Subject: Plot to Image
Posted by cavanaug on Thu, 26 Jan 1995 20:27:17 GMT

I would like to create a GIF file of one of my IDL plots. Does anyone know
 a way to transfer a plot to an image, without first displaying the plot and
 then using tvrd to capture it? My main concern is that I don't want to
 display the plot, I just want to capture it into an image.

 Any help would be greatly appreciated.

 Charles
--

Charles Cavanaugh   "Words are very unnecessary, they can only do harm"
cavanaug@ncar.ucar.edu   - Depeche Mode
National Center for Atmospheric Research   "Facts all come with points of view"

Subject: Re: Plot to Image
Posted by ryba on Fri, 27 Jan 1995 14:13:51 GMT

In article <1995Jan27.131134.14811@alw.nih.gov>, bertin@euler.cpi.com writes:
|> >In article <3g90j5$f7u@ncar.ucar.edu> cavanaug@uars1.acd.ucar.edu (Charles
|> Cavanaugh) writes:
|> >>
|> >>I would like to create a GIF file of one of my IDL plots. Does anyone know
|> >>a way to transfer a plot to an image, without first displaying the plot and
|> >>then using tvrd to capture it? My main concern is that I don't want to
|> >>display the plot, I just want to capture it into an image.
|> >>
|> >
|> Try plotting to a 2-D Z-Buffer device. You will still need to use tvdr,
|> but the plotting will not be displayed.

   Not to nitpick (I'm sure the Z-buffer works, though the comment
about fonts gives me pause), but I've had perfectly fine results using
the X driver and the following..

window, /pixmap ; Create a new graphics window as a pixmap

(etc., including TVRD, TVLCT, WRITE_GIF)

Any comments on the difference between a X pixmap and a Z-buffer? I
guess if you are running a remote X-terminal it may matter. Also,
given the clunkiness of various X servers (like Sun's), maybe having
IDL do the memory management is better.

--
Dr. Marty Ryba | Generation X:
  MIT Lincoln Laboratory | Too young to be cynical,
    ryba@ll.mit.edu | too old to be optimistic.
Of course nothing I say here is official policy, and Laboratory affiliation is
for identification purposes only, blah, blah, blah....

Subject: Re: Plot to Image
Posted by chase on Fri, 27 Jan 1995 19:49:27 GMT

>>>> > "ryba" == ryba <ryba@ll.mit.edu> writes:

ryba> Not to nitpick (I'm sure the Z-buffer works, though the comment
ryba> about fonts gives me pause), but I've had perfectly fine results using
ryba> the X driver and the following..

ryba> window, /pixmap ; Create a new graphics window as a pixmap

ryba> (etc., including TVRD, TVLCT, WRITE_GIF)

ryba> Any comments on the difference between a X pixmap and a Z-buffer? I
ryba> guess if you are running a remote X-terminal it may matter. Also,
ryba> given the clunkiness of various X servers (like Sun's), maybe having
ryba> IDL do the memory management is better.

I specifically use a Z-buffer when I want to run IDL as a
background/batch process to create a bunch of images. Generally for
this situation I am not connected to an X server (for example, it
might be a job that I am running during the night or that I start from
a remote telnet connection). If IDL was running in the background
using the pixmap method, you would not be able to end your X session
and leave whenever you want (you would have to leave the X session
running until IDL was finished - tying up the server or leaving it
unattended for someone else to accidentally/maliciously tamper with)

If the IDL session is not connected to an X server the pixmap option
will not work. Additionally as was pointed out, when the X server is on
a different host from the IDL process you may see a performance hit
using TVRD(). The Z-buffer method is also protable to MS Windows or
Macintosh versions of IDL.

I am not familiar with the font problem alluded to in the previous
posts.

Chris

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Subject: Re: Plot to Image
Posted by sterner on Sun, 29 Jan 1995 13:34:19 GMT
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geomagic@seismo.do.usbr.gov (Dan O-Connell) writes:
 . . .

> The Z-Buffer can give you higher resolution than the X-window display.
> This might be important if you want to match the resolution of a
> printer with >= 300 dpi.

 I'm not sure what you mean by higher resolution. I often use
 x windows of size 2000 x 1500 when I want to generate images for
 output on our color printer. I've also used a display window of
 about 5000 x 7000 to display a Landsat image. Of course such
 windows do not fit the screen (not the computers I use anyway).
 I made a routine called SWINDOW (scrolling window) that lets you
 define both the full size of the window and the visible size. We
 use this routine here quite a lot and it seems to work well. It's
 useful for looking at long time series plots, a window of size
 10000 x 500 (or even 20000 x 500) has been used. This routine is
 in the JHU/APL/S1R IDL library at fermi.jhuapl.edu pub/idl, get the
 file readme.txt (or something like that, it's in the FAQ).

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