



IOWA STATE UNIVERSITY

Climate Science Program

Iowa Climate Statement 2014

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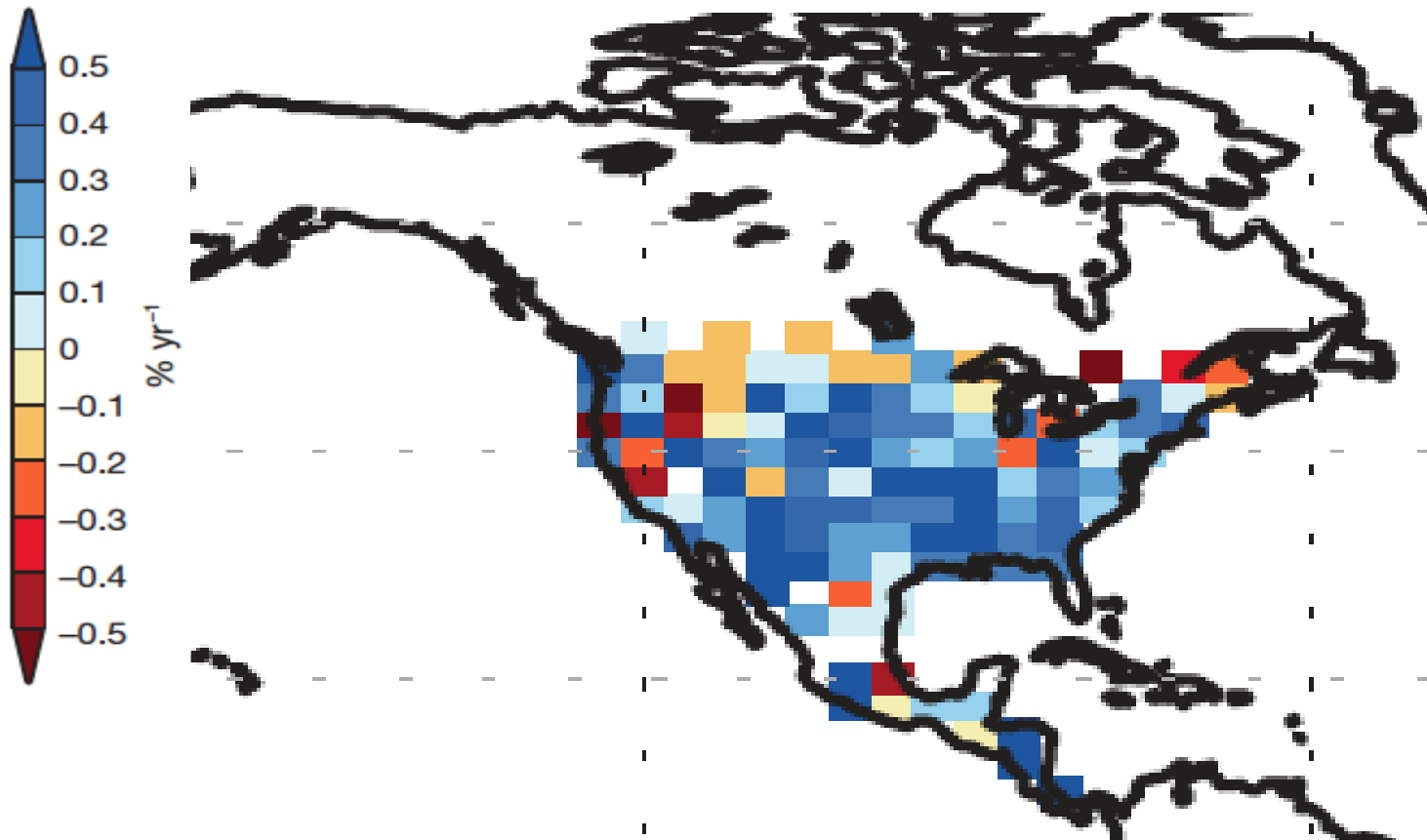
Ames, IA 50011

23 October 2014

Climate Change in Iowa is different from Climate Change on TV

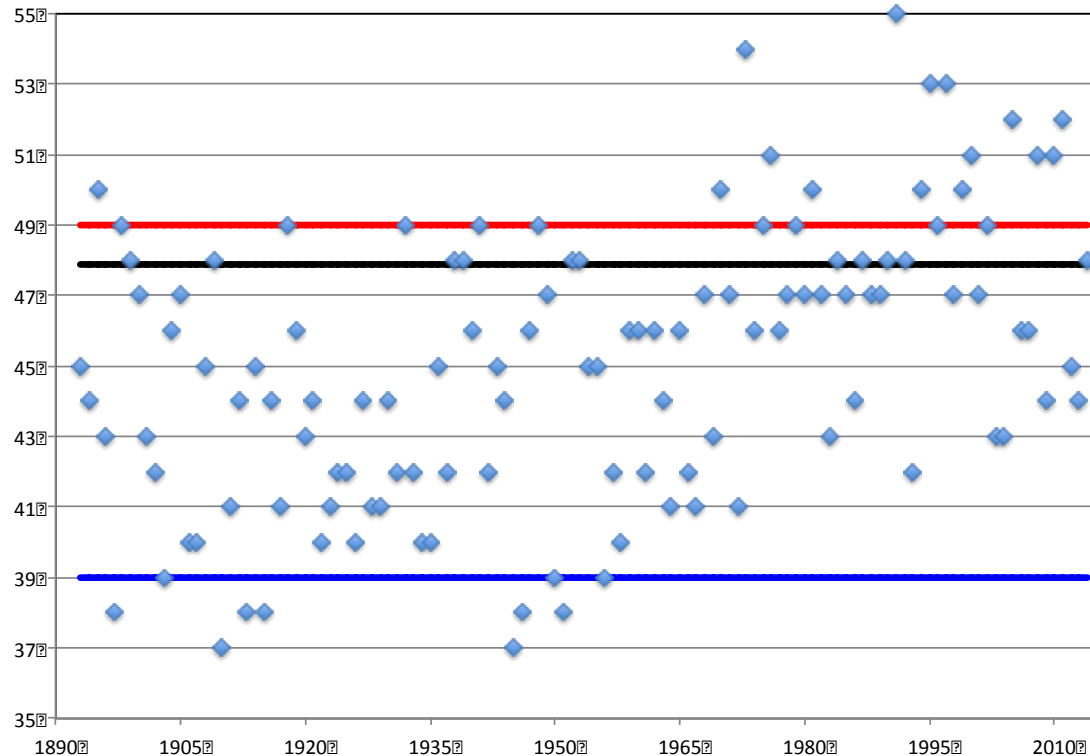


The pattern of change in extreme rainfall is a fingerprint of human influence on climate change.



Humidity change causes simultaneous increase in rainfall hot nights during summer.

Iowa City June-July-August Minimum Temperature



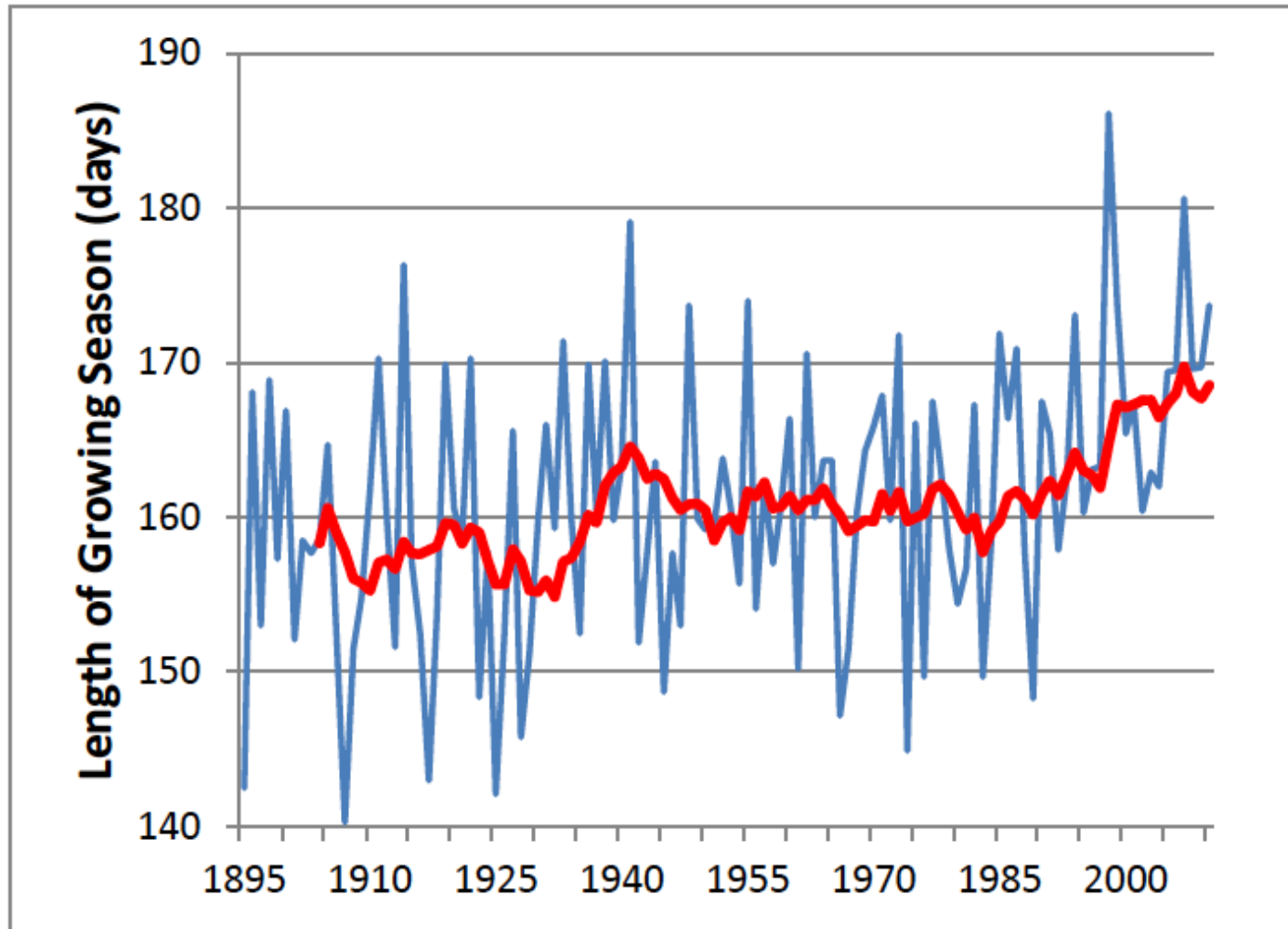
In Iowa City, high summer night time temperature is more frequent. Ten of the top 15 years have occurred since 1990.



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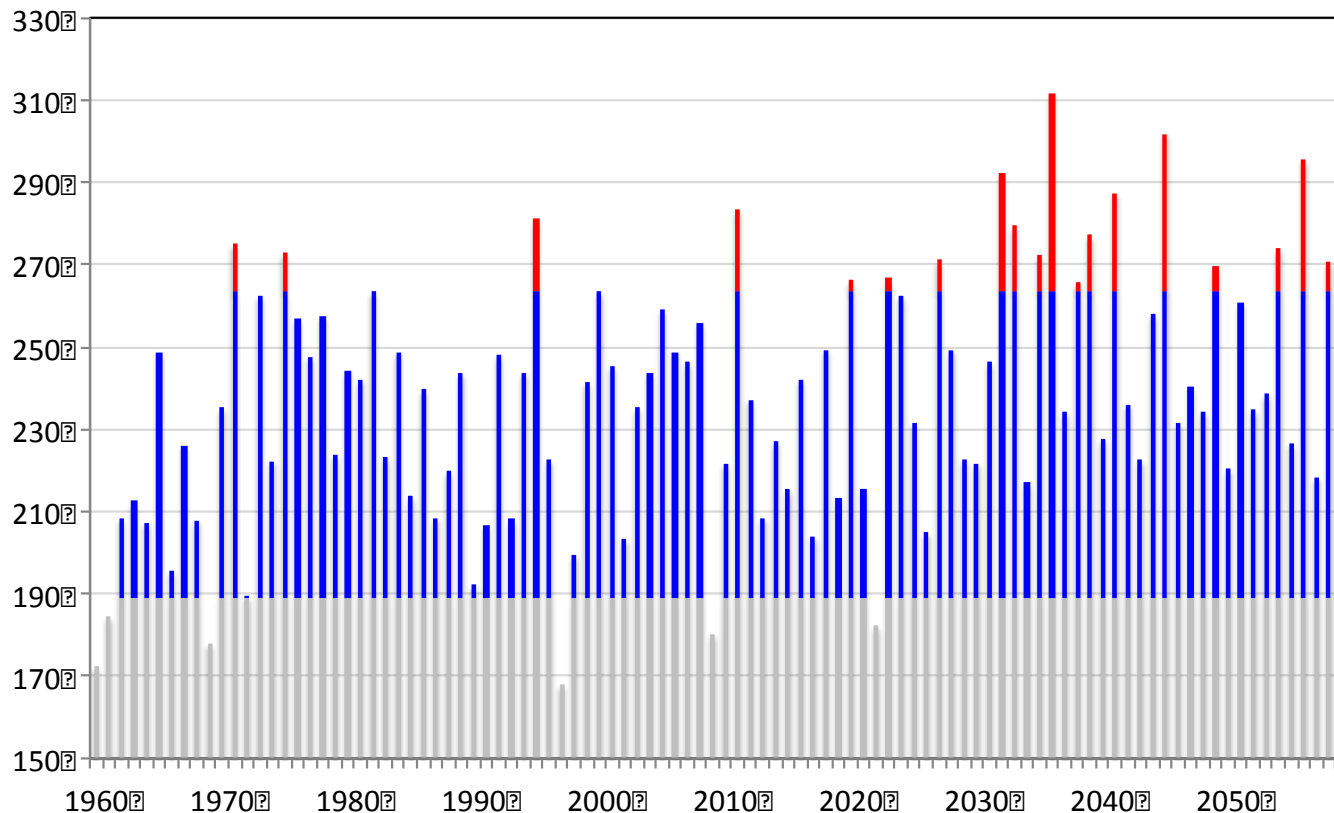
Length of Growing Season is 10 days longer across the Midwest



In Iowa, corn is planted one week earlier than in the 1950s.

Climate change will continue the recent trend of increasing frequency of wet springs

Climate Projection of Iowa May-June Rainfall



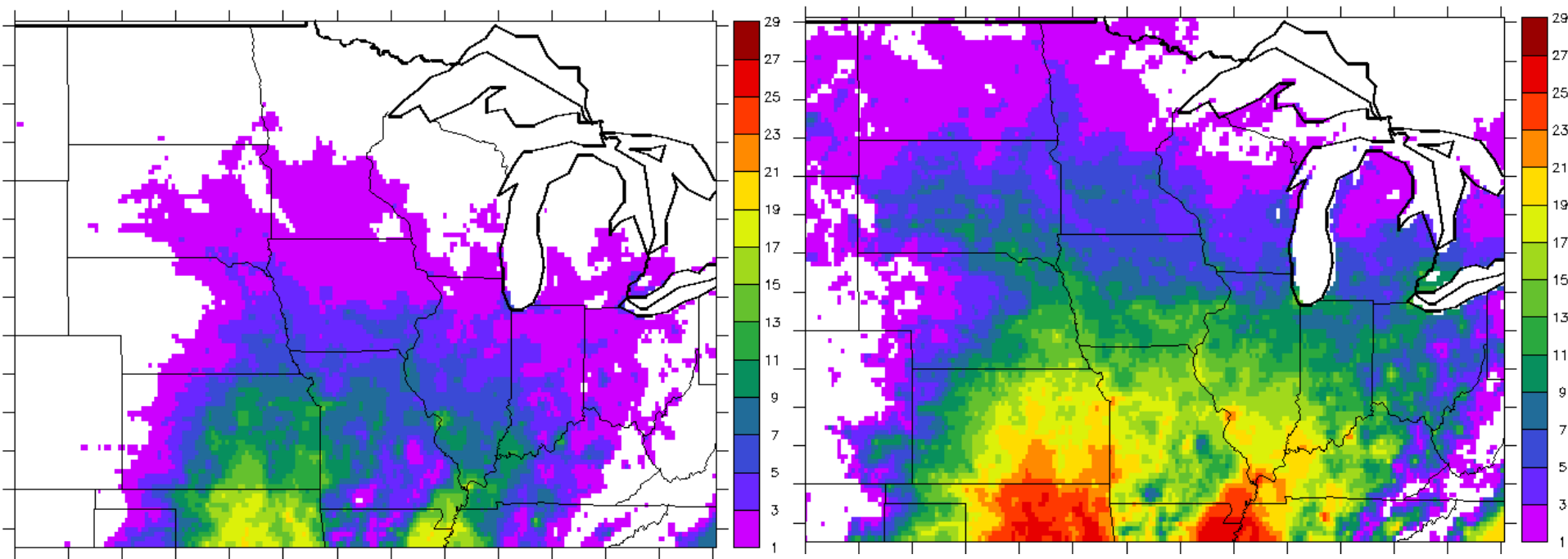
A one-in-ten year wet spring during 1960-1999 becomes a two-in-five year wet spring during 2020-2059.
Data Source: Stoner et al. (2013)

Climate change will continue the recent trend of increasing frequency of hot summer nights.

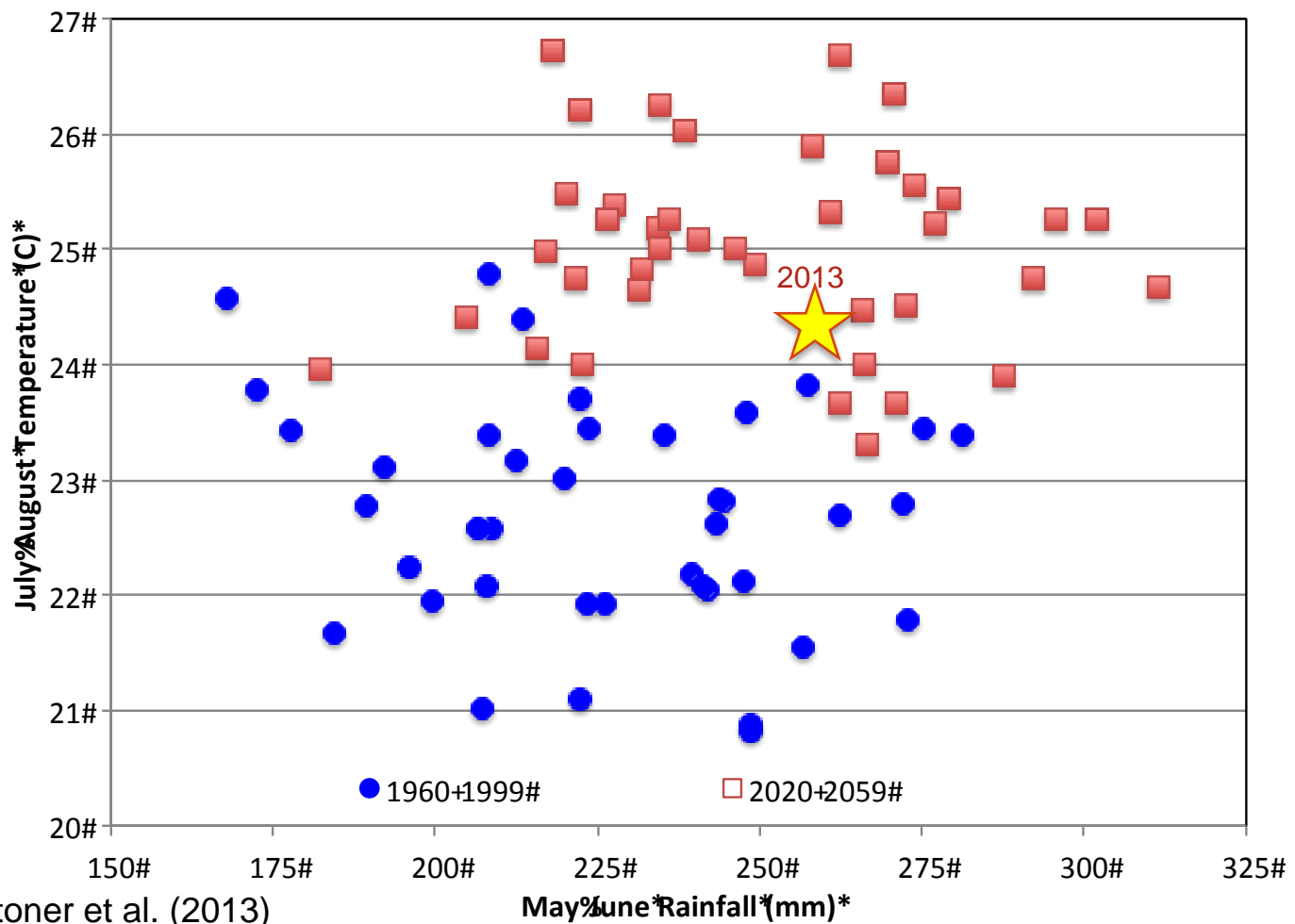
Number of July Nights with Temperature > 70F

1960-1999

2020-2059



Years like 2013 are expected to be more frequent as climate changes.



Data Source: Stoner et al. (2013)