



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

**Press Release**  
**Date: 13<sup>th</sup> September, 2022**  
**Time of Issue: 1315 hrs IST**

**Subject:** i) **Well Marked Low Pressure Area over central parts of Madhya Pradesh & neighbourhood.**  
ii) **Intense spell of rainfall likely to continue over south Gujarat Region, north Maharashtra and Madhya Pradesh during next 4-5 days.**  
iii) **Isolated heavy to very heavy rainfall likely over plains of Northwest India, Uttarakhand & Himachal Pradesh during 14<sup>th</sup>-17<sup>th</sup> 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 southeast Madhya Pradesh & neighbourhood now lies over central parts of Madhya Pradesh. It is likely to move nearly northwestwards slowly towards north Madhya Pradesh.
- The western end of the **monsoon trough** at mean sea level runs south of its normal position and its eastern end runs near its normal position.
- A trough runs from Northwest Arabian Sea to north Bangladesh and extends upto mid-tropospheric levels.
- An upper air cyclonic circulation is likely to form over North Bay of Bengal along & off north Odisha-west Bengal coasts around 18<sup>th</sup> September, 2022.

**Under the influence of the above systems:**

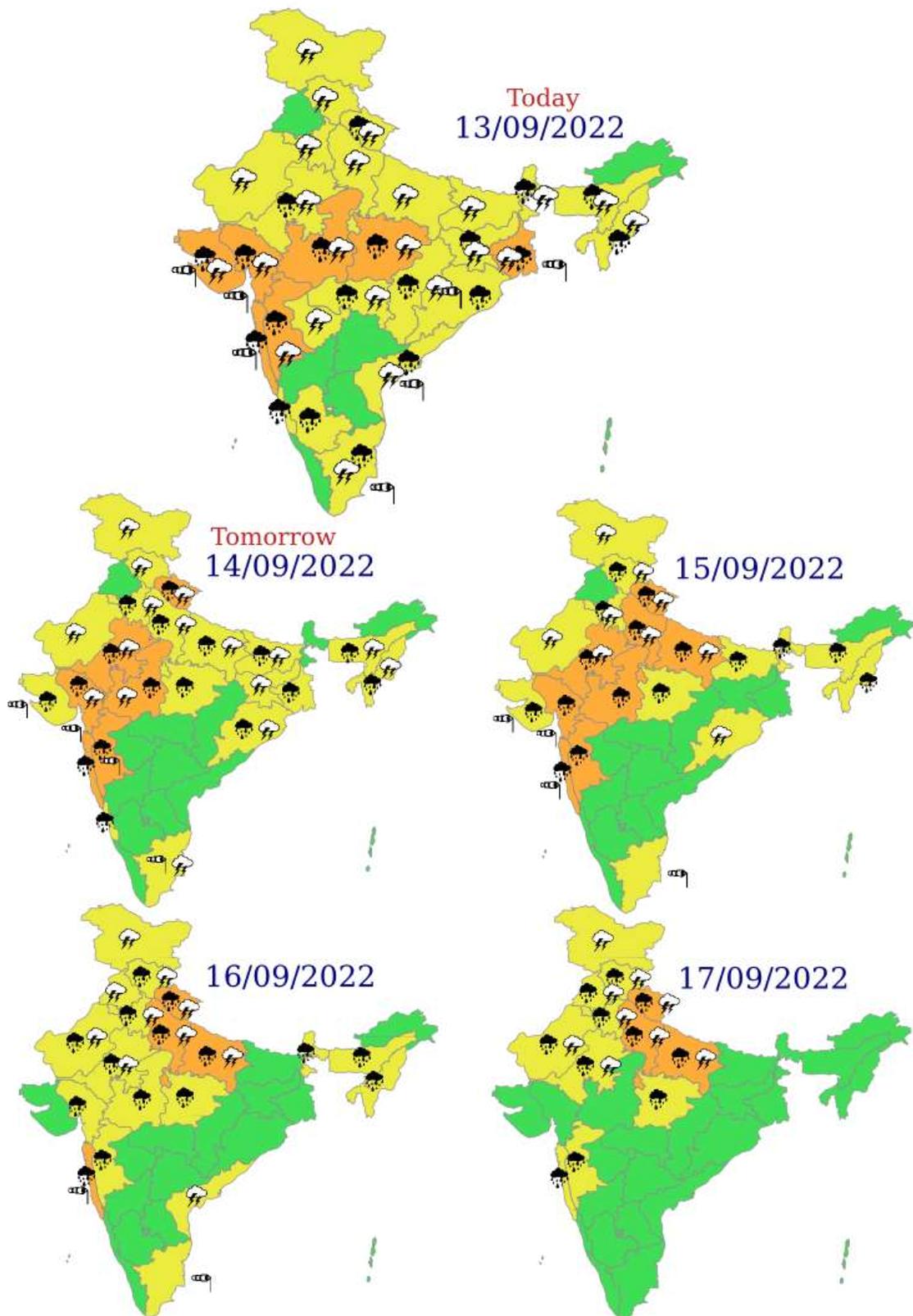
- FWS/WS light/moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely over Jharkhand, Chhattisgarh & Vidarbha on 13<sup>th</sup>; Gangetic West Bengal & Odisha on 13<sup>th</sup> & 14<sup>th</sup>; Bihar on 14<sup>th</sup> & 15<sup>th</sup>; Sub- Himalayan West Bengal & Sikkim on 13<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup>; Saurashtra & Kutch during 13<sup>th</sup>-15<sup>th</sup>; West Madhya Pradesh & Gujarat Region during 13<sup>th</sup>-16<sup>th</sup> and over East Madhya Pradesh, ghat areas of Madhya Maharashtra and Konkan & Goa during next 5 days. **Isolated very heavy rainfall also likely over East Madhya Pradesh, Gangetic West Bengal & Saurashtra & Kutch on 13<sup>th</sup>; West Madhya Pradesh, ghat areas of Madhya Maharashtra & Gujarat Region during 13<sup>th</sup>-15<sup>th</sup> and over Konkan & Goa during 13<sup>th</sup>-16<sup>th</sup> September, 2022. Isolated extremely heavy rainfall also likely over ghat areas of Madhya Maharashtra on 15<sup>th</sup> September, 2022.**
- FWS/WS light/moderate rainfall with isolated **heavy falls** and **thunderstorm/lightning** very likely over Haryana-Chandigarh-Delhi & Uttar Pradesh during 14<sup>th</sup>-17<sup>th</sup>; West Rajasthan on 16<sup>th</sup> & 17<sup>th</sup>; Punjab on 17<sup>th</sup>; Himachal Pradesh during 15<sup>th</sup>-17<sup>th</sup>; Uttarakhand & East Rajasthan during next 5 days. **Isolated very heavy rainfall also likely over East Rajasthan on 14<sup>th</sup> & 15<sup>th</sup>; Uttar Pradesh during 15<sup>th</sup>-17<sup>th</sup> and over Uttarakhand during 14<sup>th</sup>-17<sup>th</sup> September, 2022. Isolated extremely heavy rainfall also likely over Uttarakhand on 17<sup>th</sup> September, 2022.**
- FWS/WS light/moderate rainfall with isolated **heavy falls** and **thunderstorm/lightning** very likely over Coastal Andhra Pradesh, South Interior Karnataka and ghat areas of Tamilnadu on 13<sup>th</sup> and over Coastal Karnataka on 13<sup>th</sup> & 14<sup>th</sup> and September, 2022.

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

**Heavy to very heavy rainfall** occurred at isolated places over Madhya Pradesh, Vidarbha, Saurashtra & Kutch, Madhya Maharashtra, Gangetic West Bengal, Coastal Andhra Pradesh and Tamil Nadu and **heavy rainfall** at isolated places over East Uttar Pradesh, Gujarat Region, Chhattisgarh, Konkan & Goa, Marathwada, Nagaland, Assam & Meghalaya, Arunachal Pradesh, Jharkhand, Coastal & South Interior Karnataka.

**Rainfall (in cm):**

- ❖ **Coastal Andhra Pradesh:** Bheemunipatnam (dist Vishakhapatnam) 20, Kalingapatnam (dist Srikakulam) 7;
- ❖ **Gangetic West Bengal:** Haldia-18, Diamond Harbour-16, Canning-15, Saltlake-9, Kolkata (Ap)-8, Kolkata (Alp) & Amfu Kakdwip-7 each;
- ❖ **Vidarbha:** Bhandara (dist Bhandara) 18, Gondia Ap (dist Gondia) 13, Nagpur Aerodrome (dist Nagpur) 13, Gondia (dist Gondia) 10, Kuhi (dist Nagpur) 8, Hingna (dist Nagpur) 8, Pauni (dist Bhandara) 7, Lakhani (dist Bhandara) 7, Arvi (dist Wardha) 7, Katol (dist Nagpur) 7;
- ❖ **East Madhya Pradesh:** Mohkheda (dist Chindwara) 17, Paraswada (dist Balaghat) 11, Kareli (dist Narsinghpur) 10, Mohgaon (dist Mandla) 9, Bargi (dist Jabalpur) 9, Sausar (dist Chindwara) 9, Birsa (dist Balaghat) 9, Malanjkhanda (dist Balaghat) 9, Tirodi (dist Balaghat) 8, Barghat (dist Seoni) 8, Bichhua (dist Chindwara) 8, Amarkantak (dist Anuppur) 8, Umreth (dist Chindwara) 8, Kirnapur (dist Balaghat) 8, Tamia (dist Chindwara) 8, Bichhia (dist Mandla) 8, Junnardeo (dist Chindwara) 7, Hatta (dist Damoh) 7, Seoni (dist Seoni) 7, Harrai (dist Chindwara) 7, Narayanganj (dist Mandla) 7;
- ❖ **Tamil Nadu:** Nilgiris: Pandalur-17, Devala-12, Wood Braiyar Estate-10;
- ❖ **Saurashtra & Kutch:** Amreli (dist Amreli) 13, Kutiana (dist Porbandar) 13, Visavadar (dist Junagadh) 10, Mendarda (dist Junagadh) 9, Lakhtar (dist Surendranagar) 9, Junagadh (dist Junagadh) 8, Bhesan (dist Junagadh) 8, Rajkot (dist Rajkot) 8, Veraval (dist Gir Somnath) 8, Babra (dist Amreli) 7, Vadia (dist Amreli) 7;
- ❖ **Madhya Maharashtra:** Gaganbawada (dist Kolhapur) 13, Mahabaleshwar- Imd Obsy (dist Satara) 12, Radhanagari (dist Kolhapur) 9;
- ❖ **West Madhya Pradesh:** Bhainsdehi (dist Betul) 12, Khandwa (dist Khandwa) 10, New Harsud (dist Khandwa) 8, Pachmarhi (dist Narmadapuram) 7, Khalwa (dist Khandwa) 7;
- ❖ **Konkan & Goa:** Mulde\_ Agri (dist Sindhudurg) 11, Kudal (dist Sindhudurg) 10, Santacruz - Imd Obsy (dist Mumbai Suburban) 9, Guhagarh (dist Ratnagiri) 9, Lanja (dist Ratnagiri) 9, Vaibhavwadi (dist Sindhudurg) 9, Malvan (dist Sindhudurg) 8, Kankavli (dist Sindhudurg) 7, Vasai (dist Palghar) 7, Wakwali\_agri (dist Ratnagiri) 7;
- ❖ **East Uttar Pradesh:** Pratapgarh-11;
- ❖ **South Interior Karnataka:** Kottigehara (dist Chikkamagaluru) 11;
- ❖ **Jharkhand:** Dhanbad & Koderma-10 each, Hazaraibag-9,
- ❖ **Nagaland:** Wokha-10;
- ❖ **Assam:** Baksa-9, Kamrup-8, Golaghat & Karbi Anglong-7 each;
- ❖ **Gujarat Region:** Navsari (dist Navsari) 9, Surat City (dist Surat) 9, Jalalpor (dist Navsari) 8, Surat\_aws (dist Surat) 8, Navasari\_aws (dist Navsari) 7;
- ❖ **Coastal Karnataka:** Kadra (dist Uttara Kannada) 8;
- ❖ **Chhattisgarh:** Rajpur (dist Balrampur) 7, Mohla (dist Rajnandgaon) 7;
- ❖ **Marathwada:** Kaij (dist Beed) 7, Pathri (dist Parbhani) 7;
- ❖ **Meghalaya:** Willisamnagar-7;
- ❖ **Arunachal Pradesh:** Tirap-7.



## IMPACT EXPECTED & ACTION SUGGESTED DUE TO-

- i) Isolated **extremely heavy rainfall** over ghat areas of Madhya Maharashtra on 15th & Uttarakhand on 17th September, 2022.
- ii) Isolated **very heavy rainfall** over East Madhya Pradesh, Gangetic West Bengal & Saurashtra & Kutch on 13th; West Madhya Pradesh, ghat areas of Madhya Maharashtra & Gujarat Region during 13th-15th; Konkan & Goa during 13th-16th; East Rajasthan on 14th & 15th; Uttar Pradesh during 15th-17th and over Uttarakhand during 14th-17th 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:

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



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

