Figure 1:

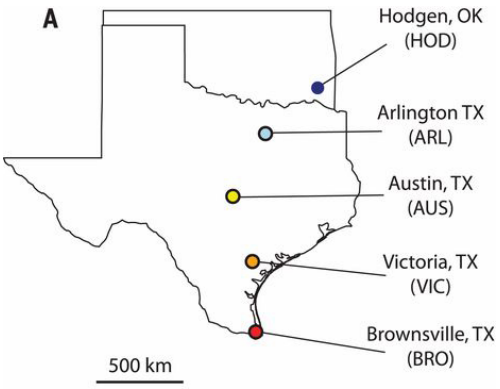
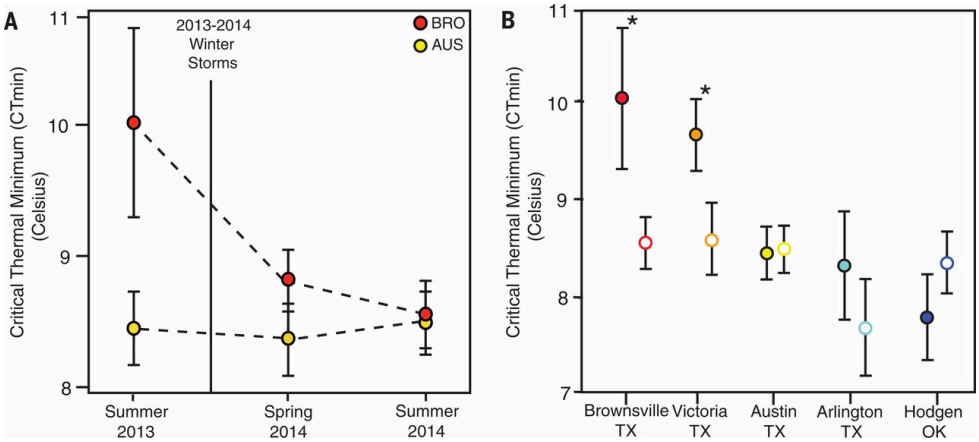


Figure 2:



Caption: *Figure 1A shows the locations of the five anole lizard populations in the study. Figure 2A shows the mean CT_{min} (critical thermal minimum, the temperature at which lizards lose their coordination) over time for two of the populations. Figure 2B compares the mean CT_{min} values for all five populations in the summers of 2013 (closed circles) and 2014 (open circles). Asterisks indicate that the CT_{min} for a population was significantly lower in 2014. Error bars represent the standard error of the mean (SEM).*

OBSERVATIONS, NOTES & QUESTIONS

BACKGROUND INFORMATION	BIG IDEAS, NOTES & QUESTIONS
Extreme climate events, such as droughts or storms, can drive evolutionary changes in populations. One such event was the winter storms of 2013 to 2014 in the southern United States, which caused some of the area's coldest temperatures in the last 15 years. Scientists investigated how these extremely cold temperatures affected local populations of anole lizards. These lizards' ability to tolerate cold is an inherited trait. The scientists thought that the extremely cold winter could cause natural selection on this trait. The scientists studied five anole lizard populations in different locations: four in Texas and one in Oklahoma. In the past, the southern locations usually had warmer, milder winters than the northern ones. Before the winter storms, the scientists sampled lizards from each population. They determined how well these lizards could tolerate cold by measuring their critical thermal minimum (CT_{min}), the temperature at which the lizards lost their coordination. (A lizard with a lower CT_{min} may be better able to move when it is cold.) After the winter storms, the scientists sampled the surviving lizards from each population. They compared the mean CT_{min} values of the samples taken *before* the storms (from the initial populations) to those of the samples taken *after* the storms (from the winter survivors).	