



REPUBLIC OF KENYA
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY
KENYA METEOROLOGICAL DEPARTMENT

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REF.NO: KMD/FCST/12-2023/MARINE/49

Date: 4th December, 2023

**7-Day Marine Forecast for the KENYA coast and off shore areas
along the Western Indian Ocean Region
Validity: 05/12/2023 - 11/12/2023**

1.0 GENERAL OUTLOOK

1.1 Wind Speed & Direction:

Predominantly north-easterly winds are expected over Tanzania, Kenya and Somalia waters with wind speeds of 10 to 20 knots (5-10 m/s) throughout the forecast period.

1.2 Sig. Wave Height and Direction:

North-easterly to easterly waves expected over Tanzania and Kenya; North-easterly waves expected Somalia waters with wave heights of 0.6 – 2.1m (\approx 2 – 7ft) throughout the forecast period.

1.3 Sea conditions

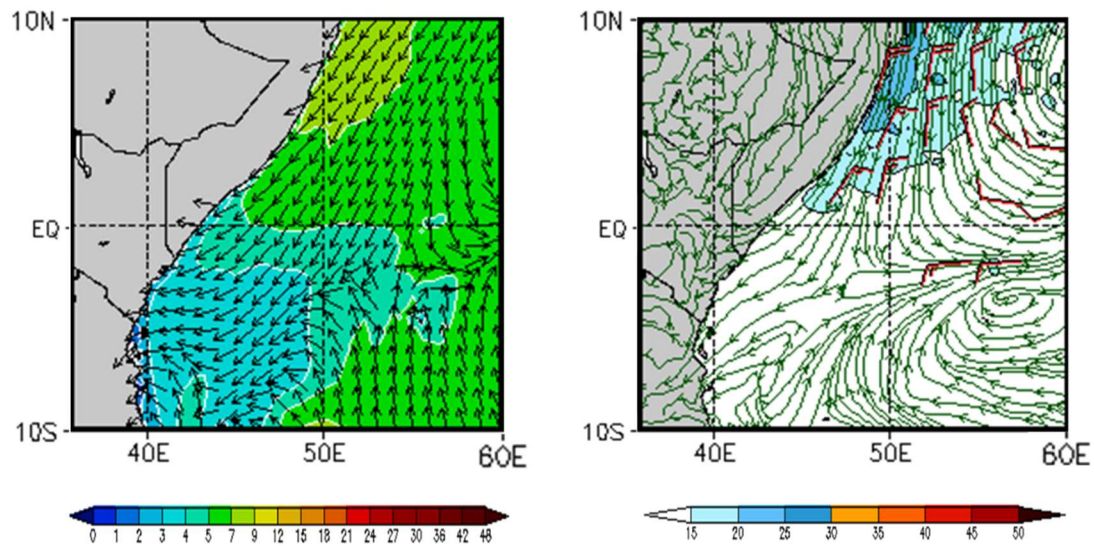
- Slight to moderate sea condition with wave heights of 1.5-2.1m (5-7ft) expected over the Somalia waters throughout the forecast period.
- Light to gentle breeze with wind speeds of (10 to 20 Knots) expected over Somalia waters throughout the forecast period.

2.0 WINDS AND SIGNIFICANT WAVE HEIGHTS FORECAST FOR THE PERIOD 5TH DECEMBER TO 11TH DECEMBER, 2023.

2.1 Tuesday 5th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 m to 1.8m (\approx 2– 6ft)

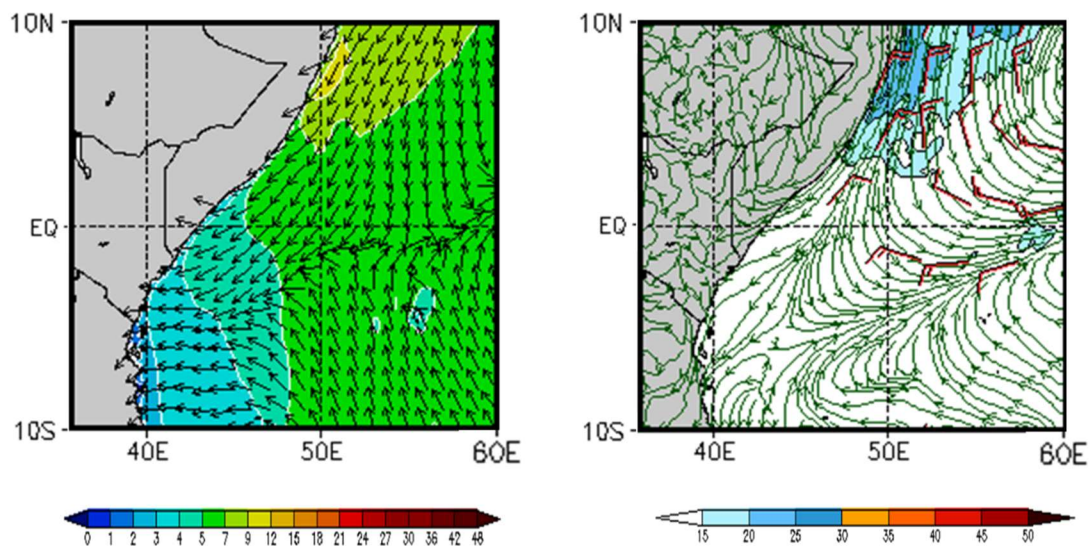
10m Winds: 10-20 knots (\approx 5 – 10 m/s)



2.2 Wednesday 6th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 2.1 m (\approx 2 – 7ft)

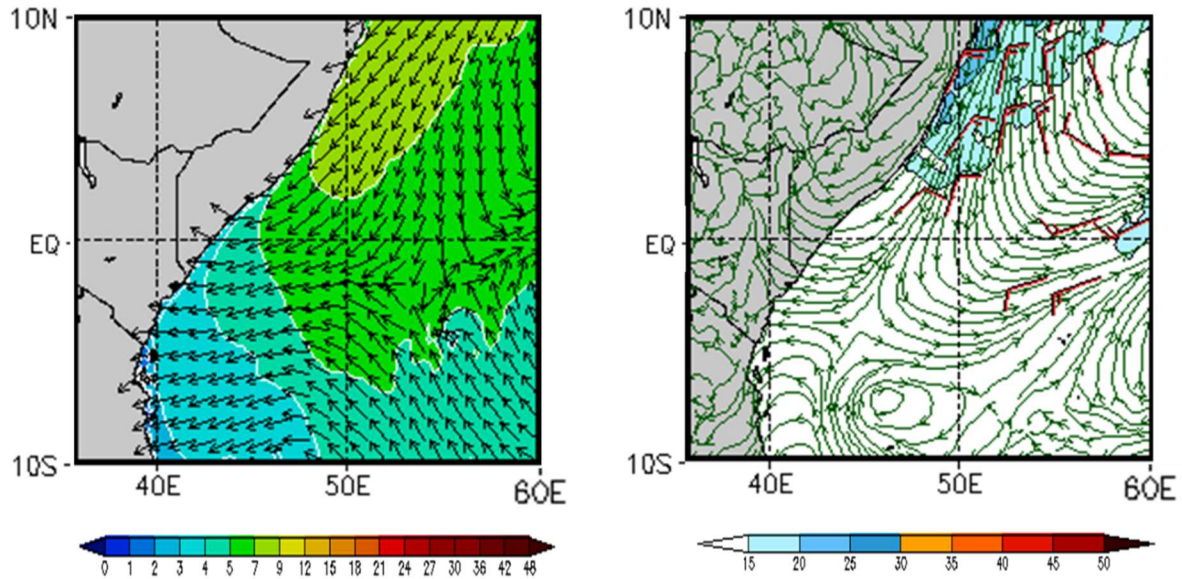
10m Winds: 10-20 knots (\approx 5 – 10m/s)



2.3 Thursday 7th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 1.8m (\approx 2– 6ft)

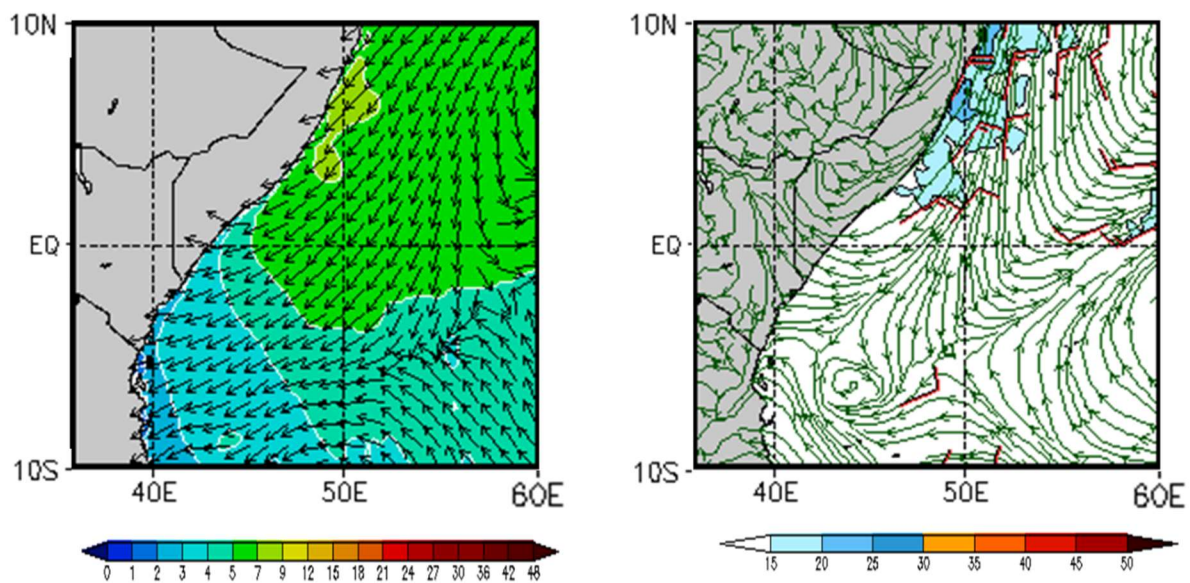
10m Winds: 10-15 knots (\approx 5-7.5 m/s)



2.4 Friday 8th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 1.8 m (\approx 2– 6ft)

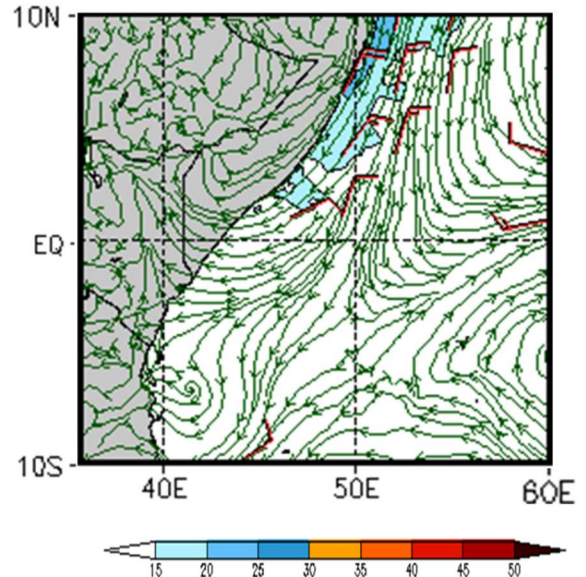
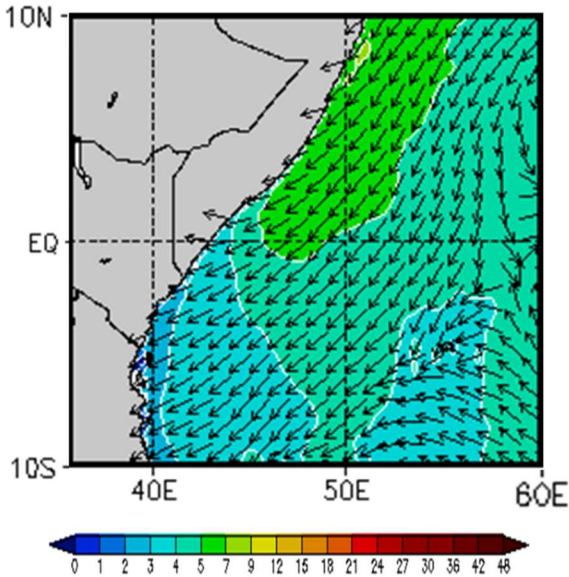
10m Winds: 10-20knots (\approx 5-10m/s)



2.5 Saturday 9th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 1.5 m ($\approx 2 - 5$ ft)

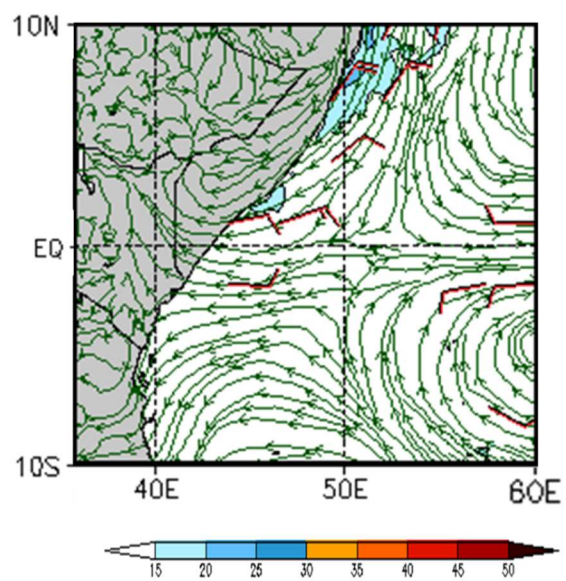
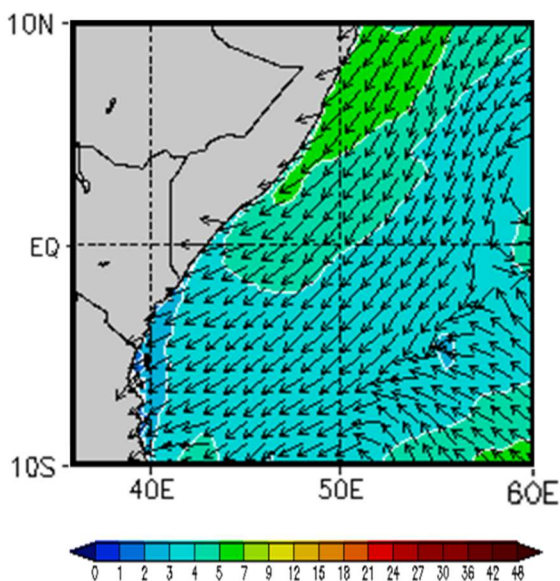
10m Winds: 10-20 knots ($\approx 5 - 10$ m/s)



2.6 Sunday 10th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 1.2m ($\approx 2-5$ ft)

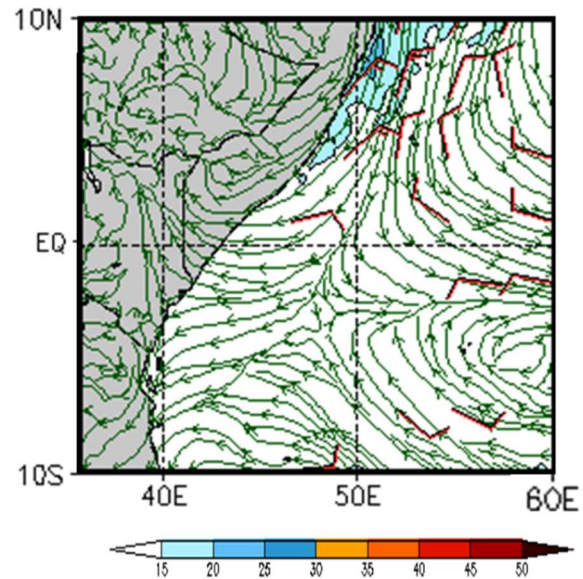
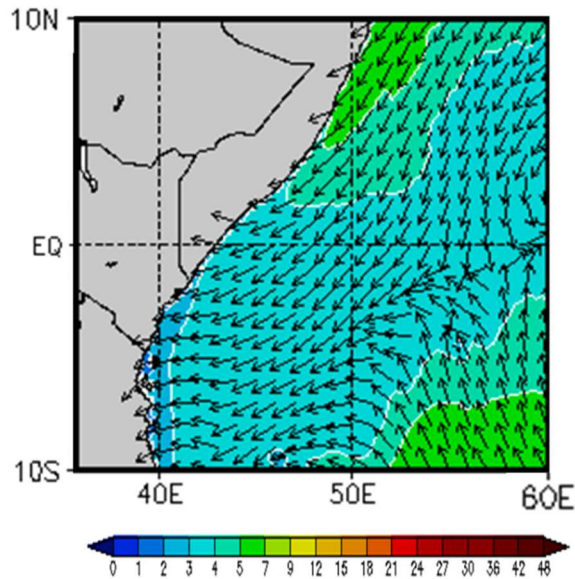
10m Winds: 10-15 knots ($\approx 5 - 7.5$ m/s)



2.7 Monday 11th December, 2023: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 1.5m (\approx 2– 5ft)

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

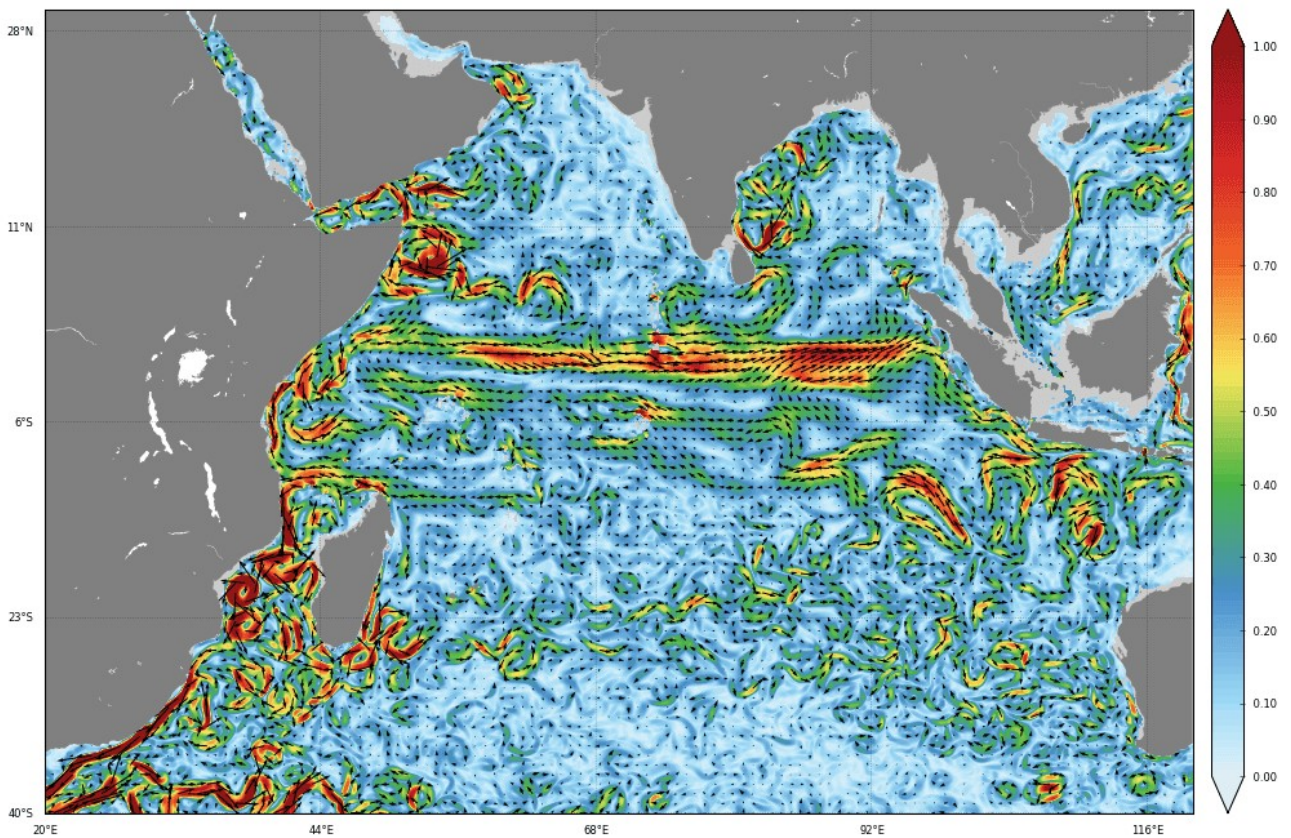


3.0 Tide forecast valid 5th December, 2023 to 11th December, 2023

Date	Description	High Tide		Low Tide	
		Time	Height	Time	Height
Tue 5 th December, 2023	1 st Tide	09:09 AM	2.42 m	02:55 AM	1.45 m
	2 nd Tide	10:29 PM	2.31 m	03:52 PM	1.21 m
Wed 6 th December, 2023	1 st Tide	10:33 AM	2.28 m	04:35 AM	1.51 m
	2 nd Tide	11:51 PM	2.43 m	05:09 PM	1.23 m
Thur 7 th December, 2023	1 st Tide	12:02 PM	2.27 m	06:10 AM	1.41 m
	2 nd Tide			06:16 PM	1.17 m
Fri 8 th December, 2023	1 st Tide	12:52 AM	2.63 m	07:15 AM	1.21 m

	2nd Tide	01:10 PM	2.37 m	07:08 PM	1.07 m
Sat 9th December, 2023	1st Tide	01:37 AM	2.85 m	08:02 AM	0.98 m
	2nd Tide	02:00 PM	2.50 m	07:50 PM	0.94 m
Sun 10th December, 2023	1st Tide	02:16 AM	3.09 m	08:42 AM	0.75 m
	2nd Tide	02:42 PM	2.64 m	08:28 PM	0.81 m
Mon 11th December, 2023	1st Tide	02:53 AM	3.30 m	09:18 AM	0.55 m
	2nd Tide	03:20 PM	2.76 m	09:05 PM	0.69 m

4.0 9 days Ocean surface current in meters per seconds (m/s) forecast valid 04/12/2023 to 12/12/2023



KEY ON SEA STATE

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

Bernard Chanzu

FOR DIRECTOR OF KENYA METEOROLOGICAL DEPARTMENT