



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

NATIONAL BULLETIN NO. 4 (LAND/02/2024)

TIME OF ISSUE: 2030 HOURS IST

DATED:25.08.2024

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, ODISHA (FAX NO. 0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)

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

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

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

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

CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)

CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)

CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)

Sub: (a) Depression over northwest Madhya Pradesh and adjoining east Rajasthan

The depression over Rajasthan and adjoining northwest Madhya Pradesh moved west-southwestwards with a speed of 15 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 25th August over northwest Madhya Pradesh and adjoining east Rajasthan near latitude 24.4°N and longitude 75.6°E, about 110 km east-southeast of Chittorgarh (Rajasthan), 130 km north-northeast of Ratlam (Madhya Pradesh) and 190 km east of Udaipur (East Rajasthan).

It is likely to continue to move nearly west-southwestwards, intensify further into a deep depression over east Rajasthan during next 12 hours. Continuing to further move slowly west-southwestwards across south Rajasthan and Gujarat, it would emerge into northeast Arabian Sea off Saurashtra & Kutch and adjoining Pakistan coasts around morning of 29th August.

(b) Low Pressure Area over south Bangladesh & neighbourhood

The low pressure area formed over **south Bangladesh & neighbourhood** persisted over the same region at 1730 hours IST of today, the 25th August 2024. It is likely to become more marked and move west-northwestwards across Gangetic West Bengal, north Odisha and Jharkhand during next 2 days.

Warnings:

(i) Rainfall Warning:

West Madhya Pradesh: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places on 25th & 26th with extremely heavy rainfall at isolated places is likely on 25th August.

East Madhya Pradesh: Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places is likely on 25th and 26th August.

East Rajasthan: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is likely on 25th and 26th August.

West Rajasthan: Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is likely during 25th to 27th .

South Rajasthan: Light to moderate rainfall at most places with isolated heavy to extremely heavy rainfall over **South Rajasthan** is likely on 27th August.

Gujarat region: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and isolated extremely heavy rainfall likely on 25th and 26th and heavy to very heavy with isolated extremely heavy rainfall over south Gujarat on 27th August.

Saurashtra & Kutch: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is likely during 25th -28th August and heavy to extremely heavy rainfall at isolated places is likely on 29th August.

Konkan & Goa: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is likely on 25th and 26th and heavy to very heavy rainfall on 27th August.

Madhya Maharashtra: Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is likely on 25th & 26th and heavy to very heavy rainfall at isolated places is likely on 27th August.

Odisha: Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is likely on 25th and 26th August.

Gangetic West Bengal: Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is likely on 25th and 26th August.

Jharkhand: Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places is likely on 25th and 26th August.

(ii) Wind warning:

- Strong surface wind speed reaching 30-40 kmph gusting to 50 kmph is very likely to prevail over Madhya Pradesh during 25th & 26th August.

- Strong surface wind speed reaching 30-40 kmph gusting to 50 kmph is very likely to prevail over South Rajasthan on 25th & 26th August and squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail on South Rajasthan on 27th August.
- Strong surface wind speed reaching 30-40 kmph gusting to 50 kmph is very likely over Gujarat state, along and off Gujarat & adjoining Pakistan and north Maharashtra coasts and northeast Arabian Sea on 26th August, becoming squally wind speed reaching 40-50 kmph gusting to 60 kmph over the same region on 27th & 28th August.
- Squally wind speed reaching 55-65 kmph gusting to 75 kmph is likely to prevail along & off Gujarat & adjoining Pakistan coasts and northeast and adjoining eastcentral Arabian Sea on 29th August. Squally wind speed reaching 40-50 kmph gusting to 60 kmph for interior district of Gujarat state on 29th August.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along and off north Maharashtra coasts on 28th & 29th August.

(iii) Sea condition:

- Squally weather with Rough to very Rough sea conditions is very likely to prevail along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts and Northeast & adjoining Eastcentral Arabian Sea till 30th August.
- Squally weather with Rough Sea condition is very likely to prevail over North Bay of Bengal and along & off North Odisha, West Bengal, Bangladesh coasts on 25th and 26th August.

(iv) Fisherman warning:

- Fishermen are advised not venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30th August.
- Fishermen are advised not to venture into North Bay of Bengal and along & off North Odisha, West Bengal, Bangladesh coasts on 25th and 26th August.

(v) Advisory for offshore/onshore Exploration and Production (E & P) Operators:

The small ships and offshore -onshore E & P operators, shipping and port authorities along & off Gujarat & north Maharashtra Coasts and Northeast & adjoining Eastcentral Arabian Sea are advised to keep watch on developing weather and take necessary actions.

(vi) 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.
- Reduction of visibility over sea area due to sea spray induced by strong wind and 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/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

- Fishermen are advised not venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30th August.
- Fishermen are advised not to venture into North Bay of Bengal and along & off North Odisha, West Bengal, Bangladesh coasts on 25th and 26th August.
- Judicious regulation of offshore/onshore Operations
- Judicious regulation of surface transports including railways and roadways.
- 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 Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra

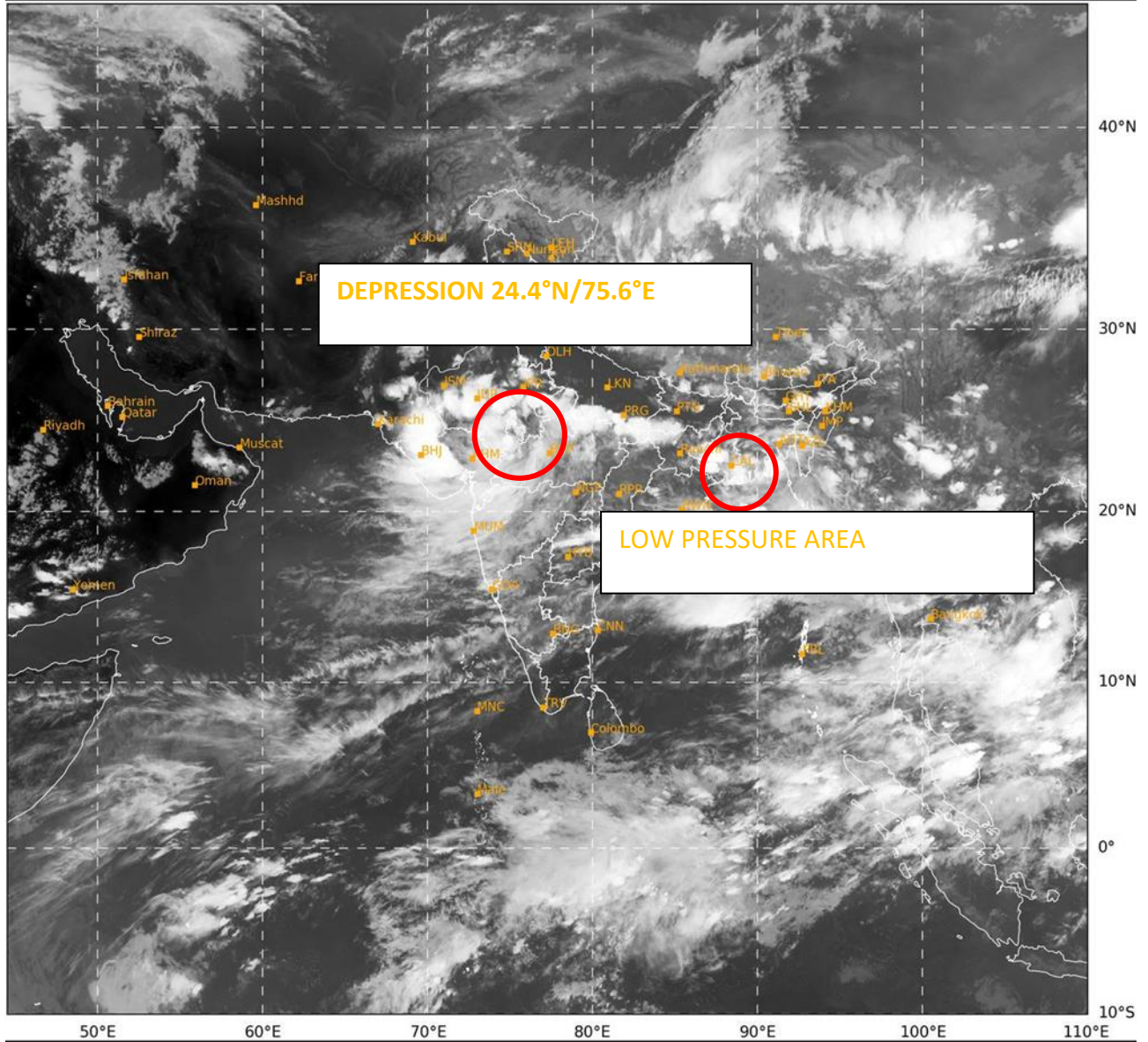
- Make provision for draining out excess water from crop fields to avoid water stagnation in Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra.
- Provide mechanical support to horticultural crops and staking to vegetables.

Realised rainfall (in cm) during 0830-1730 hrs IST is placed at Annexure-1.

Next bulletin will be issued at 0230 hours IST of tomorrow, the 26th August, 2024.

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

Copy to: ACWC Kolkata/ACWC Mumbai/RMC Mumbai/CWC Ahmedabad/MC Jaipur/RMC, Nagpur/MC, Bhopal//CWC Bhubaneswar/MC, Goa



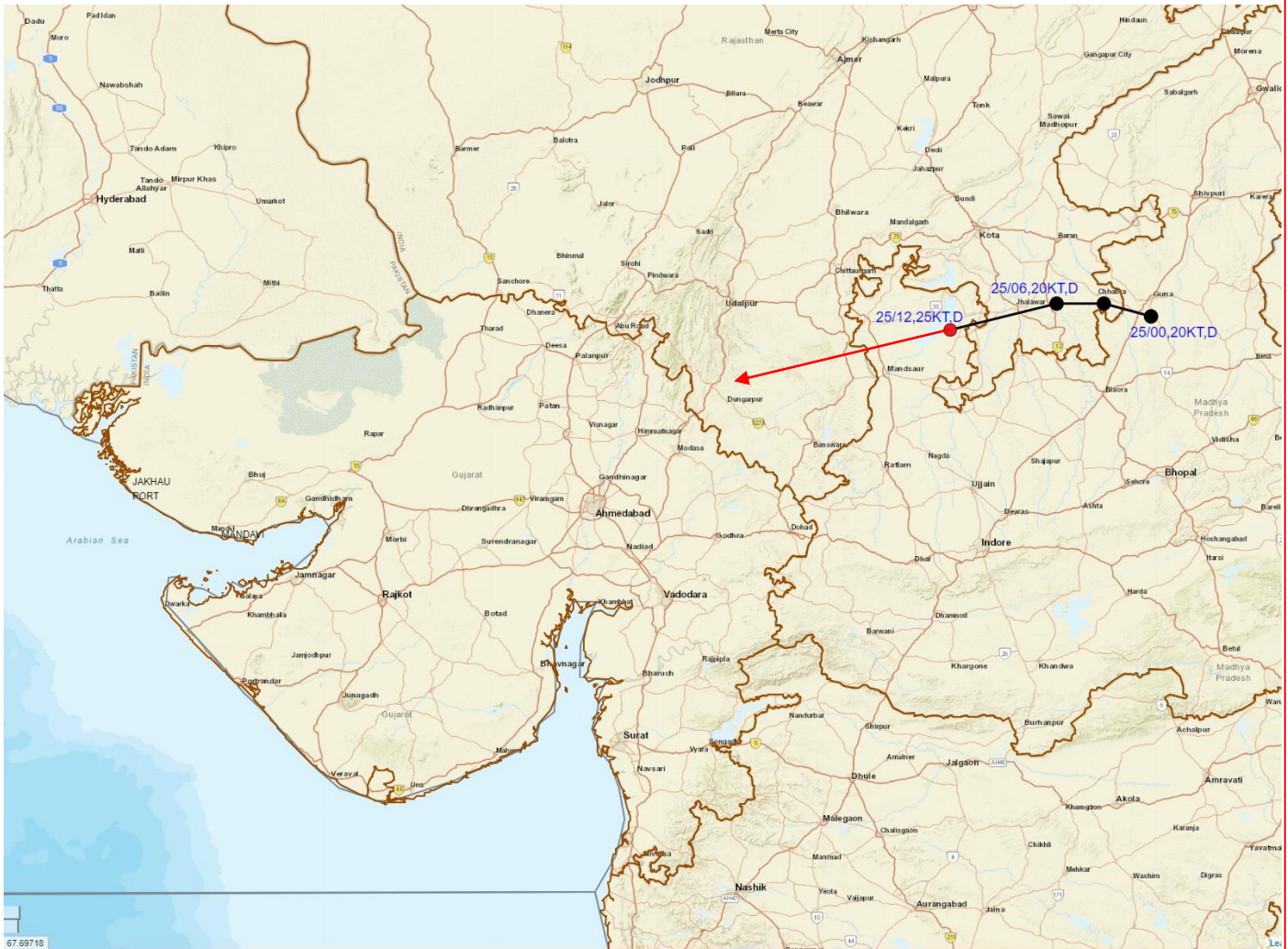
347

946

IMD, DELHI



OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHWEST MADHYA PRADESH ADJOINING EAST RAJASTHAN BASED ON 1200 UTC (1730 IST) OF 25TH 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

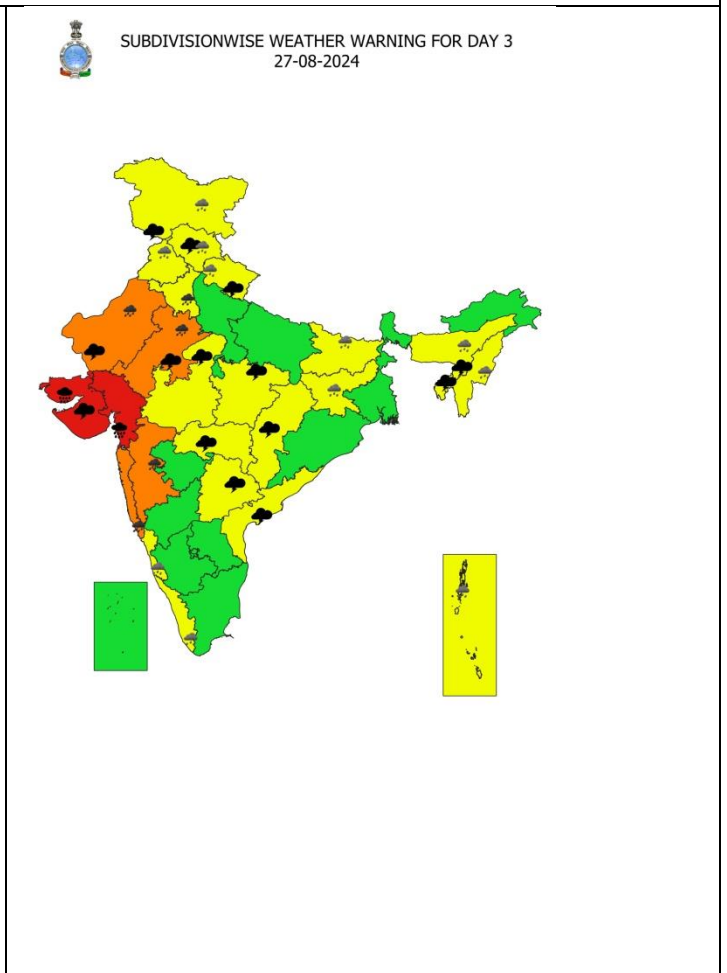
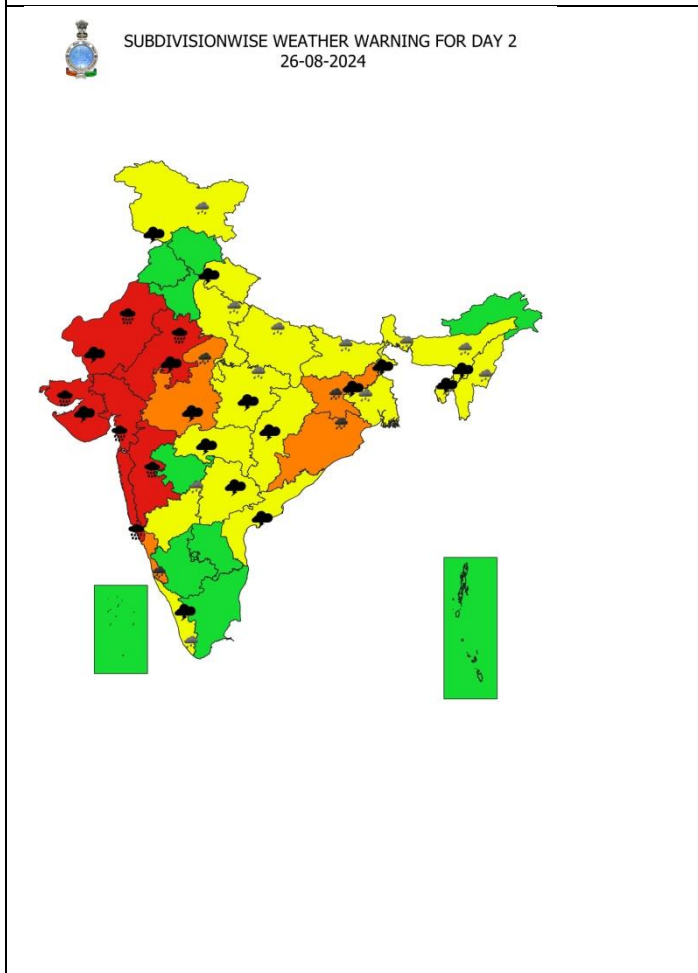
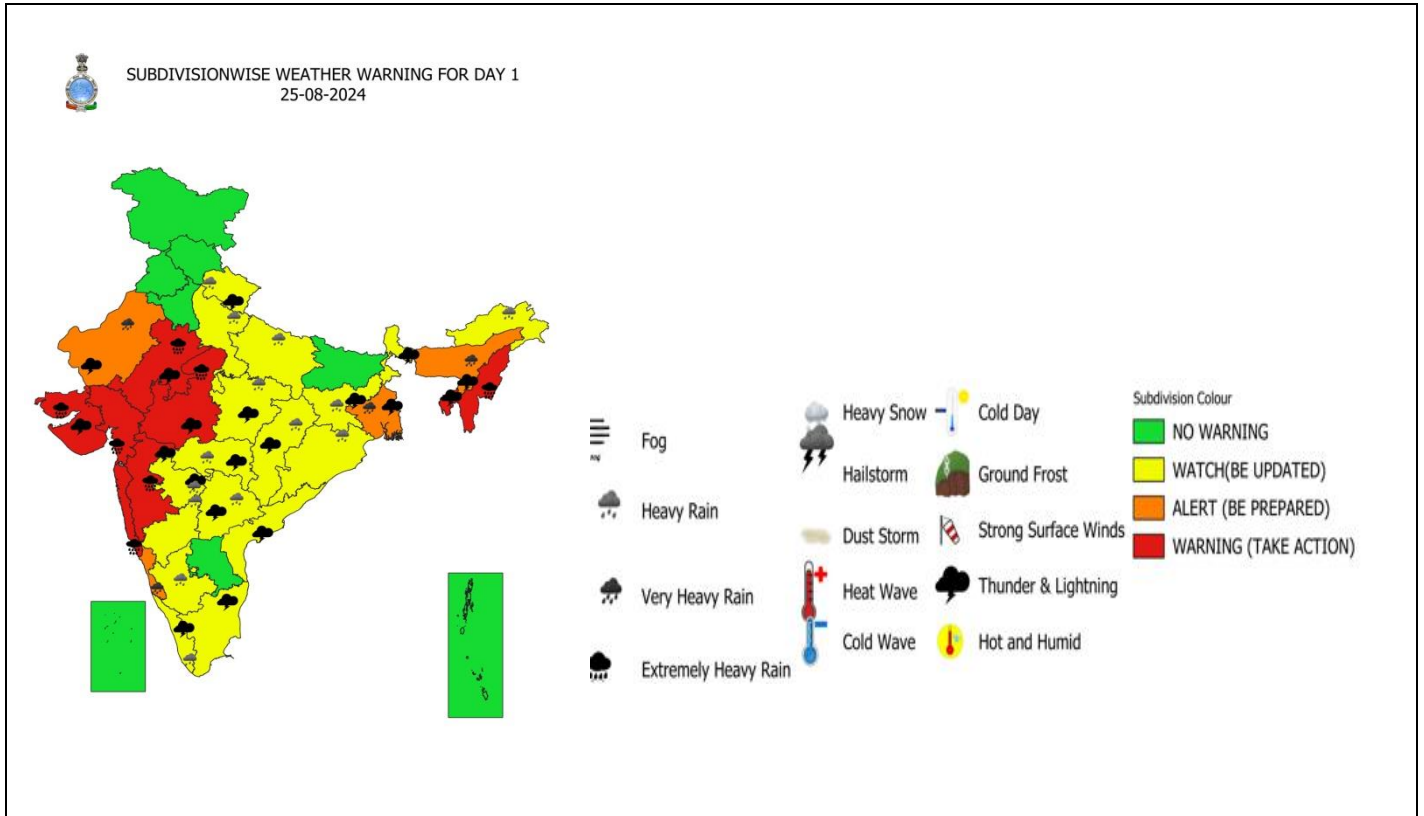
○ ≥ 48 KT

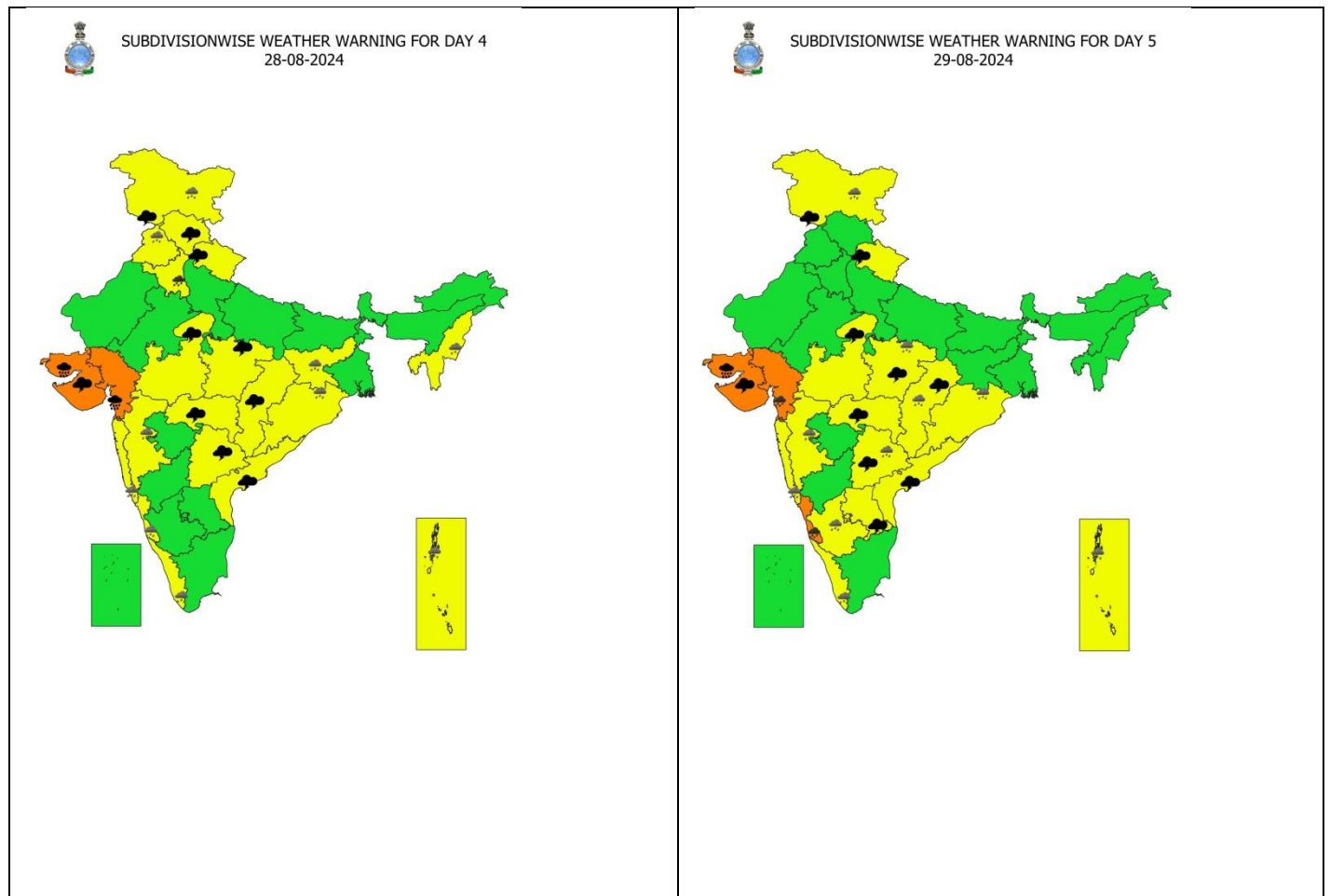
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY

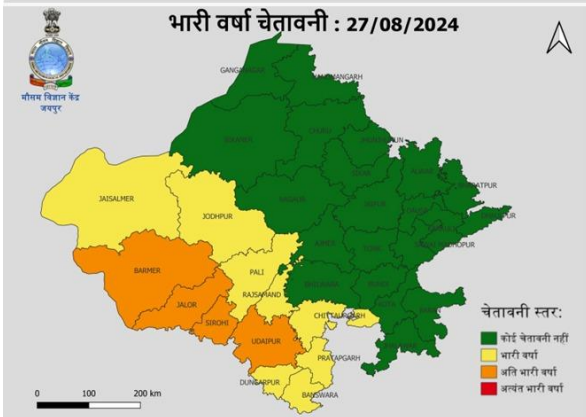
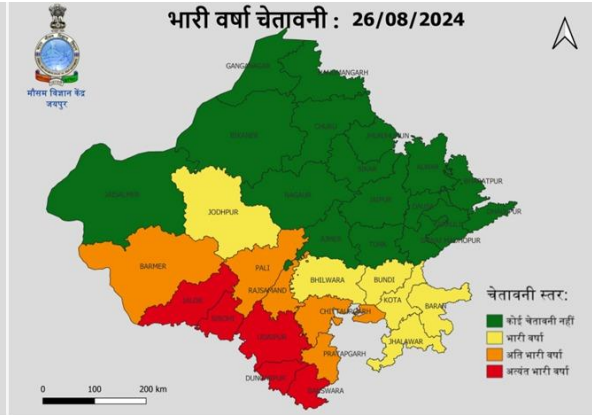
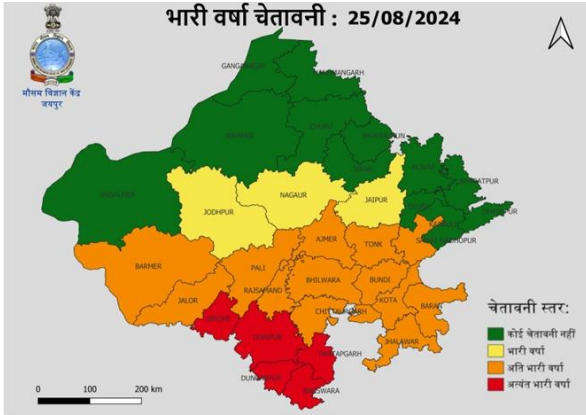
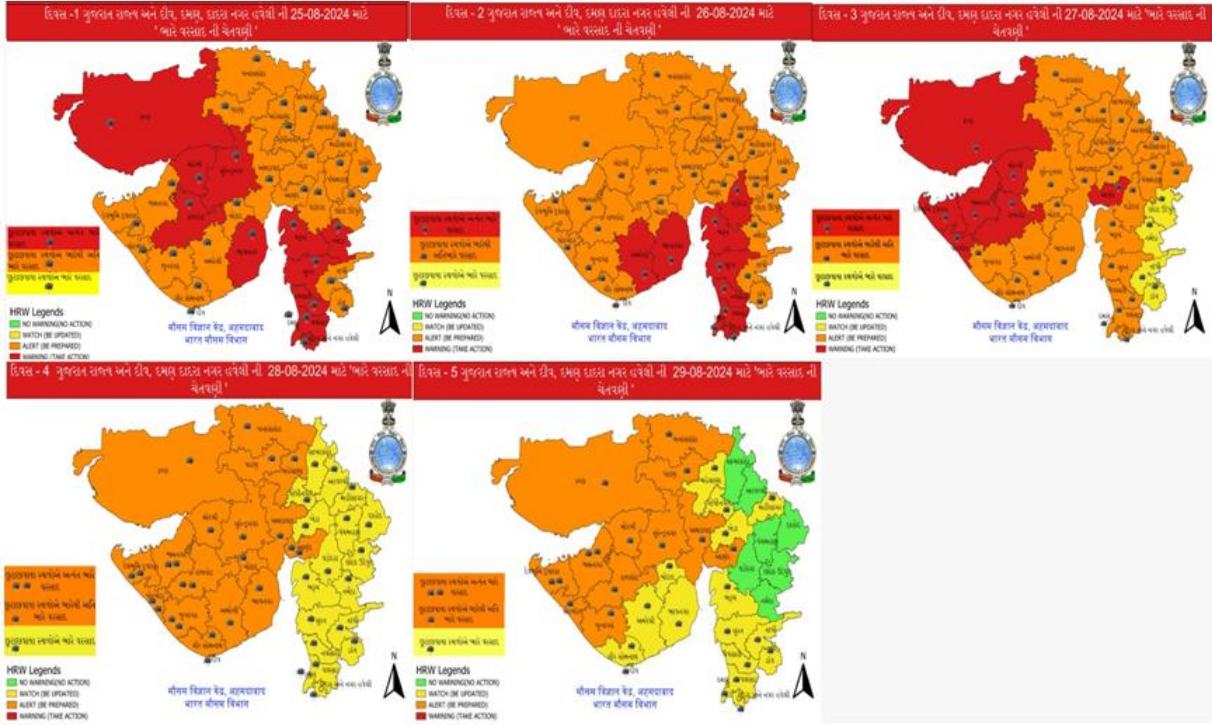
Weather Warning Graphics



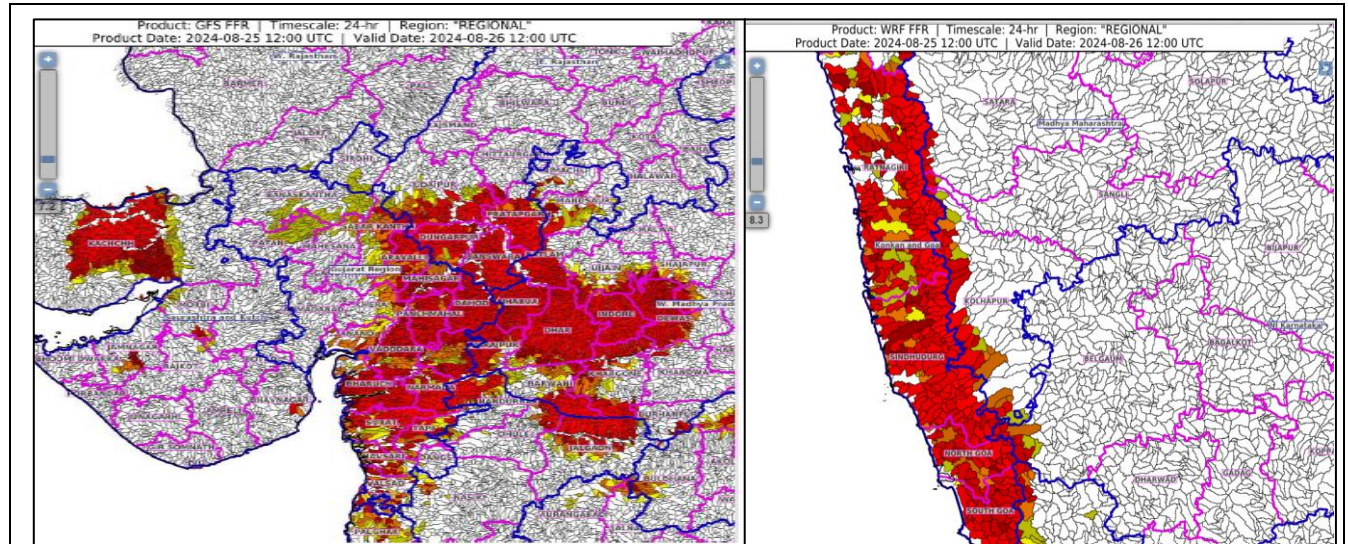


- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.




District-wise Warning Graphics



Flash Flood Guidance



Flash Flood Risk

	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 26-08-2024 :

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

East Rajasthan - Banswara, Chittaurgarh, Dungarpur, Pratapgarh, Sirohi and Udaipur districts.

West Madhya Pradesh - Alirajpur, Barwani, Dewas, Dhar, Indore, Jhabua, Khargone, Mandsaur, Ratlam, Shajapur and Ujjain districts.

Gujarat Region - Dadar & Nagar Haveli, Daman, Anand, Aravalli, Banaskantha, Bharuch, Chhota Udepur, Dangs, Gandhinagar, Khera, Mahesana, Mahisagar, Narmada, Navsari, Patan, Sabar Kantha, Surat, Tapi, Vadodara and Valsad districts.

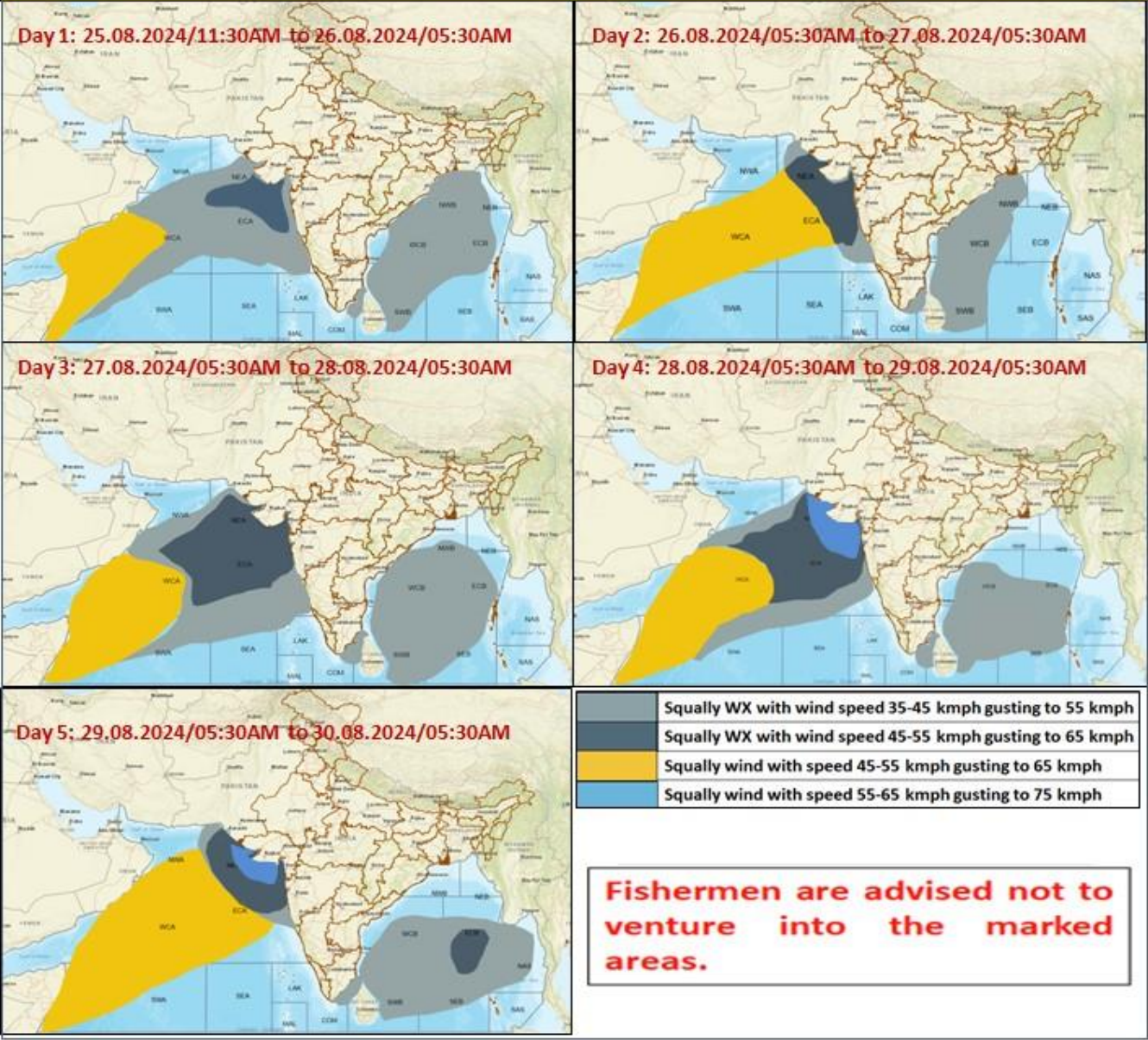
Madhya Maharashtra - Dhule and Jalgaon districts.

Saurashtra & Kutch - Bhavnagar, Jamnagar, Morbi and Kachchh districts. 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 likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Konkan & Goa - North Goa, South Goa, Ratnagiri and Sindhudurg districts. 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.

Fishermen Warning Graphics



**Significant amount of Cumulative realised rainfall (in cm) during 0830 -1730 hours
IST of 25th August**

Saurashtra & Kutch: Rajkot 17, Bhaunagar 3, Surendranagar 2;

East Rajasthan: Bhilwara 10, Beawar 7, Chittorgarh 8, Ajmer 3, Udaipur 2;

West Madhya Pradesh: Ujjain 3;

East Madhya Pradesh: Nowgong 2;

State Government Data:

Gujarat state:

Navsari 24, Narmada 17, Valsad 13, Rajkot 14, Dangs 13, Surendranagar 13, Chjotaudepur 13, Tapi 11, Morbi 12, Vadodara 11, Surat 8, Bharuch 7, Dahod 6,

East Rajasthan

Kareda(Dist. Bhilwara) 10, Sahada(Dist. Bhilwara) 8, Nimbahera (Dist. Chittorgarh) 8, Rashmi(Dist. Chittorgarh) 8, Jaitaran (Dist. Beawar) 7, Asind (Dist. Bhilwara) 7, Bhopalsagar(Dist. Chittorgarh) 7, Kapasan (Dist. Chittorgarh) 7