



**Maldives
Meteorological
Service**



CLIMATE REPORT

November 2022

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INTRODUCTION

The monthly climate report produced by Maldives Meteorological Service provides a general overview of the climate of Maldives for that particular month in terms of temperatures, rainfall, wind and sunshine. This report discusses general climatic conditions for the month of November 2022 and compares them with November 2021 data and also checks on the long-term climatic condition of the month of November.

GENERAL CLIMATE DURING THE MONTH OF NOVEMBER

November is considered as the Southwest monsoon transition month as winds over central and northern atolls blow from varying direction from east as well as from west. Temperature is relatively cool and stable. Even though rainfall continues during monsoon transition period, there will be periods of sunshine and fine weather days as well.

Winds blow from varying direction over central and northern atolls with an average speed of 6-10 miles per hour. Winds continue to be predominantly from west over southern atolls with an average speed of 8-10 miles per hour.

Average daily maximum temperature varies between 30 - 31°C over the country, while average daily minimum temperature varies between 24 - 25°C over the country.

Southwest monsoon continues to bring relatively good amount of rainfall especially over central and southern atolls. On average 230- 275 millimeters of rainfall is received over central and southern atolls while northern atolls show a gradually decreasing trend of rainfall with an average of 170 millimeters.





Cloudy condition prevails, however, there are relatively good periods of sunshine as well. On average 6hrs 30 minutes to 7hrs 30 minutes of daily sunshine is received over the country.

OVERVIEW - NOVEMBER 2022

OVERVIEW FOR THE WHOLE COUNTRY

- ❖ The total rainfall received over the country is lower (by 48%) as compared to last November of 2021.
- ❖ All three regions (the northern, central and southern) of the Maldives received less rainfall in November 2022, compared to November 2021.
- ❖ In November 2022, there was a significant decrease in rainfall by 71%, in the northern region compared to November 2021.
- ❖ The highest maximum temperature is recorded in southern regions and the lowest minimum temperature is recorded in the northern regions.
- ❖ The total sunshine recorded for the country increased by 11%. Only the central regions recorded less sunshine compared to November 2021.
- ❖ Prevailed mean wind was relatively stronger over central and southern regions compared with the northern regions.

HISTORICAL RECORDS OF MALDIVES

	NORTH	CENTRAL	SOUTH
 HIGHEST MAX TEMPERATURE	35.0°C 30 th April 2016	34.9°C 3 th June 2020	33.6°C 17 th April 1998
 LOWEST MIN TEMPERATURE	18.2°C 23 th Dec 2002	19.0°C 23 th Nov 1984	19.7°C 24 th March 2015
 STRONGEST WIND	NW-89.7mph 28 th Aug 1991	W-71.3mph 3 rd Nov 1978	SW-103.5mph 29 th May 1991
 HIGHEST 24HRS RAINFALL	189.0mm 31 st May 2017	175.9mm 23 rd Dec 1977 Hulhule'	228.4mm 24 th Nov 2015
		200.0mm 11 th Dec 1998 Male'	

NORTHERN REGION

- ❖ The total rainfall received in Hanimaadhoo meteorological station is 91.1mm, while it was 314.4mm during November 2021. (71% decrease in 2022)
- ❖ Heaviest rainfall in 24 hours was 27.6mm received on 30th November 2022.
- ❖ There were 10 rainy days in November this year, compared to 17 rain days in November 2021.

CENTRAL REGION

- ❖ The total rainfall received in Hulhule' meteorological station is 127.2mm, while it was 146.8mm during November 2021. (13% decrease in 2022)
- ❖ Heaviest rainfall in 24 hours was 24.9mm received on 9th November 2022.
- ❖ There were 14 rain days in this November as compared to 12 days in November 2021.

SOUTHERN REGION

- ❖ The total rainfall received in Gan meteorological station is 116.9mm, while it was 185.8mm during November 2021. (37% decrease in 2022)
- ❖ Heaviest rainfall in 24 hours was 23.6mm received on 6th November 2022.
- ❖ There were 17 rain days in this November as compared to 12 days in November 2021.

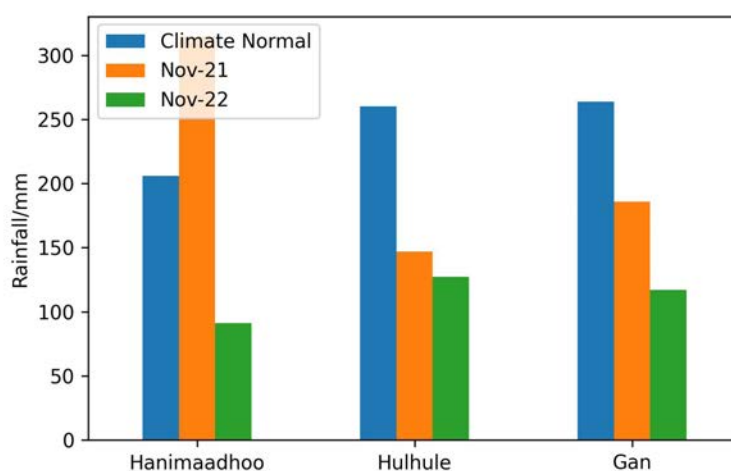


Figure1: The graph shows the monthly variation between the climate average of November vs the monthly rainfall of November 2021 and 2022.

TEMPERATURE

NORTHERN REGION

- ❖ The highest temperature recorded in November 2022 was 32.1°C on the 18th of the month. The maximum temperature varied between 32.1°C and 29.8°C during this period. The maximum temperature recorded in November 2021 was 32.3°C, on the 5th.
- ❖ The lowest minimum temperature recorded was 22.5°C of the 20th of November. The minimum temperature varied between 22.5°C and 26.8°C in this period. The minimum temperature recorded on November 2021 is also 23.1°C on the 28th.
- ❖ The mean temperature of November 2022 is 27.7 °C.

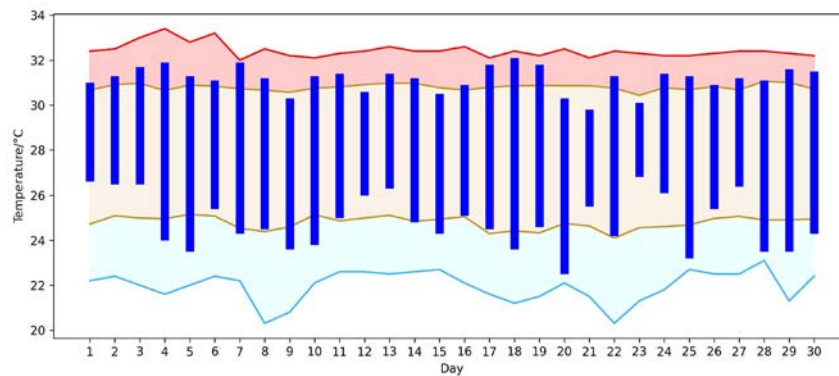


Figure 2: Daily Temperature of Hanimaadhoo met station during the month of November.

(The blue bars show November 2022 daily temperature range. The red top line shows the highest recorded value of that particular day of the month and the lower blue line represents the lowest value of that particular day of the month. The yellow line represents the climate average range of daily temperatures during the month of November.)

CENTRAL REGION

- ❖ The highest temperature recorded in November 2022 was 31.6°C on the 4th of the month. The maximum temperature varied between 31.6°C and 28.4°C during this period. The maximum temperature recorded in November 2021 was 31.8°C, on the 8th and 12th.
- ❖ The lowest minimum temperature recorded was 23.0°C of the 20th of November. The minimum temperature varied between 23.0°C and 27.5 °C in this period. The minimum temperature recorded on 2021 November is also 22.6°C on the 24th.
- ❖ The mean temperature of November 2022 is 28.0°C.

❖

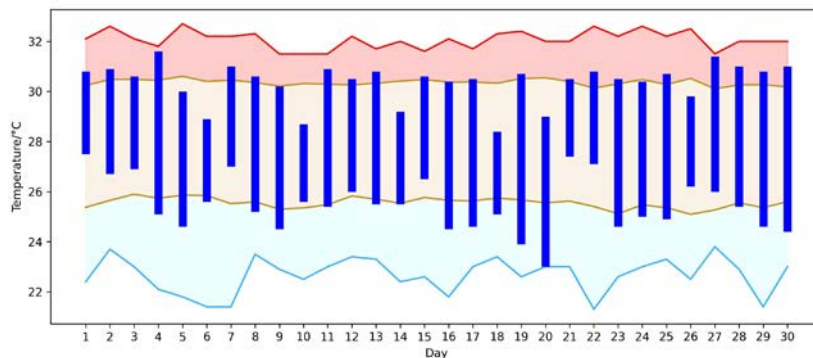


Figure 3: Daily Temperature of Hulhule' met station during the month of November.

(The blue bars show November 2022 daily temperature range. The red top line shows the highest recorded value of that particular day of the month and the lower blue line represents the lowest value of that particular day of the month. The yellow line represents the climate average range of daily temperatures during the month of November.)

SOUTHERN REGION

- ❖ The highest temperature recorded in November 2022 was 32.7°C on the 25th of the month. The maximum temperature varied between 32.7°C and 29.8°C during this period. The maximum temperature recorded in November 2021 was 32.1°C, on the 2nd of the month.
- ❖ The lowest minimum temperature recorded was 22.6°C of the 3rd of November. The minimum temperature varied between 22.6°C and 26.6°C in this period. The minimum temperature recorded on November 2021 is also 22.4°C on the 5th.
- ❖ The mean temperature of November 2022 is 27.9°C.

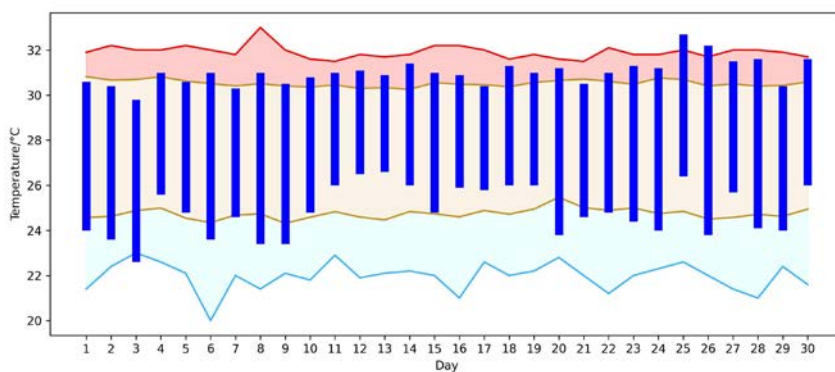


Figure 4: Daily temperature variation of Gan met station during the month of November.

(The blue bars show November 2022 daily temperature range. The red top line shows the highest recorded value of that particular day of the month and the lower blue line represents the lowest value of that particular day of the month. The yellow line represents the climate average range of daily temperatures during the month of November.)

SUNSHINE

NORTHERN REGION

- ❖ The climate average sunshine for November is 201.6 hours for Hanimaadhoo station.
- ❖ November 2022 recorded a total of 245.2 hours of sunshine which is above the climate average.
- ❖ This is slightly lower compared to the November 2021's total sunshine, which adds to 170.1 hours from 27 days.
- ❖ The entire month of November received direct sunlight on each of its 30 days.

CENTRAL REGION

- ❖ The climate average sunshine for November is 204.0 hours for Hulhule' station.
- ❖ November 2022 recorded a total of 214.7 hours of sunshine which is higher than the climate average.
- ❖ This is lower compared to the November 2021's total sunshine, which adds to 221.2 hours from 28 days.
- ❖ Out of the 30 days, 2 days did not receive any direct sunshine due to cloudy sky.

SOUTHERN REGION

- ❖ The climate average sunshine for November is 224.1 for Gan station.
- ❖ November 2022 recorded a total of 238.7 hours of sunshine which is above the climate average.
- ❖ This is only slightly higher compared to the 2021's total sunshine, which adds to 236.4 hours from 28 days.
- ❖ The entire month of November received direct sunlight on each of its 30 days.

NORTHERN REGION

- ❖ The maximum gust wind was recorded on the 9th of November 2022 at 10:34 in the morning. The speed of the wind was 27 knots (31mph) and the direction in which it was recorded is from the North North East.
- ❖ The maximum wind recorded on November 2021 was 29 knots (33 mph) from West and West South West direction on two days; 4th and 12th of November 2022.

CENTRAL REGION

- ❖ The maximum gust wind was recorded on the 24th of November 2022 at 00:53, just after midnight. The speed of the wind was 29 knots (33 mph) and the direction in which it was recorded was from the West North West.
- ❖ The maximum wind recorded on November 2021 is 37 knots (43 mph) from West South West direction.

SOUTHERN REGION

- ❖ The maximum gust wind was recorded on the 3rd of November 2022 at 21:33 in the evening. The speed of the wind was 34 knots (39 mph) and the direction in which it was recorded was from the West North West.
- ❖ The maximum wind recorded on November 2021 is 37 knots (43 mph) from West North West.

Table 1 below shows the frequency of maximum winds for the three regions. The unit used for wind speed is miles per hour (mph).

WIND SPEED	NORTH	CENTRAL	SOUTH
30-40 mph	1	4	5
40-50 mph	0	0	0
> 50 mph	0	0	0

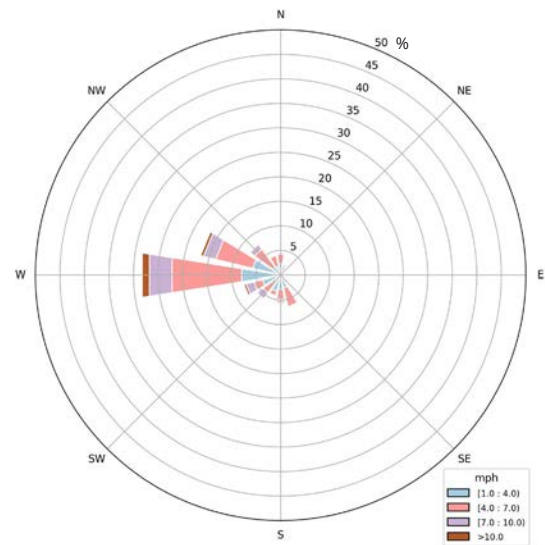
Table 1: Maximum wind speed frequency (greater than 30mph)

MEAN WIND & WINDROSE

NORTHERN REGION

- ❖ The mean wind speed and direction of Hanimaadhoo station is 4 knots (5 mph) from West, which is slightly lower than the November 2021 (8knots or 9mph).

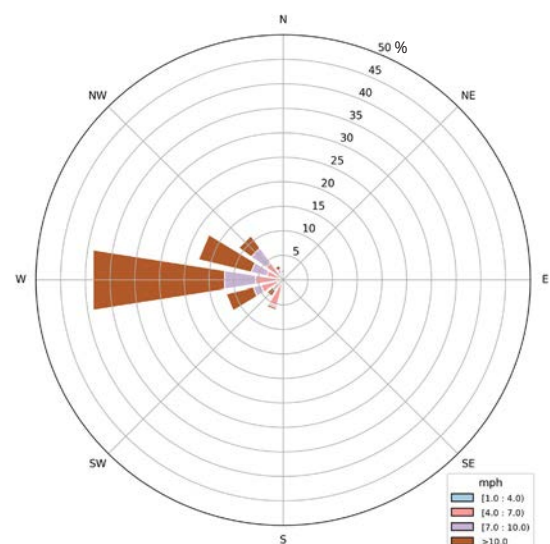
Figure 5: Wind rose diagram for the month of November 2022, Hanimaadhoo met station.



CENTRAL REGION

- ❖ The mean wind speed and direction of Hulhule' station is 8 knots (10 mph) from West, which is slightly lower than the November 2021 average of 14 knots (17 mph).

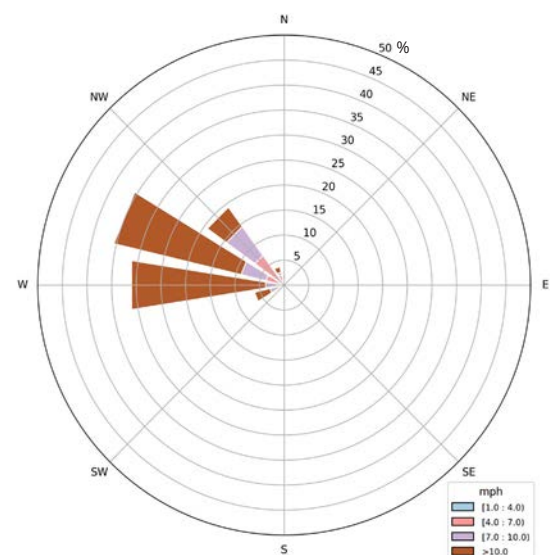
Figure 6: Wind rose diagram for the month of November 2022, Hulhule' met station.



SOUTHERN REGION

- ❖ The mean wind speed and direction of Gan station is 10 knots (11mph) from West, which is slightly lower than the November 2021 average of 11 knots (13 mph).

Figure 7: Wind rose diagram for the month of November 2022, Gan met station.



DESCRIPTION & TERMINOLOGIES

In this report, the climate information of Maldives is divided in to three regions, North, Central and South. The information presented as North is obtained from the data collected from HDh Hanimaadhoo meteorological station (6.748326, 73.169380). Information presented as Central is the data collected in Hulhule' meteorological station (4.192767,73.5269378) and the south represents the data collected from S Gan meteorological station (-0.6903831,73.149961).

UNITS OF MEASUREMENTS

Except where noted, temperature is given in Degrees Celsius, Rainfall is given in millimeters (mm), Wind is given in miles per hour (mph) and Sunshine is given in hours.

OBSERVATION TIMES

- ❖ Maximum temperatures are for the 24 hours from 17:00 local time to 17:00 on the date mentioned.
- ❖ Minimum temperatures are for the 24 hours from 08:00 local time to 08:00 on the date mentioned.
- ❖ Daily Rainfall are for the 24 hours from 08:00 local time to 08:00 on the date mentioned.
- ❖ Maximum wind is in the 24 hours from 05:00 local time to 05:00 on the date mentioned.

CLIMATOLOGICAL VALUES

The climatological averages used in the visuals and tables are observations from 1991-2020.

HISTORICAL RECORDS

The historical records of each station given is from all the data collected from that station. The initial date of data collection is different from individual stations.

Front cover: Halo phenomena; the optical phenomena is produced by the reflection/refraction of light by ice crystals in the cirriform clouds. (Photo: MMS)



Climate Report - November 2022
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