Climate Monitoring and Prediction for the Maldives – February 2025

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PACIFIC SEAS STATE

February 19, 2025

As of mid-February 2025, weak La Niña conditions persist in the equatorial Pacific. These conditions have been in place since December 2024, following the initial crossing of the La Niña threshold. The IRI ENSO plume forecasts equal chances for La Niña and ENSO-neutral conditions for Feb-Apr, 2025. For Mar-May, 2025, onwards to the Jun-Aug, ENSO-neutral conditions are favoured. In summary, there are equal chance of La Niña and ENSO-neutral conditions during Feb-Apr 2025, while ENSO-neutral conditions are favoured from Mar-May through the boreal summer. (Text Courtesy IRI)

INDIAN OCEAN STATE

4-10 February, 2025

O.5°C above average SST was observed around the northern and southern islands, while nearneutral SST was observed around the central islands of Maldives.

During the last two weeks of February, central islands received the highest rainfall (up to 50 mm/day), while northern islands received little to no rainfall. March is expected to bring heavy rain in the first two weeks.

Highlights

Monitored:

In January, the central islands received up to 25 mm of rainfall; while remaining islands received less. Easterly winds prevailed for northern islands of Maldives during the month of January.

Predictions:

La Niña conditions are expected to persist in the near-term, with a transition to ENSO-neutral likely during March-May 2025 (66% chance).

Summary

CLIMATOLOGY

Monthly Climatology:

In March, northern and central islands receive average rainfall up to 50 mm while southern islands receive up 100 mm of rain. Wind is northeasterly. Usually in April, Southern islands usually receive about 150 mm of rainfall. The wind direction in southern and central islands is westerly and in northern islands, it is northwesterly. Rainfall usually increases up to 200 mm in May in the entire country. The wind direction remains the same but the speed increases.

MONITORING

Fortnightly Rainfall Monitoring:

	Rainfall				
Date	Northern Islands	Central Islands	Southern Islands		
12 th February	-	TR	-		
13 th February	-	TR	-		
14 th February	-	-	TR		
15 th February	-	-	TR		
16 th February	-	-	-		
17 th February	-	5 mm	-		
18 th February	-	TR	-		
19 th February	-	20 mm	5 mm		
20 th February	-	50 mm	10 mm		
21st February	-	5 mm	TR		
22 nd February	-	-	TR		
23 rd February	-	-	TR		
24 th February	-	TR	-		
25 th February	-	40 mm	20 mm		
26 th February	TR	10 mm	TR		

TR - Trace Value

Monthly and Seasonal Rainfall Monitoring

Monthly Average: In January, the northern islands received up to 15 mm of rainfall, central islands received up to 25 mm rainfall, southern islands received up to 12 mm rainfall.

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	Northern Islands	Central Islands	Southern Islands
T Max	34.0°C	34.0°C	32.0°C
T Min	24.6°C	24.6°C	23.0°C

Dekadal Rainfall Estimates

1-10 February, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall

Central Islands: 10 mm rainfall

Southern Islands: 5 mm rainfall

11-20 February, Dekadal rainfall estimated as; Northern Islands: No rainfall

Central Islands: 70 mm rainfall Southern Islands: 10 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall			
	Northern Islands	Central Islands	Southern Islands	
01st March	70 mm	70 mm	20 mm	
02 nd March	130 mm	70 mm	40 mm	
03 rd March	70 mm	10 mm	TR	
04 th March	TR	TR	10 mm	
05 th March	TR	10 mm	-	
06 th March	TR	-	-	
07 th March	10 mm	20 mm	10 mm	

Biweekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of below-normal tercile by 40% for the northern and central islands, by 50% for the southern islands between 8^{th} - 21^{st} March.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 45% probable in the northern islands, and 50% probable in the central islands; and below-normal tercile is 45% probable in the southern islands from March-April-May 2025 and seasonal rainfall forecast is higher likelihood of above-normal range for the Maldives.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 1 and 2 respectively in the next two weeks (27 February – 13 March 2025). MJO in phase 2 usually enhance the rainfall over the Maldives.

Figures in Annexure

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 - Seasonal Predictions from IRI¹

