Climate Monitoring and Prediction for the Maldives – April 2024

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April 29, 2024

PACIFIC SEAS STATE April 19, 2024

As of mid-April 2024, El Niño conditions still persist in the centraleastern equatorial Pacific, with important oceanic and atmospheric indicators aligning with an ongoing El Niño event that is gradually diminishing. Most models in the IRI ENSO prediction plume forecast a transition of the El Niño event to ENSOneutral in Apr-Jun, 2024, which then persists during boreal summer seasons of May-Jul, and Jun-Aug, 2024. La Niña becomes the most probable category in Aug-Oct 2024 through Dec-Feb 2025, while no category is dominant during Jul-Sep 2024. (Text Courtesy IRI)

INDIAN OCEAN STATE 2 – 8 April, 2024

0.5°C – 1.0°C above average SST was observed around the Maldives.

Highlights

Monitored:

In March, the Maldives has received less than 5 mm of rainfall. North-easterly winds prevailed for the northern and central islands during the month of March.

Predictions:

A transition from El Niño to ENSO-neutral is likely by April-June 2024, with the odds of La Niña developing by June-August 2024. Seasonal climate predictions predict a wet condition for the Maldives from May to July 2024.

Summary

CLIMATOLOGY

Monthly Climatology:

In May, average rainfall is about 200 mm in the entire country. The wind direction is westerly and the speed is higher than in April. The rainfall in northern islands usually increases up to 250 mm in June, while it decreases to 150 mm in southern islands. Wind direction in June is usually easterly but with low speeds. In July, the entire country receives up to 200 mm rainfall and the wind speed and direction does not change.

MONITORING

Fortnightly Rainfall Monitoring:

Date	Rainfall			
	Northern Islands	Central Islands	Southern Islands	
13 th April	60 mm	60 mm	80 mm	
14 th April	NA	NA	NA	
15 th April	NA	NA	NA	
16 th April	NA	NA	NA	
17 th April	NA	NA	NA	
18 th April	NA	NA	NA	
19 th April	NA	NA	NA	
20 th April	NA	NA	NA	
21 st April	NA	NA	NA	
22 nd April	TR	TR	10 mm	
23 rd April	TR	10 mm	10 mm	
24 th April	TR	40 mm	50 mm	
25 th April	-	5 mm	30 mm	
26 th April	TR	30 mm	10 mm	
27 th April	10 mm	10 mm	10 mm	

TR - Trace Value

Monthly and Seasonal Rainfall Monitoring: In March, central and southern islands received up to 5 mm of rainfall; and northern islands received below 5mm of rainfall.

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Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
T Max	34.0°C	34.0°C	33.0 ^o C
T Min	25.0°C	24.2 ^o C	24.0°C

Dekadal Rainfall Estimates

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

PREDICTIONS

Daily Rainfall Forecast:

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

Biweekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of above-normal tercile by 45% for the southern islands: below-normal tercile by 40% for the northern islands and near normal for central islands between 4th-17th May.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 60% probable in the central islands; 50% probable in the northern islands; and 45% probable in the southern islands from May-June-July 2024 and seasonal rainfall forecast is higher likelihood of wet range for the Maldives. **MJO Index:**

The MJO is predicted by NOAA CPC to be in phases 3 and 4 in the next two weeks (30 April – 13 May 2024). MJO in phase 3 usually enhances the rainfall over the Maldives.

Figures in Annexure

Inside this Issue

Rainfall Monitoring

- Daily Satellite derived Rainfall Estimates
- Monthly Rainfall derived from Satellite Rainfall Estimate
- Monthly and Seasonal Monitoring

Ocean Surface Monitoring

- Rainfall Predictions
 - Weekly Predictions from NOAA/NCEP
 - Seasonal Predictions from IRI¹

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