Climate Monitoring and Prediction for the Maldives – September 2024

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PACIFIC SEAS STATE September 19, 2024

As of mid-September 2024, ENSO-neutral conditions persist in the western equatorial Pacific, while oceanic and atmospheric indicators started to show signs of La Niña development, including a sustained strengthening of trade winds, and reduced convection over the central-eastern Pacific during last two months. The IRI ENSO prediction plume forecasts equal chances for ENSO-neutral conditions and La Nina for Sep-Nov. 2024. Borderline La Niña conditions are forecasted during Oct-Dec (60% chances) that continue during the boreal winter, ENSO-neutral conditions subsequently re-emerge as the most likely during the boreal spring and remain so till the end of the forecast period. (Text Courtesy IRI)

INDIAN OCEAN STATE

3 – 9 September, 2024

Between 0.5°C - 1°C above average SST was observed around the Maldives.

Highlights

Monitored:

In August, the central islands received up to 12 mm of rainfall; while remaining islands received less. North-westerly winds prevailed for the northern and central Maldives during the month of August.

Predictions:

La Niña is favored to emerge in September-November (71% chance) and is expected to persist through January-March 2025.

Summary

CLIMATOLOGY

Monthly Climatology:

In October, the northern half of the country usually receives up to 200 mm rain while the southern half receives up to 250 mm rain. Wind is westerly. The entire country usually receives up to 200 mm rain in November with no change in the wind direction from October. Usually in December, northern islands receive up to 150 mm while central and southern islands receive up to 200 mm and 250 mm rain respectively. Southern islands get north easterly wind while southern islands get northerly wind.

MONITORING

Fortnightly Rainfall Monitoring:

Date	Rainfall			
	Northern Islands	Central Islands	Southern Islands	
16 th September	10 mm	TR	TR	
17 th September	20 mm	10 mm	20 mm	
18 th September	10 mm	50 mm	50 mm	
19 th September	5 mm	5 mm	10 mm	
20 th September	TR	10 mm	20 mm	
21st September	20 mm	30 mm	TR	
22 nd September	10 mm	30 mm	TR	
23 rd September	TR	TR	5 mm	
24 th September	10 mm	10 mm	20 mm	
25 th September	20 mm	30 mm	10 mm	
26 th September	40 mm	50 mm	10 mm	
27 th September	TR	20 mm	10 mm	
28 th September	5 mm	10 mm	5 mm	
29 th September	5 mm	40 mm	TR	
30 th September	40 mm	30 mm	TR	

TR - Trace Value

Monthly and Seasonal Rainfall Monitoring

Monthly Average: In August, the central islands received up to 12 mm of rainfall, northern islands received up to 8 mm of rainfall and southern islands received below 5 mm of rainfall.

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	Northern Islands	Central Islands	Southern Islands
T Max	32.0°C	33.0°C	32.0°C
T Min	23.9°C	23.7°C	23.0°C

Dekadal Rainfall Estimates

11-20 September, Dekadal rainfall estimated as; Northern Islands: 40 mm rainfall

Central Islands: 80 mm rainfall Southern Islands: 80 mm rainfall

21-30 September, Dekadal rainfall estimated as; Northern Islands: 100 mm rainfall

Central Islands: 100 mm rainfall Southern Islands: 40 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall			
	Northern Islands	Central Islands	Southern Islands	
04 th October	20 mm	TR	20 mm	
05 th October	20 mm	40 mm	20 mm	
06 th October	40 mm	20 mm	20 mm	
07 th October	40 mm	70 mm	20 mm	
08 th October	40 mm	70 mm	40 mm	
09 th October	40 mm	70 mm	40 mm	
10 th October	40 mm	70 mm	20 mm	

Biweekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of above-normal tercile by 80% for the northern islands and the southern islands; and tercile by 50% for the central islands between 5^{th} - 18^{th} October.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 40% probable in the northern islands; and below-normal tercile is 45% probable in the central islands; and tercile is 60% probable in the southern islands from October-November-December 2024 and seasonal rainfall forecast is higher likelihood of below-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 (1 - 15) October 2024). MJO in phase 2 usually enhance the rainfall over the Maldives.

Figures in Annexure

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 - Seasonal Predictions from IRI¹

