

Climate Monitoring and Prediction for the Maldives – September 2021

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PACIFIC SEAS STATE

September 15, 2021

In mid-Sept 2021, SSTs in the east-central Pacific are near to below average. The evolution of key atmospheric variables is consistent with ENSO-neutral conditions. However, a La Niña Watch remains in effect for Sep 2021. The collection of latest ENSO prediction models indicate SSTs to cool further through boreal autumn and winter, and then return to ENSO-neutral levels during late spring months. The official CPC/IRI outlook calls for La Niña to emerge during Sep-Nov and persist through winter and early spring, with return to ENSO-neutral in late spring and early summer of 2022. (Text Courtesy IRI)

INDIAN OCEAN STATE

September 15, 2021

0.5 °C above average SST was observed around Maldives.

Highlights

Monitored:

During August, the Northern and Southern islands received above normal rainfall while the Central islands received less.

Over the last 365 days, rainfall exceeded climatology by 10% in the Northern islands; 8% in the Southern islands and deficit by 21% in the Central islands.

Predictions:

La Niña tendency is predicted in months ahead and this results in the dry tendency in the Central and Northern Islands for October to December 2021.

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
10 th - 12 th Sept	-	-	-
13 th Sept	10 mm	-	-
14 th Sept	10 mm	30 mm	20 mm
15 th Sept	40 mm	80 mm	50 mm
16 th Sept	-	10 mm	10 mm
17 th - 20 th Sept	-	-	-
21 st Sept	10 mm	-	-
22 nd Sept	20 mm	20 mm	80 mm
23 rd Sept	-	10 mm	60 mm
24 th Sept	10 mm	40 mm	30 mm

Monthly and Seasonal Rainfall Monitoring: In August, Northern and Southern islands received up to 10 mm above average rainfall while remaining islands received less.

The cumulative rainfall during the last 365 days, shows for: Northern islands: Excess of 140 mm from an average of 1470 mm average
Central islands: Deficit of 350 mm from an average of 1700 mm average
Southern islands: Excess of 150 mm from an average of 1775 mm average

Decadal Rainfall Estimates:

1-10 September, Dekadal rainfall estimated as; Northern Islands: 20 mm rainfall
Central Islands: 5 mm rainfall
Southern Islands: 5 mm rainfall

11-20 September, Dekadal rainfall estimated as; Northern Islands: 60 mm rainfall
Central Islands: 110 mm rainfall
Southern Islands: 80 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

NOAA GFS model predicts up to 20 mm of rainfall in the southern islands; and up to 10 mm in northern and central islands on 28th Sept; Up to 10 mm of rainfall in the entire islands on 29th- 30th Sept; Up to 10 mm of rainfall in the northern and southern islands on 1st Oct; Up to 20 mm of rainfall in the northern islands; and up to 10 mm in central and southern islands on 2nd Oct; Up to 40 mm of rainfall in the northern and central islands; and up to 10 mm in southern islands on 3rd Oct; and up to 70 mm of rainfall in the northern islands; up to 40 mm in the central islands; and up to 10 mm in southern islands on 4th Oct.

Weekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of above-normal tercile by 70% in the Northern islands and 50% in the Central islands; And neutral tercile in the Southern islands between 25th Sept – 1st Oct.

Seasonal Rainfall and Temperature Forecast:

Below-normal precipitation tercile is 70% probable in the central islands; and 45% probable in the northern and southern islands from October-November- December 2021 and seasonal rainfall predicts dry tendency.

Although El Nino neutral conditions are prevalent at present, La Nina tendency is likely in the next months. As a result, the consensus for the multi-model seasonal climate predictions systems are for a dry tendency predicted in the Northern and Central Islands for October to December. However, the dry tendency for Southern Islands is not explained.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 4 & 5 and it remains weak in the next two weeks (26 September – 10 October 2021). MJO shall suppress the rainfall over the Maldives during this period.

Figures in Annexure

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