



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

**Press Release**  
**Date: 15<sup>th</sup> December, 2023**  
**Time of Issue: 1230 hours IST**

**Subject: Intense spell of rainfall activity over extreme south Peninsular India during next 3-4 days.**

**Realized weather during past 24 hours till 0830 hours IST of today:**

**Minimum temperatures** are in the range of 5-10°C over most parts of Punjab, Haryana-Chandigarh-Delhi, north Rajasthan and Uttar Pradesh.

**Weather Systems and Forecast & Warnings during next 5 days: (graphics in Annexure I)**

**Weather Systems**

- A Cyclonic Circulation lies over southwest Bay of Bengal & adjoining Equatorial Indian Ocean in lower tropospheric levels.
- A Western Disturbance as a trough in middle tropospheric levels runs roughly along Long. 58°E and north of Lat. 28°N.

**Forecast & Warnings:**

- Light to moderate rainfall at a few places very likely over Tamil Nadu and Kerala & Mahe on 15<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> December. It is likely at many places over Tamil Nadu and Kerala & Mahe on 16<sup>th</sup> & 17<sup>th</sup> and over Lakshadweep during 16<sup>th</sup> - 19<sup>th</sup> December.
- **Isolated heavy rainfall likely over south Tamil Nadu during 15<sup>th</sup> to 19<sup>th</sup> and over Kerala on 16<sup>th</sup> & 17<sup>th</sup> December. Isolated very heavy rainfall is also very likely over south Tamil Nadu on 16<sup>th</sup> & 17<sup>th</sup> and over south Kerala on 17<sup>th</sup> December, 2023.**
- Isolated rainfall/snowfall is very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 16<sup>th</sup> & 17<sup>th</sup> and over Himachal Pradesh on 16<sup>th</sup> December.
- No significant weather likely over remaining parts of the country during next 5 days.

**Dense fog warning:**

- **Dense fog** during morning hours very likely in isolated pockets over Punjab and Haryana during next 5 days.

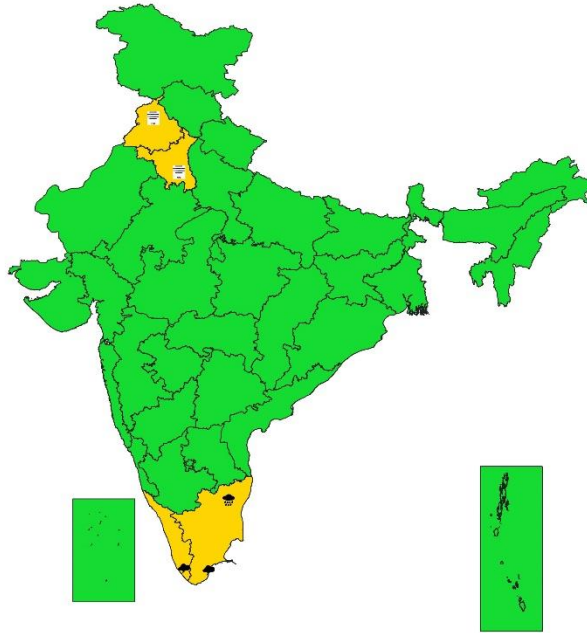
**Minimum Temperatures Forecast:**

- No significant change in Minimum Temperatures likely over northern parts of the country during next 4-5 days.

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) and <https://mausam.imd.gov.in/responsive/cycloneinformation.php>



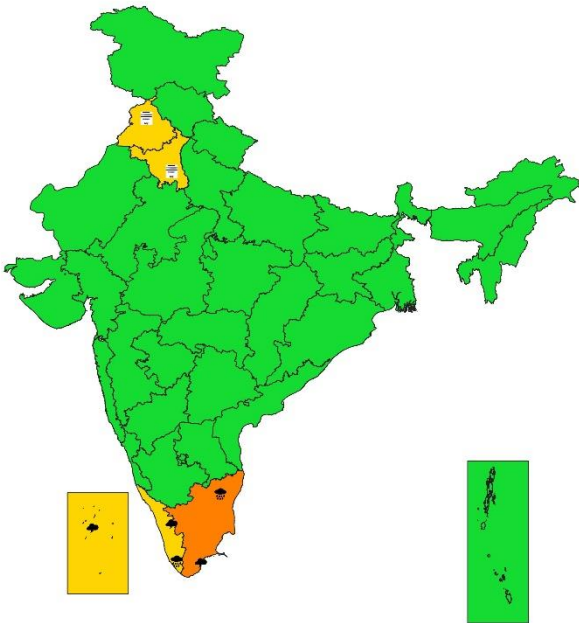
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
( 15-12-2023 )**



- |                             |                         |                          |
|-----------------------------|-------------------------|--------------------------|
| <b>Subdivision Warning</b>  | <b>Dust Storm</b>       | <b>Subdivision color</b> |
| ☁️ 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)  |



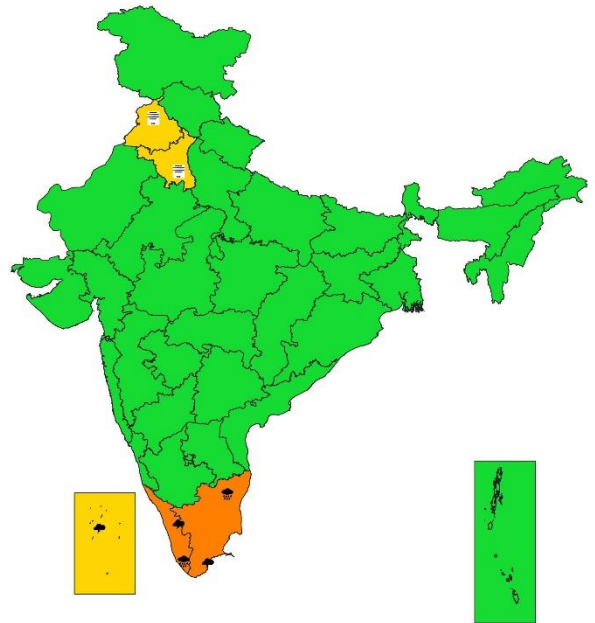
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
( 16-12-2023 )**



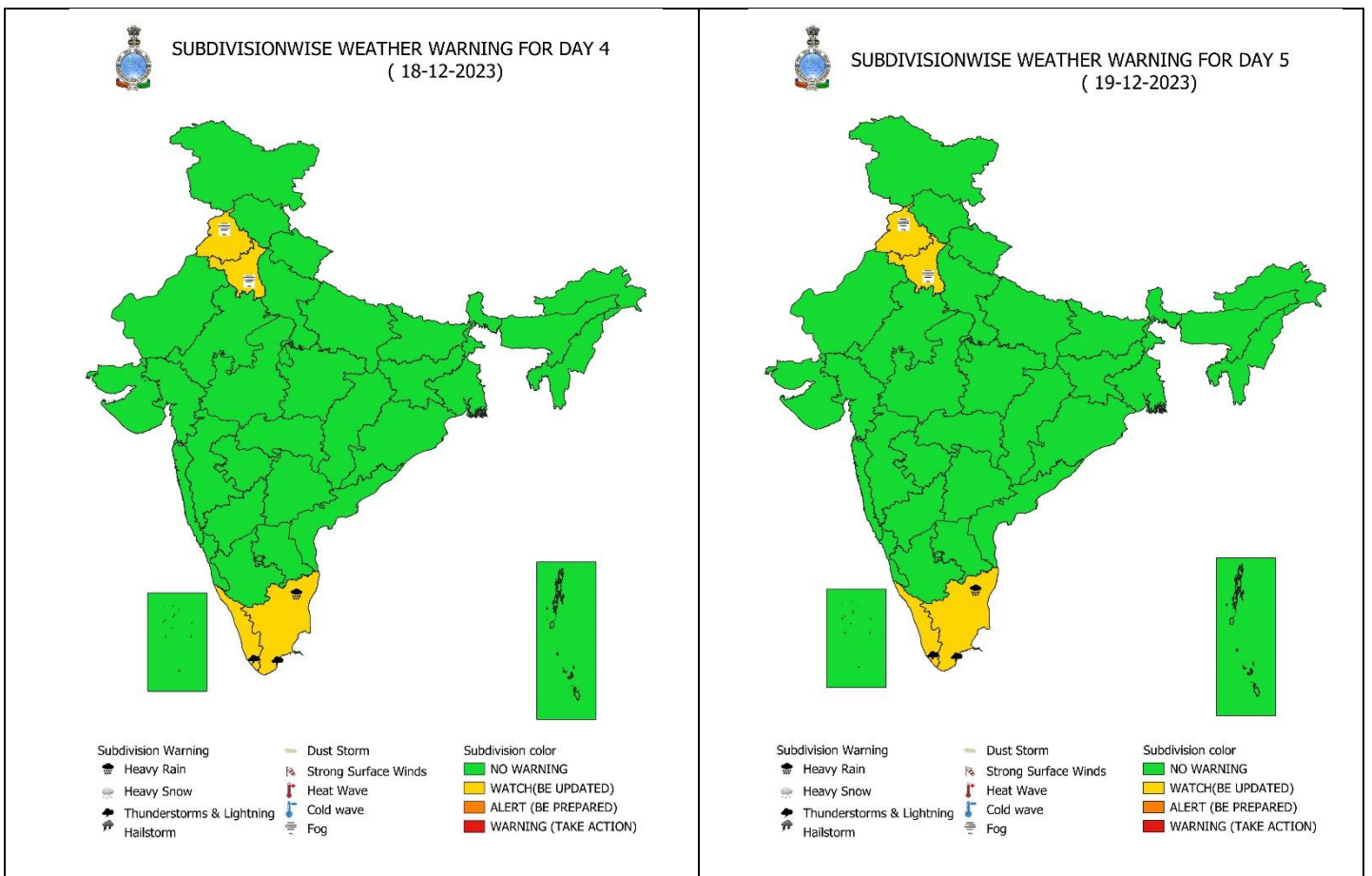
- |                             |                         |                          |
|-----------------------------|-------------------------|--------------------------|
| <b>Subdivision Warning</b>  | <b>Dust Storm</b>       | <b>Subdivision color</b> |
| ☁️ Heavy Rain               | 🌪️ Strong Surface 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  
( 17-12-2023 )**



- |                             |                         |                          |
|-----------------------------|-------------------------|--------------------------|
| <b>Subdivision Warning</b>  | <b>Dust Storm</b>       | <b>Subdivision color</b> |
| ☁️ 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 very heavy rainfall** over south Tamil Nadu on 16<sup>th</sup> & 17<sup>th</sup> and over south Kerala on 17<sup>th</sup> December, 2023.

#### A. Impact Expected

- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutcha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides
- ❖ Damage to horticulture and standing crops in some areas due to inundation.
- ❖ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).














#### B. Action Suggested

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.



## Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation
- ❖ **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-Himalayan 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, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

<b>SPATIAL DISTRIBUTION</b> (% 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)

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

<b>Flash Flood Risk</b>	
	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)