Subject: Re: Making color images from 3 grayscale images
Posted by deutsch on Thu, 20 Jan 1994 21:13:32 GMT
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In article 1398@news.uit.no, roy@mack.uit.no (Roy Oestensen) writes:
> Does anybody have experience with constructing a true color image
> from three grayscale images (R+G+B) in IDL?
>
> I have several astronomical images that have been made in appropriate
> wavebands, and would very much like to construct real RGB images for
> publishing.

I have never made 24 bit images (but that should be fairly straightforward)
but I have made some "true" pseudo-color image from R G and B using the
COLOR_QUAN() function. I have attached a little sample code which does
this below... This is probably what you were looking for?

cheers,
Eric

>
> If anybody out there have the IDL programs that does this kind of stuff,
> please let me know!
>
>
> Roy OEstensen * E-mail: roy@mack.uit.no ** "Sometimes I think I
> Auroral Observatory * ** understand everything
> University of Tromsoe * PLEASE NOTE: The letters ** ---- Then I regain
> Norway * oe and OE is \o and \O in TeX ** consciousness..."
>

```
Red_im='rgn20060'  ; image file names
Vis_im='rgn20061'
Blu_im='rgn20062'

rmax=2500   ; max value for R
vadj=1.4   ; mult. factor for V image (fudge)
badj=5    ; mult. factor for B image (fudge)
skyred=200.   ; sky value to subtract for R image


;imgread,imgr,hr,Red_im  ; Read images
;imgread,imgv,hv,Vis_im
;imgread,imgb,hb,Blu_im
```

```
skyr=avg(extrac(imgr,325,260,30,30))-skyred  ; calc sky values
skyv=avg(extrac(imgv,325,260,30,30))-skyred/vadj
skyb=avg(extrac(imgb,325,260,30,30))-skyred/badj

; extract the 3 appropriate subimages
 imr=bytscl(extrac(imgr,443-256,498-256,512,512)-skyr,0,(rmax -skyr))
 imv=bytscl(extrac(imgv,443-256,498-256,512,512)-skyv,0,(rmax -skyr)/vadj)
 imb=bytscl(extrac(imgb,443-256,498-256,512,512)-skyb,0,(rmax -skyr)/badj)

im=color_quan(imr,imv,imb,r,g,b)  ; convert to "true" color
mkhdr,h,im     ; make a header

tvlct,r,g,b     ; set color table
tv,im      ; display image


end

; imgroam,im,h
; choose "Plain TV"

; write_gif
```

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