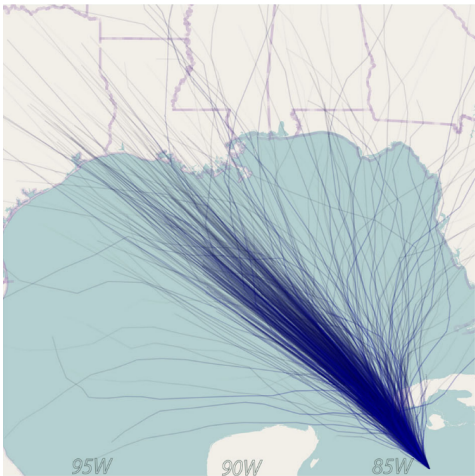
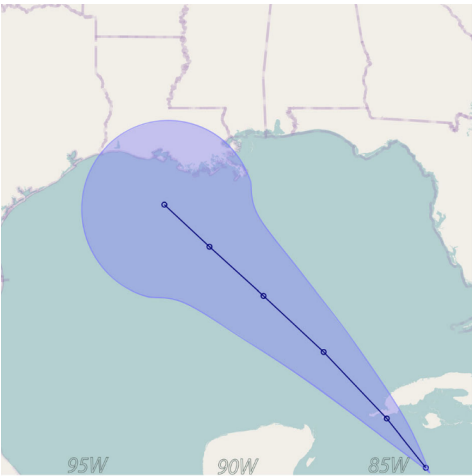


The New York Times election needle, as used in the 2016 election, **oscillated** in proportion to the uncertainty in the current predicted presidential vote margin as returns were counted in real time, an example of a **hypothetical outcome plot**.

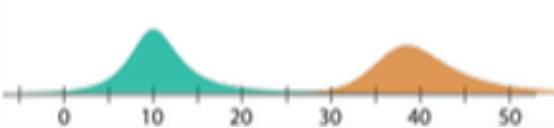


Hurricane error cones (left), employed by NOAA and journalists, are often misinterpreted by people (e.g., by thinking that they depict predicted size instead of uncertainty). Line ensembles (right), a **frequency framing** visualization, mitigate this misinterpretation.



Compared to density plots, quantile dotplots (another **frequency framing** uncertainty visualization), are easier for people to estimate intervals from and yield higher-quality decisions in incentivized decision-making experiments.

Density plots



Quantile dotplots

