



Mauritius Meteorological Services

Summer Season Outlook

SWIOCOF 2016

Seychelles



Introduction

- This report gives an indication of the expected evolution of the South West Indian Ocean (SWIO) summer - namely, the likely cyclonic activity during the coming cyclone season, summer rains and the temperatures in Mauritius and Rodrigues.



- The normal summer season is between 01 November and 15 May of the following year, though it is not unlikely that at times cyclones do form outside these dates.
- The contents of this outlook are meant to be used as general guidelines for planning purposes by stakeholders in various sectors.



Main predictors analyzed are:

Global

- El Nino/ La Nina /Southern Oscillation Index (ENSO);
- Quasi-biennial Oscillation (QBO);
- Madden Julian Oscillation (MJO)



Regional

- Current state of the oceans;
- Arabian high
- Indian monsoon activity;
- Large-scale convective activity along the Inter-Tropical Convergence Zone (ITCZ);
- Axis of the Mascarenes subtropical anticyclones;
- Indian Ocean Dipole



Local

- Mean sea-level pressure anomalies during previous winter
- Mean temperature patterns during previous winter;
- Cumulative rainfall over Mauritius during previous winter;
- Convective activity over the islands of the South West Indian Ocean; and
- Upper level winds



This outlook has also considered the conclusion of the Southern Africa Regional Climate Outlook Forum (SARCOF) and model products from Global Producers of Long Range Forecast (GPLRF).

List of GPLRF are as follows:



- European Center for Medium Range Weather Forecast (ECMWF)
- EUROSIP multi-model seasonal forecasting system
- United Kingdom Meteorological Office (UKMO)
- International Research Institute (IRI), USA
- Australian Bureau of Meteorology (BoM)
- National Center for Environmental Prediction (NCEP), USA



Conclusions

After careful analysis of the behaviour of all indicators and taking into considerations analogue patterns, the following conclusions are made :

- 1) Summer will be slightly warmer or cooler than usual or normal.

Statements as follows are also made:

However, on certain days it is likely that temperatures will exceed the average by more than two degrees Celsius in some locations. Maximum temperatures may reach 35 degrees Celsius at Port Louis and in coastal areas on some afternoons.

At Rodrigues, maximum temperatures are likely to reach 33 degrees Celsius along coastal areas on certain occasions.



It is very likely that above normal temperatures giving rise to torrid conditions may be experienced at times. Above average daytime temperatures with high humidity and light wind conditions over prolonged periods, especially in the months of January to March, can cause severe discomfort to the vulnerable groups of the population



2) *Cumulative summer rainfall is expected to be near normal with an average of about 1350 mm over Mauritius and around 650 mm over Rodrigues. Localised summer rains are likely to be timely as from the second fortnight of December. However, widespread heavier rainfalls are expected as from January.*



3) *During January to March atmospheric conditions will become conducive to the occurrence of extreme weather events such as torrential rains and strong winds. Heavy summer rains may trigger occasional localized flash floods during this period.*



4) The number of named storms evolving in the whole of the South West Indian Ocean basin for the summer season is given.

An example is given below:

There will most likely to be 8 to 10 with a probability of a second named storm by the end of November. During this season, the region between Agalega and Diego Garcia seems to be more conducive to storm formation.



All named storms that will develop in the South Indian Ocean will NOT necessarily be a direct threat to the islands of the Republic of Mauritius. Climatologically, at least one storm may pass within 100 km of either Mauritius or Rodrigues causing cyclonic conditions



This report is updated upon the availability of fresh information.



WATER RESOURCE PRESENT SITUATION

RESERVOIRS	WATER LEVEL as at 12 September 2016(%)
Mare aux Vacoas	91.1
La Nicoliere	72.8
Piton du Milieu	92
La Ferme	79.8
Mare Longue	98.6
Midlands	98



Expectations

- SARCOF gives a broad guideline of the evolution of the likely rainfall season
- More information is desirable from the SWIOCOF.
- Amount of rainfall to help us know if the state of reservoirs will remain positive
- Downscaling to give a national and regional output.
- Agriculture: When and where the rain will fall.
- NDRRMC: Occurrence of flash floods
- Education: Occurrence of torrential rain



THANK YOU