

# Climate Monitoring and Prediction for the Maldives – February 2024

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## PACIFIC SEAS STATE

February 19, 2024

As of mid-Feb 2024, moderate-strong 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. An El Niño advisory from the CPC continues for February 2024, alongside a La Niña watch issued for June to August 2024. Almost all the models in the IRI ENSO prediction plume forecast a continuation of the El Niño event during the rest of the boreal winter and spring of 2024, which rapidly weakens thereafter. ENSO-neutral conditions become the most likely category in Apr-Jun, and May-Jul of 2024. For Jun-Aug 2024, no single category stands out as dominant, with ENSO-neutral and La Niña being almost equally likely. (Text Courtesy IRI)

## INDIAN OCEAN STATE

6 – 12 Feb, 2024

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

## Highlights

### Monitored:

In January, central islands received up to 10 mm of rainfall, while remaining islands received less. North-easterly winds prevailed during the month of January over the northern and central islands of MV.

### 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 dry condition in the southern islands and a near-normal tendency for the remaining islands from March to May 2024.

## Summary

### CLIMATOLOGY

#### Monthly Climatology:

In March, northern and central islands receive average rainfall up to 50 mm while southern islands receive up to 100 mm of rain. Wind is northeasterly. Usually in April, Southern islands usually receive about 150 mm of rainfall. The wind direction in southern and central islands is westerly and in northern islands, it is northwesterly. Rainfall usually increases up to 200 mm in May in the entire country. The wind direction remains the same but the speed increases.

### MONITORING

#### Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
12 <sup>th</sup> February	TR	80 mm	30 mm
13 <sup>th</sup> February	-	5 mm	5 mm
14 <sup>th</sup> February	TR	5 mm	10 mm
15 <sup>th</sup> February	TR	20 mm	5 mm
16 <sup>th</sup> February	10 mm	40 mm	10 mm
17 <sup>th</sup> February	TR	50 mm	20 mm
18 <sup>th</sup> February	-	TR	5 mm
19 <sup>th</sup> February	-	5 mm	TR
20 <sup>th</sup> February	-	20 mm	30 mm
21 <sup>st</sup> February	-	130 mm	80 mm
22 <sup>nd</sup> February	-	5 mm	5 mm
23 <sup>rd</sup> February	TR	TR	10 mm
24 <sup>th</sup> February	-	TR	20 mm
25 <sup>th</sup> February	TR	TR	10 mm
26 <sup>th</sup> February	TR	TR	20 mm

TR - Trace Value

**Monthly and Seasonal Rainfall Monitoring:** In January, central islands received up to 15 mm of rainfall, while northern and southern islands received up to 5 mm.

## Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
<b>T Max</b>	33.4°C	33.2°C	32.0°C
<b>T Min</b>	24.0°C	24.4°C	23.4°C

## Dekadal Rainfall Estimates

1-10 Feb, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall  
Central Islands: 10 mm rainfall  
Southern Islands: 40 mm rainfall

11-20 Feb, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall  
Central Islands: 200 mm rainfall  
Southern Islands: 70 mm rainfall

## PREDICTIONS

### Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
<b>29<sup>th</sup> February</b>	TR	40 mm	40 mm
<b>1<sup>st</sup> March</b>	-	20 mm	20 mm
<b>2<sup>nd</sup> March</b>	TR	10 mm	TR
<b>3<sup>rd</sup> March</b>	10 mm	10 mm	-
<b>4<sup>th</sup> March</b>	10 mm	10 mm	-
<b>5<sup>th</sup> March</b>	-	20 mm	TR
<b>6<sup>th</sup> March</b>	-	TR	10 mm

### Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 45% for the southern islands; by 40% for the central islands and near-normal for the northern islands between 2<sup>nd</sup> - 15<sup>th</sup> March.

### Seasonal Rainfall and Temperature Forecast:

Below-normal tercile is 40% probable in the southern islands; and near-normal tercile probable in the northern and central islands from March-April-May 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 3 and 4 in the next two weeks (27 Feb – 12 Mar 2024). MJO in phase 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>

