

Climate Monitoring and Prediction for the Maldives – August 2023

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PACIFIC SEAS STATE

August 18, 2023

As of mid-Aug 2023, the previously moderate El Niño conditions in the central-eastern equatorial Pacific have strengthened further. Key oceanic and atmospheric variables are consistent with the El Niño, though the atmosphere is not yet fully coupled to the warm sea surface temperature anomalies in the central-eastern equatorial Pacific Ocean. A CPC El Niño advisory remains in place for August 2023. Almost all of the models in the IRI ENSO prediction plume forecast an El Niño event during boreal autumn continuing into winter and early spring of 2024, while weakening during the end of the forecast and ENSO-neutral become the most likely category (Apr-Jun 2024 with 59% chance).

(Text Courtesy IRI)

INDIAN OCEAN STATE

1 Aug – 7 Aug, 2023

1^oC above average SST was observed around northern islands and 0.5^oC was observed around the central and southern islands.

Highlights

Monitored:

In July, some of islands northern, central, and southern received light showers (10 mm). Westerly to north-westerly winds prevailed during the month.

Predictions:

El Niño conditions have strengthened further and will continue through the Northern Hemisphere winter. Seasonal climate predictions predict a wet tendency for the entire islands from September to November 2023.

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

Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
12 th August	TR	TR	10 mm
13 th August	-	TR	TR
14 th August	TR	TR	-
15 th August	-	TR	TR
16 th August	-	TR	-
17 th August	TR	TR	TR
18 th August	TR	5 mm	TR -
19 th August	TR	TR	20 mm
20 th August	-	5 mm	5 mm
21 th August	TR	5 mm	5 mm
22 nd August	-	TR	10 mm
23 rd August	TR	5 mm	TR
24 th August	TR	TR	TR
25 th August	TR	TR	-
26 th August	TR	TR	-

TR - Trace Value

Monthly and Seasonal Rainfall Monitoring: In July, some of islands northern, central, and southern received up to 10 mm of rainfall, while other islands received up to 5 mm.

Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
T Max	34.7°C	33.0°C	32.0°C
T Min	32.7°C	25.0°C	24.0°C

Dekadal Rainfall Estimates

1-10 Aug, Dekadal rainfall estimated as; Northern Islands: 40 mm rainfall
Central Islands: 60 mm rainfall
Southern Islands: 80 mm rainfall

11-20 Aug, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall
Central Islands: 10 mm rainfall
Southern Islands: 60 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
30th August	40 mm	70 mm	40 mm
31st August	20 mm	10 mm	TR
1st September	40 mm	40 mm	10 mm
2nd September	40 mm	70 mm	40 mm
3rd September	20 mm	70 mm	70 mm
4th September	40 mm	70 mm	20 mm
5th September	40 mm	40 mm	TR

Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 70% for the northern and central islands; and 40% for some parts of the southern islands between 2nd Sept- 15th Sept.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 70% probable in the northern islands; 60% probable in the central islands and 40-45% probable in the southern islands from September-October-November 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 1,2,3 & 4 respectively in the next two weeks (28 Aug – 11 Sept 2023). MJO in phase 2 and 3 is usually enhance the 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

