

REPUBLIC OF KENYA MINISTRY OF ENVIRONMENT & FORESTRY KENYA METEOROLOGICAL DEPARTMENT

Dagoretti Corner, Ngong Road, P. O. Box 30259, 00100 GPO, Nairobi, Kenya **Telephone:** 254 (0) 20 3867880-7, **Fax:** 254 (0) 20 3876955/3877373/3867888, e-mail: <u>director@meteo.go.ke</u>, <u>info@meteo.go.ke</u> Website: <u>http://www.meteo.go.ke</u>

REF.NO: KMD/FCST/7-2022/MARINE/29 Date: 25TH JULY, 2022

7-Day Marine Forecast for the KENYA coast and off shore areas along the Western Indian Ocean Region Validity: 26/07/2022 - 01/08/2022

1.0 GENERAL OUTLOOK

1.1 Wind Speed & Direction:

Southeasterly winds are expected over Tanzania and Kenya waters, turning to southwesterly over Somalia waters wind speeds of 10 to 25 knots (5- 12.5 m/s) throughout the forecast period.

1.2 Sig. Wave Height and Direction:

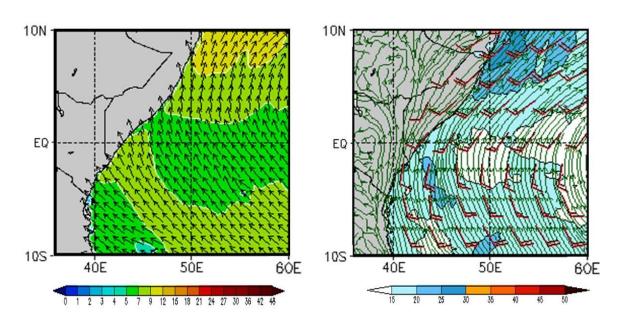
Southeasterly waves expected over Kenya and Tanzania waters, turning to southwesterly over Somalia waters with wave heights of $1.2 - 2.7 \text{m} (\approx 4 - 9 \text{ft})$ throughout the forecast period.

1.3 Sea conditions

- Moderate to rough sea condition with wave heights of 1.2- 2.7m (4-9ft) expected over Kenya, Tanzania and Somalia waters.
- Fresh to strong breeze with wind speeds of (10 to 25 Knots) expected over Somali waters from 26th to 27th July 2022.

2.0 WINDS AND SIGNIFICANT WAVE HEGHTS FORECAST FOR THE PERIOD 26TH JULY TO 1ST AUGUST, 2022.

2.1 Tuesday 26th July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



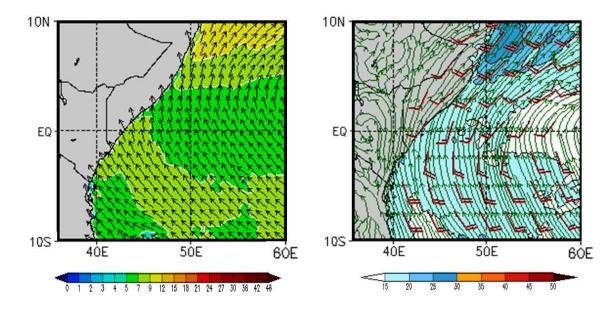
Wave height: 1.2 m to 2.7m ($\approx 4-9$ ft)

2.2 Wednesday 27th July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

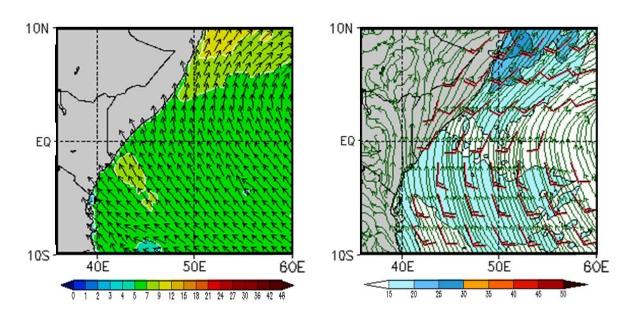
Wave height: 1.2 to 2.7 m ($\approx 4-9$ ft)

10m Winds: 10-25 knots ($\approx 5 - 12.5$ m/s)

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2.3 Thursday 28th July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

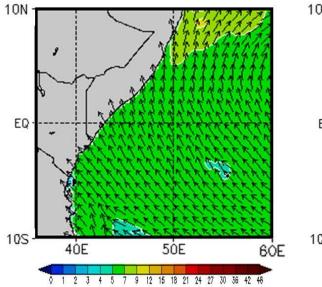


Wave height: 1.2 to 2.7m ($\approx 4-9$ ft)

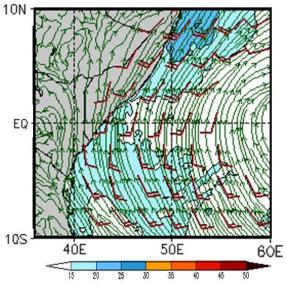
10m Winds: 10-20 knots ($\approx 5 - 10$ m/s)

2.4 Friday 29th July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

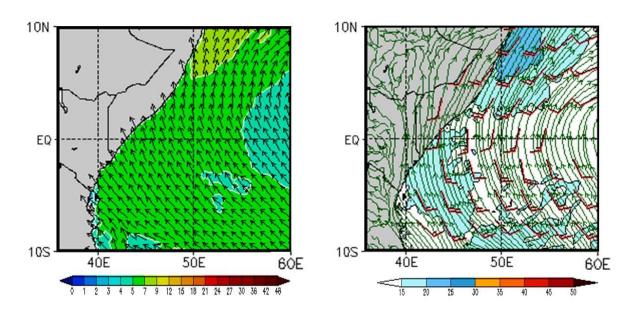
Wave height: 1.2 to 2.4 m (\approx 4–8ft)



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



2.5 Saturday 30th July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



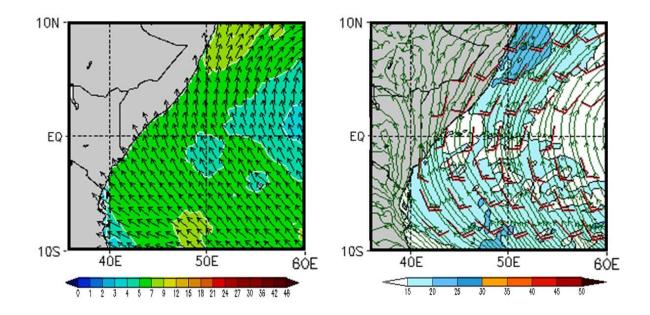
Wave height: 1.2 to 2.1 m ($\approx 4-7$ ft)

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

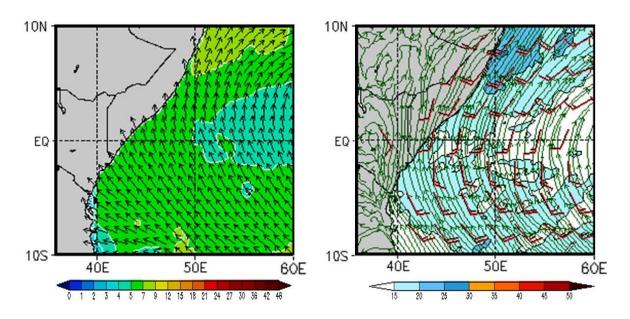
2.6 Sunday 31st July, 2022: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

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

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



2.7 Monday 1st August, 2022: 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)

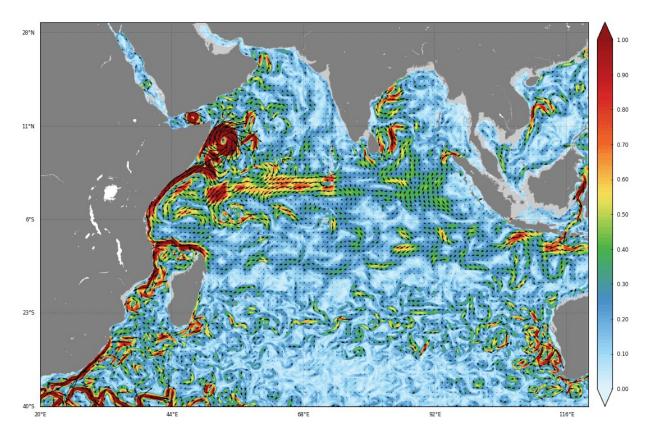
10m Winds: 10-25 knots ($\approx 5 - 12.5$ m/s)

3.0 Tide forecast valid 26th July, 2022 to 1st August, 2022

Date	Description	High Tide		Low Tide	
		Time	Height	Time	Height
Tue 26 th July, 2022	1 st Tide	03:08 AM	2.38 m	08:43 AM	1.06 m
	2 nd Tide	03:14 PM	3.03 m	09:43 PM	0.77 m
Wed 27 th July, 2022	1 st Tide	03:47 AM	2.54 m	09:27 AM	0.93 m
	2 nd Tide	03:51 PM	3.17 m	10:17 PM	0.63 m
Thur 28 th July, 2022	1 st Tide	04:22 AM	2.68 m	10:05 AM	0.80 m
	2 nd Tide	04:25 PM	3.28 m	10:49 PM	0.50 m
Fri 29 th July, 2022	1 st Tide	04:54 AM	2.82 m	10:39 AM	0.71 m

	2 nd Tide	04:57 PM	3.35 m	11:18 PM	0.41 m
Sat 30 th July, 2022	1 st Tide	05:25 AM	2.92 m	11:12 AM	0.64 m
	2 nd Tide	05:28 PM	3.38 m	11:47 PM	0.37 m
Sun 31 st July, 2022	1 st Tide	05:55 AM	3.00 m	11:45 AM	0.61 m
	2 nd Tide	05:59 PM	3.36 m		
Mon 1 st August, 2022	1 st Tide	06:26 AM	3.05 m	12:15 AM	0.36 m
	2 nd Tide	06:31 PM	3.28 m	12:17 PM	0.62 m

4.0. 9 days Ocean surface current in meters per seconds (m/s) forecast valid 25/07/2022 to 02/08/2022



KEY ON SEA STATE

WAVE HEIGHT RANGE (Meters)	DESCRIPTION	ІМРАСТ	
$0.6 - 1.0 \text{ m} \ (\approx 1.8 - 3.0 \text{ ft})$	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	ІМРАСТ
	< 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