



Extreme Event Attribution in the Electric Power Sector

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Extreme event attribution in the electric power sector:

1. Motivation for Action
2. Context and Scoping
3. Justify Investments
4. Accountability

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Climate-informed planning is *not yet* standard practice among electric utility companies

Attribution can help motivate the need for climate considerations in power system planning

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There's a natural curiosity and everyone wants to compare to past experiences

Attribution provides context for why this time may have been different

Attribution can aid in scoping high-stress scenarios for system planning

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Evaluating costs and benefits to justify and prioritize adaptation investments for climate resilience is hard

Attribution studies can help refine estimates of event likelihood or provide evidence in support of emission scenarios to plan to

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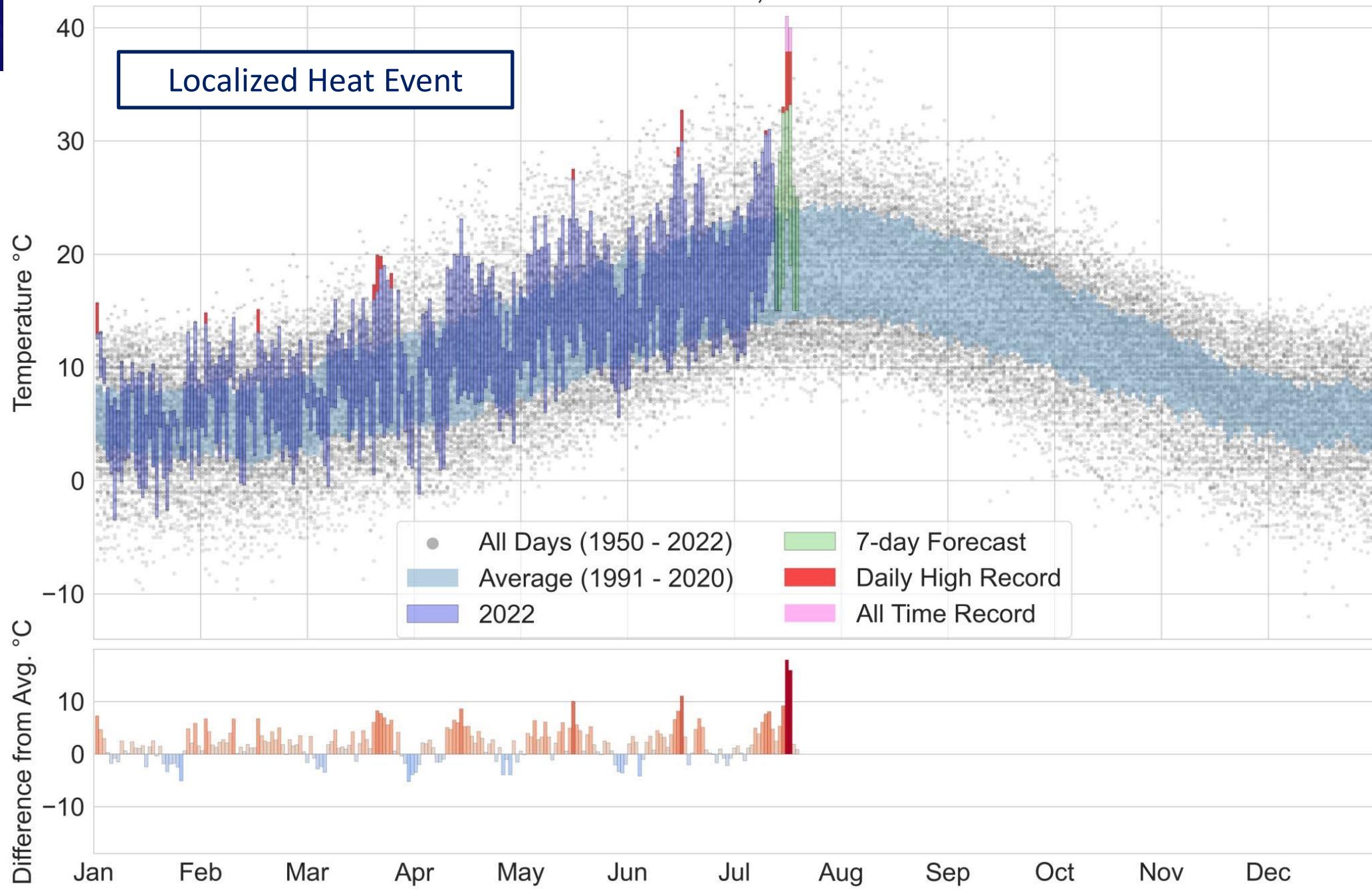
Who's to blame for severe consequences following a disruptive event?

Have we experienced something like this before? Should this have been anticipated? Would a *prudent plan* have prepared the power system for this?



Motivation and Context

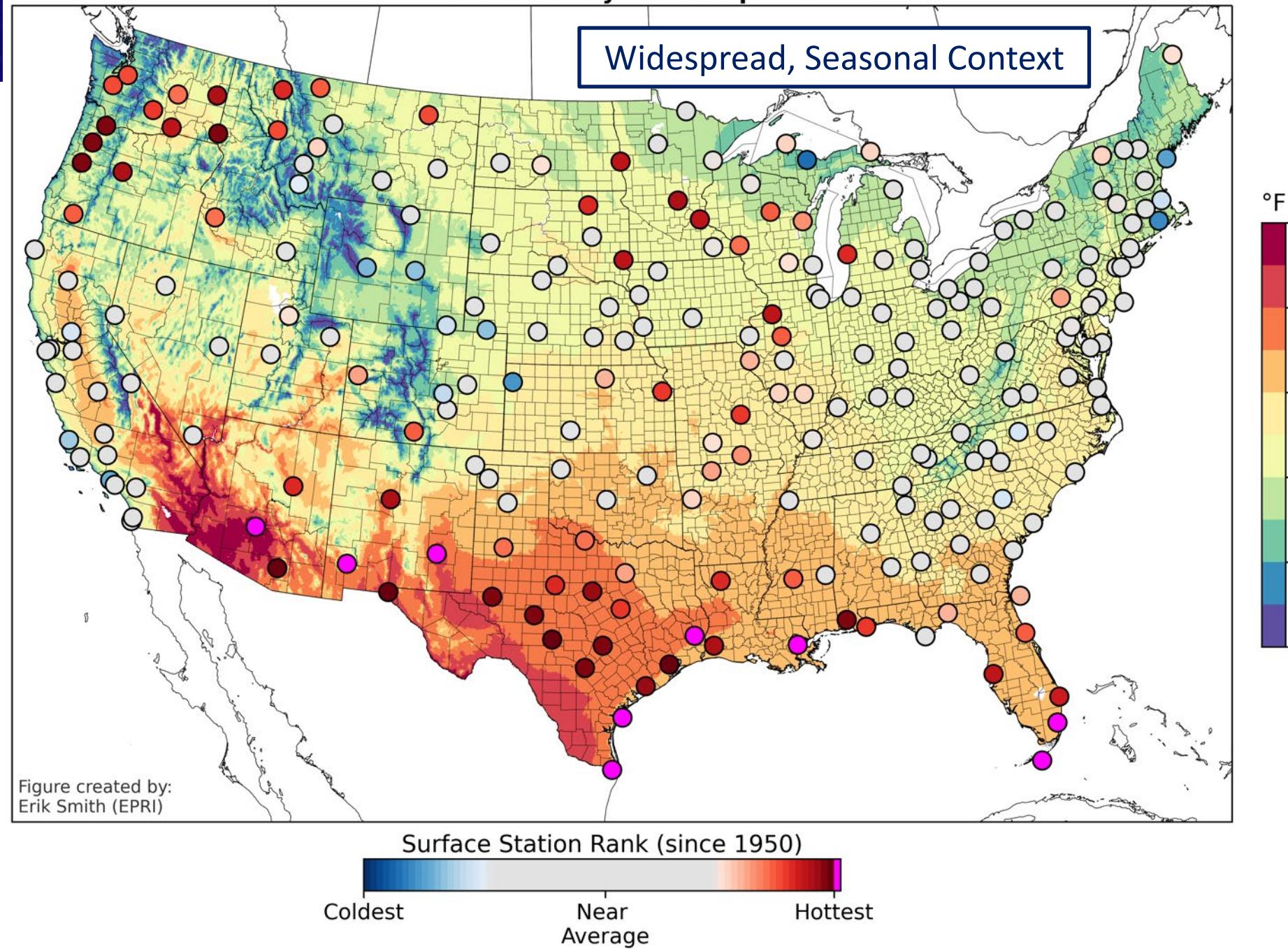
London, UK



Motivation and Context

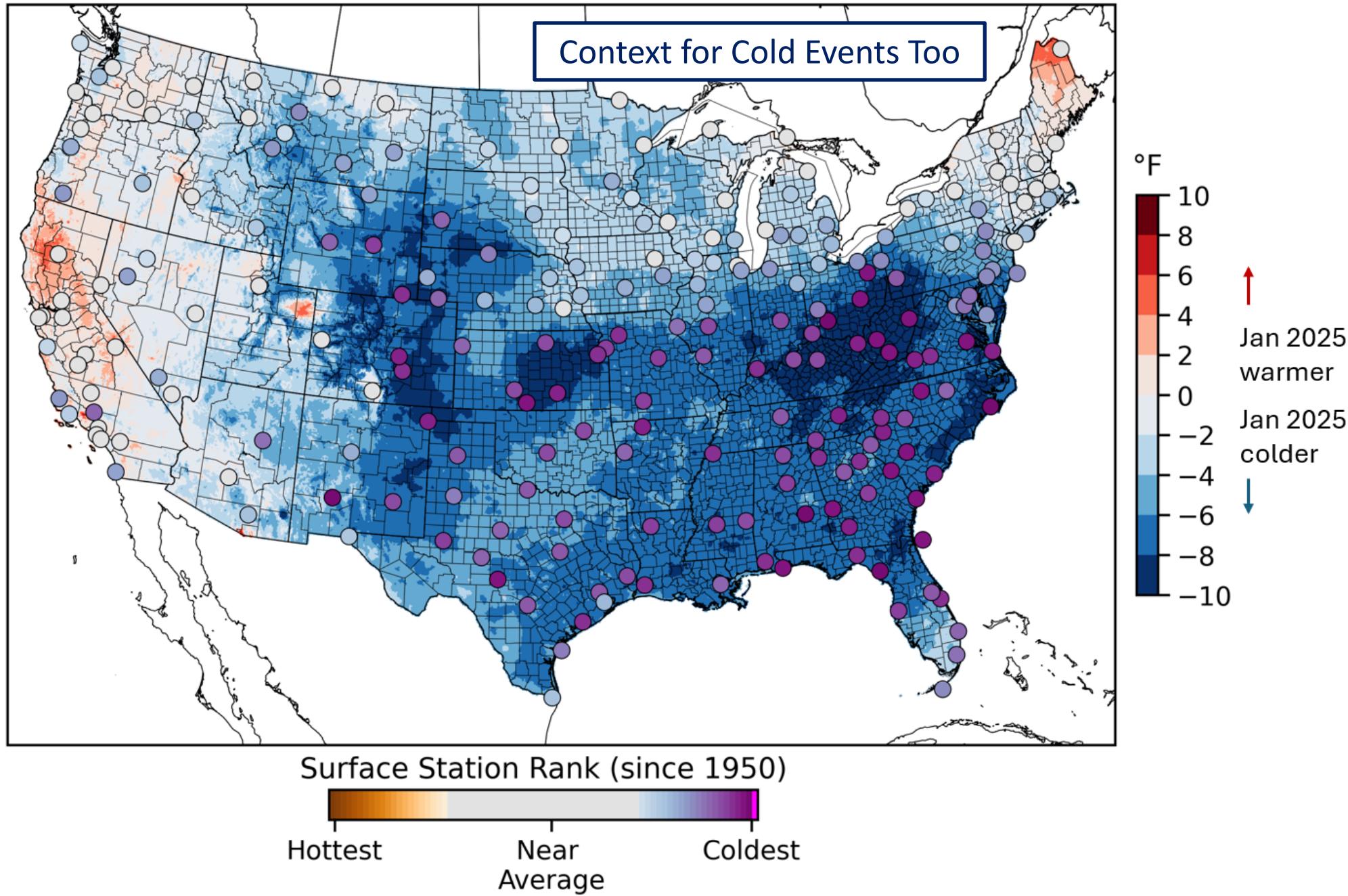
Summer 2023 Daytime Temperatures

Widespread, Seasonal Context

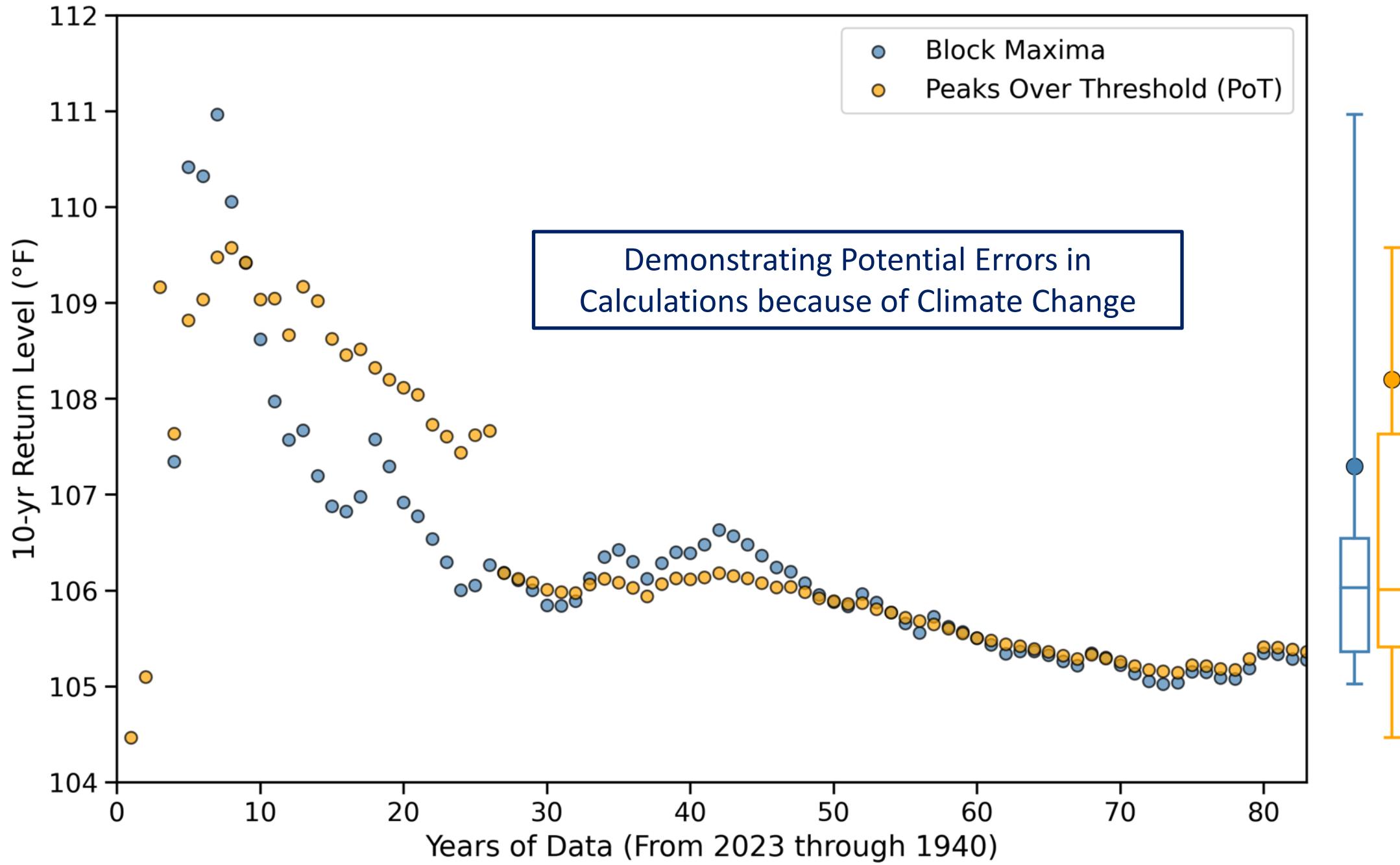


Motivation and Context

January 2025 Departure from Average and Surface Station Rank



Motivation and Context





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