Subject: Re: Help with PLOTS
Posted by meron on Fri, 16 Feb 1996 08:00:00 GMT

In article <4g2r6b$i1k@maze.dpo.uab.edu>, rkj@dukebar.crml.uab.edu (R. Kyle Justice) writes:
> Can anyone help with the following problem using
> PV-Wave's PLOTS function:
>
> I have two arrays(xarr, yarr), one containing x and the other
> containing y coordinates that I want to plot on top of
> an image.
>
> The following command does not give me what I want and I
> can't figure out why:
>
> PLOTS, [xarr,xarr], [yarr,yarr], /Device
>
>
> If I use a loop I get the desired results, but it is
> quite slow at plotting the points:
>
> FOR i=0,N_ELEMENTS(xarr)-1 DO PLOTS, $
>   [xarr(i),xarr(i)], [yarr(i),yarr(i)], /Device
>
> (xarr and yarr have the same number of elements)
>
> I know there has to be a way to plot the points
> using array notation without looping . . .
>
>
Just do

 PLOTS, XARR, YARR [optional keywords here]

By doubling the array (the way you did it) you loop back from your
last point to the first one, introducing an extra straight line. Is
this what happened?

Mati Meron | "When you argue with a fool,
meron@cars3.uchicago.edu | chances are he is doing just the same"

Subject: Re: Help with PLOTS
Posted by Ken Knighton on Sat, 17 Feb 1996 08:00:00 GMT

rkj@dukebar.crml.uab.edu (R. Kyle Justice) wrote:
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> can't figure out why:
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> PLOTS, [xarr,xarr], [yarr,yarr], /Device
>

In IDL or PV-Wave, you could use the PSYM keyword:

PLOTS, xarr, yarr, /DEVICE, PSYM=3   ;or other symbols. see manual

I hope this helps.

Ken Knighton   knighton@gav.gat.com   knighton@cts.com
General Atomics
San Diego CA

Subject: Re: Help with PLOTS
Posted by rkj on Mon, 19 Feb 1996 08:00:00 GMT
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Ken Knighton (knighton@gav.gat.com) wrote:
: rkj@dukebar.crml.uab.edu (R. Kyle Justice) wrote:
: >Can anyone help with the following problem using
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: >
: >I have two arrays(xarr, yarr), one containing x and the other
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: >

: In IDL or PV-Wave, you could use the PSYM keyword:

: PLOTS, xarr, yarr, /DEVICE, PSYM=3   ;or other symbols. see manual

: I hope this helps.

: Ken Knighton   knighton@gav.gat.com   knighton@cts.com
: General Atomics
: San Diego CA

Thanks Ken and Mati!

Using PSym=3 was all that I needed. And to think I wasted several
hours before posting . . . :)

When I did not use PSym, the last and first points in the arrays
were connected as was suggested. This was a problem since I
wanted to fill in part of insersecting polylines. I have
an outer contour and an inner contour and I want to fill only
the "doughnut" and not the "hole." Who knows, there is
probably a way to do this POLYFILL but I could not figure it
out. I did use POLYFILLV to get the points inside the
two overlapping boundaries.

Kyle

"In abundance of counselors there is victory." - Proverb

Subject: Re: Help with PLOTS
Posted by Sergei Senin on Mon, 19 Feb 1996 08:00:00 GMT
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rkj@dukebar.crml.uab.edu (R. Kyle Justice) wrote:
> Can anyone help with the following problem using
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>
> I have two arrays(xarr, yarr), one containing x and the other
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```
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>   [xarr(i),xarr(i)], [yarr(i),yarr(i)], /Device
>
> (xarr and yarr have the same number of elements)
>
> I know there has to be a way to plot the points
> using array notation without looping . . .
> Kyle J.
>
>
```

I just tried it:
;;image from pv-wave examples
openr, 1, filepath('head.img', subdir='data')
head_ls=bytarr(512, 512)
readu, 1, head_ls
close, 1
tv, head_ls
a=findgen(100)
c=a^3
b=a^2
plots, a, c
plots, a, b

It gave me two curves (c and b) plotted over this image

When I used "device" keyword, it...well... didn't work. (I think the explanation is in the Reference book)

Making plots as

plots, [a, a] , [b, b]

gives two curves: a=a and b=a^2

--
S.S.
ss@ee.port.ac.uk
http://www.ee.port.ac.uk:80/~ss-www/ruspage.html

Subject: Re: Help with PLOTS
Posted by Sergei Senin on Mon, 19 Feb 1996 08:00:00 GMT
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Sergei Senin <ss@ee.port.ac.uk> wrote:
> skipped<<<
> plots, [a, a] , [b, b]
>
> gives two curves: a=a and b=a^2
        ^^^^
Oops , sorry. Was too eager to help :-)

plots, [a, a] , [b, b] -
It looks like it connects the first and the last points on the graph.

--
S.S.
ss@ee.port.ac.uk
http://www.ee.port.ac.uk:80/~ss-www/ruspage.html