

Saturday, July 27, 2024  
Time of Issue: 1945 hours IST  
(NIGHT)

**All India Impact Based Weather Warning Bulletin**

**27 July (Day 1):**

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa, Madhya Maharashtra, Gujarat Region and Coastal & South Interior Karnataka; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Haryana-Chandigarh-Delhi, Uttar Pradesh, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Odisha, Marathwada, Saurashtra & Kutch, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning very likely** at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather with wind speed reaching 35s kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off south Gujarat, Maharashtra, Konkan, goa, Karnataka coasts, along and off north Kerala coast and adjoining Lakshadweep area, off Sri Lanka coast, over many parts of south Bay of Bengal & most parts of central Bay of Bengal & southern parts of north Bay of Bengal, north Andaman sea, off north Andhra Pradesh, off Odisha coasts. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Mannar, over many parts of central Bay of Bengal & parts of south Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

**28 July (Day 2):**

- ❖ **Heavy to very heavy rainfall with extremely heavy falls ( $\geq 20$  cm) very likely at isolated places** over Gujarat Region; **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over East Rajasthan, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch, Kerala & Mahe and Coastal Karnataka ; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Uttarakhand, Haryana-Chandigarh-Delhi, West Rajasthan, Himachal Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning very likely** at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Gujarat Region and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off south Gujarat, Maharashtra, Konkan, goa, Karnataka coasts, along and off north Kerala coast and adjoining Lakshadweep area, off Sri Lanka coast, over many parts of south Bay of Bengal & most parts of central Bay of Bengal & southern parts of north Bay of Bengal, north Andaman sea, off north Andhra Pradesh coast. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Mannar, over many parts of westcentral Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

### 29 July (Day 3):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Nagaland & Manipur and Gujarat Region; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Bihar, Odisha, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch, Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Arunachal Pradesh and Gujarat Region.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northeast and adjoining northwest Arabian sea, most parts of central Arabian sea, northern parts of southeast and southwest Arabian sea, along and off south Gujarat, Maharashtra, Konkan, goa, Karnataka coasts, off Sri Lanka coast, over many parts of south Bay of Bengal & most parts of central Bay of Bengal & southern parts of north Bay of Bengal, off north Andhra Pradesh coast. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Mannar. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

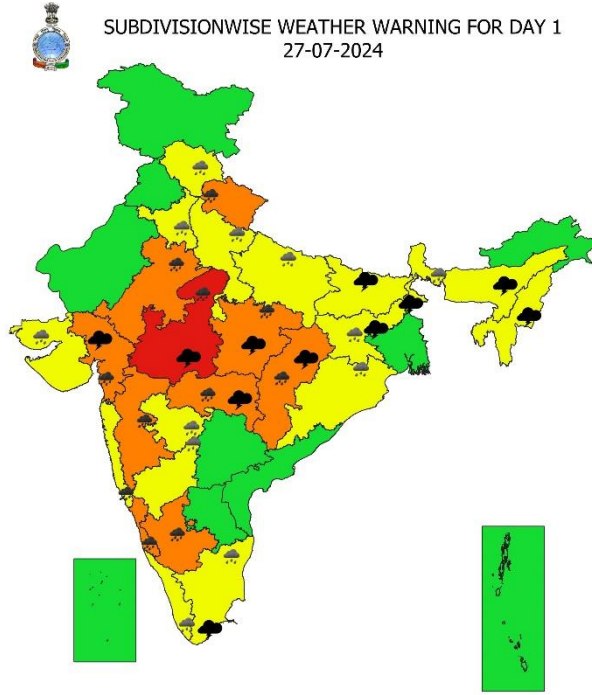
### 30 July (Day 4):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Uttarakhand and Nagaland & Manipur; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Uttar Pradesh, East Rajasthan, Haryana-Chandigarh-Delhi, Chhattisgarh, Bihar, Jharkhand, Odisha, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Assam & Meghalaya, Kerala & Mahe and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh and Gangetic West Bengal.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of central Arabian sea, northern parts of southeast and many places of southwest Arabian sea, off south Gujarat, Maharashtra, Konkan, goa coasts, off Sri Lanka coast, over many parts of south Bay of Bengal & most parts of central Bay of Bengal & southern parts of north Bay of Bengal. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Mannar. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

### 31 July (Day 5):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Uttarakhand and East Madhya Pradesh **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Uttar Pradesh, East Rajasthan, Haryana-Chandigarh-Delhi, West Madhya Pradesh, Vidarbha, Gangetic West Bengal, Chhattisgarh, Bihar, Jharkhand, Odisha, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Vidarbha and Chhattisgarh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of central Arabian sea, northern parts of southeast and southwest Arabian sea, off south Gujarat, Maharashtra, Konkan, goa coasts, off Sri Lanka coast, over many parts of south Bay of Bengal & most parts of central Bay of Bengal & southern parts of north Bay of Bengal. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Mannar. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

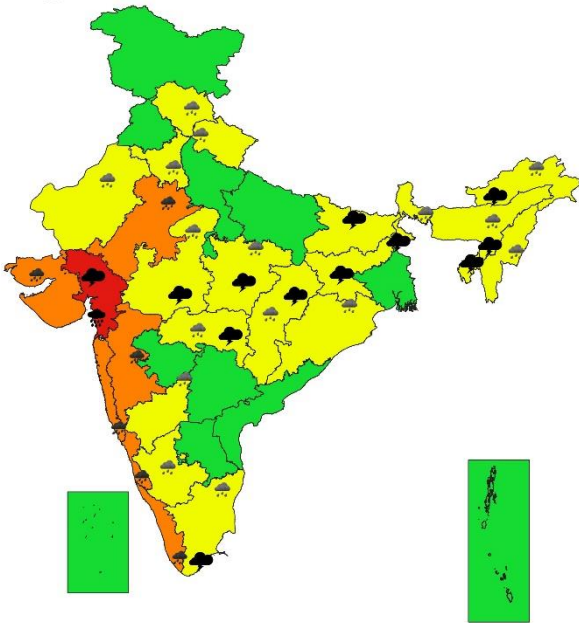
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
 27-07-2024



Subdivision Warning

Fog	Heavy Snow	Cold Day	NO WARNING
Heavy Rain	Hailstorm	Ground Frost	WATCH(BE UPDATED)
Very Heavy Rain	Dust Storm	Strong Surface Winds	ALERT (BE PREPARED)
Extremely Heavy Rain	Heat Wave	Thunder & Lightning	WARNING (TAKE ACTION)
	Cold Wave	Hot and Humid	

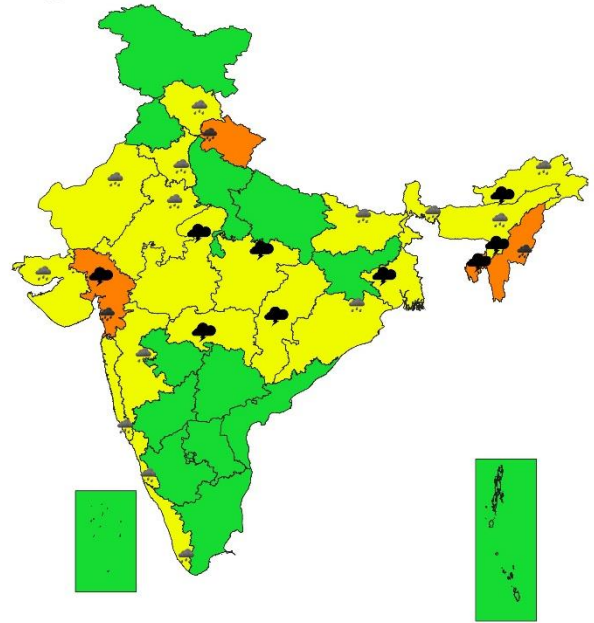
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
 28-07-2024



Subdivision Warning

Fog	Heavy Snow	Cold Day	NO WARNING
Heavy Rain	Hailstorm	Ground Frost	WATCH(BE UPDATED)
Very Heavy Rain	Dust Storm	Strong Surface Winds	ALERT (BE PREPARED)
Extremely Heavy Rain	Heat Wave	Thunder & Lightning	WARNING (TAKE ACTION)
	Cold Wave	Hot and Humid	

SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
 29-07-2024

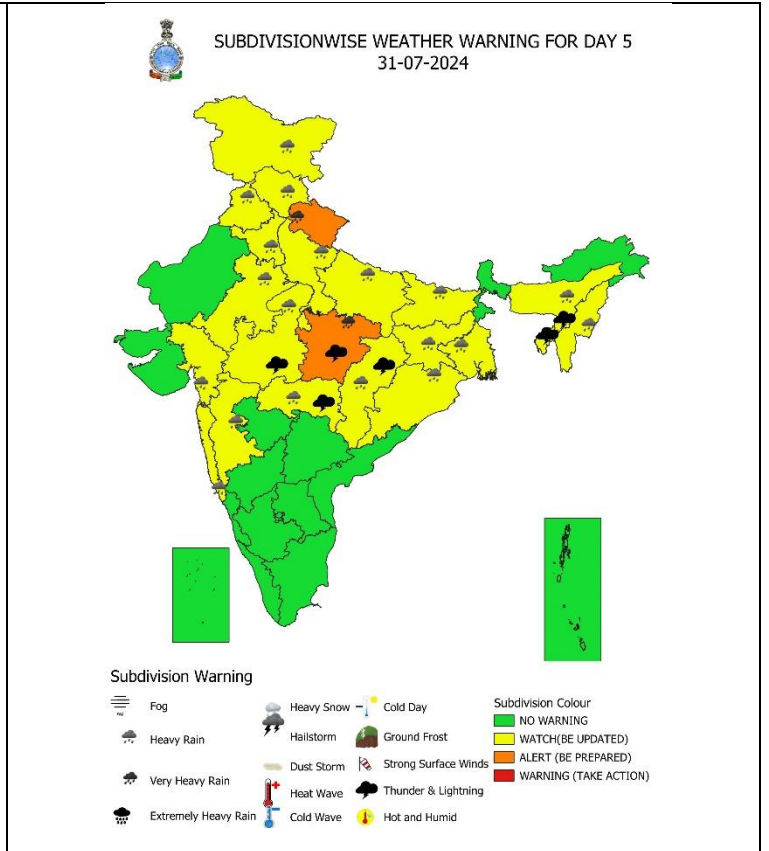
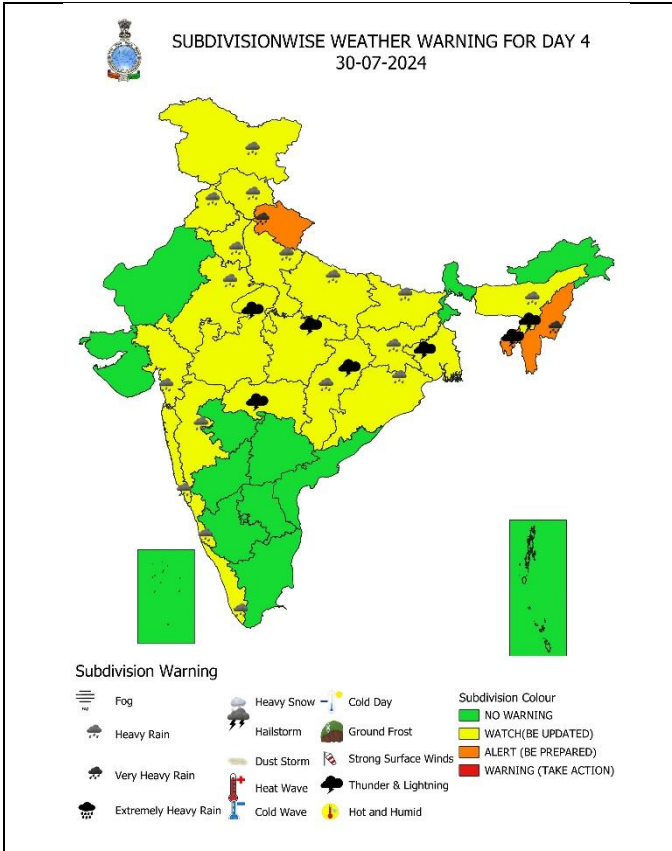


Subdivision Warning

Fog	Heavy Snow	Cold Day	NO WARNING
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Extremely Heavy Rain	Heat Wave	Thunder & Lightning	WARNING (TAKE ACTION)
	Cold Wave	Hot and Humid	

**\* Red colour warning does not mean "Red Alert", Red colour 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)





**IMPACT & ACTION SUGGESTED due to**

- ✓ **Isolated extremely heavy rainfall very likely over Gujarat Region on 28th July.**
- ✓ **Very heavy rainfall very likely at isolated places over Uttarakhand on 27th, 30th & 31st; East Rajasthan, Konkan & Goa, Madhya Maharashtra and North Interior Karnataka on 27th & 28th; West Madhya Pradesh, Vidarbha, Chhattisgarh and South Interior Karnataka on 27th; East Madhya Pradesh on 27th & 31st; Nagaland & Manipur on 29th & 30th; Saurashtra & Kutch and Kerala & Mahe on 28th; Gujarat Region on 27th & 29th July.**

- Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

**Action Suggested**

- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

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**Agromet advisories for Heavy Rainfall likely over various parts of the country**

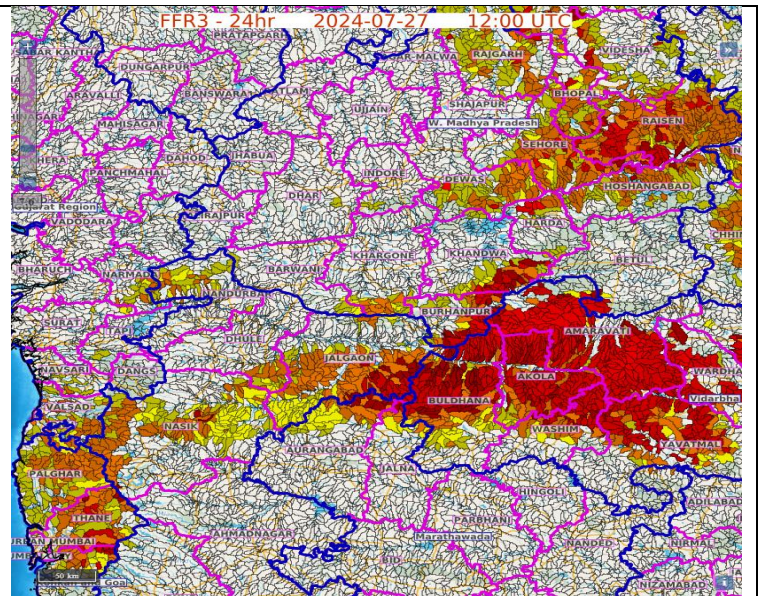
- Make provision for draining out excess water from crop fields to avoid water stagnation in Sub Himalayan West Bengal, Odisha, Jharkhand, Himachal Pradesh, Uttarakhand, Haryana, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Konkan & Goa, Ghat areas of Madhya Maharashtra, Gujarat State, Tamil Nadu, Kerala and Karnataka.
- Postpone transplanting of rice and vegetable seedlings in Konkan and ghat areas of Madhya Maharashtra.
- Provide mechanical support to horticultural crops & staking to vegetables.

**FLASH FLOOD GUIDANCE:**

**24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 28-07-2024 :**

**Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Vidarbha, West Madhya Pradesh, Northern Madhya Maharashtra and Northern Konkan & Goa Met Sub-divisions during next 24 hours.**

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.





## 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



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

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

(b). Based on Actual maximum temperature

<b>Heat Wave:</b> When actual maximum temperature $\geq 45^\circ\text{C}$ .
<b>Severe Heat Wave:</b> 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  $40^\circ\text{C}$

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

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

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

<b>Cold Wave :</b> When Minimum Temperature is $\leq 4.0^\circ\text{C}$
<b>Severe Cold Wave:</b> 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

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



Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

<b>Moderate Fog:</b> When the visibility between 500-200 metres
<b>Dense Fog:</b> when the visibility between 50- 200 metres
<b>Very Dense Fog:</b> 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)
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A strong wind that rises suddenly, lasts for atleast 1 minute.

<b>Moderate:</b> Wind speed 52-61 kmph
<b>Severe:</b> Wind speed 62-87 kmph
<b>Very Severe:</b> Wind speed $> 87$ kmph



Effect of various waves in the sea over specific area

<b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
<b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre
<b>Phenomenal:</b> Wind speed $> 117$ kmph ( $> 63$ knots) & Wave height $> 14$ metre



<b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots)
<b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots)
<b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots)
<b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots)
<b>Super Cyclone Storm:</b> 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.