Climate Monitoring and Prediction for the Maldives – August 2024

Prepared by Staff at Foundation for Environment, Climate and Technology, Maldives and Sri Lanka and Columbia University

Nipuni Alahakoon, Dilrukshi Kulasooriya, Lareef Zubair, A. Afaaf and Michael Bell

August 28, 2024

Highlights Monitored:

PACIFIC SEAS STATE August 19, 2024

As of mid-August 2024, ENSO-neutral conditions persist in the western equatorial Pacific, and oceanic and atmospheric indicators also align with an ENSO-neutral state. The IRI ENSO prediction plume forecasts ENSOneutral conditions for Aug-Oct, and Sep-Nov, 2024. Borderline La Niña conditions are forecasted during Oct-Dec, and Nov-Jan, but with very weakly elevated probabilities. **ENSO-neutral conditions** subsequently re-emerge as the most likely during the horeal winter and spring of 2025. (Text Courtesy IRI)

INDIAN OCEAN STATE 6 – 12 August, 2024

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

In July, the northern and central islands received up to 10 mm of rainfall; while remaining islands received less. North-westerly winds prevailed for the northern and central Maldives during the month of July.

Predictions:

ENSO-neutral conditions are present and it is expected to continue for the next several months, with La Niña favored to emerge during September-November 2024.

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:

Dete		Rainfall			
	Date	Northern Islands	Central Islands	Southern Islands	
12 ^t	th August	130 mm	40 mm	20 mm	
13 ^t	th August	130 mm	60 mm	40 mm	
14 ^t	th August	10 mm	20 mm	10 mm	
15 ^t	th August	40 mm	40 mm	10 mm	
16 ^t	th August	80 mm	30 mm	10 mm	
17 ^t	th August	60 mm	20 mm	TR	
18 ^t	th August	20 mm	20 mm	10 mm	
19 ^t	th August	10 mm	20 mm	10 mm	
20 ^t	th August	130 mm	50 mm	20 mm	
21 ^s	st August	10 mm	TR	TR	
22 ^r	^{1d} August	TR	-	-	
23'	rd August	TR	-	-	
24 ^t	th August	-	-	5 mm	
25 ^t	th August	-	TR	5 mm	
26 ^t	th August	-	-	TR	
TD Tro	rco Valuo				

TR - Trace Value

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

ECT Foundation for Environment

Web: www.climate.mv

Climate and Technology Blog: fectmv.blogspot.com

Phone: (+960) 7788010 (MV), (+94) 81-2376746 (SL)

E-mail: fectmv@gmail.com

FECT, Maldives, Sri Lanka & New York

FB: www.fb.com/fectmv

TW: @fectmv

Monthly Temperature Monitoring:

	Northern Islands	Central Islands	Southern Islands
T Max	32.9 ⁰ C	33.0°C	32.0 ⁰ C
T Min	23.0°C	23.5°C	22.0 ^o C

Dekadal Rainfall Estimates

1-10 August, Dekadal rainfall estimated as; Northern Islands: 60 mm rainfall Central Islands: 100 mm rainfall Southern Islands: 80 mm rainfall 11-20 August, Dekadal rainfall estimated as; Northern Islands: 250 mm rainfall Central Islands: 250 mm rainfall Southern Islands: 160 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

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

Biweekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of below-normal tercile by 40% for the northern islands and neutral tercile for the central and southern islands between 31th August -13th September.

Seasonal Rainfall and Temperature Forecast:

Above-normal tercile is 40% probable in the northern islands; and below-normal tercile is 50% probable in the southern islands and central islands from September-October-November 2024 and seasonal rainfall forecast is higher likelihood of near-normal range for the Maldives.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 4 and 5 respectively in the next two weeks (27 August – 10 September 2024). MJO in phases 4 & 5 usually suppress 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

www.fb.com/fectmv

www.climate.mv