



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

**Press Release
Date: 12th July, 2023**

Time of Issue: 1345 hours IST

**Subject: i) Extremely heavy rainfall activity likely over Northeast India & Sikkim on 12th & 13th and over Bihar today, the 12th July and decrease thereafter.
ii) Heavy to very heavy rainfall activity likely to continue over Uttarakhand, Uttar Pradesh and West Madhya Pradesh during next 2 days and decrease thereafter.
iii) Decrease in rainfall activity over northwest India, however rainfall activity likely to continue over Gangetic Plains during next 5 days. Rainfall activity over Central India and Peninsular India will be normal till 14th July and subdued during 15th to 16th and increase thereafter.**

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 north of its normal position.
- ❖ A cyclonic circulation lies over central parts of south Uttar Pradesh & neighbourhood in lower tropospheric levels.
- ❖ A Western Disturbance as a trough lies over Kashmir & Ladakh in middle & upper tropospheric levels.
- ❖ A cyclonic circulation lies over Westcentral & adjoining Eastcentral Bay of Bengal in middle tropospheric levels.
- ❖ A cyclonic circulation is likely to form over Northwest Bay of Bengal around 16th July, 2023.

Weather Forecast and Warning:

Northwest India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** is very likely over Uttarakhand and Uttar Pradesh during next 2 days and isolated heavy rainfall thereafter. **Isolated heavy rainfall also very likely** over East Rajasthan during 13th-16th and over Himachal Pradesh on 15th & 16th July.

East & adjoining Northeast India: Fairly widespread to widespread light/moderate rainfall with isolated **heavy to very heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur and Bihar during next 2 days and isolated heavy rainfall thereafter. Isolated **heavy rainfall** very likely over Odisha on 11th, 14th & 15th; Jharkhand during 12th-14th July.

Isolated extremely heavy rainfall also very likely over Arunachal Pradesh, and Sub-Himalayan West Bengal & Sikkim on 12th & 13th; Meghalaya and Bihar on 12th July.

Central India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** is very likely over Madhya Pradesh during next 5 days; Vidarbha during 12th-14th July.

Isolated heavy to very heavy rainfall likely over West Madhya Pradesh on 12th & 13th July.

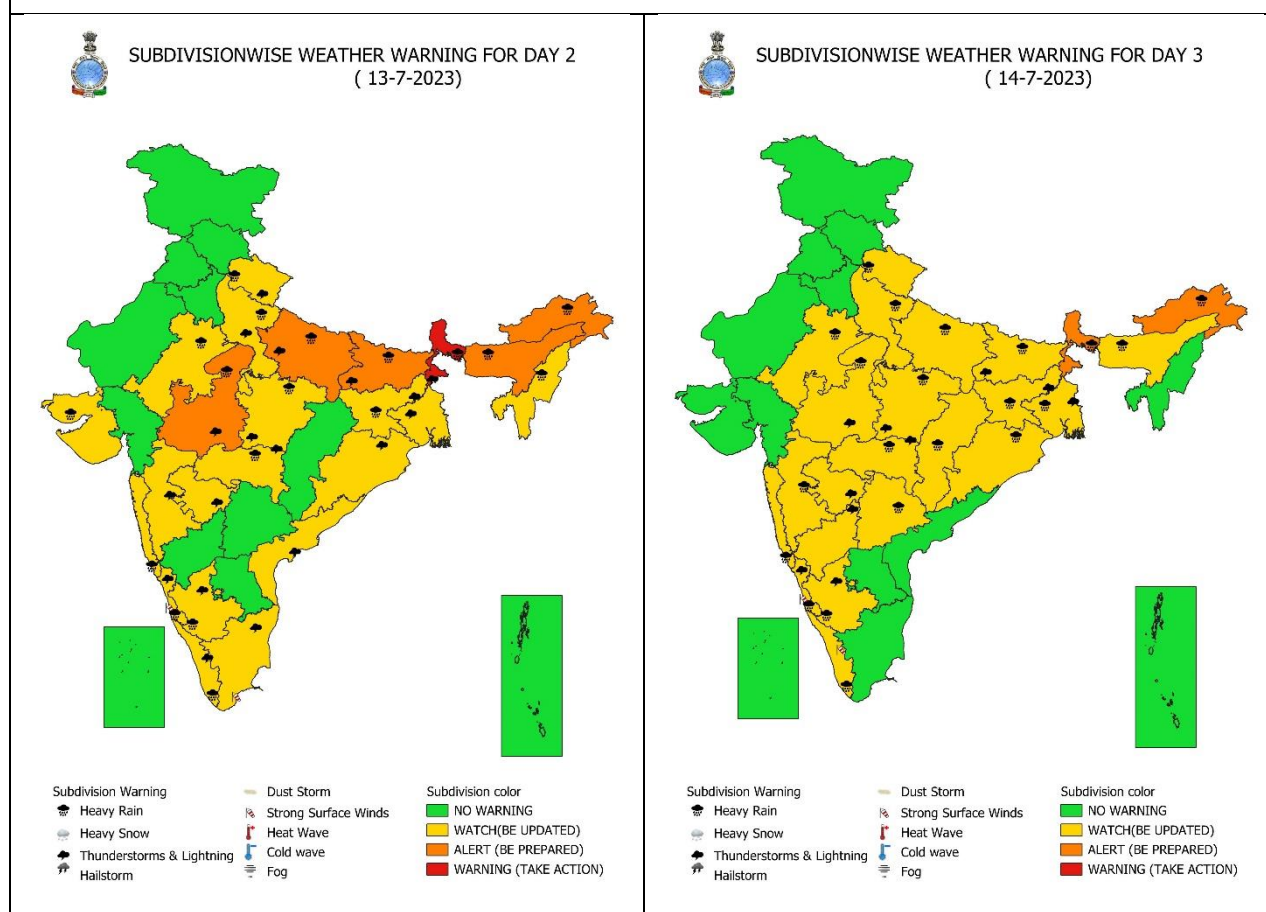
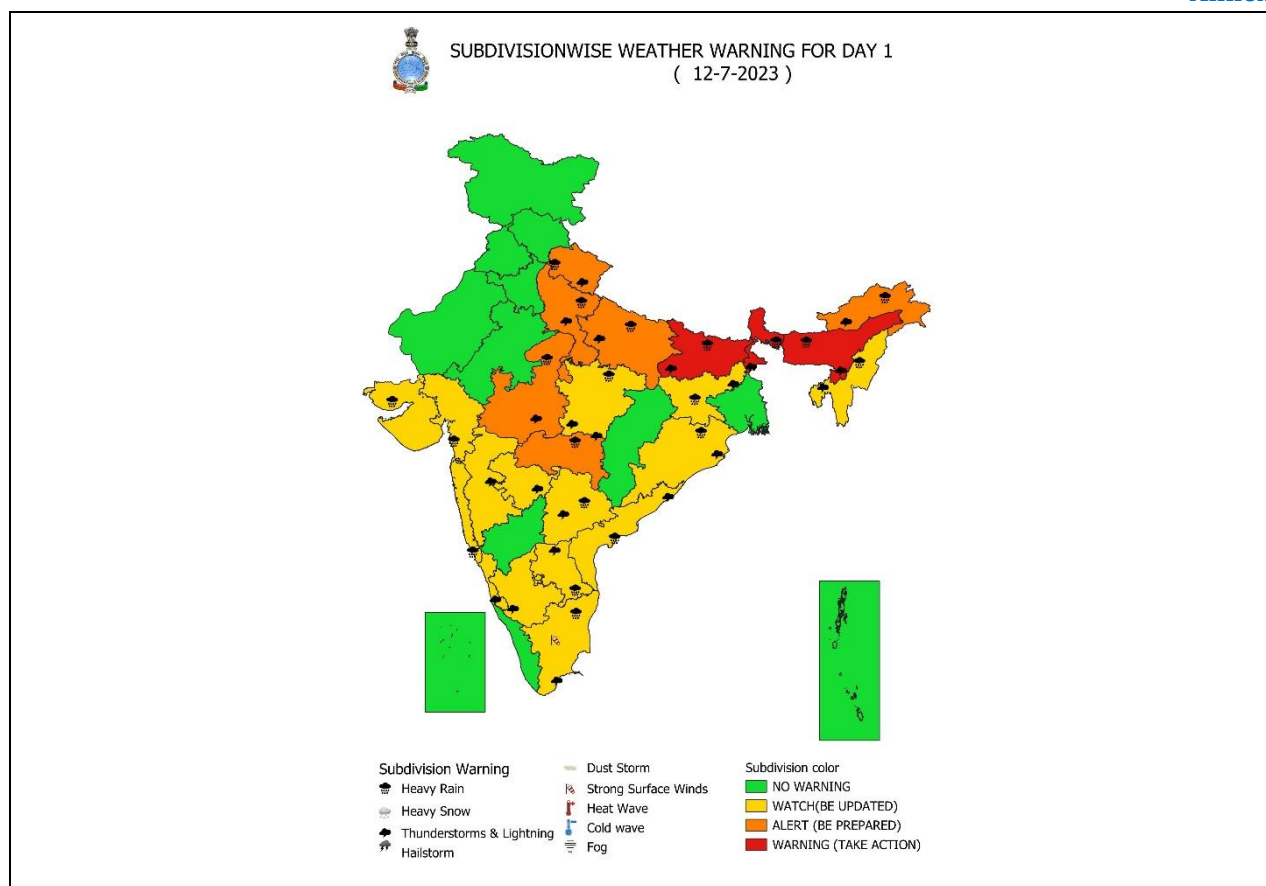
West India: Light/moderate widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa, Saurashtra during next 5 days. **Isolated heavy rainfall** very likely over ghat areas of Madhya Maharashtra during 14th-16th; Gujarat region on 12th, 15th & 16th July.

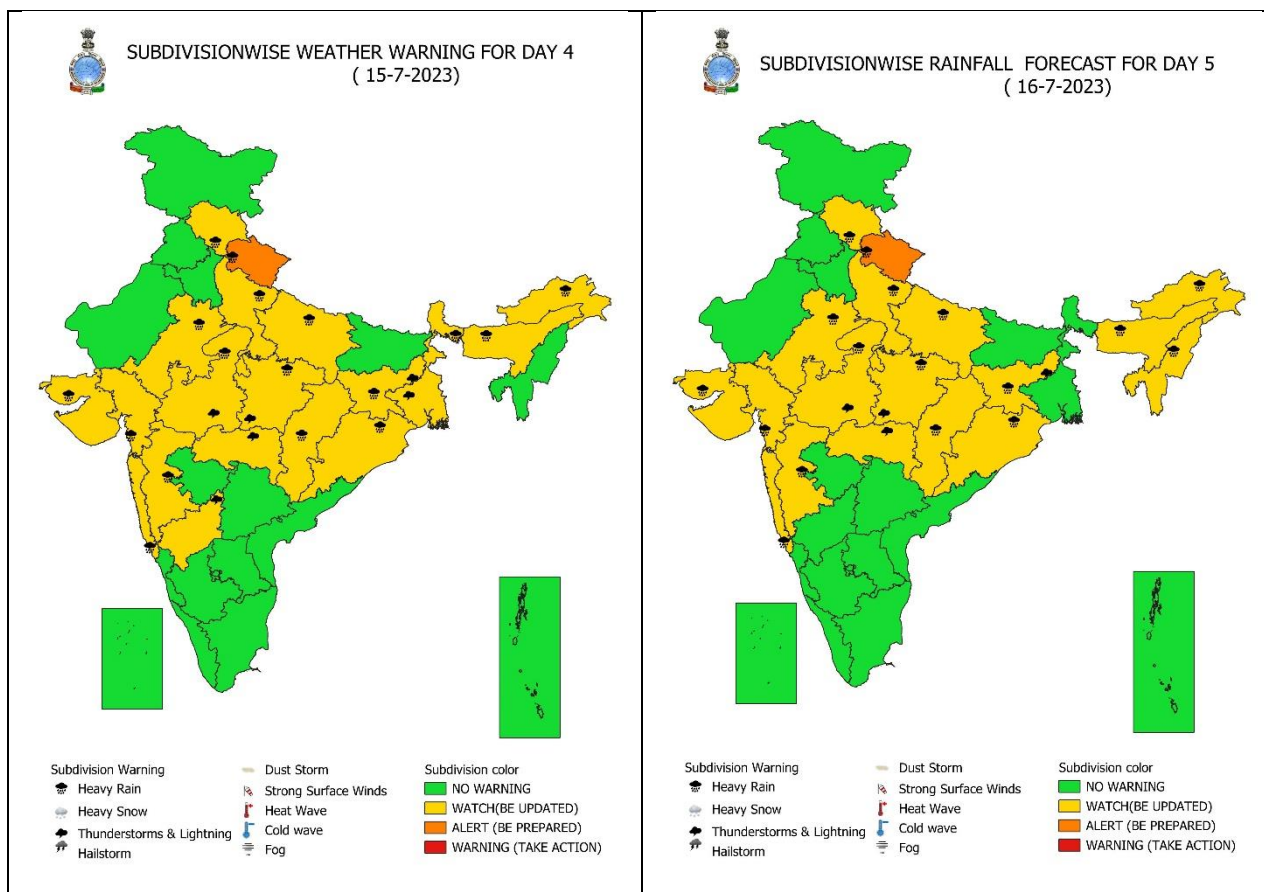
South India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to over Coastal Karnataka, South Interior Karnataka and Kerala on 13th & 14th; Coastal Andhra Pradesh, Telangana, Rayalaseema on 12th July.

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 12th July 2023):

- **Heavy Rainfall observed: Extremely heavy rainfall** at isolated places over East Uttar Pradesh, West Madhya Pradesh, Bihar, Meghalaya; **Heavy to Very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Vidarbha, Saurashtra, Sub-Himalaya West Bengal & Sikkim, Arunachal Pradesh, Assam and **Heavy rainfall** at isolated places over West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Gujarat Region, Tripura, Odisha, Jharkhand and Coastal Andhra Pradesh.
- **Significant rainfall recorded (in cm):**
 - **Assam & Meghalaya:** Cherrapunji (dist East Khasi Hills) 26, Mawkyrwat (dist South West Khasi Hills) 23, Mawkyrwat_arg (dist South West Khasi Hills) 19, Tura_ Aws (dist West Garo Hills) 17, Mawphlang (dist East Khasi Hills) 14, Gossaigaon (dist Kokrajhar) 10,
 - **East Uttar Pradesh:** Elgin Bridge (dist Barabanki) 26, Kaiserganj (dist Bahraich) 21, Ramnagar (dist Barabanki) 15, Haidargarh (dist Barabanki) 14, Sirauli Gauspur Tehsil (dist Barabanki) 13, Fatehpur Tehsil (dist Barabanki) 12,
 - **West Madhya Pradesh:** Bagh (dist Dhar) 21, Alot (dist Ratlam) 15, Bajna (dist Ratlam) 13, Sardarpur (dist Dhar) 11, Raoti (dist Ratlam) 11, Rama (dist Jhabua) 11, Dabra (dist Gwalior) 10, Ashta-aws (dist Sehore) 9, Tal (dist Ratlam) 9, Pohri (dist Shivpuri) 9, Petlawad (dist Jhabua) 9, Godadongri (dist Betul) 9, Indergarh (dist Datia) 9, Begumganj (dist Raisen) 8,
 - **Bihar:** Kishanganj: Tedhagach, Thakurganj-21 each
 - **Sub-Himalaya West Bengal & Sikkim:** Jalpaiguri, Cooch Behar-19 each, North Sikkim-9
 - **Arunachal Pradesh:** Roing (dist Lower Dibang Valley) 12, Pasighat_ Aero (dist East Siang) 11, Tezu (dist Lohit) 10, Tuting (dist Upper Siang) 7,
 - **Uttarakhand:** Nainital: Koshya Kuttauli-12 Nainital-9, Pauri: Bharsar, Satpuli-11, Rikhnikhil-10, Lansdown, Thailisain-8 each, Syunsi-7, Tehri: Narendranagar-10, Amora: Ranikhet-7, Rudraprayag-8
 - **Haryana:** Dadupur (dist Yamuna Nagar) 13, Tajewala (dist Yamuna Nagar) 9, Chhachhrauli (dist Yamuna Nagar) 8, Partapnagar Rev (dist Yamuna Nagar) 7,
 - **East Madhya Pradesh:** Dhanora (dist Seoni) 11, Bargi (dist Jabalpur) 7, Rahatgarh (dist Sagar) 7,
 - **West Uttar Pradesh:** Chandpur (dist Bijnor) 7,
 - **Himachal Pradesh:** Renuka / Dadhau (dist Sirmaur) 9, Sangraha (dist Sirmaur) 9,
 - **East Rajasthan:** Danpur (dist Banswara) 8,
 - **Saurashtra & Kutch:** Shihor (dist Bhavnagar) 13, Umralla (dist Bhavnagar) 9,
 - **Gujarat Region:** Umerpada (dist Surat) 10, Ukai (dist Surat) 9, Valod (dist Tapi) 9, Kaprada (dist Valsad) 8, Palsana (dist Surat) 7, Bodeli (dist Chhota Udepur) 7,
 - **Vidarbha:** Pauni (dist Bhandara) 12, Ner (dist Yeotmal) 10, Nandgaonkazi (dist Amraoti) 7,
 - **Coastal Andhra Pradesh:** Pathapatnam (dist Srikakulam) 7, Bheemunipatnam (dist Vishakhapatnam) 7,
 - **Odisha:** Gosani (dist Gajapati) 7, Harabhanga (dist Boudhgarh) 7, Phulbani (dist Kandhamal) 7,
 - **Jharkhand:** Sahibganj: Rajmahal-7





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, Sub Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Madhya Pradesh, Gujarat state, Konkan & Goa, Tamil Nadu, Kerala, Coastal Karnataka, Coastal Andhra Pradesh, Telangana and North Eastern States.
- ❖ Postpone transplanting of rice in Meghalaya and Uttarakhand.
- ❖ Postpone sowing of maize, soybean and vegetables in Uttarakhand.
- ❖ Provide staking to vegetables.

Impact & Action Suggested due to very heavy/extremely heavy rainfall and likely Flash Flood (for Flash Flood details, refer below)

12th July: Uttarakhand, Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim, Bihar, Arunachal Pradesh and Assam & Meghalaya

13th July: East Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim, Bihar, Arunachal Pradesh and Assam & Meghalaya

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.

Observed Flash Flood Threat (IFFT) till
1130 IST of 12-07-2023 :

No Flash flood threat observed in last
06 hours.

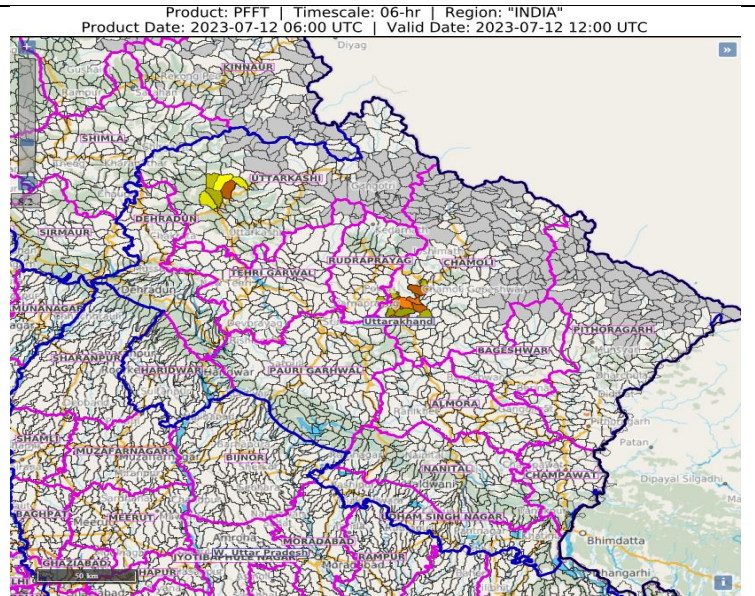


Persistent Flash Flood Threat (PFFT) till 1730 IST of 12-07-2023 :

Moderate flash flood threat likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 6 hours.

Uttarakhand - Chamoli and Uttarkashi districts.

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 6 hours.

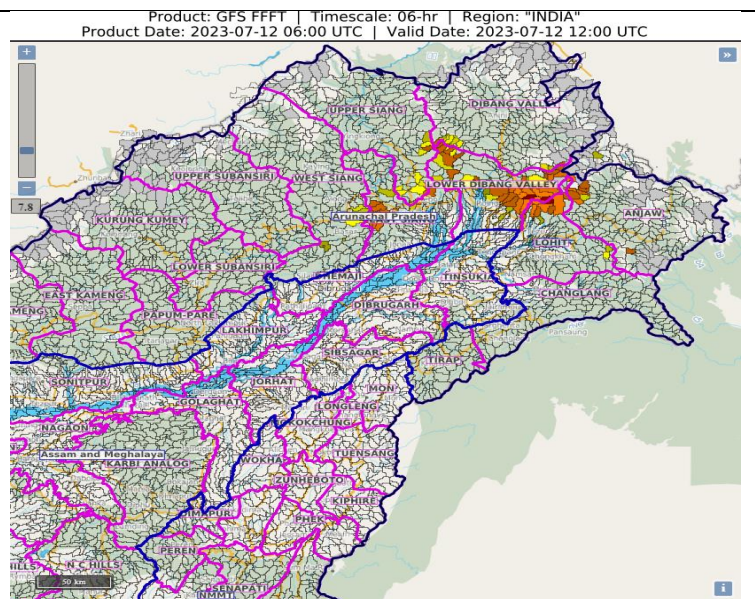


Forecast Flash Flood Threat (FFFT) till 1730 IST of 12-07-2023 :

Moderate flash flood threat likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 6 hours.

Arunachal Pradesh - Dibang Valley, East Siang, Lohit, Lower Dibang Valley, Upper Siang, Anjaw and West Siang districts.

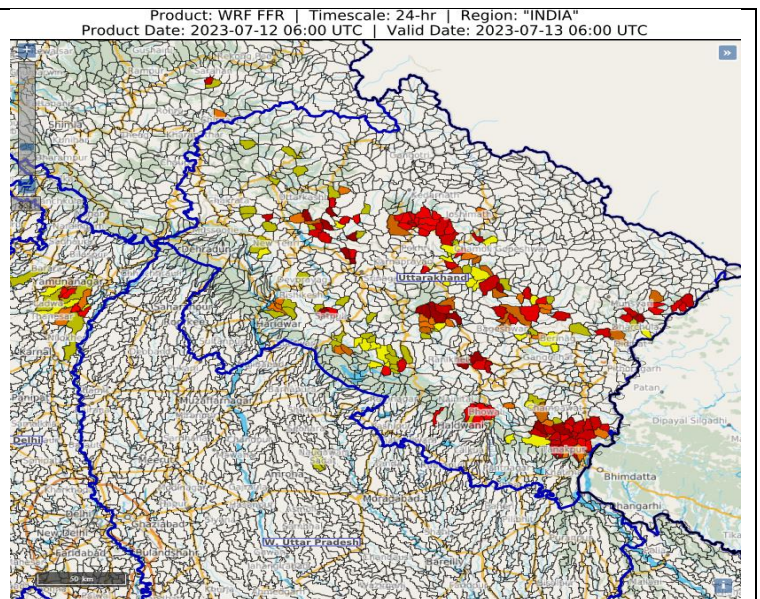
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 6 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 13-07-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of 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.



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