

Heat Hazards Outlooks for the Caribbean

Date of Issue: 2025-06-24

Week-1, Valid for: 25 - 01 July 2025

Week-2, Valid for: 02 - 08 July 2025

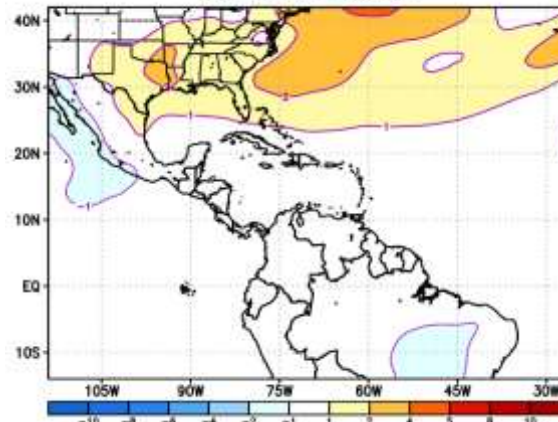
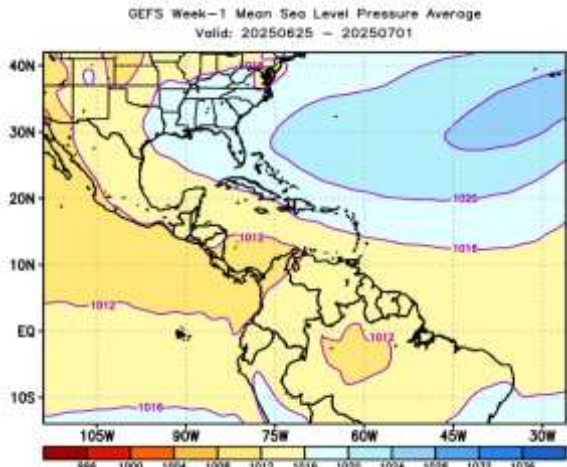


Week-1, Mean Sea Level Pressure & 500-hPa Height

7-day Total

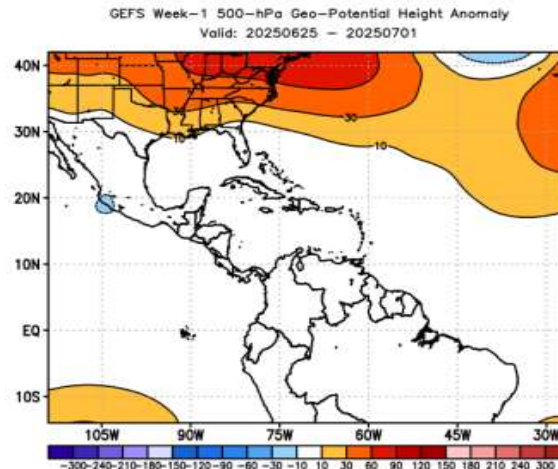
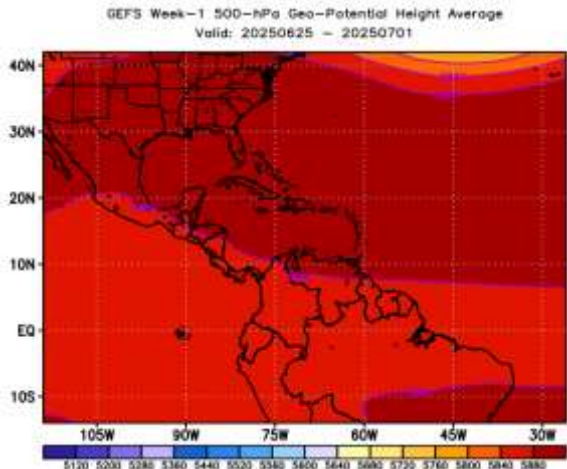
7-day Anomaly

MSLP



Next week, mean sea level pressure is forecasted to be near-average over much of the Caribbean and slightly above average over the northern the Bahamas.

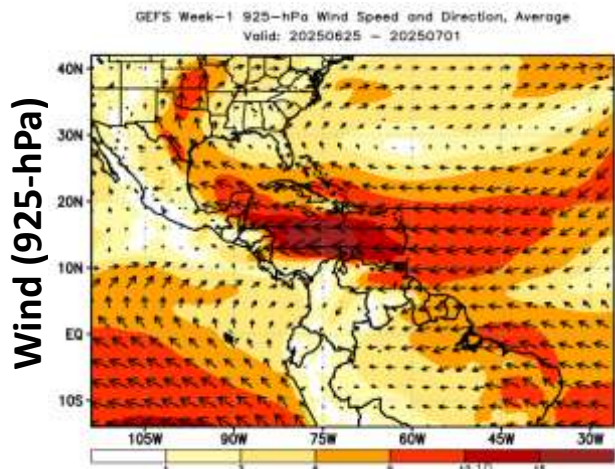
Geop. Height (500-hPa)



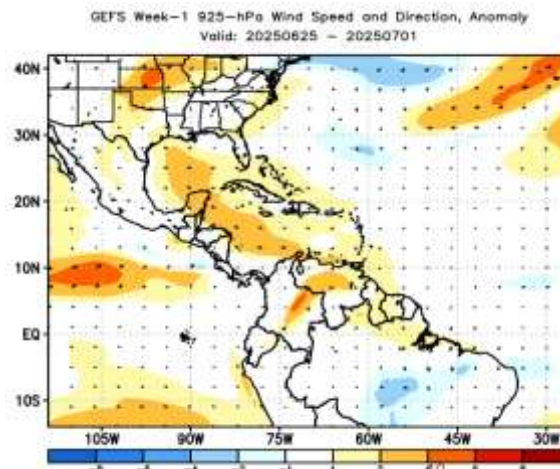
At 500-hPa, geopotential height anomalies in the region also expected to be near-average over the Caribbean for next week.

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

7-day Total

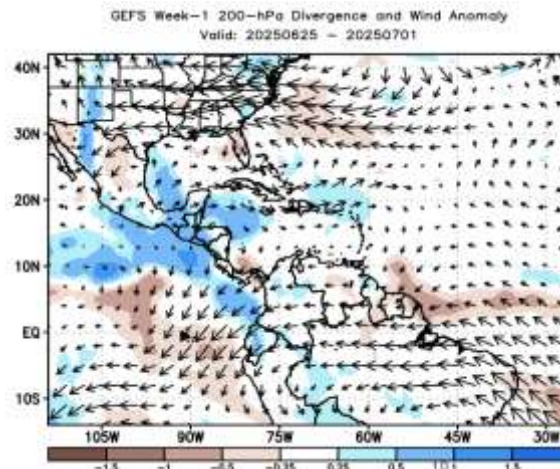
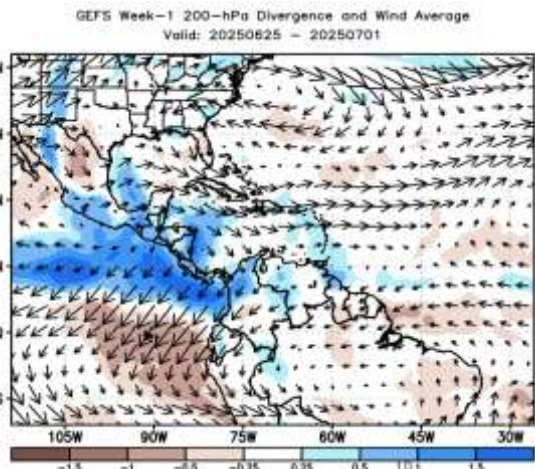


7-day Anomaly



For week-1, low-level winds are expected to be above-average over much of the Caribbean.

Wind & Diverg. (200-hPa)

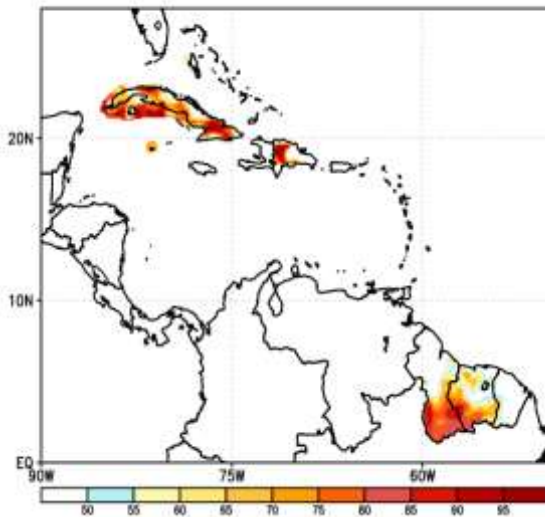


Upper-level convergence is expected over Cuba, Jamaica, and southern Caribbean.

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

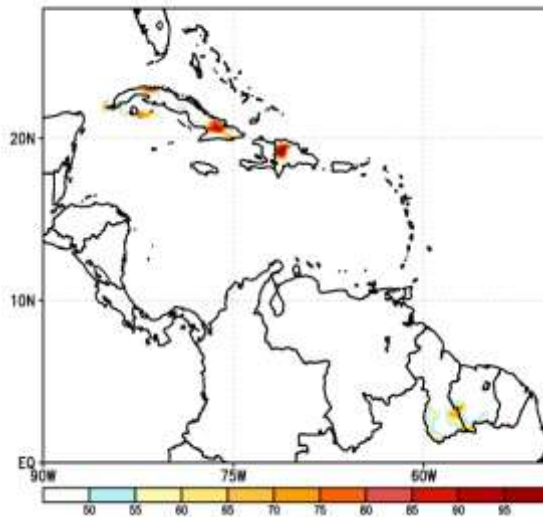
**hybrid > 80th percentile,
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250625 - 20250701



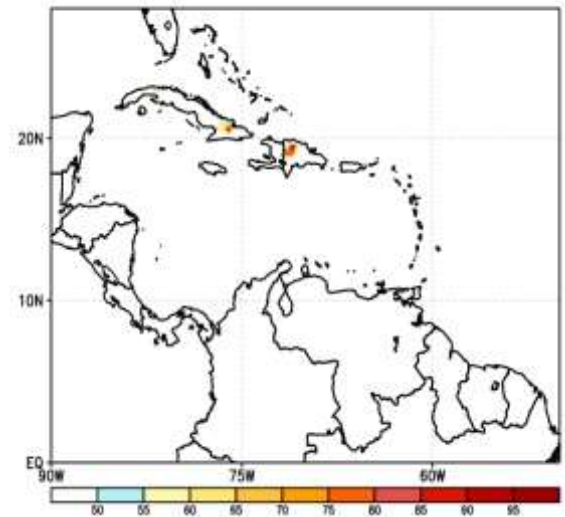
**hybrid > 90th percentile,
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250625 - 20250701



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

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250625 - 20250701

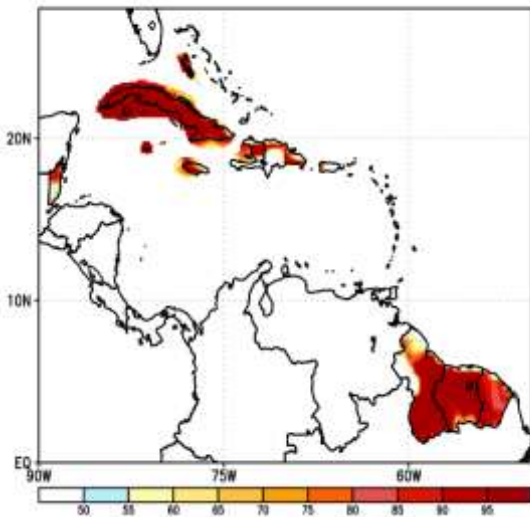


There is moderate to high chance for daily Tmax/HI hybrid index to exceed the 80th percentile for at least 3 consecutive days over Cuba, western Dominican Republic, southern Guyana, most parts of Suriname. There is a low chance for daily Tmax/HI hybrid index to exceed the 95th percentile for at least 3 consecutive days over eastern Cuba and western Dominican Republic.

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

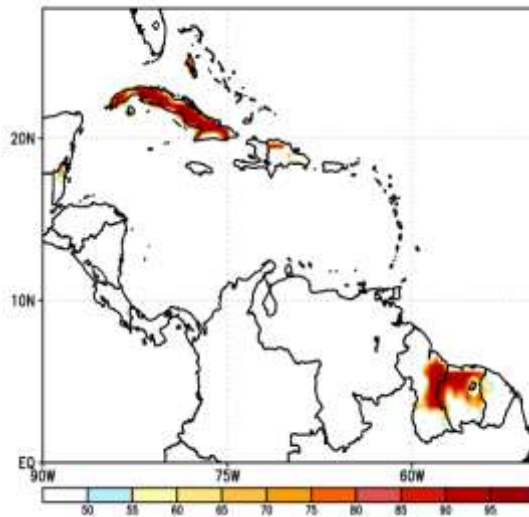
**hybrid > 33°C,
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701



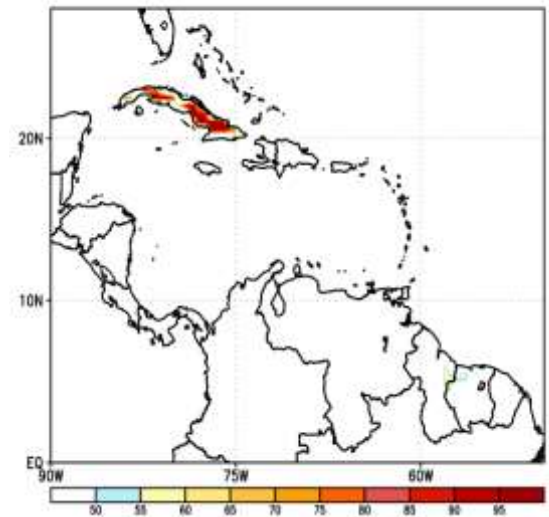
**hybrid > 35°C,
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701



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

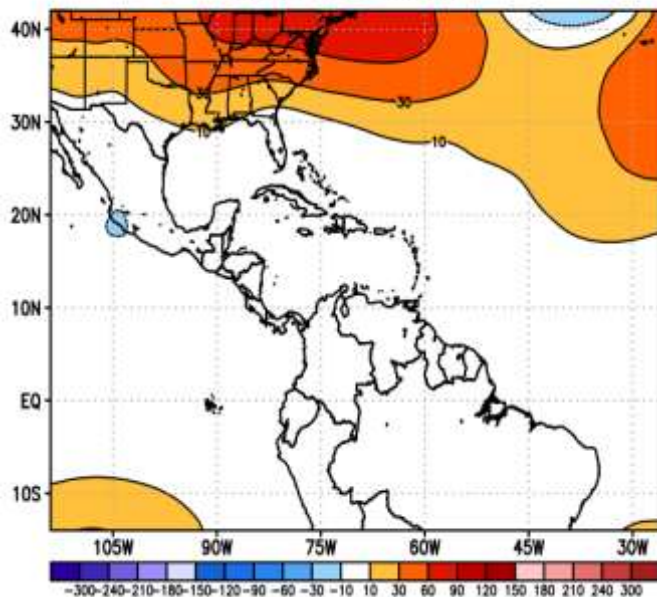
FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701



There is a high probability for daily Tmax/HImax hybrid index to exceed 33°C for at least 3 consecutive days over Cuba, Jamaica, the Bahamas, Hispaniola, and southern Caribbean. There is also a moderate to high chance for daily Tmax/HImax hybrid index to exceed 37°C over few parts of Cuba.

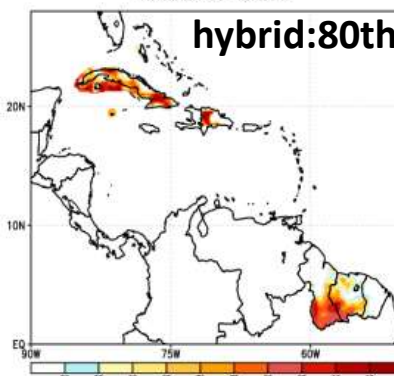
Week-1, Convergence of Evidences

GEFS Week-1 500-hPa Geo-Potential Height Anomaly
Valid: 20250625 - 20250701

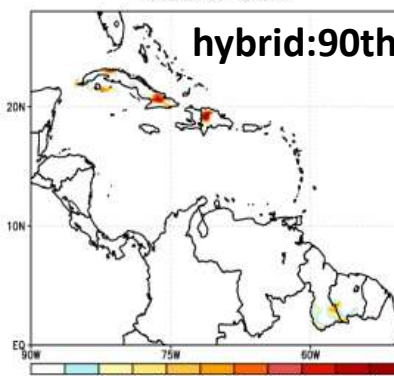


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be near-average over the Caribbean for next week.
- Hybrid index exceedance probability forecasts indicate:
 - Moderate to high chances for the hybrid index to exceed the 80th percentile over Cuba, western Dominican Republic, southern Guyana, most parts of Suriname.
 - High chances for the hybrid index to exceed 37°C over most parts of Cuba.

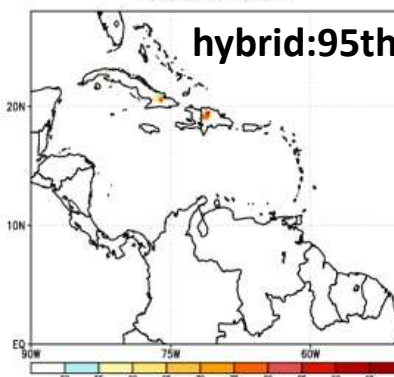
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250625 - 20250701



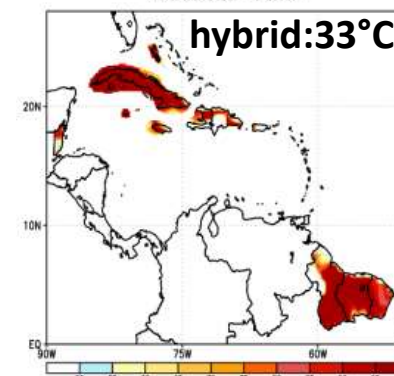
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250625 - 20250701



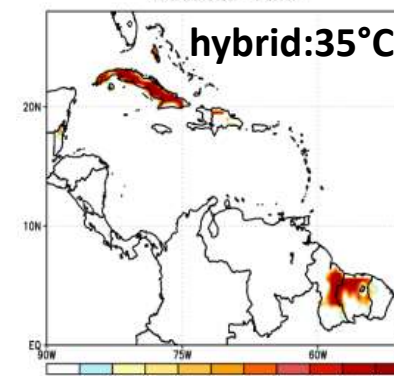
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250625 - 20250701



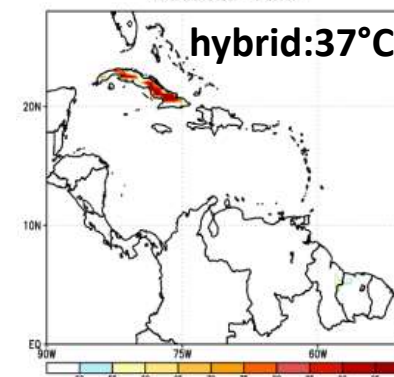
FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701



FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701

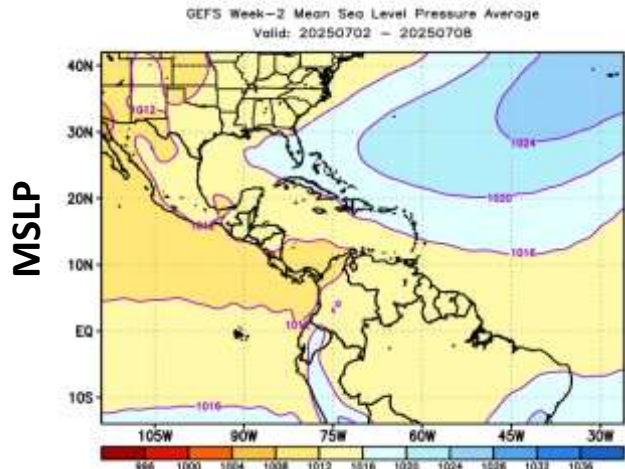


FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250625 - 20250701

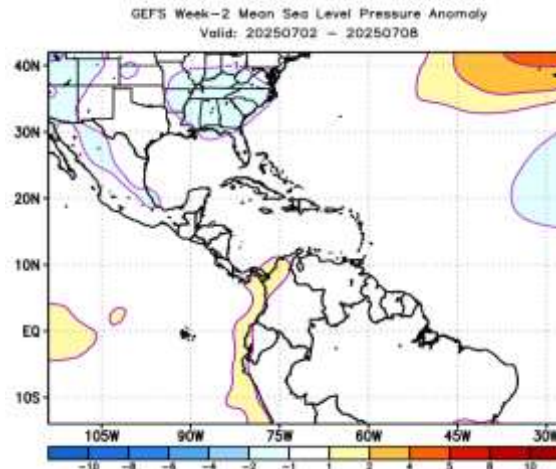


Week-2, Mean Sea Level Pressure & 500-hPa Height

7-day Total



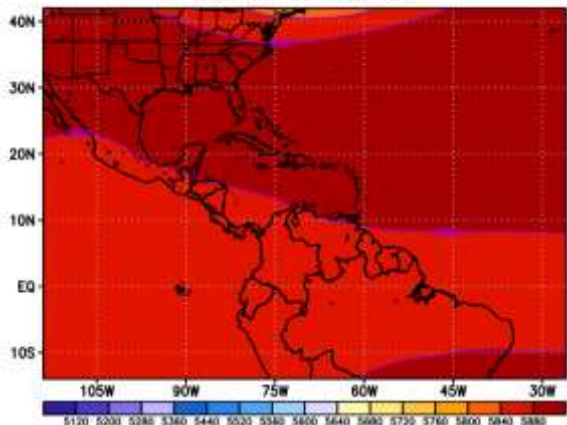
7-day Anomaly



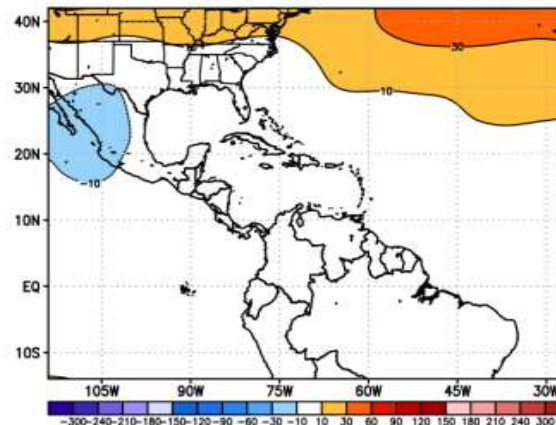
For week-2, mean sea level pressure is forecasted to be near-average over the Caribbean.

Geop. Height (500-hPa)

GEFS Week-2 500-hPa Geo-Potential Height Average
Valid: 20250702 - 20250708



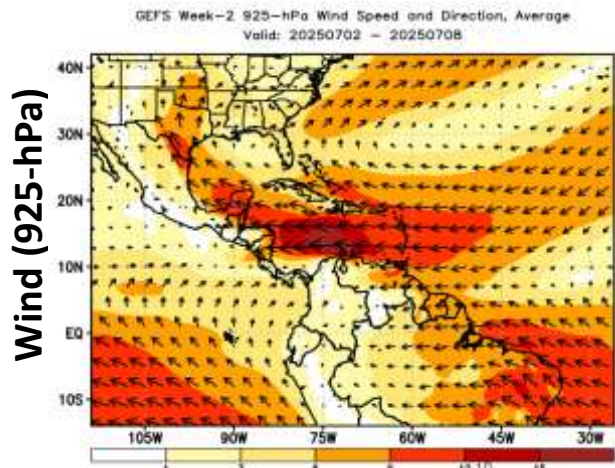
GEFS Week-2 500-hPa Geo-Potential Height Anomaly
Valid: 20250702 - 20250708



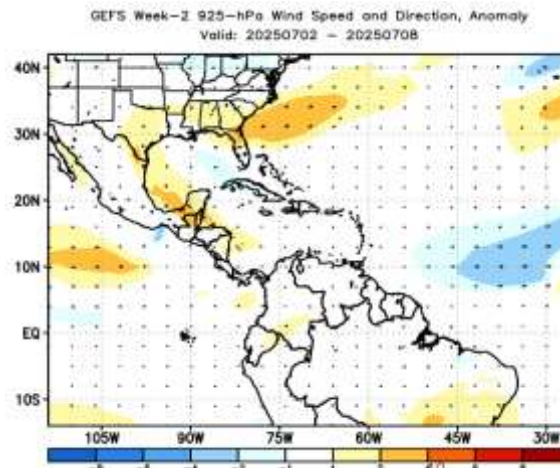
At 500-hPa, geopotential height anomalies in the region expected to be near-average over Caribbean for week 2.

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

7-day Total

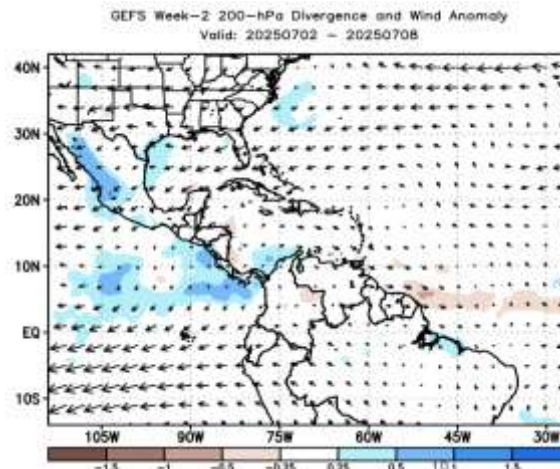
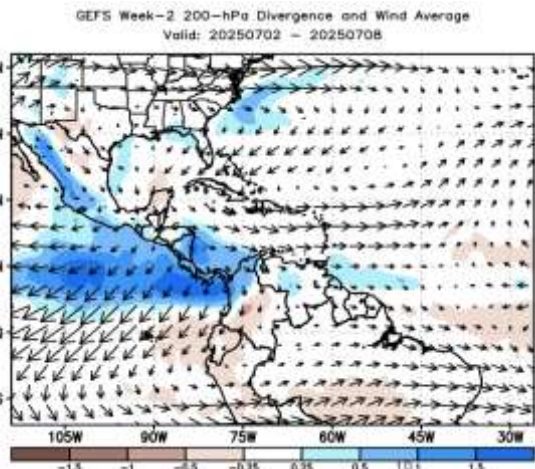


7-day Anomaly



For week-2, low-level winds are expected to be near-average over the Caribbean.

Wind & Diverg. (200-hPa)

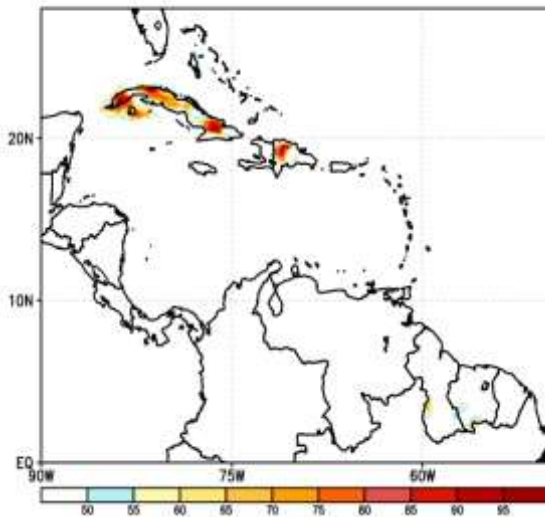


No upper-level convergence is expected over the Caribbean for week-2.

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

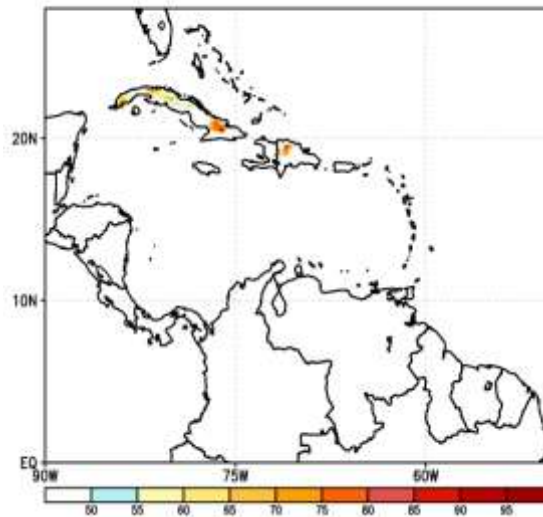
**hybrid > 80th percentile,
≥3 consecutive days**

GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250702 - 20250708



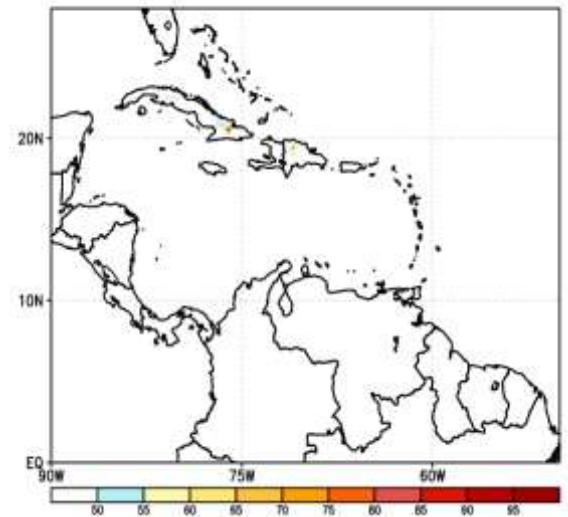
**hybrid > 90th percentile,
≥3 consecutive days**

GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250702 - 20250708



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

GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250702 - 20250708

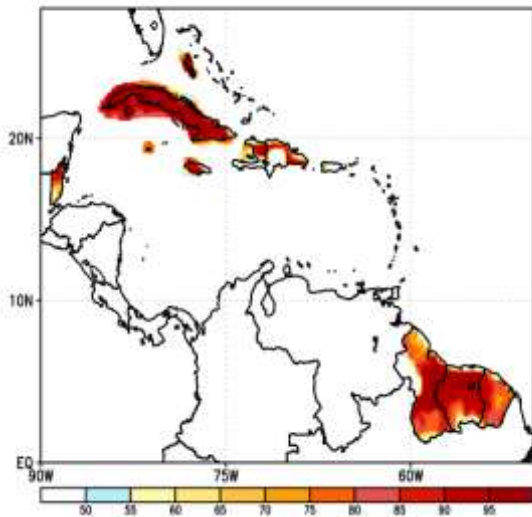


There is low to moderate chance for daily Tmax/HI max hybrid index to exceed the 80th percentile for at least 3 consecutive days over Cuba, Cayman Islands, and western Dominican Republic. There is low chance for daily Tmax/HI max hybrid index to exceed the 95th percentile for at least 3 consecutive days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

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

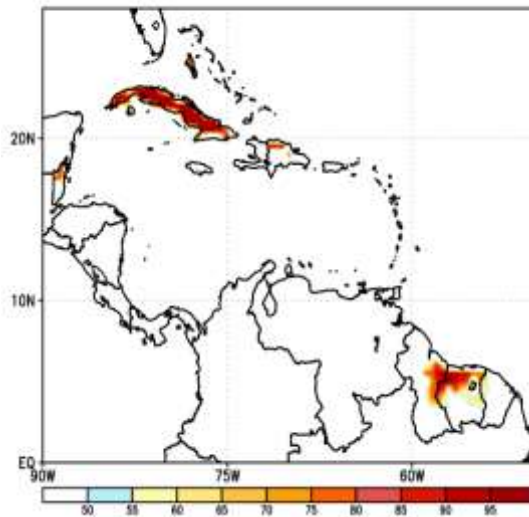
**hybrid > 33°C,
≥3 consecutive days**

FS Week-2 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



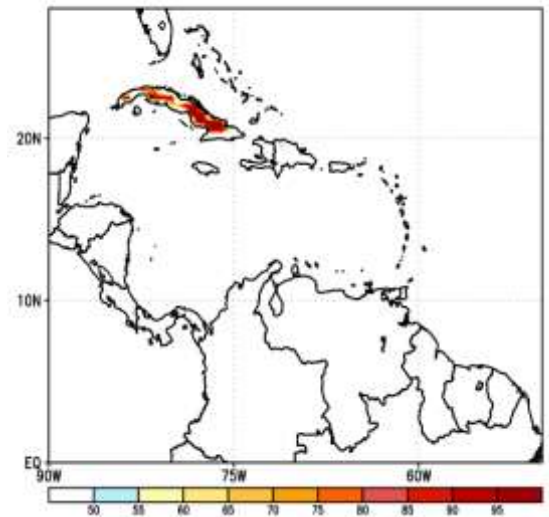
**hybrid > 35°C,
≥3 consecutive days**

FS Week-2 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



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

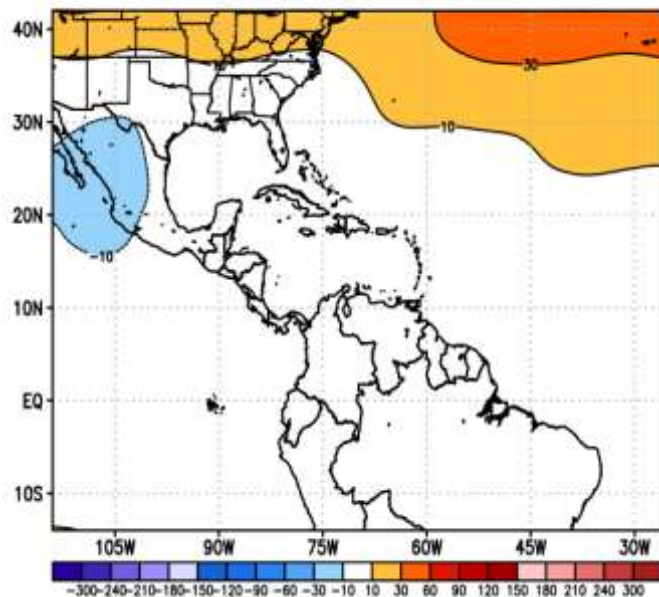
FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



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

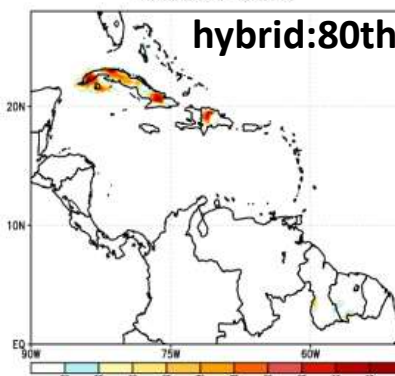
Week-2, Convergence of Evidences

GEFS Week-2 500-hPa Geo-Potential Height Anomaly
Valid: 20250702 - 20250708

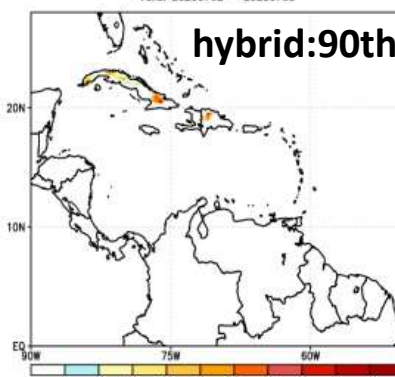


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be near-average over the Caribbean for week 2.
- Hybrid index exceedance probability forecasts indicate:
 - Low to moderate chances for the hybrid index to exceed the 80th percentile over Cuba, Cayman Islands, and western Dominican Republic.
 - High chances for the hybrid index to exceed 37°C over most parts of Cuba.

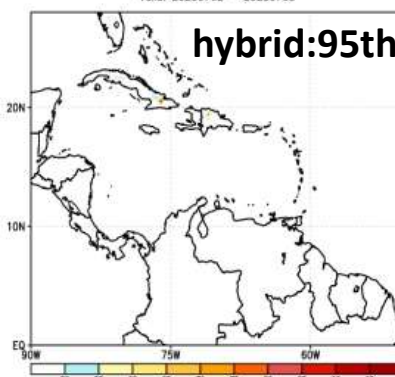
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250702 - 20250708



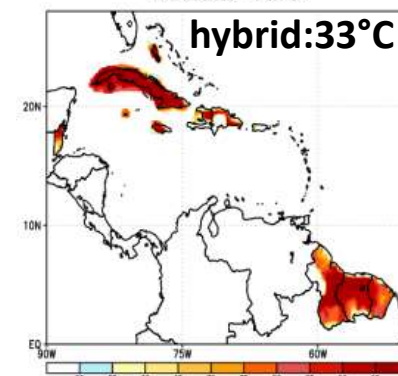
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250702 - 20250708



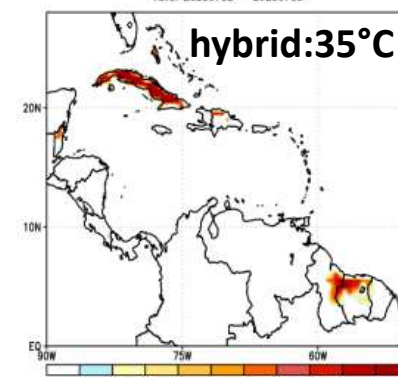
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250702 - 20250708



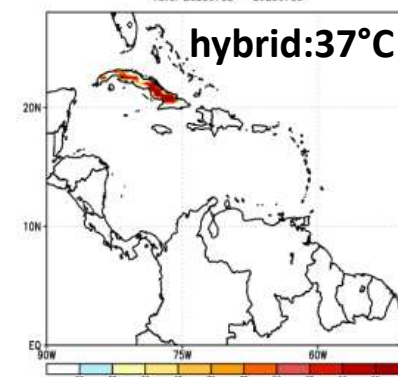
FS Week-2 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



FS Week-2 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250702 - 20250708



Urban Heat Island Alerts for Caribbean



https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI_alert_Caribbean.html

Urban Heat Island Forecasts Week-1

NO	Stations	80th Pctl Clim	Jun-25-2025			Jun-26-2025			Jun-27-2025			Jun-28-2025			Jun-29-2025		
			Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert
1	Barquisimeto	28.9 degC															
2	Barranquilla	30.5 degC															
3	Cartagena	31.3 degC															
4	Castries	28.7 degC															
5	Chaguanas	29.7 degC															
6	Havana	31.5 degC															
7	Kingston	30.9 degC															
8	Lucaya	28.1 degC															
9	Maracaibo_La_Chinita	33.9 degC															
10	Miami_FI	35.4 degC															
11	Port_Au_Prince	30.8 degC															
12	San_Juan	28.3 degC															
13	Santiago_De_Cuba	28.4 degC															
14	Tampa	34.0 degC															
15	Santo_Domingo	30.4 degC															
16	Punta_Cana	30.2 degC															



https://www.cpc.ncep.noaa.gov/products/international/UHI/Caribb_day_80.html

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

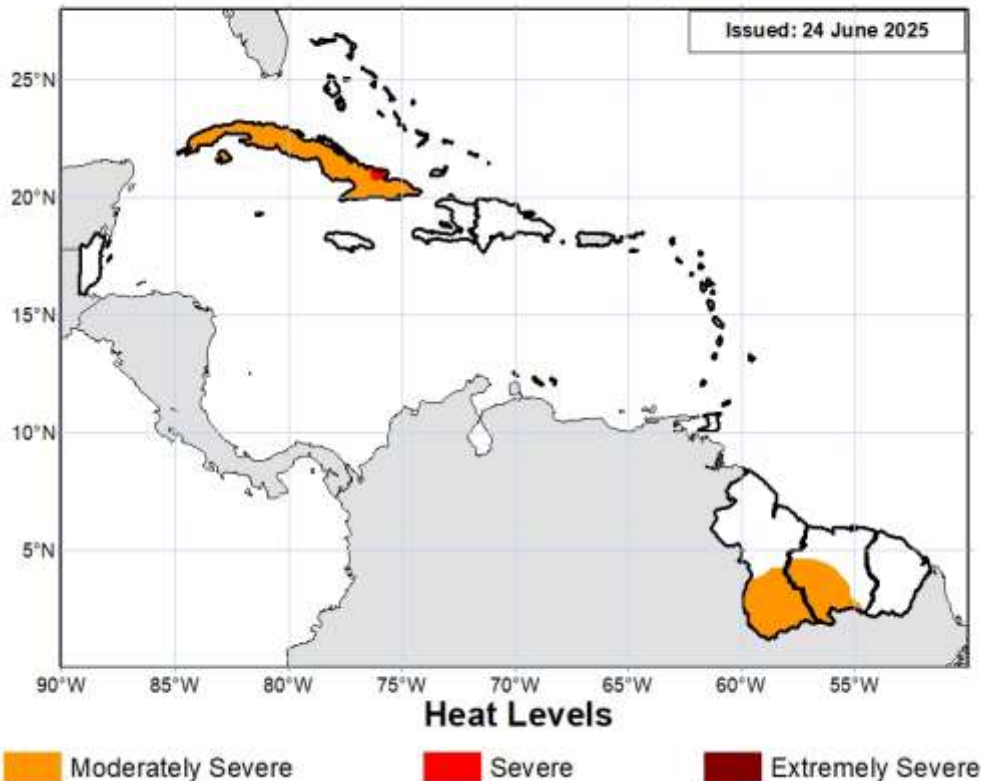
NO	Stations	Week 2: 30Jun2025 - 06Jul2025				Week 3: 07Jul2025 - 13Jul2025				Week 4: 14Jul2025 - 20Jul2025			
		80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert
1	Barquisimeto	28.2 degC				28.5 degC				29.2 degC			
2	Barranquilla	30.6 degC				30.6 degC				30.1 degC			
3	Cartagena	30.9 degC				31.5 degC				31.1 degC			
4	Castries	28.3 degC				28.7 degC				28.9 degC			
5	Chaguanas	29.3 degC				29.5 degC				29.6 degC			
6	Havana	31.3 degC				31.8 degC				32.6 degC			
7	Kingston	30.6 degC				31.2 degC				31.4 degC			
8	Lucaya	28.4 degC				28.8 degC				29.0 degC			
9	Maracaibo_La_Chinita	34.1 degC				34.5 degC				34.6 degC			
10	Miami_FI	35.1 degC				35.6 degC				35.5 degC			
11	Nassau	28.2 degC				28.6 degC				28.7 degC			
12	Port_Au_Prince	30.2 degC				30.1 degC				30.3 degC			
13	Port_De_Paix	28.2 degC				28.3 degC				28.4 degC			
14	San_Juan	28.3 degC				28.6 degC				28.6 degC			
15	Tampa	34.4 degC				34.0 degC				34.9 degC			
16	Santo_Domingo	29.7 degC				30.3 degC				30.4 degC			
17	Punta_Cana	30.1 degC				30.5 degC				30.7 degC			



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: 25 June - 01 July 2025



- There is an increased chance for **moderately severe heat** over Cuba, Cayman Islands, southern Guyana and southwestern Suriname.
- There is an increased chance for **severe heat** exists over a local area in northeastern Holguín Province, 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: 25 June - 01 July 2025



Heat Levels

Moderately Severe

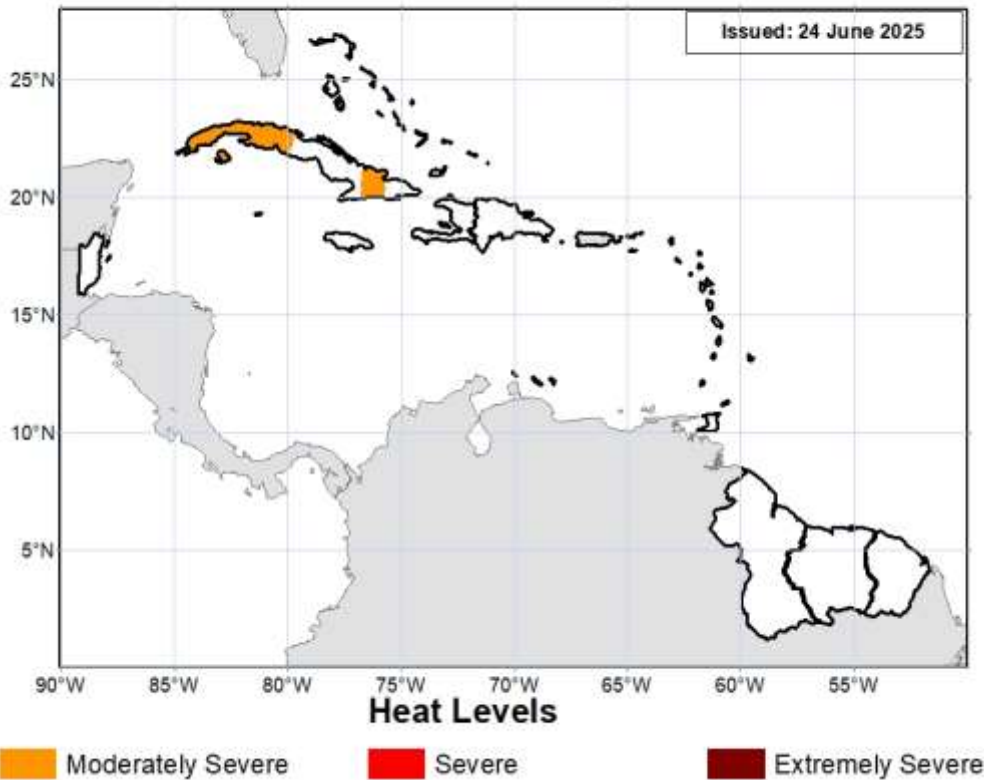
Severe

Extremely Severe

- There are no hazards forecast for week 1.

Week-2 Heat Hazards Outlook

Week-2 Caribbean Heat Hazard Outlooks Valid: 02 - 08 July 2025



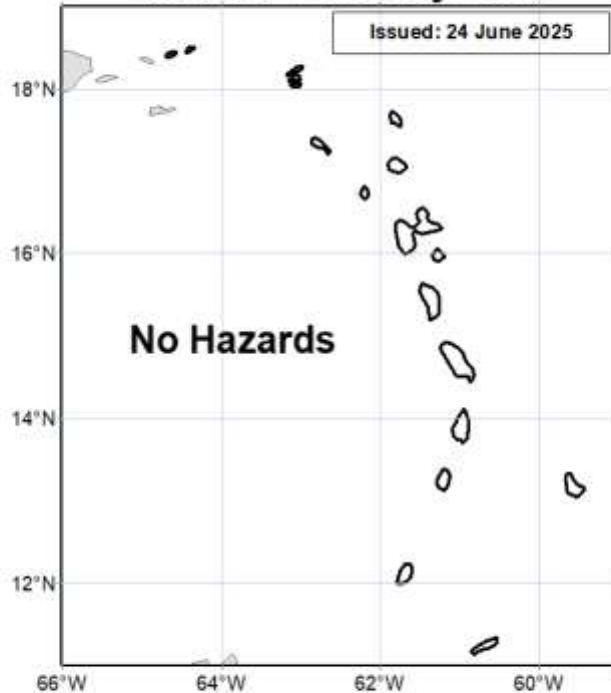
- There is an increased chance for **moderately severe heat** over few parts of Cuba.

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

Week-2 Lesser Antilles Heat Hazard Outlooks Valid: 02 - 08 July 2025

Issued: 24 June 2025



Heat Levels

Moderately Severe

Severe

Extremely Severe

- 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

Urban Heat Island Alerts:

https://www.cpc.ncep.noaa.gov/products/international/UHI/UHI_alert_Caribbean.html