



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 93 (ARB/01/2023)

TIME OF ISSUE: 1245 HOURS IST

DATED: 18.06.2023

FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

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Sub: Depression (Remnant of Cyclonic Storm 'Biparjoy') over central parts of South Rajasthan & neighbourhood

The Depression (Remnant of Cyclonic Storm 'Biparjoy') over central parts of South Rajasthan & neighbourhood moved east-northeastwards with a speed of 13 kmph during past 6-hours, and lay centered at 0830 hours IST of today, the 18th June, 2023 over the same region near latitude 26.2°N and longitude 73.8°E, about 80 km east-southeast of Jodhpur and 90 km west-southwest of Ajmer.

It is very likely to continue to move east-northeastwards and maintain the intensity of Depression till evening of today, the 18th June.

Warnings:

(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 18th June.
- Light to moderate rainfall at most places is very likely with isolated heavy to extremely heavy rainfall over **Southeast Rajasthan** on 18th June, isolated heavy to very heavy rainfall on 19th June and isolated heavy rainfall on 20th June.
- Light to moderate rainfall at most places is likely with isolated heavy rainfall over **Northeast Rajasthan** on 18th June, isolated heavy to very heavy rainfall on 19th June and isolated heavy rainfall on 20th June.
- Light to moderate rainfall at most places is likely with isolated heavy to very heavy rainfall over **West Madhya Pradesh** on 19th and 20th June and isolated heavy rainfall over **southwest Uttar Pradesh** on 20th June.

- Light to moderate rainfall at many places is likely with isolated heavy rainfall over **North Gujarat Region** on 18th June.

(ii) Wind warning:

Wind Warning for Rajasthan and adjoining North Gujarat

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely till evening of 18th 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 19th June.

(iii) Damage expected over south Rajasthan and adjoining areas of Districts of North Gujarat during next 12 hours:

- Inundation of low lying areas.
- Reduction in visibility causing difficulty in surface transport in heavy rain
- Some breaches in Kutcha road due to flooding.
- Damage to loose / unsecured structures.
- Minor damage to Banana, papaya, drumstick trees and horticultural crops.

(iv) Action suggested:

- Avoid staying in low lying areas which could be inundated due to heavy rain.
- Protect solar panels etc. from damage due to strong winds & lightning.
- Stay indoors, close windows & doors and avoid travel, if possible, during thunderstorms & gusty winds.
- Take safe shelters; do not take shelter under trees.
- Keep away from all the objects that conduct electricity during thunderstorm.
- Adventure activities & tourism trips may be avoided.
- Make necessary arrangements for draining out excess water from crop fields to avoid water stagnation in Gujarat, Rajasthan and West Madhya Pradesh.
- Provide mechanical support to horticultural crops and staking to vegetables.

Observed Heavy Rainfall 18th June, 2023 (0830 hours IST):

Rajasthan:

Mounntabu (Sirohi) 36, Sr Chitalwana (Jalore) 34, Raniwada (Jalore) 32, Jalore (Jalore) 32, Sheoganj (Sirohi) 31, Sanchore (Jalore) 30, Jaswantpur (Jalore), 29, A Sumerpur (Pali) 27, Chotan (Barmer) 27, Dhorimanna (Barmer) 26, Rani (Pali) 25, Reodar (Sirohi) 24, Bali (Pali) 24, Siwana (Barmer) 24, Bagoda (Jalore) 23, Jawai Dam (Pali) 23, Abu Road (Sirohi) 20, Pali (Pali) 20, Samdari (Barmer) 20, Sedwa (Barmer) 19, Dhanau (Barmer) 18, Balotra (Barmer) 18, Desuri (Pali) 18, Pindwara (Sirohi) 18, Bhinmal (Jalore) 17, Deogarh (Rajsamand) 15, Guddamalan (Barmer) 14, Marwar (Pali) 13, Junction Pachbhadra (Barmer) 13, Sirohi (Sirohi) 13, Kubhalgarh (Rajsamand) 12, Gadhbora (Rajsamand) 12, Gogunda (Udaipur) 12, Bhadrachal (Jalore) 11, Ahore (Jalore) 10, Kotda (Udaipur) 10, Nokda (Barmer) 9, Jodhpur (Jodhpur) 9, Luni (Jodhpur) 9, Kalyanpur (Barmer) 9, Sindhari (Barmer) 9, Jodhpur (Jodhpur) 9, Rohat (Pali) 9, Baitu (Barmer) 8, Sayla (Jalore) 8, Sojat (Pali) 8, Amet (Rajsamand) 7, Ramsar (Barmer) 7, Todgarh (Ajmer) 7

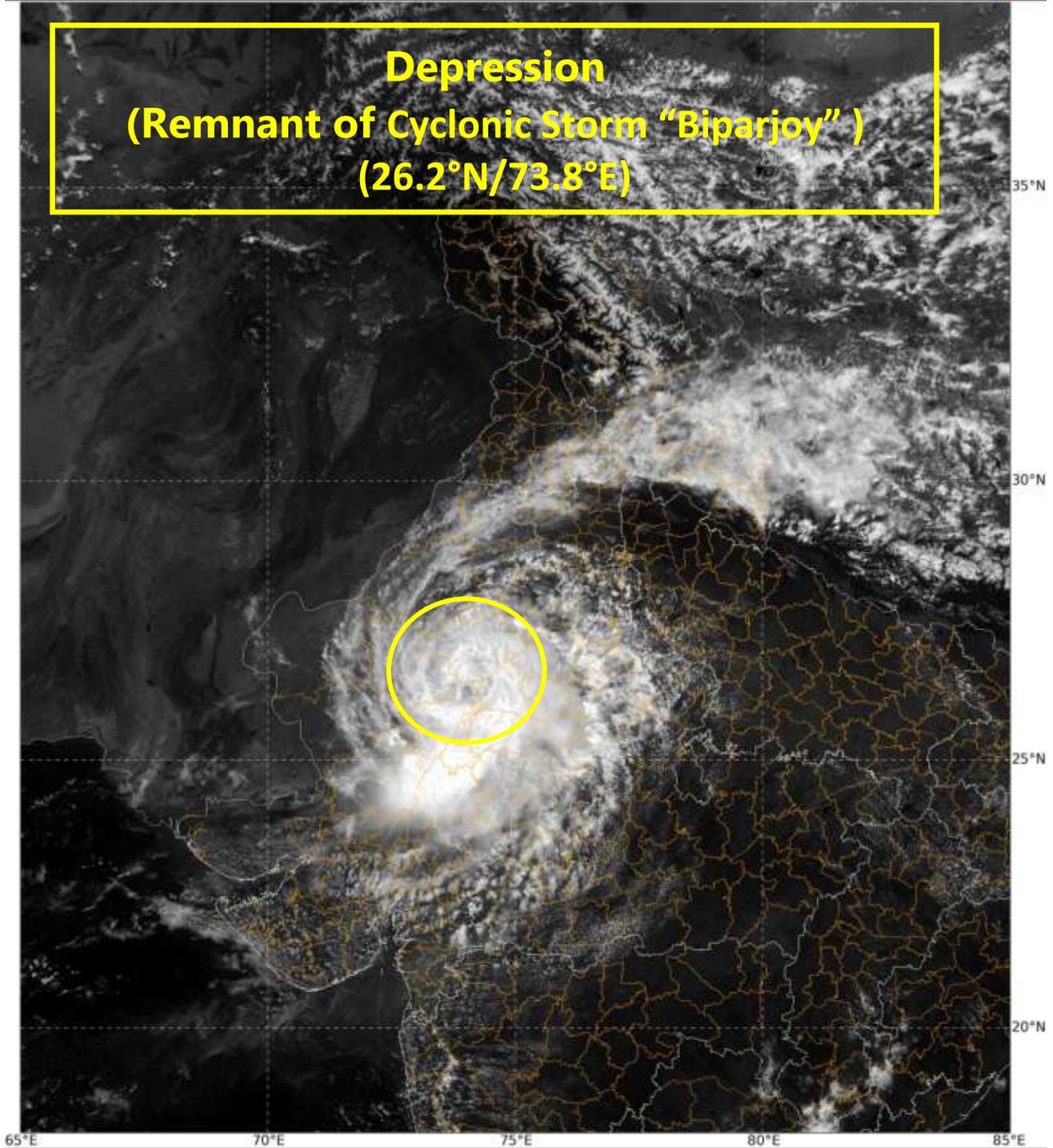
The system is under continuous surveillance and the next message will be issued at 1430 hours IST of today, the 18th June, 2023.

(Ananda Kumar Das)
Scientist F, Cyclone Warning Division, New Delhi

Copy to: ACWC Mumbai/ CWC Ahmedabad/MC Jaipur/MC Bhopal/RMC Nagpur/MC Lucknow
LEGEND: Heavy Rainfall: 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total

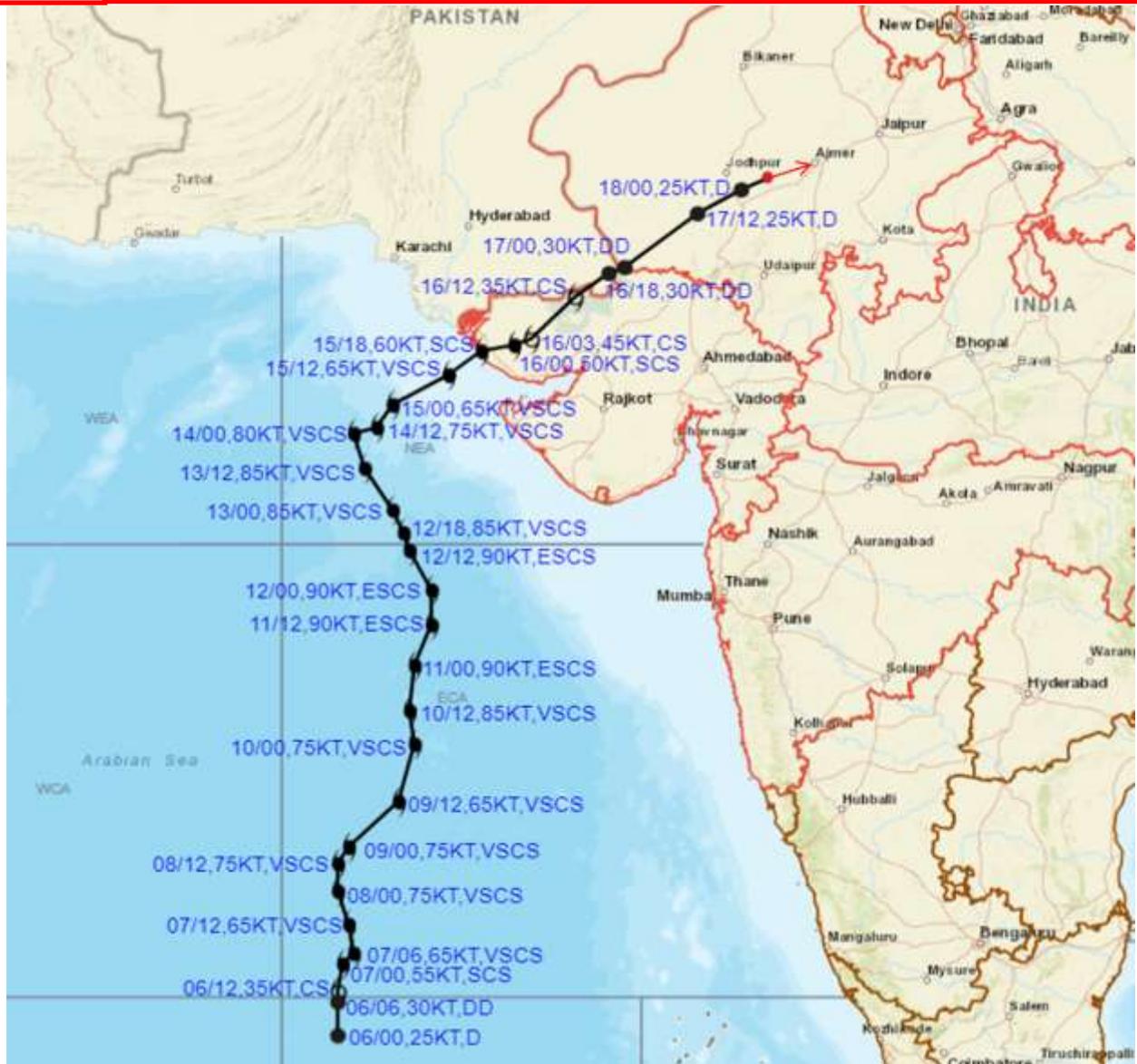


Depression
(Remnant of Cyclonic Storm "Biparjoy")
(26.2°N/73.8°E)





OBSERVED AND FORECAST TRACK OF DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER CENTRAL PARTS OF SOUTH RAJASTHAN AND NEIGHBOURHOOD BASED ON 0300 UTC (0830 IST) OF 18TH JUNE 2023.



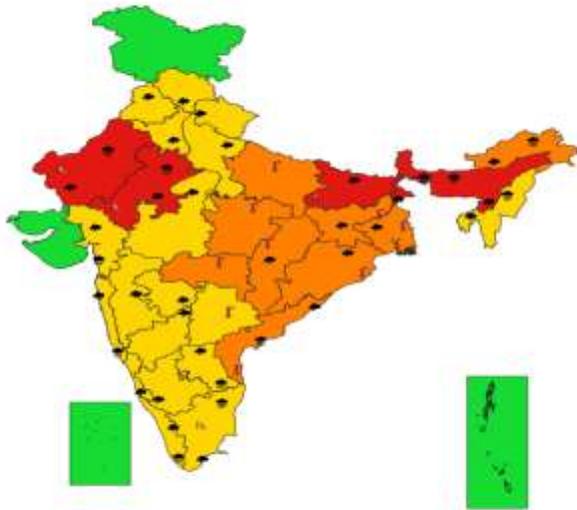
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

- LESS THAN 34 KT
- 34.47 KT
- \geq 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

All India Heavy Rainfall Warning Maps for 18th & 19th June



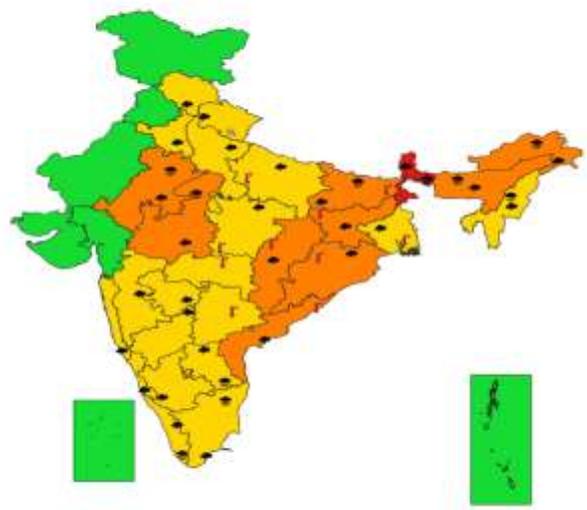
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(18-6-2023)



- | | | |
|---|---|--|
| Subdivision Warning
☁ Heavy Rain
❄ Heavy Snow
⚡ Thunderstorms & Lightning
❄ Halobrom | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
🌡 Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH (BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|---|---|--|



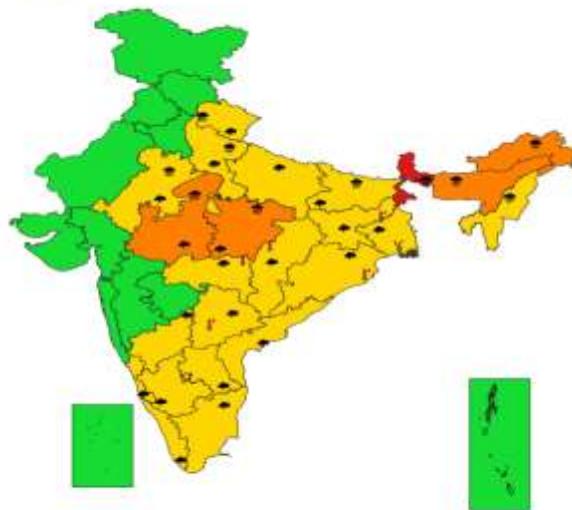
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(19-6-2023)



- | | | |
|---|---|--|
| Subdivision Warning
☁ Heavy Rain
❄ Heavy Snow
⚡ Thunderstorms & Lightning
❄ Halobrom | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
🌡 Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH (BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|---|---|--|

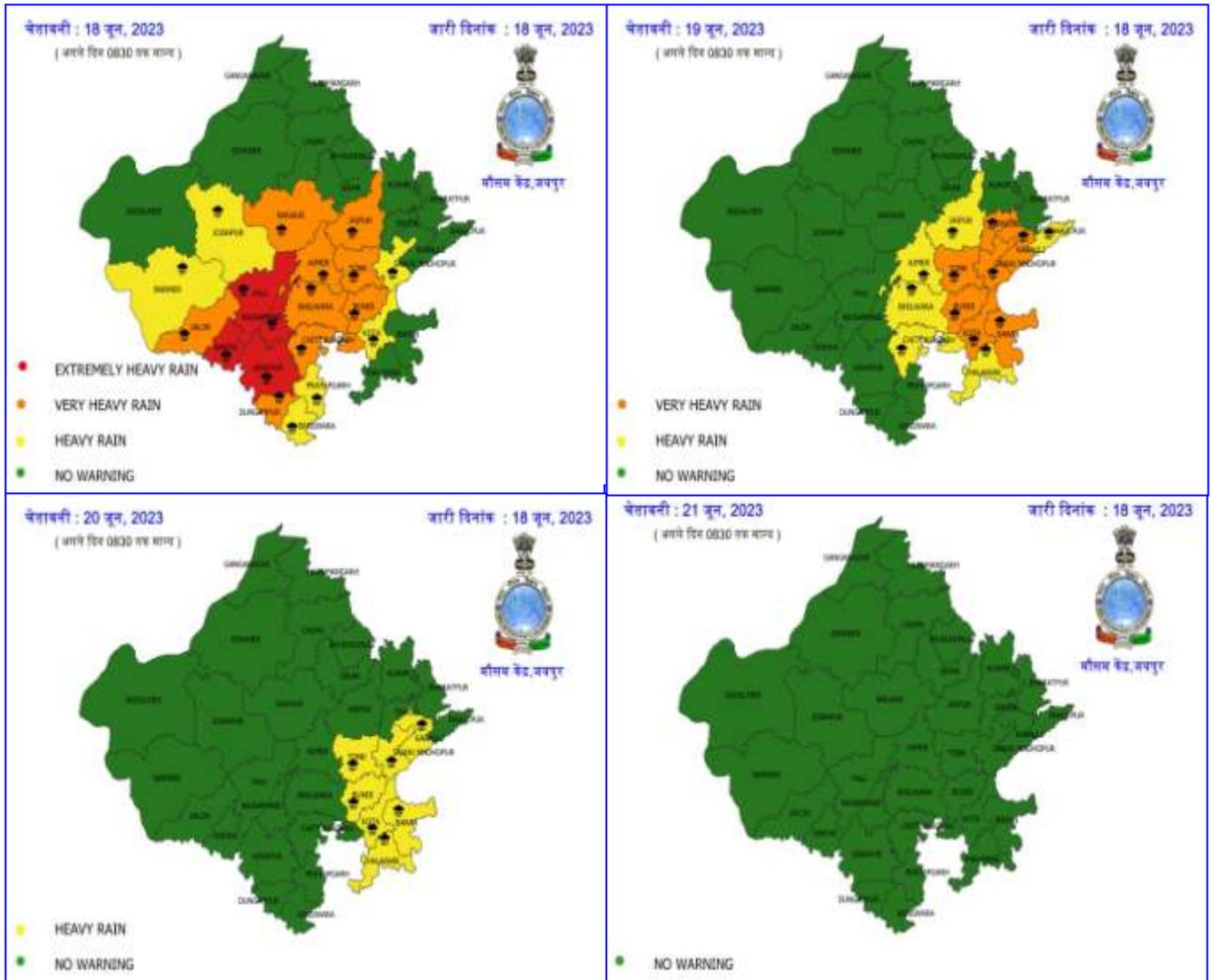


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(20-6-2023)



- | | | |
|---|---|--|
| Subdivision Warning
☁ Heavy Rain
❄ Heavy Snow
⚡ Thunderstorms & Lightning
❄ Halobrom | ☁ Dust Storm
🌪 Strong Surface Winds
🌡 Heat Wave
🌡 Cold wave
🌫 Fog | Subdivision color
🟢 NO WARNING
🟡 WATCH (BE UPDATED)
🟠 ALERT (BE PREPARED)
🔴 WARNING (TAKE ACTION) |
|---|---|--|

District-wise Heavy Rainfall Warning Maps for 18th – 21st June for Rajasthan

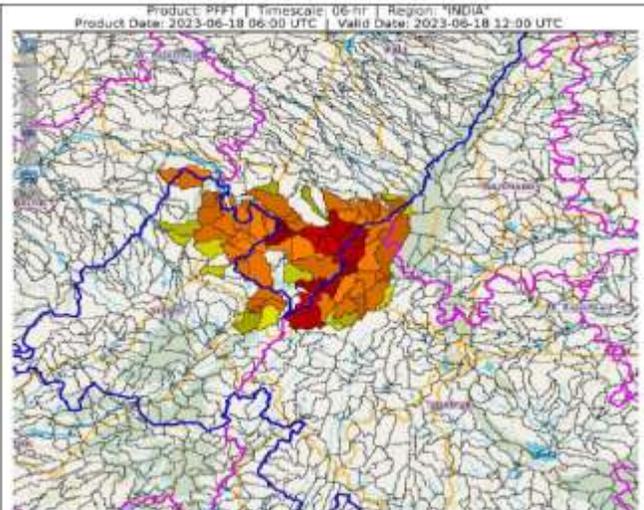


Persistent Flash Flood Threat (PFFT) till 1730 IST of 18-06-2023 :

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.

