



**REPUBLIC OF KENYA**  
**MINISTRY OF ENVIRONMENT & FORESTRY**  
**KENYA METEOROLOGICAL DEPARTMENT**

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**REF.NO: KMD/FCST/3-2023/MARINE/12**

**Date: 20<sup>th</sup> March, 2023**

**7-Day Marine Forecast for the KENYA coast and off shore areas  
along the Western Indian Ocean Region  
Validity: 21/03/2023 - 27/03/2023**

## **1.0 GENERAL OUTLOOK**

### **1.1 Wind Speed & Direction:**

South-easterly winds are expected over Tanzania, Kenya, while north–easterly winds are expected in Somalia waters with wind speeds of 5 to 15 knots (2.5- 7.5 m/s) throughout the forecast period.

### **1.2 Sig. Wave Height and Direction:**

South-easterly waves expected over Tanzania, Kenya and Somalia waters with wave heights of 0.3 –1.5m ( $\approx$  1– 5ft) throughout the forecast period.

### **1.3 Sea conditions**

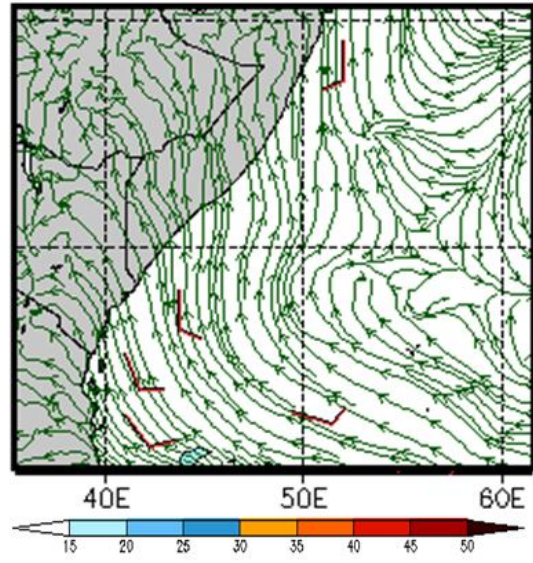
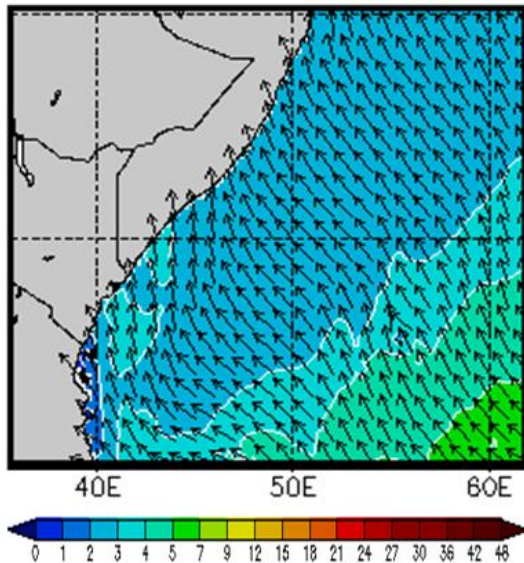
- Slight to moderate sea condition with wave heights of 0.3-1.5m (2-5ft) expected Tanzania, Kenya and Somalia waters throughout the forecast period.
- Gentle to fresh breeze with wind speeds of (5 to 15 Knots) expected Tanzania, Kenya and Somalia waters throughout the forecast period.

**2.0 WINDS AND SIGNIFICANT WAVE HEIGHTS FORECAST FOR THE PERIOD 21<sup>ST</sup> MARCH TO 27<sup>TH</sup> MARCH, 2023.**

**2.1 Tuesday 21<sup>st</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 m to 1.5m ( $\approx$  1– 5ft)

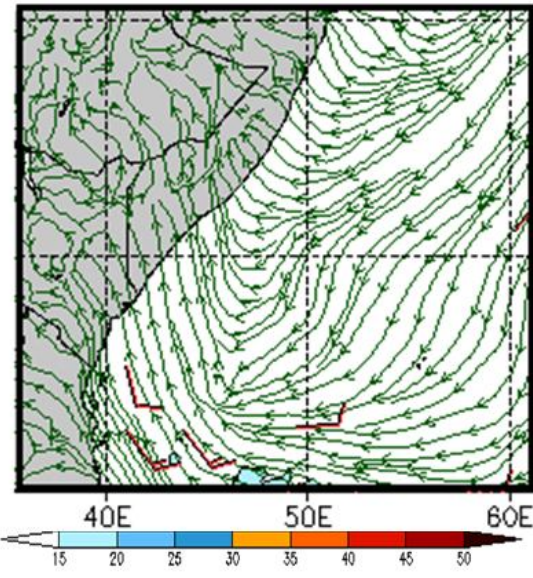
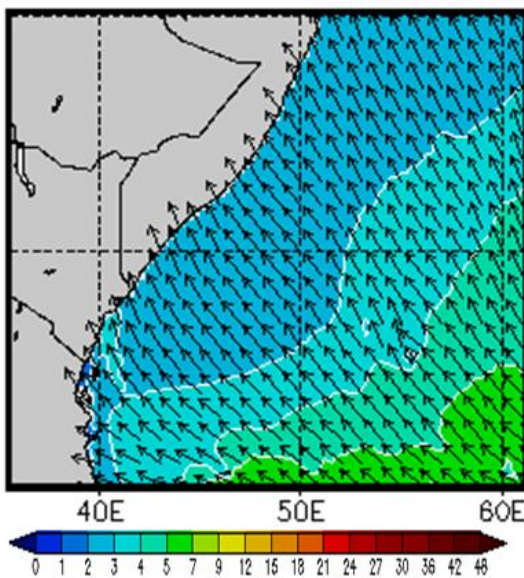
10m Winds: 10-15 knots ( $\approx$  5 – 7.5 m/s)



**2.2 Wednesday 22<sup>nd</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 1.2 m ( $\approx$  1 – 4ft)

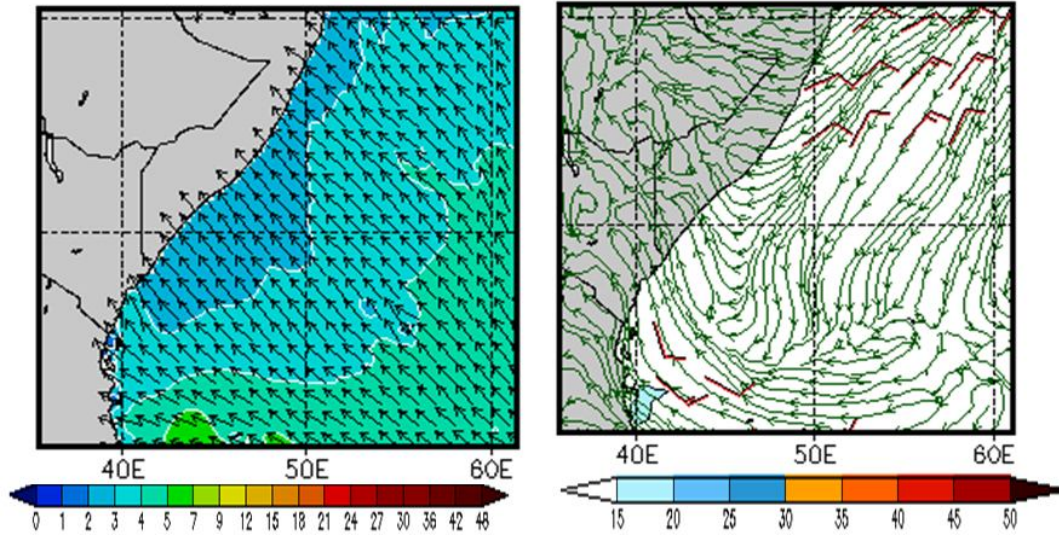
10m Winds: 5-10 knots ( $\approx$  2.5 – 5m/s)



**2.3 Thursday 23<sup>rd</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 1.2m ( $\approx$  1– 4ft)

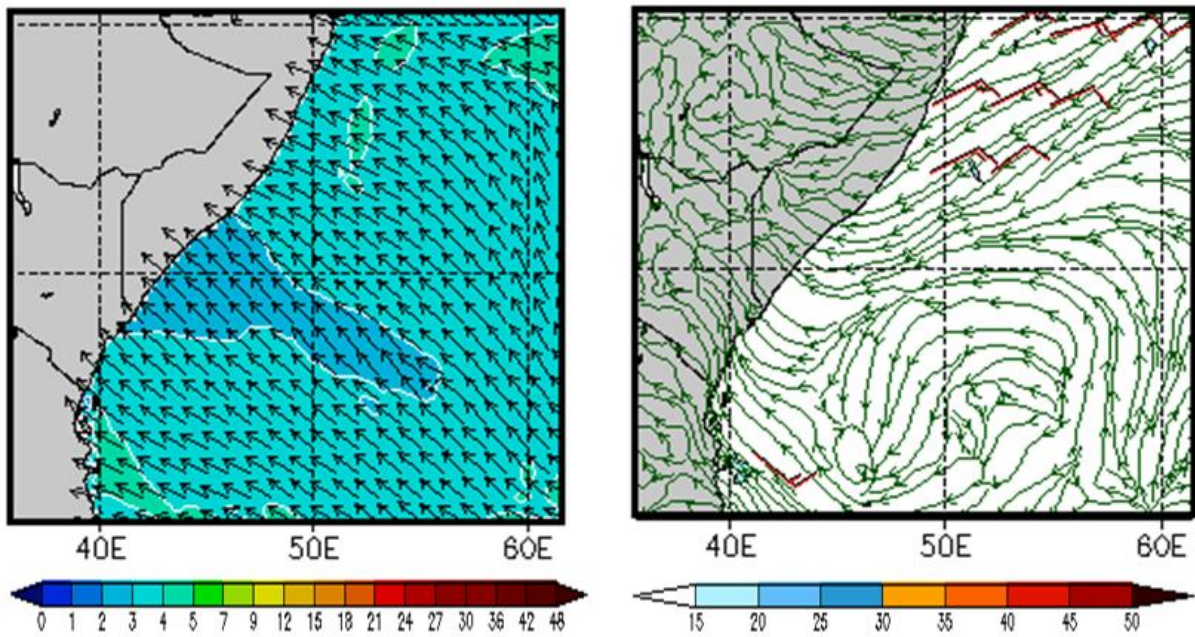
10m Winds: 5-10 knots ( $\approx$  2.5 – 5m/s)



**2.4 Friday 24<sup>th</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 1.2 m ( $\approx$  1– 4ft)

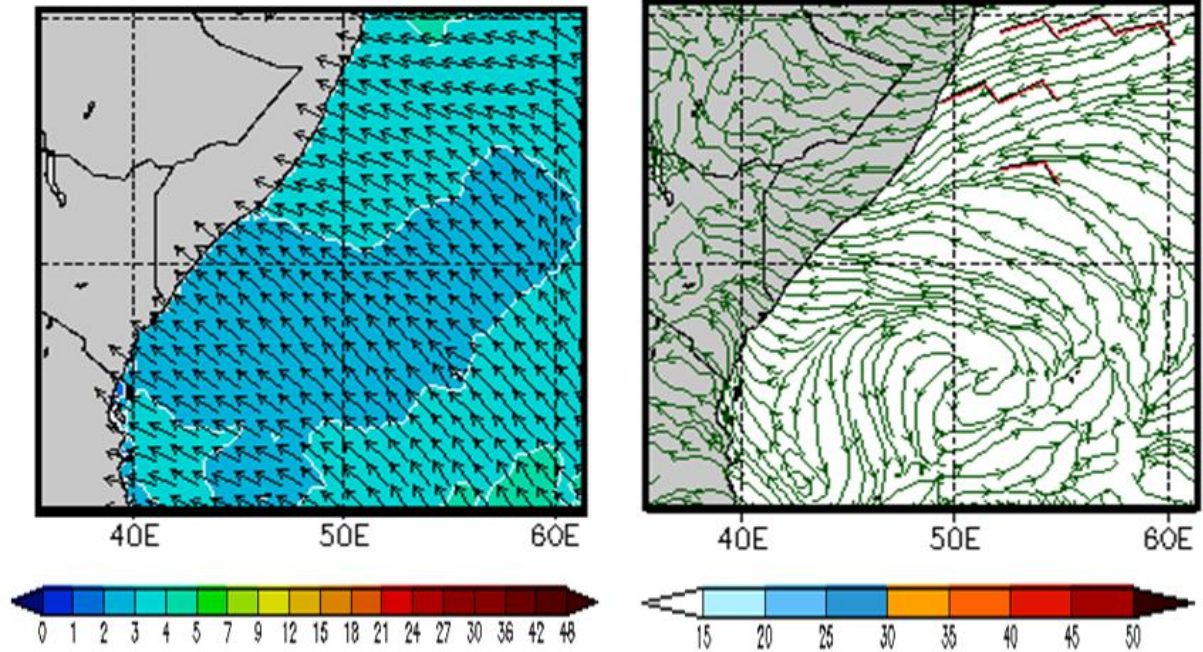
10m Winds: 5-15knots ( $\approx$  2.5 – 7.5m/s)



**2.5 Saturday 25<sup>th</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 1.2 m ( $\approx$  1–4ft)

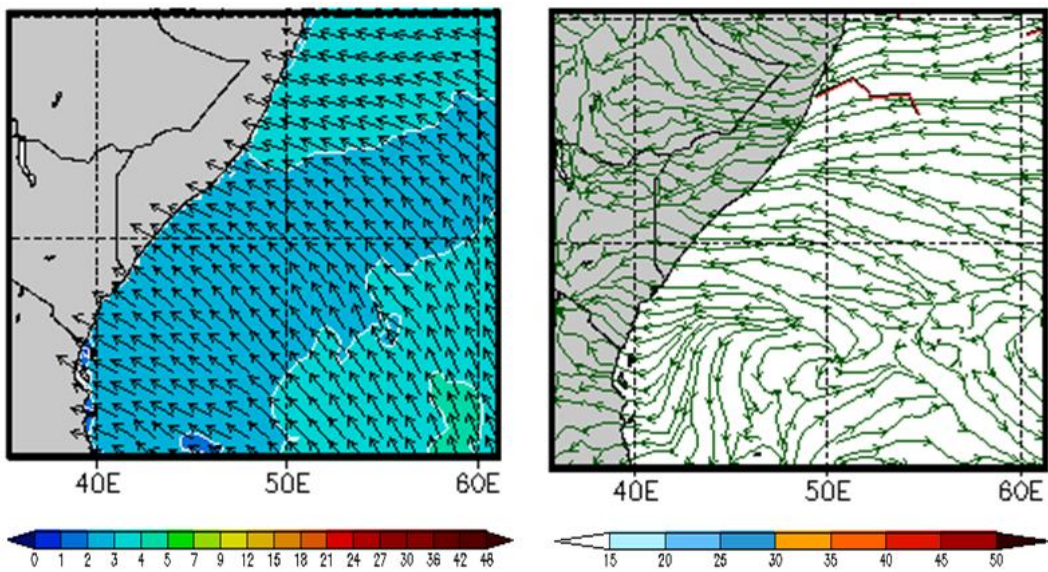
10m Winds: 5-10 knots ( $\approx$  2.5 – 5m/s)



**2.6 Sunday 26<sup>th</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 1.2m ( $\approx$  1–4ft)

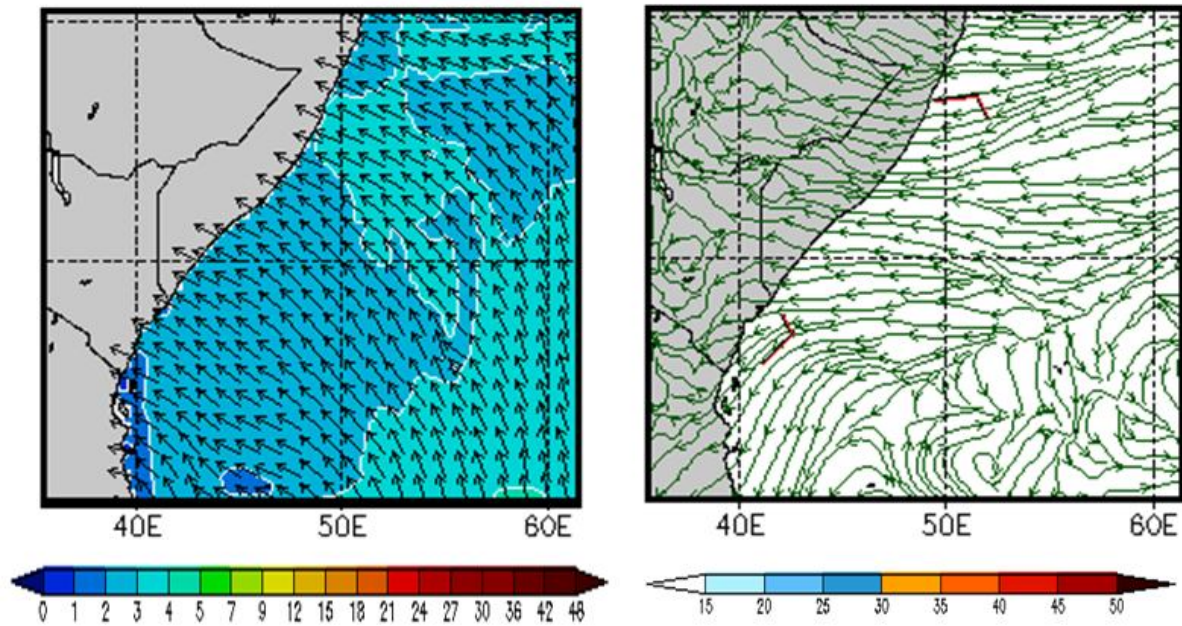
10m Winds: 5-10 knots ( $\approx$  2.5 – 5m/s)



**2.7 Monday 27<sup>th</sup> March, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)**

Wave height: 0.3 to 0.9m ( $\approx$  1– 3ft)

10m Winds: 5-10 knots ( $\approx$  2.5 – 5 m/s)

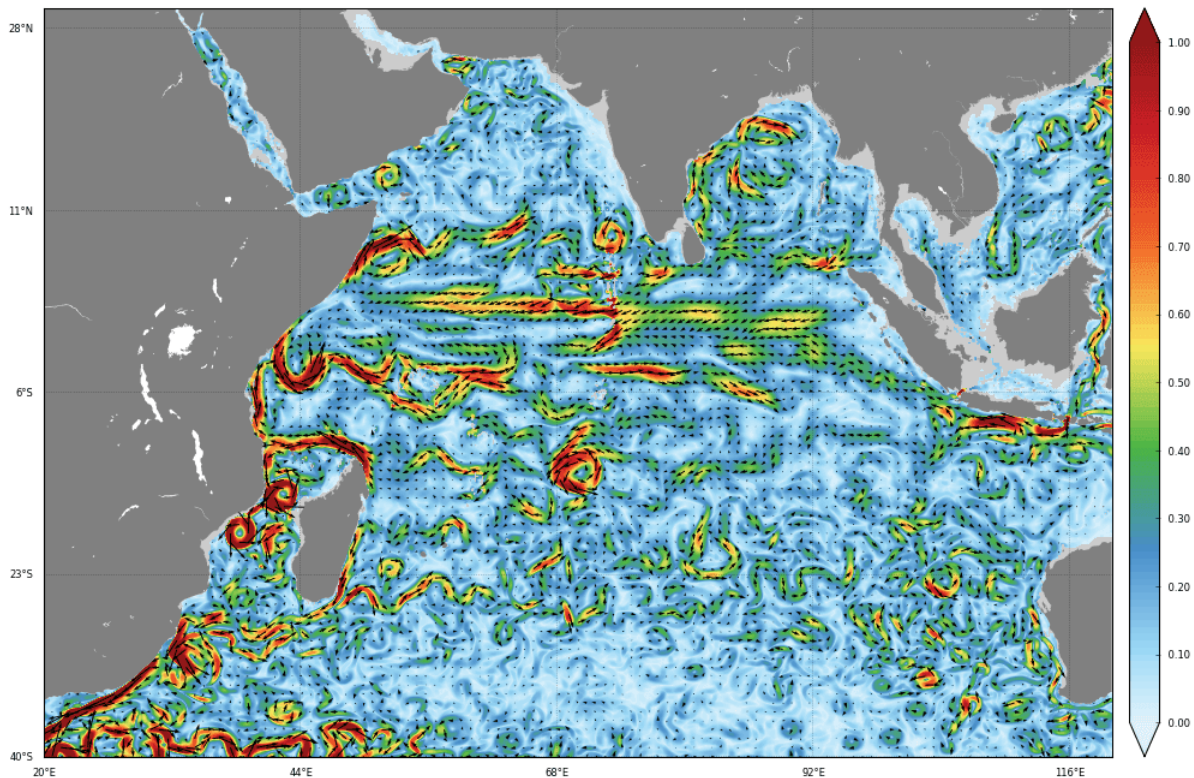


**3.0 Tide forecast valid 14<sup>th</sup> March, 2023 to 20<sup>th</sup> March, 2023**

Date	Description	High Tide		Low Tide	
		Time	Height	Time	Height
Tue 21 <sup>st</sup> March, 2023	1 <sup>st</sup> Tide	04:05 AM	3.62 m	10:14 AM	0.17 m
	2 <sup>nd</sup> Tide	04:26 PM	3.64 m	10:30 PM	0.12 m
Wed 22 <sup>nd</sup> March, 2023	1 <sup>st</sup> Tide	04:43 AM	3.71 m	10:46 AM	0.05 m
	2 <sup>nd</sup> Tide	05:01 PM	3.84 m	11:07 PM	0.01 m
Thur 23 <sup>rd</sup> March, 2023	1 <sup>st</sup> Tide	05:18 AM	3.69 m	11:17 AM	0.03 m
	2 <sup>nd</sup> Tide	05:35 PM	3.91 m	11:43 PM	0.02 m

<b>Fri 24<sup>th</sup> March, 2023</b>	<b>1<sup>st</sup> Tide</b>	05:51 AM	3.56 m	11:48 AM	0.10 m
	<b>2<sup>nd</sup> Tide</b>	06:07 PM	3.85 m		
<b>Sat 25<sup>th</sup> March, 2023</b>	<b>1<sup>st</sup> Tide</b>	06:24 AM	3.35 m	12:17 AM	0.15 m
	<b>2<sup>nd</sup> Tide</b>	06:39 PM	3.69 m	12:18 PM	0.27 m
<b>Sun 26<sup>th</sup> March, 2023</b>	<b>1<sup>st</sup> Tide</b>	06:55 AM	3.08 m	12:51 AM	0.37 m
	<b>2<sup>nd</sup> Tide</b>	07:10 PM	3.43 m	12:47 PM	0.50 m
<b>Mon 27<sup>th</sup> March, 2023</b>	<b>1<sup>st</sup> Tide</b>	07:25 AM	2.78 m	01:25 AM	0.66 m
	<b>2<sup>nd</sup> Tide</b>	07:43 PM	3.12 m	01:16 PM	0.78 m

**4.0 9 days Ocean surface current in meters per seconds (m/s) forecast valid 20/03/2023 to 28/03/2023**



## KEY ON SEA STATE

WAVE HEIGHT RANGE (Meters)	DESCRIPTION	IMPACT
0.6 – 1.0 m (≈ 1.8 – 3.0 ft)	Slight	Conditions suitable for Marine activities
1.0 – 1.9 m (≈ 3.0 – 5.7 ft)	Slight - Moderate	
2.0 – 2.9 m (≈ 6.0 – 8.7 ft)	Moderate-Rough	Caution on operating marine activities
3.0 – 4.0 m (≈ 9.0 – 12.0 ft)	Rough	Warning in place!!!! Warning in place and marine activities on hold
4.1 – 5.5 m (≈ 12.3 – 16.5 ft)	Very Rough	

## KEY ON SEA STATE

WIND	RANGE	DESCRIPTIONS	IMPACT
	< 1 – 7 Knots	Calm to Light breeze	1 – 6 knots, the Ocean is relatively calm with very little disturbance. Suitable for Marine operations
	7 – 21 Knots	Gentle breeze to Fresh breeze	7 – 17 knots, small boats are likely to be filled with water sprays and become unstable. Caution in carrying out marine activities
	22 – ≥34 Knots	Strong breeze to Extremely Strong breeze	More than 21 knots, the ocean state is very much disturbed and the prevailing conditions are dangerous for marine operations. Warning in place!!!!

*N.B: This forecast should be used in conjunction with the daily marine forecast issued by this Department.*

*In concurrence with outputs from relevant marine data platforms, acknowledgement is fully accorded to: ESSO- Indian National Centre for Ocean Information Services (INCOIS), mercator-ocean.fr, COPERNICUS Marine Environment Monitoring Service (CMEMS) and other related sources.*

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