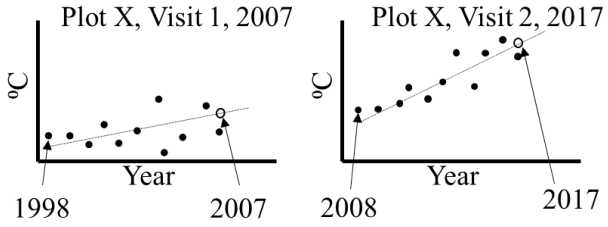
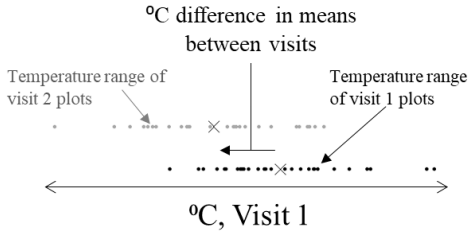
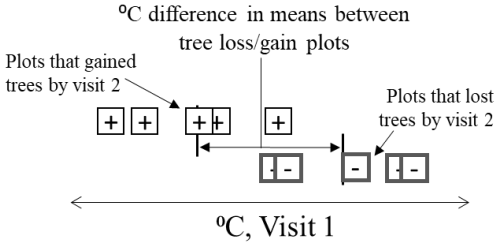
1. Predict temperature or precipitation values (open circles) for visits 1 and 2 at all FIA plots.



2. Standardizing by visit 1 predicted temperature or precipitation values, conduct range shift analysis for species of interest. Range shift = mean of temperature or precipitation values for the population of plots occupied in visit 2 – those occupied in visit 1.



3. Standardizing by visit 1 predicted temperature or precipitation values and using FIA plots at which a species either lost or gained individuals between visits, conduct density shift analysis. Density shift = mean of temperature/precipitation values for plots that gained trees – those that lost trees.



4. Using all FIA plots occupied by a species at either visit and the predicted temperature or precipitation values for visit 1 and visit 2, examine changes in plot temperature or precipitation (visit 2 – visit 1) across plots. Determine if an intercept-only or slope model better fit the data.

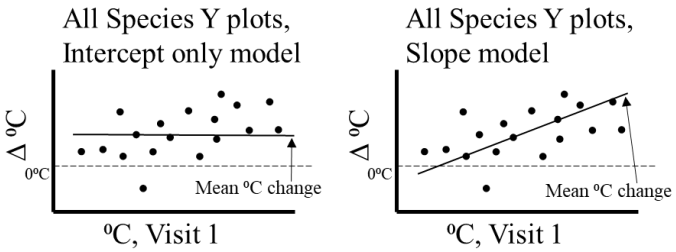


Figure 2. Analysis steps. First, temperature and precipitation values were predicted for the visit 1 and 2 years for all analysis plots. Second, the range shift analysis examined a species' difference in mean temperature or precipitation between plots occupied during visits 1 and 2. Third, the density shift analysis finds mean temperature and precipitation differences between a species' plots that gained and lost individuals. Fourth, for each species we examined how plot temperature and precipitation values changed between the two visits and related to visit 1 values.