



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY NO. 14**

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 27.05.2024

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. 14 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 27.05.2024 BASED ON 0300 UTC OF 27.05.2024

SUB: CYCLONIC STORM “REMAL” PRONOUNCED AS “RE-MAL” OVER COASTAL BANGLADESH AND ADJOINING COASTAL WEST BENGAL

THE CYCLONIC STORM “REMAL” (PRONOUNCED AS “RE-MAL”) OVER COASTAL BANGLADESH AND ADJOINING COASTAL WEST BENGAL MOVED NEARLY NORTHWARDS, WITH A SPEED OF 15 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 27TH MAY, 2024 OVER THE SAME REGION, NEAR **LATITUDE 22.8°N AND **LONGITUDE 89.3°E** ABOUT 40 KM NORTHWEST OF MONGLA (41958, BANGLADESH), 90 KM EAST OF KOLKATA (42807, WEST BENGAL), 90 KM NORTHEAST OF CANNING (42812, WEST BENGAL), 130 KM NORTHWEST OF KHEPUPARA (41984, BANGLADESH) AND 140 KM SOUTHWEST OF DHAKA (41923, BANGLADESH)**

THE SYSTEM IS LIKELY TO MOVE NORTH-NORTHEASTWARDS, AND GRADUALLY WEAKEN FURTHER INTO DEEP DEPRESSION BY 1200 UTC OF TODAY, THE 27TH MAY 2024. THE CYCLONE IS UNDER THE CONTINUOUS SURVEILLANCE OF KOLKATA DOPPLER WEATHER RADAR.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
27.05.24/0300	22.8/89.3	75-85 GUSTING TO 95	CYCLONIC STORM
27.05.24/0600	23.2/89.5	60-70 GUSTING TO 80	CYCLONIC STORM
27.05.24/1200	23.8/90.0	50-60 GUSTING TO 70	DEEP DEPRESSION
27.05.24/1800	24.4/90.5	40-50 GUSTING TO 60	DEPRESSION
28.05.24/0000	25.1/91.2	35-45 GUSTING TO 55	DEPRESSION
28.05.24/1200	26.5/92.6	20-30 GUSTING TO 40	WELL, MARKED LOW PRESSURE AREA

AS PER INSAT-3D IMAGERY, VORTEX (REMA) IS LOCATED OVER SOUTH BANGLADESH & NEIGHBOURHOOD. ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER NORTH BAY OF BENGAL, COASTAL ODISHA, GANGETIC WEST BENGAL, MIZORAM, TRIPURA AND BANGLADESH (MINIMUM CLOUD TOP TEMPERATURE IS -93 DEG CEL). AS PER MULTISATELLITE WINDS, STRONGER WINDS ARE SEEN IN THE SOUTHEAST SECTOR.

AS PER LATEST OBSERVATIONS, ESTIMATED CENTRAL PRESSURE IS 979 HPA AT 0300 UTC OF 27 MAY. SATKHIRA (41946, BANGLADESH) REPORTED 979 HPA MEAN SEA LEVEL PRESSURE. ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. SEA CONDITION IS HIGH OVER NORTH BAY OF BENGAL AND ALONG & OFF BANGLADESH AND WEST BENGAL COASTS. THE CYCLONE IS UNDER THE CONTINUOUS SURVEILLANCE OF KOLKATA DOPPLER WEATHER RADAR.

WARNINGS (GRAPHICS ATTACHED):

HEAVY RAINFALL WARNING:

(A) WEST BENGAL: LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH **HEAVY TO VERY HEAVY RAINFALL** AT A FEW PLACES IS LIKELY OVER COASTAL DISTRICTS OF WEST BENGAL AND EASTERN DISTRICTS OF GANGETIC WEST BENGAL ADJACENT TO BANGLADESH ON 27TH MAY. THE PEAK RAINFALL ACTIVITY IS LIKELY TILL NOON OF 27TH MAY. LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH **HEAVY TO VERY HEAVY RAINFALL** AT ISOLATED PLACES LIKELY OVER EASTERN DISTRICTS OF SUB-HIMALAYAN WEST BENGAL ON 27TH AND 28TH MAY.

(B) NORTHEASTERN STATES: LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH **HEAVY TO VERY HEAVY RAINFALL** AT ISOLATED PLACES IS LIKELY OVER ASSAM, MEGHALAYA, ARUNACHAL PRADESH, NAGALAND, MIZORAM, MANIPUR & TRIPURA ON 27TH & 28TH MAY. ISOLATED **EXTREMELY HEAVY RAINFALL** (≥ 20 CM) IS ALSO LIKELY OVER ASSAM, MEGHALAYA ON 27TH & 28TH MAY, ARUNACHAL PRADESH ON 28TH MAY AND MIZORAM & TRIPURA ON 27TH MAY.

WIND WARNING:

(A) BAY OF BENGAL

GALE WIND SPEED REACHING 80-90 KMPH GUSTING TO 100 KMPH IS PREVAILING OVER NORTH BAY OF BENGAL. IT IS LIKELY TO DECREASE BECOMING 60-70 KMPH GUSTING TO 80 KMPH BY NOON OF 27TH MAY AND SQUALLY WIND SPEED REACHING 45-55 KMPH GUSTING TO 65 KMPH BY EVENING OF 27TH MAY.

SQUALLY WIND SPEED REACHING 40-50 KMPH GUSTING TO 60 KMPH WILL CONTINUE TO PREVAIL OVER ADJOINING CENTRAL BAY OF BENGAL TILL NOON OF 27TH MAY.

(B) ALONG & OFF BANGLADESH AND WEST BENGAL COASTS

GALE WIND SPEED REACHING 80-90 KMPH GUSTING TO 100 KMPH WILL CONTINUE TO PREVAIL ALONG & OFF BANGLADESH AND ADJOINING WEST BENGAL COASTS DURING NEXT 3 HOURS. IT IS LIKELY TO DECREASE BECOMING 60-70 KMPH GUSTING TO 80 KMPH BY NOON, SQUALLY WIND 50-60 KMPH GUSTING TO 70 KMPH BY EVENING OF 27TH MAY AND DECREASE GRADUALLY THEREAFTER.

GALE WIND SPEED REACHING 60-70 KMPH GUSTING TO 80 KMPH WILL CONTINUE TO PREVAIL OVER HOWRAH, HOOGLY & KOLKATA, OVER EAST MEDINIPUR DURING NEXT 6 HOURS AND DECREASE GRADUALLY THEREAFTER.

(C) ALONG & OFF NORTH ODISHA COASTS

SQUALLY WIND SPEED REACHING 40-50 KMPH GUSTING TO 60 KMPH IS LIKELY TO PREVAIL DURING NEXT 6 HOURS AND DECREASE GRADUALLY THEREAFTER.

(D) NORTHEASTERN STATES

SQUALLY WIND SPEED REACHING 50-60 KMPH GUSTING TO 70 KMPH IS LIKELY OVER MIZORAM TRIPURA & SOUTH MANIPUR ON 27TH MAY AND **40-50 KMPH GUSTING TO 60 KMPH** IS LIKELY OVER SOUTH ASSAM AND MEGHALAYA ON 27TH MAY

SEA CONDITION WARNING:

(A) NORTH BAY OF BENGAL

HIGH SEA CONDITION IS LIKELY OVER NORTH BAY OF BENGAL TILL NOON AND GRADUALLY IMPROVE BECOMING VERY ROUGH TO ROUGH BY EVENING OF 27TH MAY AND GRADUALLY IMPROVE THEREAFTER.

(B) ALONG & OFF BANGLADESH AND WEST BENGAL COASTS

HIGH SEA CONDITION IS LIKELY ALONG & OFF BANGLADESH AND WEST BENGAL COASTS TILL NOON AND GRADUALLY IMPROVE BECOMING VERY ROUGH TO ROUGH BY EVENING OF 27TH MAY AND GRADUALLY IMPROVE THEREAFTER.

(C) ALONG & OFF NORTH ODISHA COAST

ROUGH SEA CONDITION IS LIKELY ALONG & OFF NORTH ODISHA COAST DURING NEXT 6 HOURS AND IMPROVE THEREAFTER.

(D) CENTRAL BAY OF BENGAL

ROUGH SEA CONDITION IS LIKELY TO PREVAIL OVER CENTRAL BAY OF BENGAL DURING NEXT 6 HOURS AND IMPROVE THEREAFTER.

FISHERMEN WARNING (GRAPHICS ATTACHED):

FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTH BAY OF BENGAL ALONG AND OFF WEST BENGAL AND BANGLADESH COASTS ON 27TH MAY

REMARKS:

LOW LEVEL VORTICITY IS ABOUT $250 \times 10^{-5} \text{S}^{-1}$ OVER NORTH BAY OF BENGAL & ADJOINING COASTAL BANGLADESH AND WEST BENGAL WITH VERTICAL EXTENSION UPTO 200 HPA LEVEL. LOW LEVEL CONVERGENCE IS ABOUT $40 \times 10^{-5} \text{S}^{-1}$ TO THE SOUTH OF THE SYSTEM CENTER. STRONG EQUATORWARD OUTFLOW IS SEEN. UPPER-LEVEL DIVERGENCE IS ABOUT $20 \times 10^{-5} \text{S}^{-1}$ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR (VWS) IS LOW (05-10 KT) ALONG THE FORECAST TRACK.

THE SEVERE CYCLONIC STORM CROSSED THE BANGLADESH AND ADJOINING WEST

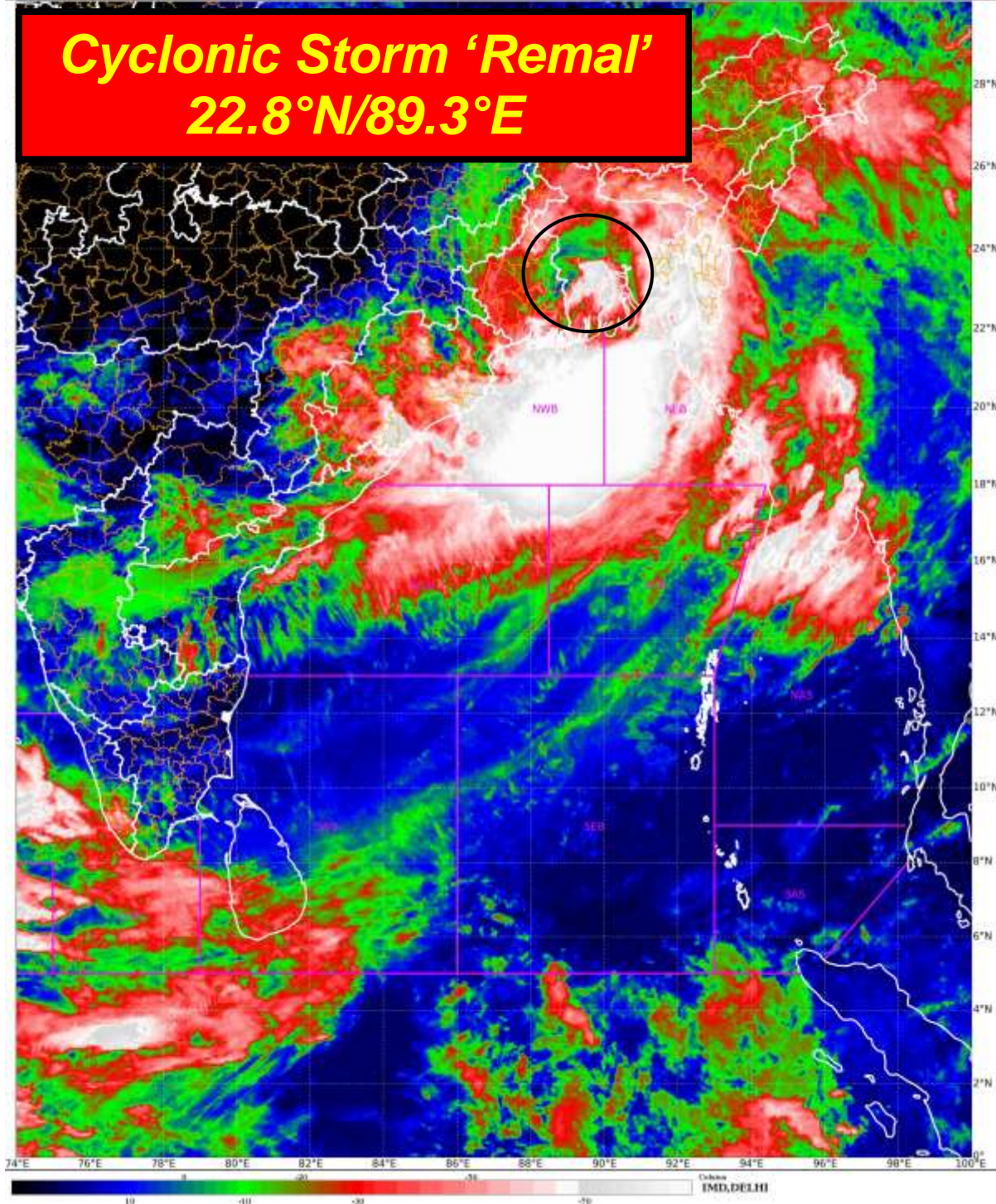
BENGAL COASTS BETWEEN SAGAR ISLANDS AND KHEPUPARA CLOSE TO SOUTHWEST OF MONGLA BETWEEN 1700 UTC OF 26TH MAY TO 1900 UTC OF 26TH MAY 2024. DUE TO LAND INTERACTION AND FRICTION INTENSITY THE SYSTEM WEAKENED TO CYCLONIC STORM AT 00 UTC OF 27TH MAY 2024. THE TPWV MAP SUGGESTS AVAILABILITY OF MOISTURE IN THE MID ATMOSPHERE WHICH IS HELPING THE SYSTEM TO MAINTAIN ITS INTENSITY OF CYCLONIC STORM FOR SOME TIME AND THE SYSTEM IS LIKELY TO WEAKEN GRADUALLY SUBSEQUENTLY.

THE NWP MODEL INDICATES THE SYSTEM IS LIKELY TO MOVE NEARLY NORTH-NORTHEASTWARDS AND MAINTAIN ITS INTENSITY UP TO DEPRESSION DURING NEXT 24 HOURS.

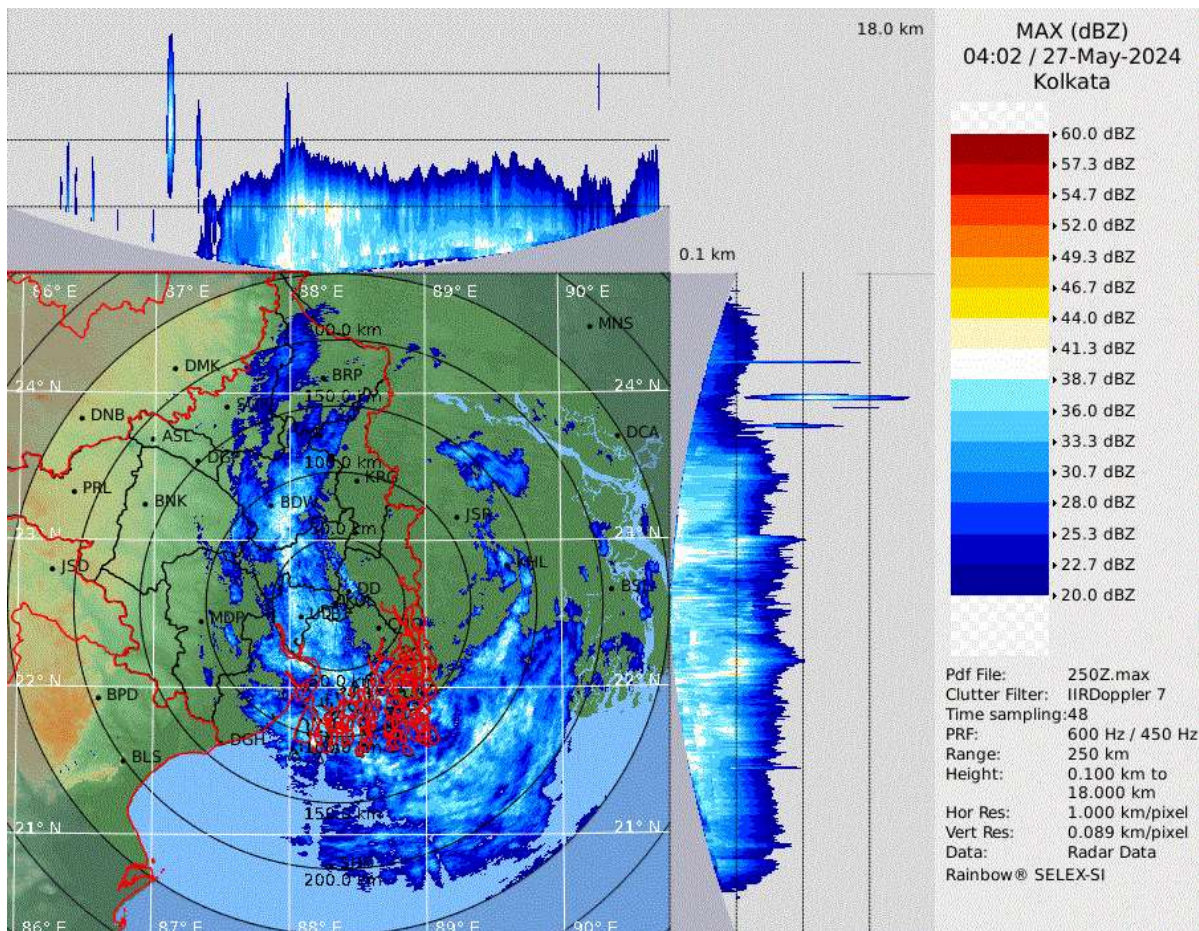
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RSMC NEW DELHI



Cyclonic Storm 'Remal' 22.8°N/89.3°E



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%
This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins

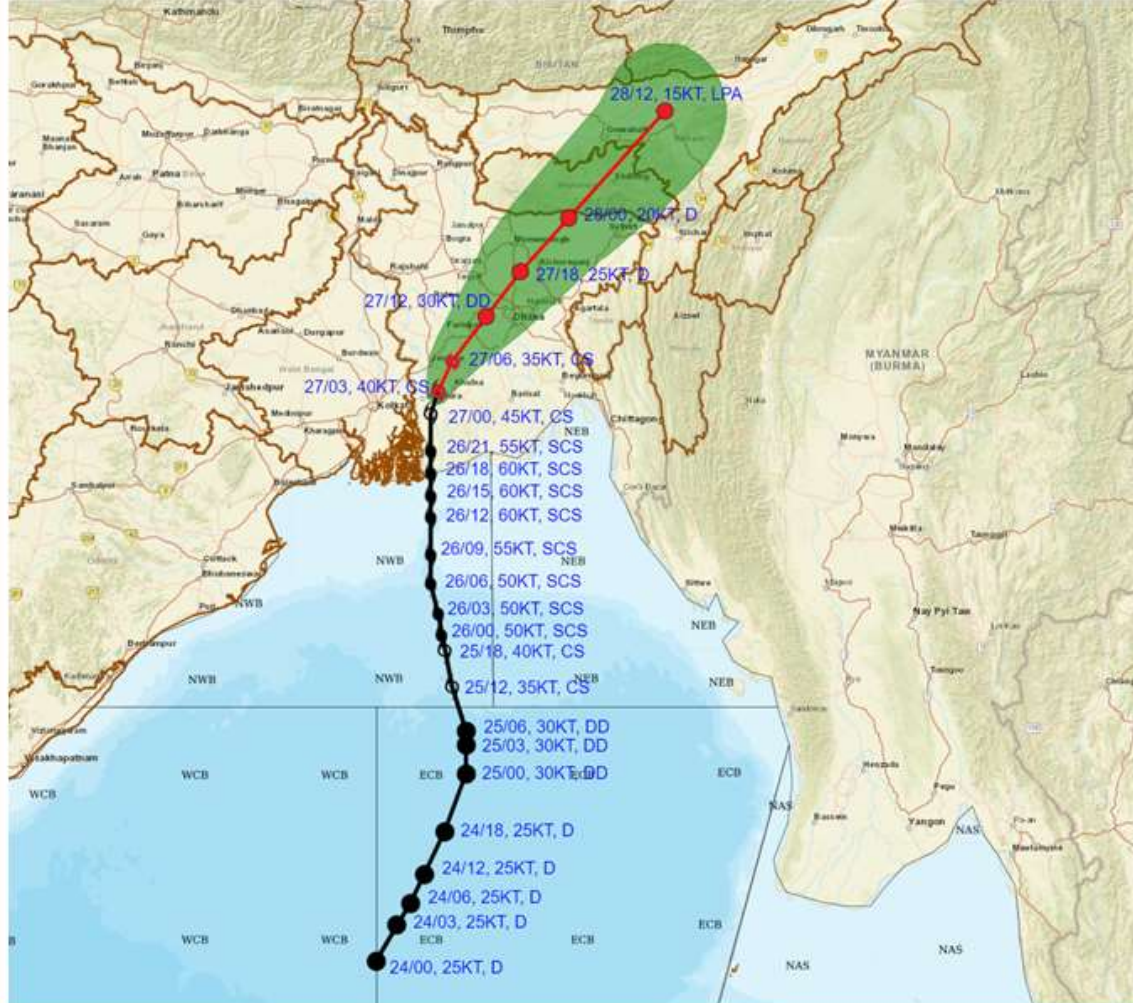


Kolkata Radar Image 0400 UTC of today, the 27th May

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FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH CYCLONIC STORM 'REMAL' OVER COASTAL BANGLADESH AND ADJOINING COASTAL WEST BENGAL BASED ON 0300 UTC (0830 IST) OF 27TH MAY 2024.



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

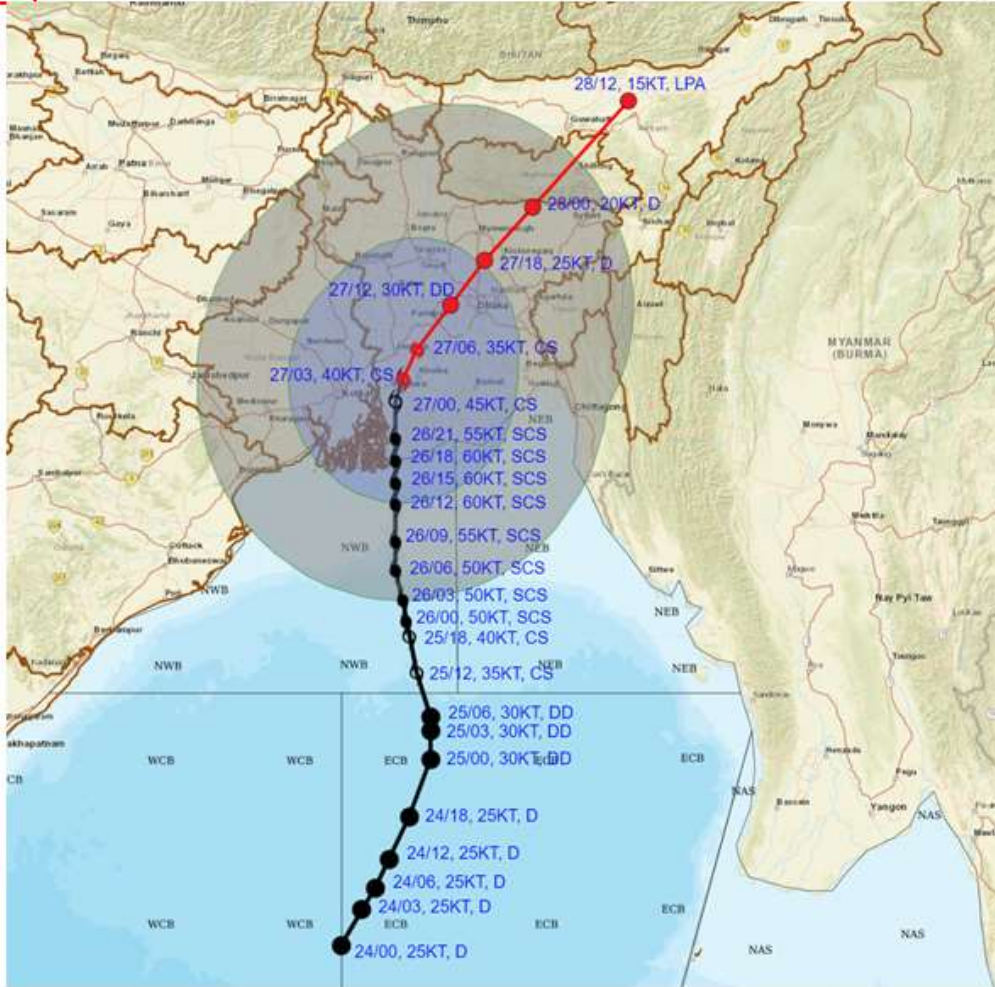
— FORECAST TRACK

▲ CONE OF UNCERTAINTY

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS			
Date and Time (UTC)	Canning	Khepupara	Sagar Island	Mongla
27.05.24/0300	90, NE	140, NW	190, NE	40, NW
27.05.24/0600	140, NE	160, NNW	230, NE	70, N



FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH CYCLONIC STORM 'REMAL' OVER COASTAL BANGLADESH AND ADJOINING COASTAL WEST BENGAL BASED ON 0300 UTC (0830 IST) OF 27TH MAY 2024.



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● 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

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Fishermen Warning Graphics

Day 1: 27.05.2024/05:30 AM to 28.05.2024/05:30AM



Day 2: 28.05.2024/05:30AM to 29.05.2024/05:30AM



Day 3: 29.05.2024/05:30AM to 30.05.2024/05:30AM



Day 4: 30.05.2024/05:30AM to 31.05.2024/05:30AM



Day 5: 31.05.2024/05:30AM to 01.06.2024/05:30AM



	Squally WX with wind speed 35-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind with speed 45-55 kmph gusting to 65 kmph
	Squally wind with speed 50-60 kmph gusting to 70 kmph
	CS with Gale wind speed 60-90 kmph gusting to 110 kmph

Fishermen are advised not to venture into the marked areas.

24 hours Flash Flood Risk Outlook till 1200 UTC of 27.05.2024 FOR BANGLADESH:

Persistent Flash Flood Threat (PFFT) till 1130 IST of 27-05-2024 :

Low flash flood threat likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 6 hours.

Gangetic West Bengal - Mursidabad and Nadia districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 6 hours.

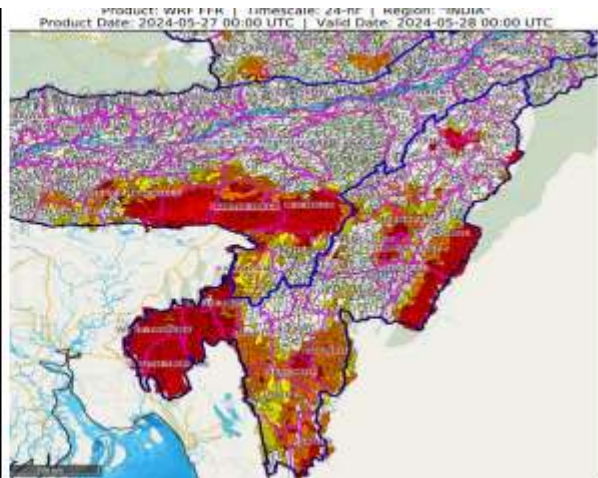








24 hours Flash Flood Risk Outlook till 1730 UTC of 27.05.2024 FOR WEST BENGAL

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 28-05-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Assam & Meghalaya and NMMT Met Sub-divisions during next 24 hours.

Surface runoff/ Inundation may occur on low lying areas due to persistent rainfall under the influence of impending Cyclonic Storm "Remal" in next 24 hours.



Flash Flood Threat	Flash Flood Risk
 High Threat (Take Action)	 High Risk (Take Action)
 Moderate threat (Be Prepared)	 Moderate Risk (Be Prepared)
 Low Threat (Be Updated)	 Low Risk (Be Updated)