

## Climate Monitoring and Prediction for the Maldives – March 2021

Prepared by Staff at Foundation for Environment, Climate and Technology, Sri Lanka and Maldives, Maldives  
Meteorological Service, and Columbia University  
Nipuni Alahakoon, Ushan Adithya, Lareef Zubair, Zahid and Michael Bell

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### PACIFIC SEAS STATE

March 10, 2021

In early-Mar 2021, the tropical Pacific remained in an ENSO-neutral state, although SSTs in the east-central and central Pacific have cooled to the threshold for La Niña while the atmosphere continues to maintain largely ENSO-neutral patterns. The collection of latest ENSO prediction models indicates ENSO-neutral or weak El Niño as two possible scenarios during Northern Hemisphere spring 2021. The official CPC/IRI outlook slightly favors La Niña development, and carries a La Niña watch.  
(Text Courtesy IRI)

### INDIAN OCEAN STATE

March 10, 2021

0.5 °C above average SST was observed around Maldives.

## Highlights

### Monitored:

During February, the southern islands received above normal rainfall while the central and northern islands received less. Over the 365 days, rainfall exceeded climatology by 27% in the Northern islands; deficit by 15% in the Central islands and the southern islands are close to normal.

### Predictions:

With weak La Nina conditions established; dry conditions are set to prevail across Maldives from April-June 2021. The seasonal temperature remains climatological – perhaps the La Nina influence is countervailed by the prevailing anomalously warm ocean surfaces by the Maldives.

## 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 increase 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
6 <sup>th</sup> March	-	-	5 mm
7 <sup>th</sup> March	-	-	-
8 <sup>th</sup> March	10 mm	20 mm	-
9 <sup>th</sup> March	40 mm	60 mm	10 mm
10 <sup>th</sup> March	40 mm	60 mm	60 mm
11 <sup>th</sup> March	40 mm	60 mm	30 mm
12 <sup>th</sup> March	10 mm	20mm	-
13 <sup>th</sup> March	5 mm	10 mm	-
14 <sup>th</sup> March	10 mm	40 mm	5 mm
15 <sup>th</sup> March	20 mm	40 mm	20 mm
16 <sup>th</sup> March	-	30 mm	40 mm
17 <sup>th</sup> March	-	-	-
18 <sup>th</sup> March	-	10 mm	5 mm
19 <sup>th</sup> March	30 mm	30 mm	-
20 <sup>th</sup> March	10 mm	5 mm	20 mm

**Monthly and Seasonal Rainfall Monitoring:** *In February, southern islands received up to 10 mm and central islands received up to 5 mm above average rainfall. The cumulative rainfall during the last 365 days, shows for: Northern islands: Excess of 400 mm from an average of 1450 mm average  
Central islands: Deficit of 250 mm from an average of 1700 mm average  
Southern islands: Excess of 200 mm from an average of 1750 mm average*

#### **Deckadal Rainfall Estimates:**

*1-10 Feb, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall  
Central Islands: 100 mm rainfall  
Southern Islands: 40 mm rainfall*

*11-20 Feb, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall  
Central Islands: 60 mm rainfall  
Southern Islands: 160 mm rainfall*

## **PREDICTIONS**

#### **Daily Rainfall Forecast:**

*NOAA GFS model predicts up to 10 mm of rainfall in the entire islands on 23<sup>rd</sup> Mar; up to 40 mm of rainfall in the northern and central islands; and up to 10 mm in southern islands on 24<sup>th</sup>- 25<sup>th</sup> Mar; up to 20 mm of rainfall in the central and up to 10 mm in northern and southern islands on 26<sup>th</sup> Mar; up to 40 mm of rainfall in the central and southern islands; and up to 10 mm in northern islands on 27<sup>th</sup>- 28<sup>th</sup> Mar; and up to 70 mm of rainfall in the central islands; up to 40 mm in southern islands; and up to 10 mm in northern islands on 29<sup>th</sup> Mar.*

#### **Weekly Rainfall Forecast:**

*NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 70% in the northern islands; tercile by 45% in central islands; and tercile by 40% in southern islands between 20<sup>th</sup>- 26<sup>th</sup> Mar.*

#### **Seasonal Rainfall and Temperature Forecast:**

*Above-normal temperature tercile is 40% probable in the northern islands; and below-normal temperature tercile is 45% probable in central islands and 50% probable in southern islands and seasonal rainfall forecast is climatological.*

#### **MJO Index:**

*The MJO is predicted by NOAA CPC to be in phase 2 and 3 and it is strong in the next two weeks (22 Mar - 5 Apr 2021). MJO in phase 2 usually enhances rainfall over the Maldives.*

## **Figures in Annexure**

#### *Inside this Issue*

- **Rainfall Monitoring**
  - Daily Satellite derived Rainfall Estimates
  - 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>

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