Agenda

- EDA Refresher
- Effective Visualization
  - Graphical Integrity
  - Scope
  - Displays
  - Sensible Design
- Communication
  - Motivation
  - Key Considerations

Agenda

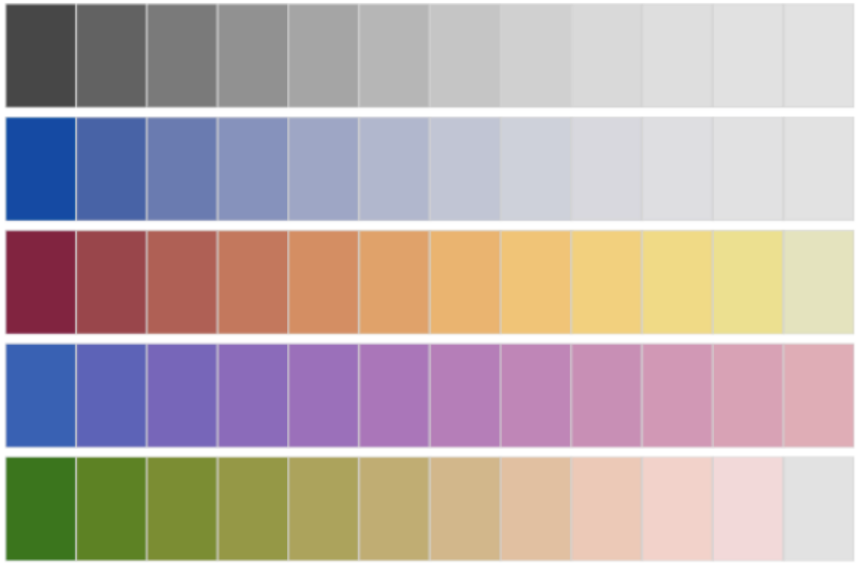
- EDA Refresher
- Effective Visualization
  - Graphical Integrity
  - Scope
  - Displays
  - Sensible Design
- Communication
  - Motivation
  - Key Considerations

Colors for Categories

Do not use more than 5-8 colors at once

Colors for Ordinal Data

Vary luminance and saturation

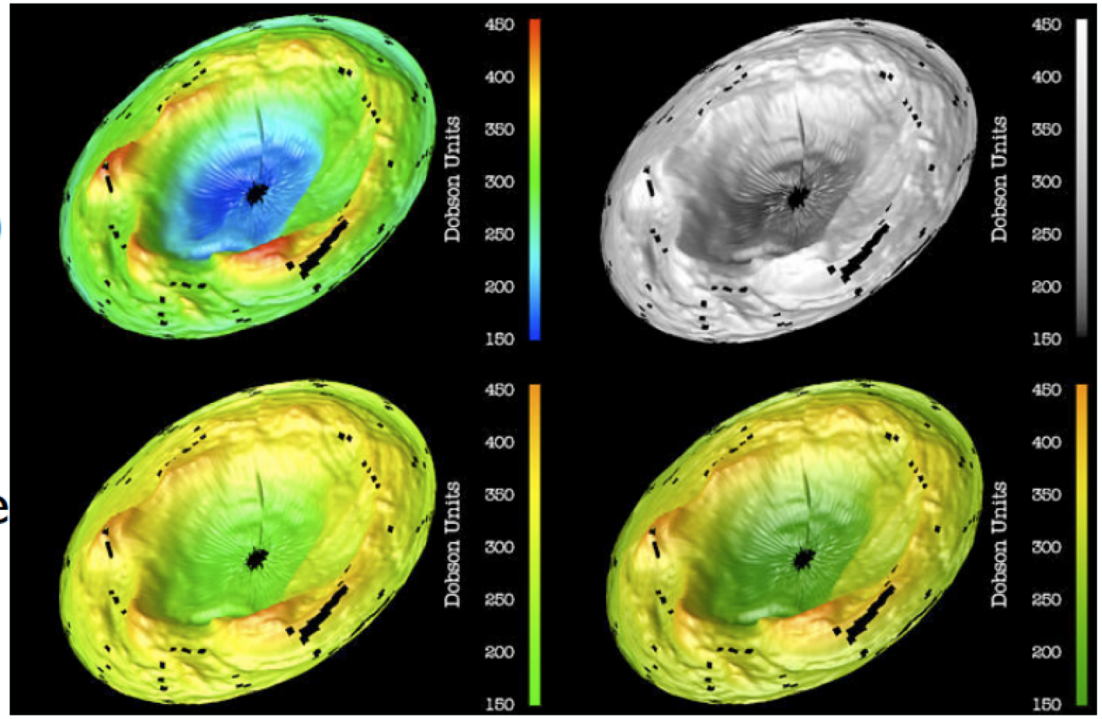


Zeilis et al, 2009, "Escaping RGBland: Selecting Colors for Statistical Graphics"

Colors for Quantitative Data

Hue (Rainbow)

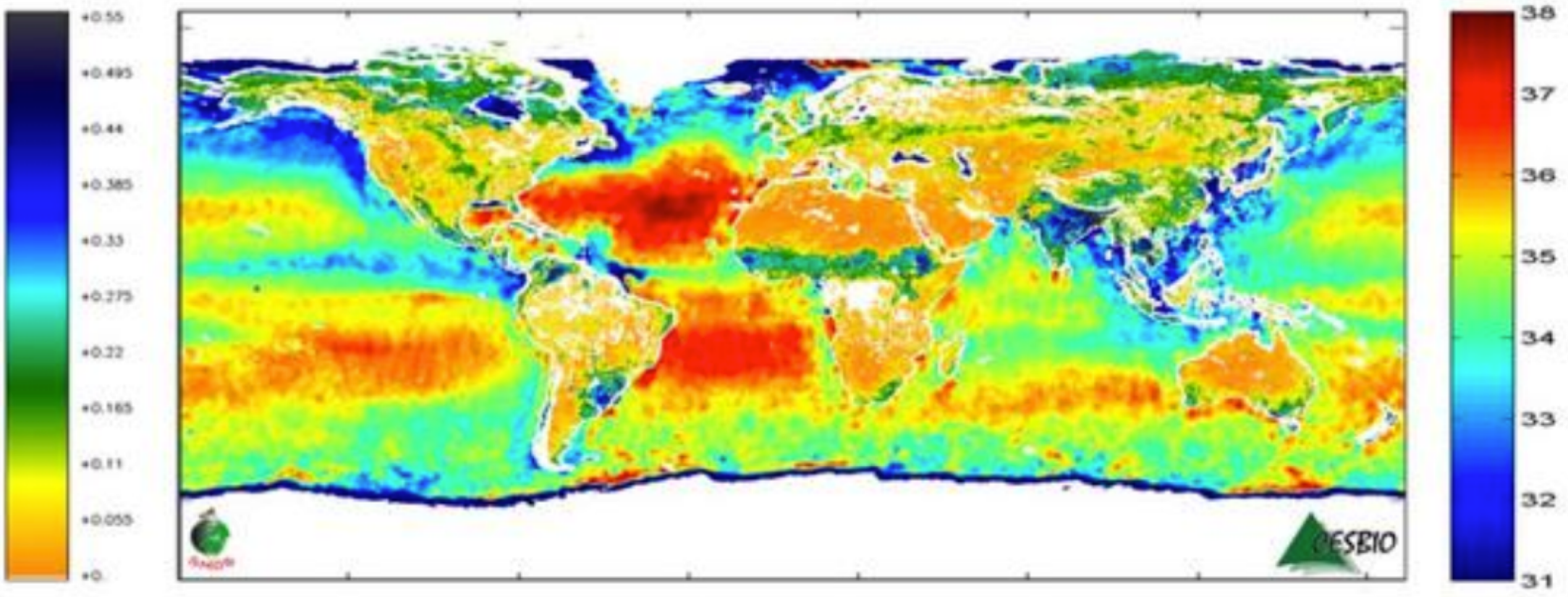
Luminance & Hue



Luminance

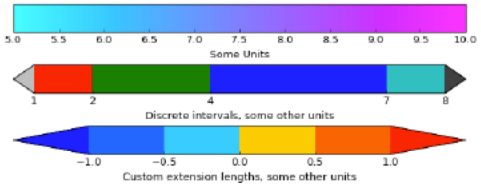
Rogowitz and Treinish, Why should engineers and scientists be worried about color?

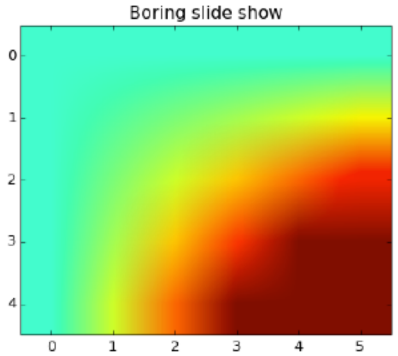
Sensible Design: Color Gradients

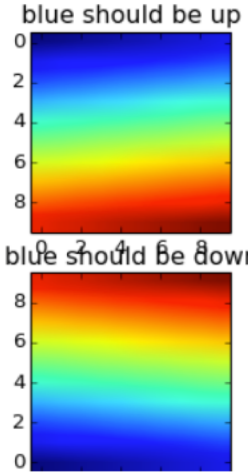


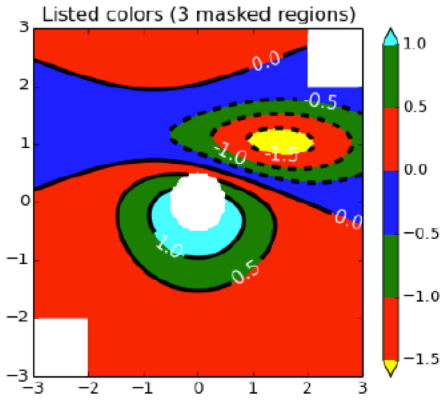
Sensible Design: Color Gradients

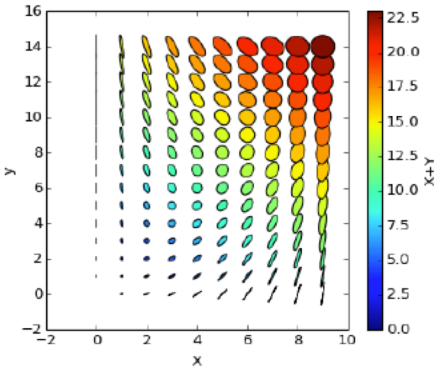
Avoid Rainbow Colors!

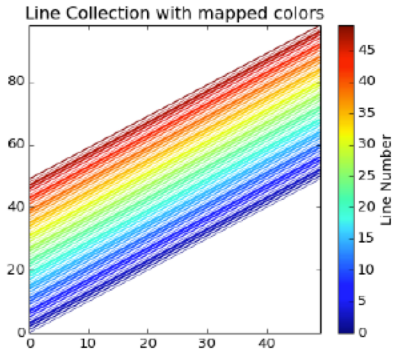








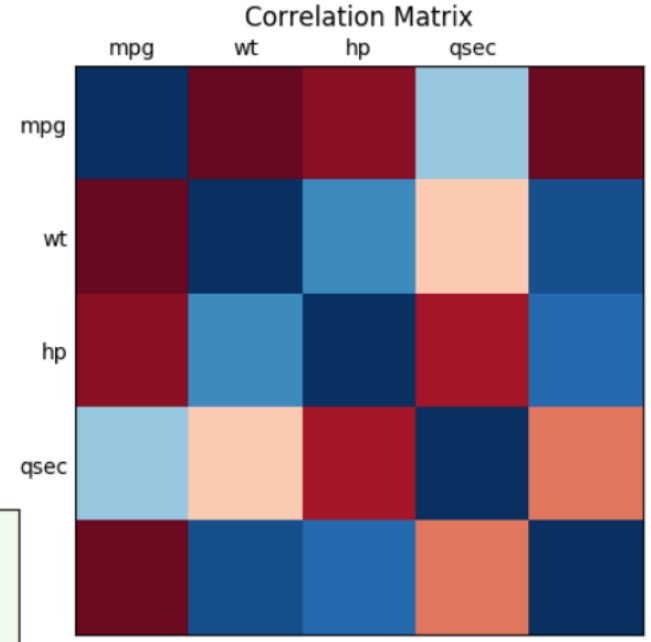


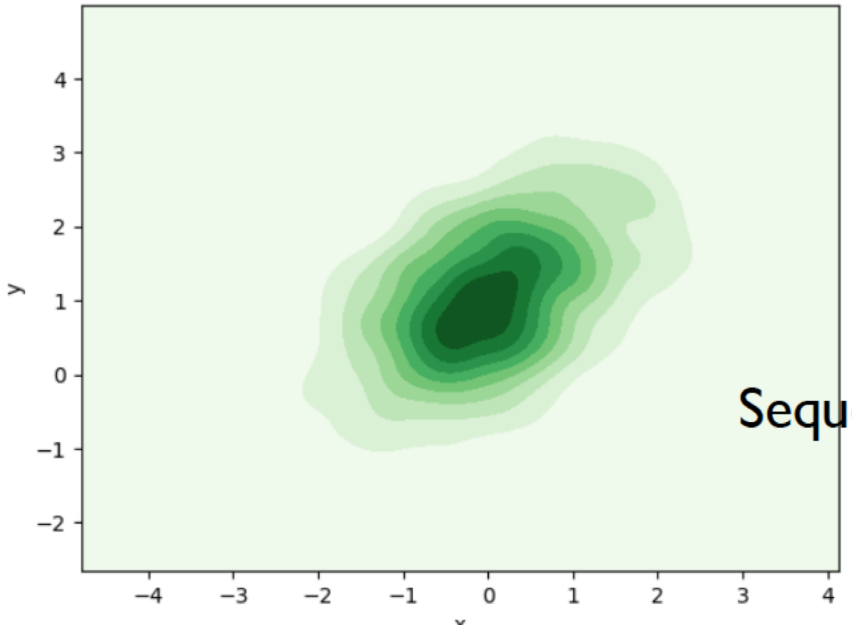


matplotlib gallery

Sensible Design: Color Gradients

Diverging Palette for Quantitative or Ordinal

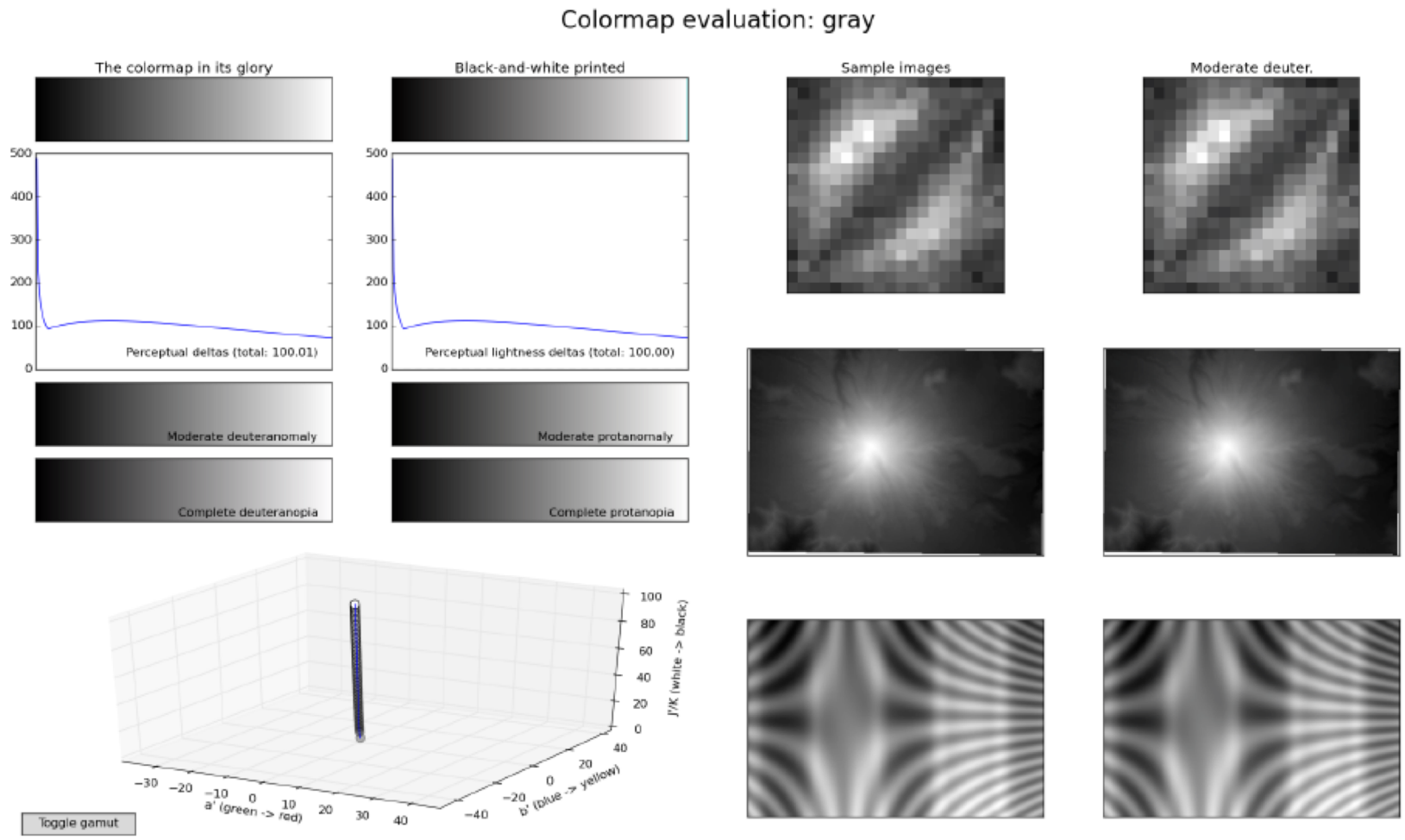




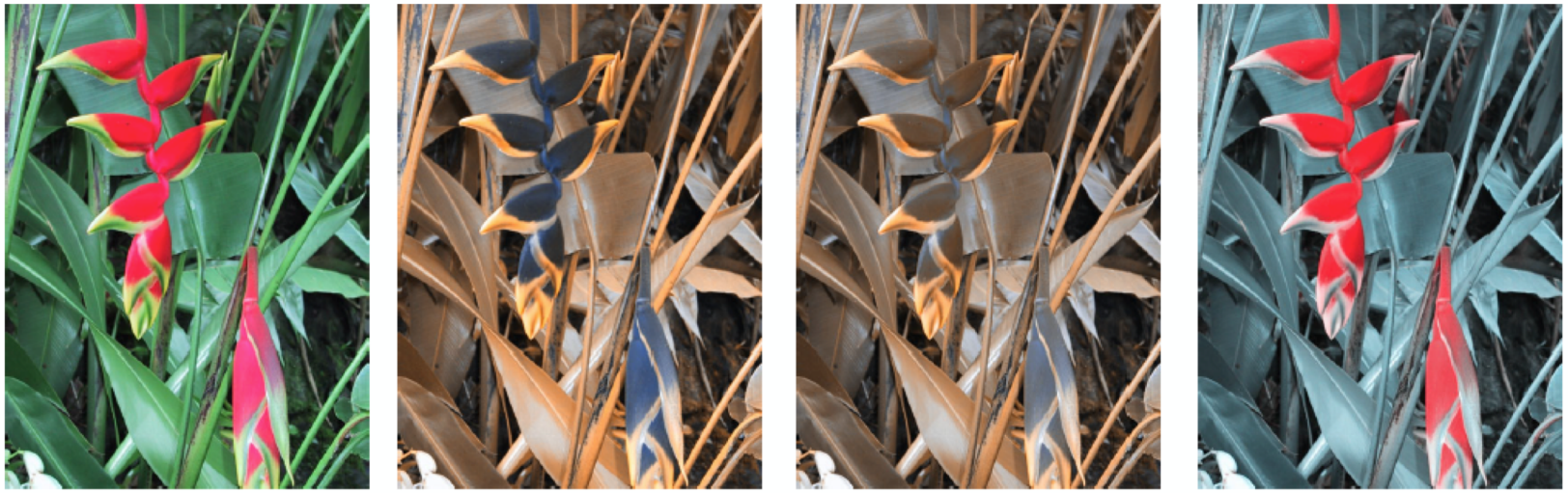
Sequential Palette for Densities

Sensible Design: Color Gradients

Gray



Color Blindness



Protanope Deuteranope Tritanope

Red / green deficiencies

Blue / Yellow deficiency

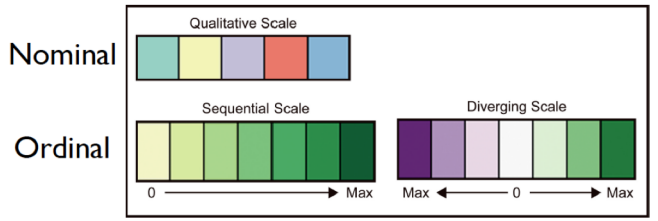
Color Blindness

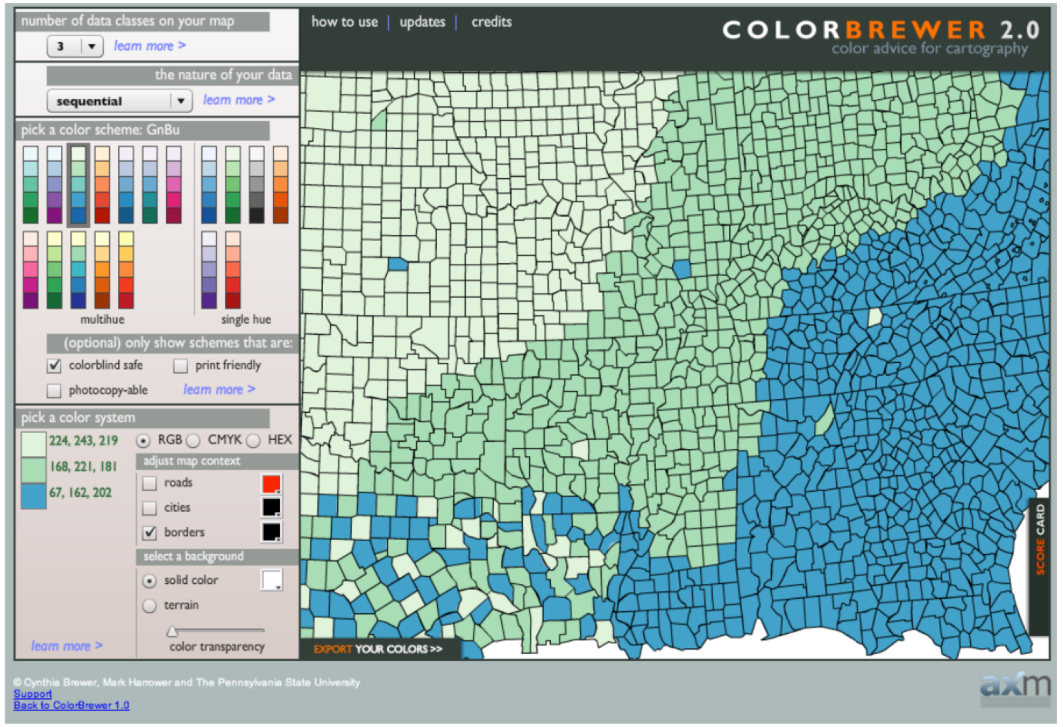
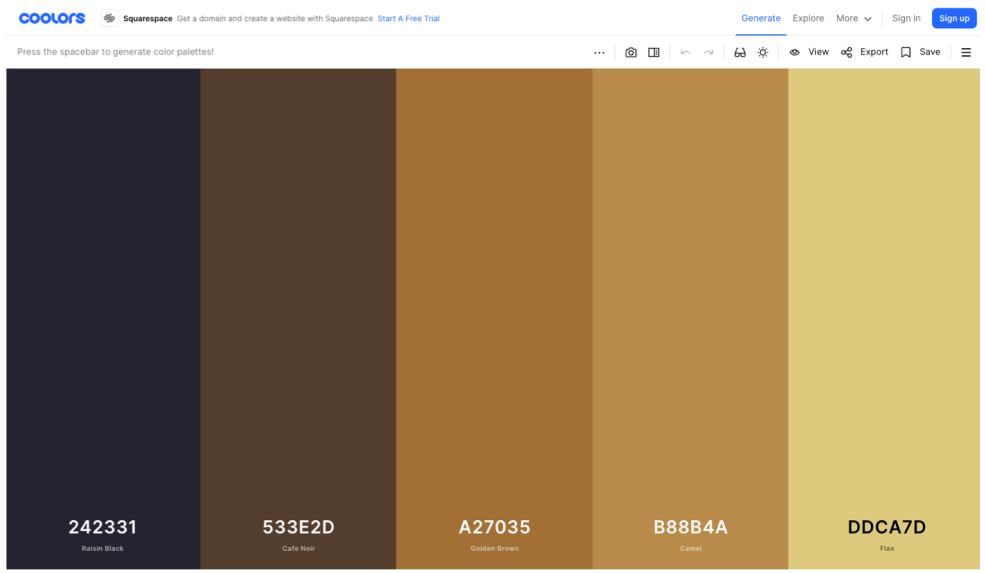
Sensible Design: Color Pickers!

Great sites for selecting color schemes:

- http://colorbrewer2.org
- https://coolors.co/

Color Brewer





Coolors.co