



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 31<sup>st</sup> March, 2024

Time of Issue: 1315 hours IST

**Subject:**

- i. **Enhanced rainfall/thunderstorm activity likely to continue over Northeast India till 04<sup>th</sup> April, 2024.**
- ii. **Heat wave conditions likely to prevail over parts of central & peninsular India during next 2<sup>nd</sup> -4<sup>th</sup> April, 2024.**

**Realised weather during past 24 hours till 0830 hours IST of today: (details in Annexure I)**

- ❖ **Hailstorm** recorded at isolated places over Himachal Pradesh, Uttarakhand and East Madhya Pradesh.
- ❖ **Light/Moderate rainfall/snowfall** accompanied with thunderstorm recorded at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh; at many places over Uttarakhand and Arunachal Pradesh; at a few places over Sub-Himalayan West Bengal & Sikkim.
- ❖ **Light/Moderate rainfall** accompanied with thunderstorm recorded at many places over Punjab, Gangetic West Bengal; at a few places over Jharkhand, Assam & Meghalaya, Lakshadweep; at isolated places over Haryana-Chandigarh-Delhi, East Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Bihar, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, North Interior Karnataka and Kerala & Mahe.
- ❖ **Warm night conditions** prevailed in isolated pockets over East Madhya Pradesh and Madhya Maharashtra.

**Weather Systems and Forecast & Warnings: (Annexure II)**

- ❖ A Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 72°E to the north of Lat. 30°N and an induced cyclonic circulation lies over south Haryana & neighbourhood in lower tropospheric levels. Under their influence:
  - ✓ Isolated light to moderate rainfall/snowfall with isolated **thunderstorms & lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh & Uttarakhand and light rainfall over north Punjab on 31<sup>st</sup> March, 2024.
- ❖ Two fresh Western Disturbances likely to affect Western Himalayan region, 1<sup>st</sup> from 02<sup>nd</sup> April night and 2<sup>nd</sup> from 05<sup>th</sup> April. Under their influence:
  - ✓ Isolated to Scattered light/moderate rainfall/snowfall with isolated **thunderstorms & lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh & Uttarakhand during 03<sup>rd</sup>-06<sup>th</sup> April and light isolated rainfall over Punjab, Haryana & Chandigarh during 03<sup>rd</sup>-05<sup>th</sup> April, 2024.
- ❖ A cyclonic circulation lies over northeast Assam & a north-south trough runs from east Bihar to north Bay of Bengal in lower tropospheric levels. Under the influence of these systems:
  - ✓ Fairly widespread to widespread light/moderate rainfall/snowfall with isolated **thunderstorms & lightning very likely** over Arunachal Pradesh; light to moderate rainfall over Assam & Meghalaya and scattered light to moderate rainfall over Nagaland, Manipur, Mizoram & Tripura and Sikkim during 31<sup>st</sup> March-04<sup>th</sup> April, 2024.

- ✓ *Isolated heavy rainfall/snowfall very likely over Arunachal Pradesh during 31<sup>st</sup> March- 04<sup>th</sup> April with isolated very heavy falls on 31<sup>st</sup> March.*
- ✓ *Isolated heavy rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 31<sup>st</sup> March & 01<sup>st</sup> April with isolated very heavy falls over Assam & Meghalaya on 31<sup>st</sup> March.*

#### Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday, Maximum temperatures were in the range of 40-42°C at a few places over East Madhya Pradesh & south Andhra Pradesh and at isolated pockets over North Interior Karnataka, Madhya Maharashtra, Marathwada, Vidarbha and Telangana.
- ❖ Today, minimum temperatures are **above normal by 3-5°C** at most places over East Uttar Pradesh; at many places over Sub-Himalayan West Bengal & Sikkim and West Uttar Pradesh; at a few places over Bihar, Madhya Pradesh, Madhya Maharashtra; at isolated places over Haryana-Chandigarh-Delhi, East Rajasthan, Chhattisgarh, Odisha, Konkan & Goa, Marathwada, Jharkhand, Arunachal Pradesh and Assam & Meghalaya.
- ❖ Fall in maximum temperatures by above 2°C very likely over many parts of Northwest India during next 2 days and rise by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures very likely over many parts of central India during next 24 hours and over east during 3 days and rise by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures very likely over many parts of Madhya Maharashtra & Madhya Maharashtra during next 48 hours and rise by 2-3°C thereafter and No significant change in maximum temperatures over rest parts of west India during next 5 days.
- ❖ No significant change in maximum temperatures very likely over many parts of south peninsular India during next 5 days except parts of Tamil Nadu & Andhra Pradesh where temperature are likely to rise by 2-3°C during next 3 days.
- ❖ No significant change in maximum temperatures over rest parts of the country during next 5 days.

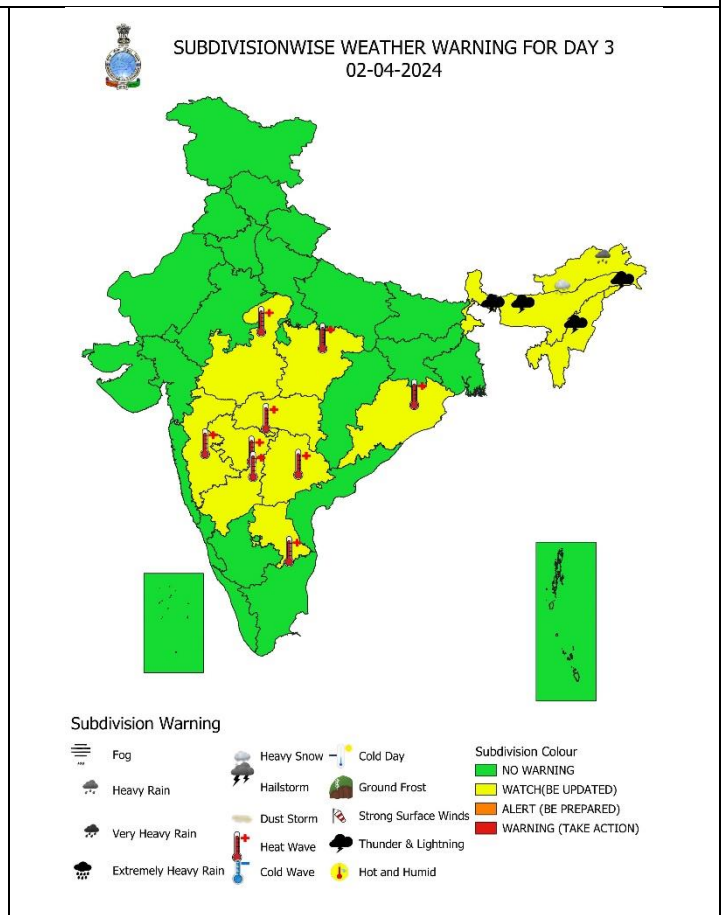
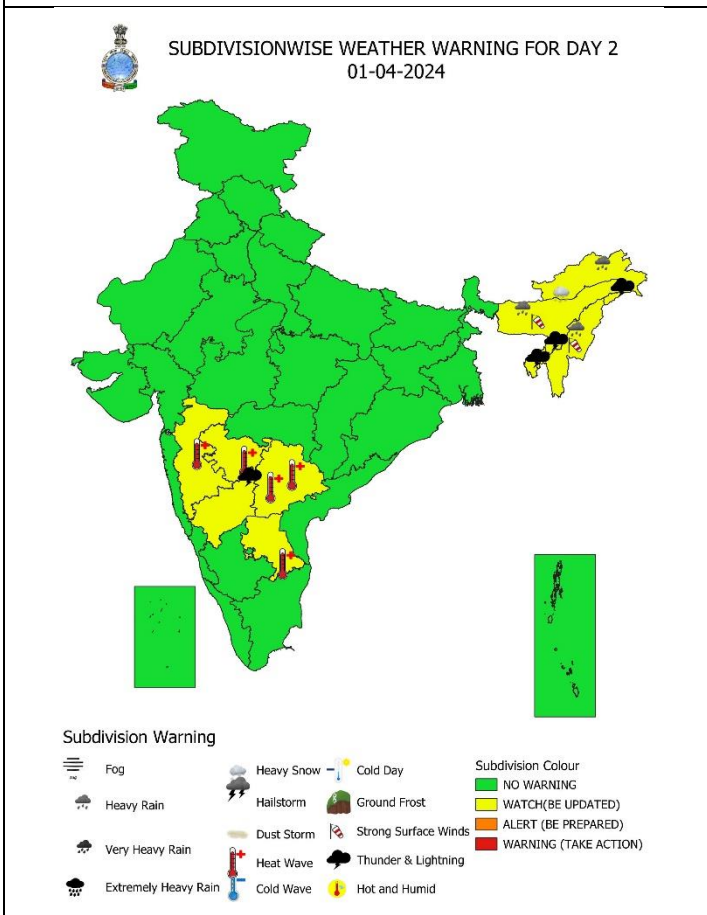
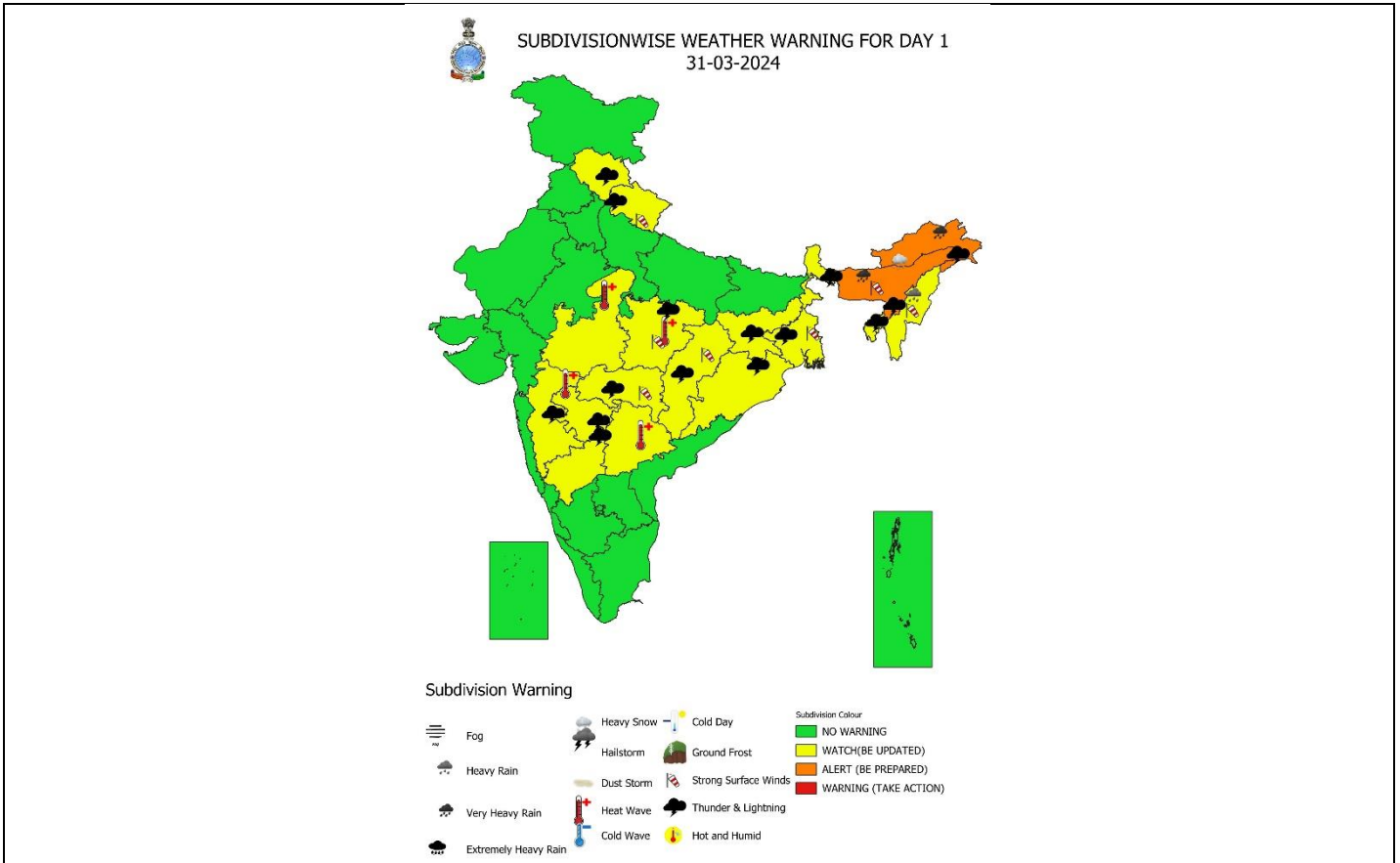
#### Heat wave, Warm Night and Hot & Humid weather warning for next 5 days:

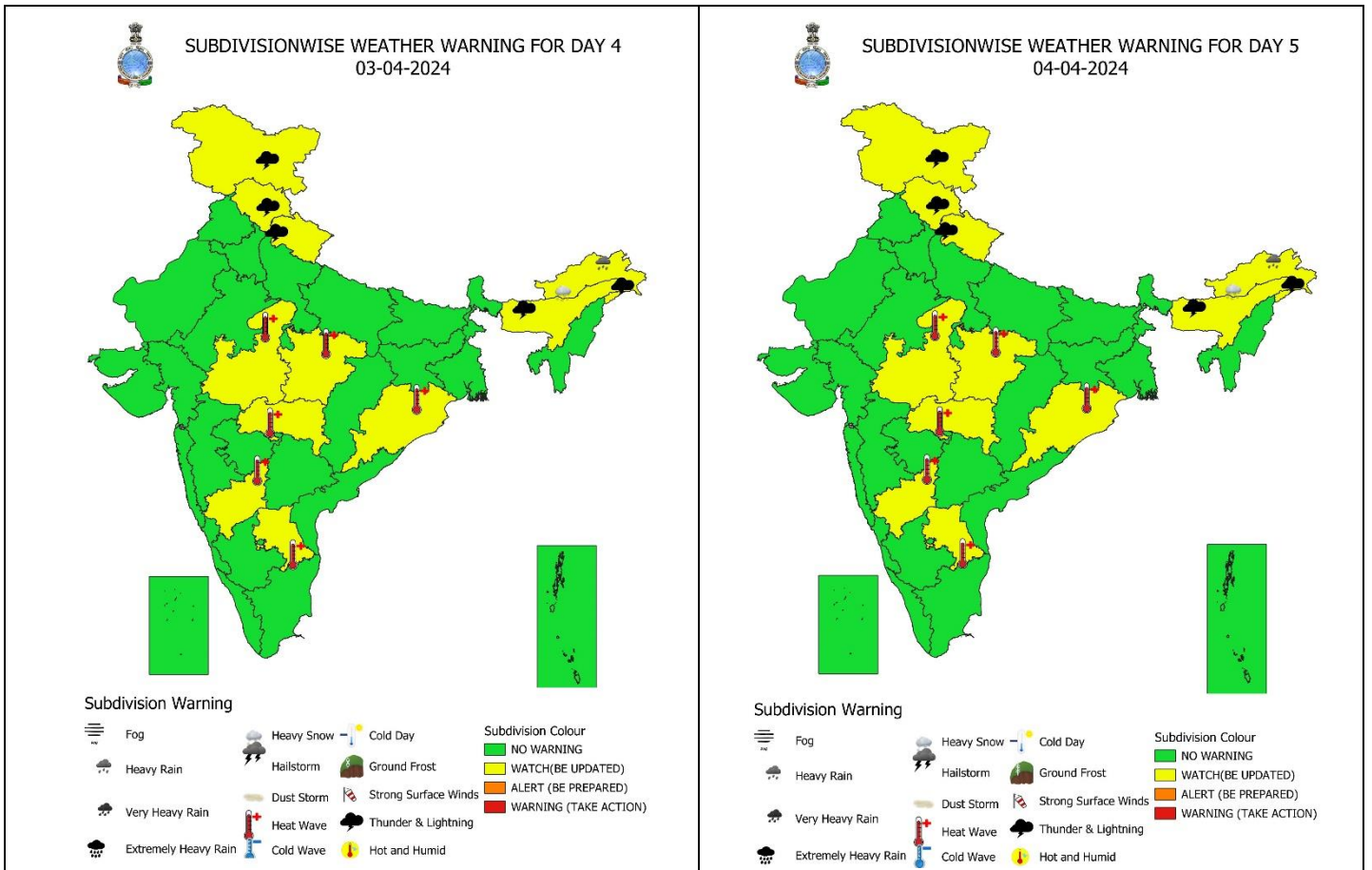
- ❖ **Heat wave conditions** very likely in isolated pockets over Madhya Pradesh, Vidarbha & North Interior Karnataka during 02<sup>nd</sup>-04<sup>th</sup> April; over Rayalaseema during 01<sup>st</sup>-4<sup>th</sup> April and over Telangana on 01<sup>st</sup> & 02<sup>nd</sup> April, 2024.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Madhya Pradesh on 31<sup>st</sup> March; over Odisha during 02<sup>nd</sup>-04<sup>th</sup> April; over Madhya Maharashtra during 31<sup>st</sup> March- 03<sup>rd</sup> April, Marathwada on 01<sup>st</sup> & 02<sup>nd</sup> and over Telangana on 31<sup>st</sup> March & 01<sup>st</sup> April, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Rayalaseema on 31<sup>st</sup> March, Coastal Andhra Pradesh & Yanam, Kerala & Mahe & Tamil Nadu, Puducherry & Karaikal during 31<sup>st</sup> March-04<sup>th</sup> April; over Odisha during 02<sup>nd</sup> – 04<sup>th</sup> April, 2024.
- ❖ Yesterday, the maximum temperature exceeded 95th percentile at isolated places over Marathwada. Maximum temperature likely to exceeded 95th percentile over parts of Rayalaseema, Karnataka, Marathwada and Odisha till 4<sup>th</sup> April, over Chhattisgarh, Jharkhand, East Madhya Pradesh and Vidarbha, from 4<sup>th</sup> April onward and over north Tamil Nadu from 3<sup>rd</sup> April, 2024.

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)

**Significant amount of rainfall (in cm):**

- ❖ **Assam & Meghalaya:** Badarpur Arg (dist Karimganj) 5, Tamulpur Arg (dist Baksa) 3, Lakhipur Arg (dist Cachar) 3, Jorhat (dist Jorhat) 2, Sonari\_arg (dist Sibsagar) 2, Rangia (dist Kamrup (rural)) 2, Marigaon Arg (dist Morigaon) 2,
- ❖ **Kerala:** Thiruvalla Aws (dist Pathanamthitta) 5, Mancompu (dist Alapuzha) 2, Kottayam (dist Kottayam) 2,
- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Nowgam (dist Kupwara) 4, Batote (dist Ramban) 3, Gund (dist Ganderbal) 3, Kukernag (dist Anantnag) 3, Pahalgam (dist Anantnag) 3, Shalimar Agro (dist Srinagar) 2, Anantnag (dist Anantnag) 2, Srinagar Aero (dist Badgam) 2, R M Bagh Arg (dist Srinagar) 2, Kupwara Kvk Aws (dist Kupwara) 2, Udampur(iaf) (dist Udampur) 2, Konibal (dist Pulwama) 2, Srinagar Agro Aws (dist Srinagar) 2, Rambagh Aws (dist Srinagar) 2, Batkoot Arg (dist Anantnag) 2, Qazi Gund (dist Kulgam) 2, Rajouri (dist Rajouri) 2, Srinagar (dist Srinagar) 2, Banihal (dist Ramban) 2, Reasi Arg (dist Reasi) 2, Shopian Aws (dist Shopian) 2, Bandipora Arg (dist Bandipore) 2, Khudwani Arg (dist Anantnag) 2, Larnoo Arg (dist Anantnag) 2, Govindpura Aws (dist Ramban) 2, Kupwara (dist Kupwara) 2, Asham Arg (dist Bandipore) 2, Baramulla Aws (dist Baramula) 2, Ganderbal (dist Ganderbal) 2, Harran Aws (dist Badgam) 2, Anantnag Aws (dist Anantnag) 2;
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Lembuchhera (dist West Tripura) 4, Kanchanpur (dist North Tripura) 4, Kvk Dhalai (distDhalai) 3, Jiribam\_ Aws (dist Imphal East) 3, Agartala Aero (dist West Tripura) 2, Kailashahar Aero(dist Unakoti) 2, Kamalpur (dist Dhalai) 2, Tamenglong (dist Tamenglong) 2, Amarpur (dist Gomati) 2, Gokulpur\_aws (dist Gomati) 2, Churachandpur (dist Churachandpur) 2, Kvk South (dist SouthTripura) 2, Khowai\_ Aws (dist Khowai) 2, Dharmanagar/ Panisagar (dist North Tripura) 2,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Jalpaiguri (dist Jalpaiguri) 2;
- ❖ **Gangetic West Bengal:** Panagarh (dist Burdwan) 2; Sri Niketan (dist Birbhum) 2;
- ❖ **East Madhya Pradesh:** Katni(mudwara) (dist Katni) 2;
- ❖ **Arunachal Pradesh:** Namsai Kvk Aws (dist Lohit) 2, Oyan Arg (dist East Siang) 2;





**Impact & Action Suggested due to heavy/very heavy rainfall/snowfall over Arunachal Pradesh and Assam & Meghalaya on 31<sup>st</sup> March & 01<sup>st</sup> April, 2024.**

**Impacts Expected for Rain/Snow**

- ❖ Disruption of Electricity.
- ❖ Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- ❖ Disruption of traffic flow.
- ❖ Damage to Kuccha and unsecured structures.

**Suggested Actions**

- ❖ Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- ❖ Stay away from power lines or electrical wires.
- ❖ Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon.
- ❖ Drive carefully.



**Agromet advisories for Heavy Rainfall, Gusty winds and Heat Wave likely over various parts of the country**














**(Based on the IBF and advisories issued by different AMFUs)**

- ❖ Drain out excess water from crop fields in Jammu & Kashmir.
- ❖ Make necessary arrangements for draining out excess water from crop fields to avoid water stagnation in North Eastern States. Also provide mechanical support to horticultural crops and staking to vegetables.
- ❖ Postpone fresh sowing of vegetables and other crops; cover the already-sown crops with farm residues or paddy straw in Arunachal Pradesh.
- ❖ Postpone sowing of Ahu rice, Capsularis jute and gourds in Assam.
- ❖ Apply light and frequent irrigation to standing crops in Rayalaseema and Telangana.

## Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office.
- ❖ **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