



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

**BULLETIN NO. : 20 (ARB/04/2019) and BULLETIN NO. : 65 (ARB/03/2019)**

**TIME OF ISSUE: 2000 HOURS IST**

**DATED: 01.11.2019**

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

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23092398/23093750)**

**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 (23421101, 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)**

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

**ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 0489-6263180)**

**ADMINISTRATOR, UNION TERRITORY OF DAMAN & DIU (0260-2230775)**

**ADMINISTRATOR, UNION TERRITORY OF DADRA NAGAR HAVELI (0260-2230775)**

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

**CHIEF SECRETARY, TAMILNADU (FAX NO.044-25672304)**

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

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

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

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

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

**BULLETIN NO. : 20 (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 further west-northwestwards with a speed of 19 kmph during past 06 hours, and lay centered at 1730 hrs IST of today, the 01<sup>st</sup> November, 2019 over eastcentral Arabian Sea near latitude 15.6°N and longitude 69.5°E, about 590 km south-southwest of Veraval (Gujarat) and 460 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.

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
01.11.19/1730	15.6/69.5	90-100 gusting to 115	Severe Cyclonic Storm
01.11.19/2330	16.1/69.0	95-105 gusting to 120	Severe Cyclonic Storm
02.11.19/0530	16.6/68.6	100-110 gusting to 125	Severe Cyclonic Storm
02.11.19/1130	17.0/68.2	110-120 gusting to 135	Severe Cyclonic Storm
02.11.19/1730	17.4/67.9	120-130 gusting to 145	Very Severe Cyclonic Storm
03.11.19/0530	17.8/67.5	130-140 gusting to 155	Very Severe Cyclonic Storm
03.11.19/1730	18.1/66.7	140-150 gusting to 165	Very Severe Cyclonic Storm
04.11.19/0530	18.3/66.0	145-155 gusting to 170	Very Severe Cyclonic Storm
04.11.19/1730	18.7/65.2	150-160 gusting to 175	Very Severe Cyclonic Storm
05.11.19/0530	19.1/65.0	150-160 gusting to 175	Very Severe Cyclonic Storm
05.11.19/1730	19.6/65.5	140-150 gusting to 165	Very Severe Cyclonic Storm
06.11.19/0530	19.8/66.7	130-140 gusting to 155	Very Severe Cyclonic Storm
06.11.19/1730	20.2/67.9	120-130 gusting to 145	Very Severe Cyclonic Storm

**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.**

## 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.
- Light to moderate rainfall at many places with isolated heavy falls over Saurashtra and Gujarat region on 6<sup>th</sup> & 7<sup>th</sup> November, 2019.

### (ii) Wind warning

- Gale wind speed reaching 90-100 kmph gusting to 115 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 120-130 kmph gusting to 145 kmph by the evening of 2<sup>nd</sup> November and 150-160 kmph gusting to 175 kmph over eastcentral & adjoining westcentral and northeast Arabian Sea by 04<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 from 6<sup>th</sup> November morning.

### (iii) Sea condition

- Sea condition will be very high over eastcentral Arabian Sea for the next 24 hours and will become phenomenal from 02<sup>nd</sup> November evening 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 into the 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. : 65 (ARB/03/2019)

### (B) Depression over westcentral Arabian Sea

The Depression over westcentral Arabian Sea moved west-southwestwards with a speed of 24 kmph during past 06 hours and lay centred at 1730 hrs IST of today, the 01<sup>st</sup> November, 2019 over westcentral Arabian Sea near latitude 15.4°N and longitude 57.5°E, about 1670 km west-southwest of Mumbai (Maharashtra), 420 km east-southeast of Salalah (Oman) and 600 km south-southeast of Masirah (Oman). It is very likely to move southwestwards across westcentral Arabian Sea, maintaining the intensity of a depression during next 12 hours and weaken into a Well Marked Low Pressure Area thereafter.

## 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 12 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 12 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 2330 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.**

**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.**

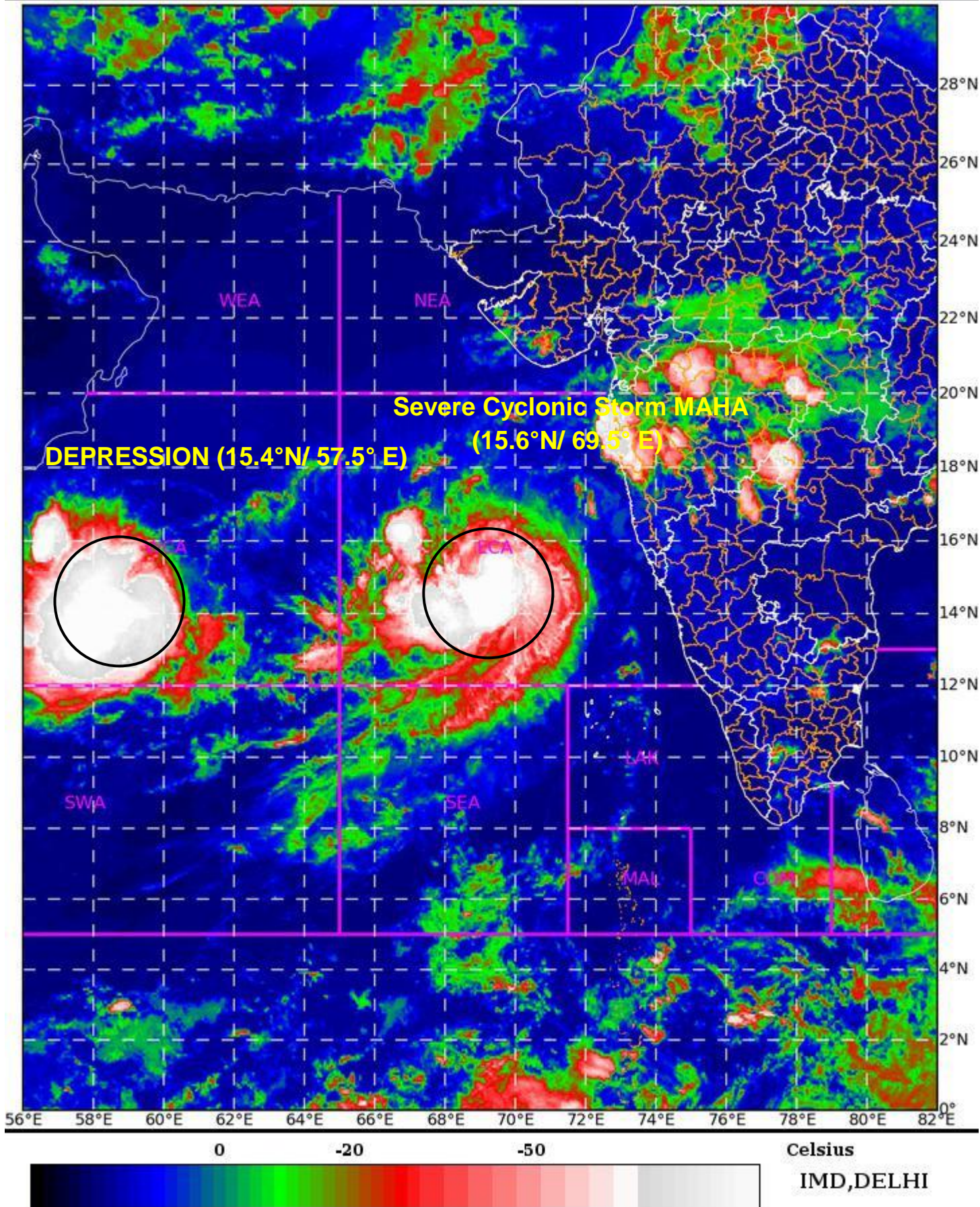
SAT : INSAT-3D IMG

01-11-2019/(1330 to 1356) GMT

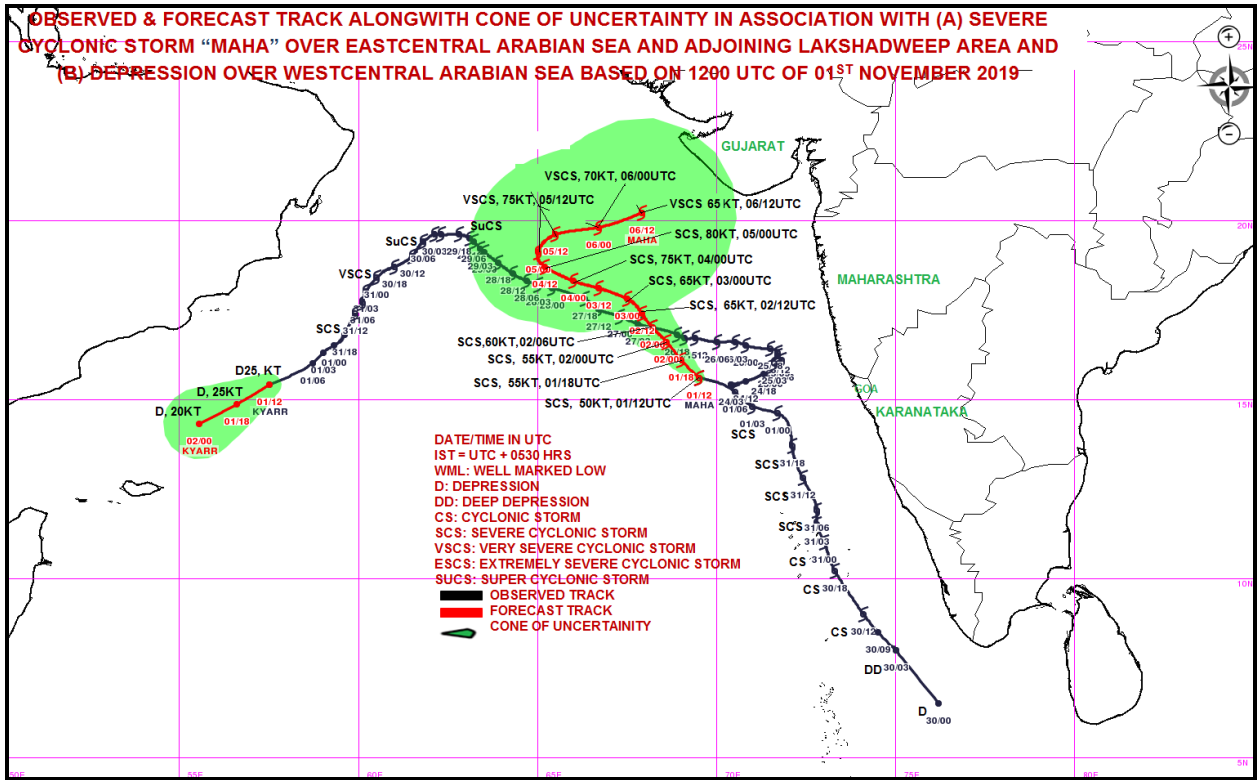
IMG\_TIR1\_TEMP 10.8 um

01-11-2019/(1900 to 1926) 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.



ZXXX39 DEMS 011515

Severe cyclonic storm MAHA over eastcentral Arabian Sea centered near latitude 15.6°N and longitude 69.5°E, about 460 km west of Goa. It will move northwestwards during next 24 hours, west-northwestwards during 02nd to 04th November and recurve east-northeastwards towards south Gujarat coast thereafter. It will intensify into a very severe cyclonic storm over eastcentral Arabian Sea during next 24 hours.

**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.**