



**India Meteorological Department  
(Ministry of Earth Sciences)**

**BULLETIN NO. 15 (BOB/07/2022)**

**TIME OF ISSUE: 1715 HOURS IST**

**DATED: 24.10.2022**

**FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)**

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**Subject: Cyclonic Storm "SITRANG" (pronounced as "Si-Trang") over North Bay of Bengal (Cyclone Warning for West Bengal coast: Orange Message)**

The cyclonic storm "**SITRANG**" pronounced as "**Si-Trang**" over northwest and adjoining central Bay of Bengal moved north-northeastwards with a speed of 33 kmph during past 06 hours and lay centered at 1430 hours IST of today, the 24<sup>th</sup> October over north Bay of Bengal near latitude 19.9<sup>0</sup>N and longitude 89.7<sup>0</sup>E, about 260 km southeast of Sagar Island and 320 km south-southwest of Barisal (Bangladesh).

It is very likely to continue to move north-northeastwards and intensify further into a severe cyclonic storm during next 06 hours. Continuing to move north-northeastwards thereafter, it is very likely to cross Bangladesh coast between Tinkona Island and Sandwip close to Barisal around 25<sup>th</sup> October early hours.

**Forecast track and intensity are given below:**

<b>Date/Time(IST)</b>	<b>Position (Lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (Kmph)</b>	<b>Category of cyclonic disturbance</b>
24.10.22/1430	19.9/89.7	80-90 gusting to 100	Cyclonic Storm
24.10.22/1730	20.5/90.0	90-100 gusting to 110	Severe Cyclonic Storm
24.10.22/2330	21.7/90.4	90-100 gusting to 110	Severe Cyclonic Storm
25.10.22/0530	23.0/90.9	75-85 gusting to 95	Cyclonic Storm
25.10.22/1130	24.3/91.5	45-55 gusting to 65	Depression
25.10.22/2330	26.9/92.4	25-35 gusting to 45	Low Pressure Area

### **Warnings:**

#### **(i) Rainfall (warning graphics enclosed)**

**Odisha:** Light to moderate rainfall at many places is likely over north coastal Odisha on 24<sup>th</sup> with possibility of isolated heavy rainfall over Vadrak and Balasore districts.

**West Bengal:** Light to moderate rainfall at most places with isolated **heavy to very heavy rainfall** is likely over coastal districts of West Bengal (South & North Parganas, East Medinipur & adjoining areas of West Medinipur) on 24<sup>th</sup> October. Light to moderate rainfall at many with isolated **heavy to very heavy rainfall** is likely over coastal districts (South & North Parganas and Nadia) of West Bengal on 25<sup>th</sup> October.

#### **Northeastern States:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is likely over North Assam, Arunachal Pradesh, Nagaland & Manipur; **heavy to Extremely heavy rainfall** likely over South Assam, Meghalaya, Mizoram, & Tripura on 24<sup>th</sup> October.

Light to moderate rainfall at most places with isolated **heavy to very heavy rainfall** is likely over Arunachal Pradesh, Assam, Meghalaya, Mizoram, & Tripura on 25<sup>th</sup> and isolated **heavy rainfall** is likely over Arunachal Pradesh, northeast Assam and Nagaland on 26<sup>th</sup> October.

#### **(ii) Wind warning:**

**24<sup>th</sup> October:** Gale wind speed reaching 80-90 kmph gusting to 100 kmph prevailing over westcentral & adjoining eastcentral Bay of Bengal and north Bay of Bengal. It would further increase gradually becoming 90-100 kmph gusting to 110 kmph over the same region from today, the 24<sup>th</sup> evening till 25<sup>th</sup> morning.

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is prevailing along & off West Bengal coast and 40-50 kmph gusting to 50 kmph along & off Odisha coast. It would gradually increase becoming 60-80 kmph gusting to 90 kmph along and off West Bengal coast and 50-60 kmph gusting to 70 kmph along and off north Odisha coast from the evening hours of today.

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely over Mizoram & Tripura from tonight.

**25<sup>th</sup> October:** Gale wind speed reaching 90-100 kmph gusting to 110 kmph is likely over north Bay of Bengal and along & off Bangladesh coast till early morning and gradually decrease becoming 50-60 gusting 70 kmph by noon.

Gale wind speed reaching 70-90 kmph gusting to 100 kmph likely along & off 24 Parganas District and 60-70 kmph gusting to 80 kmph along & off east Medinipur district off West Bengal coast till early morning. It would gradually decrease becoming 45-55 kmph gusting to 65 kmph along & off above areas by noon.

Squally wind speed reaching 40-50 gusting to 60 kmph is likely along and off Balasore district & 35-45 kmph gusting to 55 kmph along & off remaining north coastal districts of Odisha in the morning.

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely over Tripura and 45-55 kmph gusting to 65 kmph is likely over Mizoram, south Assam and adjoining east Meghalaya & Manipur till evening and decrease thereafter gradually.

### **(iii) Sea condition**

**24<sup>th</sup> October: High** Sea conditions are prevailing over westcentral & adjoining eastcentral Bay of Bengal and North Bay of Bengal; **Rough to very rough** Sea conditions are prevailing along & off Odisha-West Bengal-Bangladesh coasts. It would become **high to very high** from 24<sup>th</sup> evening along & off West Bengal-Bangladesh coasts.

**25<sup>th</sup> October: Very high to high** over North Bay of Bengal along & off Bangladesh-West Bengal coasts in the morning and improve gradually from noon.

### **(iv) Storm Surge Warning (warning graphics enclosed)**

(i) Tidal wave of about 2.0 m height above astronomical tide is likely to inundate low lying areas of Bangladesh coast near the landfall area around the time of landfall.

(ii) Tidal wave of about 1.0 m height above astronomical tide is likely to inundate low lying areas of West Bengal (North & South 24 Parganas) around the time of landfall.

### **(v) Fishermen Warning (warning graphics enclosed)**

Fishermen are advised not to venture into central Bay of Bengal on 24<sup>th</sup>, north & adjoining central Bay of Bengal on 24<sup>th</sup> and 25<sup>th</sup> October, 2022.

Fishermen are advised not to venture into Sea along and off Odisha, West Bengal & Bangladesh coasts during 24<sup>th</sup> to 25<sup>th</sup> October. Fishermen out at sea are advised to return to the coast.

### **(vi) Damage expected over coastal districts of West Bengal (South and North 24 Parganas including Sundarbans and East Mednipur)**

- Damage to thatched huts.
- Damage to power and communication lines due to breaking of branches.
- Major damage to Kutcha and minor damage to Pucca roads.
- Damage to paddy crops, banana, papaya trees and orchards.
- Sea water inundation in low lying areas after erosion of Kutcha embankments
- Adverse impact on flora & fauna and animal lives of Sundarbans.

### **(vii) Damage expected over Tripura, Mizoram, Meghalaya, Manipur and South Assam**

- Damage to standing crops including agricultural and horticultural crops due to heavy rain and squally winds
- Breaking of tree branches and uprooting of small trees like drumsticks, banana and papaya trees
- Inundation/localized flooding in low lying areas due to heavy rains
- Localised landslides/ mudslides/ mud slips/ mud sink possibility due to heavy rain
- Traffic may be disrupted due to poor visibility in association with heavy rain
- Vulnerable structures like hoardings, tents and display boards may be damaged

### **(viii) Action suggested for West Bengal**

- Total suspension of fishing operations.
- People to remain in safe places.

**(ix) Action suggested for Tripura, Mizoram, Meghalaya, Manipur and South Assam**

- People are advised to be cautious while going outside
- Regulate traffic
- People should not move nearby to vulnerable structures

**(viii) Advisory for On-shore and Off-shore Installations**

Regulation of off-shore activities from 24<sup>th</sup> over central and North Bay of Bengal till 25<sup>th</sup>. Suspension of off-shore activities during 24<sup>th</sup> to 25<sup>th</sup> October along and off Odisha and West Bengal coasts.

**The system is under continuous surveillance and the next message will be issued at 2030 hours IST of today, the 24<sup>th</sup> October, 2022.**

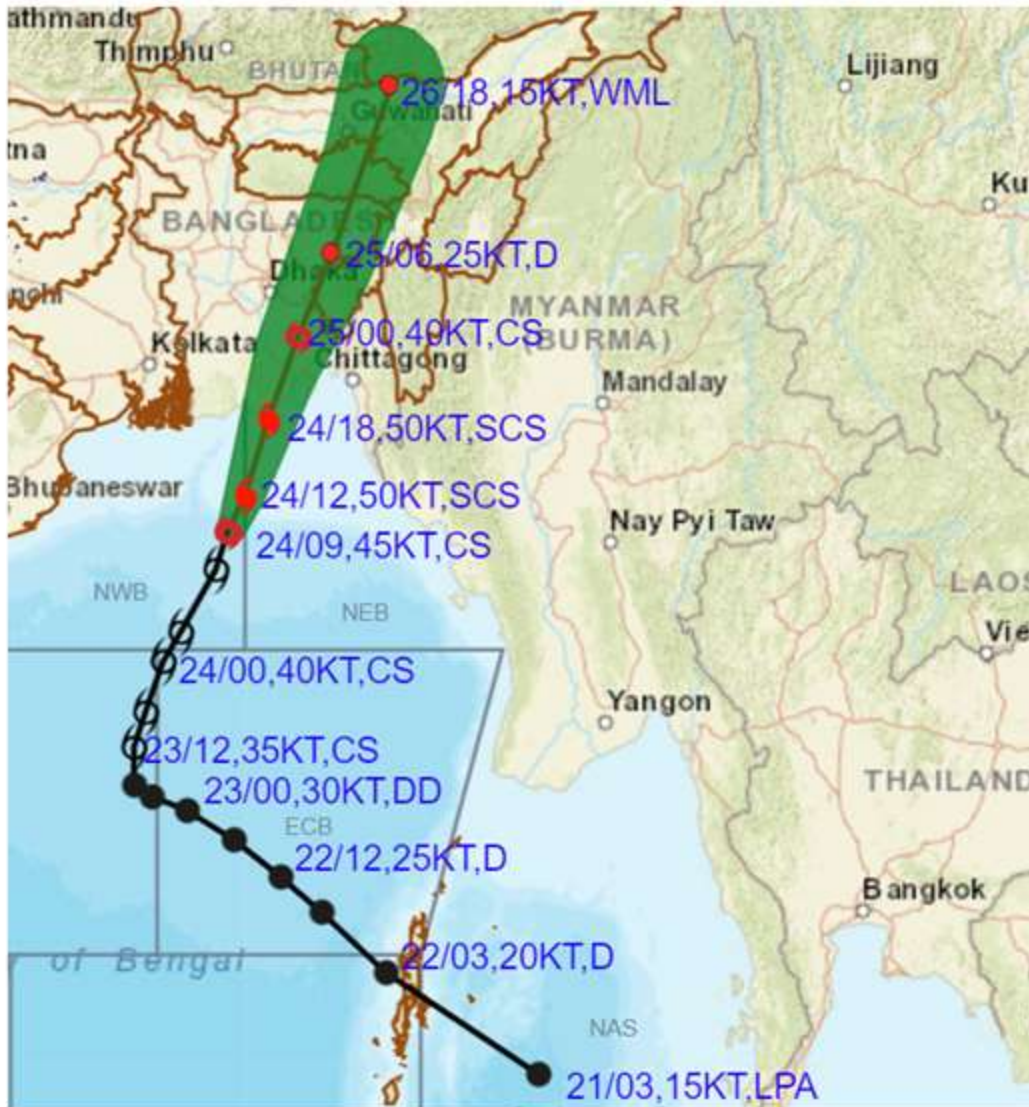
**(Surendra Pratap Singh)**  
**Scientist- C, Cyclone Warning Division, New Delhi**

*Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWCVisakhapatnam/MO Port Blair*

**LEGEND: Heavy Rainfall:** 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total



**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM SITRANG OVER NORTH BAY OF BENGAL BASED ON 0900 UTC OF 24<sup>th</sup> OCTOBER, 2022**

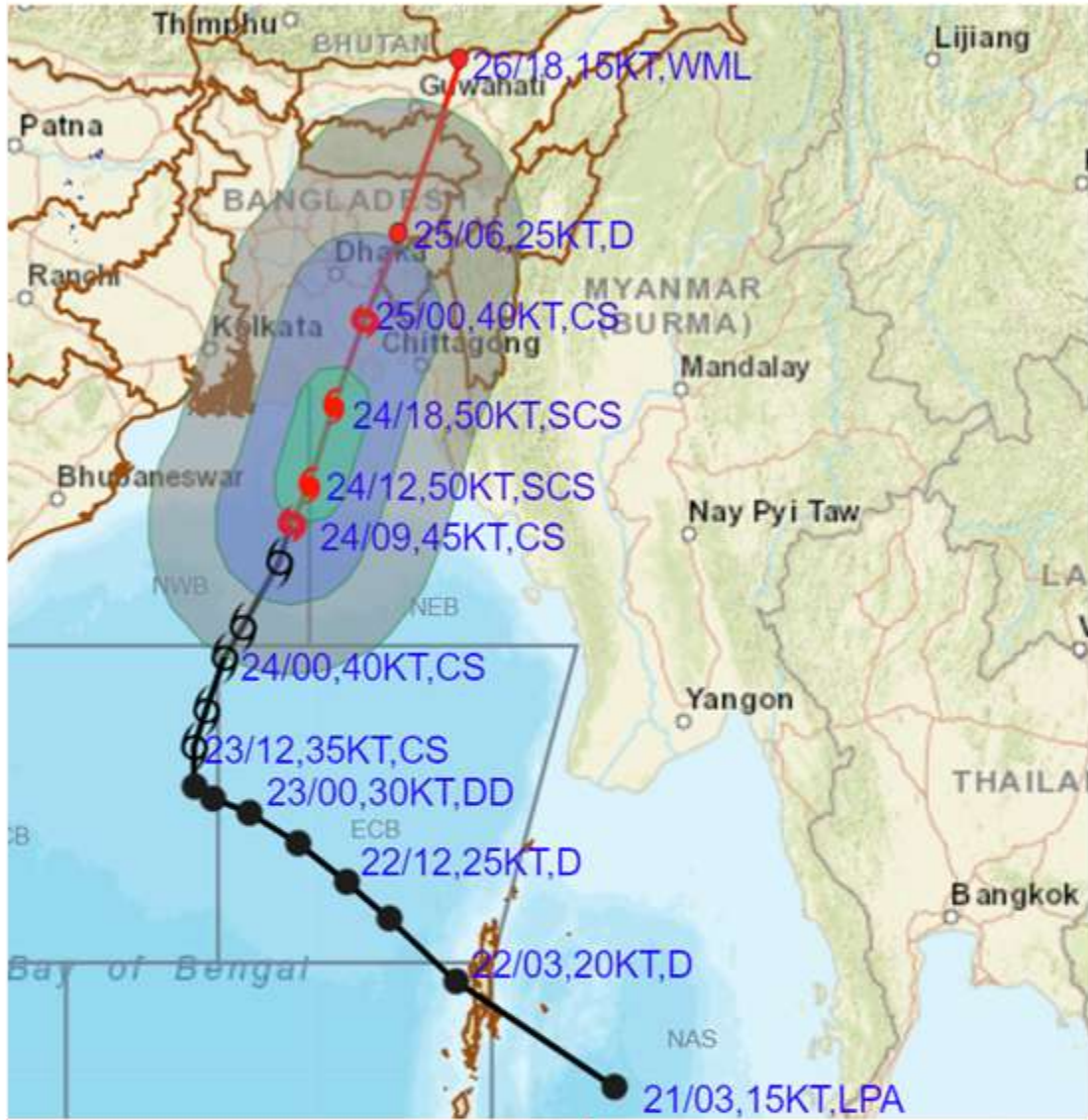


DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq 20$  KT)

- LESS THAN 34 KT
- 34-47 KT
- $\geq 48$  KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



**OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM SITRANG OVER NORTH BAY OF BENGAL BASED ON 0900 UTC OF 24<sup>th</sup> OCTOBER, 2022**



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 (≥20 KT)

● LESS THAN 34 KT  
○ 34.47 KT  
● ≥ 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)  
≥ 64 KT (≥118 KMPH)

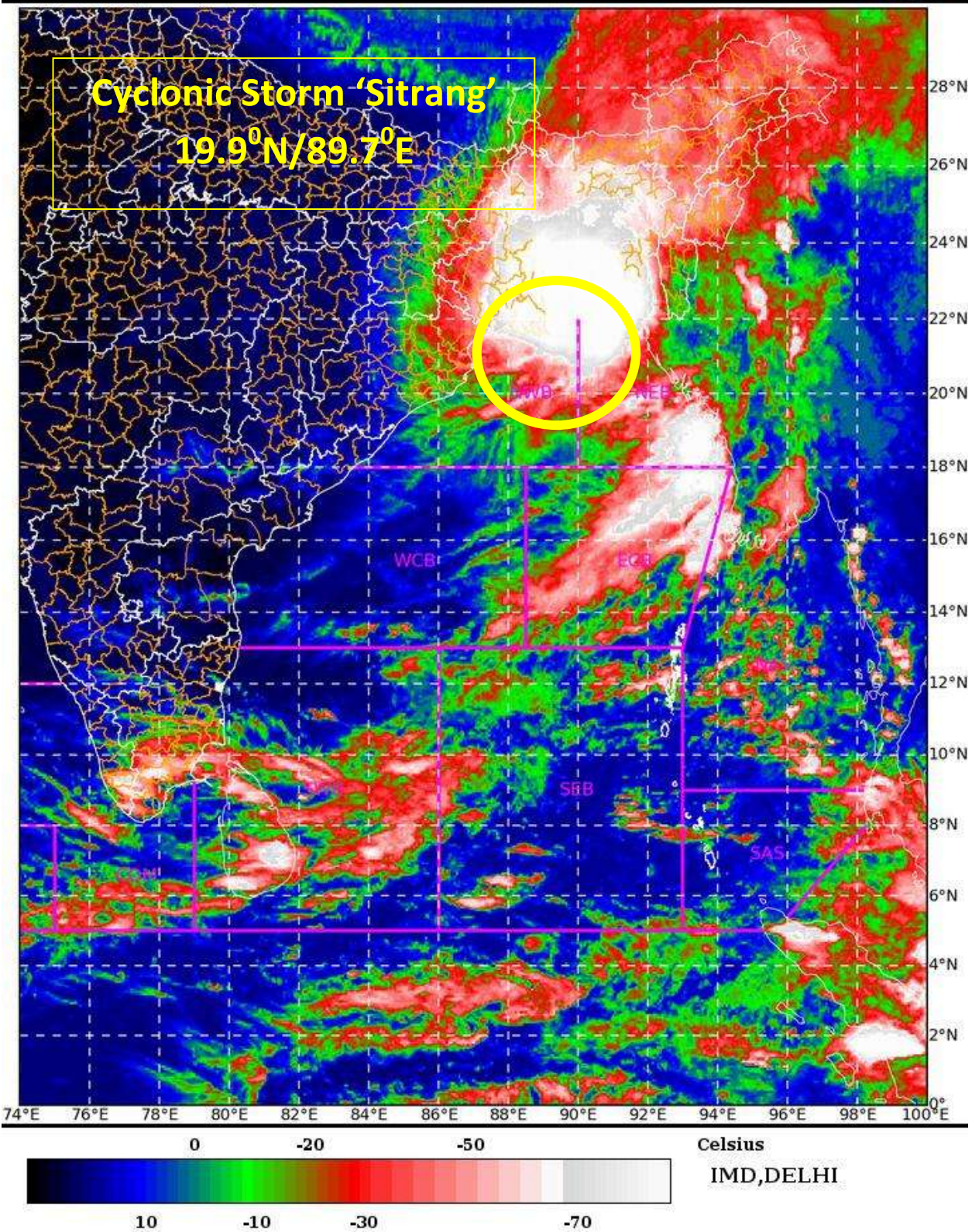
**IMPACT OVER THE SEA**

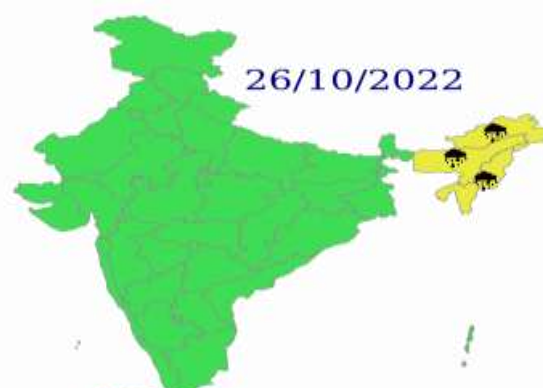
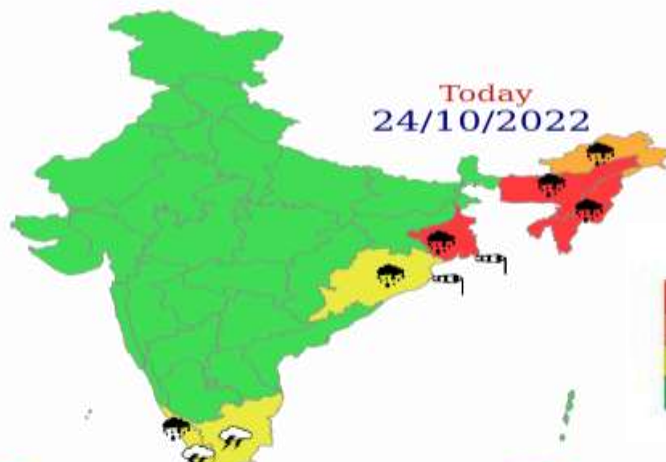
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

SAT : INSAT-3D IMG 24-10-2022/(1000 to 1026) GMT

IMG\_TIR1\_TEMP 10.8 um 24-10-2022/(1530 to 1556) IST

L1C Mercator





Heavy Rain	Heavy Snow	Thunderstorm	Dust Storm
Strong Winds	Visibility	Cyclone	Squall/ Hail
Frost	Cold Wave	Heat Wave	Sea State



# Fishermen warning graphics

**Day 1: 24.10.2022/11:30AM to 25.10.2022/05:30AM**



**Day 2: 25.10.2022/05:30AM to 26.10.2022/05:30AM**



**Day 3: 26.10.2022/05:30AM to 27.10.2022/05:30AM**



**Day 4: 27.10.2022/05:30AM to 28.10.2022/05:30AM**

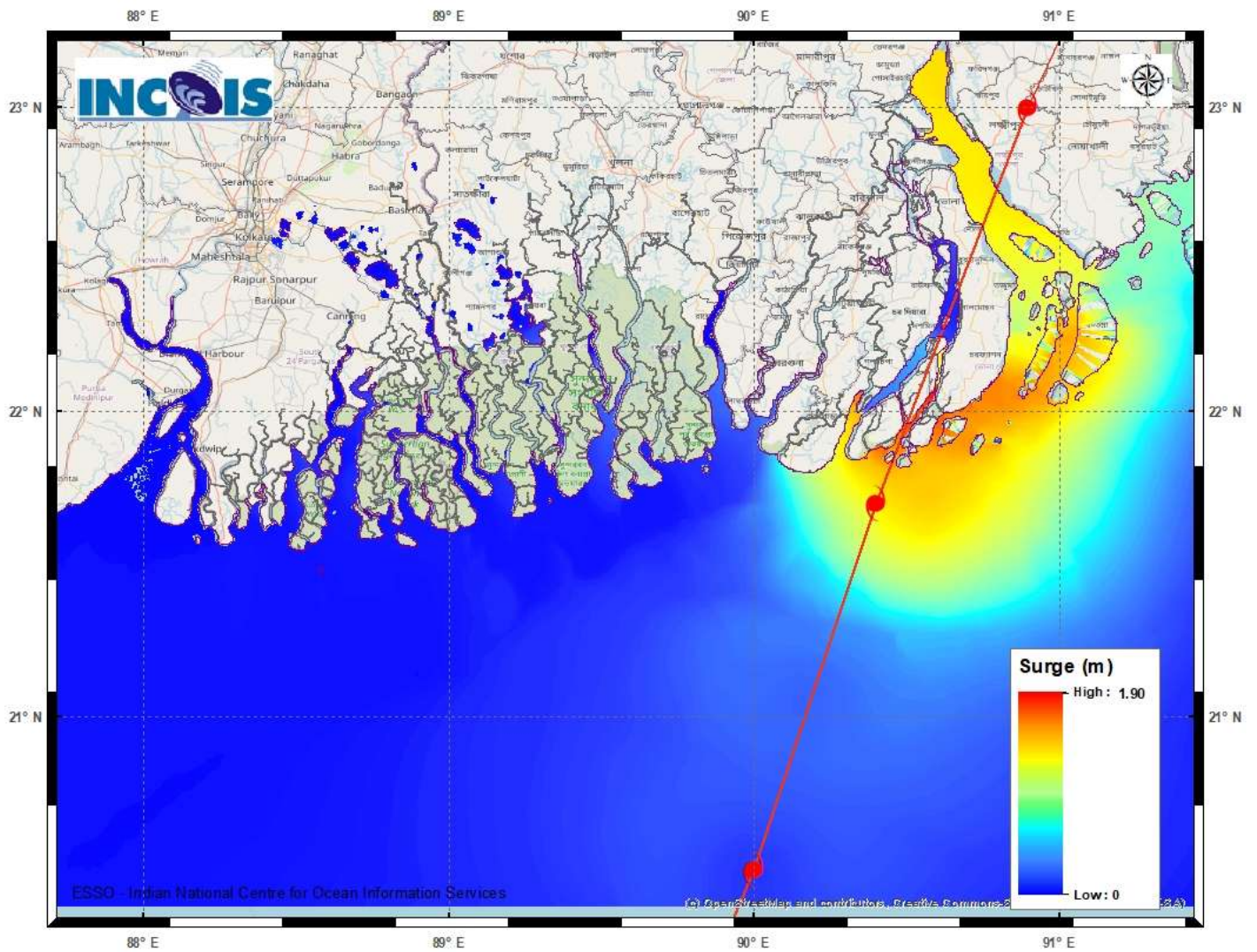


**Day 5: 28.10.2022/05:30AM to 29.10.2022/05:30AM**



	Squally WX with wind speed 40-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed with wind speed 55-65 kmph gusting to 75 kmph
	Gale wind speed with wind speed 65-75 kmph gusting to 85 kmph
	Gale wind speed with wind speed 80-90 kmph gusting to 100 kmph
	Gale wind speed with wind speed 90-100 kmph gusting to 110 kmph

**Fishermen are advised not to venture into the marked areas.**



**Storm Surge Warning Graphics**