



**India Meteorological Department  
(Ministry of Earth Sciences)**

**NATIONAL BULLETIN NO. 16 (LAND/01/2024)**

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

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)**

**CONTROL ROOM NDMA (FAX.NO. 26701729)**

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)**

**PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)**

**SECRETARY, MOES (FAX NO. 24629777)**

**H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)**

**DIRECTOR GENERAL, DOORDARSHAN (23385843)**

**DIRECTOR GENERAL, AIR (23421105, 23421219)**

**PIB MOES (FAX NO. 23389042)**

**UNI (FAX NO. 23355841)**

**D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)**

**DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)**

**CHIEF SECRETARY, MADHYA PRADESH (FAX NO. 0755-2441076)**

**CHIEF SECRETARY, UTTAR PRADESH (FAX NO.0522-2239283)**

**CHIEF SECRETARY, RAJASHTHAN (FAX NO. 0141-2227114)**

**CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)**

**CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022-22028594)**

**Sub: Depression over Northwest Rajasthan and neighbourhood**

The depression over Northeast Rajasthan and neighbourhood moved west-northwestwards with a speed of 30 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 5<sup>th</sup> August over Northwest Rajasthan near latitude 27.6°N and longitude 73.5°E, about 50 km south-southeast of Bikaner (Rajasthan), 120 km east-northeast of Phalodi (Rajasthan), 150 km north-northeast of Jodhpur (Rajasthan) and 270 km east-northeast of Jaisalmer (Rajasthan).

It is likely to continue to move west-northwestwards across Northwest Rajasthan and weaken into a well marked low pressure area during next 12 hours.

**Warnings (Graphics Attached):**

**(i) Rainfall Warning:**

**East Rajasthan:**

Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at isolated places on 5<sup>th</sup> and heavy rainfall at isolated places on 6<sup>th</sup> August.

**West Rajasthan:**

Light to moderate rainfall at most places is very likely with **heavy to extremely heavy rainfall** at isolated places on 5<sup>th</sup> and heavy to very heavy rainfall at isolated places on 6<sup>th</sup> August.

**Gujarat region:**

Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places on 5<sup>th</sup> and **heavy rainfall** at isolated places on 6<sup>th</sup> August.

**Saurashtra & Kutch:**

Light to moderate rainfall at many places is very likely with heavy rainfall at isolated places on 5<sup>th</sup> August.

**West Madhya Pradesh:**

Light to moderate rainfall at most places is very likely with **heavy rainfall** at isolated places on 05<sup>th</sup> August.

**Madhya Maharashtra:**

Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places on 5<sup>th</sup> and **heavy rainfall** at isolated places on 6<sup>th</sup> August.

**Konkan & Goa:**

Light to moderate rainfall at most places with **heavy rainfall** at a few places is very likely on 5<sup>th</sup> & 6<sup>th</sup> August.

**(ii) Flash Flood Guidance (Graphics Attached):****24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 06-08-2024 (Graphics attached):**

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

Low to Moderate flash flood risk is likely over few watersheds & neighbourhoods of Konkan & Goa 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.

**(iii) Wind warning:**

- Strong wind speed reaching 30-40 kmph gusting to 50 kmph is very likely over West Rajasthan and neighbourhood during next 12 hours and decrease thereafter.

**(iv) 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 leading to increased travel time.
- Surface runoff/ inundation may occur at some fully saturated soils & low-lying areas
- Minor damage to kutch roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- 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)

**(v) 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.

**(vi) Agromet advisories for Heavy Rainfall likely over various parts of the country**

- Make provision for draining out excess water from crop fields to avoid water stagnation in Rajasthan, Gujarat, Madhya Maharashtra and Konkan & Goa.
- Provide mechanical support to horticultural crops and staking to vegetables.

**Next bulletin will be issued at 0230 hours IST of tomorrow, the 6<sup>th</sup> August, 2024.**

**(Monica Sharma)**  
**Scientist-D, Cyclone Warning Division, New Delhi**

*Copy to: ACWC Kolkata/RMC, New Delhi/RMC, Nagpur/ MC, Bhopal/MC, Jaipur/CWC  
Bhubaneswar/MC, Lucknow/RMC, Mumbai/MC, Ahmedabad*

**24 hours cumulative realised rainfall (in cm) ending at 0830 hours IST of 5th August (Graphics Attached)**

**East Rajasthan:** Nagrarfort (Tonk) 32, Hindoli (Bundi) 22, Jahazpur (Bhilwara) 21, Bundi (Bundi) 19, Sarwar (Ajmer) 18, Kekri (Ajmer) 18, Sawar (Ajmer) 17, Geola Sr (Ajmer) 17, Deoli (Tonk) 17, Kishanganj (Baran) 16, Mangliawas (Ajmer) 15, Mangrol (Baran) 15, Bakani (Jhalawar) 13, Pisagan (Ajmer) 13, Uniara / Aligarh (Tonk) 12, Deogarh (Rajsamand) 12, Bhinay (Ajmer) 11, Badesar (Chittorgarh) 11, Shahpura (Bhilwara) 11, Baran (Baran) 11, Malpura (Tonk) 11, Patan (Bundi) 11, Mandalgarh (Bhilwara) 11, Nayanagar/beawar (Ajmer) 11, Todaraisingh (Tonk) 11, Talera (Bundi) 11, Bhainsroadgarh (Chittorgarh) 10, Nainwa (Bundi) 10, Tatgarh (Ajmer) 10, Pratapgarh (Pratapgarh) 10, Tonk Tehsil (Tonk) 10, Atru (Baran) 10, Nimbahera (Chittorgarh) 10, Masuda (Ajmer) 9, Pachpahar (Jhalawar) 9, Pushkar (Ajmer) 9, Jhalarapatan (Jhalawar) 9, Piplu (Tonk) 9, Nasirabad (Ajmer) 9, Bijoliya (Bhilwara) 8, Kotri (Bhilwara) 8, Pirawa (Jhalawar) 8, Shahabad (Baran) 8, Ladpura (Kota) 8, Indergarh (Bundi) 8, Gangdhar (Jhalawar) 8, Aklera (Jhalawar) 8, Chothkabarwara (Sawai Madhopur) 7, Degod (Kota) 7, Kota (Kota) 7, Mavli (Udaipur) 7, Anta (Baran) 7, Ramganjmandi (Kota) 7, Arai (Ajmer) 7, Railmagra (Rajsamand) 7, Chittorgarh (Chittorgarh) 7, Begu (Chittorgarh) 7, Jhalawar (Jhalawar) 7, Rashmi (Chittorgarh) 7, Dug (Jhalawar) 7,

**West Rajasthan:** Sojat (Pali) 26, Degana (Nagaur) 10, Raipur (Pali) 9, Bilara (Jodhpur) 9, Jaitran (Pali) 6,

**Gujarat Region:** Khergam (Navsari) 23, Dharampur (Valsad) 18, Kaprada (Valsad) 17, Dangs (Dangs) 16, Chikhli (Navsari) 15, Vansda (Navsari) 14, Waghai (Dangs) 14, Valsad (Valsad) 14, Dang (Dangs) 13, Pardi (Valsad) 13, Daman (Daman) 13, Subir (Dangs) 11, Dolvan (Tapi) 11, Valsad (Valsad) 11,

**Madhya Maharashtra:** Surgana (Nashik) 20, Lonavala (Pune) 15, Igatpuri (Nashik) 14, Peth (Nashik) 12, Mahabaleshwar- (Satara) 12, Ozarkheda - (Nashik) 11, Yaval (Jalgaon) 11, Trimbakshwar (Nashik) 10, Harsul (Nashik) 9, Paud Mulshi (Pune) 7, Velhe (Pune) 6, Dindori (Nashik) 6;

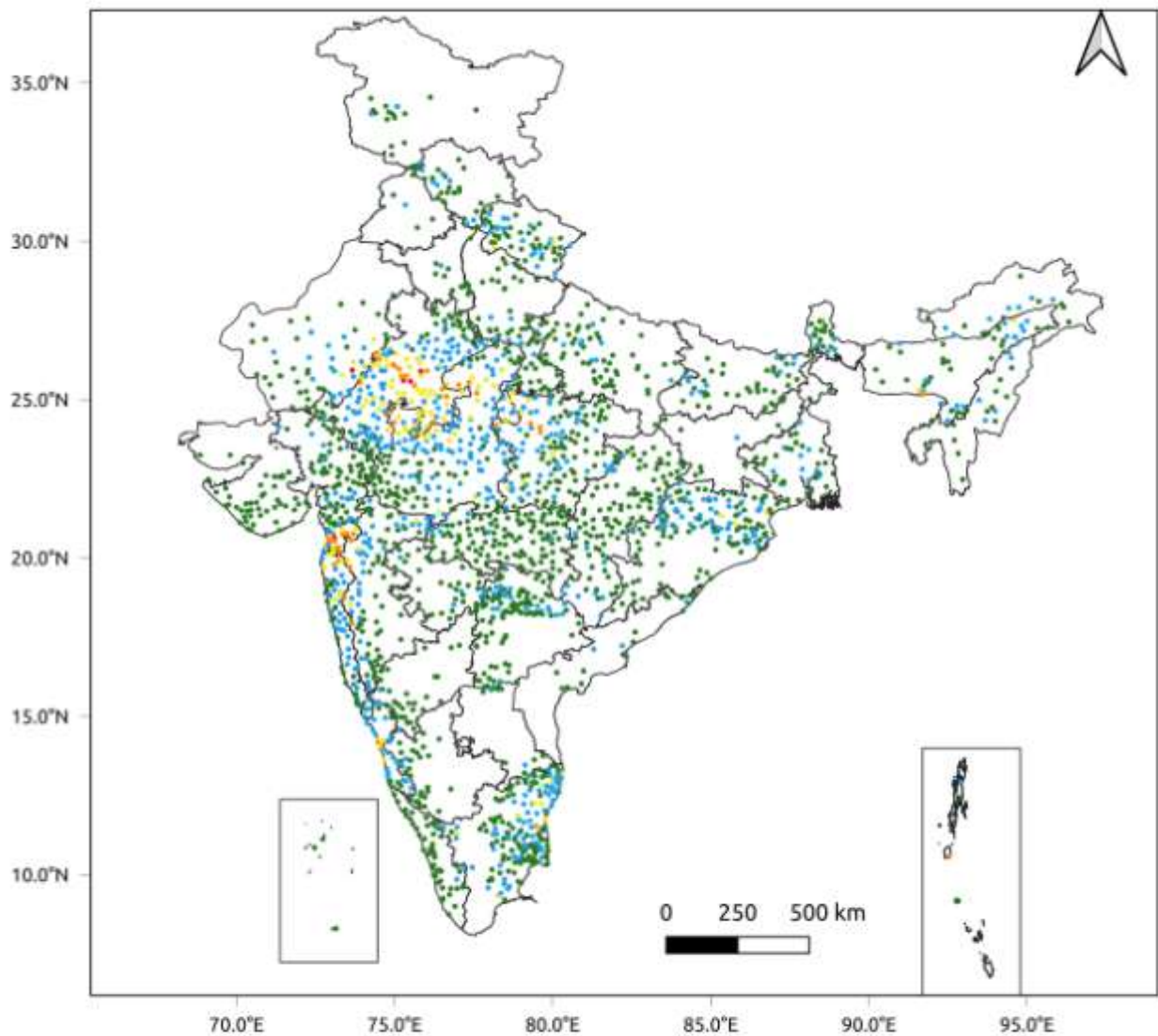
**East Madhya Pradesh:** Buxwaha (Chhatarpur) 15, Orchha (Niwari) 15, Hatta (Damoh) 14, Patera (Damoh) 12, Bina (Sagar) 12, Shahgarh (Sagar) 11, Malthone (Sagar) 11, Mohangarh (Tikamgarh) 9, Amarkantak (Anuppur) 9, Panagar (Jabalpur) 9, Khargapur (Tikamgarh) 8, Junnardeo (Chindwara) 8, Prithvipur (Niwari) 7, Badagaon Dhasan (Tikamgarh) 7, Palera (Tikamgarh) 7, Niwari (Niwari) 7,

**West Madhya Pradesh:** Malhargarh (Mandsaur) 15, Karhal (Sheopur) 14, Jawad (Neemuch) 13, Pohri (Shivpuri) 13, Kolaras (Shivpuri) 12, Sheopur-aws (Sheopur) 11, Karera (Shivpuri) 11, Pichhore (Shivpuri) 10, Bamori (Guna) 10, Zirapur (Rajgarh) 9, Narwar (Shivpuri) 9, Badoda (Sheopur) 9, Manasa (Neemuch) 9, Shivpuri (Shivpuri) 9, Kayampur (Mandsaur) 9, Raghogarh (Guna) 8, Dhundhadaka (Mandsaur) 8, Biaora (Rajgarh) 8, Khirkiya-arg (Harda) 8, Barod (Agar-malwa) 8, Bhanpura (Mandsaur) 7, Bhimpur (Betul) 7, Nepanagar (Burhanpur) 7, Susner (Agar-malwa) 7, Bairad (Shivpuri) 7, Neemuch (Neemuch) 7, Shamgarh (Mandsaur) 7, Badarwas (Shivpuri) 7, Sitamau (Mandsaur) 7, Pachore (Rajgarh) 7,

**Konkan & Goa:** Vikramgad (Palghar) 15, Jawhar (Palghar) 15, Mokheda (Palghar) 9, Talasari (Palghar) 9, Khalapur (Raigad) 8, Pen (Raigad) 8, Palghar (Palghar) 7, Matheran (Raigad) 7

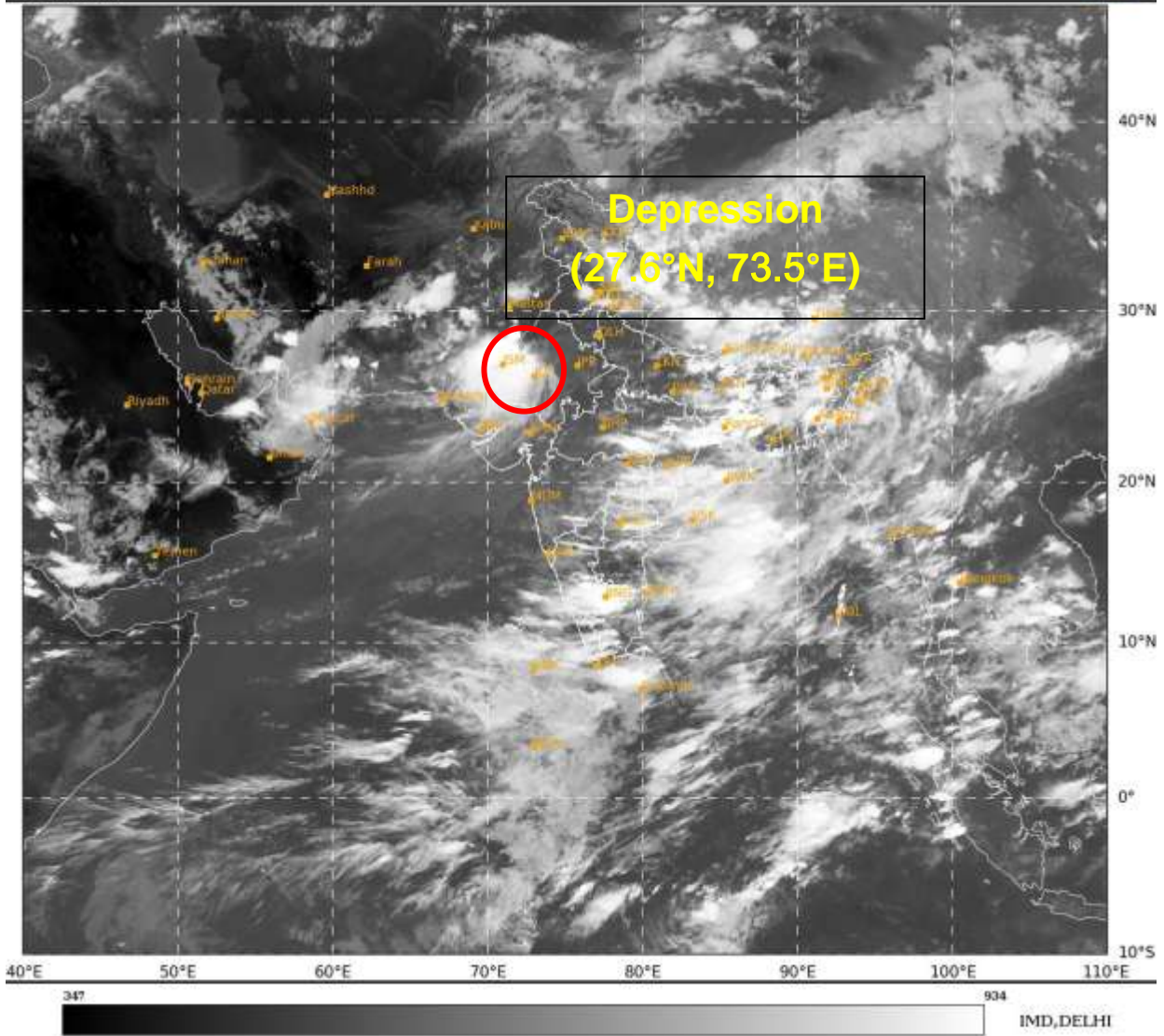


## 24 Hr cumulative rainfall recorded over different stations during 0830 IST of 4-8-2024 to 0830 IST of 5-8-2024



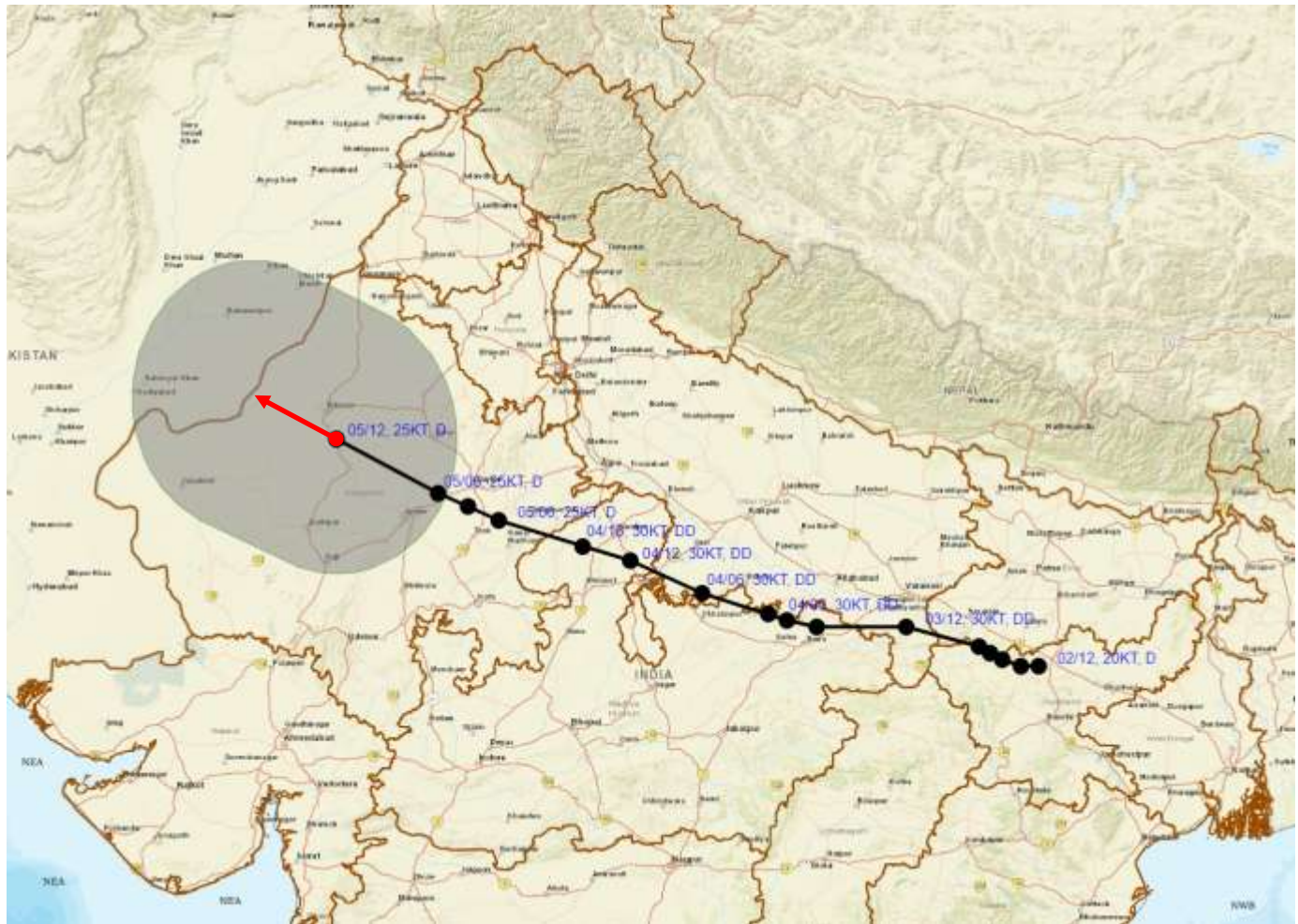
### Legends

- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)





**OBSERVED AND FORECAST TRACK ALONGWITH WIND DISTRIBUTION IN ASSOCIATION WITH DEPRESSION OVER NORTHWEST RAJASTHAN AND NEIGHBOURHOOD BASED ON 1730 IST (1200 UTC) OF 05th AUGUST, 2024.**



**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

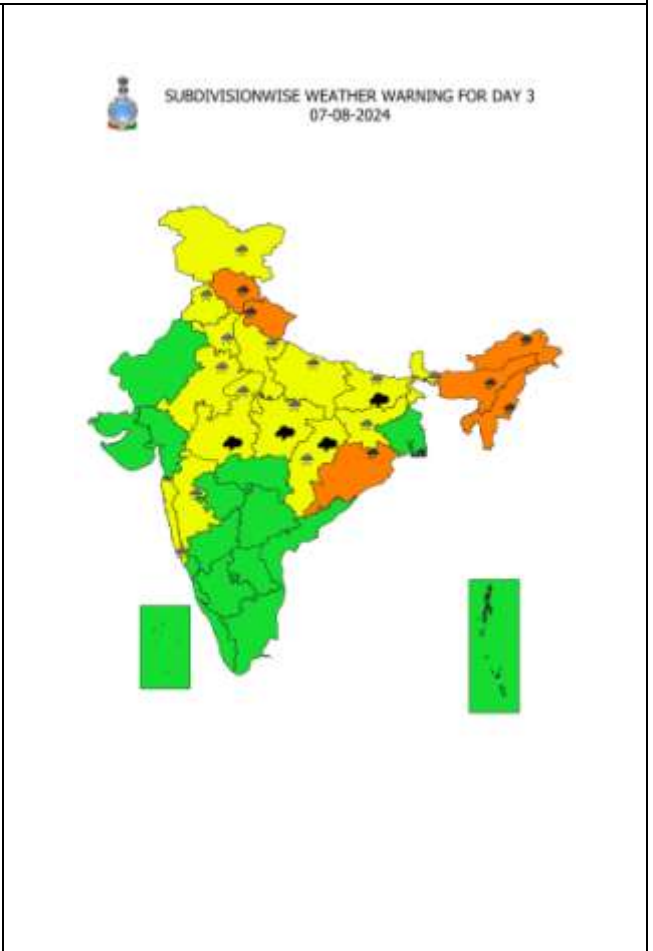
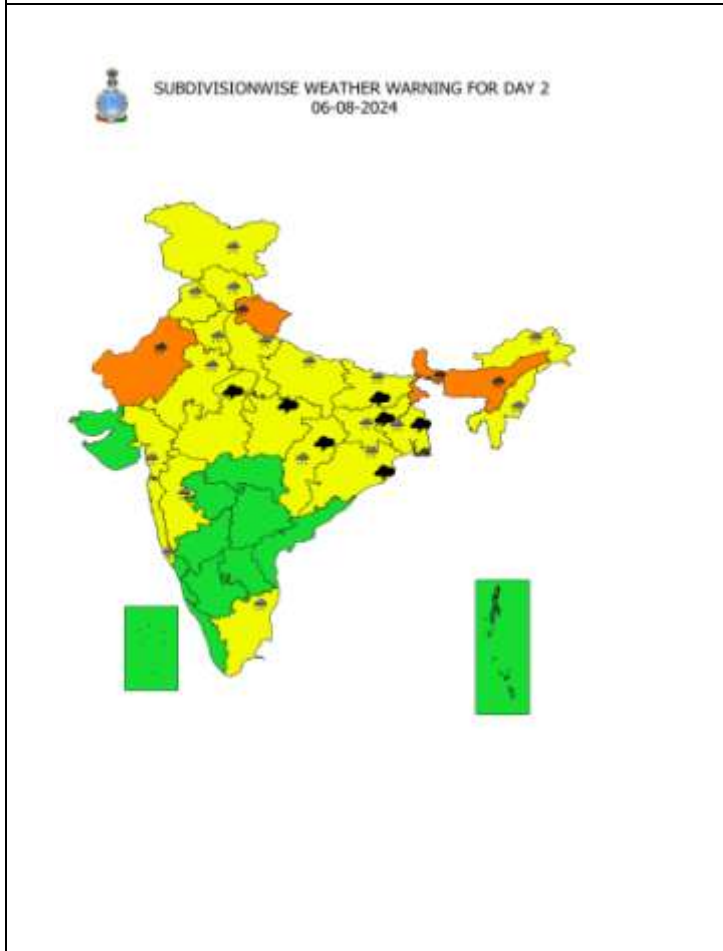
— FORECAST TRACK

■ CONE OF UNCERTAINTY

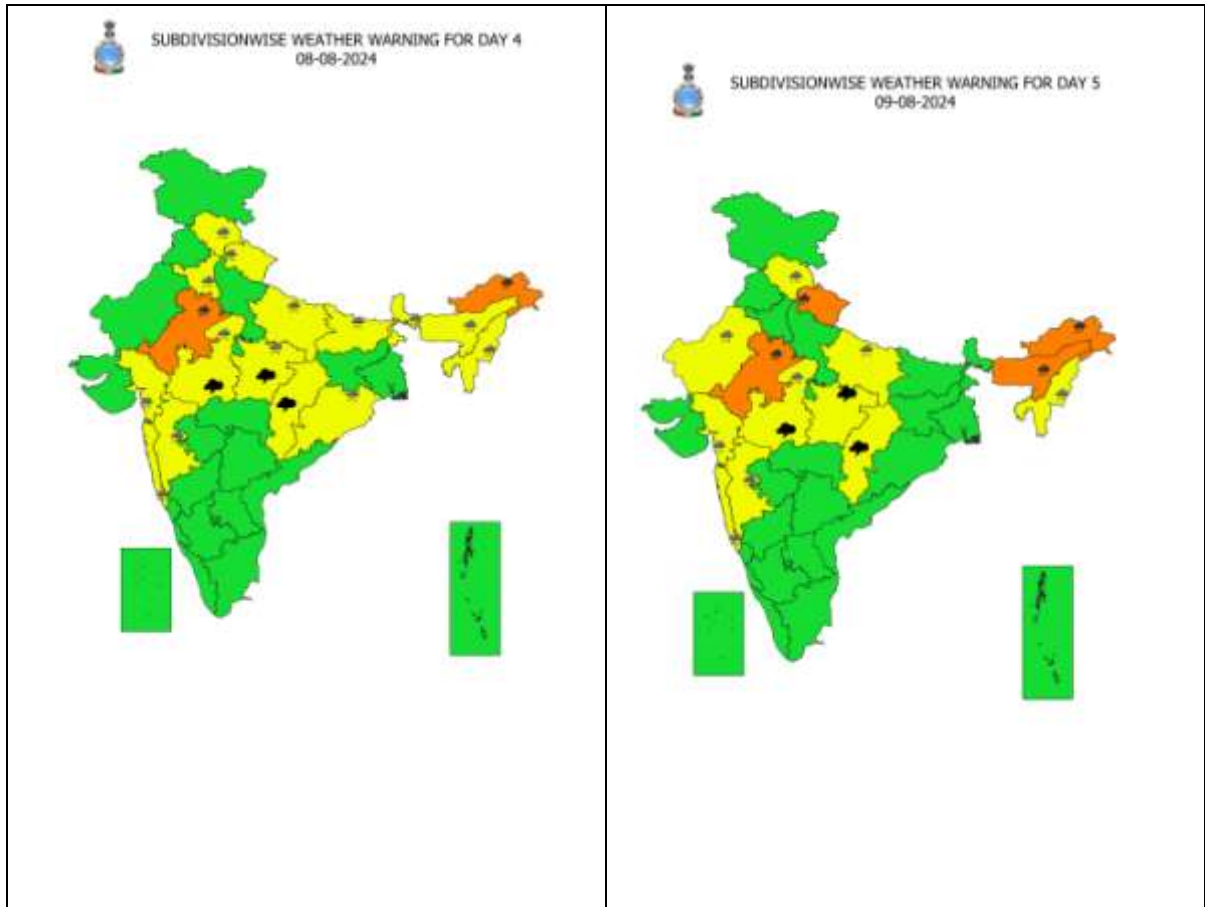
■ AREA OF MAXIMUM SUSTAINED WIND SPEED:

■ 40-50 KMPH GUSTING TO 60 KMPH

# Warning Graphics







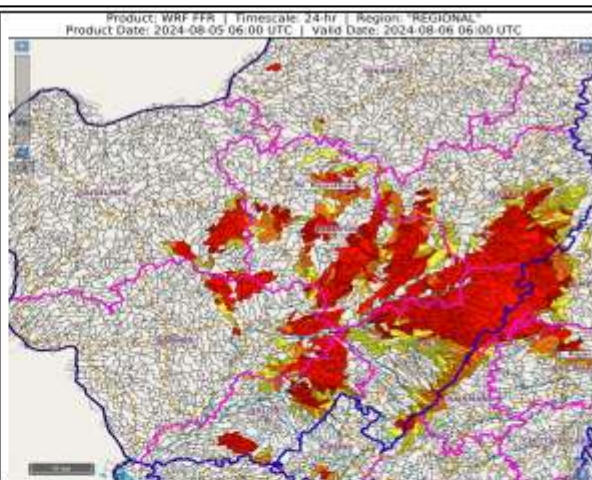
- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

## Flash Flood Guidance

### **24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 06-08-2024 :**

**Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of **West Rajasthan** Met Sub-divisions during next 24 hours.

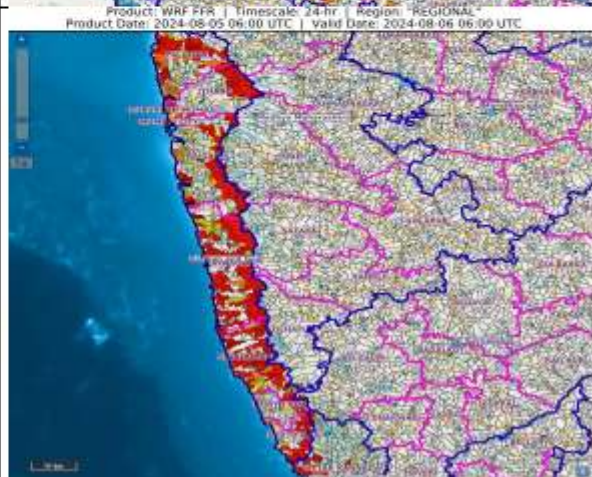
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.






### **24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 06-08-2024 :**

**Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of **Konkan & Goa** 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.



### **Flash Flood Risk**

|   |                                    |
|---|------------------------------------|
|  | <b>High Risk (Take Action)</b>     |
|  | <b>Moderate Risk (Be Prepared)</b> |
|  | <b>Low Risk (Be Updated)</b>       |