# **General Climate and Weather Highlights 2021**

This report briefly describes general weather conditions that prevailed across the Maldives during the year 2021 and how it compares with the climatological standard normal (Average of 1991 to 2020). In addition, average monthly sunshine durations, annual mean wind frequency charts and relative humidity are also included.

#### Rainfall for the year was 91% of the normal

Rainfall for the year was 91% of the normal for the Maldives as a whole. The Maldives average rainfall for 2021 was 1915 mm which is 9% below the 1991-2020 average of 2109 millimeters. However, it lays within the normal range (90%-110%) of annual rainfall. Comparing the distribution of rainfall across the Maldives; northern, central and southern parts of Maldives received 106% (Hdh.Hanimaadhoo), 80% (Hulhule') and 107% (S.Gan) of the normal rainfall respectively. The remaining two Meteorological stations; Meteorological office in L.Kadhdhoo and Gdh.Kaadehdhdhoo, received 77% and 86% respectively.

 Heaviest rainfall recorded for the year was 212.5 mm, which was recorded at the Automatic Weather Station (AWS) in B.Dharavandhoo on 12<sup>th</sup> January 2021.

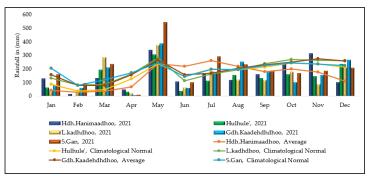


Figure 1: Monthly Rainfall of 2021 against Climatological standard normals or Long Period Average (LPA) of respective Meteorological stations. It shows that during the month of March and May all stations have received above average rainfall. Comparatively, in the month of April and June all stations have received below average rainfall.

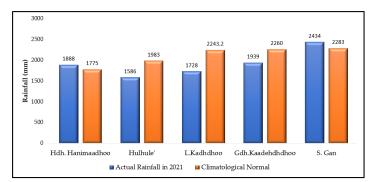


Figure 2: Yearly Total Rainfall 2021 with Climatological standard normals or Long Period Average (LPA) of respective Meteorological stations.

### Average Annual Maximum Temperature Anomaly was +0.5°C in 2021.

Temperature anomalies were higher over the central part of Maldives than over northern and southern part of the country. Average anomalies were +0.5, +0.7 and +0.4°C in Hdh.Hanimaadoo, Hulhule' and S.Gan respectively. The highest deviation of +1.3 °C was observed in the month of December at Hulhule'.

- Highest Maximum temperature was 33.9 ° C, recorded at the National Meteorological Center, Hulhule on 28th April 2021.
- Lowest Minimum temperature was 21.9 ° C, recorded at the National Meteorological Center,

Hulhule on 15th September 2021.

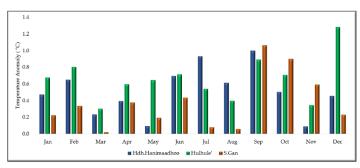


Figure 3: This chart shows Monthly Mean Maximum Temperature Anomalies of Hanimaadhoo, Hulhule' and Gan. The highest deviation of + 1.3 °C was observed in the month of December at Hulhule'.

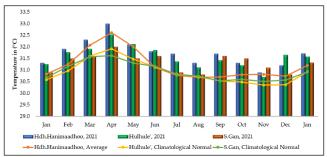


Figure 4: This chart shows the Monthly Mean Maximum Temperatures of Hanimaadhoo, Hulhule' and Gan, against the climatological normal/Long Period Average (LPA). Month of April was the hottest month on average.

# Maximum hours of Sunshine recorded in the month of April 2021.

On average, Maldives receives good amount of sunshine throughout the year. Normally maximum sunshine is received during the month of March. However, in 2021, it was observed in the month of April.

 Monthly average hours of sunshine over Northern, Central and Southern atolls range between 272 (Hdh. Hanimaadhoo), 288 (Hulhule') and 306 (S.Gan) hours respectively in 2021.

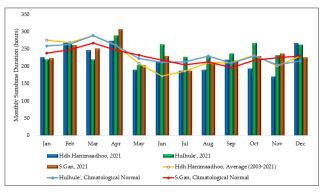
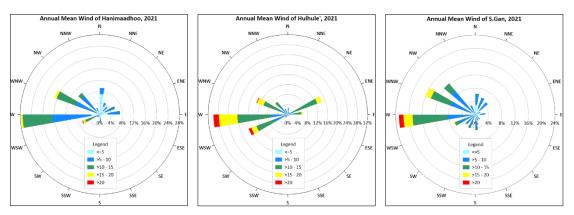


Figure 5: Monthly Average Sunshine duration of Hanimaadhoo, Hulhule and Gan in 2021 with Climatological Normal / Average.

### Annual Mean Wind Frequency, 2021.

On average, 60 – 70% of times surface winds varied between south-west to north-westerly direction, indicating prolonged south-west monsoon season over the Maldives. About 15 -25% of the times, surface winds varied between north and easterly direction, indicating relatively shorter period of northeast monsoon.

 Highest maximum wind speed of 61 miles per hour was recorded at the AWS in Hdh.Hanimaadhoo and H.dh Kulhudhuffushi on 14th May 2021.

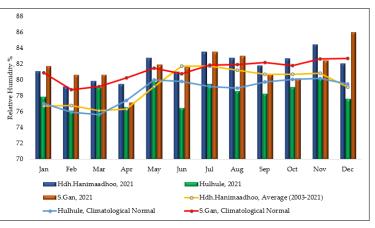


*Figure 6: Wind Frequency from Hanimaadhoo (Left) Hulhule ( center) and Gan (right) shows winds mainly prevailed from the western sector as southwest monsoon spans over majority of the year. During North East Season, wind blew from northeast or the eastern sector.* 

# Average Monthly Relative Humidity is lower in the month of March and April.

On Average, the relative humidity is lower during the month of March and April over the Maldives.

• On average, monthly Relative Humidity varied between 76% and 83%. It had varied between 76% and 86% in 2021.



*Figure 7: Monthly Average Relative Humidity of Hanimaadhoo, Hulhule and Gan 2021 with Climatological Normal / Average.*