



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

**Press Release  
Date: 20<sup>th</sup> May, 2023  
Time of Issue: 1300 hours IST**

**Subject: (i) Wet spell over northwest India due to an active Western Disturbance during 23<sup>rd</sup> to 26<sup>th</sup> May.  
(ii) Heat wave conditions over isolated pockets of northwest, central & east India during next 2-3 days.**

**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 3 days.

**Significant Meteorological features:**

- ❖ A trough runs from west Bihar to Telangana and another one from North Interior Karnataka to south Tamil Nadu at lower tropospheric levels.
- ❖ 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:**

**Northeast India:**

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very likely to continue over the region during next 5 days.
- ❖ **Heavy rainfall** at isolated places over Assam & Meghalaya during 20<sup>th</sup> to 24<sup>th</sup>; Arunachal Pradesh on 20<sup>th</sup> & 21<sup>st</sup> and Nagaland, Manipur, Mizoram & Tripura on 24<sup>th</sup> May, 2023.

**East India:**

- ❖ Light/moderate fairly widespread to widespread rainfall 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> May, 2023.
- ❖ **Hailstorm** very likely at isolated places over Odisha on 20<sup>th</sup> May.
- ❖ **Thundersquall (speed 50-60 kmph) with lightning** very likely at isolated places over Gangetic West

Bengal on 23<sup>rd</sup> 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 23<sup>rd</sup> to 26<sup>th</sup> and decrease thereafter.
- ❖ **Thundersquall (speed 50-60 kmph) with Hail & lightning** likely over Uttarakhand on 24<sup>th</sup> May.
- ❖ **Duststorm/dust raising winds** likely in isolated pockets over Rajasthan 22<sup>nd</sup> to 24<sup>th</sup> May.

#### **Central India:**

- ❖ Light/moderate isolated rainfall with thunderstorm/lightning/gusty winds over Vidarbha & Chhattisgarh during next 5 days and over Madhya Pradesh during 22<sup>nd</sup> to 24<sup>th</sup> May.
- ❖ **Hailstorm** very likely at isolated places over south Chhattisgarh on 20<sup>th</sup> May.

#### **South India:**

- ❖ Light/moderate isolated to scattered rainfall with thunderstorm/lightning/gusty winds very likely over most parts of the region during next 5 days.
- ❖ **Thunderstorm/lightning/gusty winds (speed 40-50 kmph)** very likely over Coastal Andhra Pradesh & Yanam and Telangana on 20<sup>th</sup> May.
- ❖ **Squally Weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over Gulf of Mannar and along & off south Tamil Nadu coast on 23<sup>rd</sup> & 24<sup>th</sup> May.

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

- ❖ Yesterday, Maximum Temperatures were in the range of 40-42°C over many parts of Rajasthan, 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.
- ❖ Maximum Temperatures were near normal over most parts of the country.
- ❖ **Yesterday, No Heat wave conditions observed in any parts of the country.**

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

- ❖ Maximum temperatures are very likely to rise by 2-4°C over Northwest India during next 3 days and fall by 2-4°C thereafter. These are very likely to rise by 2-3°C over Central India during next 2 days and no significant change thereafter. These are very likely to rise by about 2°C over East India during next 3 days and no significant change 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 Uttar Pradesh and Gangetic West Bengal during 20<sup>th</sup> to 22<sup>nd</sup>; Jharkhand during 21<sup>st</sup> to 23<sup>rd</sup>; south Haryana, West Rajasthan and Chhattisgarh on 21<sup>st</sup> & 22<sup>nd</sup> and north Madhya Pradesh on 21<sup>st</sup> May.
- ❖ Due to humid air & high temperature, **Hot and Discomfort weather** is very likely over Odisha during next 5 days; Konkan region during 20<sup>th</sup> to 22<sup>nd</sup>; and over Andhra Pradesh, Tamil Nadu and Kerala on 20<sup>th</sup> & 21<sup>st</sup> May, 2023.

For more details kindly refer:

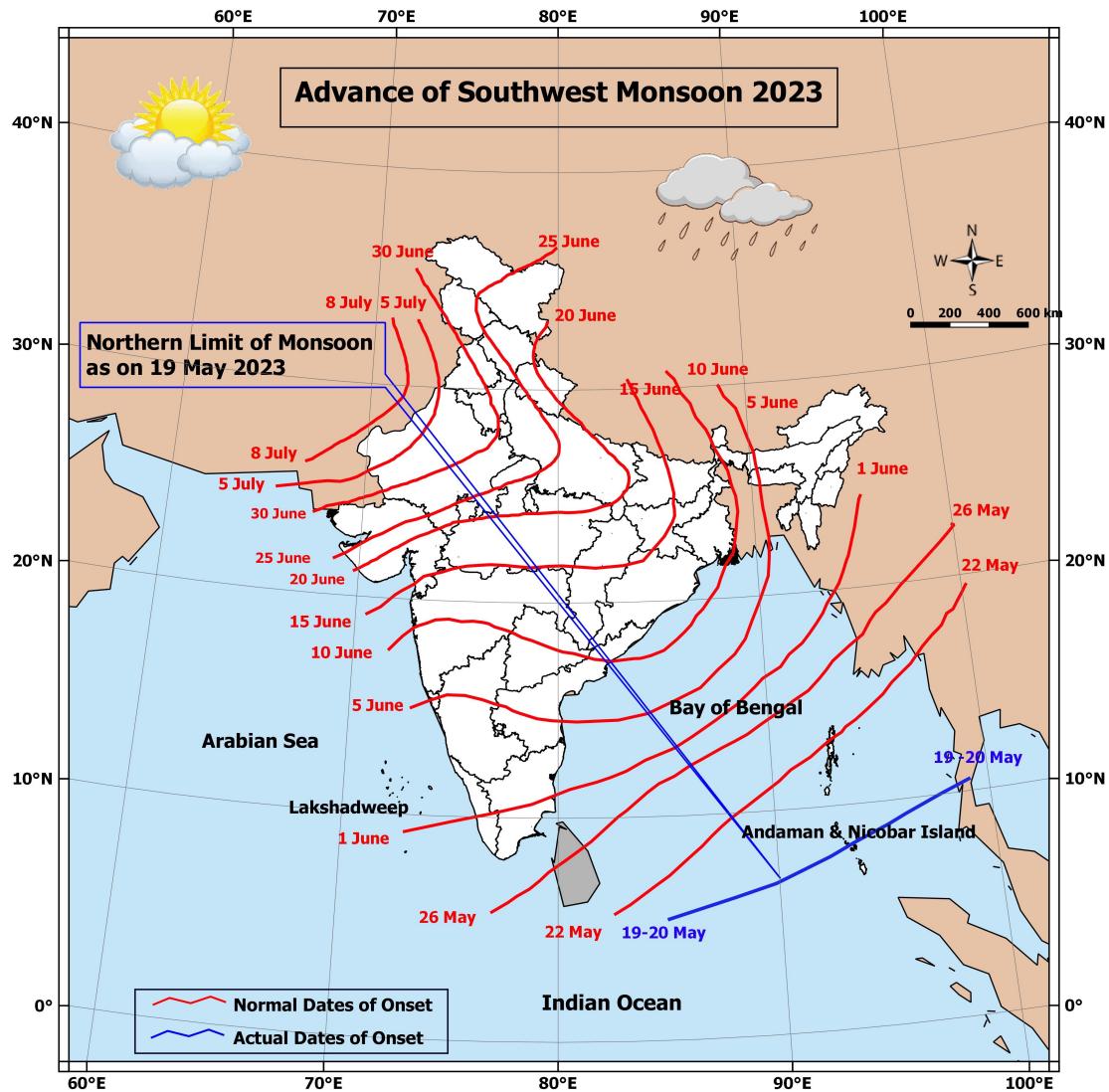
[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

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

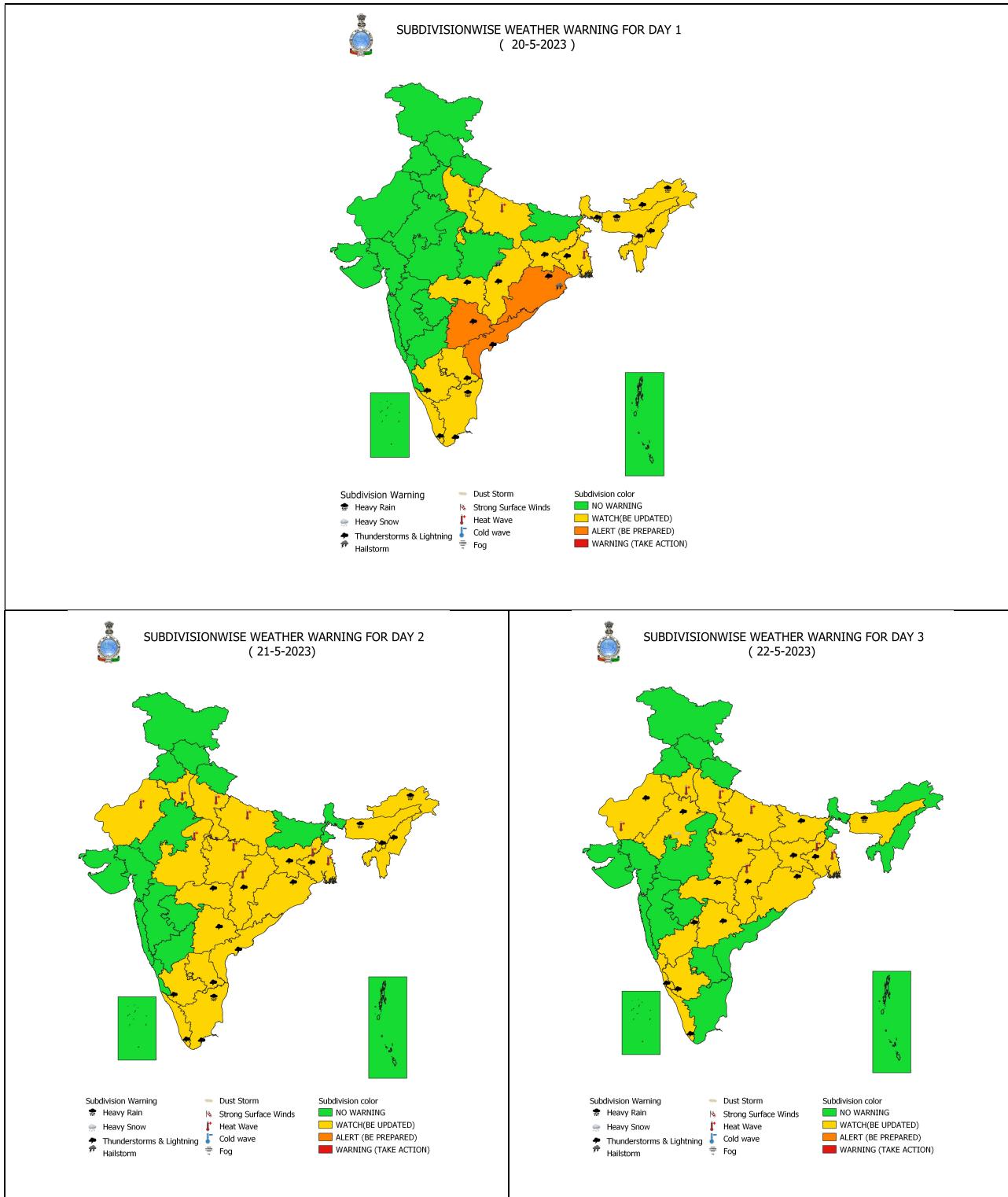
**Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):**

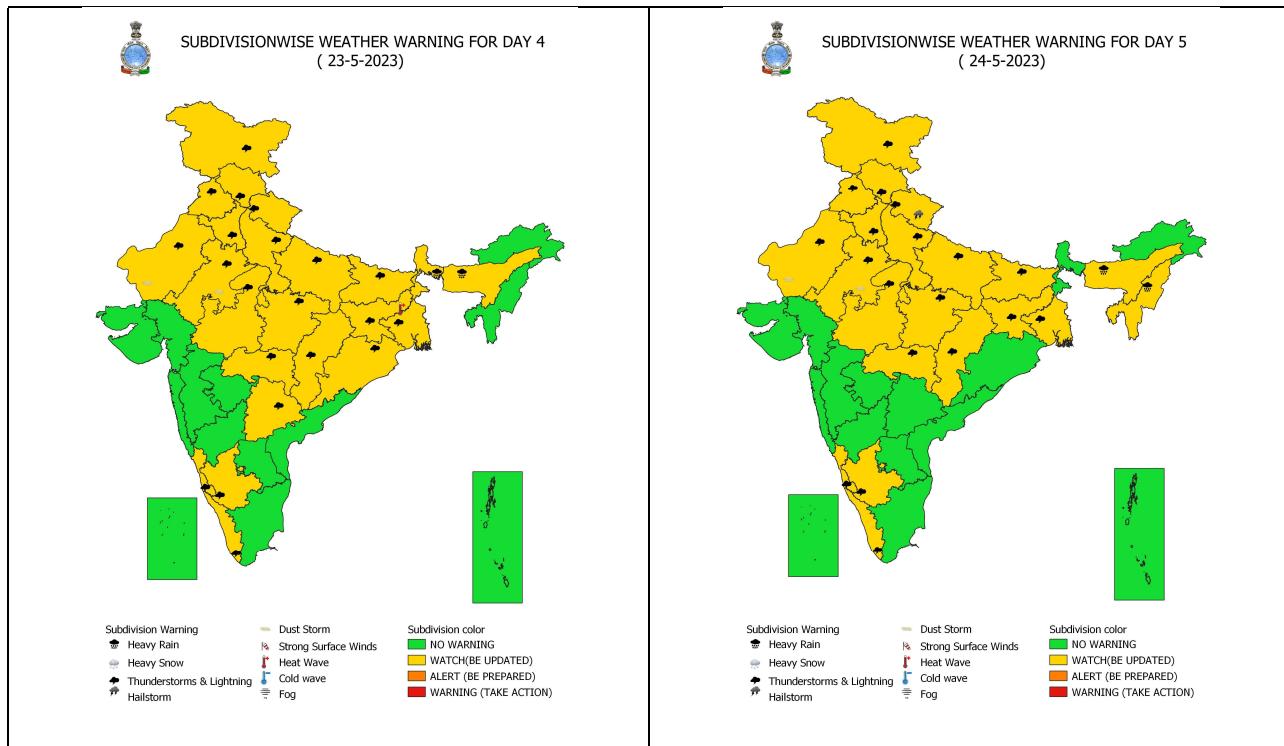
- **Rainfall/thundershowers** observed **at most places** over Arunachal Pradesh, Gangetic West Bengal; **at many places** over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim; **at a few places** over Andaman & Nicobar Islands, Odisha, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and **at isolated places** over Jharkhand, Bihar, Uttarakhand, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and South Interior Karnataka.
- **Heavy to Very Heavy Rainfall** observed at isolated places over south Assam and **Heavy Rainfall** at isolated places over Arunachal Pradesh.
- **Significant rainfall recorded** (in cm): **Assam & Meghalaya:** B P Ghat (dist Karimganj) 14, A P Ghat (dist Cachar) 9, Silchar (dist Cachar) 7, Lakhipur (dist Cachar) 6, Karimganj\_aws (dist Karimganj) 5, Lakhipur Arg (dist Cachar) 5, Majbat (dist Udaguri) 5, Karimganj (dist Karimganj) 5, **Arunachal Pradesh:** Tuting (dist Upper Siang) 8, **Nagaland, Manipur, Mizoram & Tripura:** Jiribam\_Aws (dist Imphal East) 6, Dharmanagar/ Panisagar (dist North Tripura) 5, Mamit Agri (dist Mamit) 5, Lunglei (dist Lunglei) 5, Chottabekra (dist Imphal West) 5, **Tamilnadu:** Kakkachi (dist Tirunelveli) 6, Nalumukku (dist Tirunelveli) 5, Elumalai (dist Madurai), Manimutharu (dist Tirunelveli), Coonoor PTO (dist Nilgiris), Kundah Bridge (dist Nilgiris) 3 each, **Coastal Andhra Pradesh & Yanam:** Chintapalle (dist Alluri Sitharamaraju) 4, Palakoderu (dist West Godavari) 3, Visakhapatnam Ap (dist Vishakhapatnam) 3, Palasa (dist Srikakulam) 3, Komarada (dist Parvathipuram Manyam) 3: **Kerala & Mahe:** Ambalavayal (Wayanad district) & Thodupuzha ARG (Idukki district) 3 each, **Chhattisgarh:** Sukma (dist Sukma) 5, Dantewara (dist Dantewada) 4, Jagdalpur (dist Bastar) 3, **Odisha: Orissa:** Nawarangpur (dist Nawarangpur) 5, R.udaigiri (dist Gajapati) 5, Nawarangpur Pto (dist Nawarangpur) 4, Korukunda (dist Malkangiri) 4, Tikabali (dist Kandhamal) 4, Kankadahad (dist Dhenkanal) 4, Kashipur (dist Rayagada) 4.
- **Hailstorm** observed at isolated places over Gangetic West Bengal, Odisha, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Chhattisgarh.
- **Squall** observed at isolated places over Gangetic West Bengal.

## Annexure II



### Annexure III





### 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 North Eastern States and Tamilnadu.
- Provide mechanical support to horticultural crops and staking to vegetables in Tamilnadu, Kerala, Andhra Pradesh, Telangana, West Bengal, Odisha, Jharkhand, Chhattisgarh, Vidarbha, Assam, Meghalaya and NMMT.
- Apply light and frequent irrigation to standing crops in South Haryana, Uttar Pradesh, Rajasthan, North Madhya Pradesh, Chhattisgarh, Gangetic West Bengal and Jharkhand.
- Use hail nets to protect orchards in Chhattisgarh.

### 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