Climate Monitoring and Prediction for the Maldives – February 2023

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

Nipuni Alahakoon, Ushan Adithya, Lareef Zubair, A. Afaaf and Michael Bell

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PACIFIC SEAS STATE

February 20, 2023

In mid-February 2023, SST in the central-eastern equatorial Pacific weakened further but remain at the level of the La Niña threshold. Key oceanic and atmospheric variables have remained consistent with La Niña conditions. A CPC La Niña Advisory remains in place for February 2023. All models (except one statistical model) in the IRI ENSO prediction plume predict SSTs to transition to an ENSO-neutral state during Mar-May, 2023. The likelihood of El Niño remains low during Mar-May (3%), increasing to 20% in Apr-Jun, and 47% in May-Jul, and then becomes the dominant category thereafter with probabilities in the 56-59% range from Jun-Aug to Oct-Dec 2023. ENSO-neutral is the next most-likely category starting from boreal summer onward, but the probabilities remain in the range of 31-38%. **(Text Courtesy IRI)**

INDIAN OCEAN STATE

February 1, 2023

SST was observed near-neutral around the Maldives.

Highlights

Monitored:

During January, the entire Maldives received up to 5 mm, while some islands received less. The average rainfall exceeded climatology in the central and southern islands by 27%; and was in deficit by 2% in the northern islands.

Predictions:

A transition from the level of a La Niña to ENSO-neutral state is expected in the months ahead. Seasonal climate predictions predict a climatological average from March to May 2023 for the Maldives.

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:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
11th Feb	-	-	-
12th Feb	-	-	-
13th Feb	-	-	-
14th Feb	-	-	-
15th Feb	-	-	-
16th Feb	-	-	-
17th Feb	-	TR	TR
18th Feb	-	-	-
19th Feb	-	-	TR
20th Feb	TR	TR	5 mm
21st Feb	10 mm	10 mm	TR
22nd Feb	TR	5 mm	5 mm
23rd Feb	-	-	TR
24th Feb	5 mm	20 mm	-
25th Feb	TR	TR	TR

FECT Foundation for Environment Climate and Technology

FECT, Maldives, Sri Lanka & New York

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

Web: www.climate.mv **Blog: fectmv.blogspot.com** **E-mail: fectmv@gmail.com** **FB: www.fb.com/fectmv** **TW: @fectmv**

Monthly and Seasonal Rainfall Monitoring: *In January, the entire Maldives received up to 5 mm, while some islands received less. The cumulative rainfall during the last 365 days,*
shows for: Northern islands: Deficit of 25 mm from an average of 1400 mm average
Central islands: Excess of 325 mm from an average of 1200 mm average
Southern islands: Excess of 325 mm from an average of 1200 mm average

Dekadal Rainfall Estimates:

1-10 Feb, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall
Central Islands: *10 mm rainfall*
Southern Islands: *20 mm rainfall*

11-20 Feb, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall
Central Islands: 5 mm rainfall
Southern Islands: 5 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
28th Feb	-	TR	40 mm
1th Mar	-	TR	40 mm
2th Mar	-	TR	TR
3th Mar	10 mm	10 mm	20 mm
4th Mar	TR	20 mm	40 mm
5th Mar	-	20 mm	40 mm

Biweekly Rainfall Forecast:

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

Seasonal Rainfall and Temperature Forecast:

Above-normal precipitation tercile is 45% probable in the southern islands; and near-normal condition is probable in the northern and central islands from Mar-Apr-May 2023 and seasonal rainfall forecast is higher likelihood of near-neutral range.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 7 & 8 and shall strengthen in the next two weeks (28 Feb – 12 Mar 2023). MJO in phases 7 & 8 usually suppress the rainfall over the Maldives.

Figures in Annexure

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