



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

**Press Release
Date: 16th September, 2022
Time of Issue: 1230 hrs IST**

Subject: Due to Well Marked Low Pressure Area over central parts of Uttar Pradesh, very heavy to extremely heavy falls over Uttarakhand & north Uttar Pradesh on 16th & 17th September, 2022.

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

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

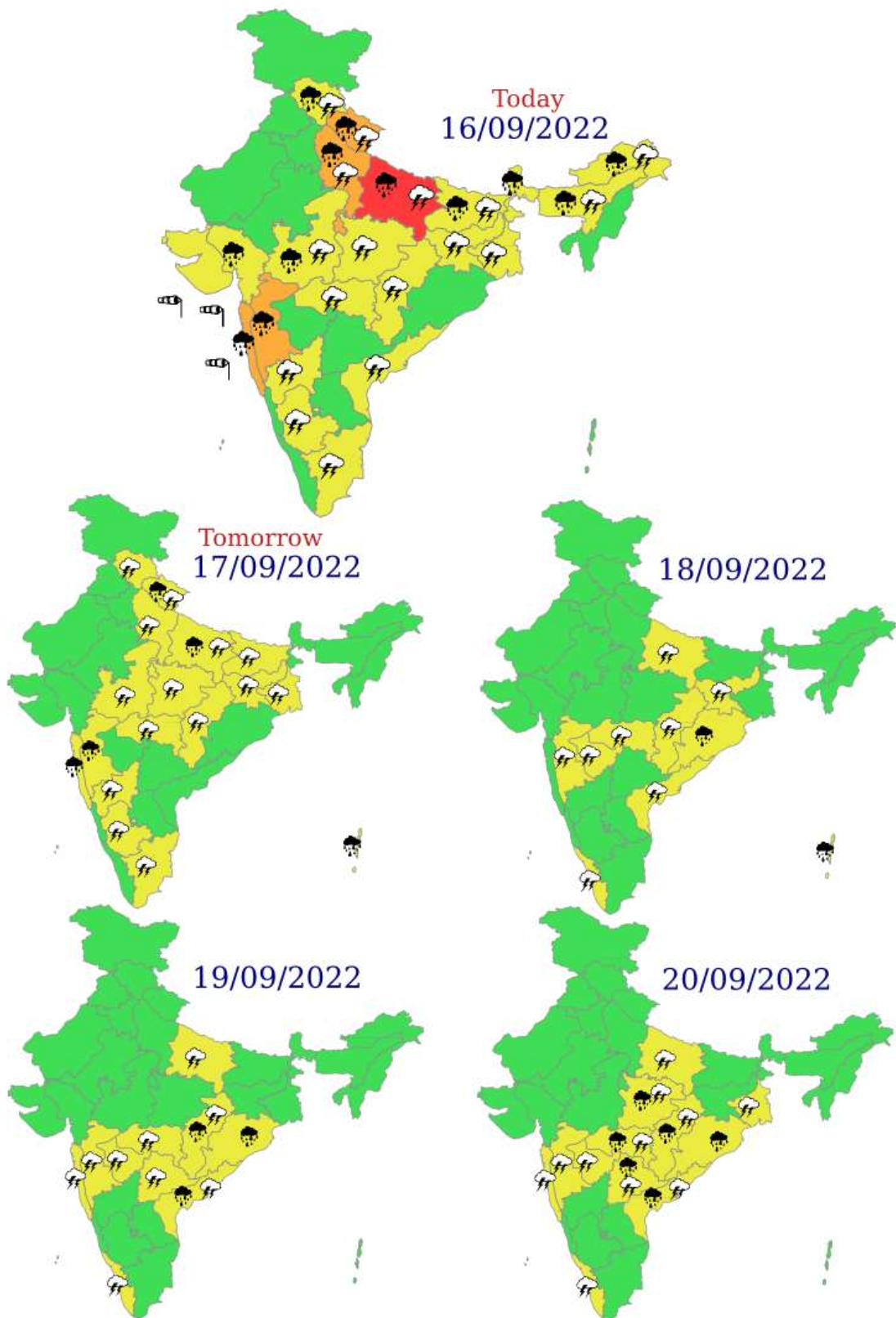
- Yesterday's **Well Marked Low Pressure Area** over northwest Madhya Pradesh & neighbourhood now lies over central parts of Uttar Pradesh with associated cyclonic circulation extending upto mid-tropospheric levels. It is likely to move east-northeastwards during next 24 hours.
- An upper air cyclonic circulation is likely to form over Northwest & adjoining Westcentral Bay of Bengal around 18th September, 2022. Under its influence, a Low Pressure Area is likely to form over the same region during subsequent 48 hours.
- **Under their influence:**
 - FWS/WS light/moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely over Himachal Pradesh & West Madhya Pradesh on 16th; Uttarakhand & East Uttar Pradesh on 17th September, 2022. **Isolated heavy to very heavy rainfall also likely over Uttarakhand & north Uttar Pradesh on 16th September, 2022. Isolated heavy to very heavy rainfall with extremely heavy falls also likely over northern parts of East Uttar Pradesh on 16th September, 2022.**
 - FWS/WS light/moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely over Bihar, Sub-Himalayan West Bengal & Sikkim and Gujarat Region on 16th; ghat areas of Madhya Maharashtra and Konkan & Goa on 16th & 17th; Chhattisgarh on 19th & 20th; East Madhya Pradesh & Vidarbha on 20th and over Odisha during 18th-20th September, 2022. **Isolated very heavy rainfall also likely over ghat areas of Madhya Maharashtra and Konkan & Goa on 16th and over Odisha on 20th September, 2022.**
 - Subdued rainfall activity likely over South Peninsular & Northeast India during next 5 days.

For more details kindly refer: https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Extremely heavy rainfall occurred at isolated places over East Uttar Pradesh; **heavy to very heavy rainfall** over Himachal Pradesh, Bihar, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Gujarat State, Manipur, Meghalaya and **heavy rainfall** at isolated places over West Uttar Pradesh, East Rajasthan, West Bengal, East Madhya Pradesh, Haryana-Chandigarh, Arunachal Pradesh and Coastal Karnataka.

Rainfall (in cm):

- ❖ **East Uttar Pradesh:** Fatehpur Tehsil (dist Barabanki) 29, Ramnagar (dist Barabanki) 27, Haidargarh (dist Barabanki) 21, Dhaurahara (dist Kheri) 21, Elgin Bridge (dist Barabanki) 20, Lucknow (hs) (dist Lucknow) 20, Lucknow (Cr) (dist Lucknow) 20, Bhatpurwaghat (dist Sitapur) 19, Sirauli Gauspur Tehsil (dist Barabanki) 18, Bara Banki (dist Barabanki) 17, Kaiserganj (dist Bahraich) 17, Lucknow (Ap) (dist Lucknow) 16, Mahsi (dist Bahraich) 14, Nawabganj Tehsil (dist Barabanki) 13, Chanderdeepghat (dist Gorakhpur) 13, Ayoadhya (dist Ayodhya) 13, Neemsar (dist Sitapur) 12, Kanpur Iaf (dist Kanpur City) 12, Ghosi (dist Mau) 11, Bhinga (dist Shrawasti) 11, Deoria (dist Deoria) 11, Rasra (dist Ballia) 11, Bahraich (dist Bahraich) 10, Bindki (dist Fatehpur) 10, Gaighat (Bla Fmo) (dist Ballia) 9, Gonda Cwc (dist Gonda) 9, Ram Sanehi Ghat Tehsil (dist Barabanki) 9, Tulasipur (dist Balrampur) 8, Nanpara (dist Bahraich) 8, Mehdawal (dist Sant Kabir Nagar) 8, Ballia Obsy (dist Ballia) 8, Kanpur Obsy (dist Kanpur City) 8, Malihabad (dist Lucknow) 7, Ikauna (dist Shrawasti) 7, Kakerdarighat (dist Shrawasti) 7, Zamania (dist Ghazipur) 7, Bansi Tehsil (dist Siddharth Nagar) 7, Misrikh (dist Sitapur) 7;
- ❖ **Gujarat Region:** Dolvan (dist Tapi) 20, Bardoli (dist Surat) 17, Vansda (dist Navsari) 15, Vapi (dist Valsad) 15, Khergam (dist Navsari) 14, Pardi (dist Valsad) 13, Navsari (dist Navsari) 13, Waghai (dist Dangs) 13, Dharampur (dist Valsad) 13, Kaprada (dist Valsad) 12, Chikhli (dist Navsari) 12, Gandevi (dist Navsari) 12, Palsana (dist Surat) 12, Dangs (ahwa) (dist Dangs) 12, Mahuva (dist Surat) 11, Valod (dist Tapi) 11, Mangrol (dist Surat) 11, Valsad (dist Valsad) 11, Umerpada (dist Surat) 11, Daman (dist Daman) 10, Silvassa (dist Dadara & Nagar Haveli) 10, Vyara (dist Tapi) 9, Nandod (dist Narmada) 9, Daman Fmo (dist Daman) 9, Jalalpor (dist Navsari) 9, Subir (dist Dangs) 9, Umergam (dist Valsad) 9, Mandvi (dist Surat) 8, Ukai (dist Surat) 8, Nanipalson (dist Valsad) 7, Songadh (dist Tapi) 7, Khanvel (dist Dadara & Nagar Haveli) 7;
- ❖ **West Madhya Pradesh:** Biaora (dist Rajgarh) 18, Zirapur (dist Rajgarh) 10, Sanwer (dist Indore) 10, Moman Badodiya (dist Shajapur) 9, Sonkatch (dist Dewas) 9, Dewas-aws (dist Dewas) 9, Raoti (dist Ratlam) 9, Bhitwarwar (dist Gwalior) 7, Raghogarh (dist Guna) 7, Narsingarh (dist Rajgarh) 7;
- ❖ **Bihar:** West Champaran-17, East Champaran-15, Buxar-9, Nawada, Muzaffarpur & Siwan 7 each Kathiyar-8;
- ❖ **Manipur:** Kangkopki-15;
- ❖ **Meghalaya:** Williamnagar-14, Sohra-11, Shella-8;
- ❖ **Konkan & Goa:** Shahapur (dist Thane) 13, Matheran (dist Raigad) 12, Uran (dist Raigad) 10, Jawhar (dist Palghar) 10, Panvel_agri (dist Raigad) 9, Murbad (dist Thane) 9, Ulhasnagar (dist Thane) 9, Wada (dist Palghar) 8, Mokheda - Fmo (dist Palghar) 8, Karjat_agri (dist Raigad) 8, Bhiwandi (dist Thane) 8, Kalyan (dist Thane) 8, Ambernath (dist Thane) 7, Khalapur (dist Raigad) 7, Tala (dist Raigad) 7, Sudhagad Pali (dist Raigad) 7;
- ❖ **Madhya Maharashtra:** Igatpuri (dist Nashik) 12, Mahabaleshwar- Imd Obsy (dist Satara) 11, Lonavala_agri (dist Pune) 11, Peth (dist Nashik) 8
- ❖ **Himachal Pradesh:** Sirmaur-12;
- ❖ **Saurashtra & Kutch:** Diu (dist Diu) 12, Kodinar (dist Gir Somnath) 10, Sutrapada (dist Gir Somnath) 7;
- ❖ **Coastal Karnataka:** Ankola (dist Uttara Kannada) 10;
- ❖ **West Uttar Pradesh:** Tahrauli (dist Jhansi) 10, Hamirpur Obsy (dist Hamirpur) 9, Hamirpur Cwc (dist Hamirpur) 9, Jansath (dist Muzaffarnagar) 7, Muzaffarnagar(t) (dist Muzaffarnagar) 7, Bijnor (dist Bijnor) 7, Chandpur (dist Bijnor) 7.
- ❖ **Sub-Himalayan West Bengal:** Buxaduar-9;
- ❖ **East Madhya Pradesh:** Orchha (dist Niwari) 9;
- ❖ **Gangetic West Bengal:** Monteswar-8, Mankar & Sundarpur(Murshidabad)-7 each;
- ❖ **Haryana-Chandigarh:** Jagadhari (dist Yamuna Nagar) 8, Dadupur (dist Yamuna Nagar) 7;
- ❖ **East Rajasthan:** Jhalawar & Bharatpur-7 each;
- ❖ **Arunachal Pradesh:** Bhalukpong & Passighat-7 each.



IMPACT EXPECTED & ACTION SUGGESTED DUE TO-

- i) Isolated **extremely heavy rainfall** over East Uttar Pradesh on 16th September, 2022.
- ii) Isolated **very heavy rainfall** over Uttarakhand, Uttar Pradesh, ghat areas of Madhya Maharashtra and Konkan & Goa on 16th and over Odisha on 20th 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.

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 Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



 **Thunderstorm with Lightning**

WARNING	
WARNING (TAKE ACTION)	
ALERT (BE PREPARED)	
WATCH (BE UPDATED)	
NO WARNING / NO ACTION	

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