

Climate Monitoring and Prediction for the Maldives – November 2023

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PACIFIC SEAS STATE

November 20, 2023

As of mid-Nov 2023, El Niño conditions in the central-eastern equatorial Pacific remain strong with key oceanic and atmospheric variables consistent with an ongoing El Niño event. A CPC El Niño advisory remains in place for November 2023. Almost all the models in the IRI ENSO prediction plume forecast a continuation of the El Niño event during the boreal winter and early boreal spring of 2024, which rapidly weakens thereafter. ENSO-neutral conditions become the most likely category in May-Jul, of 2024, and remain so during rest of the forecast period. (Text Courtesy IRI)

INDIAN OCEAN STATE

7 – 13 Nov, 2023

0.5°C above average SST was observed around northern and central islands and near-neutral for the southern islands in the Maldives.

Highlights

Monitored:

In September, northern islands and some of the central islands received up to 10 mm of rainfall. South-easterly winds prevailed during the month of October over the Maldives .

Predictions:

Seasonal climate predictions predict a wet tendency for the northern and central islands; and dry tendency for the southern islands from December to February 2024.

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
14 th November	20 mm	10 mm	TR
15 th November	TR	TR	10 mm
16 th November	5 mm	5 mm	30 mm
17 th November	5 mm	50 mm	50 mm
18 th November	20 mm	20 mm	TR
19 th November	10 mm	10 mm	TR
20 th November	10 mm	20 mm	5 mm
21 st November	20 mm	40 mm	10 mm
22 nd November	40 mm	30 mm	TR
23 rd November	30 mm	30 mm	20 mm
24 th November	40 mm	50 mm	20 mm
25 th November	5 mm	5 mm	5 mm
26 th November	TR	TR	5 mm
27 th November	50 mm	40 mm	5 mm
28 th November	10 mm	40 mm	TR

TR - Trace Value

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

Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
T Max	34.5°C	32.3°C	32.0°C
T Min	23.2°C	24.5°C	24.0°C

Dekadal Rainfall Estimates

1-10 Nov, Dekadal rainfall estimated as; Northern Islands: 150 mm rainfall
Central Islands: 100 mm rainfall
Southern Islands: 60 mm rainfall

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

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
30th November	70 mm	20 mm	10 mm
1st December	40 mm	20 mm	10 mm
2nd December	-	40 mm	20 mm
3rd December	20 mm	40 mm	10 mm
4th December	40 mm	70 mm	TR
5th December	20 mm	20 mm	10 mm
6th December	40 mm	20 mm	10 mm

Biweekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 40% for some of the southern islands; and near-neutral tercile for the rest of the Maldives between 2th - 15th Dec.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 60% probable in the central islands; 50% probable in the northern islands; and below-normal tercile is 40% probable in the southern islands from December-January-February 2024 and seasonal rainfall forecast is higher likelihood of wetter range for the northern and central islands.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 2,3,4 & 7 in the next two weeks (29 Nov – 13 Dec 2023). MJO in phases 2 & 3 is usually enhances the rainfall over the Maldives. And then, the rainfall shall suppress after first week of December.

Figures in Annexure

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 - Monthly Rainfall derived from Satellite Rainfall Estimate
 - Monthly and Seasonal Monitoring
- **Ocean Surface Monitoring**
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 - Weekly Predictions from NOAA/NCEP
 - Seasonal Predictions from IRI¹

