
Subject: Re: Large dots in Postscript output
Posted by [Liam E. Gumley](#) on Wed, 05 Feb 2003 16:13:01 GMT
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"Irene Dumkow" <irene.dumkow@uni-essen.de> wrote in message
news:3E412FC4.6225593B@uni-essen.de...

> I am feeling a little like Lady Macbeth: Out, Out damned spot
>
> My problem: I am plotting data in the range 0 to 10000 and IDL is giving
> me tickmarks at 2000, 4000, 6000, 8000 and 10000. I have no problem with
> that, except that when using Postscript/Device - Fonts, IDL plots it as
> 2×10^4 , etc with the x being one large dot. Can somebody explain to me
> why IDL does that or has a good and or easy solution to at least shrink
> that dot or transform it into an x? Apart from getting the tickvalues
> via `gettickv` and putting it together by hand.
> I even used `ps_show_fonts` trying to figure out, what IDL might use and
> saw that character 183 is significantly smaller, if one uses the
> `/isolatin1` option. But that seems to work only for the sample fonts, not
> for my example.

Have you tried TrueType fonts? For example:

```
set_plot, 'PS'  
device, set_font='Helvetica', /tt_font  
plot, indgen(10) * 10000.0, font=1  
device, /close_file
```

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>

Subject: Re: Large dots in Postscript output
Posted by [David Fanning](#) on Wed, 05 Feb 2003 16:22:58 GMT
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Irene Dumkow (irene.dumkow@uni-essen.de) writes:

> I am feeling a little like Lady Macbeth: Out, Out damned spot
>
> My problem: I am plotting data in the range 0 to 10000 and IDL is giving
> me tickmarks at 2000, 4000, 6000, 8000 and 10000. I have no problem with
> that, except that when using Postscript/Device - Fonts, IDL plots it as
> 2×10^4 , etc with the x being one large dot. Can somebody explain to me
> why IDL does that or has a good and or easy solution to at least shrink
> that dot or transform it into an x? Apart from getting the tickvalues
> via `gettickv` and putting it together by hand.

> I even used ps_show_fonts trying to figure out, what IDL might use and
> saw that character 183 is significantly smaller, if one uses the
> /isolatin1 option. But that seems to work only for the sample fonts, not
> for my example.
>
> I hope somebody can shed some light!
>
> Irene
>
> PS: As these are intensity data, I could always use the 'arbitrary units'
> option, but I would really like to know, why IDL does this.

Huh!? Could you just show us the part of the code
you are using to produce your PostScript file. :-)

When I Plot, Findgen(10000) I get the same kind of output
on the display and in the PostScript file, using either
vector fonts or hardware fonts (font=0). Are you using
some particular kind of font?

Cheers,

David

--

David W. Fanning, Ph.D.
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Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Large dots in Postscript output
Posted by [Liam E. Gumley](#) on Wed, 05 Feb 2003 16:23:01 GMT
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"Liam Gumley" <Liam.Gumley@ssec.wisc.edu> wrote in message
news:b1rd6c\$jpt\$1@news.doit.wisc.edu...

> Have you tried TrueType fonts? For example:
>
> set_plot, 'PS'
> device, set_font='Helvetica', /tt_font
> plot, indgen(10) * 10000.0, font=1
> device, /close_file

You may also be interested in the PSON and PSOFF utilities I developed for
my book. PSON sets up the PostScript page with the same aspect ratio as the
current graphics window, and sizes the plot to fit inside the drawable area

of the page. A range of pages sizes (Letter, Legal, A4, etc.) are selectable. For example:

```
;- Create a plot in a graphics window
window, /free
plot, indgen(10) * 10000.0
```

```
;- Reproduce the plot in PostScript landscape mode on A4 paper
pson, /landscape, paper='A4', filename='test.ps'
plot, indgen(10) * 10000.0
psoff
```

The plot in the PostScript file will have the same aspect ratio as it does in the graphics window. I find these utilities much easier to use than the usual SET_PLOT and DEVICE commands. You can find PSON and PSOFF in my example program library at

http://www.gumley.com/PIP/About_Book.html

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>

Subject: Re: Large dots in Postscript output
Posted by [Paul Van Delst\[1\]](#) on Wed, 05 Feb 2003 17:21:36 GMT
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Liam Gumley wrote:

```
>
> "Liam Gumley" <Liam.Gumley@ssec.wisc.edu> wrote in message
> news:b1rd6c$jpt$1@news.doit.wisc.edu...
>> Have you tried TrueType fonts? For example:
>>
>> set_plot, 'PS'
>> device, set_font='Helvetica', /tt_font
>> plot, indgen(10) * 10000.0, font=1
>> device, /close_file
>
> You may also be interested in the PSON and PSOFF utilities I developed for
> my book. PSON sets up the PostScript page with the same aspect ratio as the
> current graphics window, and sizes the plot to fit inside the drawable area
> of the page. A range of pages sizes (Letter, Legal, A4, etc.) are
> selectable. For example:
>
> ;- Create a plot in a graphics window
> window, /free
```

```
> plot, indgen(10) * 10000.0
>
> ;- Reproduce the plot in PostScript landscape mode on A4 paper
> pson, /landscape, paper='A4', filename='test.ps'
> plot, indgen(10) * 10000.0
> psoff
```

Let me put in a good word for these little utility programs that I got from Liam's library. I use 'em a lot and they're great for quick and easy PS output. In a lot of cases I just want to change the size of a plot so it looks better on a printed page. With PSON/OFF all I do is change the onscreen graphics window to how I want the plot to look/be-sized, invoke PSON, replot, PSOFF, and it's done. No more stuffing around with SET_PLOT and DEVICE.

paulv

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