
Subject: Re: Vector symbol

Posted by [Maarten\[1\]](#) on Mon, 06 Feb 2006 11:18:48 GMT

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Paolo Grigis wrote:

> Maarten Sneepe wrote:

>> Since you already seem to know (La)TeX, you may be able to use psfrag

>> to postprocess the eps output from IDL, using the full (La)TeX for the

>> labels.

>

> After reading this post I tried it out, because there are many situations

> where this might be a valuable addition for a plot, but I have mixed

> feelings about that... the application of psfrags to IDL plots is not

> 100% straightforward (a bit of editing of the EPS file itself often

> required) and it bothers me that I have to embed the original plot in a LaTeX

> document to have the final version. Is there a simple way of producing an

> eps file (with the same size as the original plot) from the dvi output of

> a LaTeX file containing just the original plot and the psfrag substitution

> commands?

Warning: getting offtopic. Further questions are better directed to
comp.text.tex

Tip 1: use single letter labels in IDL: this makes it a lot easier to
generate the substitution text. Also ensure that you use hardware fonts
(say, times) in your plot. Numbers along the axis can be a bit more
painful, although if you ensure that the values are scaled to a range
where exponents are not needed, you'll probably be just fine (just add
the scale factor to the axis label).

Tip 2: The following latex file may help:

```
\documentclass{article}
```

```
\usepackage{geometry}
```

```
\usepackage{graphicx}
```

```
\usepackage{psfrag}
```

```
\pagestyle{empty}
```

```
\geometry{paperwidth=12cm,paperheight=8cm,margin=0pt}
```

```
\begin{document}
```

```
% define labels here
```

```
\includegraphics[width=12cm,height=8cm]{figure.eps}
```

```
\end{document}
```

Adapt sizes to your liking, make sure the lines you use in IDL are
thick enough.

Process with
latex

and

```
dvips -o figure-labeled.eps figure.dvi
```

This should produce a ps file with width 12 cm and height 8 cm. Convert to pdf and use with pdflatex as you please, although I think the ps output can be included with latex+dvips as well (despite the fact that it isn't eps). The -E flag may be interesting for dvips as well.

Maarten
