

# India Meteorological Department (Ministry of Earth Sciences)

#### NATIONAL BULLETIN NO. 11 (LAND/01/2024)

TIME OF ISSUE: 2100 HOURS IST DATED:04.08.2024

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, WEST BENGAL (FAX NO. 033-22144328)

CHIEF SECRETARY, JHARKHAND (FAX NO. 0651-2400255)

CHIEF SECRETARY, CHHATTISGARH (FAX NO. 0771-2221206)

CHIEF SECRETARY, BIHAR (FAX NO. 0612-2217085)

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)

# Sub: (A) Deep Depression over northwest Madhya Pradesh and adjoining southwest Uttar Pradesh

(B) Low Pressure Area over South Pakistan & neighbourhood

# (A) Deep Depression over northwest Madhya Pradesh and adjoining southwest Uttar Pradesh

The deep depression over southwest Uttar Pradesh and adjoining northeast Madhya Pradesh moved west-northwestwards with a speed of 23 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 4<sup>th</sup> August over northwest Madhya Pradesh and adjoining southwest Uttar Pradesh near latitude 25.8°N and longitude 78.4°E, about 40 km north-northwest of Jhansi (Uttar Pradesh), 100 km northeast of Shivpuri (Madhya Pradesh), 200 km east of Sawai Madhopur (Rajasthan) and 280 km east-southeast of Jaipur (Rajasthan).

It is likely to move nearly westwards across northwest Madhya Pradesh and northeast Rajasthan and weaken gradually into a depression during next 6 hours.

#### (B) Low Pressure Area over South Pakistan & neighbourhood

The low pressure area over **South Pakistan & adjoining Southwest Rajasthan** moved away westwards and lay over **South Pakistan & neighbourhood** at 1730 hours IST of today, the 4<sup>th</sup> August, 2024. It is likely to continue to move nearly westwards during next 12 hours. This is the last update in association with this system.

### **Warnings (Graphics Attached):**

# (i) Rainfall Warning:

# **East Madhya Pradesh:**

Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places during 4<sup>th</sup>August and **heavy rainfall** at isolated places on 5<sup>th</sup> August.

# West Madhya Pradesh:

Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places is very likely on 4<sup>th</sup> August and heavy rainfall at isolated places during 5<sup>th</sup> -6<sup>th</sup> August.

### **East Uttar Pradesh:**

Light to moderate rainfall at many places is very likely with heavy rainfall at isolated places during 5<sup>th</sup>-6<sup>th</sup> August.

#### **West Uttar Pradesh:**

Light to moderate rainfall at many places is very likely with **heavy rainfall** at isolated places over West Uttar Pradesh during 4<sup>th</sup>-5<sup>th</sup> August and very heavy rainfall at isolated places over Southwest Uttar Pradesh on 4<sup>th</sup> August.

# East Rajasthan:

Light to moderate rainfall at most places with **heavy to very heavy & extremely heavy** rainfall at isolated places on 4<sup>th</sup> August. Light to moderate rainfall at most places with isolated heavy rainfall is very likely at isolated places on 5<sup>th</sup> August.

## West Rajasthan:

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is very likely during 4<sup>th</sup> - 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 4<sup>th</sup> and 5<sup>th</sup>; extremely heavy rainfall at isolated places on 4<sup>th</sup> August and heavy rainfall at isolated places on 6<sup>th</sup> August.

#### Saurashtra & Kutch:

Light to moderate rainfall at most places is very likely with heavy rainfall at isolated places on 4<sup>th</sup> August.

# Madhya Maharashtra:

Light to moderate rainfall at most places is very likely with **heavy rainfall** at a few places during 4<sup>th</sup> to 6<sup>th</sup> August, **very heavy rainfall** at isolated places on 5<sup>th</sup> August and **extremely heavy rainfall** at isolated places on 4<sup>th</sup> August.

#### Konkan & Goa:

Light to moderate rainfall at most places with **heavy rainfall** at a few places is very likely during 4<sup>th</sup> to 6<sup>th</sup> August and **extremely heavy rainfall** at isolated places on 4<sup>th</sup> August.

### Vidarbha:

Light to moderate rainfall at most places is very likely with **heavy rainfall** at isolated places on 4<sup>th</sup> August.

#### (ii) Flash Flood Guidance (Graphics Attached):

Low to Moderate flash flood risk is likely over few watersheds & neighbourhood of West Madhya Pradesh and adjoining East 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 & neighbourhood of South Gujarat Region, North Konkan & Goa, North Madhya Maharashtra, Marathawada and adjoining

Vidarbha 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 40-50 kmph gusting to 60 kmph is very likely over northwest Madhya Pradesh and adjoining southwest Uttar Pradesh during next 12 hours and gradually decrease thereafter.
- Strong wind speed reaching 35-45 kmph gusting to 55 kmph is very likely over West Madhya Pradesh and adjoining East Rajasthan & West Uttar Pradesh on 5<sup>th</sup> August.

# (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 in roads leading to increased travel time.
- Surface runoff/ inundation may occur at some fully saturated soils & low-lying areas
- Minor damage to kutcha 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 West Bengal, Sub Himalayan West Bengal, Odisha, Jharkhand, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh.
- > Provide mechanical support to horticultural crops and staking to vegetables.

Next bulletin will be issued at 0230 hours IST of tomorrow, the 4th August, 2024.

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

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

#### Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 04.08.2024 (in cm):

Madhya Pradesh:-Katni -24, Badwara (Katni) - 20, Garhakota (Sagar) - 19, Ramnagar (Maihar) - 19, Sihora (Jabalpur) - 19, Vijayraghavgarh (Katni) - 18, Majholi (Jabalpur) - 18, Singodi (Katni) - 18, Jaisinagar (Shahdol) - 18, Devsar (Singrouli) - 17, Tendukheda (Damoh) - 17, Maihar - 16, Barhi (Katni) - 16, Bilharli (Katni) - 16, Deemarkheda (Katni) - 16, Umariyapan (Katni) - 16, Beohari (Shahdol) - 16, Bichhiya (Mandla) - 16, Mada (Singrouli) - 15, Patan (Jabalpur) - 15, Shahpura (Jabalpur) - 15

Konkan & Goa: Matheran (dist Raigad) 29, Thane (dist Thane) 15, Karjat\_agri (dist Raigad) 13, Talasari (dist Palghar) 13, Murbad (dist Thane) 12, Ulhasnagar (dist Thane) 12, Khalapur (distRaigad) 11, Kalyan (dist Thane) 11, Bhiwandi (dist Thane) 11, Mokheda - Fmo (dist Palghar) 10, Jawhar (dist Palghar) 10, Panvel\_agri (dist Raigad) 10, Santacruz - Imd Obsy (dist MumbaiSuburban) 10, Wada (dist Palghar) 9, Poladpur (dist Raigad) 9, Tbialmd Part Time (dist Thane)9, Ambernath (dist Thane) 8, Vikramgad (dist Palghar) 8, Shahapur (dist Thane) 8, Canacona(dist South Goa) 8, Mangaon (dist Raigad) 7, Mahad (dist Raigad) 7, Quepem (dist South Goa)7, Pen (dist Raigad) 7, Uran (dist Raigad) 7

Madhya Maharashtra: Igatpuri (dist Nashik) 24, Lonavala\_agri (dist Pune) 24, Surgana (dist Nashik) 17,Trimbakshwar (dist Nashik) 16, Mahabaleshwar- Imd Obsy (dist Satara) 14, Akole (distAhmednagar) 13, Ozharkheda - Fmo (dist Nashik) 13, Harsul - Fmo (dist Nashik) 12, Velhe (distPune) 11, Peth (dist Nashik) 11, Nashik - Imd Obsy (dist Nashik) 7, Chandgad (dist Kolhapur) ,Shahuwadi (dist Kolhapur) 7, Vani-arg (dist Nashik) 7

Chhattisgarh: Janakpur Bharatpur (dist ManendragarhBharatpur) 23, Wandrafnagar (dist Balrampur) 17, Doura Kochali (dist Balrampur) 15, Ramanujganj (dist Balrampur) 13, Biharpur (dist Surajpur) 13, Kotadol (dist ManendragarhBharatpur) 11, Bhatgaon (dist Surajpur) 11, Kukdur (distKabirdham) 10, Balrampur (dist Balrampur) 8, Raghunath Nagar (dist Balrampur) 8,Ramchandrapur (dist Balrampur) 8, Rajpur (dist Balrampur) 8, Odagi (dist Surajpur) 7, Chalgali(dist Balrampur) 7, Belgahna (dist Bilaspur) 7, Ramanujnagar (dist Surajpur) 7

Gujarat Region: Vansda (dist Navsari) 18, Waghai (dist Dangs) 16, Nanipalson (dist Valsad) 14, Dharampur (dist Valsad) 14, Kaprada (dist Valsad) 14, Dolvan (dist Tapi) 13, Dangs (ahwa) (distDangs) 13, Dang\_kvk Aws (dist Dangs) 13, Silvassa (dist Dadara& Nagar Haveli) 12, Khergam (distNavsari) 12, Vapi (dist Valsad) 12, Khanvel (dist Dadara& Nagar Haveli) 11, Dholka\_arg (distAhmedabad) 11, Songadh (dist Tapi) 11, Valsad\_ Kvk Aws (dist Valsad) 11, Chikhli (dist Navsari)10, Umerpada (dist Surat) 10, Subir (dist Dangs) 10, Madhbun (dist Dadara& Nagar Haveli) 10, Mahuva (dist Surat) 9, Valod (dist Tapi) 9, Godra\_aws (dist Panchmahal) 9, Godhra (distPanchmahal) 9, Gandevi (dist Navsari) 9, Padra (dist Vadodara) 8, Vyara (dist Tapi) 8, Pardi (distValsad) 7, Vijaynagar (dist Sabarkantha) 7, Sagbara (dist Narmada) 7, Dhanera (dist Banaskantha) 7

**East Rajasthan**: Arai (dist Ajmer) 10, Kekri (dist Ajmer) 9, Nithuwa (dist Dungarpur) 7, Mounnt Abu (dist Sirohi) 7;

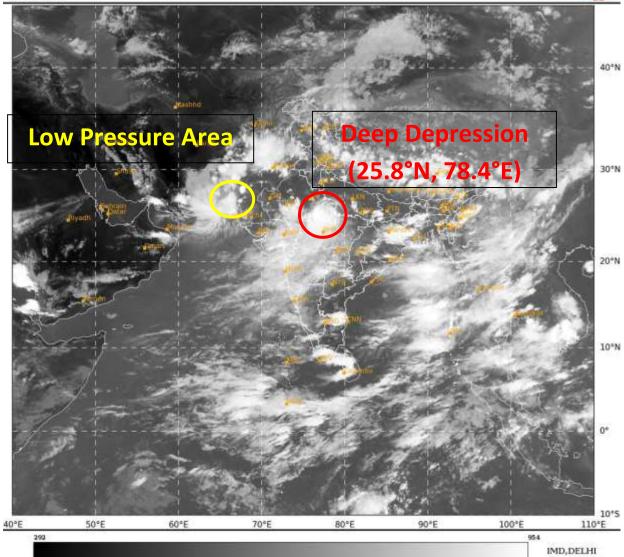
**West Rajasthan**: Gudamalani (dist Barmer) 9, Sum (dist Jaisalmer) 8, Raniwada (dist Jalore) 7 Ramsar (dist Barmer) 7, Bagoda (dist Jalore) 7

Jharkhand: Messenjor (dist Dumka) 9, Daltonganj (dist Palamu) 7, Dhurki (dist Garhwa) 7

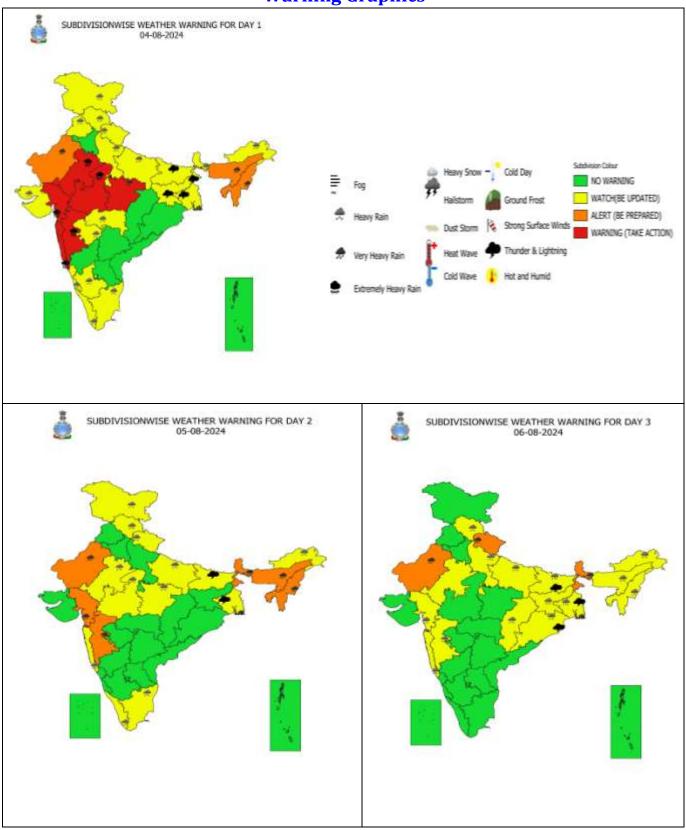
Bihar: Mansahi (dist Katihar) 9, Amdabad (dist Katihar) 9, Katihar (dist Katihar) 7

East Uttar Pradesh: Dudhi (Sonbhadra) 6, Prayagraj PBO (PRAYAGRAJ) 5, Churk (Sonbhadra) 5,





# **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 1130 IST of 05-08-2024:

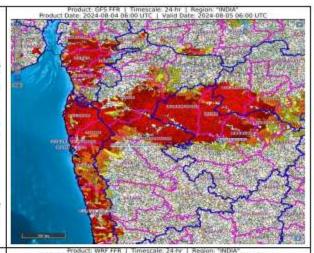
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of South Gujarat Region, North Konkan & Goa, North Madhya Maharashtra, Marathawada and adjoining Vidarbha Met Sub-divisions during next 24 hours.

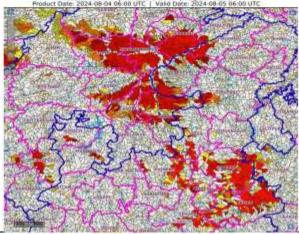
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.

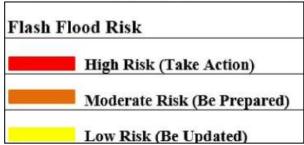
# 24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 05-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of West Madhya Pradesh and adjoining East 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.

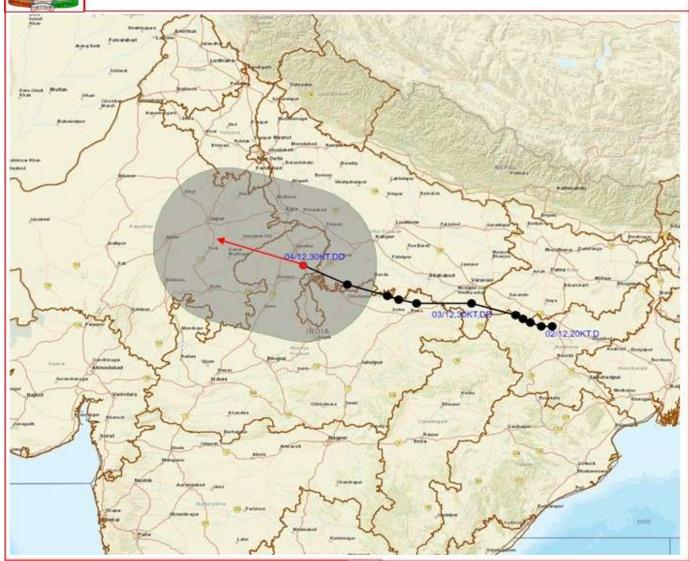








OBSERVED AND FORECAST TRACK ALONGWITH WIND DISTRIBUTION IN ASSOCIATION WITH DEEP DEPRESSION OVER NORTHWEST MADHYA PRADESH AND ADJOINING SOUTHWEST UTTAR PRADESH BASED ON 1200 UTC OF 04th AUGUST, 2024.



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 (≥ 120 KT)

LESS THAN 34 KT

34-47 KT

≥ 48 KT

OBSERVED TRACK FORECAST TRACK

CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED: 40-50 KMPH GUSTING TO 60 KMPH