

Climate Monitoring and Prediction for the Maldives – December 2021

Prepared by Staff at Foundation for Environment, Climate and Technology, Sri Lanka and Maldives and Columbia University

Nipuni Alahakoon, Ushan Adithya, Lareef Zubair, Zahid and Michael Bell

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PACIFIC SEAS STATE

December 20, 2021

In mid-December, SSTs

remained well below normal in the central-eastern equatorial

Pacific. The evolution of

key oceanic and

atmospheric variables

is consistent with weak

La Niña conditions, and

therefore, a La Niña

Advisory remained in

place for Dec 2021. The

official CPC/IRI outlook

also anticipates a

continuation of the weak

La Niña event with high

probability during Dec-

Feb, persisting until

Feb-Apr, dissipating in

Mar-May and return to

ENSO-neutral conditions

with high probabilities

for rest of the forecast

period (Text Courtesy

IRI)

INDIAN OCEAN STATE

December 22, 2021

0.5 °C above average

SST was observed

around Maldives.

Highlights

Monitored:

During November, the entire Maldives received above normal rainfall. Over the last 365 days, rainfall exceeded climatology by 20% in the Northern islands; by 7% in the Central islands and was in deficit by 19% in the Central islands.

Predictions:

In the months ahead, a weak La Niña trend is expected. Seasonal climate prediction for wetter tendency in the islands other than in the Southern-most island for January to March.

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		
	Northern Islands	Central Islands	Southern Islands
12 th Dec	30 mm	30 mm	20 mm
13 th Dec	40 mm	30 mm	-
14 th Dec	20 mm	20 mm	5 mm
15 th Dec	30 mm	-	-
16 th Dec	10 mm	10 mm	-
17 th Dec	-	20 mm	5 mm
18 th Dec	-	40 mm	10 mm
19 th Dec	-	10 mm	10 mm
20 th Dec	-	40 mm	10 mm
21 st Dec	-	40 mm	60 mm
22 nd Dec	-	20 mm	60 mm
23 rd Dec	-	30 mm	-
24 th Dec	-	5 mm	-
25 th Dec	-	-	30 mm
26 th Dec	-	-	5 mm

Monthly and Seasonal Rainfall Monitoring: In November, the entire Maldives received up to 10 mm above average rainfall. The cumulative rainfall during the last 365 days,

shows for: Northern islands: Excess of 300 mm from an average of 1475 mm average

Central islands: Deficit of 325 mm from an average of 1725 mm average

Southern islands: Excess of 125 mm from an average of 1800 mm average

FECT Foundation for Environment
Climate and Technology

FECT, Maldives, Sri Lanka & New York

Phone: (+960) 7788010(MV), (+94) 81-2376746 (SL)

Web: www.climate.mv

Blog: fectmv.blogspot.com

E-mail: fectmv@gmail.com

FB: www.fb.com/fectmv

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

Deckadal Rainfall Estimates:

1-10 December, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall
Central Islands: 50 mm rainfall
Southern Islands: 100 mm rainfall

11-20 December, Dekadal rainfall estimated as; Northern Islands: 70 mm rainfall
Central Islands: 100 mm rainfall
Southern Islands: 50 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

NOAA GFS model predicts up to 20 mm of rainfall in the southern Islands; and up to 10 mm in northern and central islands on 29th Dec; Up to 40 mm of rainfall in the central islands; up to 20 mm of rainfall in the southern islands and up to 10 mm in northern islands on 30th Dec; Up to 20 mm of rainfall in the southern islands; and up to 10 mm in northern and central islands on 31st Dec; Up to 40 mm of rainfall in the central and southern islands; and up to 10 mm in northern islands on 1st Jan; Up to 70 mm of rainfall in the southern islands; up to 20 mm of rainfall in central islands; and up to 10 mm in northern islands on 2nd Jan; Up to 40 mm of rainfall in the central islands; and up to 10 mm in northern and southern islands on 3rd Jan; and up to 40 mm of rainfall in the central islands; up to 20 mm in northern islands; and up to 10 mm in southern islands on 4th Jan.

Weekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 60% in the southern islands; and below-normal tercile by 50% in the northern and central islands between 25th – 31th December.

Seasonal Rainfall and Temperature Forecast:

Above-normal precipitation tercile is 45% probable in the northern islands; and near normal precipitation tercile is probable in central and southern islands from January-February-March 2022 and seasonal rainfall forecast is climatological.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 7 & 8 and it is strong in the next two weeks (27th Dec 2021- 10th Jan 2022). MJO in phase 7 usually suppresses rainfall over the Maldives.

Figures in Annexure

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 - Monthly Rainfall derived from Satellite Rainfall Estimate
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 - Seasonal Predictions from IRI¹

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