
Subject: Re: Coord_transform in axes

Posted by [penteado](#) on Thu, 06 Nov 2014 17:52:53 GMT

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This is one way to do it: You can make your plot, then change the location of the axis ticks to arbitrary locations, and change the tick labels to arbitrary values.

```
imdata=dist(150,50) ;make some mock data
x=dindgen(150) ;make the x coordinates
y=-1d0+2d0*dindgen(50)/49d0 ;make the y coordinates from -1 to 1
myimage=image(imdata,x,y,axis_style=1,position=[0.2,0.2,0.8, 0.8],aspect_ratio=40.) ;make the image
nyticks=11 ;number of ticks for the y axis
ygrid=-1d0+2d0*dindgen(nyticks)/(nyticks-1d0) ;make an array of y tick values
ylabels=string(asin(ygrid)*180d0/!dpi,format='(I)') ;make the labels for the y axis
myimage['axis1'].tickvalues=ygrid ;replace the tick locations
myimage['axis1'].tickname=ylabels ;replace the tick labels
myimage.ytitle='$\theta$'
naxis=axis('y',location='right',title='sin($\theta$)',tickvalues=ygrid) ;add a second axis with the sines of the angle
```

On Monday, November 3, 2014 10:17:03 PM UTC-2, Joe Llama wrote:

> Just to be slightly clearer,

>

> I'm basically after a y-axis that has tick marks -90, 30, 0, 30, 90 that are all roughly equally spaced - sin(theta) space rather than in theta space where it would be -90, -45, 0, 45, 90.
