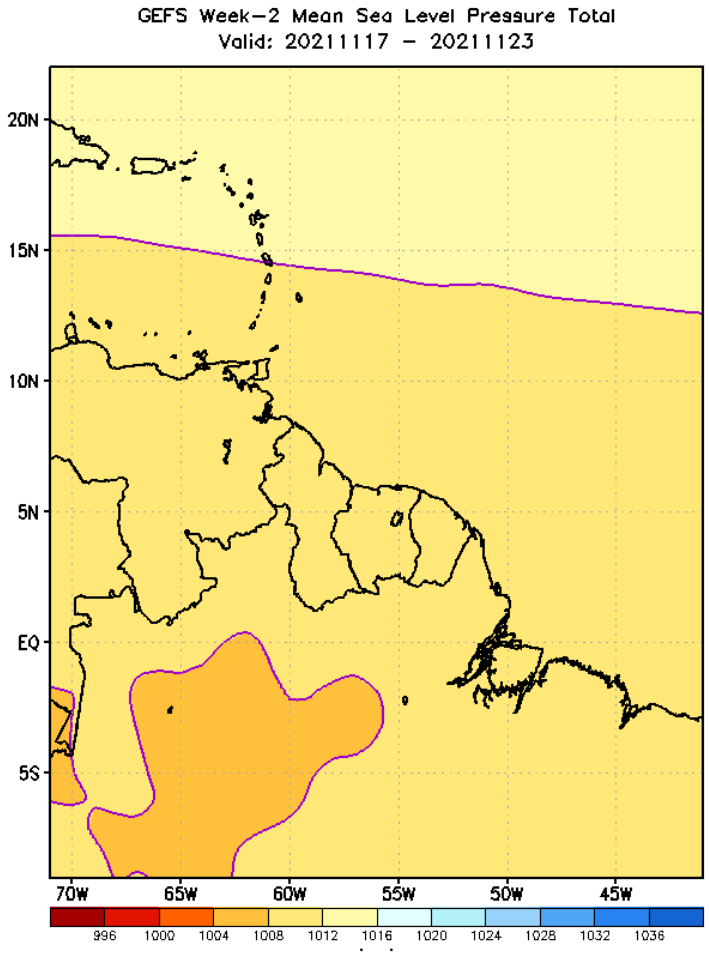
Second WMO RCC-Washington International Training Workshop

Real-time week-2 extreme temperature outlook

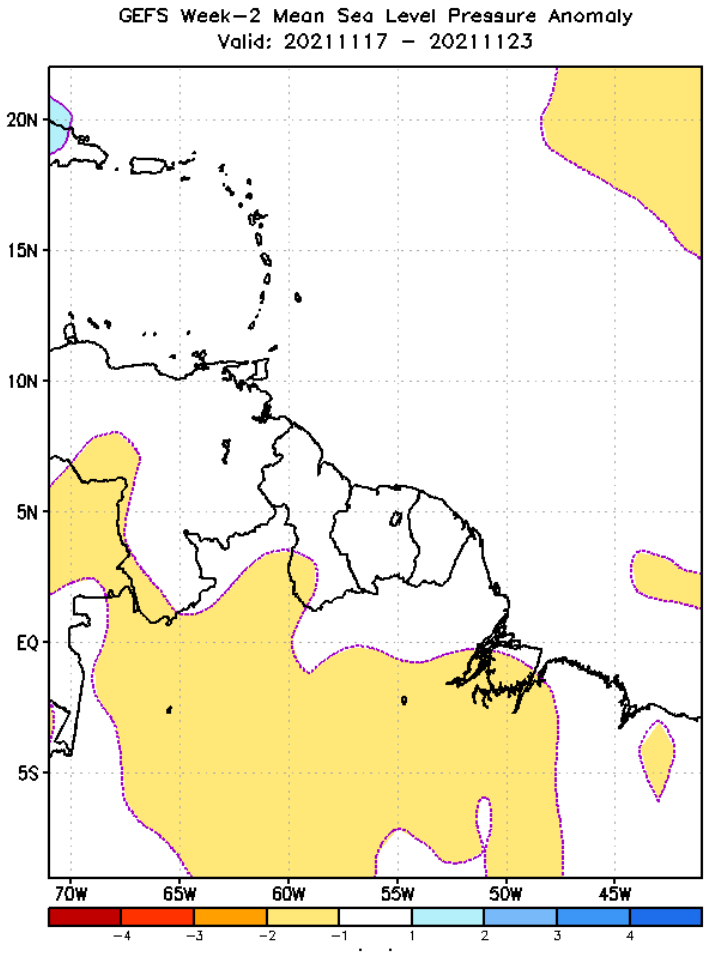
8 – 10 November 2021

Mean Sea Level Pressure

Total

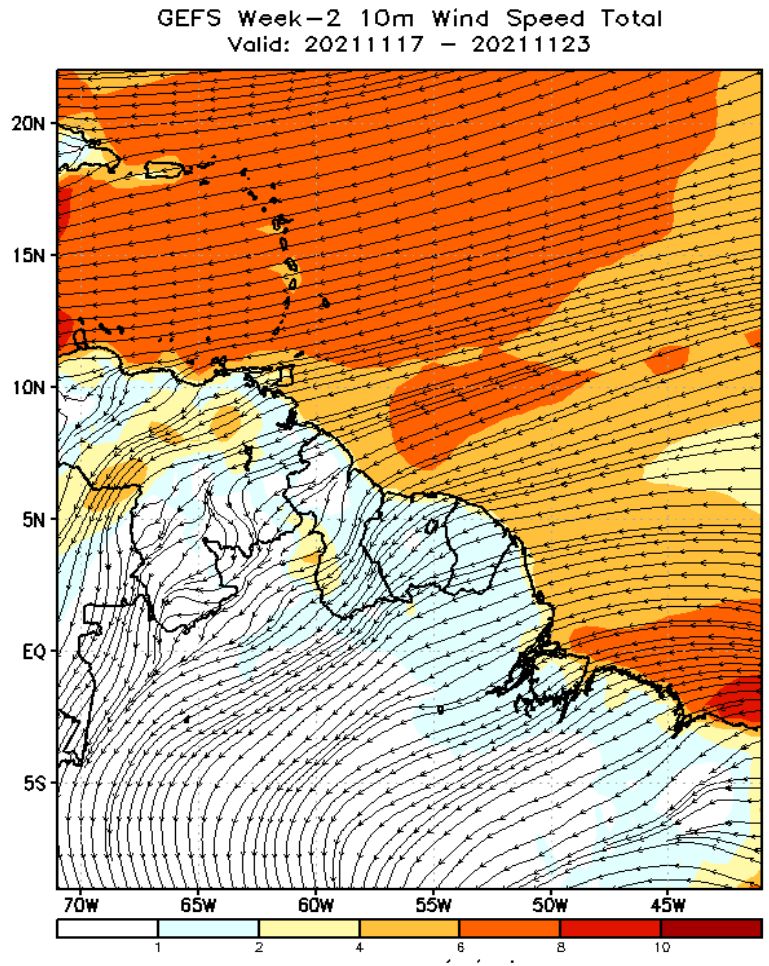


Anomaly

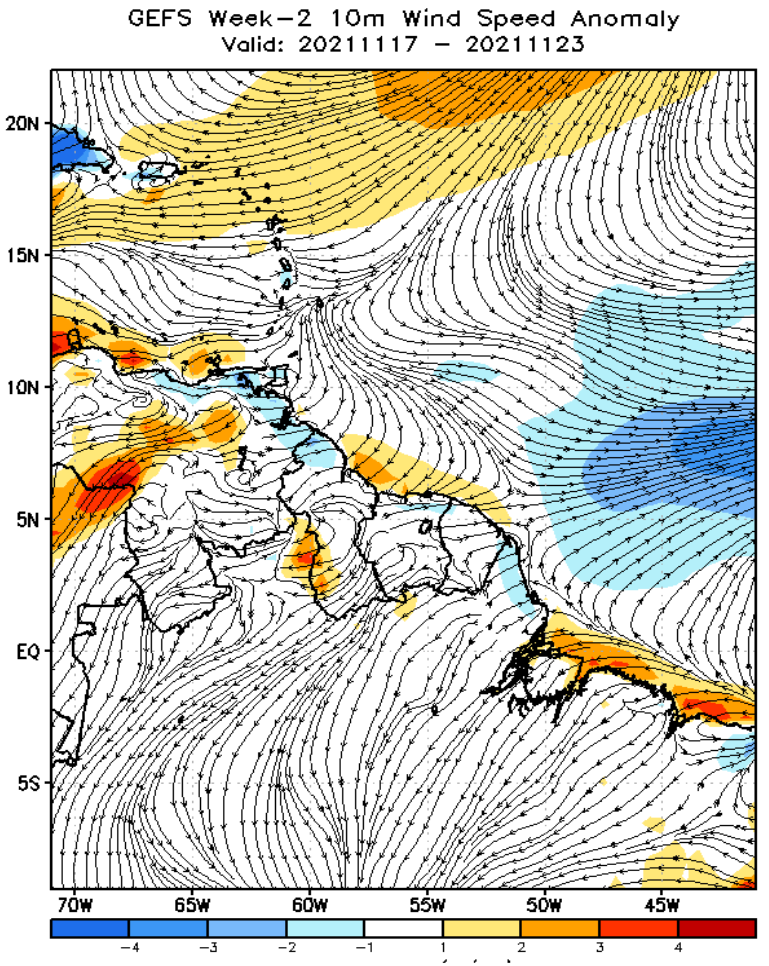


10m Wind

Total

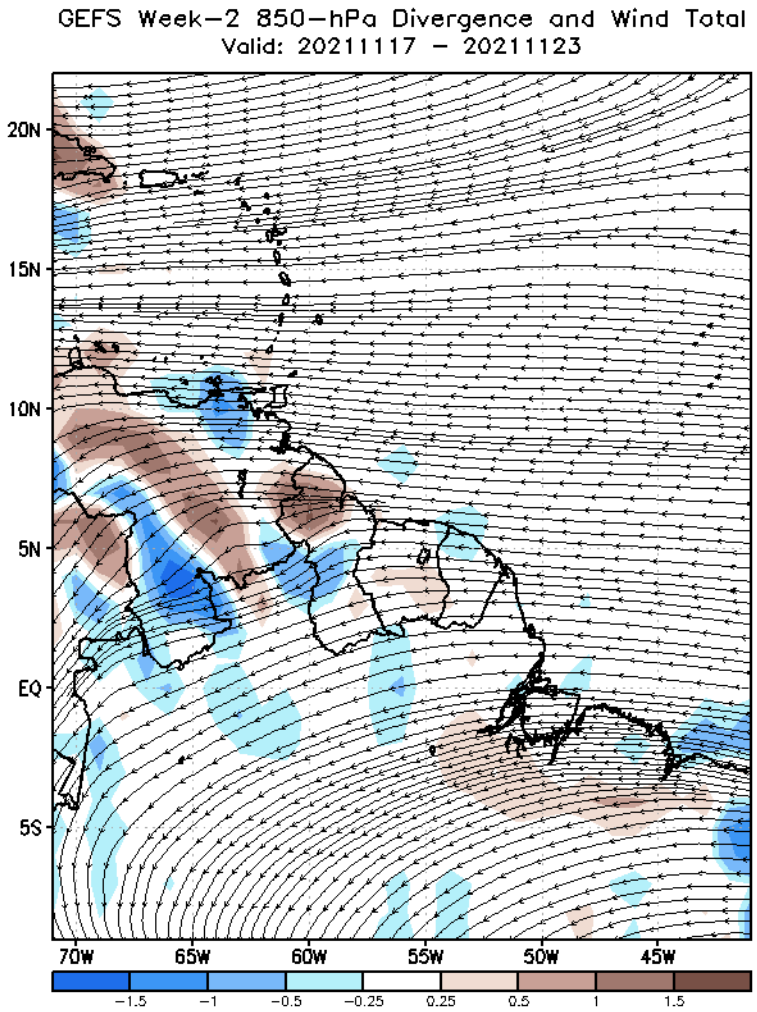


Anomaly

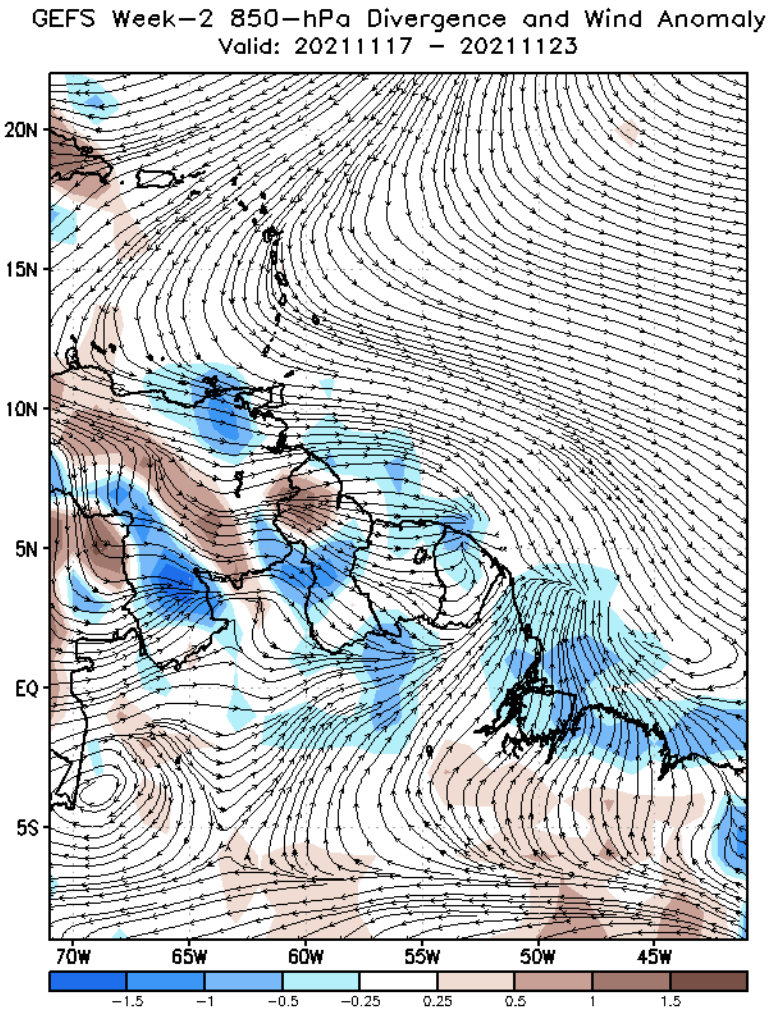


850-hPa Wind

Total

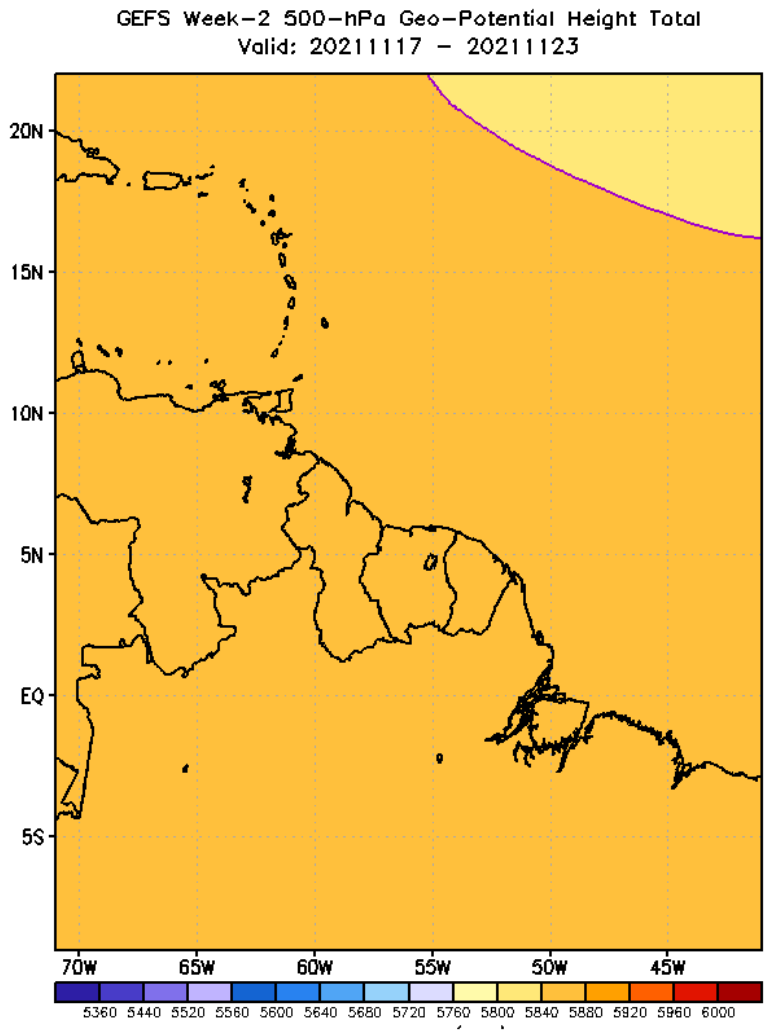


Anomaly



500-hPa Height

Total



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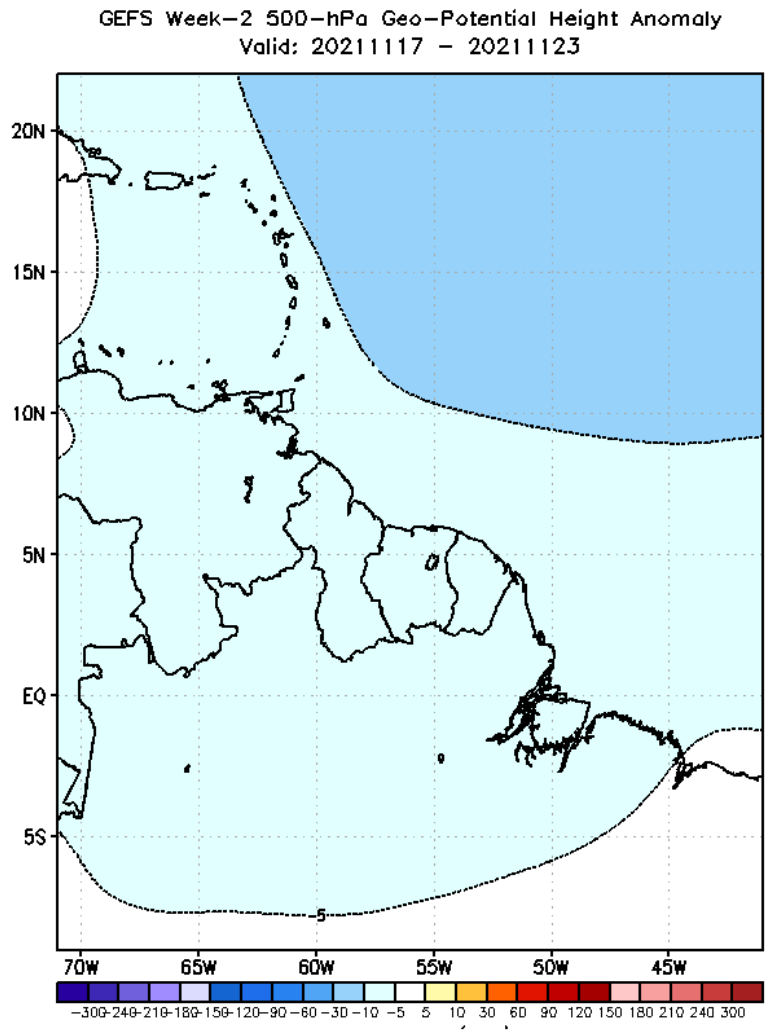
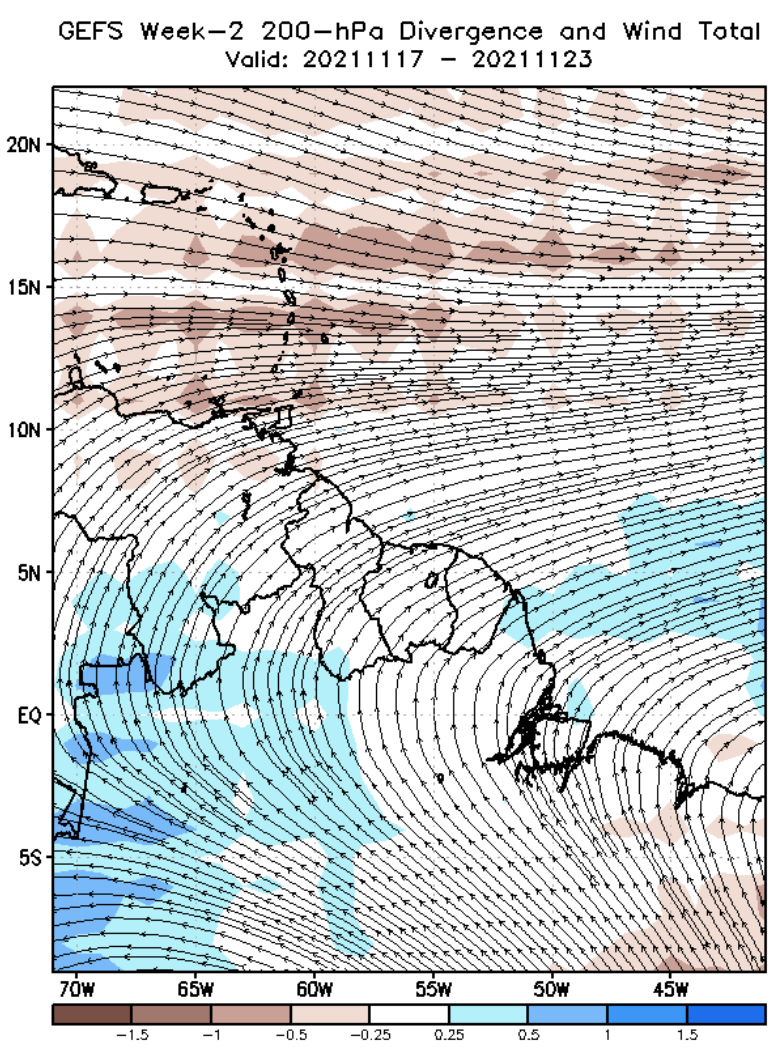
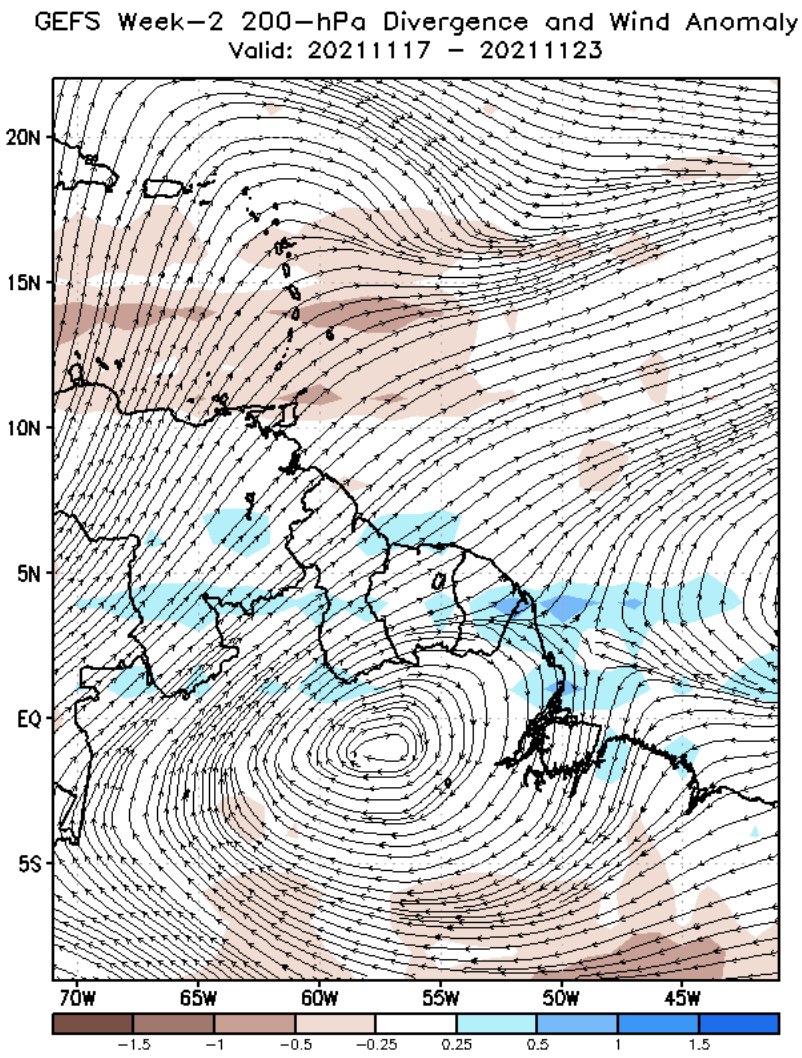


200-hPa Wind

Total

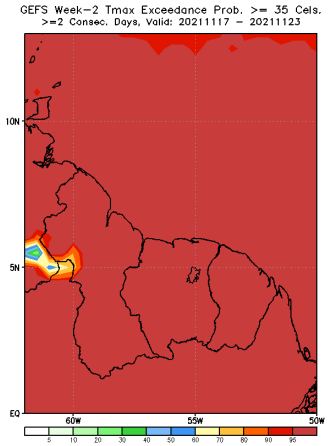


Anomaly

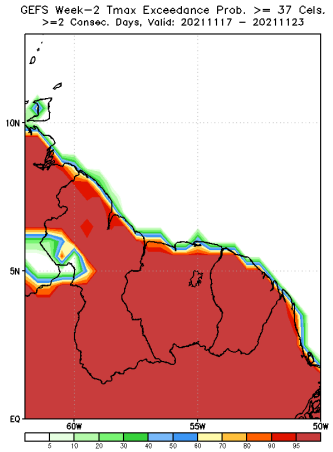


Tmax Exceedance Probability for at least 2 Consecutive Days

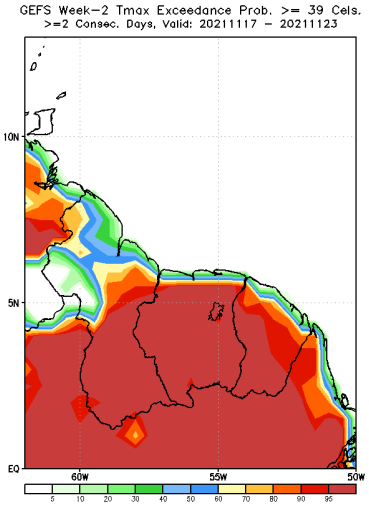
≥ 35°C



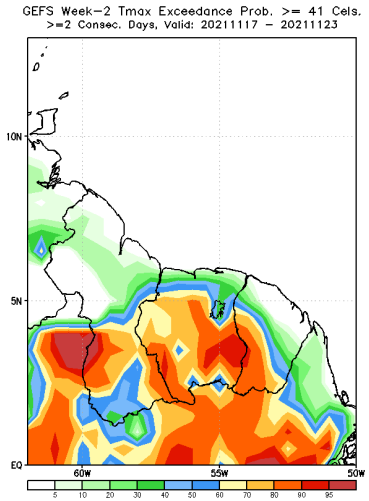
≥ 37°C



≥ 39°C

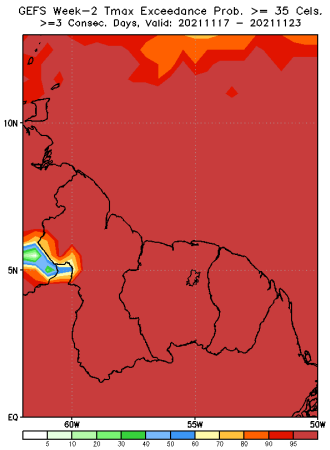


≥ 41°C

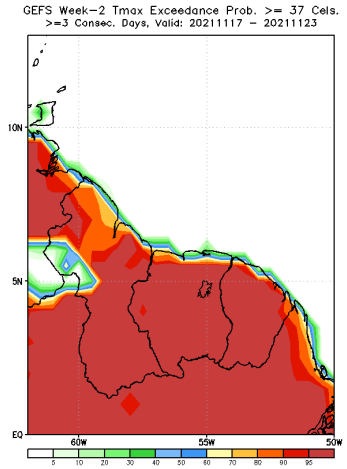


Tmax Exceedance Probability for at least 3 Consecutive Days

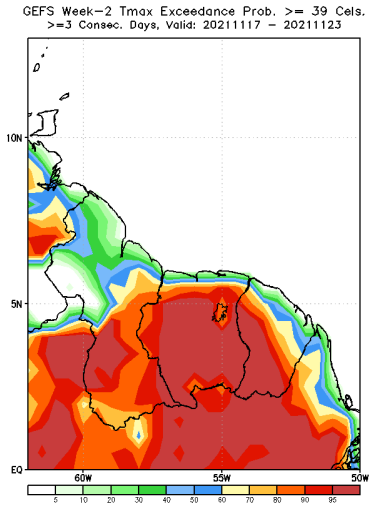
≥ 35 ºC



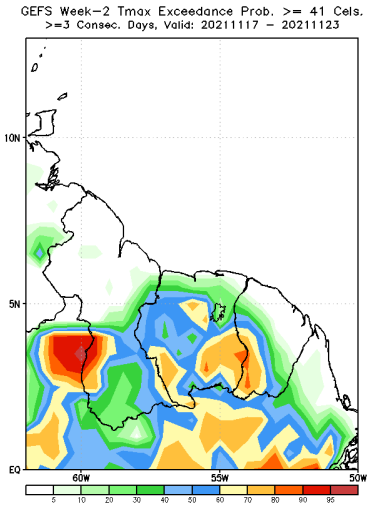
≥ 37 ºC



≥ 39 ºC

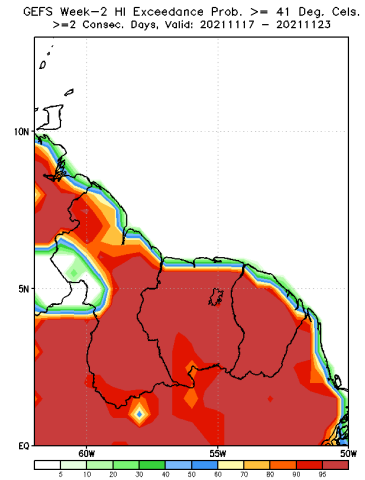


≥ 41 ºC

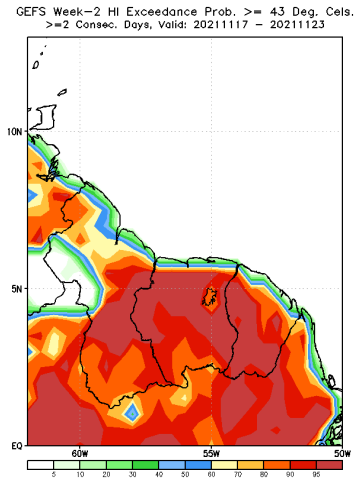


HI Exceedance Probability for at least 2 Consecutive Days

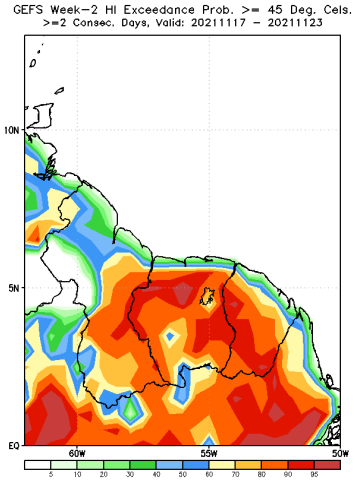
≥ 41°C



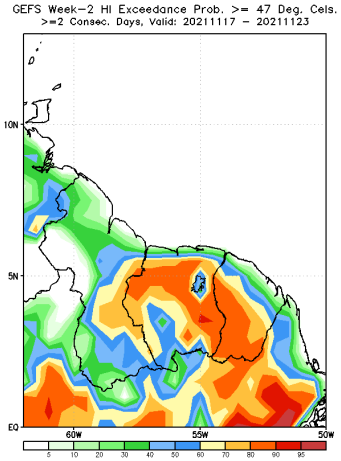
≥ 43°C



≥ 45°C

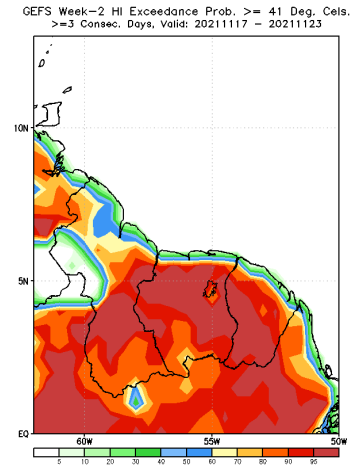


≥ 47°C

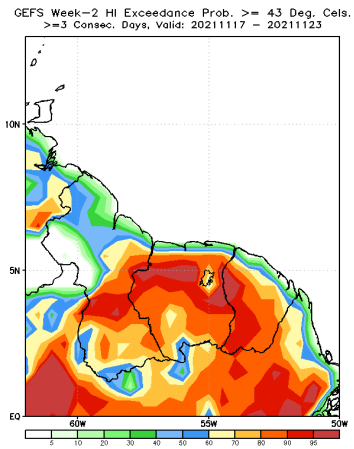


HI Exceedance Probability for at least 3 Consecutive Days

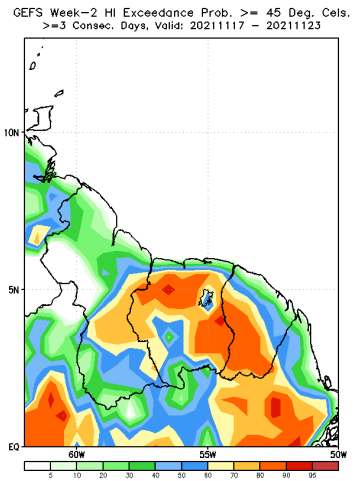
≥ 41°C



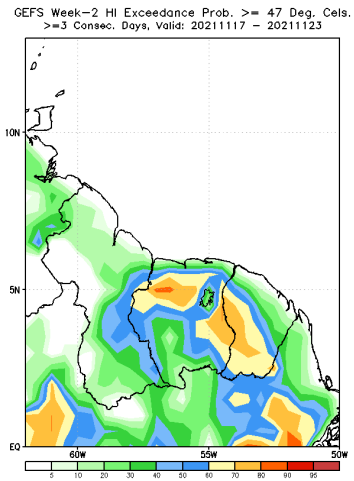
≥ 43°C



≥ 45°C

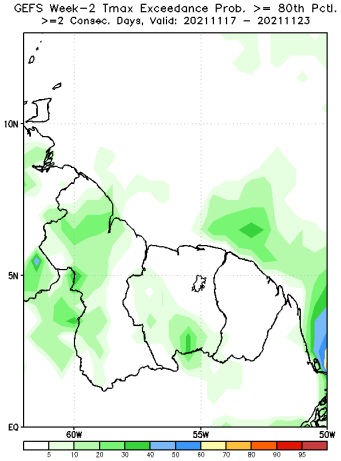


≥ 47°C

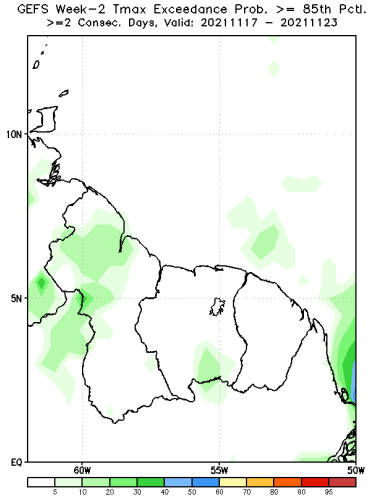


Tmax Exceedance Probability with respect to Percentiles for at least 2 Consecutive Days

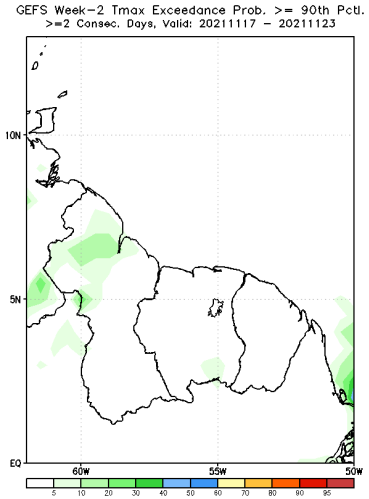
≥ 80th percentile



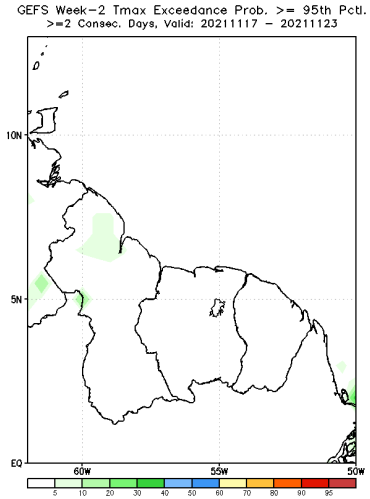
≥ 85th percentile



≥ 90th percentile

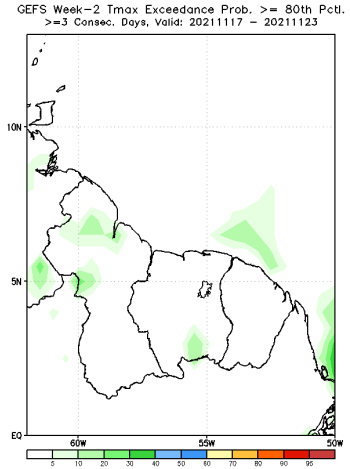


≥ 95tn percentile

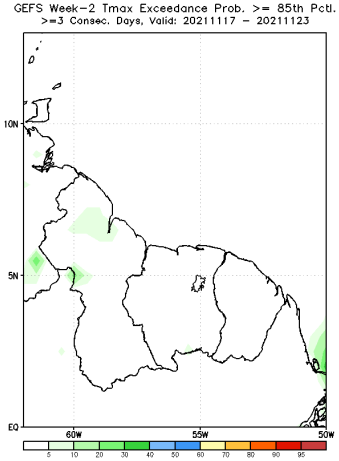


Tmax Exceedance Probability with respect to Percentiles for at least 3 Consecutive Days

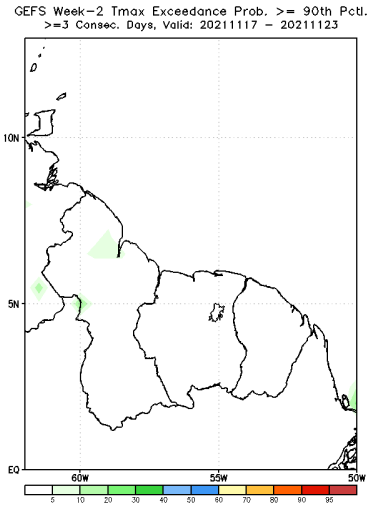
≥ 80th percentile



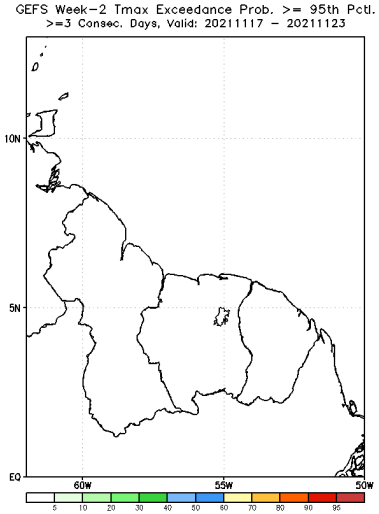
≥ 85th percentile



≥ 90th percentile

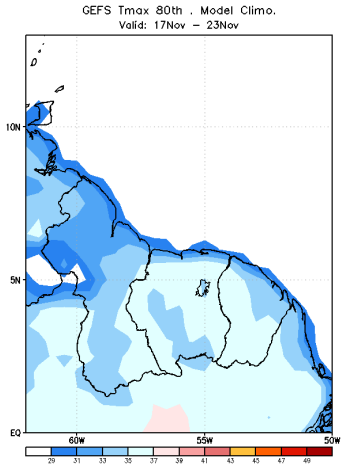


≥ 95th percentile

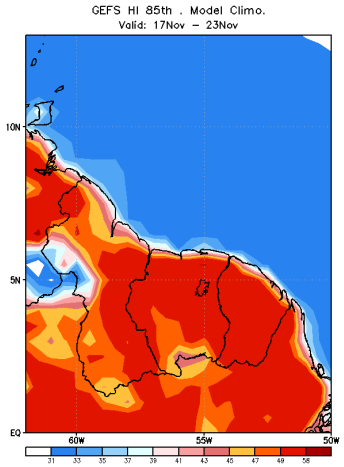


Tmax Percentile Climatology

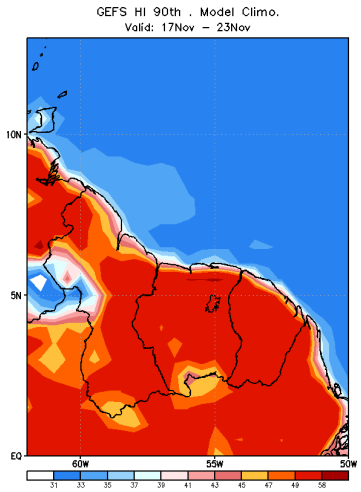
80th percentile



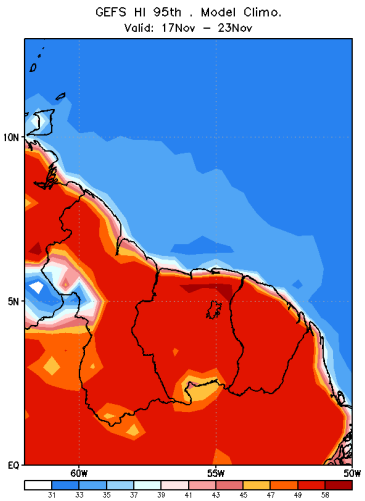
85th percentile



90th percentile

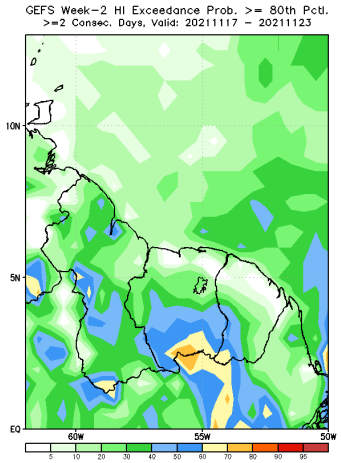


95th percentile

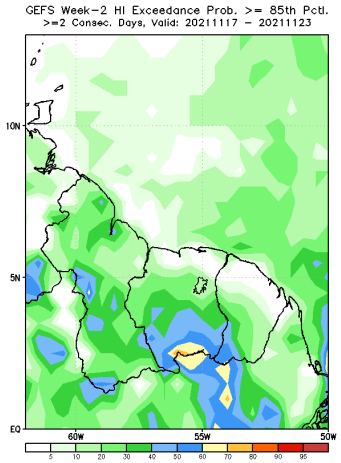


HI Exceedance Probability with respect to Percentiles for at least 2 Consecutive Days

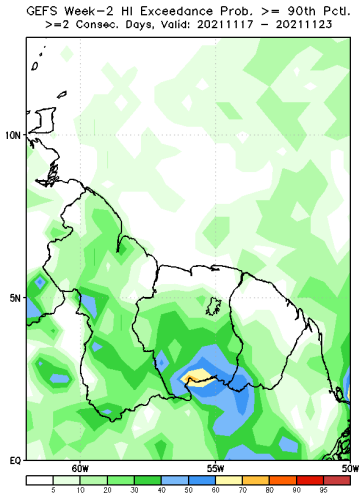
≥ 80th percentile



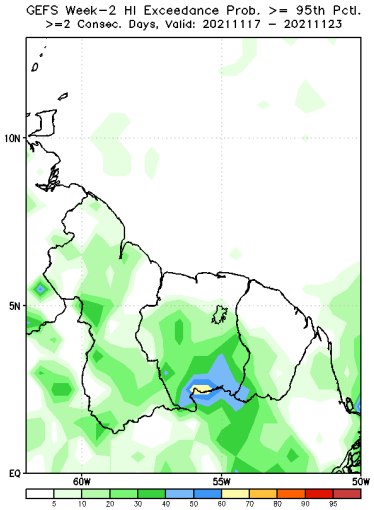
≥ 85th percentile



≥ 90th percentile

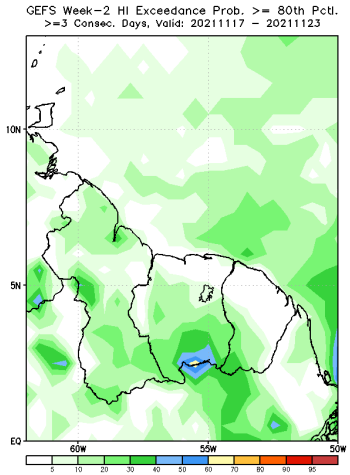


≥ 95th percentile

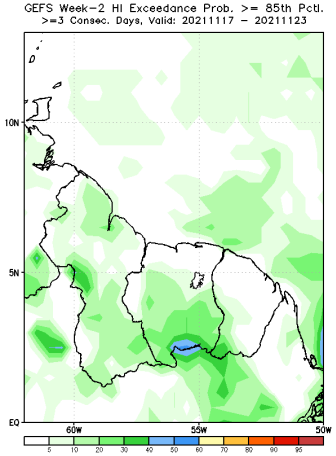


HI Exceedance Probability with respect to Percentiles for at least 3 Consecutive Days

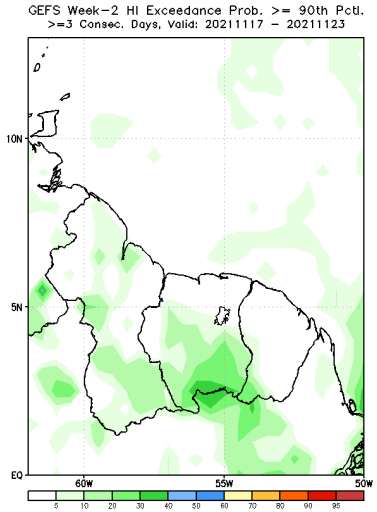
≥ 80th percentile



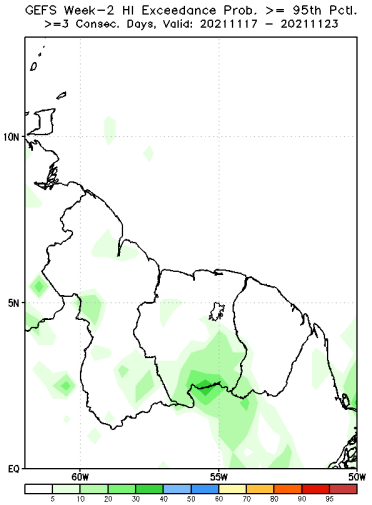
≥ 85th percentile



≥ 90th percentile

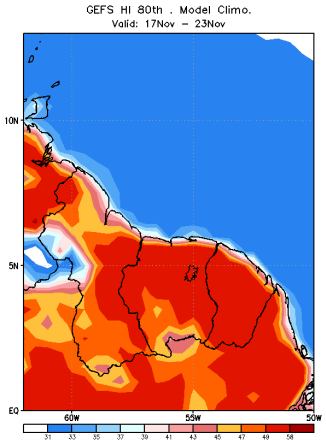


≥ 95th percentile

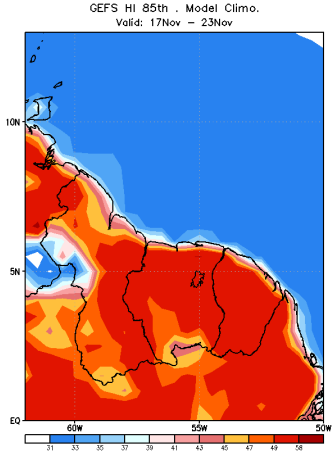


HI Percentile Climatology

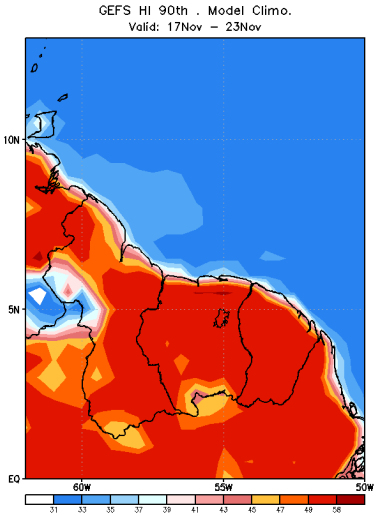
80th percentile



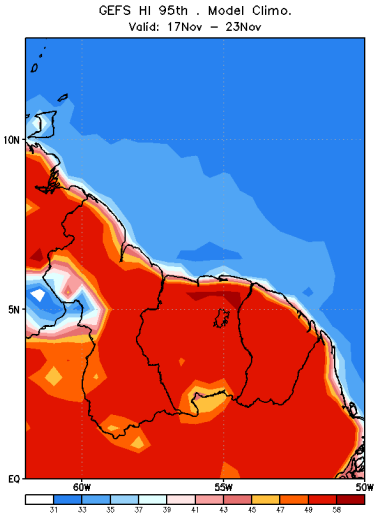
85th percentile



90th percentile



95th percentile



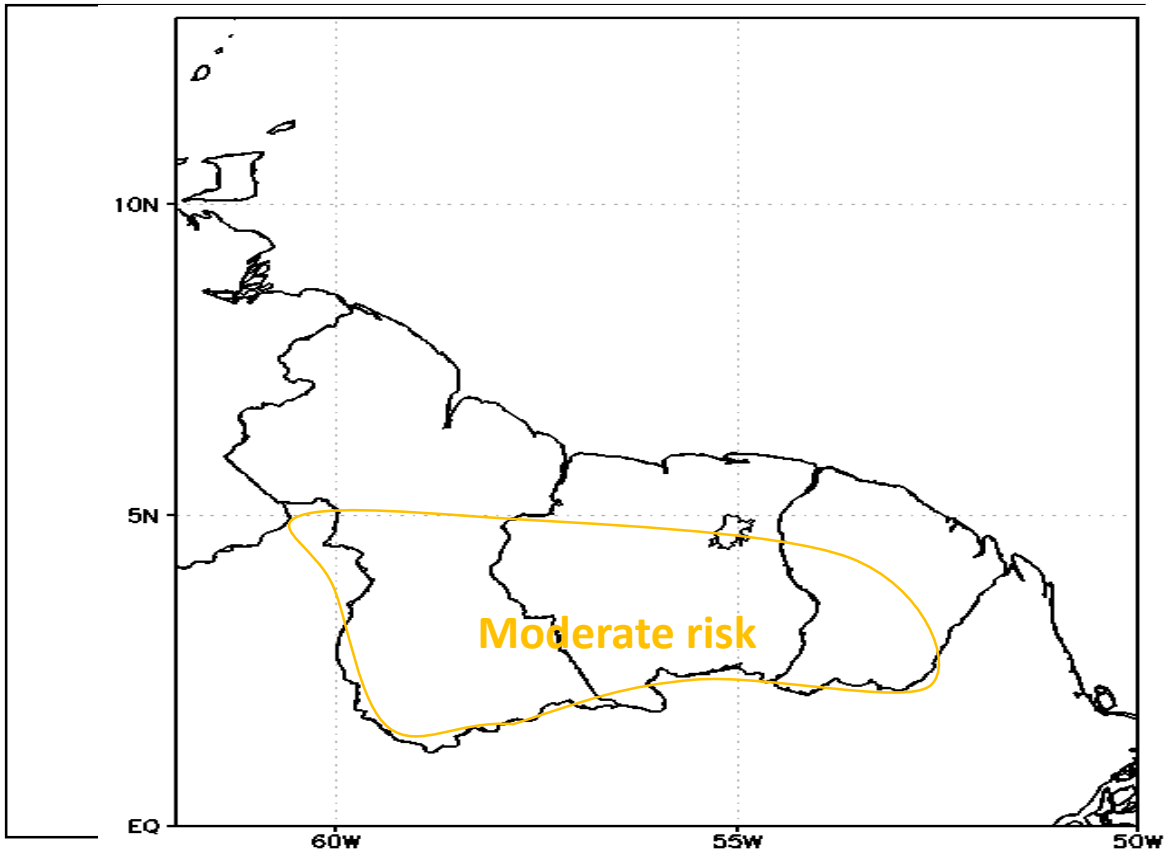
Summary

- Weak surface and low level winds in the eastern Atlantic ocean, south eastern Caribbean and Guianas couple with upper level convergence.
- 500hpa shows anomaly of low geopotential heights for eastern Caribbean and Guianas.
- Generally pockets of low level convergence on coast of Guianas and upper level support while interior has neutral conditions.
- Heat season still occurring over Guianas while its ending over Trinidad and Tobago and this is seen in the climatology
- Possible localise convective build up along the coast prior to Tmax occurring in Trinidad and Guianas which may limit max temp and max Heat Index, while the savannahs in along the Guianas interior clear skies and forest evapotranspiration (moisture) will definitely aid to excessive heat.

Summary

1. There is a very high probability Tmax >=35 C over the interior of the Guianas and consequently extremely high heat index values.
2. Tmax Exceedance probability with respect to >=80,>=85,>=90 and >=95 percentiles for at least 2 consecutive days have generally low probability of occurring.
3. Tmax Exceedance probability with respect to >=80,>=85,>=90 and >=95 percentiles for at least 3 consecutive days have generally lower probability of occurring.

Excessive Heat Outlook



Legend

- High risk
- Moderate risk

Insert your justification

Justification

1. The outlined area over the interior of the Guianas will experience moderate excessive heat conditions owing to the fact that they are still in their heat season and the lack of cloud cover, light winds and available moisture(relative humidity), particularly in open savannah areas.
2. 2 consecutive days high temperatures >= 80^{th} percentile have generally low probability of occurrence.
3. 3 consecutive days high temperatures >= 80^{th} percentile have even lower probability of occurrence.