

Ministry of Earth Sciences India Meteorological Department Cyclone Warning Division, New Delhi

Tropical Cyclone Forecast Programme Report Dated 18th October 2025

Time of Issue: 1300 UTC

Synoptic features (based on 0300 UTC analysis):

- ➤ An upper air cyclonic circulation lies over south Andaman Sea & adjoining southeast Bay of Bengal and extends upto 1.5 km above mean sea level. Under its influence, a Low Pressure area is likely to form over southeast Bay of Bengal around 21st October. It is likely to move west-northwestwards and intensify further into a depression over central parts of south Bay of Bengal and adjoining westcentral Bay of Bengal by 23rd October morning.
- ➤ Under the influence of the upper air cyclonic circulation over southeast Arabian Sea & adjoining Lakshadweep area, a Low-Pressure area formed over southeast Arabian Sea & Lakshadweep area off Kerala-Karnataka coasts at 0000 UTC of today, the 18th October 2025 and it persisted over the same region and became well marked low pressure area at 0300 UTC of today, 18th October, 2025. The associated cyclonic circulation extends upto 5.8 km above mean sea level. It is likely to move west north-westwards and intensify into a depression during next 36 hours.

Environmental Features based on 0300 UTC:

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Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)				
Sea Surface Temperature (SST) ^o C	 ➢ Around 28-30°C over northwest and westcentral BoB along west Bengal coast to Andhra Pradesh coast, ➢ 30°C over rest of the BoB. 	➤ Around 28-30°C overastcentral Arabian Se Lakshadweep Island, Maldiver Comorin areas, along and of Kerala, south Karnataka coasparts of northwest Arabian Sea ➤ 26-28°C over rest of the Arabian Sea.				
Tropical Cyclone Heat Potential (TCHP) kJ/cm2	 ➤ 100-130 over northeast BoB, eastcentral BoB, south Andaman Sea and southern parts of south BoB. ➤ 90-110 over southeas Lakshadweep Is Maldives islands and Coarse area. ➤ 50-60 over rest AS. 					
Cyclonic Relative - vorticity (X10 ⁻⁶ s ⁻¹)	 ▶ 60-80 over southwest BoB adjoining to south Sri Lanka coast. ▶ 50-60 over Southeast BoB, south Andaman sea. 	Maldives, Comorin areas, and southeast Arabian Sea extending upto 700 hPa.				
Low-Level convergence (X10-5 s-1)	 ▶ 5 over westcentral BoB and adjoining Andhra Pradesh- Tamil Nadu coast ▶ 10-15 over southeast AS, Lakshadweep, Maldives area Kerala-Karnataka coasts, over Comorin area. 					

Upper-Level divergence (X10-5 s-1)	➤ 5 over westcentral BoB and adjoining Andhra Pradesh- Tamil Nadu coast	➤ 20-30 over Lakshadweep, Maldives, Comorin areas and 5- 20 over some parts of southeast, eastcentral AS, Kerala-Karnataka		
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	 High over north BoB. Low to moderate over rest of BoB. 	coasts, over Gulf of Mannar. > Low to moderate over Southeast AS and Westcentral AS. > Moderate to high over rest of Arabian Sea.		
Wind Shear Tendency (knots)	 ➤ 10 over eastcentral and southeast eastern BoB. ➤ 5 over the Andhra Pradesh coast. 	➤ 5-10 over Southeast adjoining eastcentral AS.		
Upper tropospheric Ridge	➤ At 13 ⁰ N.	➤ At 12 ⁰ N.		

Satellite observations based on INSAT imagery (0300 UTC):

Over the BoB & Andaman Sea:

Scattered to broken low and medium clouds with embedded intense to very intense convection lay over westcentral and south Bay of Bengal, Andaman Sea. Scattered low and medium clouds with embedded moderate to intense convection lay over eastcentral Bay of Bengal.

Over the Arabian Sea:

Associated broken low and medium clouds with embedded intense to very intense convection lay over southeast adjoining eastcentral Arabian sea and Lakshadweep islands area. The minimum cloud top temperature is minus 70 to 90 degree Celsius.

Outside India:

Scattered low/medium clouds with embedded moderate to intense convection over Sri Lanka, Palk Strait, Gulf of Mannar, Maldives, Tibet, China, Yellow Sea, adjoining East China Sea, Myanmar, Thailand, Gulf of Thailand, Cambodia, Laos, Vietnam, Gulf of Tonkin, Sumatra, Strait of Malacca, Malaysia, Borneo, South China Sea, Java Islands & Sea, Philippines and over Indian Ocean between latitude 5.0N TO 25.0S, longitude 50.0E TO 100.0E.

M.J.O. Index:

The guidance from ECMM model indicates that Madden Julian Oscillation (MJO) index is likely to be in phases 3 during 18th to 20th October and in phase 4 during 21st to 28th October with amplitude remaining close to 1. Thereafter, it is likely to enter into phase 5. Thus, MJO would support enhancement of convective activity and cyclogenesis over Arabian Sea during 17th to 20th and over the Bay of Bengal during 18th to 26th.

Equatorial waves guidance:

Guidance from NCICS model indicates enhanced cross equatorial flow from 18th October onwards leading to westerly wind burst over southern parts of Arabian Sea and Bay of Bengal and adjoining equatorial Indian Ocean during 18th to 26th October. The Model indicates prevalence of equatorial Rossby wave (ERW) Kelvin wave (KW), MJO, Low frequency Background wave (LW), enhanced westerly wind Anomaly >9mps) over the region during 18th to 26th October. The model is also indicating setting in of easterly wind over the Bay of Bengal and Arabian Sea with enhanced easterly wind anomaly (7-9 mps) over central and adjoining south Bay of Bengal during 18th to 26th October and easterly wind anomaly (3-5 mps) over southeast Arabian Sea during 18th-21st October and easterly wind anomaly (5-7 mps) during 22nd to 26th October over central Arabian Sea. These features indicate a favourable environment for Cyclogenesis (formation of Depression) over Arabian Sea during 20th to 21st and over the Bay of Bengal during 22nd to 23rd October.

MODEL	Bay of Bengal (BoB)	Arabian Sea (AS)		
GUIDANCE				
IMD-GFS	LPA over Southeast BoB on 21/00 UTC. While moving west-northwestwards, it intensifies into depression over Southeast BoB on 22/00 UTC. Model is also indicating the intensification of system upto VSCS on 24 th over southwest BoB, weakening gradually thereafter while reaching Tamil Nadu coast.	LPA over southeast AS on 18/00 UTC, having westnorthwestards movement and intensifies into depression on 20/00 UTC. Moving in the same direction towards north Somalia coast while weakening till 25/00 UTC.		
IMD-GEFS	LPA over Southeast BoB on 21/00 UTC. While moving west-northwestwards, it intensifies into depression over Southeast BoB on 23/00 UTC. Model is also indicating the intensification of system upto CS on 24 th over southwest BoB, weakening gradually thereafter while reaching Tamil Nadu coast, crossing the coast on 26/00 as DD.	LPA over southeast AS on 18/00 UTC, having westnorthwestards movement and intensifies into depression on 21/00 UTC. Moving in the same direction towards north Somalia coast while weakening till 23/00 UTC.		
IMD-WRF	Model is not indicating any significant system for the next three days.	LPA over southeast AS on 18/00 UTC, having westnorthwestards movement and intensifies into depression on 20/00 UTC over southeast Arabian Sea. Moving in the same direction towards north Somalia coast as depression.		
BFS	LPA over Southeast BoB on 21/00 UTC. While moving west-northwestwards, it intensifies into depression over Southeast BoB on 22/00 UTC. Model is also indicating the intensification of system upto VSCS on 24 th over southwest BoB, weakening gradually thereafter while reaching Tamil Nadu coast.	LPA over southeast AS on 18/00 UTC, having westnorthwestards movement and intensifies into depression on 20/00 UTC. Moving in the same direction towards north Somalia coast while weakening till 25/00 UTC.		

NCMRWF- NCUM(G)	Model is not indicating any significant system.	Extended low over southeast Arabian Sea on 21/00 UTC. Becoming LPA on 23/00 UTC over southwest and adjoining southeast Arabian Sea and moving towards Gulf of Aden without further intensification.		
NCMRWF- NCUM(R)	-	-		
NEPS	-	becoming WML by 18/12 UTC. It will have westnorthwestards movement and intensifies into depression on 19/09 UTC over southeast Arabian Sea. Moving in westnorthwestwards direction towards Gulf of Aden while weakening till 23/00 UTC. LPA over southeast AS on 18/12 UTC, having westnorthwestards movement and intensifies into depression on 21/18 UTC over southeast Arabian Sea. Moving slowly in westnorthwestwards direction till 27/12 UTC while weakening.		
ECMWF	LPA over Southeast BoB on 21/00 UTC. While moving west-northwestwards, it intensifies into depression over Southeast BoB on 21/18 UTC. Moving further in northwestwards towards south Andhra Pradesh – Tamil Nadu coast and cross the coast at 14.5N/80.1E as depression on 23/15 UTC.			
NCEP-GFS	LPA over Southeast BoB adjoining south Andaman Sea on 19/18 UTC. While moving west-northwestwards, it intensifies into depression over Southeast BoB on 20/12 UTC. Model is also indicating the intensification of system upto VSCS on 24/00 over southwest BoB, weakening gradually thereafter while reaching Tamil Nadu coast.			
EC-AIFS	LPA over Southwest BoB adjoining south Andaman Sea on 21/06 UTC. While moving west-northwestwards, it intensifies into depression over Southwest BoB on 22/12 UTC. Moving then in the northnorthwestwards towards central Andhra Pradesh coast and cross the coast on 25/00 UTC as DD.	LPA over southeast AS on 19/00 UTC, having westnorthwestards movement and intensifies into depression on 20/18 UTC over southeast Arabian Sea. Moving slowly in westnorthwestwards direction till 27/12 UTC while weakening.		

Summary:

(a) Bay of Bengal:

Many of the models are capturing showing formation of low pressure area (LPA) over southeast Bay of Bengal around 21st October except NCEP-GFS which is showing early development around 19/18 UTC. Most of the models are also indicating the formation of depression during 20/12 UTC to 23/00 UTC with IMD-GFS & ECMWF showing depression around 22nd, BFS around 21st, IMD-GEFS around 23rd. GFS group is showing further intensification of the system into a cyclone while ECMWF and ECAI up to depression/deep depression. There is good consensus among various models w.r.t westnorthwestwards movement towards north Tamil Nadu – south Andhra Pradesh coast.

(b) Arabian Sea

Most of the numerical models are indicating development of low-pressure area over southeast AS on 18th October. There is good consensus among various models in this regards. There is also good consensus among various models w.r.t intensification over southeast Bay of Bengal by 21st October and its westnorthwestwards movement towards Gulf of Aden.

Inference:

Considering various large-scale environmental features and model guidance, it is inferred that

- (a) Under the influence of existing upper air cyclonic circulation over southeast Arabian Sea & adjoining Lakshadweep area, a low-pressure area is formed over southeast Arabian Sea & Lakshadweep area off Kerala-Karnataka coasts on 18th October, 2025. It is likely to move west-northwestwards and intensify into a depression around 20/00 UTC.
 - (i) Confidence level in forecast of intensification (formation of Depression): High
 - (ii) Confidence level in forecast of location of Depression: High
- (b) It is inferred that a low pressure area is likely to form over southeast Bay of Bengal around 21st October. It is likely to move west-northwestwards and intensify further into a depression over central parts of south and adjoining westcentral Bay of Bengal by 23rd October morning.
 - (i) Confidence level in forecast of formation of Low: **High**
 - (ii) Confidence level in forecast of location area of Low: High
 - (iii) Confidence level in forecast of intensification (formation of Depression): High
 - (iv) Confidence level in forecast of location of Depression: **Moderate**

Both the systems are under continuous watch.

<u>Probability of cyclogenesis (formation of depression and above intensity</u> systems) over the Bay of Bengal during next 168 hours:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	LOW	MOD	HIGH	-

<u>Probability of cyclogenesis (formation of depression and above intensity</u> systems) over the Arabian Sea during next 168 hours:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
LOW	MOD	HIGH	HIGH	-	-	-

[&]quot;- "indicates genesis has already occurred.

Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%.

Every 24 hrs forecast ends at the 0300 UTC of date.

Intense Observation Period (IOP): IOP for Kerala, Karnataka, south Tamil Nadu and West Sri Lanka coasts, Andaman & Nicobar Islands during 18th to 22nd October.

Warnings over the Arabian Sea:

> Rainfall Warning:

Lakshadweep Islands: Light to moderate rainfall at most places and heavy to very heavy rainfall at isolated places is very likely on 18th &19th October.

Kerala: Light to moderate rainfall at most places and heavy to very heavy rainfall at isolated places is very likely on 18th & 19th October.

Coastal & South Interior Karnataka: Light to moderate rainfall at most places and heavy rainfall at isolated places is very likely on 18th & 19th October.

> Wind warning:

Squally weather with wind speed reaching 35-45 gusting to 55 kmph is likely to prevail over Southeast and adjoining Eastcentral Arabian Sea, Lakshadweep & Comorin Area and along & off Karnataka, Kerala and adjoining South Tamil Nadu coasts till evening of 19th October.

It is likely to increase thereafter becoming squally wind with speed reaching 40-50 kmph gusting to 60 kmph over central parts of south Arabian sea and adjoining central Arabian Sea from 19th October evening to 21st October and southwest and adjoining westcentral Arabian Sea on 22 October 2025.

> Sea condition:

Sea condition is very likely to be moderate to rough over Southeast and adjoining Eastcentral Arabian Sea, Lakshadweep & Comorin Area and along & off Karnataka, Kerala and adjoining South Tamil Nadu coasts on 18th & 19th October. It would become rough to very rough over central part of south Arabian sea and adjoining central Arabian Sea from 19th October evening till 21st October and over southwest and adjoining westcentral Arabian Sea on 22 October 2025.

> Fishermen warnings:

Fishermen are advised not to venture into Southeast Arabian Sea, Lakshadweep & Comorin Area and along & off Karnataka, Kerala and adjoining South Tamilnadu coasts during 18th -20th October and southwest and adjoining west central Arabian Sea during 20 to 22 October 2025.

Impact Expected and Action Suggested due to heavy rain and strong winds (Lakshadweep Islands & Kerala)

Impact expected:

- Breaking of tree branches. Strong wind and heavy rain may damage plantation, horticulture and standing crops.
- Minor damage to kutcha houses/walls, huts and roads due to strong winds and heavy rain.
- Road and rail traffic may be affected due to heavy rain.
- There could be localised landslides, mudslides, landslips, water logging, inundation and flooding over low lying areas.

- Occasional reduction in visibility due to heavy rainfall.
- Surface & Helicopter services may be regulated.
- Small ships & country boats would be affected due to strong wind and heavy rain.

Action suggested:

- People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly.
- Take safe shelters; do not take shelter under trees, as there could be lightning.
- In case of expected lightning, unplug electrical/ electronic appliances, immediately, get out of water bodies and keep away from all the objects that conduct electricity.
- Tourism and recreational activities to be regulated.
- Surface transport and helicopter services to be regulated.

Warnings over Bay of Bengal:

> Rainfall Warning:

Andaman & Nicobar Islands: Light to moderate rainfall at most places and heavy rainfall at isolated places is very likely during 18th to 22nd October.

Tamil Nadu & Puducherry: Light to moderate rainfall at most places and heavy rainfall at isolated places during 18th to 24th October with very heavy rainfall at isolated places on 18th & during 22nd to 23rd October. **Andhra Pradesh:** Light to moderate rainfall at most places and heavy rainfall at isolated places during 22nd to 24th October.

➤ Wind warning:

Squally weather with wind speed reaching 30-40 gusting to 50 kmph is likely to prevail over Southeast Bay of Bengal and adjoining South Andaman Sea on21st and 22nd October.

Squally wind with speed reaching 40-50 kmph gusting to 60 kmph over central parts of south Bay of Bengal and adjoining areas of central Bay of Bengal 22nd and 23rd October 2025.

> Sea conditions:

Sea condition is likely to become rough to very rough over southeast Bay of Bengal and adjoining South Andaman Sea on 21st and 22nd October and over central parts of south Bay of Bengal and adjoining areas of central Bay of Bengal on 22nd and 23rd October.

> Fishermen Warning:

Fishermen are advised not to venture into South and adjoining central Bay of Bengal from 21st afternoon onwards. Those fishermen out at sea should return to coast by 21st October.

ANNEXURE















