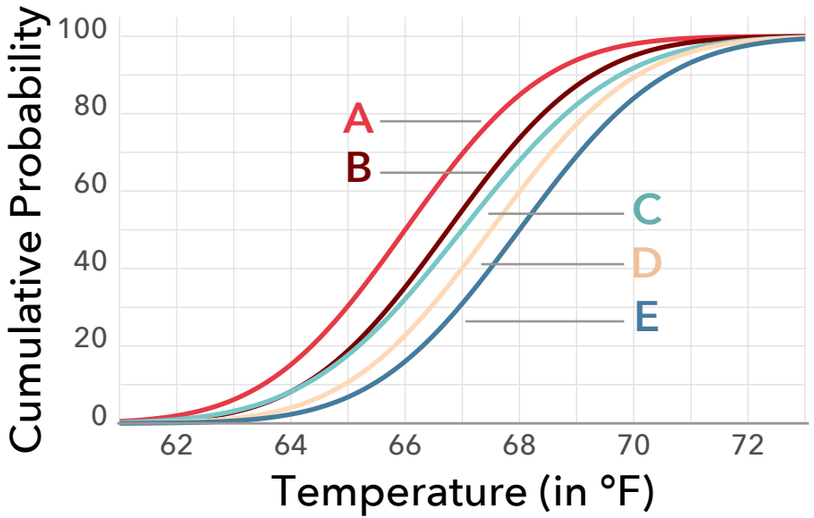
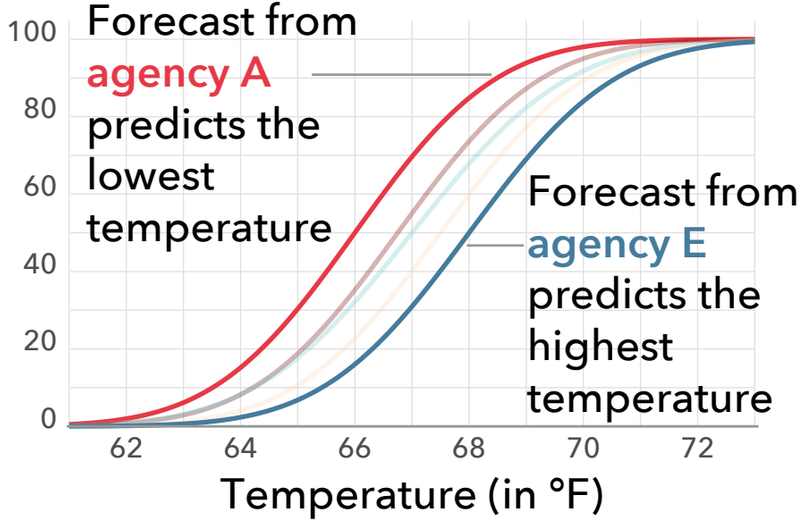
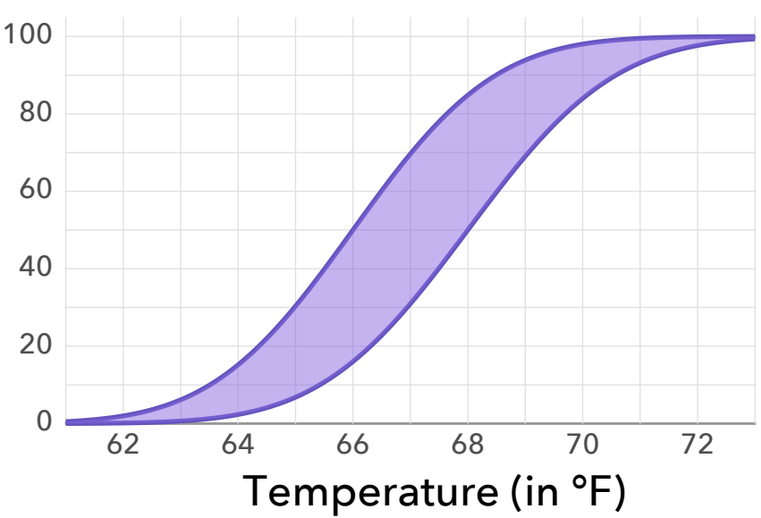
The graph below shows the temperature forecast for a particular city from *five different agencies*. Each line represents one forecast and shows the probability that the temperature will be a value less than or equal to x.



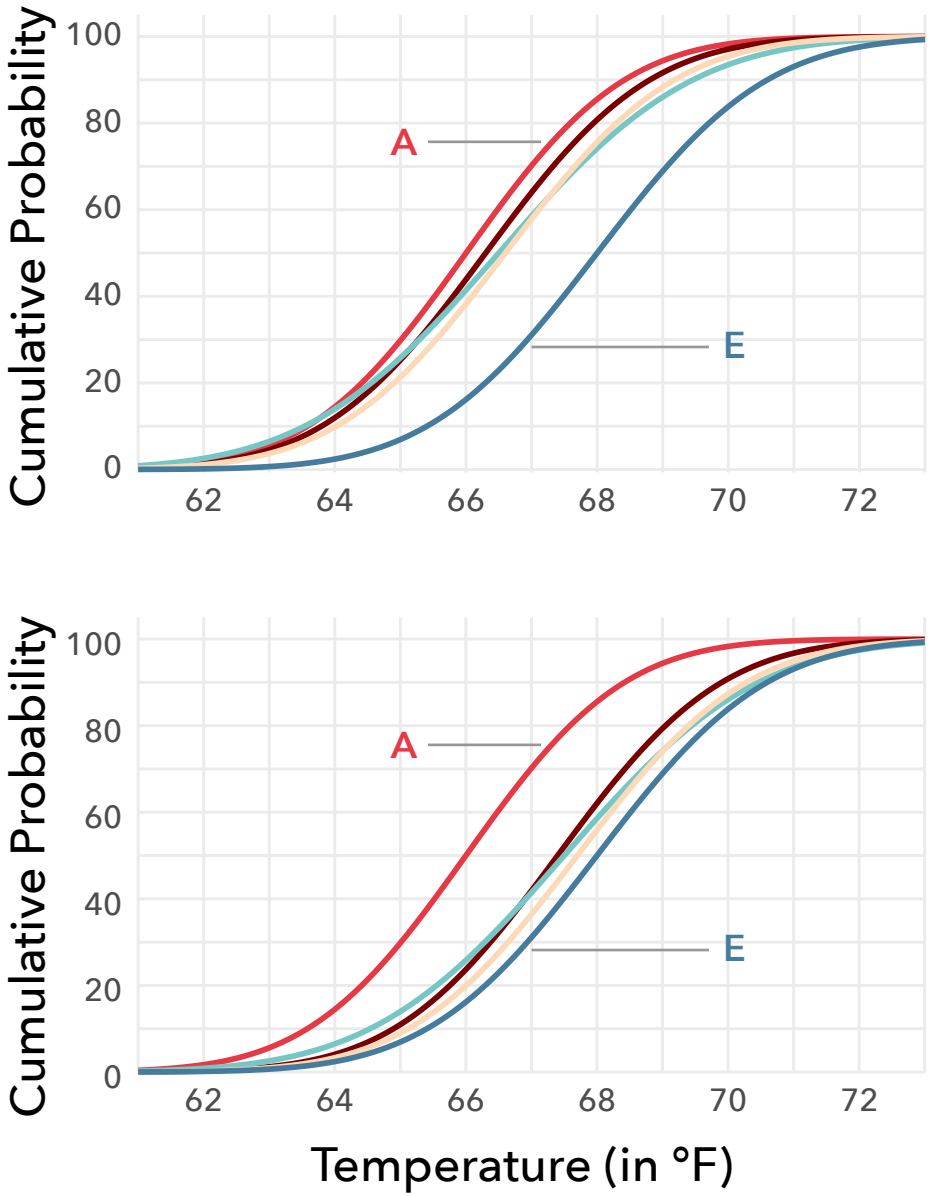
Despite the difference in forecasts, each forecast agency is known to be reliable.

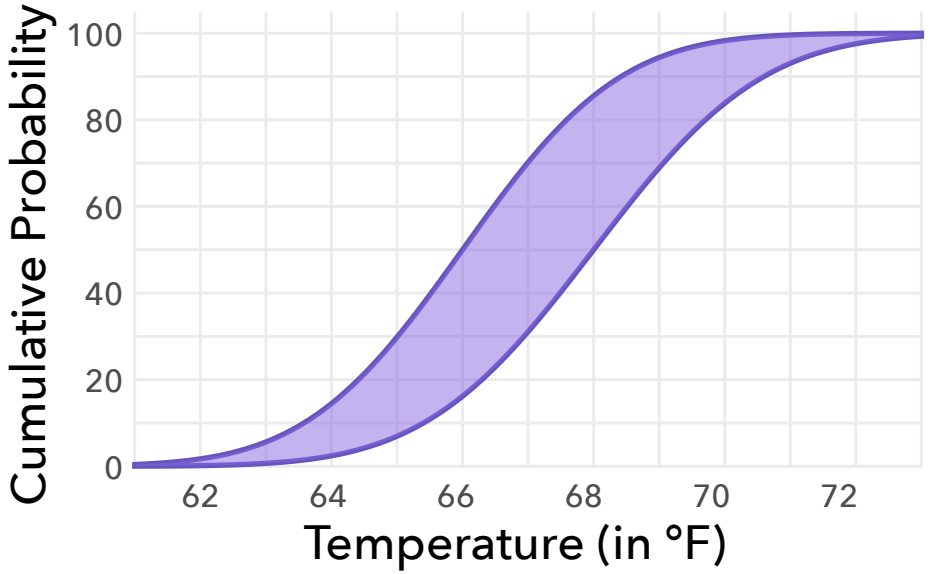


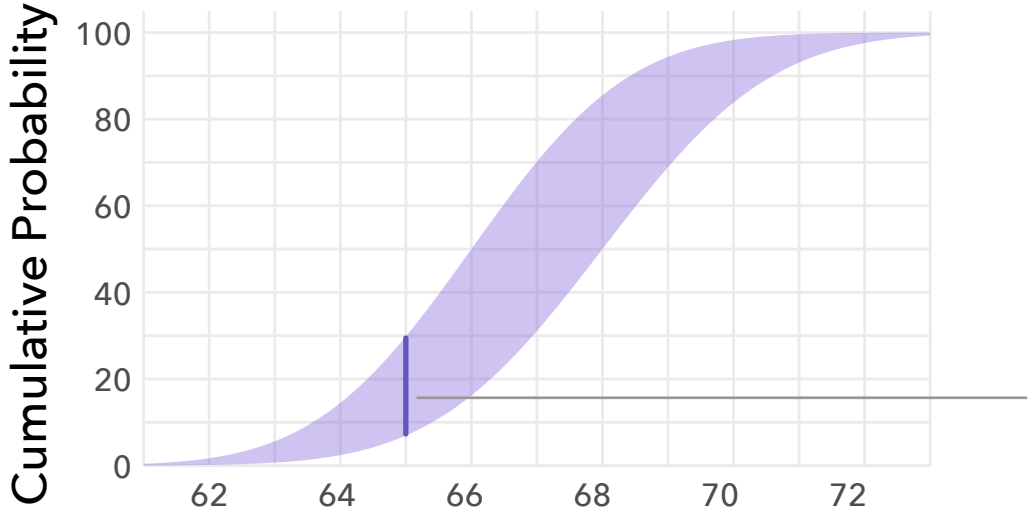
We use p-boxes to show the aggregated results from the different forecast agencies. P-boxes are created by considering the lower and upper bounds of the forecasts:



If the lower (A) and upper (E) bounds of the set of forecasts are the same, as is the case for the two plots below, it will result in the ***same p-box***. This is because the forecasts **B**, C and D are bounded by the same lower and upper bound.

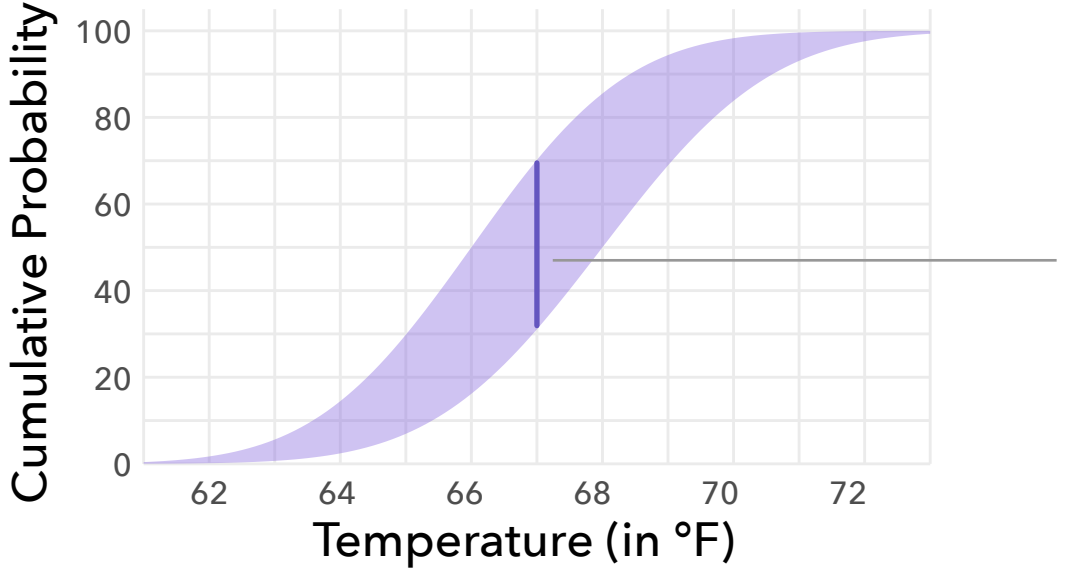






According to this chart...

there is at least one forecast which predicts that the probability the temperature will be less than or equal to 65°F is 7%, and there is at least one other forecast which predicts that the probability the temperature will be less than or equal to 65°F is 30%



there is at least one forecast which predicts that the probability the temperature will be less than or equal to 67°F is 31%, and there is at least one other forecast which predicts that the probability the temperature will be less than or equal to 67°F is 70%