



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

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

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

CABINET SECRETARIAT (FAX.NO.23012284, 23018638)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MOES (FAX NO. 24629777)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

DIRECTOR GENERAL, DOORDARSHAN (23385843)

DIRECTOR GENERAL, AIR (23421105, 23421219)

PIB MOES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)

DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 0413-262184)

CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)

CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22258913)

CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)

CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)

CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)

CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)

CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)

CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)

CHIEF SECRETARY, TAMIL NADU (FAX NO 044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX NO 0413-2334145)

CHIEF SECRETARY, GOVT. OF TRIPURA (FAX NO. 0381-2414013, 2413200)

CHIEF SECRETARY, GOVT. OF MIZORAM (FAX NO. 0389-2322745, 2320588)

CHIEF SECRETARY, GOVT. OF MANIPUR (FAX NO. 0385-2452629)

CHIEF SECRETARY, GOVT. OF NAGALAND (FAX NO. 0370-2270057)

ADMINISTRATOR, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (A) Deep Depression over southwest Arabian Sea

(B) Low pressure Area over southwest and adjoining southeast Bay of Bengal

(A) Deep Depression over southwest Arabian Sea

The deep depression over southwest Arabian Sea moved west-northwestwards with a speed of 11 kmph during past 6 hours and lay centered at 2330 hours IST of 20th October over the same region, near latitude 9.5°N and longitude 60.7°E about 820 km east-southeast of Socotra (Yemen), 1100 km south-southeast of Salalah Airport (Oman) and 1180 km east-southeast of Al Ghaidah (Yemen).

It is very likely to move west-northwestwards and intensify into a cyclonic storm over southwest Arabian Sea during next 06 hours. Continuing to move west-northwestwards, it is likely to intensify into a severe cyclonic storm in the evening of 22nd October. Thereafter, it would move north-northwestwards from 24th morning towards south Oman and adjoining Yemen coasts and cross Oman-Yemen coasts between Salalah (Oman) and Al Ghaidah (Yemen).

Forecast track and intensity are given below:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
20.10.23/2330	9.5/60.7	55-65 gusting to 75	Deep Depression
21.10.23/0530	9.9/60.2	60-70 gusting to 80	Cyclonic Storm
21.10.23/1130	10.4/59.6	70-80 gusting to 90	Cyclonic Storm
21.10.23/1730	10.8/58.9	75-85 gusting to 95	Cyclonic Storm
21.10.23/2330	11.3/58.2	80-90 gusting to 100	Cyclonic Storm
22.10.23/1130	12.5/56.8	90-100 gusting to 110	Severe Cyclonic Storm
22.10.23/2330	13.5/55.6	95-105 gusting to 115	Severe Cyclonic Storm
23.10.23/1130	14.3/54.8	100-110 gusting to 120	Severe Cyclonic Storm
23.10.23/2330	15.0/54.3	105-115 gusting to 125	Severe Cyclonic Storm
24.10.23/1130	15.7/54.0	95-100 gusting to 110	Severe Cyclonic Storm
24.10.23/2330	16.6/53.7	80-90 gusting to 100	Cyclonic Storm
25.10.23/1130	17.3/53.9	65-75 gusting to 85	Cyclonic Storm
25.10.23/2330	17.9/54.7	55-65 gusting to 75	Deep Depression

Warnings:

(i) Wind warning (warning graphics enclosed):

• **Southwest Arabian Sea:**

Squally wind speed reaching **55-65 kmph gusting to 75 kmph** is prevailing and likely to increase gradually becoming Gale Wind speed reaching **60-70 kmph gusting to 80 kmph** by morning of 21st, **80-90 kmph gusting to 100 kmph** by morning of 22nd October. It is likely to decrease gradually thereafter.

• **Westcentral Arabian Sea:**

Squally wind speed reaching **50-60 kmph gusting to 70 kmph** is prevailing and likely to become **Gale wind speed reaching 80-90 kmph gusting to 100 kmph** by morning of 22nd, becoming **95-105 kmph gusting to 115 kmph** by morning of 23rd and further **105-115 kmph gusting to 125 kmph** in the evening of 23rd October. Thereafter, it is likely to decrease gradually becoming **Gale wind speed reaching 85-95 kmph gusting to 115 kmph by 24th evening** and **70-80 kmph gusting to 90 kmph** in the morning of 25th October.

(ii) Sea Condition

• **Southwest Arabian Sea:**

Very rough to high sea condition is prevailing and likely to become **high to phenomenal** from morning of 21st to 23rd October. It is likely to improve gradually thereafter.

• **Westcentral Arabian Sea:**

Rough to very rough sea condition is prevailing and it is likely to become **very rough to phenomenal** from 22nd till 25th evening.

(iii) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

- ❖ **Southwest Arabian Sea** till 23rd October.
- ❖ **Westcentral Arabian Sea** till 25th evening.

Those out at sea are advised to return to coast.

(B) Low Pressure Area over southwest and adjoining southeast Bay of Bengal

The low pressure area over southwest and adjoining southeast Bay of Bengal persists over the same region at 2330 hours IST of 20th October, 2023. It is very likely to move northwestwards and intensify into a depression over westcentral Bay of Bengal around 22nd October. Thereafter, it is likely to move north-northeastwards towards Bangladesh and adjoining West Bengal coasts during subsequent 3 days.

Warnings:

(i) Rainfall Warning

Nagaland, Manipur, Mizoram & Tripura:

Light to moderate rainfall at most places with isolated heavy rainfall is likely on 24th and 25th October.

Coastal Districts of Odisha: Light to moderate rainfall at a few places is likely on 23rd and at many places on 24th & 25th October.

Coastal Districts of West Bengal:

Light to moderate rainfall at many places is likely on 24th and 25th October.

(ii) Wind warning (warning graphics enclosed):

• Southwest and adjoining southeast Bay of Bengal:

Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail near the system on 21st & 22nd and **50-60 kmph gusting to 70 kmph** on 23rd October. It is likely to decrease gradually thereafter.

• Westcentral Bay of Bengal:

Squally wind speed reaching **40-50 kmph gusting to 60 kmph** is likely to prevail on 21st October. It is likely to gradually increase becoming **45-55 kmph gusting to 65 kmph** on 22nd and **50-60 kmph gusting to 70 kmph** on 23rd & 24th October.

• North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:

Squally wind speed reaching **45-55 kmph gusting to 65 kmph** is likely to prevail from 24th to 26th October.

(iii) Sea Condition

• Southwest and adjoining southeast Bay of Bengal:

Moderate to rough sea condition is likely to prevail near the system on 21st and it is likely to become **rough to very rough** on 23rd October. It is likely to improve gradually thereafter.

• Westcentral Bay of Bengal:

Rough sea condition is likely to prevail on 21st October. It is likely to become **rough to very rough** from 23rd October.

• North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts:

Rough to very rough sea condition is likely from 24th to 26th October.

(iv) Fishermen Warning (Graphics attached):

Fishermen are advised not to venture into

❖ **Southwest and adjoining southeast Bay of Bengal** till 23rd October.

❖ **Westcentral Bay of Bengal** from 21st October onwards.

❖ **North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts** from 24th to 26th October.

Those out at sea are advised to return to coast.

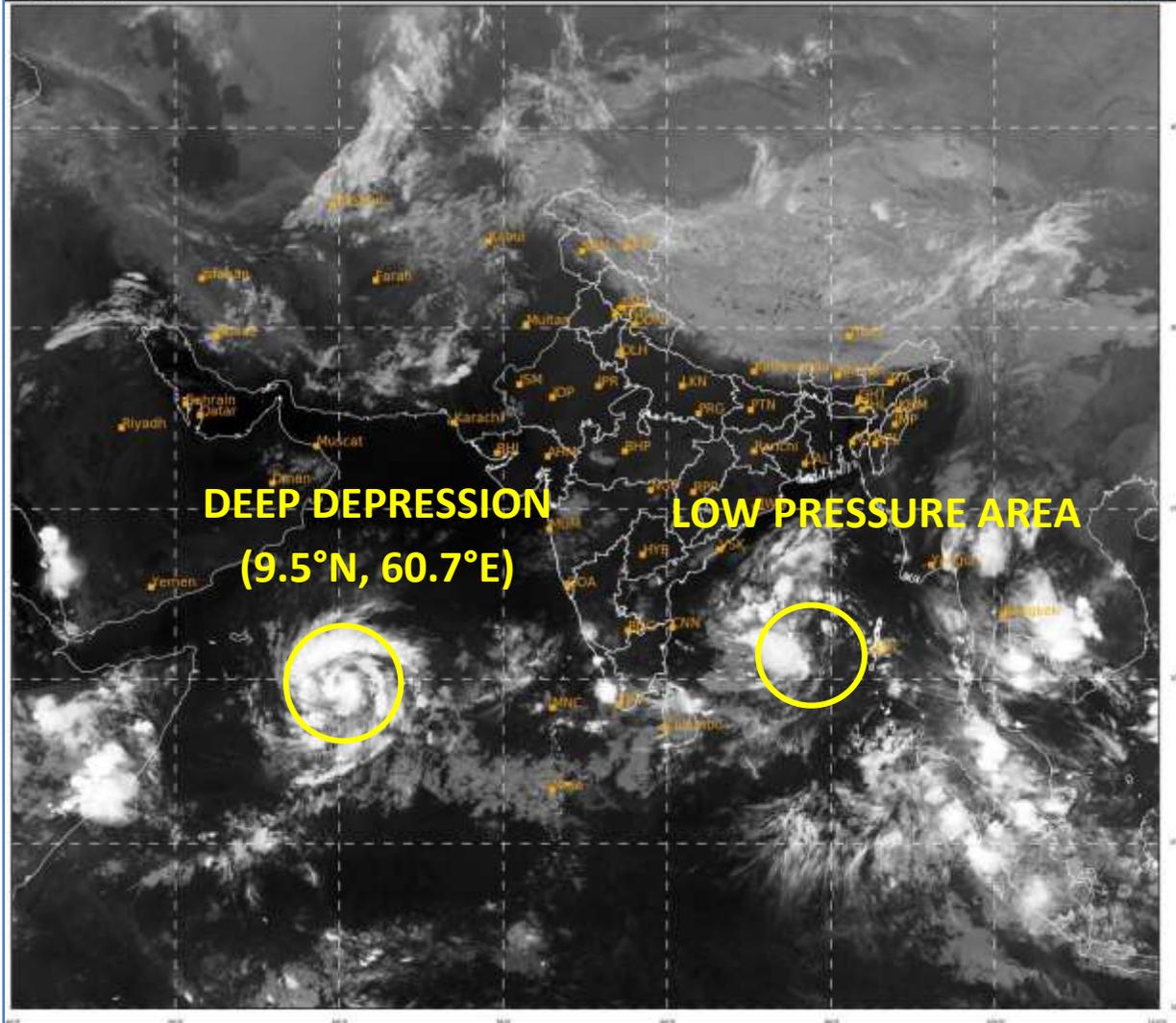
Both the systems are under continuous surveillance and the next bulletin will be issued at 0830 hours IST of today, the 21st October, 2023.

(Shobhit Katiyar)
Scientist D, Cyclone Warning, New Delhi

Copy to: ACWC Mumbai/ ACWC Chennai/ ACWC Kolkata/CWC Ahmedabad/CWC Bhubaneswar/CWC Vishakhapatnam/CWC Thiruvananthapuram/MC Goa

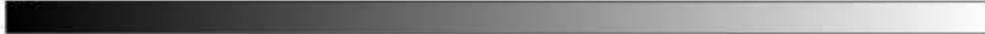
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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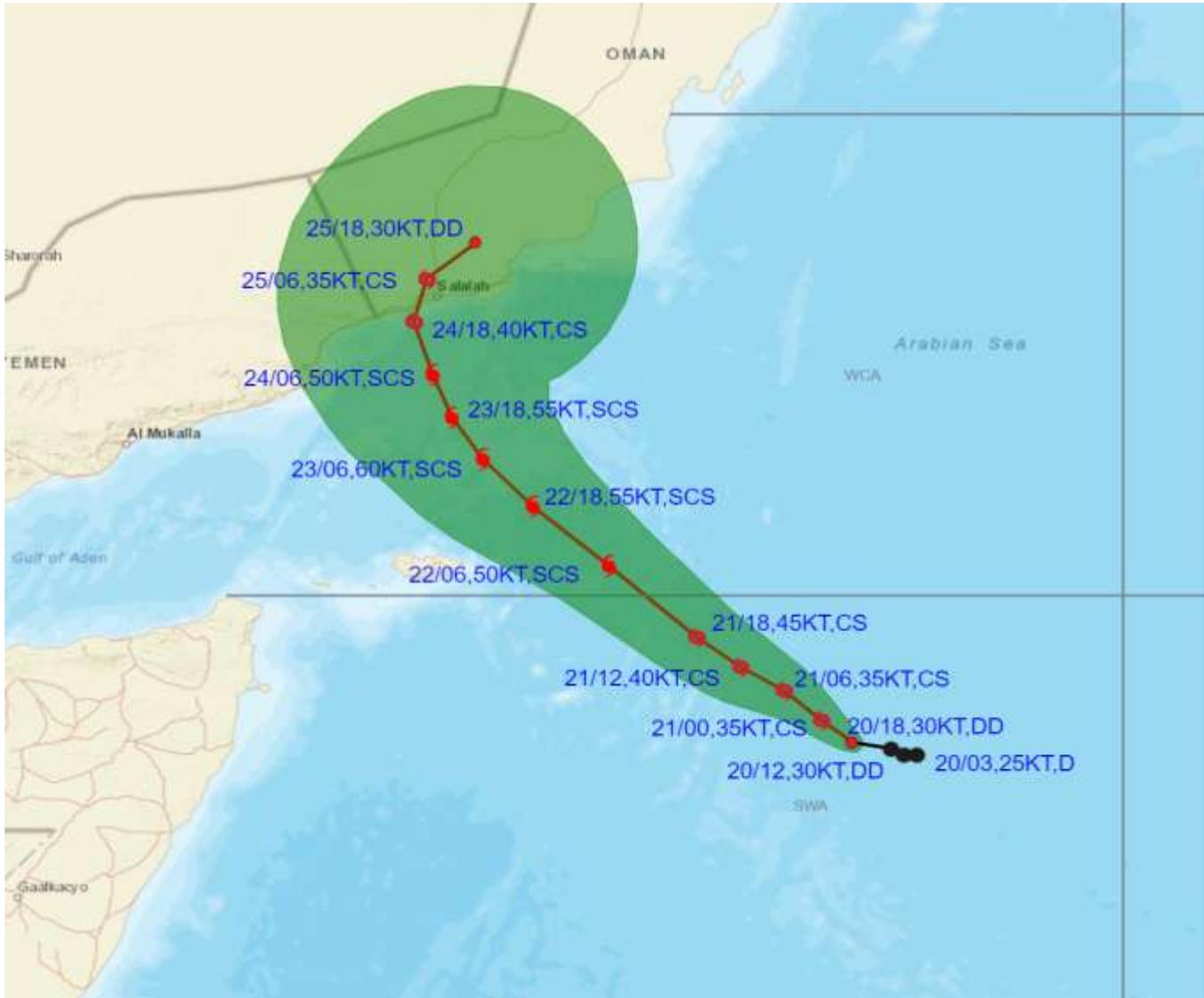
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IMD, DELHI



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTHWEST ARABIAN SEA BASED ON 1800 UTC (2330 IST) OF 20TH OCTOBER 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 (\geq 120 KT)

● LESS THAN 34 KT

⊙ 34-47 KT

⊙ \geq 48 KT

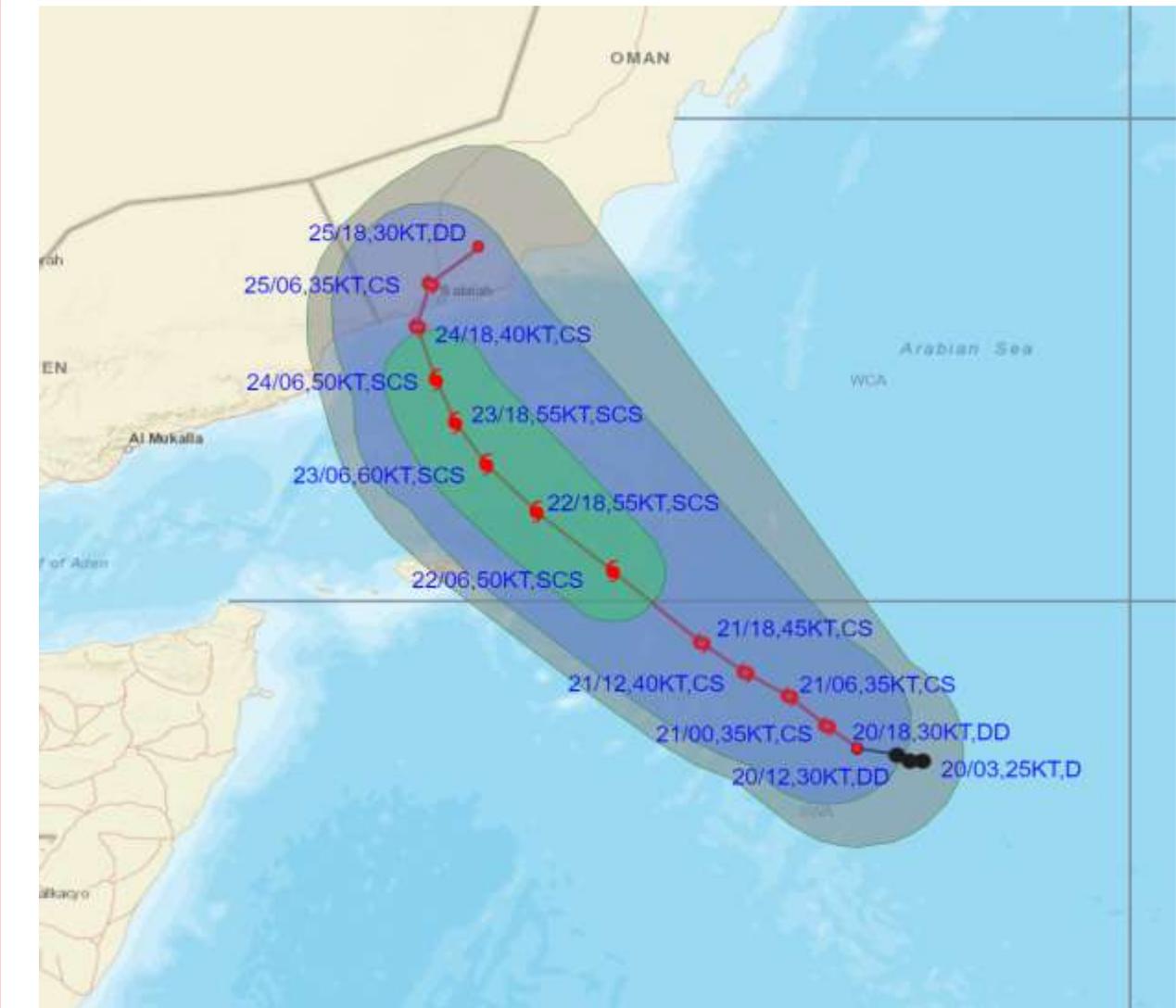
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST ARABIAN SEA BASED ON 1800 UTC (2330 IST) OF 20TH OCTOBER 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

AREA OF MAXIMUM SUSTAINED WIND SPEED:

■ 28-33 KT (52-61 KMPH)

■ 34-49 KT (62-91 KMPH)

■ 50-63 KT (92-117 KMPH)

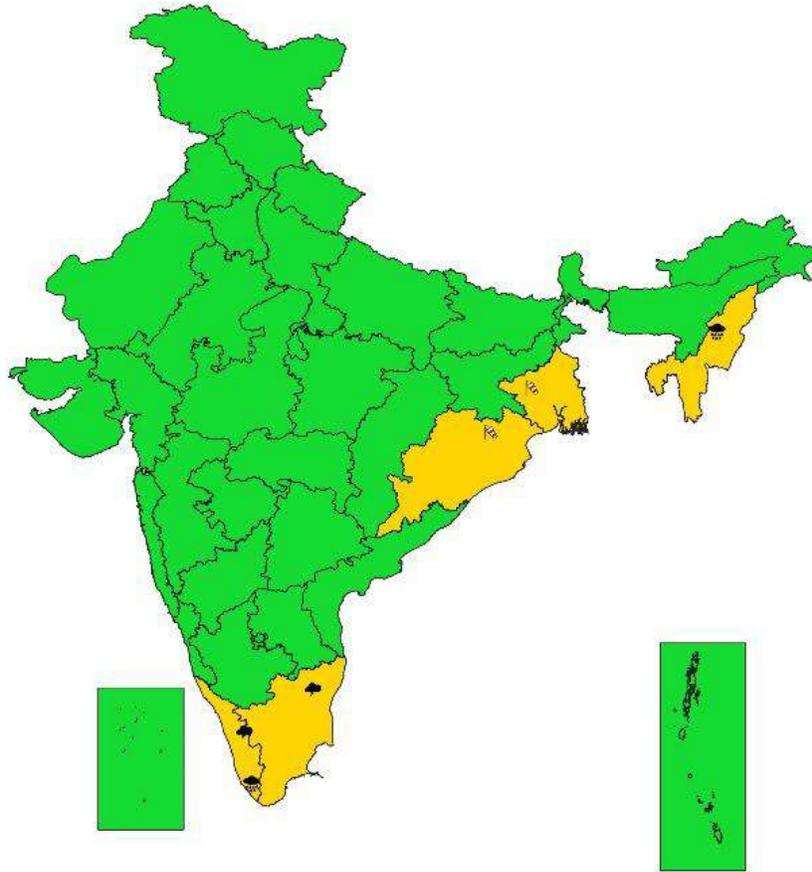
■ ≥ 64 KT (≥118 KMPH)

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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5 (24-10-2023)



Subdivision Warning

- ☁ Heavy Rain
- ❄ Heavy Snow
- ⚡ Thunderstorms & Lightning
- 🌨 Hailstorm

Subdivision color

- ☁ Dust Storm
- 🌪 Strong Surface Winds
- 🔥 Heat Wave
- ❄ Cold wave
- 🌫 Fog

Subdivision color

- 🟢 NO WARNING
- 🟡 WATCH (BE UPDATED)
- 🟠 ALERT (BE PREPARED)
- 🔴 WARNING (TAKE ACTION)

Fishermen warning graphics

Day 1: 20.10.2023/17:30AM to 21.10.2023/05:30AM



Day 2: 21.10.2023/05:30AM to 22.10.2023/05:30AM



Day 3: 22.10.2023/05:30AM to 23.10.2023/05:30AM



Day 4: 23.10.2023/05:30AM to 24.10.2023/05:30AM



Day 5: 24.10.2023/05:30AM to 25.10.2023/05:30AM



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 with speed 50-60 kmph gusting to 70 kmph

CS with Gale wind speed 60-90 kmph gusting to 110 kmph

SCS with Gale wind speed 90-110 kmph gusting to 120 kmph

Fishermen are advised not to venture into the marked areas.