STAT259 Summary 7

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MPL Colormaps

Smith, N. and van der Walt, S.

Summary

This weeks reading (and video) related to matplotlib's shift from the default jet colormap to using viridis. Viridis was selected based on science for determining colormaps with little-to-no perceptual variation across the colormap. This is in contrast with colormaps with strong perceptual variation, such as jet, which seem visibly harsh and are scientifically misleading. In the video, Nathaniel Smith discusses the science behind how viridis was chosen as the default after analysis of the color space, trials with a variety of criteria matching colormaps, and (partially) democratic polling of matplotlib users/developers.

Exploration

I have to say, I am very pleased by this "reading" selection. I had noticed the viridis color scheme when using matplotlib's plotting (especially using 'imshow') and thought it was an interesting, and peculiar, color choice. I thought that Nathaniel's video did an excellent job explaining how they reached this decision, with enough background to be fairly accessible to most users. I also really appreciate the scientific process behind the decision to switch to viridis. I remember the discussion earlier in the semester about how the jet colormap could be misleading, but certainly did not have a full appreciation as to why until this assignment. Seeing the plots of perceptual variation in jet versus virdis made this quite obvious.