Subject: Keep getting a transparent background on a composite image
Posted by simulana on Wed, 08 Apr 2015 21:26:56 GMT
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http://user.physics.unc.edu/~chaig/research/images/040815/2d amr1-3_paper.png

Yet another puzzler. I would like a white background instead of transparent, but I can't quite figure out to get it. Further mystery - cgImage plots have a white background, but the cgcolorbar part does not. Is it something in my device command? Is it because I set my own color table? All I know from other forums is that I apparently have something that other people want, but I don't want.

For brevity, I won't post the whole code with all 9 images:

```
set_plot,'ps'
r = Interpol([ 255, 0,  0,  0,255,234,107,0], [0, 36, 73,110,147,184,220,255], Findgen(256))
g = Interpol([ 255, 0,255,126,255, 82,  0,0], [0, 36, 73,110,147,184,220,255], Findgen(256))
b = Interpol([ 255,91,255,  0,  0,  0,  0,0], [0, 36, 73,110,147,184,220,255], Findgen(256))
TVLCT, r, g, b
 device,filename='2damr1-3_paper.eps',/color,bits=8,/encaps,x
size=xsizecm,ysize=ysizecm,decomposed=0
  cgimage, image(0,*,*), /DEVICE, /SCALE,/AXES ,$
 position=position1,$
 xrange=[-6.25,6.25],yrange=[-8.545,8.545],ytitle='[pc]',$
 color='black',charsize=4,/KEEP_ASPECT_RATIO,$
  AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,xtickformat:'(A1) '},/noerase
  cgimage, image(1,*,*), /DEVICE, /SCALE,/AXES ,$
  position=position2,xrange=[-6.25,6.25],yrange=[-8.545,8.545] ,$
 color='black',charsize=4,/KEEP_ASPECT_RATIO,$
  AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,ytickformat:'(A1) ',xtickformat:'(A1)'},/noerase
  cgimage, image(2,*,*), /DEVICE, /SCALE,/AXES ,$
  position=position3,xrange=[-6.25,6.25],yrange=[-8.545,8.545] ,$
 color='black',charsize=4,/KEEP_ASPECT_RATIO,$
  AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,ytickformat:'(A1) ',xtickformat:'(A1)'},/noerase

   ticks=loglevels([30,4000],/Fine)
   nticks = n_elements(ticks)
   cgColorbar,Range=[30,4000],Title='Density (cm!e-3!n)',Position=[0.87, 0.2, 0.90, 0.8],$
     /ylog,/vertical,yticks=nticks-1,ytickv=ticks,charsize=5,char thick=13,/right
```

Subject: Re: Keep getting a transparent background on a composite image
Posted by David Fanning on Wed, 08 Apr 2015 23:35:40 GMT
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simulana@gmail.com writes:

> Yet another puzzler. I would like a white background instead of transparent, but I can't quite figure out to get it. Further mystery - cgImage plots have a white background, but the cgcolorbar

part does not. Is it something in my device command? Is it because I set my own color table? All I know from other forums is that I apparently have something that other people want, but I don't want.
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> For brevity, I won't post the whole code with all 9 images:
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> g = Interpol([255, 0,255,126,255, 82, 0,0], [0, 36, 73,110,147,184,220,255], Findgen(256))
> b = Interpol([255,91,255, 0, 0, 0, 0,0], [0, 36, 73,110,147,184,220,255], Findgen(256))
> TVLCT, r, g, b
> device,filename='2damr1-3_paper.eps',/color,bits=8,/encaps,x
size=xsizecm,ysize=ysizecm,decomposed=0
> cgimage, image(0,*,*), /DEVICE, /SCALE,/AXES ,$
> position=position1,$
> xrange=[-6.25,6.25],yrange=[-8.545,8.545],ytitle='[pc]',$
> color='black',charsize=4,/KEEP_ASPECT_RATIO,$
> AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,xtickformat:'(A1) '},/noerase
> cgimage, image(1,*,*), /DEVICE, /SCALE,/AXES ,$
> position=position2,xrange=[-6.25,6.25],yrange=[-8.545,8.545] ,$
> color='black',charsize=4,/KEEP_ASPECT_RATIO,$
> AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,ytickformat:'(A1)
',xtickformat:'(A1)'},/noerase
> cgimage, image(2,*,*), /DEVICE, /SCALE,/AXES ,$
> position=position3,xrange=[-6.25,6.25],yrange=[-8.545,8.545] ,$
> color='black',charsize=4,/KEEP_ASPECT_RATIO,$
> AXKEYWORDS={CHARTHICK:10,xthick:5,ythick:5,ytickformat:'(A1)
',xtickformat:'(A1)'},/noerase
>
> ticks=loglevels([30,4000],/Fine)
> nticks = n_elements(ticks)
> cgColorbar,Range=[30,4000],Title='Density (cm!e-3!n)',Position=[0.87, 0.2, 0.90, 0.8],$
> /ylog,/vertical,yticks=nticks-1,ytickv=ticks,charsize=5,char thick=13,/right

I can't really figure out what question you are asking. But, it is probably a mistake to use both the POSITION keyword and the KEEP_ASPECT_RATIO keyword on the same cgImage command.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Keep getting a transparent background on a composite image
Posted by simulana on Thu, 09 Apr 2015 02:00:07 GMT
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It's hard to see the problem if you open up the png on a browser, because the browser natively has a white background. However if you open up the png with a photoviewer like Picasa or against a black background you will see that the background of the border of the image is transparent (anywhere there is not a cgimage plot).

So I guess my problem has something to do with the device command, or some other thing missing. I have tried setting !P.Background, but with no apparent effect.

Subject: Re: Keep getting a transparent background on a composite image
Posted by simulana on Thu, 09 Apr 2015 02:12:41 GMT
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Technically I found a solution, though I wouldn't call it ideal.

If I set decomposed=1, and then use a polyfill command, I can fake a white background:

```
PolyFill, [0,0,1,1,0], $
        [0,1,1,0,0], $
        COLOR='ffffff'x, /NORMAL
```

I feel like there must be a better way, however.

Subject: Re: Keep getting a transparent background on a composite image
Posted by David Fanning on Thu, 09 Apr 2015 02:12:48 GMT
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simulana@gmail.com writes:

> It's hard to see the problem if you open up the png on a browser, because the browser natively has a white background. However if you open up the png with a photoviewer like Picasa or against a black background you will see that the background of the border of the image is transparent (anywhere there is not a cgimage plot).
>
> So I guess my problem has something to do with the device command, or some other thing missing. I have tried setting !P.Background, but with no apparent effect.

Well, I've tried a number of photo viewers, but I have to admit I don't see any problems with the output. I put it in Lightroom, which has a black background, and I don't see any black at all around the border of any image. In fact, the PNG image appears to me to have a white background, as I would expect from a PNG created from a PostScript file.

If you are saying that your images don't always fill up your image positions, I can believe that. That would be a result of using the two keywords I mentioned before simultaneously and would be a mistake.

Anyway, still not sure what your real question is. The output looks great to me.

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Keep getting a transparent background on a composite image
Posted by simulana on Thu, 09 Apr 2015 13:12:17 GMT
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On Wednesday, April 8, 2015 at 10:12:54 PM UTC-4, David Fanning wrote:
> simulana@gmail.com writes:
>
>> It's hard to see the problem if you open up the png on a browser, because the browser natively has a white background. However if you open up the png with a photoviewer like Picasa or against a black background you will see that the background of the border of the image is transparent (anywhere there is not a cgimage plot).
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> positions, I can believe that. That would be a result of using the two
> keywords I mentioned before simultaneously and would be a mistake.
>
> Anyway, still not sure what your real question is. The output looks
> great to me.
>
> Cheers,
>
> David

> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

I see now that my problem is a photoviewer software problem instead of an IDL problem. I retract the question.

Subject: Re: Keep getting a transparent background on a composite image
Posted by David Fanning on Thu, 09 Apr 2015 13:14:20 GMT
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simulana@gmail.com writes:

> I see now that my problem is a photoviewer software problem instead of an IDL problem. I retract the question.

Ah, done in again by inferior tools! I've known the problem myself. :-)

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Keep getting a transparent background on a composite image
Posted by simulana on Thu, 09 Apr 2015 14:47:15 GMT
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Now I'm backing out of my retraction. I'm so confused.

On Picasa, which normally show transparent backgrounds well, it appears white. On Windows Photo Viewer, transparent. On Gimp for Windows, transparent. I have not checked gimp on linux.
