



Government of India  
Ministry of Earth Sciences  
India Meteorological Department

Press Release  
Date: 23<sup>rd</sup> September, 2023  
Time of Issue: 1345 hours IST

**Subject: 1) Heavy to very heavy rainfall likely to continue over Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim and over Northeast India during next 2 days and decrease thereafter.**  
**2) Conditions are becoming favourable for withdrawal of Southwest Monsoon from parts of West Rajasthan from around 25<sup>th</sup> September.**  
**3) A Low Pressure Area is likely to form over north Andaman sea & adjoining Eastcentral Bay of Bengal by around 30<sup>th</sup> September, 2023. Thereafter, it is likely to move west-northwestwards with possibility of gradual intensification.**

**Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):**  
**Significant Weather features:**

- ❖ **Withdrawal of Southwest Monsoon:**  
Due to anti-cyclonic flow developing over northwest India at lower tropospheric levels and dry weather prevailing over parts of southwest Rajasthan, conditions are becoming favourable for withdrawal of Southwest Monsoon from parts of West Rajasthan from around 25<sup>th</sup> September.
- ❖ A cyclonic circulation lies over Southwest Bihar & neighbourhood extending upto 4.5 km above mean sea level.
- ❖ A cyclonic circulation is likely to form over north Andaman sea & neighbourhood on 29<sup>th</sup> September. Under its influence a **Low Pressure Area** is likely to form over north Andaman sea & adjoining Eastcentral Bay of Bengal during subsequent 24 hours. Thereafter, it is likely to move west-northwestwards with possibility of gradual intensification.

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

**East India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Bihar during 23<sup>rd</sup>-24<sup>th</sup>; Jharkhand and Gangetic West Bengal on 23<sup>rd</sup>; and over Andaman & Nicobar Islands during 23<sup>rd</sup>-27<sup>th</sup> September.

**Isolated very heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim on 23<sup>rd</sup>; over Bihar on 23<sup>rd</sup> & 24<sup>th</sup>; over Andaman & Nicobar on 26<sup>th</sup> & 27<sup>th</sup> September.**

**Isolated extremely heavy rainfall very likely over Bihar today, the 23<sup>rd</sup> September, 2023.**

**Northeast India:** Light/moderate fairly widespread rainfall/thunderstorm with isolated **heavy**

**rainfall** activity very likely over Arunachal Pradesh, Assam & Meghalaya during 23<sup>rd</sup>-24<sup>th</sup> September.  
**Isolated very heavy rainfall very likely over Arunachal Pradesh and west Assam & Meghalaya on 23rd September**

**Central India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over East Madhya Pradesh on 23<sup>rd</sup> & 24<sup>th</sup>; West Madhya Pradesh and Vidarbha on 23<sup>rd</sup> & 24<sup>th</sup> and Chhattisgarh during 23<sup>rd</sup> – 25<sup>th</sup> September.

**Isolated very heavy rainfall very likely over East Madhya Pradesh and north Chhattisgarh on 23rd September.**

**South India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Kerala, Tamil Nadu, Coastal Andhra Pradesh, North Interior Karnataka and Rayalaseema on 23<sup>rd</sup> September.

**Northwest India:** Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy falls** very likely over Himachal Pradesh, Uttarakhand and Punjab on 23<sup>rd</sup> September.

**West India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra and Marathwada on 23<sup>rd</sup> September.

Isolated to scattered light/moderate rainfall likely over rest parts of the country during next 5 days.

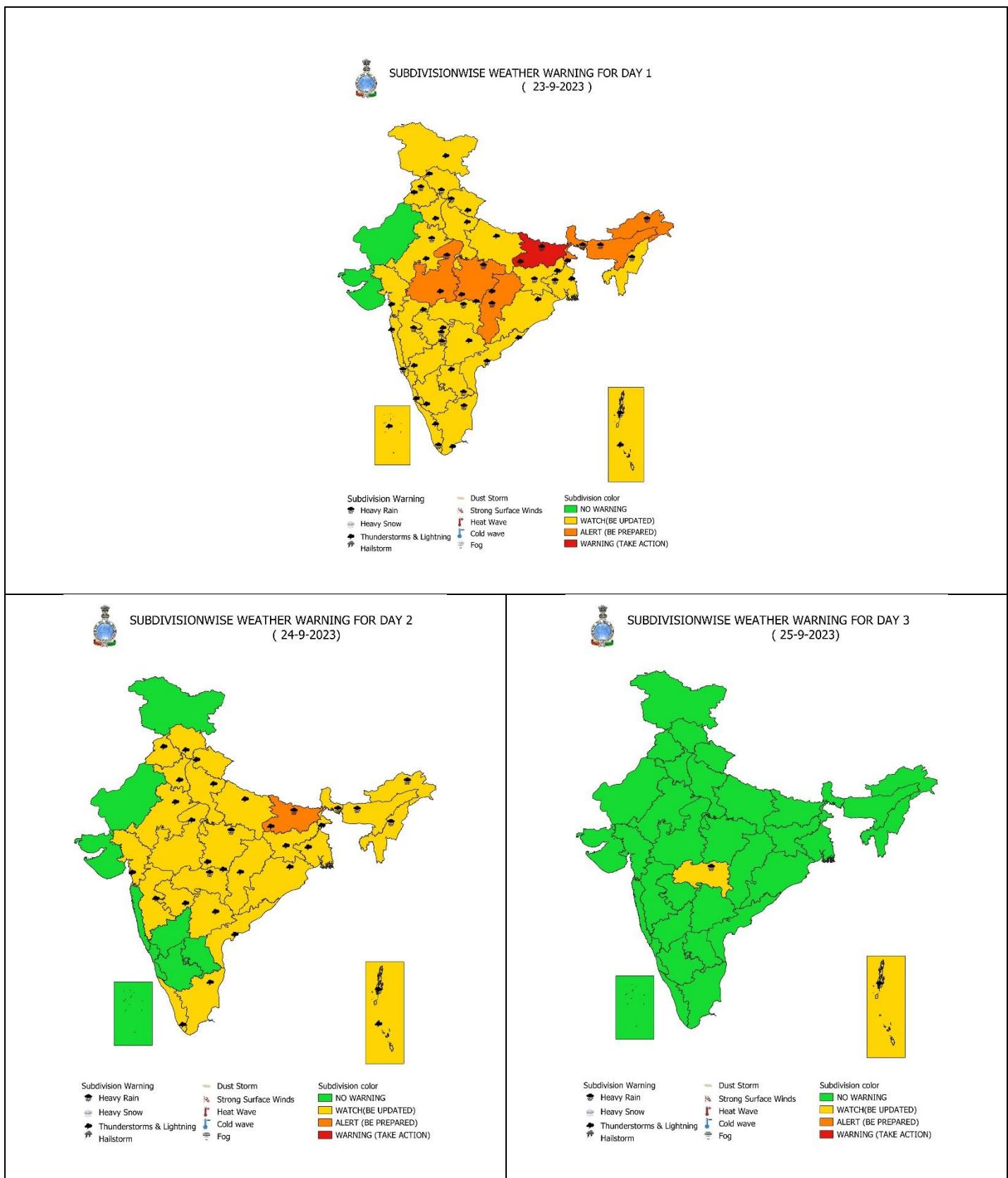
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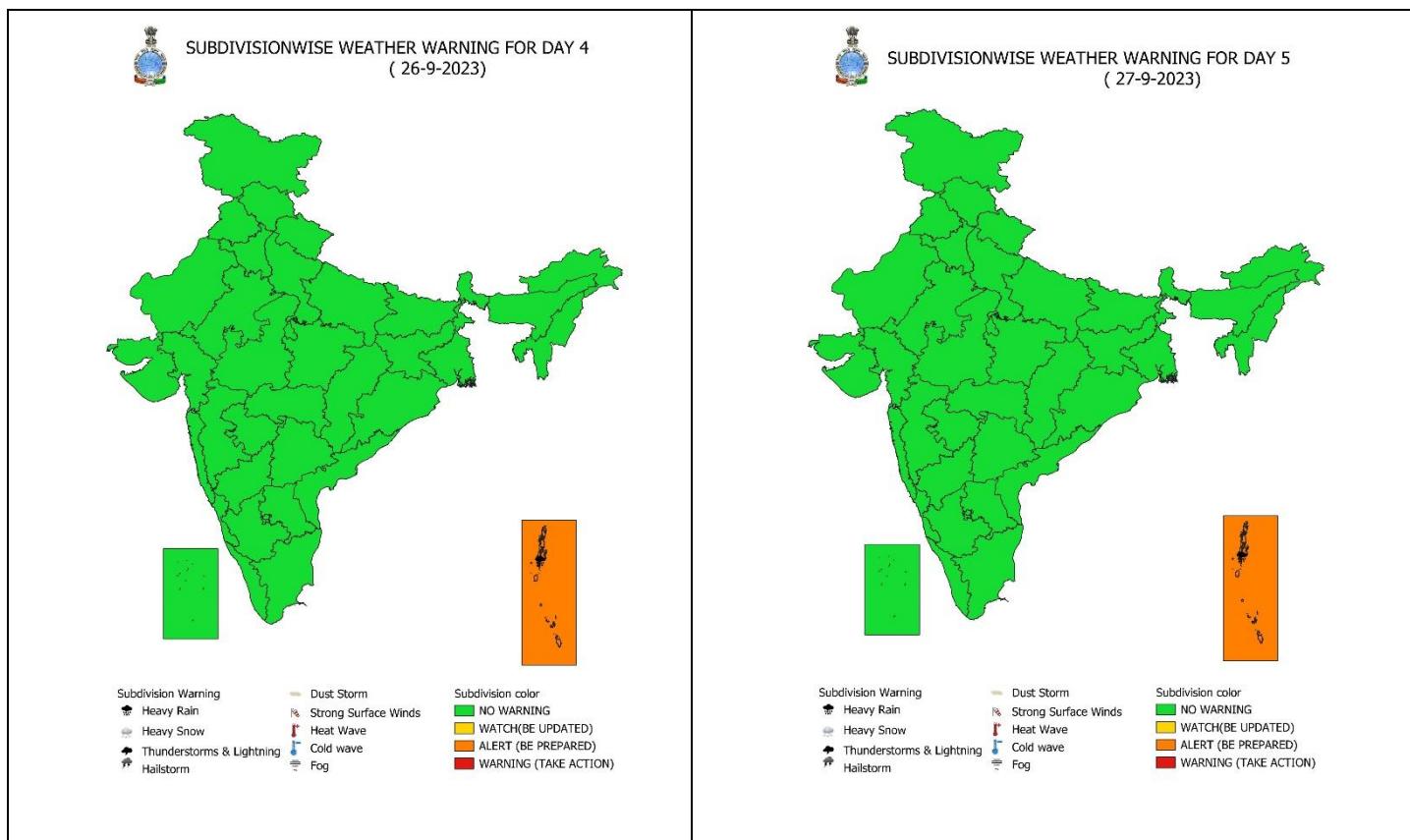
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**Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 23<sup>rd</sup> September, 2023):**

- **Extremely heavy rainfall** at isolated places over Bihar, West Uttar Pradesh; **Heavy to very heavy rainfall** at isolated places over Chhattisgarh, Rayalaseema, West Madhya Pradesh, Gangetic West Bengal, East Madhya Pradesh, Sub- Himalayan West Bengal, Kerala & Mahe and **heavy rainfall** at isolated places over Madhya Maharashtra, East Rajasthan, Konkan & Goa, Gujarat Region, Andaman & Nicobar Islands, Odisha, Jharkhand, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and North Interior Karnataka.
- **Significant rainfall recorded (in cm):**
- ✓ **Bihar:** Kodawanpur/c.b Ii (dist Begusarai) 32, Rosera (dist Samastipur) 29, Hasanpur (dist Samastipur) 27, Samastipur (dist Samastipur) 21, Cheria B.pur 1 (dist Begusarai) 18, Pusa (dist Samastipur) 18, Mahanar (dist Vaishali) 16, Kusheswarstan (dist Darbhanga) 15, Patepur (dist Vaishali) 15, Suryagadha (dist Lakhisarai) 14, Hajipur (dist Vaishali) 14, Bakhari (dist Begusarai) 14, Mushari (dist Muzaffarpur) 14, Mahua (dist Vaishali) 14, Vaishali (dist Vaishali) 14, Saraiya (dist Muzaffarpur) 13, Patori (dist Samastipur) 12, Nawada (dist Nawada) 12, Chanan (dist Lakhisarai) 12, Jamui (dist Jamui) 11, Taibpur (dist Kishanganj) 11, Dalsinghsarai (dist Samastipur) 11, Muzaffarpur (dist Muzaffarpur) 11, Thakurganj (dist Kishanganj) 11, Goraul/doli (dist Vaishali) 10, Fatuha (dist Patna) 10, Barh (dist Patna) 9, Hayaghat (dist Darbhanga) 9, Alauli (dist Khagaria) 9, Bachwara (dist Begusarai) 8, Gaighat (dist Muzaffarpur) 8, Kurhani (dist Muzaffarpur) 8, Parbatta (dist Khagaria) 8, Morwa/tajpur (dist Samastipur) 8, Barauni (dist Begusarai) 8, Forbesganj (dist Araria) 8, Jandhaha (dist Vaishali) 8, Madhepur (dist Madhubani) 7, Madhipura (dist Madhepura) 7, Khagadia (dist Khagaria) 7, Darbhanga (dist Darbhanga) 7, Rahghpur (dist Supaul) 7, Gogra (dist Khagaria) 7, Rewaghat (dist Muzaffarpur) 7, Bodh Gaya (dist Gaya) 7, Indrapuri (dist Rohtas) 7, Wazirganj (dist Gaya) 7, Bahargama (dist Araria) 7,
- ✓ **West Uttar Pradesh:** Baheri (dist Bareilly) 25, Sahawar (dist Kasganj) 7,
- ✓ **Kerala:** Mannarkkad (Palakkad district) 18, Mannarkkad AWS (Palakkad district) 15, Peerumedu (Idukki district), Enamakkal (Thrissur district) & Idamalayar Dam AWS (Ernakulam district) 7 each,
- ✓ **Chhattisgarh:** Durg (dist Durg) 17, Simga (dist Baloda Bazar) 15, Kharsiya (dist Raigarh) 13, Kartala (dist Korba) 13, Champa (dist Janjir) 12, Janjir (dist Janjir) 10, Dhamdha (dist Durg) 9, Bhatapara (dist Baloda Bazar) 9, Pamgarh (dist Janjir) 8, Korba (dist Korba) 8, Akaltara (dist Janjir) 7, Katghora (dist Korba) 7, Baloda Bazar (dist Baloda Bazar) 7, Berla (dist Bemetara) 7, Baloda (dist Janjir) 7,
- ✓ **Vidarbha:** Agriculture College (dist Nagpur) 16, Nagpur Aerodrome (dist Nagpur) 12, Tumsar (dist Bhandara) 10, Kamptee (dist Nagpur) 9, Kuhi (dist Nagpur) 8, Ramtek (dist Nagpur) 8,
- ✓ **Rayalaseema:** Gorantla (dist Sri Sathyasai District) 15,
- ✓ **West Madhya Pradesh:** Biaora (dist Rajgarh) 15,
- ✓ **Gangetic West Bengal:** Tantloi:14, Chitrangan:7;
- ✓ **East Madhya Pradesh:** Waraseoni (dist Balaghat) 13, Kirnapur (dist Balaghat) 8, Lanji (dist Balaghat) 8, Nainpur (dist Mandla) 7,
- ✓ **Sub-Himalayan West Bengal:** Bagrakote:12; LBD. Jalpaiguri, Jaldhaka, NH-31 road:10; Jalpaiguri, Domohani:9; Dhupguri, Darjeeling, Chel:8; Mekhliganj, Sonapur, Samsing:7;
- ✓ **Jharkhand:** Rajmahal- 9; Bau Kanke-8; Messenjor-7;
- ✓ **Madhya Maharashtra:** Akole (dist Ahmednagar) 9, Sinnar (dist Nashik) 8, Gaganbawada (dist Kolhapur) 8,
- ✓ **East Rajasthan:** Udaipur/d-aero (Udaipur) 8,
- ✓ **Konkan & Goa:** Mokheda - Fmo (dist Palghar) 8, Colaba - Imd Obsy (dist Mumbai City) 8,
- ✓ **Gujarat Region:** Surat City (dist Surat) 7, Surat\_kv AWS (dist Surat) 7,
- ✓ **Andaman & Nicobar Islands:** Carnicobar:7;
- ✓ **Odisha:** Kaptipada (dist Mayurbhanj) 7,
- ✓ **Assam & Meghalaya:** Majuli (dist Jorhat) 7
- ✓ **Arunachal Pradesh:** Nachu Arg (dist Upper Subansiri) 13, Tuting (dist Upper Siang) 7
- ✓ **Nagaland, Manipur, Mizoram & Tripura:** Zunheboto (dist Zunheboto) 20
- ✓ **North Interior Karnataka:** Bilgi (irri.) (dist Bagalkote) 10, Manthala (dist Bidar) 9, Khajuri (dist Kalaburgi) 8, Kalaburgi Obsy (dist Kalaburgi) 7,

**Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation





**Impact & Action Suggested due to very heavy rainfall/extremely heavy falls** over Bihar on 23<sup>rd</sup> & 24<sup>th</sup>; East Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal, Arunachal Pradesh, Assam & Meghalaya on 23<sup>rd</sup> September.

#### 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 in the hilly areas.
- ❖ 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.
- ❖ **AWS:** Automatic Weather Station
- ❖ **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, Tamil Nadu, 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 Widespred (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		Flash Flood Risk
Terms	Probability of Occurrence (%)	
Unlikely	< 25	High Risk (Take Action)
Likely	25 - 50	Moderate Risk (Be Prepared)
Very Likely	50 - 75	
Most Likely	> 75	Low Risk (Be Updated)