

Global Heat Hazards Outlooks

Date of Issuance: 11 Mar 2025

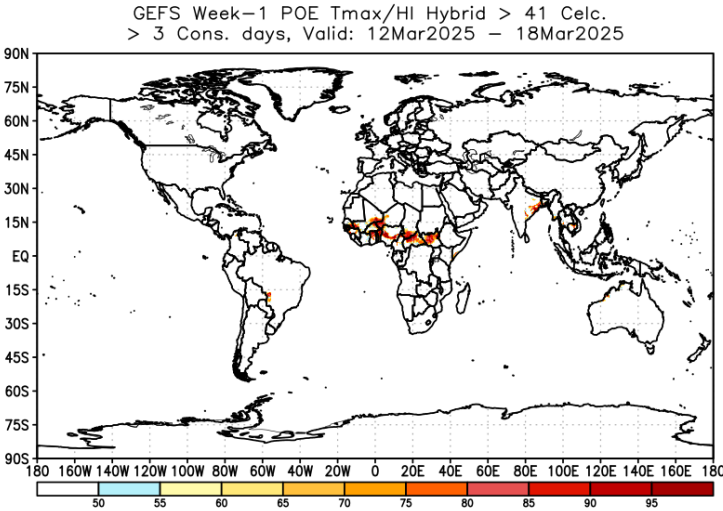
Week-1 Valid: 12 Mar 2025 – 18 Mar 2025

Week-2 Valid: 19 Mar 2025 – 25 Mar 2025

Numerical Weather Prediction Model: NCEP GEFS

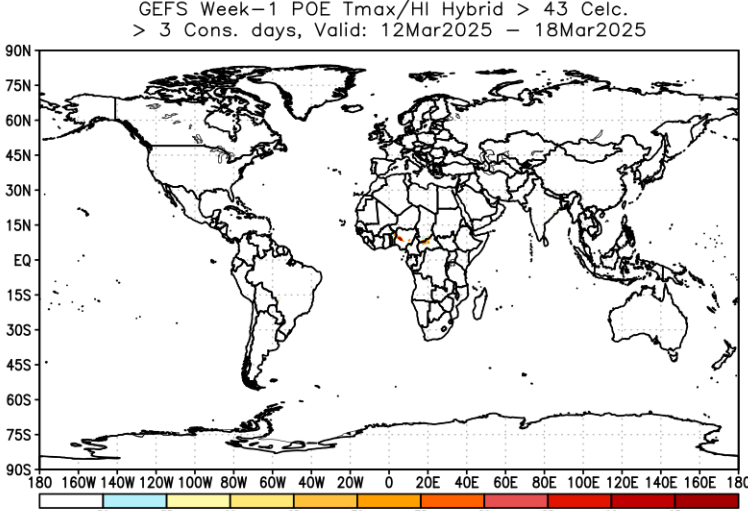
GEFS Week-1 HI/Tmax Hybrid POE with Respect to Fixed Thresholds

>41°C & > 3 Consc. Days



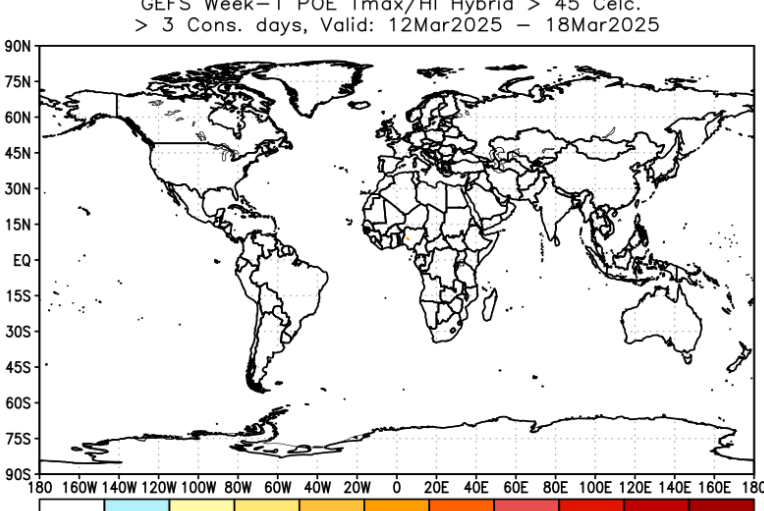
https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week1_prob_hybrid_3_glb_41.png

>43°C & > 3 Consc. Days



https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week1_prob_hybrid_3_glb_43.png

>45°C & > 3 Consc. Days



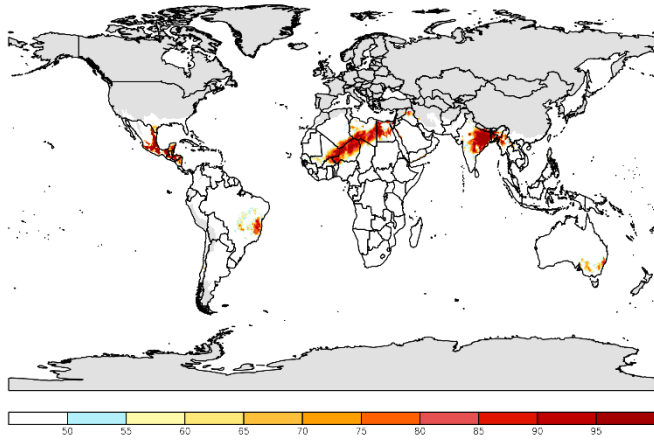
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- Probabilities exceed 85% for the hybrid index to exceed 41°C for at least three consecutive days in Ghana, Nigeria, Central African republic, South Sudan, and northeastern India.

GEFS Week-1 POE, Tmax/HI with Calmer Wind (< 5m s-1) and less Cloud Cover (< 50%)

>80th & > 3 Consc. Days

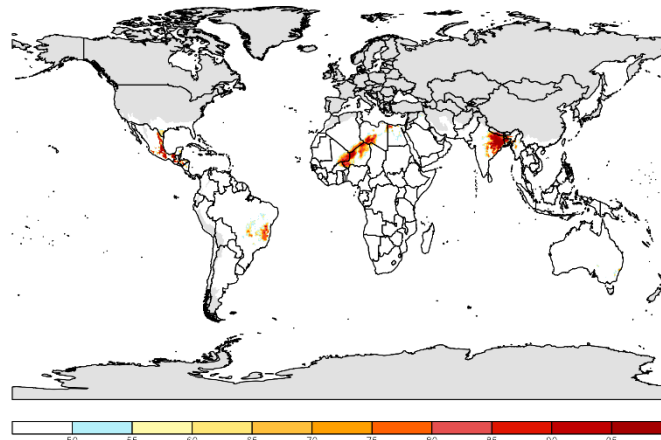
GEFS Week-1 POE Tmax/HI > 80th Pctle. with W. Speed < 5m/sec & Cloud C. < 50%, > 3 Cons. days, Valid: 12Mar2025 - 18Mar2025



https://ftp.cpc.ncep.noaa.gov/International/extreme_fc/st/gefs_heat/gefs_comb3_week1_glb_prob_80.gif

>90th & > 3 Consc. Days

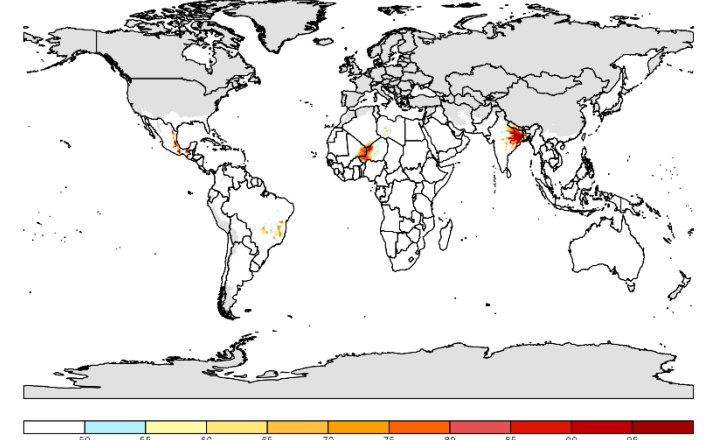
GEFS Week-1 POE Tmax/HI > 90th Pctle. with W. Speed < 5m/sec & Cloud C. < 50%, > 3 Cons. days, Valid: 12Mar2025 - 18Mar2025



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>95th & > 3 Consc. Days

GEFS Week-1 POE Tmax/HI > 95th Pctle. with W. Speed < 5m/sec & Cloud C. < 50%, > 3 Cons. days, Valid: 11Mar2025 - 17Mar2025

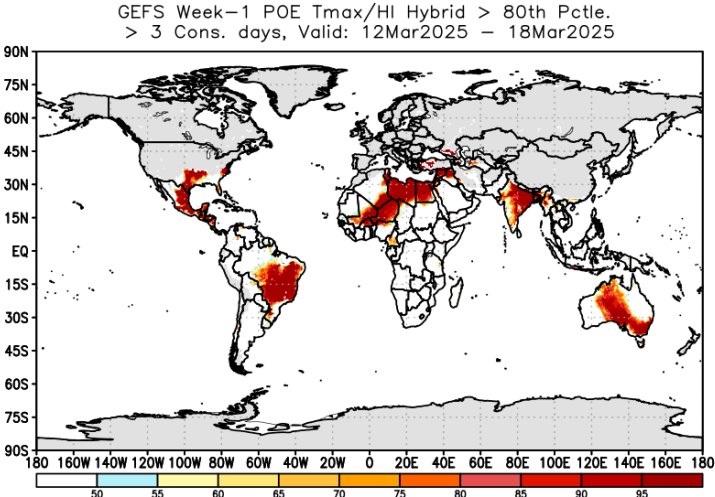


https://ftp.cpc.ncep.noaa.gov/International/extreme_fc/st/gefs_heat/gefs_comb3_week1_glb_prob_95.gif

- Probabilities exceed 70% for the hybrid index with calmer wind and less cloud cover to exceed the 80th percentile for at least three consecutive days in Mexico, northeastern Brazil, northeastern India, and isolated places in Mali, Algeria and Libya.

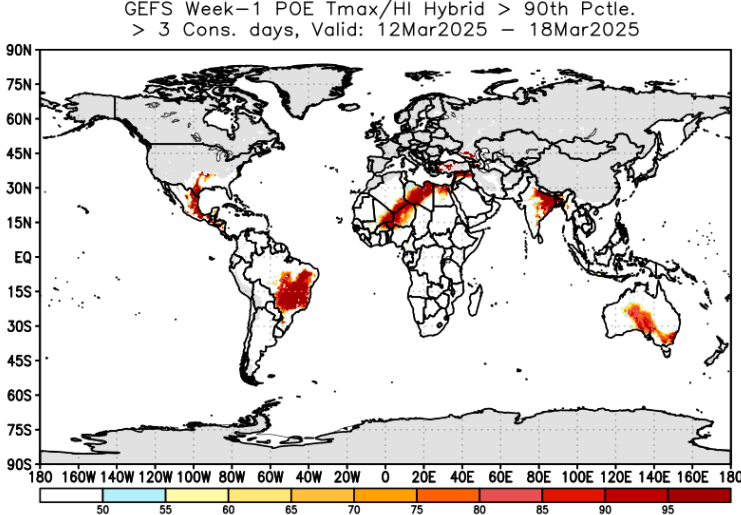
GEFS Week-1 HI/Tmax Hybrid POE with Respect to Percentile Climo. Thresholds

>80th & > 3 Consc. Days



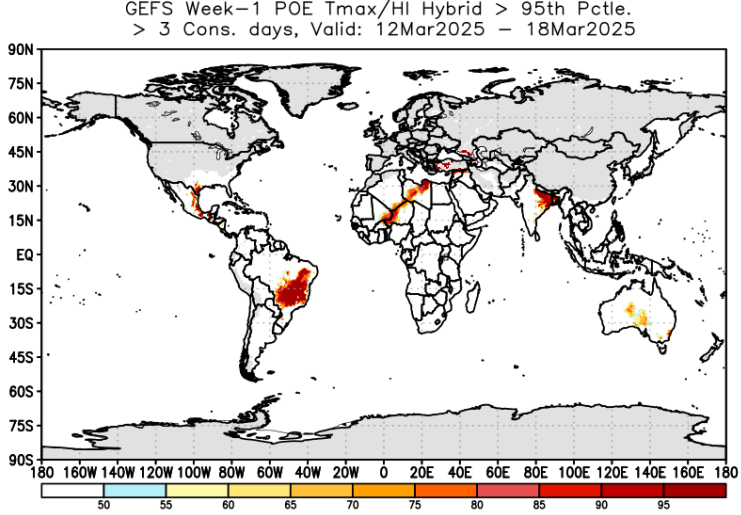
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>90th & > 3 Consc. Days



https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week1_prob_hybrid_3_glb_90.png

>95th & > 3 Consc. Days



https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week1_prob_hybrid_3_glb_95.png

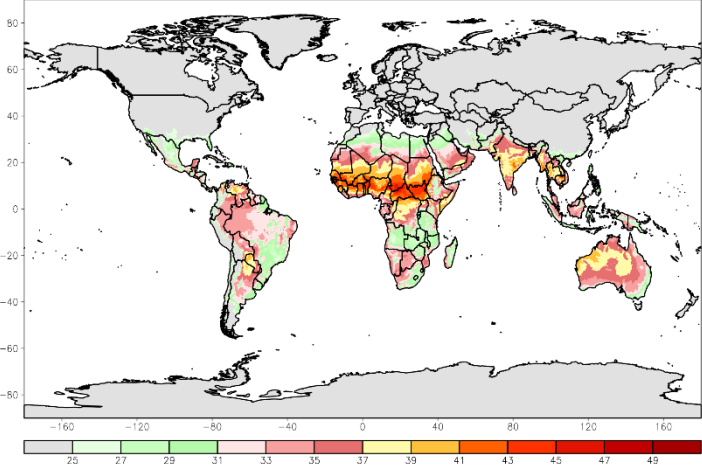
- Probabilities exceed 90% for the hybrid index to exceed the 95th percentile for at least three consecutive days in southern and eastern Brazil, northeastern Mexico, Mali, Algeria, and northeastern India.

GEFS Week-1 Tmax Percentile Climatology (°C)

Tmax 80th Percentile

GEFS Week-1 Tmax Percentile Climo (Cels.), 80th Pctle.

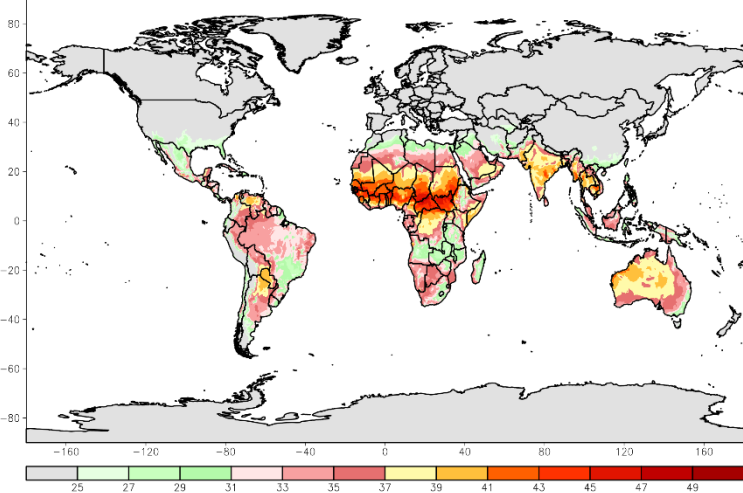
Valid: 12Mar - 18Mar



Tmax 90th Percentile

GEFS Week-1 Tmax Percentile Climo (Cels.), 90th Pctle.

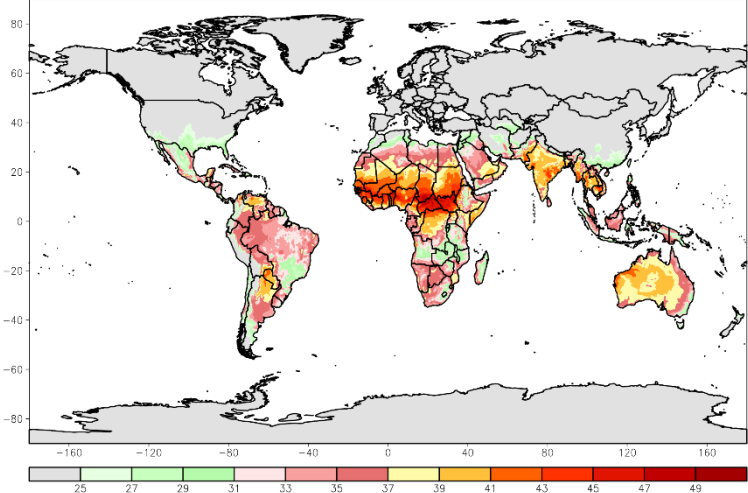
Valid: 12Mar - 18Mar



Tmax 95th Percentile

GEFS Week-1 Tmax Percentile Climo (Cels.), 95th Pctle.

Valid: 12Mar - 18Mar



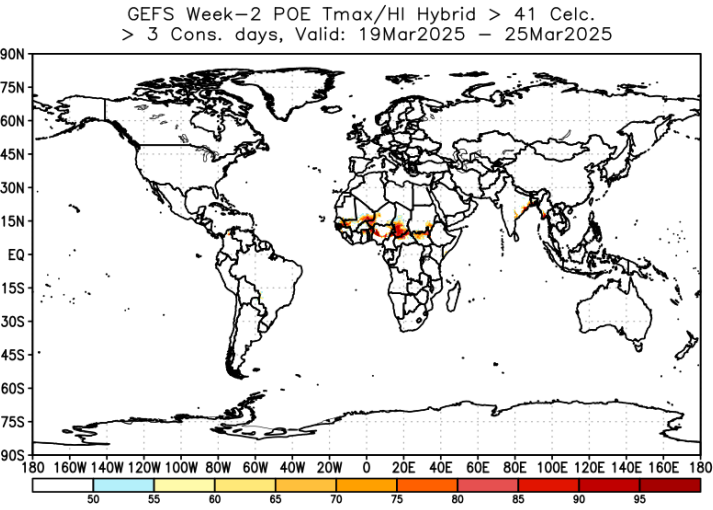
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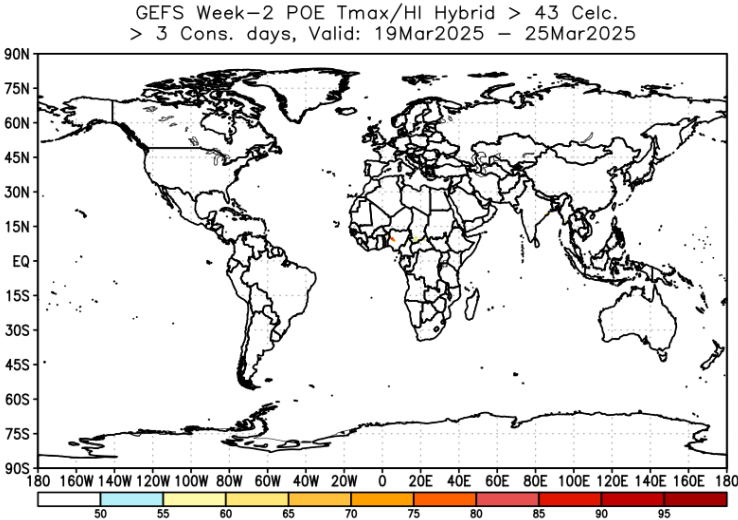
GEFS Week-2 HI/Tmax Hybrid POE with Respect to Fixed Thresholds

>41°C & > 3 Consc. Days



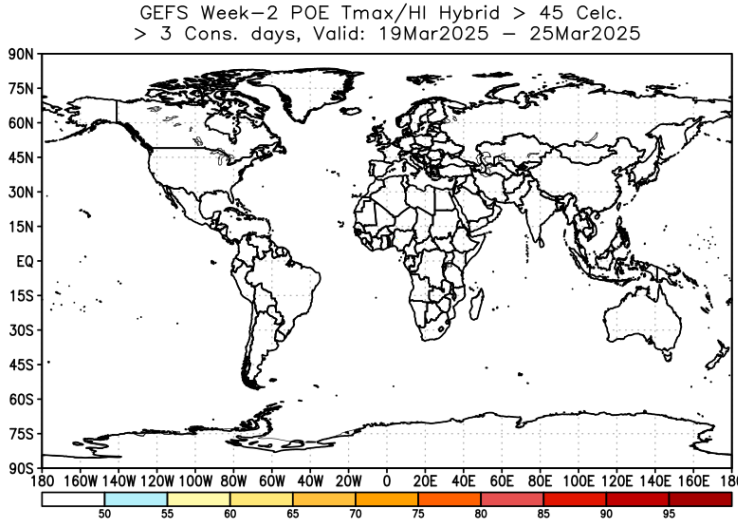
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>43°C & > 3 Consc. Days



https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week2_prob_hybrid_3_glb_43.png

>45°C & > 3 Consc. Days



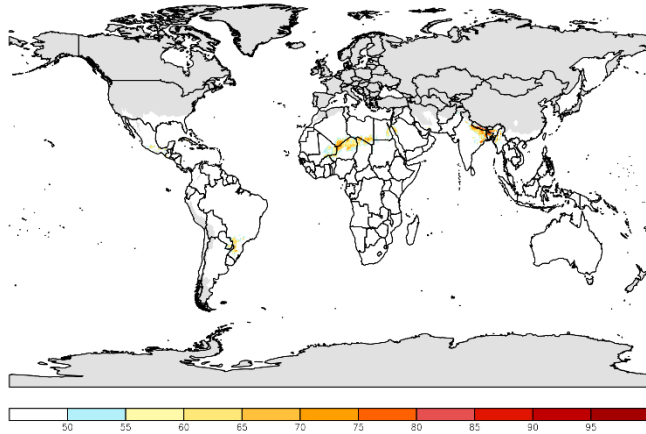
https://ftp.cpc.ncep.noaa.gov/International/global_heat/gefs_week2_prob_hybrid_3_glb_45.png

- There is an increased chance for the hybrid index to exceed 41°C for at least three consecutive days in southern Chad, northern South Sudan, Mali and Nigeria.

GEFS Week-2 POE, Tmax/HI with Calmer Wind (< 5m s-1) and less Cloud Cover (< 50%)

>80th & > 3 Consc. Days

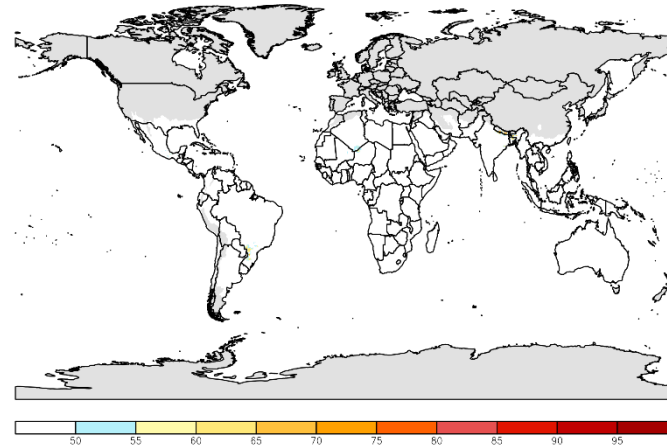
GEFS Week-2 POE Tmax/HI > 80th Pctle. with W. Speed < 5m/sec &
Cloud C. < 50%, > 3 Cons. days, Valid: 19Mar2025 - 25Mar2025



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>90th & > 3 Consc. Days

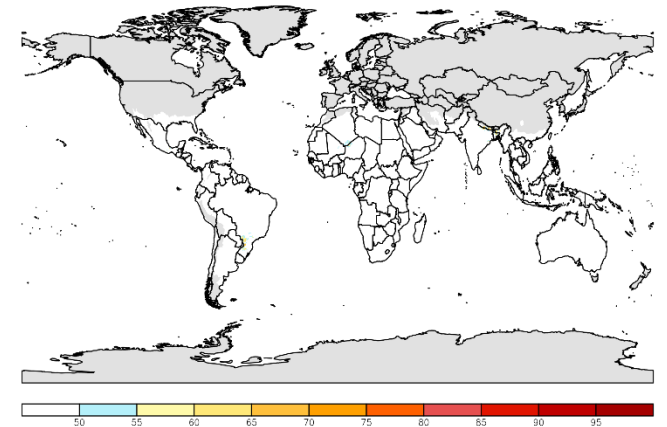
GEFS Week-2 POE Tmax/HI > 90th Pctle. with W. Speed < 5m/sec &
Cloud C. < 50%, > 3 Cons. days, Valid: 19Mar2025 - 25Mar2025



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>95th & > 3 Consc. Days

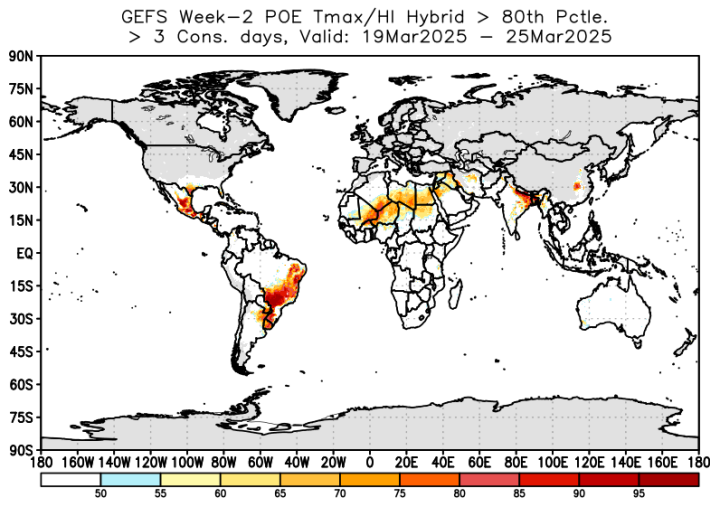
GEFS Week-2 POE Tmax/HI > 90th Pctle. with W. Speed < 5m/sec &
Cloud C. < 50%, > 3 Cons. days, Valid: 19Mar2025 - 25Mar2025



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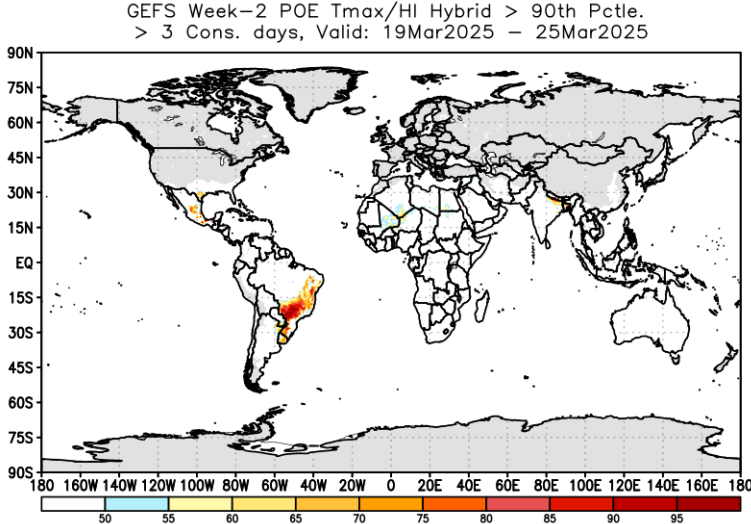
GEFS Week-2 HI/Tmax Hybrid POE with Respect to Percentile Climo. Thresholds

>80th & > 3 Consc. Days



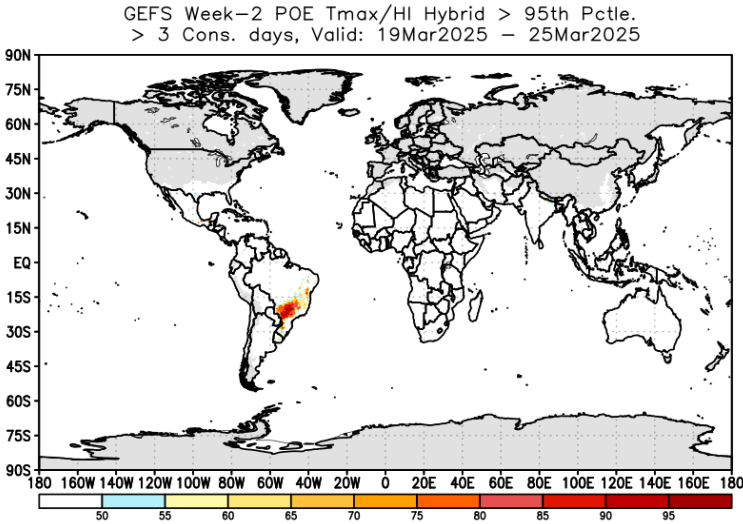
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>90th & > 3 Consc. Days



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>95th & > 3 Consc. Days



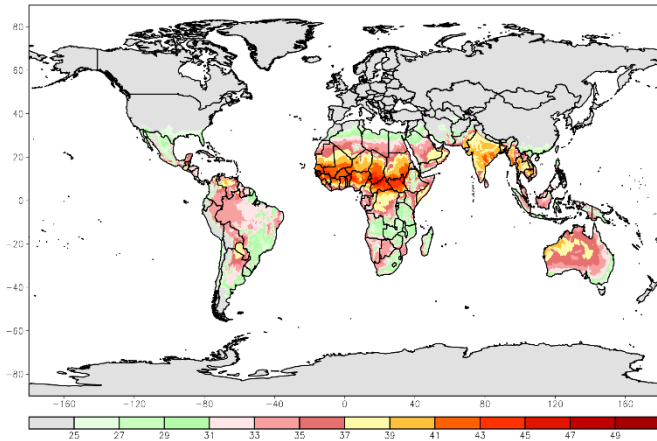
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- There is an increased chance (> 80%) for the hybrid index to exceed the 90th percentile for at least three consecutive days in southern Brazil and northeastern Mexico.

GEFS Week-2 Tmax Percentile Climatology (°C)

Tmax 80th Percentile

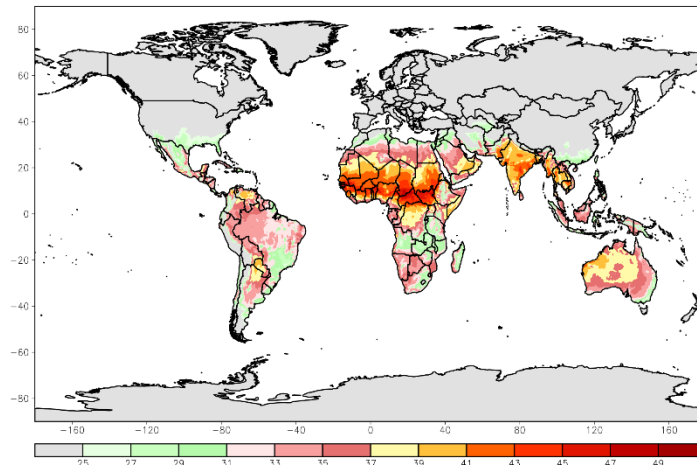
GEFS Week-2 Tmax Percentile Climo (Cels.), 80th Pctle.
Valid: 19Mar - 25Mar



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Tmax 90th Percentile

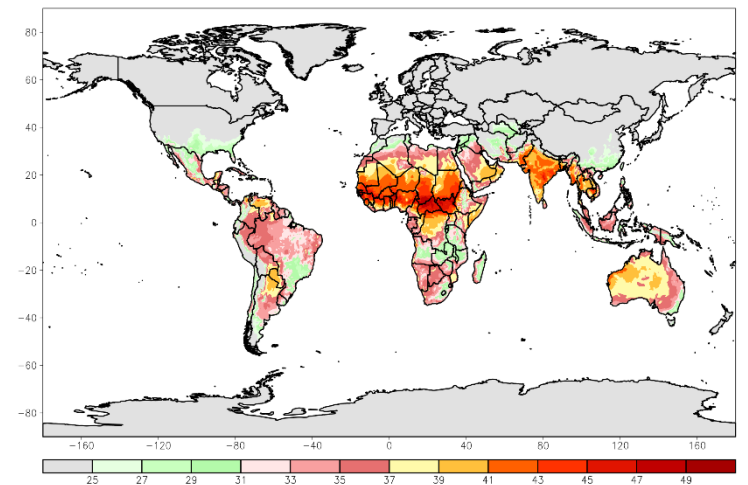
GEFS Week-2 Tmax Percentile Climo (Cels.), 90th Pctle.
Valid: 19Mar - 25Mar



https://ftp.cpc.ncep.noaa.gov/International/extreme_fc/st/gefs_heat/gefs_hybrid_week2_glb_clm_90.gif

Tmax 95th Percentile

GEFS Week-2 Tmax Percentile Climo (Cels.), 95th Pctle.
Valid: 19Mar - 25Mar

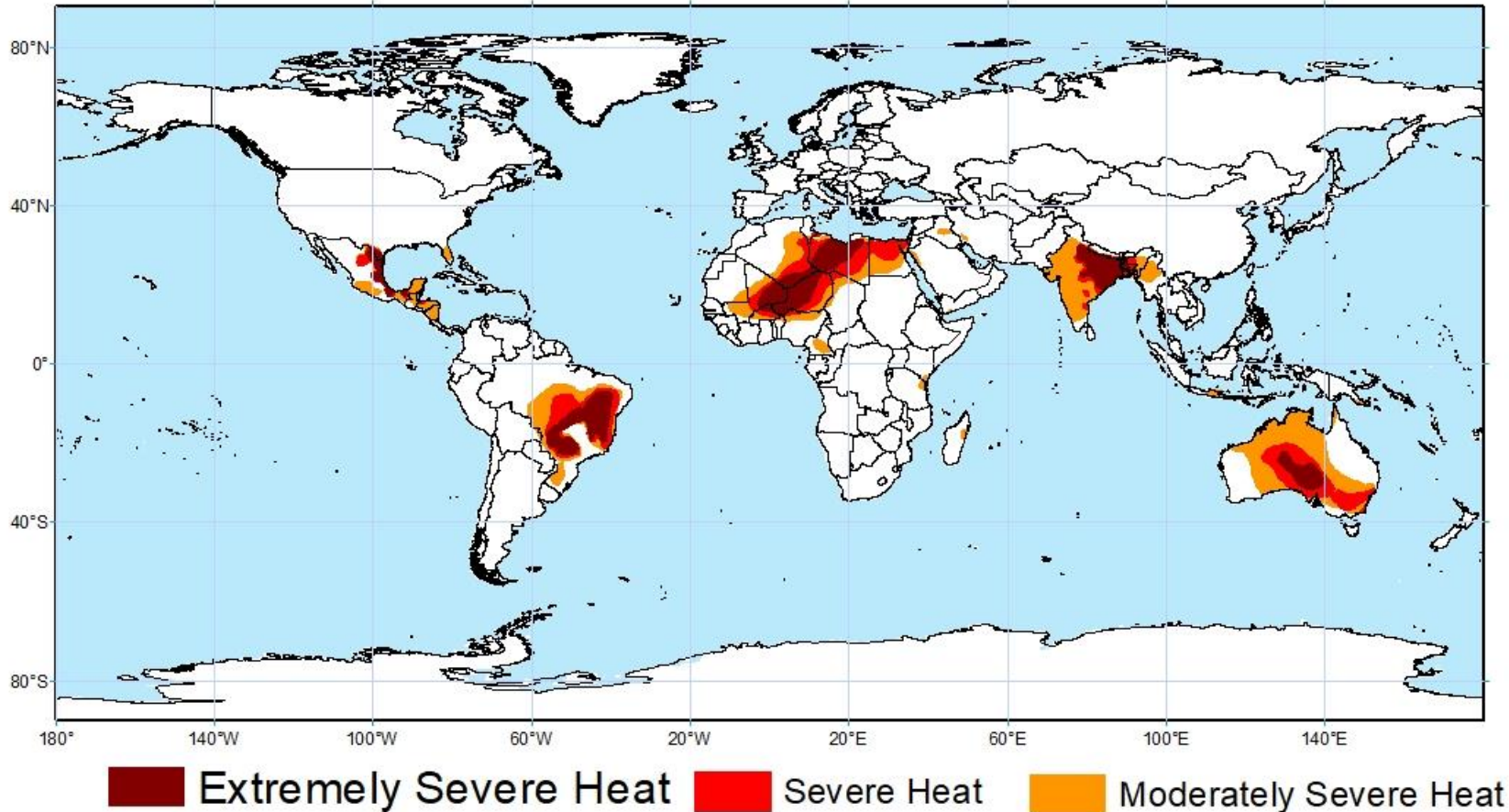


https://ftp.cpc.ncep.noaa.gov/International/extreme_fc/st/gefs_heat/gefs_hybrid_week2_glb_clm_95.gif

Week-1 Experimental Global Heat Hazard Outlook

Issued: 11 Mar 2025

Valid: 12 Mar 2025 - 18 Mar 2025



- There is an increased chance of *moderately severe heat* in far eastern and western Mexico, Guatemala, eastern and Southern Brazil, Mali, Niger, southern Algeria, Libya, Egypt, and India, Bangladesh , Myanmar and Australia.
- There is an increased chance of *extremely severe heat* in eastern Mexico, eastern and southern Brazil, south eastern Mali, Niger, southern Algeria ,Libya, northeastern India, Bangladesh, and southern Australia.

Extremely Severe Heat: Tmax/HI are among the 5% highest values over the 30-year period 1991-2020

Severe Heat: Tmax/HI are among the 10% highest values over the 30-year period 1991-2020

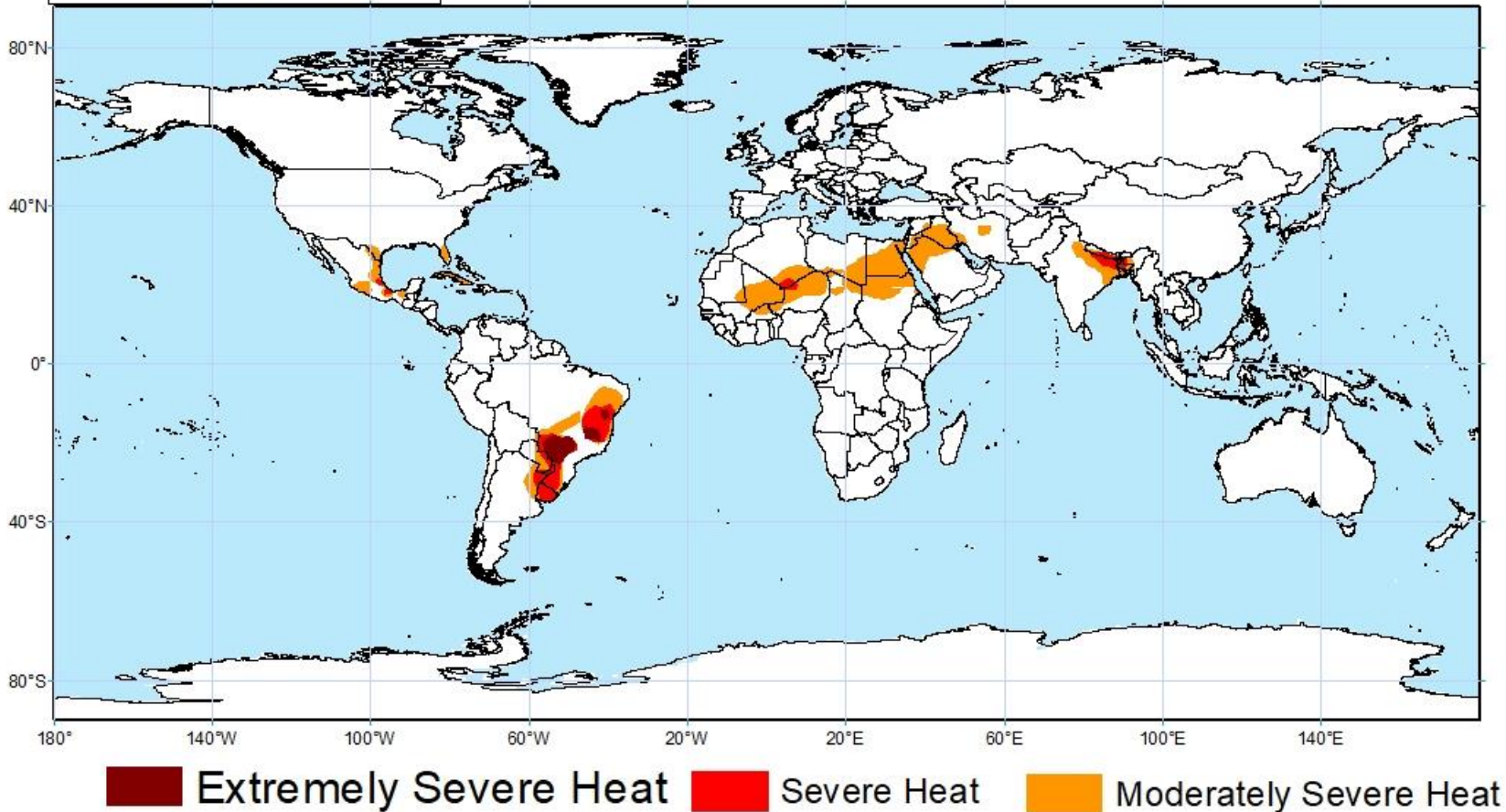
Moderately Severe Heat: Tmax/HI are among the 20% highest values over the 30-year period 1991-2020

Note: For the Sahel region in Africa: **Tmax/HI hybrid > 41°C for at least 3 consecutive days** is also considered as **Moderately Severe Heat**

Week-2 Experimental Global Heat Hazard Outlook

Valid: 19 Mar 2025 - 25 Mar 2025

Issued 11 Mar 2025



Extremely Severe Heat: Tmax/HI are among the 5% highest values over the 30-year period 1991-2020
Severe Heat: Tmax/HI are among the 10% highest values over the 30-year period 1991-2020
Moderately Severe Heat: Tmax/HI are among the 20% highest values over the 30-year period 1991-2020

Note: For the Sahel region in Africa: Tmax/HI hybrid > 41°C for at least 3 consecutive days is also considered as **Moderately Severe Heat**

- There is an increased chance for *moderately severe heat* in isolated areas in western and eastern Mexico, Hispaniola, part of northern Argentina, Uruguay, southern Paraguay, southwestern and northeastern and southern Brazil, northern Niger, southern Algeria, southern Libya, Egypt, northern Sudan and Mali, northeastern India, Bangladesh, and northern Saudi Arabia, and Iraq.
- There is an increased chance for *severe heat* over isolated areas in southwestern and northeastern Brazil, Uruguay, and isolated areas in northeastern India and Bangladesh.