



**Maldives
Meteorological
Service**



CLIMATE REPORT

August 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 August 2022 and compares them with August 2021 data and also checks on the long-term climatic condition of the month of August.

GENERAL CLIMATE DURING THE MONTH OF AUGUST

Southwest monsoon brings fresh and cool westerly breeze over the country. Temperature is in decreasing trend due to continuation of cool breeze, cloudy sky and the rainfall. Even though its rainy season, there will be periods of sunshine and fine weather days as well.

Winds are predominantly from west in northern and central atolls at an average speed of 10-11 miles per hour. While winds over southern atolls vary between South and West at an average speed of 6-8 miles per hour.

Average daily maximum temperature varies between 30 - 31 °C over the country, while average daily minimum temperature varies between 24 - 26 °C over the country.

Southwest monsoon continues to bring relatively good amount of rainfall. On average 195- 225 millimeters of rainfall is received over the country.





Cloudy condition prevails, however, there are relatively good periods of sunshine as well. On average 7-8 hours of daily sunshine is received over the country.

OVERVIEW - AUGUST 2022

OVERVIEW FOR THE WHOLE COUNTRY

- ❖ The total rainfall received over the country is higher (by 24%) as compared to last August of 2021.
- ❖ The northern and central regions receive more rainfall compared to August 2021, but the southern regions received fewer (by 54%) in August 2022.
- ❖ The highest maximum temperature is recorded in north regions and the lowest minimum temperature is recorded in the southern regions.
- ❖ The total sunshine recorded for the country decreased by 5%. Only the southern regions received more sunshine compared to August 2021.
- ❖ Prevailed mean wind was relatively stronger over central regions compared with the rest of the country.

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 290mm, while it was 120mm during August 2021. (141% increase in 2022)
- ❖ Heaviest rainfall in 24 hours was 50.5mm received on 30th August.
- ❖ There were 20 rain days in this August as compared to 15 days in August 2021.

CENTRAL REGION

- ❖ The total rainfall received in Hulhule’ meteorological station is 238mm, while it was 156mm during August 2021. (52% increase in 2022)
- ❖ Heaviest rainfall in 24 hours was 52.3mm received on 28th August.
- ❖ There were 16 rain days in this August as compared to 12 days in August 2021.

SOUTHERN REGION

- ❖ The total rainfall received in Gan meteorological station is 110mm, while it was 238mm during August 2021. (54% decrease in 2022)
- ❖ Heaviest rainfall in 24 hours was 56.6mm received on 3rd August.
- ❖ There were 10 rain days in this August as compared to 17 days in August 2021.

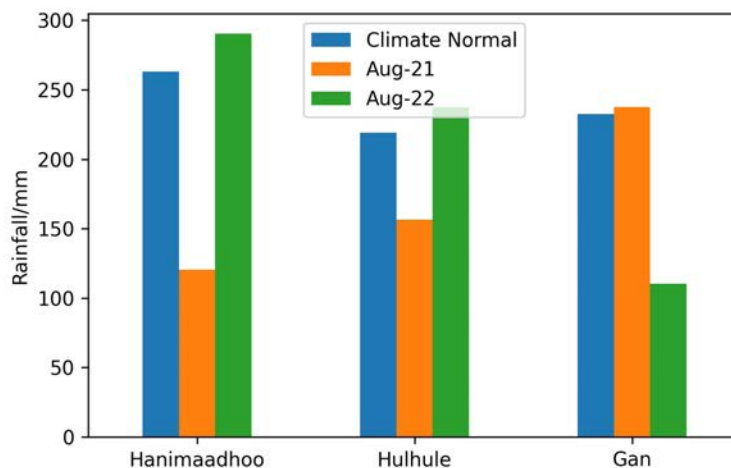


Figure1: The graph shows the monthly variation between the climate average of August vs the monthly rainfall of August 2021 and 2022.

TEMPERATURE

NORTHERN REGION

- ❖ The highest temperature recorded in August 2022 was 33.2 °C on the 18th of the month. The maximum temperature varied between 33.2 and 28.3°C during this period. The maximum temperature recorded in August 2021 was 32.8 °C, on the 11th.
- ❖ The lowest minimum temperature recorded was 22.4°C of the 7th of August. The minimum temperature varied between 22.4 and 27.2 °C in this period. The minimum temperature recorded on August 2021 is 24.0 °C on the 10th & 25th Day.
- ❖ The mean temperature of August 2022 is 27.7 °C.

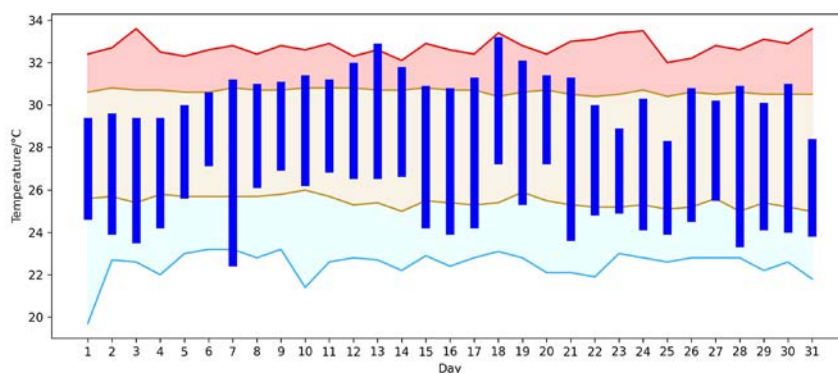


Figure 2: Daily Temperature of Hanimaadhoo met station during the month of August.

(The blue bars show August 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 August.)

CENTRAL REGION

- ❖ The highest temperature recorded in August 2022 was 32.2°C on two occasions, the 15th and the 24th of the month. The maximum temperature varied between 32.2 and 27.7°C during this period. The maximum temperature recorded in August 2021 was 32.4 °C, on the 3rd.
- ❖ The lowest minimum temperature recorded was 22.8°C of the 26th of August. The minimum temperature varied between 22.8 and 27.8 °C in this period. The minimum temperature recorded on 2021 August is 24.6 °C on the 6th.
- ❖ The mean temperature of August 2022 is 28.3 °C.

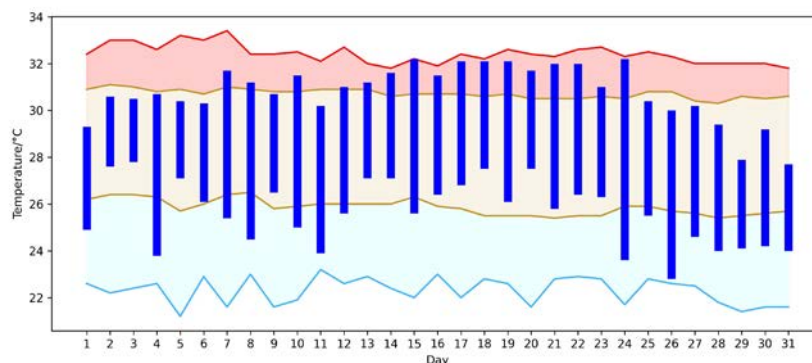


Figure 3: Daily Temperature of Hulhule' met station during the month of August.

(The blue bars show August 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 August.)

SOUTHERN REGION

- ❖ The highest temperature recorded in August 2022 was 31.6 °C on 16th of the month. The maximum temperature varied between 31.6 and 29.5°C during this period. The maximum temperature recorded in August 2021 was 31.9°C, on the 10th.
- ❖ The lowest minimum temperature recorded was 21.6 C of the 3rd of August. The minimum temperature varied between 21.6 and 26.6°C in this period. The minimum temperature recorded on August 2021 is 22.2 °C on the 4th.
- ❖ The mean temperature of August 2022 is 28.0 °C.

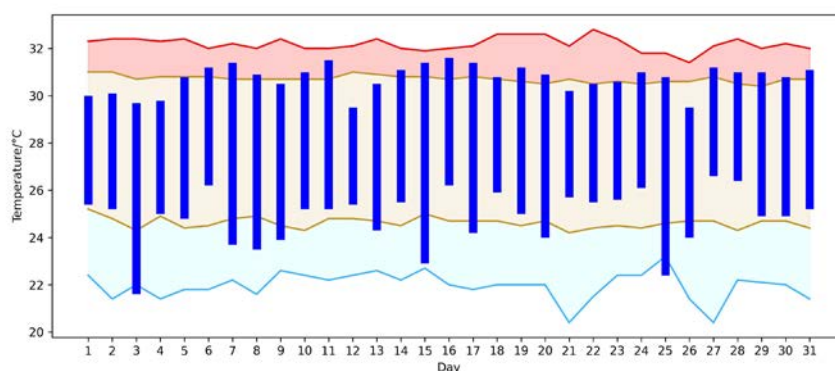


Figure 4: Daily temperature variation of Gan met station during the month of August.

The blue bars show August 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 August.)

SUNSHINE

NORTHERN REGION

- ❖ The climate average sunshine for August is 222.9 hours for Hanimaadhoo station.
- ❖ August 2022 recorded a total of 154.6 hours of sunshine which is below the climate average.
- ❖ Out of the 31 days, 6 days did not receive any direct sunshine due to cloudy sky.
- ❖ This is lower compared to the August 2021's total sunshine, which adds to 188.7 hours from 27 days.

CENTRAL REGION

- ❖ The climate average sunshine for August is 228.9 hours for Hulhule' station.
- ❖ August 2022 recorded a total of 210.5 hours of sunshine which is lower than the climate average.
- ❖ Out of the 31 days, 3 days did not receive any direct sunshine due to cloudy sky.
- ❖ This is lower compared to the August 2021's total sunshine, which adds to 226.3 hours from 30 days.

SOUTHERN REGION

- ❖ The climate average sunshine for August is 211.2 for Gan station.
- ❖ August 2022 recorded a total of 222 hours of sunshine which is above the climate average.
- ❖ All days of August 2022 received sunshine in Gan station.
- ❖ This is lower compared to the 2021's total sunshine, which adds to 206.7 hours from 30 days.

NORTHERN REGION

- ❖ The maximum gust wind was recorded on the 2nd of August 2022 at 12:13 hrs in the afternoon. The speed of the wind was 42knots (48mph) and the direction in which it was recorded is from the West north west.
- ❖ The maximum wind recorded on August 2021 was 32knots (37mph) from North west.

CENTRAL REGION

- ❖ The maximum gust wind was recorded on the 4th of August 2022 at 14:51 hrs in the afternoon. The speed of the wind was 45knots (52mph) and the direction in which it was recorded is from the West south west.
- ❖ The maximum wind recorded on August 2021 is 41knots (47mph) from West.

SOUTHERN REGION

- ❖ The maximum gust wind was recorded on the 4th of August 2022 at 00:55 hrs in the mid night. The speed of the wind was 31knots (36mph) and the direction in which it was recorded is from the West north west.
- ❖ The maximum wind recorded on August 2021 is 42knots (48mph) from 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	5	11	4
40-50 mph	5	2	0
> 50 mph	0	1	0

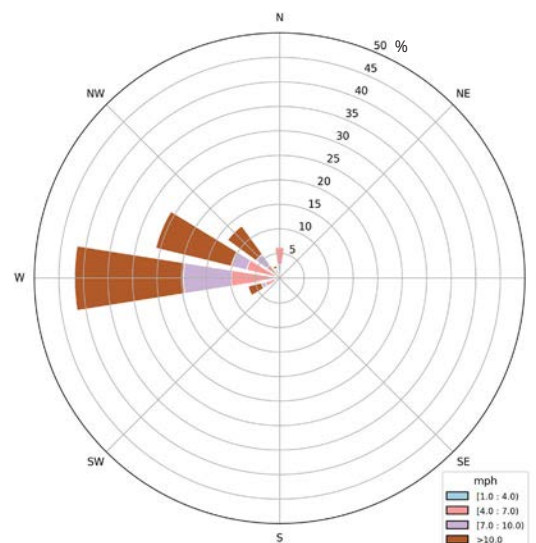
Table 1: Maximum wind speed frequency (greater than 30mph)

MEAN WIND & WINDROSE

NORTHERN REGION

- ❖ The mean wind speed and direction of Hanimaadhoo station is 9 knots (10mph) from West, which is similar to the August 2021 (8knots or 10mph).

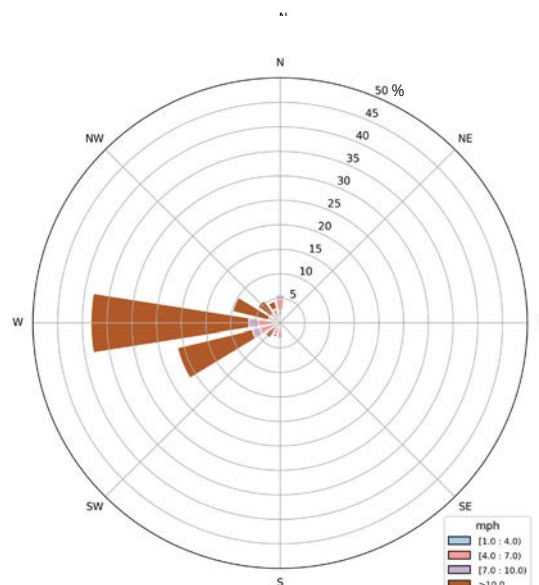
Figure 5: Wind rose diagram for the month of August 2022, Hanimaadhoo met station.



CENTRAL REGION

- ❖ The mean wind speed and direction of Hulhule' station is 11 knots (13mph) from West, which is the same as the August 2021 average of 11knots (13mph).

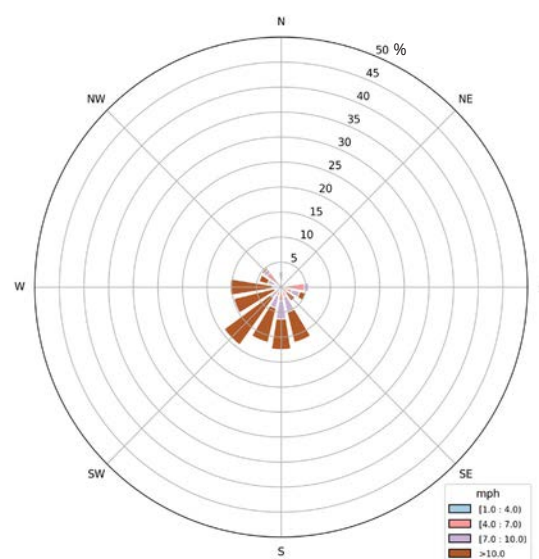
Figure 6: Wind rose diagram for the month of August 2022, Hulhule' met station.



SOUTHERN REGION

- ❖ The mean wind speed and direction of Gan station is 7 knots (8mph) from West, which is lower than the August 2021 average of 8knots (10mph).

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



DESCRIPTION & TERMINOLOGIES

In this report, the climate information of Maldives is divided into 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: Heavy showers obstructing the visibility of K.Funadhoo Island. (Photo: MMS)



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Maldives Meteorological Service
Hulhule', 22000
Republic of Maldives
climate@met.gov.mv