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Subject: overplotting contours on tvimage....

Posted by [astroboy.20000](#) on Mon, 08 May 2017 19:50:15 GMT

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Hello,

I'm trying to overplot contour lines on an image made with David Fanning's TVIMAGE command.

I'm doing something like this:

```
data=world() ;360x360 array, ranges from 0 to 254
tvimage,data,position=[.5,.5,.6,.6] ; I need to do multiple plots
```

```
contour,/overplot,data,levels =[ 100,150,200]
```

No contours show up.

I've thought about doing a congrid command something like this:

```
data2 = congrid(data,x_panel_size, y_panel_size)
contour,data2,/overplot,levels =[100,150,200]
```

but I can't figure out how to get the size of the current plot, that is, the image I plotted at position=[.5,.5,.6,.6].

Any suggestions would be welcome. I've been banging my head against the wall for a couple of days now.

Mark

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Subject: Re: overplotting contours on tvimage....

Posted by [Nikola](#) on Tue, 09 May 2017 11:40:19 GMT

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On Monday, May 8, 2017 at 8:50:18 PM UTC+1, M Q wrote:

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>

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>

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position= [.5,.5,.6,.6].  
>  
>  
> Any suggestions would be welcome. I've been banging my head against the wall for a couple of  
days now.  
>  
> Mark

I guess that the problem is that you have to set the axes when using TVIMAGE (in the latest version, set the keyword AXES). Then you have to use the same axes (same range in X and Y) when you overplot the contour.

I can't quickly test it now as I don't use the latest Coyote's library, but this may give you a hint where the problem is.

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Subject: Re: overplotting contours on tvimage....

Posted by [Markus Schmassmann](#) on Tue, 09 May 2017 11:44:51 GMT

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On 05/08/2017 09:50 PM, M Q wrote:

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command.  
>  
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position= [.5,.5,.6,.6].
>
>
> Any suggestions would be welcome. I've been banging my head against the wall for a couple of
days now.
Use
```

```
contour,data, path_info=info, path_xy=lines, /path_data_coord, $
    levels=[100,150,200]
print, info, /implied
print, lines
```

to check, whether the contours are as you expect.

I'm not familiar with the `tvimage` command, but to properly align the contours and the image, consider manually setting the window size then using device coordinates to draw the contours.

```
xwsize=1200
ywsz=1200
imagePos=[.5,.5,.6,.6]
window, xs=xwsize, ys=ywsz
tvimage, data, position=imagePos
```

```
foreach ii,info do plots, $
    imagePos[0]*xwsize +lines[0,ii.offset+lindgen(ii.n)]* $
    ((imagePos[2]-imagePos[0])/360*xwsize), $
    imagePos[1]*ywsz +lines[1,ii.offset+lindgen(ii.n)]* $
    ((imagePos[3]-imagePos[1])/360*xwsize), $
    /device
```

I hope this helps, Markus

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