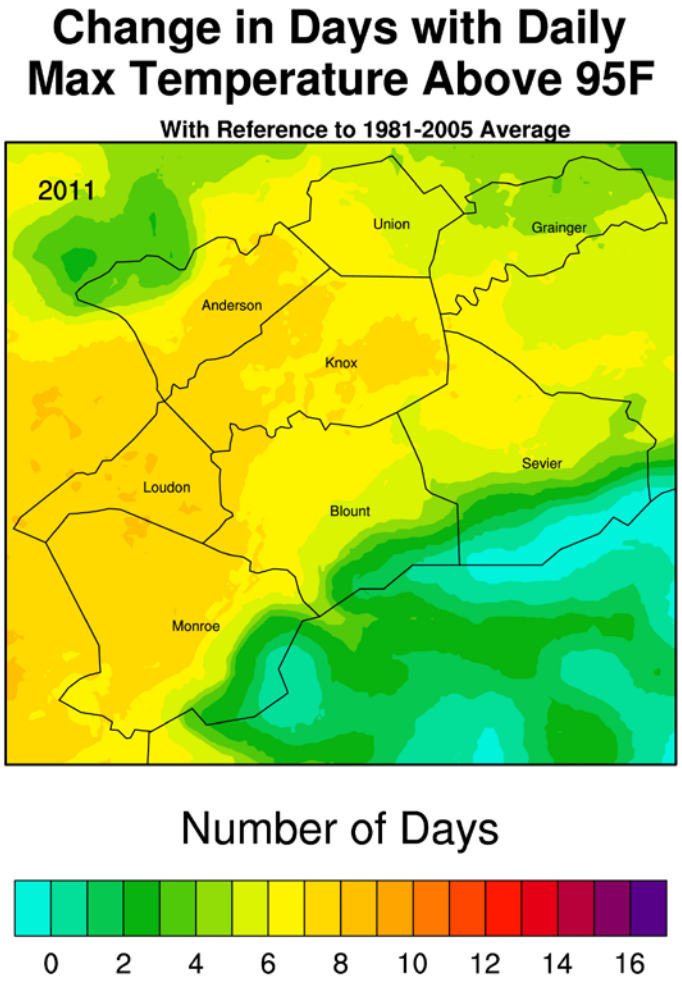
Change in Days Above 95

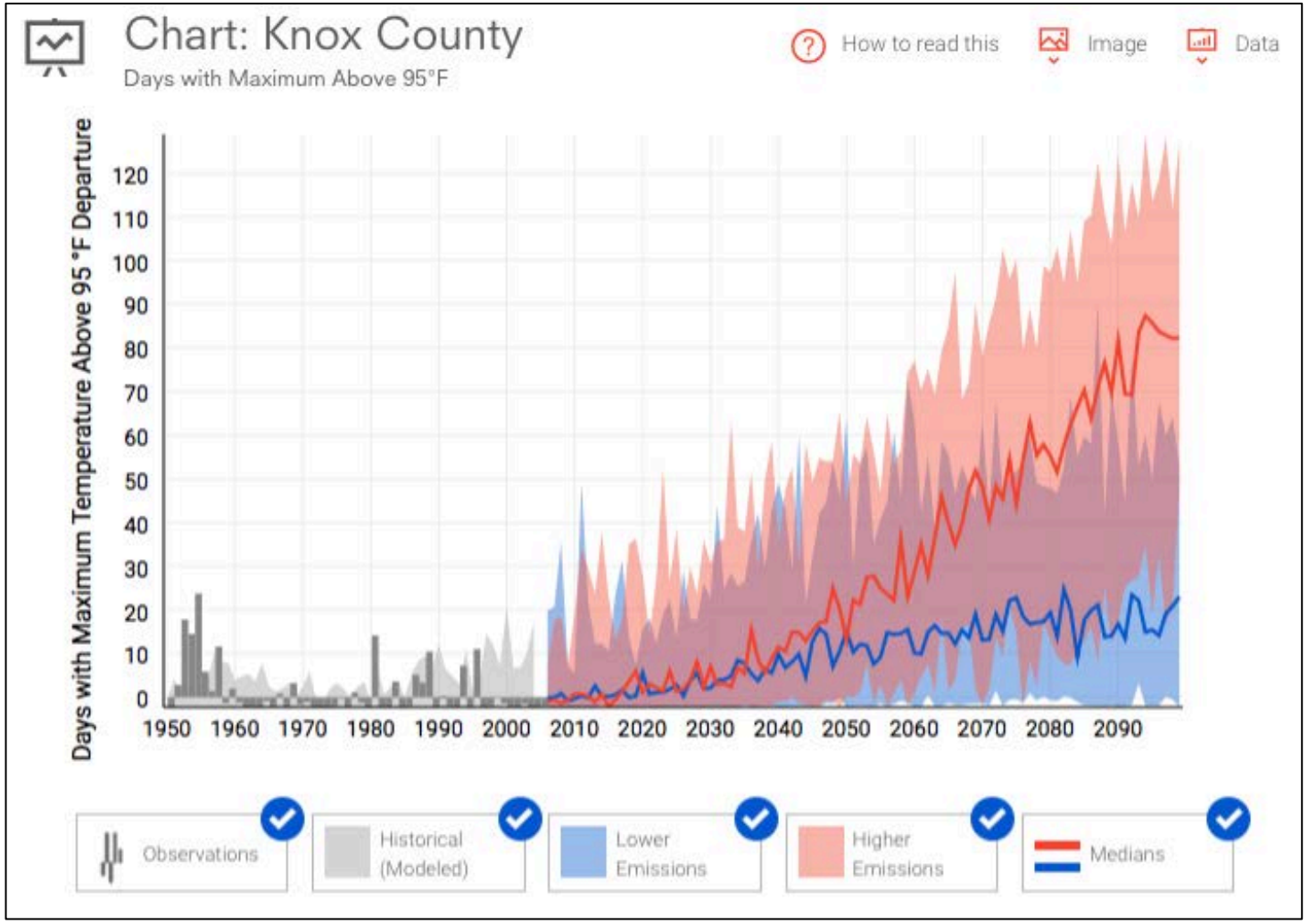
1981-2005 Reference Average (Source: ORNL)



Days With Maximum Temp Above 95ºF

By 2100: Worst Case: ~80 more days (mean) Best Case: ~20 more days (mean)

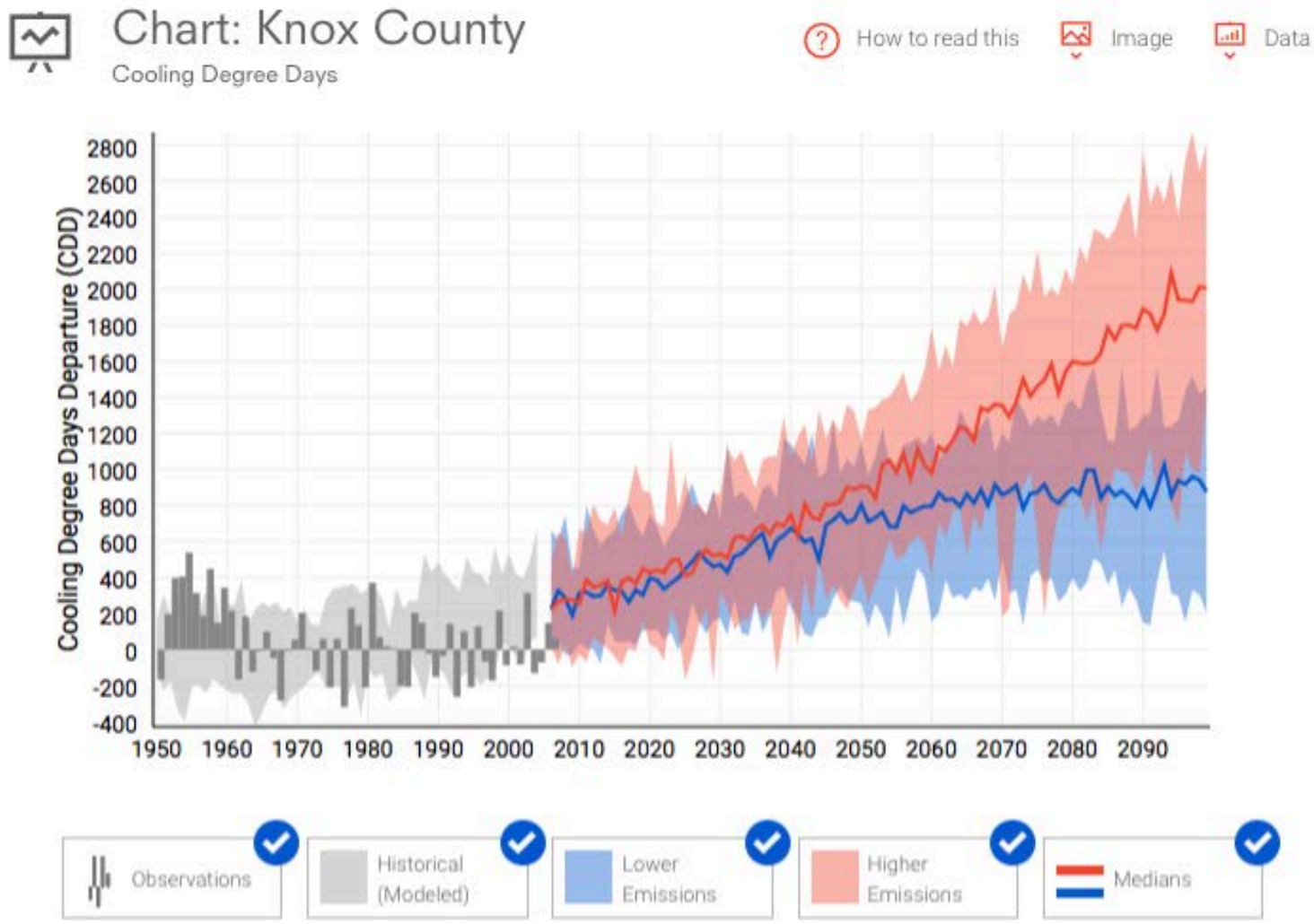
Source: NOAA Climate Explorer (20 models)



Change in Cooling Degree Days

Energy Demand on Air Conditioning

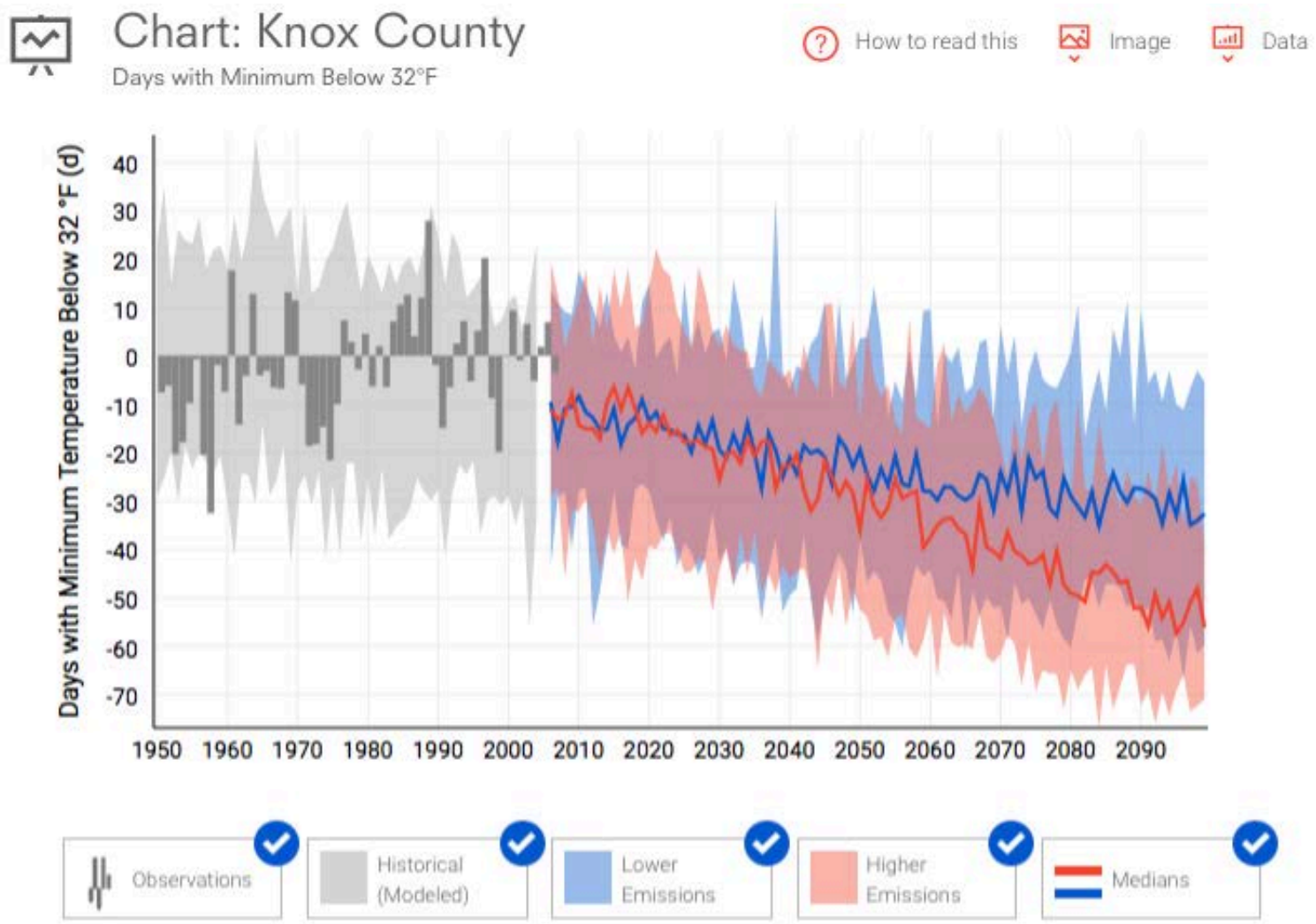
Source: NOAA Climate Explorer (33 models)



Days With Minimum Temp Below 32°F

By 2100: Worst Case: ~55 fewer days (mean) Best Case: ~30 fewer days (mean)

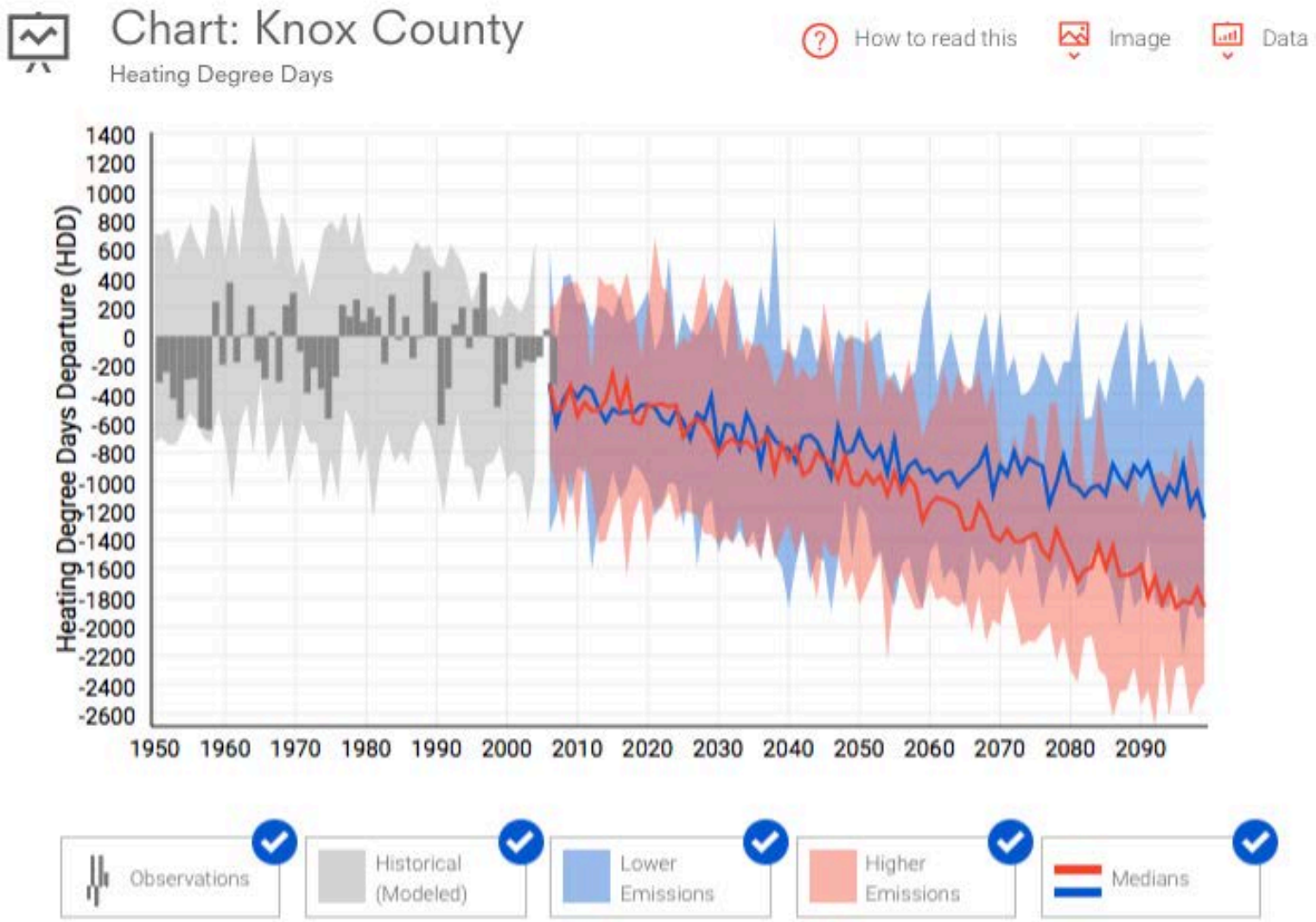
Source: NOAA Climate Explorer (20 models)



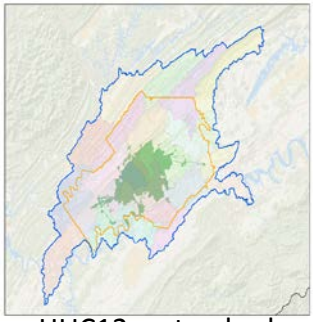
Change in Heating Degree Days

Energy Demand for Heating

Source: NOAA Climate Explorer (33 models)

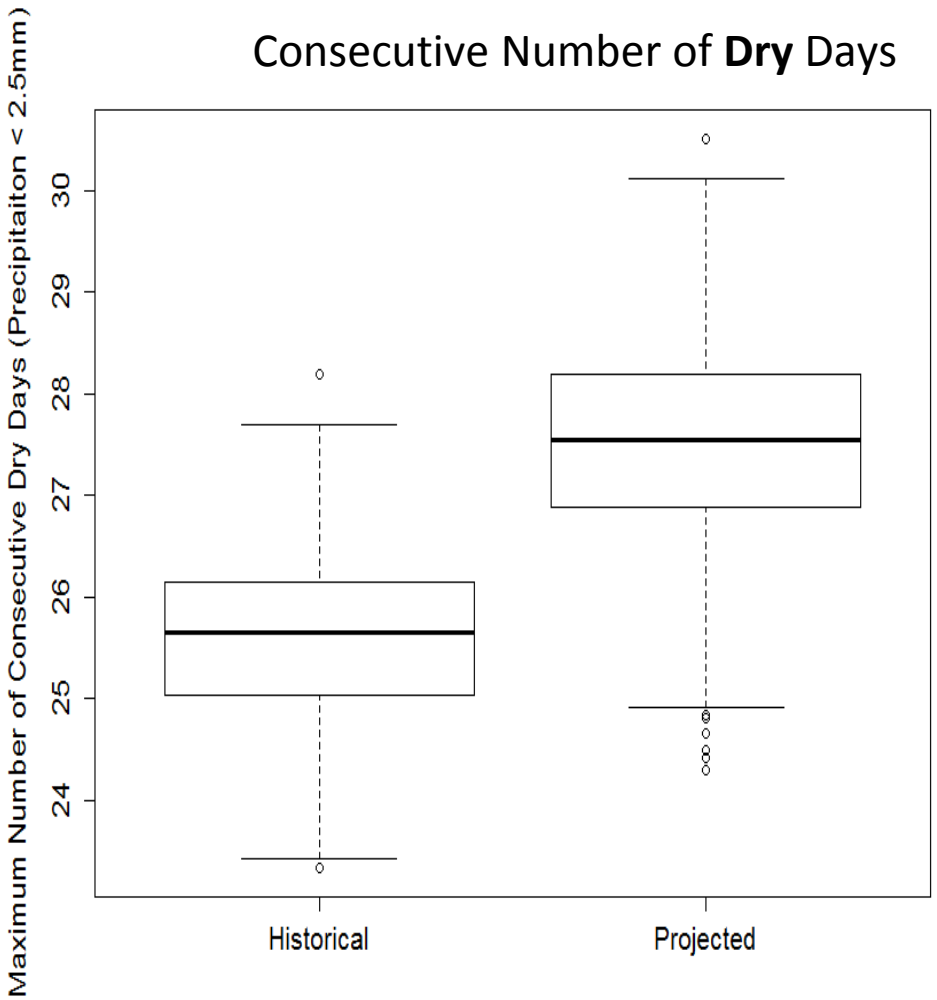


Average Annual Maximum Number of Consecutive Days

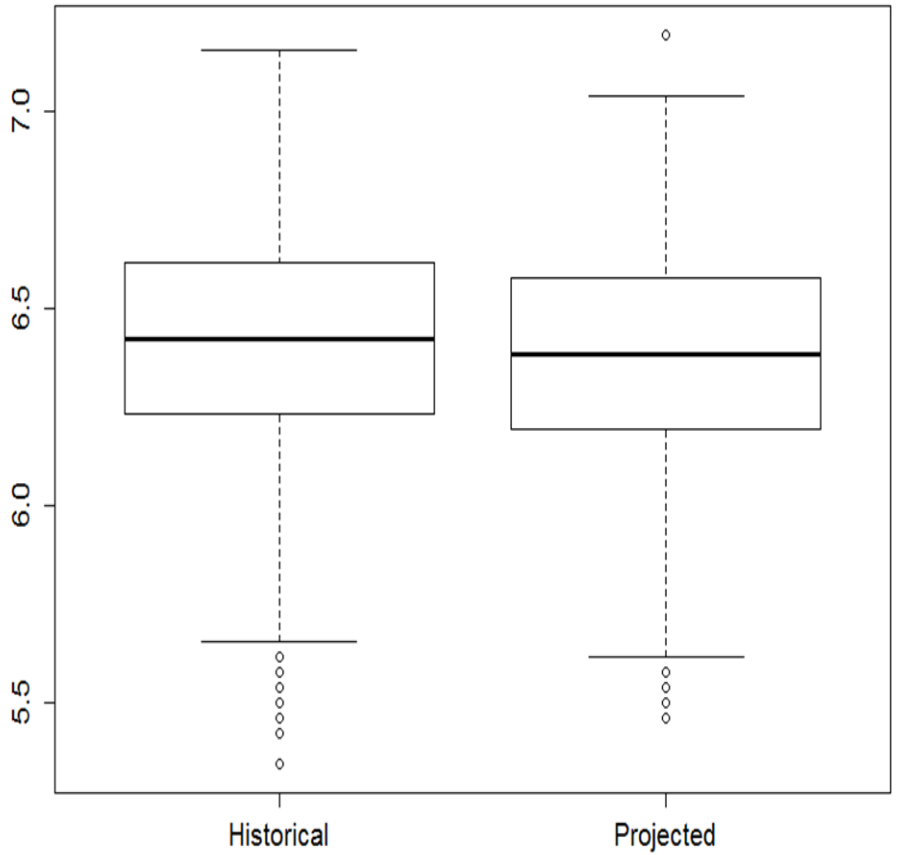


HUC12 watershed coverage
Knox County

Consecutive Number of **Dry** Days

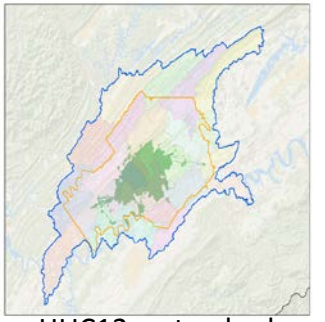


Consecutive Number of **Wet** Days



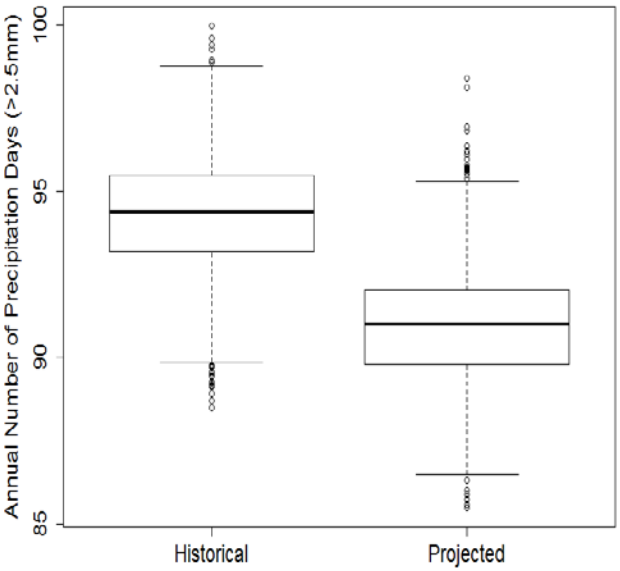
CCSM4 Moc

Annual Number of Precipitatio Days

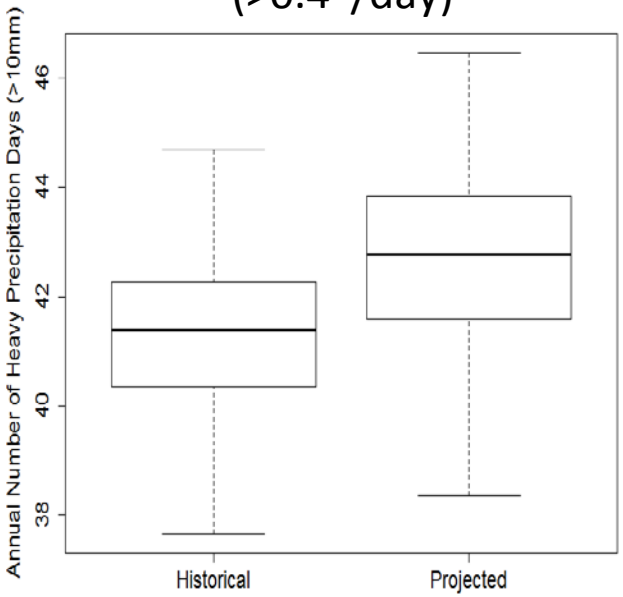


HUC12 watershed coverage
Knox County

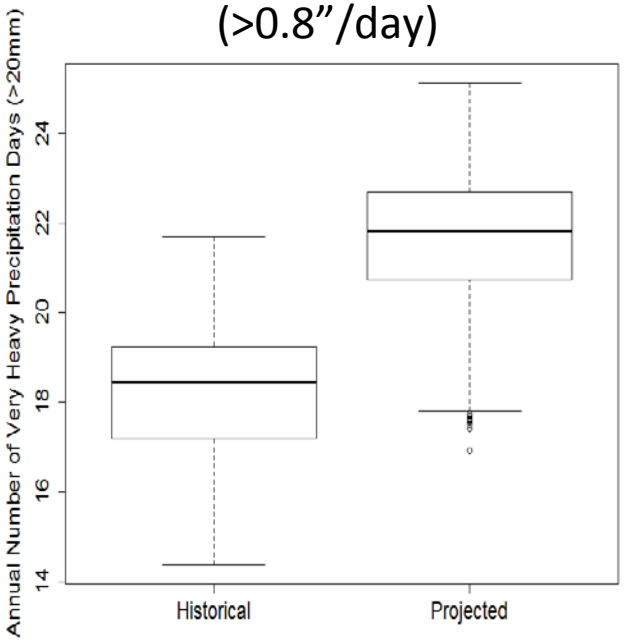
All Precipitation Days (>0.1”/day)



Heavy Precipitation Days (>0.4”/day)



Very Heavy Precipitation Days (>0.8”/day)

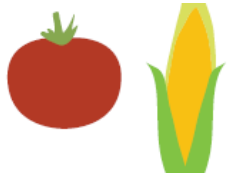


Climate Change Impacts by Sector

Positive and Negative

Warmer and Wetter Summer

- Heat-related health and infrastructure impacts
- Increased extreme weather events (floods, tornadoes, etc.).
- Reduced labor productivity
- Increased energy use and utility costs
- Increased allergens and pollutants (including ozone)
- More frequent days above air quality regulatory levels
- Increased and new pest populations
- Unwanted spread of non-native species
- Reduced agricultural productivity



Warmer and Wetter Winter

- Increased extreme weather events (ice, floods, etc.)
- Decreased energy use and utility costs
- Increased allergens and pollutants (including ozone)
- Increased and new pest populations
- Unwanted spread of non-native species