
Subject: Re: overlying an image and a contour plot
Posted by [davidf](#) on Fri, 12 Nov 1999 08:00:00 GMT
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Sarah Tebbens (tebbens@my-deja.com) writes:

> We are trying to overlay an image and a contour
> plot, but can't get a perfect match in position
> and size.
>
> On the contour plot, the x axis is 652 values and
> the y axis is 5048 values. We want to fit the
> image exactly into the contour plot.
>
> The following commands are used:
>
> position=[.6,.05,r,.95]
> tv, image, .6, .05, \$
> xsize=position(2)-position(0), \$
> ysize=position(3)-position(1), /normal
> xvalue = 652.
> yvalue = 5048.
>
> ; r should be the length of the x-axis in the
> ; normal coordinate system (x and y window
> ; size=1)
> r= 10./7.*(0.9 * xvalue/yvalue) + .6
>
> contour, xstyle=1, ystyle=1, /iso, \$
> position=[.6,.05,r,.95], /noerase
>
> The image and contour overlay, but the x-axis of
> the image is too long to fit the contour plot.
> When the command tvimage is used instead of tv,
> the images are the same size, but are offset in
> both x and y direction by a few pixels.
>
> We think the problem is with the r value, but
> we don't know why the simple commands above
> don't work.
>
> Any suggestions to get these to overlay?

I think the problem probably lies in the use
of the ISOTROPIC keyword. I've never understood
what "isotropic" means, but I think it means
"keep the damn aspect ratio correct".

I would try something like this. (I would be *very* surprised if this doesn't work, because this is what TVIMAGE was designed for. If it doesn't work, let me know immediately.)

```
windowPos = [0.1, 0.1, 0.9, 0.9]
TVImage, data, /Keep_Aspect, Position=windowPos
Contour, data, XStyle=1, YStyle=1, Position=windowPos, /NoErase
```

The key thing here is putting the window position in a variable, since the actual values in it may change in the TVImage command. In other words, the Position keyword is both an input and an output keyword in this case.

Let us know. :-)

Cheers,

David

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