



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

**Press Release
Date: 14th July, 2023**

Time of Issue: 1330 hours IST

- Subject: i) Heavy to very Heavy rainfall over Uttarakhand and heavy rainfall over Himachal Pradesh & Uttar Pradesh likely to continue during next 5 days.**
ii) Heavy to very heavy rainfall activity likely to continue over Bihar, Sikkim and Assam & Meghalaya today, the 14th July and decrease thereafter.
iii) Increase in rainfall activity over East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Konkan & Goa from 17th July, 2023.

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

Significant Weather features, Forecast and Warning during next 5 days: (Annexure II)

- ❖ The western end of the monsoon trough at mean sea level lies south of its normal position and eastern end lies north of its normal position.
- ❖ A Western Disturbance as a cyclonic circulation in middle & upper tropospheric level lies over central Pakistan.
- ❖ A cyclonic circulation lies over Haryana and another cyclonic circulation over central parts Uttar Pradesh in lower tropospheric levels.
- ❖ A cyclonic circulation is likely to form over Northwest Bay of Bengal around 16th July, 2023. Under its influence, a low pressure area is likely to form over the same region during subsequent 2-3 days.

Weather Forecast and Warning:

Northwest India: Fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** is very likely to continue over Uttarakhand and Uttar Pradesh during next 5 days. **Isolated heavy rainfall also very likely** over Himachal Pradesh, East Rajasthan during next 5 days.

Isolated extremely heavy rainfall very likely over Uttarakhand on 17th July.

East & adjoining Northeast India: Fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** very likely over **Sub-Himalaya West Bengal & Sikkim** during 14th to 17th; over Bihar on 14th & 17th July. **Isolated heavy rainfall** very likely over Odisha during next 5 days; over Jharkhand during 15th to 17th; over Gangetic West Bengal during 14th to 15th; over Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya during next 4 days and over Arunachal Pradesh during 14th to 16th July.

Central India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** is very likely over West Madhya Pradesh during next 5 days; over Vidarbha on 14th, 17th & 18th;

Isolated heavy to very heavy rainfall likely over East Madhya Pradesh during next 5 days; over Chhattisgarh during 16th to 18th July.

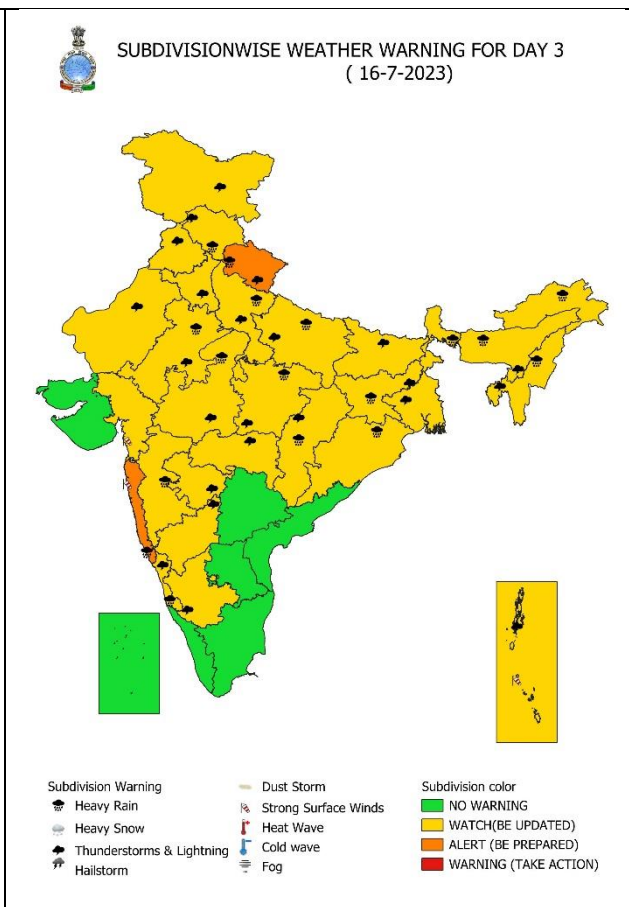
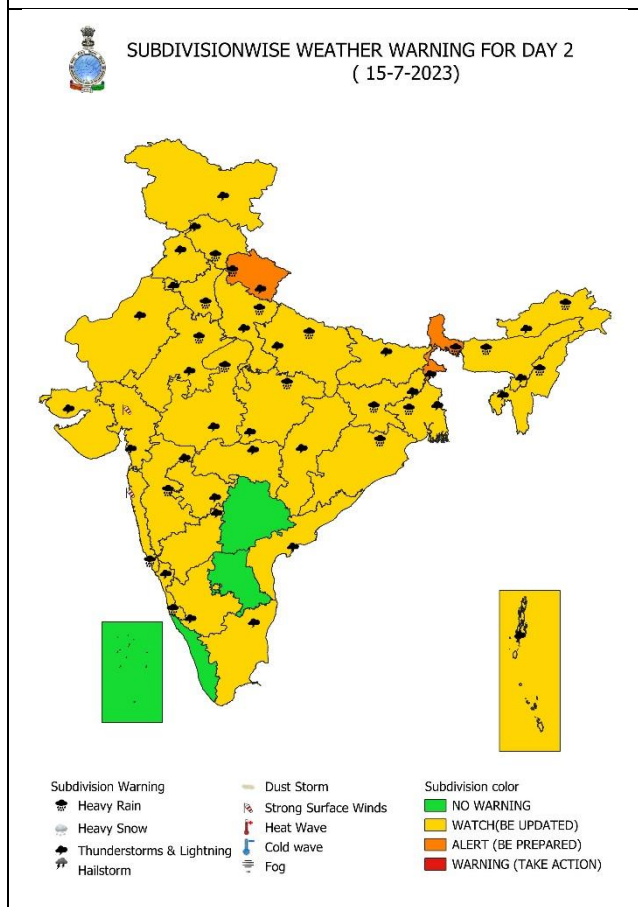
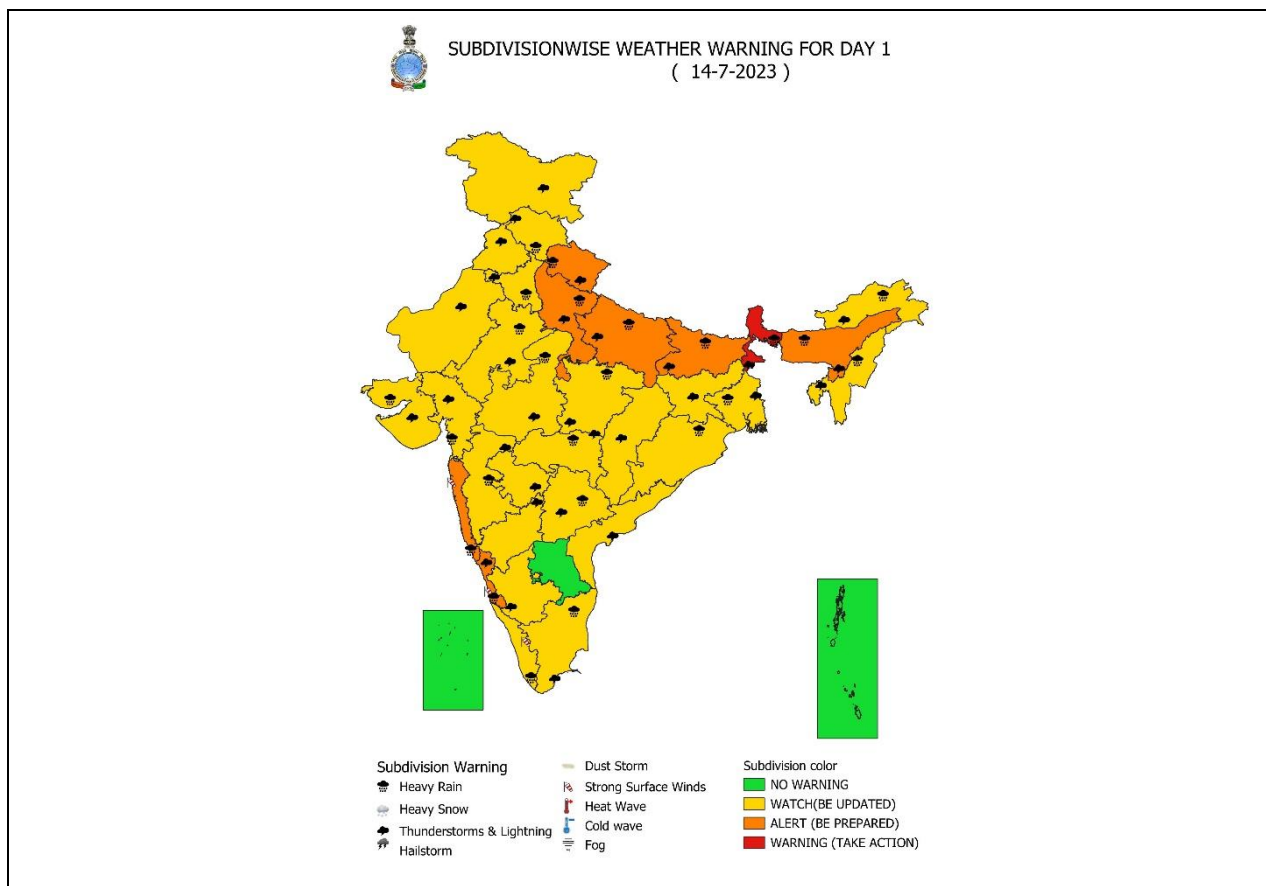
West India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** very likely to continue over **Konkan & Goa** during next 5 days. **Isolated very heavy rainfall** also very likely over Ghat areas of Madhya Maharashtra during 14th to 15th; over Gujarat Region on 14th & 18th; over Saurashtra & Kutch 14th July.

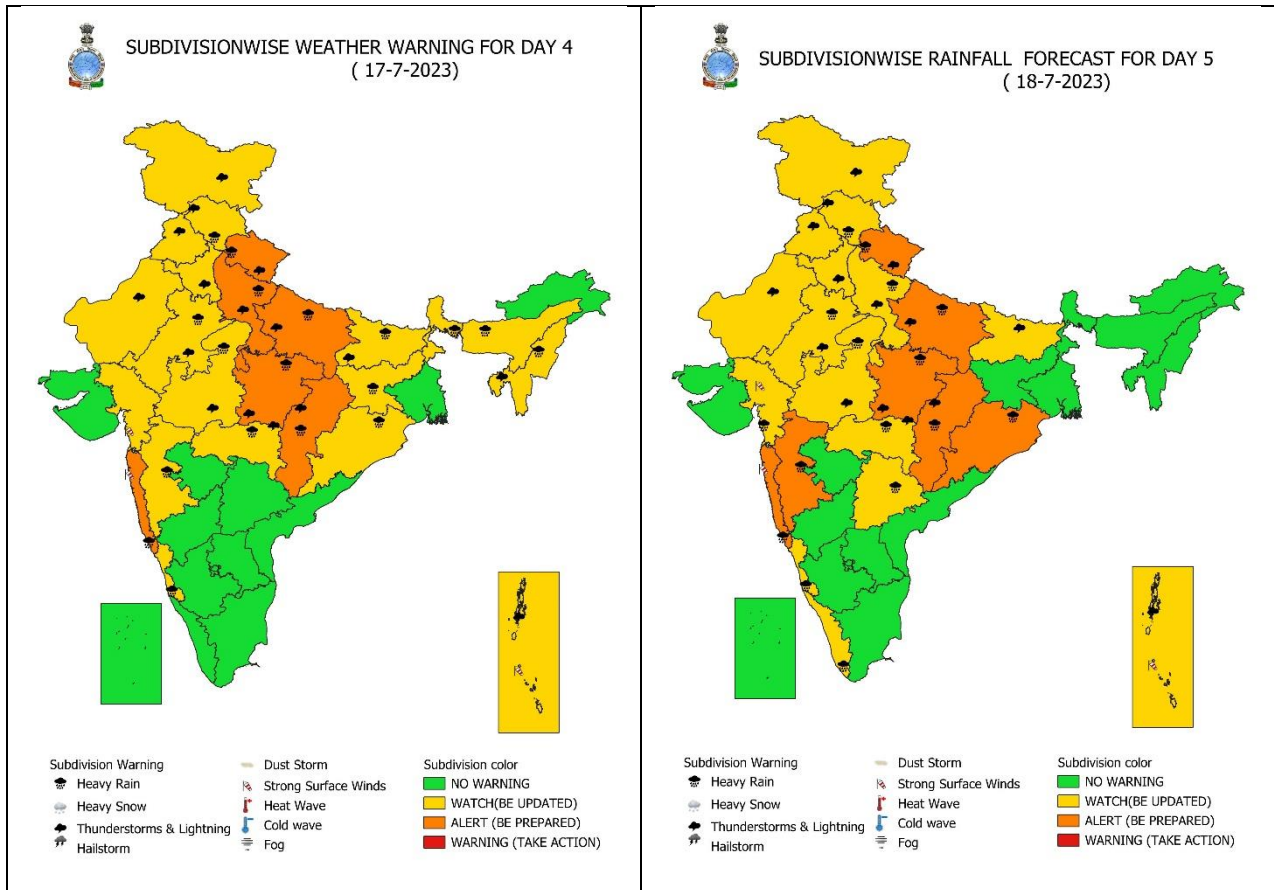
South India: Light/moderate scattered to fairly widespread rainfall with **isolated heavy rainfall** very likely to over Coastal Karnataka during 14th to 18th; over Telangana & Kerala & Mahe on 14th & 18th; over Ghat areas of Tamil Nadu on 14th July.

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

Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 14th July 2023):

- **Heavy Rainfall observed: Extremely heavy rainfall** at isolated places over Bihar; **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, West Uttar Pradesh, Uttarakhand, East Rajasthan, Coastal Karnataka, Konkan & Goa, Sub-Himalaya West Bengal & Sikkim, East Uttar Pradesh, Himachal Pradesh, Telangana and **heavy rainfall** at isolated places over Madhya Pradesh, Gujarat Region, Madhya Maharashtra and Odisha.
- **Significant rainfall recorded (in cm):**
 - **Bihar:** Bahadurganj (dist. Kishanganj) 21, Forbesganj (dist. Araria) 10, Bhimnagar (Dist. Supaul) 8, Purnea(dist. Purnea) 8, Madhipura (dist. Madhepura) 7;
 - **Assam & Meghalaya:** Cherrapunji (dist East Khasi Hills) 20, Cherrapunji(rkm) (dist East Khasi Hills) 20, Gossaigaon (dist Kokrajhar) 13, Mawsynram (dist East Khasi Hills) 13, Mawkyrwat (dist South West Khasi Hills) 8, Mawkyrwat_arg (dist South West Khasi Hills) 7, Bilasipara Arg (dist Dhubri) 7, Majuli (dist Jorhat) 7,
 - **West Uttar Pradesh:** Bilari (dist Moradabad) 19, Etawah (cwc) (dist Etawah) 11, Karhal (dist Mainpuri) 9, Aliganj (dist Etah) 8, Patiyali (dist Kasganj) 7, Bhogaon (dist Mainpuri) 7;
 - **Uttarakhand:** Kotdwar(dist. Pauri) 18, Ramnagar (dist. Nainital) 9, Bajpur (Dist. US nagar) 9, Kaladhungi (dist. Nainital) 8, Narendranagar (dist Tehri) 8, Jaspur(dist US nagar) 7;
 - **East Rajasthan:** Anta Sr (dist Baran) 15, Atru Sr (dist Baran) 9, Mahwa (dist Dausa) 6;
 - **Coastal Karnataka:** Manki (dist Uttara Kannada) 15, Ankola (dist Uttara Kannada) 13, Karwar Obsy (dist Uttara Kannada) 12, Honavar Obsy (dist Uttara Kannada) 11, Kumta (dist Uttara Kannada) 9, Castle Rock (dist Uttara Kannada) 7, Kundapur (dist Udupi) 7, Kadra (dist Uttara Kannada) 7, Kota (dist Udupi) 7, Gersoppa (dist Uttara Kannada) 7, Joida (dist Uttara Kannada) 6, Gokarna (dist Uttara Kannada) 6,
 - **Konkan & Goa:** Rameshwar_agri (dist Sindhudurg) 15, Quepem (dist South Goa) 15, Sanguem (dist South Goa) 15, Pernem (dist North Goa) 15, Kudal (dist Sindhudurg) 14, Ponda (dist North Goa) 13, Mapusa (dist North Goa) 13, Dodamarg (dist Sindhudurg) 12, Malvan (dist Sindhudurg) 12, Mulde_ Agri (dist Sindhudurg) 12, Sawantwadi (dist Sindhudurg) 12, Kankavli (dist Sindhudurg) 11, Margao (dist South Goa) 11, Panjim - Imd Obsy (dist North Goa) 11, Mormugao - Pmo Imd (dist South Goa) 11, Dabolim N.a.s.- Navy (dist South Goa) 11, Vaibhavwadi (dist Sindhudurg) 11, Canacona (dist South Goa) 9, Lanja (dist Ratnagiri) 9, Devgad (dist Sindhudurg) 8, Ratnagiri - Imd Obsy (dist Ratnagiri) 8, Matheran (dist Raigad) 7, Vikramgad (dist Palghar) 7, Rajapur (dist Ratnagiri) 7, Uran (dist Raigad) 7, Sangameshwar Devrukh (dist Ratnagiri) 6, Shahapur (dist Thane) 6;
 - **Sub-Himalaya West Bengal & Sikkim:** Bagrakote (dist. Darjeeling) 15, Jalpaiguri (dist Jalpaiguri) 13, Gangtok (East Sikkim) 8, Cooch Behar (dist. Cooch Behar) 7, Yuksom (dist. West Sikkim) 7;
 - **East Uttar Pradesh: Tirwa (dist Kannauj) 13, Nighasan (dist Kheri) 7, Trimohani Ghat Fmo (dist Maharajganj) 6, Dabri Fmo (dist Farrukhabad) 6, Fatehgarh Cwc (dist Farrukhabad) 6,**
 - **Himachal Pradesh:** Saloni (dist Chamba) 12, Kangra Aero (dist Kangra) 6, Barthin (dist Bilaspur) 6, Nagrota Surian (dist Kangra) 6;
 - **Telangana:** Navipet (dist Nizamabad) 12, Bodhan (dist Nizamabad) 7, Ranjal (dist Nizamabad) 6, Yeda Palle (dist Nizamabad) 6, Makloor (dist Nizamabad) 6;
 - **West Madhya Pradesh:** Tarana (dist Ujjain) 10, Shivpuri (dist Shivpuri) 10, Udainagar (dist Dewas) 9, Depalpur (dist Indore) 7, Khaniyadana (dist Shivpuri) 7;
 - **Gujarat Region:** Gandevi (dist Navsari) 10, Pardi (dist Valsad) 8, Khergam (dist Navsari) 8, Mandvi (dist Surat) 7, Chikhli (dist Navsari) 7, Silvassa (dist Dadara & Nagar Haveli) 7;
 - **East Madhya Pradesh:** Khurai (dist Sagar) 9, Junnardeo (dist Chindwara) 7;
 - **Madhya Maharashtra:** Gaganbawada (dist Kolhapur) 8;
 - **Odisha:** Basudevpur (dist Bhadrak) 8, Khandapara (dist Nayagarh) 7, Patrapur (dist Ganjam) 6, Derabis (dist Kendrapara) 6,
 - **Coastal Andhra Pradesh & Yanam:** Chintur (dist Alluri Sitharamaraju) 6, Peddapuram (dist Kakinada) 6;
 - **Rayalaseema:** Palasamudram (dist Chittoor) 6;
 - **Saurashtra & Kutch:** Khambha (dist Amreli) 6;
 - **Vidarbha:** Korpana (dist Chandrapur) 6;
 - **Marathwada:** Pathri (dist Parbhani) 6;
 - **Arunachal Pradesh:** Tezu (dist Lohit) 6;





Agromet advisories for rainfall likely over various parts of the country:

- Drain out excess water from crop fields to avoid water stagnation in Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, West Bengal & Sikkim, Odisha, Bihar, Madhya Pradesh, Gujarat state, Konkan & Goa, Vidarbha, Tamil Nadu, Kerala, Coastal Karnataka, Telangana and North Eastern States.
- Postpone transplanting of rice in Uttarakhand.
- Postpone sowing of maize, soybean and vegetables in Uttarakhand.
- Provide staking to vegetables.

Impact & Action Suggested due to very heavy/extremely heavy rainfall

14th July: Uttarakhand, Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim, Bihar, Assam & Meghalaya, Konkan & Goa, Coastal Karnataka

15th -18th July: Uttarakhand

17th & 18th July: East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Konkan & Goa

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:** >204.4mm.
- ❖ **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 Widespread (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