



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

**Press Release**

**Date: 16<sup>th</sup> November, 2023**

**Time of Issue: 1300 hours IST**

**Subject: i) Deep Depression over Westcentral Bay of Bengal likely to intensify into a Cyclonic Storm during next 24 hours and cross Bangladesh coast between Mongla and Khepupara with wind speed 60-70 kmph gusting to 80 kmph by the early hours of 18<sup>th</sup> November, 2023.**

**ii) A fresh easterly wave is likely to cause isolated heavy rainfall spell over Tamil Nadu and Kerala on 19<sup>th</sup> & 20<sup>th</sup> November, 2023.**

**Rainfall recorded during past 24 hours till 0830 hours IST of today:**

- ❖ **Heavy rainfall** observed at isolated places over coastal Tamil Nadu.
- ❖ **Significant Rainfall Amount (in cm): Tamil Nadu:** Tiruvallur: Pooneri-8, Kanniyakumari: Sivalogam-7.

**Weather Systems:**

- ❖ Yesterday's **Depression** over Westcentral Bay of Bengal intensified into a **Deep Depression** over the same region at 0530 hours IST of today. It moved north-northeastwards with a speed of 17 kmph during past 6 hours, and lay centred at 0830 hours IST of today, the 16<sup>th</sup> November over Westcentral Bay of Bengal near latitude 17.4°N and longitude 87.0°E, about 390 km east-southeast of Visakhapatnam (Andhra Pradesh), 320 km south-southeast of Paradip (Odisha), 460 km south-southwest of Digha (West Bengal) and 610 km south-southwest of Khepupara (Bangladesh).  
It is likely to continue to move north-northeastwards, intensify into a Cyclonic Storm during next 24 hours and cross Bangladesh coast between Mongla and Khepupara with wind speed 60-70 kmph gusting to 80 kmph by the early hours of 18<sup>th</sup> November, 2023. **(refer Annexure I & II for details).**
- ❖ An upper air **cyclonic circulation** lies over Southwest Bay of Bengal & adjoining Sri Lanka and a **trough** runs from this cyclonic circulation to the cyclonic circulation associated with the Deep Depression over Westcentral Bay of Bengal in the lower tropospheric levels.

**Forecast & Warnings associated with Deep Depression:**

**(i) Rainfall Warning: (Annexure III)**

- Light to moderate rainfall at many places with isolated heavy rainfall is likely over coastal districts of West Bengal on 16<sup>th</sup> & 17<sup>th</sup> and over coastal districts of north Odisha on 16<sup>th</sup> November.
- Light to moderate rainfall at many places with isolated heavy rainfall is likely over Nagaland, Manipur, Mizoram & Tripura during 16<sup>th</sup> to 18<sup>th</sup> November with very heavy rainfall at isolated places over Mizoram & Tripura on 17<sup>th</sup> November.
- Light to moderate rainfall at many places with isolated heavy rainfall is likely over south Assam and east Meghalaya on 17<sup>th</sup> & 18<sup>th</sup> November.

**(ii) Fishermen Warning: (Annexure IV)**

Fishermen are advised not to venture into

- Southwest Bay of Bengal on 16<sup>th</sup> November
- Westcentral Bay of Bengal during 16<sup>th</sup> to 17<sup>th</sup> November
- North Bay of Bengal during 16<sup>th</sup> to 18<sup>th</sup> November
- Along & off Andhra Pradesh Coast during 16<sup>th</sup> to 17<sup>th</sup> November
- Along & off Odisha coast during 16<sup>th</sup>-17<sup>th</sup> November
- Along & off West Bengal and Bangladesh coasts during 16<sup>th</sup> to 18<sup>th</sup> November

**(iii) Damage Expected & Action Suggested for coastal areas of Odisha & West Bengal:**

- Minor damage to loose/unsecured structures.
- Minor damage to small trees like Banana. Papaya and Drumstick and ripe paddy crops.
- Partial Damage to standing crops in coastal areas of Odisha & west Bengal.
- Minor damage to Kutcha embankments.

**Forecast & Warnings associated with Easterly Wave:**

Light to moderate rainfall at some places with **isolated heavy rainfall** is very likely over Tamil Nadu on 16<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup> & 20<sup>th</sup> and Kerala on 20<sup>th</sup> November.

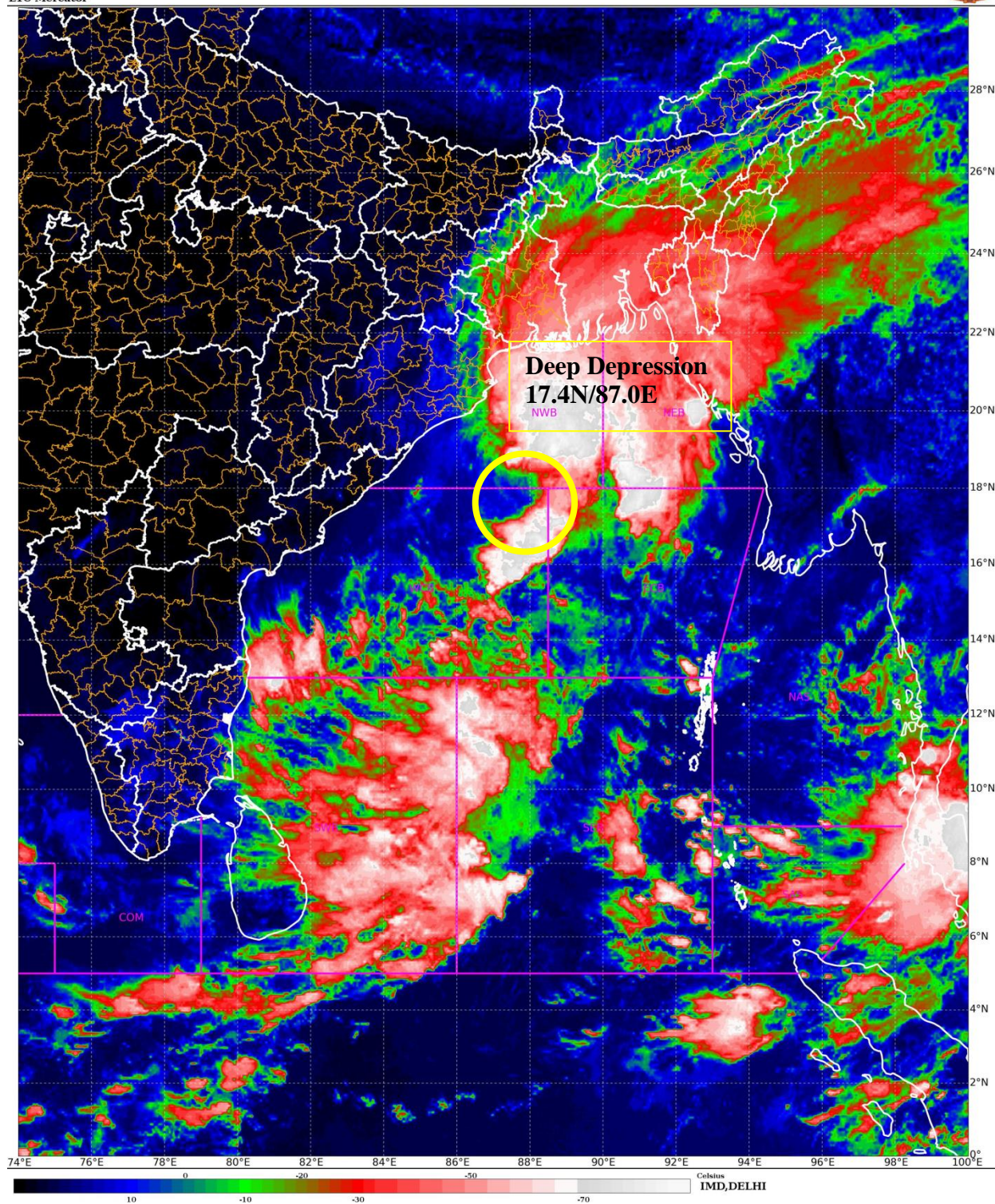
**No significant weather likely over rest parts of the country.**

For more details kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)  
and <https://mausam.imd.gov.in/responsive/cycloneinformation.php>



SAT : INSAT-3D IMG  
IMG\_TIR1\_TEMP 10.8 um  
LIC Mercator

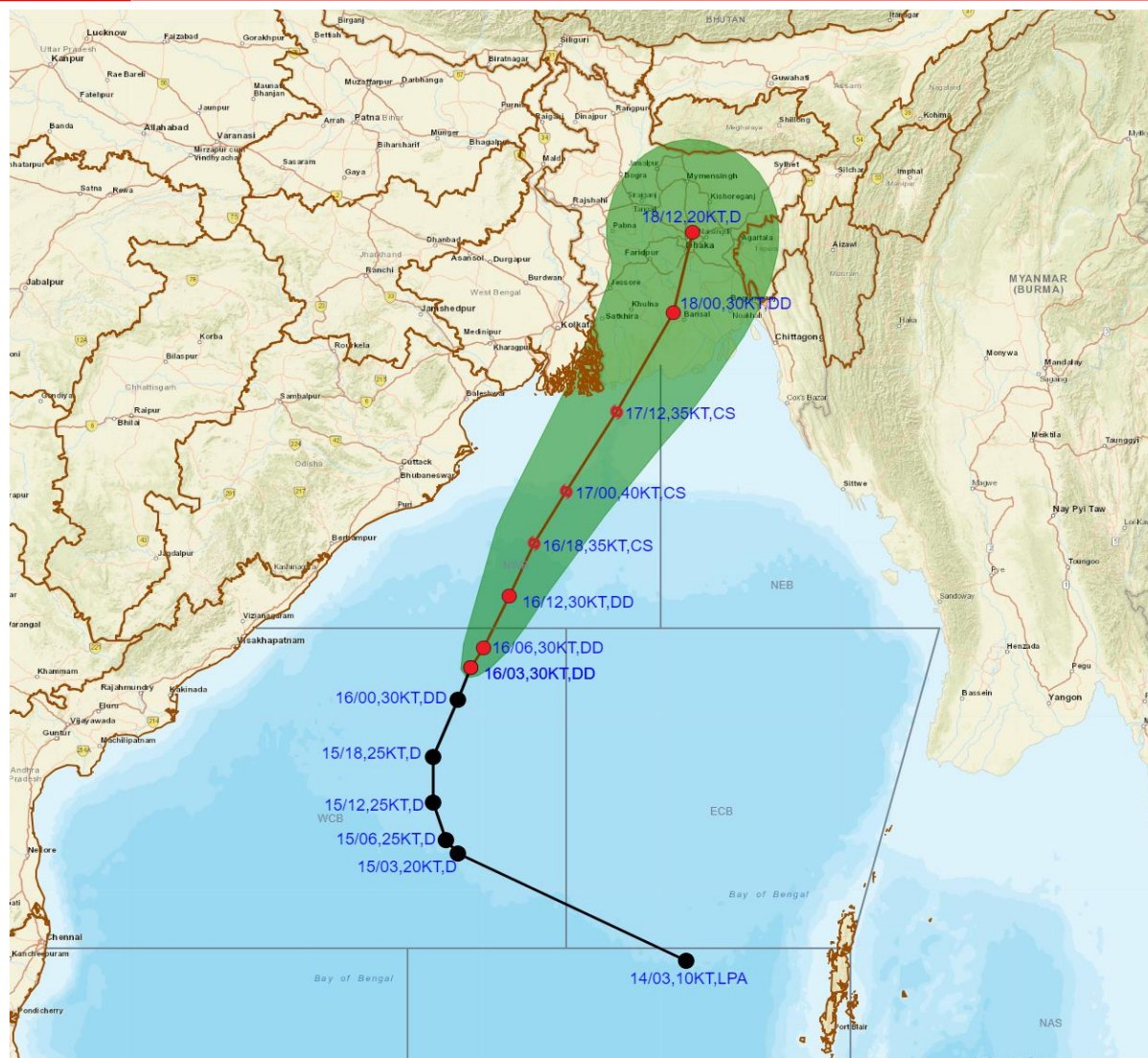
16-11-2023/(0600 to 0627) GMT  
16-11-2023/(1130 to 1157) IST







**OBSERVED AND FORECAST TRACK AND INTENSITY ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH DEEP DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0300 UTC (0830 IST) OF 16<sup>TH</sup> 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 ( $\geq 120$  KT)

● LESS THAN 34 KT

○ 34-47 KT

○  $\geq 48$  KT

— OBSERVED TRACK

— FORECAST TRACK

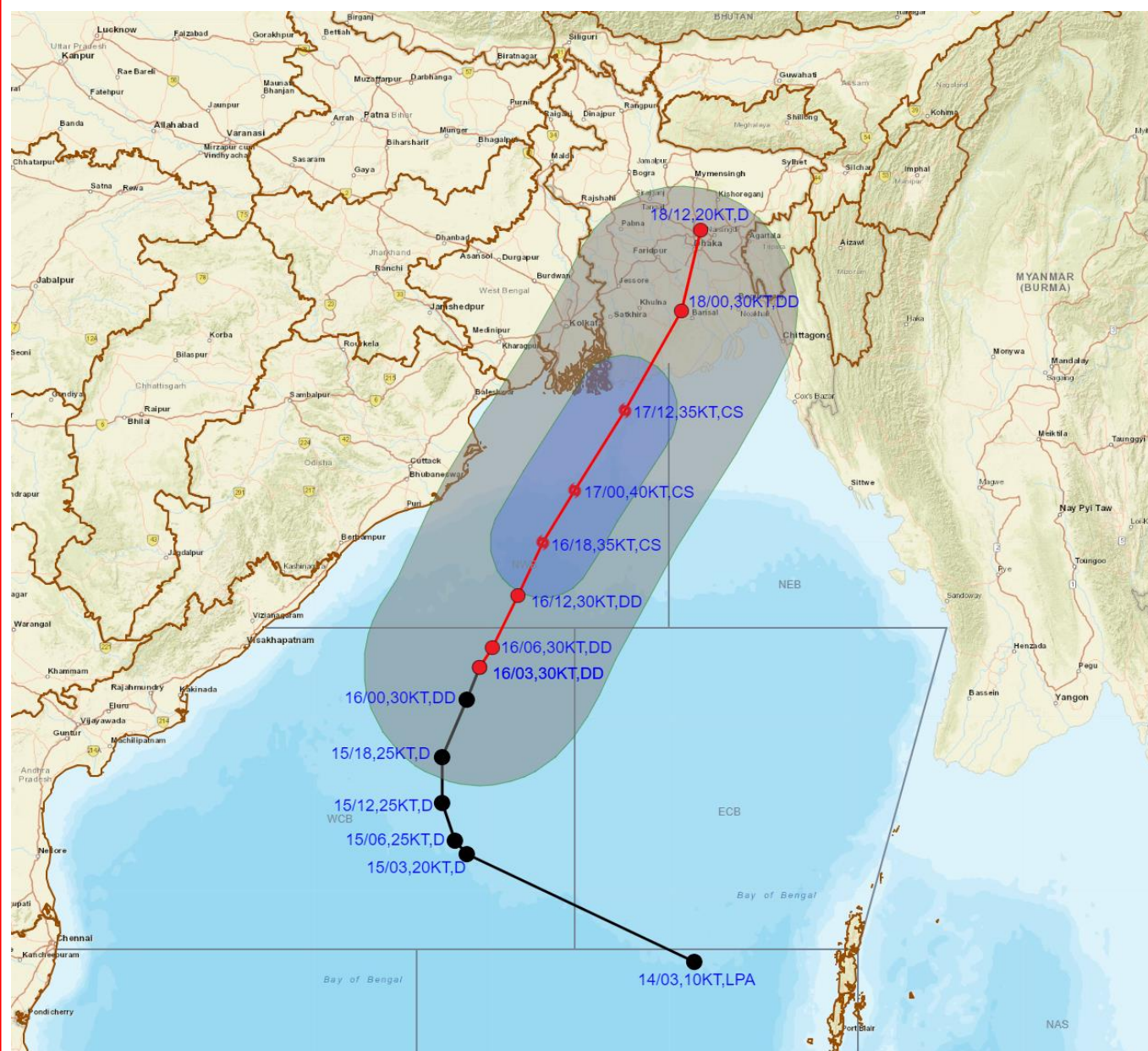
▲ CONE OF UNCERTAINTY

Forecast	DISTANCE(KM) AND DIRECTION FROM STATIONS			
Date and Time	PARADIP (CWR)	DIGHA	KHEPUPARA	CHITTAGONG (AMBAGAN)
17.11.23/0000	200, E	190, SSE	270, SW	420, SW
17.11.23/1200	300, ENE	190, E	120, SW	280, WSW
18.11.23/0000	460, NE	310, ENE	90, N	170, WNW





**OBSERVED AND FORECAST TRACK AND INTENSITY ALONG WITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH DEEP DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0300 UTC (0830 IST) OF 16<sup>TH</sup> NOVEMBER 2023.**



**DATE/TIME IN UTC**

**IST=UTC + 0530**

**L: LOW PRESSURE AREA**

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**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)

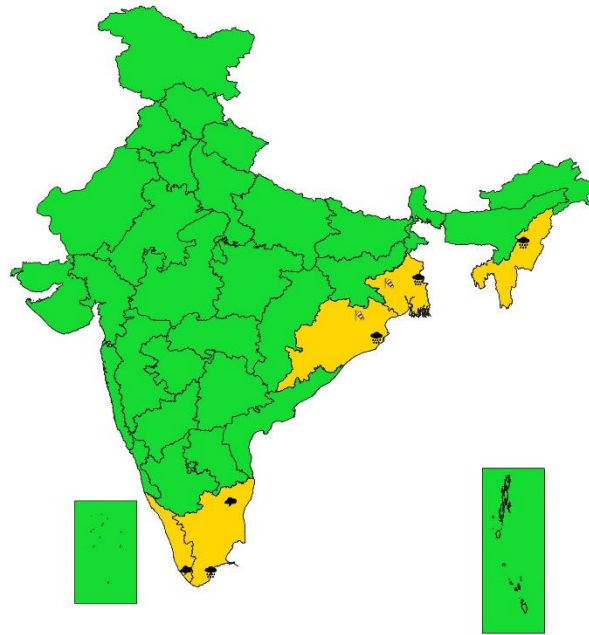
—  $\geq 64$  KT ( $\geq 118$  KMPH)

**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



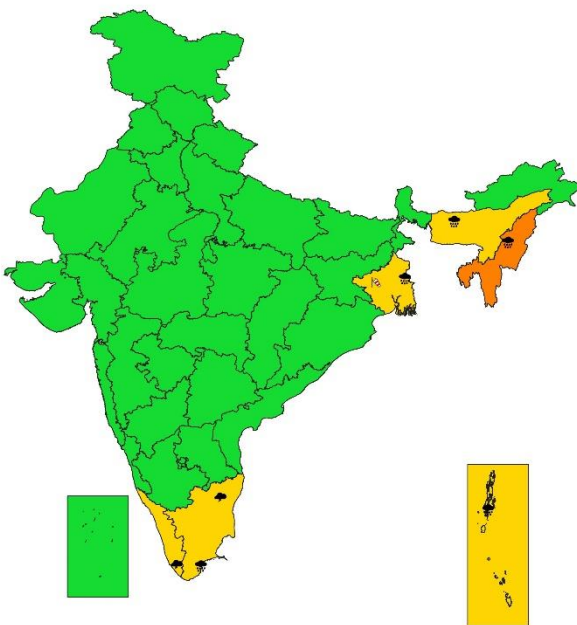
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 1 ( 16-11-2023 )



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



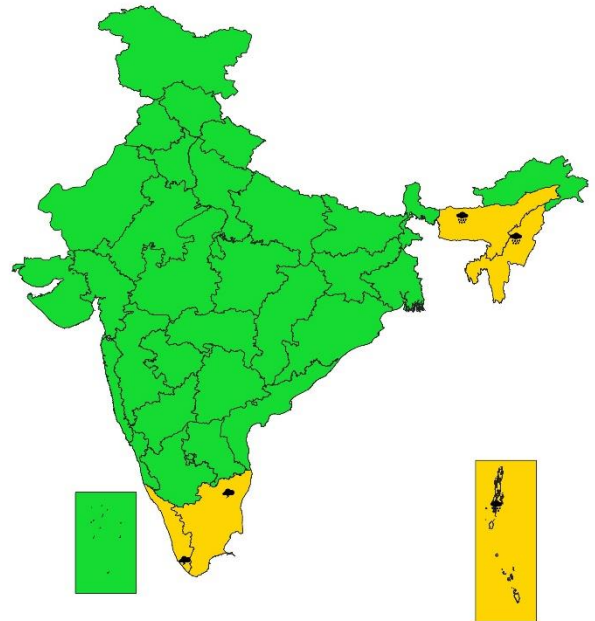
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 ( 17-11-2023 )



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

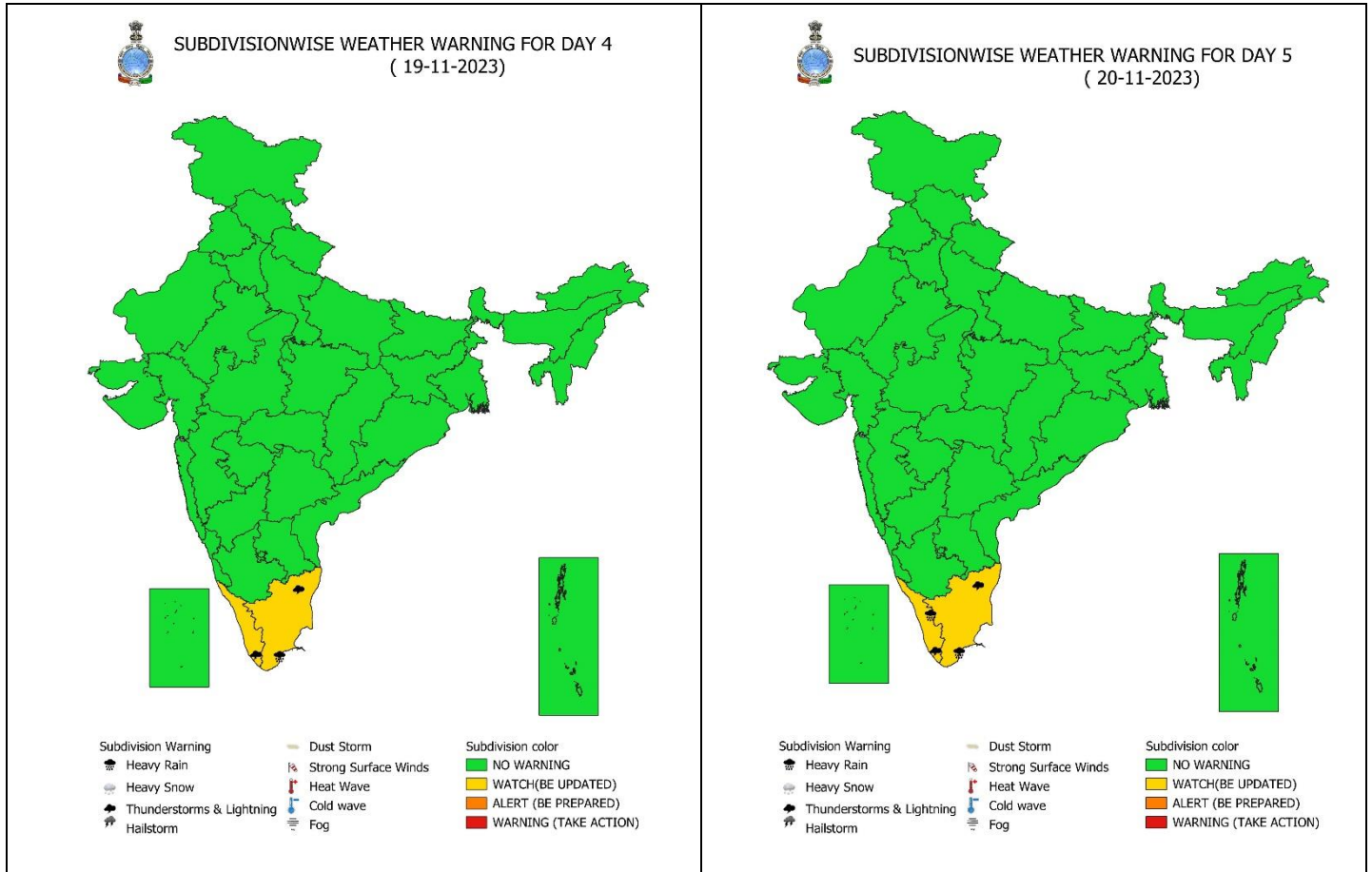


### SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 ( 18-11-2023 )



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





**Impact & Action Suggested due to very heavy rainfall** over Manipur, Mizoram & Tripura on 17<sup>th</sup> November.

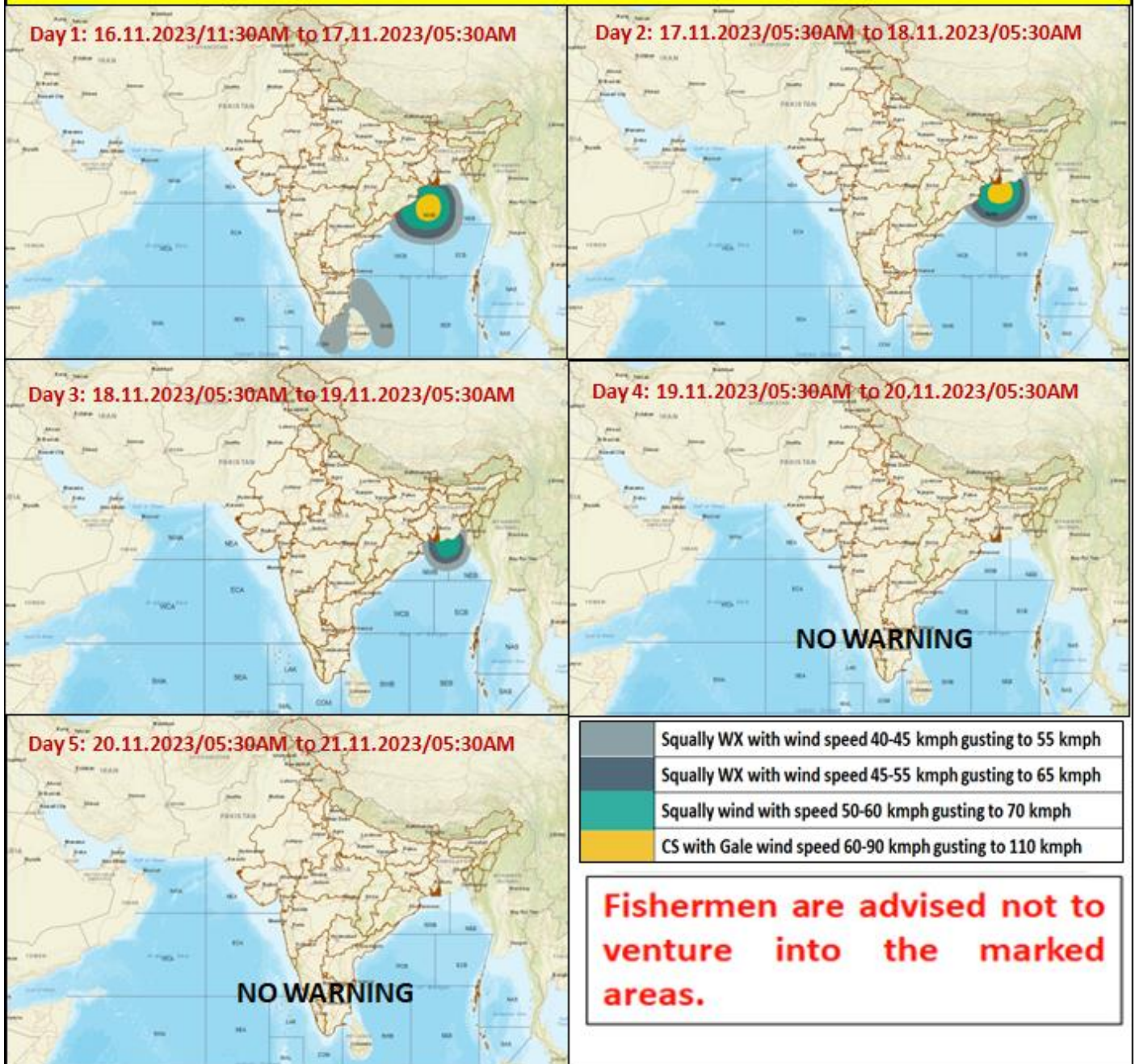
#### A. Impact Expected

- ❖ 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.
- ❖ Minor damage to kutchra roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides
- ❖ 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).

#### B. 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.

### Fishermen warning graphics



















## 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)