

# Climate and Hydrology Monthly Report for Puerto Rico and the US Virgin Islands

Valid for March 2025

Issued By: WFO San Juan, PR

Contact Information: sr-sju.webmaster@noaa.gov





### March Climate Summary for Primary Climate Sites

#### San Juan Area

(Period of Record: 1898 to present)

Highest: 91 °F on the 11<sup>th</sup>

Lowest: **73** °F on the 2, 15, 23, 27, 30 &

31<sup>st</sup>

Average: 80.6 °F (+2.0; above normal)

Rain Total: 4.03" (+1.85; above normal)

Days with  $T_{max} >= 90 \, ^{\circ}F$ : 4

Nights with  $T_{min} >= 80 \, ^{\circ}F: 0$ 

Days with Rain (>= 0.01"): 17

#### Rankings:

5<sup>th</sup> warmest

21<sup>st</sup> wettest

#### **Remarks:**

6 daily warmest minimum records set or tied.

#### St. Thomas

(Period of Record: 1953 to present)

Highest: 89 °F on the 21st

Lowest: 73 °F on the 14<sup>th</sup>

Average: 81.4 °F (+2.3; above normal)

Rain Total: 2.47" (+0.61; below normal)

Days with  $T_{max} >= 90 \, ^{\circ}F: 0$ 

Nights with  $T_{min} >= 80 \, ^{\circ}F: 0$ 

Days with Rain (>= 0.01"): 12

#### Rankings:

3<sup>th</sup> warmest

13<sup>th</sup> wettest

#### Remarks:

6 daily warmest minimum records set or tied

#### St. Croix

(Period of Record: 1951 to present)

Highest: 89 °F on the 21-28 & 30<sup>th</sup>

Lowest: 68 °F on the 20<sup>th</sup>

Average: 80.4 °F (+2.2; above normal)

Rain Total: M

Days with  $T_{max} >= 90 \, ^{\circ}F: 0$ 

Nights with  $T_{min} >= 80 \, ^{\circ}F: 0$ 

Days with Rain (>= 0.01"): M

#### Rankings:

5<sup>th</sup> warmest

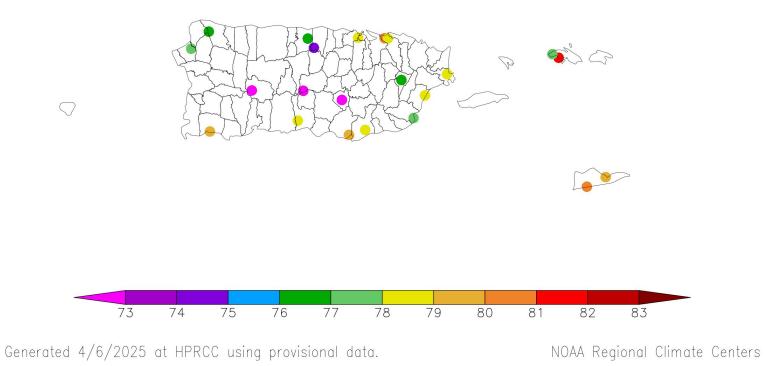
#### **Remarks:**

3 days of missing data in February. No precipitation estimates due to a sensor malfunction.

## Observed Temperature

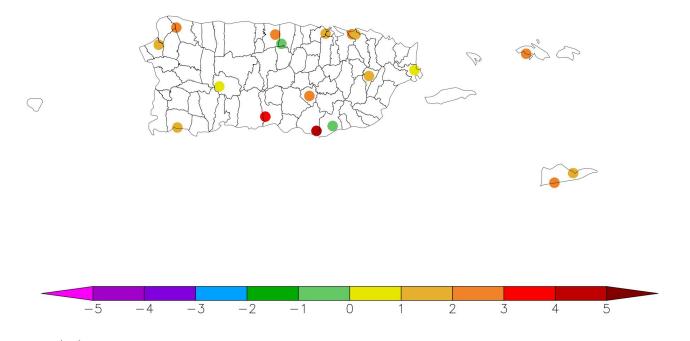
Link to generate the latest ACIS Climate Maps

Temperature (F) 3/1/2025 - 3/31/2025



• 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 92°F.

Departure from Normal Temperature (F) 3/1/2025 - 3/31/2025



Generated 4/6/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

Left - Observed Average Temperature for Puerto Rico and US Virgin Islands (COOP)

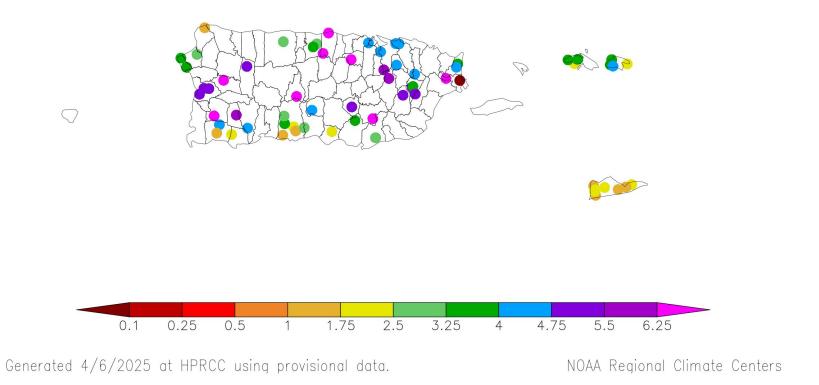
Right - Departure from normal temperature for Puerto Rico and US Virgin Islands (COOP)

Data Courtesy High Plains Regional Climate Center/NWS COOP Stations.

## Observed Rainfall

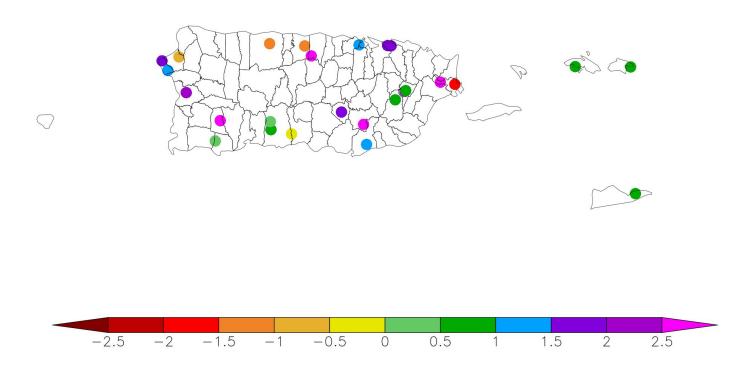
### Link to generate the latest ACIS Climate Maps

Precipitation (in) 3/1/2025 - 3/31/2025



Most stations in Puerto Rico and the U.S. Virgin Islands ended above normal, with some exceptions along the north-central Puerto Rico. The COOP station with the highest monthly rainfall accumulation was **Paraíso** in Ceiba, with **10.12**". The CoCoRaHS station with the highest monthly rainfall accumulation was **Bayamón 3.9SSE** with **8.26**".

Departure from Normal Precipitation (in) 3/1/2025 - 3/31/2025



Generated 4/6/2025 at HPRCC using provisional data.

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.



## Estimated Rainfall

Estimated Rainfall was obtained from <a href="NWPS">NWPS</a> (Puerto Rico), and <a href="CoCoraHS">CoCoraHS</a> (Virgin Islands)

- The highest rainfall accumulations were observed across El Yunque rainforest, and the central and western interior. Rainfall accumulations mostly ranged from 10 to 15".
- Lower accumulations were observed in the southern plains (1-3") and the northwest, with general amounts of 2 to 5".
- Rainfall diminishes across the Virgin Islands, but the area still received 1 to 5", especially in St. John.

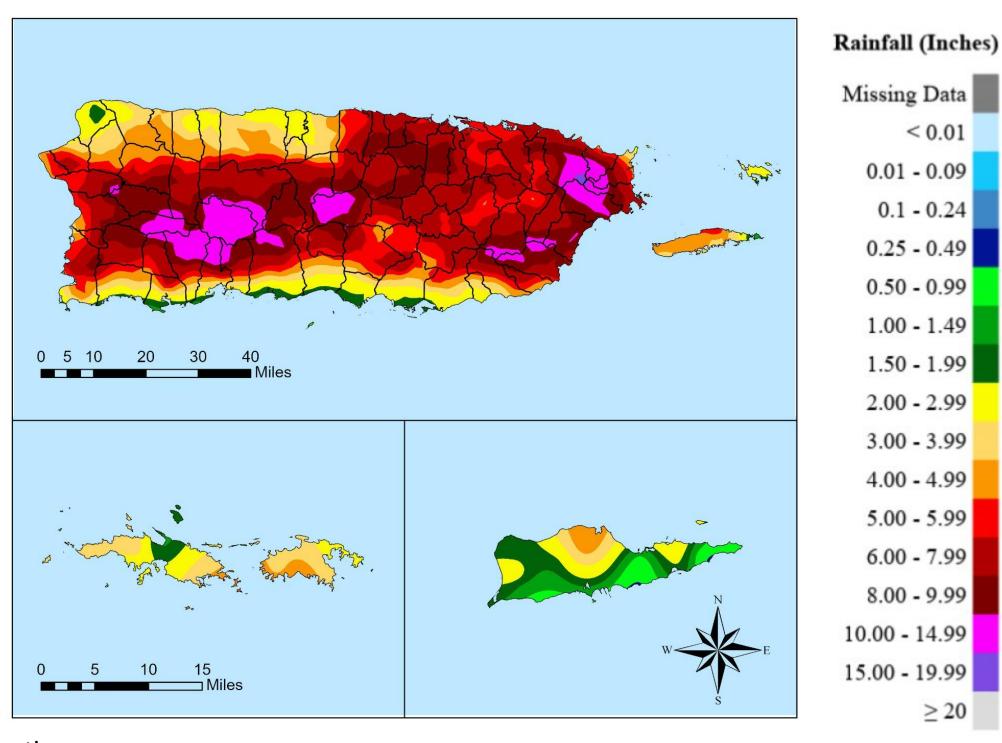


Image Captions:

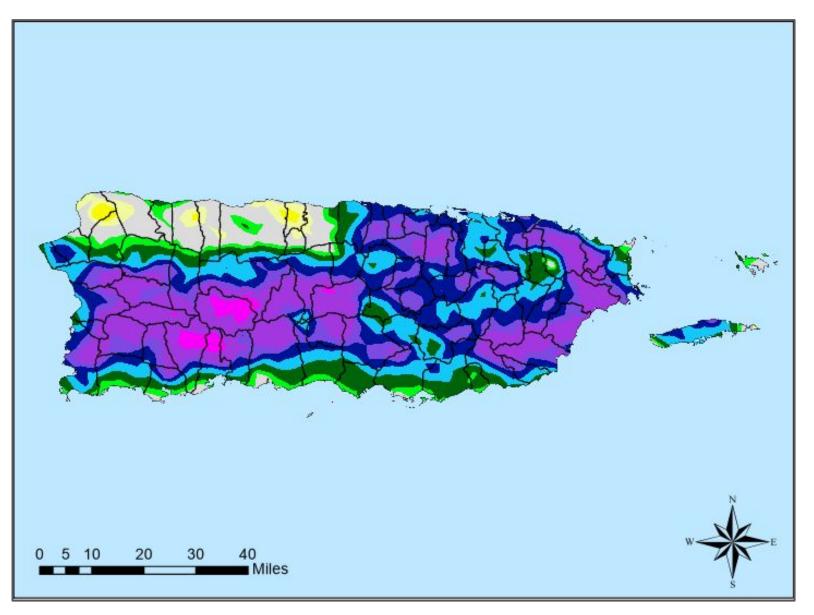
Estimated Rainfall for the month of March. This map is courtesy of the NWS SJU GIS Team.



## Departure from Normal Rainfall

Estimated Departure from normal was obtained from NWPS.

- Above-normal precipitation was observed across most of Puerto Rico, with a big swath of area showing a surplus of 5 to 8"+.
- Even though the southern plains are showing some dryness, rainfall is still about 1 to 2 inches above normal for that area.
- A slight rainfall deficit persists for the north-central and northwestern Puerto Rico.



-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

Missing data

Less than -8

-7.99 to -5

#### Image Captions:

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

## EATHER STATES

## 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 to much above normal. For Reservoir levels, click <u>here</u>.

Non-Routine Hydrologic Products Issued	Products issued for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	0
Flood Warnings ( <u>SJUFLWSJU</u> )	2
Flash Flood Warnings ( <u>SJUFFWSJU</u> )	4
Urban/Small Stream Flood Advisories (SJUFLSSJU)	40
Local Storm Reports (SJULSRSJU)	36

### Latest Monthly Average Streamflow from USGS

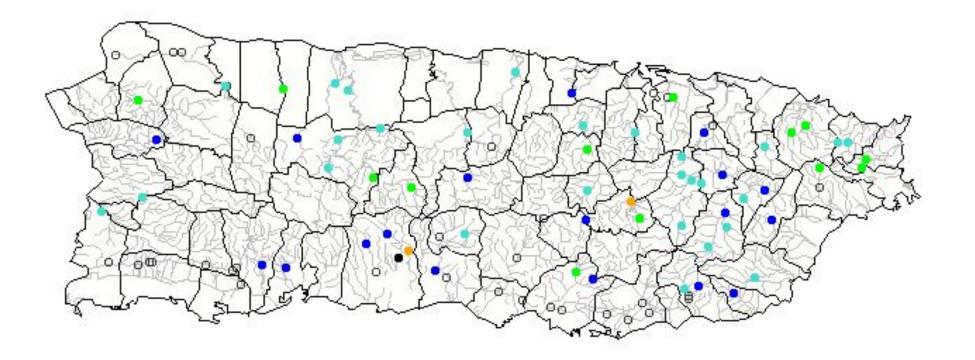


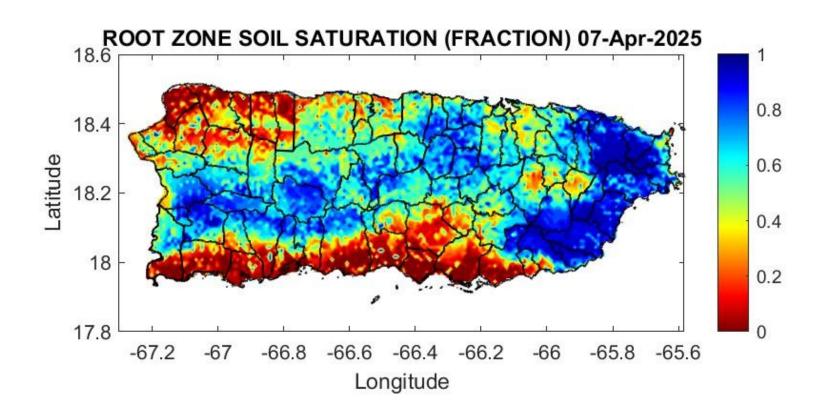
Image Caption: March 2025 compared to historical streamflows for Puerto Rico.

Explanation - Percentile classes								
•	•		•		•	•		
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked	
	Much below normal	Below normal	Normal	Above normal	Much above normal			

## Soil Saturation

The latest soil moisture information for Puerto Rico can be found on <a href="PRAGWATER">PRAGWATER</a>

The latest data retrieved from PRAGWATER indicate drying soils for the south and northwest. Vegetation stress is also observed along the southern plains and in the northwest corner.



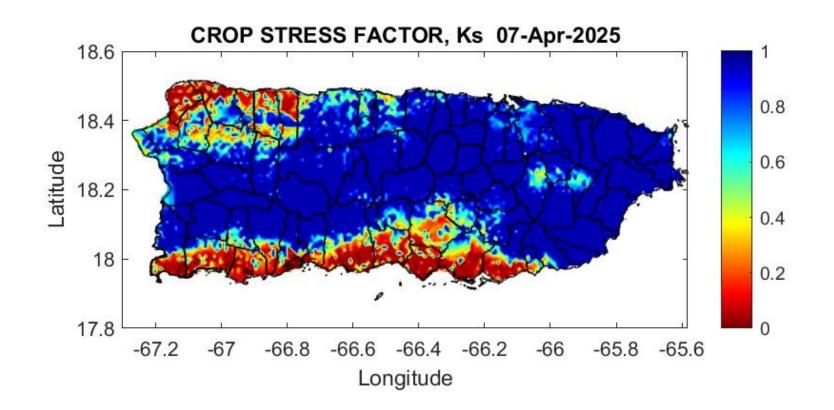
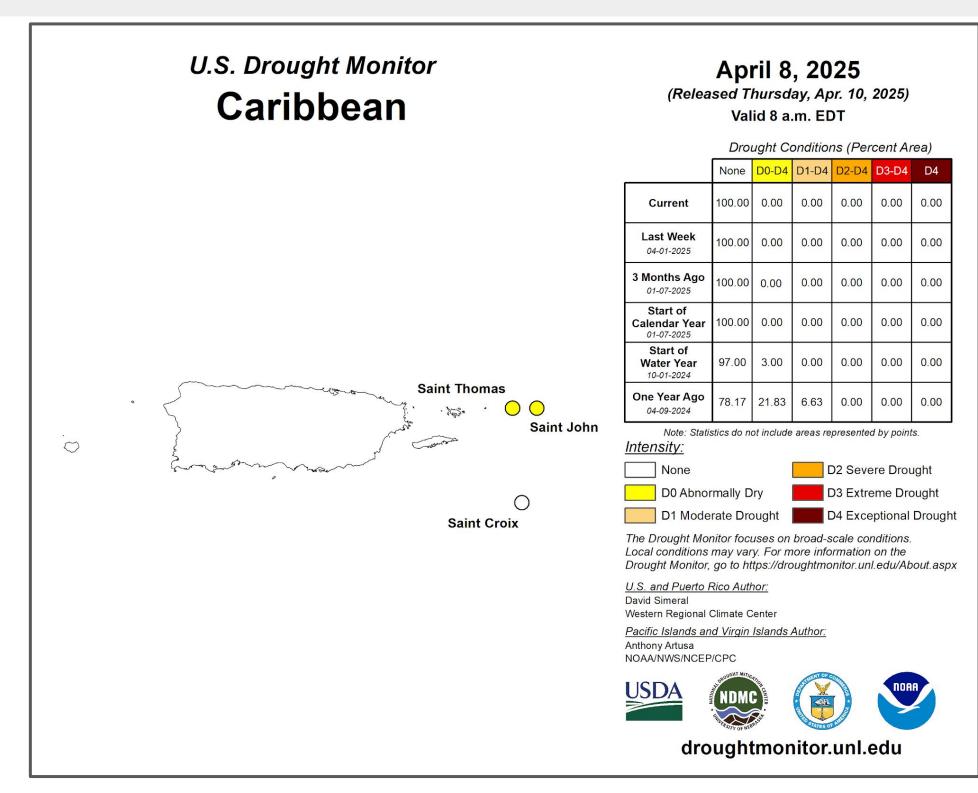


Image Caption: (Left) Crop Stress Factor for Puerto Rico. (Right) Root Zone Soil Saturation Fraction. Soil saturation: 1=Saturated. Crop Stress Factor: 0=high

## U.S. Drought Monitor

Link to the <u>latest U.S. Drought Monitor</u> for the Caribbean

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





## Recent Change in Drought Intensity

Link to the latest 4-week change map for the Caribbean

### Four Week Drought Monitor Class Change.

 Over the past month, conditions have degraded to abnormally dry across St. Thomas and St. John.

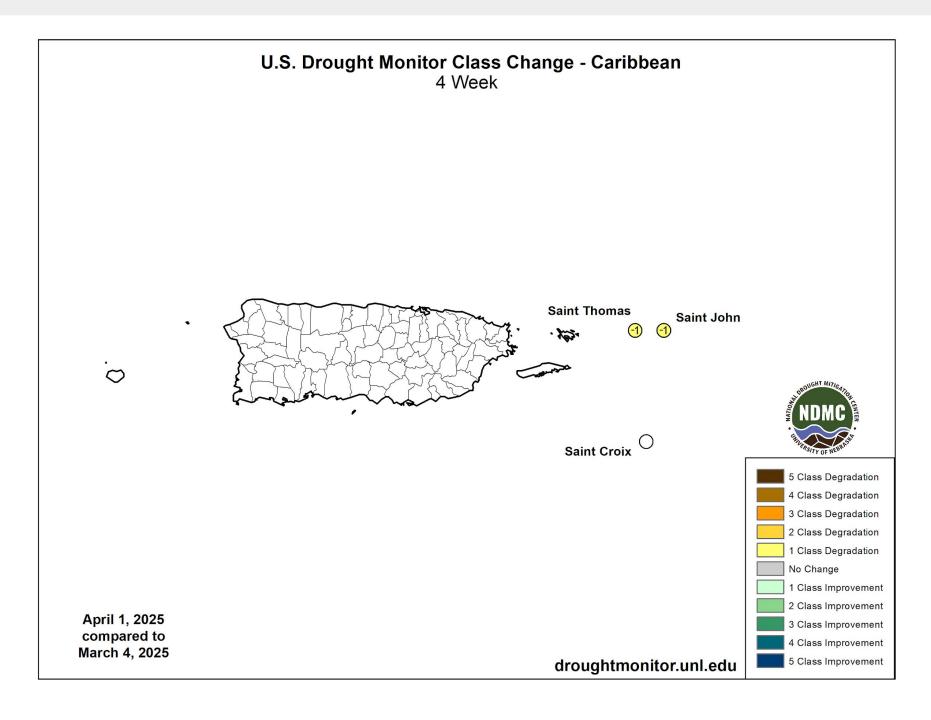


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT April 1st, 2025.

## EATHER STATES

## Long-Range Precipitation Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

• The North American Multi-Model Ensemble (NMME) shows near normal precipitation for the spring and early summer months (May-June-July) across the northeastern Caribbean.

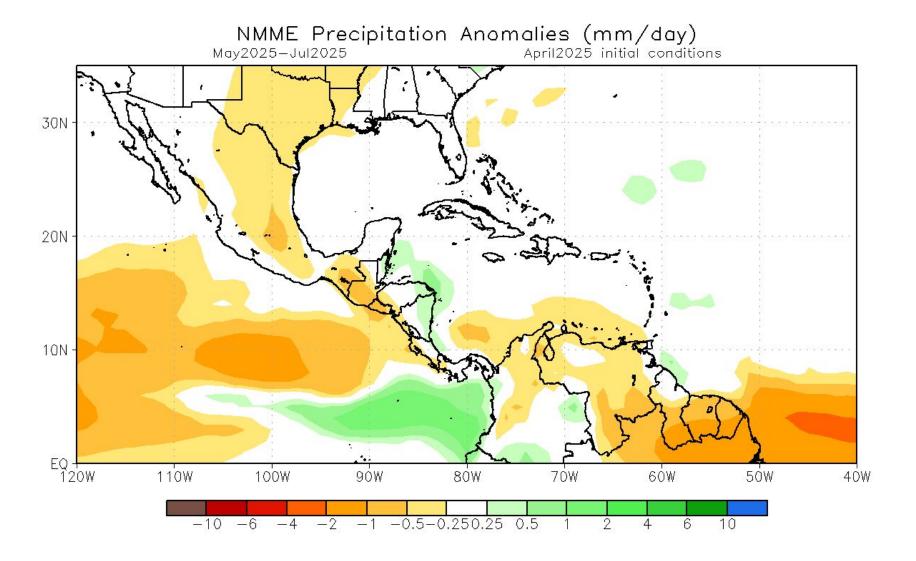


Image caption: NMME precipitation forecast issued April 2025. Valid May-June-July 2025.

## Long-Range Temperature Outlook

The latest three-months temperature outlook can be found on the CPC homepage

Based on the North American
 Multi-Model Ensemble (NMME), there
 is a ≥ 70% chance of observing above
 normal temperature for the period of
 May-June-July 2025. The temperatures
 are forecast to be nearly 0.25-0.5° C
 (0.45-0.9 °F) above normal.

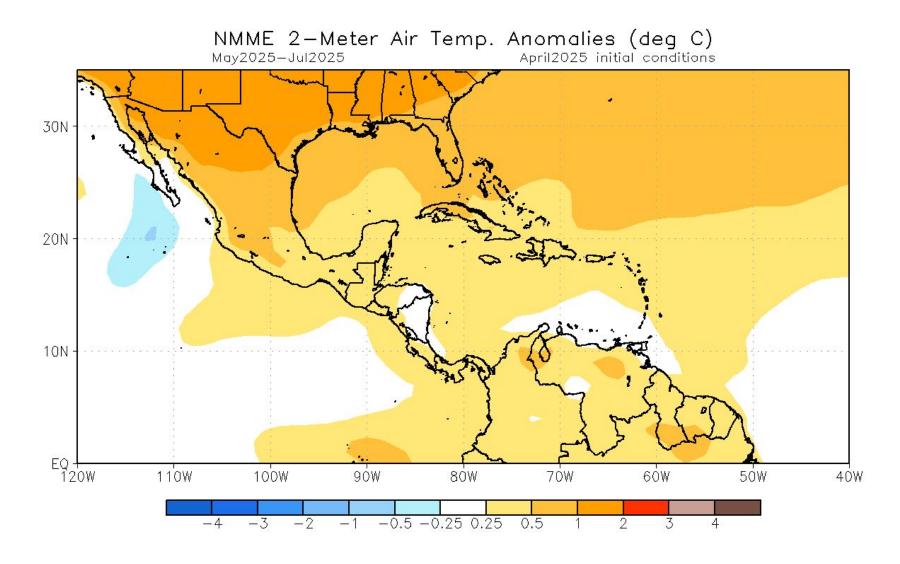


Image caption: NMME temperature forecast issued April 2025. Valid May-June-July 2025.



## Long Range Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

 Based on the expected conditions, no drought is expected to develop in Puerto Rico or the Virgin Islands in the upcoming three months. Seasonal (3-Month) Drought Outlook for March 31, 2025-June 30, 2025



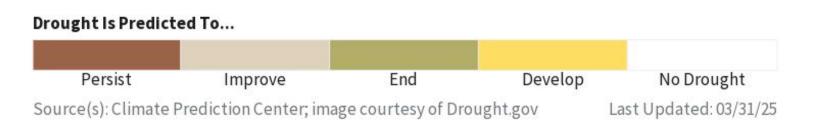


Image Caption: U.S. Seasonal Drought Outlook Valid for March 31<sup>st</sup> to June 30<sup>th</sup>, 2025.