



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

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CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)
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Sub: (a) Deep Depression over Kachchh coast and adjoining areas of Pakistan & Northeast Arabian Sea and (b) Well Marked Low Pressure Area over Westcentral & adjoining Northwest Bay of Bengal.

(a) Deep Depression over Kachchh coast and adjoining areas of Pakistan & Northeast Arabian Sea

The deep depression over Kachchh and adjoining areas of Saurashtra, Northeast Arabian Sea & Pakistan moved westwards with a speed of 5 kmph during past 6 hours and lay centered at 0830 hours IST of 30th August, 2024 over Kachchh coast and adjoining areas of Pakistan & Northeast Arabian Sea near latitude 23.5°N and longitude 68.2°E, 160 km west of Bhuj (Gujarat), 70 km west-northwest of Naliya (Gujarat) and 190 km east-southeast of Karachi (Pakistan).

It is likely to move nearly westwards, emerge into northeast Arabian Sea off Kachchh and adjoining Pakistan coasts and intensify into a Cyclonic Storm during next 06 hours. Thereafter, it would continue to move nearly west-northwestwards over northeast Arabian Sea away from Indian coast during subsequent 2 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.08.24/0830	23.5/68.2	55-65 gusting to 75	Deep Depression
30.08.24/1130	23.5/68.0	60-70 gusting to 80	Cyclonic Storm
30.08.24/1730	23.5/67.5	65-75 gusting to 85	Cyclonic Storm
30.08.24/2330	23.6/66.8	70-80 gusting to 90	Cyclonic Storm
31.08.24/0530	23.7/65.9	70-80 gusting to 90	Cyclonic Storm
31.08.24/1730	23.9/64.3	65-75 gusting to 85	Cyclonic Storm
01.09.24/0530	23.8/62.4	60-70 gusting to 80	Cyclonic Storm
01.09.24/1730	23.4/61.1	50-60 gusting to 70	Deep Depression
02.09.24/0530	22.5/59.9	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall Warning:

Gujarat State:

Saurashtra & Kachchh: Light to moderate rainfall at most places **heavy to very heavy rainfall** at isolated places over Kachchh and adjoining districts of Saurashtra on 30th August.

(ii) Wind warning:

- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely over the interior districts of South Gujarat Region and Saurashtra & Kutch on the 30th August.
- Squally wind speed reaching 55-65 kmph gusting to 75 kmph is very likely to prevail along & off Gujarat coasts & adjoining Pakistan coasts and over northeast & adjoining eastcentral Arabian Sea during 30th to 31st August.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is likely to prevail over northeast Arabian Sea off Gujarat and Pakistan coasts from noon of 30th August. It is likely to increase becoming 70-80 kmph gusting to 90 kmph from night of 30th August till 1st September morning and decrease gradually thereafter.
- Gale wind speed reaching 65-75 kmph gusting to 85 kmph is likely to prevail over northwest and adjoining westcentral Arabian Sea off Pakistan and southeast Iran coasts from morning of 31st August till 1st September, morning. Thereafter, the winds would gradually decrease gradually becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph by evening of 1st September and 40-50 kmph gusting to 60 kmph by morning of 2nd September.
- Strong wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along and off north Maharashtra coasts during 30th to 31st August.

(iii) Sea condition:

- Squally weather with Rough to very Rough sea conditions is very likely to prevail along & off Gujarat & adjoining north Maharashtra Coasts till 31st August.
- Very rough to high sea condition is likely to prevail over northeast & adjoining eastcentral and Arabian Sea off Gujarat coast and along & off Pakistan coasts during 30th August to 1st September.
- Very rough to high Sea condition is likely to prevail over northwest and adjoining westcentral Arabian Sea off Pakistan and southeast Iran coasts from 31st August till 2nd September.

(iv) Fishermen warning:

Fishermen are advised not venture into

- Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining north Maharashtra Coasts till 31st August.

- Northeast & adjoining eastcentral Arabian Sea off Gujarat coast and along & off Pakistan coasts during 30th August to 1st September.
- Northwest & adjoining westcentral Arabian Sea and along & off Pakistan and southeast Iran coasts from 31st August till 2nd September.

(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 on 30th August.

(b) Well Marked Low Pressure Area over Westcentral & adjoining Northwest Bay of Bengal

The low pressure area over westcentral & adjoining northwest Bay of Bengal off north Andhra Pradesh & South Odisha moved west-northwestwards, became a Well Marked Low pressure area over the same region at 0830 hours IST of 30th August, 2024.

It is likely to move further west-northwestwards towards north Andhra Pradesh and adjoining south Odisha coasts, intensify into a depression over westcentral and adjoining northwest Bay of Bengal during next 36 hours.

Warnings:

(i) Rainfall Warning:

Odisha: Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places during 30th to 31st August. Light to moderate rainfall at most places with isolated heavy rainfall likely on 1st September.

Coastal Andhra Pradesh: Light to moderate rainfall at most places with heavy rainfall at isolated places during 30th August to 1st September and heavy to very heavy rainfall at isolated places on 30th and 31st August.

(ii) Wind warning:

- Squally weather with wind speed reaching 30-40 kmph gusting to 50 kmph is likely to prevail over Westcentral and adjoining Northwest Bay of Bengal on 30th becoming 45-55 kmph gusting to 65 kmph on 31st August.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail along & off North Andhra Pradesh & south Odisha coasts on 31st August.

(iii) Sea condition:

- Rough sea condition is very likely to prevail over Westcentral and adjoining Northwest Bay of Bengal till 31st August.
- Rough sea condition is very likely to prevail along & off North Andhra Pradesh & south Odisha coasts on 31 August.

(iv) Fishermen warning:

Fishermen are advised not venture into

- Westcentral & adjoining northwest Bay of Bengal till 31st August and along & off south Odisha and north Andhra Pradesh Coasts on 31st 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 north Andhra Pradesh & south Odisha coasts and westcentral and adjoining northwest Bay of

Bengal are advised to keep watch on developing weather and take necessary actions on 30th August.

❖ **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)

❖ **Action Suggested**

Fishermen are advised not venture into

- Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining north Maharashtra Coasts till 31st August.
- Northeast & adjoining eastcentral Arabian Sea off Gujarat coast and along & off Pakistan coasts during 30th August to 1st September.
- Northwest & adjoining westcentral Arabian Sea and along & off Pakistan and southeast Iran coasts from 31st August till 2nd September.
- Westcentral & adjoining northwest Bay of Bengal till 31st August and along & off south Odisha and north Andhra Pradesh Coasts on 31st 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.

❖ **Agromet Advisories for Heavy Rainfall** likely over Gujarat, Odisha and Andhra Pradesh due to both systems

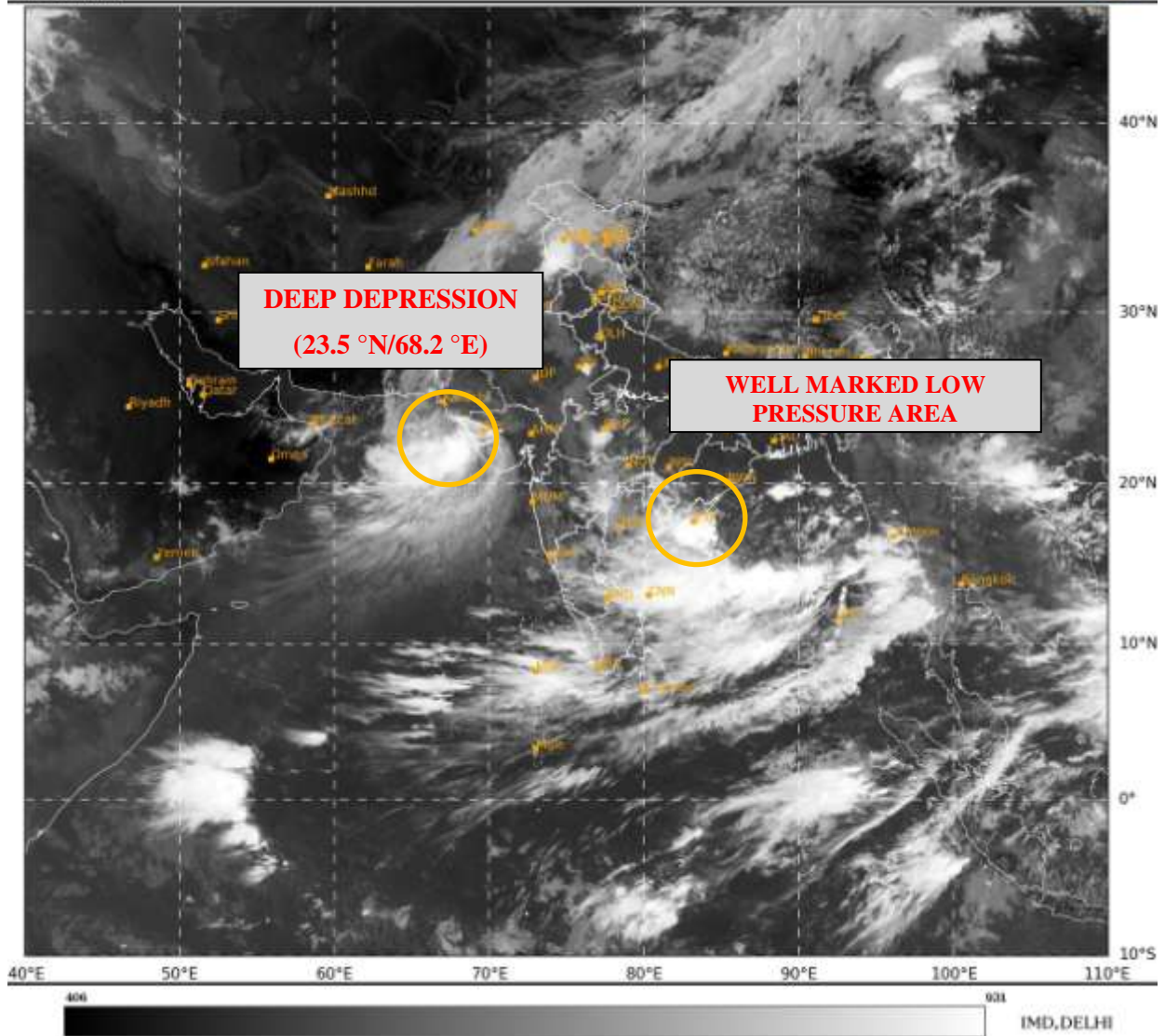
- Make provision for draining out excess water from crop fields to avoid water stagnation in Gujarat State, Odisha and Andhra Pradesh.
- Provide mechanical support to horticultural crops and staking to vegetables.

Significant rainfall recorded during last 24 hours from 0830 hours IST of 29th Aug. to 0830 hours IST of 30th Aug.) (> 7cm) is attached in Annexure-1:

Next bulletin will be issued at 1430 hours IST of today, the 30th August, 2024.

(Dr. Ananda Kumar Das)
Scientist-F, Cyclone Warning Division,
IMD, New Delhi

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











OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER KACHCHH COAST AND ADJOINING AREAS OF PAKISTAN & NORTHEAST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 30TH 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



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER KACHCHH COAST AND ADJOINING AREAS OF PAKISTAN & NORTHEAST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 30TH AUGUST, 2024.



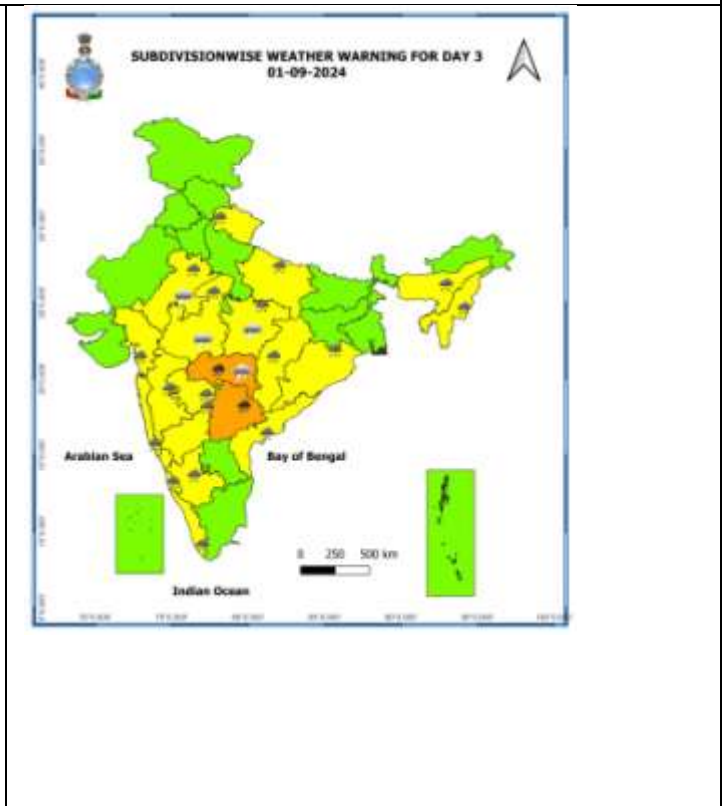
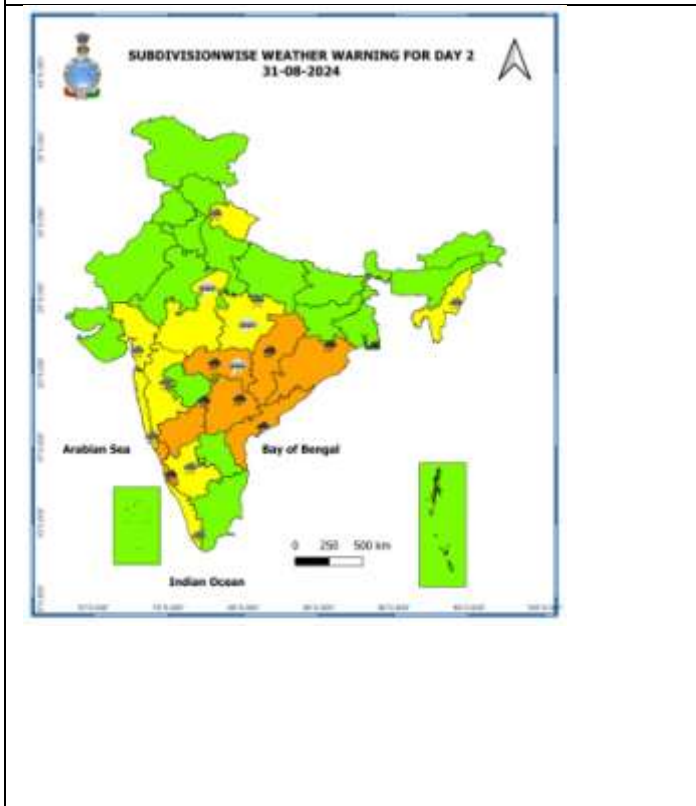
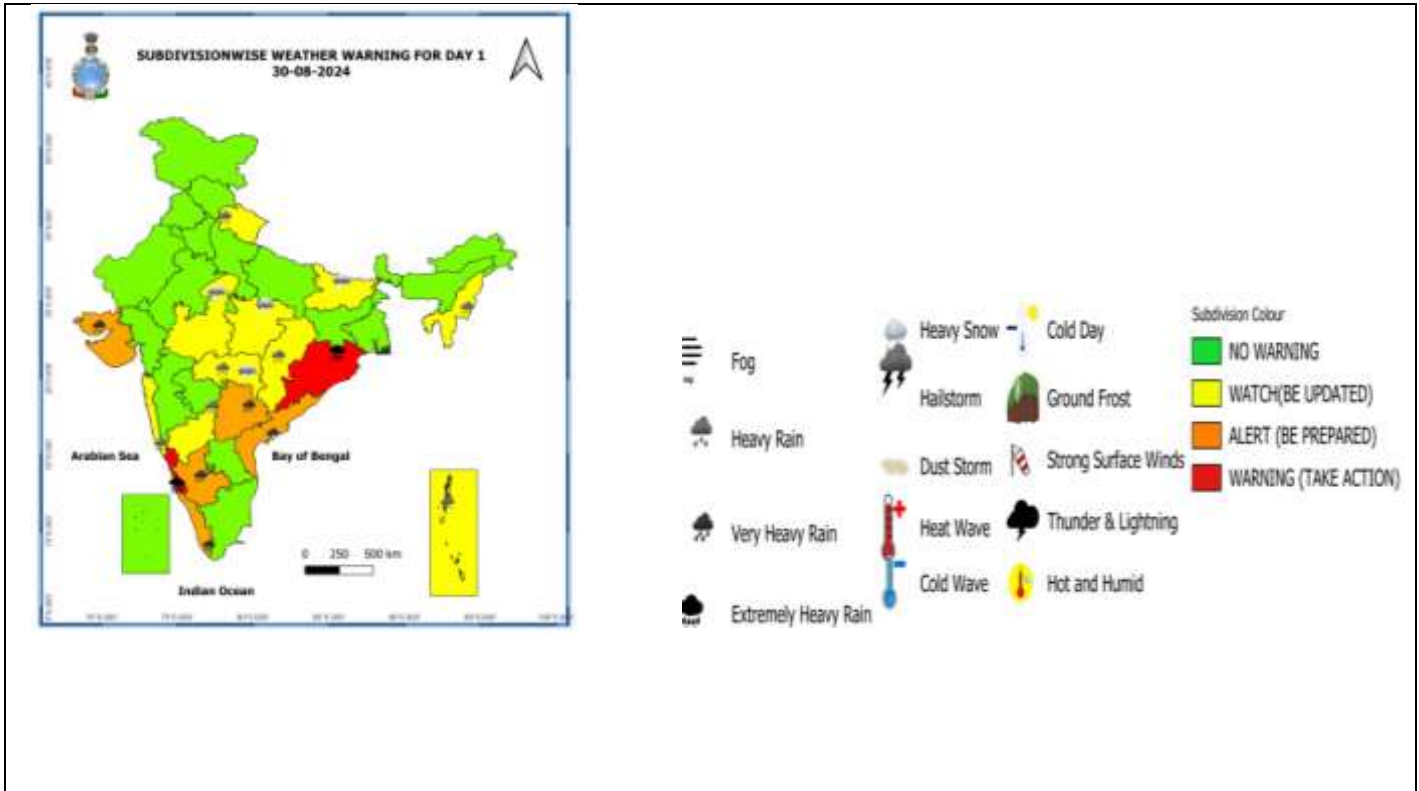
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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

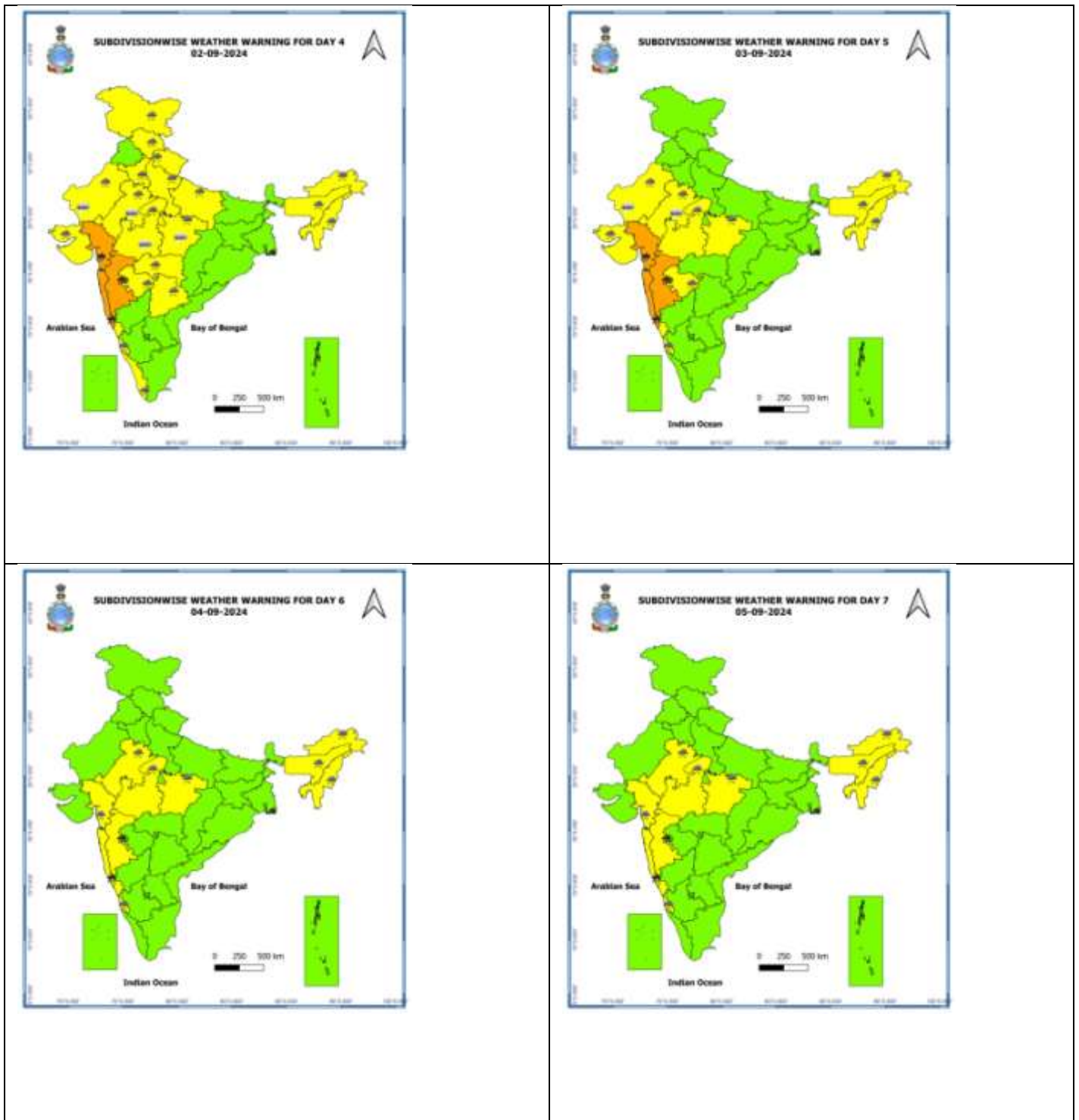
● LESS THAN 34 KT
 ○ 34-47 KT
 ● \geq 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ \geq 64 KT (\geq 118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
\geq 64 (\geq 118)	Phenomenal	Total suspension of fishing operations

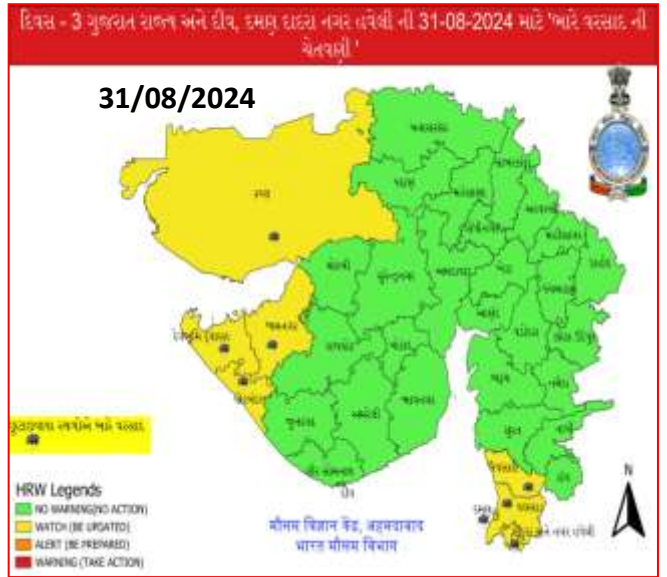
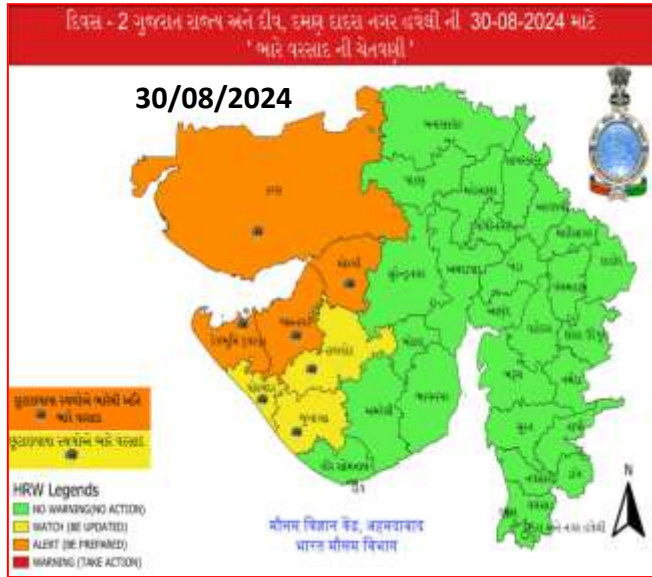
Weather Warning Graphics





- 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 Gujarat



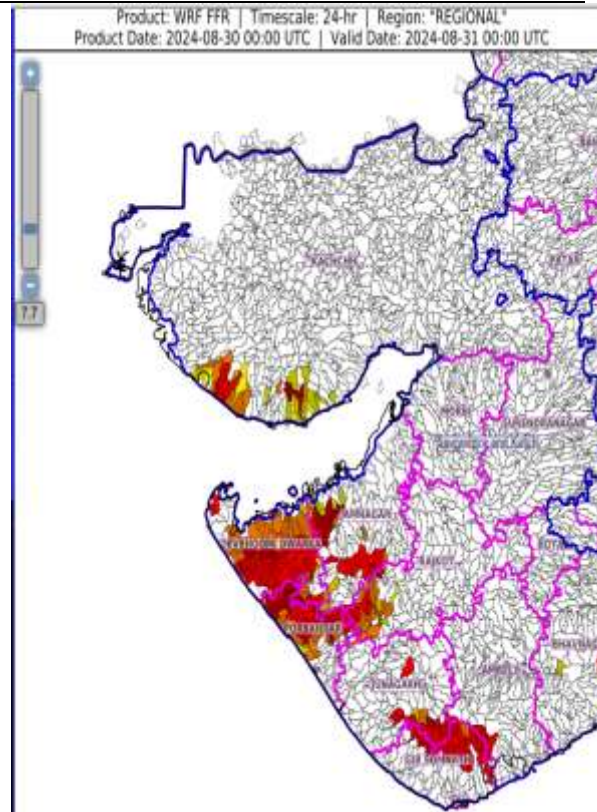
Flash Flood Guidance

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 31-08-2024 :

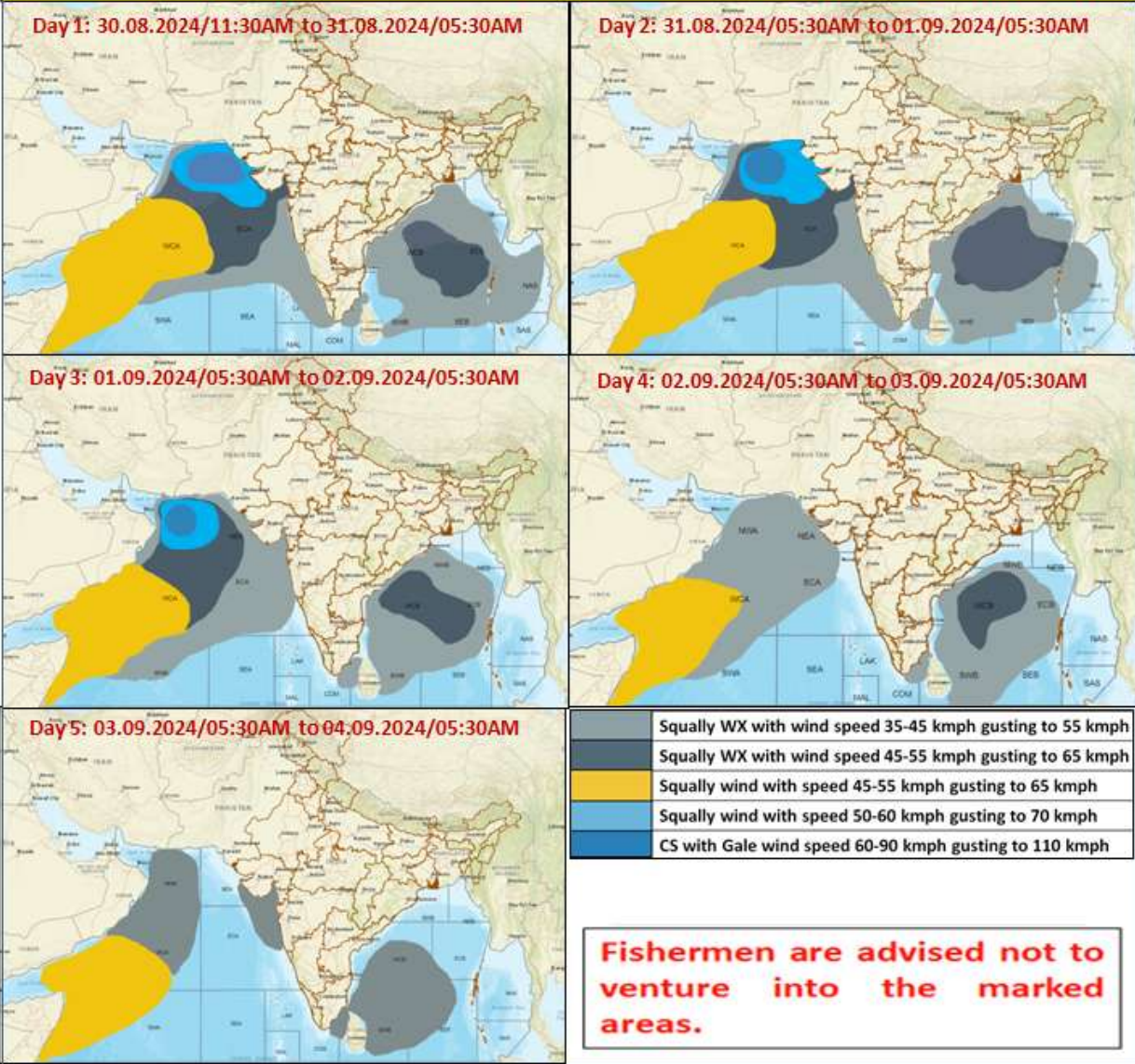
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Saurashtra & Kutch - Amreli, Bhavnagar, Devbhoomi Dwarka, Gir Somnath, Jamnagar, Junagarh, Porbandar, Rajkot 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.



Fishermen Warning Graphics



Annexure-1

1. Gujarat

Mandvi(k) (dist Kutch) 39;Mundra (dist Kutch) 22; Okha (dist Devbhoomi Dwarka) 17; Abdasa (dist Kutch) 16; Naliya (dist Kutch) 16;Dwarka (dist Devbhoomi Dwarka) 8; Anjar (dist Kutch) 8; Gandhidham (dist Kutch) 7.

2. Coastal Andhra Pradesh & Yanam

Kalingapatnam (dist Srikakulam) 8.