

# Climate Monitoring and Prediction for the Maldives – June 2023

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## Highlights

### Monitored:

In June, the majority of the northern islands and central islands received up to 10 mm of rainfall, while other islands received less. Westerly wind observed during the month. The southern islands had the lowest temperature, while the northern islands had the highest.

### Predictions:

Up to 40 mm of rainfall is predicted for the northern islands on July 6 and 7 this week. El Niño conditions are present and are expected to gradually strengthen into the Northern Hemisphere winter 2023-24. Seasonal climate predictions predict a wet tendency for the northern islands; and near-neutral to dry tendency for central and southern islands from July to September 2023 for the Maldives.

## Summary

### CLIMATOLOGY

#### Monthly Climatology:

In July, the entire country usually receives up to 200 mm average rainfall and the wind direction in July is usually westerly but with low speeds wind speed. In August and September, the rainfall in southern and central islands increases to 250 mm while in northern islands it remains about 200 mm. The wind direction and speed do not change.

### MONITORING

#### Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
19 <sup>th</sup> June	TR	TR	-
20 <sup>th</sup> June	TR	TR	5 mm
21 <sup>st</sup> June	5 mm	10 mm	10 mm
22 <sup>nd</sup> June	TR	20 mm	20 mm
23 <sup>rd</sup> June	TR	10 mm	5 mm
24 <sup>th</sup> June	50 mm	40 mm	40 mm
25 <sup>th</sup> June	40 mm	50 mm	TR
26 <sup>th</sup> June	40 mm	TR	TR
27 <sup>th</sup> June	20 mm	TR	-
28 <sup>th</sup> June	5 mm	-	-
29 <sup>th</sup> June	TR	-	-
30 <sup>th</sup> June	TR	TR	-
1 <sup>st</sup> July	TR	TR	-
2 <sup>nd</sup> July	50 mm	40 mm	TR
3 <sup>rd</sup> July	10 mm	50 mm	80 mm

TR - Trace Value

**Monthly and Seasonal Rainfall Monitoring:** In June, the majority of the northern islands and central islands received up to 10 mm of rainfall, while other islands received up to 5 mm.

### PACIFIC SEAS STATE

June 16, 2023

In mid-June 2023, the previously ENSO-neutral conditions in the central-eastern equatorial Pacific have transitioned to warm El Niño-like conditions. Key oceanic and atmospheric variables are consistent with the onset of El Niño.

CPC issued an El Niño advisory in Jun 2023, signaling the onset of the warm phase of the ENSO. Almost all of the models in the IRI ENSO prediction plume forecast an El Niño event during boreal summer, continuing into boreal autumn and winter. (Text Courtesy IRI)

### INDIAN OCEAN STATE

June 6-12, 2023

0.5°C above average SST was observed around the northern & southern Islands & near-neutral around the central islands.

## Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
<b>T Max</b>	34.4°C	33°C	32.1°C
<b>T Min</b>	28.4°C	24.1°C	22.4°C

## Dekadal Rainfall Estimates

11-20 June, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall  
Central Islands: 20 mm rainfall  
Southern Islands: 10 mm rainfall

21-30 June, Dekadal rainfall estimated as; Northern Islands: 100 mm rainfall  
Central Islands: 70 mm rainfall  
Southern Islands: 50 mm rainfall

## PREDICTIONS

### Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
6 <sup>th</sup> July	40 mm	40 mm	TR
7 <sup>th</sup> July	40 mm	20 mm	20 mm
8 <sup>th</sup> July	20 mm	10 mm	20 mm
9 <sup>th</sup> July	TR	-	TR
10 <sup>th</sup> July	TR	-	-
11 <sup>th</sup> July	TR	-	-
12 <sup>th</sup> July	NA	NA	NA

### Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 40% for the southern islands; above-normal tercile by 40% for some of the northern islands and near neutral tercile for the rest between 8<sup>th</sup> July - 21<sup>st</sup> July.

### Seasonal Rainfall and Temperature Forecast:

Below-normal tercile is 40% probable in the central islands; above-normal precipitation tercile is 40% probable in some of the northern islands; and near-neutral tercile is probable in the southern islands from July-August-September 2023 and seasonal rainfall forecast is higher likelihood of near-neutral range.

### MJO Index:

The MJO is predicted by NOAA CPC to be in phases 2,3,4 & 5 respectively in the next two weeks (6 – 18 July 2023). MJO in phase 2 is usually enhance the rainfall over the Maldives. And thereafter, shall slightly suppress the rainfall in mid-July 2023.

## 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>

