

Climate Monitoring and Prediction for the Maldives – November 2022

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November 30, 2022

PACIFIC SEAS STATE

November 18, 2022

In mid-November, sea surface temperatures in the central-eastern equatorial Pacific remain below-average. Key oceanic and atmospheric variables have remained consistent with La Niña conditions, though there is a large drop in SDI value recently (+6.9 as of 16 November, 2022). A CPC La Niña Advisory still remains in place for November 2022. Several models in the plume predict SSTs to remain below-normal at the level of a La Niña until at least Jan-Mar 2023.

The official CPC/IRI outlook forecasts a continuation of the La Niña event with high probability during Dec-Feb, which decreases to 56% in Jan-Mar 2023. Based on objective ENSO forecasts, La Niña is expected to transition into ENSO-neutral during Feb-Apr 2023, which remains the most likely category until Jun-Aug 2023. (Text Courtesy IRI)

INDIAN OCEAN STATE

November 30, 2022

0.5 °C above average SST was observed around Maldives.

Highlights

Monitored:

During September, the central islands received up to 15 mm above average rainfall while remaining islands received less. The average rainfall exceeded climatology in the central and southern islands by 20%; and was in deficit by 6% in the northern islands.

Predictions:

A La Niña is expected to continue in the months ahead. Seasonal climate predictions predict a climatological average from December to February 2023 for the Maldives.

Summary

CLIMATOLOGY

Monthly Climatology:

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. Usually, 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. 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 rain. The wind is northeasterly.

MONITORING

Fortnightly Rainfall Monitoring:

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

Monthly and Seasonal Rainfall Monitoring: In November, the central islands received up to 15 mm; while remaining islands received less. The cumulative rainfall during the last 365 days, shows for: Northern islands: Deficit of 100 mm from an average of 1600 mm average
Central islands: Excess of 250 mm from an average of 1250 mm average
Southern islands: Excess of 250 mm from an average of 1250 mm average

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Dekadal Rainfall Estimates:

11-20 Nov, Dekadal rainfall estimated as; Northern Islands: 80 mm rainfall
Central Islands: 200 mm rainfall
Southern Islands: 10 mm rainfall

21-30 Nov, Dekadal rainfall estimated as; Northern Islands: 10 mm rainfall
Central Islands: 10 mm rainfall
Southern Islands: 10 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
9 th Dec	40 mm	40 mm	20 mm
10 th Dec	10 mm	40 mm	20 mm
11 th Dec	10 mm	40 mm	40 mm
12 th Dec	10 mm	20 mm	20 mm
13 th Dec	10 mm	40 mm	20 mm
14 th Dec	10 mm	40 mm	20 mm
15 th Dec	10 mm	20 mm	20 mm

Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 40% in the central islands between 3rd - 16th Dec.

Seasonal Rainfall and Temperature Forecast:

Below-normal precipitation tercile is 45% probable in the central islands; and 40% probable in the southern islands from Dec-Jan-Feb 2023 and seasonal rainfall forecast is higher likelihood of near-neutral range.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 6 & 7 and shall strengthen in the next two weeks (12 Dec – 26 Dec 2022). MJO in phases 6 & 7 usually suppress the rainfall over the Maldives.

Figures in Annexure

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