



# CLIMATE REPORT June 2022

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# **CLIMATE OF JUNE**

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

# GENERAL CLIMATE DURING THE MONTH OF JUNE

During the month of June, Southwest monsoon brings fresh and cool westerly breeze over the country. Temperature gets slightly lowered due to cloudy sky and subsequent rainfall. Most of the rainfall are of showery type in nature and there will be periods of sunshine as well. Average daily maximum and minimum temperature during June is about 31.2oC and 25.9oC respectively.

On average, northern atolls receive about 230 millimeters of rainfall while central and southern atolls receive about 145 millimeters of rainfall during the month of June.

Direct sunshine over the Northern atolls is slightly less with average of 350 minutes while Central and Southern atolls still receive about 425 minutes of sunshine during the month of June.

# **OVERVIEW - JUNE 2022**

# **OVERVIEW FOR THE WHOLE COUNTRY - JUNE 2022**

- The total rainfall received over the country is higher (by 45%) as compared to last June of 2021.
- The Northern and the Southern regions of the country received more rainfall as compared to central region. However, the rainfall received in the central region in June 2022 is significantly higher (by 140%) than that of 2021 June.
- >> The highest maximum temperature is recorded in Northern regions and the lowest minimum temperature is recorded in the southern region.
- ★ The total sunshine recorded for the country as a whole were less (about 10%) as compared to June 2021.
- >> Central atolls received about 247 hours of sunshine while Northern and Southern atolls received about 203 hours and 195 hours of sunshine during June 2022.
- Prevailed mean wind was relatively strong over central atolls compared with the rest of the country.

#### HISTORICAL RECORDS OF MALDIVES

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

## **RAINFALL**

#### NORTHERN REGION

- >> The total rainfall received in Hanimaadhoo meteorological station is 137mm, while it was 108mm during June 2021. (26% increase in 2022)
- ★ Heaviest rainfall in 24 hours was 28mm received on 22<sup>nd</sup> June.
- There were 16 rain days in this June as compared to 12 days in June 2021.

#### **CENTRAL REGION**

- The total rainfall received in Hulhule' meteorological station is 90mm, while it was 38mm during June 2021.
- >> Heaviest rainfall in 24 hours was 21mm received on 18th June.
- There were 13 rain days in this May as compared to 6 days in June 2021.

#### **SOUTHERN REGION**

- ★ The total rainfall received in Gan meteorological station is 136mm, while it was 103mm during June 2021. (32% increase in 2022)
- >> Heaviest rainfall in 24 hours was 27mm received on 13th June.
- There were 13 rain days in this June as compared to 11 days in June 2021.

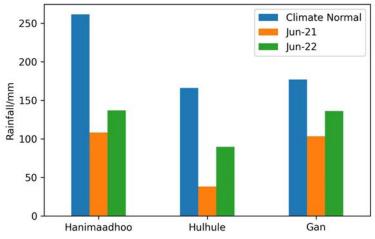


Figure 1: The graph shows the monthly variation between the climate average of June vs the monthly rainfall of June 2021 and 2022.

# **TEMPERATURE**

#### NORTHERN REGION

- The highest temperature recorded in June 2022 was 33.3 °C on the 28<sup>th</sup> of the month. The maximum temperature varied between 33.3 and 30.8°C during this period. The maximum temperature recorded in June 2021 was 32.7 °C, on the 19<sup>th</sup>.
- The lowest minimum temperature recorded was 24.0°C of the 22<sup>nd</sup> of June. The minimum temperature varied between 24.0 and 27.9°C in this period. The minimum temperature recorded on June 2021 is 23.6°C on the 27<sup>th</sup> Day.
- >> The mean temperature of June 2022 is 28.8°C.

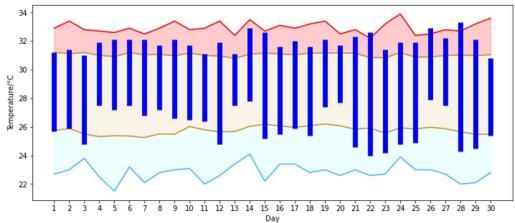


Figure 2: Daily Temperature of Hanimaadhoo met station during the month of June

(The blue bars show June 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 June.)

#### CENTRAL REGION

- The highest temperature recorded in June 2022 was 32.4°C on the 27<sup>th</sup> of the month. The maximum temperature varied between 32.4 and 30.6°C during this period. The maximum temperature recorded in June 2021 was 33.2°C, on the 14<sup>th</sup>.
- The lowest minimum temperature recorded was 23.9°C of the 27<sup>th</sup> of June. The minimum temperature varied between 23.9 and 28.4 °C in this period. The minimum temperature recorded on 2021 June is 23.8 °C on the 23<sup>rd</sup>.
- >> The mean temperature of June 2022 is 29.4°C.

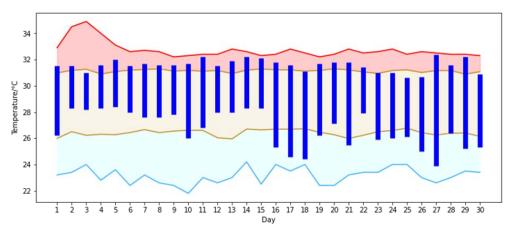


Figure 3: Daily Temperature of Hulhule' met station during the month of June

(The blue bars show June 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 June.)

#### SOUTHERN REGION

- The highest temperature recorded in June 2022 was 32.8 °C on three different occasions, 3<sup>rd</sup>, 5<sup>th</sup> and the 7<sup>th</sup> of the month. The maximum temperature varied between 32.8 and 28.2°C during this period. The maximum temperature recorded in June 2021 was 32.4°C, on the 4<sup>th</sup>.
- The lowest minimum temperature recorded was 22.5 C of the 20<sup>th</sup> of June. The minimum temperature varied between 22.5 and 28.0°C in this period. The minimum temperature recorded on June 2021 is 22.4 °C on the 5<sup>th</sup>.
- The mean temperature of June 2022 is 28.8 °C.

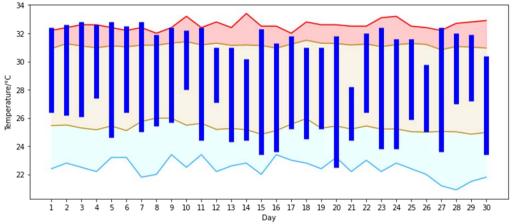


Figure 4: Daily temperature variation of Gan met station during the month of June.

The blue bars show June 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 June.)

# **SUNSHINE**

#### NORTHERN REGION

- The climate average sunshine for June is 174.9 hours for Hanimaadhoo station.
- > June 2022 recorded a total of 203 hours of sunshine which is above the climate average.
- Dut of the 30 days, 2 days did not receive any direct sunshine due to cloudy sky.
- This is lower compared to the June 2021's total sunshine, which adds to 211.9 hours from 27 days.

## **CENTRAL REGION**

- >> The climate average sunshine for June is 210.9 hours for Hulhule' station.
- > June 2022 recorded a total of 247.3 hours of sunshine which is above the climate average.
- ★ All days of June 2022 received sunshine in the Hulhule' station.
- This is higher compared to the June 2021's total sunshine, which adds to 262.9 hours from 28 days.

## **SOUTHERN REGION**

- The climate average sunshine for June is 217.4 for Gan station.
- > June 2022 recorded a total of 195.0 hours of sunshine which is below the climate average.
- All days of June 2022 received sunshine in Gan station.
- This is significantly lower (by 19%) compared to the 2021's total sunshine, which adds to 241.8 hours from 30 days.

## **MAXIMUM WIND**

#### **NORTHERN REGION**

- The maximum gust wind was recorded on the 29<sup>th</sup> of June 2022 at 19:52 hrs in the evening. 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 June 2021 was 33knots (38mph) from West.

#### **CENTRAL REGION**

- The maximum gust wind was recorded on the 29<sup>th</sup> of June 2022 at 19:20 hrs in the evening. The speed of the wind was 39knots (45mph) and the direction in which it was recorded is from the West.
- >> The maximum wind recorded on June 2021 is 35knots (40mph) from West.

#### SOUTHERN REGION

- The maximum gust wind was recorded on the 14<sup>th</sup> of June 2022 at 0714 hrs in the morning. The speed of the wind was 32knots (37mph) and the direction in which it was recorded is from the West north west.
- The maximum wind recorded on June 2021 is 35knots (40mph) 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	4	5	5
40-50 mph	3	2	0
> 50 mph	0	0	0

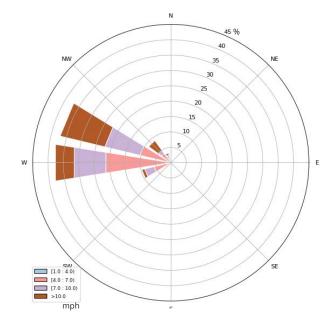
Table 1: Maximum wind speed frequency (greater than 30mph)

# **MEAN WIND & WINDROSE**

#### NORTHERN REGION

The mean wind speed and direction of Hanimaadhoo station is 7 knots (8mph) from West north west, which is the slightly lower than June 2021 (9knots or 10mph).

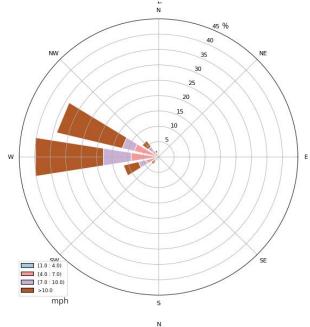
Figure 5: Wind rose diagram for the month of June 2022, Hanimaadhoo met station.



#### **CENTRAL REGION**

The mean wind speed and direction of Hulhule' station is 9 knots (11mph) from West, which is lower than the June 2021 average of 13knots (14mph).

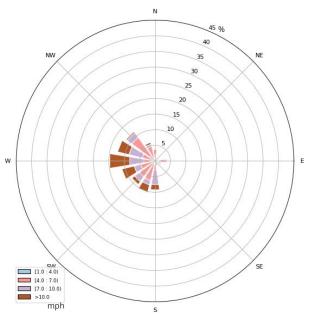
Figure 6: Wind rose diagram for the month of June 2022, Hulhule' met station.



# **SOUTHERN REGION**

The mean wind speed and direction of Gan station is 6 knots (7mph) from West, which is lower than the June 2021 average of 8knots (10mph).

Figure 7: Wind rose diagram for the month of June 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:** Showers in the vicinity of Hulhumale' beach area. (*Photo: MMS*)



Climate Report - June 2022
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