भारत सरकार भारत मौसम विज्ञान विभाग (पृथ्वी विज्ञान मंत्रालय) मौसम केन्द्र विकास भवन पी ओ तिरुवनंतपुरम - 695 033



# GOVERNMENT OF INDIA INDIA METEOROLOGICAL DEPARTMENT

(Ministry of Earth Sciences)

#### METEOROLOGICAL CENTRE

Vikas Bhavan P.O, Thiruvananthapuram-695 033

BULLETIN NO.: 16 (BOB 08/2018) and BULLETIN NO.: 26 (ARB 04/2018)

TIME OF ISSUE: 0920 HOURS IST DATED: 10.10.2018

To

The Chief Secretary, Govt. of Kerala

The Chief Administrator, Lakshadweep Islands

The Addnl. Chief Secretary (Revenue & Disaster Management

The Secretary, Dept. of Fisheries, Govt. of Kerala

The State Emergency Operation Centre

The Director General of Police

The Director of Fisheries

The District Collectors

Sub: (a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The Cyclonic Storm 'TITLI' over westcentral Bay of Bengal moved north-northwestwards with a speed of about 10 kmph during past 06 hours, intensified into a severe cyclonic storm and lay cantered at 0530 hrs IST of today, the 10<sup>th</sup> October 2018 over Westcentral Bay of Bengal near latitude 16.0°N and longitude 85.8°E, about 370 km south-southeast of Gopalpur (Odisha) and 310 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Very Severe Cyclonic Storm during next 18 hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11<sup>th</sup> October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ⁰N/ long. ⁰E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0530	16.0/85.8	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	16.7/85.6	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1730	17.4/85.3	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/1730	19.5/84.7	70-80 gusting to 90	Cyclonic Storm
12.10.18/0530	20.5/85.2	50-60 gusting to 70	Deep Depression
12.10.18/1730	22.1/86.4	40-50 gusting to 60	Depression

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Region	10 Oct. 2018 ( Rainfall till 0830	11 Oct. 2018 (Rainfall till	12 Oct. 2018( Rainfall	13 Oct. 2018( Rainfall till
	IST of next day.)	0830 IST of next day.)	till 0830 IST of next day.)	0830 IST of next day.)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	heavy to very heavy falls at	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Nil	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

## (i) Heavy rainfall warnings:

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

Heavy rain: 64.5-115.5 mm/day; Very heavy rain: 115.6-204.4 mm/day; Extremely heavy rain: more than 204.4 mm/day

#### (ii) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph prevails over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 120-130 kmph gusting to 145 kmph from today the 10<sup>th</sup> evening to 11<sup>th</sup> forenoon.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely to commence along & off north Andhra Pradesh and Odisha coasts from today afternoon.
- It is very likely to increase gradually becoming 120-130 kmph gusting to 145 kmph from 10<sup>th</sup>
   October 2018 night onwards along & off south Odisha & adjoining districts of north Andhra
   Pradesh coasts and 70-80 kmph gusting to 90 kmph along & off north Odisha and remaining districts
   of north Andhra Pradesh coasts.
- Squally winds speed reaching 50-60 kmph gusting 70 kmph is very likely to commence along & off West Bengal coast from today afternoon and gradually increase to 60-70 kmph gusting 80 kmph from today night onwards.

#### (iii) Sea condition

• The sea condition is very high over westcentral Bay of Bengal around system centre. It is very likely to be phenomenal over westcentral & adjoining north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts from tonight to 11<sup>th</sup> October 2018 forenoon.

## (iv) Storm Surge Warning

Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas
of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of
landfall.

## (v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly.
Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca
roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy
crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of
Kutcha embankments.

#### (vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11<sup>th</sup> October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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#### (b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved north-northwestwards with a speed of about 12 kmph in last 06 hours, intensified into a very severe cyclonic storm and lay centered at 0530 hrs IST 10<sup>th</sup> October 2018 over westcentral Arabian Sea, near latitude 14.1°N and longitude 59.0°E, about 610 km east-southeast of Salalah (Oman), 570 km east-northeast of Socotra Islands (Yemen) and 770 km east-southeast of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0530	14.1/59.0	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/1130	14.2/58.8	125-135 gusting to 150	Very Severe Cyclonic Storm
10.10.18/1730	14.4/58.6	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/2330	14.5/58.3	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/0530	14.6/58.1	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.5	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/56.7	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	15.1/55.9	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/0530	15.2/55.0	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/1730	15.2/53.8	120-130 gusting to 145	Very Severe Cyclonic Storm
14.10.18/0530	15.1/52.0	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/1730	14.8/49.8	90-100 gusting to 110	Severe Cyclonic Storm

#### Warnings:

## (i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 11<sup>th</sup> October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 11<sup>th</sup> onwards.

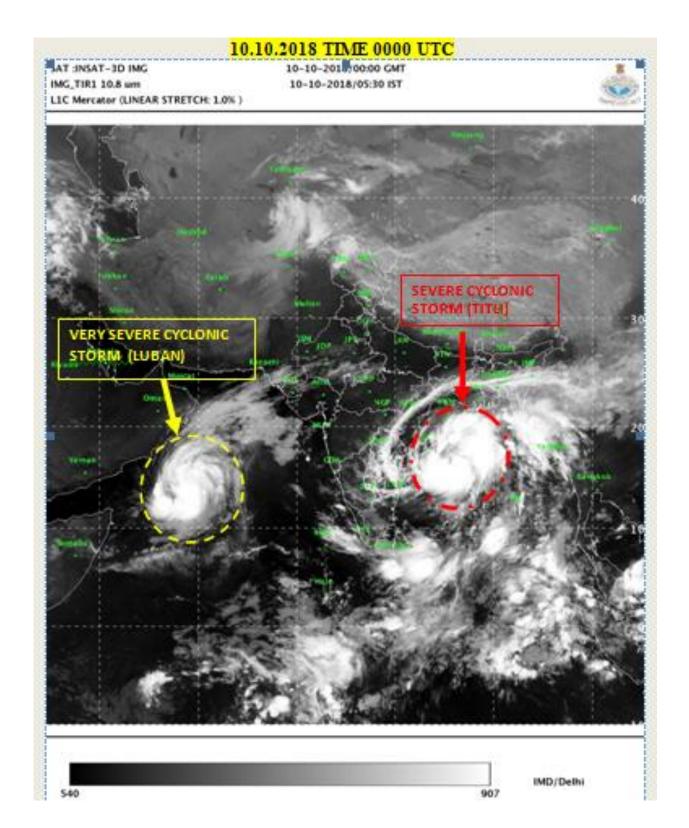
#### (ii) Sea condition

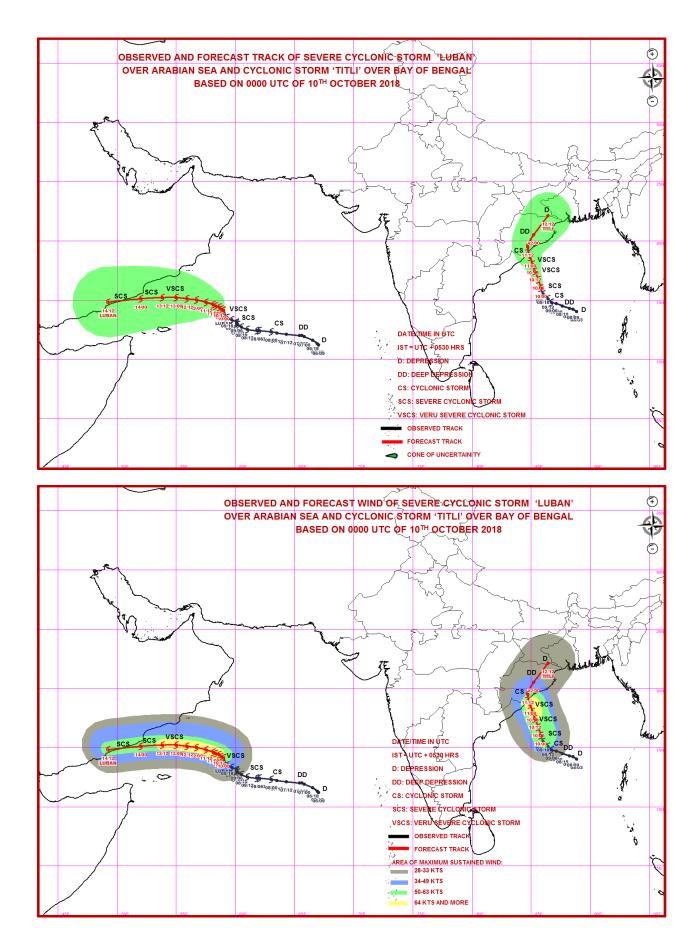
• The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13<sup>th</sup> October 2018 and over Gulf of Aden during 11<sup>th</sup> to 13<sup>th</sup> October.

## (iii) Fishermen Warning

• The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14<sup>th</sup> October and adjoining southwest Arabian Sea till 11<sup>th</sup> October.

The next bulletin will be issued at 1130 hrs IST of 10<sup>th</sup> October, 2018.





(Duty Officer) Cyclone Warning Centre Meteorological Centre, Thiruvananthapuram

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