



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW**

**DELHI TROPICAL CYCLONE ADVISORY No. 12**

**FROM: RSMC –TROPICAL CYCLONES, NEW DELHI**

**TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)  
STORM WARNING CENTRE, BANGKOK (THAILAND)  
STORM WARNING CENTRE, COLOMBO (SRILANKA)  
STORM WARNING CENTRE, DHAKA (BANGLADESH)  
STORM WARNING CENTRE, KARACHI (PAKISTAN)  
METEOROLOGICAL OFFICE, MALE (MALDIVES)  
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)  
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)  
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)  
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)  
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)  
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)**

**TROPICAL CYCLONE ADVISORY NO. 12 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2330 UTC OF 24.10.2022 BASED ON 2100 UTC OF 24.10.2022**

**SUBJECT: CYCLONIC STORM “SITRANG” (PRONOUNCED AS “SI-TRANG”) WEAKENED INTO A DEEP DEPRESSION OVER BANGLADESH**

THE CYCLONIC STORM “SITRANG” PRONOUNCED AS “SI-TRANG” OVER COASTAL BANGLADESH MOVED NORTH-NORTHEASTWARD WITH A SPEED OF 56 KMPH DURING PAST 6 HOURS AND WEAKENED INTO A DEEP DEPRESSION AND LAY CENTERED AT 2100 UTC OF 24<sup>TH</sup> OCTOBER OVER BANGLADESH NEAR LATITUDE 24.4°N AND LONGITUDE 91.0°E, ABOUT 90 KM NORTHEAST OF DHAKA(41923), 60 KM NORTH-NORTHWEST OF AGARTALA(42724), AND 160 KM SOUTHWEST OF SHILLONG(42516).

IT IS VERY LIKELY TO CONTINUE TO MOVE NORTH-NORTHEASTWARDS AND WEAKEN INTO A DEPRESSION DURING NEXT 3 HOURS AND FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 6 HOURS.

**FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:**

Date/Time(UTC)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
24.10.22/2100	24.4/91.0	55-65 GUSTING TO 75	DEEP DEPRESSION
25.10.22/0000	25.1/91.4	45-55 GUSTING TO 65	DEPRESSION
25.10.22/0600	26.5/92.2	25-35 GUSTING TO 45	WELL MARKED LOW PRESSURE AREA

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C  
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-33%, , MODERATE: 34-66% AND HIGH: 67-100%  
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CLOUDS ARE SEEN OVER NORTH BANGLADESH AND NORTHEASTERN STATES OF INDIA. ASSOCIATED BROKEN LOW/MEDIUM CLOUD. WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD OBSERVED BETWEEN LATITUDE 24.0<sup>0</sup>N & 28.0<sup>0</sup>N AND LONGITUDE 90.0<sup>0</sup>E & 95.0<sup>0</sup>E, BANGLADESH, ASSAM, TRIPURA, MEGHALAYA, AND BHUTAN. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELSIUS.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IS ABOUT 30 KNOTS GUSTING TO 35 KNOTS AROUND SYSTEM CENTER. ESTIMATED CENTRAL PRESSURE IS 998 HPA. PREVAILING ROUGH TO VERY ROUGH SEA CONDITION OVER NORTH BAY OF BENGAL DURING NEXT 6 HOURS AND IMPROVE THEREAFTER.

#### REMARKS:

THE MADDEN JULIAN OSCILLATION INDEX (MJO) CURRENTLY LIES IN PHASE 6 WITH AMPLITUDE GREATER THAN 1. IT WOULD CONTINUE IN SAME PHASE DURING NEXT 5 DAYS WITH GRADUALLY INCREASING AMPLITUDE.

SEA SURFACE TEMPERATURE (SST) IS AROUND 30<sup>0</sup>C OVER NORTH CENTRAL & BAY OF BENGAL. THE OCEAN HEAT CONTENT (OHC) IS AROUND 70-80 KJ/CM<sup>2</sup> OVER THE SAME REGION. LOW LEVEL VORTICITY IS ABOUT 150-200 X10<sup>-6</sup> S<sup>-1</sup> TO THE SOUTH OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 20 X10<sup>-5</sup> S<sup>-1</sup> TO THE NORTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 20 X10<sup>-5</sup> S<sup>-1</sup> TO THE NORTHEAST OF SYSTEM CENTRE. WIND SHEAR IS HIGH (30-40 KNOTS) AROUND THE SYSTEM CENTER AND IS HIGH (50 KNOT) TO THE NORTH OF THE SYSTEM ALONG THE PREDICTED TRACK.

A TROUGH IN MID-LATITUDE WESTERLIES IS ROUGHLY RUNNING ALONG 90<sup>0</sup>E UPTO 20<sup>0</sup>N. THE SYSTEM CONTINUED TO MOVE NORTH-NORTHEASTWARDS UNDER THE INFLUENCE OF THE TROUGH IN MID-LATITUDE WESTERLIES IN MIDDLE AND UPPER TROPOSPHERIC LEVELS, THE ANTI CYCLONE TO THE EAST OF THE SYSTEM CENTRE OVER MYANMAR AND THE SOUTH-SOUTHWESTERLY WINDS TO THE NORTH OF RIDGE ALONG 19<sup>0</sup>N.

THE ENVIRONMENTAL CONDITIONS AS WELL AS ALL NWP MODELS SUGGEST THAT THE SYSTEM IS VERY LIKELY TO CONTINUE TO MOVE NORTH-NORTHEASTWARDS AND WEAKEN INTO A DEPRESSION DURING NEXT 3 HOURS AND FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 6 HOURS.

NEXT BULLETIN WILL BE ISSUED AT 0300 UTC OF 25<sup>TH</sup> OCTOBER 2022.

(DR. SHRAVAN MUPPA)  
SCIENTIST-E, RSMC, NEW DELHI



## OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM SITRANG OVER COASTAL BANGLADESHL BASED ON 1800 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

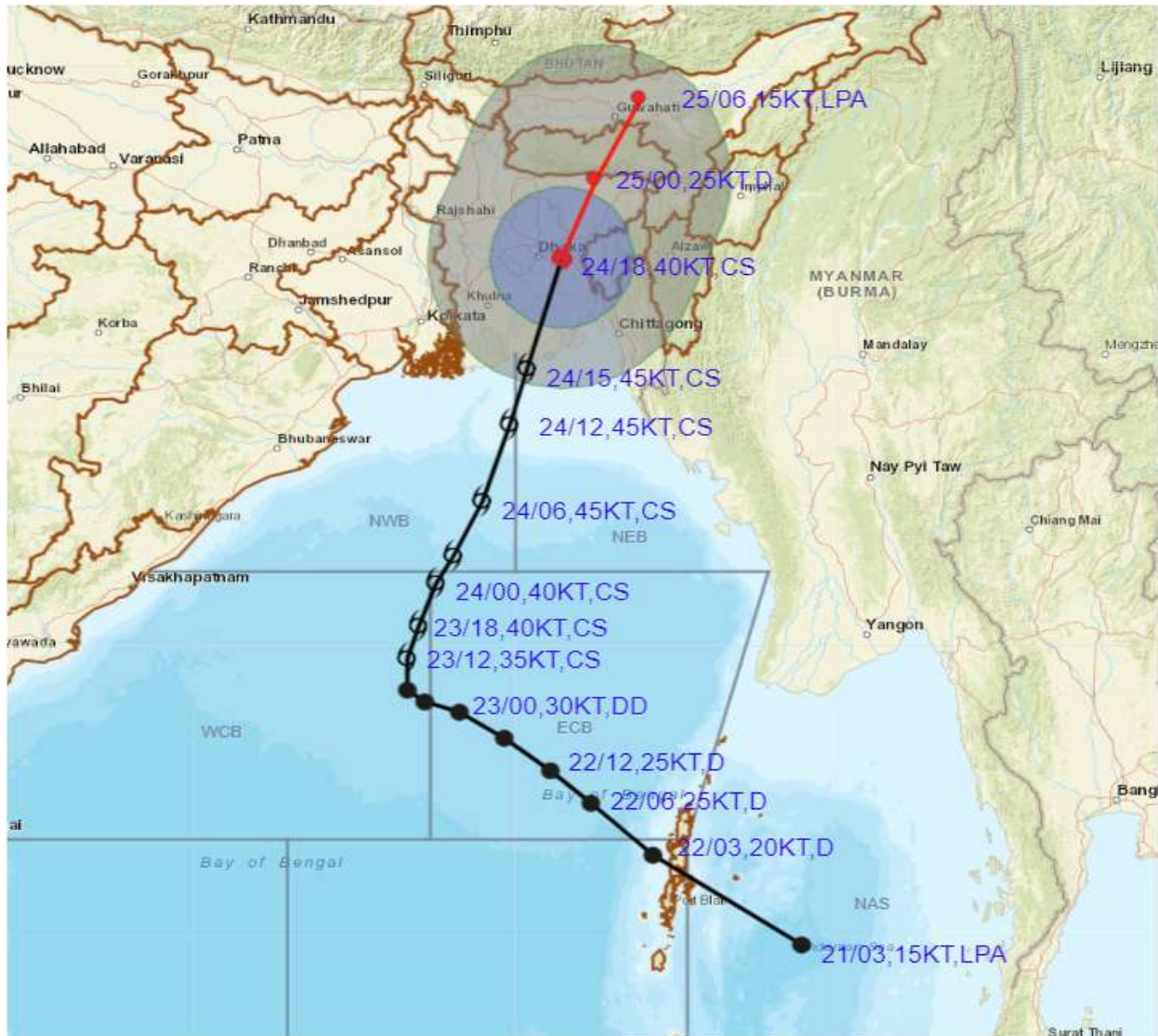
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



## OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM SITRANG OVER COASTAL BANGLADESH BASED ON 1800 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 (≥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

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SAT : INSAT-3D IMG

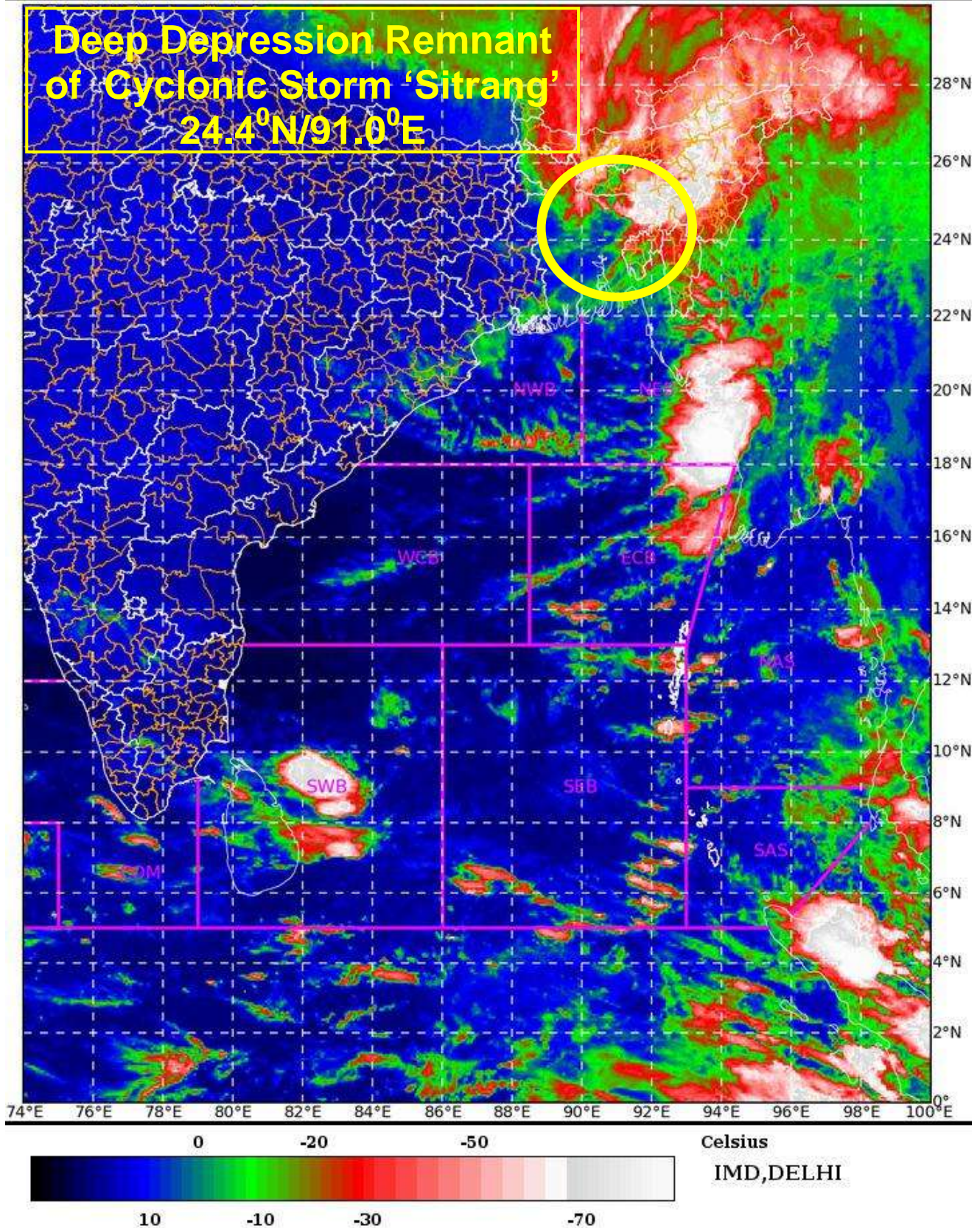
24-10-2022/(2200 to 2226) GMT

IMG\_TIR1\_TEMP 10.8 um

25-10-2022/(0330 to 0356) IST

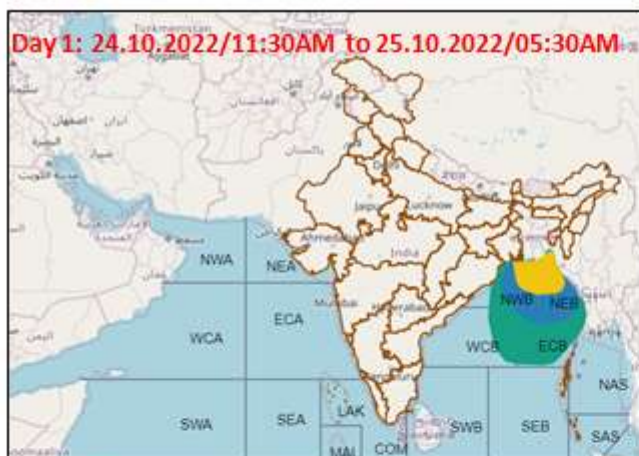


L1C Mercator



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## Fishermen warning graphics



	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.