Making better scientific figures

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In the words of the UK government chief scientific adviser “Science is not finished until it’s communicated” (Walport 2013). The tools to produce good visual communication have never been so easily accessible to scientists as at the present. Correspondingly, it has never been easier to produce and disseminate poor graphics. In this presentation, we highlight some good practice and offer some practical advice in preparing scientific figures for presentation to peers or to the public. We identify common mistakes in visualisation, including some made by the authors, and offer some good reasons not to trust defaults in graphics software. In particular, we discuss the use of colour scales and share our experiences in running a social media campaign (http://tiny.cc/endrainbow) to replace the “rainbow” (also “jet”, or “spectral”) colour scale as the default in (climate) scientific visualisation.