

A More Perceptual Color Palette for Structure Maps

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Abstract

The spectrum, one of the default color palettes in geophysical software, is inadequate to represent structure because it introduces edges and artifacts that may be interpreted as real changes in the data. This palette also interferes with the use of shading and the perception of relief, and some of its colors are very confusing for viewers with color vision deficiencies.

We recommend a new color palette and test it on a Digital Elevation Model and on a gravity dataset to demonstrate it is perceptually superior to the spectrum for both standard viewers and viewers with color deficiencies.