
Subject: Postscript plots squished and a plot tick problem.
Posted by [Grady Daub](#) on Sat, 26 Jun 1999 07:00:00 GMT
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When I make a postscript file with IDL, it thinks that the middle of the page is the bottom of the page. Is this a common problem?

Also, there's another problem.

Making line plots seems to have gone wrong. Even if I specify XTICKV,XTICKS,XTICKNAME,XRANGE, all that stuff, the first number is ALWAYS zero.

I can't get any plot without the first value being zero. So, if I want a plot of (value) zero to whatever, it's ok, except if I want the first tick value to be, say, 10. What I get is a number 10 superimposed on-top-of a number zero ("0"). Kinda looks like a squished "100".

If I set the first value to, say, 200 to 220, the 200-220 tickmarks are way over on the right of the plot and a zero is on the left end, like it thinks the plot should start at zero (which it's doing.). >:-<

This is a new thing that JUST popped up and I've been doing nothing different.

The only way to get rid of the zero is to set XTICKFORMAT not to display numbers, although, the plot still starts at zero.

Subject: Re: Postscript plots squished and a plot tick problem.
Posted by [Harald Frey](#) on Mon, 28 Jun 1999 07:00:00 GMT
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Grady Daub wrote:

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- > page is the bottom of the page. Is this a common problem?
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> This is a new thing that JUST popped up and I've been doing nothin
> different.
> The only way to get rid of the zero is to set XTICKFORMAT not to display
> numbers, although, the plot still starts at zero.

1. As David already wrote, the default is the middle of the page and you have to set the yoffset in the device command to the appropriate value.

2. You did not provide a sample program but what I assume happens here is that you improperly use the xticks and xtichv in your call.

Just try this
a=findgen(20)+9.
plot,a,a,xticks=5,xtickv=findgen(6)*4+9

But if you try

plot,a,a,xticks=6,xtickv=findgen(6)*4+9

you will always start at 0 and in your PS output x-values may be plotted one on top of the other.

Harald Frey
hfrey@ssl.berkeley.edu

Subject: Re: Postscript plots squished and a plot tick problem.
Posted by [davidf](#) on Fri, 02 Jul 1999 07:00:00 GMT
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Grady Daub (gadZOOKS8371@garnet.acns.fsuMMER.edu) writes:

> I think that remembering if something is going to be float or integer or
> whatever may run a close second to "device, decomposed=0" for IDL
> programming tip of the year.

Think of it as the dark side of the Force, and you'll
do fine. :-)

Cheers,

David

--

David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Postscript plots squished and a plot tick problem.
Posted by [Grady Daub](#) on Fri, 02 Jul 1999 07:00:00 GMT
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Yeah. I figured that. I was going for a more philosophical answer. :-)

I've now changed my code to reflect floating-point math and it works swell.

Now, I'll remember to keep track of that sort of thing.

I think that remembering if something is going to be float or integer or whatever may run a close second to "device, decomposed=0" for IDL programming tip of the year.

David Fanning wrote:

```
> Grady Daub (gadZOOKS8371@garnet.acns.fsuMMER.edu) writes:
>
>> I've found the evil badness that has caused all this pain.
>>
>> It is:
>>
>> In real life,    1/4 = 0.25
>> In IDL,    1/4 = 0
>
> Integer arithmetic, would be my guess. :-)
>
```

Subject: Re: Postscript plots squished and a plot tick problem.
Posted by [davidf](#) on Fri, 02 Jul 1999 07:00:00 GMT
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Cheers,

David

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David Fanning, Ph.D.

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Subject: Re: Postscript plots squished and a plot tick problem.

Posted by [Grady Daub](#) on Fri, 02 Jul 1999 07:00:00 GMT

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I just wrote an entirely new program and the "always starting at zero" problem is happening again. (I hope the problem is the same for both programs.)

After much experimenting and complianing and general disgust, I think I have discovered the problem.

My XTICKV values were:

39047.2 39047.2 39047.2 39047.2 41067.2

But, this didn't seem to affect the plot. IDL just made up it's own tick values. (Which, incidentally, were the ones I wanted.)

I then tried to put back all the stuff I took out while experimenting. I could only reproduce the "always starting at zero" problem by making XTICKV=XTICKV(k), where k comes from "for k=..."

Your guess at my problem seems to have been correct.

I've found the evil badness that has caused all this pain.

It is:

In real life, $1/4 = 0.25$
In IDL, $1/4 = 0$

:-)

Can somebody tell me why?

Harald Frey wrote:

```
> 2. You did not provide a sample program but what I assume happens here is
> that you improperly use the xticks and xtickv in your call.
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> Just try this
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> you will always start at 0 and in your PS output x-values may be plotted
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