



Maldives Meteorological Service

Rainfall and Temperature Outlook over Maldives

For June 2022

Summary

Rainfall is likely to be below-normal over part of southern atolls and normal over rest of the

Temperature is expected to be normal over northern atolls and slightly above-normal over other areas.

Introduction

This consensus outlook on rainfall and temperature for Maldives has been prepared through assessments including prevailing regional and global climate condition and prediction of various climate models, seasonal forecast of WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME), North American Multi-Model Ensemble (NMME) Forecasts of Monthly Climate Anomalies, Multi-model Ensemble Based Seasonal Climate Prediction of Forecast Customization System (FOCUS), climate driver update of Bureau of Meteorology (BoM) and monthly forecasts of European Centre for Medium-Range Weather Forecasts (ECMWF).

Current status of major climate drivers.

El Niño Southern Oscillation (ENSO): La Niña condition persists with below average equatorial Sea Surface Temperatures across most of the Pacific Ocean. Global models indicate La Niña condition to be continued durig June 2022.

Indian Ocean Dipole (IOD): Global models indicate currently neutral IOD value and posibility of negative IOD during the coming months, suggesting there can be low accuracy at this time of the year.

Madden-Julian Oscillation (MJO): Global models indicate enhanced MJO over Western Pacific at the begning of the month, propagate eastward to Western Hemisphere during the 1st week. It is expected over Indian Ocean towards mid of the month and become weak for rest of the month.









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Calibration of climate models

Climate Predictability Tool (CPT) was used to downscale global model outputs to local scale. These results indicate below normal rainfall across the country for June 2022.

Global Producing Centres and WMO Lead Centre Forecasts

Probabilistic Multi-Model Ensemble of WMO LC-LRFMME indicates below normal rainfall over part of southern atolls and climatological probability over rest of the country during June 2022. Probabilistic Multi-Model Ensemble of WMO LC-LRFMME indicates above-normal Temperature across the country for June 2022.

Climatic condition during the month of June

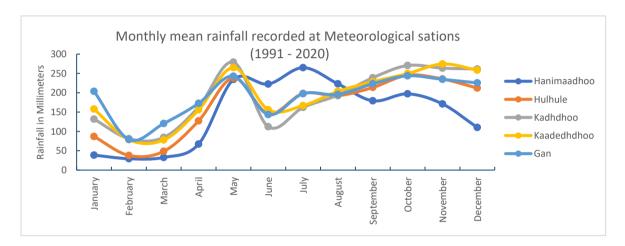


Figure 1- During the period 1991 - 2020, monthly mean rainfall of June are 223, 146, 112, 156 and 144 millimeters in Hdh.Hanimaadhoo, Hulhule, L.Kadhdhoo, Gdh.Kaadedhdhoo and S.Gan respectively.

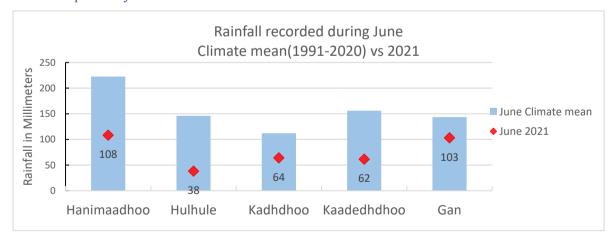


Figure 2- In June 2021, all stations received relatively low amount of rainfall than climate normal for the month. Highest amount of rainfall received in S.Gan with 72% of the average rainfall for the month and lowest rainfall was 26%, received in Hulhule.



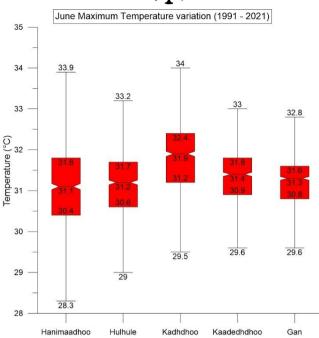


Figure 3: Daily Maximum Temperature range at Meteorological stations during June for the period 1991-2021. Highest maximum Temperature of 34.0°C recorded at Kadhdhoo Meteorological Office.

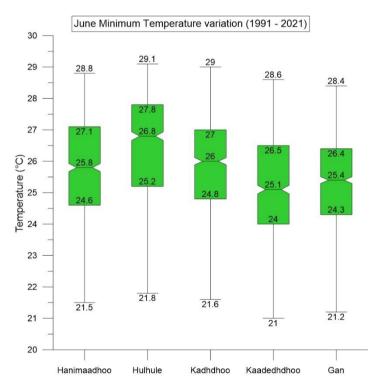


Figure 4: Daily Minimum Temperature range at Meteorological stations during April for the period 1991-2021, showing lowest minimum Temperature of 21.0 °C at Kaadedhdhoo Meteorological Office.



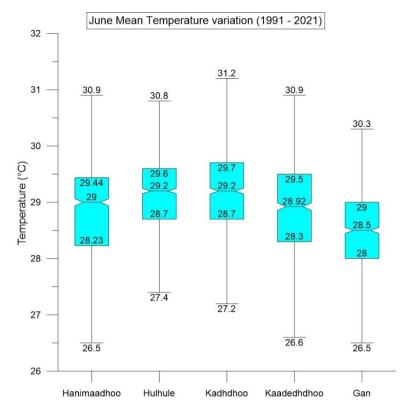


Figure 5: Daily Mean Temperature range at Meteorological stations during June for the period 1991-2021. It shows most (50%) of the times daily average temperature lies between 28.2 - 29.4°C in Hanimaadhoo, 28.7 - 29.6°C in Hulhule, 28.7 - 29.7°C in Kadhdhoo, 28.3 - 29.5°C in Kaadedhdhoo and 28.0 - 29.0°C in Gan.

Conclusion

By considering the La Niña condition, neutral IOD, weak MJO over Indian Ocean during later half of the month, Multi-Model Ensemble of WMO Lead Centre forecasts, NMME forecasts, FOCUS forecasts and climate data of Maldives, rainfall is likely to be below-normal over part of southern atolls and normal over rest of the country.

Temperature is expected to be normal over northern atolls and slightly above-normal over other areas.

Note:

Normal: Amount of rainfall between 90% - 110% of the average for the period. Above normal: Amount of rainfall more than 110% of the average for the period. Below Normal: Amount of rainfall less than 90% of the average for the period