



March 2015 Climate Review for Puerto Rico and the U.S. Virgin Islands

... Based on data received until April 15th ...

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Synopsis

A generally fair and mainly stable weather pattern prevailed across the local islands most of the month of March with trade wind showers across windward areas and limited afternoon convection across the forecast area. This pattern resulted in an average rainfall total of 2.71 inches, which is 0.23 inches below normal for Puerto Rico.

In terms of temperature, the islandwide mean temperature was 75.2°F which is approximately 0.9°F warmer than the 30-year average. The highest maximum temperature recorded this month was 92°F at Ponce 4E on March 13th, and the lowest minimum temperature was 48°F on March 31st at Toro Negro.

Statistically, the average maximum temperature at the Luis Muñoz Marín International Airport (TJSJ) in San Juan was approximately 0.4°F cooler than the 30-year average. The average temperature was below normal 35% of the month; while normal temperatures were observed 29% of the month. The average minimum temperature at TJSJ was 73.0°F, which is 0.1°F above normal in respect to the 30 year average.

Across the U.S. Virgin Islands, the mean temperature at Henry E. Rohlsen Airport (TISX) in Saint Croix and Cyril King Airport (TIST) in Saint Thomas was 78.4°F, which is 0.2 and 1.0°F below normal respectively. In terms of precipitation, a rainfall total of 1.50 inches was reported at TJSJ, which is 0.45 inches below normal. Monthly rainfall totals at TIST and TISX were 1.68 and 0.76 inches, which are 0.26 inches above and 0.80 inches below normal respectively. In fact, March 2015 ended as the 10th driest March on record at TISX. March 2015 produced 14 days of measurable rain at TJSJ, which means 45% of days where 0.01 inch or more accumulated. Meanwhile, 16 and 12 days of measurable rain were reported at TIST and TISX, resulting in 52 and 39% of the days where 0.01 inch or more accumulated.

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Data retrieved from AHPS, RAWs, CoCoRaHS, COOP stations and primary climatological data sites

RAINFALL

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Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

Following WMO criteria: Less than 10% of missing values

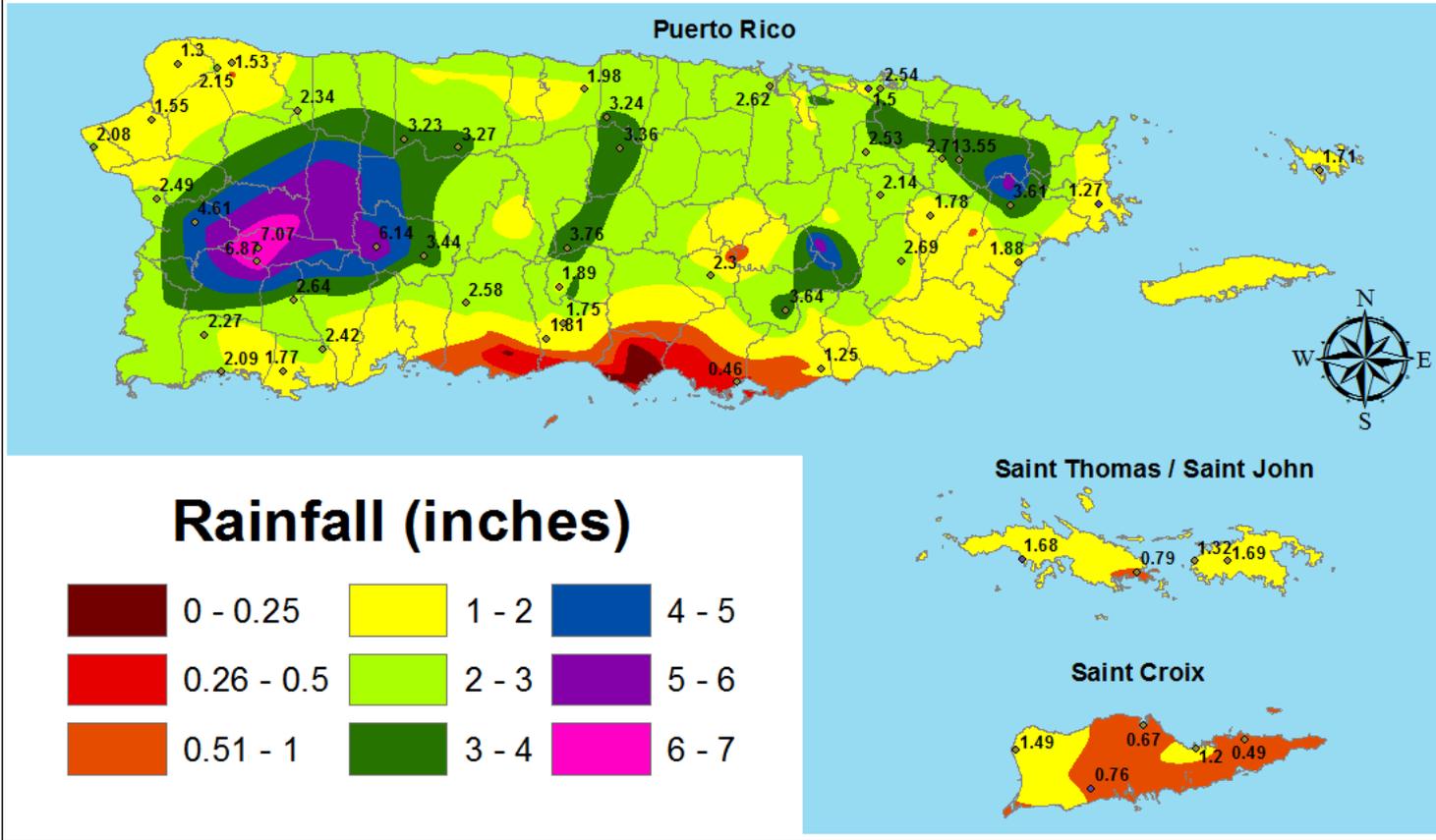


Click on image to enlarge



2015 March Observed Rainfall

Data Source: COOP, RAWS, CoCoRaHS
National Weather Service WFO San Juan
Data is Preliminary



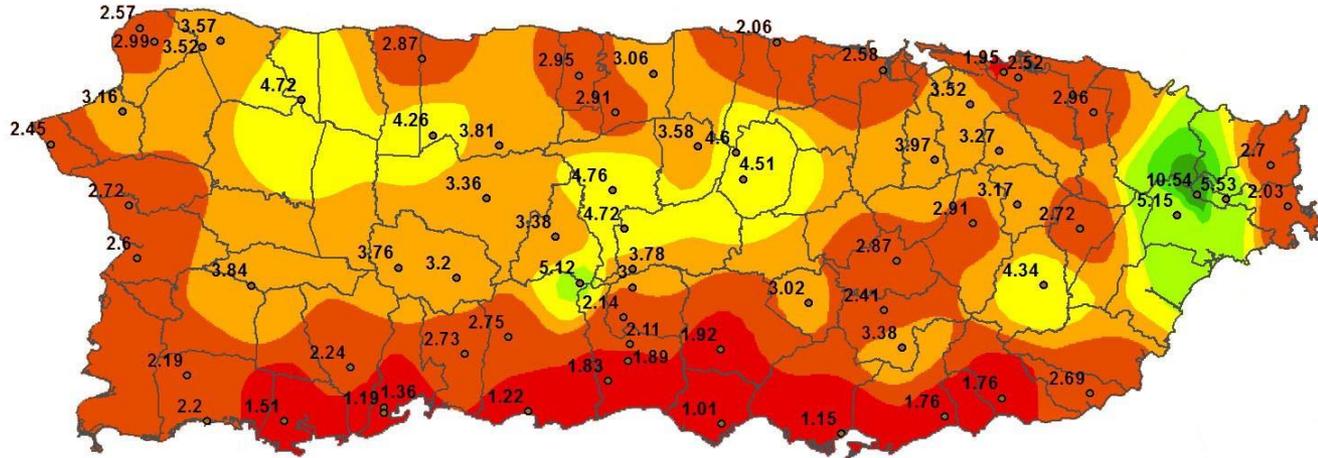
http://www.srh.noaa.gov/sju/?n=pr_usvi_normals



March Normal Rainfall 1981 - 2010



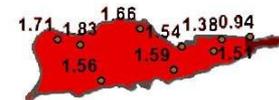
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Monthly Rainfall (Inches)



ST. THOMAS / ST. JOHN



ST. CROIX

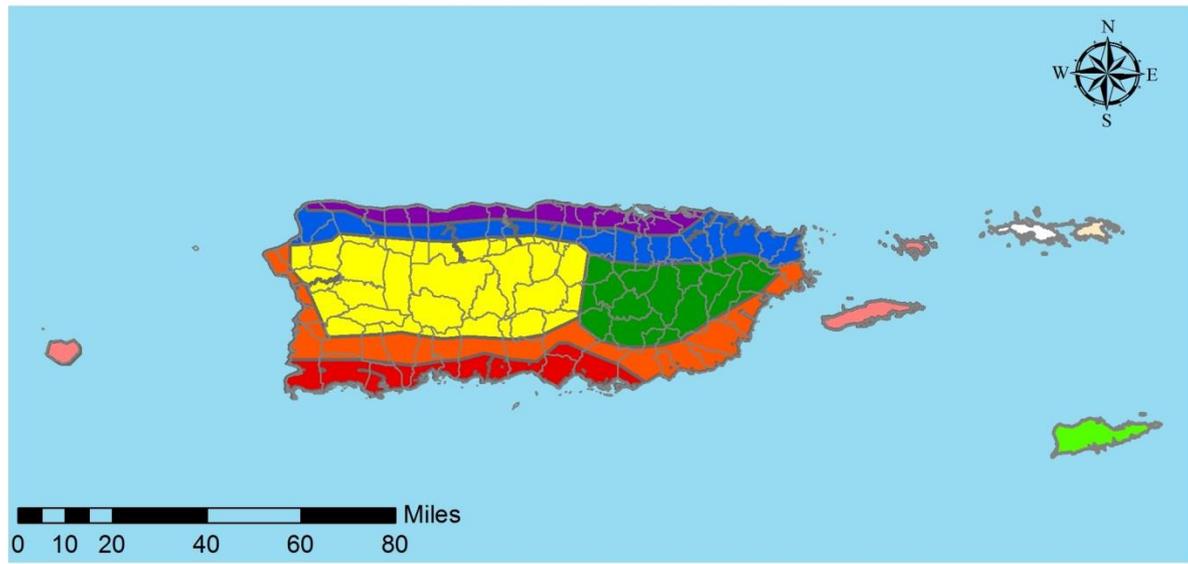




2015 Average Rainfall Accumulation per Climate Zones



Puerto Rico and U.S. Virgin Islands Climate Divisions



NORTH COASTAL - 6601	SOUTHERN SLOPES - 6604	OUTLYING ISLANDS - 6607
SOUTH COASTAL - 6602	EASTERN INTERIOR - 6605	SAINT THOMAS - 6701
NORTHERN SLOPES - 6603	WESTERN INTERIOR - 6606	SAINT CROIX - 6702
		SAINT JOHN - 6703



2015 Average Rainfall Accumulation per Climate Zones

North Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.98	3.81	2.73	---	---	---	---	---	---	---	---	---
NORMAL	4.06	2.96	2.87	---	---	---	---	---	---	---	---	---
%PON PER MONTH	98	129	95	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.98	7.79	10.52	---	---	---	---	---	---	---	---	---
NORMAL	4.06	7.02	9.89	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.06	7.02	9.89	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	98	111	106	---	---	---	---	---	---	---	---	---

South Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.92	1.85	1.79	---	---	---	---	---	---	---	---	---
NORMAL	1.62	1.45	1.78	---	---	---	---	---	---	---	---	---
%PON PER MONTH	119	128	101	---	---	---	---	---	---	---	---	---
ACCUMULATED	1.92	3.77	5.56	---	---	---	---	---	---	---	---	---
NORMAL	1.62	3.07	4.85	---	---	---	---	---	---	---	---	---
ACCUMULATION	1.62	3.07	4.85	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	119	123	115	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Northern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.32	3.80	1.98	---	---	---	---	---	---	---	---	---
NORMAL	4.20	3.03	3.23	---	---	---	---	---	---	---	---	---
%PON PER MONTH	103	125	61	---	---	---	---	---	---	---	---	---
ACCUMULATED	4.32	8.12	10.10	---	---	---	---	---	---	---	---	---
NORMAL	4.20	7.23	10.46	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.20	7.23	10.46	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	103	112	97	---	---	---	---	---	---	---	---	---

Southern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.39	2.84	2.00	---	---	---	---	---	---	---	---	---
NORMAL	2.00	1.86	2.28	---	---	---	---	---	---	---	---	---
%PON PER MONTH	120	153	88	---	---	---	---	---	---	---	---	---
ACCUMULATED	2.39	5.23	7.23	---	---	---	---	---	---	---	---	---
NORMAL	2.00	3.86	6.14	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.00	3.86	6.14	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	120	135	118	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Eastern Interior												
OBSERVED	4.34	5.83	2.70	---	---	---	---	---	---	---	---	---
NORMAL	4.69	3.92	3.90	---	---	---	---	---	---	---	---	---
%PON PER MONTH	93	149	69	---	---	---	---	---	---	---	---	---
ACCUMULATED	4.34	10.17	12.87	---	---	---	---	---	---	---	---	---
NORMAL	4.69	8.61	12.51	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.69	8.61	12.51	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	93	118	103	---	---	---	---	---	---	---	---	---
Western Interior												
OBSERVED	3.60	5.06	3.79	---	---	---	---	---	---	---	---	---
NORMAL	3.90	2.75	3.57	---	---	---	---	---	---	---	---	---
%PON PER MONTH	92	184	106	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.60	8.66	12.45	---	---	---	---	---	---	---	---	---
NORMAL	3.90	6.65	10.22	---	---	---	---	---	---	---	---	---
ACCUMULATION	3.90	6.65	10.22	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	92	130	122	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Mainland PR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.45	4.15	2.71	---	---	---	---	---	---	---	---	---
NORMAL	3.41	2.66	2.94	---	---	---	---	---	---	---	---	---
%PON PER MONTH	101	156	92	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.45	7.60	10.31	---	---	---	---	---	---	---	---	---
NORMAL	3.41	6.07	9.01	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	101	125	114	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Saint Thomas/Saint John	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.46	3.92	1.26	---	---	---	---	---	---	---	---	---
NORMAL	2.72	1.71	1.47	---	---	---	---	---	---	---	---	---
%PON PER MONTH	54	229	86	---	---	---	---	---	---	---	---	---
ACCUMULATED	1.46	5.38	6.64	---	---	---	---	---	---	---	---	---
NORMAL	2.72	4.43	5.90	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.72	4.43	5.90	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	54	121	113	---	---	---	---	---	---	---	---	---

Saint Croix	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.17	1.66	0.96	---	---	---	---	---	---	---	---	---
NORMAL	2.00	1.61	1.53	---	---	---	---	---	---	---	---	---
%PON PER MONTH	109	103	63	---	---	---	---	---	---	---	---	---
ACCUMULATED	2.17	3.83	4.79	---	---	---	---	---	---	---	---	---
NORMAL	2.00	3.61	5.14	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.00	3.61	5.14	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	109	106	93	---	---	---	---	---	---	---	---	---

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March 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Islandwide

Year	Inches
Mar-12	9.19
Mar-72	5.86
Mar-63	5.67
Mar-89	5.49
Mar-61	5.47

Year	Inches
Mar-05	0.35
Mar-57	1.10
Mar-51	1.13
Mar-70	1.14
Mar-59	1.37

**Mean Rainfall:
2.94 inches**

**Total rainfall
accumulation:
2.71 inches**

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March 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

San Juan Metro Area

Year	Inches	Year	Inches
1927	9.38	2005	T
2012	9.27	1951	0.45
1913	7.18	1924	0.46
1958	5.41	1916	0.47
1933	5.24	2014	0.51

**Mean Rainfall:
1.95 inches**

**Total rainfall
accumulation:
1.50 inches**

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Top 5 **Wettest**

Top 5 **Driest**

Cyril E. King Airport St Thomas

Year	Inches	Year	Inches
2004	6.23	2008	0.01
1961	4.37	2003	0.01
2012	3.95	1959	0.36
1975	3.95	1984	0.44
1963	3.73	1991	0.52

Mean Rainfall:
1.42 inches

Total rainfall
accumulation:
1.68 inches

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March 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Henry E. Rohlsen Airport St Croix

Year	Inches	Year	Inches
1985	4.15	1951	0.17
2012	3.81	2003	0.29
1972	3.41	2005	0.39
1988	3.31	2001	0.48
1974	2.66	1981	0.49

Mean Rainfall:
1.56 inches

Total rainfall accumulation:
0.76 inches

March 2015 ended as the 10th driest March on record.

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March 2015 in Perspective

Wettest Days

Station	Inches	Date
HACIENDA CONSTANZA 2W	2.00	3/20/2015
MARICAO FISH HATCHERY	1.60	3/24/2015
JUANA DIAZ CAMP	1.47	3/24/2015
DOS BOCAS	1.40	3/24/2015
TORO NEGRO FOREST	1.28	3/24/2015



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March 2015 Highlights for Primary Climatological Data Sites

Wettest Days

San Juan Metro Area

Inches	Date
0.38	3/2/2015
0.33	3/23/2015
0.21	3/11/2015
0.17	3/4/2015
0.12	3/3/2015

Cyril E. King AP/St Thomas

Inches	Date
0.89	3/16/2015
0.20	3/11/2015
0.13	3/4/2015
0.11	3/13/2015
0.06	3/9/2015

Henry E. Rohlsen AP/St. Croix

Inches	Date
0.15	3/11/2015
0.13	3/22/2015
0.13	3/16/2015
0.09	3/9/2015
0.06	3/1/2015

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Data retrieved from COOP stations and primary climatological data sites

TEMPERATURE

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

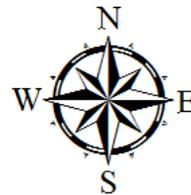
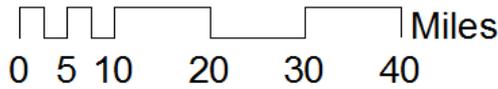
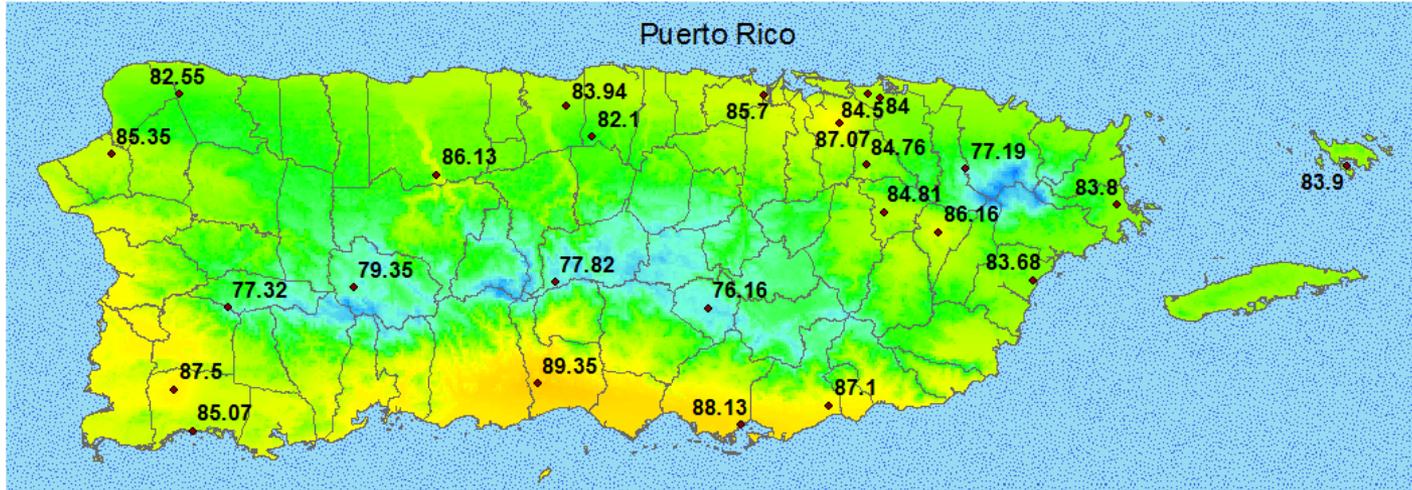
Following WMO criteria: Less than 10% of missing values





2015 March Mean Maximum Temperatures

National Weather Service WFO San Juan
Data is preliminary



Temperature Range °F

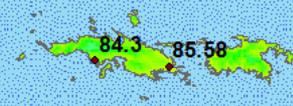


High : 100

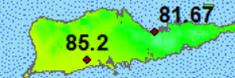
80

Low : 60

Saint Thomas / Saint John



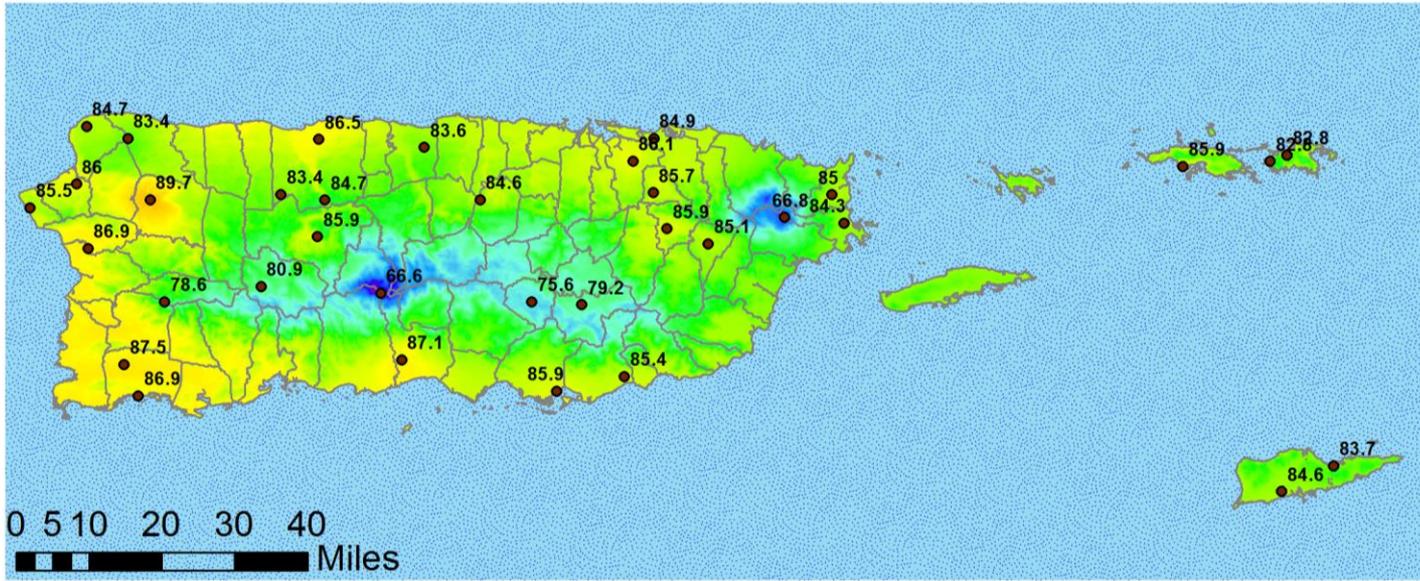
Saint Croix





March Normal Maximum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 100

80

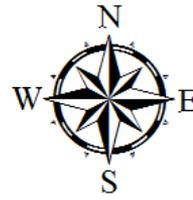
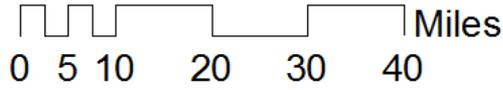
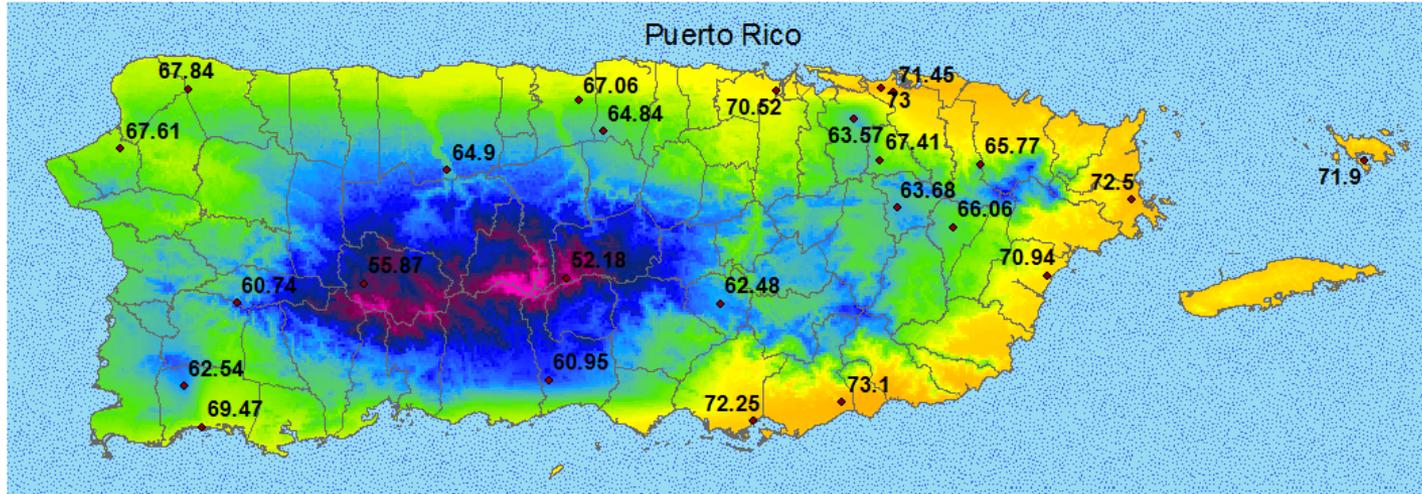
Low : 60



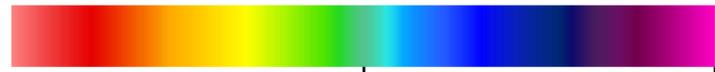


2015 March Mean Minimum Temperatures

National Weather Service WFO San Juan
Data is preliminary



Temperature Range °F

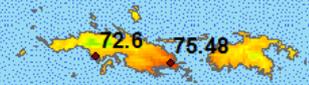


High : 80

65

Low : 50

Saint Thomas / Saint John



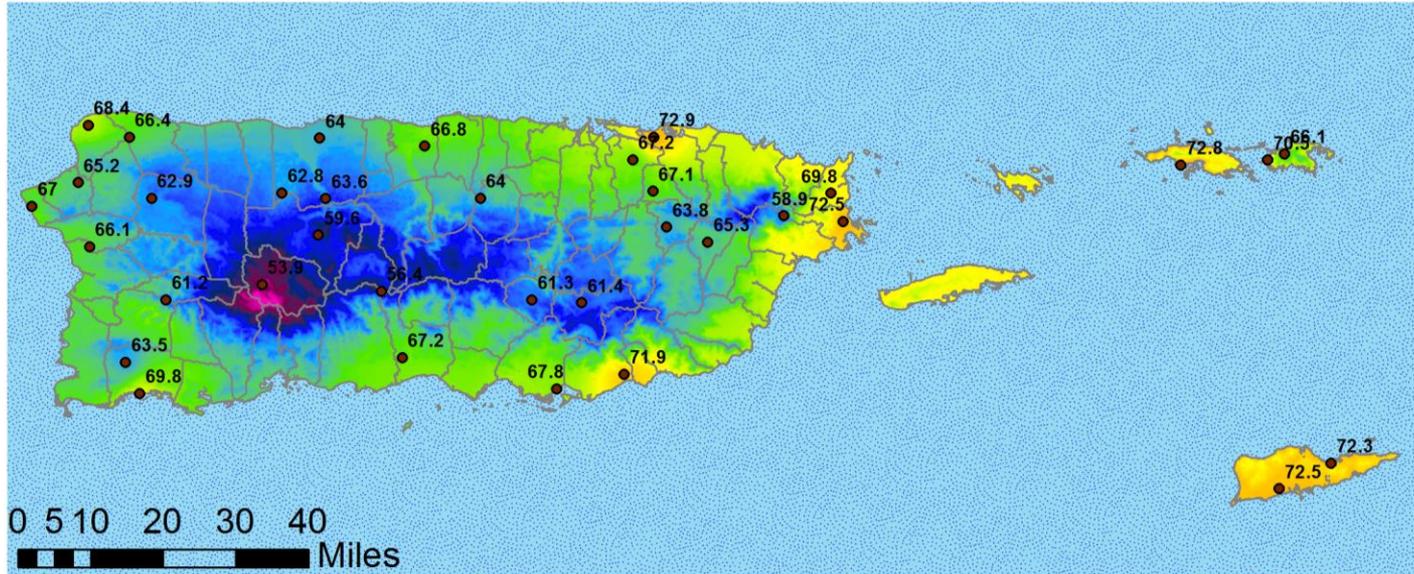
Saint Croix





March Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 80

65

Low : 50



March 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

Islandwide

Year	°F
Mar-10	76.9
Mar-07	76.6
Mar-83	76.5
Mar-47	76.3
Mar-58	75.9

Year	°F
Mar-40	67.5
Mar-43	67.6
Mar-41	68.2
Mar-00	71.2
Mar-76	72.1

Mean Temperature:
74.3 °F

**Mar 2015 mean
temperature 75.3 °F**

Following are not included because do not WMO meet criteria , 56, 57, 59, 61, 67, 73, 79, 80, 81, 82.



March 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest / Top 5 Coolest San Juan Metro Area

Year	°F
1983	82.2
1981	80.9
2010	80.7
2014	80.1
1984	80.1

Year	°F
1951	73.8
1907	74
1939	74.1
1922	74.1
1917	74.1

Mean Temperature:
78.9 °F

**Mar 2015 mean
temperature 78.7 °F**

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March 2015 in Perspective: Mean Avg. Temperature

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Top 5 **Warmest** Top 5 **Coollest**
Cyril E. King Airport St Thomas

Year	°F
1993	81.8
1994	81.7
1979	81.3
2010	81.0
1996	81.0

Year	°F
2009	76.5
2000	76.5
1955	76.6
2011	77.0
1957	77.2

Mean Temperature:
79.4 °F

**Mar 2015 mean
temperature 78.4 °F**

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March 2015 in Perspective: Mean Avg. Temperature

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Top 5 **Warmest** Top 5 **Coollest**
Henry E. Rohlsen Airport St Croix

Year	°F
2010	80.6
1983	80.6
1973	80.5
1998	80.3
1958	79.9

Year	°F
1951	75.8
1982	75.9
1955	75.9
1979	76.1
2011	76.8

Mean Temperature:
78.6 °F

**Mar 2015 mean
temperature 78.4 °F**

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March 2015 Highlights

Highest **Maximum** Temps

Station	Value (°F)	Date
PONCE 4 E	92	3/13/2015
TOA BAJA LEVITOWN	92	3/28/2015
LAJAS SUBSTATION	90	3/14/2015
AGUIRRE	90	3/29/2015
DOS BOCAS	90	3/29/2015

Lowest **Minimum** Temps

Station	Value (°F)	Date
TORO NEGRO FOREST	48	3/31/2015
PONCE 4 E	57	3/17/2015
LAJAS SUBSTATION	59	3/15/2015
MARICAO 2 SSW	59	3/31/2015
GURABO SUBSTN	60	3/15/2015

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2015 Highlights for Primary Climatological Data Sites

Spring

	Mar	Apr	May	Season	YTD
San Juan	---	---	---	---	6th warmest start to a year
Saint Thomas	---	---	---	---	Wettest start to a year
Saint Croix	10th driest	---	---	---	10th driest start to a year

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2015 Highlights for Primary Climatological Data Sites

Winter

	Dec (2014)	Jan	Feb	Season
San Juan	---	3 rd warmest	6 th warmest	5 th warmest
Saint Thomas	---	---	wettest February and 6 th wettest month	wettest
Saint Croix	8 th wettest	14 th driest	6 th warmest	---

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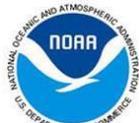
LOOKING AHEAD TOWARD APRIL



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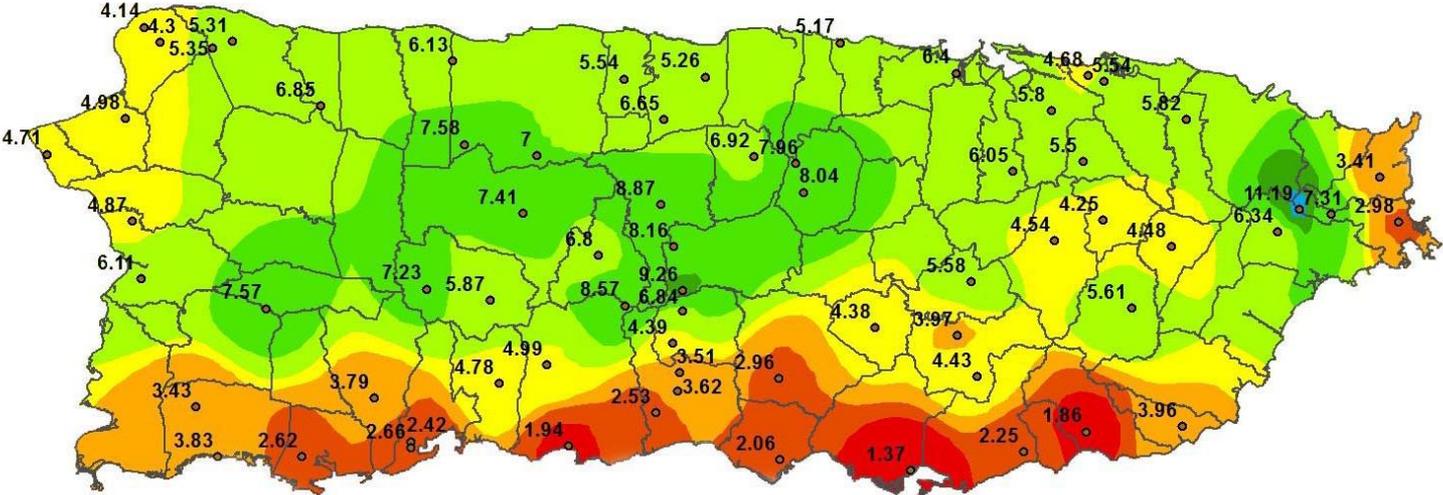




April Normal Rainfall 1981 - 2010



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Monthly Rainfall (Inches)

0 - 1	5 - 6	10 - 11	15 - 16
1 - 2	6 - 7	11 - 12	16 - 17
2 - 3	7 - 8	12 - 13	17 - 18
3 - 4	8 - 9	13 - 14	18 - 19
4 - 5	9 - 10	14 - 15	19 - 20

ST. THOMAS / ST. JOHN



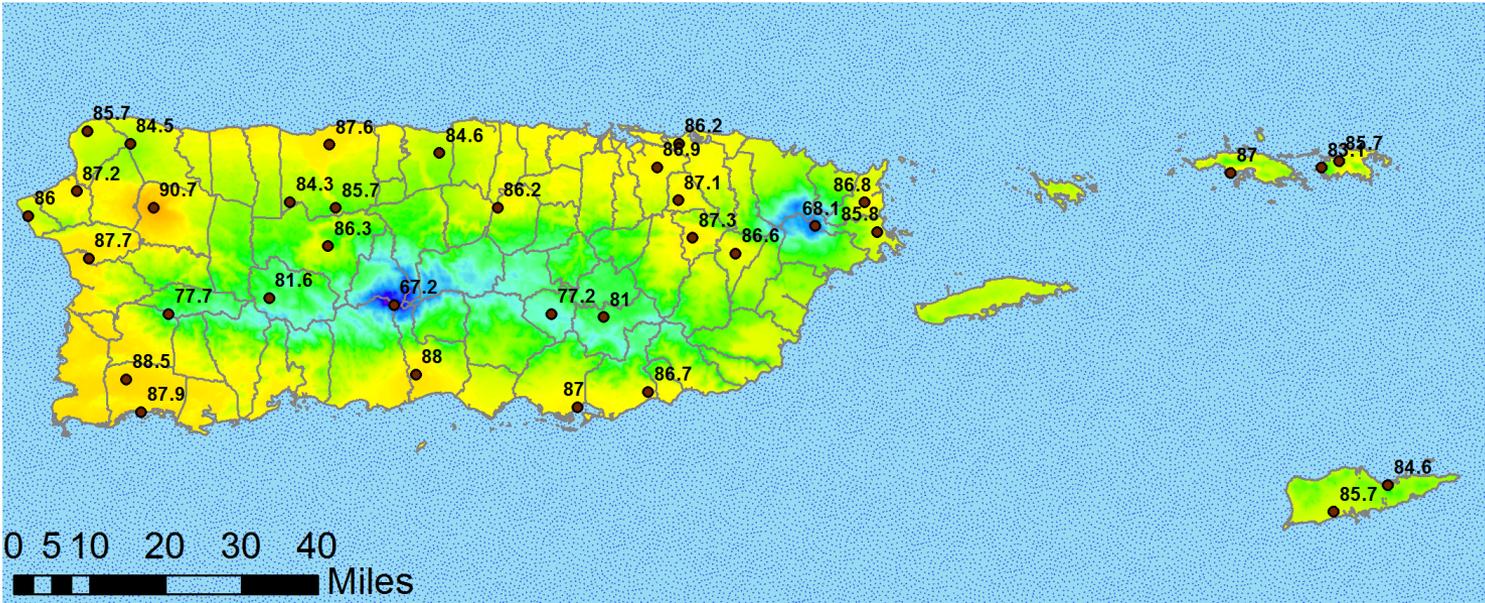
ST. CROIX





April Normal Maximum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 100

80

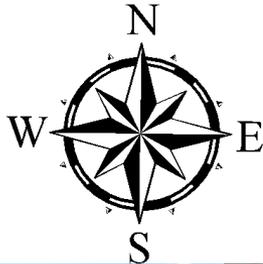
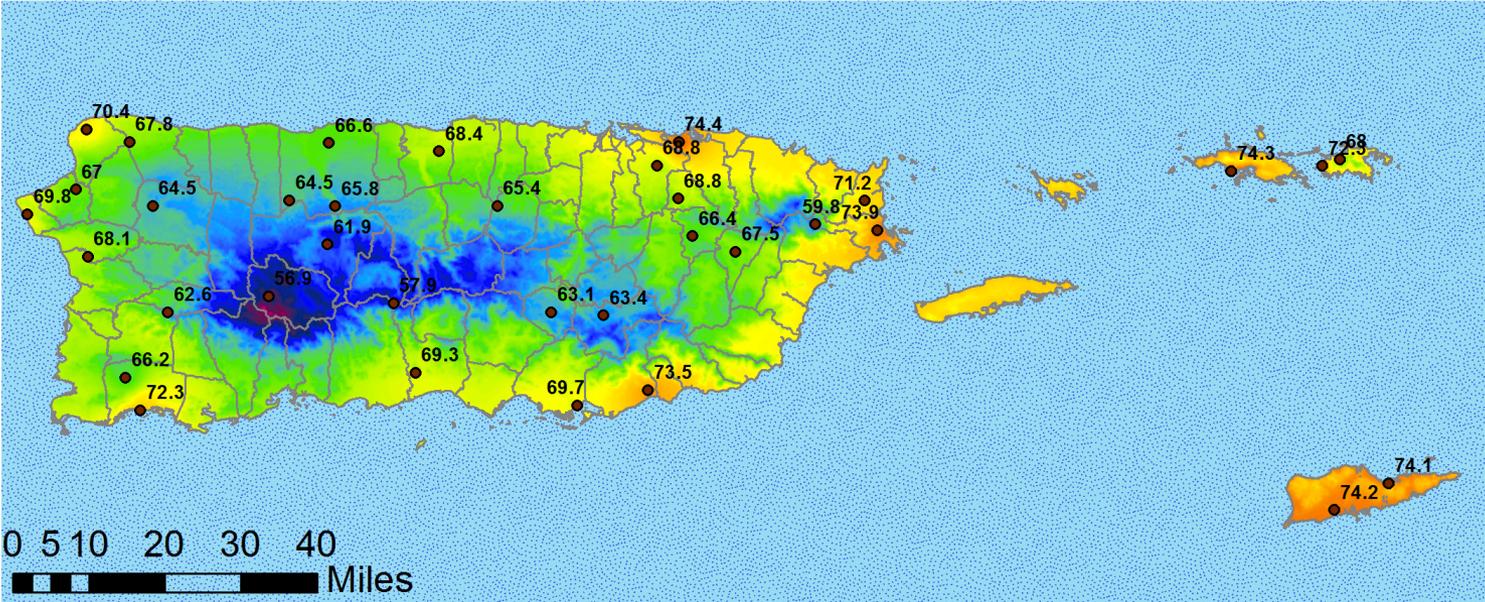
Low : 60





April Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



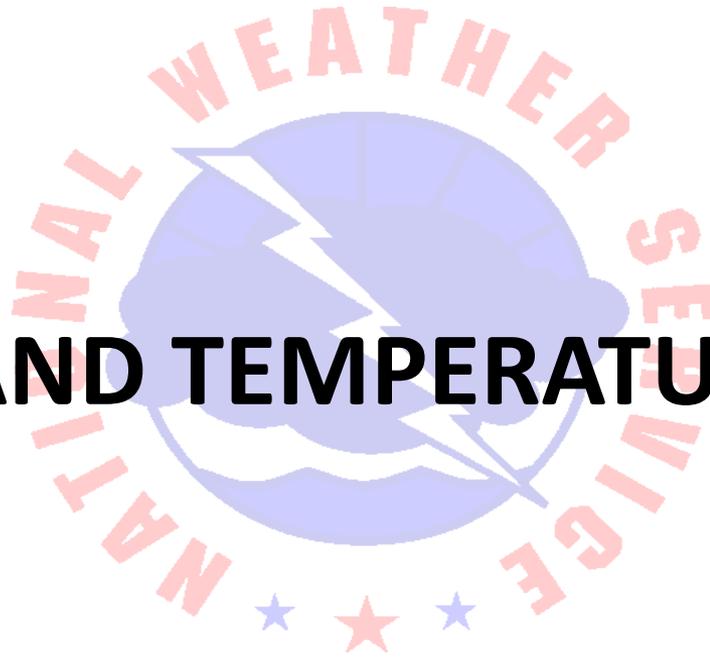
High : 80

65

Low : 50



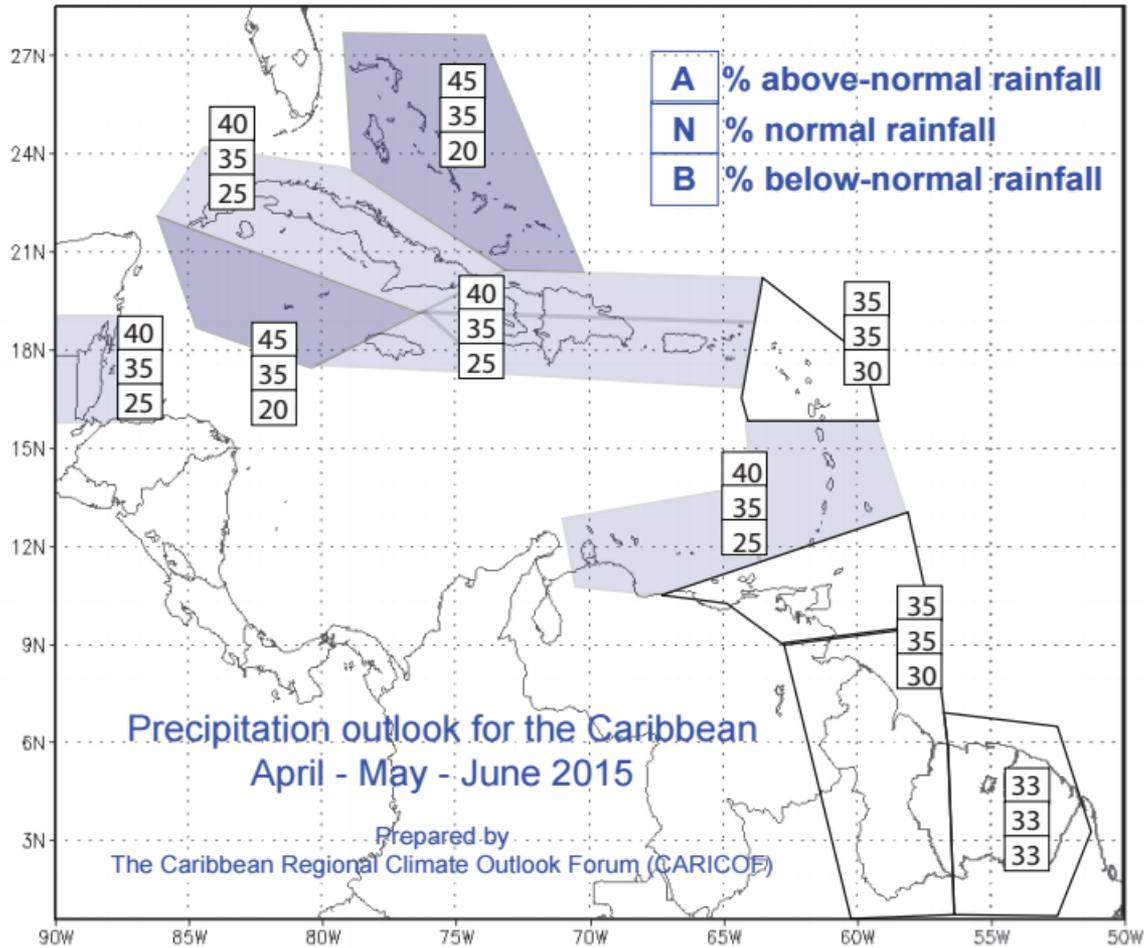
RAINFALL AND TEMPERATURE OUTLOOK



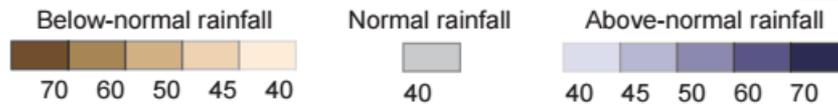
WFO

SAN JUAN



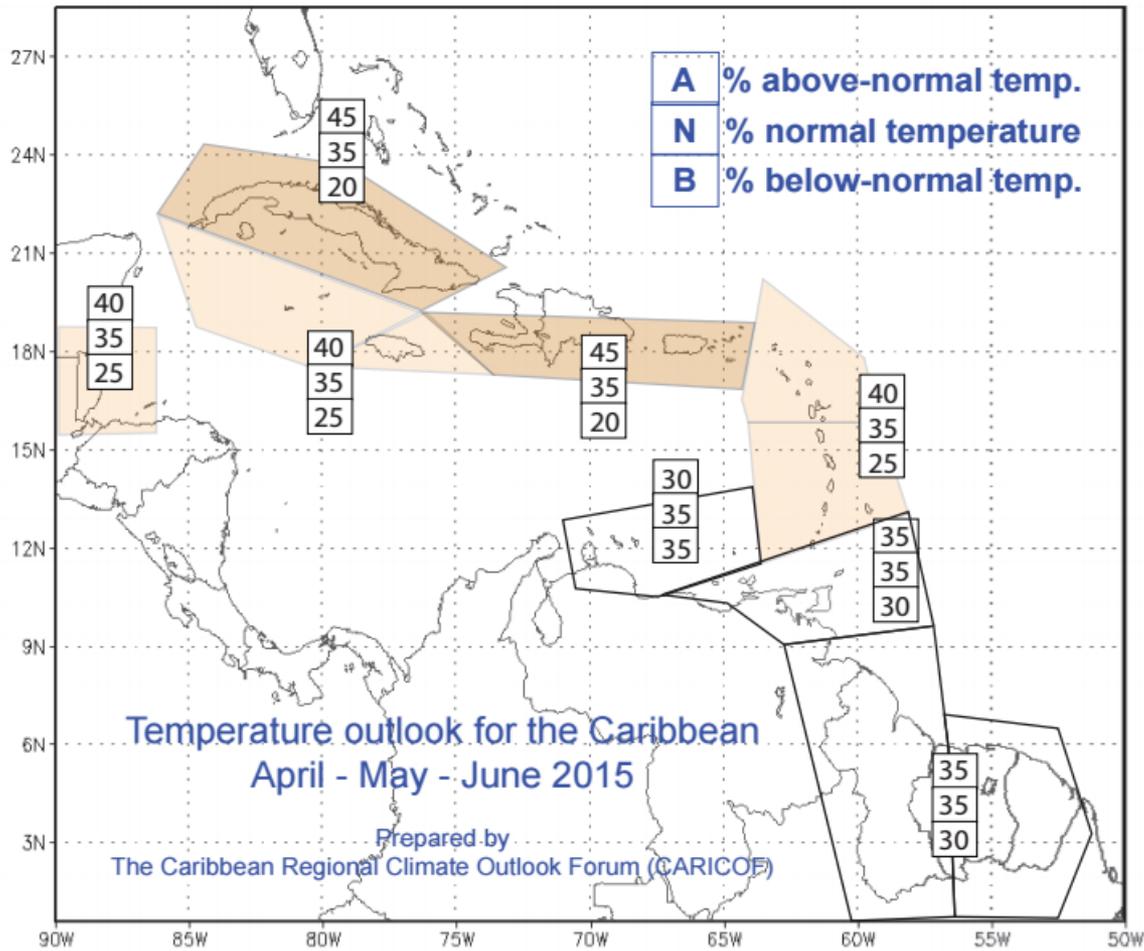


Probability (%) of Most Likely Category



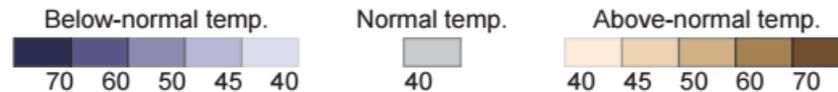
<http://www.cimh.edu.bb/?p=precipoutlook>

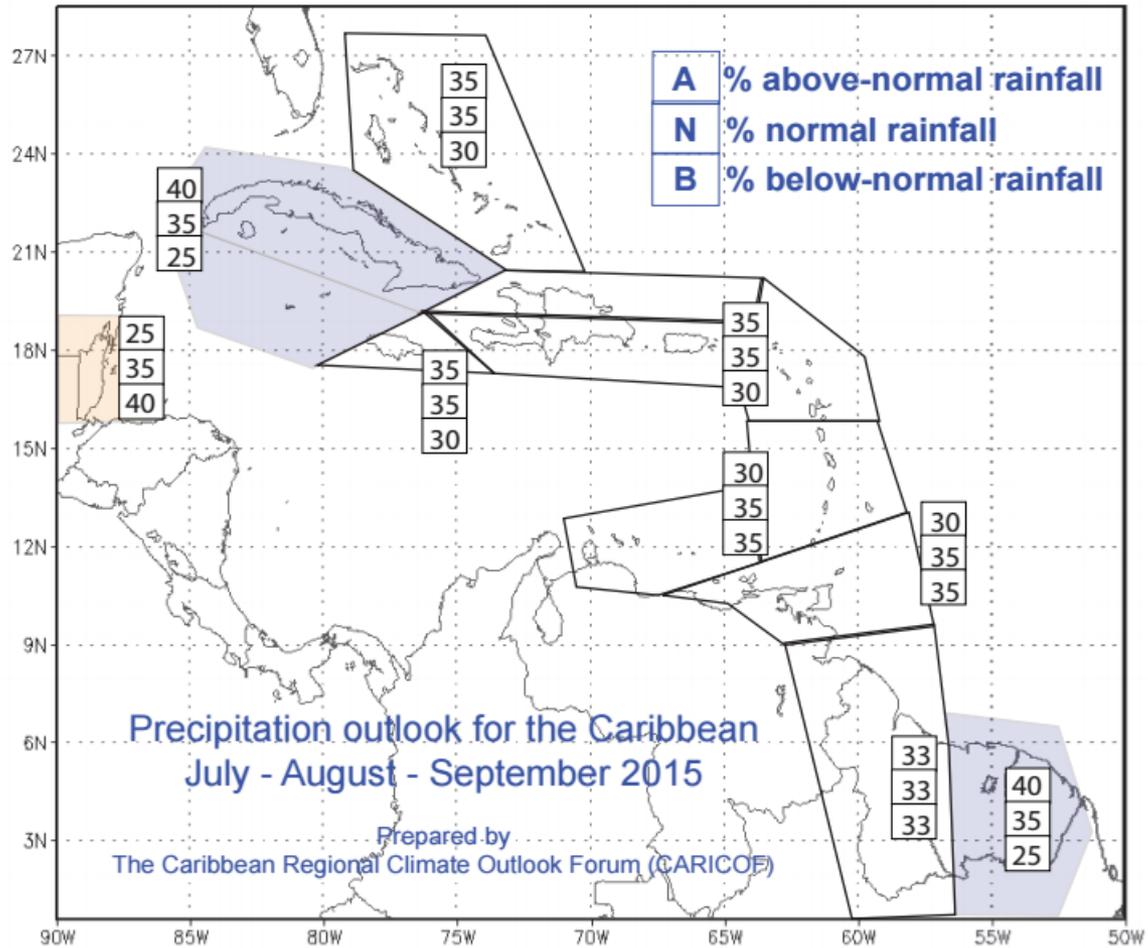




Probability (%) of Most Likely Category

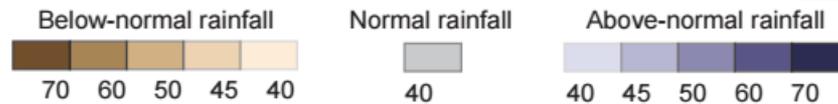
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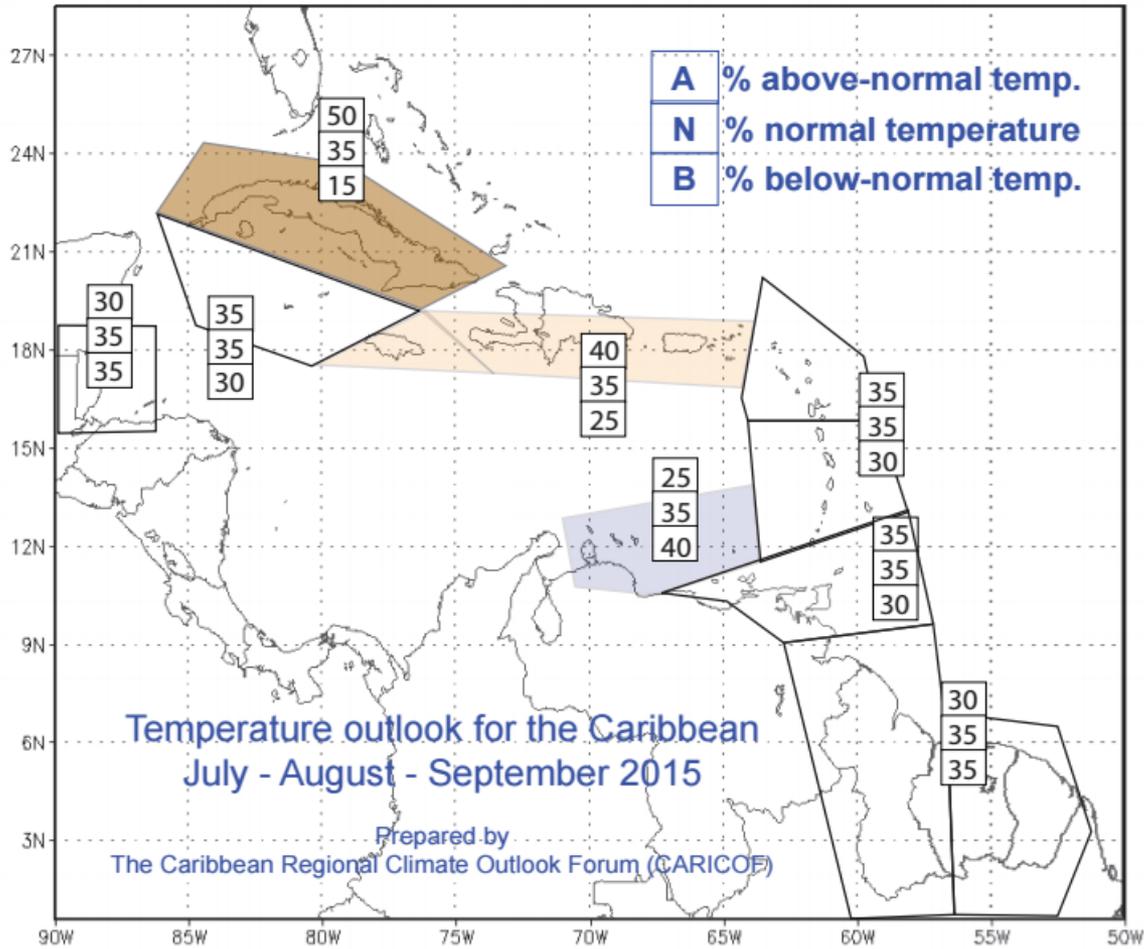




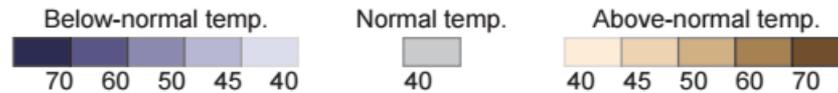
Probability (%) of Most Likely Category

<http://www.cimh.edu.bb/?p=precipoutlook>





Probability (%) of Most Likely Category



<http://www.cimh.edu.bb/?p=precipoutlook>

