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

Climate Monitoring and Prediction for the Maldives – January 2021

Prepared by Staff from Foundation for Environment, Climate and Technology, Sri Lanka and USA , Maldives Meteorological Service, and Columbia University
Nipuni Alahakoon, Ushan Adithya, Lareef Zubair, Zahid and Michael Bell

January 18, 2021

PACIFIC SEAS STATE
January 6, 2021

In early-Jan 2021, the tropical Pacific remained in an ENSO-neutral state, although SSTs in the east-central and central Pacific have cooled to the threshold for La Niña while the atmosphere continues to maintain largely ENSO-neutral patterns. The collection of latest ENSO prediction models indicates ENSO-neutral or weak El Niño as two possible scenarios during Northern Hemisphere winter 2020/21. The official CPC/IRI outlook slightly favors La Niña development, and carries a La Niña watch.
(Text Courtesy IRI)

INDIAN OCEAN STATE
January 6, 2021

0.5 ^{0}C above average SST was observed around Maldives.

Highlights

Monitored:

During December, the northern and central islands received above normal rainfall while the southern islands of Maldives received less. Over the 365 days, rainfall exceeded climatology by 10% in the Northern islands by 33%.

Predictions:

With weak La Nina conditions established; dry conditions are set to prevail across Maldives from January-March 2021. The seasonal temperature remains climatological – perhaps the La Nina influence is countervailed by the prevailing anomalously warm ocean surfaces by the Maldives.

Summary

CLIMATOLOGY

Monthly Climatology:

In February, northern islands receive average rainfall less than 50 mm while central islands receive up 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 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
2nd January	5 mm	10 mm	-
3rd January	-	30 mm	-
4th January	40 mm	10 mm	20 mm
5th January	60 mm	60 mm	40 mm
6th January	20 mm	-	-
7th January		10 mm	20 mm
8th January	-	-	-
9th January	10 mm	-	-
10th January	10 mm	10 mm	-
11th January	20 mm	10 mm	-
12th January	40 mm	30 mm	-
13th January	80 mm	10 mm	-
14th January	20 mm	-	-
15th January	20 mm	-	-
16th January	10 mm	-	-

Monthly and Seasonal Rainfall Monitoring: *In December, central and northern islands received up to 10 mm; and southern islands received up to 5 mm above average rainfall. The cumulative rainfall during the last 365 days,*

shows for: Northern islands: Excess of 150 mm from an average of 1450 mm average
Central islands: Deficit of 400 mm from an average of 1650 mm average
Southern islands: Excess of 50 mm from an average of 1750 mm average

Deckadal Rainfall Estimates:

21-31 Dec, Dekadal rainfall estimated as; Northern Islands: 80 mm rainfall
Central Islands: *160 mm rainfall*
Southern Islands: *40 mm rainfall*

1-10 Jan, Dekadal rainfall estimated as; Northern Islands: 110 mm rainfall
Central Islands: 110 mm rainfall
Southern Islands: 80 mm rainfall

PREDICTIONS

Daily Rainfall Forecast:

NOAA GFS model predicts up to 70 mm of rainfall in the northern islands and up to 40 mm in central islands on 19th Jan; up to 40 mm of rainfall in the northern and central islands on 20th Jan; up to 10 mm of rainfall in the northern and central islands on 21st Jan; up to 10 mm of rainfall in the entire islands on 22nd-23rd Jan; and up to 40 mm of rainfall in the central islands and up to 10 mm in northern and southern islands on 24th-25th Jan.

Weekly Rainfall Forecast:

NOAA/NCEF GFS model predicts higher probability of above-normal tercile by 45% in the northern islands; and below-normal tercile by 50% in southern islands and tercile by 40% in central islands between 15th - 22nd Jan.

Seasonal Rainfall and Temperature Forecast:

Above-normal temperature tercile is 50% probable in the northern islands; Below-normal temperature tercile is 40% probable in southern islands and seasonal rainfall forecast is climatological.

MJO Index:

The MJO is predicted by NOAA CPC to be in phase 6 and it is weak in the next week (20-26 Jan 2021) and strong in week 2 (27-Feb 3). MJO in phase 6 usually suppresses rainfall over the Maldives.

Figures in Annexure

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