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-NORHEASTWARDS 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:

<table>
<thead>
<tr>
<th>DATE/TIME (UTC)</th>
<th>POSITION (LAT. °N/ LONG. °E)</th>
<th>MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)</th>
<th>CATEGORY OF CYCLONIC DISTURBANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.05.23/1800</td>
<td>22.7/94.6</td>
<td>90-100 GUSTING TO 110</td>
<td>SEVERE CYCLONIC STORM</td>
</tr>
<tr>
<td>15.05.23/0000</td>
<td>23.9/95.8</td>
<td>60-70 GUSTING TO 80</td>
<td>CYCLONIC STORM</td>
</tr>
<tr>
<td>15.05.23/0600</td>
<td>25.1/97.0</td>
<td>40-50 GUSTING TO 60</td>
<td>DEPRESSION</td>
</tr>
</tbody>
</table>
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH MYANMAR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 71 DEG CELSIUS AND WEAK TO MODERATE CONVETION 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 150-200X10^-6 S^-1 TO THE SOUTH OF SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 200 HPA LEVELS. LOW LEVEL CONVERGENCE IS AROUND 50X10^-5 S^-1 TO THE SOUTHEAST OF SYSTEM CENTRE. THE UPPER LEVEL DIVERGENCE IS AROUND 30X10^-5S^-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
VERY SEVERE CYCLONIC STORM "MOCHA"
22.7°N/94.6°E
OBSERVED AND FORECAST TRACK ALONG WITH CONE OF UNCERTAINTY OF SEVERE CYCLONIC STORM MOCHA OVER MYANMAR BASED ON 1800 UTC (2330 IST) OF 14TH MAY 2023.

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

<table>
<thead>
<tr>
<th>Forecast Date and Time</th>
<th>Lead Period</th>
<th>Lat</th>
<th>Lon</th>
<th>Station 1</th>
<th>Station 2</th>
<th>Station 3</th>
<th>Station 4</th>
<th>Station 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.05.23/1800</td>
<td>0</td>
<td>22.7</td>
<td>94.6</td>
<td>KALEWA (64,SSE)</td>
<td>GANGAW (76,NE)</td>
<td>KALEMYO (78,SE)</td>
<td>MONYWA (86,NW)</td>
<td>FALAM (97,ESE)</td>
</tr>
<tr>
<td>15.05.23/0000</td>
<td>6</td>
<td>23.9</td>
<td>95.8</td>
<td>PINLEBU (49,ESE)</td>
<td>KATHA (62,WSW)</td>
<td>HOMALIN (140,SE)</td>
<td>MAWLAIK (144,ENE)</td>
<td>SHWEBO (147,N)</td>
</tr>
<tr>
<td>15.05.23/0600</td>
<td>12</td>
<td>25.1</td>
<td>97.0</td>
<td>MYITKYINA (50,SW)</td>
<td>BHAMO (95,NNW)</td>
<td>KATHA (124,NNE)</td>
<td>HKAMTI (165,SE)</td>
<td>PINLEBU (200,NE)</td>
</tr>
</tbody>
</table>
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
L: LOW PRESSURE AREA
WM: 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 (48.63 KT)
VSCS: VERY SEVERE CYCLONIC STORM (64.89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90.119 KT)
Scs: SUPER CYCLONIC STORM (> 120 KT)

TOTAL SUSTAINED WIND SPEED:
LESS THAN 34 KT
34.47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONES 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

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

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Fishermen warning graphics

Day 1: 14.05.2023/11:30AM to 15.05.2023/05:30AM
Day 2: 15.05.2023/05:30AM to 16.05.2023/05:30AM
Day 3: 16.05.2023/05:30AM to 17.05.2023/05:30AM
Day 4: 17.05.2023/05:30AM to 18.05.2023/05:30AM
Day 5: 18.05.2023/05:30AM to 19.05.2023/05:30AM

Squally WX with wind speed 40-50 kmph gusting to 60 kmph
Squally WX with wind speed 45-55 kmph gusting to 65 kmph
Squally wind with wind speed 50-60 kmph gusting to 70 kmph
Gale wind speed 60-80 kmph gusting to 90 kmph
Gale wind with wind speed 80-100 kmph gusting to 110 kmph

FISHERMEN ARE ADVISED NOT TO VENTURE INTO THE MARKED AREAS

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