

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



Press Release Date: 13<sup>th</sup> September, 2025 Time of Issue: 1330 hours IST

Subject: i) Under the influence of Low pressure area over westcentral & adjoining northwest Bay of Bengal, north Andhra Pradesh-south Odisha coasts, heavy rainfall likely over Odisha & Maharashtra during 13<sup>th</sup>-15<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 13<sup>th</sup> & 14<sup>th</sup>; Chhattisgarh during 13<sup>th</sup>-16<sup>th</sup>; Telangana during 13<sup>th</sup>-17<sup>th</sup> September with very heavy rainfall over Telangana on 13<sup>th</sup>; Coastal Maharashtra on 14<sup>th</sup> & 15<sup>th</sup> and Madhya Maharashtra on 15<sup>th</sup> September, 2025.

ii) Conditions are becoming favourable for withdrawal of Southwest Monsoon from some parts of West Rajasthan around from 15<sup>th</sup> September, 2025.

#### Realised weather during past 24 hours till 0830 hours IST of today, the 13th September, 2025:

- ❖ Heavy to very heavy rainfall with Extremely heavy rainfall (≥21 cm) has been recorded at isolated places over Uttarakhand.
- Very heavy rainfall (12-20 cm) has been recorded at isolated places over Assam, Sub-Himalayan West Bengal & Sikkim and Marathawada.
- Heavy rainfall (7-11 cm) has been recorded at isolated places over Himachal Pradesh, West Uttar Pradesh, Odisha, Bihar, East Madhya Pradesh, Vidarbha, Jharkhand, Arunachal Pradesh, Mizoram, Telangana, Coastal Andhra Pradesh, North Interior Karnataka, Tamil Nadu & Puducherry.

For more details of realised weather, kindly refer Annexure I.

#### i. Weather Systems, Forecast and Warnings (refer to Annexure II & III):

- ❖ Conditions are becoming favourable for withdrawal of Southwest Monsoon from some parts of West Rajasthan around from 15<sup>th</sup> September.
- ❖ The western end of the **Monsoon trough** at mean sea level runs near normal and eastern end runs south of its normal position.
- The **low pressure area** lay over westcentral & adjoining northwest Bay of Bengal, north Andhra Pradesh-south Odisha coasts at 0830 hrs IST of today, the 13<sup>th</sup> September, 2025. It is likely to move west-northwestwards across south Odisha and adjoining north Andhra Pradesh and south Chhattisgarh during next 2 days.
- ❖ An upper air **cyclonic circulation** lies over southwest Bihar & adjoining Jharkhand and another over central Assam in lower tropospheric levels.
- ❖ A **trough** runs from cyclonic circulation associated with low pressure area to South Maharashtra in lower & middle tropospheric levels tilting southwestwards with height.
- An upper air **cyclonic circulation** lies over Northeast Rajasthan & neighbourhood in lower tropospheric levels.
- ❖ A **trough** runs from South Interior Karnataka to Gulf of Mannar in lower tropospheric levels. Under the influence of these systems, the following weather is likely:

#### **Northeast India:**

❖ Light/moderate rain/thunderstorm at most/many places with isolated **heavy rainfall** likely over Arunachal Pradesh during 13<sup>th</sup>-18<sup>th</sup>; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 13<sup>th</sup>-16<sup>th</sup> & on 18<sup>th</sup>, 19<sup>th</sup> September with **very heavy falls over Arunachal Pradesh during 13<sup>th</sup> -16<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 13<sup>th</sup> and Assam & Meghalaya on 14<sup>th</sup> & 15<sup>th</sup> September.** 

#### **South Peninsular India:**

- ❖ Light to moderate rain/thunderstorm & gusty winds (speed 30-40 kmph) at many/some places with isolated heavy rainfall likely over Tamil Nadu on 13<sup>th</sup> & during 16<sup>th</sup>-19<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 13<sup>th</sup> & 14<sup>th</sup>; Rayalaseema on 13<sup>th</sup>; Telangana during 13<sup>th</sup>-17<sup>th</sup>; North Interior Karnataka during 13<sup>th</sup>-16<sup>th</sup> September with very heavy falls over Telangana on 13<sup>th</sup> September.
- Strong surface winds (speed reaching 30-50 kmph) very likely over Coastal Andhra Pradesh & Yanam and Rayalaseema during next 5 days.

#### East & Central India:

❖ Light to moderate rain/thunderstorm at most/many places with isolated **heavy rainfall** likely over West Madhya Pradesh during 14<sup>th</sup>-16<sup>th</sup>; East Madhya Pradesh, Vidarbha & Odisha during 13<sup>th</sup>-15<sup>th</sup>; Chhattisgarh during 13<sup>th</sup>-16<sup>th</sup>; Andaman & Nicobar Islands on 14<sup>th</sup> & during 17<sup>th</sup>-19<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim during 13<sup>th</sup>-19<sup>th</sup>; Bihar during 13<sup>th</sup>-17<sup>th</sup>; Jharkhand during 15<sup>th</sup>-17<sup>th</sup> September with isolated **very heavy falls over Sub-Himalayan West Bengal & Sikkim on 13<sup>th</sup> & 14<sup>th</sup> and Bihar during 14<sup>th</sup>-16<sup>th</sup> September.** 

#### West India:

❖ Light to moderate rain/thunderstorm at many/some places with isolated heavy rainfall likely over Konkan & Goa, Madhya Maharashtra & Marathawada during 13th-15thSeptember with very heavy falls over Konkan & Goa on 14th & 15th and Madhya Maharashtra on 15th September.

#### **Northwest India:**

❖ Light to moderate rain/thunderstorm at some/isolated places with **isolated heavy rainfall** likely over Himachal Pradesh on 13<sup>th</sup> & 14<sup>th</sup>; Uttarakhand during 13<sup>th</sup>-16<sup>th</sup>; north Punjab on 13<sup>th</sup>; East Uttar Pradesh during 15<sup>th</sup>-19<sup>th</sup> September with **very heavy falls over Uttarakhand on 13<sup>th</sup> September**.

#### Fishermen warning:

Fishermen are advised not to venture into the following areas:

#### **Arabian Sea:**

- Westcentral & adjoining southwest Arabian Sea and along & off Somalia coast during 13<sup>th</sup> to 15<sup>th</sup> September and off Oman-Yemen coasts during 14<sup>th</sup>-15<sup>th</sup> September.
- Northwest & adjoining westcentral Arabian Sea along & off Oman coast on 16<sup>th</sup> September, on 13<sup>th</sup> & 14<sup>th</sup> September.
- Eastcentral Arabian Sea and along & off Maharashtra coast on 15th September.

#### Bay of Bengal:

- ➤ Westcentral & adjoining northwest Bay of Bengal and along & off Andhra Pradesh North Tamil Nadu coasts on 13<sup>th</sup> September.
- ➤ Gulf of Mannar & adjoining Comorin area and over parts of southwest Bay of Bengal & along and off south Sri Lanka coast during 13<sup>th</sup>-18<sup>th</sup> September.

## ii. Weather conditions and forecast over Delhi/NCR during 13th September to 16th September 2025 (Annexure IV)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all india forcast bulletin.php

 $\textbf{For District wise warnings refer:} \ \underline{\text{https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php}}$ 

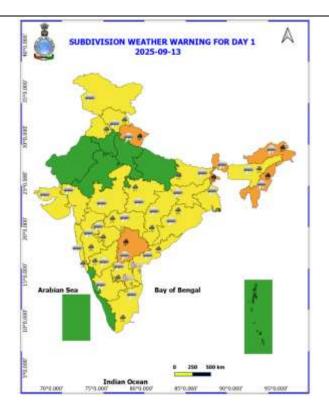
For Fishermen warning refer <a href="https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php">https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php</a>

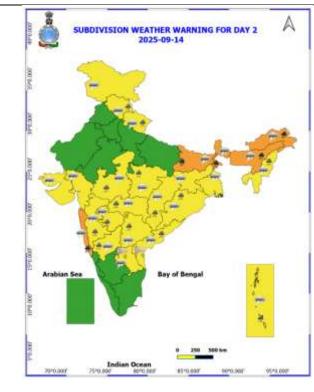
# Rainfall recorded (in cm) during past 24 hours till 0830 hours IST of today, the $13^{th}$ September ( $\geq 7$ cm):

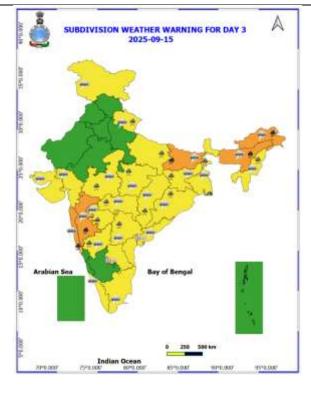
- Uttarakhand: Haripur (dist Dehradun) 25, Narendranagar (dist Garhwal Tehri) 23, Mussoorie (dist Dehradun) 19, Jollygrant (dist Dehradun) 11, Sama (dist Bageshwar) 11, Rishikesh (dist Dehradun) 8, Hardwar (dist Hardwar) 8;
- \* Sub-Himalayan West Bengal & Sikkim: Barobhisha (dist Alipurduar) 17, Chel (dist Jalpaiguri) 16, Buxaduar (dist Alipurduar) 14, Hilla T.e. (dist Jalpaiguri) 14, Chepan (dist Alipurduar) 13, Mekhliganj (dist Cooch Behar) 13, Amfu Pundibari (dist Cooch Behar) 11, Falakata (dist Alipurduar) 10, Ghish (dist Jalpaiguri) 10, Leesh River Tea Garden (dist Jalpaiguri) 10, Dalgaon Tea Estate (dist Alipurduar) 9, Washabari Tea Estate (dist Jalpaiguri) 9, Ghughumari (dist Cooch Behar) 8, Kurti T.e. (dist Jalpaiguri) 8, Diana Tea Estate (dist Jalpaiguri) 8, Bhagatpur Tea Estate (dist Jalpaiguri) 8, Ghatia T.e. (dist Jalpaiguri) 8, Chengmari/diana (dist Jalpaiguri) 7, Kumargram (dist Alipurduar) 7, Raidak Tea Estate (dist Alipurduar) 7, Alipurduar (pto) (dist Alipurduar) 7;
- \* Marathawada: Purna (dist Parbhani) 16, Palam (dist Parbhani) 11;
- ❖ Assam: Tinsukia (dist Tinsukia) 13, Gossaigaon\_ Aws (dist Kokrajhar) 8, Jiagaon (dist Tinsukia) 8, Dhubri\_imd (dist Dhubri) 8;
- \* East Madhya Pradesh: Bilhari (dist Katni) 11, Lalburra (dist Balaghat) 9;
- \* Himachal Pradesh: Palampur (dist Kangra) 9;
- Arunachal Pradesh: Longding Aws (dist Longding) 9;
- ❖ Telangana: Jakranpalle (dist Nizamabad) 9, Kollapur (dist Nagarkurnool) 9, Kasipet (dist Mancherial) 8, Dhar Palle (dist Nizamabad) 7, Navipet (dist Nizamabad) 7;
- Vidarbha: Hinganghat (dist Wardha) 9, Warora (dist Chandrapur) 8;
- \* Tamil Nadu & Puducherry: Puducherry Town (dist Puducherry) 8, Vilupuram (dist Villupuram) 7;
- Mizoram: Khawzawl Aws (dist Khawzawl) 8;
- Coastal Andhra Pradesh: Pusapatirega (dist Vizianagaram) 7;
- North Interior Karnataka: Dharwad (dist Dharwad) 7;
- West Uttar Pradesh: Najibabad (dist Bijnor) 7;
- Odisha: Bhapur (dist Nayagarh) 7;
- **❖ Bihar:** Sikta (dist West Champaran) 7;
- Jharkhand: Tilaiya (dist Koderma) 7.

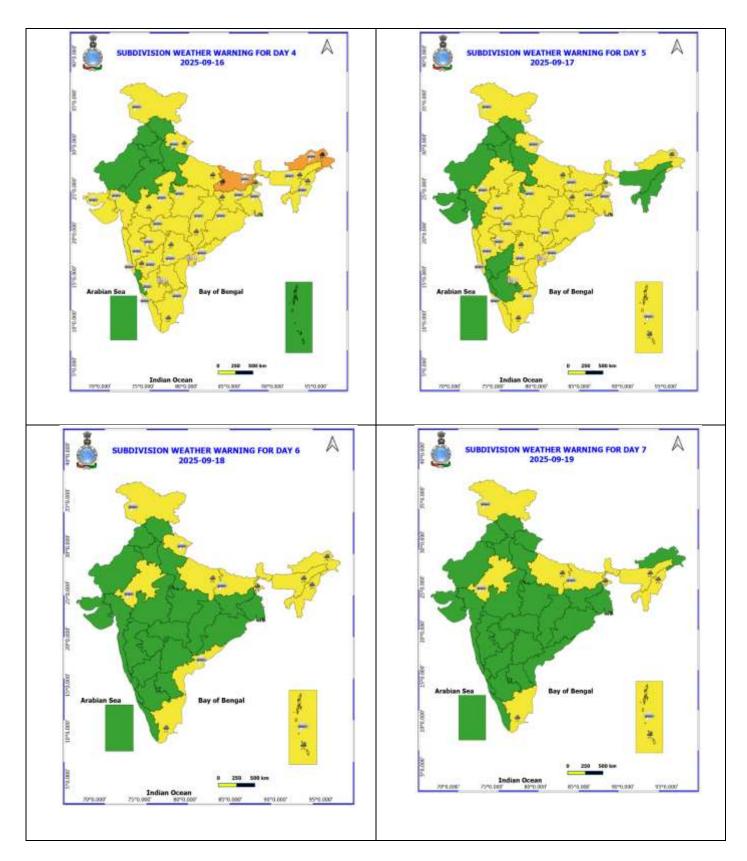
|       | Table  |                            | -C   |                               |  |       |  |      |
|-------|--|----------------------------|--|-------------------------------|--|-------|--|------|
| _     | 7 Days Rainfa  | Anne annual section of the | _  |                               |  |       |  |      |
| S.No. | Subdivision  |                            | 7.   | 1.70                          |  | 1,50  | 18- Sep  |      |
|       | AVE AVEC A VICE PART OF A VICE   | Day 1                      | Day 2  | Day 3                         | Day 4  | Day 5 | Day 6  | Day  |
|       | ANDAMAN & NICOBAR ISLANDS  | 7775                       | Wa   | VVA                           | Yes  | FIANC | FIAIR  | FLAN |
|       | ARUNACHAL PRADESH  | WY                         | WH   | WE                            | WS   | FWS   |  | FWS  |
|       | ASSAM & MEHGHALAYA   | With                       | WB   | Ws                            | ENG  | FWS   |  | SC   |
|       | NAGALAND, MANIPUR, MIZORAM AND TRIPURA   | YYS                        | WS   | WB                            | FWS  | FWS   | FWS  | SC   |
| -     | SUB HIMALAYAN WEST BENGAL & SIKKIM   | Yye                        | WS   | WA                            | Yes  | WE    | Yib  | FWS  |
| _     | GANGETIC WEST BENGAL   | FWS                        |  |                               |  | FWS   | The second secon | SC   |
| 7     | ODISHA   | W/A                        | FWS  |                               | SCT  | SCT   | SCT  | SC   |
|       | JHARKHAND  | FWS                        |  |                               | 453  | WE    | WS   | W    |
|       | BIHAR  | SCT                        |  |                               |  | FWS   | SCT  | SC   |
| _     | EAST UTTAR PRADESH   | ISOL                       |  |                               |  | SCT   | SCT  | SC   |
| 11    | WEST UTTAR PRADESH   | ISOL                       | Concession of the latest services of   |                               |  | SCT   | ISOL   | ISO  |
| 12    | AUTHORITA STUDIOS AND ANATONIA CONTRACTOR AND ANALYSIS ANALYSIS AND ANALYSIS AND ANALYSIS ANALYSIS AND ANALYSIS ANALYSI | WE                         | FWS  |                               |  | SCT   | SCT  | sc   |
| 13    | HARYANA, CHANDIGARH & DELHI  | ISOL                       | A STATE OF THE PARTY OF THE PAR |                               |  | SCT   | SCT  | SC   |
| - 2.2 | PUNJAB   | ISOL                       |  |                               |  | SCT   | SCT  | SC   |
| 15    | HIMACHAL PRADESH   | FWS                        | The second name of   |                               |  | SCT   |  | SC   |
| 16    | JAMMU AND KASHMIR AND LADAKH   | SCT                        | النخصد   | the condition of the          | المتاخفات  | SCT   |  | SG   |
| 17    | WEST RAJASTHAN   | DRY                        |  | The second name of the second |  | DRY   |  | ISO  |
| 18    | EAST RAJASTHAN   | ISOL                       | ISOL   | ISOL                          | ISOL   | ISOL  | ISOL   | ISO  |
| 19    | WEST MADHYA PRADESH  | ISOL                       | SCT  | FWS                           | FWS  | FWS   | FWS  | FWS  |
| 20    | EAST MADHYA PRADESH  | SCT                        | FWS  | FWS                           | FWS  | FWS   | FWS  | FWS  |
| 21    | GUJRAT REGION  | ISOL                       | SCT  | FWS                           | FWS  | FWS   | SCT  | SC   |
| 22    | SAURASHTRA & KUTCH   | ISOL                       | ISOL   | SCT                           | SCT  | SCT   | ISOL   | ISO  |
| 23    | KONKAN & GOA   | SCT                        | FWS  | We                            | FWS  | FWS   | FWS  | FWS  |
| 24    | MADHYA MAHARASHTRA   | SCT                        | FWS  | WS                            | FWS  | FWS   | SCT  | SC   |
| 25    | MARATHWADA   | FWS                        | FWS  | FWS                           | SCT  | SCT   | SCT  | SC   |
| 26    | VIDARBHA   | WS                         | WE   | WE                            | WS   | FWS   | FWS  | FWS  |
| 27    | CHHATTISGARH   | WS                         | WS   | FWS                           | FWS  | FWS   | FWS  | FWS  |
| 28    | COASTAL ANDHRA PRADESH   | FWS                        | SCT  | SCT                           | SCT  | SCT   | SCT  | FWS  |
| 29    | TELANGANA  | WE                         | WB   | WS                            | WS.  | SCT   | SCT  | SC   |
| 30    | A CONTRACTOR OF THE PROPERTY O | FWS                        | SCT  | ISOL                          | ISOL   | ISOL  | SCT  | FWS  |
| 31    | TAMILNADU & PUDUCHERRY   | ISOL                       |  | ISOL                          |  | SCT   | SCT  | Set  |
| 32    | COSTAL KARNATAKA   | SCT                        | FWS  | FWS                           | The second secon |       | 9/2  | FWS  |
| 33    |  | WE                         | WS   | 100                           | FWS  | FWS   | FWS  | FWS  |
|       | SOUTH INTERIOR KARNATAKA   | SCT                        | SCT  | SCT                           | FWS  | FWS   |  | FWS  |
|       | KERALA AND MAHE  | ISOL                       |  | FWS                           |  | FWS   |  | SC   |
|       | LAKSHADWEEP  | SCT                        |  | FWS                           | the same of the same of  | SCT   |  | SCT  |

• As the lead period increases forecast accuracy decrease.









- Action may be taken based on ORANGE AND REDCOLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

#### Weather forecast over Delhi/NCR during 13th to 16th September 2025

#### **Past Weather:**

There has been rise in the minimum temperature up to 1°C and no large change in maximum temperature over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi were around 33 to 34°C and 23 to 25°C respectively. The minimum and maximum temperatures were near normal. Partly cloudy sky conditions with predominant surface wind from the southwest/west direction with wind speeds up to 20 kmph prevailed during the past 24 hours. Mainly clear sky conditions with a wind speed of less than 14 kmph from the west direction prevailed over the region in the forenoon today.

#### **Weather Forecast:**

**13.09.2025:** Mainly clear sky becoming partly cloudy sky towards afternoon. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C. The maximum temperature will be above normal up to 1 to 2°C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 20-25 kmph during afternoon hours. The wind speed will decrease becoming less than 15 kmph from the northwest direction during the evening and night.

**14.09.2025:** Mainly clear sky becoming partly cloudy sky towards afternoon. Possibility of very light rain likely at isolated places. The maximum and minimum temperatures over Delhi are likely to be in the range of 33 to  $35^{\circ}$ C and 24 to  $26^{\circ}$ C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to  $1 - 2^{\circ}$ C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 20-22 kmph during morning hours. The wind speed will gradually increase becoming less than 25 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 12 kmph from the southwest direction during the evening and night.

**15.09.2025:** Mainly clear sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 33 to  $35^{\circ}$ C and 23 to  $25^{\circ}$ C respectively. The minimum temperature will be below normal up to  $1 - 2^{\circ}$ C and the maximum temperature will be above normal up to  $1 - 2^{\circ}$ C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 15-20 kmph during morning hours. The wind speed will gradually increase becoming less than 25 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 15 kmph from the southwest direction during the evening and night.

**16.09.2025:** Mainly clear sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 33 to  $35^{\circ}$ C and 24 to  $26^{\circ}$ C respectively. The minimum temperature temperatures will be near normal and the maximum temperature will be above normal up to  $1 - 2^{\circ}$ C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 15-20 kmph during morning hours. The wind speed will gradually increase becoming less than 25 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 15 kmph from the southwest direction during the evening and night.

#### **Impact & Action Suggested due to**

Heavy to very heavy rainfall (12-20 cm) at isolated places over Uttarakhand, Nagaland, Manipur, Mizoram & Tripura, Telangana on 13th; Arunachal Pradesh during 13th -16th; Sub-Himalayan West Bengal & Sikkim on 13th & 14th; Assam & Meghalaya, Konkan & Goa on 14th & 15th; Bihar during 14th-16th and Madhya Maharashtra on 15th September.

#### **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/landslips/mudslips/landsinks/mudsinks.
- > 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)

#### **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.

#### Agromet advisories for likely impact of Heavy / Heavy to Very Heavy Rainfall

- In Uttarakhand, drain out excess water from fields of green gram, black gram, soybean, barnyard millet and finger millet in Sub Humid Sub Tropic Zone. In Bhabar and Tarai Zone, maintain proper drainage in fields of rice, pigeon pea, black gram, green gram, finger millet, maize and soybean. Avoid sowing of potato and radish under heavy rainfall conditions and ensure proper drainage in already sown crop. In Hill Zone, undertake harvesting of matured crops of barnyard millet, ginger and rainfed rice and keep the harvested produce in safe place. Ensure proper drainage in pigeon pea and vegetable crops.
- In Arunachal Pradesh, immediately harvest matured crops of *Jhum* rice, soybean, finger millet, foxtail millet, vegetables, matured bunches of banana and matured fruits of apple and kiwi and shift to properly covered shelter. Maintain proper drainage in standing crops such as rice, soybean, finger millet, vegetables and fruit orchards to avoid water stagnation. Avoid fresh sowing of French bean during heavy rainfall and ensure proper drainage in already sown crop.
- ➤ In Assam, ensure proper drainage in fields of rice, sugarcane, black gram and sesame in Hill Zone. In Lower Brahmaputra Valley Zone, ensure proper drainage system in *Sali* rice fields and nursery bed of vegetables. Cover the nursery bed with thin polythene to avoid the damages due to heavy rainfall. In Barak Valley Zone, postpone the sowing of green gram and black gram and provide adequate drainage facilities in fields of rice, vegetables and already sown green gram and black gram.
- In Meghalaya, maintain proper drainage in ginger and vegetable fields and fruit orchards. Provide support to tall and fragile crops like banana, papaya, pumpkin, etc. to prevent lodging.
- > In Manipur, harvest matured colocasia and matured pods of soybean.
- In Sub-Himalayan West Bengal, drain out excess water from *aman* paddy and vegetable fields (chilli, bitter gourd, pointed gourd, okra, brinjal etc.) in Terai Zone.
- In Bihar, ensure proper drainage of excess rainwater from standing crops such as maize and vegetables in North West Alluvial Plain Zone and maize, finger millet and vegetables in North East Alluvial Zone.
- In Maharashtra, immediately harvest matured crops of green gram and black gram in Madhya Maharashtra and matured fuits of sapota and custard apple in Marathwada and keep the harvested produce at safer places. In Vidarbha, store the harvested produce of green gram and black gram at safe places, if storage is not possible cover the harvested produce with plastic or tarpaulin sheets. Make arrangements to drain out excess water from fields of vegetables and fruit orchards in Konkan; rice, sugarcane, pigeon pea, soybean, maize, vegetables and fruit orchards in Madhya Maharashtra; sugarcane, sorghum, soybean, turmeric, vegetables and fruit orchards in Marathwada; pigeon pea, cotton, soybean, maize, vegetables and fruit orchards in Vidarbha.
- ➤ In Andhra Pradesh, make arrangements to drain out excess water from fields of rice, maize, cotton, mesta, green gram, black gram, groundnut, sugarcane, and vegetables in North Coastal Zone; rice, sugarcane, maize, finger millet, groundnut, ginger, turmeric, vegetables and fruit orchards in High Altitude Tribal Zone and rice, maize, pigeon pea and cotton in Krishna Godavari Zone.
- ➤ In Telangana, ensure adequate drainage facilities in fields of rice, maize, cotton, soybean, pigeon pea, turmeric and vegetables to drain out excess rain water.

#### Livestock / Fishery

- > Keep the animals inside the shed during heavy rainfall and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- > Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

#### Agromet advisories for likely impact of Thunderstorm / Gusty Winds / Squally Winds

> Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

#### **Legends & abbreviations:**

- **♦ Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ Obsy: Observatory; Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- **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 Marathawada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



#### राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



#### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

### **LEGENDS**



#### SPATIAL DISTRIBUTION (% of Stations reporting)

| % Stations                             | Category                    |                        | % Stations | Cate                              | gory  |  |  |
|--|-----------------------------|------------------------|------------|-----------------------------------|---|--|--|
| 76-100                                 | Widespread (WS/Most Places) |                        | 26-50      | Scattered (SCT/A Few Places)      |   |  |  |
| 51-75                                  | Fairly Widesp               | read (FWS/Many Places) | 1-25       | isolated (ISOL)                   |   |  |  |
| Fog                                    |                             | Heavy Snow             | Cold Wave  | COLOUR CO                         | DED WARNING   |  |  |
| - 108                                  |                             | _                      | #          | No Warni                          | No Warning (No Action)                              |  |  |
| Heavy Rain                             |                             | Dust Storm             | Cold Day   | Watch (B                          | Watch (Be Aware) Alert (Be Prepared To Take Action) |  |  |
| Very Heavy Rain                        |                             | + Heat Wave            | Ground Fro | Alert (Be                         |   |  |  |
| Extremely Heavy Rain                   |                             | + Warm Night           |            | Warning                           | Warning (Take Action)                               |  |  |
| Thunder & Lightning                    |                             | + Hot Day              |            |                                   | bilistic Forecast                                   |  |  |
|  |                             | 4                      |            | Terms                             | Probability of Occurrence (%                        |  |  |
| Hailstorm Photography                  |                             | Hot & Humid            |            | Unlikely<br>Likely<br>Very Likely | < 25<br>25 - 50<br>50 - 75                          |  |  |
| Dust Raising Winds Strong Surface Wind |                             |                        | ds         | Most Likely                       | > 75  |  |  |





|                 | Heavy: 64.5 to 115.5 mm/cm *   |
|-----------------|--|
| ain/ Snow *     | Heavy: 04.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm*   |
|                 | Extremely Heavy: > 204.4 mm/cm *   |
|                 | When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions   |
|                 | (a) Based on Departure from normal   |
|                 | Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.   |
|                 | Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C  |
| leat Wave       | (b). Based on Actual maximum temperature   |
|                 | Heat Wave: When actual maximum temperature ≥45°C.  Severe Heat Wave: When actual maximum temperature ≥47°C   |
|                 | A STATE OF THE STA |
|                 | ( c). Criteria for heat wave for coastal stations  When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum   |
|                 | temperature ≥37°C  |
|                 | When maximum temperature remains 40°C  |
| arm Night       | Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.   |
|                 | Severe Warm Night: When minimum temperature departure >6.4 °C.   |
|                 |  |
|                 | When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions.  (a). Based on departure  |
|                 | Cold Wave: Minimum Temperature Departure from normal +4.5 °C to -6.4 °C.   |
|                 | Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C  |
| old Wave        | (b) Based on actual Minimum Temperature (for Plains only)  |
|                 | Cold Wave: When Minimum Temperature, is ≤ 4.0 °C   |
|                 | Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C   |
|                 | ( c) For Coastal Stations  |
|                 | When Minimum Temperature is ≤ -4.5 °C & actual Minimum Temperature is ≤ 15 °C  |
|                 | When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions  |
|                 | Based on departure   |
| Cold Day        | Cold Day: Maximum Temperature Departure from normal -4.5 °C to -5.4 °C.  |
|                 | Severe Cold Day: Maximum Temperature Departure from normal s -6.5 °C   |
|                 | Phenomenon of small droplets suspended in air and the horizontal visibility < 1km  |
|                 | Moderate Fog: When the visibility between 500-200 metres   |
| Fog             | Dense Fog: when the visibility between 50- 200 metres  |
|                 | Very Dense Fog: when the visibility < 50 metres  |
| understorm      | Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)   |
|                 | sound (thunder)  |
| Dust/Sand       | An ensemble of particles of dust or sand energetically lifted to great heights by a strong and   |
| Storm           | turbulent wind.  |
| (Market et la 1 | Ice deposits on ground   |
| Frost           | Air temperature ≤4°C ( over Plains)  |
|                 |  |
|                 | A strong wind that rises suddenly, lasts for atleast 1 minute.  Moderate: Wind speed 52-61 kmph  |
| Squall          | Severe: Wind speed 62-67 kmph  |
|                 | Very Severe: Wind speed >87 kmph   |
|                 | Effect of various waves in the sea over specific area  |
| 5 50            | Rough to very rough: Wind speed 41-82 kmph (22-33 knots) & Wave height 2.5-6 metre   |
| Sea State       | High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  |
|                 | Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre   |
|                 | Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  |
|                 | Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)  |
| Cyclone         | Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)  |
|                 | Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)   |
|                 | Super Cyclone Strom: Wind speed >220 kmph (>119 knots)   |

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.
For more details, kindly visit https://mausam.imd.gov.in or contact: 011-2434-4599
(Service to the Nation since 1875)

**Hot and Humid:** When maximum temperatures remain 3°C above normal along with the above normal relative humidity.