Subject: Re: 8-bit vs. 24-bit color on Windows
Posted by Liam Gumley on Thu, 28 Jan 1999 08:00:00 GMT
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William Thompson wrote:
> I didn't say that people weren't using XLOADCT. What I'm saying is that a lot
> of work (myself included, and the people I know around me) is done using
> non-widget software. The first thing you do, when you get some data that you
> don't know what it's going to look like, is you read it and display it. For
> example, I might say
>
>   IDL> fxread, 'mydata.fits', array, header   ;Generic FITS reader
>   IDL> tvscl, array
>
> Then I want to start playing with the color table, possibly using just LOADCT,
> possibly with XLOADCT, or possibly with some home-grown equivalent. It's
> EXTREMELY frustating if the colors don't change automatically.

I know many people in my own organization who do a lot of work in IDL in
just this fashion. Most people here have Unix consoles (8 bit, or 24 bit
in pseudo mode), and therefore have never seen the problem where you are
busy moving sliders around in XLOADCT, but nothing happens to the image
that is on-screen. There are a few people here who use PCs running
Xserver software to access Unix boxes. Some of them had 24 bit displays
when their new PCs arrived, but as soon as they saw colr tables in IDL
(and another in-house application) behaving oddly, they switched to 8
bit displays.

> But when I say "tvscl, array", that's what I'm assuming is happening to the
> image. I'm not working with separate red, green, and blue color values, I'm
> working with arrays of numbers which I want to appear in a color scheme that
> can be manipulated to best show what's in the data.

This is an important point. Most users of IDL have a conceptual model of
how color tables work that goes something like this:
1. I display an image
2. I invoke XLOADCT
3. I move the sliders in XLOADCT, and it causes the colors in my image
to change.
They've seen this work reliably on their Unix boxes, so if it doesn't
work on a PC or Mac, then something is 'wrong'. At this point, the only
response they get is "Well you don't understand how color tables work",
which is unsatisfactory. After all, they've seen the color tables work
'correctly' on their Unix box, so why shouldn't it work on their PC or
Mac?

> Almost everybody I know of with a 24-bit graphics cards on a Unix box opts for
> pseudo-color in IDL.

As I said earlier, this is how everyone here works on Unix boxes.

Cheers,
Liam.

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