Climate Monitoring and Prediction for the Maldives – March 2023

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PACIFIC SEAS STATE

March 20, 2023

In mid-March 2023, the previous negative SST anomalies in the centraleastern equatorial Pacific weakened further but the basin is now in an ENSOneutral state. Key oceanic and atmospheric variables are now consistent with ENSOneutral conditions. CPC issued a Final La Niña Advisory in March 2023, signaling the end of the event. Most models in the IRI ENSO prediction plume forecast SSTs in the ENSO-neutral state during Apr-Jun, and May-Jul, 2023. The likelihood of El Niño remains low durino Apr-Jun (21%), increasing to 49% in May-Jul, and then becomes the dominant category from Jun-Aug onward with probabilities in the 60-67%. ENSO-neutral is the next most-likely category, with probabilities remaining in the range of 31-35%. (Text Courtesy IRI)

INDIAN OCEAN STATE

February 1, 2023

SST was observed nearneutral around the Maldives.

Highlights

Monitored:

During February, the entire Maldives received less than 5 mm of rainfall. The average rainfall exceeded climatology in the central and southern islands by 29%; and was normal in the northern islands.

Predictions:

La Niña has ended and ENSO-neutral conditions are expected to continue in the months ahead. Seasonal climate predictions predict a climatological average from April to June 2023 for the Maldives.

Summary

CLIMATOLOGY

Monthly Climatology:

In April, Southern islands usually receive about 150 mm of average rainfall. The wind direction in southern and central islands is easterly and in northern islands, it's south-easterly. Rainfall usually increases up to 200 mm in May in the entire country. The wind direction remains the same but the speed increases. 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.

MONITORING

Fortnightly Rainfall Monitoring:

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

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shows for: Northern islands: Equal to the average of 1575 mm average

Central islands: Excess of 350 mm from an average of 1200 mm average Southern islands: Excess of 350 mm from an average of 1200 mm average

Dekadal Rainfall Estimates:

1-10 Mar, Dekadal rainfall estimated as; Northern Islands: 50 mm rainfall

Central Islands: 80 mm rainfall Southern Islands: 40 mm rainfall

11-20 Mar, Dekadal rainfall estimated as; Northern Islands: 10 mm rainfall

Central Islands: 70 mm rainfall Southern Islands: 50 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

Date	Rainfall			
	Northern Islands	Central Islands	Southern Islands	
30 th Mar	-	-	20 mm	
31 st Mar	-	TR	10 mm	
1 st Apr	-	TR	-	
2 nd Apr	-	TR	TR	
3 rd Apr	-	TR	-	
4 th Apr	-	-	-	

Biweekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of below-normal tercile by 45-50% in the central islands and by 40% in the northern and southern islands between 1^{st} - 14^{th} April.

Seasonal Rainfall and Temperature Forecast:

Below-normal precipitation tercile is 40% probable in the southern islands; and near-normal condition is probable in the northern and central islands from Apr-May-June 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 3,6 & 7 respectively in the next two weeks (28 Mar – 11 Apr 2023). MJO in phases 6 & 7 usually suppress the rainfall over the Maldives.

Figures in Annexure

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 - Monthly Rainfall derived from Satellite Rainfall Estimate
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 - Seasonal Predictions from IRI¹



