



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

**BULLETIN NO.: 28 (BOB/04/2019)**

**TIME OF ISSUE: 1700 HOURS IST**

**DATED: 08.11.2019**

**FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)  
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**Sub: Very Severe Cyclonic Storm 'Bulbul' (Pronounced as Bul bul) over westcentral and adjoining eastcentral Bay of Bengal: CYCLONE WARNING FOR WEST BENGAL COAST: ORANGE MESSAGE**

**BULLETIN NO. : 28 (BOB/04/2019)**

The Very Severe Cyclonic Storm '**Bulbul**' (Pronounced as **Bul bul**) over westcentral & adjoining eastcentral Bay of Bengal moved northwards with a speed of 17 kmph during past 06 hours, and lay centred at 1430 hrs IST of today, the 8<sup>th</sup> November 2019, over westcentral & adjoining eastcentral Bay of Bengal, near Lat.18.1°N and Long. 87.6°E about 260 km south-southeast of Paradip (Odisha), 390 km south-southwest of Sagar Islands (West Bengal) and 510 km south-southwest of Khepupara (Bangladesh) . It is very likely to intensify further till early morning of 9<sup>th</sup> November. It is very likely to move nearly northwards till 9<sup>th</sup> November morning. Thereafter, it is very likely to re-curve northeastwards and cross West Bengal - Bangladesh Coasts between Sagar Islands (West Bengal) and Khepupara (Bangladesh), across Sunderban delta by midnight of 9<sup>th</sup> November as a Severe Cyclonic Storm with maximum sustained wind speed of 110-120 Kmph gusting to 135 Kmph.

**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               |                         | Maximum sustained surface wind speed (kmph) | Category of cyclonic disturbance |
|-----------------|------------------------|-------------------------|---|----------------------------------|
|                 | Lat. ( <sup>o</sup> N) | Long. ( <sup>o</sup> E) |   |                                  |
| 08.11.19/1430   | 18.1                   | 87.6                    | 130-140 gusting to 155                      | Very Severe Cyclonic Storm       |
| 08.11.19/1730   | 18.7                   | 87.6                    | 140-150 gusting to 165                      | Very Severe Cyclonic Storm       |
| 08.11.19/2330   | 19.4                   | 87.6                    | 150-160 gusting to 175                      | Very Severe Cyclonic Storm       |
| 09.11.19/0530   | 20.1                   | 87.8                    | 150-160 gusting to 175                      | Very Severe Cyclonic Storm       |
| 09.11.19/1130   | 20.8                   | 88.1                    | 140-150 gusting to 165                      | Very Severe Cyclonic Storm       |
| 09.11.19/2330   | 22.0                   | 89.2                    | 110-120 gusting to 135                      | Severe Cyclonic Storm            |
| 10.11.19/1130   | 23.2                   | 90.8                    | 70-80 gusting to 90                         | Cyclonic Storm                   |
| 10.11.19/2330   | 23.9                   | 92.6                    | 40-50 gusting to 60                         | Depression                       |

## Warnings:

### (i) Rainfall:

#### • Odisha:

- Light to moderate rainfall at most places very likely over **north coastal districts of Odisha** with isolated heavy falls over Puri, Kendrapara, Bhadrak, Balasore and Jagatsinghpur districts on 8<sup>th</sup> November 2019.
- Light to moderate rainfall at most places very likely over **north coastal districts of Odisha** with isolated heavy to very heavy falls over Balasore, Bhadrak, Kendrapara and Jagatsinghpur districts and with heavy falls at isolated places over Jajpur district on 9<sup>th</sup> November 2019.

#### • West Bengal:

- Light to moderate rainfall at many places with isolated heavy falls very likely over North and South 24 Parganas and east Medinipur districts on 8<sup>th</sup> November.
- Light to moderate rainfall at most places very likely over **coastal districts of West Bengal** with heavy to very heavy falls at a few places and **extremely heavy falls ( ≥ 20 cm in 24 hours)** at isolated places over North & South 24 Parganas, East Medinipur, and isolated heavy to very heavy rainfall over West Medinipur, Howrah and Hooghly on 9<sup>th</sup> November 2019.
- Light to moderate rainfall at most places very likely over **coastal districts of West Bengal** with heavy to very heavy falls at a few places over North and South 24 Parganas, Nadiya and heavy falls at isolated places over East Medinipur district on 10<sup>th</sup> November 2019.

#### • North Eastern States:

- Light to moderate rainfall at many places with isolated heavy falls very likely over Mizoram and Tripura on 9<sup>th</sup> November and over South Assam & Meghalaya, Tripura, and Mizoram on 10<sup>th</sup> November.

### (ii) Wind warning

- **Bay of Bengal:** Gale wind speed reaching 130-140 kmph gusting to 155 kmph is prevailing over westcentral & adjoining eastcentral Bay of Bengal around the system centre. It is very likely to increase gradually and become 150-160 kmph gusting to 175 kmph by tonight over northwest & adjoining westcentral Bay of Bengal for subsequent 12 hours and decrease gradually thereafter.
- **Odisha coast:** Squally wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing along & off Kendrapara, Jagatsinghpur, Balasore and Bhadrak districts and is likely to become Gale wind speed reaching 70-80 kmph gusting to 90 kmph from morning hours of 9<sup>th</sup> November along & off Jagatsinghpur, Kendrapara, Balasore and Bhadrak districts for subsequent 12 hours and decrease thereafter. Puri and Ganjam districts are likely to experience squally wind speed reaching 40-50 kmph gusting to 60 kmph from afternoon of 8<sup>th</sup> November for the subsequent 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.**

- **West Bengal coast:** Squally wind speed reaching 40 – 50 kmph gusting to 60 kmph likely to commence over West Bengal coast from tonight. It will gradually increase becoming gale wind speed reaching 110-120 kmph gusting to 135 kmph from 09<sup>th</sup> midnight to 10<sup>th</sup> forenoon along & off East Medinipur, North & South 24 Parganas. Squally wind speed reaching 40-60 Kmph gusting to 70 Kmph also likely over adjoining districts of West Medinipur, Howrah and Hooghly during the same period.

**(iii) Sea condition**

- ✓ Sea condition is rough to very rough along & off Odisha and West Bengal coasts and is likely to become high to very high on 9<sup>th</sup> and 10<sup>th</sup> November.
- ✓ Sea condition is phenomenal over westcentral and adjoining eastcentral Bay of Bengal around the system centre during next 12 hours. Sea condition will be very high to phenomenal over northwest & adjoining westcentral Bay of Bengal for subsequent 24 hours and very rough to very high over northeast Bay of Bengal from 9<sup>th</sup> November morning for subsequent 36 hours.

**(iv) Storm Surge**

- Storm surge of about 1.0 to 2.0 meter height above Astronomical tide is very likely to inundate low lying areas of South and North 24 Parganas and 0.5-1.0 meter height above Astronomical tide is very likely to inundate low lying areas of east Medinipur during the time of landfall.

**(v) Fishermen Warning**

- Total suspension of fishing operations over Odisha-West Bengal coasts till forenoon of 10<sup>th</sup> November.
- Fishermen are advised not to venture into westcentral & adjoining northwest Bay of Bengal during 8<sup>th</sup> & 9<sup>th</sup> Nov. 2019 and over north Bay of Bengal during 9<sup>th</sup> – 10<sup>th</sup> November.
- Fishermen are advised not to venture into northwest Bay of Bengal along & off Odisha – West Bengal coasts from 8<sup>th</sup> to 10<sup>th</sup> November.

**(vi) Damage Expected over coastal districts of north Odisha:**

- Damage to thatched houses/ huts. 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. Large dead limbs blown from trees.
- Major damage to coastal crops

**Damage Expected over coastal districts of West Bengal:**

- Major damage to thatched houses/ huts. Roof tops may blow off. Unattached metal sheets may fly.
- Minor 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 large avenue trees. Moderate damage to banana and papaya trees. Dead limbs blown from trees.
- Major damage to coastal crops.
- Damage to embankments/ salt pans.
- Small boats, country crafts may get detached from moorings.

**(vii) Action suggested for coastal districts of north Odisha**

- Total suspension of fishing operations from 8<sup>th</sup> November onwards.

**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.**

- People in affected areas to remain indoors.
- Movement in motor boats unsafe.
- Beach movement to be restricted.

**Action suggested for coastal districts of West Bengal**

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places. Mobilise evacuation from coastal areas of South and North 24 Parganas. People in affected areas to remain indoors.
- Rail and Road traffic to be regulated.
- Movement in motor boats and small ships unsafe.
- Beach movement to be restricted.

***The next bulletin will be issued at 2030 hrs IST of 08<sup>th</sup> November, 2019.***

**(R K JENAMANI )  
Scientist-F, RSMC, New Delhi**

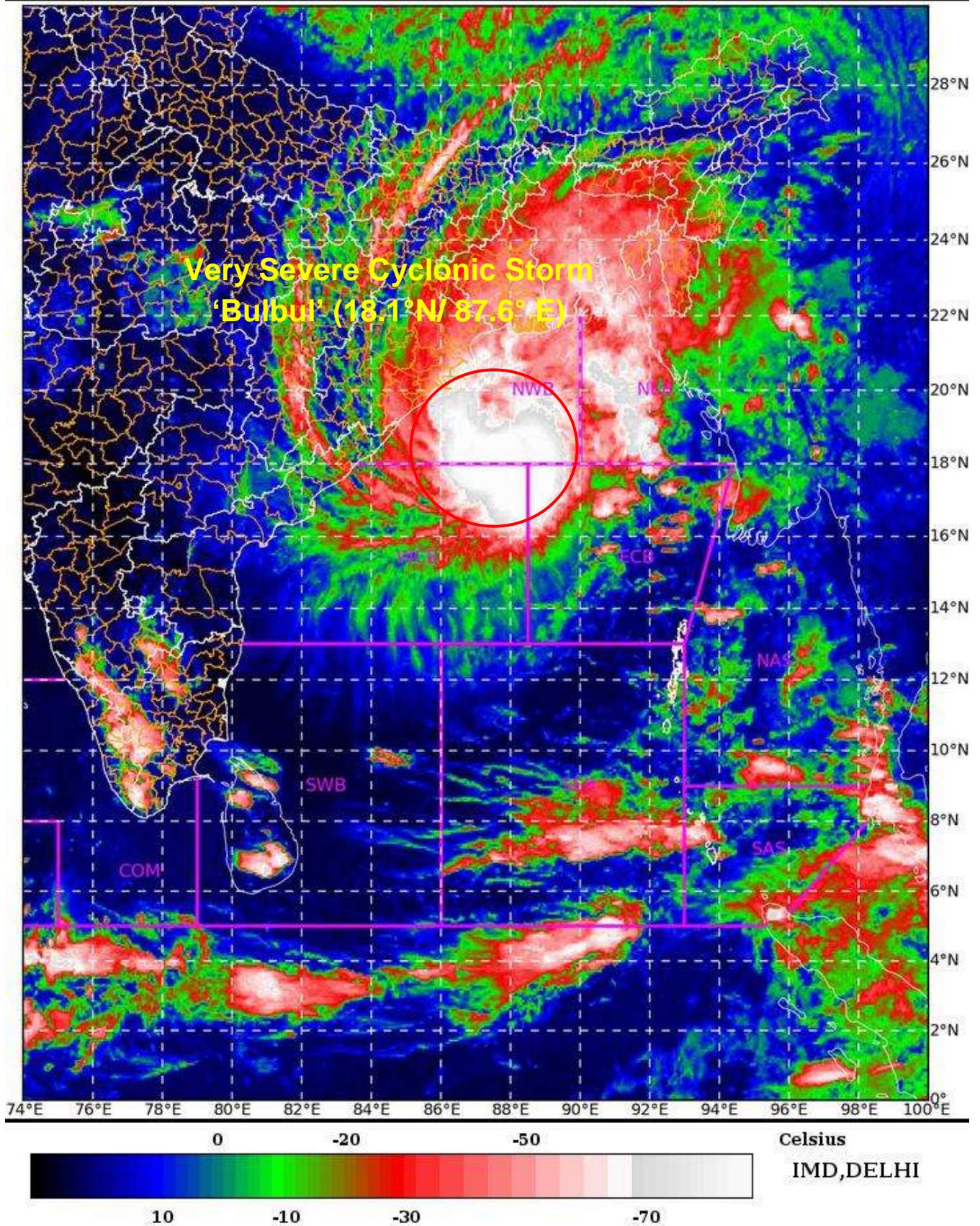
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Thiruvananthapuram/ CWC Visakhapatnam/ CWC Bhubaneswar/ M.O. Port Blair.***

**Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%  
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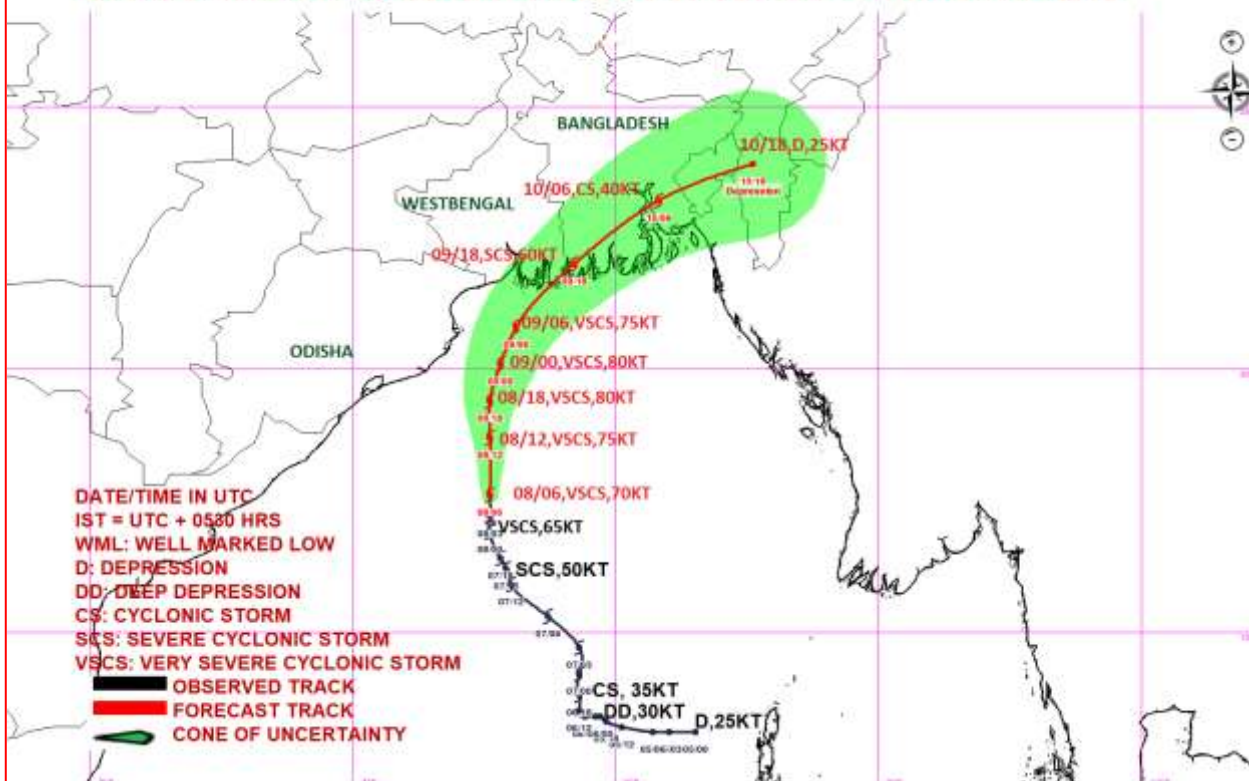
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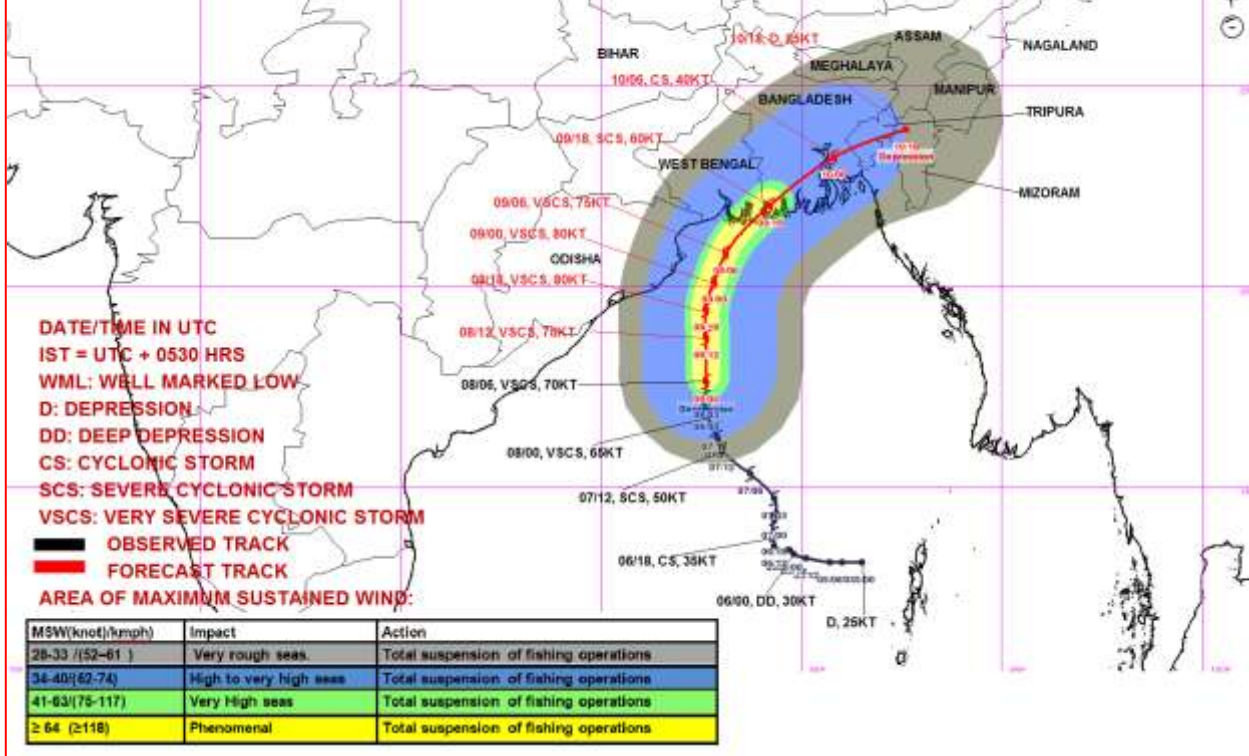
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**OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY IN ASSOCIATION WITH SEVERE CYCLONIC STORM "BULBUL" OVER WESTCENTRAL AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 0600 UTC OF 08<sup>th</sup> NOVEMBER 2019**



**OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH VERY SEVERE CYCLONIC STORM "BULBUL" OVER WESTCENTRAL AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 0600 UTC OF 08<sup>th</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.