



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date: 21st May, 2023
Time of Issue: 1400 hours IST**

**Subject: (i) Wet spell over northwest India due to an active Western Disturbance during 23rd to 25th May.
(ii) Heat wave conditions over west Rajasthan, south Haryana, southern parts of Uttar Pradesh and Gangetic West Bengal on 21st & 22nd May and Jharkhand on 22nd May.**

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 2-3 days.

Significant Meteorological features:

- ❖ Strong south-westerly 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 23rd May.

Forecast and warning over the country during next 5 days:

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 21st to 25th; Arunachal Pradesh on 21st and Nagaland, Manipur, Mizoram & Tripura on 24th & 25th 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.
- ❖ **Thundersquall (speed 50-60 kmph) with lightning** very likely at isolated places over Gangetic West Bengal on 23rd & 24th May.

Northwest India:

- ❖ Under the influence of a fresh Western Disturbance, fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds over Western Himalayan Region and isolated to scattered rainfall over plains of northwest India mainly during 23rd to 25th and decrease thereafter.

❖ **Thundersquall (speed 50-60 kmph) with Hail & lightning** likely over Uttarakhand on 24th & 25th May.

❖ **Heavy rainfall** at isolated places over Jammu and Kashmir Himachal Pradesh on 23rd May.

Central India:

❖ Light/moderate isolated rainfall with thunderstorm/lightning/gusty winds over Vidarbha & Chhattisgarh during next 3 days and over Madhya Pradesh during 23rd to 25th May.

❖ **Thunderstorm/lightning/gusty winds (speed 40-50 kmph)** very likely over Chhattisgarh on 21st & 22nd 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, Telangana and Tamil Nadu, Puducherry & Karaikal on 21st and 22nd May; over Interior Karnataka on 22nd & 23rd; over Kerala & Mahe during next 5 days.

Observed Maximum Temperatures and Heat Wave conditions:

❖ Yesterday, **Maximum Temperatures** were in the range of **44-45°C** over many parts of West Rajasthan, **42-44°C** over many parts of East Rajasthan, **40-42°C** over many parts of Madhya Pradesh, Chhattisgarh, Marathwada, Vidarbha, Telangana and over some parts of Gujarat state, East Uttar Pradesh, Bihar, Jharkhand, Madhya Maharashtra, Andhra Pradesh and north Interior Odisha, and over a few parts of Tamil Nadu.

❖ Maximum Temperatures were near normal over most parts of the country.

❖ **Yesterday, Heat wave prevailed at isolated places over Gangetic West Bengal, southwest Uttar Pradesh**

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

❖ **Maximum temperatures** are very likely to rise by 2-3°C over Northwest India during next 3 days 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 south Haryana, southern parts of Uttar Pradesh, West Rajasthan, East Madhya Pradesh, Gangetic West Bengal on 21st & 22nd; over Jharkhand on 22nd May.

❖ Due to humid air & high temperature, **Hot and Discomfort weather** is very likely over Coastal Andhra Pradesh & Yanam, Rayalaseema and Kerala & Mahe on 21st May.

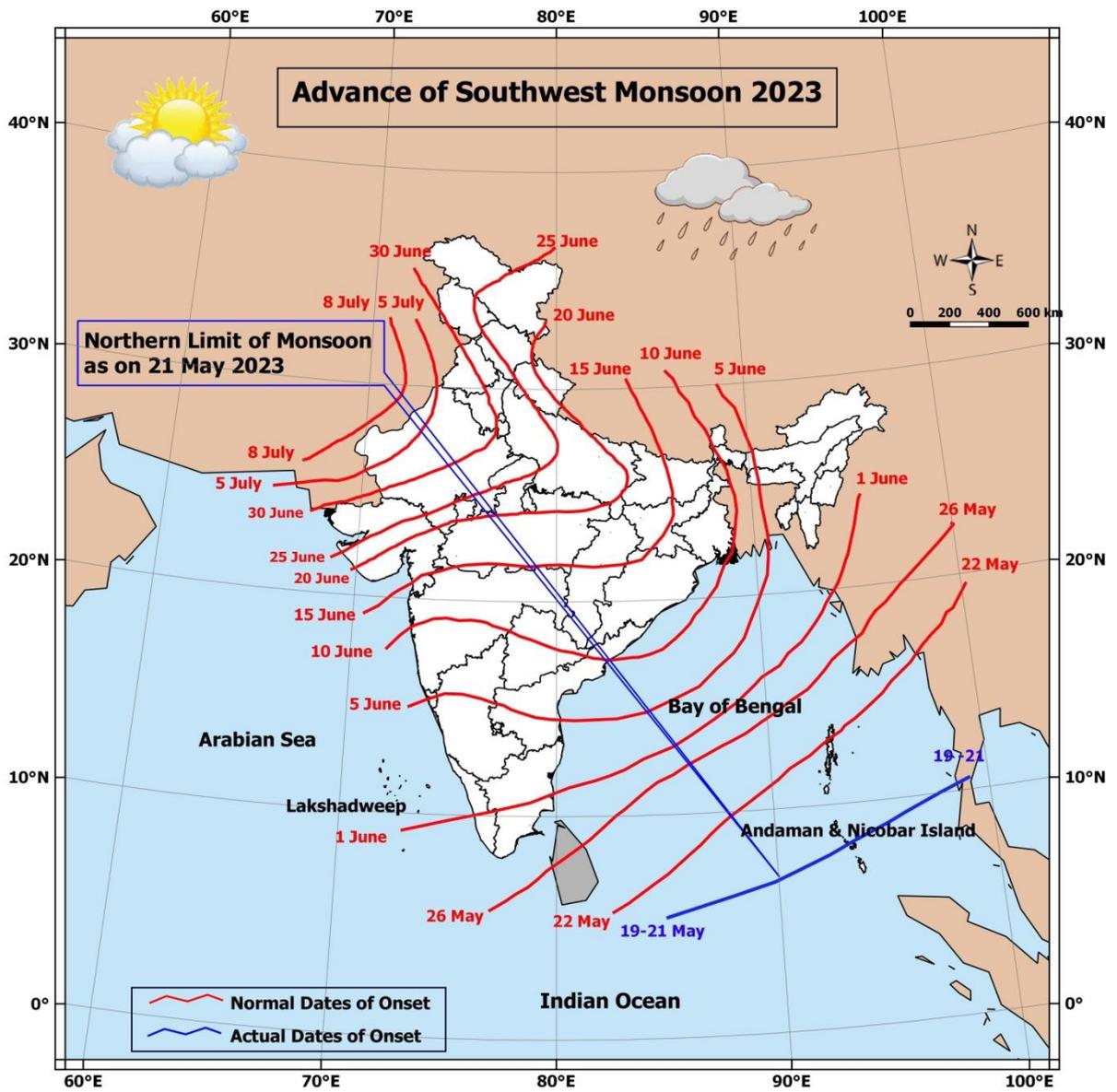
For more details kindly refer:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

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

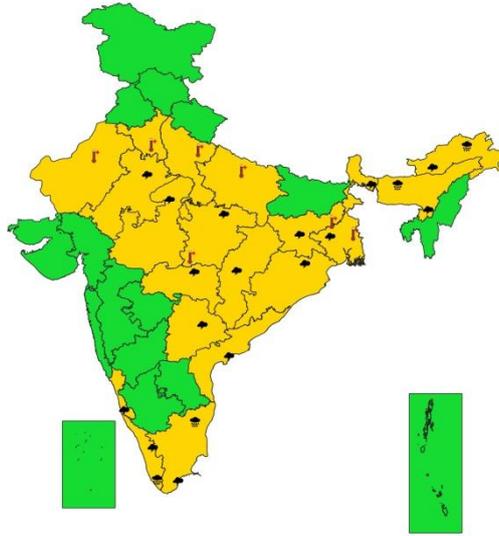
Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):

- **Rainfall/thundershowers** observed **at most places** over Arunachal Pradesh; **at many places** over Sub-Himalayan West Bengal & Sikkim; **at a few places** over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka, Kerala & Mahe and **at isolated places** over Uttarakhand, West Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Bihar, Odisha, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- **Heavy to Very Heavy Rainfall** observed at isolated places over Arunachal Pradesh and Assam & Meghalaya and **Heavy Rainfall** at isolated places over South Interior Karnataka and Tamil Nadu.
- **Significant rainfall recorded** (in cm): **Arunachal Pradesh:** Naharlagun (dist Papumpara) 15, Itanagar (dist Papumpara) 13, Yingkiong (dist Upper Siang) 6; **Assam & Meghalaya:** Ranganadi Nt Xing (dist Lakhimpur) 13, Cherrapunji (dist East Khasi Hills) 10, Lakhimpur Arg (dist Lakhimpur) 9, Cherrapunji(rkm) (dist East Khasi Hills) 8, N.lakhimpur/lilabari (dist Lakhimpur) 8, Majuli (dist Jorhat) 7, Khliehriat (dist East Jaintia Hills) 6; **Tamil Nadu:** Periyakulam (dist Theni) 7; **South Interior Karnataka:** T Narasipur (dist Mysuru) 12, Sira (dist Tumakuru) 6.
- **Hailstorm** observed at isolated places over Uttarakhand, West Madhya Pradesh, Odisha, Gangetic West Bengal and Coastal Andhra Pradesh & Yanam





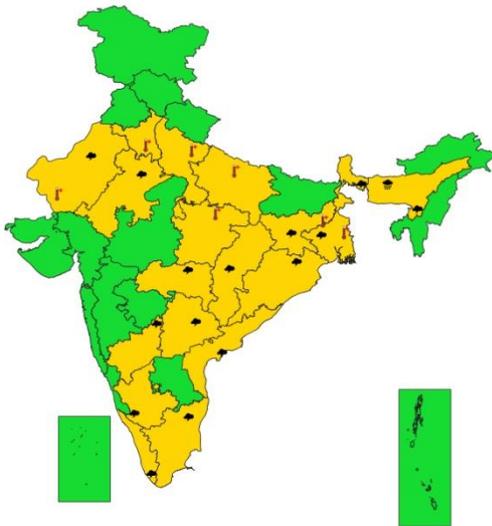
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(21-5-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| 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) |



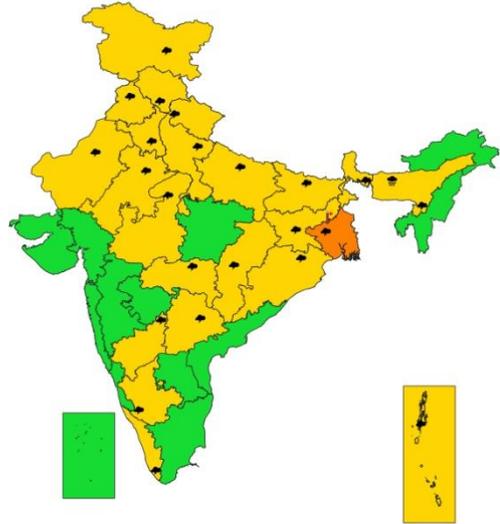
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(22-5-2023)



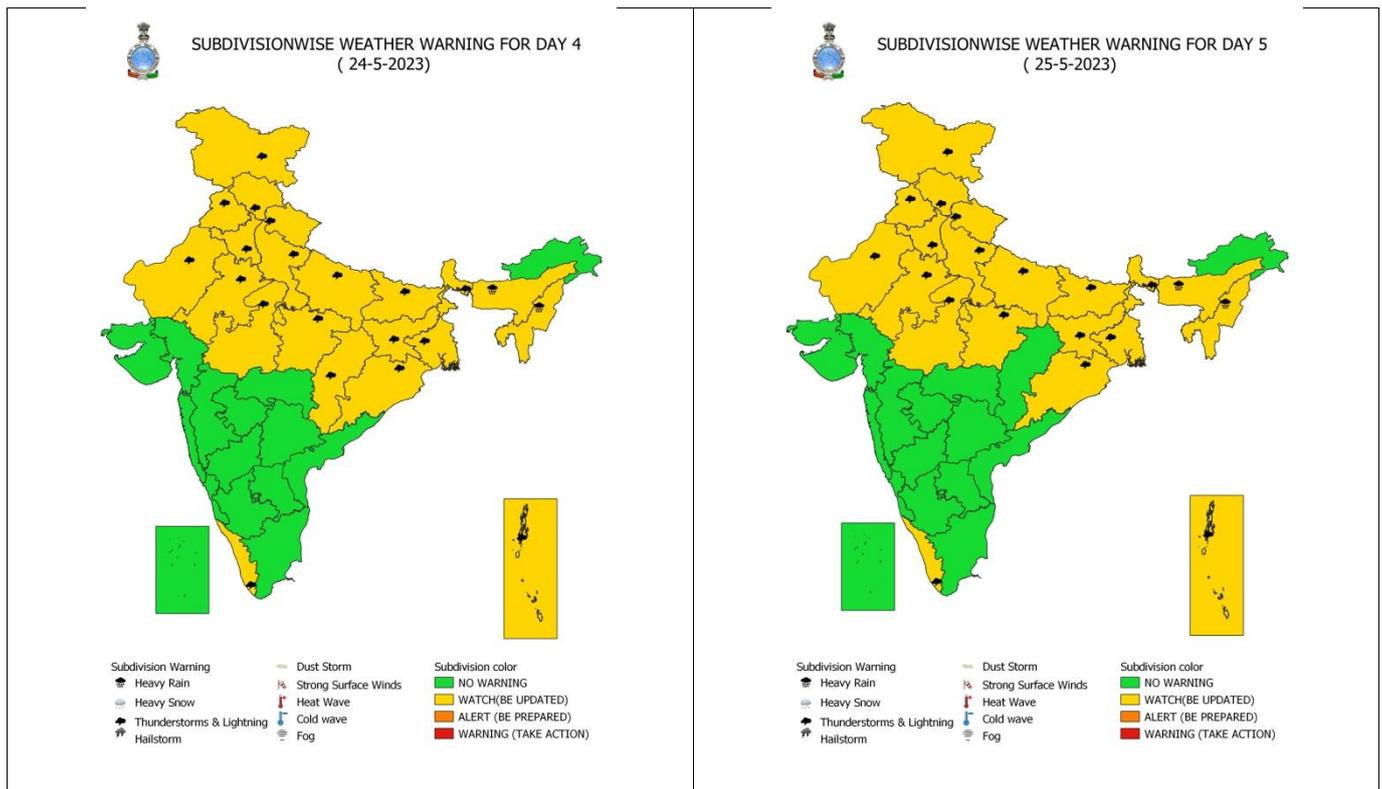
- | | | |
|----------------------------|----------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| Heavy Rain | Strong Surface Winds | NO WARNING |
| Heavy Snow | Heat Wave | WATCH (BE UPDATED) |
| Thunderstorms & Lightning | Cold wave | ALERT (BE PREPARED) |
| Hailstorm | Fog | WARNING (TAKE ACTION) |



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(23-5-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| 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) |



IMPACT & ACTION SUGGESTED due to Heat Wave:

❖ 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 coloured, loose, cotton clothes, Cover your head, use a cloth, hat or umbrella.

Agromet advisories for rainfall, thunderstorms/gusty winds and heat wave likely over various parts of the country:

- Drain out excess water from crop fields to avoid water stagnation in Arunachal Pradesh, Assam, Meghalaya, Tamil Nadu, South Interior Karnataka and Kerala.
- Provide mechanical support to horticultural crops and staking to vegetables in Assam, Meghalaya, West Bengal, Sikkim, Odisha, Jharkhand, Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Kerala, Andhra Pradesh and Telangana.
- Apply light and frequent irrigation to standing crops in South Haryana, South Uttar Pradesh, West Rajasthan, East Madhya Pradesh, Gangetic West Bengal and Jharkhand.

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