Subject: Re: Blurred display of images in PDFs created from EPS on Mac OS X
Posted by Norbert Hahn on Mon, 07 Feb 2005 16:17:03 GMT
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jm@dmu.ac.uk wrote:

> The false colour map (byte-scaled array) is displayed (written to the
> Postscript device)
> using TV just like any other image. It just happens to have small
> pixel dimensions.

Maybe your program mis-interprets some PostScript elements, such
as pixmaps? If I understand PS correctly there is no such thing
as a pixel on the input side of PS. A bitmap fed into PS is an
area which has to be filled with scalable rectangles. When printing
the PS engine (of course) has to translate the rectangles into
device pixels, and it might apply some low pass filtering to avoid
moiree.

Maybe the PS generator of IDL did something to fool your program.
I used the following program for a check:

```
IDL> set_plot, "PS"
IDL> tvscl, dist(20,30), xsize=5, ysize=5, /inch
% Compiled module: DIST.
IDL> exit
```

That resulted in PS code that looks like (the comment lines
are my interpretation):

```
%% Setup scaling 72/2540 as needed for a device with 2450 DPI res.
$IDL_DICT begin 54 360 translate 0.0283465 dup scale

%% Scale a 20x30 bitmap to 5x5 inch ( 12700 pixel on output)
12699 12699 scale 20 30 4 [20 0 0 30 0 0]

%% use the image operator to input the matrix
/J { currentfile picstr readhexstring pop} bdef
{J} image
 00123456778776543210011234567888765432111123345678987654332 1 223
[snipped]
```

... which looks correct to me.

How did you define the size of the area that TV should fill in?

Regards,
Norbert