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Rainfall and Temperature Outlook over Maldives

For March 2020

Summary

Average Temperature likely above normal throughout the country during March 2020. Rainfall likely below normal in northern and central atolls, normal in southern atolls during March 2020.

Introduction

This consensus rainfall outlook for Maldives has been developed through an expert assessment of the prevailing regional and global climate conditions, seasonal forecast products of WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME) and calibrating climate models.

El Niño -Southern Oscillation (ENSO): ENSO-neutral condition prevails with near-to-above average Equatorial Sea Surface Temperatures (SSTs) across the Pacific Ocean.

Indian Ocean Dipole (IOD): IOD is currently neutral with warmer than average sea surface temperature over the region.

Madden-Julian Oscillation (MJO): MJO is currently weak with amplitude less than 1. It is expected to emerge into phase-4(Maritime Continent) during 1st week and propagate eastward into phase-5 with increasing amplitude. The signal likely become weak by 3rd week and remain in the same condition till end of the month.

Calibration of climate models

Calibration of GCM output with station observed rain data suggests above normal rainfall in southern atolls and below normal rainfall in central and northern atolls during March 2020.

Global Producing Centres and Lead Centre

Probabilistic Multi-Model Ensemble of WMO lead centre for long-range climate indicates above normal temperature throughout the country, normal rainfall over southern and part of central atolls while below normal over northern atolls and part of central atolls. Most of the individual models suggest below normal rainfall over Maldives during March 2020.











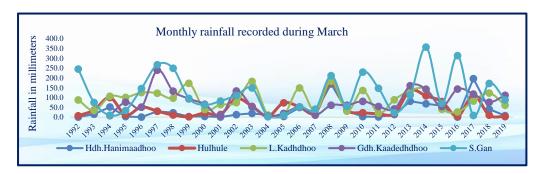




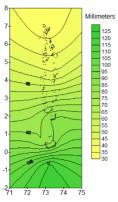




Climate condition



March is the last month of Northeast monsoon (*Iruvai moosun*). During this month, southern atolls receive relatively higher rainfall than central and northern atolls.



Spatial distribution of rainfall over the country during March

Conclusion

By considering ENSO neutral codition, preailing neutral IOD condition and expected weak MJO signal over Indian Ocean as well as Multi-Model Ensemble of WMO Lead Centre with indiviual models, rainfall likely below normal in northern and central atolls while normal in southern atolls during March 2020.

Temperature likely above normal during March 2020.

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.

References

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