**Subject: Re: Making a scaleable plot for use in publications**
Posted by DavidF[1] on Wed, 24 Oct 2012 22:48:15 GMT

On Wednesday, October 24, 2012 4:14:22 PM UTC-6, liams...@lavabit.com wrote:

> I don't know quite how to describe this technically, but here goes...
>
> I usually produce my IDL plots as an eps using truetype fonts. However, I have noticed plots in scientific publications that no matter how much you zoom in to them, the fonts/axes/graph lines always rescale so they don't look blocky.
>
> Is there a simple way of doing this in IDL? I've tried searching the web, but come up empty handed.

I presume you are talking about PDF files. I do it like this using Coyote Graphics:

```
cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.ps'
cgPS2PDF, 'histoplot.ps'
```

Cheers,

David

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**Subject: Re: Making a scaleable plot for use in publications**
Posted by liamsteele on Wed, 24 Oct 2012 23:30:40 GMT

On Wednesday, 24 October 2012 23:48:16 UTC+1, Coyote  wrote:
> On Wednesday, October 24, 2012 4:14:22 PM UTC-6, liams...@lavabit.com wrote:
>
>
>
>> I don't know quite how to describe this technically, but here goes...
>
>>
>
>> I usually produce my IDL plots as an eps using truetype fonts. However, I have noticed plots in scientific publications that no matter how much you zoom in to them, the fonts/axes/graph lines always rescale so they don't look blocky.
>
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>
>    cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.ps'
>
>    cgPS2PDF, 'histoplot.ps'
>
>
>
> Cheers,
>
>
>
> David


Thanks David.

Sorry, yes, I meant plots in PDF documents.

Will the cgPS2PDF work for all eps plots? Say I use the contour command to make a plot, with true type fonts. Will that scale properly as well? I haven't got access to IDL at the moment, so can't check.

Thanks again.

---

Subject: Re: Making a scaleable plot for use in publications
Posted by David on Wed, 24 Oct 2012 23:48:36 GMT

Liam writes:

> Sorry, yes, I meant plots in PDF documents.
>
> Will the cgPS2PDF work for all eps plots? Say I use the contour command to make a plot, with true type fonts. Will that scale properly as well? I haven't got access to IDL at the moment, so can't check.

Honestly, I don't know what will happen with EPS plots. I nearly always just create PS plots. But, yes, cgPS2PDF should work with any PostScript plot. The program requires GhostScript be installed, and it is GhostScript that is doing the convertion of PostScript to PDF.

EPS files have bounding boxes. I don't know how these

are handled by GhostScript when doing the conversion
to PDF. EPS files are restricted to Portrait mode, too,
which may matter to you when you create the PDF output.

Cheers,

David

P.S. It looks to me like EPS files are restricted in
size (what I would expect, actually) when they are
converted to PDF.

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thue. ("Perhaps thos speakest truth.")

---

## Subject: Re: Making a scaleable plot for use in publications
Posted by David on Thu, 25 Oct 2012 00:12:33 GMT

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Coyote writes:

> I presume you are talking about PDF files. I do it like this using Coyote Graphics:
>
>     cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.ps'
>     cgPS2PDF, 'histoplot.ps'

I'm not sure how the PDF functionality got missed, but I just
checked in a new cgPS2Raster file with PDF functionality, so
you don't have to use two steps to create a PDF file. If you
download the new cgPS2Raster file here:

   http://www.idlcoyote.com/programs/cgps2raster.pro

You can create PDF files from IDL commands directly:

   cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.pdf'

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thue. ("Perhaps thos speakest truth.")

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## Subject: Re: Making a scaleable plot for use in publications
Posted by liamsteele on Thu, 25 Oct 2012 01:10:21 GMT
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On Thursday, 25 October 2012 01:12:32 UTC+1, David  wrote:
> Coyote writes:
>
>
>
>>  I presume you are talking about PDF files. I do it like this using Coyote Graphics:
>
>>
>
>>    cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.ps'
>
>>    cgPS2PDF, 'histoplot.ps'
>
>
>
> I'm not sure how the PDF functionality got missed, but I just
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>
>
>
>    http://www.idlcoyote.com/programs/cgps2raster.pro
>
>
>
> You can create PDF files from IDL commands directly:
>
>
>
>    cgHistoplot, cgDemodata(7), /Fill, Output='histoplot.pdf'
>
>
>
> Cheers,
>
>
>

---

> David
>
> --
>
> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
>
> Sepore ma de ni thue. ("Perhaps thos speakest truth.")


Brilliant stuff David!

I'll certainly give your routine a go when I'm next in the office. Thanks for all the help. :)

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