
Subject: Re: RGB Color reconstruction

Posted by [David Fanning](#) on Tue, 30 Oct 2007 18:31:13 GMT

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rpertaub@gmail.com writes:

> I am doing some RGB color reconstruction and I am confused by some of
> the display. I tried to paste my image for greater clarity, but could
> not, so will try to explain as clearly as possible. Here is the simple
> code I am using with three image frames for the 3 RGB channels:

```
>  
> maxes=lonarr(3)  
> maxes[0]=max(final_red)  
> maxes[1]=max(final_grn)  
> maxes[2]=max(final_blu)  
>  
> final_image=lonarr(3,1272,1052)  
> final_image[0,*,*] = bytscl(final_blu,max=maxes[2])  
> final_image[1,*,*] = bytscl(final_red,max=maxes[0])  
> final_image[2,*,*] = bytscl(final_grn,max=maxes[1])  
>  
> window,3,title='Reconstructed Cube RGB Image',xsize=1200,ysize=900  
> tvscl,final_image,true=1
```

>
> I get my RGB image thus. Then, I look at one region that is clearly
> blue in color and click on it to get the int of each channel. My print
> out int is thus:

```
>  
> 450nm (blue-ish):3871  
> 550nm(green-ish):12518  
> 650nm(red-ish):14212
```

>
> Clearly from the intensities, red channel has the highest intensity.
> Blue is in fact the lowest. Yet, the image at that pixel was BLUE! I
> am obviously not understanding how tvscl,final_image,true=1 works...

>
> Any idea?

Well, quite a lot going wrong here, I think. :-)

First of all, you created a BGR image, instead of an RGB image.
Now I think about it, maybe that is the source of ALL your
problems. :-)

But I don't see why your are fooling around with the MAXES.
That part makes no sense at all to me, since BYTSCL would
do all this on its own.

I don't understand what you are doing to get "the int of each channel", but perhaps if you get the image planes in the right order this would be moot.

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.")
