



**India Meteorological Department  
Earth System Science Organisation  
(Ministry of Earth Sciences)**

**BULLETIN NO. : 19 (ARB/04/2019) and BULLETIN NO. : 64 (ARB/03/2019)**

**TIME OF ISSUE: 1650 HOURS IST**

**DATED: 01.11.2019**

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**Sub: (A) Severe Cyclonic Storm MAHA (Pronounced as M'maha) over eastcentral Arabian Sea**

**(B) Depression over westcentral Arabian Sea.**

**BULLETIN NO. : 19 (ARB/04/2019)**

**(A) Severe Cyclonic Storm MAHA (Pronounced as M'maha) over eastcentral Arabian Sea**

**The Severe cyclonic storm MAHA (Pronounced as M'maha) over eastcentral Arabian Sea moved west-northwestwards with a speed of 21 kmph during past 06 hours, and lay centered at 1430 hrs IST of today, the 01<sup>st</sup> November, 2019 over eastcentral Arabian Sea near latitude 15.4°N and longitude 70.0°E, about 610 km south of Veraval (Gujarat), 590 km north-northwest of Mangaluru (Karnataka) and 410 km west of Goa. It is very likely to move northwestwards during next 24 hours, west-northwestwards during 02<sup>nd</sup> to 04<sup>th</sup> November and recurve east-northeastwards towards south Gujarat coast thereafter. It is very likely to intensify into a very severe cyclonic storm over eastcentral Arabian Sea during next 24 hours.**

(Continued on next page)

**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.**

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
01.11.19/1430	15.4/70.0	100-110 gusting to 125	Severe Cyclonic Storm
01.11.19/1730	15.7/69.7	110-120 gusting to 135	Severe Cyclonic Storm
01.11.19/2330	16.1/69.3	110-120 gusting to 135	Severe Cyclonic Storm
02.11.19/0530	16.5/68.9	120-130 gusting to 145	Very Severe Cyclonic Storm
02.11.19/1130	17.0/68.6	120-130 gusting to 145	Very Severe Cyclonic Storm
02.11.19/2330	17.7/67.9	130-140 gusting to 155	Very Severe Cyclonic Storm
03.11.19/1130	18.0/67.1	140-150 gusting to 165	Very Severe Cyclonic Storm
03.11.19/2330	18.2/66.3	150-160 gusting to 175	Very Severe Cyclonic Storm
04.11.19/1130	18.5/65.6	160-170 gusting to 185	Very Severe Cyclonic Storm
04.11.19/2330	19.0/65.0	160-170 gusting to 185	Very Severe Cyclonic Storm
05.11.19/1130	19.4/65.1	150-160 gusting to 175	Very Severe Cyclonic Storm
05.11.19/2330	19.7/66.0	150-160 gusting to 175	Very Severe Cyclonic Storm
06.11.19/1130	20.0/67.4	140-150 gusting to 165	Very Severe Cyclonic Storm

### Warnings:

#### (i) Rainfall:

- Light to moderate rainfall at a few places very likely over Konkan & Goa, Madhya Maharashtra and south Gujarat during next 24 hours.

#### (ii) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph is prevailing over eastcentral Arabian Sea around the system centre.
- Gale wind speed is very likely to increase gradually over east-central Arabian Sea becoming 115-125 kmph gusting to 140 kmph by the evening of 1<sup>st</sup> November and 155-165 kmph gusting to 180 kmph over eastcentral, adjoining westcentral and northeast Arabian Sea by 05<sup>th</sup> November morning.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely along & off Goa-Maharashtra coasts during next 24 hours.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to commence over northeast Arabian Sea along & off South Gujarat coast and adjoining from 6<sup>th</sup> November morning.

#### (iii) Sea condition

- Sea condition will be very high over eastcentral Arabian Sea for the next 18 hours and will become phenomenal from 02<sup>nd</sup> November morning for subsequent 04 days.
- Sea condition will be high to phenomenal over westcentral and adjoining northeast Arabian Sea during 4<sup>th</sup> to 6<sup>th</sup> November.

#### (v) Fishermen Warning

- The fishermen are advised not to venture sea along & off Goa- Maharashtra coasts during next 24 hours and into eastcentral Arabian Sea till 6<sup>th</sup> November, 2019 and over westcentral and northeast Arabian Sea from 03<sup>rd</sup> November onwards.

### BULLETIN NO. : 64 (ARB/03/2019)

#### (B) Depression over westcentral Arabian Sea

The Depression over westcentral Arabian Sea moved southwestwards with a speed of 14 kmph during past 6 hours and lay centred at 1430 hrs IST of today, the 01<sup>st</sup> November, 2019 over westcentral Arabian Sea near latitude 15.8°N and longitude 58.4°E, about 1570 km west-southwest

**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.**

of Mumbai (Maharashtra), 490 km east-northeast of Salalah (Oman) and 540 km south-southeast of Masirah (Oman). It is very likely to move southwestwards across westcentral Arabian Sea and weaken into a Well Marked Low Pressure Area during next 06 hours.

**Warnings:**

**(i) Wind warning**

- Gale wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing around the system centre over westcentral Arabian Sea. It is very likely to reduce becoming 40-50 kmph gusting to 60 kmph during next 6 hours and decrease thereafter.

**(ii) Sea condition**

- Sea condition is rough to very rough over westcentral Arabian Sea around the system centre. It will become rough during next 6 hours and improve gradually thereafter.

**(iii) Fishermen Warning**

- The fishermen are advised not to venture into westcentral Arabian Sea during next 12 hours.

*The next bulletin will be issued at 2030 hrs IST of 01<sup>st</sup> November, 2019.*

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

**Copy to: ACWC Chennai/ ACWC Mumbai/ MC Goa/ MC Bengaluru/ CWC Ahmedabad/ Thiruvananthapuram.**

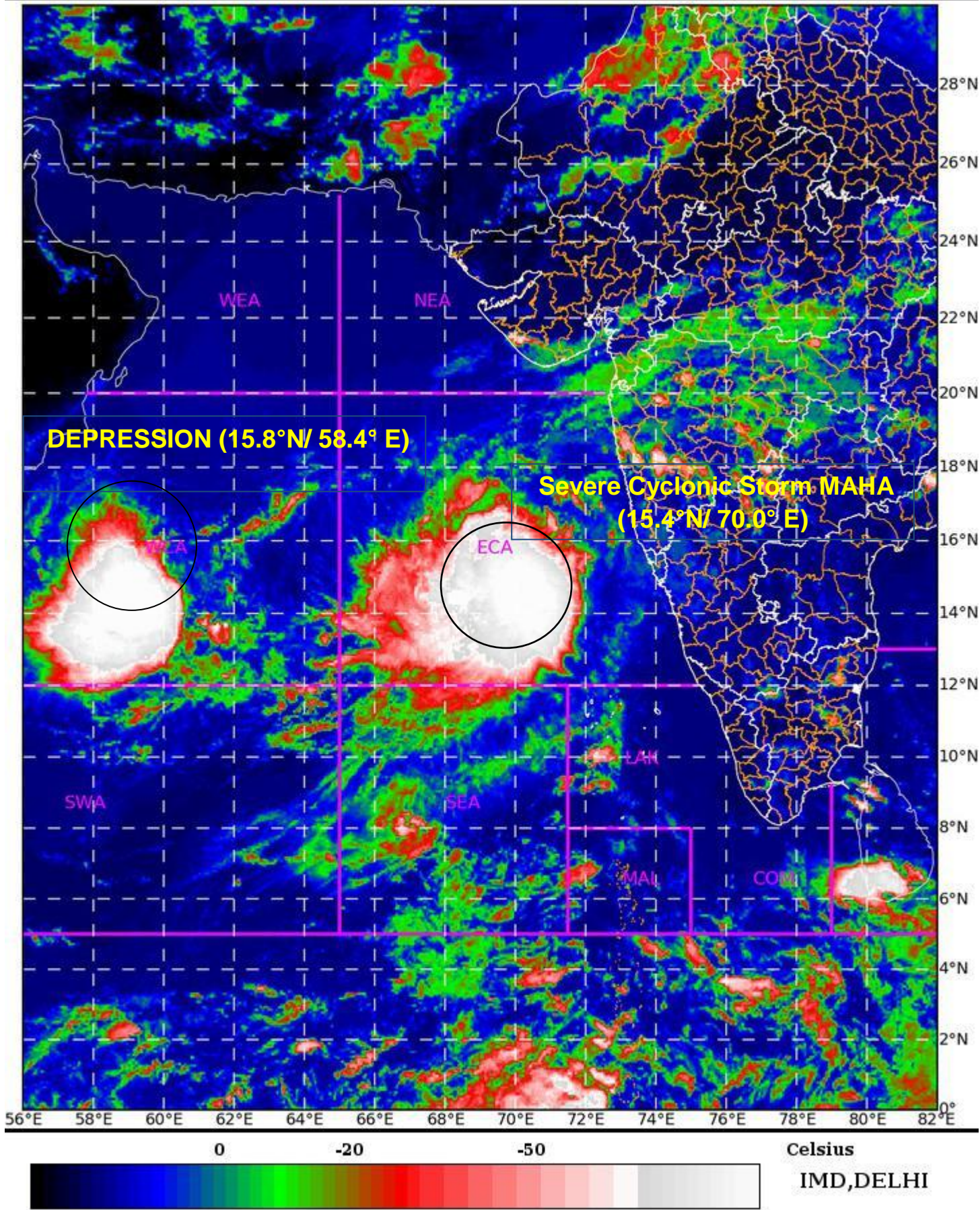
SAT : INSAT-3D IMG

01-11-2019/(1030 to 1056) GMT

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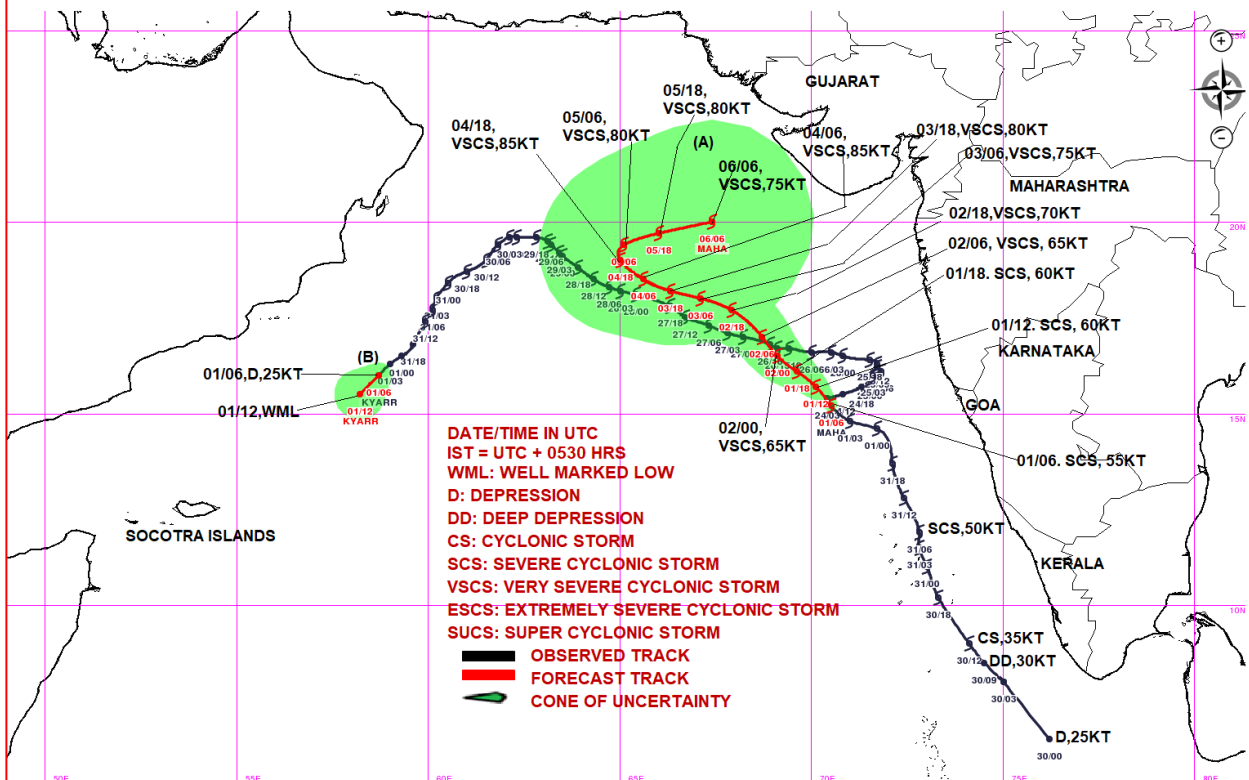
01-11-2019/(1600 to 1626) IST

ARABIAN\_SEA

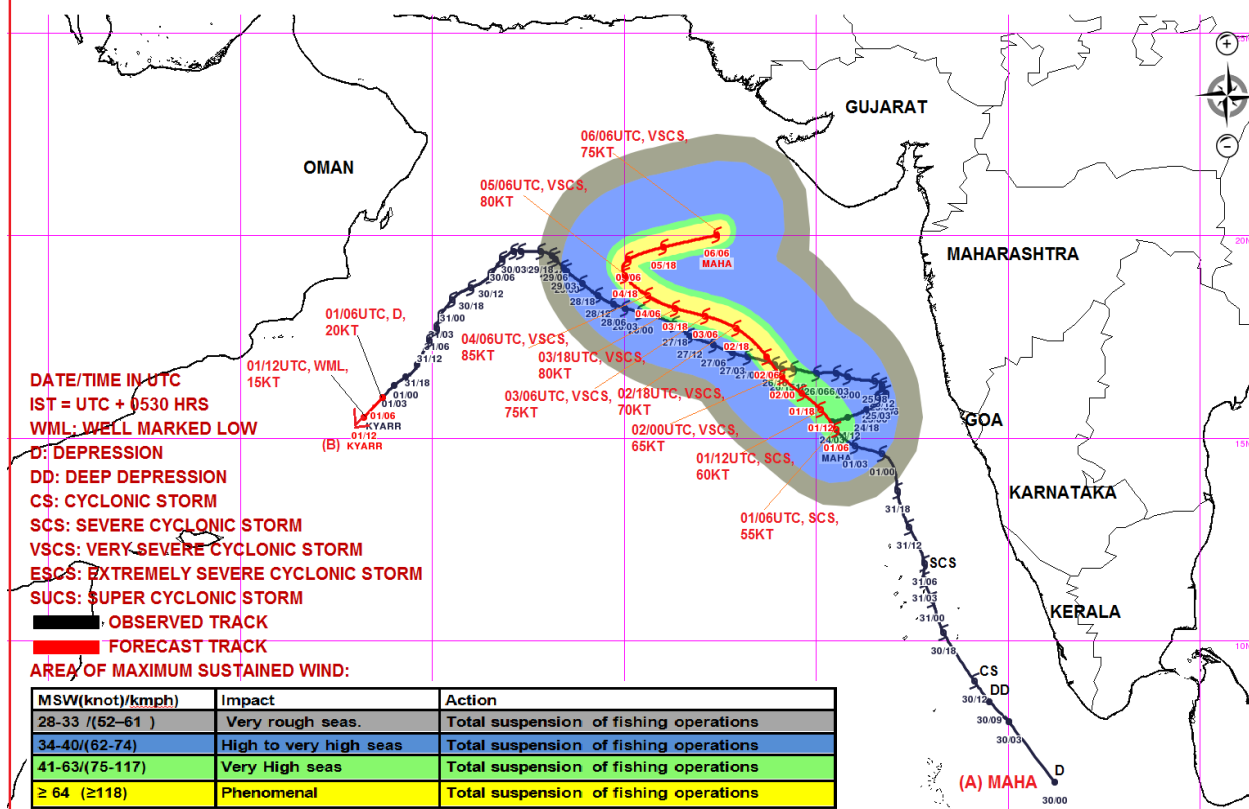


Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

**OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH (A) SEVERE CYCLONIC STORM "MAHA" OVER EASTCENTRAL ARABIAN SEA AND (B) DEPRESSION OVER WESTCENTRAL ARABIAN SEA BASED ON 0600 UTC OF 01<sup>ST</sup> NOVEMBER 2019**



**OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH (A) SEVERE CYCLONIC STORM "MAHA" OVER EASTCENTRAL ARABIAN SEA AND (B) DEPRESSION OVER WESTCENTRAL ARABIAN SEA BASED ON 0600 UTC OF 1<sup>ST</sup> NOVEMBER 2019**



**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.**