



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL CYCLONE ADVISORY NO. 31

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 14.05.2023

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. 31 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2000 UTC OF 14.05.2023 BASED ON 1800 UTC OF 14.05.2023

SUBJECT: VERY SEVERE CYCLONIC STORM “MOCHA” OVER MYANMAR

THE VERY SEVERE CYCLONIC STORM “MOCHA” (PRONOUNCED AS “MOKHA”) OVER MYANMAR MOVED NORTH-NORTHEASTWARDS WITH A SPEED OF 37 KMPH DURING PAST 6 HOURS, AND LAY CENTRED AT 1800 UTC OF 14TH MAY OVER MYANMAR NEAR LATITUDE 22.7°N AND LONGITUDE 94.6°E ABOUT 340 KM NORTH-NORTHEAST OF SITTWE (MYANMAR, 48062), 170 KM OF NORTH-NORTHWEST OF NYAUNG-U (MYANMAR, 48049), 440 KM NORTH-NORTHWEST OF NAY PYI TAW (MYANMAR, 48117) AND 310 KM EAST-NORTHSEAST OF COX’S BAZAR (BANGLADESH, 41992).

THE SYSTEM IS CONTINUING THE WEAKENING TREND AND WILL BECOME A CYCLONIC STORM DURING NEXT FEW 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
14.05.23/1800	22.7/94.6	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
15.05.23/0000	23.9/95.8	60-70 GUSTING TO 80	CYCLONIC STORM
15.05.23/0600	25.1/97.0	40-50 GUSTING TO 60	DEPRESSION

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIO LAY OVER NORTH MYANMAR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 71 DEG CELSIUS AND WEAK TO MODERATE CONVTN OVER NORTH EAST STATES & EAST BANGLADESH.

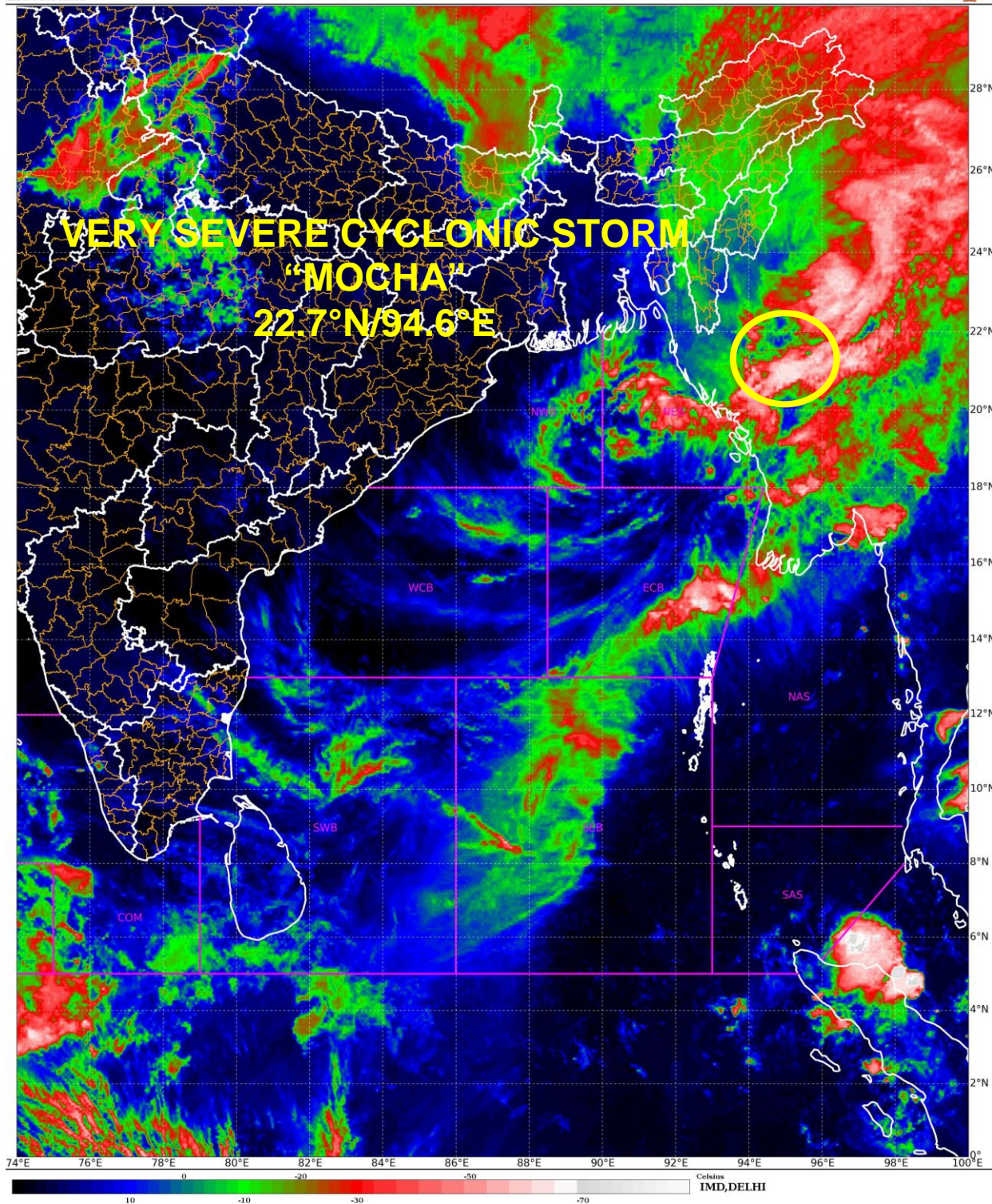
THE MAXIMUM SUSTAINED SURFACE WIND SPEED (MSW) IS 50 KNOTS GUSTING TO 60 KNOTS. THE ESTIMATED CENTRAL PRESSURE (ECP) IS ABOUT 984HPA. SEA CONDITION IS VERY ROUGH TO ROUGH TILL 0000 UTC OF 15TH MAY.

REMARKS:

DUE TO RUGGED TERRAINS AND HIGH WIND SHEAR OVER MYANMAR, THE SYSTEM WOULD WEAKEN RAPIDLY DURING NEXT 12 HOURS BECOMING A DEPRESSION AROUND 0600 UTC OF 15TH MAY.

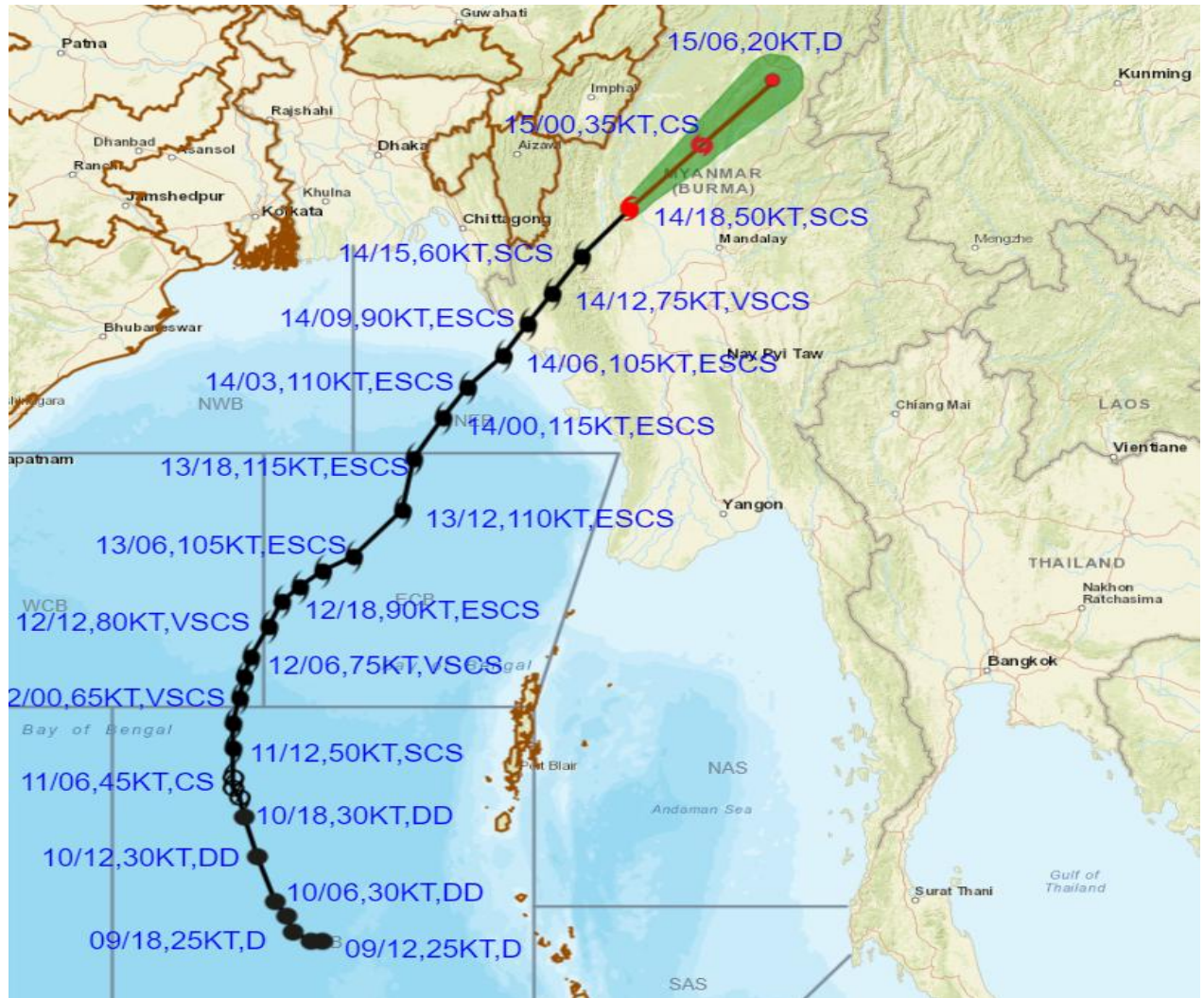
THE LOW LEVEL VORTICITY AT 850 HPA HAS REDUCED & IS AROUND $150-200 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVELS. LOW LEVEL CONVERGENCE IS AROUND $50 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHEAST OF SYSTEM CENTRE. THE UPPER LEVEL DIVERGENCE IS AROUND $30 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF SYTEM CENTRE. THE VERTICAL WIND SHEAR IS HIGH (30-40 KNOTS) OVER SYSTEM AREA AND IS INCREASING ALONG THE FORECAST TRACK. POLEWARD & EQUATORWARD OUTFLOW IS STILL SEEN. THE ENVIRONMETAL CONDITIONS INCLUDING POLEWARD OUTFLOW, HIGHER VALUES OF LOW LEVEL VORTICITY, CONVERGENCE AND DIVERGENCE WOULD FAVOUR THE SYSTEM TO MAINTAIN ITS INTENSITY OF CYCLONIC STORM DURING NEXT 6-9 HOURS. HOWEVER, AS THE SYSTEM IS MOVING OVER RUGGED TERRAINS OF MYANMAR HILLS AND WIND SHEAR IS HIGH OVER THE REGION, WEAKENING OF THE SYSTEM INTO A DEPRESSION IS LIKELY AROUND 0600 UTC OF 15TH MAY.

(S. P SINGH)
SCIENTIST-C
RSMC NEW DELHI





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1800 UTC (2330 IST) OF 14TH MAY 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)

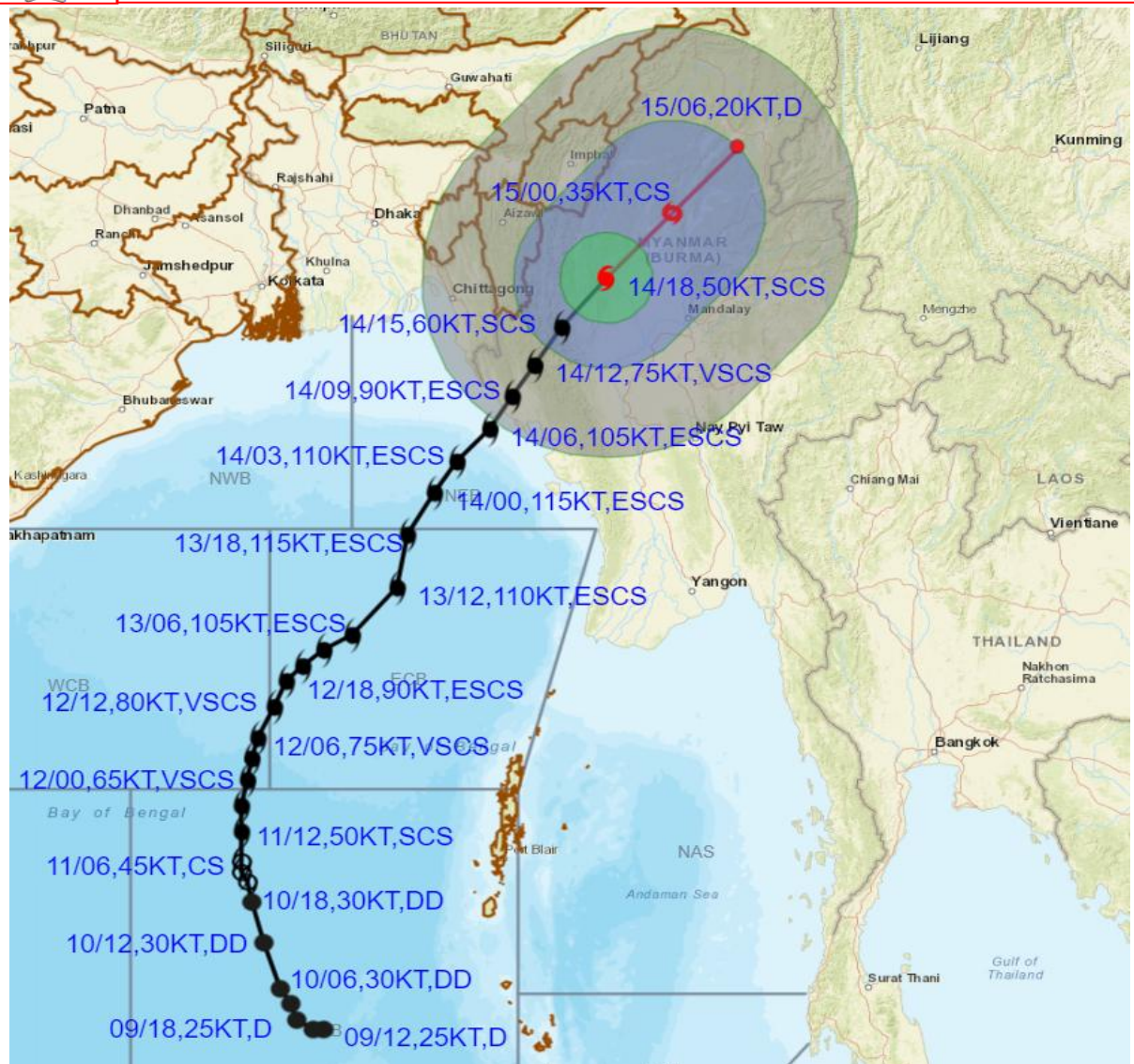
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

Forecast distance (km) and direction of the centre from nearest 5 coastal stations

Forecast Date and Time	Lead Period	Lat	Lon	Station 1	Station 2	Station 3	Station 4	Station 5
14.05.23/1800	0	22.7	94.6	KALEWA (64,SSE)	GANGAW (76,NE)	KALEMYO (78,SE)	MONYWA (86,NW)	FALAM (97,ESE)
15.05.23/0000	6	23.9	95.8	PINLEBU (49,ESE)	KATHA (62,WSW)	HOMALIN (140,SE)	MAWLAIK (144,ENE)	SHWEBO (147,N)
15.05.23/0600	12	25.1	97.0	MYITKYINA (50,SW)	BHAMO (95,NNW)	KATHA (124, NNE)	HKAMTI (165,SE)	PINLEBU (200,NE)



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1800 UTC (2330 IST) OF 14TH MAY 2023.



DATE/TIME IN UTC
IST=UTC + 0530

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WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
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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
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

Fishermen warning graphics

