
Subject: Re: EPS printouts from IDL 4.0.1
Posted by [thompson](#) on Thu, 11 Jan 1996 08:00:00 GMT
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Dale Bailey <dale> writes:

> I am a bit new to this so I hope this is not an old question that everyone
> knows already. I am using IDL 4.0.1 on a Sparc 20 (Solaris 5.3), and am trying
> to produce a plot in PostScript for printing. I want to annotate the graph
> (as in the Ref Manual V4 N-Z, Chap 3, pp3-46 ff.). I have found the following:
> * If I do not use the keyword /ENCAPSULATED, I get a PostScript file, which
> I cannot annotate readily (multiple XYOUTS calls overwrite), but it does print;
> * If I use /ENCAPSULATED, I can annotate at will (with XYOUTS), I can view it
> with the display tool (ImageTool) in Soalris on the screen, but it won't print
> to any of our printers (tried a Xerox 4520MP and a HP);

(rest deleted)

All the responses I've seen to this message focus on how to print an encapsulated PostScript file. However, what strikes me is the inference that XYOUTS behaves differently when used with encapsulated versus regular PS output. Has anyone else seen that? Does anyone know why?

Bill Thompson

Subject: Re: EPS printouts from IDL 4.0.1
Posted by [hahn](#) on Thu, 11 Jan 1996 08:00:00 GMT
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Hi,

There are two different flavours of PostScript in use, both of them are needed and are supported by IDL / Wave. The PostScript driver makes a compatible PostScript so it can be easily changed from EPS to PS by a normal text editor. But you need to know what to do.

The basic differences between EPS and PS are:

PS is intended for direct printing. It may contain any number of pages and it has all information imbedded for the printer as to position the page, the size of the page etc.

EPS on the contrary is ment for postprocessing by a program which will add statements to make it printable. *EPS must be converted to PS to become printable!* A PostScript printer may wait forever and will not print after having received

and digested a EPS file. (This is due to a missing showpage command). With an IDL generated EPS file you may simply append the showpage command and get the page printed. It may happen as well that a EPS file will produce a blank page on a printer when you simply add a showpage command and don't care for the bounding box because the contents of the page may be completely off the paper. In this case the bounding box comment will show 4 negative numbers.

One EPS file must not contain more than one page. The EPS file must contain a Bounding Box statement showing the size of the page. The IDL driver usually uses positive values in the bounding box.

If IDL output is generated for later annotation it is best to request an EPS file, do one plot, and close the file. Use a new file for each plot! Depending on what program is used for annotation it should convert the EPS to PS which can be directly printed. If that program does not make an PS file you can simply add a showpage command and print it. However, the annotation must be on the given page as neither showpage nor the printers is allowed to make a PS file fit on the page. This must be done by the postprocessing program.

Norbert Hahn

Subject: Re: EPS printouts from IDL 4.0.1
Posted by [Dale Bailey](#) on Thu, 11 Jan 1996 08:00:00 GMT
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Thanks for all your responses. If only the use of PostScript vs Encapsulated PostScript had been included in a brief statment in the IDL manual I wouldn't have had this confusion! The only time I have used PostScript previously is (unknowingly) when I send something to the printer.

Just to complete the discussion, I found that the /DATA keyword used with an XYOUTS call, after SET_PLOT,'ps', allowed me to position text easily on the PostScript plot.

Thanks again.

Subject: Re: EPS printouts from IDL 4.0.1
Posted by [Hermann Mannstein](#) on Thu, 11 Jan 1996 08:00:00 GMT
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Hello Dale,

.....

I usually use the /ENCAPSULATED keyword, as my graphics are included into

LaTeX/Postscript documents.

If I have to print one image (or graphic) alone, I use
a small latex file:

```
\documentstyle[12pt]{article}
\pagestyle{plain}
\input epsf
\begin{document}
\begin{figure}
\epsfxsize=\hsize \epsfbox{idl.eps}
\begin{center}
text - text - text - text
\end{center}
\end{figure}
\end{document}
```

Regards,

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Subject: Re: EPS printouts from IDL 4.0.1  
Posted by [Hermann Mannstein](#) on Thu, 11 Jan 1996 08:00:00 GMT  
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Regards,

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Subject: Re: EPS printouts from IDL 4.0.1
Posted by [Kenneth S. Kump](#) on Fri, 12 Jan 1996 08:00:00 GMT
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Here is my two cents:

I find the easiest way to position text and create postscript or encapsulated postscript is to use the built-in `annotate` procedure. It works on the current window.

You can include text (rotate, scale, choose fonts), make lines, polygons, etc. Once you are satisfied with the plot, you do File>ExportBitmap (don't be fooled by the File>Save box--that's for saving the actual annotations). There is

a postscript option(as well as Gif and Tif). It prompts with a filename and you are done! If you want encapsulated PS, choose Options box and click on Encapsulated...It even allows you to specify landscape/portrait and the output width. It is a little difficult getting used-to the `annotate` environment but it is an "easy" solution for most users. I have successfully included this output into my LATEX documents.

--

Ken Kump

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Dale Bailey <[dale](mailto:dale@...)> wrote:

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> with the display tool (ImageTool) in Solaris on the screen, but it won't print
> to any of our printers (tried a Xerox 4520MP and a HP);
> * I could not see how to position the plot with `/ENCAPSULATED`, as you can't
> use `XOFFSET` and `YOFFSET` with `/ENCAPSULATED`, and the reference manual's
> advice to change the size is not really for positioning it seems;
> * Once I use the command `DEVICE` with `/ENCAPSULATED` this appears to stay in
> effect for the rest of the IDL session, even if I remove `/ENCAPSULATED` from
> the command and re-compile the procedure.
>
> Any suggestions? When I try to print an encapsulated PostScript file produced

> by IDL I do get an initial response from the printer, and then nothing - no
> error msgs, nothing at all. This all seems rather messy, and inconsistent.
>
> Thanks.
>
> Dale Bailey
> MRC Cyclotron Unit
> Hammersmith Hospital,
> London. UK.
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