

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

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REF.NO: KMD/FCST/5-2021/MARINE/17

Date: 10th May, 2021

7-Day Marine Forecast for the KENYA coast and off shore areas along the Western Indian Ocean Region Validity: 11/05/2021-17/05/2021

### 1. GENERAL OUTLOOK

### 1.1 Wind Speed & Direction:

Mainly south easterly to south westerly winds expected in Kenyan, Somali and Tanzania waters with wind speed in the range of 5 to 30knots (2.5 - 15m/s) throughout the forecasting period.

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

Moderate waves of 0.9 - 4.5 m ( $\approx 3 - 15$ ft) expected to be mainly South easterly turning to south westerly over Kenyan, Tanzania and Somali waters during the forecasting period.

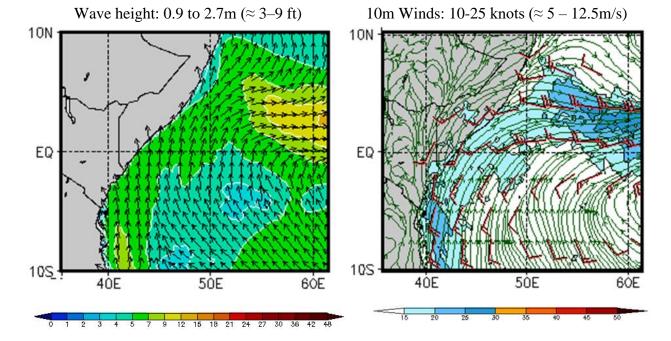
#### **1.3** Sea conditions

Slight to moderate condition of wind speeds 05-20 Knots and wave of 0.9-2.1M expected near shore over Kenya, Tanzania and Somalia waters during the forecasting period.

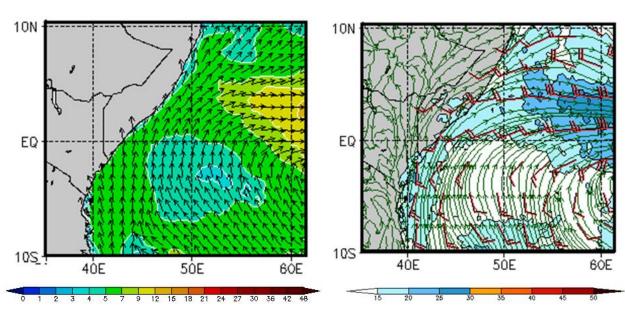
Moderate to very rough sea conditions expected at longitude 55E to 60 E as from Thursday 13<sup>th</sup> May 2021 to the end of the forecasting period, with strong winds speeds of more than 25 Knots and significant wave height more than 2.5 m.

## 2. WINDS AND SIGNIFICANT WAVE HEGHTS FORECAST FOR THE PERIOD 11<sup>TH</sup> MAY TO 17<sup>ITH</sup> MAY, 2021.

2.1 Tuesday 11<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



### 2.2 Wednesday 12<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

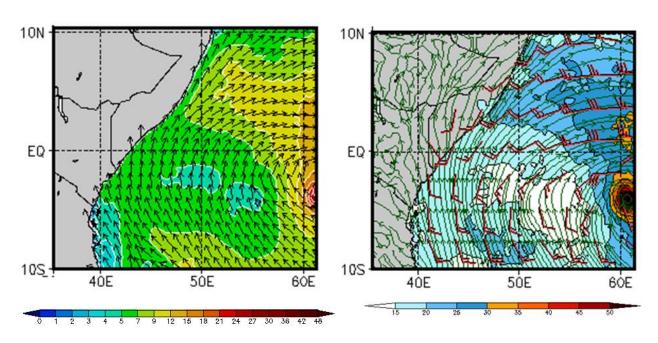


Wave height: 1.2 to 2.7m ( $\approx$  4–9ft)

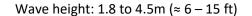
10m Winds: 10-30knots (≈ 5 -15m/s)

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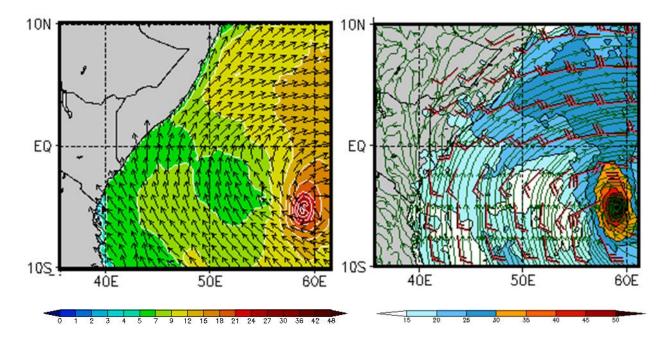
# 2.3 Thursday 13<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



2.4 Friday 14<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



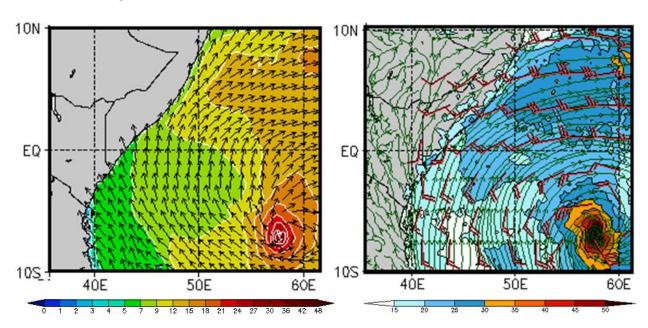
10m Winds: 10-30knots (≈ 5 -15m/s



Wave height: 1.2 to 3.6 m (≈ 4– 12 ft)

10m Winds: 10-30knots (≈ 5 – 15m/s)

# 2.5 Saturday 15<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



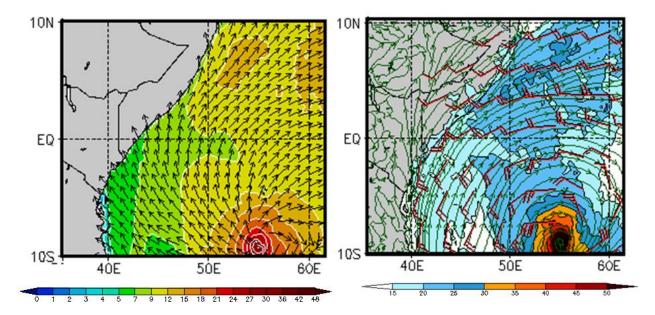
Wave height: 1.5 to 4.5 m (≈ 5–15 ft)

10m Winds: 10-30knots (≈ 5 -15m/s)

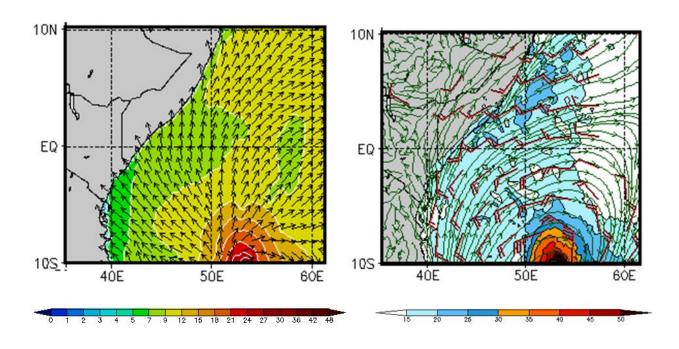
2.6 Sunday 16<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 1.5 to 4.5m (≈ 5–15ft)

10m Winds: 10-30knots (~ 5 -15m/s)



## 2.7 Monday 17<sup>th</sup> May, 2021: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



Wave height: 1.5 to 4.5m (≈ 5–15 ft)

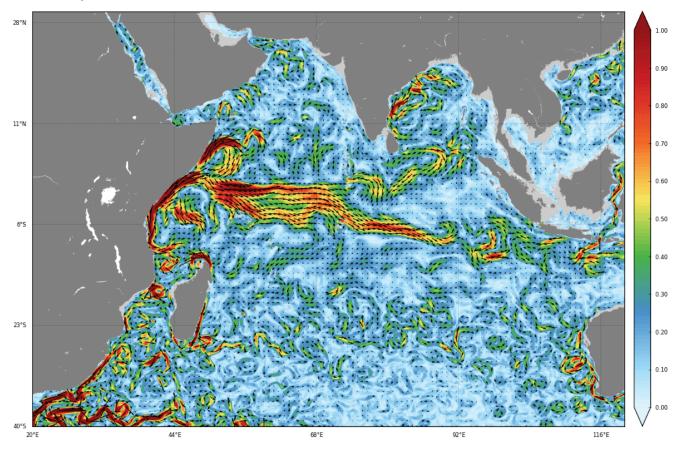
10m Winds: 10-30knots (≈ 5 -15m/s)

3. Tide forecast valid 11<sup>th</sup> May to 17<sup>th</sup> May, 2021

Date	Description	High Tide	High Tide		Low Tide	
		Time	Height	Time	Height	
Tue, 11 <sup>th</sup> May	1 <sup>st</sup> Tide	04:10 AM	3.05 m	10:00 AM	0.53 m	
	2 <sup>nd</sup> Tide	04:18 PM	3.52 m	10:33 PM	0.37 m	
Wed, 12 <sup>th</sup> May	1 <sup>st</sup> Tide	04:38 AM	3.07 m	10:27 AM	0.51 m	
	2 <sup>nd</sup> Tide	04:45 PM	3.56 m	11:01 PM	0.35 m	
Thu, 13 <sup>th</sup> May	1 <sup>st</sup> Tide	05:06 AM	3.05 m	10:54 AM	0.54 m	
	2 <sup>nd</sup> Tide	05:12 PM	3.54 m	11:30 PM	0.38 m	
Fri, 14 <sup>th</sup> May	1 <sup>st</sup> Tide	05:34 AM	2.98 m	11:21 AM	0.61 m	
	2 <sup>nd</sup> Tide	05:41 PM	3.47 m			

Sat, 15 <sup>th</sup> May	1 <sup>st</sup> Tide	06:04 AM	2.88 m	12:00 AM	0.47 m
	2 <sup>nd</sup> Tide	06:10 PM	3.35 m	11:49 AM	0.72 m
Sun, 16 <sup>th</sup> May	1 <sup>st</sup> Tide	06:37 AM	2.74 m	12:31 AM	0.60 m
	2 <sup>nd</sup> Tide	06:43 PM	3.20 m	12:18 PM	0.87 m
Mon, 17 <sup>th</sup> May	1 <sup>st</sup> Tide	07:14 AM	2.58 m	01:06 AM	0.76 m
	2 <sup>nd</sup> Tide	07:21 PM	3.01 m	12:52 PM	1.04 m

### 4. 9days Ocean surface current forecast valid 10/05/2021 to 18/05/2021



### KEY ON SEA STATE

WAVE HEIGHT RANGE	DESCRIPTION	IMPACT
(Metres)		

$0.6 - 1.0 \text{ m} (\approx 1.8 - 3.0 \text{ ft})$	Slight	Conditions suitable for Marine
$1.0 - 1.9 \text{ m} . (\approx 3.0 - 5.7 \text{ ft})$	Slight - Moderate	activities
$2.0 - 2.9 \text{ m} ~(\approx 6.0 - 8.7 \text{ ft})$	Moderate-Rough	Caution on operating marine
		activities
3.0 – 4.0 m (≈ 9.0 – 12.0 ft)	Rough	Warning in place!!!!
4.1 – 5.5 m (≈ 12.3 – 16.5 ft)	Very Rough	Warning in place and marine
		activities on hold

#### **KEY ON SEA STATE**

WIND	RANGE	DESCRIPTIONS	ІМРАСТ
SPEEDS	< 1 – 7 Knots	Calm to Light breeze	1 – 6 knots, the Ocean is relatively calm with very little disturbance. Suitable for Marine operations
SPEEDS	7 – 21 Knots	Gentle breeze to Fresh breeze	<ul> <li>7 – 17 knots, small boats are likely to be filled with water sprays and become unstable.</li> <li>Caution in carrying out marine activities</li> </ul>
	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.

#### Stella Aura, MBS DIRECTOR OF KENYA METEOROLOGICAL DEPARTMENT