
Subject: Re: 14 bit image in false color

Posted by [David Fanning](#) on Thu, 29 Mar 2007 21:08:08 GMT

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rpertaub@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 color 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

--

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

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