

Wednesday, May 08, 2024
Time of Issue: 1945 hours IST
(NIGHT)

All India Impact Based Weather Warning Bulletin

08 May (Day 1):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over East Madhya Pradesh, Vidarbha; **with lightning, gusty winds (speed reaching 30-40 kmph) & hailstorm** at isolated places over Uttarakhand; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over West Madhya Pradesh, Chhattisgarh, West Bengal & Sikkim, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and South Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Uttar Pradesh, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and North Interior Karnataka; **with lightning** at isolated places over Himachal Pradesh, Madhya Maharashtra and Arunachal Pradesh .
- ❖ **Dust Storm/Thunderstorm** very likely in isolated pockets over East Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and South Interior Karnataka.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat and Kerala & Mahe.
- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over Rajasthan, West Madhya Pradesh and Saurashtra & Kutch.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Kerala & Mahe.

09 May (Day 2):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Uttarakhand, East Madhya Pradesh and Vidarbha; **with lightning & squally winds (speed reaching 50-60 kmph gusting to 70 kmph)** at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over Chhattisgarh, Gangetic West Bengal, Jharkhand, Odisha and Coastal Andhra Pradesh & Yanam; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana and Interior Karnataka; **with lightning** at isolated places over Himachal Pradesh, Arunachal Pradesh and Kerala & Mahe.
- ❖ **Dust Storm/Thunderstorm** very likely in isolated pockets over East Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in isolated pockets over West Rajasthan and **Heat wave conditions** very likely to prevail in isolated pockets over East Rajasthan, West Madhya Pradesh and Saurashtra & Kutch.

10 May (Day 3):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Uttarakhand; **with lightning & squally winds (speed reaching 50-60 kmph gusting to 70 kmph)** at isolated places Gangetic West Bengal; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over Bihar, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim and Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Punjab, East Madhya Pradesh, Vidarbha, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and Interior Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh and Kerala & Mahe.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** very likely in isolated pockets over Rajasthan; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi and Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat and Kerala & Mahe.
- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over West Rajasthan and West Madhya Pradesh.

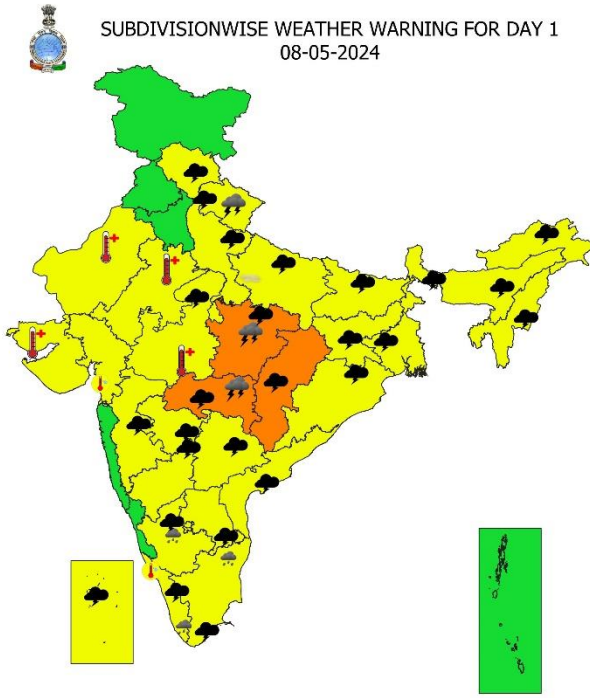
11 May (Day 4):

- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph gusting to 70 kmph) & hailstorm** likely at isolated places over Uttarakhand; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over East Rajasthan, Chhattisgarh, Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Punjab, East Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and Interior Karnataka; **with lightning** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya and Lakshadweep.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** likely in isolated pockets over West Uttar Pradesh and West Rajasthan; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi and East Uttar Pradesh.
- ❖ **Heavy rainfall** likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Hot and humid weather** likely to prevail over coastal areas of Gujarat.

12 May (Day 5):

- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph gusting to 70 kmph) & hailstorm** likely at isolated places over Uttarakhand; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over East Rajasthan, Chhattisgarh, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Telangana; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Punjab, East Madhya Pradesh, Vidarbha, Odisha, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Interior Karnataka; **with lightning** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya and Lakshadweep.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** likely in isolated pockets over West Rajasthan; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi and Uttar Pradesh.
- ❖ **Hot and humid weather** likely to prevail over coastal areas of Gujarat.

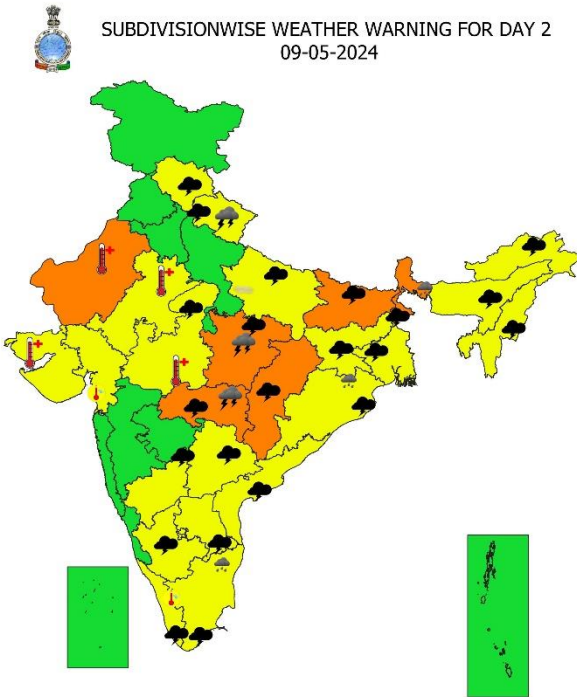
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
 08-05-2024**



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)

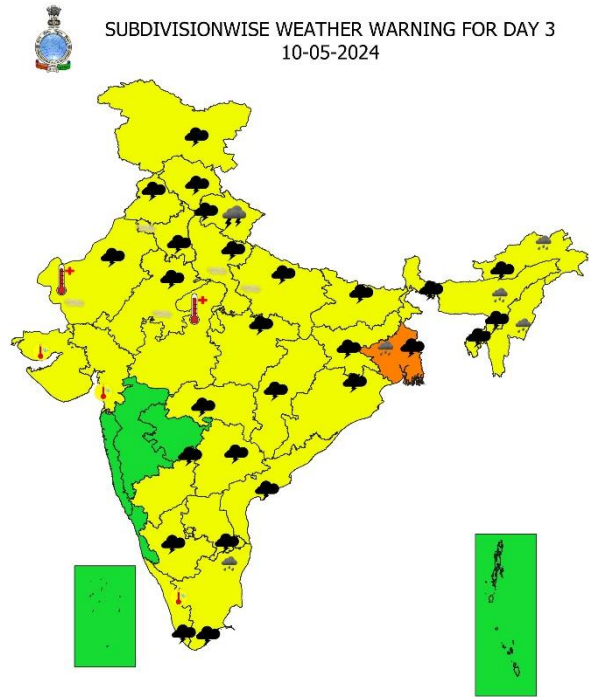
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
 09-05-2024**



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)

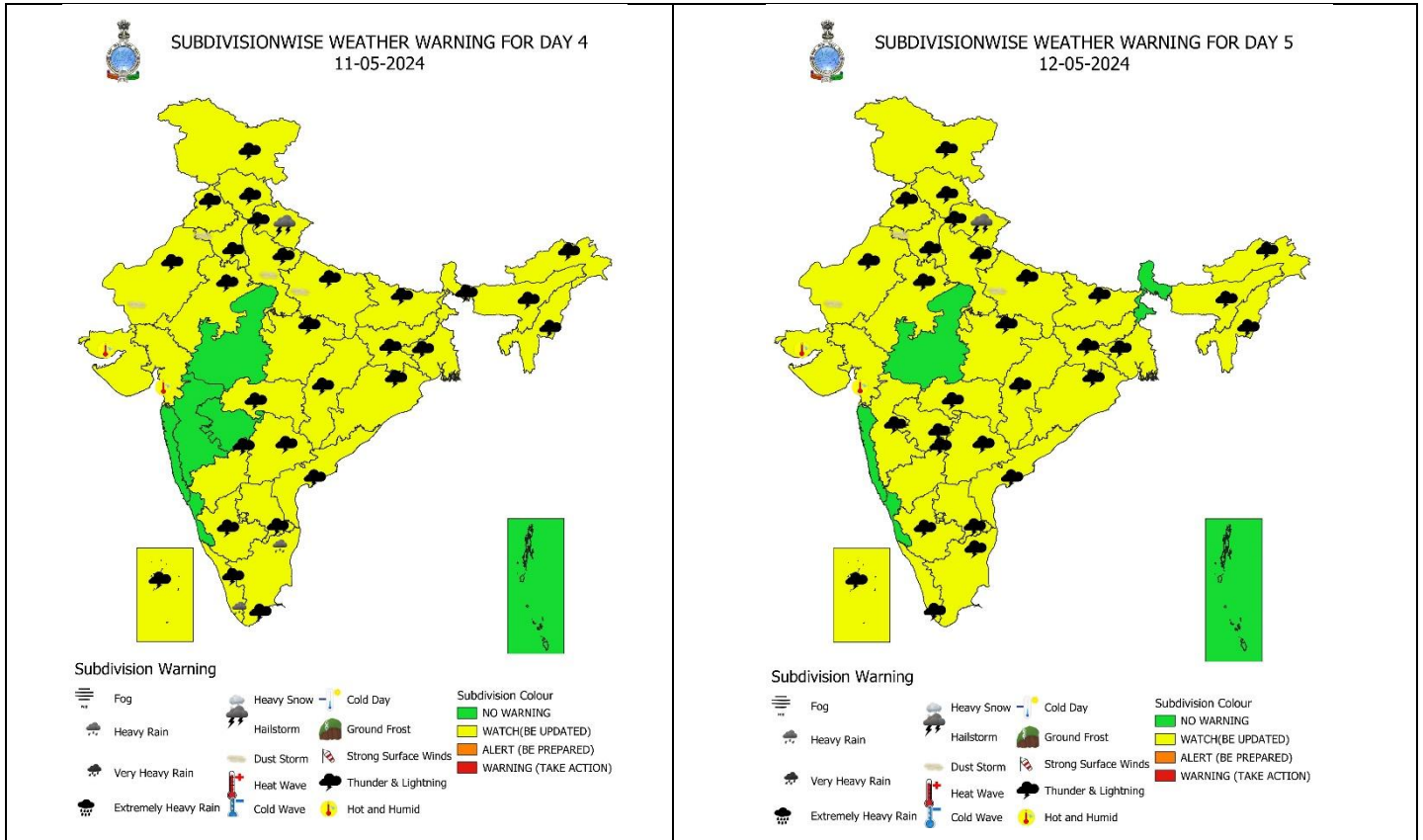
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
 10-05-2024**



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)**



Impact expected and 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 Uttarakhand during next 5 days; Central India during next 2 days; East & South Peninsular India during next 4-5 days and Northwest India during 10th-12th 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 heavy rainfall over South Interior Karnataka on 08th; Kerala & Mahe on 08th & 11th; Tamil Nadu, Puducherry & Karaikal during 08th-11th; Sub-Himalayan West Bengal & Sikkim and Odisha on 09th and Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura on 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, Hail and Heat Wave likely over various parts of the country:

- Make arrangements to drain out excess water from crop fields to avoid water stagnation in Sub-Himalayan West Bengal, Odisha, Tamil Nadu, Kerala, South Interior Karnataka, Andhra Pradesh and Telangana.
- Use hail nets or hail caps in fruit orchards to prevent mechanical damage and provide mechanical support to horticultural crops & staking to vegetables in Uttarakhand, East Madhya Pradesh and Vidarbha.
- Apply light and frequent irrigation to standing crops to avoid heat stress; provide mulching to conserve soil moisture and minimise evaporation in Saurashtra & Kutch, Rajasthan, and West Madhya Pradesh.
- 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 Strom: 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.

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