



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

**Press Release  
Date: 21<sup>st</sup> October, 2023  
Time of Issue: 1300 hours IST**

**Subject:**

**(i) The Well Marked Low Pressure Area over Southeast and adjoining Central Bay of Bengal very likely to intensify into a Depression over Westcentral Bay of Bengal by 22<sup>nd</sup>, move north-northeastwards towards Bangladesh and adjoining West Bengal coasts and intensify further during subsequent 3 days.**

**(ii) Northeast Monsoon rainfall activity has commenced over Tamil Nadu and Kerala today, the 21<sup>st</sup> October, 2023.**

**(iii) The Cyclonic Storm “Tej” over Southwest Arabian Sea very likely to intensify into a Severe Cyclonic Storm during next 12 hours, further into a Very Severe Cyclonic Storm during subsequent 24 hours and cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman) around early morning of 25<sup>th</sup> October.**

**Rainfall recorded during past 24 hours till 0830 hours IST of today, the 21<sup>st</sup> Oct., 2023 (Annexure I)**

**Commencement of Northeast Monsoon rainfall:**

In association with the Well Marked Low Pressure Area over Southeast & adjoining Central Bay of Bengal and a cyclonic circulation over the Comorin Area; northeasterly winds have strengthened over South & Central Bay of Bengal and extend upto middle tropospheric levels. Under the influence of these atmospheric conditions; Northeast Monsoon rainfall activity has commenced over Tamil Nadu and Kerala today, the 21<sup>st</sup> October, 2023.

**Significant Weather features:**

- ❖ Yesterday’s Depression over Southwest Arabian Sea moved nearly west-northwestwards, intensified into a Deep Depression at 1730 hours IST of yesterday, the 20<sup>th</sup> October and further into a **Cyclonic Storm “Tej” (pronounced as Tej)** at 0530 hours IST of today, the 21<sup>st</sup> October over the same region.
  - It moved west-northwestwards with a speed of 23 kmph during past 6 hours and lay centered at 0830 hours IST of today, the 21<sup>st</sup> October over the same region, near latitude 10.1°N and longitude 58.8°E about 600 km east-southeast of Socotra (Yemen), 920 km south-southeast of Salalah (Oman) and 980 km southeast of Al Ghaidah (Yemen).
  - It is very likely to intensify into a **Severe Cyclonic Storm** during next 12 hours and further into a **Very Severe Cyclonic Storm** during subsequent 24 hours. It is very likely to move west-northwestwards till 22<sup>nd</sup> morning, northwestwards thereafter till 24<sup>th</sup> morning & then north-northwestwards. It is likely to cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman) around early morning of 25<sup>th</sup> October. **(Cyclone track in Annexure III)**
- ❖ Yesterday’s **Low Pressure Area** over Southwest & adjoining Southeast Bay of Bengal now lies as a **Well Marked Low Pressure Area** over Southeast and adjoining Central Bay of Bengal at 0830 hours IST of 21<sup>st</sup> October, 2023. It is very likely to move northwestwards and intensify into a **Depression** over Westcentral Bay of Bengal by 22<sup>nd</sup> October. Thereafter, it is likely to move north-northeastwards towards Bangladesh and adjoining West Bengal coasts and intensify further during subsequent 3 days.

- ❖ A **cyclonic circulation** lies over Comorin area & neighbourhood in lower tropospheric levels and a trough runs from the cyclonic circulation associated with the **Well Marked Low Pressure Area** over Southeast & adjoining Central Bay of Bengal to Comorin area extending upto middle tropospheric levels.

#### **Weather warnings for next 5 days: (Graphics in Annexure II)**

**South India:** Light to moderate rainfall at most places with isolated **heavy rainfall** accompanied with thunderstorm, lightning & gusty winds very likely over Kerala during 21<sup>st</sup>-25<sup>th</sup> October. Light to moderate rainfall at some places with isolated **heavy rainfall** accompanied with thunderstorm & lightning very likely over Tamil Nadu on 21<sup>st</sup> & 22<sup>nd</sup> October.

#### **Weather warnings in association with the cyclonic storm "Tej" (pronounced as Tej) over Southwest Arabian Sea:**

##### **(i) Wind warning: (Graphics in Annexure IV)**

- ❖ **Southwest Arabian Sea:** Gale wind speed reaching **75-85 kmph gusting to 95 kmph** is prevailing and likely to increase gradually becoming **90-100 kmph gusting to 110 kmph** by evening of today, the 21<sup>st</sup> October and **110-120 kmph gusting to 135 kmph** by morning of 22<sup>nd</sup> October. It is likely to decrease gradually becoming **Gale wind speed reaching 60-70 kmph gusting to 80 kmph** by morning of 23<sup>rd</sup> and **Squally wind speed reaching 50-60 kmph gusting to 70 kmph** by morning of 24<sup>th</sup> October. It would decrease gradually thereafter.
- ❖ **Westcentral Arabian Sea:** Squally wind speed reaching **50-60 kmph gusting to 70 kmph** is prevailing and likely to become **Gale wind speed reaching 80-90 kmph gusting to 100 kmph** by evening of 21<sup>st</sup> October. It is likely to increase gradually becoming **Gale wind speed reaching 110-120 kmph gusting to 135 kmph** in the morning of 22<sup>nd</sup>, **150-160 kmph gusting to 175 kmph** in the morning of 23<sup>rd</sup> October. Thereafter, it is likely to decrease gradually from evening of 23<sup>rd</sup> October becoming **Gale wind speed reaching 135-145 kmph gusting to 160 kmph** by 24<sup>th</sup> morning and **100-110 kmph gusting to 120 kmph** on 25<sup>th</sup> morning. It would decrease rapidly after the landfall becoming **Gale wind speed reaching 60-70 kmph gusting to 80 kmph** in the evening of 25<sup>th</sup> October and **Squally wind speed reaching 35-45 kmph gusting to 55 kmph** by morning of 26<sup>th</sup> October.

##### **(ii) Fishermen Warning:**

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** till 25<sup>th</sup> October.
- ❖ **Westcentral Arabian Sea** till 26<sup>th</sup> October.

#### **Weather warnings in association with the Well Marked Low Pressure Area over Southeast & adjoining Central Bay of Bengal:**

##### **(i) Rainfall Warning: (Graphics in Annexure II)**

- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Light to moderate rainfall at most places with isolated heavy rainfall is likely on 24<sup>th</sup> and 25<sup>th</sup> October.
- ❖ **South Assam:** Light to moderate rainfall at some places with isolated heavy rainfall is likely on 25<sup>th</sup> October.
- ❖ **Coastal Districts of Odisha:** Light to moderate rainfall at a few places is likely on 23<sup>rd</sup> and at many places on 24<sup>th</sup> & 25<sup>th</sup> October.
- ❖ **Coastal Districts of West Bengal:** Light to moderate rainfall at many places is likely on 24<sup>th</sup> and 25<sup>th</sup> October.

##### **(ii) Wind warning: (Graphics in Annexure IV)**

- ❖ **Southeast and adjoining eastcentral & southwest Bay of Bengal:** Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail near the system on 21<sup>st</sup> & 22<sup>nd</sup> and **50-60 kmph gusting to 70 kmph** on 23<sup>rd</sup> October. It is likely to decrease gradually thereafter.
- ❖ **Westcentral Bay of Bengal:** Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail on 21<sup>st</sup> October. It is likely to gradually increase becoming **45-55 kmph gusting to 65 kmph** on 22<sup>nd</sup> and **50-60 kmph gusting to 70 kmph** on 23<sup>rd</sup> & 24<sup>th</sup> October.
- ❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:** Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail from 24<sup>th</sup> to 26<sup>th</sup> October.

##### **(iii) Fishermen Warning:**

Fishermen are advised not to venture into

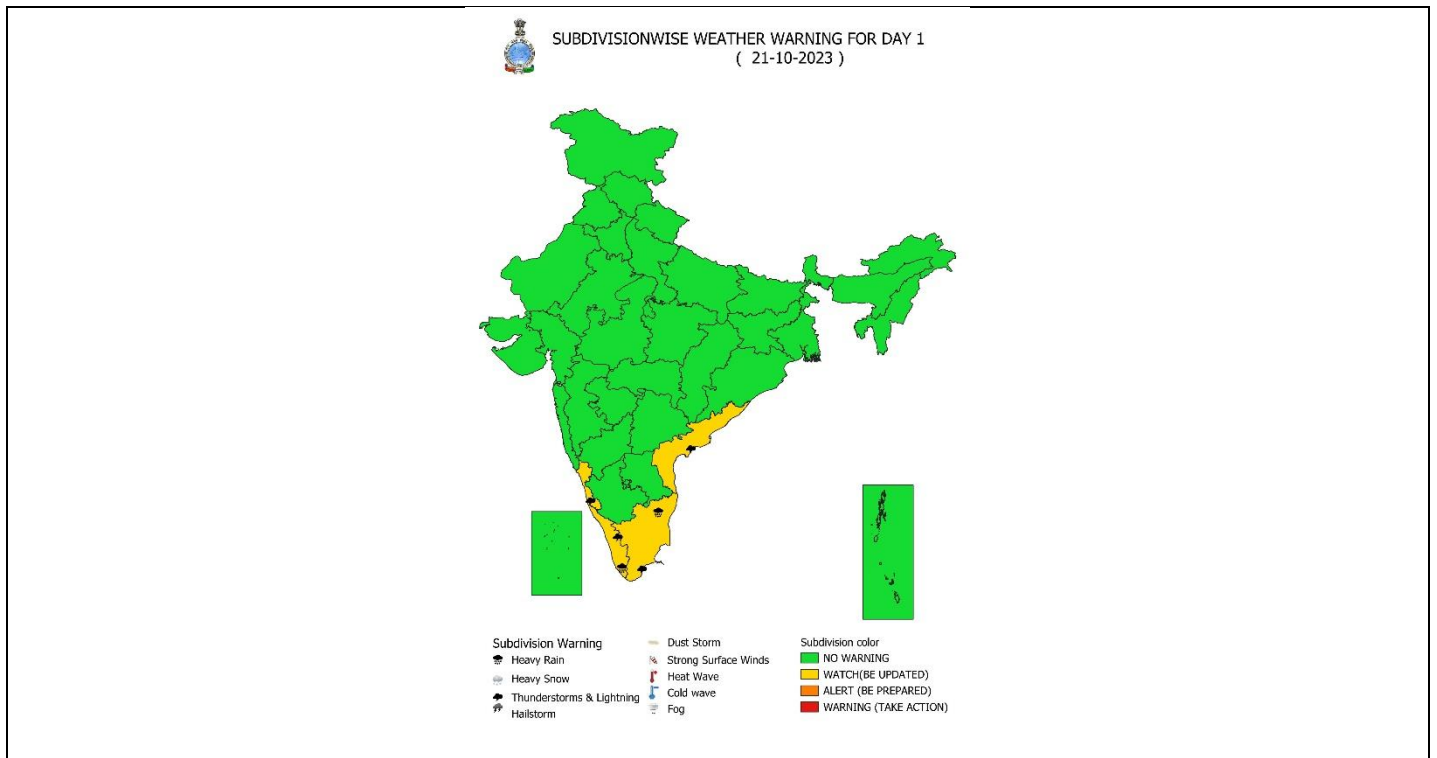
- ❖ **Southeast and adjoining eastcentral & southwest Bay of Bengal** till 23<sup>rd</sup> October.
- ❖ **Westcentral Bay of Bengal** from 21<sup>st</sup> October onwards.
- ❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** from 24<sup>th</sup> to 26<sup>th</sup> October.

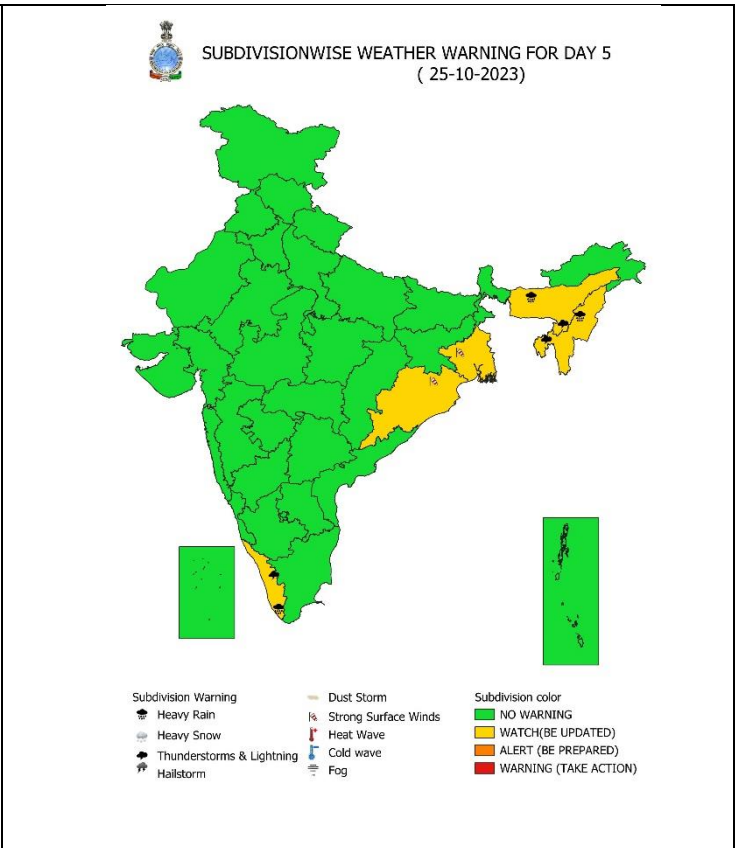
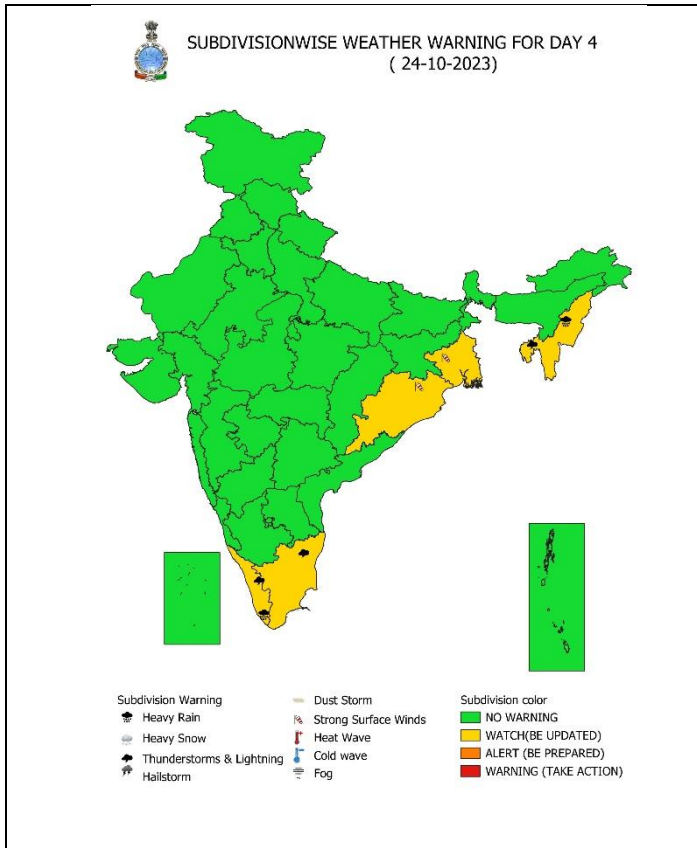
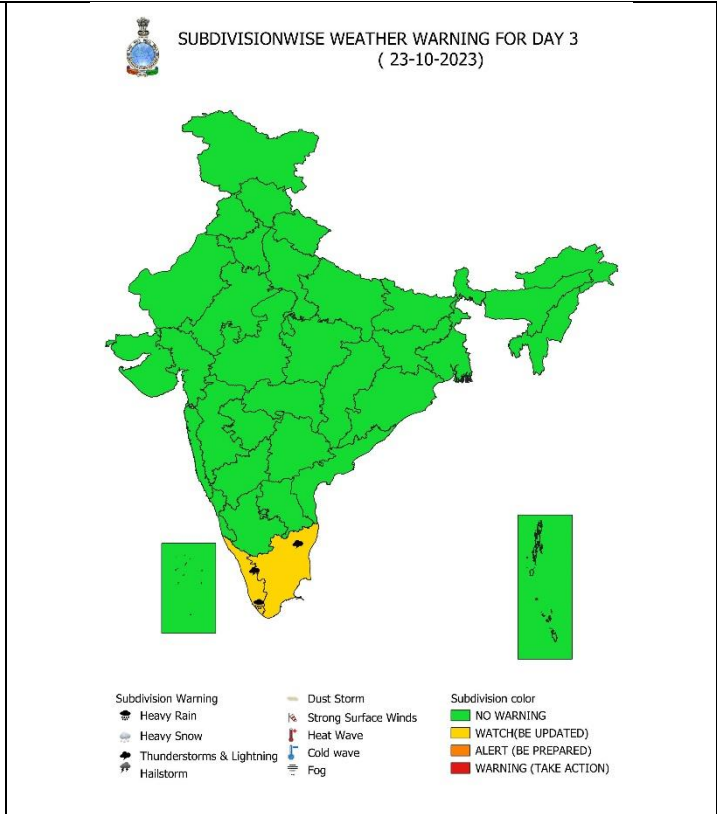
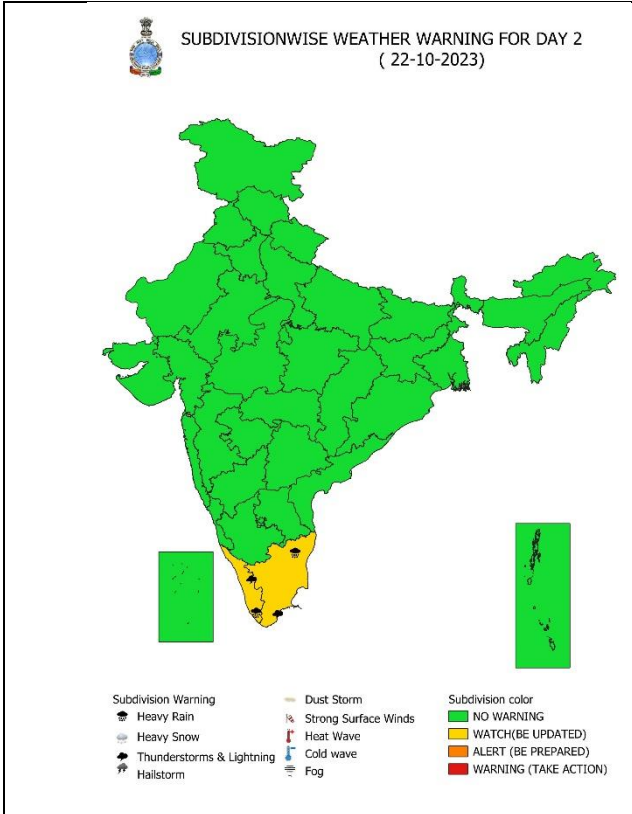
Kindly visit <https://rsmcnewdelhi.imd.gov.in/index.php?lang=en> for detailed forecast & warnings regarding the above cyclonic disturbances.

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)

**Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 21<sup>st</sup> October, 2023):**

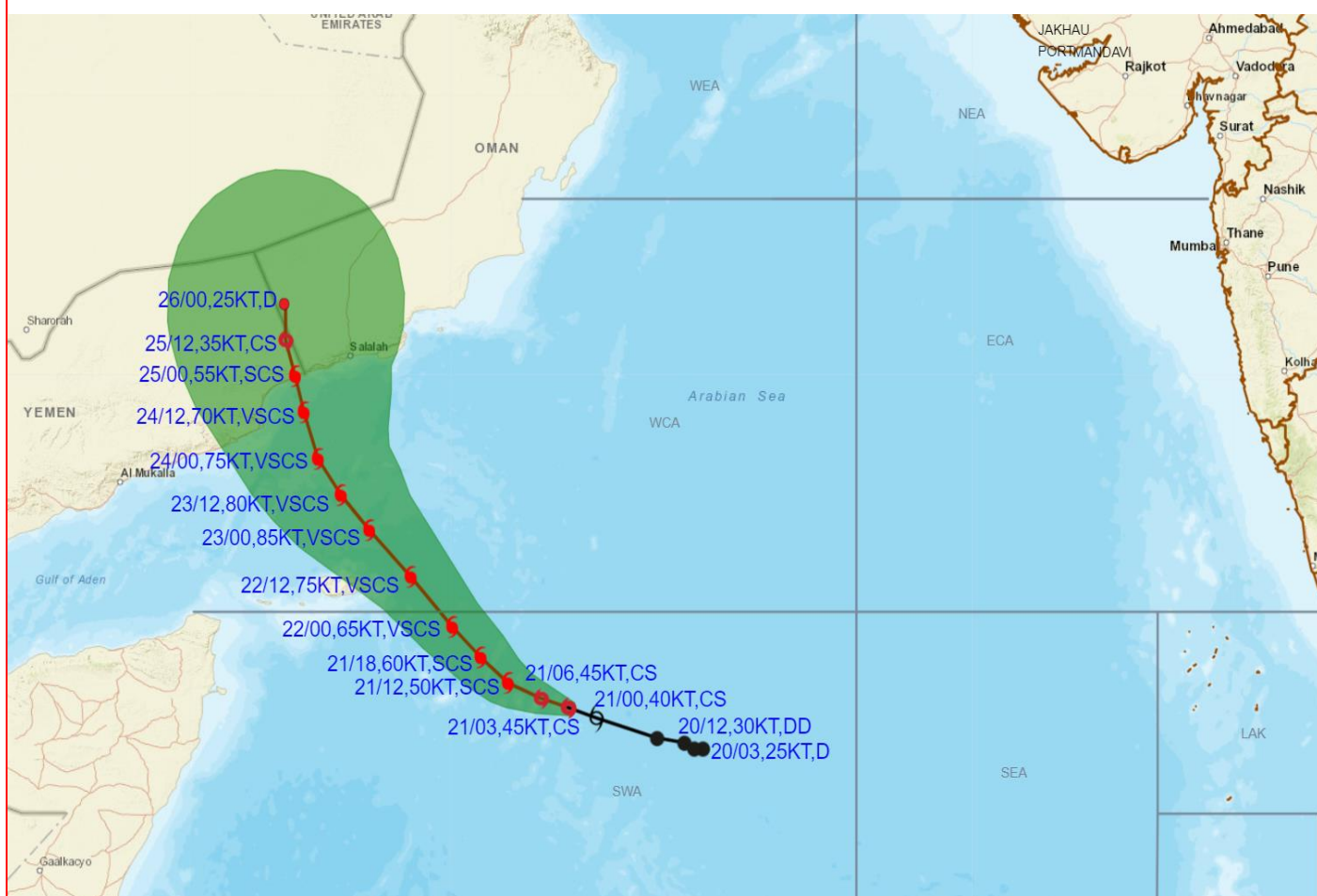
- ❖ **Heavy rainfall** recorded at isolated places over Kerala and Tamil Nadu.
- ❖ **Significant rainfall recorded (in cm):**
  - **Kerala:** Kayamkulam\_Agri (dist Alapuzha) 9, Kayamkulam (dist Alapuzha) 8;
  - **Tamil Nadu:** Kottaram (dist Kanniyakumari) 7.







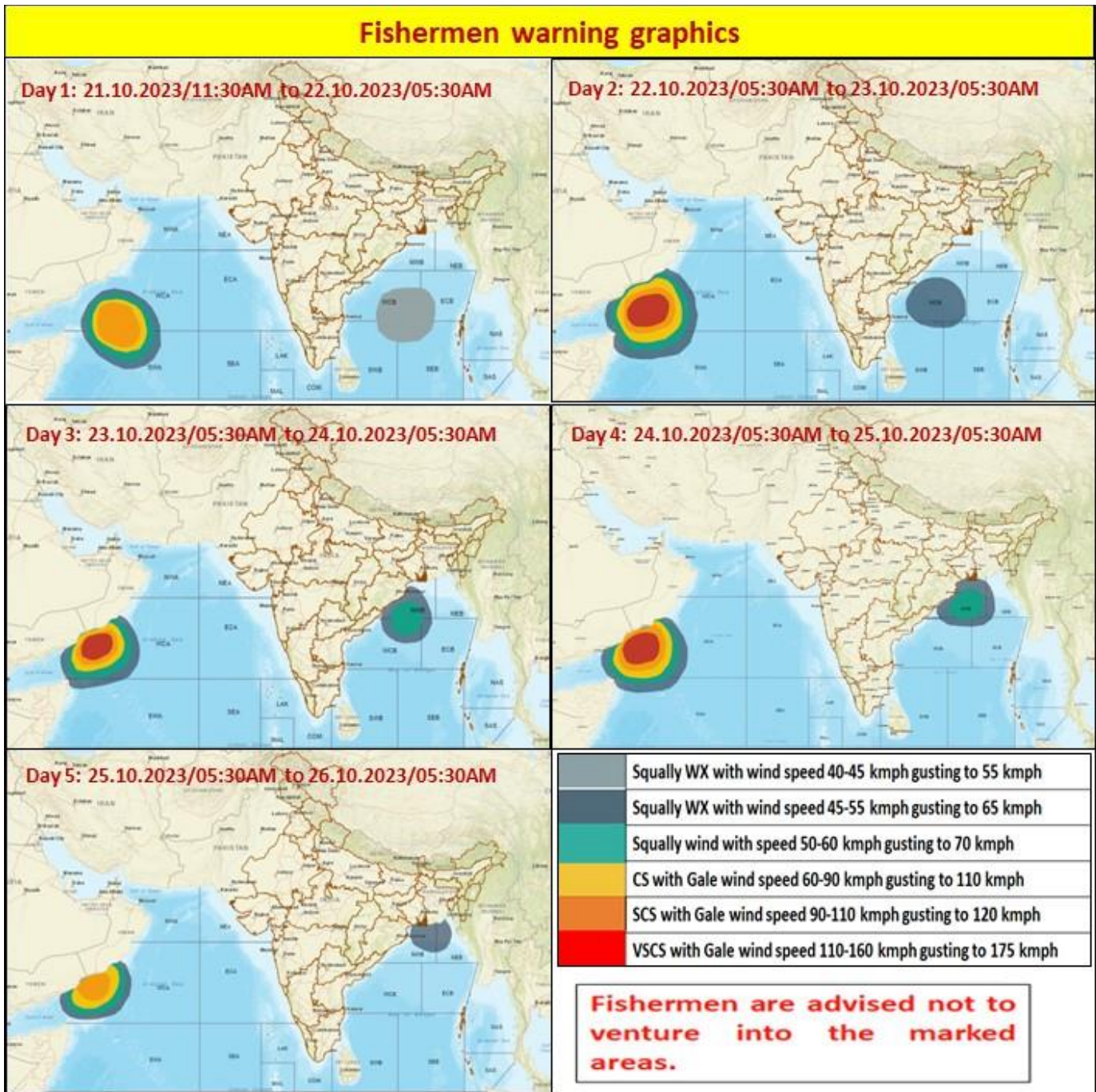
**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM "TEJ" OVER SOUTHWEST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 21<sup>ST</sup> OCTOBER 2023.**



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





**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)