

Animated Statistical Graphics using R

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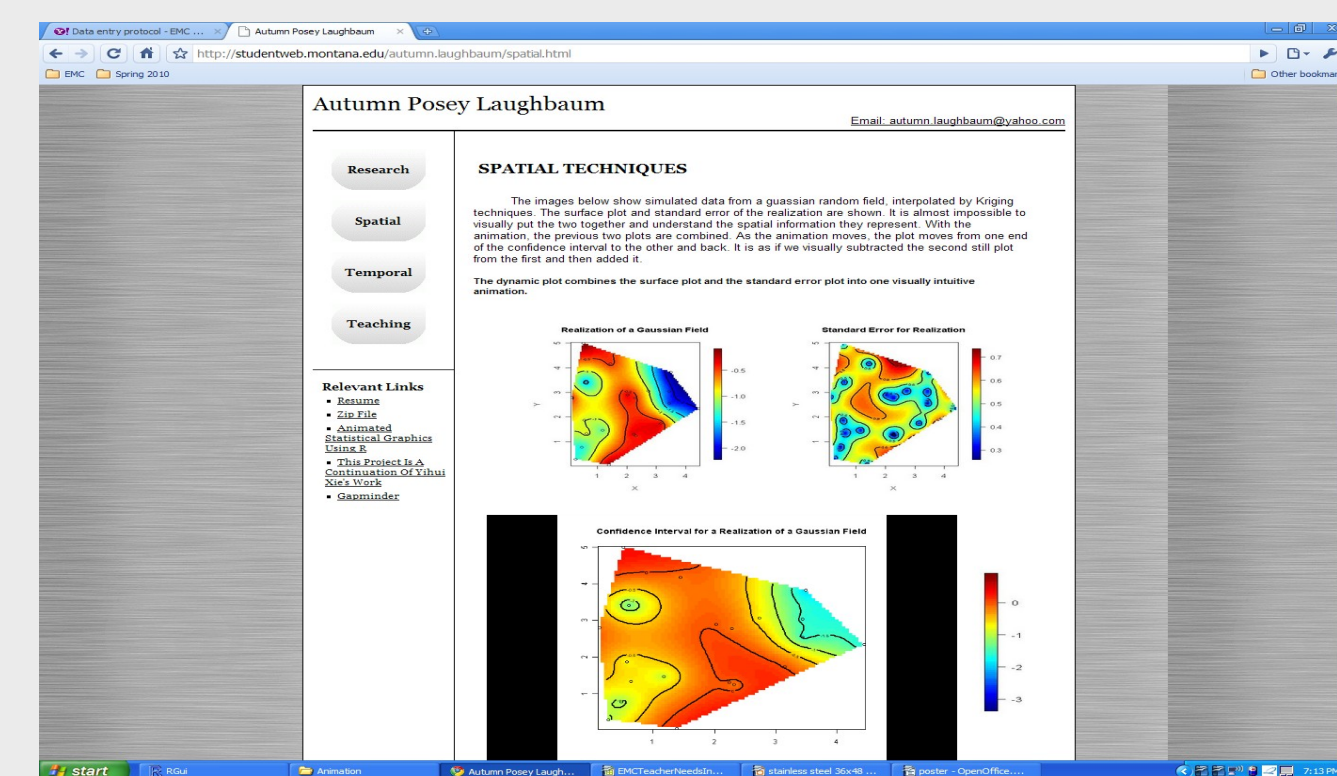
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Overview

- Animated graphics, rather than standard static graphics, engage the viewer and allow for intuitive understanding of the relationships between variables in multi-dimensional data.
- I've created animation functions in three distinct formats: spatial, temporal, and educational animations. The user-friendly functions are available in the free software package, R. <http://www.r-project.org/>

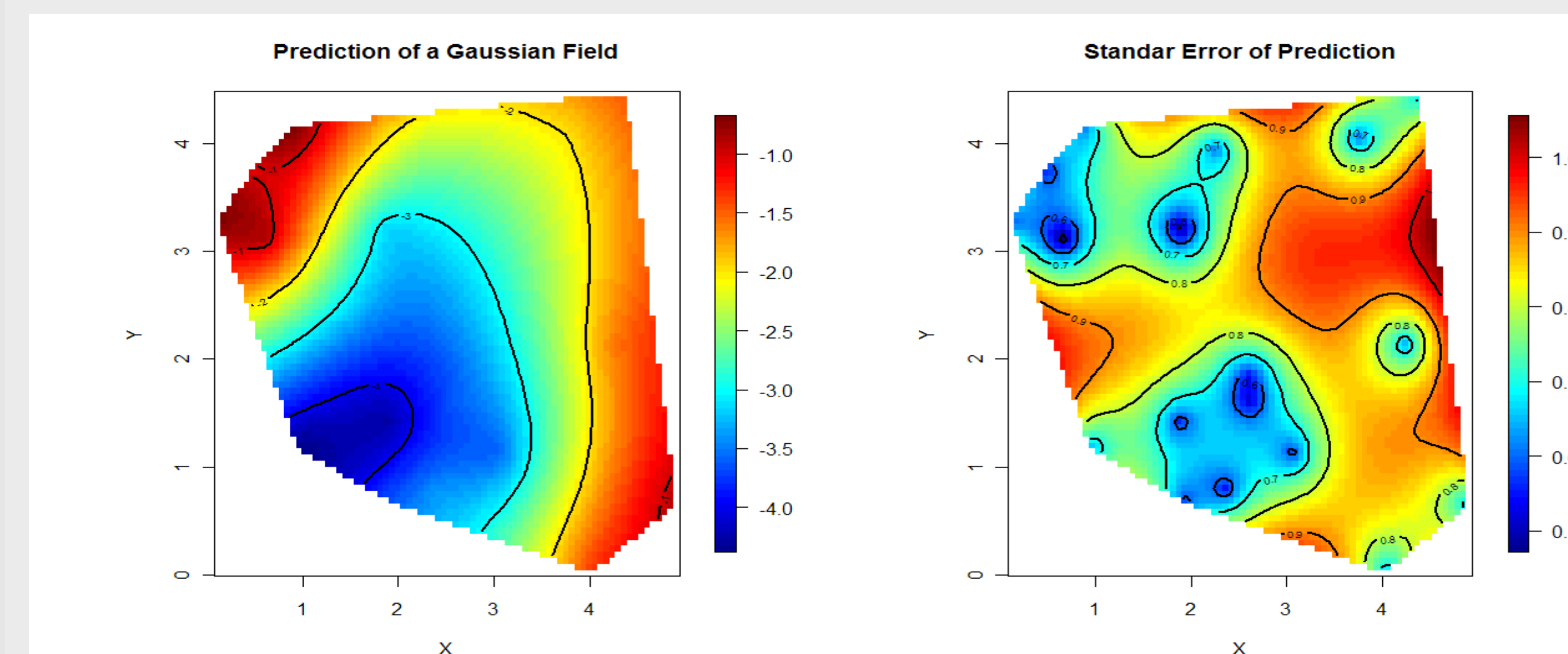
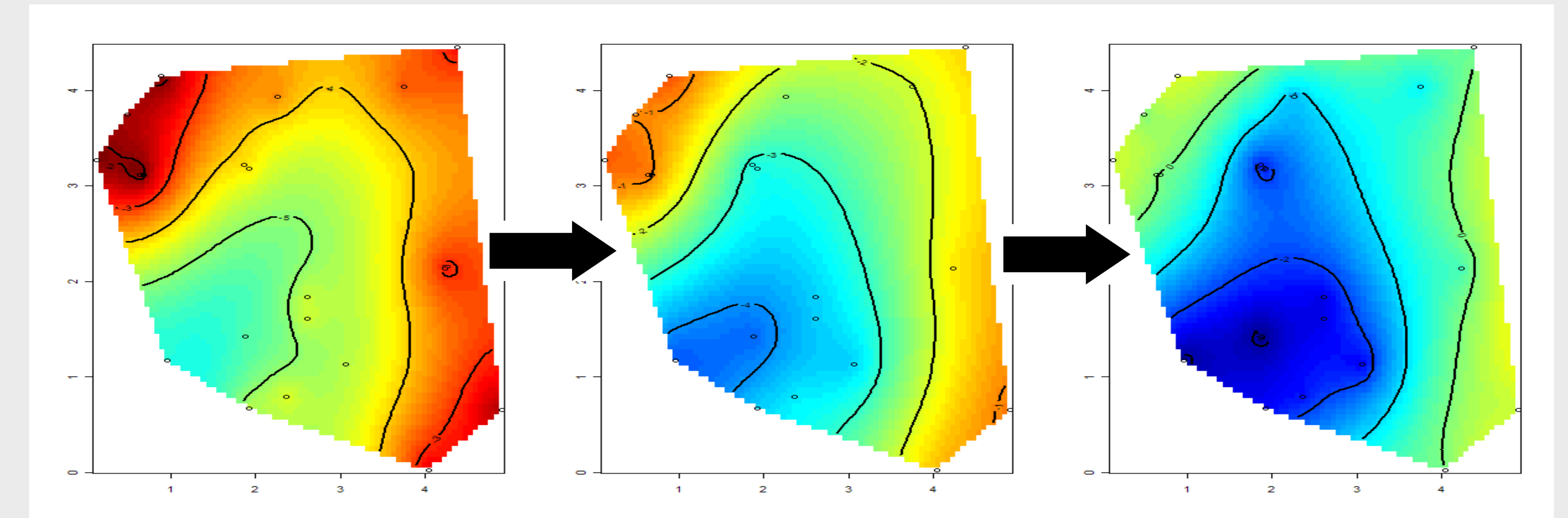
For more information, visit my website



<http://studentweb.montana.edu/autumn.laughbaum/research.html>

Spatial Techniques

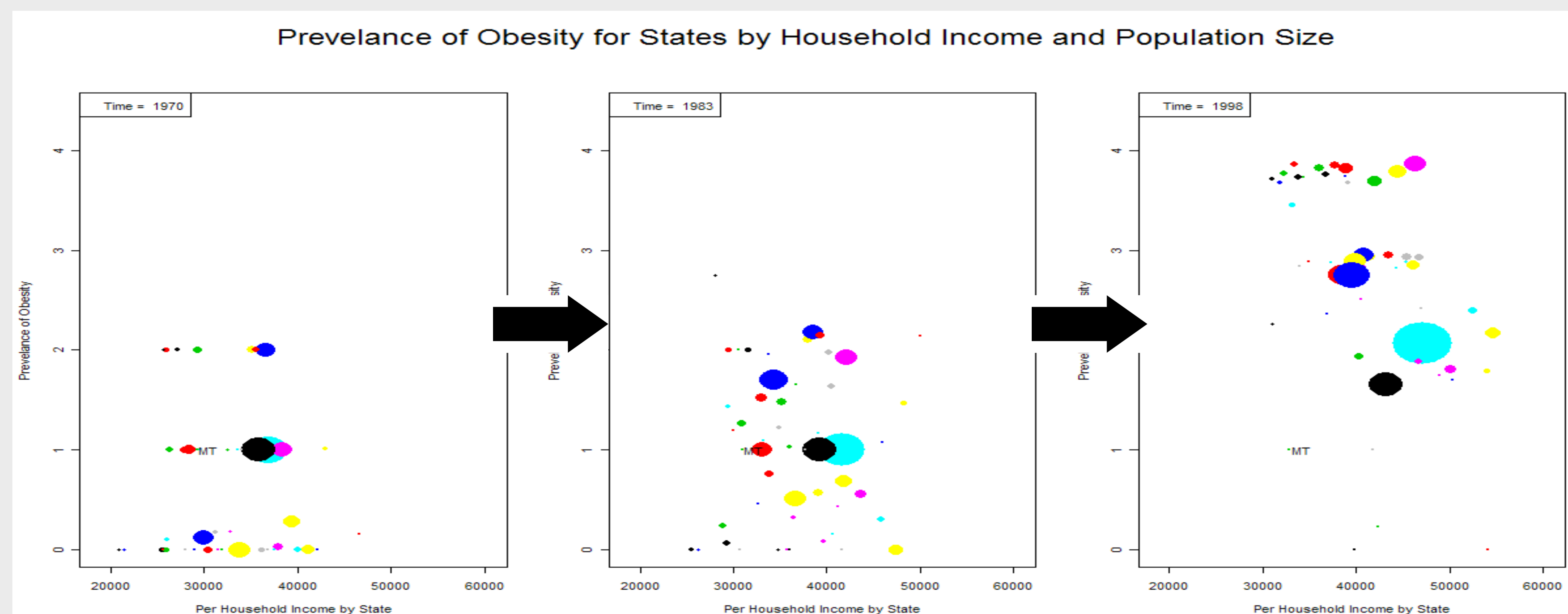
- Current Method: Display plot of surface prediction and the standard error of the prediction side-by-side (see below).



- Animation Method: Visually add and subtract the margin-of-error to the surface prediction (see screenshots of the animation above).

Temporal Techniques

- To display multi-dimensional data over time, an animated plot is intuitive and engages the viewer.



Educational Techniques

- Animation provides an intuitive approach to learning statistical concepts, such as the Central Limit Theorem shown below.

