Subject: Re: How to do RGB to CMYK conversion for PS output?
Posted by Karl Schultz on Thu, 13 Jul 2006 19:23:05 GMT
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On Thu, 13 Jul 2006 14:31:22 -0400, Paul Van Delst wrote:

> Hello there,
>
> A colleague produced a colour X-Y plot for a paper and saved it to a regular old PS file.
> The editor mailed back stating that the file contains RGB colours and could we please
> create the file in CMYK colours.
>
> How does one do this? Using
>   DEVICE,/CMYK
> produced exactly the same PS file.
>
> Doing,
>   TVLCT,r,g,b,/GET
>   CMYK_CONVERT,c,m,y,k,r,g,b,/TO_CMYK
> produced the appropriate c, m, y, and k arrays, but how does one "load" the CMYK arrays to
> be used? Doing
>   TVLCT,c,m,y
> produced exactly what I thought would happen - no black.
>
> Any ideas?

Yes.

Try:

DEVICE, /CMYK, /COLOR

You need to put the device into color mode when you select CMYK :-).

Make sure that you do any LOADCT's after the DEVICE call.

You also should not need to put CMYK values in the color table with
TVLCT/CMYK_CONVERT. The PS device should do this for you.

For a program like:

SET_PLOT, 'ps'
DEVICE, /CMYK, /COLOR
LOADCT, 5
n = 50 ; Size of array for Bessel
; Make the Bessel function:
a = BESELJ(SHIFT(DIST(n), n/2, n/2)/2, 0)

```
TVSCL, DIST(n)
nlev = 8 ; Number of contour levels
; Make the Contour at normalized Z=.6:
CONTOUR, a, /OVERPLOT, ZVALUE=.6, /T3D, $
  LEVELS=FINDGEN(nlev)*1.5/nlev-.5, COLOR=1
DEVICE, /CLOSE
```

you'll see an image in the PS file that uses a COLORTAB and

and is rendered with something like:

{COLORTAB currentfile picstr readhexstring pop 0 get
4 mul 4 getinterval } bind false 4 colorimage

Things like contour lines will have postscript color commands like

1.000 1.000 0.000 0.980 setcmykcolor

Hope this helps,

Karl