



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

Press Release

Date: 19th May, 2023

Time of Issue: 1430 hours IST

Subject: (i) Southwest Monsoon has advanced into some parts of Southeast Bay of Bengal, Nicobar Islands and South Andaman Sea today, the 19th May, 2023

(ii) A fresh Western Disturbance is likely to cause scattered to fairly widespread rainfall/thunderstorm over northwest India during 23rd to 25th May.

(iii) Heat Wave conditions over south Uttar Pradesh during 20th to 22nd; over West Rajasthan, north Madhya Pradesh on 20th & 21nd and over north Chhattisgarh and Jharkhand during 21st to 23rd May, 2023.

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

Advance of southwest monsoon:

- ❖ In association with persistence of south-westerly winds in the lower tropospheric levels and rainfall activity over the area during past 24-hours, Southwest Monsoon has advanced into some parts of Southeast Bay of Bengal, Nicobar Islands and South Andaman Sea today, the 19th May, 2023.
- ❖ The Northern Limit of Southwest Monsoon passes through 5°N/85°E, 6.5°N/90°E, Nancowry and 10°N/98°E ([Annexure II](#)).
- ❖ Conditions are favourable of further advance of southwest monsoon into some more parts of south Bay of Bengal, Andaman Sea and Andaman & Nicobar Islands during next 3-4 days..

Significant Meteorological features:

- ❖ The **Western Disturbance** as a trough in middle & upper tropospheric westerlies runs roughly along Long. 70°E to the north of Lat. 30°N.
- ❖ A **cyclonic circulation** lies over East Uttar Pradesh and trough runs from this circulation to North Interior Karnataka 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 widespread rainfall with thunderstorm/lightning/gusty winds very likely to continue over Northeast India during next 2 days.
- ❖ **Heavy rainfall** at isolated places over Assam & Meghalaya during 19th to 23rd and Nagaland, Manipur, Mizoram & Tripura on 19th May, 2023.

East India:

- ❖ Light/moderate isolated to scattered rainfall with thunderstorm/lightning/gusty winds very likely over

most part of the region during next 5 days.

- ❖ **Heavy rainfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim on 19th, 20th & 23rd May, 2023.
- ❖ **Thundersquall (speed 50-60 kmph) with lightning** very likely at isolated places over Gangetic West Bengal and Odisha on 19th May.

Northwest India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely over Uttar Pradesh and Rajasthan on 22nd & 23rd; Western Himalayan Region on 23rd May, 2023.
- ❖ **Duststorm/dust raising winds** very likely in isolated pockets over Rajasthan on 22nd & 23rd May, 2023.
- ❖ Under the influence of a fresh Western Disturbance, scattered to fairly widespread rainfall/thunderstorm likely over northwest India mainly during 23rd to 25th and decrease thereafter.

Central India:

- ❖ Light/moderate isolated light rainfall with thunderstorm/lightning/gusty winds (speed 40-50 kmph) over Chhattisgarh during next 5 days; over Vidarbha on 22nd & 23rd May, 2023.

South India:

- ❖ Light/moderate isolated light 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, Telangana and Rayalaseema on 19th May, 2023.

Observed Maximum Temperatures and Heat Wave conditions:

- ❖ Yesterday, Maximum Temperatures were in the range of 38-42°C over many parts of Rajasthan, Uttar Pradesh, Gujarat, and Central & adjoining East India and North Peninsular India.
- ❖ Maximum Temperatures are near normal/below normal many parts of the country.
- ❖ Yesterday, No significant Heat wave conditions prevailed 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 4 days and fall by 2-4°C thereafter. Gradual rise by 2-3°C during next 3 days and no significant change thereafter over central India & Maharashtra. No significant change in Maximum temperatures are very likely over east India during next 48 hours and rise by 2-3°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 Uttar Pradesh during 20th to 22nd; over West Rajasthan, north Madhya Pradesh on 20th & 21nd and over Chhattisgarh and Jharkhand during 21st to 23rd May, 2023.
- ❖ Due to humid air & high temperature, **Hot and Discomfort weather** is very likely over Konkan region during next 5 days and over Andhra Pradesh, Tamil Nadu and Kerala on 19th & 20th May, 2023.

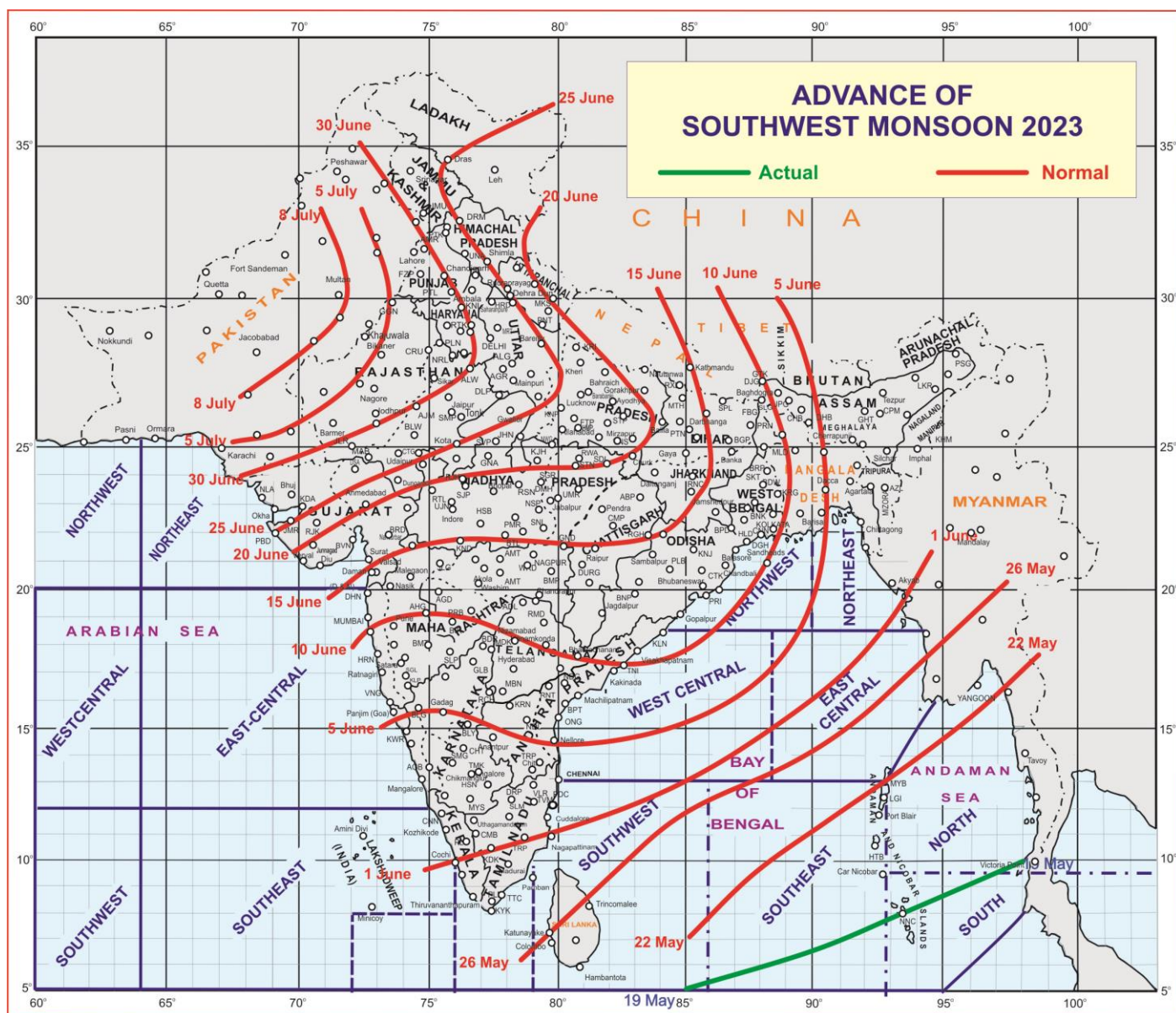
For more details kindly refer:

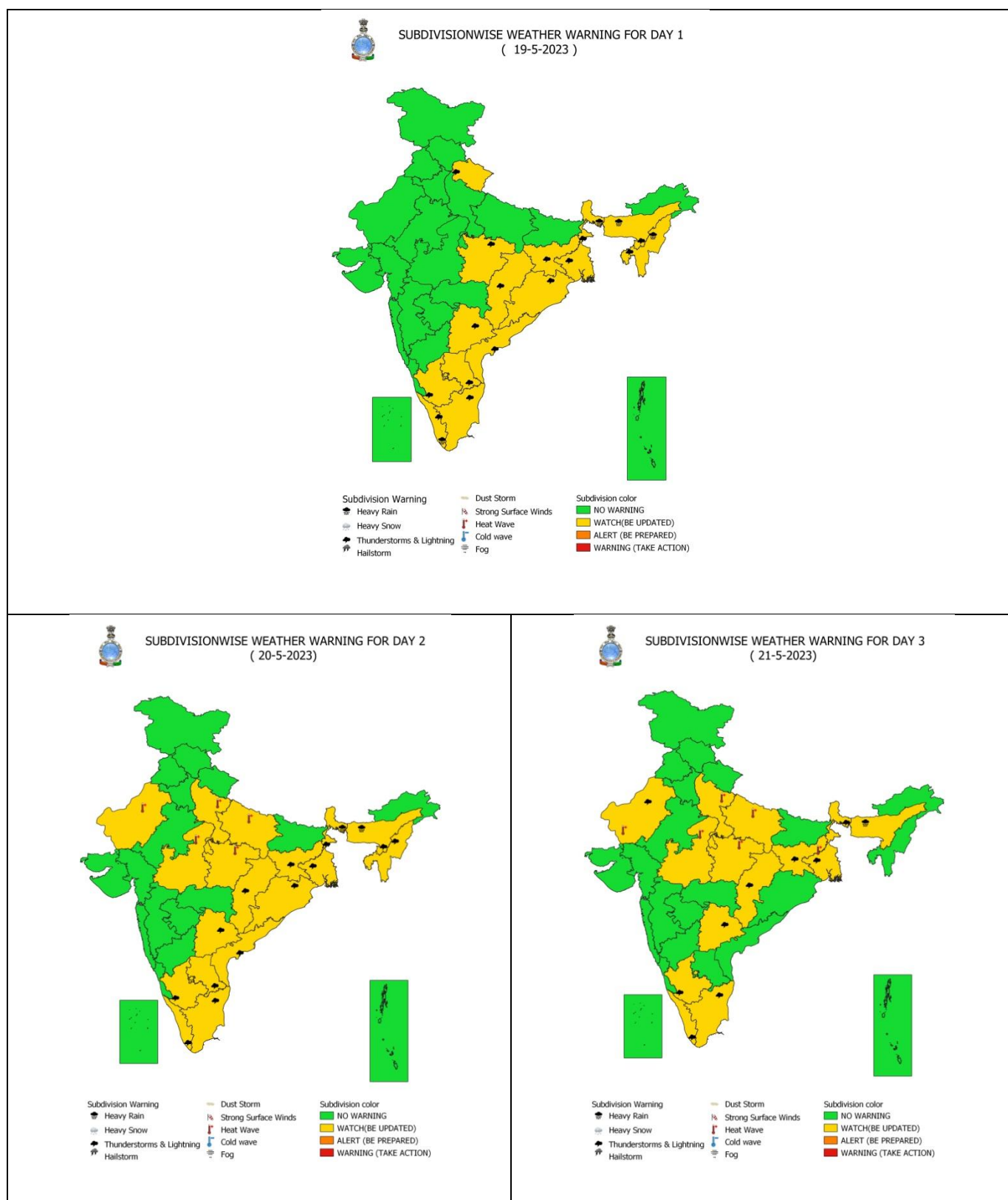
https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

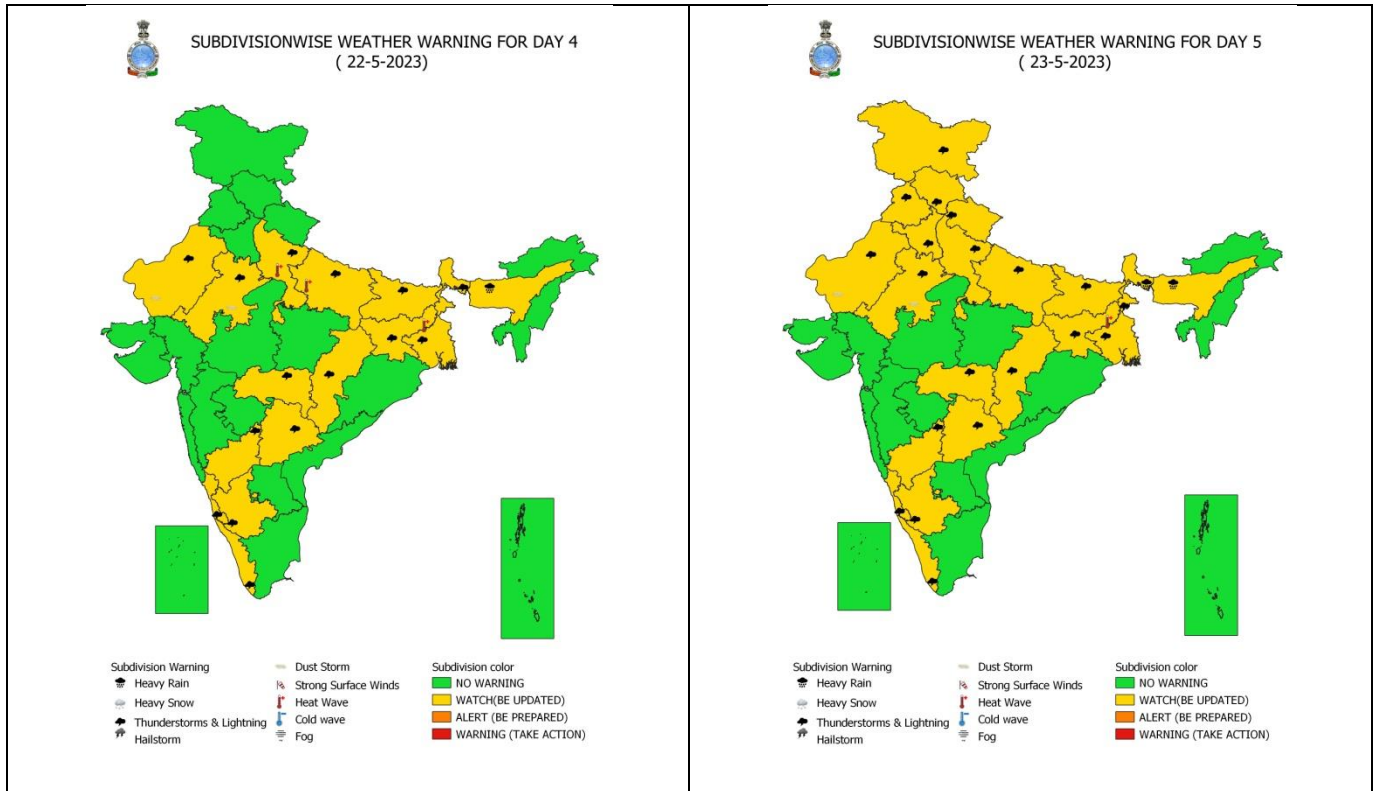
<https://mausam.imd.gov.in/responsive/districtWiseNowcast.php>

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

- **Rainfall/thundershowers** observed **at most places** over Sub-Himalayan West Bengal & Sikkim; **at many places** over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **at a few places** over Kerala & Mahe and at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- **Significant rainfall recorded (in cm): Sub-Himalayan West Bengal & Sikkim:** Bagrakote(Dist Darjeeling) 5, Rongo(Dist Darjeeling) 5, Rongli(Dist East Sikkim) 4, Khanitar(Dist East Sikkim) 4, Pakyong(Dist East Sikkim) 4, Majitar(Dist East Sikkim) 3, Pedong(Dist Darjeeling) 3, Namthang(Dist South Sikkim) 2; **Gangetic West Bengal:** Panagarh (Iaf)(Distburdwan)5, Bankura(Dist Bankura) 4, Contai(Dist East Midnapore) 4, Barrackpur(Iaf)(Dist North 24 Parganas) 3, Dum Dum (Dist North 24 Parganas) 2 **Coastal Andhra Pradesh & Yanam:** Parvathipuram (dist Parvathipuram Manyam) 3, Atmakur (dist Spsr Nellore) 2, Kurupam (dist Parvathipuram Manyam) 2, Vinjamur (dist Spsr Nellore) 2, Srungavarapukota (dist Vizianagaram) 2; **Tamilnadu:** Nagercoil (dist Kanyakumari), Pollachi (dist Coimbatore), Mylaudy (dist Kanyakumari), PWD Vaarappatti (dist Coimbatore) 3 each, Gudalur Bazar (dist Nilgiris), Anaimaduvu Dam (dist Salem), Upper Gudalur (dist Nilgiris), Kariyakovil Dam (dist Salem), Uppar Dam (dist Tiruppur), Danishpet (dist Salem), Bodinaickanur (dist Theni), Thirparappu (dist Kanyakumari), Denkanikottai (dist Krishnagiri), Amaravathy Dam (dist Tiruppur) 2 each; **Kerala:** Nilambur (Malappuram district) 3, Chalakkudy (Thrissur district) & Padinjarathara Dam AWS (Wayanad district) 2 each **Rayalaseema:** Kuppam (dist Chittoor) 2, Nagari (dist Chittoor) 2; **Odisha:** Soro (dist Balasore) 2, Keonjhar (dist Keonjhar) 2, Angul (dist Angul) 2.
- **Hailstorm** observed at isolated places over Gangetic West Bengal, Odisha, Vidarbha and Telangana.
- **Squall** observed at isolated places over Gangetic West Bengal.







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.














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