



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NUMBER: 02 (AS/02/2021)

TIME OF ISSUE: 1145 HOURS IST

DATED: 30.09.2021

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

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Sub: Depression over northeast Arabian Sea off Gujarat coast.

The Depression over northeast Arabian Sea & adjoining Kutch moved nearly westwards with a speed of about 28 kmph during past 3 hours and lay centred at 0830 hrs IST of today, the 30th September, 2021, over northeast Arabian Sea off Gujarat coast, near latitude 22.7°N and longitude 68.6°E, about 60 km west-northwest of Devbhoomi Dwarka (Gujarat), 280 km east-southeast of Karachi (Pakistan) and 860 km east-southeast of Chabahar Port (Iran).

It is very likely to move west-northwestwards and intensify into a Deep Depression over northeast Arabian Sea off north Gujarat coast during next 12 hours. Then it is very likely to move further west-northwestwards and intensify into a Cyclonic Storm during the subsequent 24 hours. Thereafter it is likely to continue to move west-northwestwards towards Pakistan – Makran coasts, **moving away from the Indian coast.**

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.09.21/0830	22.7/68.6	45-55 gusting to 65	Depression
30.09.21/1730	23.0/67.4	50-60 gusting to 70	Deep Depression
01.10.21/0530	23.3/66.2	60-70 gusting to 80	Cyclonic Storm
01.10.21/1730	23.7/64.7	80-90 gusting to 100	Cyclonic Storm
02.10.21/0530	24.2/63.2	90-100 gusting to 110	Severe Cyclonic Storm
02.10.21/1730	24.7/61.9	90-100 gusting to 110	Severe Cyclonic Storm

Warnings:

(i) Rainfall

- 30th Sept.: Light to moderate rainfall at most places with heavy to very heavy falls at isolated places very likely over Saurashtra & Kutch.

(ii) Wind warning

- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to prevail over northeast Arabian Sea and along & off south Gujarat coast and 40 – 50 kmph gusting to 60 kmph over east-central Arabian Sea along & off north Maharashtra coast till today evening.
- It would gradually increase thereafter, becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph over northeast Arabian Sea and along & off Gujarat coast and 45 – 55 kmph gusting to 65 kmph over east-central Arabian Sea along & off north Maharashtra coast from the evening of today, the 30th September, till late night.
- It would further increase becoming Gale wind speed reaching 90-100 kmph gusting to 110 kmph over northeast & adjoining northwest Arabian Sea & along & off Pakistan – Makran coasts, 70-80 kmph gusting to 90 kmph along & off Gujarat coast and squally wind speed reaching 40 – 50 kmph gusting to 60 kmph over central Arabian Sea from the evening of 1st October and 90-100 kmph gusting to 110 kmph over north Arabian Sea and along & off Pakistan – Makran coasts, and 60-70 kmph gusting to 80 kmph along & off north Gujarat coast on 2nd October 2021.

(iii) Sea condition

- Sea condition will be rough to very rough over northeast Arabian Sea and adjoining east-central Arabian Sea & along & off Gujarat – north Maharashtra coasts till today, the 30th Sept. 2021 evening.
- It will gradually increase thereafter, becoming 'High' over Northeast Arabian Sea and along & off Gujarat coast and adjoining eastcentral Arabian Sea and along and off Pakistan coast and rough to very rough along & off north Maharashtra coast on 1st October 2021.
- Sea condition will be 'High to very High' over north Arabian Sea and along and off north Pakistan – Makran coasts and 'High' over adjoining central Arabian Sea, very rough to High along & off north Gujarat coast on 2nd October.

(iv) Fishermen Warning

- Fishermen are advised not to venture into north & adjoining central Arabian Sea and along & off Gujarat & north Maharashtra coasts from 30th September till 2nd October 2021.

(v) EXPECTED IMPACT & ACTION SUGGESTED

- As the system is expected to move away from the Indian coast, apart from the impact associated with the very heavy rain events over Saurashtra & Kutch during next 24 hours, no further impact is likely over the Indian Mainland.
- However, Fishermen as well as Mariners are advised to avoid the Sea areas specified above.
- Also the On-shore & Off-shore installations located off Gujarat coast are advised to stall operations on 30th September & 1st October.
- Tourism & recreational activities along & off Gujarat coast also may be suspended on 30th Sept. & 1st October 2021.

The next bulletin will be issued at 1130 hrs IST of 30th September, 2021.

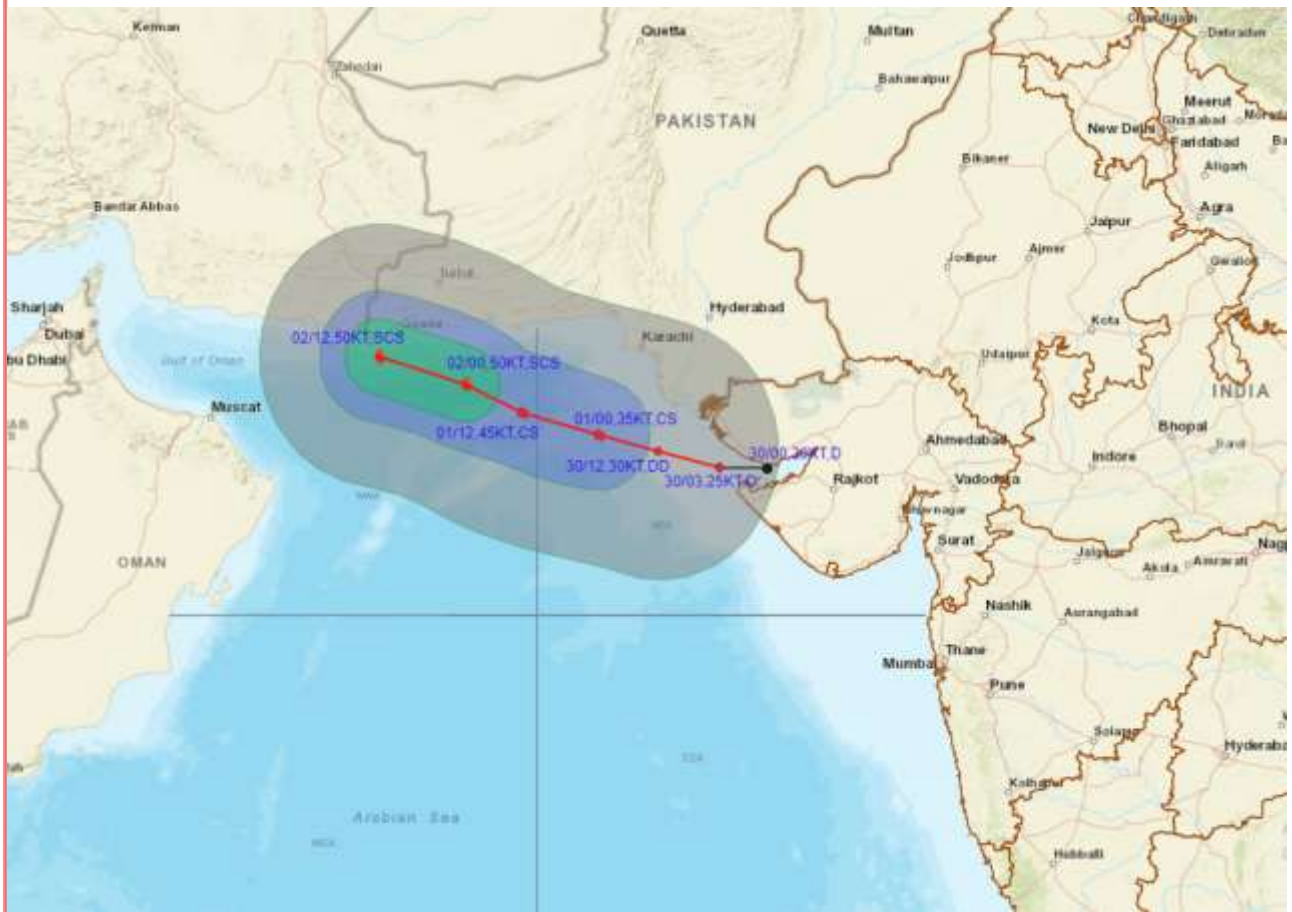
**(Sunitha Devi S.)
Scientist-F, RSMC, New Delhi**

Copy to: ACWC Mumbai/ CWC Ahmedabadr/MC Goa/CWC Thiruvananthapuram

LEGEND: Heavy Rainfall: 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total stations



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER NORTHEAST ARABIAN SEA OFF GUJARAT COAST BASED ON 0300 UTC OF 30TH SEPTEMBER, 2021



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)

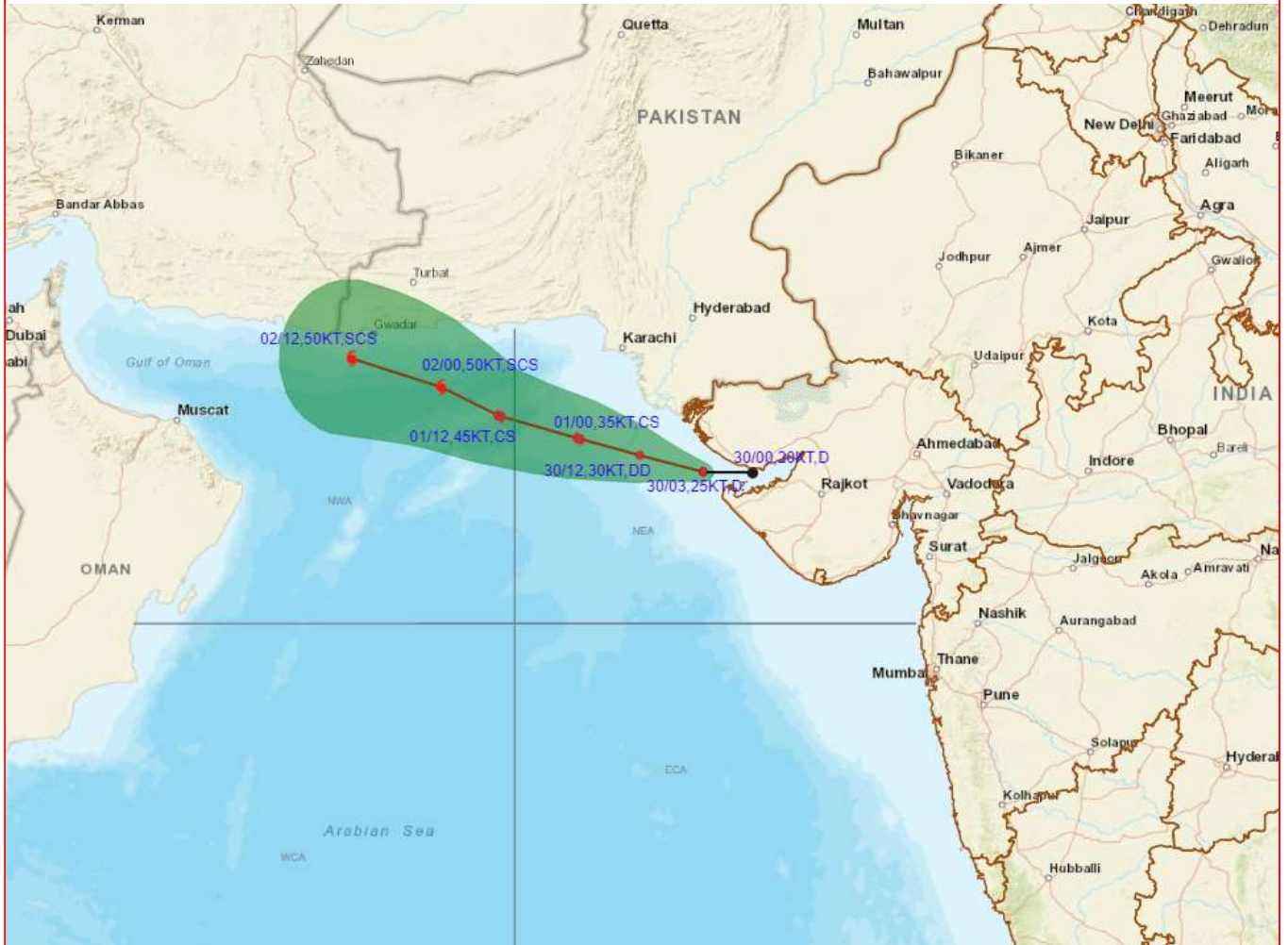
■ ≥ 64 KT (≥118 KMPH)

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

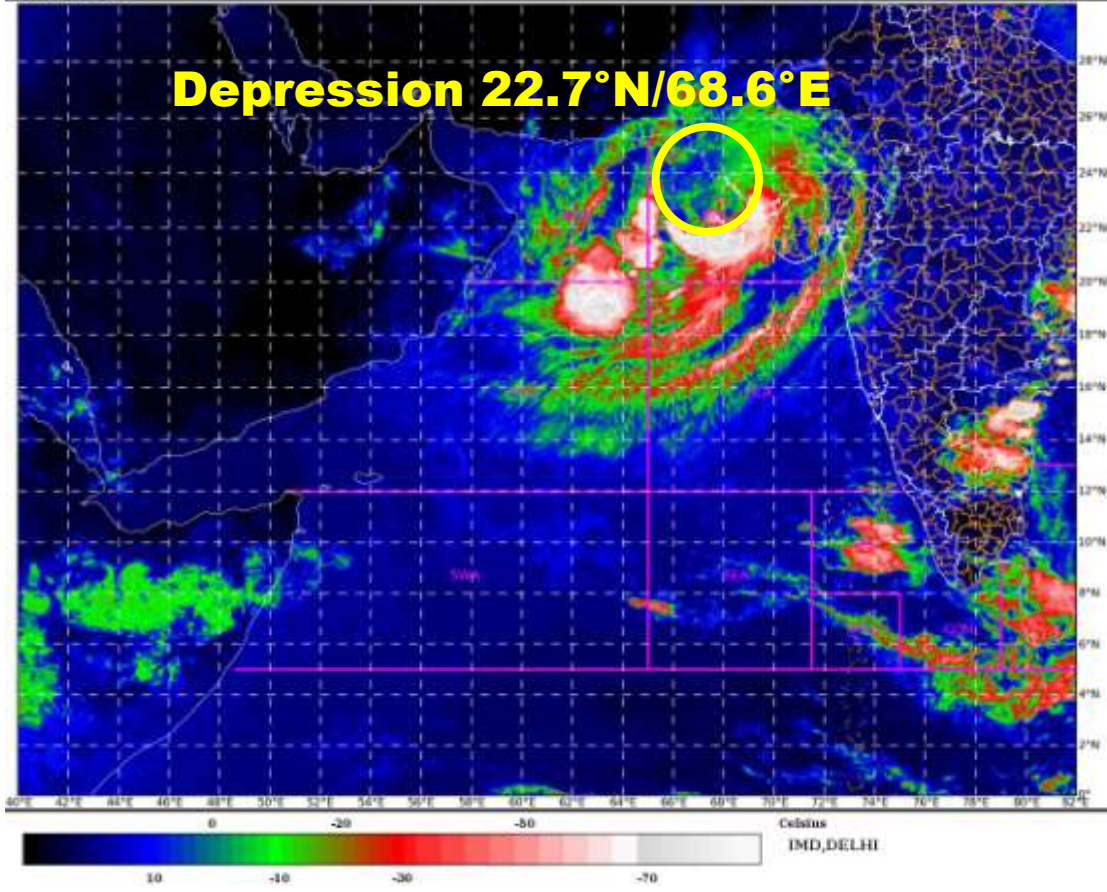


OBSERVED AND FORECAST TRACK ALONG WITH CONE OF UNCERTAINTY OF DEPRESSION OVER NORTHEAST ARABIAN SEA OFF GUJARAT COAST BASED ON 0300 UTC OF 30TH SEPTEMBER, 2021



DATE/TIME IN UTC
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 L: LOW PRESSURE AREA
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 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



Meteorological Sub-division level heavy rainfall warning

