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Maldives Meteorological Service



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Rainfall and Temperature Outlook over Maldives

For May 2021

Summary

Rainfall is likely to be above normal for northern atolls and normal over rest of the country during May 2021. Temperature is expected to be slightly above normal during the month.

Introduction

This consensus outlook for Maldives has been developed through assessments including prevailing regional and global climate condition and prediction of various models, seasonal forecast of WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME), NMME Probability Forecasts of Monthly Climate Anomalies and forecasts from Regional Integrated Multi-Hazard Early Warning System (RIMES).

El Niño -Southern Oscillation (ENSO): La Niña condition presents with currently below average Equatorial Sea Surface Temperatures (SSTs) from the west-central to eastern Pacific Ocean. Chances are high for the transition from La Niña to ENSO-Neutral during May.

Indian Ocean Dipole (IOD): Neutral IOD condition persists and models suggest same condition during the month.

Madden-Julian Oscillation (MJO): MJO is currently enhanced over Western Hemisphere and Africa. The signal is expected to be over Indian Ocean by the end of 1st week and likely become weak towards end of the month. There is uncertainty with its evolution.

Calibration of climate models

Most models suggest above normal rainfall for northern part of the country.

Global Producing Centres and Lead Centre

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal rainfall over northern-most atoll. Most individual



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models indicate above normal rainfall to northern atolls and normal rainfall to central and southern atolls for May.

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal Temperature across the country for May 2021.

Climate condition

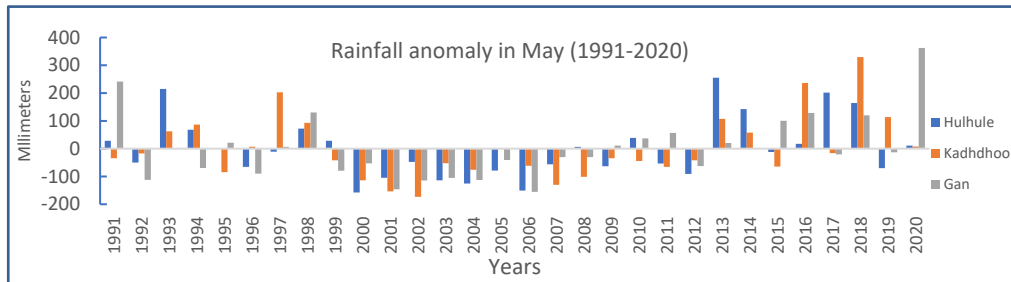


Figure 1- Rainfall has an increasing trend.

Figure 1 shows rainfall recorded between 1991 and 2020 in three Meteorological stations.

Figure 2 shows spatial distribution of rainfall across the country during May 2020, with data from all five Meteorological stations. Rainfall was higher in southern and northern atolls than central atolls.

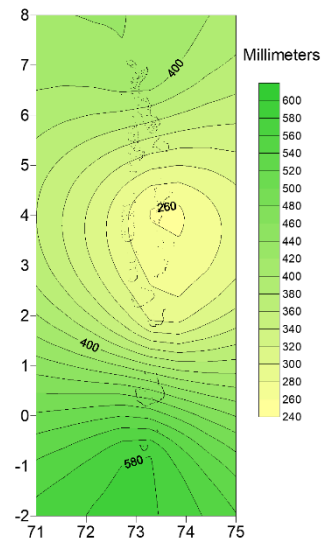


Figure 2 Spatial distribution of rainfall over the country during May 2020

Conclusion

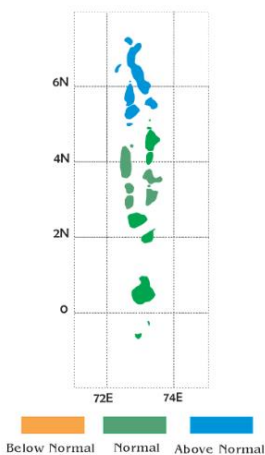


Figure 3 Rainfall probability for May 2021

By considering the neutral condition of climate drivers, enhanced MJO signal over phase 1, Multi-Model Ensemble of WMO Lead Centres, NMME Probability Forecasts, RIMES forecasts, climate data, rainfall is likely above normal for northern atolls, and normal over rest of the country.

Temperature is likely to be slightly above normal across the country during the month.

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.

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