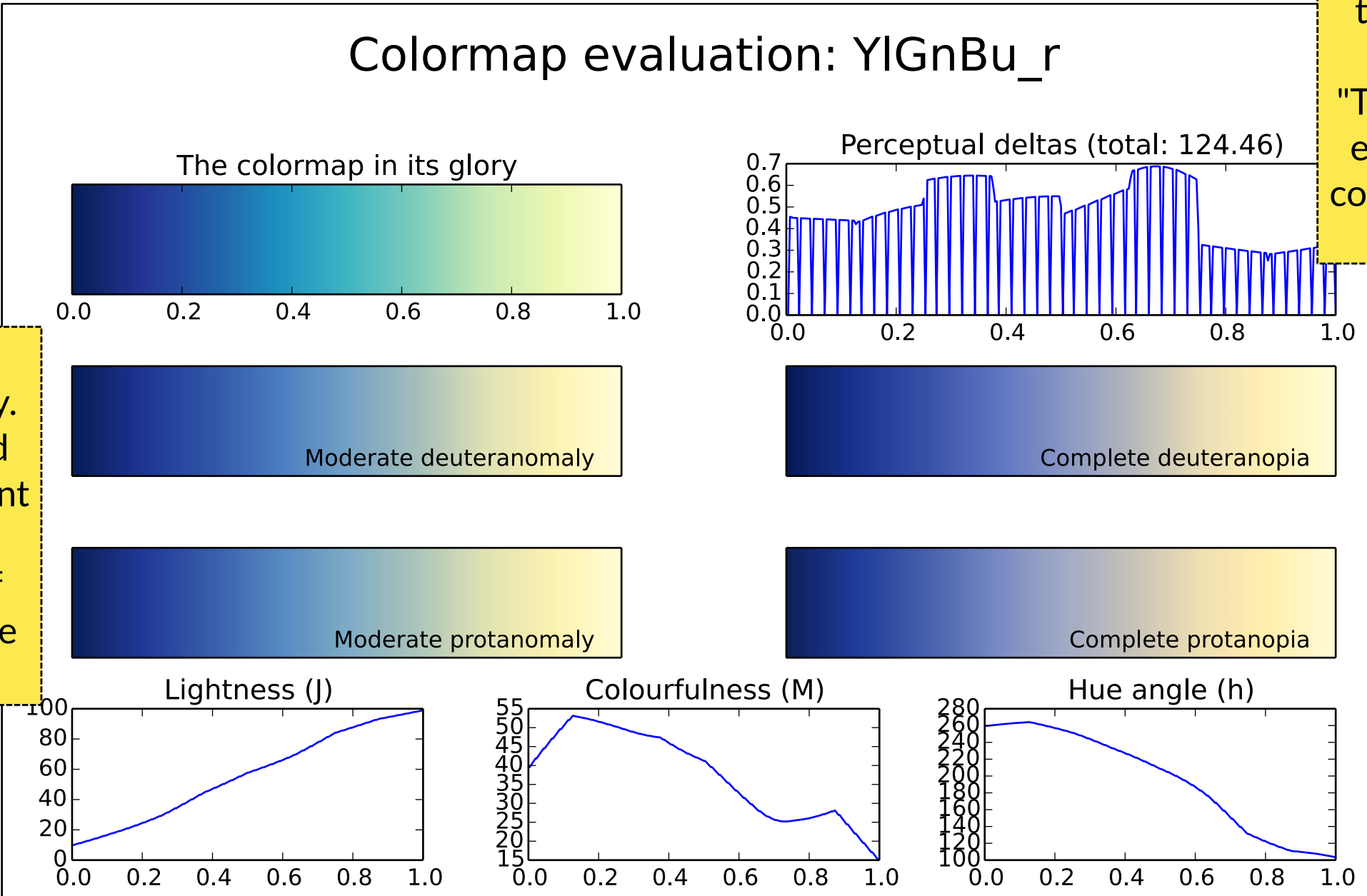


# How to read the colormap evaluation script output

This shows how far each unit step in x moves us in perceptual space. A perceptually uniform colormap should be a horizontal flat line, with no peaks or valleys. (Ignore the zebra striping, that's a quantization artifact and has been fixed now anyway.)  
 "Total" is the arclength of the whole map. All else being equal, larger is better, because a colormap that has a lot of variation allows for finer perceptual distinctions.



There are two common forms of "color blindness": deuteranomaly and protanomaly. Both create difficulties in distinguishing red versus green, and both can come in a gradient of weaker or stronger versions. We show a weaker (left) and stronger (right) version of each. Most people with color blindness have some kind of moderate deuteranomaly.

These three plots simply show the colormap in CIECAM02 JMh space. J is (almost the same as) luminance, M is (almost the same as) saturation, and h is hue angle (ranging from 0-360).  
 The J plot is useful to check lightness linearity. The other plots are just useful to see what the colormap is doing.

This is a 3d plot of the colormap in CAM02-UCS space. This is a perceptually uniform space derived from CIECAM02 (i.e., these numbers are related to but different from the graphs immediately above). The colored circles are equally spaced in x space. Compare the circle spacing in the highlighted regions to the perceptual deltas graph above.  
 This graph is much more readable when loaded up interactively so you can spin it around.

