



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

Press Release

Date: 30th November, 2023

Time of Issue: 1345 hours IST

Subject:

- I. The Well Marked Low Pressure Area over Southeast Bay of Bengal is likely to intensify into a Depression over same region during next 24 hours and further into a Cyclonic Storm over Southwest Bay of Bengal around 03rd December.**
- II. Wet spell with thunderstorm activity over Madhya Pradesh & Maharashtra during next 2 days.**
- III. Western Disturbance continue to affect Western Himalayan region & adjoining plains during next 24 hours.**

Realized weather during past 24 hours till 0830 hours IST of today: (Refer Annexure I)

Weather Systems and Forecast & Warnings during next 5 days: (graphics in Annexure II)

- ❖ Yesterday's Cyclonic Circulation over north Sri Lanka & neighbourhood now lies over Southwest Bay of Bengal & adjoining south Sri Lanka in lower & middle tropospheric levels.
- ❖ Yesterday's Western Disturbance now runs as trough in middle tropospheric levels between Lat. 37°N/Long. 65°E & Lat. 30°N/Long. 75°E and induced cyclonic circulation lies over northwest Rajasthan in lower tropospheric levels.
- ❖ **There is confluence between easterly winds from Bay of Bengal and winds associated with induced cyclonic circulation over northwest Rajasthan at lower tropospheric levels.**
- ❖ Under the influence of the above systems:
 - Scattered to fairly widespread light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 30th November. **Heavy rainfall/snowfall** at isolated places also likely over Kashmir-Gilgit-Baltistan-Muzaffarabad on 30th November. Light rainfall very likely at isolated places over the plains of Northwest India during next 48 hours. Thunderstorm & lightning very likely at isolated places over entire Northwest India except Rajasthan on 30th November. **Isolated hailstorm** very likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab and Haryana-Chandigarh on 30th November.
 - Scattered to fairly widespread light to moderate rainfall with thunderstorm & lightning during next 48 hours and **isolated hailstorm** during next 24 hours very likely over Madhya Pradesh and Vidarbha.
 - Light isolated rainfall with thunderstorm activity very likely over Madhya Maharashtra and Marathwada on 30th November & 01st December.
 - Light to moderate scattered to fairly widespread rainfall with thunderstorm activity at isolated places very likely over Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during next 5 days. **Isolated heavy rainfall** very likely over coastal Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe on 30th November & 01st December and over Rayalaseema on 30th November. **Isolated heavy to very heavy rainfall** also very likely over coastal Tamil Nadu, Puducherry & Karaikal on 30th November.

Low Pressure Area over Southeast Bay of Bengal (graphics in Annexure III)

- ❖ Yesterday's **Well Marked Low Pressure Area** over Southeast Bay of Bengal & adjoining South Andaman Sea moved west-northwestwards and lay over Southeast Bay of Bengal at 0830 hours IST of today, the 30th November, 2023. It is likely to move west-northwestwards and intensify into a **Depression** over Southeast

Bay of Bengal during next 24 hours. Continuing to move further west-northwestwards, it would intensify gradually into a **Cyclonic Storm** over Southwest Bay of Bengal around 03rd December. Thereafter, it would move northwestwards and reach North Tamil Nadu and South Andhra Pradesh coasts around the early morning of 04th December as a cyclonic storm.

Warnings in association with the above Well Marked Low Pressure Area:

(i) Rainfall Warning (graphics enclosed):

- Light to moderate rainfall at most places with **isolated heavy rainfall** is likely over Andaman & Nicobar Islands on 30th November & 1st December.
- Light to moderate rainfall at most places with **isolated heavy rainfall** is likely over north Coastal Tamil Nadu & Puducherry during 1st to 4th December with **isolated very heavy rainfall** during 2nd to 4th December.
- Light to moderate rainfall at most places with **isolated heavy to very heavy rainfall** is likely over south Coastal Andhra Pradesh during 3rd to 4th December.
- Light to moderate rainfall at most places with **isolated heavy rainfall** is likely over Rayalaseema on 3rd & 4th December.

(ii) Wind warning:

- **Andaman Sea and Andaman & Nicobar Islands:** Strong wind speed reaching 25-35 kmph gusting to 45 kmph is likely to prevail over South Andaman Sea and adjoining Andaman & Nicobar Islands on 30th November.
- **Southeast Bay of Bengal:** Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over Southeast Bay of Bengal from 1st December morning and likely to increase becoming 50-60 kmph gusting to 70 kmph on 2nd December morning and decrease thereafter.
- **Southwest Bay of Bengal:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely over Southwest Bay of Bengal from 1st December morning and 50-60 kmph gusting to 70 kmph from 2nd December morning. It would increase becoming Gale Wind speed reaching 60-70 kmph gusting to 80 kmph from 3rd December morning for subsequent 24 hours.
- **Westcentral Bay of Bengal:** Squally wind speed reaching 35-45 kmph gusting to 55 kmph is likely over westcentral Bay of Bengal from 2nd December evening and is likely to increase becoming 45-55 kmph gusting to 65 kmph from 3rd December morning.

(iii) Fishermen Warning (graphics attached): Fishermen are advised not to venture into:

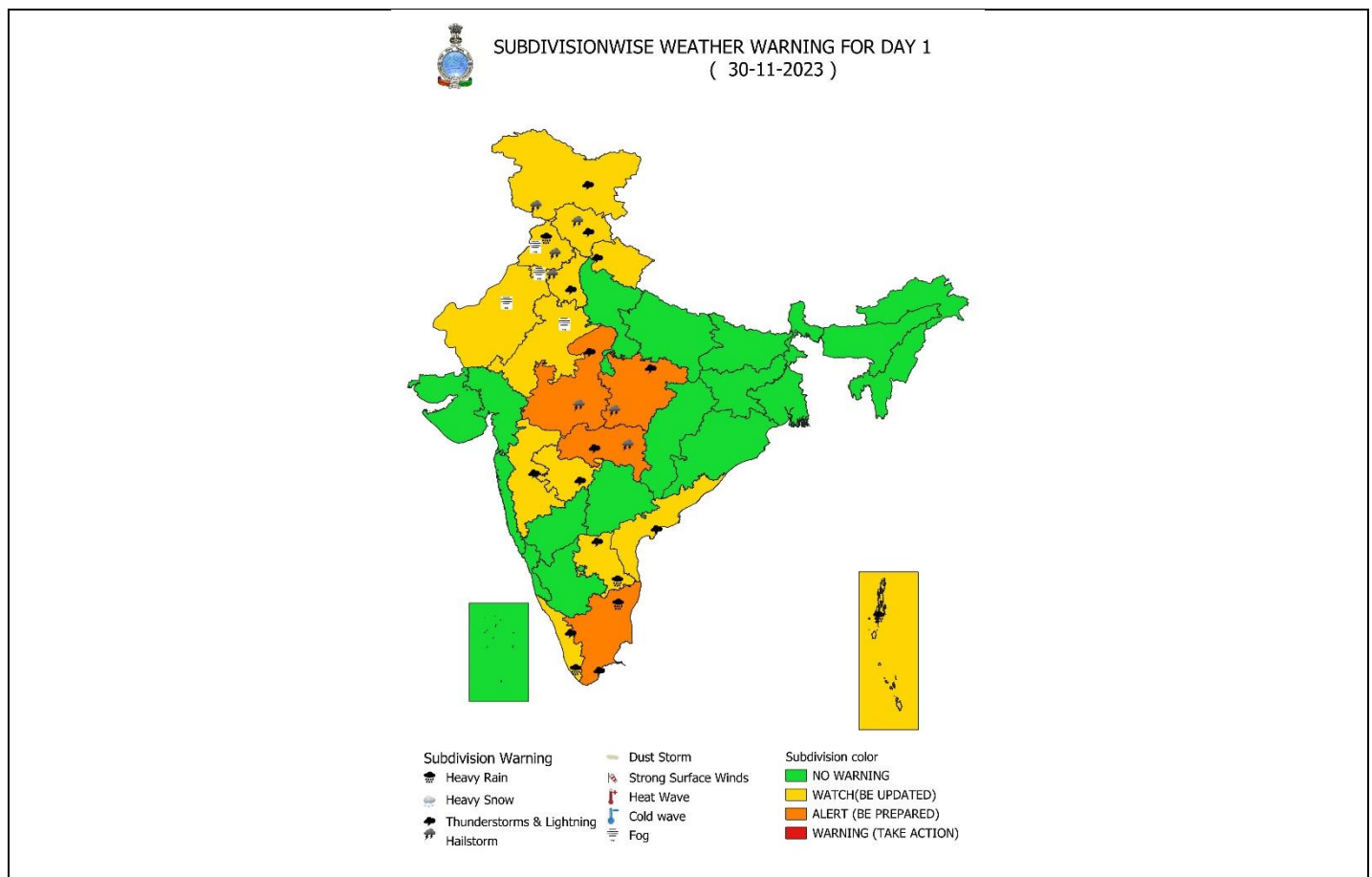
- South Andaman Sea on 30th November.
- Southeast Bay of Bengal during 30th November to 2nd December.
- Southwest Bay of Bengal during 1st to 4th December.
- Westcentral Bay of Bengal from 2nd December morning to 5th December.

The Fishermen out at sea are advised to return to Andaman & Nicobar Islands and those off east coast of India (from Tamil Nadu coast to Odisha coast) are advised to return to coast by 1st December.

For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php and <https://mausam.imd.gov.in/responsive/cycloneinformation.php>

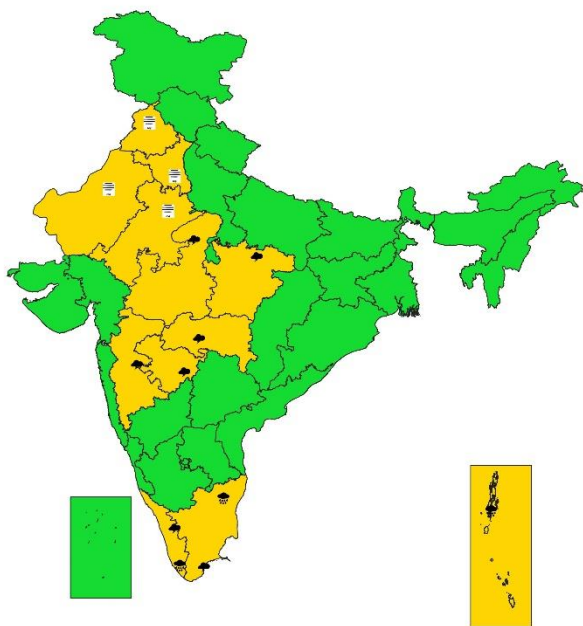
Realized weather during past 24 hours till 0830 hours IST of today:

- ❖ **Heavy to very heavy rainfall** reported at isolated places over Tamil Nadu, Puducherry & Karaikal and Rayalaseema.
- ❖ **Significant Rainfall Amount:**
 - **Tamil Nadu, Puducherry & Karaikal:** Avadi (dist Tiruvallur) 19, Kolathur (dist Chennai), T.V.K Nagar (dist Chennai), Ponneri (dist Tiruvallur) 15 each, Ambattur (dist Chennai), Malar Colony (dist Chennai), Ambathur (dist Chennai) 14 each, Thalaigaiy (dist Nagapattinam), Cholavaram (dist Tiruvallur), Alandhur (dist Chennai) 13 each, Ambattur (dist Chennai), Adyar Eco Park (dist Chennai), Anna University (dist Chennai), Maduravoyal (dist Chennai), Puzhal ARG (dist Tiruvallur), Red Hills (dist Tiruvallur) 12 each
 - **Rayalaseema:** Tada (dist Tirupati) 14, Venkatagiri (dist Tirupati) 10, Satyavedu (dist Tirupati) 7

Annexure II



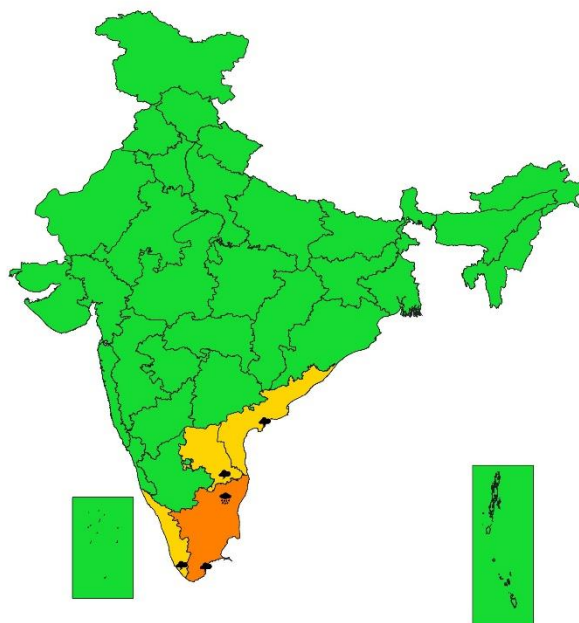
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 (1-12-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| Heavy Rain | Strong Surface Winds | NO WARNING |
| Heavy Snow | Heat Wave | WATCH (BE UPDATED) |
| Thunderstorms & Lightning | Cold wave | ALERT (BE PREPARED) |
| Hailstorm | Fog | WARNING (TAKE ACTION) |



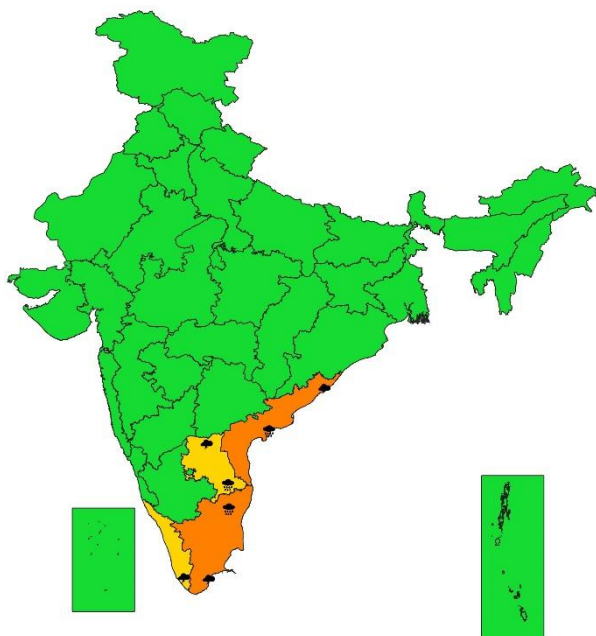
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 (2-12-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| Heavy Rain | Strong Surface Winds | NO WARNING |
| Heavy Snow | Heat Wave | WATCH (BE UPDATED) |
| Thunderstorms & Lightning | Cold wave | ALERT (BE PREPARED) |
| Hailstorm | Fog | WARNING (TAKE ACTION) |



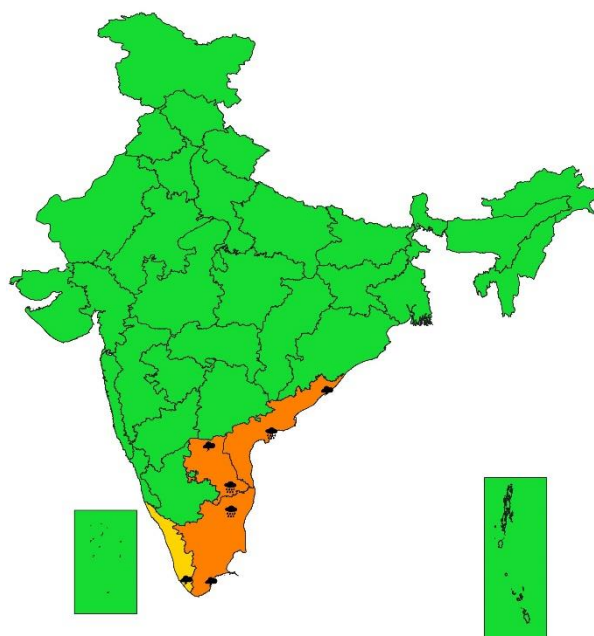
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 (3-12-2023)



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|----------------------------|----------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| Heavy Rain | Strong Surface Winds | NO WARNING |
| Heavy Snow | Heat Wave | WATCH (BE UPDATED) |
| Thunderstorms & Lightning | Cold wave | ALERT (BE PREPARED) |
| Hailstorm | Fog | WARNING (TAKE ACTION) |



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5 (4-12-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| Subdivision Warning | Dust Storm | Subdivision color |
| Heavy Rain | Strong Surface Winds | NO WARNING |
| Heavy Snow | Heat Wave | WATCH (BE UPDATED) |
| Thunderstorms & Lightning | Cold wave | ALERT (BE PREPARED) |
| Hailstorm | Fog | WARNING (TAKE ACTION) |

Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm over Madhya Pradesh and Vidarbha on 30th November.

Impact expected:

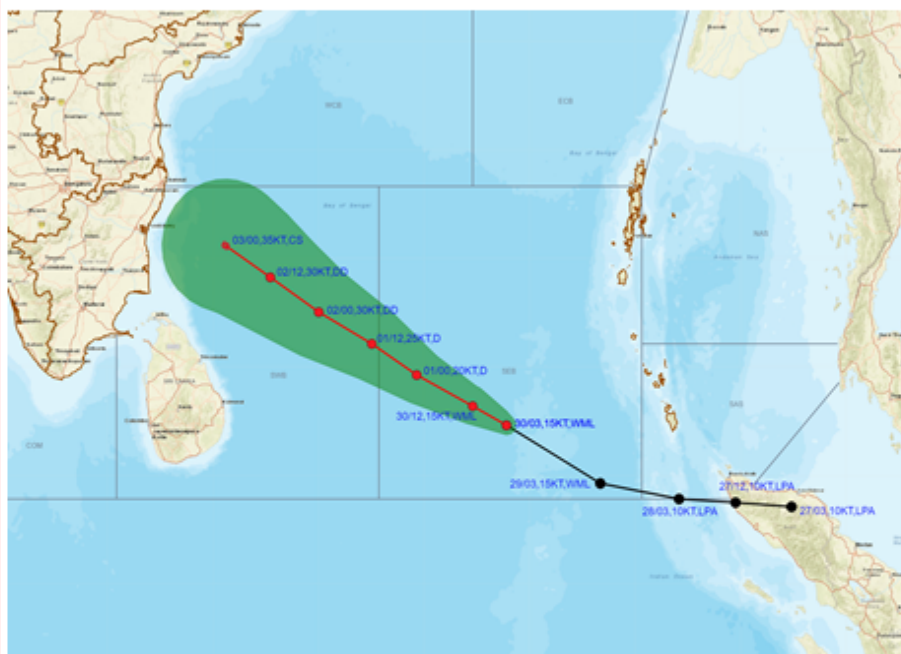
- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

Action suggested:






- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.

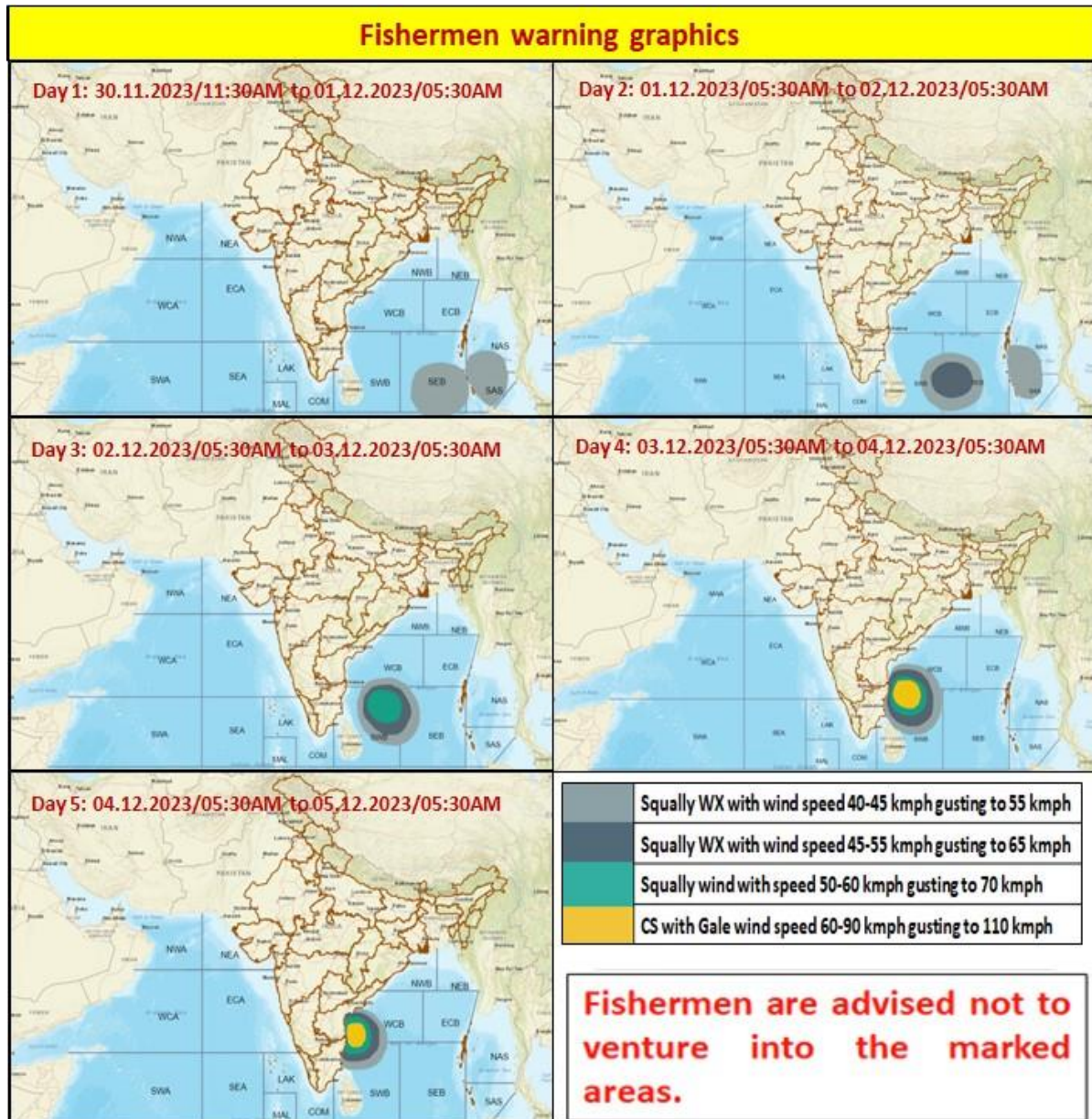


PREGENESIS TRACK FORECAST ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC (0830 IST) OF 30TH NOVEMBER 2023.



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



Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning	 Dust Storm	Subdivision color
 Heavy Rain	 Strong Surface Winds	 NO WARNING
 Heavy Snow	 Heat Wave	 WATCH(BE UPDATED)
 Thunderstorms & Lightning	 Cold wave	 ALERT (BE PREPARED)
 Hailstorm	 Fog	 WARNING (TAKE ACTION)

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

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