk likely over few watersheds & neighbourhoods of Coastal AP & Yanam - East Godavari, Guntur, Krishna, Prakasam, Spsr Nellore, Vishakhapatnam, West Godavari and Yanam districts, Rayalaseema - Chittoor, Kurnool and Kadapa districts.Telangana - Khammam, Nagarkurnool, Nalgonda and Suryapet districts.Tamil Nadu - Pudu & Karaikal - Chennai and Tiruvallur districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



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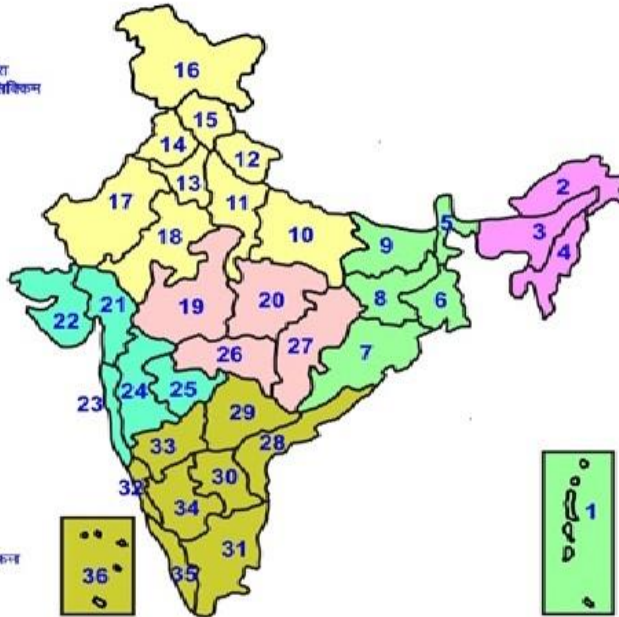
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(Service to the Nation since 1875)

## LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सोराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तमिलनाडु, पुदुचेरी एवं काराईकल
- 31 तटस्थ कर्नाटक
- 32 आंतरिक उत्तरी कर्नाटक
- 33 आंतरिक दक्षिणी कर्नाटक
- 34 केरल एवं माहे
- 35 लक्षद्वीप
- 36



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, Chd & Delhi
14. Punjab
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. Marathawada
26. Vidharbha
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)

## WARNING

WARNING (TAKE ACTION)
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

## Probabilistic Forecast

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

 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Hail
 Frost	 Cold Wave	 Heat Wave	 Sea State



## LEGENDS

### WARNING

<b>WARNING (TAKE ACTION)</b>
<b>ALERT ( BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING ( NO ACTION)</b>

### Probabilistic Forecast

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



**Heavy:** 64.5 to 115.5 mm/cm \*  
**Very Heavy:** 115.6 to 204.4 mm/cm\*  
**Extremely Heavy:** > 204.4 mm/cm \*



**When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions**  
**(a) Based on Departure from normal**

**Heat Wave:** Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
**Severe Heat Wave:** Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

**(b). Based on Actual maximum temperature**

**Heat Wave:** When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .  
**Severe Heat Wave:** When actual maximum temperature  $\geq 47^{\circ}\text{C}$

**(c). Criteria for heat wave for coastal stations**

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



**When maximum temperature remains  $40^{\circ}\text{C}$**

**Warm Night:** When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
**Severe Warm Night:** When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .



**When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.**  
**(a). Based on departure**

**Cold Wave:** Minimum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
**Severe Cold Wave:** Minimum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$

**(b) Based on actual Minimum Temperature (for Plains only)**

**Cold Wave :** When Minimum Temperature is  $\leq 4.0^{\circ}\text{C}$   
**Severe Cold Wave:** When Minimum Temperature is  $\leq 2.0^{\circ}\text{C}$

**(c) For Coastal Stations**

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



**When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions**  
**Based on departure**

**Cold Day:** Maximum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
**Severe Cold Day:** Maximum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$



**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



**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  $\leq 4^{\circ}\text{C}$  ( 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 ( 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)

**Severe Cyclonic Storm:** Wind speed 88-117 kmph (48-63 knots)

**Very Severe Cyclonic Storm:** Wind speed 118-165 kmph (64 - 89 knots)

**Extremely Severe Cyclonic Storm:** Wind speed 166-220 kmph (90 -119 knots)

**Super Cyclone Storm:** Wind speed  $> 220$  kmph ( $> 119$  knots)

Kindly download MAUSAM APP for location specific forecast & warning, MEGHDOOT APP for Agromet advisory and DAMINI APP for Lightning Warning & visit state MC/RMC websites for district wise warning.