



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release

Date: 18th July, 2023

Time of Issue: 1345 hours IST

Subject: i) Increase in rainfall activity along west coast likely to continue with heavy to very heavy rainfall spell over Konkan & Goa & Madhya Maharashtra during next 05 days and over Gujarat, Chhattisgarh, Vidarbha, Telangana & Odisha during next 03 days.

ii) Subdued rainfall activity likely over northeast & adjoining east India and over plains of northwest India (except East Rajasthan) during next 4-5 days.

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

Significant Weather features:

- ❖ A cyclonic circulation lies over Northwest Bay of Bengal & adjoining coastal Odisha and extends up to middle tropospheric levels. Under its influence, a **Low Pressure Area** is likely to form over Northwest Bay of Bengal during next 48 hours.
- ❖ Yesterday's cyclonic circulation over south Jharkhand & neighbourhood, now lies over south Chhattisgarh & neighbourhood in lower tropospheric levels.
- ❖ The shear zone now runs roughly along Lat. 18° N between 4.5 km & 7.6 km above mean sea level tilting southwards with height.

Weather Forecast and Warning (Annexure II):

Northwest India: Light/moderate Fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, East Rajasthan during 18th-22nd; Himachal Pradesh on 18th, 20th & 21nd; West Rajasthan during 18th-19th; Haryana, Chandigarh & Delhi, West Uttar Pradesh on 18th July 2023.

Isolated very heavy rainfall also very likely over Uttarakhand on 18th, 21st and 22nd and over East Rajasthan on 18th & 22nd July.

Central India: Light/moderate fairly widespread to widespread rainfall **and thunderstorm & lightning** and **isolated heavy rainfall** is very likely over the region during next 5 days. **Isolated very heavy rainfall** also likely over Madhya Pradesh on 18th & 22nd, Vidarbha during 18th -20th and over Chhattisgarh during 18-22nd July.

West India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** very likely to continue over Maharashtra (except Marathwada) during next 5 days and over Gujarat during next 3 days.

Isolated heavy to very heavy rainfall very likely to continue over Mumbai during next 03 days.

Isolated extremely heavy rainfall likely over Konkan & Goa, ghat areas of Madhya Maharashtra on 18th & 19th and over Gujarat state on 19th July.

South India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to over Kerala, Coastal & South Interior Karnataka & Telangana during next 5 days; over coastal Andhra Pradesh on 18th, 19th & 22nd and over North interior Karnataka during 18th-20nd July. **Isolated very heavy rainfall** also likely over coastal Andhra Pradesh and North interior Karnataka on 18th, over coastal Karnataka on 18th & 19th and over Telangana (including Hyderabad) on 18th -20th July.

Isolated Extremely Heavy rainfall also very likely over Telangana on 18th July.

East India: Light/moderate Fairly widespread to widespread rainfall with isolated **heavy to very heavy rainfall** very likely over Odisha and **heavy rainfall** over Andaman & Nicobar Islands during next 5 days. **Isolated extremely heavy rainfall also likely over south Odisha on 18th July.**

Northeast India: Light/moderate Scattered to Fairly widespread rainfall likely over the region. **Isolated heavy rainfall** likely over South Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura 20th-22nd July.

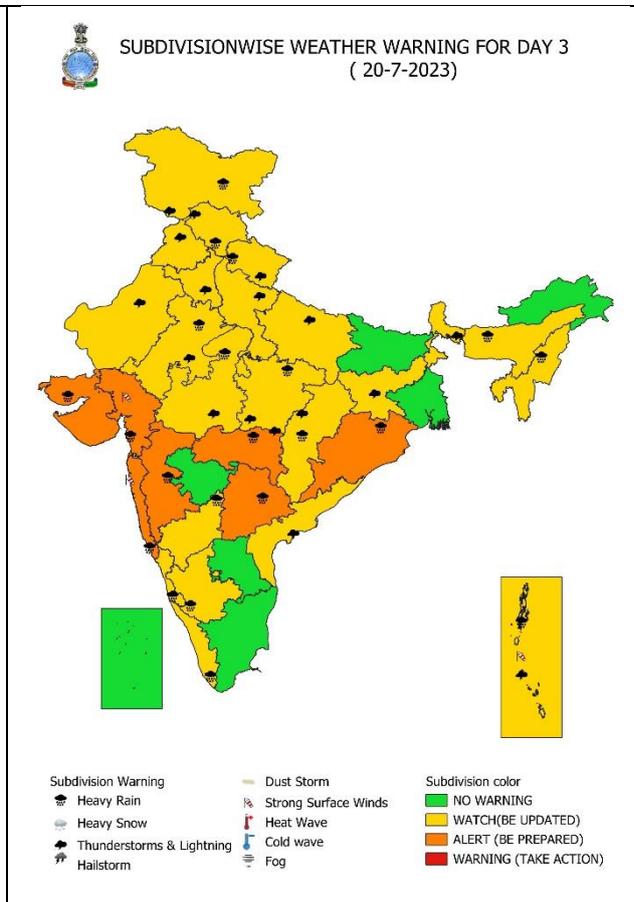
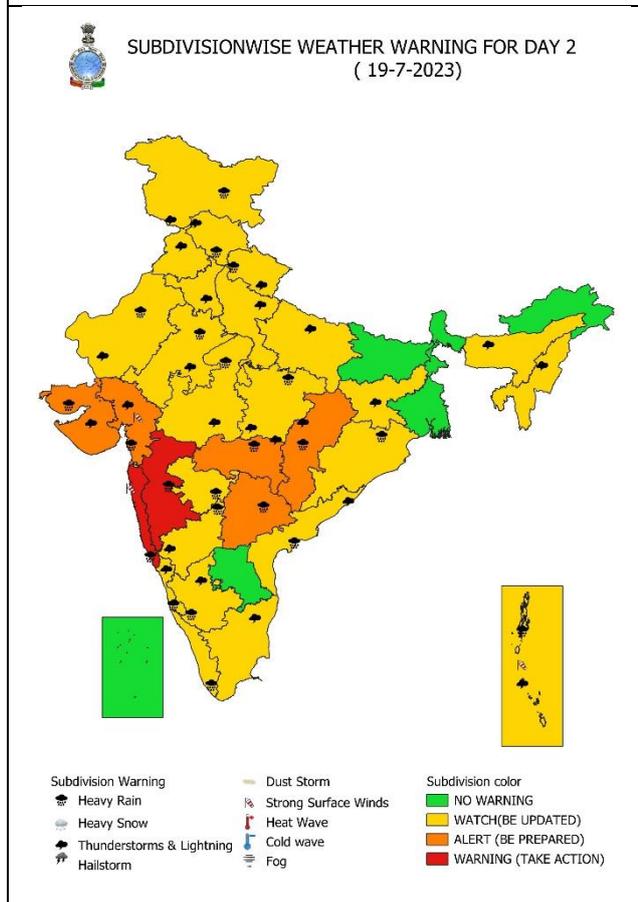
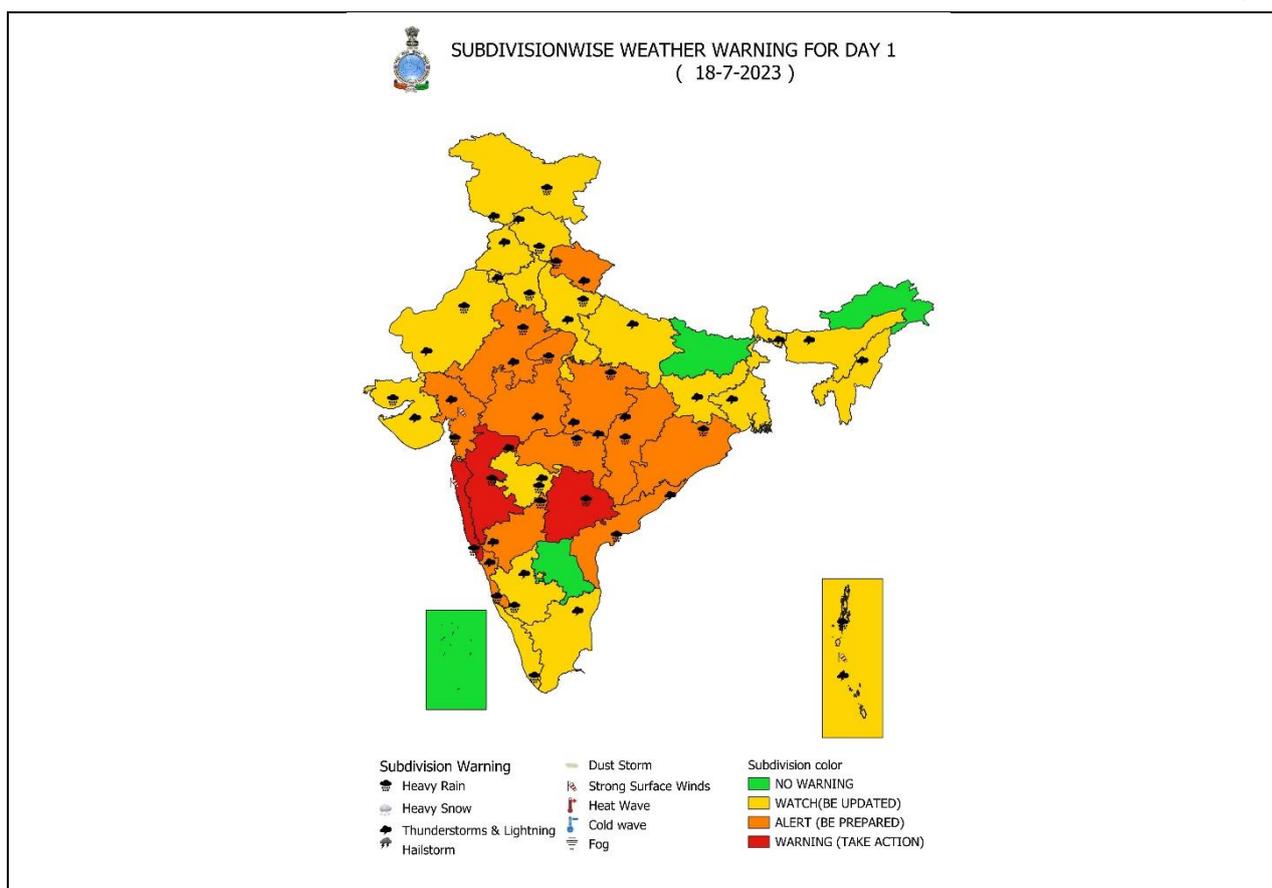
For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

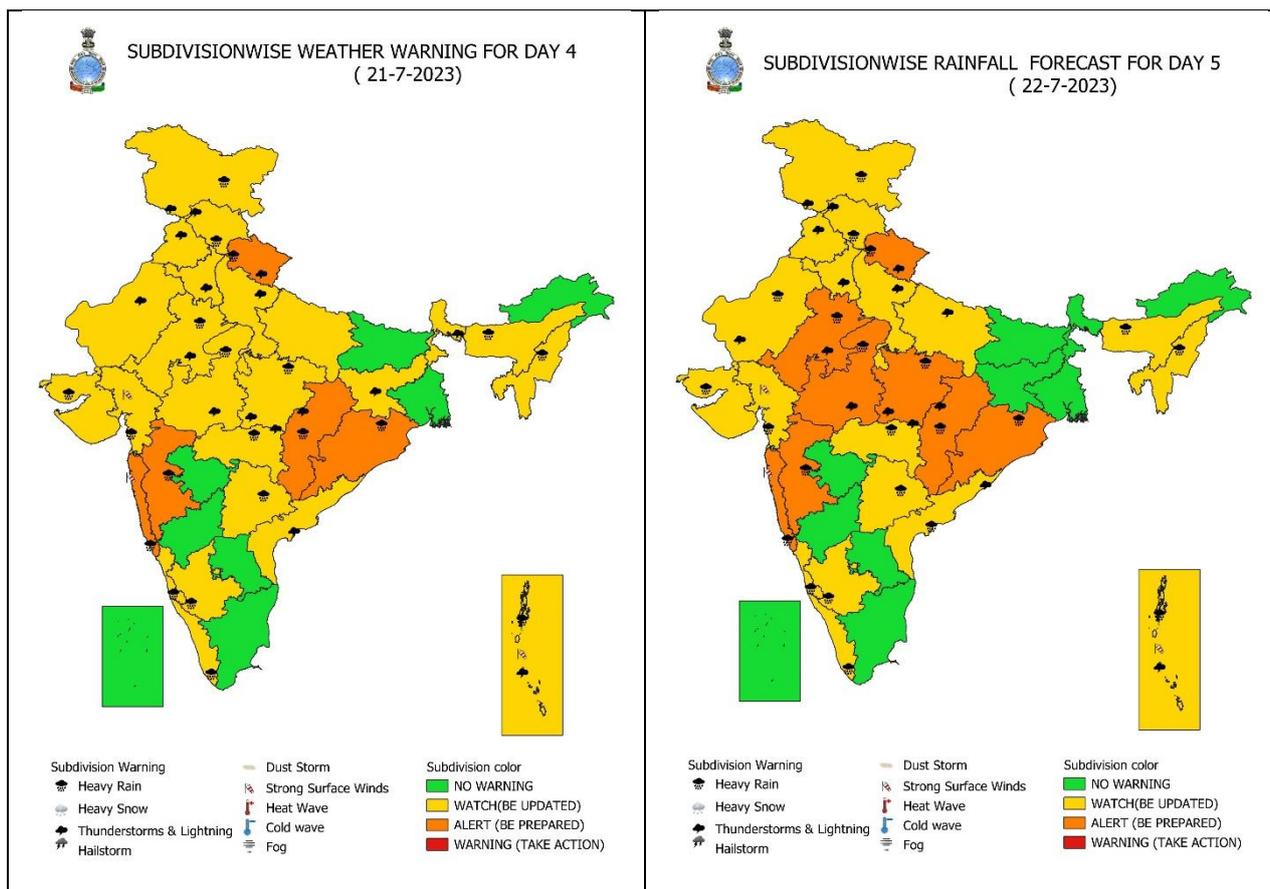
Annexure I

Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 17th July 2023):

- **Heavy Rainfall observed:** Isolated **extremely heavy rainfall** at isolated places over Odisha, Konkan & Goa, Uttarakhand, Madhya Maharashtra, **very heavy rainfall** at isolated places over West Madhya Pradesh, Chhattisgarh, Himachal Pradesh, Coastal Karnataka, Vidarbha and **Heavy rainfall** at isolated places over Jammu & Kashmir, West Uttar, Telangana, Coastal Andhra Pradesh, East Madhya Pradesh, Kerala & mahe and Haryana.
- **Significant rainfall recorded (in cm):**
 - **Odisha:** Gudvela (dist Bolangir) 30, Th Rampur (dist Kalahandi) 19, Karlamunda (dist Kalahandi) 18, Bolangir (dist Bolangir) 16, Kantamal (dist Boudhgarh) 10, Mathili (dist Malkangiri) 10, Tarva (dist Sonepur) 10, Bijepur (dist Bargarh) 10, Kalampur (dist Kalahandi) 9, Belgaon (dist Bolangir) 9, Jeypore (dist Koraput) 9, Deogaon (dist Bolangir) 8, Dabugan (dist Nawarangpur) 8, Saintala (dist Bolangir) 8, Koraput (dist Koraput) 8, Agalpur (dist Bolangir) 7, Dunguripalli (dist Sonepur) 7, Lamataput (dist Koraput) 7, Madanpur Rampur (dist Kalahandi) 7, Salebhatta (dist Bolangir) 7, Gosani (dist Gajapati) 7,
 - **Konkan & Goa:** Mangaon (dist Raigad) 25, Khalapur (dist Raigad) 23, Pen (dist Raigad) 19, Matheran (dist Raigad) 17, Karjat_agri (dist Raigad) 17, Tala (dist Raigad) 16, Poladpur (dist Raigad) 15, Uran (dist Raigad) 15, Roha (dist Raigad) 14, Sudhagad Pali (dist Raigad) 12, Santacruz - IMD Obsy (dist Mumbai Suburban) 12, Panvel_agri (dist Raigad) 11, Colaba - ImdObsy (dist Mumbai City) 11, Mahad (dist Raigad) 10, Vasai (dist Palghar) 10, Murud (dist Raigad) 8, Wada (dist Palghar) 7, Mandangad (dist Ratnagiri) 7, Tbia Imd Part Time (dist Thane) 7, Mhasla (dist Raigad) 7, Sanguem (dist South Goa) 7, Mapusa (dist North Goa) 7, Bhiwandi (dist Thane) 7,
 - **Uttarakhand:** Sama (Dist Bageshwar) 22, Mussoorie (Dist Dehradun) 18, Kapkot (Dist Bageshwar) 17, Laksar (Dist Hardwar) 15, Loharkhet (Dist Bageshwar) 12, Pantnagar (Dist Udham Singh Nagar) 11, Haripur (Dist Dehradun) 10, Roshnabad (Dist Hardwar) 10, Chamoli (Dist Chamoli) 9, Kotdwara (Dist Garhwal Pauri) 7,
 - **Madhya Maharashtra:** Lonavala_agri (dist Pune) 21, Mahabaleshwar- Imd Obsy (dist Satara) 18, Gaganbawada (dist Kolhapur) 7, Pachora (dist Jalgaon) 6, Radhanagari (dist Kolhapur) 6, Velhe (dist Pune) 5, Igatpuri (dist Nashik) 5, Bhadgaon (dist Jalgaon) 5,
 - **West Madhya Pradesh:** Babai (makhan Nagar) (dist Narmadapuram) 16, Goharganj (dist Raisen) 5, Pipariya (dist Narmadapuram) 13, Sohagpur (dist Narmadapuram) 11, Bajna (dist Ratlam) 10, daipura (dist Raisen) 10, Itarsi (dist Narmadapuram) 10, Bankhedi (dist Narmadapuram) 10, Dolariya (dist Narmadapuram) 9, Bareli (dist Raisen) 9, Vidisha (dist Vidisha) 9, Narmadapuram (dist Narmadapuram) 8, Hatpiplaya (dist Dewas) 7, Sultanpur (dist Raisen) 6, Pachmarhi (dist Narmadapuram) 6, Seoni Malwa (dist Narmadapuram) 6, Raisen-aws (dist Raisen) 6,
 - **Chhattisgarh:** Pakhanjur (dist Kanker) 14, Bijapur (dist Bijapur) 7, Sukma (dist Sukma) 7, hamdha (dist Durg) 7, Usoor (dist Bijapur) 6, Berla (dist Bemetara) 6, Chhura (dist Gariaband) 6, Khairagarh (dist Rajnandgaon) 5,

- Bhanupratappur (dist Kanker) 5, Simga (dist Baloda Bazar) 5, Bhairamgarh (dist Bijapur) 5, Abhanpur (dist Raipur) 5, Durg (dist Durg) 5,
- **Himachal Pradesh:** Renuka / Dadhau (dist Sirmaur) 12, JATTON BARRAGE (dist Sirmaur) 12, SANGRAHA (dist Sirmaur) 11, CHUARI (dist CHAMBA) 10, Kataula (dist mandi) 6, CHAMBA AWS (dist CHAMBA) 6;
 - **Coastal Karnataka:** Castle Rock (dist Uttara Kannada) 12, Kollur (dist Udupi) 11, Jagalbet (dist Uttara annada) 8, Kadra (dist Uttara Kannada) 7, Manchikere (dist Uttara Kannada) 7, Siddapura (dist Udupi) 6, Yellapur (dist Uttara Kannada) 6, Gersoppa (dist Uttara Kannada) 5, Joida (dist Uttara Kannada) 5,
 - **Vidarbha:** Mulchera (dist Gadchiroli) 12, Etapalli (dist Gadchiroli) 9, Dhanora (dist Gadchiroli) 8, Korchi (dist Gadchiroli) 7, Kurkheda (dist Gadchiroli) 7, Ahiri (dist Gadchiroli) 6, Gadchiroli (dist Gadchiroli) 5, Bhamragad (dist Gadchiroli) 5,
 - **Jammu & Kashmir:** Katra (dist Reasi) 11, Reasi Arg (dist Reasi) 7, Jammu Aero (dist Jammu) 5;
 - **West Uttar Pradesh:** Najibabad (t) (dist Bijnor) 11, Nagina (dist Bijnor) 7, Mirganj (dist Bareilly) 5, Baheri (dist Bareilly) 5, Nawabganj (dist Bareilly) 5,
 - **Telangana:** Venkatapur (dist Mulugu) 9, Tadwai Mlg (dist Mulugu) 9, Govindaraopet (dist Mulugu) 9, Venkatapuram (dist Mulugu) 9, Parkal (dist Warangal) 8, Regonda (dist J. Bhupalpally) 7, Yellareddypeta (dist Rajanna Sircilla) 7, Bheemgal (dist Nizamabad) 7, Atmakurwrgl (dist Warangal) 7, Gangadhara (dist Karimnagar) 7, Choppadandi (dist Karimnagar) 7, Chandurthi (dist Rajanna Sircilla) 7, Huzurabad (dist Karimnagar) 7, Mulug (dist Mulugu) 7, Chityal (dist J. Bhupalpally) 7, Shayampet (dist Hanumakonda) 7, Gambhiraopet (dist Rajanna Sircilla) 6,
 - **Coastal Andhra Pradesh:** Palasa (dist Srikakulam) 8, Pathapatnam (dist Srikakulam) 7, Tekkali (dist Srikakulam) 4, Bondapalle (dist Vizianagaram) 4,
 - **East Madhya Pradesh:** Gadarwara (dist Narsinghpur) 8, Budhar (dist Shahdol) 7, Shahpura (dist indori) 7, Majholi (dist Jabalpur) 5, Anuppur-aws (dist Anuppur) 5, Banda (dist Sagar) 5, Venkatnagar (dist Anuppur) 5, Parasia (dist Chindwara) 5, Shahdole (sohagpur) (dist Shahdol) 4, Sihora (dist Jabalpur) 4, Bijadandi (dist Mandla) 4, Mandla (dist Mandla) 4, Rahatgarh (dist Sagar) 4,
 - **Kerala & Mahe:** Padinjarathara Dam AWS (Wayanad district) 7, Vythiri (Wayanad district) 4, dukki & Mattannur ARG (Kannur district) 3 each;
 - **Haryana:** Kosli (dist Rewari) 7, Bawal (dist Rewari) 7, Julana (dist Jind) 7, Rajaund (dist Kaithal) 7, Nahar Rev (dist Rewari) 6, Narnaul Rev (dist Mahendragarh) 5, Ateli (dist Mahendragarh) 5, Narnaul (dist Mahendragarh) 4,
 - **South Interior Karnataka:** Tarikere (dist Chikkamagaluru) 6, Kammardi (dist Chikkamagaluru) 6, Koppa (dist Chikkamagaluru) 5, Hunchadakatte (dist Shivamogga) 5, Bhagamandala (dist Kodagu) 5, Thalaguppa (dist Shivamogga) 4, Linganamakki Hms (dist Shivamogga) 4,
 - **North Interior Karnataka:** Londa (dist Belagavi) 4, Belagavi Pto (dist Belagavi) 3,
 - **Marathwada:** Purna (dist Parbhani) 4, Naigaon Khairgaon (dist Nanded) 3, Dharmabad (dist Nanded) 3, Mukhed (dist Nanded) 3, Billoli (dist Nanded) 3, Ardhapur (dist Nanded) 3,





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

- Drain out excess water from crop fields to avoid water stagnation in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Rajasthan, Odisha, Andaman & Nicobar Islands, Madhya Pradesh, Chhattisgarh, Gujarat state, Konkan & Goa, ghat areas of Madhya Maharashtra, Vidarbha, Kerala, Karnataka, Coastal Andhra Pradesh and Telangana.
- Postpone transplanting of rice in Uttarakhand and South Gujarat. Postpone direct sowing of rice in Telangana.
- Postpone sowing of maize, soybean and vegetables in Uttarakhand.

Impact & Action Suggested due to very heavy rainfall over

Konkan & Goa(including Mumbai) & Madhya Maharashtra during next 05 days and over Gujarat, Chhattisgarh, Vidarbha, Telangana(including Hyderabad) & Odisha during next 03 days.

Uttarakhand, East Rajasthan, Madhya Pradesh, Coastal Andhra Pradesh, Coastal Karnataka on 18th July.

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 kutchha roads.

- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides in the hilly areas.
- ❖ 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).

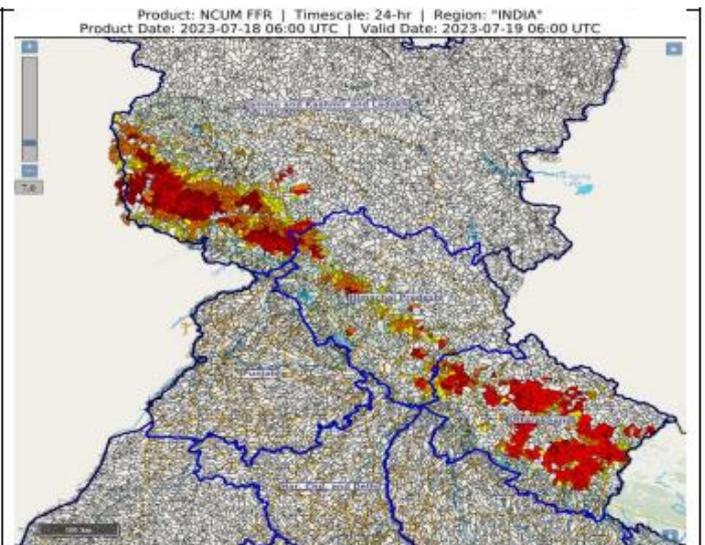
B. Action Suggested

- ❖ 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.

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 19-07-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Himachal Pradesh, Southern Parts of Jammu & Kashmir & Ladakh and Uttarakhand Met Sub-divisions during next 24 hours.

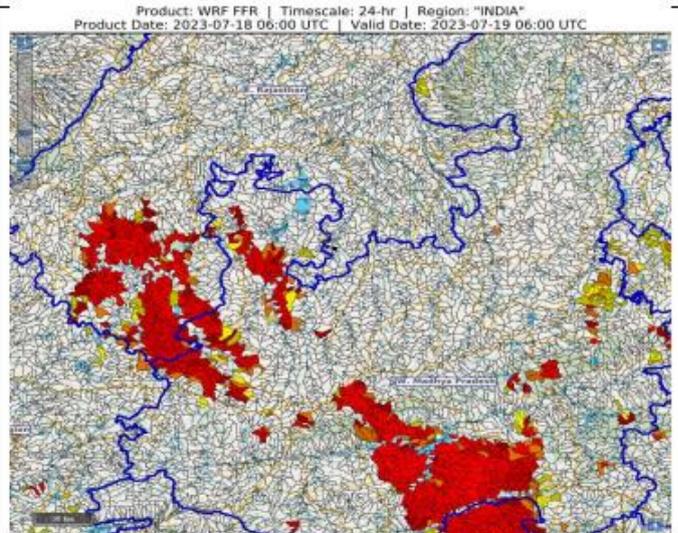
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 19-07-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of **West Madhya Pradesh adjoining East Rajasthan** Met Sub-divisions during next 24 hours.

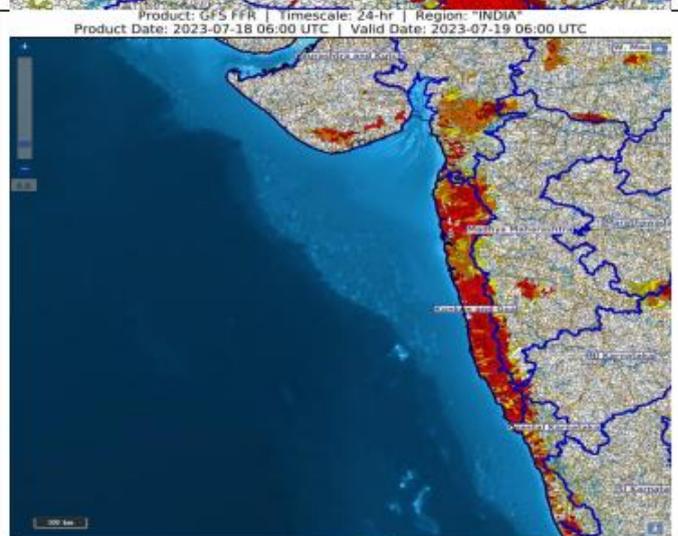
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 19-07-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of **Konkan & Goa adjoining Southern parts of Gujarat Region and Saurashtra & Kutch** Met Sub-divisions during next 24 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



Disclaimer: This is only a guidance bulletin and not a warning for flash floods.

Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station
- ❖ **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