



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO. 96 (ARB/01/2023)

TIME OF ISSUE: 0100 HOURS IST

DATED: 19.06.2023

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

The Depression (Remnant of Cyclonic Storm 'Biparjoy') over central parts of East Rajasthan and neighbourhood moved nearly eastwards with a speed of 08 kmph during past 6-hours, and lay centered at 2330 hours IST of 18th June, 2023 over the same region near latitude 26.3°N and longitude 75.2°E, about 60 km west-northwest of Tonk, 60 km east-southeast of Ajmer and 80 km southwest of Jaipur.

It is very likely to continue to move nearly east-northeastwards and maintain its intensity of Depression during next 12 hours.

Warnings:

(i) Heavy Rainfall Warning (Rajasthan and Madhya Pradesh):

- Light to moderate rainfall at most places is very likely with isolated heavy to very heavy rainfall over **East Rajasthan** 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.

(ii) Wind warning:

Wind Warning for Rajasthan and adjoining Northwest Madhya Pradesh

- Squally wind speed reaching 30-40 kmph gusting to 50 kmph is very likely over **East Rajasthan and adjoining areas of West Madhya Pradesh** during next 12 hours and decrease thereafter

becoming strong wind speed reaching 25-35 kmph gusting to 45 kmph thereafter over the region till evening of 19th June.

(iii) Damage expected over East Rajasthan and adjoining areas of Northwest Madhya Pradesh 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.

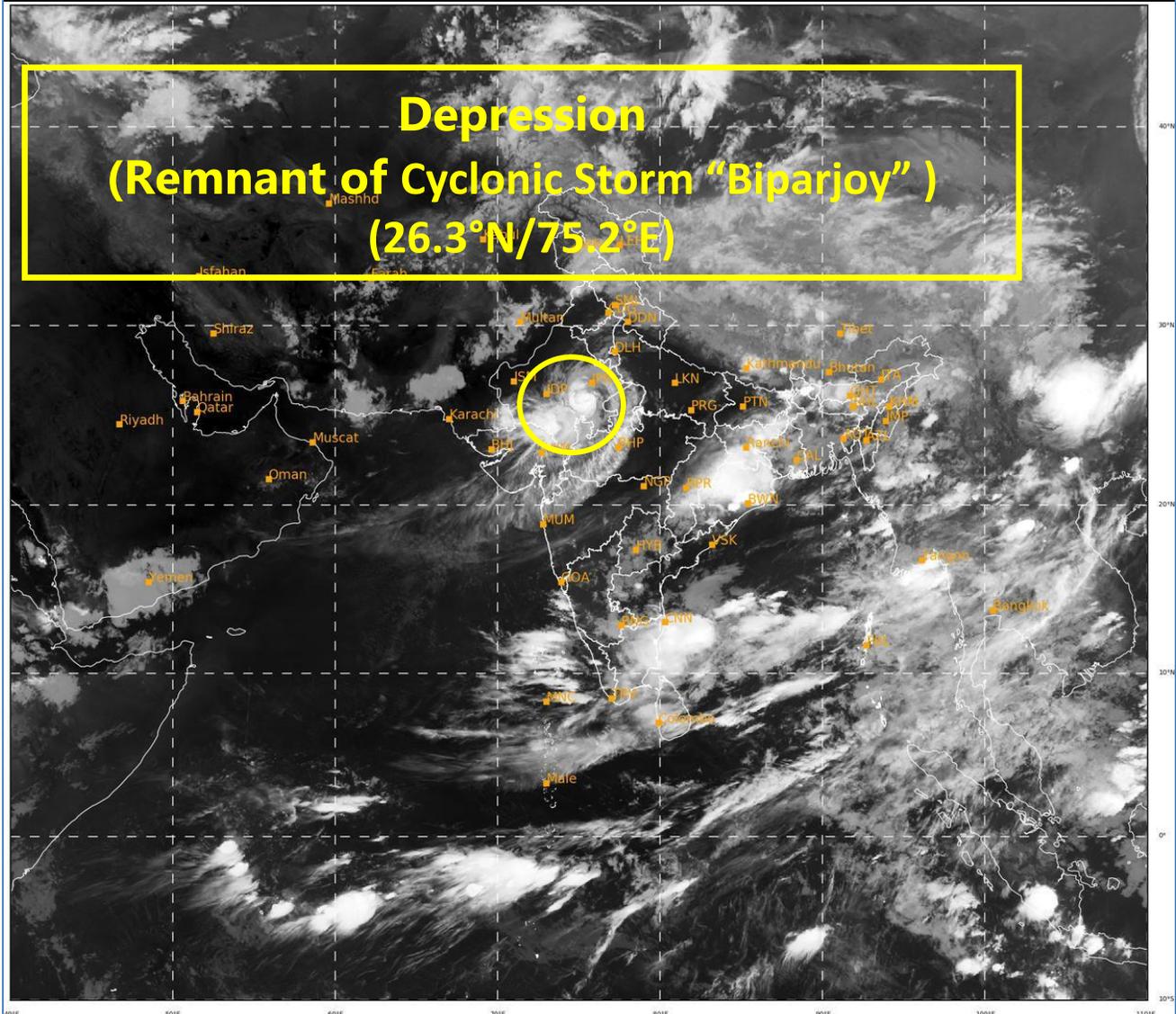
(iv) Action suggested:

- 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.

The system is under continuous surveillance and the next message will be issued at 0830 hours IST of 19th June, 2023.

(Shobhit Katiyar)
Scientist C
Cyclone Warning Division
IMD, 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



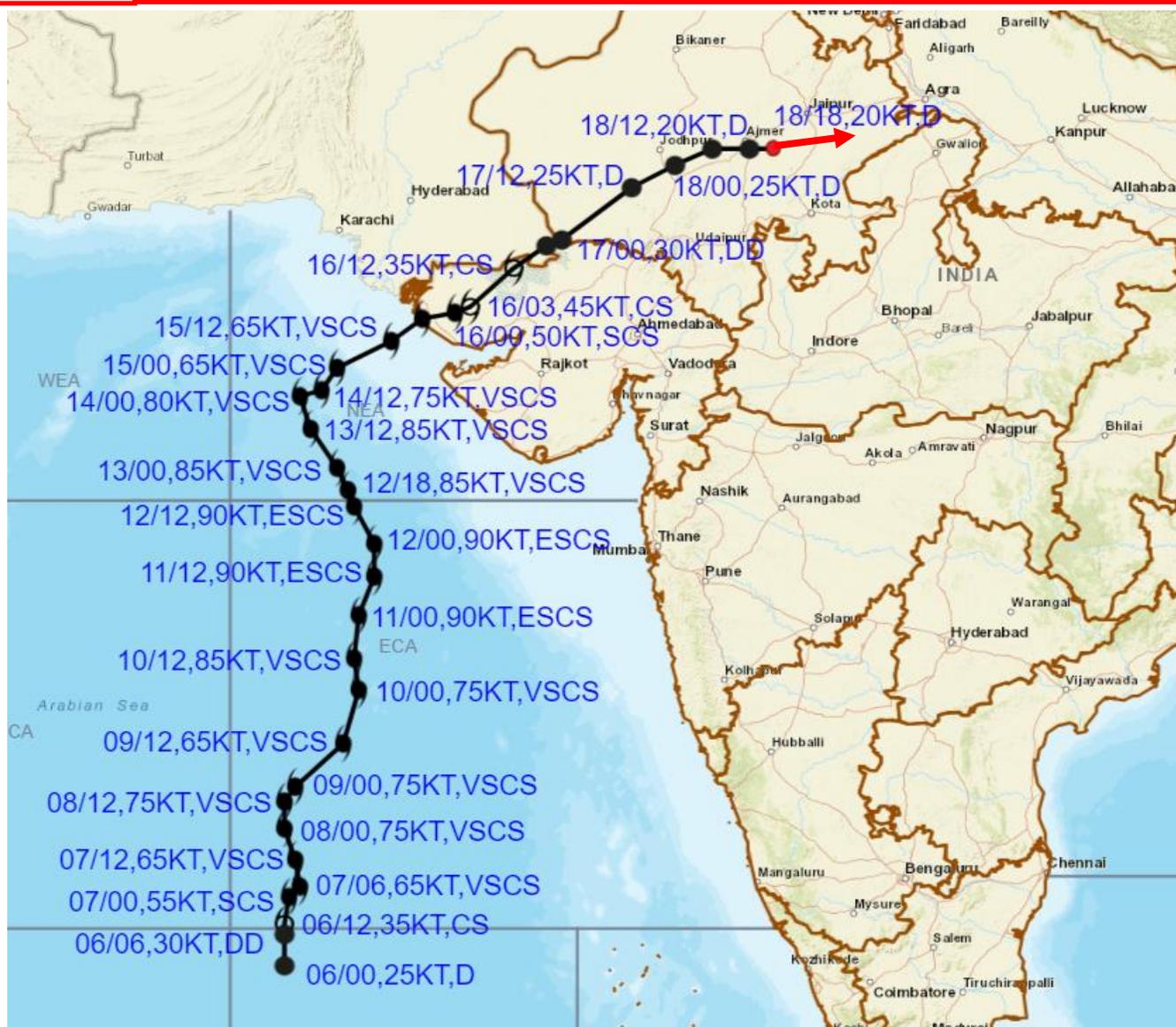
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IMD, DELHI



OBSERVED AND FORECAST TRACK OF DEPRESSION (REMANANT OF CYCLONIC STORM BIPARJOY) OVER CENTRAL PARTS OF EAST RAJASTHAN AND NEIGHBOURHOOD BASED ON 1800 UTC (2330 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

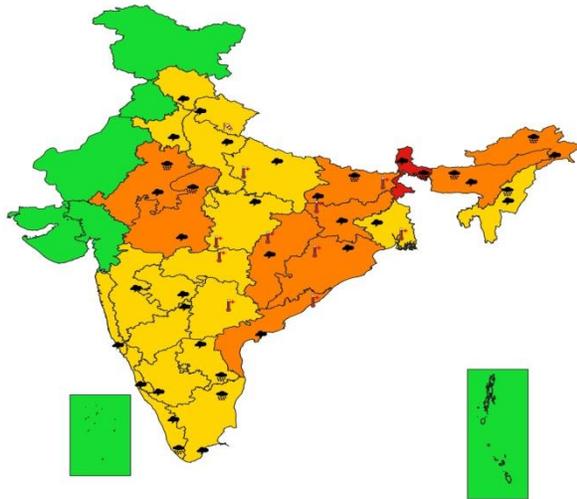
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



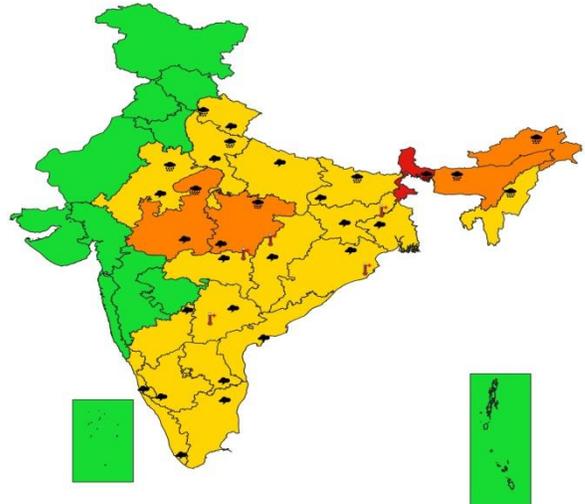
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(19-6-2023)**



- | | | |
|---------------------------|----------------------|-----------------------|
| 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) |



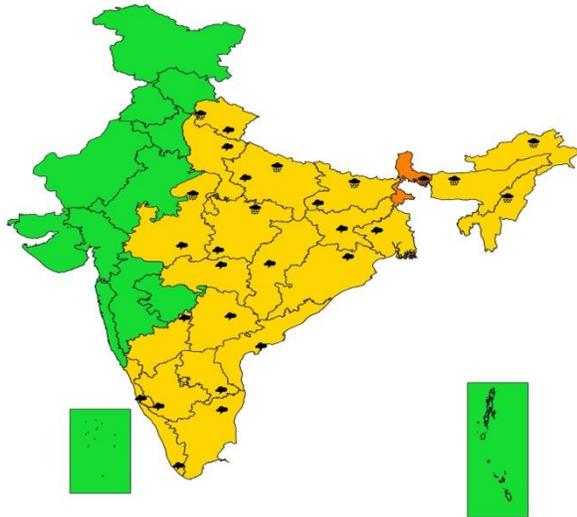
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(20-6-2023)**



- | | | |
|---------------------------|----------------------|-----------------------|
| 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) |

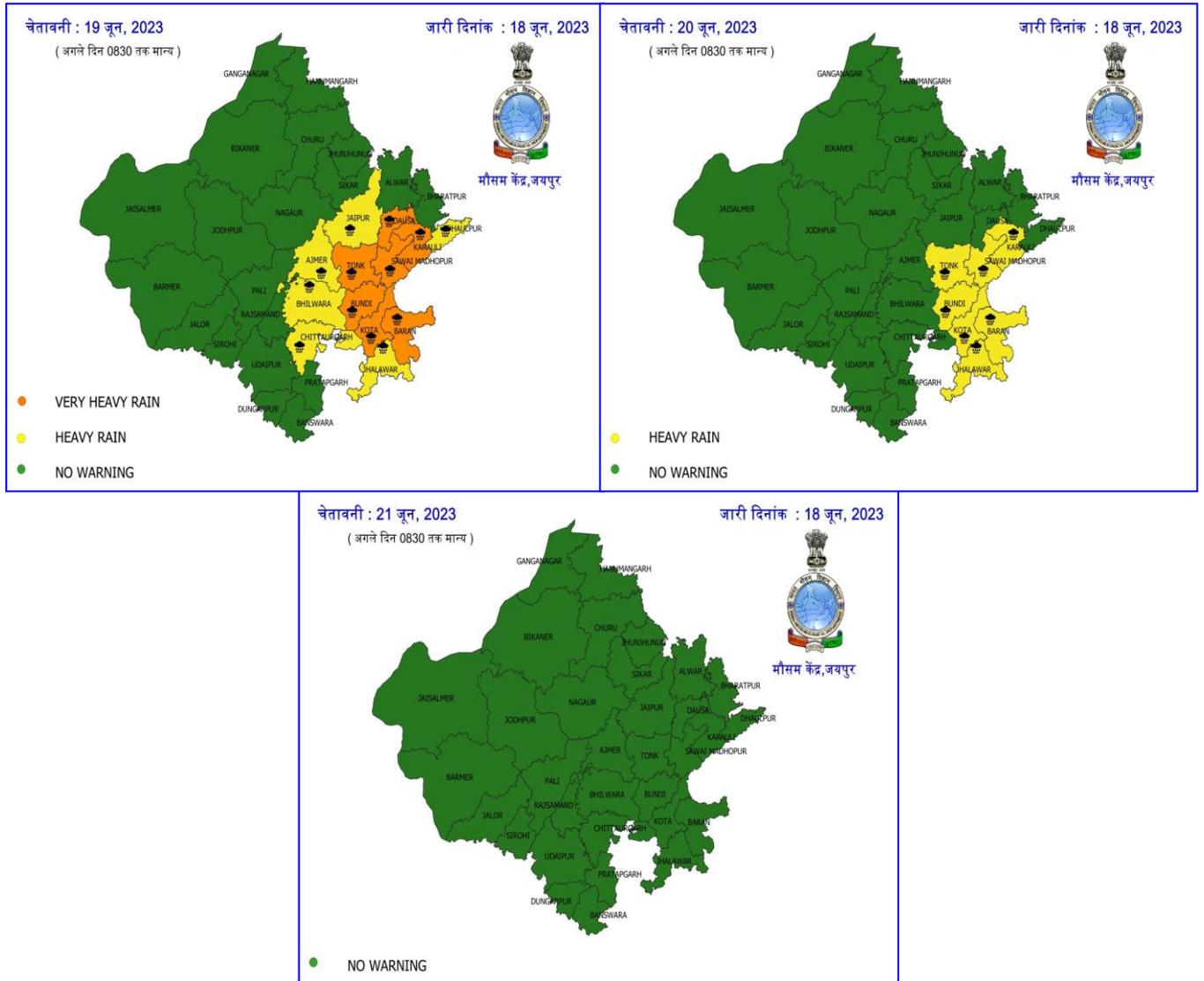


**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(21-6-2023)**



- | | | |
|---------------------------|----------------------|-----------------------|
| 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) |

District-wise Heavy Rainfall Warning Maps for 19th – 21st June for Rajasthan



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.

