



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

**Press Release
Date: 22nd October, 2023
Time of Issue: 1400 hours IST**

Subject:

(i) Extremely Severe Cyclonic Storm “Tej” (pronounced as Tej) over westcentral & adjoining southwest Arabian Sea likely to move northwestwards and cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman), close to east of Al Ghaidah (Yemen) around noon of 24th October as a very severe cyclonic storm

(ii) Depression over westcentral Bay of Bengal is likely to move northwestwards during next 12 hours, then recurve and move north-northeastwards during subsequent 3 days towards Bangladesh & adjoining West Bengal coasts.

(iii) Heavy rainfall likely over Kerala and Tamil Nadu during next 2 days.

Rainfall recorded during past 24 hours till 0830 hours IST of today, the 22nd Oct., 2023 (Annexure I)

Significant Weather features:

- ❖ Yesterday's **Cyclonic Storm “Tej”** (pronounced as Tej) over Southwest Arabian Sea intensified in Severe Cyclonic Storm over southwest Arabian Sea at 1130 hours IST of 21st October into **Very Severe Cyclonic Storm** at 2030 hours IST of 21st October over Southwest Arabian Sea. It further intensified into an **Extremely Severe Cyclonic Storm** over westcentral & adjoining southwest Arabian Sea at 0830 hours IST of today, the 22nd October, near latitude 12.3°N and longitude 55.4°E about 160 km east-southeast of Socotra (Yemen), 540 km south-southeast of Salalah (Oman) and 550 km southeast of Al Ghaidah (Yemen). It is very likely to move northwestwards and cross Yemen-Oman coasts between Al Ghaidah (Yemen) & Salalah (Oman), close to east of Al Ghaidah (Yemen) around noon of 24th October as a very severe cyclonic storm with wind speed of 115-125 kmph gusting to 140 kmph (**Cyclone track in Annexure III & Satellite imagery in Annexure VI**).
- ❖ Yesterday's **Well Marked Low Pressure Area** over Southeast & adjoining Central Bay of Bengal concentrated into a Depression at 2330 hours IST of 21st October over Westcentral Bay of Bengal. It lay centered at 0830 hours IST of today, the 22nd October over the same region, near latitude 15.0°N and longitude 86.2°E about 590 km south of Paradip (Odisha), 740 km south of Digha (West Bengal), and 880 km south-southwest of Khepupara (Bangladesh). It is likely to further intensify into a deep depression during next 12 hours. It is likely to move northwestwards during next 12 hours, then recurve and move north-northeastwards during subsequent 3 days towards Bangladesh & adjoining West Bengal coasts. (**Cyclone track in Annexure IV & Satellite imagery in Annexure VI**).
- ❖ The **Western Disturbance** seen as a cyclonic circulation over north Pakistan & neighbourhood in lower tropospheric level.

Weather forecast & warnings for next 5 days: (Annexure II)

South India: Light to moderate rainfall at many places with isolated **heavy rainfall** accompanied with thunderstorm, lightning & gusty winds very likely over Kerala on 22nd & 23rd October. Light to moderate rainfall at isolated places with isolated **heavy rainfall** accompanied with thunderstorm & lightning very likely over Tamil Nadu on 22nd October.

Northwest India: Light to moderate rainfall at some places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand on 22nd & 23rd and over Punjab and Rajasthan on 22nd October.

Weather warnings in association with the Extremely Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea:

(i) Wind warning:

➤ Southwest Arabian Sea:

Gale wind speed reaching **170-180 kmph gusting to 200 kmph** is prevailing and is likely to continue till night of 22nd October. Thereafter, it is likely to decrease gradually becoming **Gale wind** speed reaching **100-110 kmph gusting to 120 kmph** by evening of 23rd and **Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** by morning of 24th October. It would decrease gradually thereafter.

➤ Westcentral Arabian Sea:

Gale wind speed reaching **170-180 kmph gusting to 200 kmph** is prevailing and likely to increase gradually becoming **190-200 kmph gusting to 220 kmph** in the evening of 22nd till morning of 23rd October. Thereafter, it is likely to decrease gradually becoming **Gale wind speed reaching 150-160 kmph gusting to 175 kmph** by 23rd evening and **90-100 kmph gusting to 110 kmph** on 24th evening. It would decrease rapidly after the landfall becoming **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** in the evening of 25th October.

(ii) Fishermen Warning: (Annexure V)

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** till 25th October.
- ❖ **Westcentral Arabian Sea** till night of 25th October.
- ❖ Those out at sea are advised to return to coast.

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Weather warnings in association with the Depression over westcentral Bay of Bengal:

(i) Rainfall Warning

Nagaland, Manipur, Mizoram & Tripura: Light to moderate rainfall at most places with isolated heavy rainfall is likely on 24th and 25th October.

Coastal Districts of Odisha: Light to moderate rainfall at a few places is likely on 23rd and at many places on 24th & 25th October.

Coastal Districts of West Bengal: Light to moderate rainfall at many places is likely on 24th and 25th October.

(ii) Wind warning (warning graphics enclosed):

➤ **Westcentral Bay of Bengal:** **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is prevailing and likely to increase gradually becoming **50-60 kmph gusting to 70 kmph** from evening of 22nd till 25th October. It is likely to decrease gradually thereafter.

➤ **Adjoining eastcentral & southeast Bay of Bengal:** **Squally wind** speed reaching **40-50 kmph gusting to 60 kmph** is prevailing near the system and likely to become **50-60 kmph gusting to 70 kmph** from morning of 22nd till 23rd October. It is likely to decrease gradually thereafter.

➤ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:**

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely on 23rd and likely to increase gradually becoming **Gale wind** speed reaching **60-70 kmph gusting to 80 kmph** from 24th to 26th October.

(iii) Fishermen Warning: (Annexure V)

Fishermen are advised not to venture into

- ❖ **Westcentral Bay of Bengal** till 25th October.
- ❖ **Adjoining eastcentral & southeast Bay of Bengal** till 23rd October.
- ❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** during 23rd to 26th October.

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

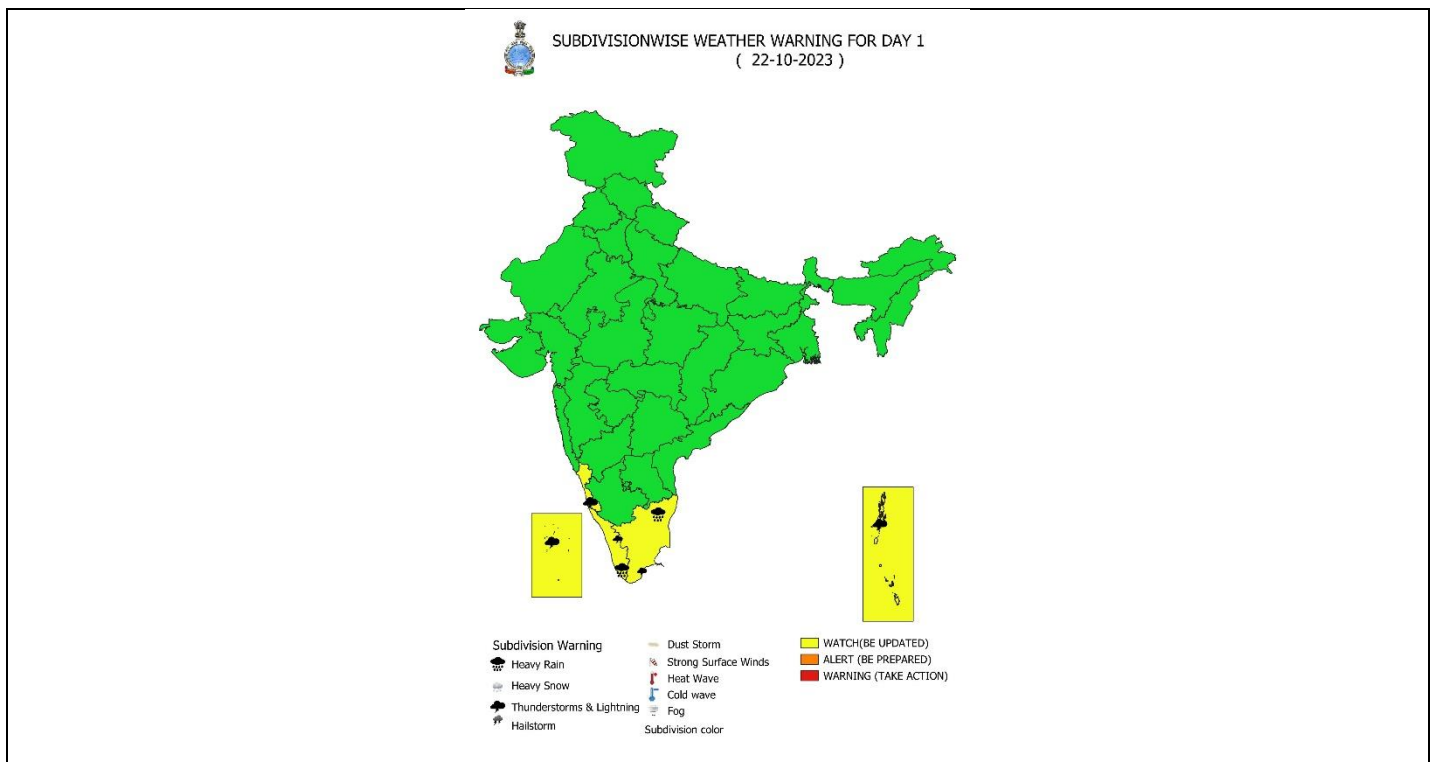
For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_fzorcst_bulletin.php

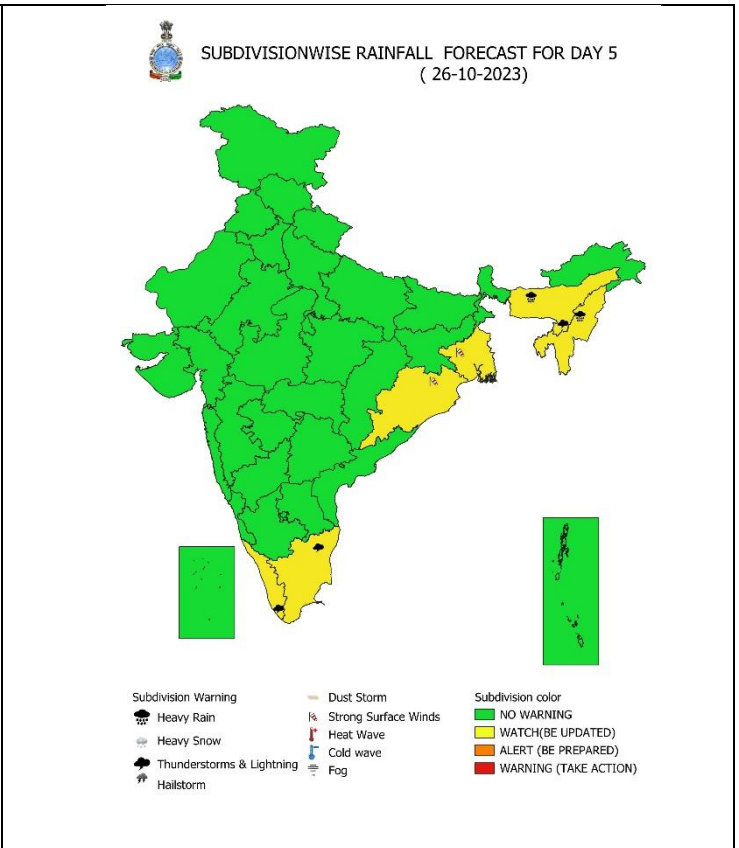
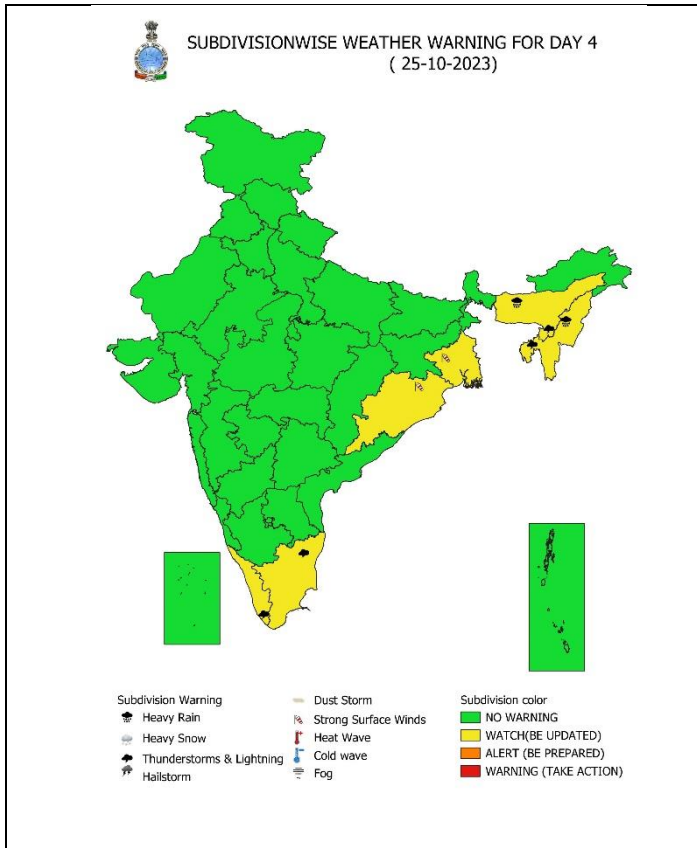
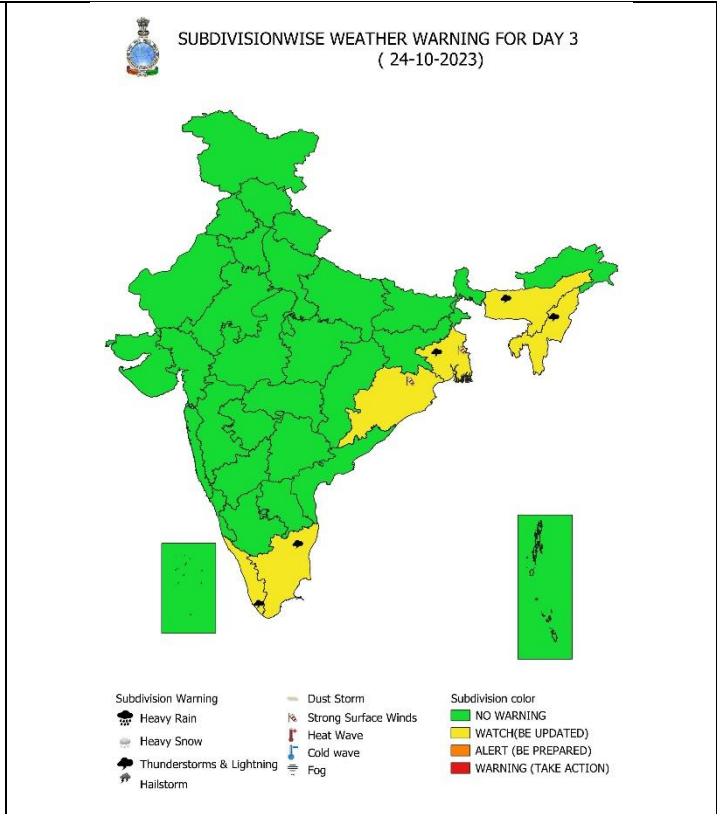
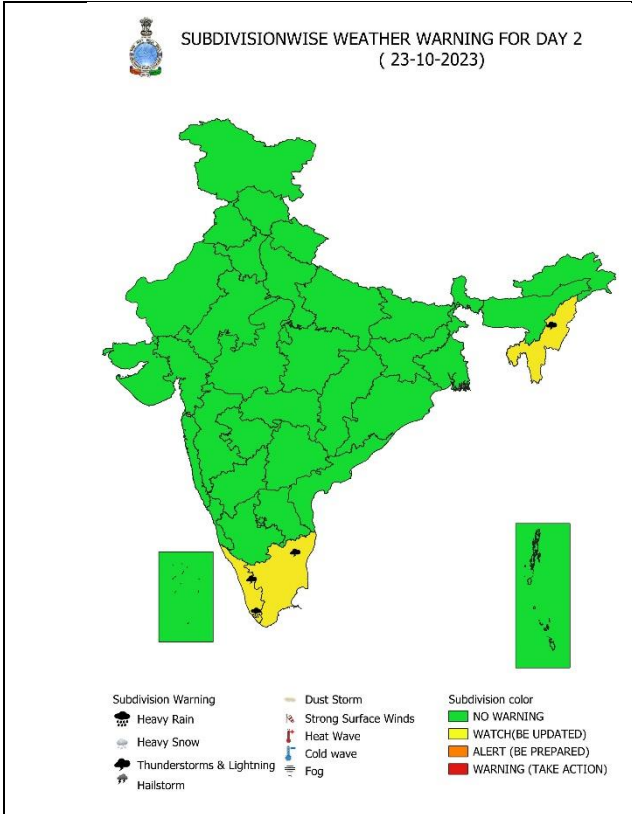
Annexure I

Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 22nd October, 2023):

- ❖ **Significant rainfall recorded (in cm): Andaman & Nicobar Islands:** Port Blair (dist. South Andaman) 7, Hut Bay (dist. South Andaman) 3; **Kerala & Mahe:** Konni (Pathanamthitta district) 6, Chavara AWS (Kollam district) 5, Aryankavu (Kollam district), Kanjirappally (Kottayam district) & Idukki 4 each; **Tamilnadu:** Ayanavaram Taluk Office (dist Chennai), Melur (dist Madurai) 5 each, Singampunari (dist Sivaganga) 4 each, Tallakulam (dist Madurai), Madurai North (dist Madurai), Thaniamangalam (dist Madurai), Idayapatti (dist Madurai), Kallikudi (dist Madurai), Madurai City (dist Madurai) 3 each; **Royalaseema:** Chinnamandem (dist Annamayya District) 5, **Coastal Karnataka:** Puttur Hms (dist Dakshina Kannada) 4, Mangaluru (dist Dakshina Kannada) 3.
- ❖ **Heavy rainfall** occurred at isolated places over Andaman & Nicobar Islands.

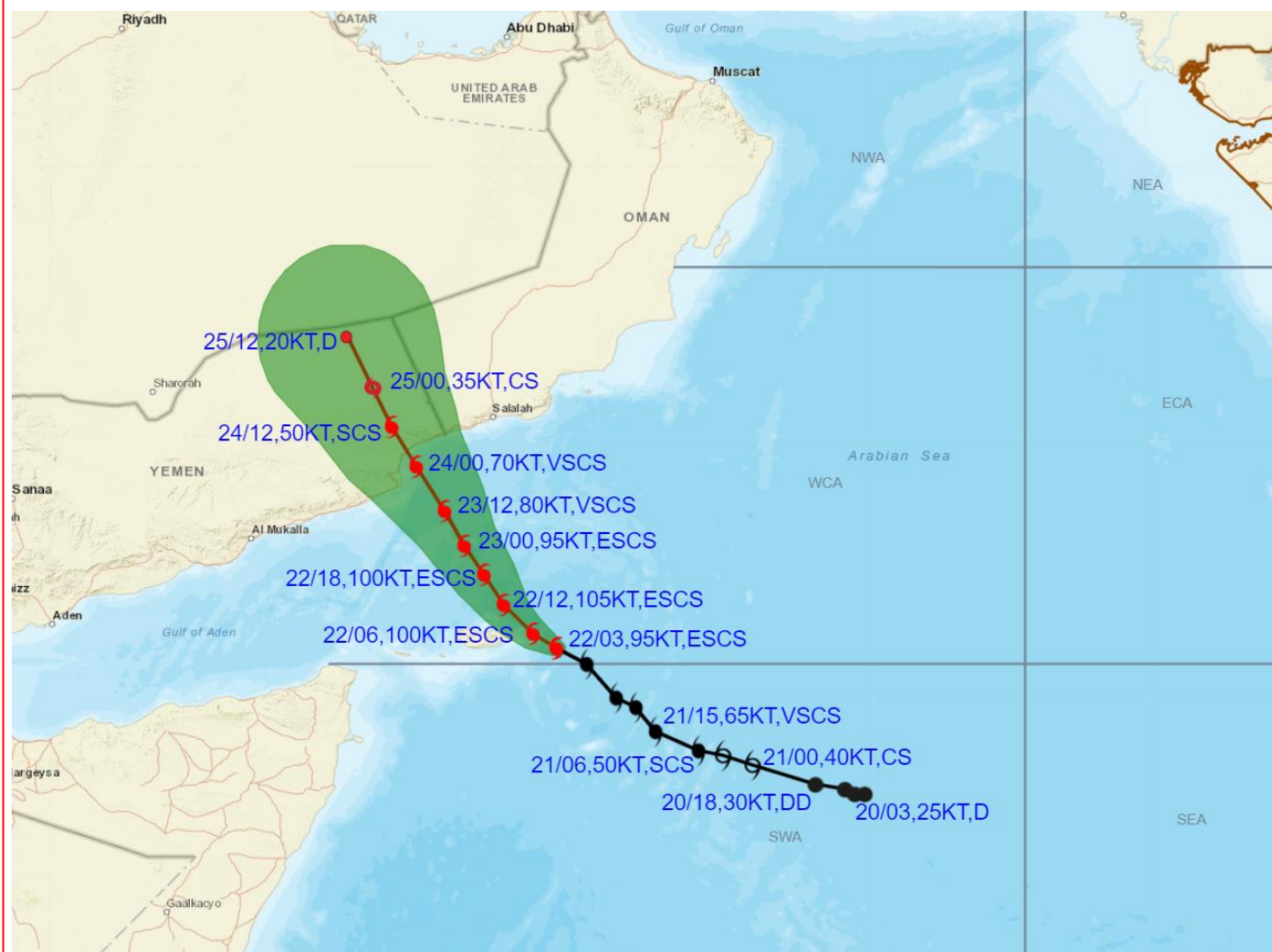
Annexure II







OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF EXTREMELY SEVERE CYCLONIC STORM "TEJ" OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 22ND 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 (≥ 120 KT)

● LESS THAN 34 KT

○ 34-47 KT

○ ≥ 48 KT

— OBSERVED TRACK

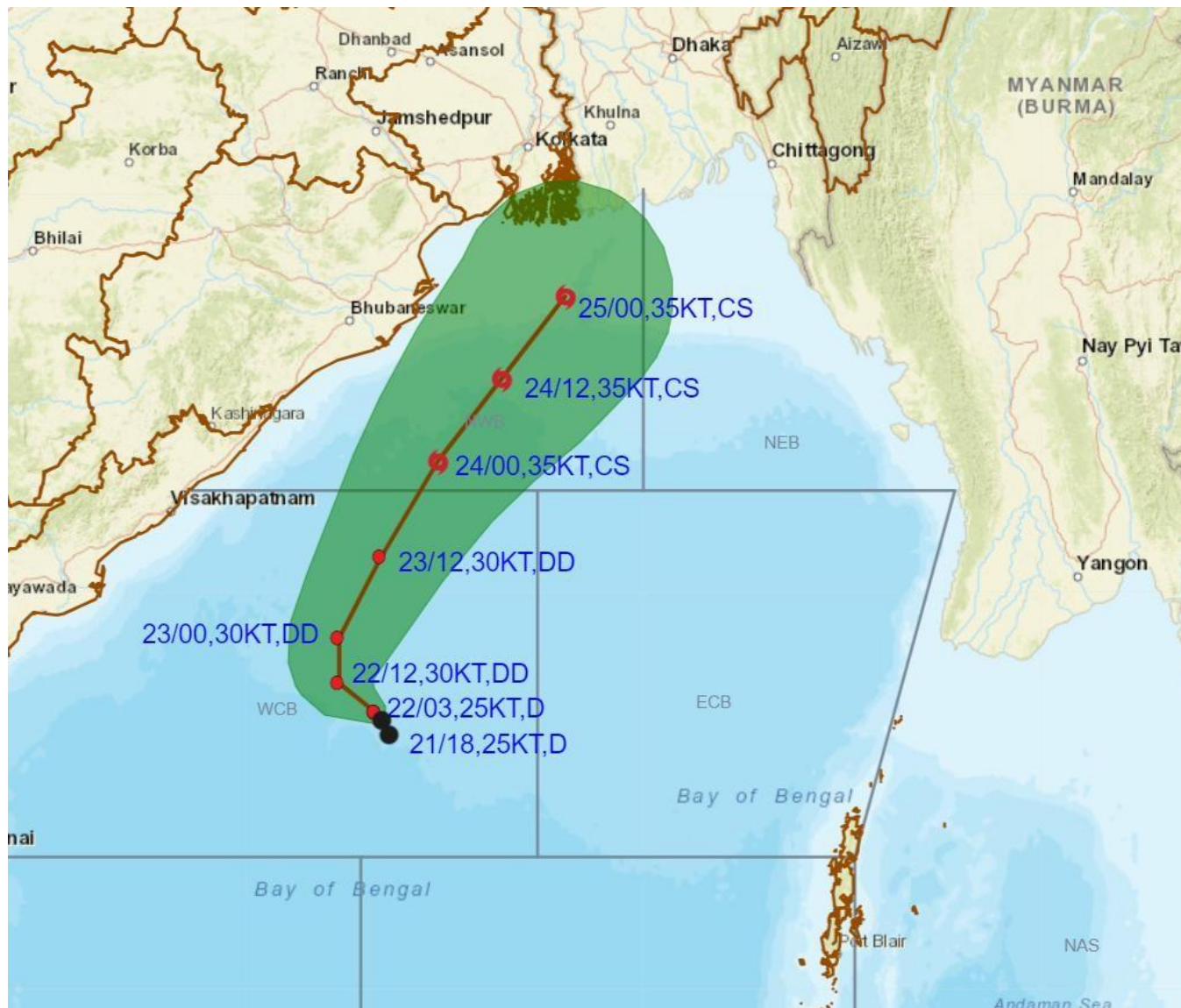
— FORECAST TRACK

▲ CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	23.10.23/0300	24.10.23/0000	25.10.23/0000
SOCOTRA	210, NNW	410, NNW	610, NNW
SALALAH	290, SSW	250, SW	270, WNW
AL-GHAIDAH	240, SE	50, ESE	180, NNW

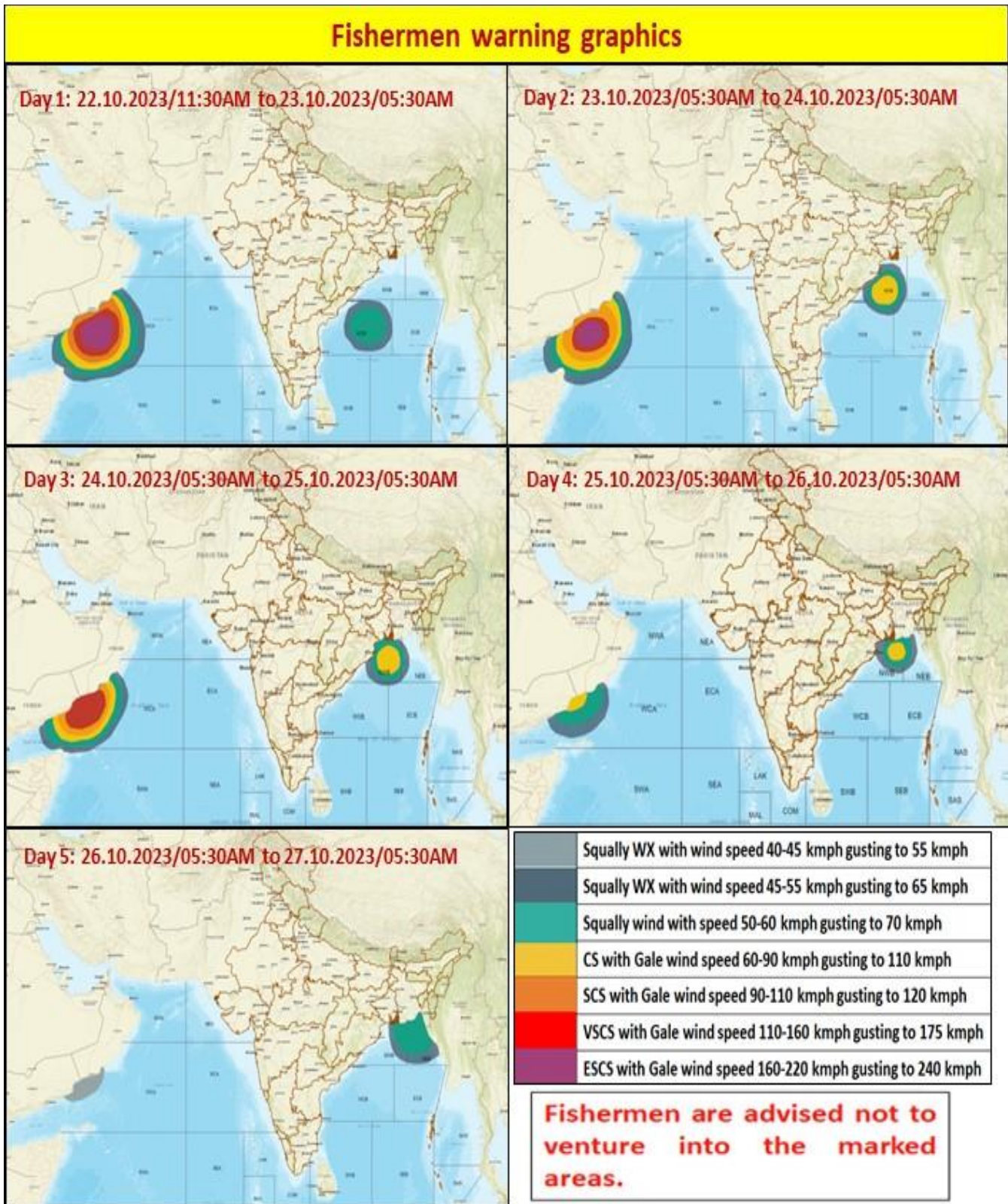


OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER WESTCENTRAL BAY OF BENGAL BASED ON 0300 UTC (0830 IST) OF 22ND OCTOBER 2023.



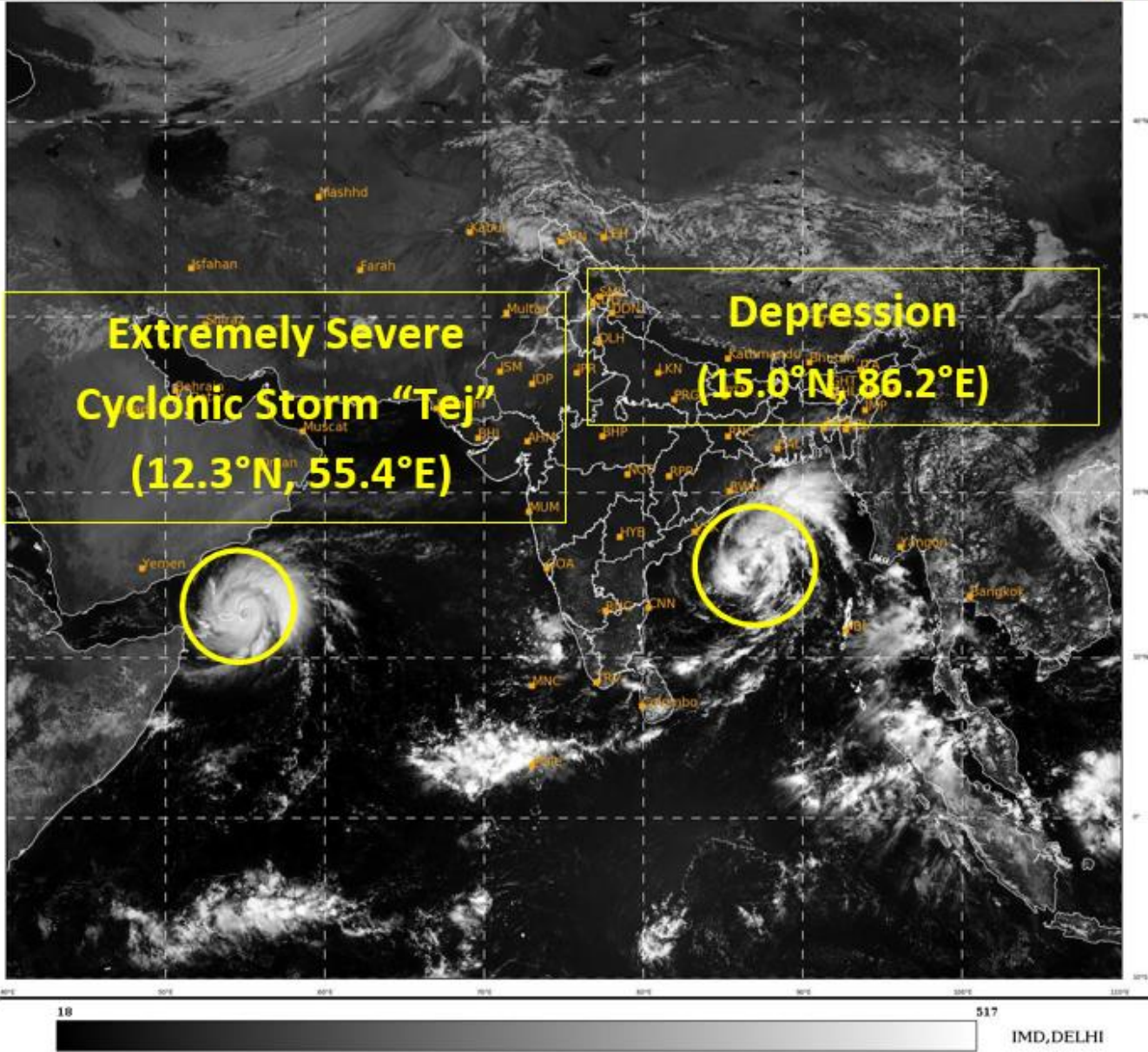
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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



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

22-10-2023/(0600 to 0626) GMT
22-10-2023/(1130 to 1156) IST



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)