

Climate Monitoring and Prediction for the Maldives – August 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)

September 2, 2019

PACIFIC SEAS STATE

August 19, 2019

The weak El Niño of 2018-19 has ended, as SSTs in the east-central Pacific cooled to ENSO-neutral levels during July. Patterns in most atmospheric variables also are showing ENSO-neutral conditions. Collective model forecasts favor ENSO-neutral through autumn and winter, but with higher chances for El Niño than La Niña. The official CPC/IRI outlook, no longer carrying an El Niño advisory,

(Text Courtesy IRI)

INDIAN OCEAN STATE

August 28, 2019

0.5 °C above average SST was observed around Maldives.

MJO INDEX

The MJO was significant in Phase 1 from Aug 18-20; and in Phase 2 from Aug 21-22; and in Phase 3 in Aug 24-25. Usually rainfall in Maldives is augmented in Phase 2.

 www.fb.com/fectmv

 @fectmv

Highlights

Monitored: During August, northern and southern parts of the country received rainfall above than is normal for the season; and central islands received below normal rainfall. The Southern Islands have an excess of 400 mm of rainfall during last year compared to the average while the Northern Islands are having a deficit of 375 mm and Central islands a deficit of 200 mm. The sea surface temperature around Maldives was 0.5 °C above normal.

Predictions: IMD GFS model predicts up to 10 mm of daily rainfall in the northern and central islands during September 3rd - 7th. On the 8th, rainfall up to 10 mm is expected in the entire country. Long Range Weather prediction models simulations anticipate total rainfall up to 25 mm for the entire country next week.

Summary

CLIMATOLOGY

Monthly Climatology: In September islands in the northern half of the country receive up to 150 mm rainfall while the southern half receives up to 200 mm rainfall. The same rainfall pattern continues in October and in November the entire country usually receives up to 150 mm rainfall. The wind pattern is usually westerly during these three months.

MONITORING

Weekly Rainfall Monitoring:

Date	Rainfall
17 th August	No Rainfall.
18 th August	Up to 30 mm in the southern islands; and up to 20 mm in the central islands.
19 th August	Up to 20 mm in the northern and southern islands; and up to 10 mm in the central islands.
20 th August	Up to 20 mm in the northern islands; and up to 10 mm in central islands.
21 st – 24 th August	No Rainfall.
25 th August	Up to 50 mm in the northern islands.
26 th August	Up to 30 mm in the northern and central islands.
27 th August	Up to 20 mm in the northern and central islands.
28 th August	Up to 50 mm in the northern and southern islands; up to 30 mm in the central islands.
29 th August	More than 150 mm in the northern islands; up to 50 mm in the southern islands; and up to 30 mm in central islands.
30 th – 31 st August	No Rainfall.

Monthly and Seasonal Rainfall Monitoring: In August, northern and southern islands received slightly above than normal rainfall for the season; and central islands received up to 100 mm rainfall below than normal. The northern islands received up to 450 mm of total rainfall; and central and southern islands up to 300 mm.

PREDICTIONS

Weekly Rainfall Forecast: According to IMD GFS daily rainfall up to 10 mm of is expected in the northern and central islands during September 3rd - 7th. On the 8th, rainfall up to 10 mm is expected in the entire country. On the 9th, rainfall up to 40 mm of is expected in the southern islands and up to 10 mm in the rest of the country.

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 IRI¹