
Subject: Re: 14 bit image in false color

Posted by rpertaub@gmail.com on Thu, 29 Mar 2007 20:16:12 GMT

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On Mar 29, 4:08 pm, David Fanning <n...@dfanning.com> wrote:

> rpert...@gmail.com writes:

>> I have a 14 bit image, that I obviously cannot see with TV, but need
>> to use, TVSCL or bytescale the image before using TV. My question is
>> this: I want to see the 14 bit image without any scaling, and would
>> think I would be able to do this with false coloring, since we have
>> millions of colors in a 32 bit display...
>> But I am not sure how to do that in IDL.

>

> I don't know how you are going to do it either, since

> 14 doesn't divide by 3 evenly. :-)

>

> The best you could do would be $16 * 32 * 32 = 16,384$
> colors. But you might try something like this. Let's
> say 32 shades of red, 32 shades of green and 16 shades
> of blue.

>

> red = image AND ($2^0 + 2^1 + 2^2 + 2^3 + 2^4$)

> grn = image AND ($2^5 + 2^6 + 2^7 + 2^8 + 2^9$)

> blu = image AND ($2^{10} + 2^{11} + 2^{12} + 2^{13}$)

>

> image24 = [[[BytScl(red)]], [[BytScl(grn)]], [[BytScl(blu)]]]

> TV, image24, TRUE=3

>

> Put that up on the web. I'd be interested to see what
> that looks like. :-)

>

> Cheers,

>

> David

>

> --

> David Fanning, Ph.D.

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> Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

This 14-bit image I have was actually taken by a camera that saved the 14 bit on 2 pixels. i.e. 1 pixel info of 14-bit was saved on 2 8 bit pixels, therefore I had to do a small algorithm to figure out the values of the pixel. (just some background). The funny thing, when I do TV image, the image is snowy, and when I do TVSCL it is the right

image (white dots against dark background). I tried the few lines you posted, unfortunately, it gave me only colored snowy image, and not the (colored) dots I would expect...Maybe what I am trying to do is not possible?
