

SAINT LUCIA AGROMET REPORT – APRIL 2021

The monthly averages for the Hewanorra and George F L Charles airport stations for April 2021 are shown in the table below:

AVERAGE MONTHLY DATA FOR HEWANORRA (Hew) and GEORGE F L CHARLES (GFLC)											
Stn	Cloud Cover (oktas)	Wind Dir (o from N)	Wind Speed (kt)	Air Temp. (°C)	RH (%)	Rainfall Long-Term Mean (mm)	Rainfall Total (mm)	Max Temp (°C)	Min Temp (°C)	Daily Sunshine (Hrs)	Daily Evap (mm)
Hew	5	70	12	26.5	74	74.9	61.1	30.1	24.8	8.9	7.7
GFLC	5	100	9	28.3	69	89.7	158.5	29.8	24.1		

In general, precipitation gradually increases in the month of April transitioning out of the dry season which culminates in May. For the month, normal rainfall was experienced at Hewanorra whereas at George F. L. Charles, precipitation was greater than expected. At Hewanorra, 61.1 mm was recorded and at George F. L. Charles, 158.5 mm, which was about 77 percent above the long term mean and within the top 10 wettest years (*based on 55 years of data*). There were 8 rainy days at Hewanorra with significant 9 and 7-day dry spells whilst at George F. L. Charles, 8 rainy days were noted with two 7-day dry spells. Notably, extreme events for the month included 2 days of flooding, i.e. on the 12th and 28th, and the effects of volcanic ash experienced from the 11th.

May marks the change between the dry and wet season. Precipitation generally increases towards the end of the dry season and in this regard, the climatological mean for May is 71.6 mm at Hewanorra and 105.1 mm at George F. L. Charles (*using base period 1991 – 2020*). During this time of year, precipitation is the result of isolated moisture surges embedded in the easterly trade winds and on occasion, tropical waves may add to the increased rainfall experienced towards the end of the month.

Thus, the precipitation outlook for May to July (**MJJ**) indicates **below normal** rainfall totals which could range from 178.7 mm to 272.8 mm at Hewanorra and 272.9 mm to 376.4 mm at George F. L. Charles. Similarly, the extended precipitation outlook for August to October (**ASO**) suggests **below normal** rainfall amounts for the island. These could range from 369.9 mm to 485.9 mm at Hewanorra and at George F. L. Charles 549 mm to 612.6 mm.

The maximum and minimum temperatures at Hewanorra were as expected, however, at George F. L. Charles, these temperatures were below normal and normal, respectively. Model projections for temperatures are for **warmer than usual** maximum and minimum

temperatures during MJJ and ASO with the exception of ASO minimum temperature potentially being **cooler than usual** for Saint Lucia.

The Standardized Precipitation Indices (SPIs) for the 1, 3, 6 and 12-months were all normally wet for Hewanorra and at George F. L. Charles, moderately wet (1-month), normal wet (3 & 6 months) and normally dry (12-months). Short term drought (*6 months SPI*) by the end of July is still possible locally to the north of the island but is of no concern regionally. Moreover, long term (*12 months SPI*) drought both regionally and locally is of no concern by the end of May. The overall rainfall accumulation for the calendar year is at a surplus for both stations. With the consideration of all these factors and the probability of drier and generally warmer than normal temperatures for the MJJ and ASO seasons, water resources should still be monitored and the necessary conservation measures should be taken especially to the north of the island in an effort to maintain water stores.