
Subject: Re: gamma correction

Posted by [David Fanning](#) on Thu, 27 Jun 2002 23:57:00 GMT

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Dick Jackson (dick@d-jackson.com) writes:

> But if you just want to try adding a 'gamma correction' (an exponential
> function) in IDL as a step in the middle (between the camera and the monitor), I
> see no harm in using Gamma_CT as in my example. I would just keep in mind that
> there is already some function going on between the image array values and the
> light coming from the monitor (something close to a gamma function at around
> gamma=2.5 as Rick mentions). By changing the colortables with Gamma_CT or just
> using TVLCT, you are just adding another function in front of that.

I just point out again that while this would probably work on a Mac and PC, it probably won't work on a UNIX machine. The last time I checked (several years ago and God knows RSI has changed the way color works enough times that two years is ancient history), a UNIX machine in TRUECOLOR mode, with color decomposition turned OFF, did not take the image values through the color table before display, as it does with PCs.

In other words, on UNIX machines a true-color image is a true-color image and what you have is what you see. I always thought this was the correct way to operate and assumed the PC behavior (which almost always results in wacky image colors) was a bug.

Now I see that the fore-sighted engineers at RSI were really concerned about gamma correction and had put the machinery in place to handle this without me even realizing it. Have I mentioned that I *love* IDL! I'm just feeling sorry for the UNIX guys now. They are going to have to modify the numbers in their image to get the same effect.

> Sorry for the long ramble, I hope it's of some help.

I think the long discussion just points out my earlier contention that gamma is a strange thing and it is hardly ever clear what you mean by it. Charles Poynton is clear about most things having to do with color, and in my experience almost invariably right. I look forward to seeing the IDL code that results. :-)

Cheers,

David

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