

Climate Monitoring and Prediction for the Maldives – October 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

October 27, 2021

In mid-October, SSTs in the central-eastern equatorial Pacific are below average. The evolution of key atmospheric variables is consistent with La Niña conditions, and therefore, a La Niña Advisory has been issued for Oct 2021. The collection of latest ENSO prediction models indicates SSTs to cool further through boreal autumn and winter, and then return to ENSO-neutral levels during spring. The official CPC/IRI outlook also anticipates a La Niña event with high probability during Oct-Dec and persisting until Jan-Mar, with a return to ENSO-neutral conditions with high probabilities for rest of the forecast period. (Text Courtesy IRI)

INDIAN OCEAN STATE

October 27, 2021

0.5 °C above average SST was observed around Maldives.

Highlights

Monitored:

During October, the Northern received above normal rainfall while the Central and Southern islands received less. Over the last 365 days, rainfall exceeded climatology by 21% in the Northern islands; 5% in the Southern islands and was in deficit by 22% in the Central islands.

Predictions:

La Niña tendency is predicted in months ahead and this results in the dry tendency in the Central and Southern Islands for November to January 2021.

Summary

CLIMATOLOGY

Monthly Climatology:

In November, the whole country usually receives up to 200 mm rain. The wind is westerly. 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. Northern islands get north-easterly wind while southern islands get northerly wind. In January northern islands receive up to 50 mm rain while central and southern islands receive up to 100 mm and 250 mm rain respectively. The wind is northeasterly.

MONITORING

Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
17 th Oct	40 mm	20 mm	-
18 th Oct	10 mm	30 mm	10 mm
19 th Oct	5 mm	-	10 mm
20 th Oct	-	-	20 mm
21 st Oct	5 mm	-	-
22 nd Oct	10 mm	-	-
23 rd Oct	10 mm	10 mm	-
24 th Oct	5 mm	10 mm	-
25 th Oct	20 mm	30 mm	5 mm
26 th Oct	5 mm	10 mm	20 mm
27 th Oct	10 mm	10 mm	10 mm
28 th Oct	5 mm	5 mm	10 mm
29 th - 30 th Oct	10 mm	-	10 mm
31 st Oct	10 mm	5 mm	40 mm

Monthly and Seasonal Rainfall Monitoring: In October, Northern islands received up to 10 mm above average rainfall while remaining islands received less.

The cumulative rainfall during the last 365 days,

shows for: Northern islands: Excess of 325 mm from an average of 1550 mm average

Central islands: Deficit of 400 mm from an average of 1750 mm average

Southern islands: Excess of 100 mm from an average of 1850 mm average

Deckadal Rainfall Estimates:

11-20 October, Dekadal rainfall estimated as; Northern Islands: 60 mm rainfall
Central Islands: 60 mm rainfall
Southern Islands: 40 mm rainfall

21-31 October, Dekadal rainfall estimated as; Northern Islands: 60 mm rainfall
Central Islands: 40 mm rainfall
Southern Islands: 80 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

NOAA GFS model predicts up to 40 mm of rainfall in the northern islands; and up to 20 mm in central and southern islands on 3rd Oct - 4th Nov; Up to 40 mm of rainfall in the in the northern and central islands; and up to 20 mm in southern islands on 5th Nov; Up to 70 mm of rainfall in the in the northern and central islands; and up to 20 mm in southern islands on 6th Nov; Up to 70 mm of rainfall in the in the northern islands; and up to 40 mm in central and southern islands on 7th Nov; Up to 40 mm of rainfall in the northern and central islands; and up to 20 mm in southern islands on 8th Nov; and up to 40 mm of rainfall in the northern islands; up to 20 mm in the central islands ; and up to 10 mm in southern islands on 9th Nov.

Weekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 50% in the Northern islands; below-normal tercile by 40% in the Central islands; and neutral tercile in the Southern islands between 6th – 12th November.

Seasonal Rainfall and Temperature Forecast:

Above-normal precipitation tercile is 40% probable in the northern islands; And Below- normal precipitation tercile is 45% probable in the central and southern islands from November- December-January 2021 and seasonal rainfall forecast is climatological.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 3 & 4 in the next two weeks over the Maldives. and it shall enhance the rainfall during 4th – 8th November and suppress the rainfall during 9th – 18th November.

Figures in Annexure

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 - Monthly Rainfall derived from Satellite Rainfall Estimate
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- **Ocean Surface Monitoring**
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 - Seasonal Predictions from IRI¹

