



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

> Tuesday, April 1, 2025 Time of Issue: 2000 hours IST (NIGHT)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

## **Significant Weather Features:**

## Weather Systems, Forecast and Warnings:

- The Cyclonic Circulation lies over Madhya Maharashtra & neighbourhood in lower tropospheric levels; The trough runs from south Chhattisgarh to cyclonic circulation over Madhya Maharashtra & neighbourhood and the North-south trough runs form above Cyclonic Circulation over Madhya Maharashtra to Comorin area in the lower tropospheric levels. Under the influence of these systems and confluence of moist winds from Arabian sea and Bay of Bengal in lower tropospheric levels;
  - ✓ Isolated to Scattered light/moderate rainfall accompanied with thunderstorm, lightning & gusty winds (speed 30-60 kmph) likely over Gujarat State, Telangana on 01<sup>st</sup> & 02<sup>nd</sup>; Central India, Odisha, Madhya Maharashtra, Marathawada, during 01<sup>st</sup>-04<sup>th</sup>; Tamilnadu Puducherry & Karaikal, Kerala & Mahe and Karnataka during 01<sup>st</sup>-05<sup>th</sup>; Coastal Andhra Pradesh & Yanam, Rayalaseema during 02<sup>nd</sup>-05<sup>th</sup> April.
  - ✓ Hailstorm likely over Madhya Maharashtra, Marathawada on 01<sup>st</sup> & 02<sup>nd</sup>; Madhya Pradesh, Vidarbha, Chhattisgarh, South Interior Karnataka, Telangana on 02<sup>nd</sup> & 03<sup>rd</sup>; North Interior Karnataka during 02<sup>nd</sup>-04<sup>th</sup>; Jharkhand on 03<sup>rd</sup>; Odisha, Coastal Karnataka on 03<sup>rd</sup> & 04<sup>th</sup> April.
  - Heavy rainfall very likely at isolated places over Kerala & Mahe, South Interior Karnataka during 02<sup>nd</sup>-06<sup>th</sup>; Tamil Nadu Puducherry & Karaikal during 03<sup>rd</sup> -05<sup>th</sup>; Coastal Karnataka during 03<sup>rd</sup>-06<sup>th</sup>; north Interior Karnataka on 03<sup>rd</sup> & 06<sup>th</sup>; Andaman & Nicobar Islands on 04<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 04<sup>th</sup> April.

#### **Temperature Forecast:**

- ✤ Gradual rise in maximum temperatures by 3-5°C likely over Northwest India during next 7 days.
- Gradual fall in maximum temperatures by 2-4°C likely over Central India and Maharashtra during next 3 days and rise by 2-4°C during subsequent 4 days.
- Gradual fall in maximum temperatures by 2-4°C likely over South Peninsular India during next 5 days.
- No significant change in maximum temperatures likely over rest parts of the country during next 7 days.

#### Heat wave and Hot & Humid weather warning:

- Heat Wave conditions very likely to prevail at isolated pockets of Saurashtra & Kutch on 01<sup>st</sup> & 02<sup>nd</sup>; West Rajasthan during 05<sup>th</sup>-07<sup>th</sup> April.
- Hot & humid weather conditions very likely to prevail at isolated pockets of Tripura during 01st -03rd; Assam during 03rd-05th; Gujarat State during 03rd-07th April.
- **\*** Warm night very likely to prevail at isolated pockets of Vidarbha on 01<sup>st</sup> April.





Main Weather Observations:

- Rainfall distribution (from 0830 hours IST to 1730 hours IST of today): at isolated places over Odisha and Kerala & Mahe.
- Significant amount of rainfall (from 0830 hours IST to 1730 hours IST of today) (in cm): Kerala & Mahe: Thiruvananthapuram- 1.
- Minimum Temperature Departures (as on 01-04-2025): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over West Madhya Pradesh and Madhya Maharashtra; above normal (1.6°C to 3.0°C) at many places over Coastal Karnataka and Andaman & Nicobar Islands; at a few places over Saurashtra & Kutch; at isolated places over Himachal Pradesh, Uttarakhand, Konkan & Goa, Jharkhand, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. These are markedly below normal (-5.1°C or less) at isolated places over Haryana and East Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Rajasthan, Delhi and East Madhya Pradesh, below normal (-3.0°C to -1.6°C) at many places over East Uttar Pradesh, at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, South Interior Karnataka and Telangana; at isolated places over West Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country (Fig. 4). Today, the lowest minimum temperature of 9.8°C is reported at Adampur IAF (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 01-04-2025): Maximum Temperatures are markedly above normal (5.1°C or more) at isolated places over Saurashtra & Kutch; appreciably above normal (3.1°C to 5.0°C) at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh; at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at a few places over Gujarat Region and Gangetic West Bengal; at isolated places over Uttarakhand, Rajasthan, East Uttar Pradesh, Bihar, Odisha, Rayalaseema and Marathwada. These are appreciably above normal (3.1°C to 5.0°C) at many places over Vidarbha; at isolated places over Madhya Maharashtra; below normal (-3.0°C to -1.6°C) at a few places over Telangana; at isolated places over Madhya Pradesh, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Rayalaseema and near normal over rest parts of the country (Fig. 2). Today, the highest maximum temperature of 42.3°C is reported at Surendranagar (Saurashtra & Kutch) over the country.



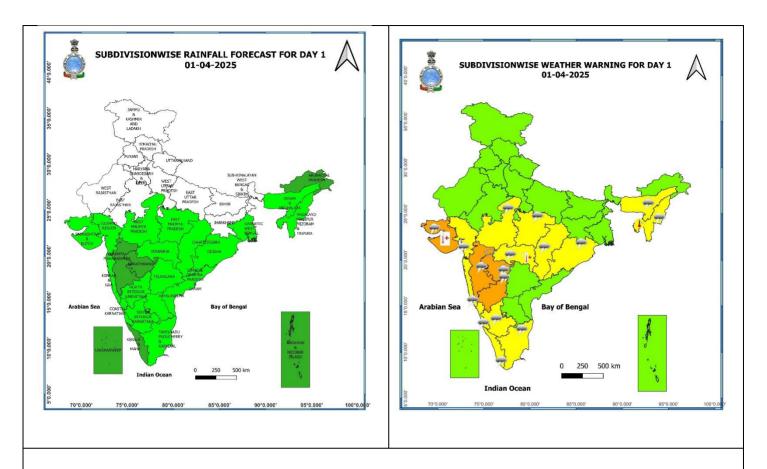


Meteorological Analysis (Based on 1730 hours IST)

- The Cyclonic Circulation over Madhya Maharashtra & neighbourhood at 0.9 km above mean sea level persists.
- The trough from south Chhattisgarh to above cyclonic circulation over Madhya Maharashtra & neighbourhood across Vidarbha & Marathwada at 0.9 km above mean sea level persists.
- The north-south trough from the cyclonic circulation over Madhya Maharashtra & neighbourhood to Comorin area across Karnataka & Tamil Nadu at 0.9 km above mean sea level persists.
- The upper air Cyclonic Circulation over southwest Bay of Bengal & adjoining north Tamil Nadu between 1.5 & 3.1 km above mean sea level persists.
- The Cyclonic Circulation over northeast Assam & neighbourhood extending upto 1.5 km above mean sea level persists.
- A fresh Western Disturbance is likely to affect Western Himalayan Region from 03<sup>rd</sup> April, 2025.

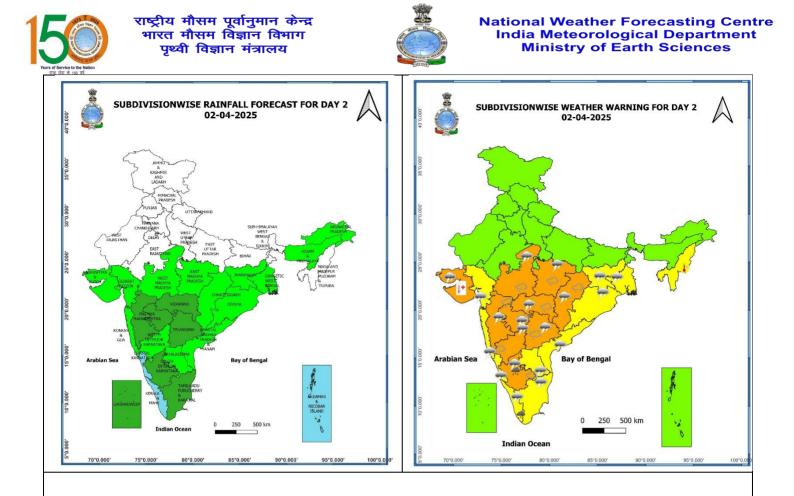






# 01st April (Day 1):

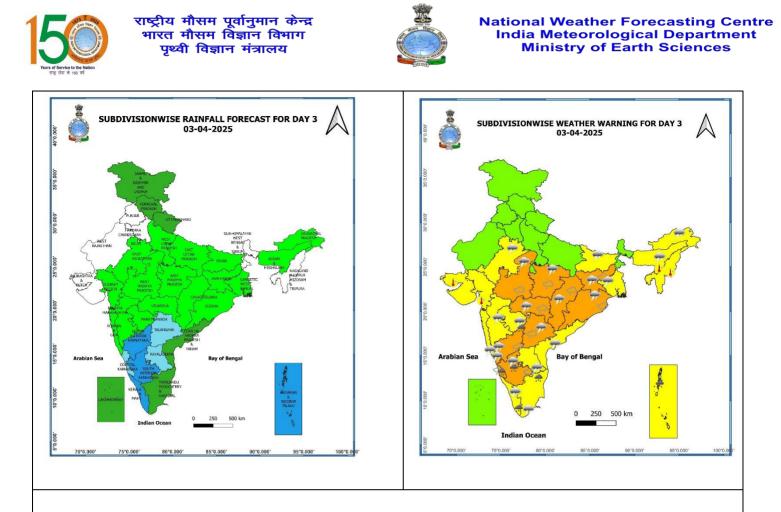
- Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph)& hail very likely at isolated places over Madhya Maharashtra & Marathwada; with lightning & squall (speed reaching 50-60 kmph) at isolated places over North Interior Karnataka; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Odisha, Konkan & Goa, Gujarat State, Kerala & Mahe; with lightning at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal & South Interior Karnataka.
- Hot and Humid Weather conditions very likely at isolated places over Tripura.
- Heat wave conditions very likely at isolated places over Saurashtra & Kutch.
- Warm night conditions very likely to prevail in isolated pockets over Vidarbha.
- Squally weather with wind speed reaching 45 to 50 gusting to 55 kmph very likely to prevail along and off goa, Maharashtra and adjoining south Gujarat coasts. Fishermen are advised not to venture into these areas.



## 02<sup>nd</sup> April (Day 2):

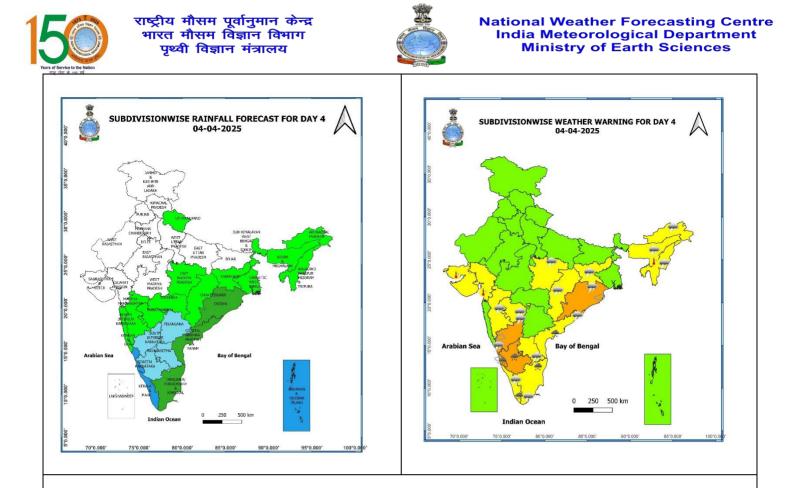
• Heavy rainfall very likely at isolated places over South Interior Karnataka and Kerala & Mahe.

- Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) & hail very likely at isolated places over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada, North Interior Karnataka; with lightning & gusty winds (speed reaching 40-50 kmph) & hail at isolated places over Chhattisgarh, South Interior Karnataka & Telangana; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Jharkhand, Odisha, Konkan & Goa, Coastal Karnataka; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Gangetic West Bengal, Gujarat State, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- Hot and Humid Weather conditions very likely at isolated places over Tripura.
- Heat wave conditions very likely at isolated places over Saurashtra & Kutch.



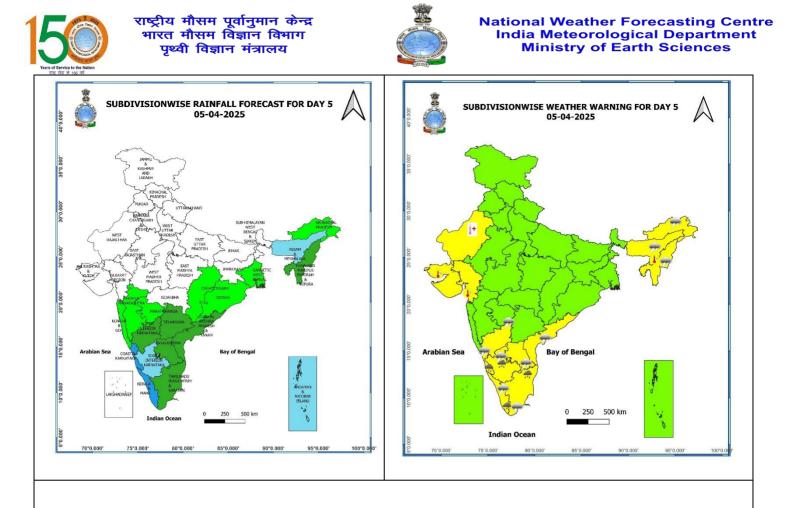
## 03rd April (Day 3):

- Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Karnataka.
- Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) & hail very likely at isolated places over Jharkhand, Odisha and North Interior Karnataka; with lightning & gusty winds (speed reaching 40-50 kmph) & hail at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Telangana, Coastal & South Interior Karnataka; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over East Rajasthan, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning & gusty winds (speed reaching 30 40 kmph) at isolated places over Gangetic West Bengal, Bihar, Konkan & Goa, Assam & Meghalaya; with lightning at isolated places over Arunachal Pradesh and Tamil Nadu, Puducherry & Karaikal.
- Hot and Humid Weather conditions very likely at isolated places over Assam & Meghalaya, Tripura and Gujarat state.



## 04th April (Day 4):

- Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka.
- Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) & hail likely at isolated places over Odisha and North Interior Karnataka; with lightning & gusty winds (speed reaching 40-50 kmph) & hail at isolated places over Coastal Karnataka; with lightning & gusty winds (speed reaching 40 50 kmph) at isolated places over East Madhya Pradesh, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema and Kerala & Mahe; with lightning & gusty winds (speed reaching 30 40 kmph) at isolated places over Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Madhya Maharashtra; with lightning at isolated places over Arunachal Pradesh.
- Hot and Humid Weather conditions likely at isolated places over Gujarat state.



## 05th April (Day 5):

- Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka.
- Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 50 kmph) likely at isolated places over Coastal Karnataka, North Interior Karnataka & Kerala & Mahe; with lightning & gusty winds (speed reaching 30 40 kmph) at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka; with lightning at isolated places over Arunachal Pradesh.

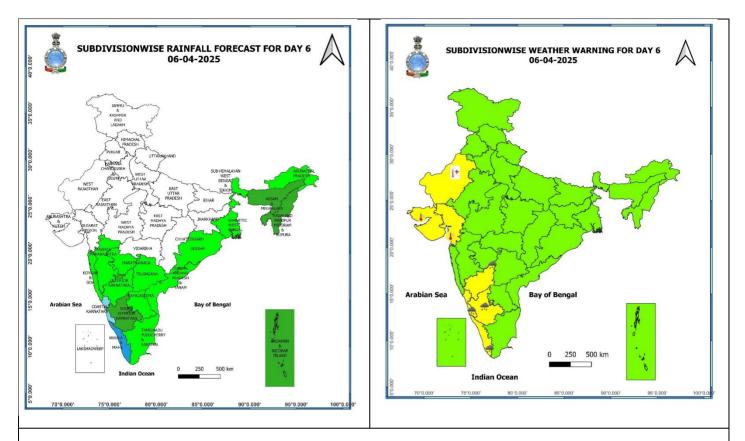
\* Hot and Humid Weather conditions likely at isolated places over Gujarat state.

• Heat wave conditions very likely at isolated places over West Rajasthan.





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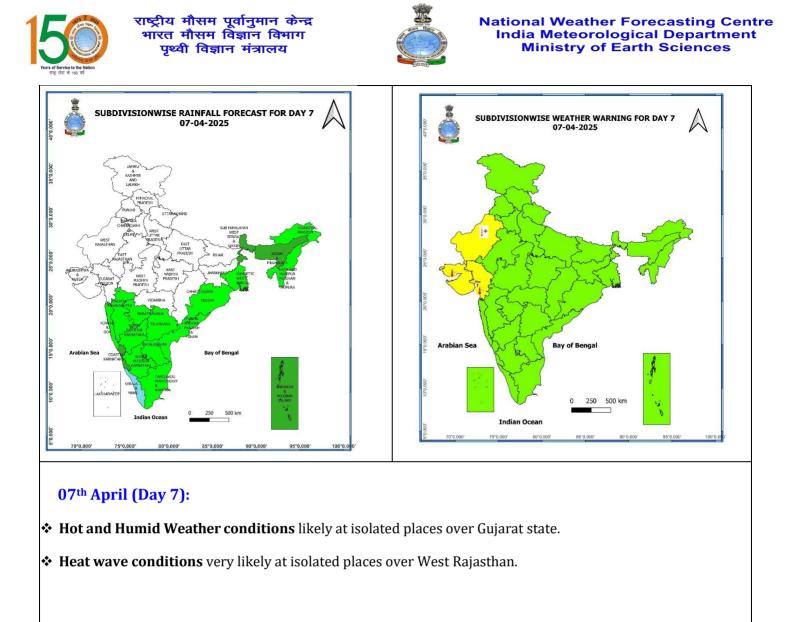


# 06th April (Day 6):

• Heavy rainfall likely at isolated places over Kerala & Mahe and Karnataka.

• Hot and Humid Weather conditions likely at isolated places over Gujarat state.

• Heat wave conditions likely at isolated places over West Rajasthan.



# Weather Outlook for subsequent 3 days (During 08th April- 10th April, 2025)

✤ Isolated to scattered rainfall likely over Western Himalayan Region and Northeast India, Chhattisgarh, Odisha, Vidarbha & Maharashtra and south peninsular India.

Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.

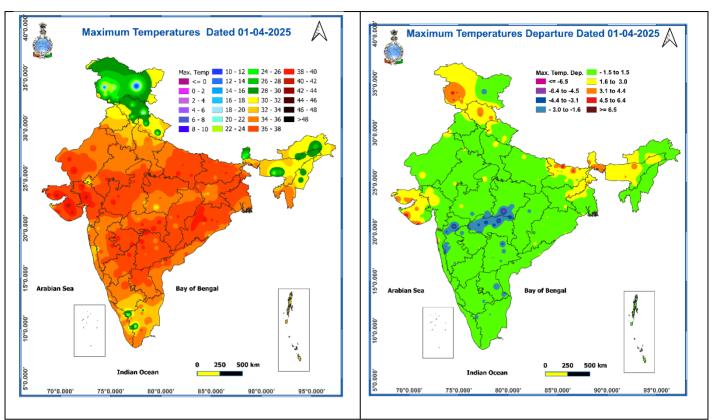
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.





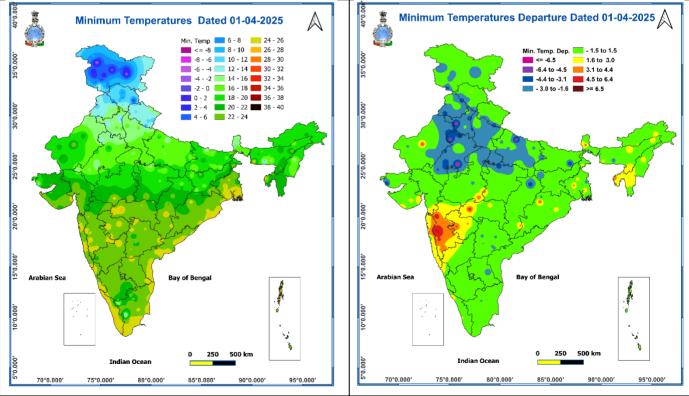
Fig. 2: Departure of Maximum Temperatures

### Fig. 1: Maximum Temperatures



## Fig. 3: Minimum Temperatures

#### Fig. 4: Departure of Minimum Temperatures



\* 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 Heat Wave conditions over Saurashtra & Kutch on 01st & 02nd; West Rajasthan during 05<sup>th</sup> -07<sup>th</sup> April.

## **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 isolated thunderstorm with lightning/gusty winds & Hailstorm over central and adjoining East & Peninsular India during 01<sup>st</sup> -04<sup>th</sup> April.

## 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.





# Agromet advisories for likely impact of Hailstorm, Heavy Rainfall, Strong Surface Winds

- In Madhya Maharashtra, Marathwada, Vidarbha, Coastal and North Interior Karnataka, Telangana, Madhya Pradesh, Chhattisgarh, Odisha and Jharkhand, immediately harvest the matured crops, fruits and vegetables and shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields to avoid the adverse impact of likely hailstorm. Use hail net and hail caps to prevent mechanical damage in orchards due to hailstorms.
- In Tamilnadu, Kerala, Coastal and South Interior Karnataka, make provision to drain out excess water from standing crop and vegetable fields.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

## Livestock/ poultry

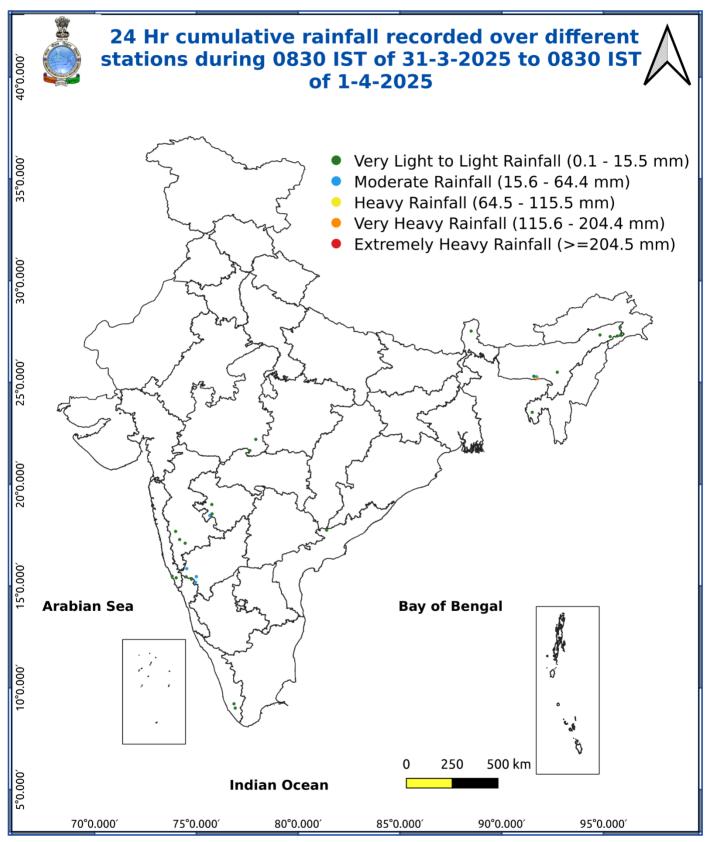
- > Keep the animals inside the shed during heavy rainfall/hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.





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## Fig. 5: Accumulated Rainfall (mm) during past 24 hours



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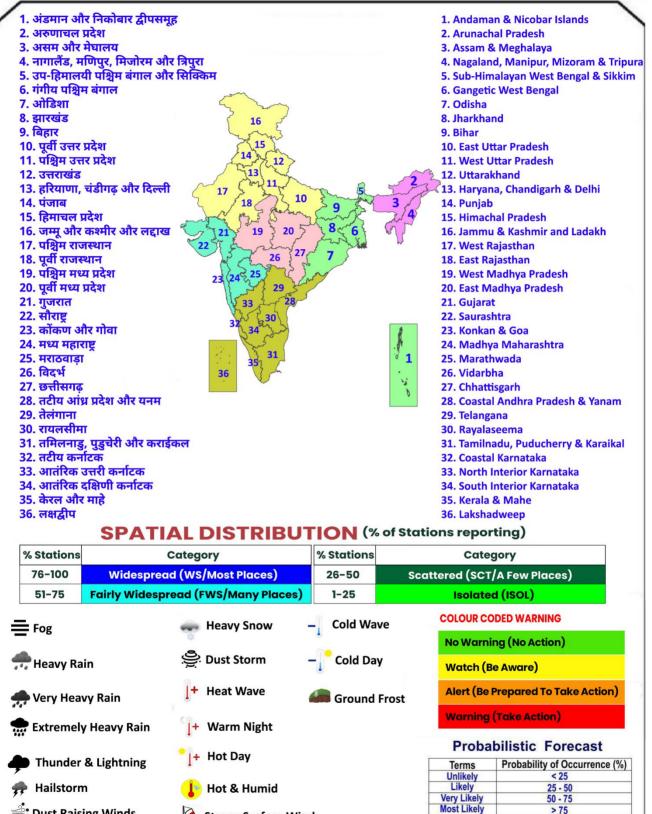
Sust Raising Winds



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# **LEGENDS**



🔦 Strong Surface Winds





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 ≥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
	(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
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 °C.
	Severe warm Night: when minimum temperature departure 26.4 °C.
Cold Wave	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
	(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
	When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C
Cold Day	When minimum temperature of a station $\leq$ 10°C for plains and $\leq$ 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
understorm	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 ≤4°C ( over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
Squall	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 41-62 kinpl (22-33 kinds) & Wave height 2.3-6 hiete
	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)

Hot and Humid: When maximum temperatures remains 3°C above normal along with the above normal relative humidity.