



**Maldives
Meteorological
Service**



CLIMATE REPORT

May 2022

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INTRODUCTION

The monthly climate report produced by Maldives Meteorological Service provide 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 condition for the month of May 2022 and compares them with May 2021 data and also check on the long-term climatic condition of the month of May.

GENERAL CLIMATE DURING THE MONTH OF MAY

Warmer and relatively dry atmospheric condition continues up to the onset of southwest monsoon. Normally southwest monsoon onset during mid-May. Average daily maximum temperature during May is about 32.0°C over Northern atolls and 31.4° C over Central and Southern atolls, while average daily minimum temperature is about 26.6°C over Northern and Central atolls and 25.4°C over Southern atolls.

Rainy season start with the onset of southwest monsoon during the month of May. The date of monsoon onset varies from year to year with normal onset day falling close to mid-May (2nd week of May). On average, 220 – 240 millimeters of rainfall is received over the country during the month of May.

Direct sunshine over the Northern atolls is slightly less with an average of 207 hours while Central and Southern atolls still enjoy about 220-230 hours of sunshine during the months of May.

OVERVIEW - MAY 2022

OVERVIEW FOR THE WHOLE COUNTRY - MAY 2022

- ❖ The total rainfall received over the country is slightly less (by 22%) as compared to last May of 2021.
- ❖ The Northern region of the country received more rainfall as compared to rest of the country. The Southern atolls received about 75% less rainfall than that of 2021 May.
- ❖ The mean, maximum and minimum temperatures recorded were similar in all 3 regions. Only the northern region recorded a higher maximum temperature compared to the May of 2021.
- ❖ The total sunshine recorded for the country as a whole were slightly more (about 1.8%) as compared to May 2021.
- ❖ Southern atolls received about 265 hours of sunshine while Central and Northern atolls received about 206 hours and 145 hours of sunshine during May 2022.
- ❖ Prevailed mean wind was relatively strong over Central atolls compared with the rest of the country.
- ❖ Southwest Monsoon onset was declared on the 8th of May 2022.

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 511 mm, while it was 341 mm during May 2021.
- ❖ Heaviest rainfall in 24 hours was 101mm received on 16th May.
- ❖ There were 19 rain days in this May as compared to 21 days in May 2021. However, total amount of rainfall received during this May is relatively more than that of last May of 2021.

CENTRAL REGION

- ❖ The total rainfall received in Hulhule' meteorological station is 300 mm, while it was 308 mm during May 2021.
- ❖ Heaviest rainfall in 24 hours was 65mm received on 16th May.
- ❖ There were 19 rain days in this May as compared to 16 days in May 2021. However, total amount of rainfall received during this May is slightly less than that of last May of 2021.

SOUTHERN REGION

- ❖ The total rainfall received in Gan meteorological station is 135 mm, while it was 559 mm during May 2021.
- ❖ Heaviest rainfall in 24 hours was 34mm received on 05th May.
- ❖ There were only 8 rain days in this May as compared to 13 days in May 2021. This fewer number of rainy days is being reflected by highly deficit rainfall over this area during this May.

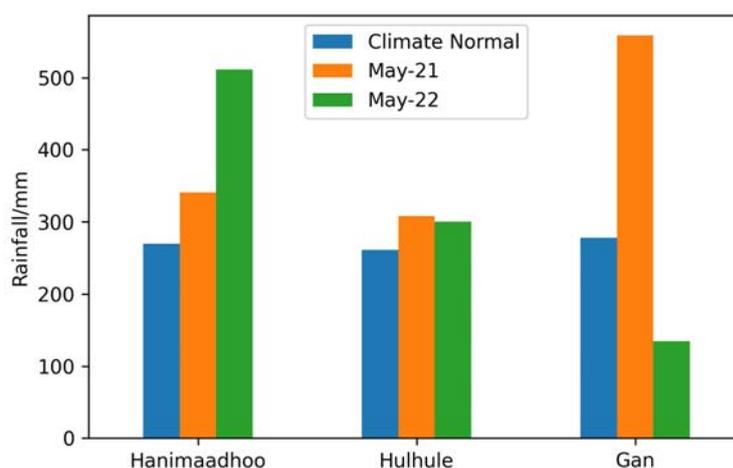


Figure1: The graph shows the monthly variation between the climate average of May vs the monthly rainfall of May 2021 and 2022.

TEMPERATURE

NORTHERN REGION

- ❖ The highest temperature recorded in May 2022 was 33.8°C on the 2nd of the month. The maximum temperature varied between 33.8 and 29.0°C during this period. The maximum temperature recorded in 2021 May was 33.7°C, on the third day.
- ❖ The lowest minimum temperature recorded was 23.1°C of the 17th of May. The minimum temperature varied between 23.1 and 29.0°C in this period. The minimum temperature recorded on 2021 May is 24.0°C on the 27th Day.
- ❖ The mean temperature of May 2022 is 28.9°C.

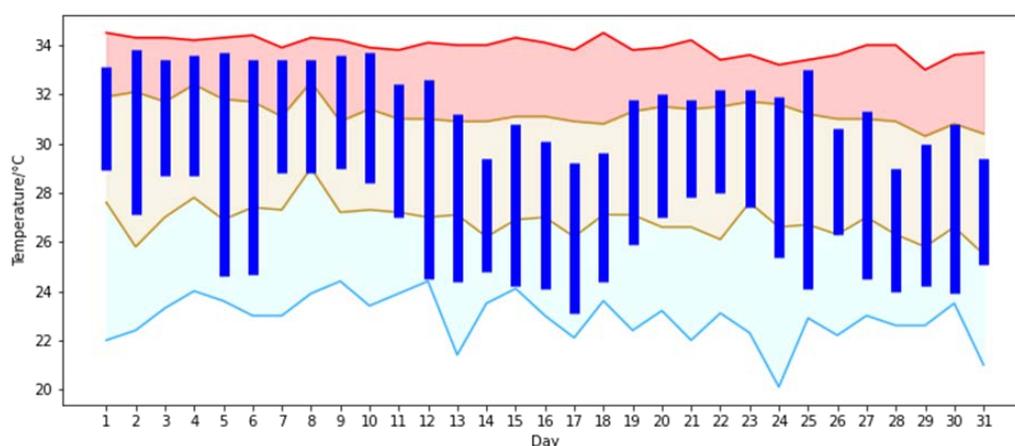


Figure 2: Daily Temperature of Hanimaadhoo met station during the month of May

(The blue bars show May 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 May.)

CENTRAL REGION

- ❖ The highest temperature recorded in May 2022 was 33.1°C on the 25th of the month. The maximum temperature varied between 33.1 and 29.5°C during this period. The maximum temperature recorded in May 2021 was 33.6°C, on the 8th.
- ❖ The lowest minimum temperature recorded was 23.8°C of the 16th of May. The minimum temperature varied between 23.8 and 29.5°C in this period. The minimum temperature recorded on May 2021 is 23.7°C on the 24th Day.
- ❖ The mean temperature of May 2022 is 29.3°C.

TEMPERATURE

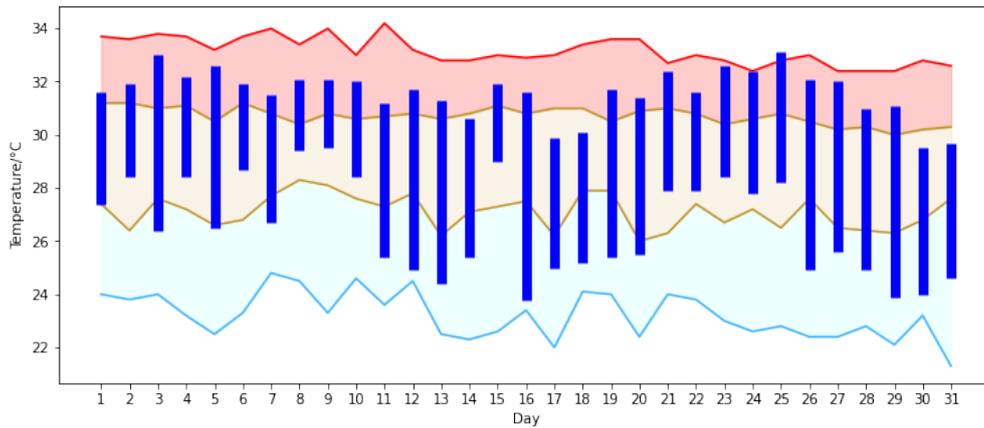


Figure 3: Daily Temperature of Hulhule' met station during the month of May

(The blue bars show May 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 May.)

SOUTHERN REGION

- ❖ The highest temperature recorded in May 2022 was 33.2°C on the 24th of the month. The maximum temperature varied between 33.2 and 28.5°C during this period. The maximum temperature recorded in May 2021 was 32.6°C, on the 6th.
- ❖ The lowest minimum temperature recorded was 23.3°C of the 5th of May. The minimum temperature varied between 23.3 and 28.2°C in this period. The minimum temperature recorded on 2021 May is 23.9°C on the 2nd Day.
- ❖ The mean temperature of May 2022 is 29.3 °C.

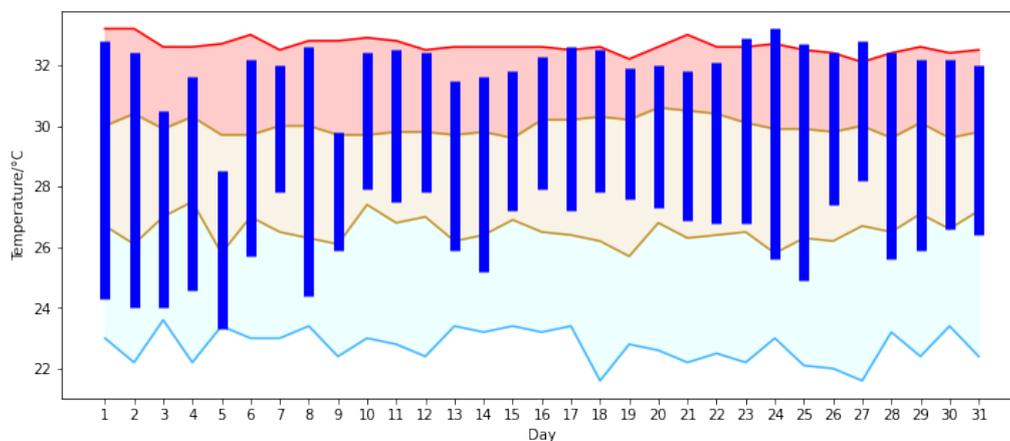


Figure 4: Daily Temperature of Gan met station during the month of May

(The blue bars show May 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 May.)

SUNSHINE

NORTHERN REGION

- ❖ The climate average sunshine for May is 217.7 hours for Hanimaadhoo station.
- ❖ May 2022 recorded a total of 144.8 hours of sunshine which is below the climate average.
- ❖ Out of the 31 days, 9 days did not receive any direct sunshine due to cloudy sky.
- ❖ This is lower compared to the May 2021's total sunshine, which adds to 189.1 hours from 27 days.

CENTRAL REGION

- ❖ The climate average sunshine for May is 223.1 hours for Hulhule' station.
- ❖ The May of 2022 recorded a total of 205.9 hours of sunshine which is below the climate average.
- ❖ There was only 1 day in May 2022, which did not receive any direct sunshine due to cloudy sky.
- ❖ This is higher compared to the May 2021's total sunshine, which adds to 196.3 hours from 24 days.

SOUTHERN REGION

- ❖ The climate average sunshine for May is 231.3 for Gan station.
- ❖ The May of 2022 recorded a total of 264.9 hours of sunshine which is above the climate average.
- ❖ There were only 3 days in May 2022, which did not receive any direct sunshine due to cloudy sky.
- ❖ This is higher compared to the 2021's total sunshine, which adds to 213.4 hours from 28 days.

NORTHERN REGION

- ❖ The maximum gust wind was recorded on the 17th of May 2022 at 11:42 hrs in the morning. The speed of the wind was 40knots (46mph) and the direction in which it was recorded is from the North west.
- ❖ The maximum wind recorded on May 2021 was 41knots (47mph) from West.

CENTRAL REGION

- ❖ The maximum gust wind was recorded on the 16th of May 2022 at 23:32 hrs in the night. The speed of the wind was 47knots (54mph) and the direction in which it was recorded is from the West.
- ❖ The maximum wind recorded on 2021 May is 48knots (55mph) from West south west.

SOUTHERN REGION

- ❖ The maximum gust wind was recorded on the 4th of May 2022 at 1421 hrs in the afternoon. The speed of the wind was 41knots (47mph) and the direction in which it was recorded is from the West north west.
- ❖ The maximum wind recorded on 2021 May is 34knots (39mph) 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	9	6	7
40-50 mph	3	5	4
> 50 mph	0	4	0

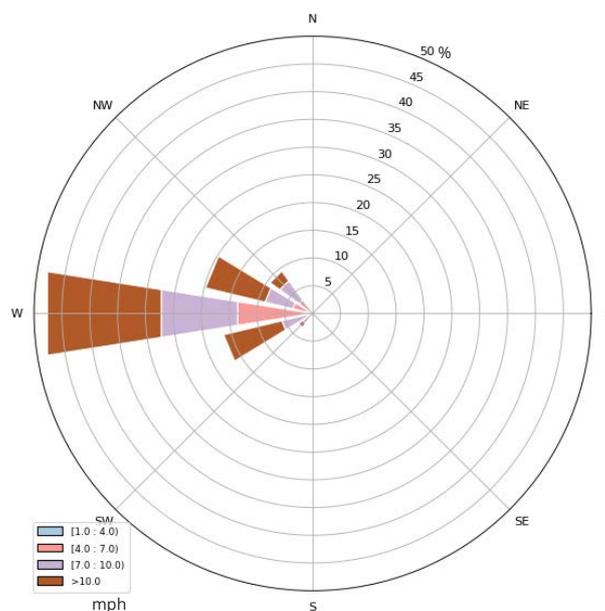
Table 1: Maximum wind speed frequency (greater than 30mph)

MEAN WIND & WINDROSE

NORTHERN REGION

- ❖ The mean wind speed and direction of Hanimaadhoo station is 9 knots (10mph) from West side, which is the same as of 2021 May.

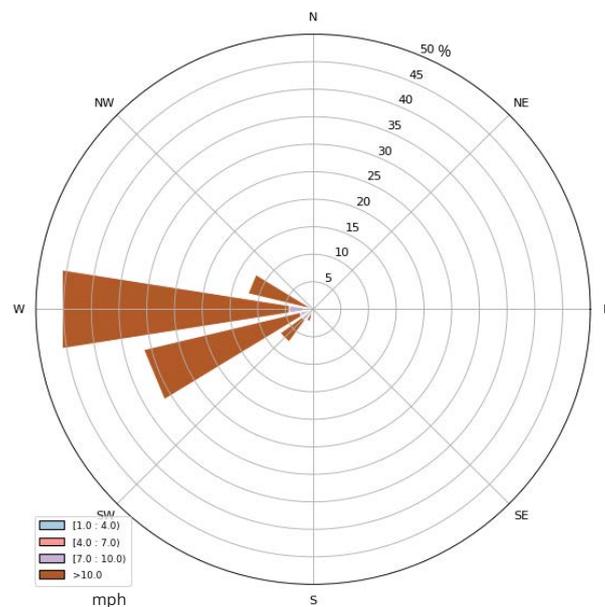
Figure 5: Wind rose diagram for the month of May 2022, Hanimaadhoo met station.



CENTRAL REGION

- ❖ The mean wind speed and direction of Hulhule' station is 14 knots (16mph) from West side, which is slightly higher than the 2021 May average of 12knots (14mph).

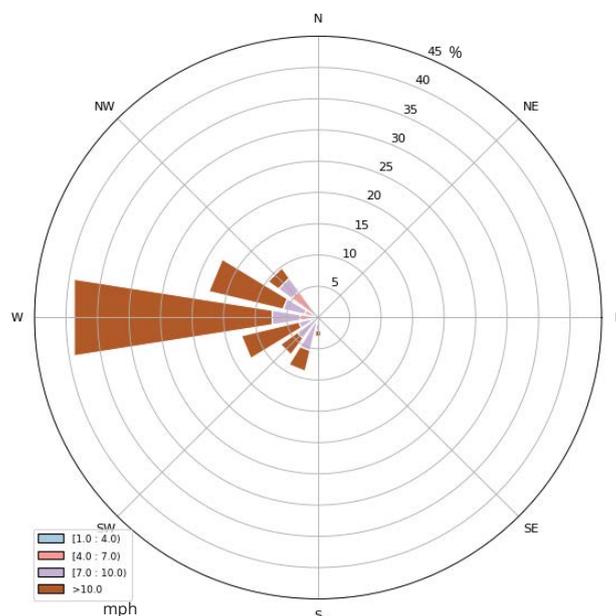
Figure 6: Wind rose diagram for the month of May 2022, Hulhule' met station.



SOUTHERN REGION

- ❖ The mean wind speed and direction of Gan station is 11 knots (12mph) from West side, which is higher than the 2021 May average of 9knots (10mph).

Figure 7: Wind rose diagram for the month of May 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: Automatic Weather Station (AWS) installed in Sh Komandoo. (Photo: MMS)



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