

Tuesday, May 07, 2024
Time of Issue: 0745 hours IST
(MORNING)

All India Impact Based Weather Warning Bulletin

07 May (Day 1):

- ❖ **Thunderstorm accompanied with lightning & squally winds (speed reaching 50-60 kmph gusting to 70 kmph)** very likely at isolated places over Gangetic West Bengal; **with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** at isolated places over East Madhya Pradesh, Vidarbha, Jharkhand and South Interior Karnataka; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over East Uttar Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Uttarakhand, Tamil Nadu, Puducherry & Karaikal; **with lightning** at isolated places over Arunachal Pradesh, Marathwada, Kerala & Mahe, Coastal Karnataka and North Interior Karnataka.
- ❖ **Duststorm** very likely at isolated places over East Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and South Interior Karnataka.
- ❖ **Hot and humid weather** very likely to prevail over Coastal Karnataka and Kerala & Mahe.
- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over West Rajasthan, Gujarat state, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka.
- ❖ **Squally wind (speed 40 kmph to 45 kmph gusting to 55 kmph)** very likely to prevail along and off north Andhra Pradesh coast and adjoining south Odisha coast; **wind (speed 45 kmph to 55 kmph gusting to 65 kmph)** prevail along and off south Andhra Pradesh coast, Odisha and West Bengal coasts and adjoining northwest Bay of Bengal. Fishermen are advised not to venture into these areas.

08 May (Day 2):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Vidarbha; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over East Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, East Madhya Pradesh, Sub-Himalayan West Bengal; Tamil Nadu, Puducherry & Karaikal; **with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, Karnataka.
- ❖ **Duststorm** very likely at isolated places over East Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Odisha, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Hot and humid weather** very likely to prevail over Coastal Karnataka and Kerala & Mahe.
- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over Rajasthan, West Madhya Pradesh and Gujarat state.

09 May (Day 3):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 50-60 kmph)** likely at isolated places over Gangetic West Bengal; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Chhattisgarh, Bihar, Jharkhand, Odisha; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Uttarakhand, East Rajasthan, East Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura .
- ❖ **Heavy rainfall** likely at isolated places over Odisha and Kerala & Mahe.
- ❖ **Heat wave conditions** likely to prevail in isolated pockets over Rajasthan, West Madhya Pradesh, Gujarat state.

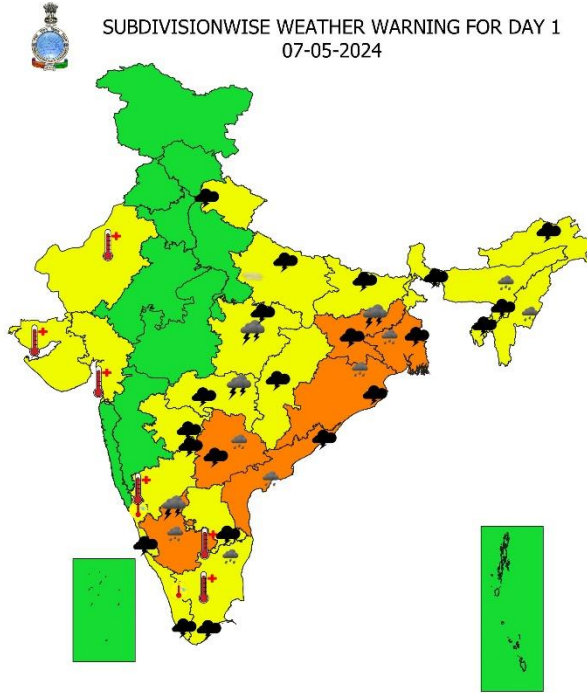
10 May (Day 4):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh and Gangetic West Bengal; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Uttarakhand, Vidarbha, Bihar, Jharkhand, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Odisha, Arunachal Pradesh, Haryana-Chandigarh-Delhi, Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Duststorm** likely at isolated places over Haryana-Chandigarh-Delhi and Uttar Pradesh.
- ❖ **Heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Kerala & Mahe.
- ❖ **Heat wave conditions** likely to prevail in isolated pockets over Rajasthan, West Madhya Pradesh and Gujarat state.

11 May (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh and Gangetic West Bengal; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Uttarakhand, Vidarbha, Bihar, Jharkhand, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Odisha, Arunachal Pradesh, Haryana-Chandigarh-Delhi, Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Duststorm** likely at isolated places over Haryana-Chandigarh-Delhi and Uttar Pradesh.
- ❖ **Heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Kerala & Mahe.
- ❖ **Heat wave conditions** likely to prevail in isolated pockets over Rajasthan, West Madhya Pradesh and Gujarat state.

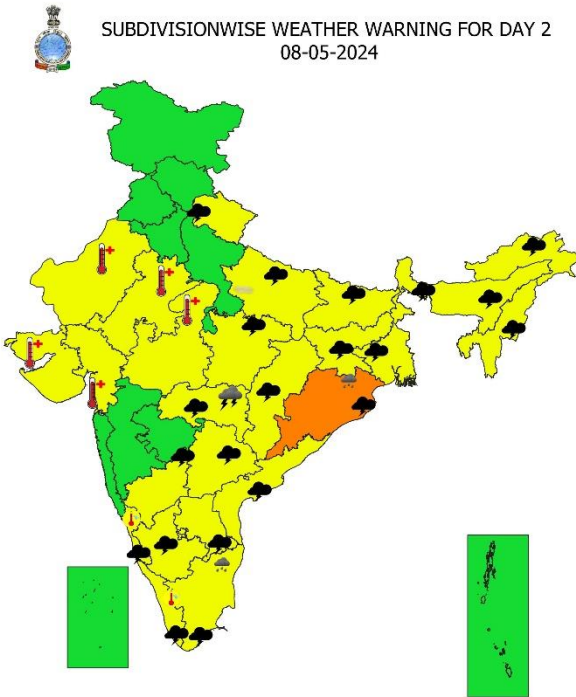
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
 07-05-2024



Subdivision Warning

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

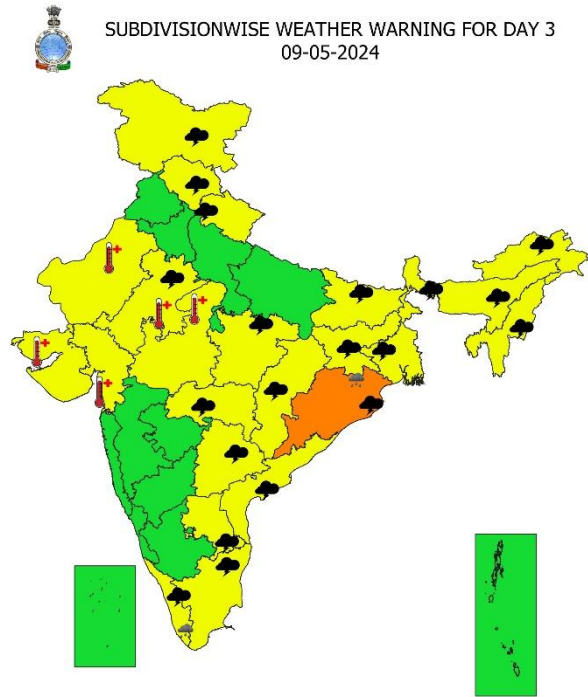
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
 08-05-2024



Subdivision Warning

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

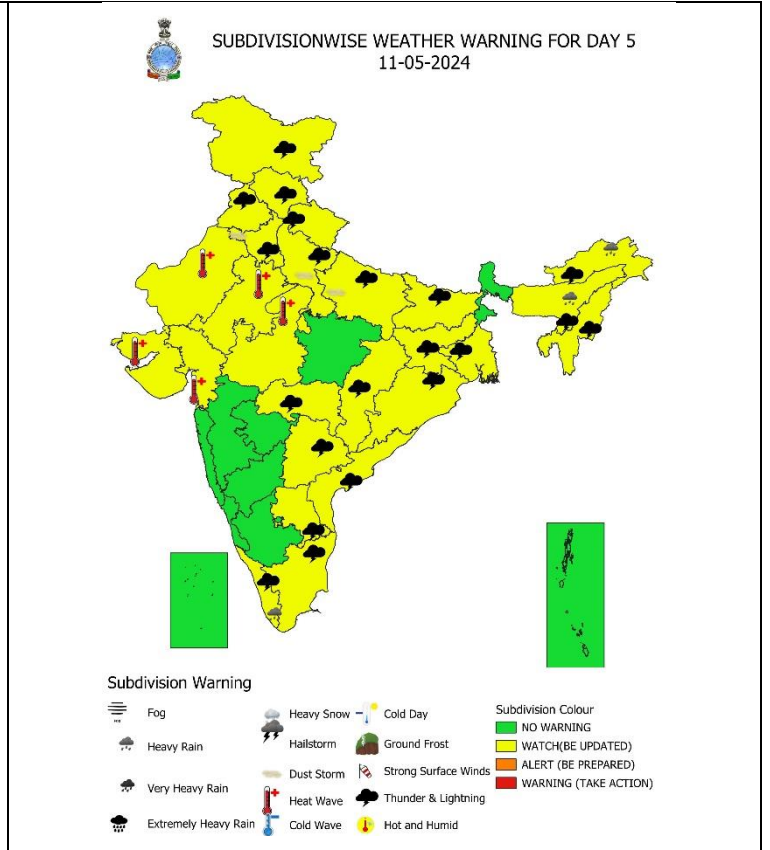
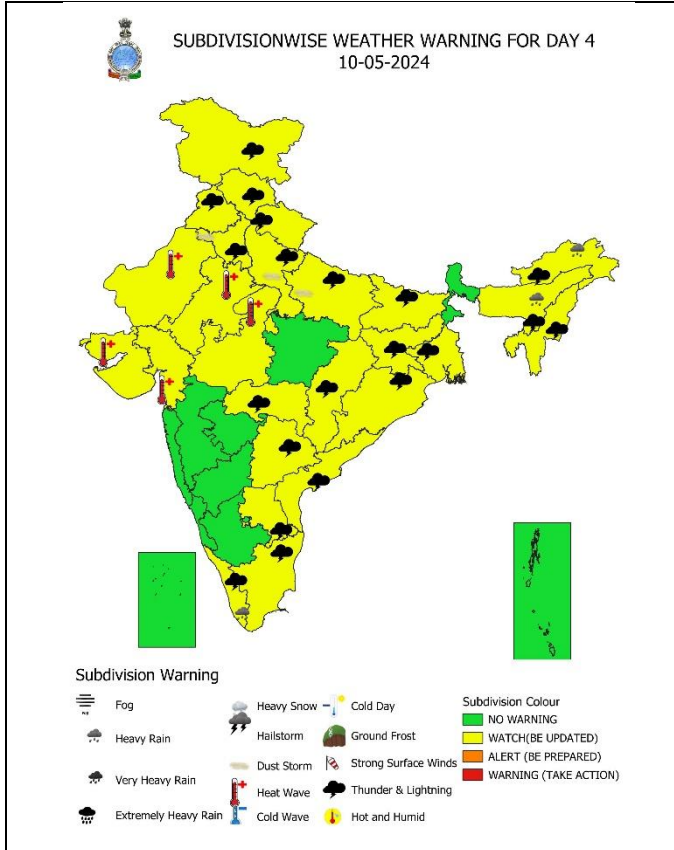
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
 09-05-2024



Subdivision Warning

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

*** 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)



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IMPACT & ACTION SUGGESTED due to Heat Wave Conditions:

Orange alert Areas

- ✓ High temperature & increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- ✓ High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- ✓ Avoid heat exposure- keep cool. Avoid dehydration.
- ✓ Drink sufficient water- even if not thirsty.
- ✓ Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

Yellow alert Areas

- ✓ Moderate temperature & heat is tolerable for general public but moderate health concern likely for vulnerable people e.g. infants, elderly, people with chronic diseases.
- ✓ Avoid heat exposure.
- ✓ Wear lightweight, light colour, loose, cotton clothes.
- ✓ Cover your head, use a cloth, hat or umbrella.

Impact expected and action suggested due to thunderstorm accompanied with lightning/gusty winds & Hailstorm over East Madhya Pradesh, Jharkhand and South Interior Karnataka on 07th; over Vidarbha on 07th & 08th May, 2024.

Impact expected:

- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

Action suggested:

- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.

Impact & Action Suggested due to

(i) **Isolated heavy rainfall** over Arunachal Pradesh on 10th; Assam & Meghalaya on 07th & 10th; and over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal on 07th; over Odisha during 07th -09th; over Tamil Nadu, Puducherry & Karaikal & South Interior Karnataka on 07th & 08th; over Coastal Andhra Pradesh & Yanam, Telangana on 07th and over Kerala & Mahe on 09th & 10th May, 2024.

Impacts Expected for Rainfall/Snowfall over above regions:

- ✓ Disruption of Electricity.
- ✓ Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- ✓ Disruption of traffic flow.
- ✓ Damage to Kuccha and unsecured structures.

Suggested Actions

- ✓ Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- ✓ Stay away from power lines or electrical wires.
- ✓ Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon.
- ✓ Drive carefully.

Agromet advisories for Heavy Rainfall, Gusty winds and Heat Wave likely over various parts of the country:

- Make necessary arrangements for draining out excess water from crop fields to avoid water stagnation in Gangetic West Bengal, Odisha, Tamil Nadu, Andhra Pradesh, Telangana, South Interior Karnataka and North Eastern States.
- In Arunachal Pradesh, postpone sowing of *Jhum* paddy, maize and soybean.
- Use hail nets or hail caps in fruit orchards to prevent mechanical damage and provide mechanical support to horticultural crops & staking to vegetables in Sub Himalayan West Bengal, Sikkim, Jharkhand, East Madhya Pradesh, Vidarbha and South Interior Karnataka.
- Apply light and frequent irrigation to standing crops to avoid heat stress; provide mulching to conserve soil moisture and minimise evaporation in Gujarat, Vidarbha, West Rajasthan, Tamil Nadu, Interior Karnataka, Rayalaseema and Telangana.
- Provide mechanical support to horticultural crops & staking to vegetables to prevent damage from gusty winds.

LEGENDS

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



Rain/ Snow *

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



Heat Wave

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°C to 6.4°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 $\geq 37^\circ\text{C}$



Warm Night

When maximum temperature remains 40°C

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



Cold Wave

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°C to -6.4°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 $\leq 15^\circ\text{C}$



Cold Day

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



Fog

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

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.



Frost

Ice deposits on ground

Air temperature $\leq 4^\circ\text{C}$ (over Plains)



Squall

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



Sea State

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



Cyclone

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.