

### REPUBLIC OF KENYA

### MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

### KENYA METEOROLOGICAL DEPARTMENT

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### REF.NO: KMD/FCST/5-2024/MARINE/18 Date: 6th May, 2024

7-Day Marine Forecast for the KENYA coast and off shore areas along the Western Indian Ocean Region Validity: 7/05/2024 - 13/05/2024

### 1.0 GENERAL OUTLOOK

### 1.1 Wind Speed & Direction:

South Easterly winds are expected over Somali waters with wind speeds of 10 knots (5 m/s) hence South Easterly winds are expected over Kenya and Tanzania waters with winds of 10 to 30Knots (5-15m/s) during the entire forecast period.

### 1.2 Sig. Wave Height and Direction:

South-easterly waves expected over Somalia, Kenya and Tanzania waters with expected wave height of 1.2 to 2.7m (4-9ft) throughout the entire forecast period.

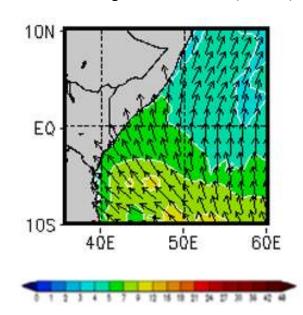
#### 1.3 Sea conditions

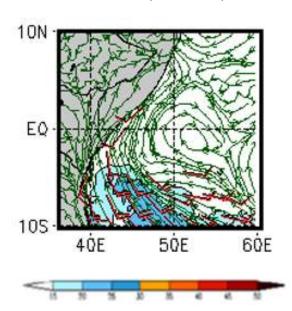
- Moderate sea condition with wave heights of 1.2-2.1m (4-7ft) expected over Somalia
- While moderate to strong sea conditions of wave height 1.5 -2.7m (5-9ft) expected over Kenya and Tanzania waters.
- Fresh to strong breeze with wind speeds of (10 to 30 Knots) expected over Kenya and Tanzania waters from 7<sup>th</sup> to 10<sup>th</sup> May 2024
- While in Somalia Gentle breeze with winds of 10knots are expected

- 2.0 WINDS AND SIGNIFICANT WAVE HEGHTS FORECAST FOR THE PERIOD 7<sup>th</sup> May TO 13<sup>th</sup> May, 2024.
- 2.1 Tuesday 7<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 1.2 m to 2.4m ( $\approx 4-8$ ft)

10m Winds: 10-20knots ( $\approx 5$ -10 m/s)

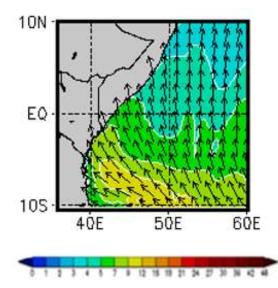


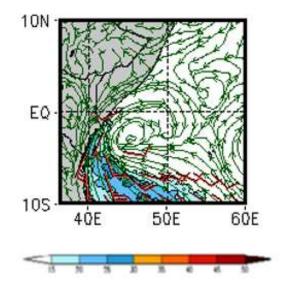


2.2 Wednesday 8<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 1.8 to 2.7 m ( $\approx 6 - 9$ ft)

10m Winds: 10-30knots ( $\approx 5.0-15 \text{ m/s}$ )

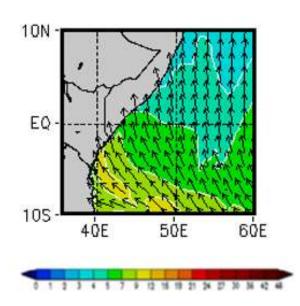


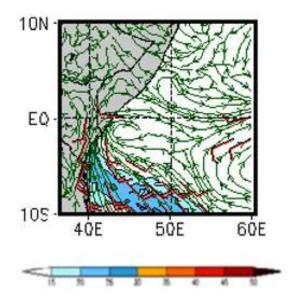


# 2.3 Thursday 9<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 2.1 to 2.7m ( $\approx 7-9$ ft)

10m Winds: 10-30knots ( $\approx 5-15$  m/s)

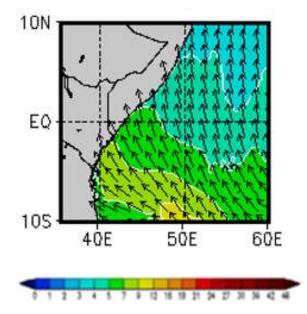


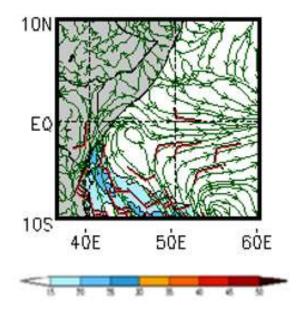


## 2.4 Friday 10<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 2.1 to 2.7 m ( $\approx 7-9$ ft)

10m Winds: 10-30knots ( $\approx 5-15 \text{ m/s}$ )

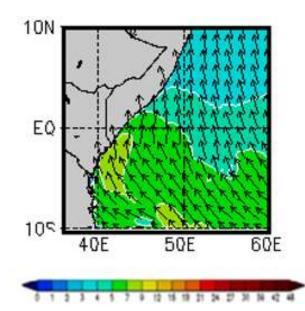


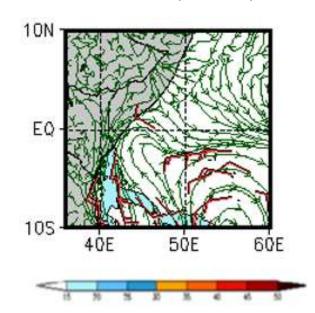


2.5 Saturday 11<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 1.8 to 2.1 m ( $\approx 6 - 7$ ft)

10m Winds: 10 -20 knots ( $\approx 5$ -10 m/s)

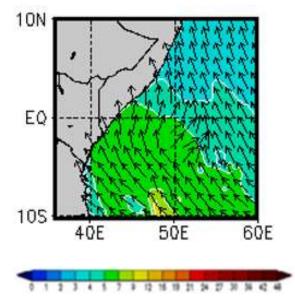


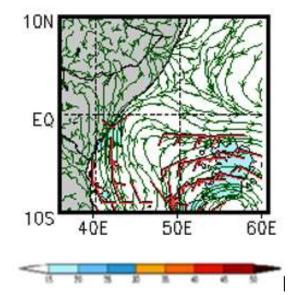


2.6 Sunday 12<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

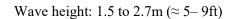
Wave height: 1.2 to 2.1m ( $\approx 4-7$ ft)

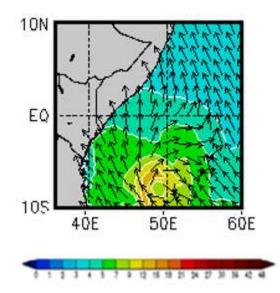
10m Winds: 10-20 knots ( $\approx 5 - 10 \text{m/s}$ )

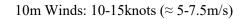


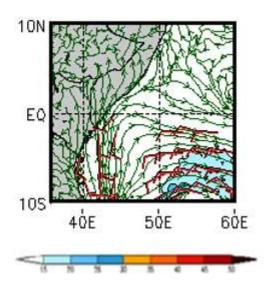


# 2.7 Monday 13<sup>th</sup> May, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)







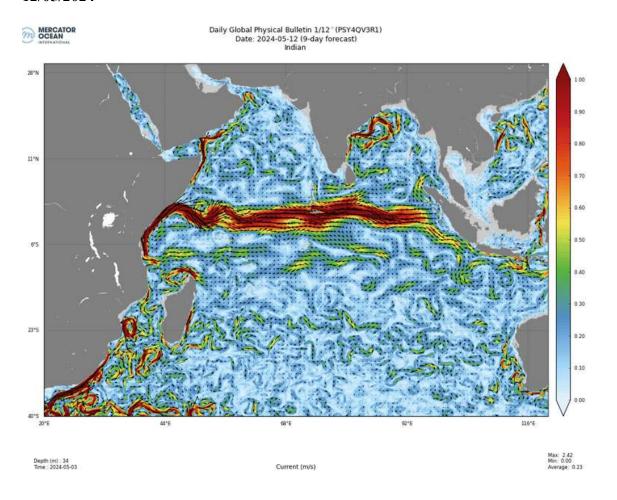


### 3.0 Tide forecast valid 7th May, 2024 to 13th May, 2024

Date	Description	High Tide		Low Tide	
		Time	Height	Time	Height
Tue 7th May, 2024	1st Tide	03:30 AM	3.22 m	09:22 AM	0.33 m
	2 <sup>nd</sup> Tide	03:45 PM	3.85 m	10:03 PM	0.10 m
Wed 8th May, 2024	1st Tide	04:10 AM	3.28 m	09:59 AM	0.25 m
	2 <sup>nd</sup> Tide	04:23 PM	3.96 m	10:42 PM	0.05 m
Thur 9th May, 2024	1st Tide	04:49 AM	3.26 m	10:36 AM	0.26 m
	2 <sup>nd</sup> Tide	05:00 PM	3.93 m	11:20 PM	0.11 m
Fri 10th May, 2024	1st Tide	05:27 AM	3.16 m	11:12 AM	0.35 m

	2 <sup>nd</sup> Tide	05:38 PM	3.80 m	11:58 PM	0.26 m
Sat 11th May, 2024	1st Tide	06:04 AM	3.00 m	11:48 AM	0.52 m
	2 <sup>nd</sup> Tide	06:15 PM	3.57 m		
Sun 12th May, 2024	1st Tide	06:43 AM	2.80 m	12:36 AM	0.48 m
	2 <sup>nd</sup> Tide	06:54 PM	3.29 m	12:26 PM	0.75 m
Mon 13th May, 2024	1st Tide	07:25 AM	2.59 m	01:18 AM	0.74 m
	2 <sup>nd</sup> Tide	07:37 PM	2.98 m	01:07 PM	1.01 m

### $4.0\,$ 9 days Ocean surface current in meters per seconds (m/s) forecast valid 03/05/2024 to 12/05/2024



### **KEY ON SEA STATE**

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

### **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.

Dr. David Gikungu

DIRECTOR OF KENYA METEOROLOGICAL DEPARTMENT