Subject: how to animate/loop plots (not images) Posted by demott on Wed, 28 Aug 1996 07:00:00 GMT

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I have a series of simple 2D line plots that I would like to animate. I'm currently writing the plots to a postscript file, and then using some external applications to convert them to (unfortunately large) tiff files and then loop them. Is there a simpler way to do this in IDL? The manuals talk about how to loop a series of images stored in a single array, but this isn't what I'm dealing with.

Thanks for any insight on this problem.

Charlotte demott@olympic.atmos.colostate.edu

Subject: Re: how to animate/loop plots (not images)
Posted by Liam Gumley on Thu, 29 Aug 1996 07:00:00 GMT
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Charlotte DeMott wrote:

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- > in a single array, but this isn't what I'm dealing with.

Check out the frame tools page at

http://cimss.ssec.wisc.edu/~gumley/frame.html

You can set up a series of graphics frames (as many as you want), and create a plot in each frame, and then loop through them. e.g.

fset x=sin(findgen(10)) plot,x,sin(x) af plot,x,cos(x) af plot,x,sin(x)^2 af plot,x,cos(x)^2 If

Cheers.

Subject: Re: how to animate/loop plots (not images)
Posted by Robert Moss on Thu, 29 Aug 1996 07:00:00 GMT
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Charlotte DeMott wrote:

>

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>

> Thanks for any insight on this problem.

>

- > Charlotte
- > demott@olympic.atmos.colostate.edu

You can use XINTERANIMATE to do this. The trick is to plot your images to a pixmap, then use TVRD to get the pixmap and load it into XINTERANIMATE.

XINTERANIMATE, SET=[256,256,10] ;SAY YOU HAVE 10 PLOTS WINDOW, /FREE, /PIXMAP, XSIZE=256, YSIZE=256 FOR I=0,9 DO BEGIN PLOT, X, Y ;DO YOUR 10 PLOTS HERE AS YOU SEE FIT XINTERANIMATE, FRAME = I, IMAGE = TVRD() ENDFOR XINTERANIMATE, /KEEP_PIXMAPS

Of course these plots will have screen resolution, but since your displaying it on the screen that shouldn't be a problem

Robert M. Moss, Ph.D. - mossrm@texaco.com - FAX (713)954-6911

This does not necessarily reflect the opinions of Texaco Inc.

Subject: Re: how to animate/loop plots (not images) Posted by peter on Fri, 30 Aug 1996 07:00:00 GMT View Forum Message <> Reply to Message

Thorsten Becker (becker@geophysik.uni-frankfurt.de) wrote: : Robert Moss wrote: : > : > Charlotte DeMott wrote: : > > I have a series of simple 2D line plots that I would like to animate. : > > I'm currently writing the plots to a postscript file, and then using : > > some external applications to convert them to (unfortunately large) : > > tiff files and then loop them. Is there a simpler way to do this in : > > IDL? The manuals talk about how to loop a series of images stored : > > in a single array, but this isn't what I'm dealing with. : > > : > > Thanks for any insight on this problem. :>> : > > Charlotte : > > demott@olympic.atmos.colostate.edu : > You can use XINTERANIMATE to do this. The trick is to plot your : > images to a pixmap, then use TVRD to get the pixmap and load it : > into XINTERANIMATE. : > : Take care using xinteranimate/xanimate if you have a lot of plots to

: Take care using xinteranimate/xanimate if you have a lot of plots to combine. It is very memory consuming and may cause your (small) system's : X11 to crash. (Did it with a 250 images 500x500 picture on a 32MB : PowerPC running AIX.) Works fine on a big machine. Another way would be : to convert your Postscript files using a shell script and gs. Or save as : a tiff/gif from IDL, whatever. After that use special tools to produce : GIF-animation (e.g. gifmerge) or MPEGs. This has the advantage of being : more "exportable".

If they are simple plots, then just plot them. IDL is fast enough to plot many frames a second of simple graphics. More often you'll need to slow it down than speed it up. For slightly smoother graphics, maybe plot to a hidden pixmap and then copy it to the screen window.

Peter

Subject: Re: how to animate/loop plots (not images) Posted by jlaw on Fri, 30 Aug 1996 07:00:00 GMT View Forum Message <> Reply to Message

How about using TVRD() to turn the plots into images??

Subject: Re: how to animate/loop plots (not images)

Posted by Thorsten Becker on Fri, 30 Aug 1996 07:00:00 GMT

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Robert Moss wrote: > Charlotte DeMott wrote: >> >> I have a series of simple 2D line plots that I would like to animate. >> I'm currently writing the plots to a postscript file, and then using >> some external applications to convert them to (unfortunately large) >> tiff files and then loop them. Is there a simpler way to do this in >> IDL? The manuals talk about how to loop a series of images stored >> in a single array, but this isn't what I'm dealing with. >> >> Thanks for any insight on this problem. >> >> Charlotte >> demott@olympic.atmos.colostate.edu > > You can use XINTERANIMATE to do this. The trick is to plot your > images to a pixmap, then use TVRD to get the pixmap and load it > into XINTERANIMATE. > XINTERANIMATE, SET=[256,256,10] :SAY YOU HAVE 10 PLOTS > WINDOW, /FREE, /PIXMAP, XSIZE=256, YSIZE=256 FOR I=0.9 DO BEGIN PLOT, X, Y :DO YOUR 10 PLOTS HERE AS YOU SEE FIT XINTERANIMATE, FRAME = I, IMAGE = TVRD() > **ENDFOR** > XINTERANIMATE, /KEEP_PIXMAPS > > Of course these plots will have screen resolution, but since > your displaying it on the screen that shouldn't be a problem > Take care using xinteranimate/xanimate if you have a lot of plots to combine. It is very memory consuming and may cause your (small) system's X11 to crash. (Did it with a 250 images 500x500 picture on a 32MB PowerPC running AIX.) Works fine on a big machine. Another way would be to convert your Postscript files using a shell script and gs. Or save as a tiff/gif from IDL, whatever. After that use special tools to produce GIF-animation (e.g. gifmerge) or MPEGs. This has the advantage of being more "exportable". Thorsten

_Thorsten Becker ___

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