

## Climate Monitoring and Prediction for the Maldives – September 2019

Prepared by Staff from Foundation for Environment, Climate and Technology, Sri Lanka and USA, Maldives Meteorological Service, and Columbia University

(Ruchira Lokuhetti, Lareef Zubair, Chayana Gunatillake, Zahid and Michael Bell)

October 7, 2019

### PACIFIC SEAS STATE

**September 19, 2019**

SSTs in the east-central Pacific maintained ENSO-neutral levels during September. Patterns in the key atmospheric variables are also showing ENSO-neutral conditions. Model forecasts generally favor ENSO-neutral through autumn, winter and into spring, with slightly higher chances for El Niño than La Niña. The official CPC/IRI outlook is consistent with these model forecasts.

(Text Courtesy IRI)

### INDIAN OCEAN STATE

**September 18, 2019**

1 °C above average SST was observed around Maldives.

### MJO INDEX

The MJO was significant in Phase 8 from Sep 15-20; and in Phase 1 from Sep 21-30. Usually rainfall in Maldives is augmented in Phase 2.



[www.fb.com/fectmv](http://www.fb.com/fectmv)



[@fectmv](https://twitter.com/fectmv)

### Highlights

**Monitored:** During September, northern and central parts of the country received rainfall above than is normal for the season; and southern islands received normal rainfall. The Southern Islands have an excess of 650 mm of rainfall during last year compared to the average while the Northern and Central Islands experiencing average rainfall. The sea surface temperature around Maldives was 1 °C above normal. This is extremely warm.

**Predictions:** IMD GFS model predicts up to 10 mm of rainfall in the entire country on October 7<sup>th</sup>. On the 8<sup>th</sup>, rainfall up to 40 mm is expected in the central and southern islands and up to 10 mm in the northern islands. On the 9<sup>th</sup>, rainfall up to 20 mm of is expected in the central and southern islands and up to 10 mm in the northern islands. Long Range Weather prediction models simulations anticipate total rainfall up to 75 mm for the entire country next week.

### Summary

#### CLIMATOLOGY

**Monthly Climatology:** In October, the northern half of the country usually receives up to 200 mm rain while the southern half receives up to 250 mm rain. Wind is westerly. The entire country usually receives up to 200 mm rain in November with no change in the wind direction from October. Usually in December, northern islands receive up to 150 mm while central and southern islands receive up to 200 mm and 250 mm rain respectively. Southern islands get north easterly wind while southern islands get northerly wind.

#### MONITORING

##### Weekly Rainfall Monitoring:

Date	Rainfall
19 <sup>th</sup> September	Up to 50 mm in the southern islands.
20 <sup>th</sup> – 21 <sup>st</sup> September	Up to 50 mm in the northern and central islands; and up to 30 mm in the southern islands.
22 <sup>nd</sup> September	Up to 50 mm in the northern and central islands; and up to 10 mm in the southern islands.
23 <sup>rd</sup> September	Up to 50 mm in the central islands; and up to 30 mm in northern and southern islands.
24 <sup>th</sup> September	Up to 100 mm in the central; up to 50 mm in northern; and up to 20 mm southern islands.
25 <sup>th</sup> September	Up to 50 mm in the northern and central islands; and up to 10 mm in the southern islands.
26 <sup>th</sup> September	Up to 10 mm in the southern islands.
27 <sup>th</sup> September	Up to 20 mm in the central islands; and up to 10 mm in the southern islands.
28 <sup>th</sup> September	Up to 30 mm in the southern islands; up to 10 mm in the central islands.
29 <sup>th</sup> September	Up to 20 mm in the northern and central islands.
30 <sup>th</sup> September	Up to 50 mm in the northern and up to 30 mm in central islands.

**Monthly and Seasonal Rainfall Monitoring:** In September, Central islands received up to 200 mm rainfall above than normal rainfall for the season; and northern islands up to 100 mm. The southern islands received average rainfall for the season. The central and southern islands received up to 450 mm of total rainfall; and central and northern islands up to 300 mm.

#### PREDICTIONS

##### Weekly Rainfall Forecast:

to IMD GFS rainfall up to 10 mm of is expected in the entire country on October 7<sup>th</sup>. On the 8<sup>th</sup>, rainfall up to 40 mm is expected in the central and southern islands and up to 10 mm in the northern islands. On the 9<sup>th</sup>, rainfall up to 20 mm of is expected in the central and southern islands and up to 10 mm in the northern islands. On the 10<sup>th</sup>, rainfall up to 70 mm of is expected in the central and southern islands and up to 40 mm in the northern islands.

#### Inside this Issue

1. Rainfall Monitoring
  - a. Daily Satellite derived Rainfall Estimates
  - b. Monthly Rainfall derived from Satellite Rainfall Estimate
  - c. Monthly and Seasonal Monitoring
2. Ocean Surface Monitoring
3. Rainfall Predictions
  - a. Weekly Predictions from NOAA/NCEP
  - b. Seasonal Predictions from IRI<sup>1</sup>