



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

**Press Release  
Date: 18<sup>th</sup> June, 2023  
Time of Issue: 1330 hours IST**

**Subject: i) Depression (Remnant of Cyclonic Storm ‘Biparjoy’) over central parts of south Rajasthan.  
ii) Heat wave to severe heat wave conditions likely to continue over East, eastcentral and east peninsular India during next 3 days and abatement thereafter.  
iii) Very heavy to extremely heavy falls very likely to continue over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 3 days and decrease in intensity thereafter.**

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

**Advance of Southwest Monsoon**

- ❖ Conditions are favourable for further advance of Southwest Monsoon over some more parts of south Peninsular, West Bengal, Jharkhand and Bihar during 2-3 days.

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

**(A) Depression (Remnant of Cyclonic Storm ‘Biparjoy’) over central parts of South Rajasthan**

- ❖ Yesterday’s **Deep Depression** over Southwest Rajasthan & neighbourhood weakened into a Depression over central parts of South Rajasthan & adjoining north Gujarat at 1730 hrs IST of 17<sup>th</sup> June. It lay centered over central parts of south Rajasthan & neighbourhood at 0830 hours IST of today, the 18<sup>th</sup> June, 2023. It is very likely to move east-northeastwards and maintain the intensity of Depression till evening of today, the 18<sup>th</sup> June. Under its influence:

**(i) Heavy Rainfall Warning (Gujarat, Rajasthan and Madhya Pradesh):**

- Light to moderate rainfall at most places with isolated heavy to very heavy rainfall is very likely over **Southwest Rajasthan** on 18<sup>th</sup> June.
- Light to moderate rainfall at most places is very likely with isolated heavy to extremely heavy rainfall over **Southeast Rajasthan** on 18<sup>th</sup> June, isolated heavy to very heavy rainfall on 19<sup>th</sup> June and isolated heavy rainfall on 20<sup>th</sup> June.
- Light to moderate rainfall at most places is likely with isolated heavy rainfall over **Northeast Rajasthan** on 18<sup>th</sup> June, isolated heavy to very heavy rainfall on 19<sup>th</sup> June and isolated heavy rainfall on 20<sup>th</sup> June.
- Light to moderate rainfall at most places is likely with isolated heavy to very heavy rainfall over **West Madhya Pradesh** on 19<sup>th</sup> and 20<sup>th</sup> June and isolated heavy rainfall over **southwest Uttar Pradesh** on 20<sup>th</sup> June.
- Light to moderate rainfall at many places is likely with isolated heavy rainfall over **North Gujarat Region** on 18<sup>th</sup> June.

**(ii) Wind warning (Rajasthan and adjoining North Gujarat)**

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely till evening of 18<sup>th</sup> June over **South Rajasthan and adjoining areas of North Gujarat** and decrease thereafter becoming strong wind speed reaching 25-35 kmph gusting to 45 kmph thereafter over **East Rajasthan and adjoining areas** till morning of 19<sup>th</sup> June.

**(B) Weather Forecast and Warning for rest parts of the country:**

**Northeast & adjoining East India:**

- ❖ Light/moderate rainfall at most places with isolated **Heavy to Very Heavy falls** very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 5 days. Isolated **extremely heavy rainfall** also likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya during 18<sup>th</sup>-20<sup>th</sup> June.
- ❖ Light isolated to scattered rainfall with thunderstorm & lightning very likely over Gangetic West Bengal, Bihar, Jharkhand & Odisha during next 2 days and fairly widespread rainfall thereafter. Isolated **heavy rainfall** also likely over Bihar during 19<sup>th</sup>-21<sup>st</sup>; Gangetic West Bengal and Odisha on 22<sup>nd</sup> June.

**Northwest & adjoining Central India:**

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm & lightning very likely in isolated places over Uttarakhand and isolated to scattered rainfall over Himachal Pradesh and Uttar Pradesh during next 5 days. **Thundersquall (60-70 kmph)** very likely at isolated places over Uttarakhand on 19<sup>th</sup> June and isolated **heavy rainfall** during 20<sup>th</sup>-22<sup>nd</sup> June.

**South India:**

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm & lightning very likely over the region during next 5 days. **Isolated Heavy rainfall** also likely over Tamilnadu, Kerala and Rayalaseema on 18<sup>th</sup> & 19<sup>th</sup>, Coastal Andhra Pradesh on 18<sup>th</sup> June.

**No significant weather likely over rest parts of the country during next 5 days.**

**Maximum Temperatures and Heat Wave warning (Graphics in Annexure III):**

- ❖ Yesterday, Maximum Temperatures were in the range of 42-44°C over parts of Odisha, Bihar, Jharkhand, Chhattisgarh, East Uttar Pradesh and 40-42°C over parts of East Madhya Pradesh, Vidarbha, Telangana and Coastal Andhra Pradesh & Yanam.
- ❖ Yesterday, **Heat Wave to Severe Heat Wave conditions** prevailed in many parts of East Uttar Pradesh, Bihar, Jharkhand, Odisha, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Chhattisgarh, East Madhya Pradesh. **Heat Wave conditions** prevailed in some parts of Vidarbha and in isolated pockets over Sub-Himalayan West Bengal.
- ❖ No significant change in maximum temperatures very likely over East & south India during next 2 days and fall by 2-4°C thereafter. Fall by 2-4°C in maximum temperatures very likely over Madhya Pradesh during next 5 days.
- ❖ **Heat Wave/Severe heat wave conditions** very likely to continue in some/isolated pockets over
  - Vidarbha, Chhattisgarh, Jharkhand, Odisha, Telangana during next 3 days;
  - Coastal Andhra Pradesh & Yanam, Bihar, Gangetic West Bengal, East Madhya Pradesh, East Uttar Pradesh during next 2 days and gradual abatement of heat wave conditions from above regions thereafter.

For more details kindly refer:

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

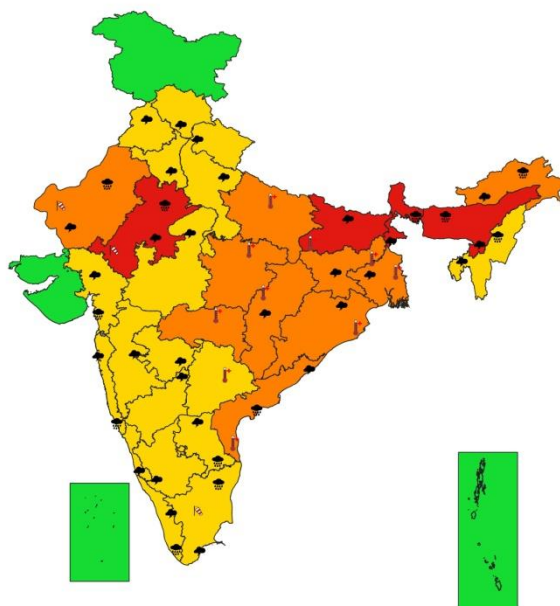
<https://mausam.imd.gov.in/responsive/districtWiseNowcast.php>

**Weather Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):**

- ❖ **Rainfall/thundershowers observed:** at most places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe, Coastal Karnataka; at many places over Gangetic West Bengal, Rajasthan, Gujarat Region, Konkan & Goa, Lakshadweep; at a few places over Uttarakhand.
- ❖ **Rainfall observed:** Extremely heavy rainfall at isolated places over Gujarat Region, south Rajasthan, Assam, Sub-Himalayan West Bengal & Sikkim; Very heavy rainfall at isolated places over Meghalaya, Goa, Coastal Karnataka; Heavy rainfall at isolated places over Arunachal Pradesh, Odisha and Kerala.
- ❖ **Significant rainfall recorded (in cm):** **Rajasthan:** Mounntabu Tehsil Sr (dist Sirohi) 36, Raniwada Sr (dist Jalore) 32, Jalore (dist Jalore) 32, Sheoganj (dist Sirohi) 31, Sanchoore (dist Jalore) 30, Jaswantpura (dist Jalore) 29, Sumerpur Sr (dist Pali) 27, Chotan (dist Barmer) 27, Dorimanna Sr (dist Barmer) 26, Bali (dist Pali) 24, Siwana Sr (dist Barmer) 24, Reodar Sr (dist Sirohi) 24, Bagoda Sr (dist Jalore) 23, Erinpura/jawai Dam (dist Pali) 23, Pali (dist Pali) 20, Abu Road Sr (dist Sirohi) 20, Pindwara (dist Sirohi) 18, Deogarh (dist Rajsamand) 15, Sirohi (dist Sirohi) 13, Kumbhalgarh Sr (dist Rajsamand) 12, **Gujarat Region:** Amirgadh (dist Banaskantha) 21, Danta (dist Banaskantha) 17, Dhanera (dist Banaskantha) 16, Dantiwada (dist Banaskantha) 15, Poshina (dist Sabarkantha) 15, Palanpur (dist Banaskantha) 14, Santalpur (dist Patan) 13, Deesa (dist Banaskantha) 13, **Arunachal Pradesh:** Bhalukpong (dist West Kameng) 7, **Assam & Meghalaya:** Kokrajhar (dist Kokrajhar) 21, Gossaigaon (dist Kokrajhar) 19, Cherrapunji(rkm) (dist East Khasi Hills) 18, Cherrapunji (dist East Khasi Hills) 17, **Sub-Himalayan West Bengal & Sikkim:** Jalpaiguri-21, Darzeeling, Coch Behar-12 each, north Sikkim-10; Coastal Karnataka: Mangaluru Ap Obsy (dist Dakshina Kannada) 12, Panambur Obsy (dist Dakshina Kannada) 10, **Kerala:** Kottayam 8, Palakkad & Odakali AWS (Ernakulam district) 6 each,; **Goa:** Margao (dist South Goa) 13, Quepem (dist South Goa) 10, Pernem (dist North Goa) 8, Mapusa (dist North Goa) 6; **Odisha:** Dhenkanal Pto (dist Dhenkanal) 7.



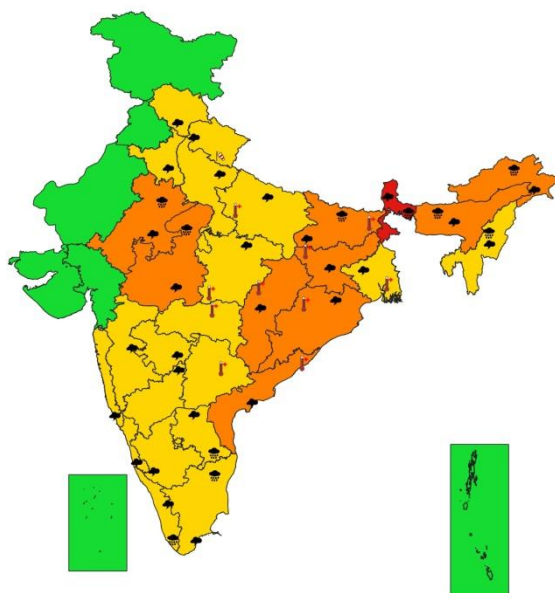
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 1 ( 18-6-2023 )



- |  |   |   |
|--|---|---|
| <b>Subdivision Warning</b><br>Heavy Rain<br>Heavy Snow<br>Thunderstorms & Lightning<br>Hailstorm | Dust Storm<br>Strong Surface Winds<br>Heat Wave<br>Cold wave<br>Fog | <b>Subdivision color</b><br>NO WARNING<br>WATCH(BE UPDATED)<br>ALERT (BE PREPARED)<br>WARNING (TAKE ACTION) |
|--|---|---|



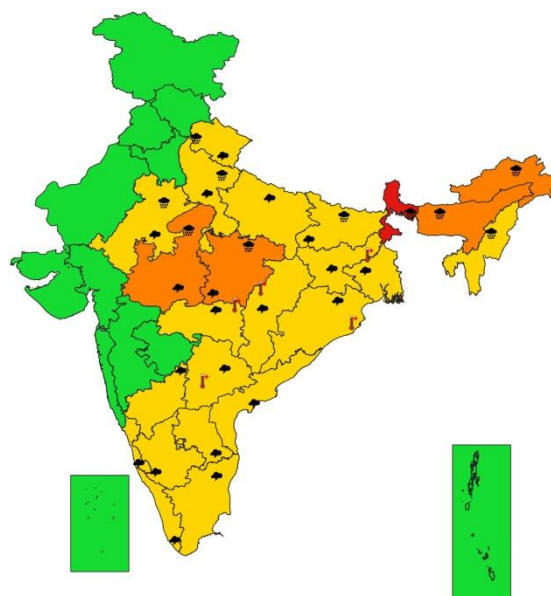
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 ( 19-6-2023 )



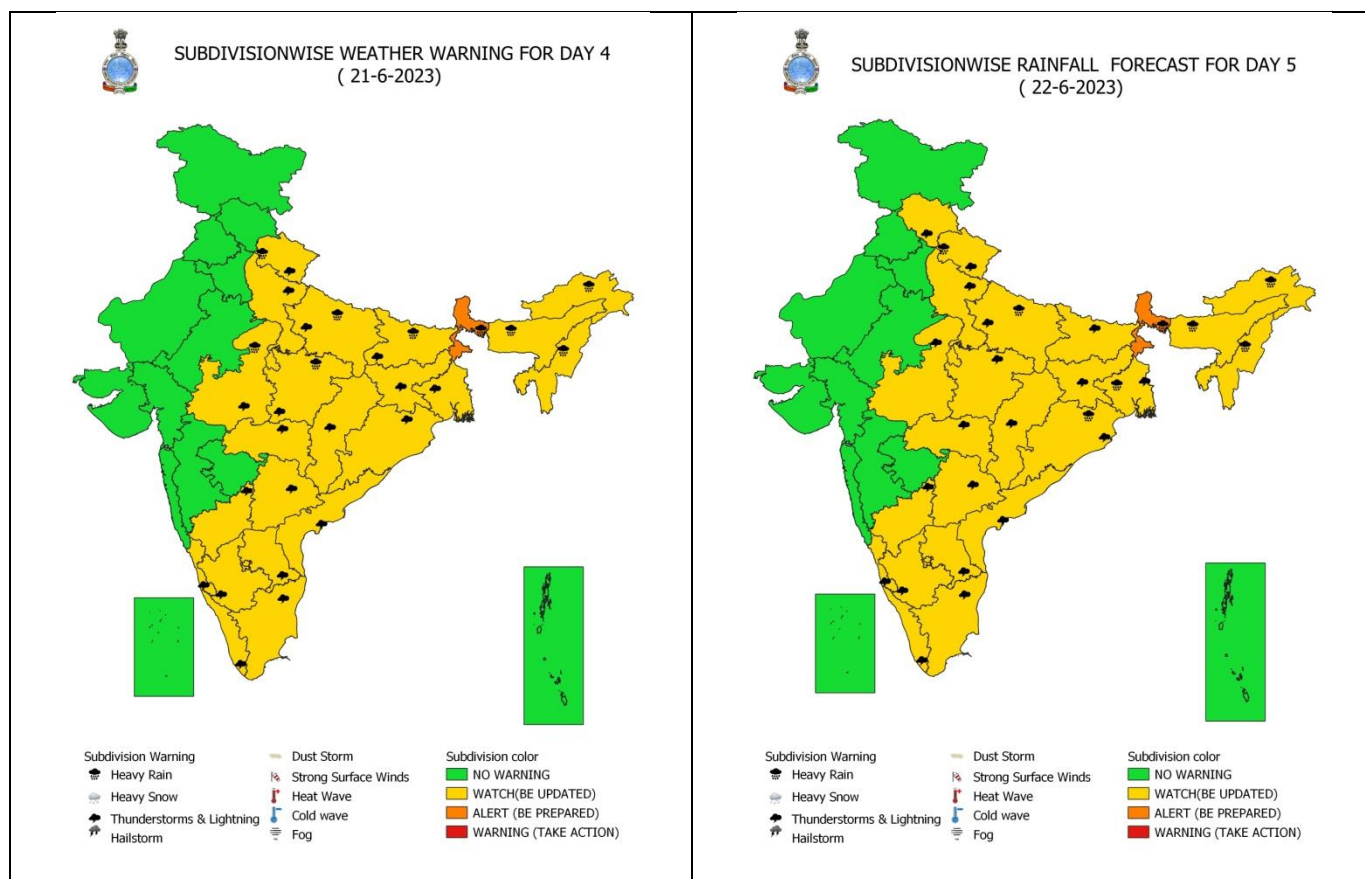
- |  |   |   |
|--|---|---|
| <b>Subdivision Warning</b><br>Heavy Rain<br>Heavy Snow<br>Thunderstorms & Lightning<br>Hailstorm | Dust Storm<br>Strong Surface Winds<br>Heat Wave<br>Cold wave<br>Fog | <b>Subdivision color</b><br>NO WARNING<br>WATCH(BE UPDATED)<br>ALERT (BE PREPARED)<br>WARNING (TAKE ACTION) |
|--|---|---|



### SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 ( 20-6-2023 )



- |  |   |   |
|--|---|---|
| <b>Subdivision Warning</b><br>Heavy Rain<br>Heavy Snow<br>Thunderstorms & Lightning<br>Hailstorm | Dust Storm<br>Strong Surface Winds<br>Heat Wave<br>Cold wave<br>Fog | <b>Subdivision color</b><br>NO WARNING<br>WATCH(BE UPDATED)<br>ALERT (BE PREPARED)<br>WARNING (TAKE ACTION) |
|--|---|---|



## IMPACT & ACTION SUGGESTED due to Heat Wave Conditions:

### ❖ Yellow alert Areas:

- Moderate temperature, Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure, Wear lightweight, light colour, loose, cotton clothes, Cover your head, use a cloth, hat or umbrella.

### ❖ Orange alert Areas:

- High temperature, Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work. High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Drink sufficient water- even if not thirsty, Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

### Agromet advisories:

- Make necessary arrangements for draining out excess water from crop fields to avoid water stagnation in Gujarat, Rajasthan, Sub Himalayan West Bengal & Sikkim, Kerala, Tamil Nadu, Andhra Pradesh, West Madhya Pradesh, Goa and North Eastern States.
- Provide mechanical support to horticultural crops and staking to vegetables.
- Apply light and frequent irrigation to standing crops in Gangetic West Bengal, Odisha,
- Bihar, Jharkhand, East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh,
- Coastal Andhra Pradesh and Telangana.

**IMPACT & ACTION SUGGESTED due to very heavy/extremely heavy rainfall over south Rajasthan on 18<sup>th</sup>; Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim during 18<sup>th</sup>-20<sup>th</sup> June.**

**A. Impact Expected**

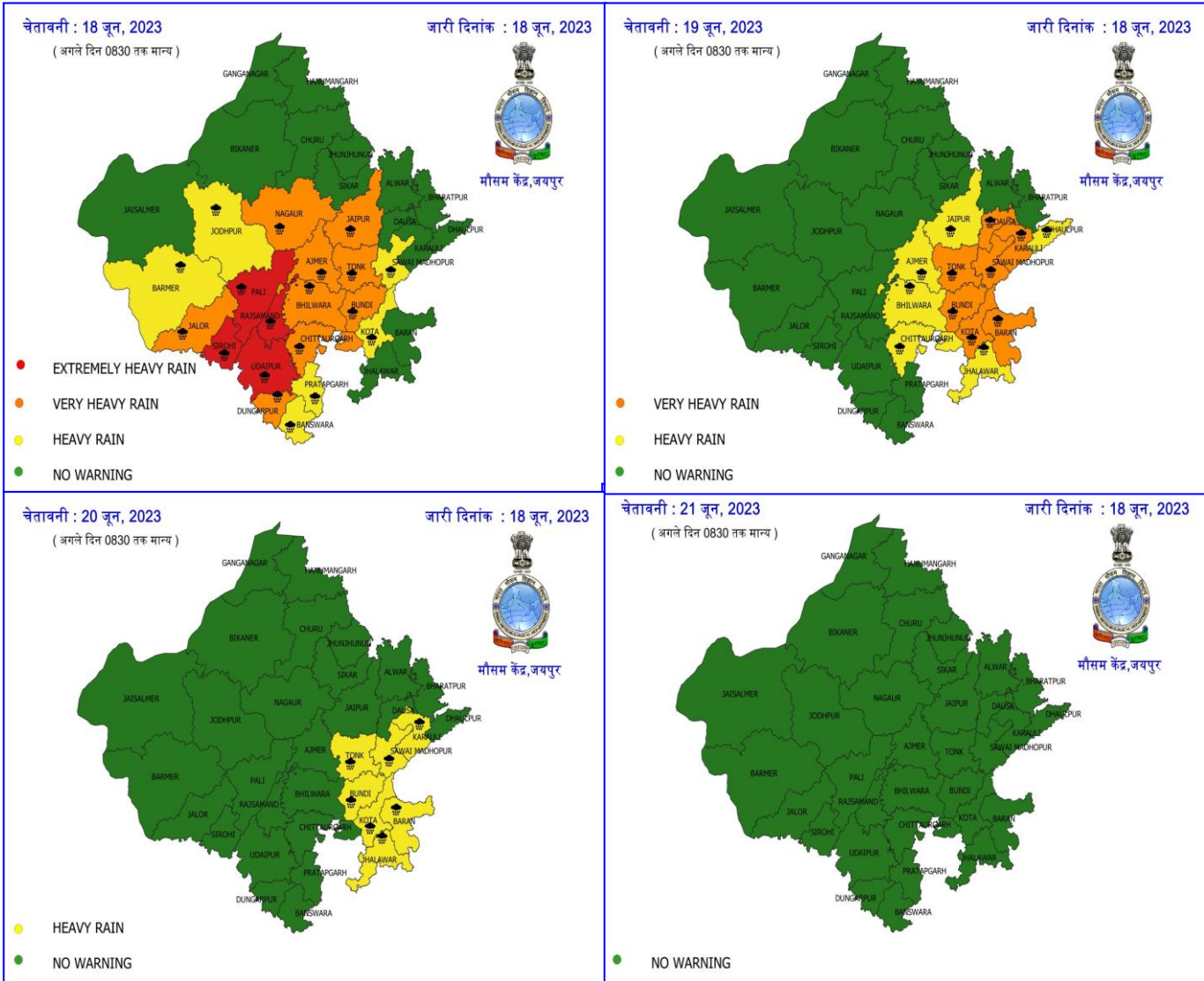
- Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor 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.



### **District-wise Heavy Rainfall Warning Maps for 18<sup>th</sup> – 21<sup>st</sup> June for Rajasthan**



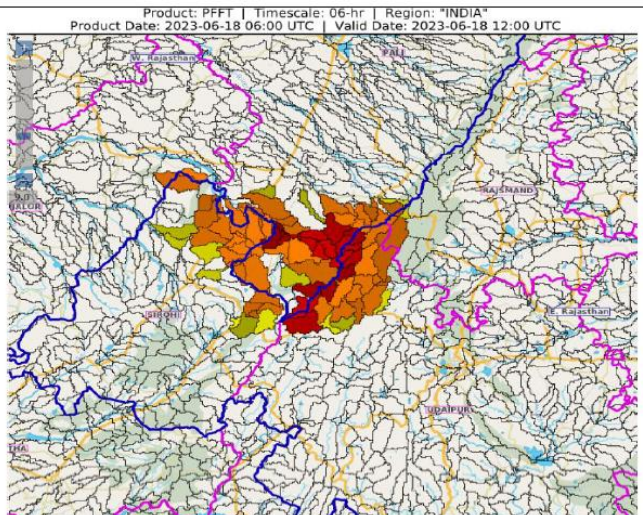
**Persistent Flash Flood Threat (PFFT) till 1730 IST of 18-06-2023 :**

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

**East Rajasthan** - Rajsmand, Sirohi and Udaipur districts.

**West Rajasthan** - Pali district.

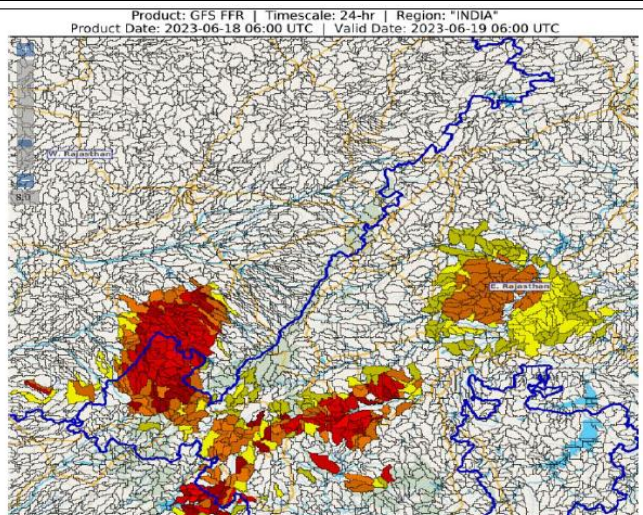
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 6 hours.



**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 19-06-2023 :**

**Light to Moderate flash flood risk** likely over few watersheds & neighbourhoods of **East Rajasthan** and **West 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.


















## 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, Tamilnadu, 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			Subdivision color		
	Heavy Rain		Dust Storm		NO WARNING
	Heavy Snow		Strong Surface Winds		WATCH(BE UPDATED)
	Thunderstorms & Lightning		Heat Wave		ALERT (BE PREPARED)
	Hailstorm		Cold wave		WARNING (TAKE ACTION)
			Fog		

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