

# Climate Monitoring and Prediction for the Maldives – January 2023

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## PACIFIC SEAS STATE

January 19, 2023

In mid-January 2023, SST in the central-eastern equatorial Pacific remain below-average. Key oceanic and atmospheric variables have remained consistent with La Niña conditions, though there are indications that this is weakening. A CPC La Niña Advisory remains in place for January 2023. The majority of models (19 out of 23) in the IRI ENSO prediction plume predict SSTs to transition from the level of a La Niña to ENSO-neutral state during Feb-Apr 2023. The likelihood of El Niño remains low through May-Jul 2023 (44% chance) but becomes the dominant category thereafter with probabilities in the 53-57% range. (Text Courtesy IRI)

## INDIAN OCEAN STATE

January 25, 2023

SST was observed near-neutral around the Maldives.

## Highlights

### Monitored:

During December, the central islands received up to 10 mm above average rainfall while remaining islands received less. The average rainfall exceeded climatology in the central and southern islands by 26%; and was normal 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 February to April 2023 for the Maldives.

## 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
23 <sup>rd</sup> Jan	60 mm	30 mm	40 mm
24 <sup>th</sup> Jan	30 mm	60 mm	10 mm
25 <sup>th</sup> Jan	60 mm	TR	-
26 <sup>th</sup> Jan	TR	TR	-
27 <sup>th</sup> Jan	TR	10 mm	-
28 <sup>th</sup> Jan	5 mm	TR	5 mm
29 <sup>th</sup> Jan	TR	10 mm	TR
30 <sup>th</sup> Jan	-	10 mm	TR
31 <sup>st</sup> Jan	-	-	TR
1 <sup>st</sup> Feb	-	-	-
2 <sup>nd</sup> Feb	-	-	-
3 <sup>rd</sup> Feb	10 mm	-	-
4 <sup>th</sup> Feb	TR	-	TR
5 <sup>th</sup> Feb	TR	-	-
6 <sup>th</sup> Feb	TR	TR	-

**Monthly and Seasonal Rainfall Monitoring:** *In December, the central islands received up to 10 mm, while remaining islands received less. The cumulative rainfall during the last 365 days, shows for: Northern islands: Equal to the average of 1600 mm*

*Central islands: Excess of 325 mm from an average of 1250 mm average*

*Southern islands: Excess of 325 mm from an average of 1250 mm average*

**Dekadal Rainfall Estimates:**

*11-20 Jan, Dekadal rainfall estimated as; Northern Islands: 5 mm rainfall*

*Central Islands: 10 mm rainfall*

*Southern Islands: 20 mm rainfall*

*21-31 Jan, Dekadal rainfall estimated as; Northern Islands: 80 mm rainfall*

*Central Islands: 80 mm rainfall*

*Southern Islands: 40 mm rainfall*

**PREDICTIONS**

**Daily Rainfall Forecast:**

Date	Rainfall		
	Northern Islands	Central Islands	Southern Islands
9 <sup>th</sup> Feb	-	20 mm	10 mm
10 <sup>th</sup> Feb	-	20 mm	40 mm
11 <sup>th</sup> Feb	-	20 mm	20 mm
12 <sup>th</sup> Feb	-	-	10 mm
13 <sup>th</sup> Feb	-	-	10 mm
14 <sup>th</sup> Feb	-	10 mm	10 mm

**Biweekly Rainfall Forecast:**

*NOAA/NCEP GFS model predicts higher probability of below-normal tercile by 50% for the entire Maldives between 11<sup>th</sup>-24<sup>th</sup> Feb.*

**Seasonal Rainfall and Temperature Forecast:**

*Near-normal precipitation tercile is probable for the entire islands from Feb-Mar-Apr 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 6 & 7 and shall strengthen in the next two weeks (9 Feb – 23 Feb 2023). MJO in phases 6 & 7 usually suppress the rainfall over the Maldives.*

**Figures in Annexure**

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  - Daily Satellite derived Rainfall Estimates
  - Monthly Rainfall derived from Satellite Rainfall Estimate
  - Monthly and Seasonal Monitoring
- **Ocean Surface Monitoring**
- **Rainfall Predictions**
  - Weekly Predictions from NOAA/NCEP
  - Seasonal Predictions from IRI<sup>1</sup>

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