
Subject: TV/postscript problem

Posted by [R.Balthazor](#) on Thu, 05 Nov 1998 08:00:00 GMT

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I'd be grateful if anyone could point me in the right direction with this problem.

I'm running a program with the general form shown below. It cycles over 20 timesets of two datasets, each time reading them both in and displaying one as a false-color image on a map projection and then displaying the second as a contour image overlaid on it. Each time it flashes up the completed image satisfactorily on the X-windows, and the postscript file builds up until it is 20 pages long.

However, each page of the postscript file is a horrible two-tone mess of black and white, looking like it is an 'overexposed' photograph and nothing like what was on the screen; and moreover, the TV,imageset is larger than and displaced from the desired position.

What have I done wrong? I've tried;

- doing a single dataset read in case it was to do with multiple pages written to the postscript file - but still the horrible mess.
- using CONTOUR,dataset1,/FILL as an approximation to TV,imageset1; this works perfectly (but I want more than 26 levels)
- using WRITE_GIF; this works perfectly.

I'd be very grateful for any suggestions; I presume the problem is in the postscript writing.

```
;=====
```

```
PRO myprogram
```

```
SET_PLOT,'X'
```

```
mainprogram
```

```
SET_PLOT,'PS'
```

```
  DEVICE,file='image.ps',/LANDSCAPE,XSIZE=27,YSIZE=17,XOFFSET=
```

```
2,YOFFSET=28.5,/TIMES,/COLOR
```

```
mainprogram
```

```
DEVICE,/CLOSE
```

```
END
```

```
;=====
```

```
mainprogram
```

```
time=-1
REPEAT BEGIN
  time=time+1
  ;(Read in dataset1,dataset2, and some processing)

  MAP_SET,(arguments)
  imageset1=MAP_IMAGE(dataset1,startx,starty,other arguments)
  TV,imageset1,startx,starty
  CONTOUR,dataset2,/OVERPLOT
ENDREP UNTIL time EQ 19

END
;=====
```

Subject: Re: TV/postscript problem
Posted by [R.Bauer](#) on Tue, 24 Nov 1998 08:00:00 GMT
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philip aldis wrote:

```
> R Balthazor wrote:
>
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>> black and white, looking like it is an 'overexposed' photograph and
>> nothing like what was on the screen; and moreover, the TV,imageset is
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>> works perfectly (but I want more than 26 levels)
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>> - using WRITE_GIF; this works perfectly.
>>
>>
>
>>
> I'm not entirely sure if this is the problem and it may well be something a lot more
> complicated than I can cope with - but I noticed that on your device, ..... you did not set
> bits_per_pixel=8, failure to do this means that the postscript file can only print with 16
> colours, which may have caused the problem.
>
> A second point I noticed is to do with the colours available. When you are working on the
> screen, you probably don't have all 256 colours available due to the window manager nicking
```

> some, however in postscript there are always 256 colours available. There are two options to
> correct this:
>

If you like to have on a unix 256 colors you should try in your startup file

```
window,0,xsize=10,ysize=10,colors=256  
wdelete,0
```

I learned this from someone else from this news group

Unfortunately It don't work on a Windows PC.

```
>  
> * If you want to scale the screen image to the number of colours available on the screen  
> and then scale the postscript output to the number of colours available there then use  
> TVSCL, instead of TV. This simply scales the image to the number of colours available.  
> * Or if you want both images to be scaled to the same value - the number of colours  
> available on the screen-, then after the set_plot, 'x' put scale_factor = !d.n_colors .  
> !d.n_colors, as you may have guessed, is simply the number of available colours. Then  
> when you tv the image, don't tv just the image but instead  
>  
>         TV, bytscl(image, top=scale_factor)  
>  
> I hope this solves the problem, although there seems to be something more fundamental  
> because I haven't been able to explain the positioning problems or the black and white only.  
> I hope someone else can give you a slightly more informed answer than mine.  
>  
>         cheers,  
>         Phil Aldis
```
