

# Climate Monitoring and Prediction for the Maldives – March 2024

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## PACIFIC SEAS STATE

March 19, 2024

As of mid-March 2024, El Niño conditions persist in the central-eastern equatorial Pacific, with important oceanic and atmospheric indicators aligning with an ongoing El Niño event that is gradually diminishing. Almost all the models in the IRI ENSO prediction plume forecast a continuation of the El Niño event during boreal spring, which rapidly weakens thereafter. ENSO-neutral conditions become the most likely category in Apr-Jun, May-Jul, and Jun-Aug of 2024. La Niña becomes the most probable category in Jul-Sep 2024 through Nov-Jan 2025. (Text Courtesy IRI)

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## INDIAN OCEAN STATE

5 – 11 Mar, 2024

0.5°C above average SST was observed around the Maldives.

## Highlights

### Monitored:

In February, central islands received up to 15 mm of rainfall, while remaining islands received less. North-easterly winds prevailed during the month of January over the Maldives.

### Predictions:

A transition from El Niño to ENSO-neutral is likely by April-June 2024, with increasing odds of La Niña developing in June-August. Seasonal climate predictions predict a wet condition for the Maldives from April to June 2024.

## Summary

### CLIMATOLOGY

#### Monthly Climatology:

In April, Southern islands usually receive about 150 mm of average rainfall. The wind direction in southern and central islands is easterly and in northern islands, it's south-easterly. Rainfall usually increases up to 200 mm in May in the entire country. The wind direction remains the same but the speed increases. The rainfall in northern islands usually increases up to 250 mm in June, while it decreases to 150 mm in southern islands. Wind direction in June is usually easterly but with low speeds.

### MONITORING

#### Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
11 <sup>th</sup> March	-	-	-
12 <sup>th</sup> March	-	-	-
13 <sup>th</sup> March	-	-	-
14 <sup>th</sup> March	-	-	-
15 <sup>th</sup> March	-	-	-
16 <sup>th</sup> March	-	TR	TR
17 <sup>th</sup> March	TR	TR	TR
18 <sup>th</sup> March	TR	TR	TR
19 <sup>th</sup> March	TR	TR	-
20 <sup>th</sup> March	-	TR	-
21 <sup>st</sup> March	-	10 mm	TR
22 <sup>nd</sup> March	5 mm	10 mm	10 mm
23 <sup>rd</sup> March	10 mm	TR	TR
24 <sup>th</sup> March	TR	TR	TR
25 <sup>th</sup> March	TR	20 mm	TR

TR - Trace Value

**Monthly and Seasonal Rainfall Monitoring:** In February, central islands received up to 15 mm of rainfall; southern islands received up to 10 mm of rainfall and northern islands received below 5mm of rainfall.

## Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
<b>T Max</b>	33.5°C	34.0°C	33.0°C
<b>T Min</b>	26.1°C	24.1°C	23.4°C

## Dekadal Rainfall Estimates

1-10 Mar, Dekadal rainfall estimated as; Northern Islands: 10 mm rainfall  
Central Islands: 100 mm rainfall  
Southern Islands: 20 mm rainfall

11-20 Mar, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall  
Central Islands: 5 mm rainfall  
Southern Islands: 5 mm rainfall

## PREDICTIONS

### Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
<b>28<sup>th</sup> March</b>	-	20 mm	10 mm
<b>29<sup>st</sup> March</b>	-	TR	TR
<b>30<sup>th</sup> March</b>	TR	20 mm	TR
<b>31<sup>st</sup> March</b>	TR	20 mm	TR
<b>1<sup>st</sup> April</b>	-	TR	20 mm
<b>2<sup>nd</sup> April</b>	-	TR	40 mm
<b>3<sup>rd</sup> April</b>	-	TR	20 mm

### Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 45% for the central islands; by 40% for the northern and southern islands between 30<sup>th</sup> March- 12<sup>th</sup> April.

### Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 45% probable in the northern and central islands; and 40% tercile probable in the southern islands from April-May-June 2024 and seasonal rainfall forecast is higher likelihood of normal range for the Maldives.

### MJO Index:

The MJO is predicted by NOAA CPC to be in phases 1, 2 and 3 in the next two weeks (26 Mar – 9 Apr 2024). MJO in phases 2 & 3 usually enhances the rainfall over the Maldives.

## Figures in Annexure

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  - Monthly Rainfall derived from Satellite Rainfall Estimate
  - Monthly and Seasonal Monitoring
- **Ocean Surface Monitoring**
- **Rainfall Predictions**
  - Weekly Predictions from NOAA/NCEP
  - Seasonal Predictions from IRI<sup>1</sup>

