Subject: Re: color value interpolation from colorbar
Posted by pgrigis on Fri, 05 Dec 2008 15:17:32 GMT
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I would fit a*x^b for red and blue and c+dx for blue.

Ciao,
Paolo

Jeremy Bailin wrote:

>> images to usenet forums, please let me know.
>>
>> Below is the Picasa link to the two images requested by Vince and
>> Paolo, (1) an example frame grab of a scan, and (2) its colorbar RGB
>> plotted against colorbar location:
>>
>> http://picasaweb.google.com/j.coenia/ColorInterpolation?auth key=H9iPr...
>>
>> To answer Jeremy's question, the colorbar length is 140 pixels or so
>> (scaled here from 1 to 100 on the x axis, which is vertical in the

>> center of the colorbar, as the colorbar tends to bleed a little into
>> the dark background near the edges (more errors).
>>

>> reasonably guess the color levels in that artery using the colorbar on

>> I've been instructed to assume linear gradient from 1 to 100.
>> Radiologists and researchers use these colors; can the computer
>> quantify them to extract more meaningful information?
>>
>> Thanks again.
>
> I think that your colour bar is sampled well enough for the approach I
> suggested to work. You'll need to smooth out your R,G,B curves first,
> though - I would first use Peter's suggestion of taking the mean over
> a few columns within the colour bar, and then I'd pass it through a
> median filter to get rid of the artifacts and further smooth it.
>
> I quite like Peter's approach, actually - assuming that the curves can
> be fit to a sufficiently low-order polynomial, which you'll have to
> check. It should be a lot faster, and is definitely more elegant! The

> approach I suggested should work pretty generically for any bizarre
> colour table, but yours looks it would be reasonably well-behaved once
> smoothed.
>
> -Jeremy.
