

# Climate Monitoring and Prediction for the Maldives – April 2022

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## PACIFIC SEAS STATE

April 19, 2022

In mid-April, SSTs remained below-average (strengthening slightly) in the central-eastern equatorial Pacific. The evolution of key oceanic and atmospheric variables is consistent with continued La Niña conditions, and therefore, a La Niña Advisory remains in place for April 2022. A large majority of the models in the plume predict SSTs to stay below-normal at the level of a weak La Niña until May-Jul. The official CPC/IRI outlook also anticipates a continuation of the La Niña event with high probability during May-Jul. (Text Courtesy IRI)

## INDIAN OCEAN STATE

April 20, 2022

0.5 °C above average SST was observed around Maldives.

## Highlights

### Monitored:

During March, the central islands received up to 5mm of rainfall while the remaining islands received less.

The average rainfall exceeded climatology in the Northern islands by 10%; and was in deficit by 44% in the Central islands and by 19% in the southern islands.

A deficit was built up during March for the all the islands however, an above-average rainfall was experienced in the Northern and Central islands from April.

### Predictions:

A La Niña is in place for April and shall continue in the months ahead. Seasonal climate predictions predict a drought tendency from May to July 2022 for the Maldives.

## Summary

### CLIMATOLOGY

#### Monthly Climatology:

In May, average rainfall is about 200 mm in the entire country. The wind direction is westerly and the speed is higher than in April. 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. In July, the entire country receives up to 200 mm rainfall and the wind speed and direction does not change.

### MONITORING

#### Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
6 <sup>th</sup> – 7 <sup>th</sup> April	-	-	-
8 <sup>th</sup> April	10 mm	20 mm	-
9 <sup>th</sup> April	10 mm	10 mm	-
10 <sup>th</sup> April	10 mm	10 mm	-
11 <sup>th</sup> April	-	5 mm	-
12 <sup>th</sup> April	30 mm	80 mm	-
13 <sup>th</sup> April	100 mm	30 mm	-
14 <sup>th</sup> April	20 mm	-	-
15 <sup>th</sup> – 18 <sup>th</sup> April	-	-	-
19 <sup>th</sup> April	20 mm	-	-
20 <sup>th</sup> April	10 mm	-	-

**Monthly and Seasonal Rainfall Monitoring:** In March, the central islands received up to 5 mm above average rainfall while remaining islands received less. The cumulative rainfall during the last 365 days,

shows for: Northern islands: Excess of 150 mm from an average of 1450 mm average

Central islands: Deficit of 750 mm from an average of 1700 mm average

Southern islands: Deficit of 350 mm from an average of 1800 mm average

## Dekadal Rainfall Estimates:

1-10 April, Dekadal rainfall estimated as; Northern Islands: 40 mm rainfall  
Central Islands: 20 mm rainfall  
Southern Islands: 5 mm rainfall

11-20 April, Dekadal rainfall estimated as; Northern Islands: 100 mm rainfall  
Central Islands: 100 mm rainfall  
Southern Islands: 5 mm rainfall

## PREDICTIONS

### Daily Rainfall Forecast:

NOAA GFS model predicts up to 10 mm of rainfall in the northern and central islands on 27<sup>th</sup> Apr; Up to 20 mm of rainfall in the southern islands; and up to 10 mm of rainfall in northern and central islands on 28<sup>th</sup> Apr; Up to 20 mm of rainfall in the central and southern islands; and neutral for northern island on 29<sup>th</sup> Apr; Up to 10 mm of rainfall in the entire islands on 30<sup>th</sup> Apr – 1<sup>st</sup> May; and up to 20 mm of rainfall in the northern and central islands; and up to 10 mm of rainfall in southern islands on 2<sup>nd</sup> – 3<sup>rd</sup> May.

### Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile in the central and southern islands and below-normal tercile in the northern islands between 30<sup>th</sup> Apr - 13<sup>th</sup> May.

### Seasonal Rainfall and Temperature Forecast:

Below-normal precipitation tercile is 50% probable in the central and southern islands and 40% probable for the northern islands from May-June-July 2022 and seasonal rainfall forecast is climatological.

### MJO Index:

The MJO is predicted by NOAA CPC to be weakened in the next two weeks (26 April - 10 May 2022). MJO shall slightly enhance the rainfall from 26<sup>th</sup> – 30<sup>th</sup> April and shall remain neutral from 1<sup>st</sup> – 10<sup>th</sup> May 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>

