

REPUBLIC OF KENYA MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

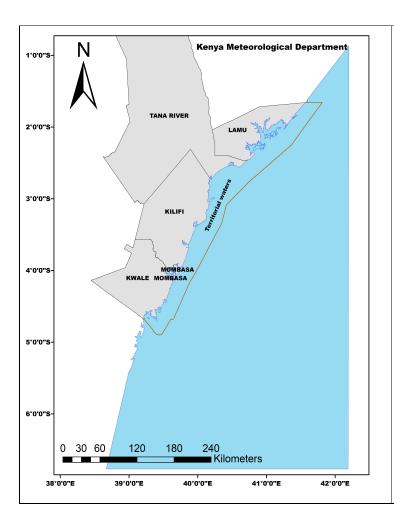
KENYA METEOROLOGICAL DEPARTMENT

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: director@meteo.go.ke, info@meteo.go.ke Website: https://www.meteo.go.ke

DAILY MARINE NEAR SHORE FORECAST FOR KENYAN COAST Issued at: 1500 EAT on 13th December, 2024

Valid: 0000 EAT on 14th December 2024 to 0000 EAT on 15th December 2024



GENERAL OUTLOOK

Morning sea state:

Light and variable winds (03-14 knots) with slight choppy seas. ESE waves of 4-5 feet (1.2 - 1.5m) with small period waves of (11 sec) are expected in Kwale, Mombasa, Kilifi and Lamu.

Afternoon sea state:

Light E to SE winds (09-20 knots) with slight choppy seas. ESE waves of 5-6 feet (1.5 – 1.8m) with small period waves of (12 sec) are expected in Kwale, Mombasa, Kilifi and Lamu.

Visibility:

 Moderate visibility (9-10 km) expected in Kwale, Mombasa, Kilifi and Lamu.

COASTAL COUNTIES MARINE NEAR SHORE FORECAST

i. <u>KWALE</u>

- Morning Winds: NNW 12 to 14 knots.
- Morning Waves: E 4 feet at 10 seconds.
- Morning sea state: Breezy NNW winds with moderate choppy seas. Small mid period waves.
- Afternoon Winds: ENE 17 to 20 knots.
- Afternoon Waves: ESE 5 feet at 12 seconds.
- Afternoon sea state: Moderate to strong ENE winds with choppy seas. Moderate mid period waves.
- Visibility: Moderate (9-10 km)
- High Tide: 02.54AM; 3.7m, 03:24PM; 3.1m
- Low Tide: 09:23AM;0.35m, 09:16PM;0.51m

ii. MOMBASA

- Morning Winds: NNW 7 to 9 knots.
- Morning Waves: ESE 4 feet at 11 seconds.
- Morning sea state: Light NNW winds with a slight chop. Small mid period waves.
- Afternoon Winds: ENE 12 to 15 knots.
- Afternoon Waves: ESE 5 feet at 12 seconds.
- Afternoon sea state: Breezy ENE winds with moderate choppy seas. Moderate mid period waves.
- Sunrise; 5:57AM and sunset; 6:17PM
- Visibility: Moderate (9-10 km)
- High Tide: 03:00AM; 3.6m, 03:32PM; 2.9m
- Low Tide: 09:28AM; 0.3m, 09:15PM;0.5m

iii. KILIFI

- Morning Winds: NNW 4 to 5 knots.
- Morning Waves: ESE 5 feet at 11 seconds.
- Morning sea state: Light and variable winds with smooth seas. Small mid period waves.
- Afternoon Winds: ENE 9 to 11 knots.
- Afternoon Waves: ESE 6 feet at 12 seconds.
- Afternoon sea state: Light ENE winds with a slight chop. Moderate mid period waves.
- Sunrise; 5:57AM and sunset; 6:15PM
- Visibility: Moderate (9-10km)
- High Tide: 02:48AM; 3.3m, 03:24PM;2.6m
- Low Tide; 09:20AM; 0.2m, 09:08PM;0.4m

iv. LAMU

- Morning Winds: NNE 3 to 5 knots.
- Morning Waves: ESE 4 feet at 11 seconds.
- Morning sea state: Light and variable winds with smooth seas. Small mid period waves.
- Afternoon Winds: E 9 to 18 knots.
- Afternoon Waves: SE 5 feet at 12 seconds
- Afternoon sea state: Light E winds with a slight chop. Moderate mid period waves.
- Sunrise; 5.55AM and sunset; 6:10PM
- Visibility: Moderate (9-10km)
- High Tide: 02:48 AM; 3.2m, 03:24 PM;2.4m
- Low Tide: 09:23 AM; 0.2m, 09:08 PM;0.4m

Advisory

- Slight sea conditions are expected with a significant wave height of 1.2m-1.8m in Kwale, Mombasa, Kilifi and Lamu.
- Light to gentle breeze of (03-20 knots) expected in Kwale, Mombasa, Kilifi and Lamu.

KEY ON SEA STATE

KET ON SEA STATE		
WAVE HEIGHT RANGE	DESCRIPTION	IMPACT
(Meters)		
$0.6 - 1.0 \text{ m} \ (\approx 1.8 - 3.0 \text{ ft})$	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!!!!!

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.

Mr. Kainga M. Misheck Duty Analyst Marine Forecasting Services

For DIRECTOR, KENYA METEOROLOGICAL DEPARTMENT