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Subject: Re: Some questions on cgsurf and cgsurface  
Posted by [David Fanning](#) on Wed, 20 Jul 2011 20:13:36 GMT  
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Paulo Penteado writes:

> I have been trying to make shaded surfaces with CG, and encountered a  
> few difficulties, which perhaps have obvious solutions for those who  
> can find their way around the CG routines:  
>  
> I tried to follow the examples with  
>  
> data=dist(200)  
> loadct,33  
> cgwindow,'cgsurf',data,/shaded  
> cgcontrol,create\_ps='cgtest.ps'  
>  
> Which results in a file with a red background. The same if using the  
> menu in the window.

Yes, this is because shaded surfaces are really  
images with axes overlayed on them. To get a white  
background, you will have to do something like this:

```
data=dist(200)
loadct,33, ncolors=254
set_shading, values=[0,254]
tvlct, 255, 255, 255, 255
cgwindow,'cgsurf',data,/shaded
cgcontrol,create_ps='cgtest.ps'
```

> Also, am I correct in thinking that all ps output is only bitmap? It  
> is what it looked like from what I saw in the code.

A shaded surface is a bitmap, because what is returned  
from SHADE\_SURF is an image. Most other graphic output  
is vectorized.

> Then I tried cgsurface:  
>  
> data=dist(200)  
> loadct,33  
> cgsurface,data,/shaded  
>  
> Which does make a much nicer looking ps file, which also matches what  
> I see in the screen. But I could not find a way to programmatically  
> make the file. And it also seems to only make bitmaps, at a fixed  
> resolution.

Yes, there is no current way to create a PostScript file programmatically. And, to make things easy, the resolution is set to the window size. I am not sure if this can be vectorized, and I can't research it right now, as I am getting ready to leave Africa in a few hours.

I'm planning a report on the lion roaring outside my hut, just 15 feet from my unlock screened door, and the cheetah I saw in the wild! :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thue. ("Perhaps thos speakest truth.")

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Subject: Re: Some questions on cgsurf and cgsurface  
Posted by [penteado](#) on Wed, 20 Jul 2011 21:09:25 GMT  
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Ok, thanks for the help.

On Jul 20, 5:13 pm, David Fanning <n...@dfanning.com> wrote:

> Paulo Penteado writes:

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> --  
> David Fanning, Ph.D.  
> Fanning Software Consulting, Inc.  
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Subject: Re: Some questions on cgsurf and cgsurface  
Posted by [David Fanning](#) on Thu, 21 Jul 2011 02:00:09 GMT  
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David Fanning writes:

```
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> cgwindow,'cgsurf',data,/shaded
> cgcontrol,create_ps='cgtest.ps'
```

I woke up at 4AM for some reason, so I decided to fix this problem before I jumped on the plane. The cgSurf program now produces correct PostScript output in the original way Paulo called the program. You can find the updated program here:

<http://www.idlcoyote.com/programs/cgsurf.pro>

Testing revealed a couple of problems with the Z-graphics buffer and other Coyote Graphics programs, which I also fixed.

<http://www.idlcoyote.com/programs/cgdefcharsize.pro>  
<http://www.idlcoyote.com/programs/cgquery.pro>

Cheers,

David

--

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Subject: Re: Some questions on cgsurf and cgsurface  
Posted by [penteado](#) on Thu, 21 Jul 2011 02:16:57 GMT  
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That is very helpful. Thanks.

On Jul 20, 11:00 pm, David Fanning <n...@dfanning.com> wrote:

> David Fanning writes:

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