



MESSAGE

**FROM: ESSO-INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES  
(Earth System Science Organisation, Ministry of Earth Sciences, Government of India)  
(E-Mail: [osf@incois.gov.in](mailto:osf@incois.gov.in), Website: [www.incois.gov.in](http://www.incois.gov.in), FAX NO. +91-40-23892910)**

**INCOIS-IMD JOINT BULLETIN**

**To:** Senior MET Officer, Eastern Naval Command, Indian Navy  
Commandant, Indian Coast Guard, East Region  
Commandant, Indian Coast Guard, North East Region  
Commandant, Indian Coast Guard, A & N Region  
Ports in AP, Odisha & West Bengal  
Chief Secretary, Odisha  
Chief Secretary, West Bengal  
Chief Secretary, Andaman & Nicobar  
Chief Secretary, Government of AP  
State Disaster Management Authority, Odisha  
State Disaster Management Authority, Andhra Pradesh  
Basanti Devi College (INCOIS Project), Kolkata  
IKSL- Odisha, Andhra Pradesh and West Bengal  
Andhra University (INCOIS Project), Visakhapatnam  
Chief Secretary, Government of Kerala  
KSDMA, Thiruvananthapuram  
Administrator, UT of Lakshadweep  
Commandant, Indian Coast Guard, Southern Region  
DNOM, Indian Navy  
Reliance Foundation, Mumbai  
MSSRF, Chennai  
PMSSS, Puducherry  
Administrator, UT Puducherry  
Kamaraj College, Tuticorin  
Ports in Tamil Nadu, Kerala and Lakshadweep  
Ports in Karnataka, Goa, Maharashtra and Gujarat  
Chief Secretary, Government of Tamil Nadu  
Chief Secretary, Government of Karnataka  
Chief Secretary, Government of Goa  
Chief Secretary, Government of Gujarat  
Chief Secretary, Government of Maharashtra  
Shipping Corporation of India.  
T.V. & Radio channels and newspapers of relevant states/UT  
KUFOS, Kochi

**Time of issue: 09:30 hours IST Dated: 10.10.2018, Bulletin No.: INCOIS/10/10/2018/1**

**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:

**High Wave/Ocean State warning/alert for Odisha, North Andhra Pradesh and West Bengal**

**Odisha**

**Table 1:** Forecasted Significant wave height and corresponding swell height, for coastal region, into the ocean upto 10 km off **Odisha**.

Location/ District	Date/Time		Significant Wave Height (m)	Swell height (m)
	From	To		
Ganjam	10-10-2018/1230	11-10-2018/2330	4.2	1.3
Puri	10-10-2018/1230	11-10-2018/2330	3.2	1.8
Cuttack	10-10-2018/1230	11-10-2018/2330	2.7	1.8
Baleshwar	10-10-2018/1230	11-10-2018/2330	1.9	1.2
Gajaraipur	10-10-2018/1230	11-10-2018/2330	2.3	1.9
Dhamra	10-10-2018/1230	11-10-2018/2330	2.4	1.9

**Offshore:**

High waves in the range of 2.5 - 3.4 meters are forecasted during 11:30 hours on 10-10-2018 to 23:30 hours of 11-10-2018 along the coast of Odisha from Gopalpur to Chandipur. Surface Current speeds vary between 68 - 221 cm/sec.

**North Andhra Pradesh**

**Table 1:** Forecasted Significant wave height and corresponding swell height, for coastal region, into the ocean upto 10 km off **North Andhra Pradesh**.

Location/ District	Date/Time		Significant Wave Height (m)	Swell height (m)
	From	To		
Srikakulam	10-10-2018/1030	11-10-2018/2330	4.7	1.4
Vizianagaram	10-10-2018/1030	11-10-2018/2330	2.6	2.2
Visakhapatnam	10-10-2018/1030	11-10-2018/2330	2.8	2.2

### Offshore

High waves in the range of 3.0 - 4.4 meters are forecasted during 10:30 hours on 10-10-2018 to 23:30 hours of 11-10-2018 along the coast of Andhra Pradesh from Dugarajapatnam to Baruva. Surface Current speeds vary between 88 - 213 cm/sec.

### West Bengal

**Table 1:** Forecasted Maximum wave height and corresponding swell height, for coastal region, into the ocean upto 10 km off **West Bengal**.

Location/ District	Date/Time		Maximum Wave Height (m)	Swell height (m)
	From	To		
Digha	10-10-2018/1130	11-10-2018/2330	<b>2.8</b>	<b>0.6</b>
ParganasSagar	10-10-2018/1130	11-10-2018/2330	<b>1.7</b>	<b>0.4</b>
PurbaMedinipore	10-10-2018/1130	11-10-2018/2330	<b>1.9</b>	<b>0.3</b>
South24 Parganas	10-10-2018/1130	11-10-2018/2330	<b>1.1</b>	<b>0.2</b>

### Offshore:

High waves in the range of 2.5 - 3.7 meters are forecasted during 10:30 hours on 10-10-2018 to 23:30 hours of 11-10-2018 along the coast of West Bengal from Digha to Bakkhali. Surface Current speeds vary between 73 - 158 cm/sec.

### Warnings

#### **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.

#### **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.

#### **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.

**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.

**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

Region	10 Oct. 2018 ( Rainfall till 0830 IST of next day.)	11 Oct. 2018 ( Rainfall till 0830 IST of next day.)	12 Oct. 2018( Rainfall till 0830 IST of next day.)	13 Oct. 2018( Rainfall till 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.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	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

**(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.

**Warnings:**

**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.

**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.

**Marine Forecaster  
Ocean State Forecast Team  
Information Services and Ocean Sciences Group**

For Specific Ocean State forecast for Shipping visit <http://115.113.76.77/shipforecast/shipforecast.html>

Port and Harbours visit (<http://115.113.76.77/OSF>).

For location specific forecast data for any part of Arabian Sea/ Bay of Bengal, visit ([http://115.113.76.77/webmapservice/Indian Ocean Forecast.html](http://115.113.76.77/webmapservice/Indian_Ocean_Forecast.html))

For complete details visit (<http://www.incois.gov.in/portal/osf/osf.jsp>)