Subject: Re: image display with different pixel size in x & y
Posted by David Fanning on Wed, 23 Nov 2005 05:18:50 GMT
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Jess writes:

> Is it possible to display a pixel image in which the pixel sizes are
> different in X and Y directions?

It is certainly possible in a device that supports
scaleable pixel sizes (e.g., the PostScript device).
It is considerably harder in devices (e.g., your computer
display) that have fixed their pixels sizes in hardware. :-)

Cheers,

David

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

Subject: Re: image display with different pixel size in x & y
Posted by peter.albert@gmx.de on Wed, 23 Nov 2005 07:20:29 GMT
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As David has said, the pixel size on your monitor can't of course be
changed, but instead you can mimick that by using a different number of
window pixels in x- and y-direction for each of your data pixels. If,
as an example, you have an array of 200 x 200 pixels, where the (data)
pixel y-size is 3 times its x-size, than I'd try plotting it all in a
200x600 sized window:

```
IDL> window, 1, xsize = 200, ysize = 600
IDL> tv, congrid(data, 200, 600)
```

or, more general:

```
IDL> ds = size(data, /dim)
IDL> x_factor = 2
IDL> y_factor = x_factor * 3
IDL> window, 1, $
IDL>   xsize = ds[0] * x_factor, $
IDL>   ysize = ds[1] * y_factor
IDL> tv, congrid(data, ds[0] * x_factor, ds[1] * y_factor)
```

Now, for the contours, I'd try calculating them from the CONGRIDded data, allowing to overlay them easily over the plot.

Cheers,

Peter

Subject: Re: image display with different pixel size in x & y
Posted by Jess on Wed, 23 Nov 2005 11:12:53 GMT
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Thanks Peter & David for the clarification. Congrid is just what I need.
- Jess
