



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

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REF.NO: KMD/FCST/4-2024/MARINE/16

Date: 15th April, 2024

**7-Day Marine Forecast for the KENYA coast and off shore areas
along the Western Indian Ocean Region
Validity: 16/04/2024 - 22/04/2024**

1.0 GENERAL OUTLOOK

1.1 Wind Speed & Direction:

South-easterly winds are expected over Tanzania and Kenya waters; South-westerly winds are expected over Somalia waters with wind speeds of 05 to 20 knots (2.5-10 m/s) throughout the forecast period.

1.2 Sig. Wave Height and Direction:

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

1.3 Sea conditions

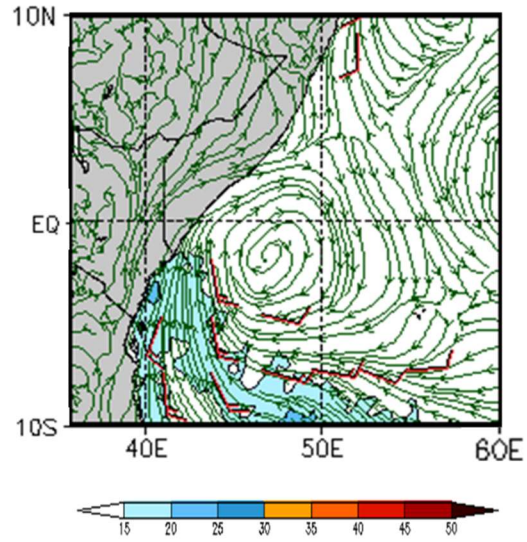
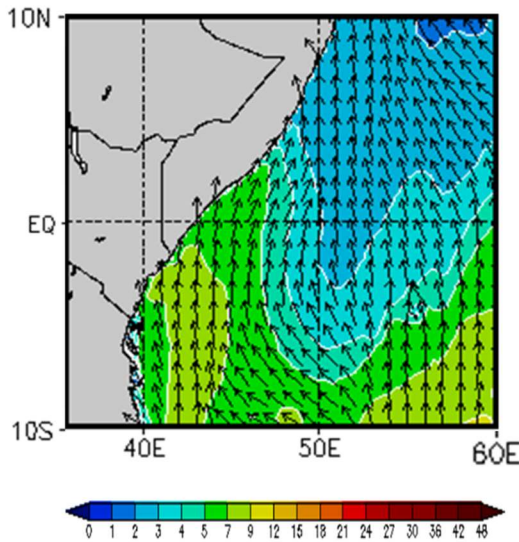
- Slight to moderate sea condition with wave heights of 0.6-2.1m (2-7ft) expected over the Tanzania, Kenya and Somalia waters throughout the forecast period.
- Gentle to fresh breeze with wind speeds of (05 to 20 Knots) expected over Tanzania, Kenya and Somalia waters throughout the forecast period.

2.0 WINDS AND SIGNIFICANT WAVE HEIGHTS FORECAST FOR THE PERIOD 16TH APRIL, 2024 TO 22ND APRIL, 2024.

2.1 Tuesday 16th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

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

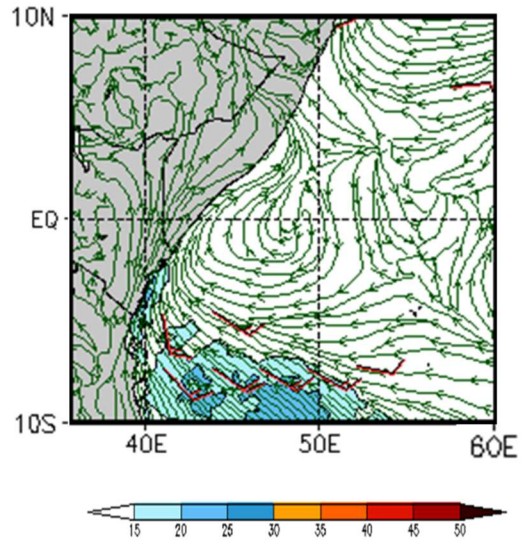
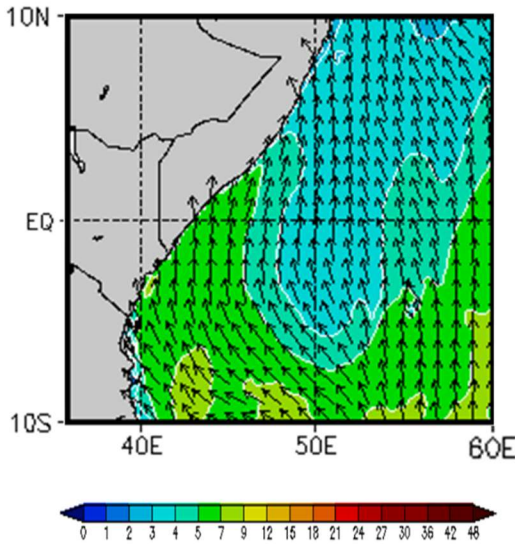
10m Winds: 10-20 knots (\approx 5 – 10 m/s)



2.2 Wednesday 17th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.9 to 2.1 m (\approx 3 – 7ft)

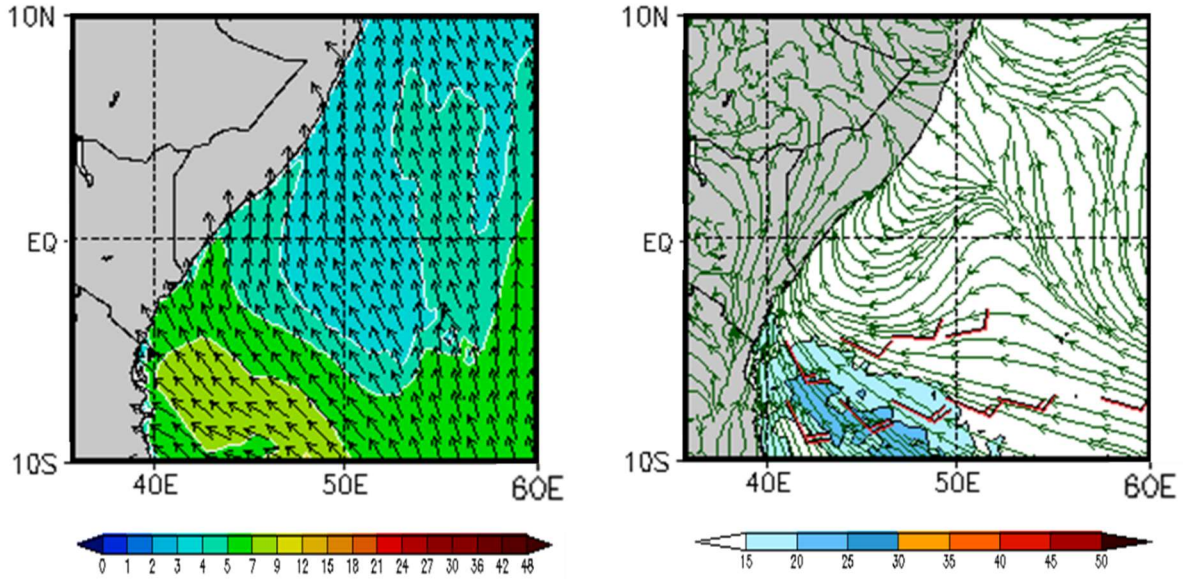
10m Winds: 10-20 knots (\approx 5 - 10m/s)



2.3 Thursday 18th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.9 to 2.1m (\approx 3– 7ft)

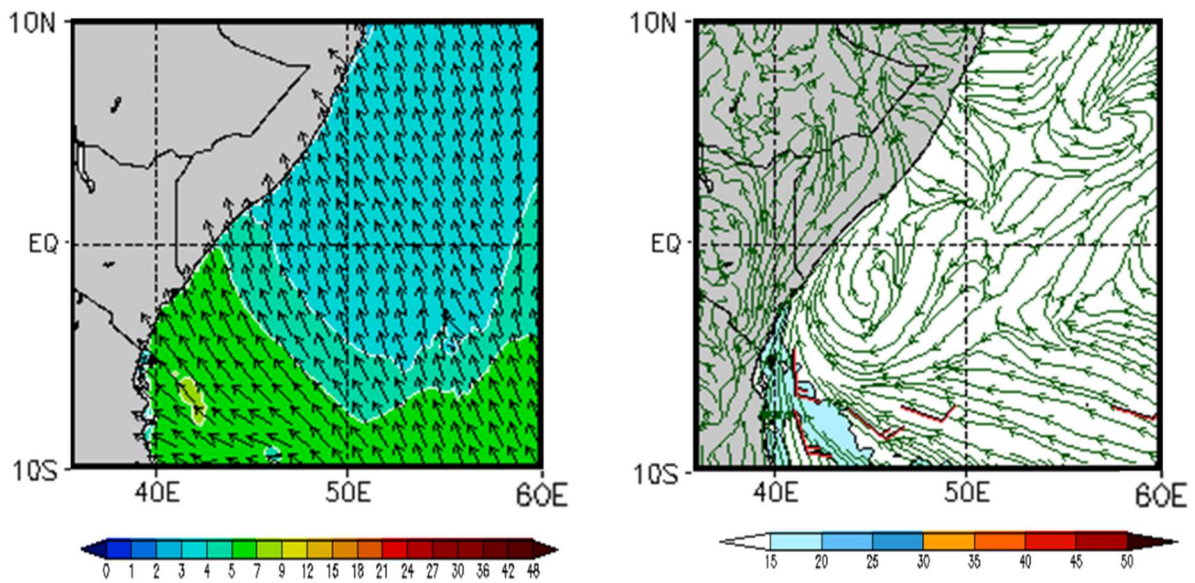
10m Winds: 10-20 knots (\approx 5-10 m/s)



2.4 Friday 19th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.9 to 1.5 m (\approx 3– 5ft)

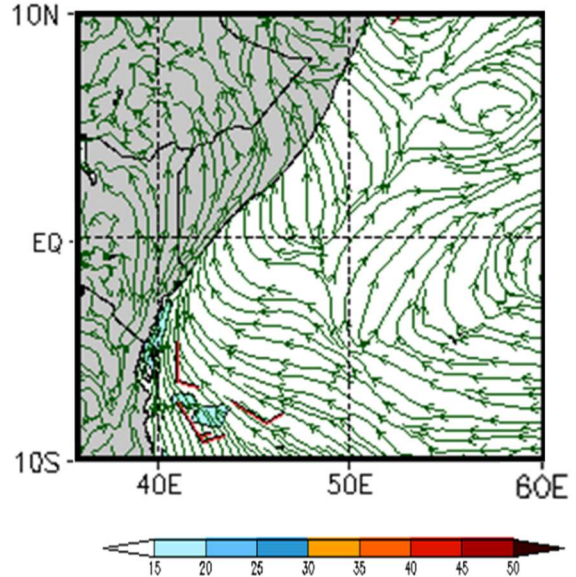
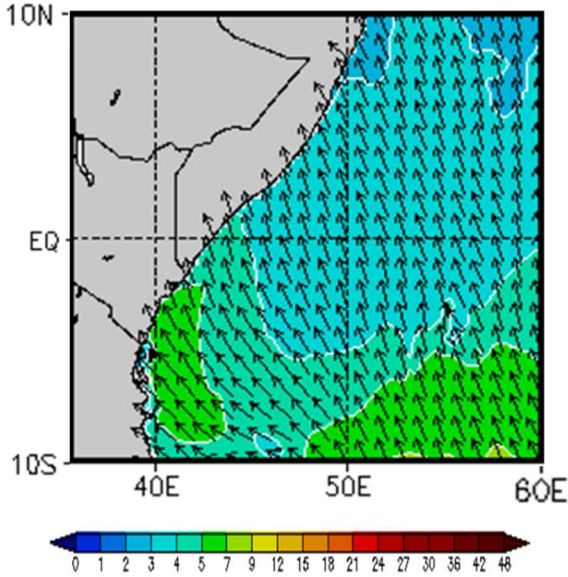
10m Winds: 10-15knots (\approx 5-7.5m/s)



2.5 Saturday 20th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

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

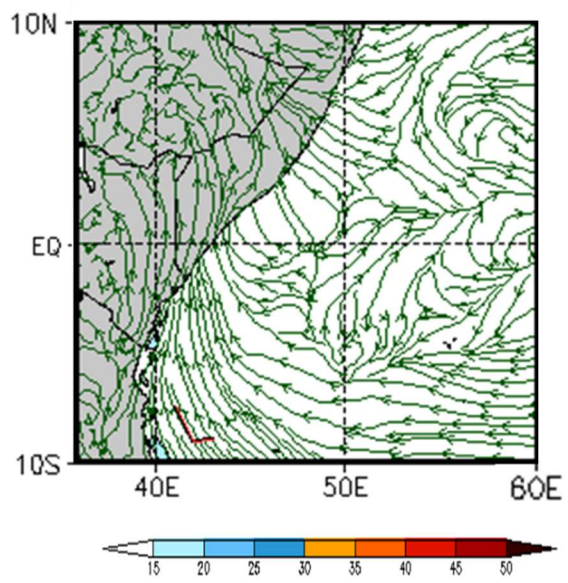
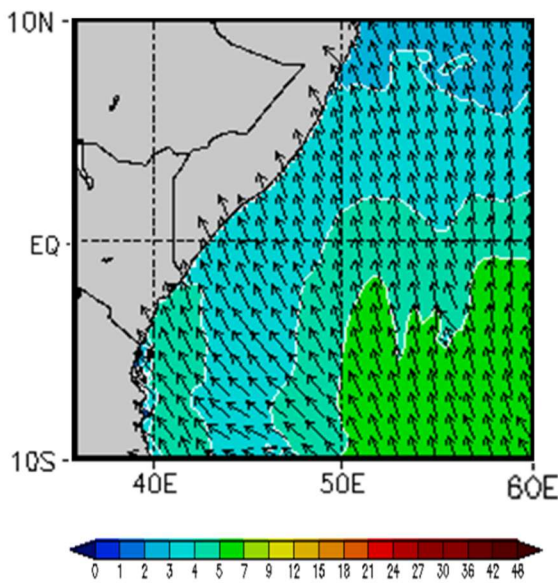
10m Winds: 10-15 knots (\approx 5 – 7.5m/s)



2.6 Sunday 21st April, 2024: 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)

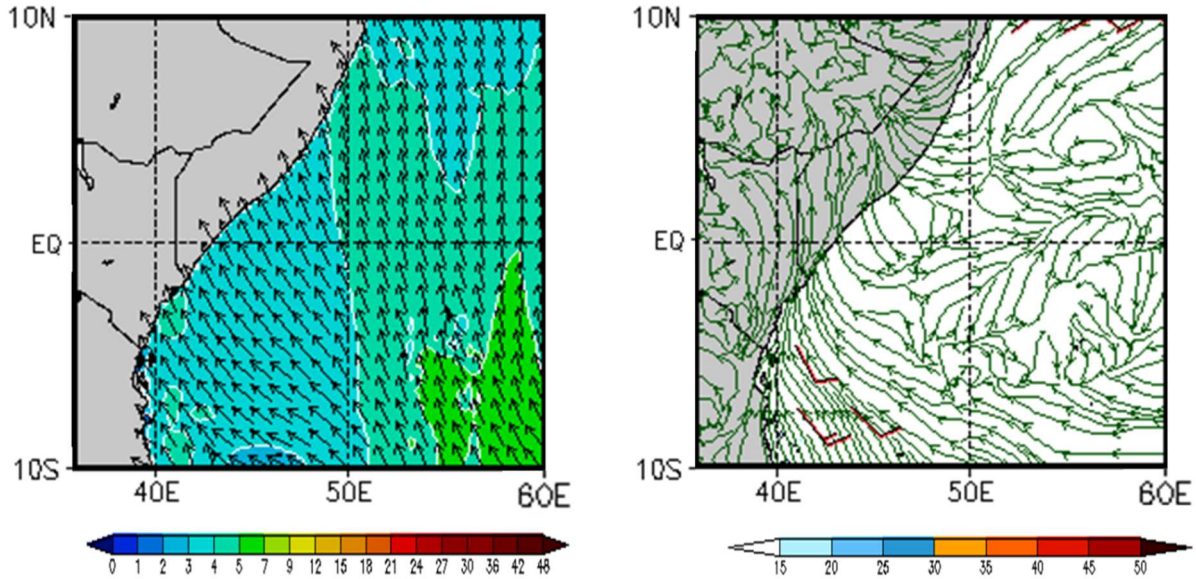
10m Winds: 5-10 knots (\approx 2.5 – 5m/s)



2.7 Monday 22nd April, 2024: 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)

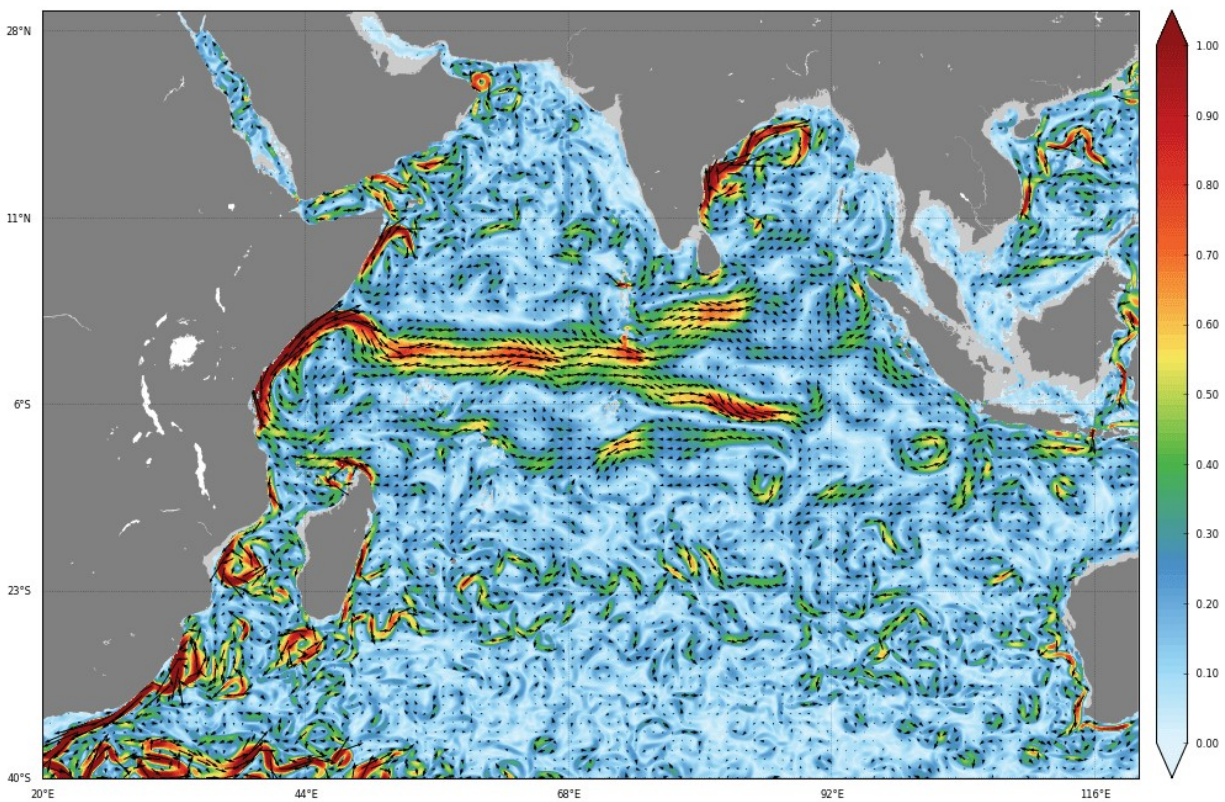


3.0 Tide forecast valid 16th April, 2024 to 22nd April, 2024

| Date | Description | High Tide | | Low Tide | |
|-----------------------------------|----------------------|-----------|--------|----------|--------|
| | | Time | Height | Time | Height |
| Tue 16 th April, 2024 | 1 st Tide | 09:45 AM | 2.07 m | 03:33 AM | 1.38 m |
| | 2 nd Tide | 10:29 PM | 2.37 m | 03:21 PM | 1.58 m |
| Wed 17 th April, 2024 | 1 st Tide | 12:34 PM | 2.10 m | 05:53 AM | 1.47 m |
| | 2 nd Tide | | | 06:17 PM | 1.63 m |
| Thur 18 th April, 2024 | 1 st Tide | 12:48 AM | 2.38 m | 07:28 AM | 1.30 m |
| | 2 nd Tide | 01:52 PM | 2.38 m | 07:47 PM | 1.39 m |
| Fri 19 th April, 2024 | 1 st Tide | 01:57 AM | 2.56 m | 08:13 AM | 1.10 m |

| | | | | | |
|--|----------------------------|----------|--------|----------|--------|
| | 2nd Tide | 02:30 PM | 2.67 m | 08:32 PM | 1.12 m |
| Sat 20th April, 2024 | 1st Tide | 02:38 AM | 2.75 m | 08:44 AM | 0.90 m |
| | 2nd Tide | 02:59 PM | 2.93 m | 09:05 PM | 0.87 m |
| Sun 21st April, 2024 | 1st Tide | 03:10 AM | 2.91 m | 09:10 AM | 0.73 m |
| | 2nd Tide | 03:25 PM | 3.17 m | 09:34 PM | 0.65 m |
| Mon 22nd April, 2024 | 1st Tide | 03:39 AM | 3.04 m | 09:36 AM | 0.60 m |
| | 2nd Tide | 03:50 PM | 3.36 m | 10:01 PM | 0.48 m |

4.0 9 days Ocean surface current in meters per seconds (m/s) forecast valid 15/04/2024 to 23/04/2024



KEY ON SEA STATE

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

Kennedy Thiong'o
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