

Climate Monitoring and Prediction for the Maldives – January 2022

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PACIFIC SEAS STATE

January 19, 2022

In mid-January, SSTs remained below normal in the central-eastern equatorial Pacific. The evolution of key oceanic and atmospheric variables is consistent with weak La Niña conditions, and therefore, a La Niña Advisory remained in place for Jan 2022. A large majority of the models in the plume predict SSTs to stay below-normal to the level of a La Niña till Mar-May and then return to ENSO-neutral levels. The official CPC/IRI outlook also anticipates a continuation of the weak La Niña event with high probability during Jan-Mar and Feb-Apr. (Text Courtesy IRI)

INDIAN OCEAN STATE

January 12, 2022

0.5 °C above average SST was observed around Maldives.

Highlights

Monitored:

During December, the central and southern islands received above normal rainfall while the northern islands received less. Over the last 365 days, rainfall exceeded climatology by 17% in the Northern islands; by 11% in the Southern islands and was in deficit by 27% in the Central islands.

Predictions:

In the months ahead, a weak La Niña trend is expected. Seasonal climate predictions indicate a wetter tendency in the Northern and Central islands and a drought tendency in the Southern Islands for February to April.

Summary

CLIMATOLOGY

Monthly Climatology:

In February, northern islands receive average rainfall less than 50 mm while central islands receive up to 50 mm rain and southern islands receive up to 100 mm of rain. Usually in March, northern and central islands receive rainfall up to 50 mm while southern islands receive up to 100 mm of rain. 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's northwesterly.

MONITORING

Fortnightly Rainfall Monitoring:

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
8 th Jan	-	5 mm	-
9 th Jan	10 mm	-	-
10 th Jan	-	-	10 mm
11 th Jan	-	-	10 mm
12 th Jan	-	-	5 mm
13 th - 15 th Jan	-	-	-
16 th Jan	-	-	30 mm
17 th - 18 th Jan	-	-	-
19 th Jan	-	10 mm	10 mm
20 th Jan	-	-	5 mm
21 st Jan	-	10 mm	-
22 nd Jan	-	-	-

Monthly and Seasonal Rainfall Monitoring: In December, the central 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 250 mm from an average of 1450 mm average

Central islands: Deficit of 450 mm from an average of 1675 mm average

Southern islands: Excess of 200 mm from an average of 1800 mm average

Deckadal Rainfall Estimates:

1-10 January, Dekadal rainfall estimated as; Northern Islands: 10 mm rainfall
Central Islands: 80 mm rainfall
Southern Islands: 60 mm rainfall

11-20 January, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall
Central Islands: 10 mm rainfall
Southern Islands: 40 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

NOAA GFS model predicts up to 10 mm of rainfall in the central and southern Islands on 25th Jan; Up to 10 mm of rainfall in the entire islands on 26th - 27th Jan; Up to 10 mm of rainfall in the central and southern Islands on 28th Jan; Up to 10 mm of rainfall in the entire islands on 29th Jan; Up to 20 mm of rainfall in the northern islands; and up to 10 mm in central and southern islands on 30th Jan; and Up to 20 mm of rainfall in the northern islands; and up to 10 mm in central islands on 31st Jan.

Weekly Rainfall Forecast:

NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 50% in the central islands and by 45% northern and southern between 22nd - 28th January.

Seasonal Rainfall and Temperature Forecast:

Above-normal precipitation tercile is 60% probable in the northern islands; 50% probable in the central islands; and below-normal precipitation tercile is 40% probable in the southern islands from February-March-April 2022 and seasonal rainfall forecast is climatological.

MJO Index:

The MJO is predicted by NOAA CPC to be in phases 7, 8 & 4 respectively and it is strong in the next two weeks (23rd Jan- 6th Feb 2022). MJO in phase 4 usually enhances rainfall over the Maldives.

Figures in Annexure

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 - Seasonal Predictions from IRI¹

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