



Government of India
Ministry of Earth Sciences



India Meteorological Department

PRESS RELEASE-4

Time of issue: 1600 hours IST

Dated: 28th August, 2024

Sub: (a) Deep Depression over Saurashtra & Kachchh and (b) Low Pressure Area over northwest Jharkhand and neighbourhood became less marked

(a) Deep Depression over Saurashtra & Kachchh

Yesterday's Deep Depression over north Gujarat moved nearly westwards and lay over Saurashtra & Kachchh in the afternoon (1130 hours IST) of today, the 28th August near latitude 23.7°N and longitude 69.7 °E, 50 km north-northwest of Bhuj (Gujarat), 100 km east-northeast of Naliya (Gujarat) and 290 km east-southeast of Karachi (Pakistan).

It is likely to move slowly west-southwestwards across Saurashtra & Kachchh region and reach Saurashtra & Kachchh and adjoining areas of Pakistan coasts by morning of 29th August. It is likely to continue to move west-southwestwards and emerge into northeast Arabian Sea off Kachchh and adjoining Saurashtra & Pakistan coasts by morning of 30th August. While moving west-southwestwards over northeast Arabian Sea away from the Indian coast, there is a possibility of its temporary and marginal intensification over northeast Arabian Sea on 30th August.

(b) A fresh low pressure area is likely to form over north and adjoining Central Bay of Bengal during next 24 hours. It is likely to move west-northwestwards close to south Odisha & north Andhra Pradesh coasts during next 2 days.

(c) Low Pressure Area over northwest Jharkhand and neighbourhood became less marked

Yesterday's low pressure area over Jharkhand and Neighbourhood moved west-northwestwards and lay over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh and became less marked in the early morning (0530 hours IST) of today, the 28th August, 2024.

This is the last update with respect to this system.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Warnings:

(i) Rainfall Warning:

Gujarat State:

(a) Saurashtra & Kachchh: 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 28th August; heavy to extremely heavy rainfall at isolated places on 29th August and heavy rainfall at isolated places on 30th August.

(b) Gujarat region: Light to moderate rainfall at many places with heavy rainfall at isolated places is very likely on 28th August.

South Rajasthan: Light to moderate rainfall at many places with heavy rainfall at isolated places is very likely on 28th August.

Madhya Maharashtra: Light to moderate rainfall at most places with heavy rainfall at isolated places is likely on 28th August.

Konkan & Goa: Light to moderate rainfall at most places with heavy rainfall at isolated places is likely on 28th August.

(ii) Wind warning:

- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely over the districts of South Gujarat Region and Saurashtra & Kutch during 28th-29th 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 northeast & adjoining eastcentral Arabian Sea during 28th-30th August.
- Strong surface wind speed reaching 40-50 kmph gusting to 60kmph is very likely to prevail over South Rajasthan on 27th August.
- Strong wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along and off north Maharashtra coasts on 28th- 29thAugust.

(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 30thAugust.

(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.

(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

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India
Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com,
Website: rsmcnewdelhi.imd.gov.in, **Spatial rainfall distribution:** Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, **Rainfall amount (mm):** Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

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

(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 kutchha 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 to venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30th 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) Agrometadvisories for Heavy Rainfall likely over 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.

All associated graphics have been kept in Annexure-1. The 24 hours accumulated realised rainfall (≥ 7 cm) ending at 0830 hours IST of 28th August is kept in Annexure-2.

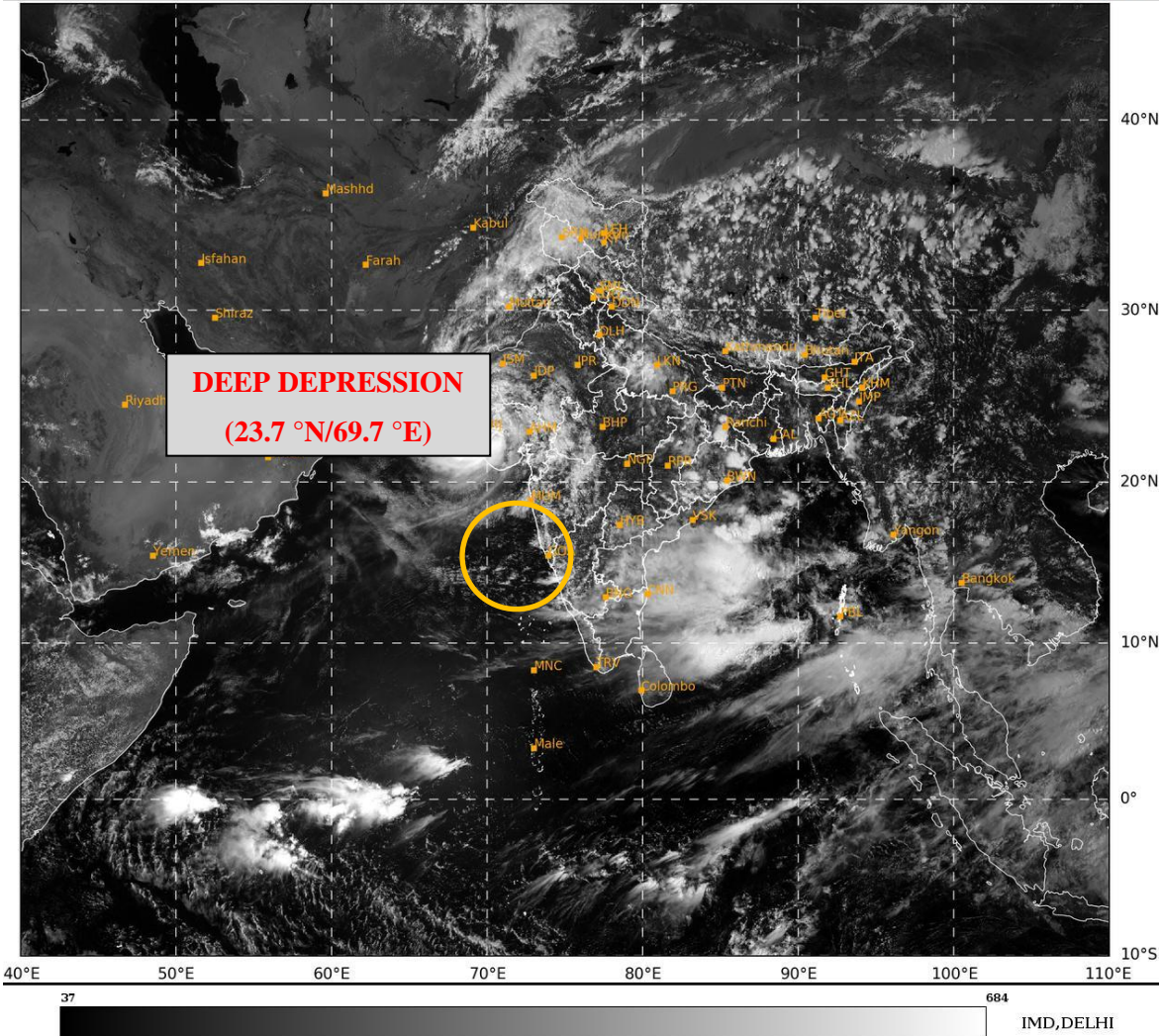
Next Press Release will be issued at 1330 hours IST of tomorrow, the 29th August, 2024.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Annexure – I

SAT : INSAT-3DR IMG
Visible Count 0.65 um
LIC Mercator

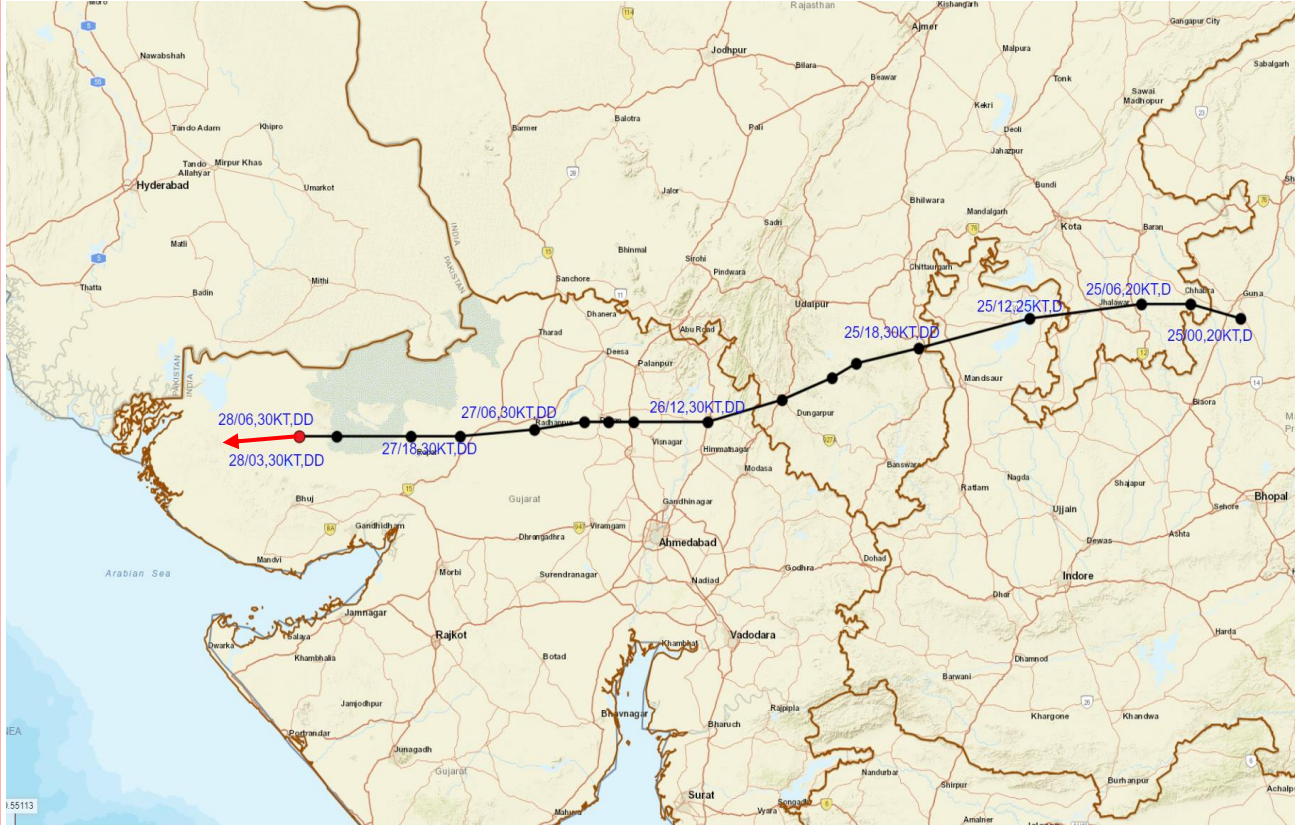
28-08-2024/(0815 to 0842) GMT
28-08-2024/(1345 to 1412) IST



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER SAURASHTRA & KACHCHH BASED ON 0600 UTC (1130 IST) OF 28TH AUGUST, 2024.

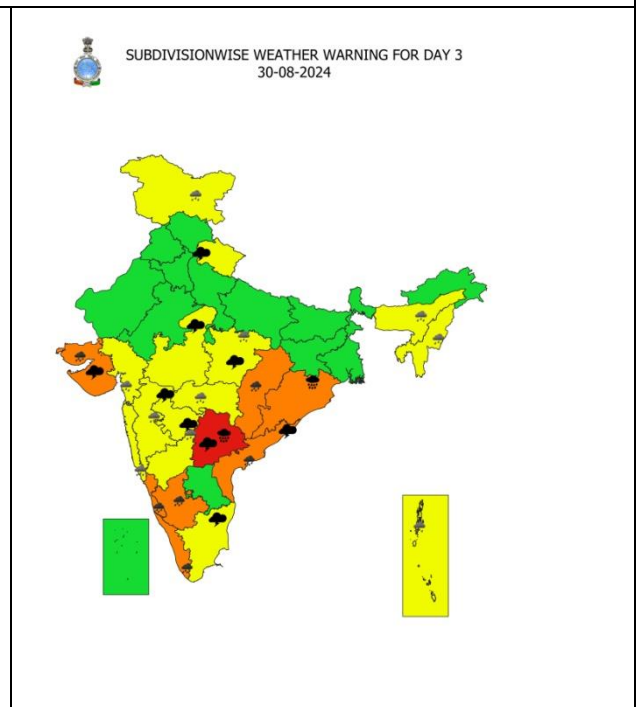
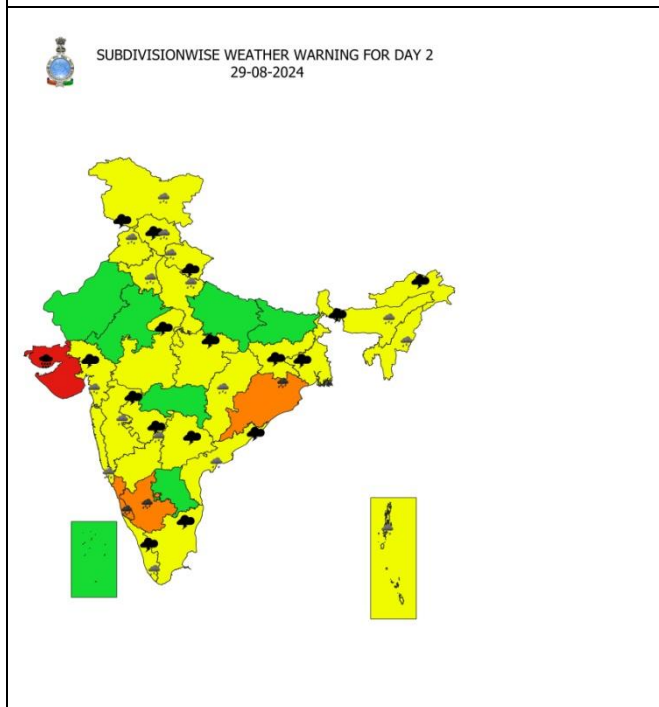
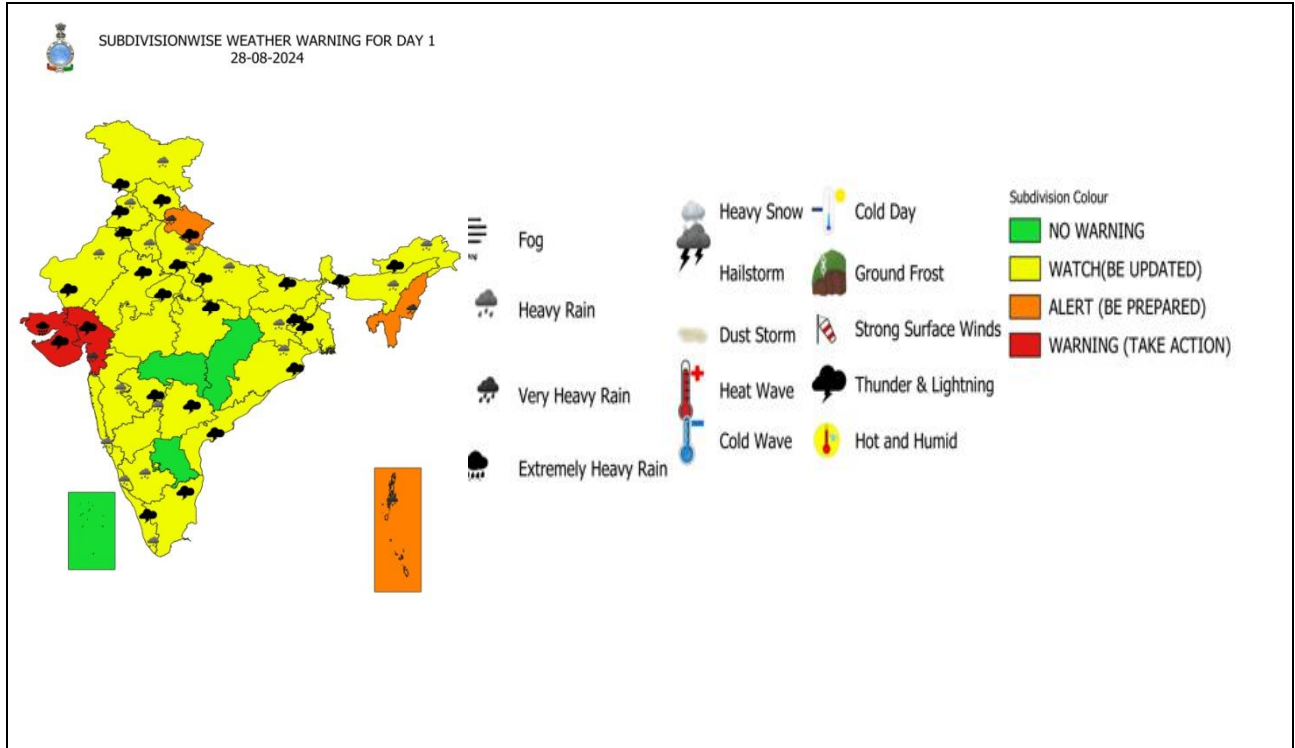


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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

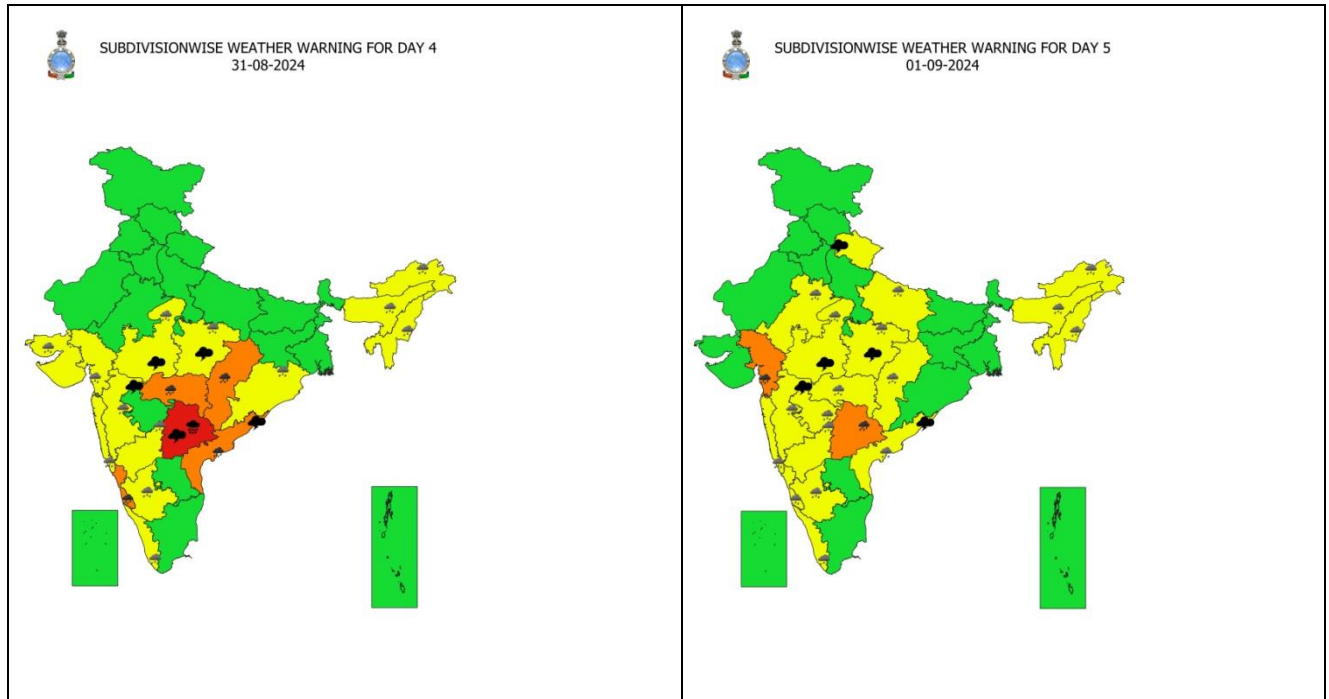
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India
 Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com,
 Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many:
 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 –
 204.4, Extremely heavy rain: 204.5 or more.

Weather Warning Graphics



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India
Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com,
Website: rsmcnewdelhi.imd.gov.in, **Spatial rainfall distribution:** Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, **Rainfall amount (mm):** Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



- 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.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

District wise Warning Graphics Gujarat

દિવસ - 1 ગુજરાત રાજ્ય અને દીવ, દમણ, દાદરા નગર હવેલી ની 28-08-2024 માટે 'ભારે વરસાદ ની ચેતવણી'

દિવસ - 2 ગુજરાત રાજ્ય અને દીવ, દમણ દાદરા નગર હવેલી ની 29-08-2024 માટે 'ભારે વરસાદ ની ચેતવણી'

28/08/2024

29/08/2024

છૂટાછવાયા સ્વળોએ અન્યત ભારે વરસાદ
છૂટાછવાયા સ્વળોએ ભારે વરસાદ
છૂટાછવાયા સ્વળોએ ભારે વરસાદ
છૂટાછવાયા સ્વળોએ ભારે વરસાદ ની ચેતવણી

છૂટાછવાયા સ્વળોએ અન્યત ભારે વરસાદ
છૂટાછવાયા સ્વળોએ ભારે વરસાદ

HRW Legends
 NO WARNING(NO ACTION)
 WATCH (BE UPDATED)
 ALERT (BE PREPARED)
 WARNING (TAKE ACTION)

HRW Legends
 NO WARNING(NO ACTION)
 WATCH (BE UPDATED)
 ALERT (BE PREPARED)
 WARNING (TAKE ACTION)

મૌસમ વિજ્ઞાન કેન્દ્ર, અહમદાવાદ
ભારત મૌસમ વિભાગ

મૌસમ વિજ્ઞાન કેન્દ્ર, અહમદાવાદ
ભારત મૌસમ વિભાગ

દિવસ - 3 ગુજરાત રાજ્ય અને દીવ, દમણ દાદરા નગર હવેલી ની 30-08-2024 માટે 'ભારે વરસાદ ની ચેતવણી'

દિવસ - 4 ગુજરાત રાજ્ય અને દીવ, દમણ દાદરા નગર હવેલી ની 31-08-2024 માટે 'ભારે વરસાદ ની ચેતવણી'

30/08/2024

31/08/2024

છૂટાછવાયા સ્વળોએ ભારે વરસાદ
છૂટાછવાયા સ્વળોએ ભારે વરસાદ

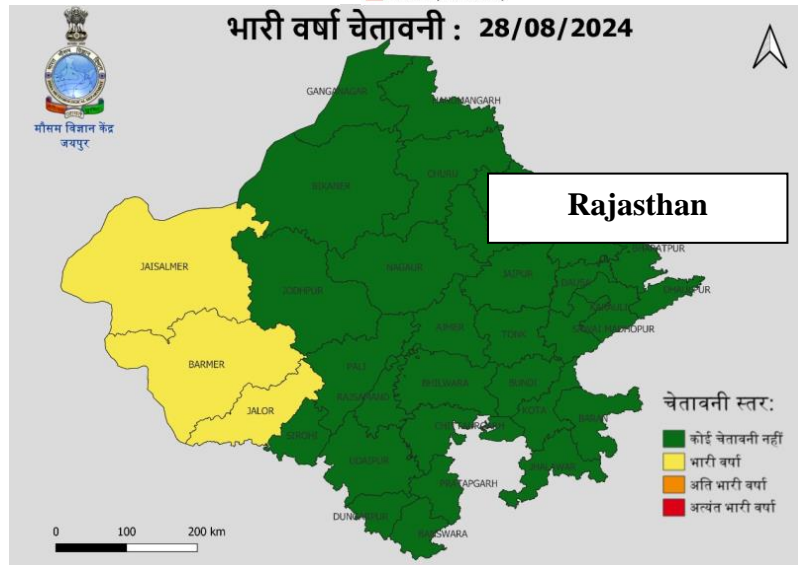
છૂટાછવાયા સ્વળોએ ભારે વરસાદ

HRW Legends
 NO WARNING(NO ACTION)
 WATCH (BE UPDATED)
 ALERT (BE PREPARED)
 WARNING (TAKE ACTION)

HRW Legends
 NO WARNING(NO ACTION)
 WATCH (BE UPDATED)
 ALERT (BE PREPARED)
 WARNING (TAKE ACTION)

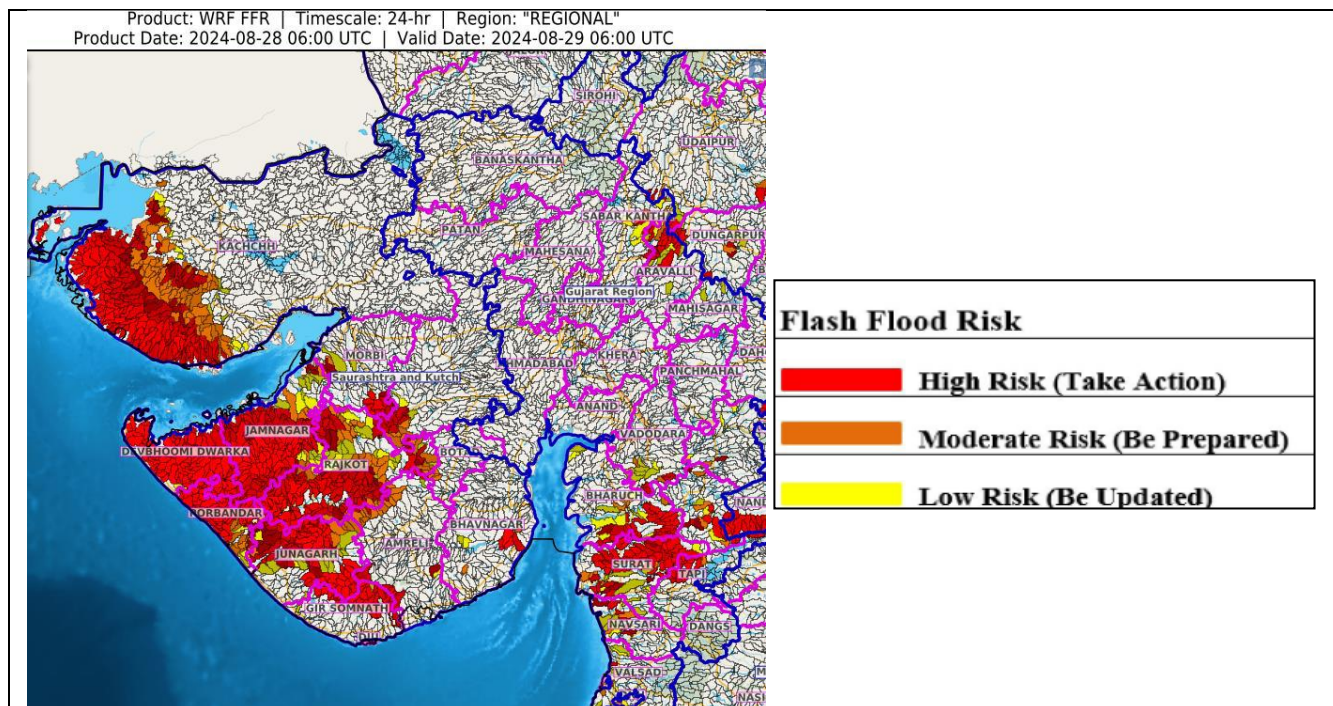
મૌસમ વિજ્ઞાન કેન્દ્ર, અહમદાવાદ
ભારત મૌસમ વિભાગ

મૌસમ વિજ્ઞાન કેન્દ્ર, અહમદાવાદ
ભારત મૌસમ વિભાગ



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Flood Guidance



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 29-08-2024 :

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

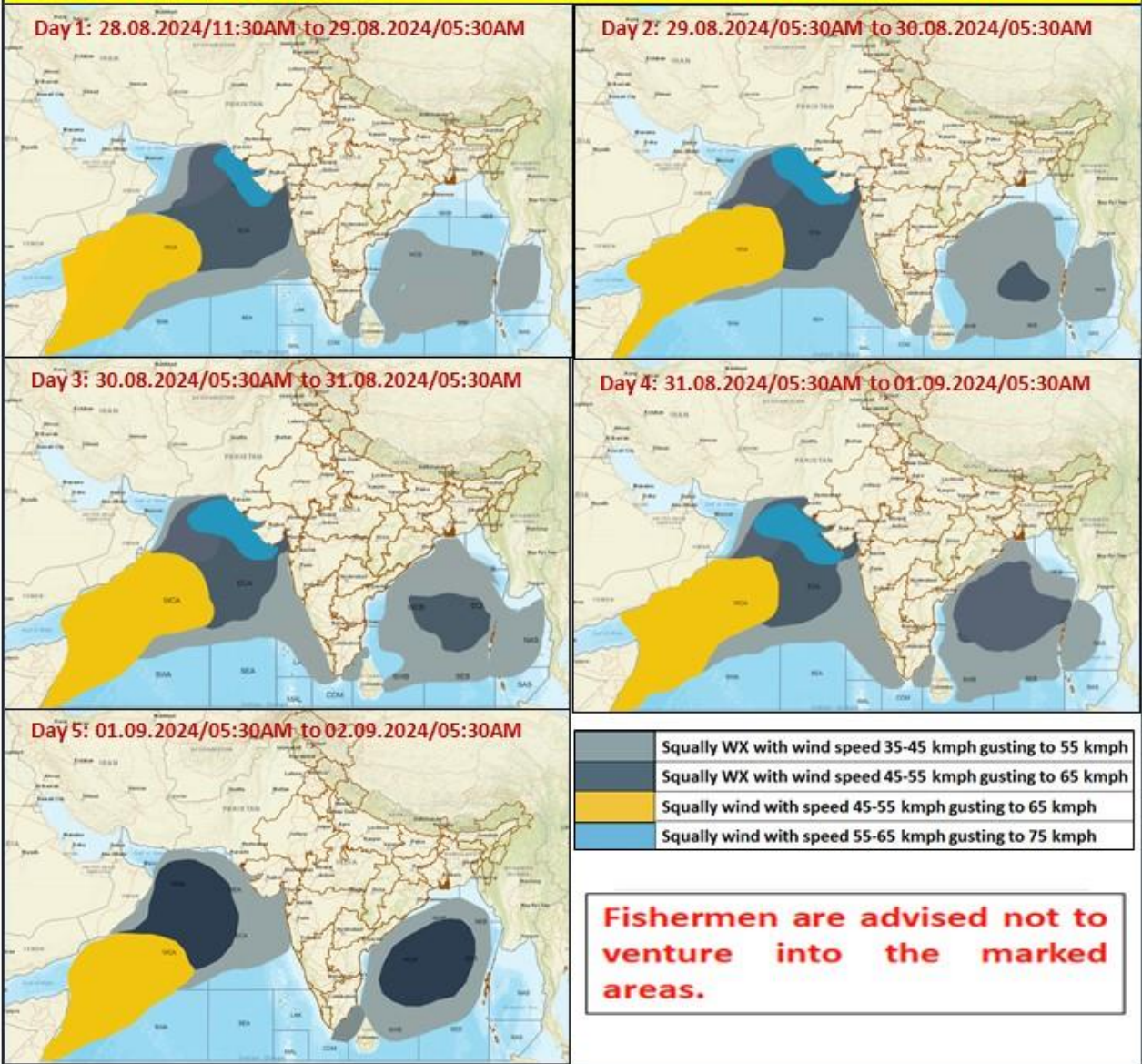
Gujarat Region - Daman, Aravalli, Bharuch, Chhota Udepur, Mahisagar, Narmada, Navsari, Sabar Kantha, Surat, Tapi, Vadodara and Valsad districts.

Saurashtra & Kutch - Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, Diu, Gir Somnath, Jamnagar, Junagarh, Porbandar, Rajkot, Surendranagar, Morbi and Kachchh districts.

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

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India
Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com,
Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Fishermen Warning Graphics



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

ANNEXURE –II

Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 28.08.2024 (in cm):

Saurashtra & Kutch: Khambhalia (Devbhoomi Dwarka) 43, Jamnagar (Jamnagar) 38, Jamjodhpur (Jamnagar) 32, Dwarka (Devbhoomi Dwarka) 31, Lalpur (Jamnagar) 30, Porbandar (Porbandar) 28, Ranavav (Porbandar) 28, Bhanvad (Devbhoomi Dwarka) 24, Kalavad (Jamnagar) 24, Kalyanpur (Devbhoomi Dwarka) 24, Kotdasangani (Rajkot) 23, Dhrol (Jamnagar) 18, Lodhika (Rajkot) 17, Dhoraji (Rajkot) 16, Jamkandorna (Rajkot) 16, Jodia (Jamnagar) 15, Gondal (Rajkot) 15, Kutiana (Porbandar) 13, Morbi (Morbi) 12, Mangrol (Junagadh) 12, Tankara (Morbi) 12, Visavadar (Junagadh) 12, Rajkot (Rajkot) 12, Upleta (Rajkot) 11, Vanthali (Junagadh) 11, Manavadar (Junagadh) 11, Bhesan (Junagadh) 10, Talala (Gir Somnath) 10, Jetpur (Rajkot) 10, Paddhari (Rajkot) 10, Junagadh (Junagadh) 9, Naliya (Kutch) 9, Mendarda (Junagadh) 8, Wankaner (Morbi) 8, Keshod (Junagadh) 8, Babra (Amreli) 8, Abdasa (Kutch) 8, Botad (Botad) 7

Gujarat Region: Nadiad (Kheda) 8, Kapadvanj (Kheda) 7,

East Rajasthan: Mounnt Abu (Sirohi) 9,

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India
Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com,
Website: rsmcnewdelhi.imd.gov.in, **Spatial rainfall distribution:** Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%, **Rainfall amount (mm):** Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.