BRIEF SUMMARY: OCTOBER 2015 TO APRIL 2016

End of 2015 was warmer than usual throughout the Caribbean. After a failure of the wet season in ABC Islands and dry conditions in parts of the eastern Caribbean, many island territories remained in drought. Heavy rains in Belize alleviated droughted there.

February to April 2016: We expect above-normal, but comfortable temperatures throughout the region, except for cooler temperatures in the extreme north-west. Drought is expected to intensify in the eastern and southern Caribbean, with few rain disruptions of outdoor activities and limited flash flood potential. Intensifying drought worsens current water shortages in households and agriculture, and increases fire risk.

Observations

• TEMPERATURES: December, November & October: above-normal across the Caribbean, record high in some places.

Notable climate records:
• DRY - OND: 2 territories with locations experiencing record low rainfall (49% of average at 1 location in Barbados, 13-34% of avg. at 2 locations in Dom. Rep.).
• WET - OND: 2 locations in Belize (almost twice the average).
• HOT - OND: 5 territories with locations recording highest max. temps. (Bahamas, Cayman, Dominica, Guyana, Jamaica).

Notable Impacts
• Prevailing short- and long-term drought across the Caribbean, notably in Antigua, Barbados, St. Kitts & Nevis with widespread agricultural losses and/or domestic water shortages.
**BRIEF CLIMATE OUTLOOK - May to July 2016**

Temperatures are expected to rise to uncomfortable, above-normal levels by July across the Caribbean. There are indications (medium to high confidence) that abundant rains may return towards the end of the period. The latter may finally alleviate long-term drought in most places, as well as the drought that builds up this year in the Guianas.

For detailed temperature and precipitation outlooks for MJJ 2016, please visit [rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/](http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/).

**Drought conditions up to May**

**Currently:**

Most islands are in long-term drought. These places suffer water shortages. Some are also in short-term drought. However, drought was alleviated in Belize.

**Alert levels:**

**Drought warning or worse:** ABC Islands, Barbados, Guianas, southern Leewards, Trinidad & Tobago.

**Long-term Concern:**

Existing water shortages may worsen throughout the first half of 2016, with drought relief not in sight for the remainder of the dry season.

**What influences the next season?**

**El Niño Southern Oscillation (ENSO)**

**Recent observations:** Very strong El Niño reached peak strength at the end of 2015; sea-surface temperatures (SSTs) 2.5-3°C above avg. in equatorial eastern Pacific (NINO3.4).

**Model forecast and guidance:** Models indicate weakening El Niño conditions for FMA (99% confidence), and possible disappearance in MJJ (60-70% confid.).

**Expected impacts on rainfall and temperatures:** Shift towards higher probabilities for below-normal rainfall for the east and south, as El Niño usually weakens the development of storms. By contrast, a shift towards above-normal rainfall is noted for the NW C’bean due to reduced winds in the upper atmosphere, which allows for stronger showers. Large shift to higher temperatures for the region, except extreme NW.

**Climate conditions in the Tropical North Atlantic and Caribbean**

**Recent observations:** SSTs 0-1°C above-average north of C’bean; trade wind speed stronger than avg; upper level winds stronger than usual in the south, weaker in the north.

**Expected conditions:** SST anomalies expected to warm up towards the east; strength of trade winds hardly predictable.

**Expected impacts:** Warm Atlantic temperatures increase evaporation and local deep atmospheric convection, potentially increasing precipitation. However, strong high level winds are expected to reduce shower activity from Leewards southward by prohibiting vertical growth of clouds.

**Climate outlooks - background**

The Caribbean Climate Outlooks are prepared by the Caribbean Regional Climate Outlook Forum (CariCOF). The Caribbean Institute for Meteorology and Hydrology, in its role as WMO Regional Climate Centre in demonstration phase, coordinates the CariCOF process. Contributors to the Outlooks are the Meteorological Services from the region. For more information, please visit [rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/](http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/).

The Precipitation and Temperature Outlooks are issued in the form of a map, which shows regions where the forecast rainfall or temperatures have the same probabilities to be:

- **Above-normal (A)** - within the wettest/hottest third of the historical record
- **Near-normal (N)** - within the middle third of the historical record
- **Below-normal (B)** - within the driest/coldest third of the historical record

**DISCLAIMER**

The information contained herein is provided with the understanding that The Caribbean Climate Outlook Forum makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the Outlook. The information may be used freely by the public with appropriate acknowledgement of its source, but shall not be modified in content and then presented as original material.