Twitter Thread by Jessica Tierney



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It's #FigureFriday, so let's chat about my favorite subject: color palettes ■ for climate science visualization! (1/12)

First, why is it important? Put simply: a beautiful figure can communicate your results more effectively than text. It can make a figure more understandable to a public audience. So it is worth it to put care into your figure design. (2/12)

First, if you're plotting up climate model data, especially anomalies, I highly recommend Cynthia Brewer's palettes on ColorBrewer. BrBG is my go-to for precip anomalies, and RdBu is a natural for temperature. (3/12) https://t.co/FiCgxyahIp

The sequential palettes are also great if you've got data going in one direction. Here's the Brewer "blues" at work for a figure showing LGM T change. (4/12)

But what about line graphs? If you are paleoclimatologist like me, you are probably plotting a bunch of squiggly lines. For this, I suggest designing a palette for your *entire paper* ahead on time, and then plot stuff in this palette in every figure. (5/12)

My favorite tool for palette design is Coolors (thanks @talia_and for the tip!). This awesome app helps you design palettes with colors that harmonize. (6/12) https://t.co/HIirTdAgKd

For example, here is the Coolors palette I designed for our Review paper in @ScienceMagazine. I wanted to use bold colors that also harmonized with Brewer colors for the global maps in the paper. (7/12)

Coolors allows you to dynamically check color-blind compatibility, but I also love Color Oracle for this, which flips everything on your computer screen to color-blind views. (8/12) https://t.co/w2XREsQeXD

Here's a figure from our Past Climates review on the Coolors palette, in real color, and then what it looks it for folks with deuteranopia (red-green) color blindness. (9/12)

I don't always choose bold colors...sometimes I'm interested in softer looks...like here is a blue-brown gradient palette I'm working on for an upcoming paper. It just depends on what suits your work. (10/12)

Another source for color ideas is cpt-city. Many of these palettes are for graphic design, but it has the NCAR NCL palettes, cmocean palettes from @thyngkm, various semi- and continuous- versions of the Brewer palettes, and many other jewels (11/12) https://t.co/1RYQH1iT0i

Anyway, hope these tips help! What are your favorite color palettes? I'm always looking for good ideas. (12/12) ■