### October 2017 Climate Review for Puerto Rico and U.S. Virgin Islands.

#### **Summary**

The first half of the month featured a very active weather pattern. Frequent trofiness combined with several tropical waves moving through created favorable conditions for several days of heavy rainfall activity across several portions of PR and across the USVI. Given the excessive rainfall observed in September, due mainly to the passage of both Hurricane Irma and Maria, the terrain was saturated to the point that flooding was frequently observed with these heavy rainfall events. The weather pattern, however, after the 18th of the month changed to a generally drier and more stable pattern. This created mainly fair weather conditions across most of the region with shower and thunderstorm activity mostly confined to interior and western portions of PR due to local and diurnal effects. As a result of the very active weather pattern observed during the first half of the month, most areas of the islands observed above normal rainfall. In fact, a 151 % of normal rainfall was observed across the forecast area.

### **Historical Rainfall and Temperature**

	Puer	to Rico	San Jua	an Area	IS	ST	IS	X
1	1968	3.74	1979	1.17	2011	1.95	1964	1.05
2	2014	4.26	1915	1.61	1988	2.00	2002	1.10
3	1993	4.43	1963	1.63	1979	2,21	1960	1.23

Table 2. Driest Octobers on record.

	Puer	to Rico	San Jua	an Area	IS	ST	IS	SX
1	1985	21.71	1970	15.06	2010	16.20	1977	16.20
2	1970	20.40	1927	12.15	2005	12.49	1990	12.95
3	1990	17.95	2005	11.94	1974	12.45	1954	11.79

Table 3. Wettest Octobers on record.

	Puerto	Rico**	San Jua	an Area	IS	ST	IS	X
1	2015	80.5	2015	84.6	1993	85.5	1972	84.3
2	1951	80.5	2009	84.4	1994	85.4	2015	83.7
3	1947	80.3	1980	84.4	1992	85.2	2013	83.5

Table 4. Warmest Octobers on record.

	Puerto	Rico**	San Jua	an Area	IS	ST	IS	SX
1	1941	71.4	1917	78.3	1954	78.7	1954	78.8
2	1940	72.5	1913	78.3	1956	80.3	2010	80.0
3	1942	76.2	1922	79.0	2010	80.5	1981	80.3

Table 5. Coolest Octobers on record.

\*\* Following years are not included due to lack of data: 1955, 1956, 1957, 1959, 1967, 1978, 1979\*\*

	Puerto Rico	San Juan Area	IST	ISX
Temperature	78.4 °F	82.1°F	82.8°F	82.1°F
Rainfall	8.30"	5.59"	5.42"	5.25"

**Table 6. Normal Values for October** 

## Monthly and Seasonal Highlights for Primary Climatological Data Sites.

	September	October	November	Season SON
San Juan Area	3 <sup>rd</sup> warmest and wettest			
IST	10 <sup>th</sup> wettest			
ISX	2 <sup>nd</sup> wettest			

**Table 7. Fall 2017** 

# **Additional Highlights Based on COOP Data**

### **Wettest Days**

Station	Inches (inches)	Date
GUAYAMA 2E	5.16	10/17/2017
CORRAL VIEJO	3.88	10/17/2017
PALMA SOLA	2.91	10/15/2017

# **Highest Maximum Temperatures**

Station	Temperature (°F)	Date
SAN JUAN L M MARIN AP	92	10/5/2017
TOA BAJA LEVITTOWN	92	10/6/2017
San Juan Area	92	10/5/2017

## **Lowest Minimum Temperatures**

Station	Temperature (°F)	Date
PALMAREJO VEGA BAJA	70	10/30/2017
CULEBRA HILL	71	10/1/2017
TOA BAJA LEVITTOWN	73	10/9/2017

Data is preliminary and has not undergone final quality control by the National Centers for Environmental Information / NCEI/. Therefore, this data is subject to revision. Report based on data received until Nov 15<sup>th</sup> 2017.

Puerto Rico Climate Record Period: 1940 to 2017 San Juan Metro Area Climate Record Period: 1898 to 2017 (Primary climatological site) Cyril E. King Airport/St Thomas Climate Record Period: 1953 to 2017 (Primary climatological site) Henry E. Rohlsen Airport/St Croix Climate Record Period: 1951 to 2017 (Primary climatological site)