



Government of India
Ministry of Earth Sciences
Earth System Science Organisation



Earth System Science Organisation
India Meteorological Department

PRESS RELEASE- 13

Time of issue: 1330 hours IST

Dated: 05-11-2019

Sub:(A) Extremely Severe Cyclonic Storm “MAHA” weakened into a very severe cyclonic storm: CYCLONE ALERT FOR GUJARAT COAST: **YELLOW MESSAGE and (B) Depression over eastcentral & adjoining southeast Bay of Bengal and North Andaman Sea.**

(A) Extremely Severe Cyclonic Storm “MAHA” weakened into a very severe cyclonic storm over westcentral and adjoining eastcentral Arabian Sea

Yesterday’s extremely severe cyclonic storm over eastcentral & adjoining westcentral Arabian Sea moved north-northwestwards till early hours (0230 hrs IST) of 5th November. Thereafter, it moved northwards, weakened into a very severe cyclonic storm and lay centered at 0830 hrs IST of today, the 05th November, 2019 over westcentral and adjoining eastcentral Arabian Sea near latitude 19.7°N and longitude 63.6°E, about 660 km west-southwest of Porbandar (Gujarat), 720 km west-southwest of Veraval (Gujarat) and 770 km west-southwest of Diu.

It is very likely to move rapidly east-northeastwards with gradual weakening. It is very likely to cross Gujarat coast between Diu and Porbandar as a Cyclonic Storm with a maximum sustained wind speed of 70-80 Kmph gusting to 90 Kmph by early hours of 7th November, 2019.

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
05.11.19/0830	19.7/63.6	155-165 gusting to 180	Very Severe Cyclonic Storm
05.11.19/1130	19.9/64.0	145-155 gusting to 170	Very Severe Cyclonic Storm
05.11.19/1730	20.0/64.7	125-135 gusting to 150	Very Severe Cyclonic Storm
05.11.19/2330	20.1/65.6	105-115 gusting to 125	Severe Cyclonic Storm
06.11.19/0530	20.2/66.5	95-105 gusting to 115	Severe Cyclonic Storm
06.11.19/1730	20.5/68.5	80-90 gusting to 100	Cyclonic Storm
07.11.19/0530	21.0/70.6	60-70 gusting to 80	Cyclonic Storm
07.11.19/1730	21.6/72.6	40-50 gusting to 60	Depression
08.11.19/0530	22.0/74.1	25-35 gusting to 45	Well Marked Low Pressure Area

Warnings:

(i) Rainfall:

- **Gujarat:** Light to moderate rainfall at most places with heavy to very heavy falls at a few places very likely over Saurashtra and Gujarat region (**Junagarh, Gir Somnath, Amreli, Bhavnagar, Surat, Bharuch, Anand, Ahmedabad, Botad, Porbandar, Rajkot**) on 6th & isolated heavy to very heavy falls over **Bhavnagar, Surat, Bharuch, Anand, Ahmedabad, Botad, Vadodara** on 7th November, 2019.
- **Maharashtra:** Light to moderate rainfall at most places with isolated heavy falls very likely over Madhya Maharashtra and north Konkan (Palghar & Thane districts) on 6th & northern most districts of Madhya Maharashtra on 7th November, 2019.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,
India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail: cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

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.

(ii) Wind warning

- **Gujarat , Daman, Diu, Dadra & Nagar Haveli:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to commence over northeast Arabian Sea along & off Gujarat coast from 6th November morning. It is very likely to increase gradually becoming 70-80 Kmph gusting to 90 Kmph along & off **Junagarh, Gir Somnath, Diu, Amreli** districts and 60-70 kmph gusting to 80 kmph over **Bhavnagar, Bharuch, Anand, Ahmedabad, Botad, Porbandar, Rajkot** districts, 50-60 kmph gusting to 70 kmph over Surat, Navsari, Valsad, Daman and Dadra & Nagar Haveli from 6th November evening for next 12 hours. It will decrease thereafter.
- **Maharashtra:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely along & off Maharashtra coast from 6th morning, it is very likely to increase becoming 50-60 Kmph gusting to 70 Kmph from 6th November evening along & off Palghar & Thane districts for subsequent 12 hours.
- **Arabian Sea:** Gale wind speed reaching 155-165 kmph gusting to 180 kmph is prevailing over westcentral & adjoining eastcentral Arabian Sea around the system centre. It is very likely to decrease gradually and become 60-70 kmph gusting 80 kmph on 7th November morning and further decrease thereafter.

(iii) Sea condition

- **Gujarat Coast:** Sea condition will be rough to very rough along & off Gujarat coast from 6th November morning and becoming high from 6th evening.
- **Maharashtra Coast:** Sea condition will be rough to very rough along & off north Maharashtra coast on 06th November.
- **Arabian Sea:** Sea condition will be phenomenal over westcentral and adjoining eastcentral and northwest Arabian Sea till 05th November and will be very high on 6th November. Sea condition will be high over westcentral Arabian Sea from 5th November evening and improve thereafter. It will be very high to high over north Arabian Sea during 5th and 6th November.

(iv) Storm surge

- Storm surge of about 0.5 – 1.0 meter above Astronomical tide is likely to inundate low lying areas of **Bhavnagar, Junagarh, Gir Somnath, Amreli, Surat, Bharuch, Anand, Ahmedabad, Porbandar** Districts around the time of landfall.

(v) Fishermen Warning

- Total suspension of fishing operations till 6th November.
- The fishermen are advised not to venture into westcentral Arabian Sea till 5th November and over eastcentral & adjoining northeast Arabian Sea till 06th November.
- The fishermen are advised not to venture into Sea along & off Gujarat coast and adjoining north Maharashtra coast from 5th to 7th November evening.
- The fishermen out at Sea are advised to return to the coast.

(vi) Damage Expected over coastal districts of Gujarat (Junagarh, Gir Somnath, Amreli, Bhavnagar, Surat, Bharuch, Anand, Ahmedabad, Botad, Porbandar, Rajkot) and Daman, Diu, Dadra & Nagar Haveli:

- Damage to thatched houses/ huts. Thatched roof tops may blow off. Unattached metal sheets may fly.
- Damage to embankments/ salt pans.
- Partial damage to power and communication lines.
- Major damage to Kutcha and some damage to Pucca roads. Flooding of escape routes.
- Breaking of tree branches, uprooting of trees. Damage to banana and papaya trees. Dead limbs blown from trees.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,
India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail: cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

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.

- Major damage to coastal crops.

(vii) Action Suggested for Gujarat coast (Junagadh, Gir Somnath, Amreli, Bhavnagar, Surat, Bharuch, Anand, Ahmedabad, Botad, Porbandar, Rajkot) and Daman, Diu, Dadra & Nagar Haveli:

- Total suspension of fishing operations till 6th November.
- Coastal hutment dwellers to be moved to safer places. People in affected areas to remain indoors.
- Movement in motor boats unsafe.

(B) Depression over eastcentral & adjoining southeast Bay of Bengal and North Andaman Sea.

The Depression over eastcentral & adjoining southeast Bay of Bengal and North Andaman Sea moved westwards and lay centred at 0830 hrs IST of today, the 5th November 2019, over eastcentral & adjoining southeast Bay of Bengal and North Andaman Sea, near Lat.13.1°N and Long. 91.0°E, about 200 km west-northwest of Maya Bandar (Andaman Islands), about 920 km south-southeast of Paradip (Odisha), 1000 km south-southeast of Sagar islands (West Bengal) and 990 km south-southwest of Khepupara (Bangla Desh) . It is very likely to intensify into a Deep Depression during next 12 hours and into a Cyclonic Storm during the subsequent 24 hours. It is very likely to move west-northwestwards initially and then north-northwestwards, towards West Bengal & adjoining north Odisha and Bangladesh coasts.

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
05.11.19/0830	13.1/91.0	40-50 gusting to 60	Depression
05.11.19/1730	13.2/90.7	50-60 gusting to 70	Deep Depression
06.11.19/0530	13.4/90.5	60-70 gusting to 80	Cyclonic Storm
06.11.19/1730	13.6/90.4	70-80 gusting to 90	Cyclonic Storm
07.11.19/0530	14.3/90.2	80-90 gusting to 100	Cyclonic Storm
07.11.19/1730	15.4/90.0	90-100 gusting to 110	Severe Cyclonic Storm
08.11.19/0530	16.1/89.3	105-115 gusting to 125	Severe Cyclonic Storm
08.11.19/1730	16.8/88.6	120-130 gusting to 145	Very Severe Cyclonic Storm
09.11.19/0530	17.4/88.1	120-130 gusting to 145	Very Severe Cyclonic Storm
09.11.19/1730	18.1/87.9	120-130 gusting to 145	Very Severe Cyclonic Storm

Warnings:

(i) Rainfall:

- **Andaman and Nicobar Islands:** Light to moderate rainfall at most places with heavy falls at isolated places very likely over **Andaman and Nicobar Islands** during 5th and 6th Nov, 2019.
- **Odisha:** Light to moderate rainfall at most places very likely to commence over **coastal districts of Odisha** from 9th Nov. 2019.
- **West Bengal:** Light to moderate rainfall at most places with heavy falls at isolated places very likely to commence over **coastal districts of West Bengal** from 9th Nov. 2019.

(ii) Wind warning

- **Andaman and Nicobar Islands:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph is prevailing over Andaman Islands, north Andaman Sea and Adjoining areas southeast & eastcentral Bay of Bengal. It is likely to increase becoming 60–70 kmph gusting to 80 kmph by 6th November morning and decrease gradually thereafter.
- **Bay of Bengal:** Squally wind speed reaching 50-60 kmph gusting to 70 kmph very likely to over east central Bay of Bengal around the system centre for next 12 hours and will become

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail: cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

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.

gale wind speed reaching 80-90 kmph gusting to 100 kmph by 7th November morning. It will gradually increase further over central parts of Bay of Bengal, becoming 120-130 kmph gusting to 145 kmph by 8th November evening.

- **Odisha & west Bengal coasts:** Squally wind speed reaching 40 – 50 kmph gusting to 60 kmph likely to commence over northwest Bay of Bengal off Odisha – West Bengal coasts from 8th November evening and gradually increase thereafter.

(iii) Sea condition

- Sea condition will be rough to very rough over north Andaman Sea and Adjoining areas southeast and eastcentral Bay of Bengal during next 36-hours.
- Sea condition will be very rough to High over eastcentral Bay of Bengal till 7th November morning and become very high to phenomenal during 7th November evening to 8th November evening.
- Sea condition will be very High to Phenomenal over eastcentral & adjoining westcentral Bay of Bengal on 8th November and over westcentral and adjoining northwest Bay of Bengal and along and off Odisha – west Bengal coasts from 8th November evening. Then rough to very rough over north Bay of Bengal during 8th to 9th November morning and very High to Phenomenal on 10th November morning.

(v) Fishermen Warning

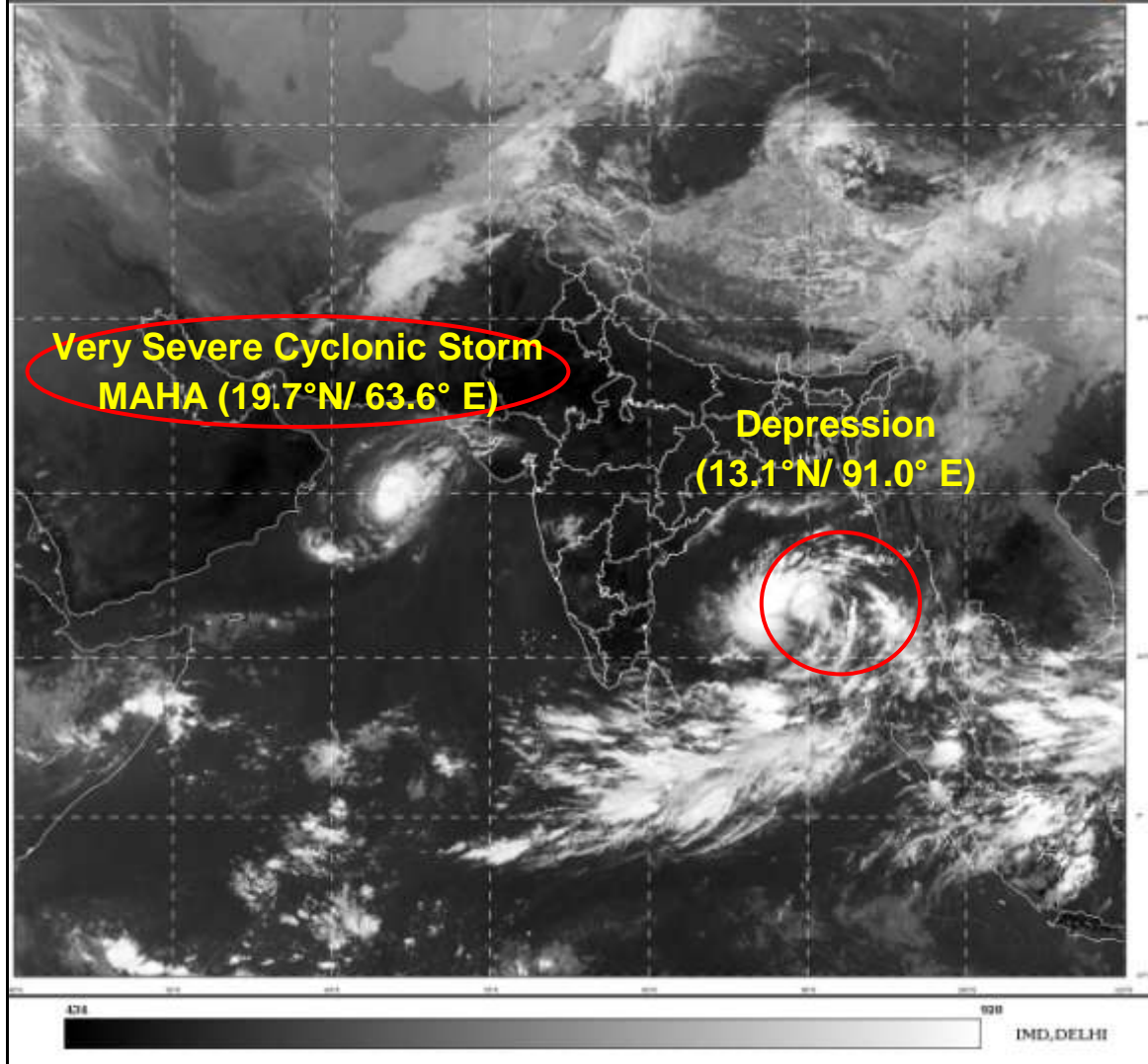
- Total suspension of fishing operations over north Andaman Sea during next 36 hours and over Adjoining areas southeast and eastcentral Bay of Bengal till 6th November.
- The fishermen are advised not to venture into eastcentral Bay of Bengal during 6th – 7th November, over east central and adjoining westcentral Bay of Bengal during 7th - 9th November and over north Bay of Bengal along & off Odisha – west Bengal coasts from 8th November onwards.
- The fishermen along & off Odisha and West Bengal coasts are advised not to venture into sea from 8th onwards.
- The fishermen out at sea are advised to return to the coast from these areas.

Both the systems are under continuous surveillance and concerned state governments are being informed regularly.

Kindly visit www.imd.gov.in, www.rsmcnewdelhi.imd.gov.in and www.mausam.imd.gov.in for updates on the system.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

05-11-2019/(0500 to 0527) GMT
05-11-2019/(1030 to 1057) IST



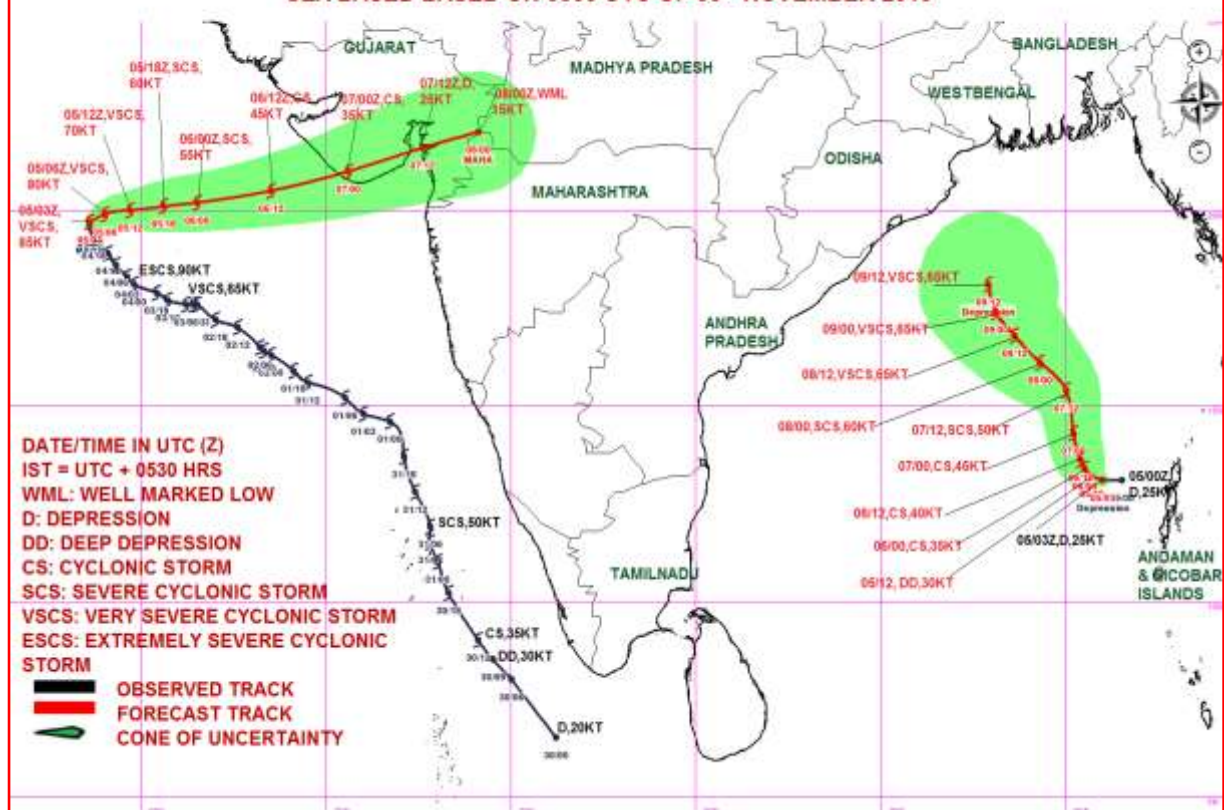
Contact: Cyclone Warning Division, Office of the Director General of Meteorology,
India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail: cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in

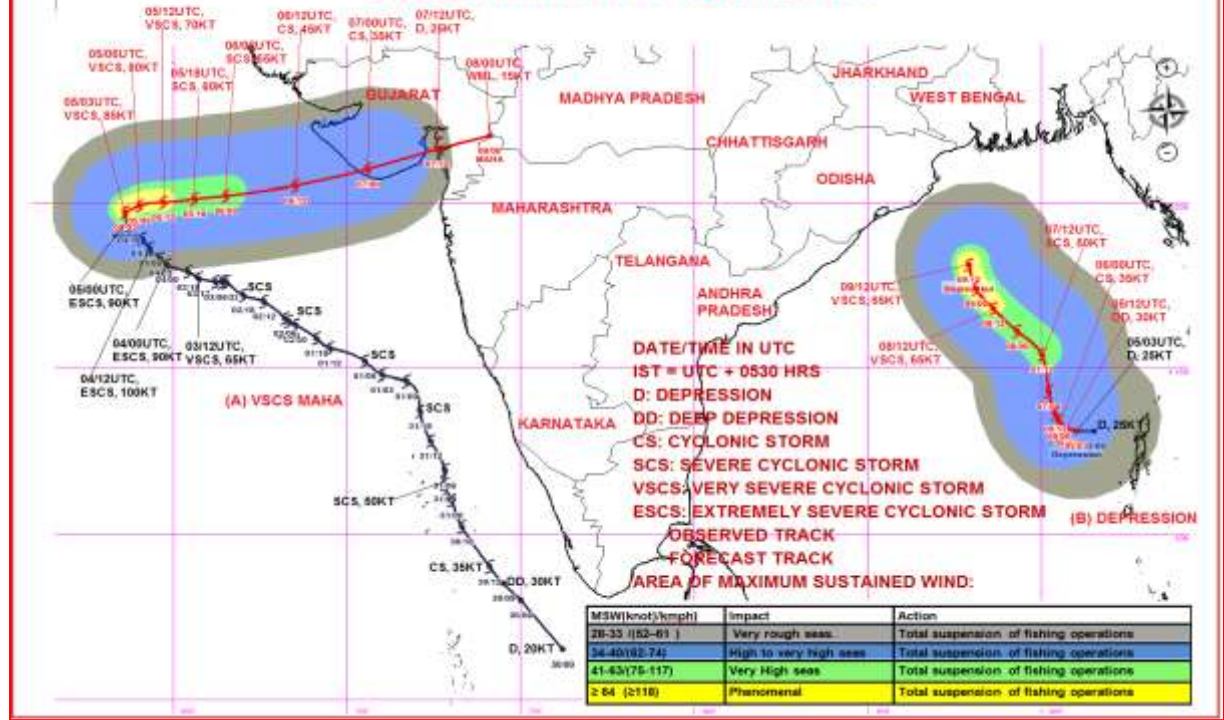
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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

OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH (A) VERY SEVERE CYCLONIC STORM "MAHA" OVER WESTCENTRAL & ADJOINING EASTCENTRAL ARABIAN SEA AND (B) DEPRESSION OVER EASTCENTRAL & ADJOINING SOUTHEAST BAY OF BENGAL AND ANDAMAN SEA BASED ON 0300 UTC OF 05th NOVEMBER 2019



OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH (A) VERY SEVERE CYCLONIC STORM "MAHA" OVER WESTCENTRAL & ADJOINING EASTCENTRAL ARABIAN SEA AND (B) DEPRESSION OVER EASTCENTRAL & ADJOINING SOUTHEAST BAY OF BENGAL AND ANDAMAN SEA BASED ON 0300 UTC OF 5th NOVEMBER 2019



Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences.
 Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail: cwdhq2008@gmail.com, Website: rsmcnewdelhi.imd.gov.in
 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.