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Seasonal Forecast: July-August-September (JAS) 2023

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What are the usual JAS conditions?

July-August-September RAINFALL CLIMATOLOGICAL NORMAL (30YEARS)		
	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal Accumulation	559.4 to 805.6mm	651.1 to 874.4mm
Number of Wet Days	52 to 64 days	56 to 69 days
Number of 7-day Wet Spells	4 to 7	3 to 7
Number of 7-day Dry Spells	-	-
TEMPERATURE (15YRS AVERAGES)		
Average Maximum	32.1°C to 32.5°C	31.0°C to 31.4°C
Average Mean	28.1°C to 28.4°C	27.7°C to 28.1°C
Average Minimum	24.0°C to 24.3°C	24.5°C to 24.7°C

What is the forecast for this JAS season?

Rainfall

- The island has observed its start of the rains with normal rainfall so far;
- Anomalous tropical cyclone observed in the Tropical Atlantic with the formation of two storms in June;
- Rainfall total is likely to be as usual;
- Though more wet days than usual may be expected, the usual number of wet spells is likely;
- One to two very wet spells (low confidence) which could result in flash floods and other hazards are expected;
- There is no concern for drought by the end of September, but some areas may be in long term rainfall deficits by end of November.

Temperature

- Temperatures have been increasing since April and are expected to peak in August/ September;
- Daytime and night-time temperatures are likely to be higher than usual;
- Temperatures are forecast to be high enough to be uncomfortable to many;
- This may manifest in recurring heatwaves and rapidly increasing heat stress that may rival hot years such as 2010, 2016 and 2020.

What factors are influencing this forecast?

1. El Niño Southern Oscillation (ENSO)

Recent observations: Sea Surface Temperatures (SSTs) in the eastern Pacific have risen from near-average to weak El Niño conditions by the end of May.

Model forecast and guidance: The forecast models indicate a likely transition to El Niño conditions in JAS and OND (90% confidence).

Expected impacts on rainfall and temperatures: El Niño more often than not is marked by a warmer heat season, a drier summer season, and reduced tropical cyclone activity, especially from September to November.

2. Climate conditions in the Tropical North Atlantic (TNA) and the Caribbean Sea

Recent observations: SSTs have hovered around 1°C to 2°C above average in much of the Tropical North Atlantic (TNA) in recent weeks, even reaching record-high values by mid-June.

Expected conditions: Models are confidently forecasting increasingly warm SST anomalies of 0.5°C to 2°C (or more) above average across the Caribbean Sea and the TNA.

Expected impacts: Warm SSTs in and around the Caribbean tend to contribute to higher air temperatures with above-average humidity and an increased frequency of heatwaves, but also higher Atlantic Hurricane Season activity, seasonal rainfall totals and an increased frequency of extreme rainfall during the wet season.