

#### **Maldives Meteorological Service**



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#### **Rainfall and Temperature Outlook over Maldives**

For November 2021

### Summary

Rainfall is likely to be below normal over most parts of the country. However, slightly above normal rainfall may occur in some parts of southern-most atolls. Temperature is expected to be slightly above normal during the month.

# Introduction

This consensus rainfall and temperature outlook 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), NMME Forecasts of Monthly Climate Anomalies monthly forecasts of European Centre for Medium-Range Weather Forecasts (ECMWF).

# Current status of major cliamte drivers.

El Niño Southern Oscillation (ENSO): La Niña conditions have developed with below average equatorial Sea SurfaceTemperatures across central and east-central Pacific Ocean.

Indian Ocean Dipole (IOD): IOD continues in negative value. However, most global models indicate that value for November will be within neutral range.

Madden-Julian Oscillation (MJO): MJO is expected to be weak over Indian Ocean (Phase 2) at the beginning of this month and propagate to Maritime Continent (Phase 5) by end of the 1<sup>st</sup> week. It is likley to remain over Western Pacific (Phase 6) towards end of the month.







## Calibration of climate models

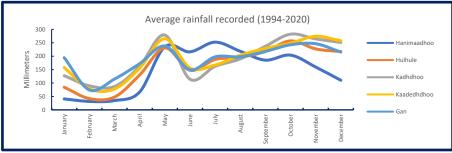
Climate Predictability Tool (CPT) was used to downscale global model outputs to local scale. These results indicate below normal rainfall across the country.

# Global Producing Centres and WMO Lead Centre products

Probabilistic Multi-Model Ensemble of WMO Lead Centre for Long Range Forecast Multi-Model Ensemble indicates above normal rainfall over part of southern atolls, below normal rainfall over northern atolls and part of central atolls with climatological probability over rest of the country.

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

### Climatic condition during the month of November



*Figure 1-* Seasonal distribution of average rainfall showing bimodal characteristics of rainfall in central and southern atolls and unimodal characteristics in northern atolls.

Figure 2: Long Term Average spatial distribution shows more rain over southern atolls than rest of the country during November.

Figure 3: Percentage deviation of rainfall of November 2020 shows wetter than normal over northern atolls and part of southern atolls and drier than normal over rest of the country.

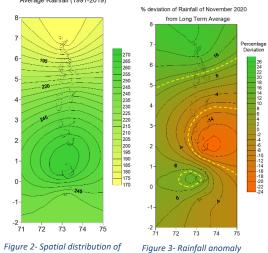


Figure 2- Spatial distribution of rainfall during November (1991-2019),



#### Conclusion

By considering the La Niña condition, neutral IOD, MJO signal over Indian Ocean, Multi-Model Ensemble of WMO Lead Centres, NMME Forecasts and climate data, rainfall is likely to be below normal over most parts of the country during the month of November 2021. However, above normal rainfall may occur in some parts of southern-most atolls. 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.