

Heat Hazards Outlooks for the Caribbean

Date of Issue: 2025-06-10

Week-1, Valid for: 11 - 17 June 2025

Week-2, Valid for: 18 - 24 June 2025

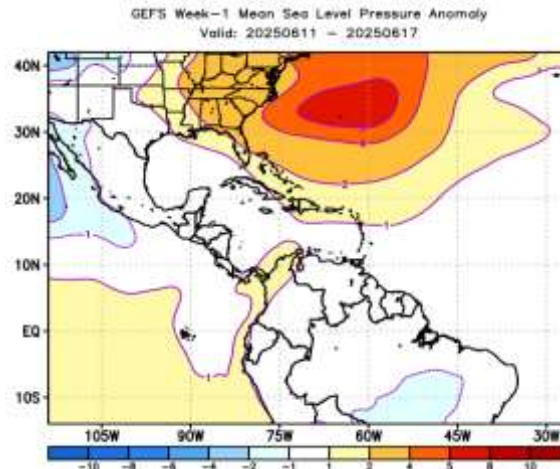
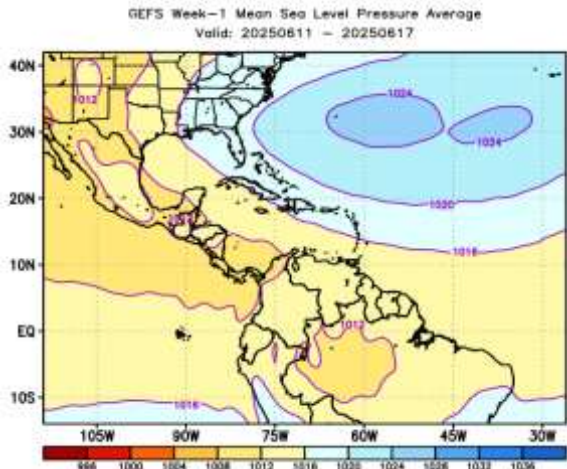


Week-1, Mean Sea Level Pressure & 500-hPa Height

7-day Total

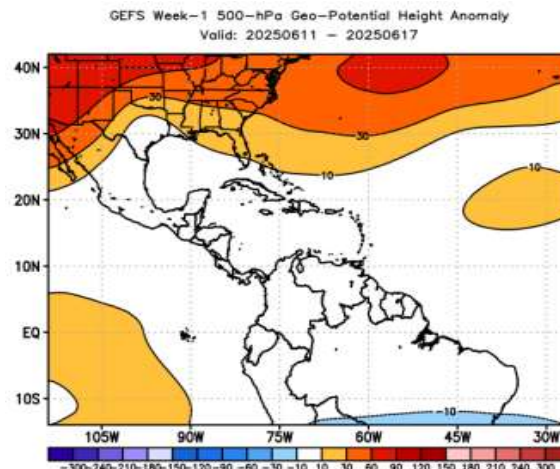
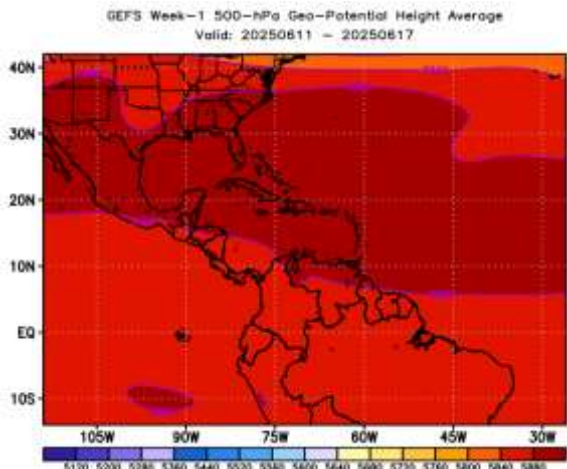
7-day Anomaly

MSLP



Next week, mean sea level pressure is forecasted to be slightly-above-average over the Bahamas, southern Cuba, Hispaniola and northern lesser Antilles.

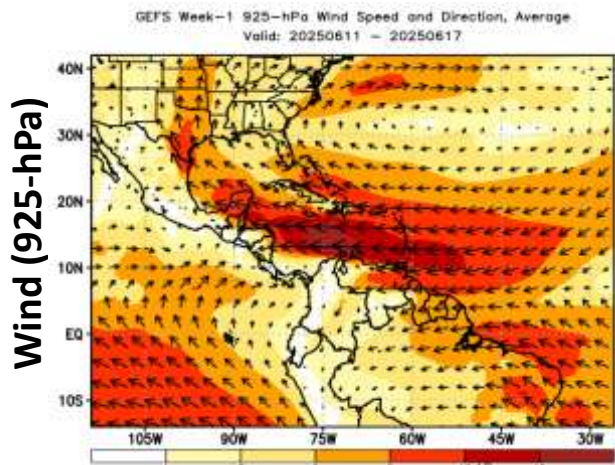
Geop. Height (500-hPa)



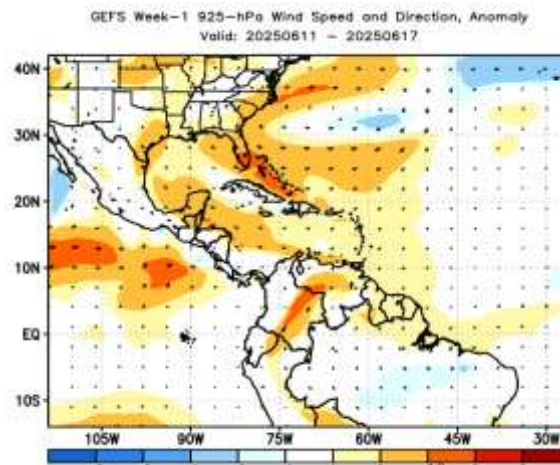
At 500-hPa, geopotential height anomalies in the region also expected to be normal over the Caribbean for next week.

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

7-day Total

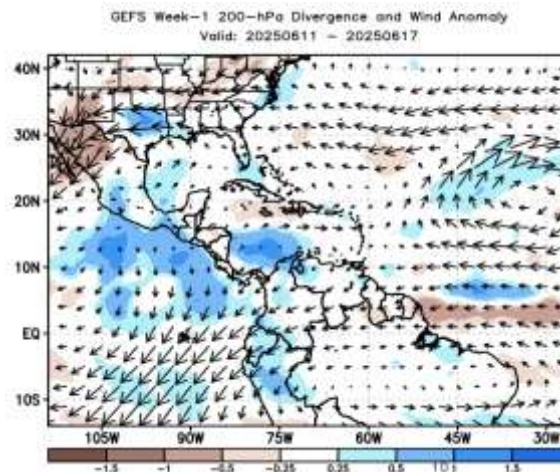
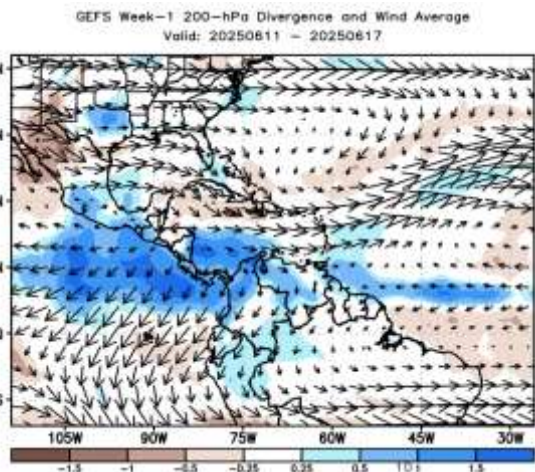


7-day Anomaly



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

Wind & Diverg. (200-hPa)

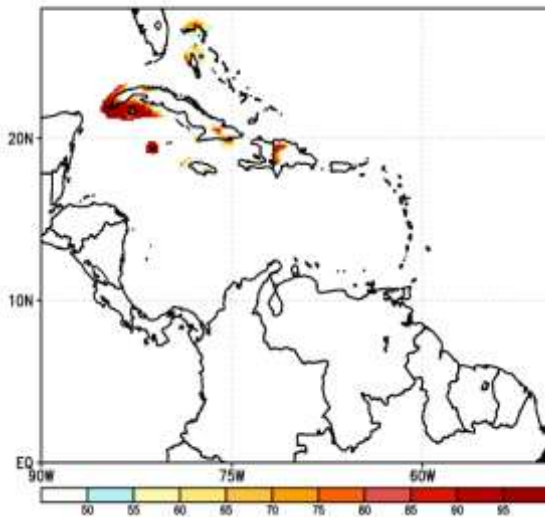


Upper-level convergence is expected over Jamaica, Hispaniola, and southern Caribbean.

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

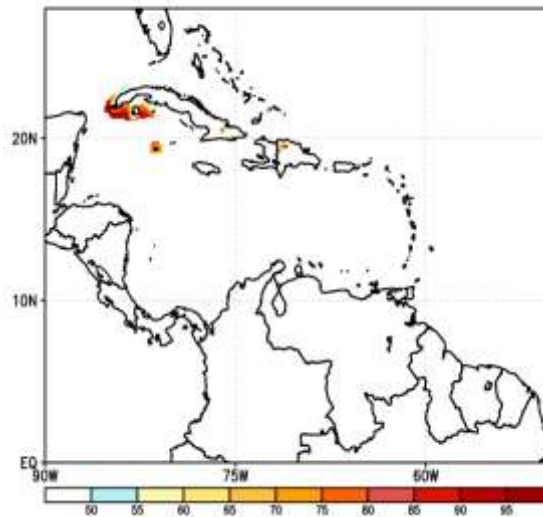
**hybrid > 80th percentile,
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250611 - 20250617



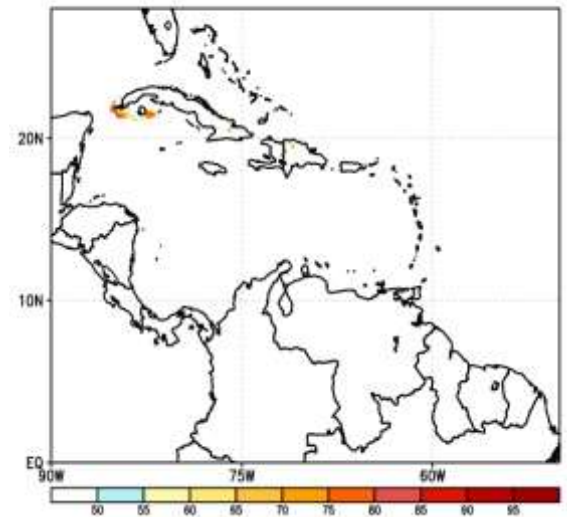
**hybrid > 90th percentile,
≥3 consecutive days**

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250611 - 20250617



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

GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250611 - 20250617

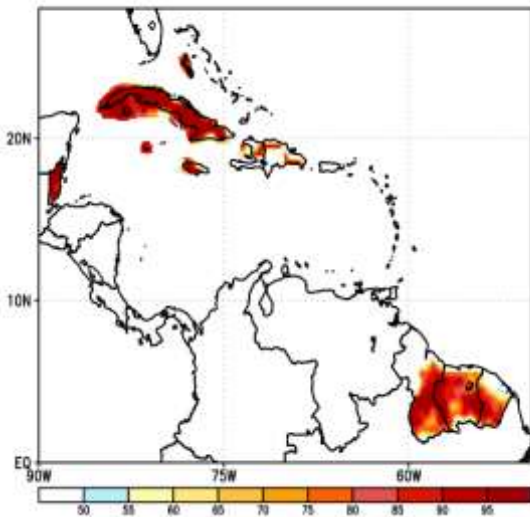


There is a low to moderate chance for daily Tmax/HI max hybrid index to exceed the 80th percentile for at least 3 consecutive days over the Bahamas, few parts of Cuba, Cayman Islands and western Dominican Republic. There is a low chance for daily Tmax/HI max hybrid index to exceed the 95th percentile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

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

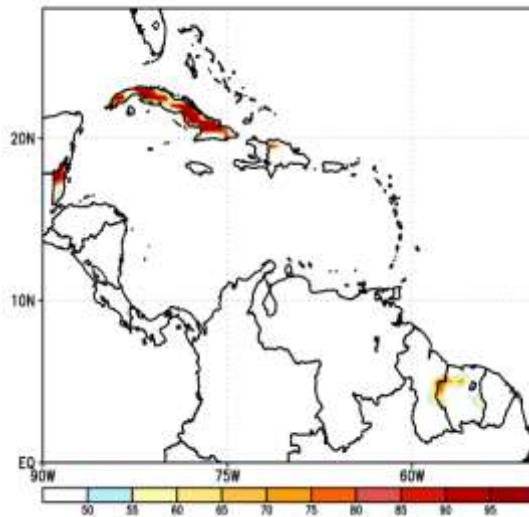
**hybrid > 33°C,
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250611 - 20250617



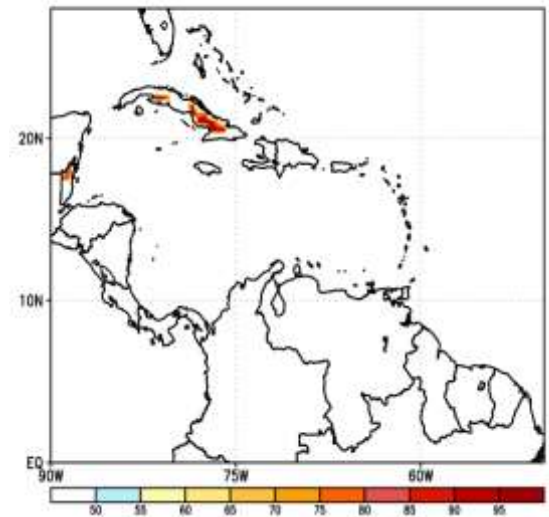
**hybrid > 35°C,
≥3 consecutive days**

FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250611 - 20250617



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

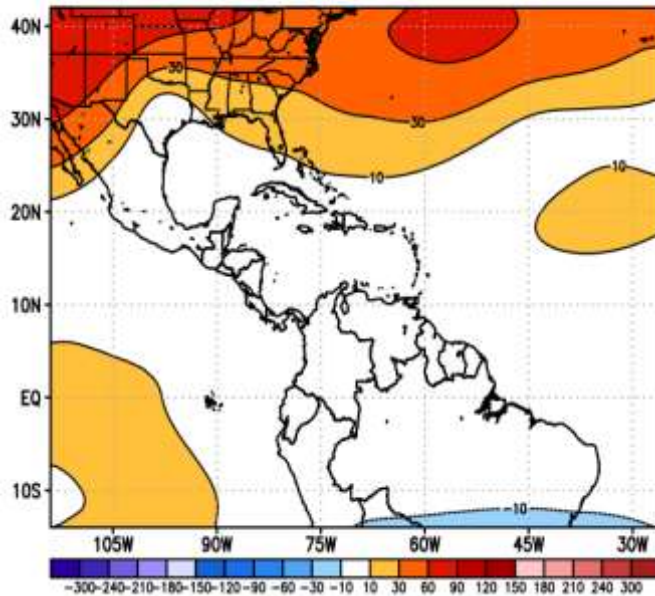
FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250611 - 20250617



There is a high probability for daily Tmax/HImax hybrid index to exceed 33°C for at least 3 consecutive days over the Bahamas, Cuba, Cayman Islands 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.

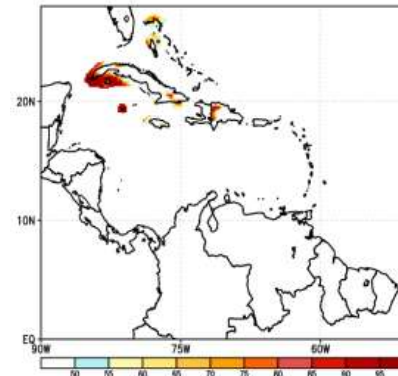
Week-1, Convergence of Evidences

GEFS Week-1 500-hPa Geo-Potential Height Anomaly
Valid: 20250611 - 20250617

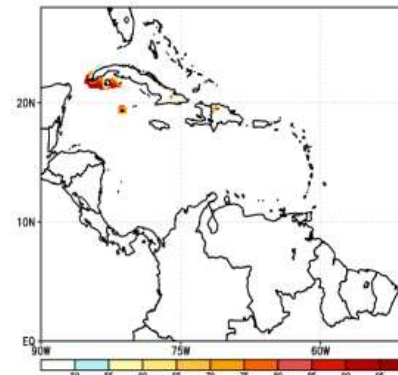


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be normal for next week.
- Hybrid index exceedance probability forecasts indicate:
 - Low chances for the hybrid index to exceed the 95th percentile over Cayman Islands.
 - High chances for the hybrid index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

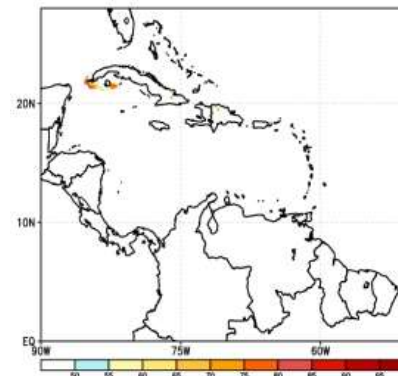
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250611 - 20250617



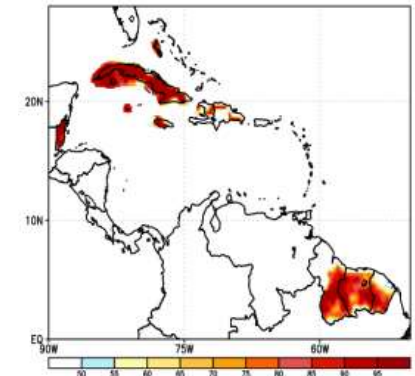
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250611 - 20250617



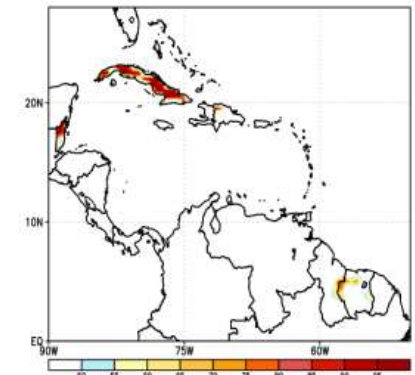
GEFS Week-1 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
Valid: 20250611 - 20250617



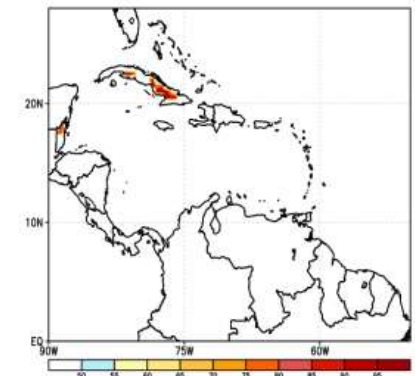
FS Week-1 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250611 - 20250617



FS Week-1 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250611 - 20250617

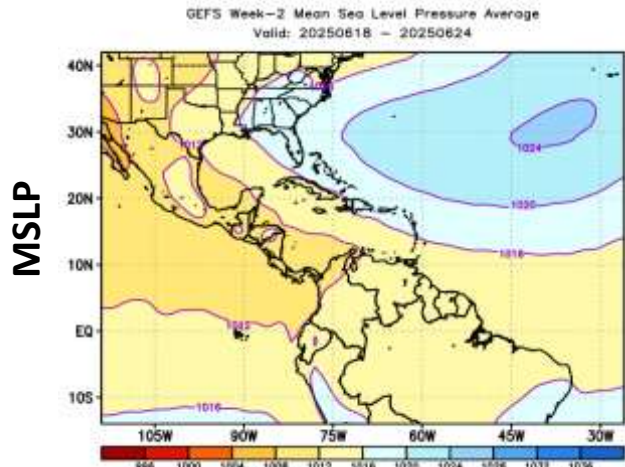


FS Week-1 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
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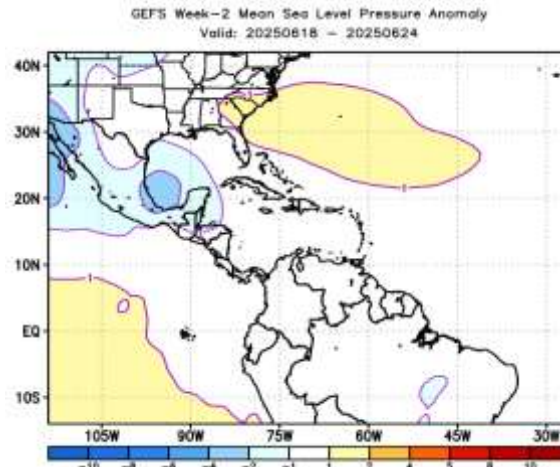


Week-2, Mean Sea Level Pressure & 500-hPa Height

7-day Total



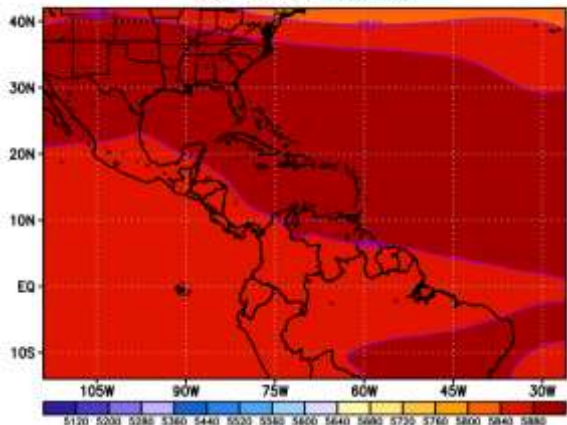
7-day Anomaly



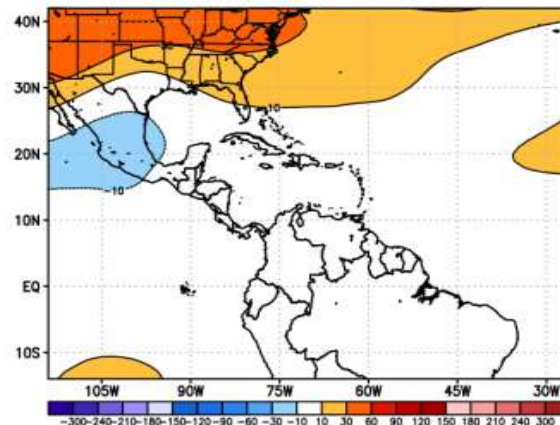
For week-2, mean sea level pressure is forecasted to be normal over the Caribbean.

Geop. Height (500-hPa)

GEFS Week-2 500-hPa Geo-Potential Height Average
Valid: 20250618 - 20250624



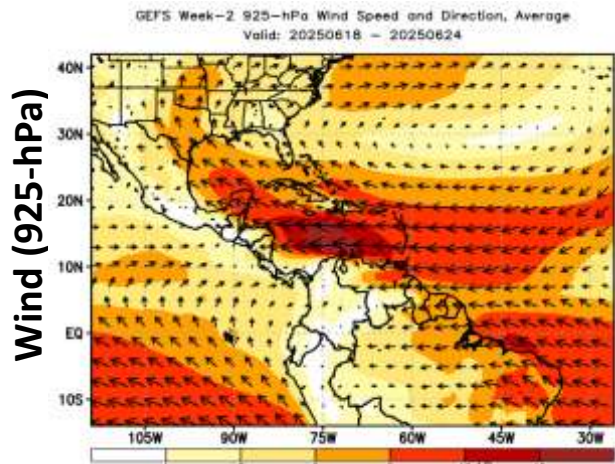
GEFS Week-2 500-hPa Geo-Potential Height Anomaly
Valid: 20250618 - 20250624



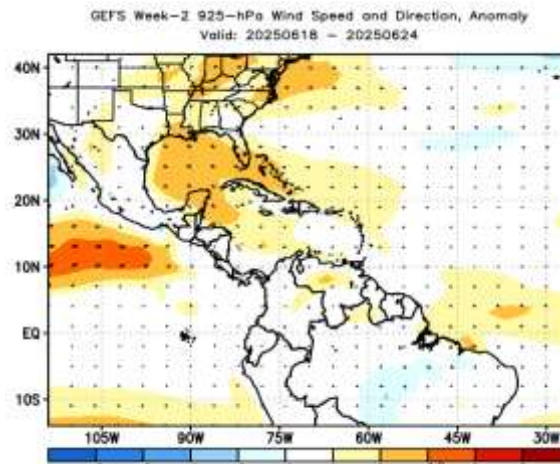
At 500-hPa, geopotential height anomalies in the region expected to be normal over the Caribbean for week 2.

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

7-day Total

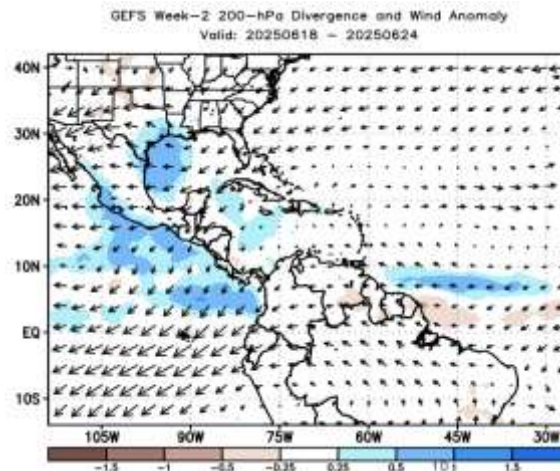
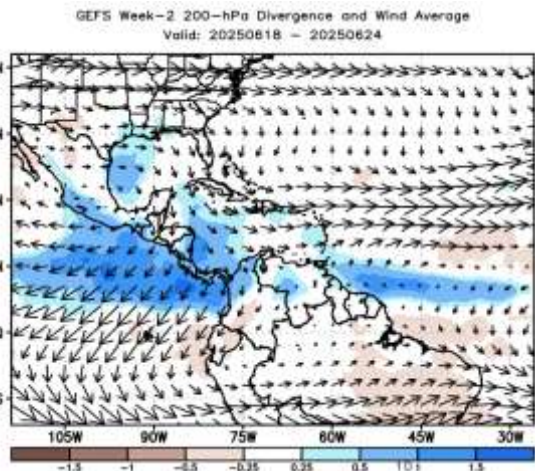


7-day Anomaly



For week-2, low-level winds are expected to be normal over much of the Caribbean, while low-level winds are expected to be above-normal over the Lucayan Archipelago.

Wind & Diverg. (200-hPa)

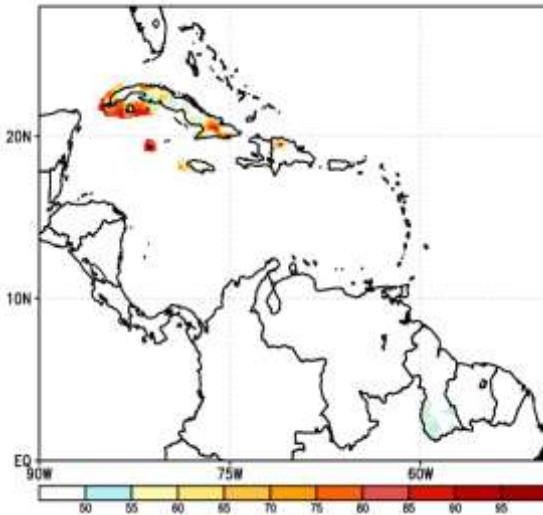


There is no upper-level convergence is expected over the Caribbean.

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

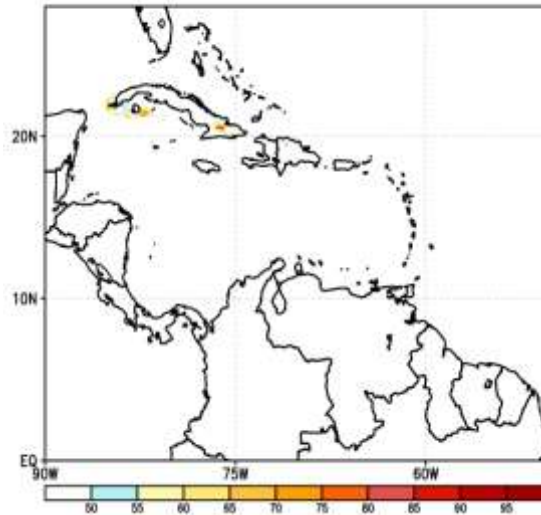
**hybrid > 80th percentile,
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GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 80th, > 3 consec. days
Valid: 20250617 - 20250623



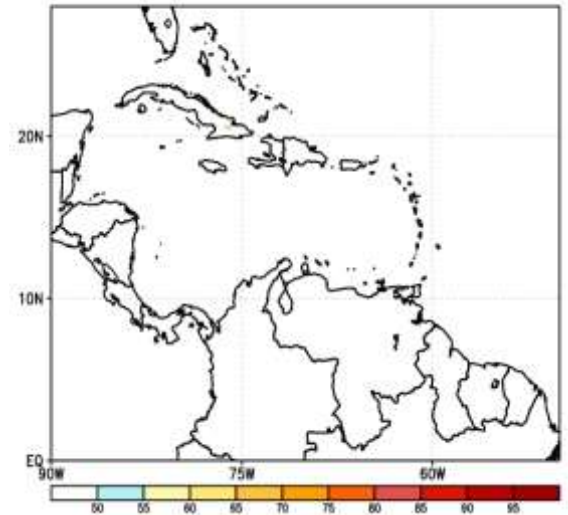
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GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 90th, > 3 consec. days
Valid: 20250617 - 20250623



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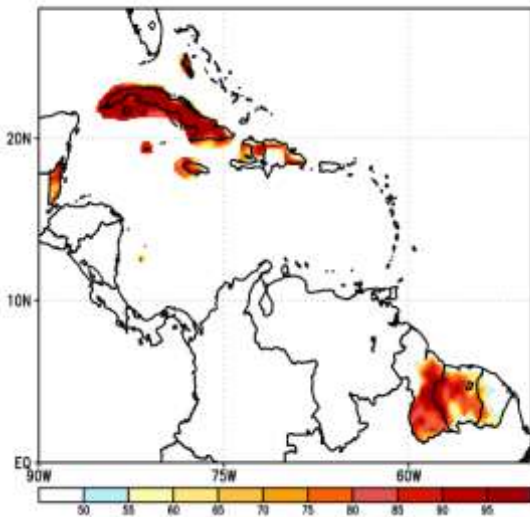


There is a low to moderate to high chance for daily Tmax/HImax hybrid index to exceed the 80th percentile for at least 3 consecutive days over few parts of Cuba and Cayman Islands. There is no chance for daily Tmax/HImax hybrid index to exceed the 95th percentile for at least 3 consecutive days over the Caribbean.

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

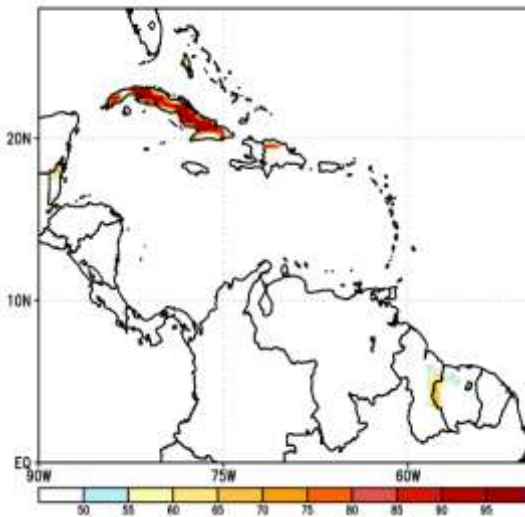
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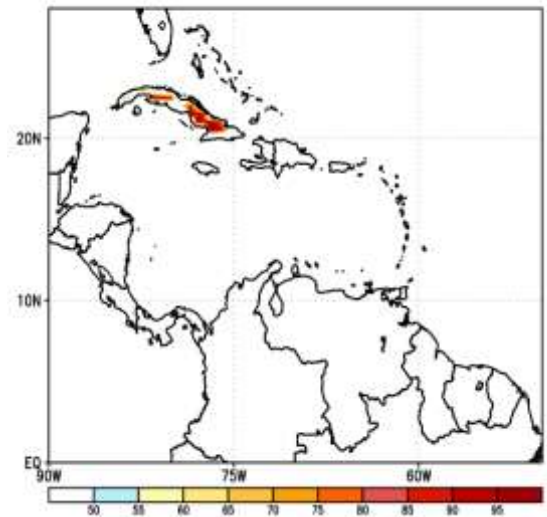
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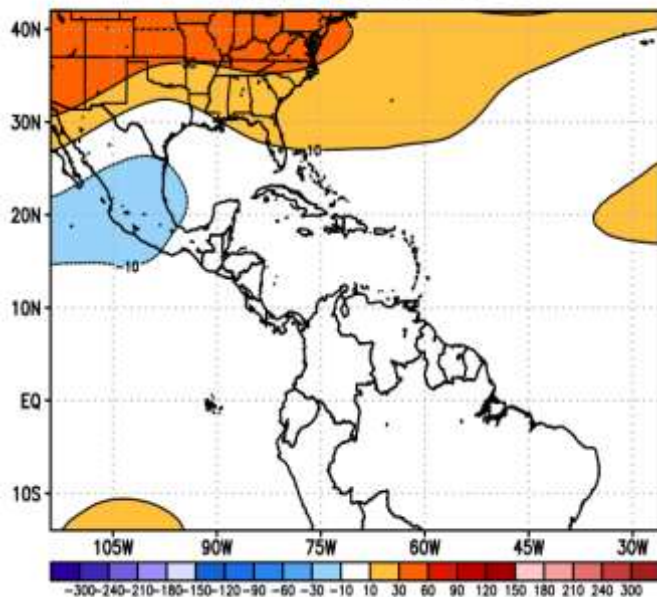
FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250617 - 20250623



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

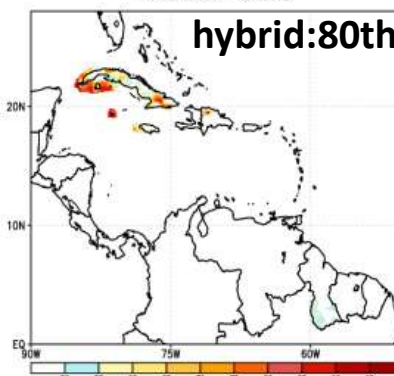
Week-2, Convergence of Evidences

GEFS Week-2 500-hPa Geo-Potential Height Anomaly
Valid: 20250618 - 20250624

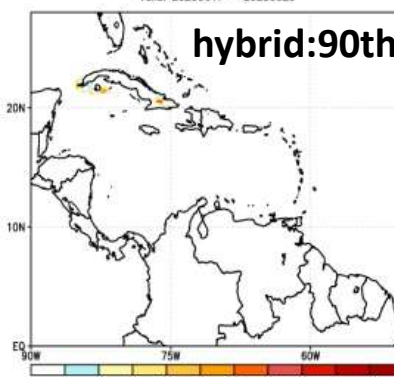


- At 500-hPa, model forecasts indicate geopotential height anomalies in the region expected to be normal over the Caribbean for week 2.
- Hybrid index exceedance probability forecasts indicate:
 - No chances for the hybrid index to exceed the 95th percentile over the Caribbean.
 - Low to moderate chances for the hybrid index to exceed 37°C over few parts of Caribbean.

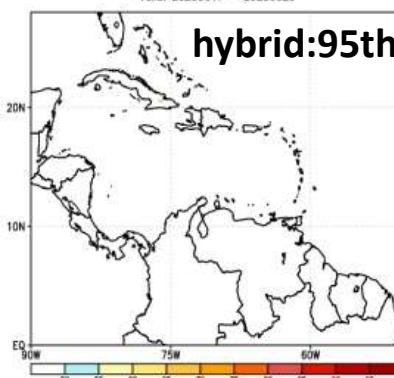
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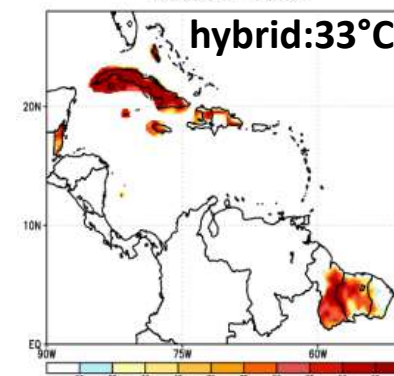
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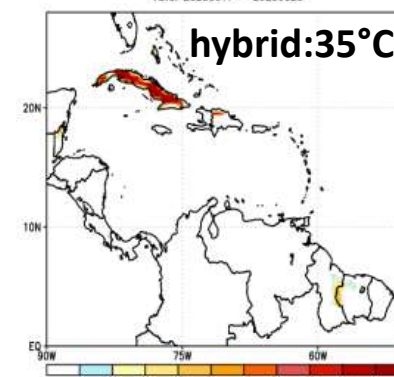
GEFS Week-2 Tmax/HI hybrid exceedance Prob. > 95th, > 3 consec. days
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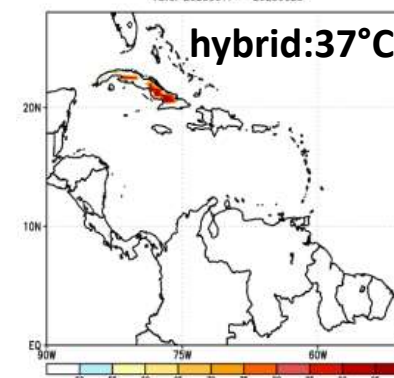
FS Week-2 Tmax/HI hybrid exceedance Prob. > 33 deg. Cels., > 3 consec. da
Valid: 20250617 - 20250623



FS Week-2 Tmax/HI hybrid exceedance Prob. > 35 deg. Cels., > 3 consec. da
Valid: 20250617 - 20250623



FS Week-2 Tmax/HI hybrid exceedance Prob. > 37 deg. Cels., > 3 consec. da
Valid: 20250617 - 20250623



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 Clm	Jun-04-2025			Jun-05-2025			Jun-06-2025			Jun-07-2025			Jun-08-2025		
			Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert	Tmax	Rain	Alert
1	Barquisimeto	28.5 degC															
2	Barranquilla	30.9 degC															
3	Cartagena	31.0 degC															
4	Castries	28.5 degC															
5	Chaguanas	29.7 degC															
6	Fort_De_France	28.1 degC															
7	Havana	31.3 degC															
8	Kingston	30.1 degC															
9	Maracaibo_La_Chinita	33.6 degC															
10	Miami_FI	34.2 degC															
11	Port_Au_Prince	29.9 degC															
12	Port_De_Paix	28.4 degC															
13	San_Juan	28.8 degC															
14	Santiago_De_Cuba	28.1 degC															
15	Tampa	34.9 degC															
16	Santo_Domingo	30.2 degC															
17	Punta_Cana	30.3 degC															



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

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

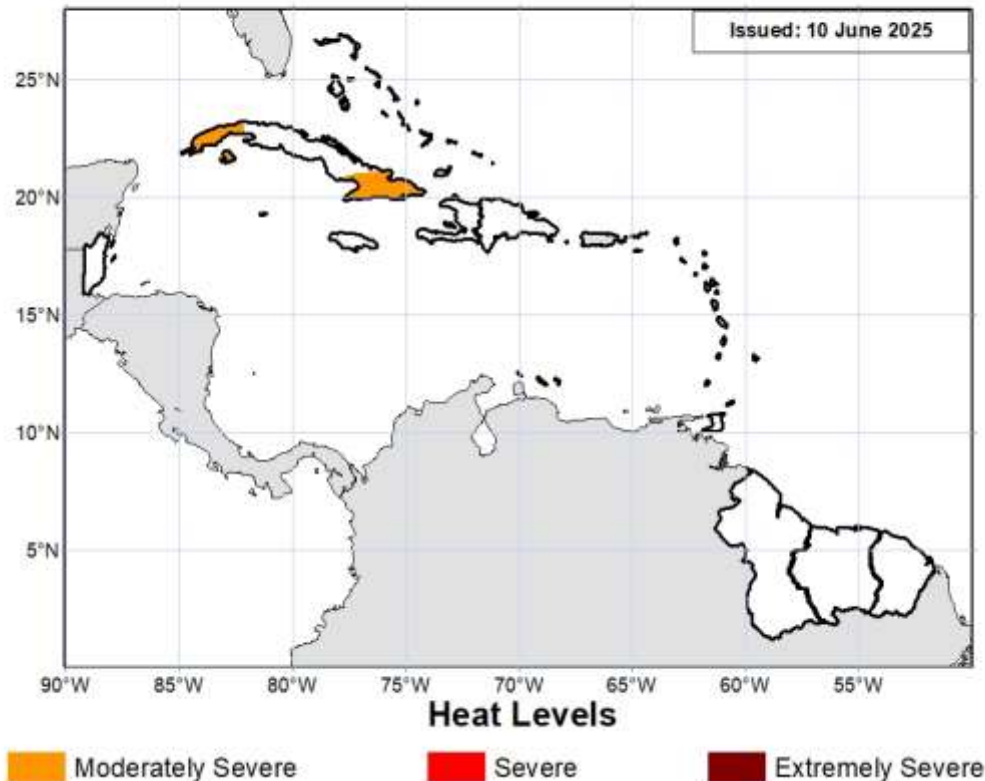
		Week 2: 09Jun2025 - 15Jun2025				Week 3: 16Jun2025 - 22Jun2025				Week 4: 23Jun2025 - 29Jun2025			
NO	Stations	80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert	80th Pctl Clim	Tmax	Rain	Alert
1	Barranquilla	30.0 degC				30.3 degC				29.8 degC			
2	Cartagena	30.2 degC				31.2 degC				30.8 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

Week-1 Heat Hazards Outlook

Week-1 Caribbean Heat Hazard Outlooks Valid: 11 - 17 June 2025

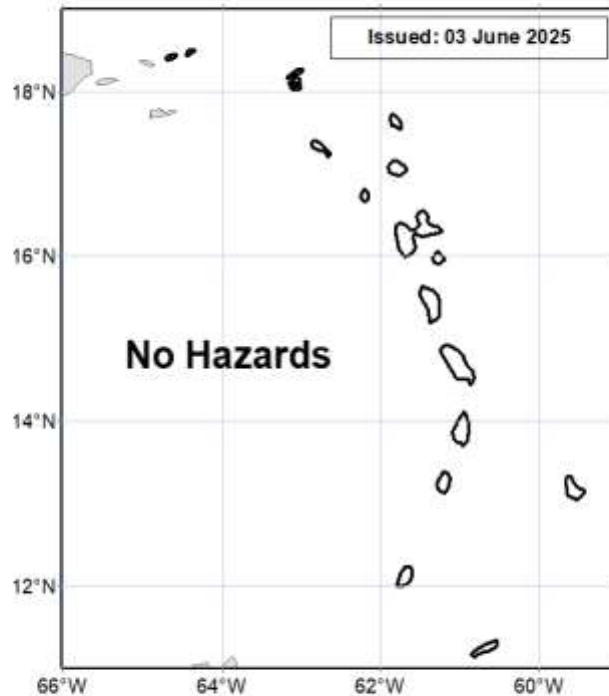


- There is an increased chance for moderately severe heat over few parts of Cuba and Cayman Islands.

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: 11 - 17 June 2025

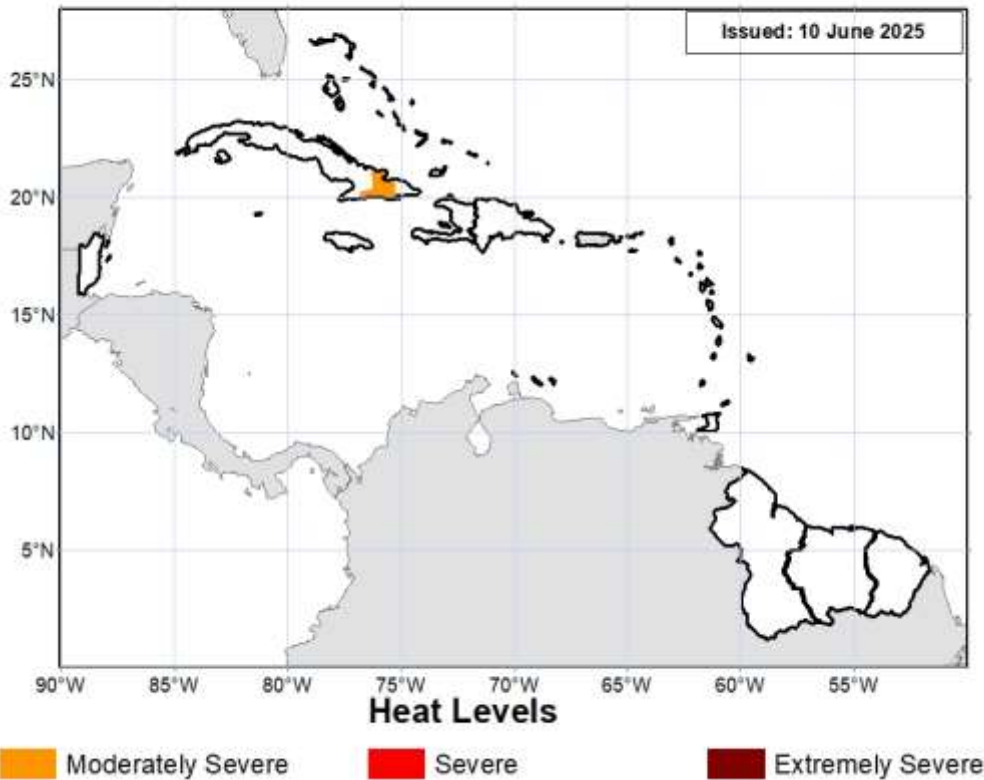


Moderately Severe Severe Extremely Severe

- There are no hazards forecast for week 1.

Week-2 Heat Hazards Outlook

Week-2 Caribbean Heat Hazard Outlooks Valid: 18 - 24 June 2025



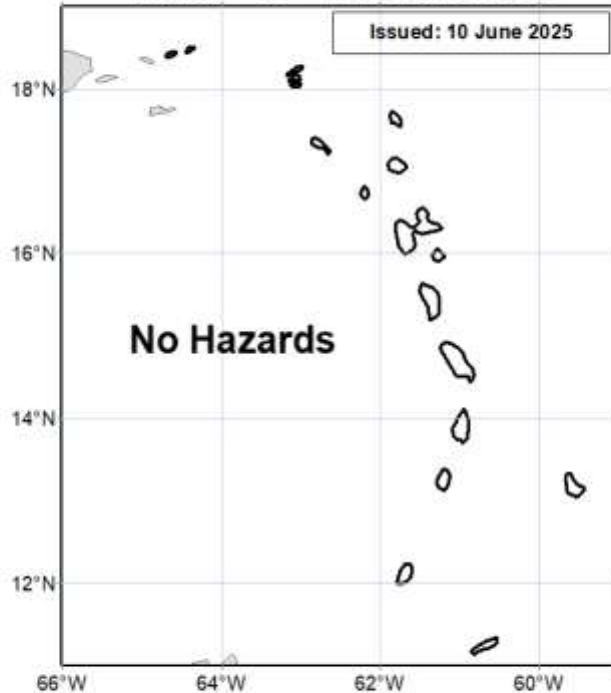
- There is an increased chance for moderately severe heat over southern Cuba.

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: 18 - 24 June 2025

Issued: 10 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