



Government of India  
Ministry of Earth Sciences  
India Meteorological Department

Press Release

Date: 29<sup>th</sup> July, 2023

Time of Issue: 1400 hours IST

**Subject:**

- i) Heavy to very heavy rainfall activity likely to continue over east, northeast and east central India during next 4-5 days.
- ii) Heavy to very heavy rainfall activity likely to continue over northwest India today and decrease during 31<sup>st</sup> July to 1<sup>st</sup> August and increase on 2<sup>nd</sup> and 3<sup>rd</sup> August.
- iii) Enhancement of rainfall activity along west coast on 2<sup>nd</sup> and 3<sup>rd</sup> August and decrease in rainfall activity over remaining parts of peninsular India.

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

**Significant Weather features:**

- ❖ A Low Pressure Area has formed over north Odisha and adjoining West Bengal Coasts. Associated cyclonic circulation extends upto mid tropospheric levels tilting south-westwards with height.
- ❖ The Monsoon Trough at mean sea level now passes through Sri Ganganagar, Rohtak, Lucknow, Gaya, Ranchi, center of Low Pressure Area over north Odisha and adjoining West Bengal Coasts and thence southeastwards to east central Bay of Bengal. The western end of the monsoon trough lies along its normal position while the eastern end lies south of its normal position and extends southeastwards up to east central Bay of Bengal.
- ❖ A cyclonic circulation lies over Punjab & adjoining north Pakistan in low to mid tropospheric levels.
- ❖ The Western Disturbance as mid-tropospheric westerlies is now seen with its axis at 5.8 km above mean sea level roughly along Long. 69°E to the north of 30°N.

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

**Northwest India:** Light/Moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over Himachal Pradesh, Punjab, West Uttar Pradesh, Haryana, East Rajasthan on 29<sup>th</sup> July & 2<sup>nd</sup> August; West Uttar Pradesh on 29<sup>th</sup> July, 1<sup>st</sup> & 2<sup>nd</sup> August over Uttarakhand during 29<sup>th</sup> July-02<sup>nd</sup> August; over East Uttar Pradesh during 29<sup>th</sup> July-31<sup>st</sup> August, 2023.

**Isolated very heavy rainfall also likely over East Uttar Pradesh on 29<sup>th</sup> July.**

**Central India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over East Madhya Pradesh and Chhattisgarh during 29<sup>th</sup>-31<sup>st</sup> July; West Madhya Pradesh on 1<sup>st</sup> & 2<sup>nd</sup> August; and Vidarbha on 2<sup>nd</sup> August.

**Isolated very heavy rainfall also likely over Chhattisgarh on 29<sup>th</sup> July, 1<sup>st</sup> & 2<sup>nd</sup> August; over East Madhya Pradesh on 1<sup>st</sup> & 2<sup>nd</sup>; Vidarbha on 1<sup>st</sup> August.**

**West India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa and Madhya Maharashtra during 29<sup>th</sup> July & 1<sup>st</sup> August; over Gujarat Region on 29<sup>th</sup> July, 2023.

**Isolated very heavy rainfall very likely over Konkan & Goa and Madhya Maharashtra on 2<sup>nd</sup> August, 2023.**

**South India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely

over Coastal Karnataka during 29<sup>th</sup> July-02<sup>nd</sup> August, over Telangana on 1<sup>st</sup> & 2<sup>nd</sup> and South Interior Karnataka on 2<sup>nd</sup> August.

**East India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over West Bengal & Sikkim on 29<sup>th</sup> & 30<sup>th</sup> July; over Jharkhand during 29<sup>th</sup> July-01<sup>st</sup> August and over Bihar during 31<sup>st</sup> July-2<sup>nd</sup> August 2023.

**Isolated very heavy rainfall very likely over Odisha during 29<sup>th</sup> July-02<sup>nd</sup> August and Bihar on 29<sup>th</sup> & 30<sup>th</sup> July, 2023.**

**Northeast India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over the region during next 5 days.

**Isolated very heavy rainfall likely over Arunachal Pradesh on 29<sup>th</sup> July; Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 1<sup>st</sup> & 2<sup>nd</sup> August 2023.**

For more details kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php)

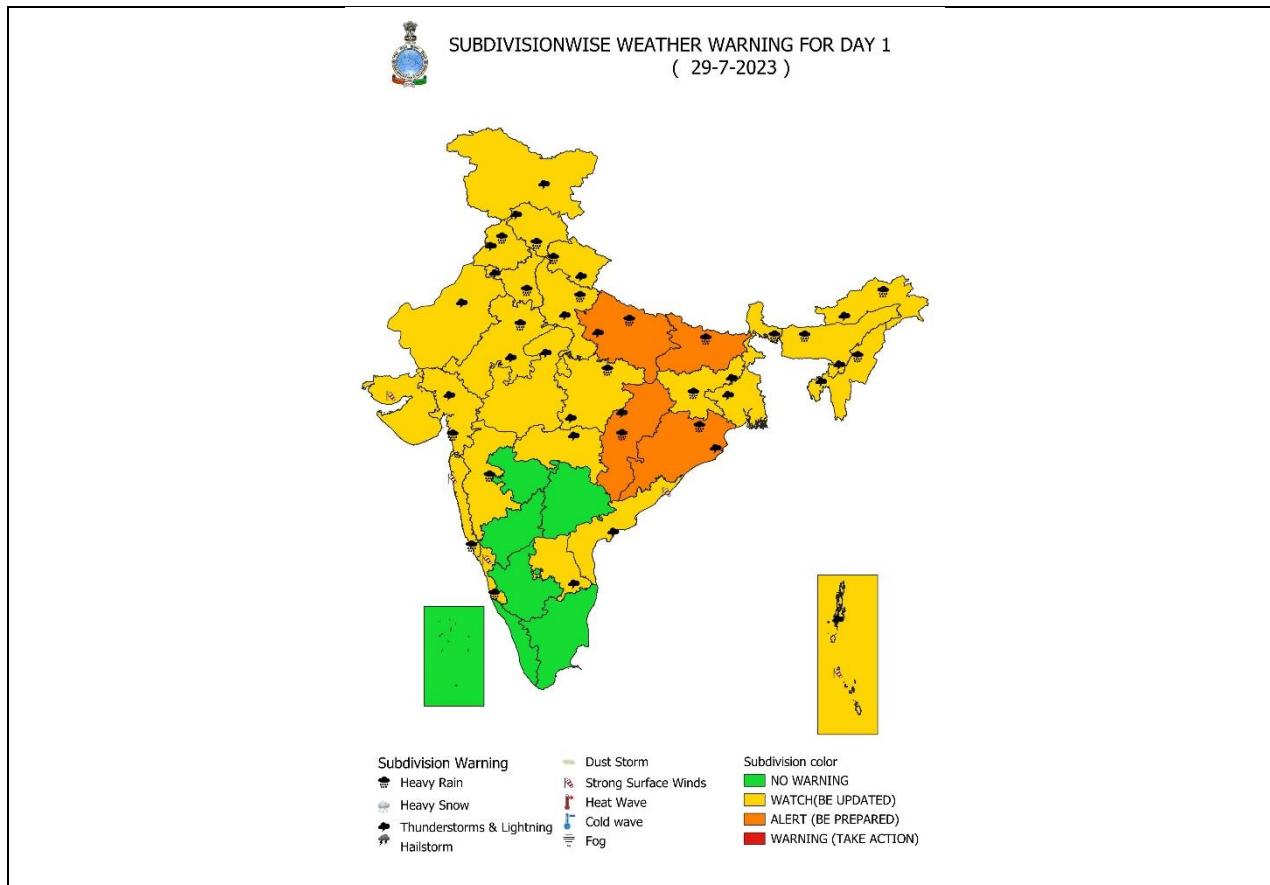
**Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 29<sup>th</sup> July 2023):**

- **Heavy to very heavy rainfall with isolated extremely heavy rainfall** observed over Konkan & Goa, Arunachal Pradesh; **Heavy to very heavy rainfall** at isolated places over East Rajasthan and Chhattisgarh, Madhya Pradesh, Uttar Pradesh, Konkan & Goa, Odisha and Madhya Maharashtra; **Heavy rainfall** at isolated places over Himachal Pradesh, West Rajasthan,

**Significant rainfall recorded (in cm):**

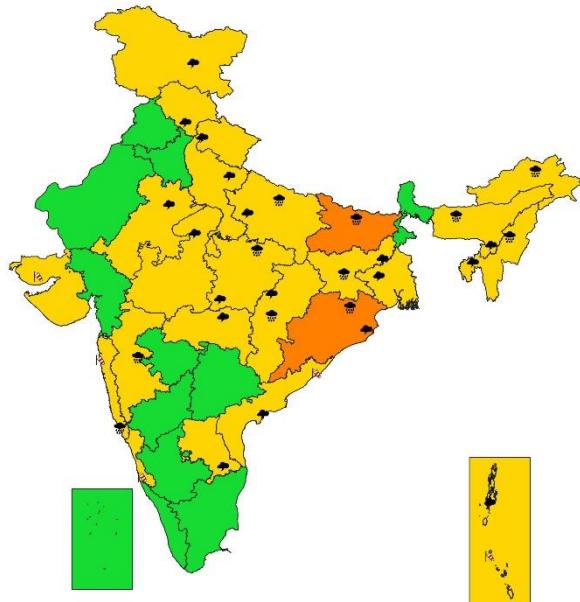
- **Konkan & Goa:** Ambernath (dist Thane) 17, Wada (dist Palghar) 11, Jawhar (dist Palghar) 11, Mhasla (dist Raigad) 10, Poladpur (dist Raigad) 9, Shahapur (dist Thane) 9, Matheran (dist Raigad) 9, Mangaon (dist Raigad) 8, Vikramgad (dist Palghar) 8, Panvel\_agri (dist Raigad) 8, Tala (dist Raigad) 8, Roha (dist Raigad) 8, Mokheda - Fmo (dist Palghar) 8, Sudhagad Pali (dist Raigad) 8, Ulhasnagar (dist Thane) 7, Bhiwandi (dist Thane) 7, Murbad (dist Thane) 7, Mahad (dist Raigad) 7, Vasai (dist Palghar) 7, Tbia Imd Part Time (dist Thane) 7, Shriwardhan (dist Raigad) 7, Mandangad (dist Ratnagiri) 7;
- **Gujarat Region:** Jetpur Pavi (dist Chhota Udepur) 21, Jambughoda (dist Panchmahal) 15, Chhota Udepur (dist Chhota Udepur) 10, Sankheda (dist Chhota Udepur) 10, Tilakwada (dist Narmada) 10, Sinor (dist Vadodara) 8, Bodeli (dist Chhota Udepur) 8, Nanipalson (dist Valsad) 7;
- **East Uttar Pradesh:** Birdghat (dist Gorakhpur) 17, Lambhuua (dist Sultanpur) 12, Gorakhpur (dist Gorakhpur) 8;
- **West Uttar Pradesh:** Muzaffarnagar(t) (dist Muzaffarnagar) 10, Muzaffarnagar (dist Muzaffarnagar) 8, Budhana (dist Muzaffarnagar) 7;
- **Madhya Maharashtra:** Mahabaleshwar- Imd Obsy (dist Satara) 13, Lonavala\_agri (dist Pune) 10, Igatpuri (dist Nashik) 9;
- **Odisha:** Harabhanga (dist Boudhgarh) 16, Phulbani (dist Kandhamal) 10, Chandua Kuliana (dist Mayurbhanj) 10, Jamsolaghat (dist Mayurbhanj) 8, Binika (dist Sonepur) 7, Pattamundai (dist Kendrapara) 7, Phiringia (dist Kandhamal) 7, Sarasakana (dist Mayurbhanj) 7;
- **Himachal Pradesh:** Rampur Bushar (dist Shimla) 7;
- **Assam & Meghalaya:** Ranganadi Nt Xing (dist Lakhimpur) 12, Dhemaji (dist Dhemaji) 9, Mawsynram (dist East Khasi Hills) 8, Lakhimpur Arg (dist Lakhimpur) 8, Jiagaon (dist Tinsukia) 7, N.lakhimpur/lilabari (dist Lakhimpur) 7, Cherrapunji (dist East Khasi Hills) 7, Cherrapunji(rkm) (dist East Khasi Hills)- 7;
- **East Madhya Pradesh:** Bajag (dist Dindori) 18, Mangawan (dist Rewa) 10, Nagode (dist Satna) 10, Channodi (dist Shahdol) 10, Kusmi (dist Sidhi) 10, Rampur Baghelan (dist Satna) 8, Jaitpur (dist Shahdol) 8, Gudh (dist Rewa) 8, Gohparu (dist Shahdol) 7, Venkatnagar (dist Anuppur) 7, Raipurkarchuliyan (dist Rewa) 7;
- **West Madhya Pradesh:** Kathiwada (dist Alirajpur) 19, Alirajpur (dist Alirajpur) 11, Multai (dist Betul) 8, Sardarpur (dist Dhar) 7, Ujjain-aws (dist Ujjain) 7, Jabot (dist Alirajpur) 7, Jawad (dist Neemuch) 7;
- **East Rajasthan:** Jaipur Tehsil Sr (dist Jaipur) 16, Lalsot (dist Dausa) 12, Bhim (dist Rajsamand) 9, Atru Sr (dist Baran) 8, Neemkathana Sr (dist Sikar) 7, Ajmer Tehsil Sr (dist Ajmer) 7, Gangapur (dist Sawai Madhopur) 7, Beir Sr (dist Bharatpur) 7, Chomu (dist Jaipur) 7, Srinagar Sr (dist Ajmer) 7;
- **West Rajasthan:** Nokha (dist Bikaner) 8;
- **Chhattisgarh:** Pendra Road (dist Bilaspur) 15, Pendra (dist Bilaspur) 9, Labhandih (dist Raipur) 7;
- **Haryana:** Nagina Rev (dist Nuh) 9, Badli Rev (dist Jhajjar) 9, Punhana (dist Nuh) 8, Gurgaon Rev (dist Gurgaon) 7, Sohana (dist Gurgaon) 7, Thanesar (dist Kurukshetra) 7,
- **Arunachal Pradesh:** Pasighat\_ Aero (dist East Siang) 21, Yupia (Phed dist. Papumpare) 11, Yupa (ARG dist. Papumpare) 10, Itanagar (dist Papumpara) 8, Roing (dist Lower Dibang Valley) 8, Seppa (dist East Kameng)-7;

## Annexure II





SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
( 30-7-2023 )



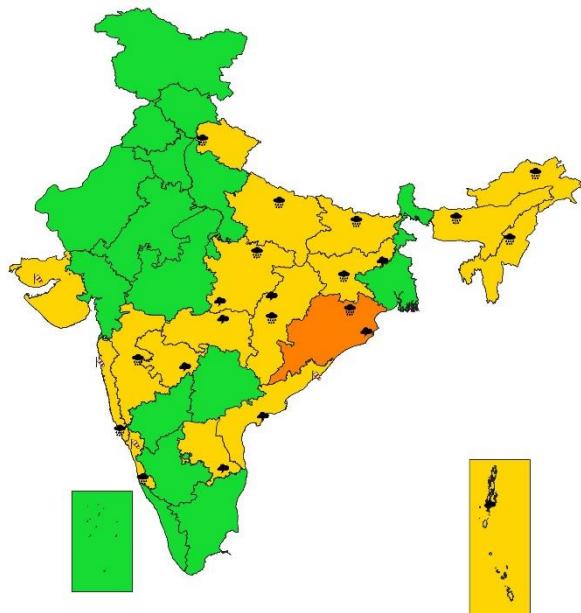
Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm

Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
( 31-7-2023 )



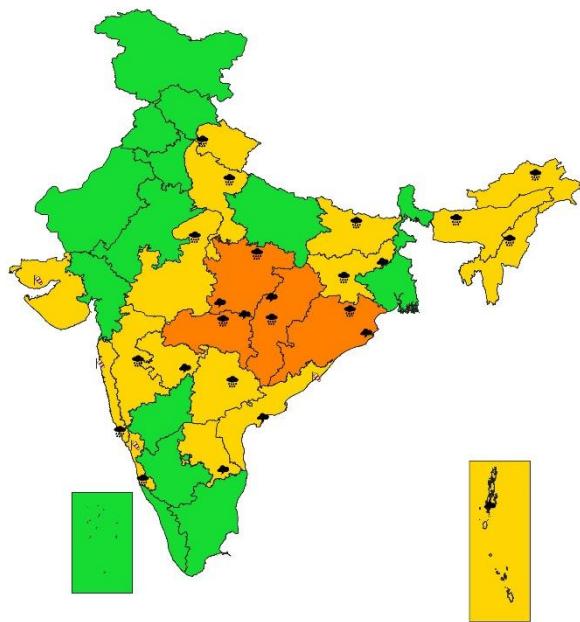
Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm

Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
( 1-8-2023 )



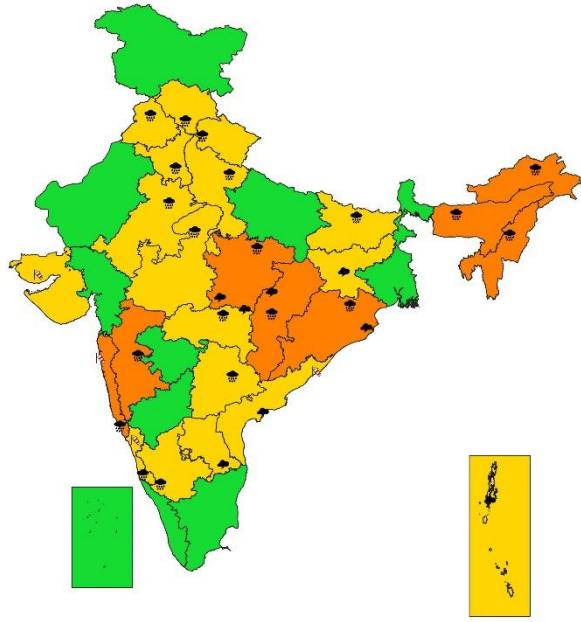
Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm

Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5  
( 2-8-2023 )



Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm

Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)

### **Agromet advisories for heavy rainfall likely over various parts of the country**

- Drain out excess water from crop fields to avoid water stagnation in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Rajasthan, Sub Himalayan West Bengal & Sikkim, Odisha, Madhya Pradesh, Chhattisgarh, Maharashtra, Goa, Gujarat State, Karnataka, Andhra Pradesh, Rayalaseema, Telangana and North Eastern States.
- Postpone transplanting of rice and finger millet in Konkan; rice in ghat regions of Madhya Maharashtra and Telangana.
- Postpone sowing of cotton, groundnut, castor and red gram in Telangana.

### **Impact & Action Suggested due to very heavy rainfall:**

**29<sup>th</sup> July: East Uttar Pradesh, Chhattisgarh, Bihar, Odisha;**

**30th July: Odisha and Bihar;**

**31st July: Odisha;**

**01st August: East Madhya Pradesh, Vidarbha, Odisha, Chhattisgarh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura;**

**02nd August: East Madhya Pradesh, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa and Madhya Maharashtra.**

#### **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.
- ❖ **Obsy:** Observatory; **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 |                               |
|------------------------|-------------------------------|
| Terms                  | Probability of Occurrence (%) |
| Unlikely               | < 25                          |
| Likely                 | 25 - 50                       |
| Very Likely            | 50 - 75                       |
| Most Likely            | > 75                          |