

Ministry of Earth Sciences
India Meteorological Department

Press Release Date: 23<sup>rd</sup> September, 2022

Time of Issue: 1230 hrs IST

Subject: Intense spell of rainfall likely to continue over parts of plains of northwest India during next 2 days; over Himachal Pradesh & Uttarakhand during next 3 days and significant reduction thereafter.

Weather observed during past 24 hours ending at 0830 hrs IST of today: (Refer Annex. I)

#### Withdrawal of Southwest Monsoon

➤ The line of withdrawal of Southwest Monsoon passes through Khajuwala, Bikaner, Jodhpur and Naliya.

### Weather systems, rainfall/thunderstorm Forecast & Warnings: (Warning Graphics in Annexure II)

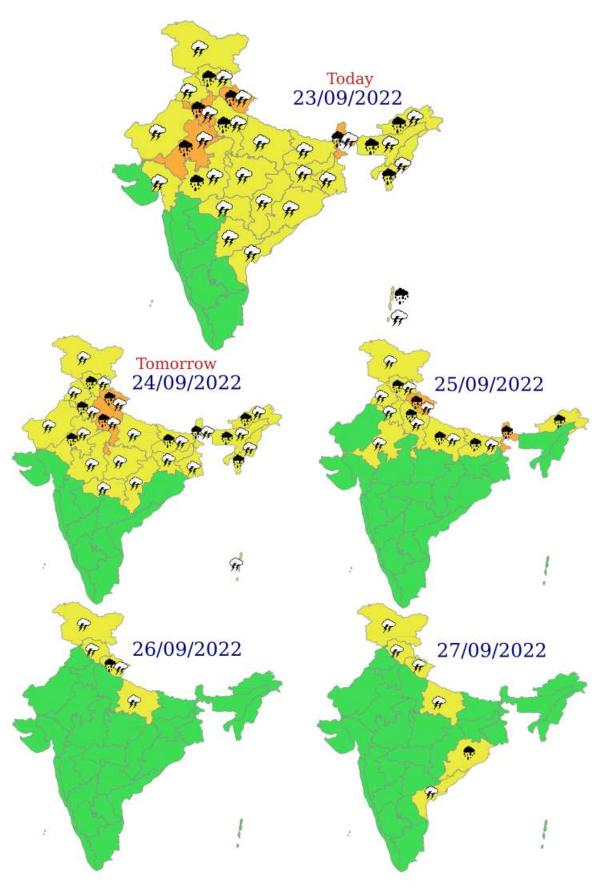
- > A cyclonic circulation lies over northwest Madhya Pradesh & neighbourhood and extends upto middle tropospheric levels.
- > A trough runs from cyclonic circulation over northwest Madhya Pradesh & neighbourhood to Northwest Bay of Bengal in lower tropospheric levels.
- > A fresh Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 65°E to the north of Lat. 30°N.
- > Under the influence of above systems:
  - o Fairly widespread/widespread light/moderate rainfall with **isolated heavy falls** & **thunderstorm/lightning** very likely over Uttarakhand during 23<sup>rd</sup>-26<sup>th</sup>; Himachal Pradesh and West Uttar Pradesh during 23<sup>rd</sup>-25<sup>th</sup>; Haryana, Chandigarh and East Rajasthan on 23<sup>rd</sup> & 24<sup>th</sup>; East Uttar Pradesh on 25<sup>th</sup> and Delhi & West Madhya Pradesh on 23<sup>rd</sup> September, 2022. **Isolated very heavy rainfall also likely over Uttarakhand during 23<sup>rd</sup>-25<sup>th</sup>; Haryana & East Rajasthan on 23<sup>rd</sup> and West Uttar Pradesh on 24<sup>th</sup> September, 2022.**
  - Fairly widespread/widespread light/moderate rainfall with isolated heavy falls & thunderstorm/lightning very likely over Sub-Himalayan West Bengal & Sikkim during 23<sup>rd</sup>-25<sup>th</sup>; Andaman & Nicobar Islands on 23<sup>rd</sup>; Bihar on 24<sup>th</sup> & 25<sup>th</sup> and Odisha on 27<sup>th</sup> September, 2022. Isolated very heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim on 23<sup>rd</sup> & 25<sup>th</sup> September, 2022.
  - Fairly widespread/Widespread light/moderate rainfall with isolated heavy falls & thunderstorm/lightning very likely over Arunachal Pradesh during 23<sup>rd</sup>-25<sup>th</sup>; Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 23<sup>rd</sup> & 24<sup>th</sup> September, 2022.
  - For more details kindly refer:
     https://mausam.imd.gov.in/imd\_latest/contents/all\_india\_forcast\_bulletin.php

**Very heavy rainfall** occurred at isolated places over Haryana, East Uttar Pradesh, Arunachal Pradesh, Andaman & Nicobar Islands, Sikkim and West Madhya Pradesh and **heavy rainfall** at isolated places over Sub-Himalayan West Bengal, Delhi, East Madhya Pradesh, Telangana, Uttarakhand, Arunachal Pradesh, Tripura, Assam and Gujarat Region.

### Rainfall (in cm):

- Haryana: Ballabgarh (dist Faridabad) 18, Faridabad (dist Faridabad) 15, Palwal (dist Palwal) 12, Manesar Rev (dist Gurgaon) 11, Gurgaon Rev (dist Gurgaon) 11, Mandkhola Aws (dist Nuh) 11, Sohana (dist Gurgaon) 11, Mewat Nuh Aws (dist Nuh) 11, Gurgaon Aws (dist Gurgaon) 11, Hodal (dist Palwal) 10, Taoru (dist Nuh) 9, Karnal (dist Karnal) 8, Farukhnagar (dist Gurgaon) 7;
- West Uttar Pradesh: Etah (Etah) 17; Aligarh (Aligarh) 13; Narora (Bulandshahar) 10; Deoband (Saharanpur) 10; Budaun (Badaun) 10; Tundla (Firozabad) 9; Jalesar (Etah) 9; Sikandarabad (Bulandshahar) 8; Atrauli (Aligarh) 8;
- Arunachal Pradesh: Bhalukpong (dist West Kameng) 14;
- Andaman & Nicobar Islands: Car Nicobar: 14, IAF Car Nicobar: 10;
- Sikkim: Sankalan : 13, Singhik : 11;
- West Madhya Pradesh: Guna-aws (dist Guna) 12, Bamori (dist Guna) 10, Lateri (dist Vidisha) 9, Sironj (dist Vidisha) 9, Shivpuri (dist Shivpuri) 8, Sheopur-aws (dist Sheopur) 7, Badoda (dist Sheopur) 7;
- East Rajasthan: Kotkasim Sr (Alwar) 12; Anta Sr (Baran) 9; Govindgarh Sr (Alwar) 8; Baran (Baran) 8; Paowta (Jaipur) 8; Bansur (Alwar) 8; Tatgarh Sr (Ajmer) 7; Nagar Sr (Bharatpur) 7;
- Sub-Himalayan West Bengal & Sikkim: Hasimara: 11, Nagrakata: 10, Buxaduar: 9, Bagrakote: 8, Chepan: 8, Barobhisha: 7, Murti: 7, Rongo: 7; Pachpahar Sr (Jhalawar) 7; Uniara / Aligarh (Tonk) 7; Deogarh (Rajsamand) 7;
- Delhi: Ayanagar: 11, Palam 10, Safdarjung & Lodi Road 7 each;
- East Madhya Pradesh: Balaghat-aws (dist Balaghat) 9, Mohgaon (dist Mandla) 7, Ghughri (dist Mandla) 7;
- Uttarakhand: Haridwar & Roshnabad (dist Haridwar) 9 each;
- Assam: Gossaigaon AGRI (dist Kokrajhar) 8;
- Tripura: Khowai (AWS) (dist Khowai) 7;
- Telangana: Yellareddy (dist Kamareddy) 7;
- Gujarat Region: Umergam (dist Valsad) 7.

## **Annexure II**



#### **IMPACT EXPECTED & ACTION SUGGESTED DUE TO-**

Isolated very heavy rainfall over Uttarakhand during 23<sup>rd</sup>-25<sup>th</sup>; Haryana & East Rajasthan on 23<sup>rd</sup>; West Uttar Pradesh on 24<sup>th</sup> and over Sub-Himalayan West Bengal & Sikkim on 22<sup>nd</sup> & 25<sup>th</sup> September, 2022.

### 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**

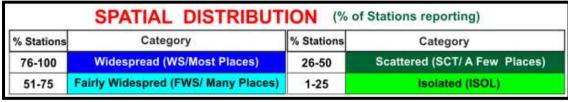
- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

# Legends:

**Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

# Region wise classification of meteorological Sub-Divisions:

- 1) **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.
- 2) Central India: West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.





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

**F** Thunderstorm with Lightning