

# Heat Hazards Outlooks for the Caribbean

**Date of Issue: 2025-06-03**

**Week-1, Valid for: 04 - 10 June 2025**

**Week-2, Valid for: 11 - 17 June 2025**



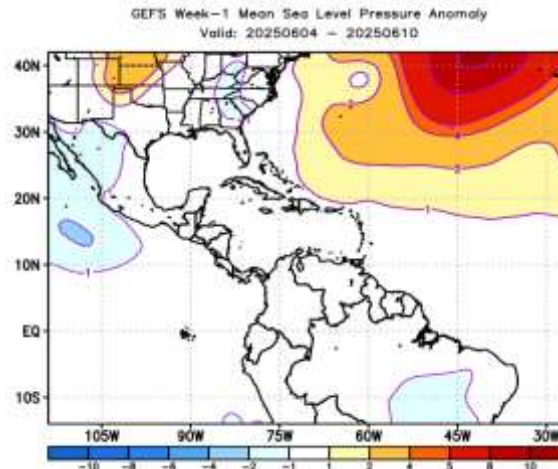
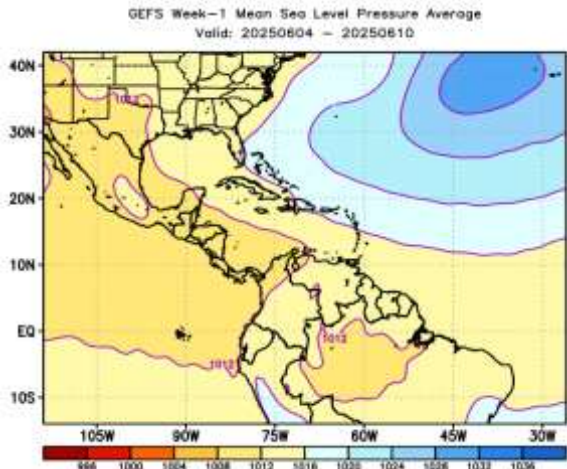
# Week-1, Mean Sea Level Pressure & 500-hPa Height

## 7-day Total

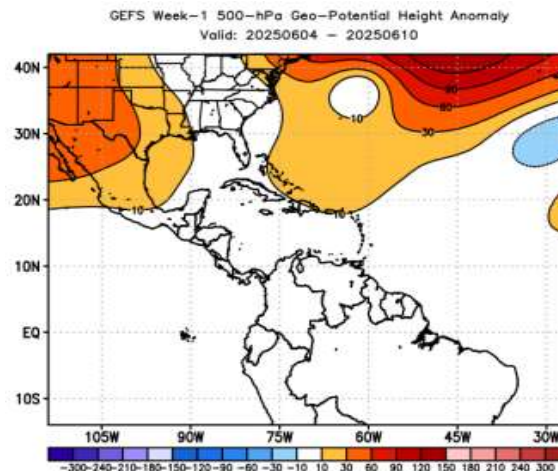
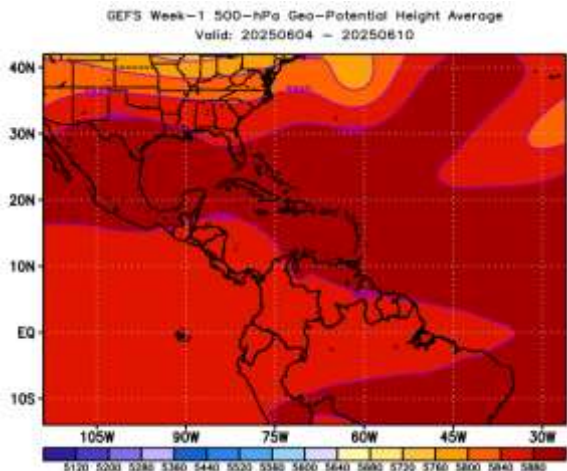
## 7-day Anomaly

Next week, mean sea level pressure is forecasted to be normal across the Caribbean.

MSLP



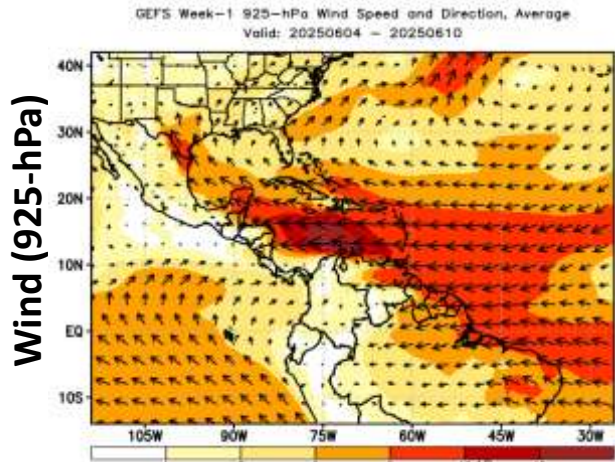
Geop. Height (500-hPa)



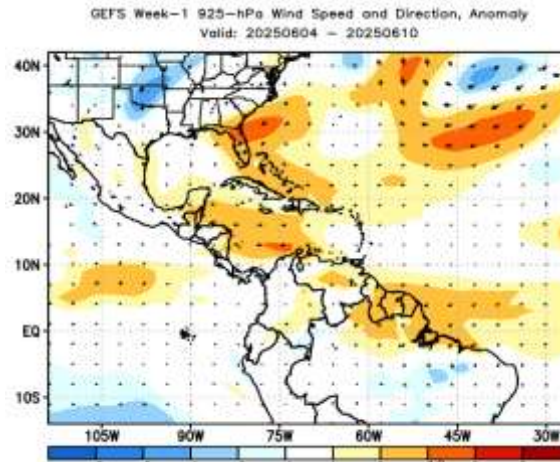
At 500-hPa, geopotential height anomalies in the region also expected to be above-normal over Lucayan Archipelago and parts of Hispaniola, while near normal across the rest of the Caribbean for next week.

# Week-1, 925-hPa and 200-hPa Wind

## 7-day Total

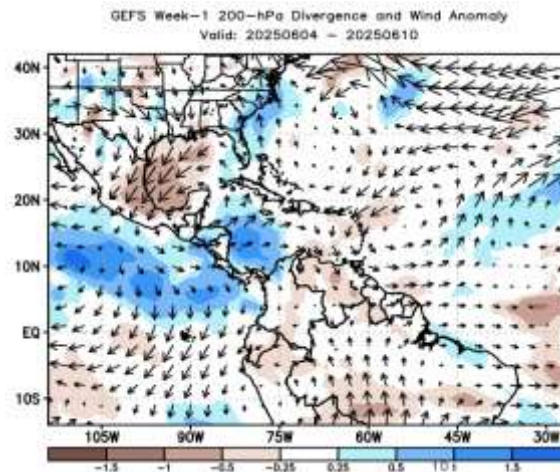
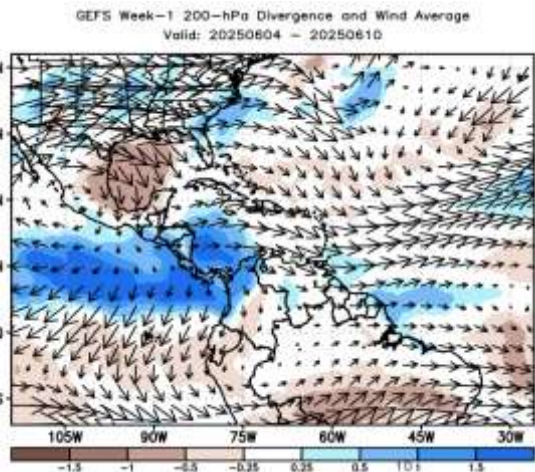


## 7-day Anomaly



For week-1, low-level winds are expected to be above-normal over Cuba, parts of Hispaniola, and the Lesser Antilles, with an increase over the Lucayan Archipelago and the southern Caribbean.

## Wind & Diverg. (200-hPa)



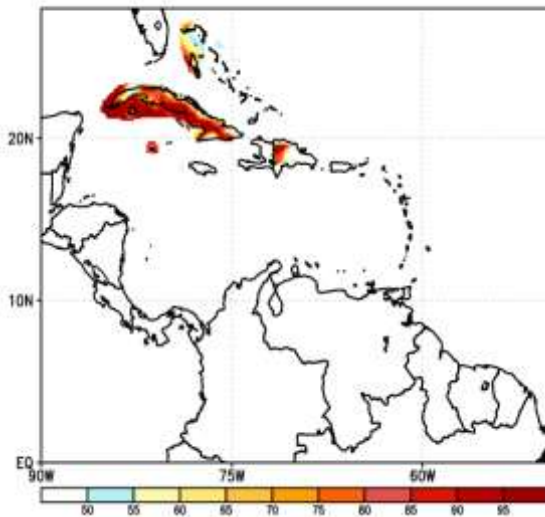
Upper-level convergence is expected over Lesser Antilles and the southern Caribbean.



# Week-1, Daily Tmax/HI Hybrid Index Exceedance Probability, with Respect to Percentile Thresholds

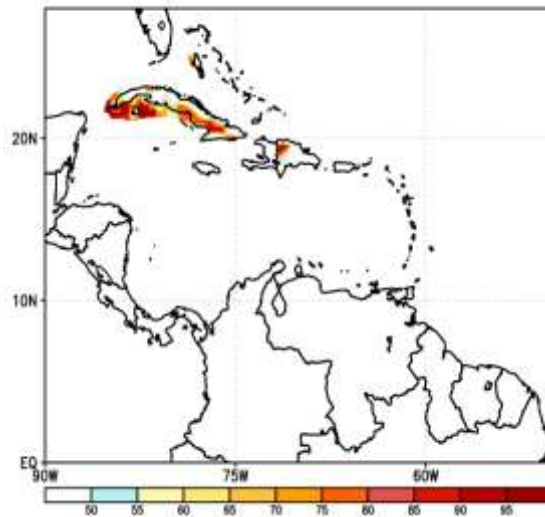
**hybrid > 80th percentile,  
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days  
Valid: 20250604 – 20250610



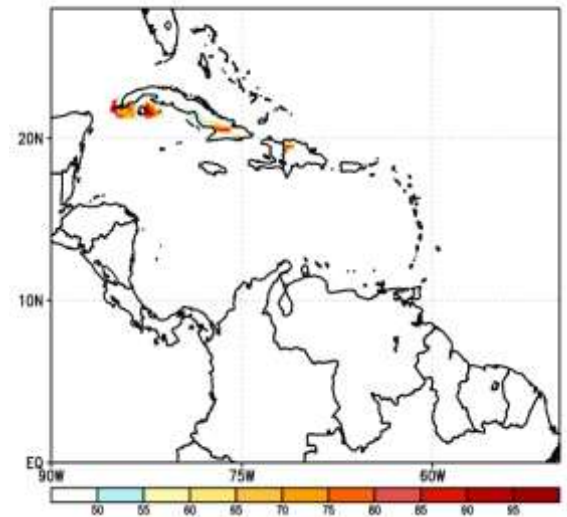
**hybrid > 90th percentile,  
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days  
Valid: 20250604 – 20250610



**hybrid ≥ 95th percentile,  
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days  
Valid: 20250604 – 20250610

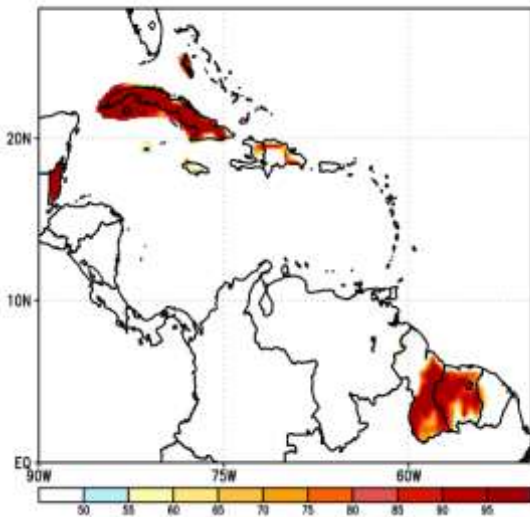


**There is a high chance for daily Tmax/HI max hybrid index to exceed the 80th percentile for at least 3 consecutive days over Cuba, Cayman Islands and parts of Dominican Republic. There is a low to moderate chance for daily Tmax/HI max hybrid index to exceed the 95th percentile for at least 3 consecutive days over parts of Cuba and Cayman Islands.**

# Week-1, Daily Tmax/HI Hybrid Index Exceedance Probability, with Respect to Fixed Thresholds

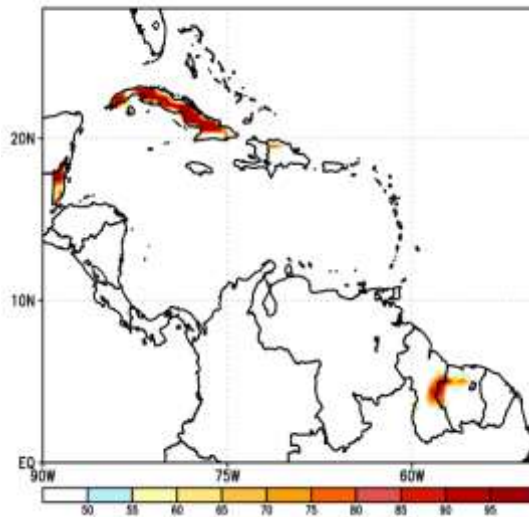
**hybrid > 33°C,  
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610



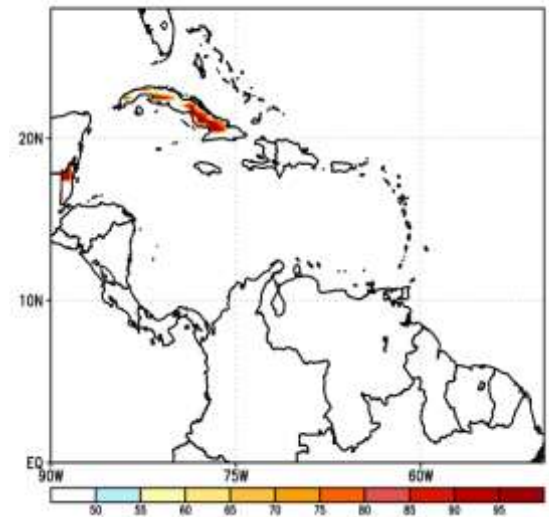
**hybrid > 35°C,  
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610



**hybrid > 37°C,  
≥3 consecutive days**

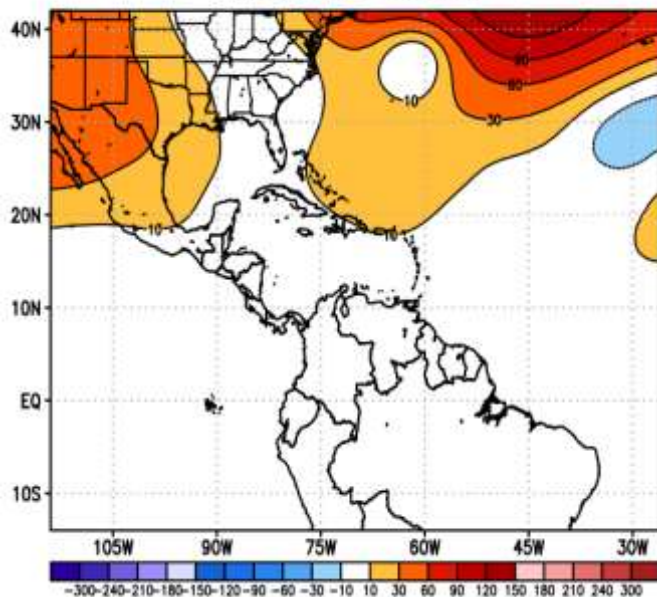
FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610



**There is a high probability for daily Tmax/HI max hybrid index to exceed 33°C for at least 3 consecutive days over Cuba, the Bahamas, some parts of Hispaniola, southern Guyana and Suriname. There is also a moderate to high chance for daily Tmax/HI max hybrid index to exceed 37°C over most parts of Cuba.**

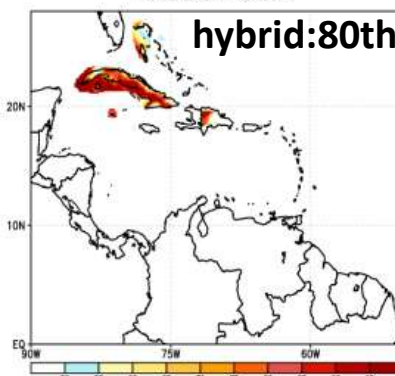
# Week-1, Convergence of Evidences

GEFS Week-1 500-hPa Geo-Potential Height Anomaly  
Valid: 20250604 - 20250610

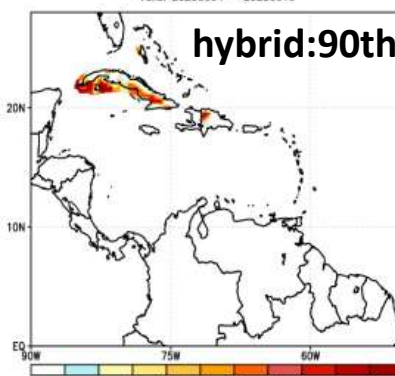


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be above-normal over Lucayan Archipelago and parts of Hispaniola, while near normal across the rest of the Caribbean for next week
- Hybrid index exceedance probability forecasts indicate:
  - Low to moderate chances for the hybrid index to exceed the 95th percentile over parts of Cuba and Cayman Islands.
  - Moderate to high chances for the hybrid index to exceed 37°C over most parts of Cuba.

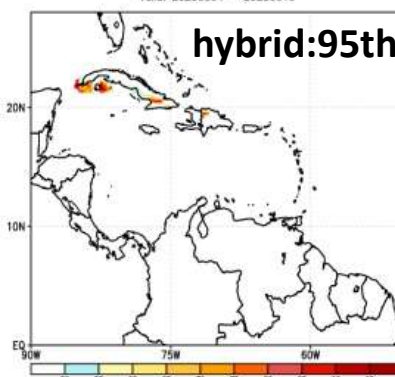
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days  
Valid: 20250604 - 20250610



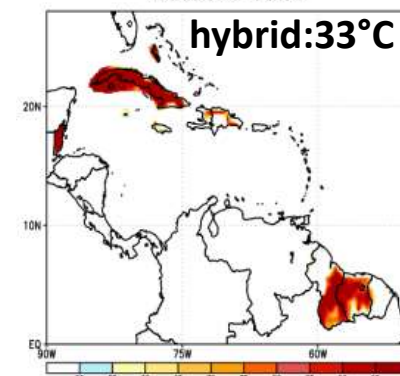
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days  
Valid: 20250604 - 20250610



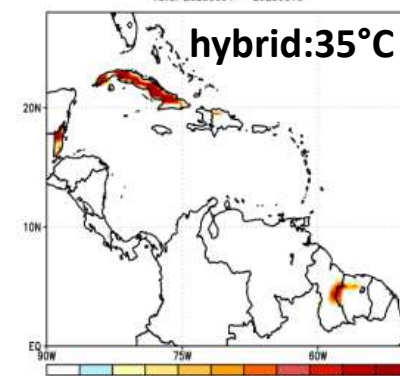
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days  
Valid: 20250604 - 20250610



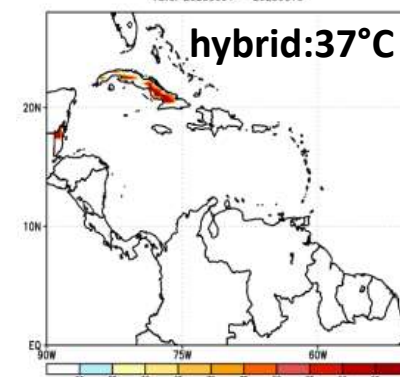
FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610



FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610

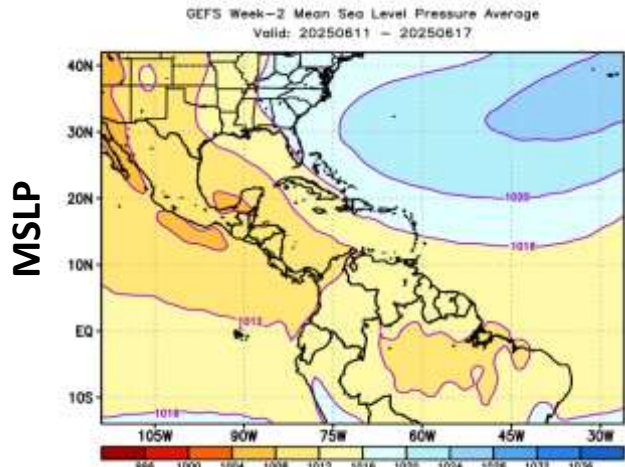


FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da  
Valid: 20250604 - 20250610

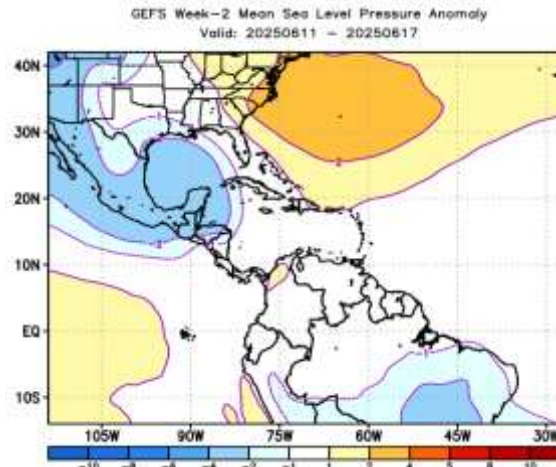


# Week-2, Mean Sea Level Pressure & 500-hPa Height

## 7-day Total



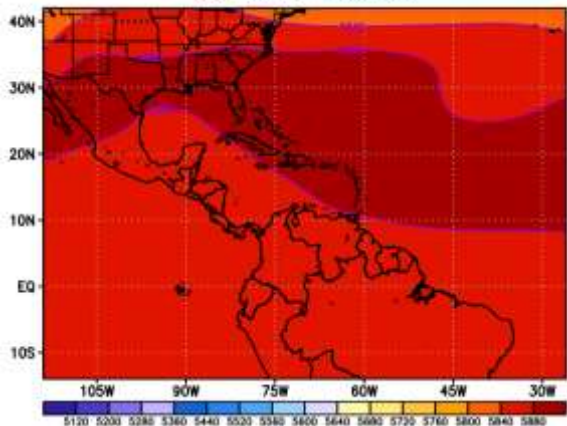
## 7-day Anomaly



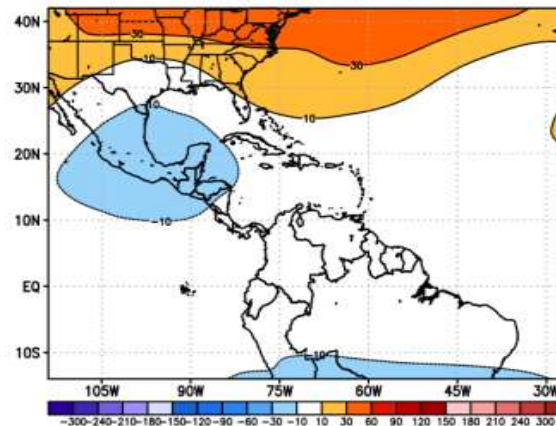
For week-2, mean sea level pressure is forecasted to be normal over most of the Caribbean.

Geop. Height (500-hPa)

GEFS Week-2 500-hPa Geo-Potential Height Average  
Valid: 20250611 - 20250617



GEFS Week-2 500-hPa Geo-Potential Height Anomaly  
Valid: 20250611 - 20250617

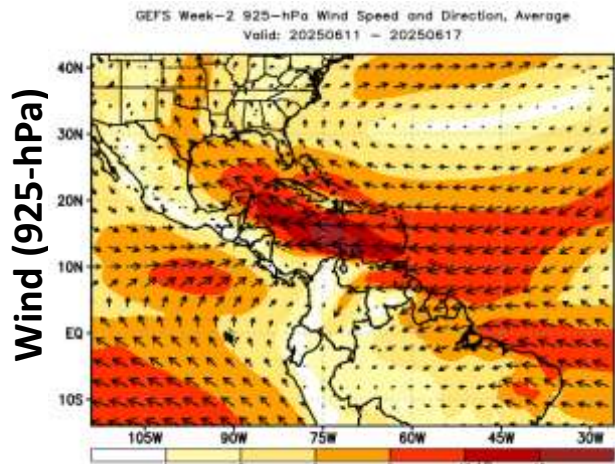


At 500-hPa, geopotential height anomalies in the region expected to be normal over the Caribbean for week 2.

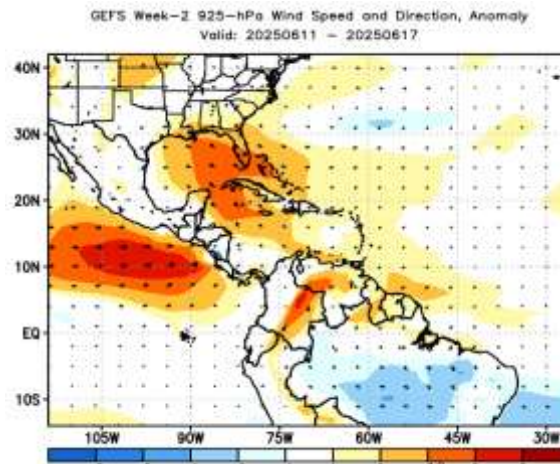


# Week-2, 925-hPa and 200-hPa Wind

## 7-day Total

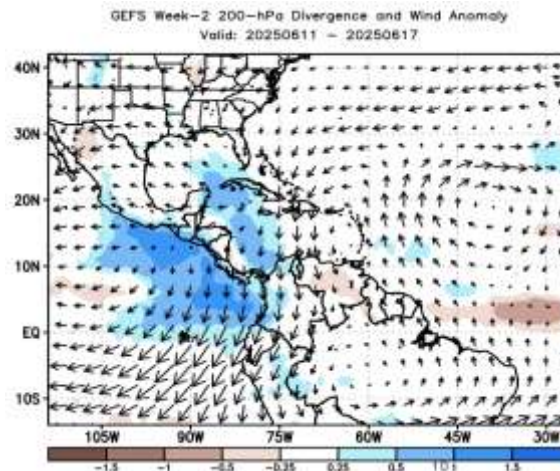
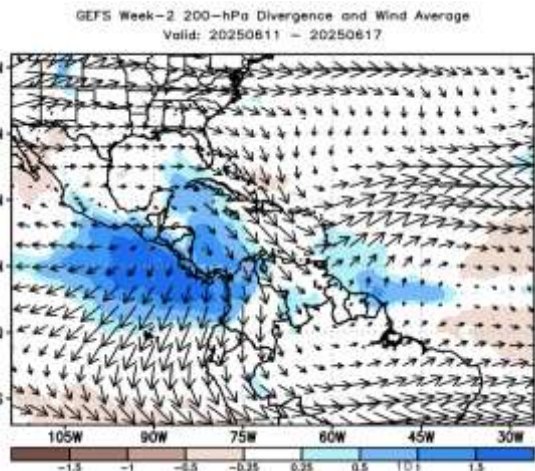


## 7-day Anomaly



For week-2, low-level winds are expected to be above-normal over most of the Caribbean with an increase over Cuba, Cayman Islands and Lucayan Archipelago.

Wind & Diverg. (200-hPa)



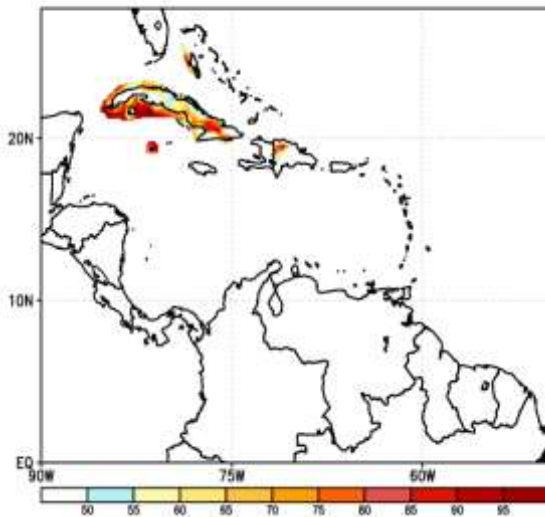
Upper-level convergence is expected over western Cuba.



# Week-2, Daily Tmax/HI Hybrid Index Exceedance Probability, with Respect to Percentile Thresholds

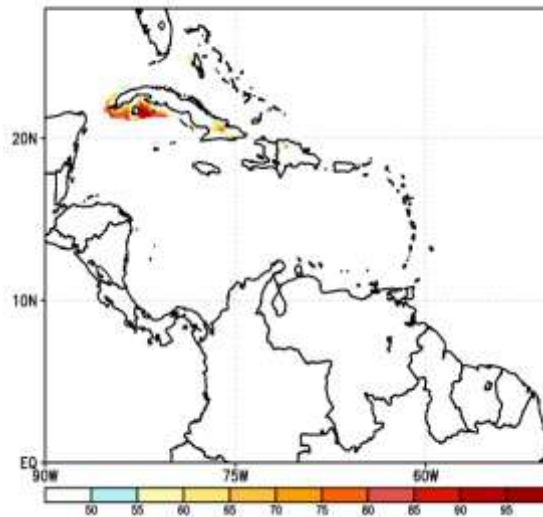
**hybrid > 80th percentile,  
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GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days  
Valid: 20250611 - 20250617



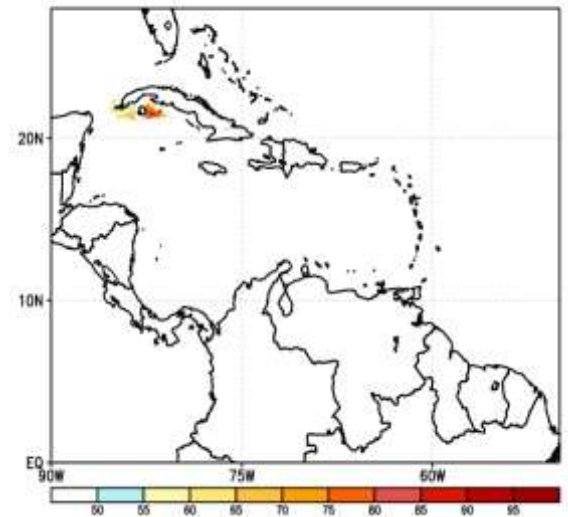
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GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days  
Valid: 20250611 - 20250617



**hybrid ≥ 95th percentile,  
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GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days  
Valid: 20250611 - 20250617

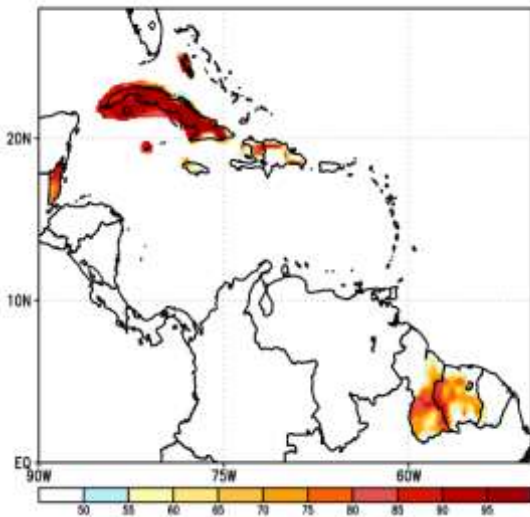


There is a moderate to high chance for daily Tmax/HI hybrid index to exceed the 80th percentile for at least 3 consecutive days over Cuba, Cayman Islands and the Bahamas. There is a low chance for daily Tmax/HI hybrid index to exceed the 95th percentile for at least 3 consecutive days over Cayman Islands.

# Week-2, Daily Tmax/HI Hybrid Index Exceedance Probability, with Respect to Fixed Thresholds

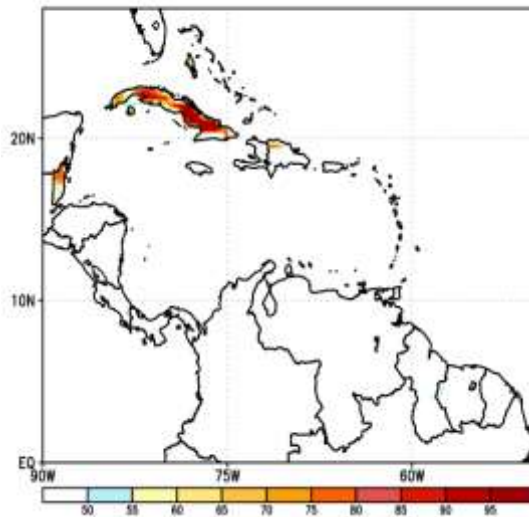
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FS Week-2 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da  
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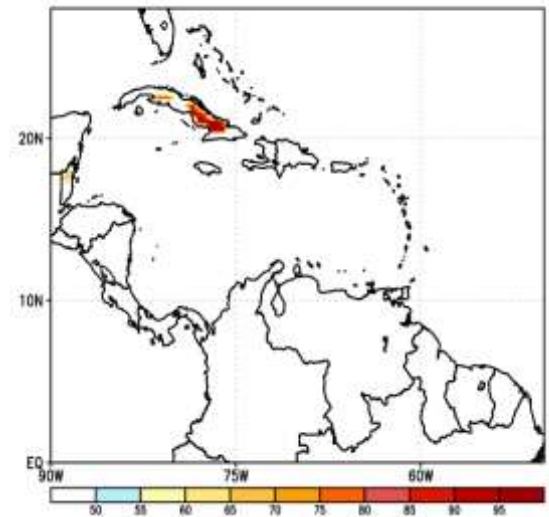
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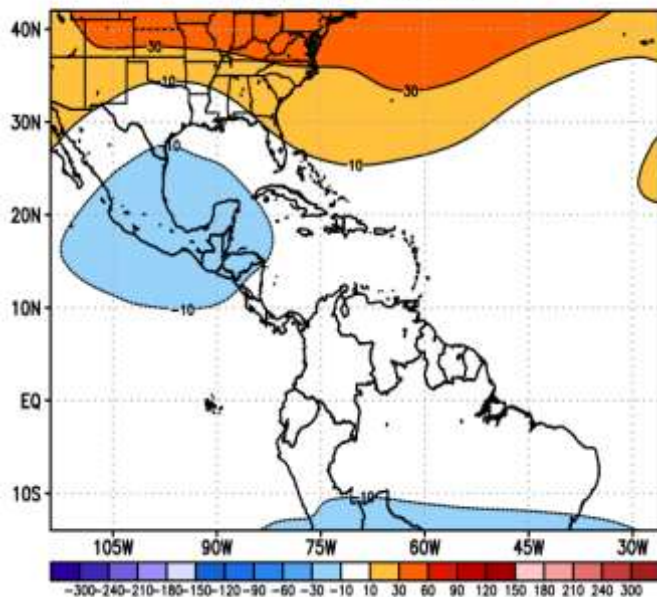
FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da  
Valid: 20250611 - 20250617



**There is a moderate to high probability for daily Tmax/HI max hybrid index to exceed 33°C for at least 3 consecutive days over Cuba, Cayman Islands, Jamaica, the Bahamas, some parts of Hispaniola, southern Guyana and Suriname. There is a moderate to high chance for daily Tmax/HI max hybrid index to exceed 37°C over parts of Cuba.**

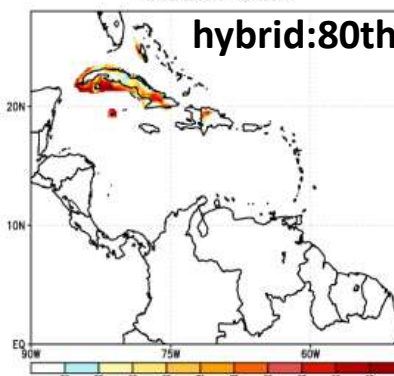
# Week-2, Convergence of Evidences

GEFS Week-2 500-hPa Geo-Potential Height Anomaly  
Valid: 20250611 - 20250617

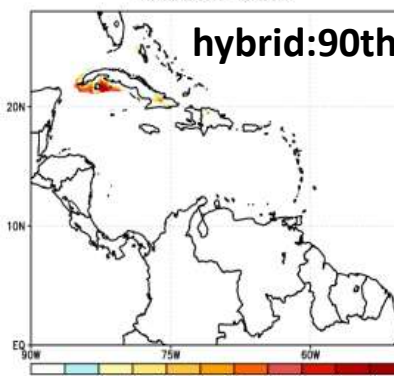


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be normal over the Caribbean for week 2.
- Hybrid index exceedance probability forecasts indicate:
  - Low chances for the hybrid index to exceed the 95th percentile over Cayman Islands.
  - Moderate to high chances for the hybrid index to exceed 37°C over parts of Cuba.

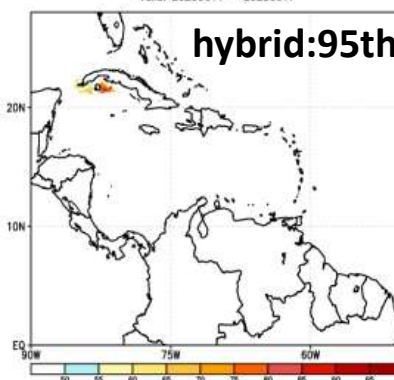
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days  
Valid: 20250611 - 20250617



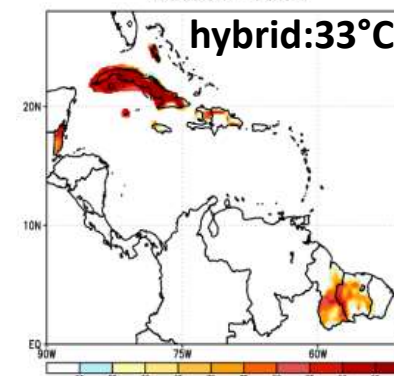
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days  
Valid: 20250611 - 20250617



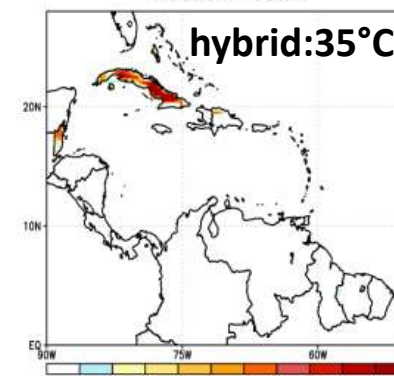
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days  
Valid: 20250611 - 20250617



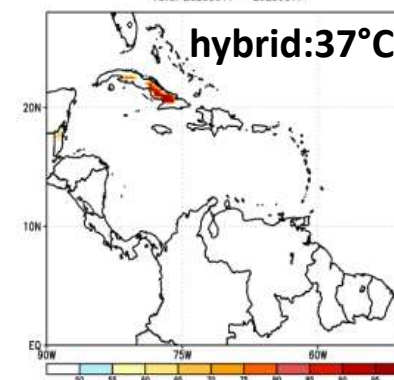
FS Week-2 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da  
Valid: 20250611 - 20250617



FS Week-2 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da  
Valid: 20250611 - 20250617



FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da  
Valid: 20250611 - 20250617





# Urban Heat Island Alerts for Caribbean



[https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI\\_alert\\_Caribbean.html](https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI_alert_Caribbean.html)

# Urban Heat Island Forecasts Week-1



[https://www.cpc.ncep.noaa.gov/products/international/UHI/Caribb\\_day\\_80.html](https://www.cpc.ncep.noaa.gov/products/international/UHI/Caribb_day_80.html)

# Urban Heat Island Forecasts Weeks-2, 3, & 4

NO	Stations	Week 2: 09Jun2025 - 15Jun2025				Week 3: 16Jun2025 - 22Jun2025				Week 4: 23Jun2025 - 29Jun2025			
		80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert
1	Barranquilla	30.0 degC				30.3 degC				29.8 degC			
2	Cartagena	30.2 degC				31.2 degC				30.8 degC			
3	Castries	28.6 degC				28.6 degC				28.6 degC			
4	Chaguanas	29.6 degC				29.5 degC				29.6 degC			
5	Havana	31.7 degC				32.5 degC				32.0 degC			
6	Kingston	30.0 degC				30.4 degC				30.9 degC			
7	Lucaya	28.3 degC				28.9 degC				29.0 degC			
8	Maracaibo_La_Chinita	33.0 degC				33.8 degC				33.9 degC			
9	Miami_FI	35.1 degC				36.4 degC				36.3 degC			
10	Port_Au_Prince	30.2 degC				30.3 degC				30.1 degC			
11	Port_De_Paix	28.7 degC				28.8 degC				28.6 degC			
12	San_Juan	28.9 degC				29.0 degC				28.8 degC			
13	Tampa	34.5 degC				34.4 degC				35.2 degC			
14	Santo_Domingo	30.0 degC				30.2 degC				30.4 degC			
15	Punta_Cana	30.3 degC				30.4 degC				30.4 degC			

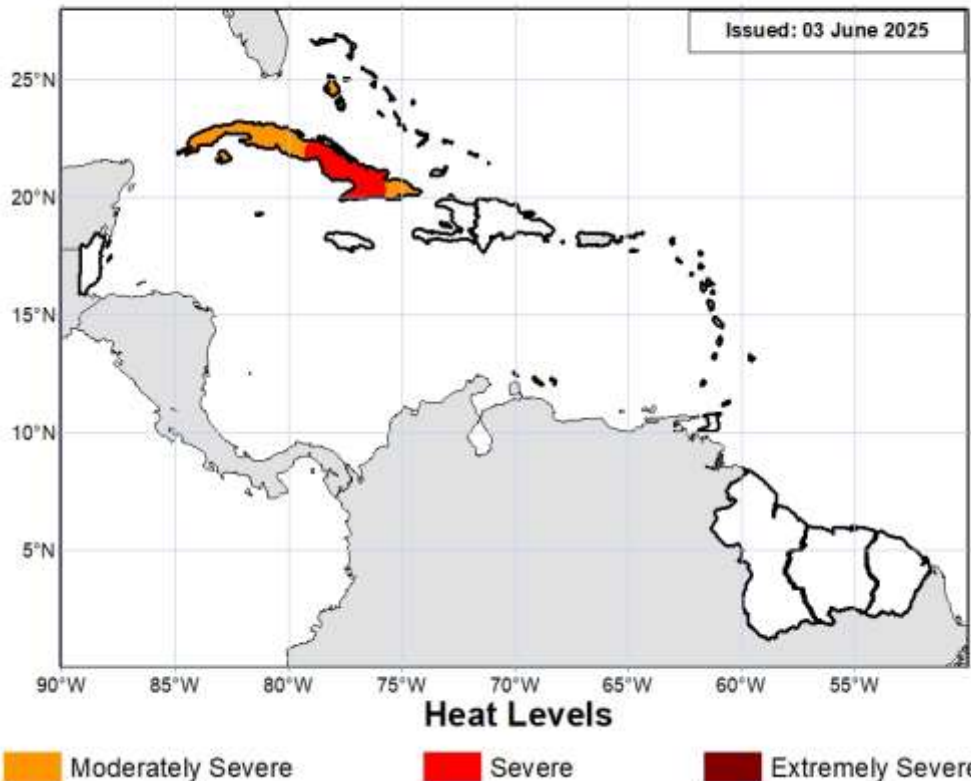


[https://www.cpc.ncep.noaa.gov/products/international/UHI/Caribb\\_week234\\_80.html](https://www.cpc.ncep.noaa.gov/products/international/UHI/Caribb_week234_80.html)



# Week-1 Heat Hazards Outlook

Week-1 Caribbean Heat Hazard Outlooks  
Valid: 04 - 10 June 2025

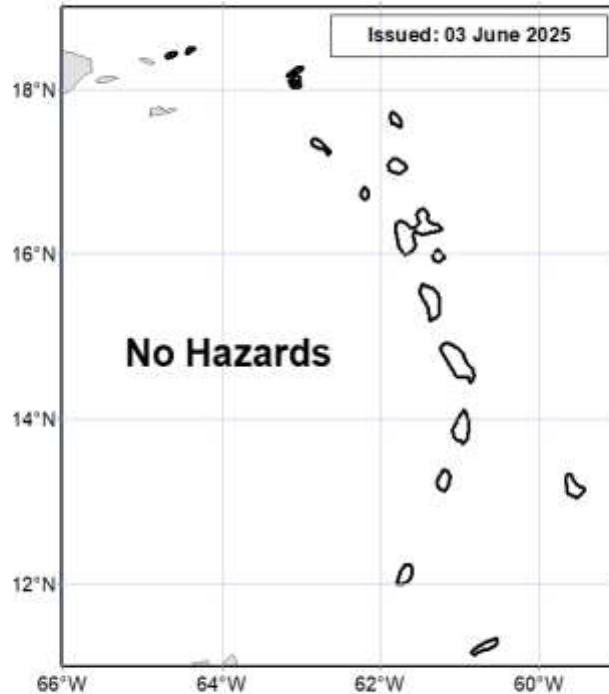


- There is an increased chance for **moderately severe heat** over western parts of Cuba, Cayman Islands, and the Bahamas.
- There is an increased chance for **severe heat** exists over central and eastern parts of Cuba.

Hybrid index probability of exceedance forecasts also suggest high chances for persistent heat in the orange and red shaded areas.

# Week-1 Lesser Antilles Heat Hazards Outlook

**Week-1 Lesser Antilles Heat Hazard Outlooks**  
**Valid: 04 - 10 June 2025**



## Heat Levels

Moderately Severe

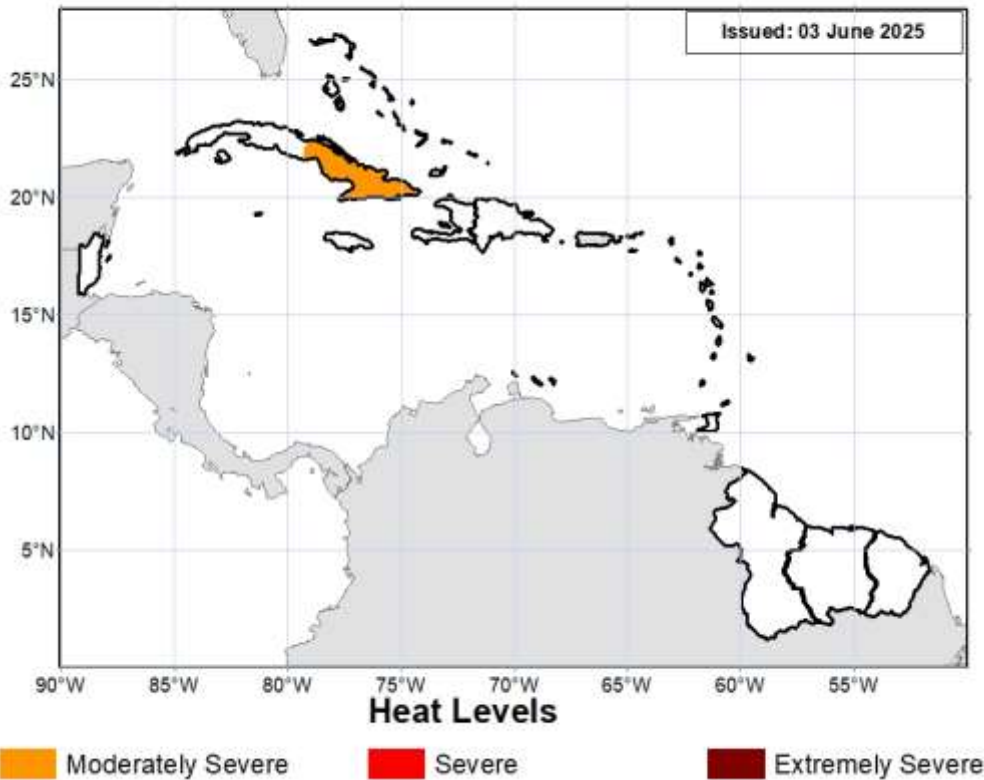
Severe

Extremely Severe

- There are no hazards forecast for week 1.

# Week-2 Heat Hazards Outlook

## Week-2 Caribbean Heat Hazard Outlooks Valid: 11 - 17 June 2025



- There is an increased chance for **moderately severe heat** over eastern Cuba.

Hybrid index probability of exceedance forecasts also suggest high chances for persistent heat in the orange and red shaded areas.



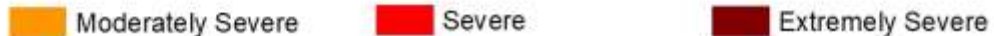
# Week-2 Lesser Antilles Heat Hazards Outlook



Issued: 03 June 2025

### No Hazards

## Heat Levels



- **There are no hazards forecast for week 2.**

# For More Information Please Visit

## Forecasting Tools:

[https://www.cpc.ncep.noaa.gov/products/international/endalk/climate\\_health/heat-health\\_forecasts\\_alt.shtml](https://www.cpc.ncep.noaa.gov/products/international/endalk/climate_health/heat-health_forecasts_alt.shtml)

## Urban Heat Island Alerts:

[https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI\\_alert\\_Caribbean.html](https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI_alert_Caribbean.html)