
Subject: Clipping shade_surf

Posted by [e.grono](#) on Thu, 19 Dec 2013 15:49:24 GMT

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I'm running IDL 8.2.0 and have been finding it impossible to successfully use the clip keyword with shade_surf despite the fact the IDL documentation says it should work. No error messages are displayed, the plot just appears without any clipping done. Surface can be clipped successfully so it shouldn't be my use of the keyword causing trouble. Anyone have any experience with this issue?

Subject: Re: Clipping shade_surf

Posted by [David Fanning](#) on Thu, 19 Dec 2013 16:14:56 GMT

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e.grono@live.ca writes:

> I'm running IDL 8.2.0 and have been finding it impossible to successfully use the clip keyword with shade_surf despite the fact the IDL documentation says it should work. No error messages are displayed, the plot just appears without any clipping done. Surface can be clipped successfully so it shouldn't be my use of the keyword causing trouble. Anyone have any experience with this issue?

Yes. I wouldn't put too much faith in the documentation. :-)

Can you show us the code you are trying to use and give us some quick explanation of what you are trying to do with it?

The problem, probably, is that shaded surfaces are returned as images (although it is hard to realize this). But, I never admit defeat until I've chewed on it for a day or two. :-)

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: Clipping shade_surf

Posted by [e.grono](#) on Thu, 19 Dec 2013 16:28:17 GMT

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It doesn't take anything too complicated to demonstrate.

```
z=dist(100)
shade_surf,z,ax=90,az=0,xrange=[40,60],xstyle=1,clip=[40,0,60,100],noclip=0
```

I just want to crop out what goes outside the axes.

How it works with surface:

```
surface,z,ax=90,az=0,xrange=[40,60],xstyle=1
surface,z,ax=90,az=0,xrange=[40,60],xstyle=1,clip=[40,0,60,100],noclip=0
```

I could just chop out the data I don't want from the array I'm plotting but the resolution of my data set is low enough that when I force the x and y ranges I want I end up with little bars of empty space where there is no data.

Subject: Re: Clipping shade_surf
Posted by [David Fanning](#) on Thu, 19 Dec 2013 16:51:03 GMT
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e.grono@live.ca writes:

```
> It doesn't take anything too complicated to demonstrate.
> z=dist(100)
> shade_surf,z,ax=90,az=0,xrange=[40,60],xstyle=1,clip=[40,0,60,100],noclip=0
> I just want to crop out what goes outside the axes.
>
> How it works with surface:
> surface,z,ax=90,az=0,xrange=[40,60],xstyle=1
> surface,z,ax=90,az=0,xrange=[40,60],xstyle=1,clip=[40,0,60,100],noclip=0
>
> I could just chop out the data I don't want from the array I'm plotting but the resolution of my
data set is low enough that when I force the x and y ranges I want I end up with little bars of empty
space where there is no data.
```

Yes. I doubt you are going to be able to do this.

I think you might be better off to do something like this:

```
cgplot, [1], xrange=[40,60], yrange=[0,100], /nodata
cgimage, z, xrange=[40,60], yrange=[0,100], /overplot, /scale
```

That seems to give you the same thing, but you don't have to worry about clipping the surface. If you wanted the shading to be Gouroud shading, you could recover the image from Shade_Surf (I would use cgSurf), and use that with cgImage, I suppose. The point is, cgImage will clip the 2D array for you, given the current range of the axes.

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: Clipping shade_surf
Posted by [e.grono](#) on Tue, 31 Dec 2013 00:04:12 GMT
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Alright, thanks for your help.
