

Climate and Hydrology Monthly Report for Puerto Rico and the US Virgin Islands Valid for January 2025

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JanuaryClimate Summary for Primary Climate Sites

San Juan Area (Period of Record: 1898 to present)

Highest: **87** °F on the 27 & 29th Lowest: **70** °F on the 12th Average: 79.6 °F (+2.0; above normal) Rain Total: 3.51" (-0.56; below normal)

Days with $T_{max} \ge 90 \text{ °F: 0}$ Nights with $T_{min} \ge 80 \text{ °F: 0}$ Days with Rain (>= 0.01"): 20

Rankings: 4th warmest 56th wettest

Remarks:

11 daily warmest minimum records set or tied.

St. Thomas

(Period of Record: 1953 to present)

Highest: **87** °F on the 30th Lowest: **67** °F on the 12th Average: 79.1 °F (+0.3; above normal) Rain Total: 1.11" (-1.53; below normal)

Days with $T_{max} \ge 90 \text{ °F: 0}$ Nights with $T_{min} \ge 80 \text{ °F: 0}$ Days with Rain (>= 0.01"): 17

Rankings: 12th warmest 11th driest

Remarks:

Two days of missing precipitation data.



St. Croix

(Period of Record: 1951 to present)

Highest: **89** °F on the 19, 25th Lowest: **67** °F on the 12, 13th Average: 79.9 °F (+2.2; above normal) Rain Total: M

Days with $T_{max} \ge 90 \text{ °F: 0}$ Nights with $T_{min} \ge 80 \text{ °F: 0}$ Days with Rain (>= 0.01"): M

Rankings:

4th warmest

Remarks:

No precipitation estimates due to a sensor malfunction.





Generated 2/2/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

Generated 2/6/2025 at HPRCC using provisional data.

• Temperatures across the majority of the local sites have been mostly above normal. The COOP station with the highest daily maximum temperature was Lajas Substation with **93F**.

NOAA Regional Climate Centers

Image Captions:

Left - Observed Average Temperature for Puerto Rico and US Virgin Islands (COOP) Right - Departure from normal temperature for Puerto Rico and US Virgin Islands (COOP) Data Courtesy High Plains Regional Climate Center/NWS COOP Stations.





Precipitation (in) 1/1/2025 - 1/31/2025



Generated 2/2/2025 at HPRCC using provisional data. NOAA Regional Climate Centers Most stations Puerto Rico and the Virgin Islands ended drier than normal, with some exceptions along the north-central and eastern Puerto Rico. The COOP station with the highest monthly rainfall accumulation was Palmarejo in Vega Baja, with 7.82".

Image Captions: Left - Observed Average Temperature for Puerto Rico and US Virgin Islands (COOP) Right - Departure from normal temperature for Puerto Rico and US Virgin Islands (COOP) Data Courtesy High Plains Regional Climate Center/NWS COOP Stations.

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Departure from Normal Precipitation (in) 1/1/2025 - 1/31/2025

Estimated Rainfall

Estimated Rainfall was obtained from MRMS NSSL

- The highest rainfall accumulations were observed across north-central and northeastern Puerto Rico, with localized amounts ranging from 10 to 15 inches.
- Most of the island recorded rainfall totals between 2 to 6 inches, with higher amounts along the northern slopes and interior regions.
- Lower accumulations (1 to 3 inches) were observed across southwestern Puerto Rico, particularly near Guánica, Cabo Rojo, and parts of the western coastal areas.

Image Captions: Estimated Rainfall for the month of January. This map is courtesy of the NWS SJU GIS Team.

Rainfall (Inches)

Missing Data	
< 0.01	
0.01 - 0.09	
0.1 - 0.24	
0.25 - 0.49	
0.50 - 0.99	
1.00 - 1.49	
1.50 - 1.99	
2.00 - 2.99	
3.00 - 3.99	
4.00 - 4.99	
5.00 - 5.99	
6.00 - 7.99	
8.00 - 9.99	
10.00 - 14.99	
15.00 - 19.99	
≥ 20	

Departure from Normal Rainfall

Estimated Departure from normal was obtained from <u>NWPS</u>

- Above-normal precipitation was observed across north-central and southeastern Puerto Rico, with the most significant positive departures in north-central areas, where values ranged from 4 to 8 inches above normal.
- Near-normal to mostly below-normal rainfall was recorded across western and southern Puerto Rico, with deficits generally ranging from -1 to -2 inches.

Image Captions:

Estimated Departure from Normal Rainfall for Puerto Rico during the month of January. This map is courtesy of the NWS SJU GIS Team. *NWPS does not provide rainfall departure from normal for the USVI.

Missing data Less than -8 -7.99 to -5 -4.99 to -4 -3.99 to -3 -2.99 to -2 -1.99 to -1 -0.99 to -0.5 -0.49 to 0.49 0.5 to 0.99 1 to 1.99 2 to 2.99 3 to 3.99 4 to 4.99 5 to 7.99

Hydrologic Conditions and Impacts The latest soil monthly streamflow for Puerto Rico can be found on WaterWatch

• The 28-day average streamflow from the USGS river gauge network indicates most streamflows running near normal or just above normal, with below normal streams observed in San Juan and Cidra. For Reservoir levels, click <u>here</u>.

Image Caption: January 2025 compared to historical streamflows for Puerto Rico.

Non-Routine Hydrologic Products Issued	Products issued for the month		
Hydrologic Outlooks (SJUESFSJU)	0		
Flood Watches (<u>SJUFFASJU</u>)	0		
Flood Warnings (<u>SJUFLWSJU</u>)	0		
Flash Flood Warnings (<u>SJUFFWSJU</u>)	0		
Urban/Small Stream Flood Advisories (SJUFLSSJU)	7		
Local Storm Reports (SJULSRSJU)	13		

Latest Monthly Average Streamflow from USGS

		Explan	nation - F	Percent	ile classe	s	
		•				•	0
w	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above	Much above normal		

The latest data retrieved from PRAGWATER indicates that soils are drying out along the south, west, and east interior. Vegetation stress is also worsening along the southern plains and in the northwest.

Image Caption: (Left) Crop Stress Factor for Puerto Rico. (Right) Root Zone Soil Saturation Fraction. Soil saturation: 1=Saturated. Crop Stress Factor: 0=high

Soil Saturation

The latest soil moisture information for Puerto Rico can be found on **PRAGWATER**

U.S. Drought Monitor

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DROUGHT CONDITIONS : No drought or dryness is currently observed in the islands.

U.S. Drought Monitor

Image Caption: U.S. Drought Monitor valid 8am EDT Dec 24th.

Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT December 24th, 2024.

The North American Multi-Model **Ensemble (NMME)** shows a chance of 40-50% of near normal precipitation for the spring months (March-April-May) across the northeastern Caribbean.

Image caption: NMME precipitation forecast issued January 2025. Valid March-April-May 2025.

Based on the North American Multi-Model Ensemble (NMME), there is a \geq 70% chance of observing above normal temperature for the period of March-April-May 2025. The temperatures are forecast to be nearly 0.5-1° C (0.9-1.8 °F) above normal.

Image caption: NMME temperature forecast issued January 2025. Valid March-April-May 2025.

2025-April 30, 2025

Based on the expected conditions, no drought is expected to develop in Puerto Rico in the upcoming three months.

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Drought Is Predicted To...

Persist

Seasonal (3-Month) Drought Outlook for January 31,

Image Caption: U.S. Seasonal Drought Outlook Valid for January 31st to April 30th, 2025.