



Government of India  
Ministry of Earth Sciences  
India Meteorological Department

Press Release

Date: 22<sup>nd</sup> May, 2023

Time of Issue: 1500 hours IST

**Subject: (i) Wet spell over northwest India due to an active Western Disturbance during 23<sup>rd</sup> to 25<sup>th</sup> May.**

**(ii) Heat wave conditions over south Haryana, southern parts of Uttar Pradesh, Gangetic West Bengal, Bihar and Jharkhand on 22<sup>nd</sup> May and abate thereafter.**

**Weather observed during past 24 hours ending at 0830 hrs IST of today: ([Annexure I](#))**

**Advance of southwest monsoon:**

- ❖ The Northern Limit of Southwest Monsoon continues to pass through 5°N/85°E, 6.5°N/90°E, Nancowry and 10°N/98°E ([Annexure II](#)).
- ❖ Conditions are favourable for further advance of southwest monsoon into some more parts of south Bay of Bengal, Andaman Sea and Andaman & Nicobar Islands during next 2 days.

**Significant Meteorological features:**

- ❖ Strong southwesterly winds from Bay of Bengal to northeast India are prevailing at lower tropospheric levels.
- ❖ A fresh Western Disturbance is likely to affect northwest India from 23<sup>rd</sup> May.

**Forecast and warning over the country during next 5 days:**

**Northwest India:**

- ❖ In association with above; rainfall at most places with thunderstorm, lightning & occasional gusty winds/squall very likely over Western Himalayan Region and rainfall at many places with thunderstorm, lightning & occasional gusty winds/squall very likely over plains of Northwest India mainly during 23<sup>rd</sup> to 26<sup>th</sup> May with maximum intensity on 24<sup>th</sup> & 25<sup>th</sup> May.
- ❖ **Thundersquall/Gusty Wind speed reaching 50-60 kmph** likely at isolated places over Uttarakhand on 24<sup>th</sup> & 25<sup>th</sup> and over Punjab, Haryana-Chandigarh-Delhi on 24<sup>th</sup> May.
- ❖ **Heavy rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 23<sup>rd</sup> & 24<sup>th</sup> May and over Punjab on 24<sup>th</sup> May.
- ❖ **Hailstorm** very likely at isolated places over Himachal Pradesh on 23<sup>rd</sup>; Haryana on 24<sup>th</sup> and north Rajasthan on 24<sup>th</sup> & 25<sup>th</sup> May.
- ❖ **Duststorm/Thunderstorm** with gusty winds (40-50 kmph) likely over Rajasthan during 23<sup>rd</sup>-25<sup>th</sup> May, 2023.

**Northeast India:**

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very

likely to continue over the Assam & Meghalaya during next 3 days.

❖ **Heavy rainfall** at isolated places over Assam & Meghalaya during 22<sup>nd</sup> to 26<sup>th</sup> and Nagaland, Manipur, Mizoram & Tripura on 24<sup>th</sup> - 26<sup>th</sup> May, 2023.

#### **East India:**

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very likely over Sub-Himalayan West Bengal & Sikkim and isolated to scattered rainfall with thunderstorm/lightning/gusty winds over rest parts of the region during next 5 days.
- ❖ **Heavy rainfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim on 23<sup>rd</sup> & 25<sup>th</sup> May.
- ❖ **Hailstorm** very likely at isolated places over Bihar and West Bengal & Sikkim on 23<sup>rd</sup> & 24<sup>th</sup> May.

#### **Central India:**

- ❖ Light/moderate isolated rainfall with thunderstorm/lightning/gusty winds over Madhya Pradesh, Vidarbha & Chhattisgarh during next 3 days.
- ❖ **Hailstorm** very likely at isolated places over West Madhya Pradesh on 24<sup>th</sup> & 25<sup>th</sup> May.

#### **South India:**

- ❖ Light/moderate isolated to scattered rainfall over many parts of the region during next 5 days and with thunderstorm/lightning/gusty winds very likely over Coastal Andhra Pradesh & Yanam, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal on 22<sup>nd</sup> May.
- ❖ **Heavy rainfall** very likely at isolated places over South Interior Karnataka, south Tamil Nadu and Kerala on 22<sup>nd</sup> May.

#### **Observed Maximum Temperatures and Heat Wave conditions:**

- ❖ Yesterday, Maximum Temperatures were in the range of 40-45°C over most parts of plains of Northwest India, Central India and interior parts of West, East & Peninsular India and below 40°C over rest parts of the country.
- ❖ Maximum Temperatures were either normal or above normal by 2-4°C over most parts of the country except over many parts of Arunachal Pradesh, Assam & Coastal Andhra Pradesh where these are below normal by 2-4°C.
- ❖ Yesterday, Heat wave conditions prevailed in some parts of West Rajasthan and in isolated pockets over south Uttar Pradesh, Bihar, Jharkhand and Gangetic West Bengal.

#### **Maximum Temperature Forecast and Heat Wave Warnings (Graphics in Annexure III):**

- ❖ No significant change in maximum temperature very likely over Northwest & Central India during next 24 hours and fall by 3-5°C thereafter. No significant change in maximum temperature very likely over rest parts of the country during next 5 days.
- ❖ **Heat wave conditions** in isolated pockets very likely over Jharkhand on 22<sup>nd</sup> & 23<sup>rd</sup> and south Haryana, southern parts of Uttar Pradesh, East Madhya Pradesh, Bihar, Gangetic West Bengal on 22<sup>nd</sup> May.
- ❖ Due to humid air & high temperature, **Hot and Discomfort weather** is very likely over Marathawada, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema and Kerala & Mahe on 22<sup>nd</sup> May.

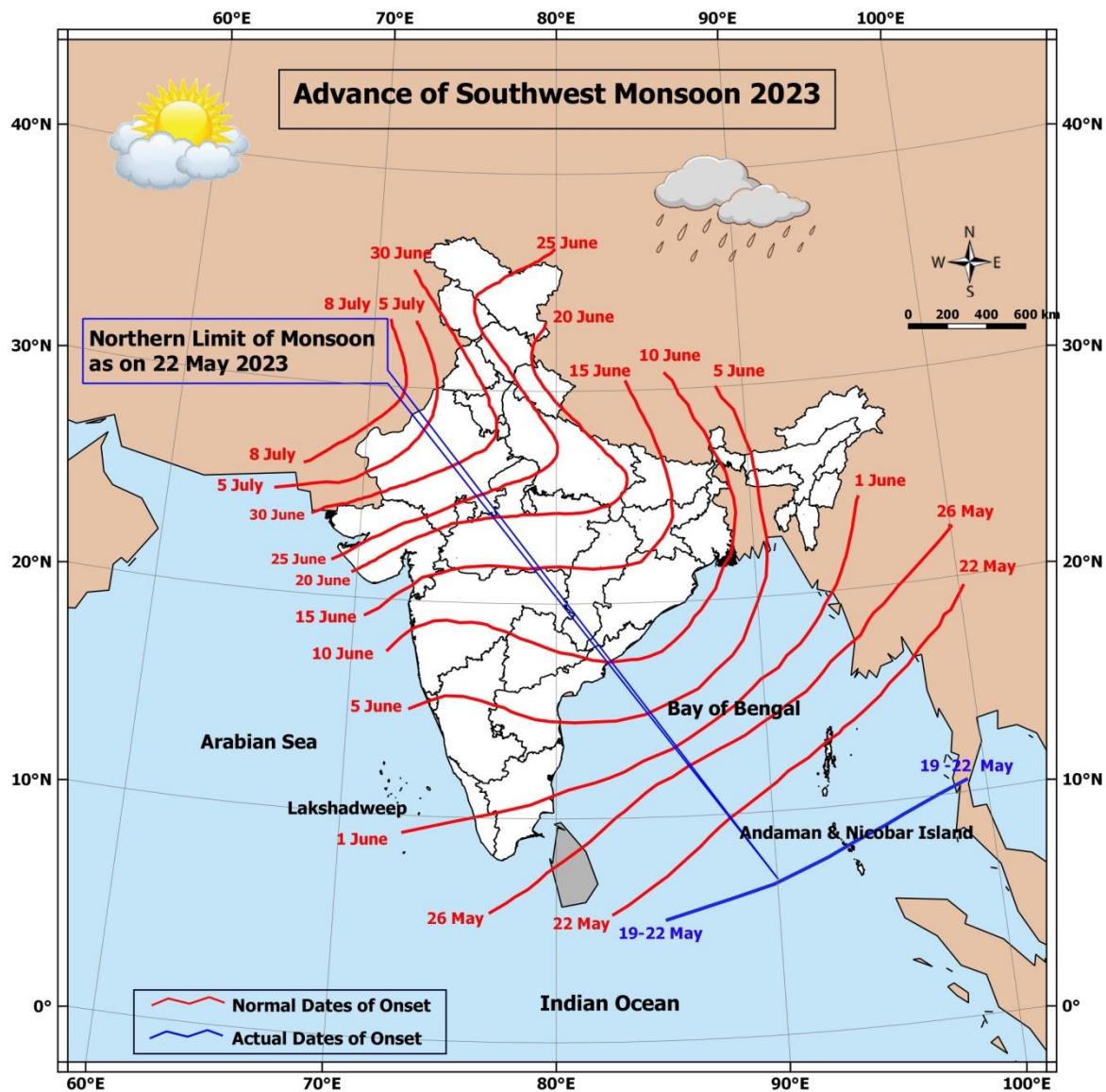
For more details kindly refer:

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

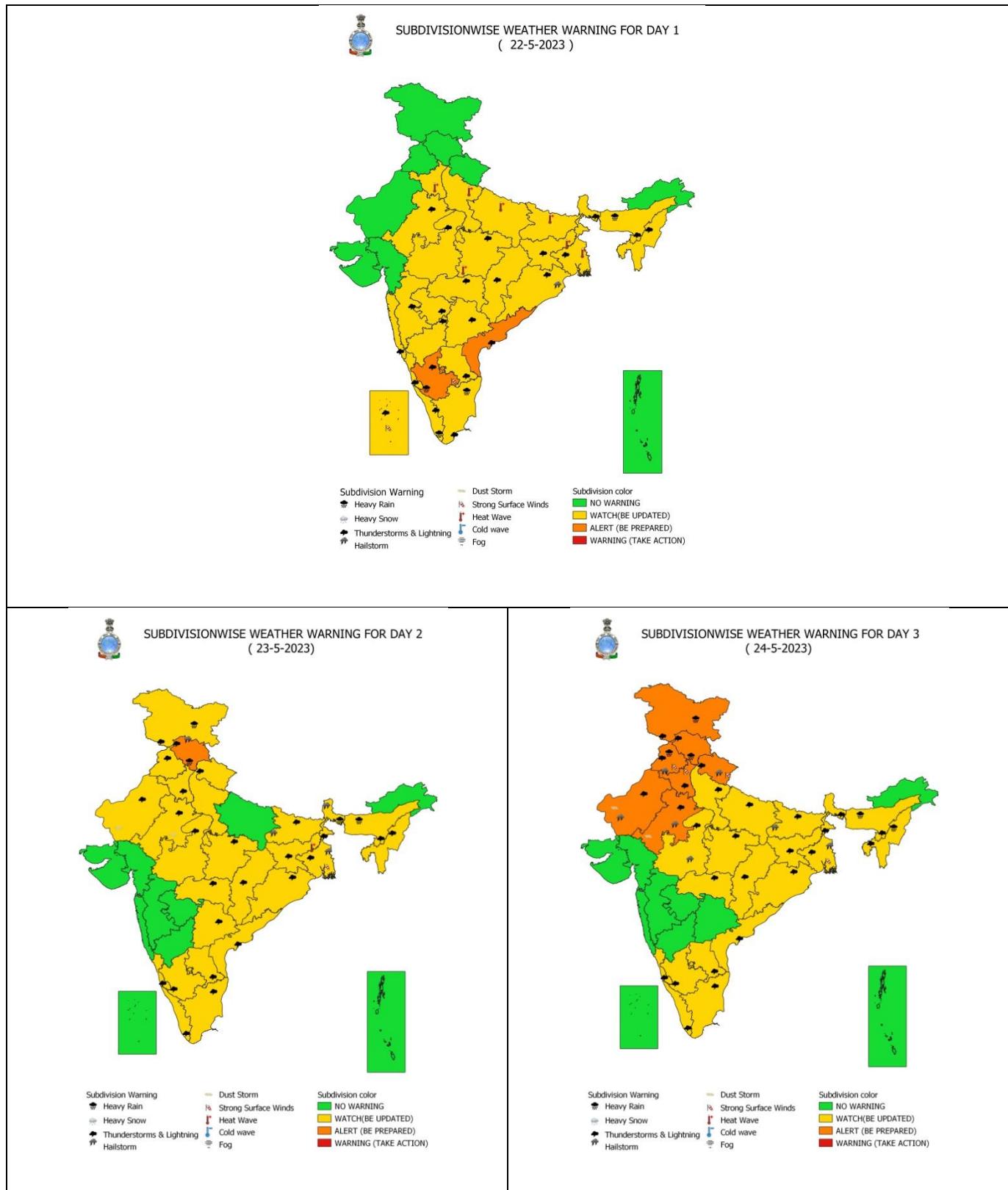
<https://mausam.imd.gov.in/responsive/districtWiseNowcast.php>

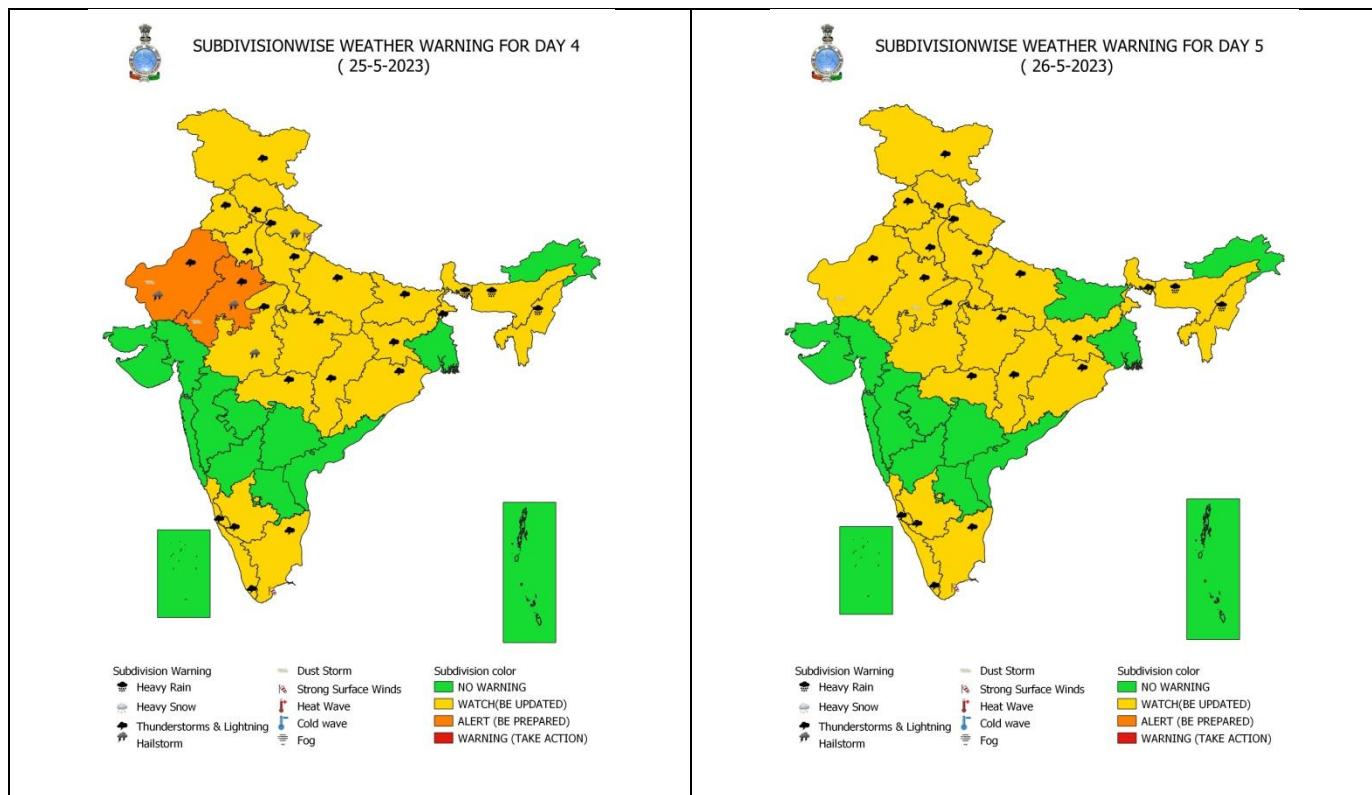
**Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):**

- **Rainfall/thundershowers** observed **at most places** over Arunachal Pradesh, Assam & Meghalaya, Coastal & South Interior Karnataka; **at many places** over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe; **at a few places** over Telangana, Rayalaseema, North Interior Karnataka, Lakshadweep and **at isolated places** over Andaman & Nicobar Islands, Bihar, Jharkhand, Odisha, Gangetic West Bengal, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Marathawada, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- **Heavy Rainfall** observed at isolated places over South Interior Karnataka and Rayalaseema.
- **Significant rainfall recorded** (in cm): **Rayalaseema:** Pulivendla (dist Ysr District) 8, Hindupur (dist Sri Sathyasai District) 6, Penu Konda (dist Sri Sathyasai District) 4, **South Interior Karnataka:** Tyagarthi (dist Shivamogga) 7, Yagati (dist Chikkamagaluru) 6, Davanagere (dist Davangere) 5, Kadur (dist Chikkamagaluru) 4, Konanur (dist Hassan) 4, **Tamil Nadu:** Madathukulam (dist Tiruppur) 5, Tiruvallur (dist Tiruvallur), Dharmapuri PTO (dist Dharmapuri), Thuraiyur (dist Trichy), Chennimalai (dist Erode) 3 each, **Kerala:** Konni (Pathanamthitta district) 4, C.I.A.L. Kochi (Ernakulam district), Kurudamannil (Pathanamthitta district), Kollengode (Palakkad district), Ambalavayal (Wayanad district) & Mahe (Puducherry UT) 3 each, **Coastal Karnataka:** Sulya (dist Dakshina Kannada) 5, Puttur Hms (dist Dakshina Kannada) 3, **Telangana:** Regode (dist Medak) 4, Rajendranagar(a) (dist Rangareddy) 4, **North Interior Karnataka:** Gangavathi (dist Koppal) 3, **Coastal Andhra Pradesh & Yanam:** Narsipatnam (dist Anakapalli) 3, **Assam & Meghalaya:** Badatighat (dist Lakhimpur) 4, **Chhattisgarh:** Tokapal (dist Bastar) 5; **Odisha:** Kalinga (dist Kandhamal) 5, Gunupur (dist Rayagada) 5, Kaptipada (dist Mayurbhanj) 4, G Udayagiri (dist Kandhamal) 4, Basudevpur (dist Bhadrak) 4.
- **Hailstorm** observed at isolated places over West Madhya Pradesh, Telangana and South Interior Karnataka.



### Annexure III





## IMPACT & ACTION SUGGESTED due to Heat Wave Conditions:

### ❖ Yellow alert Areas:

- (1) Moderate temperature, Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- (2) 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:**

- ✓ **22<sup>nd</sup> May:** Odisha
- ✓ **23<sup>rd</sup> May:** Himachal Pradesh, West Bengal & Sikkim, Bihar
- ✓ **24<sup>th</sup> May:** Uttarakhand, Haryana, Chandigarh & Delhi, north Rajasthan, West Madhya Pradesh, West Bengal & Sikkim, Bihar
- ✓ **25<sup>th</sup> May:** Uttarakhand, north Rajasthan, West Madhya Pradesh

### **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 rainfall, thunderstorms/gusty winds and heat wave likely over various parts of the country (Based on the IBF and advisories issued by different AMFUs and DAMUs)**

- Make necessary arrangement for draining out excess water from crop fields to avoid water stagnation in Jammu & Kashmir, Himachal Pradesh, Assam, Meghalaya, Tamil Nadu, South Interior Karnataka and Kerala.
- Provide mechanical support to horticultural crops and staking to vegetables.
- Apply light and frequent irrigation to standing crops in South Haryana, South Uttar Pradesh, Rajasthan, East Madhya Pradesh, Gangetic West Bengal, Bihar and Jharkhand.
- Use hail nets to protect orchards in Himachal Pradesh, West Bengal, Sikkim, Odisha, and Bihar.

### Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
  - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
  - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
  - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
  - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
  - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and 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)

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)

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