

Climate Monitoring and Prediction for the Maldives – December 2020

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PACIFIC SEAS STATE

December 16, 2020

In mid-Dec 2020, 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 fall and winter. The official CPC/IRI outlook slightly favors La Niña development, and carries a La Niña watch.

(Text Courtesy IRI)

INDIAN OCEAN STATE

December 16, 2020

0.5 °C above average SST was observed around Maldives.

MJO INDEX

The MJO significantly suppressed the rainfall in phase 2 and phase 3 from 9th– 23rd December.

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Highlights

Monitored:

During November, the southern islands received above normal rainfall while the northern and central islands of Maldives received less. Over the 365 days, rainfall exceeded climatology by 14% in the Northern islands by 33%.

Predictions:

With weak La Nina conditions from November anticipated, dry conditions are set to prevail across Maldives from November-February 2020. However, the seasonal temperature remains climatological – perhaps the La Nina influence is countervailed by the prevailing anomalously warm ocean.

Summary

CLIMATOLOGY

Monthly Climatology:

In January, northern islands receive up to 50 mm of rain while central and southern islands receive up to 100 mm and 250 mm of rain respectively. Wind is north easterly. Usually in February, northern islands receive rainfall less than 50 mm while central islands receive up to 50 mm rain and southern islands receive up to 100 mm of rain. Wind is north easterly. In March, northern and central islands receive rainfall up to 50 mm while southern islands receive up to 100 mm of rain. Wind is north easterly.

MONITORING

Fortnightly Rainfall Monitoring:

Date	Rainfall
12 th December	Up to 30 mm in the northern and central islands.
13 th December	Up to 10 mm in the northern islands.
14 th December	No rainfall.
15 th December	Up to 10 mm in the central islands.
16 th -18 th December	No rainfall.
19 th December	Up to 10 mm in the northern and central islands.
20 th December	Up to 30 mm in the northern and central islands.
21 st December	Up to 70 mm in the central islands; up to 30 mm in northern islands and up to 10 mm in southern islands.
22 nd December	Up to 40 mm in the northern and central islands.
23 rd December	Up to 40 mm in the central islands.
24 th -26 th December	No rainfall.

Monthly and Seasonal Rainfall Monitoring: *In November, southern islands received up to 20 mm and; northern and central islands received up to 10 mm above average rainfall. The cumulative rainfall during the last 365 days,*

shows for: Northern islands: Excess of 200 mm from an average of 1450 mm average

Central islands: Deficit of 300 mm from an average of 1750 mm average

Southern islands: Excess of 190 mm from an average of 1800 mm average

Monthly rainfall anomaly:

During November the rainfall in the Maldives were:

Northern Islands: +6 mm above average

Central Islands: -5 mm below-average

Southern Islands: +8 mm above-average

Deckadal Rainfall Estimates:

1-10 Dec, Dekadal rainfall estimated as; Northern Islands: 40 mm rainfall

Central Islands: 40 mm rainfall

Southern Islands: 30 mm rainfall

11-20 Dec, Dekadal rainfall estimated as; Northern Islands: 60 mm rainfall

Central Islands: 60 mm rainfall

Southern Islands: 5 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

IMD GFS model predicts up to 20mm of rainfall in the northern and central islands and up to 10mm in southern islands on 29thDec; up to 40mm of rainfall in the northern and central islands and up to 10mm in southern islands on 30thDec; up to 70mm of rainfall in the northern islands; and up to 40mm in central and southern islands on 31stDec; up to 70mm of rainfall in the central islands; and up to 40mm in northern and southern islands on 1stJan; up to 70mm of rainfall in the northern and central islands and up to 10mm in southern islands on 2ndJan and up to 130mm of rainfall in the northern and central islands and up to 10mm in southern islands on 3rdJan.

Weekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 40% in the northern and central islands and below-normal tercile by 50% in southern islands between 26th Dec - 1st Jan.

Seasonal Rainfall and Temperature Forecast:

Above-normal temperature tercile is 60% probable in the northern islands; Below-normal temperature tercile is 45% probable in southern and central islands and seasonal rainfall forecast is climatological.

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