
Subject: Re: -0.0

Posted by [David Fanning](#) on Thu, 20 Jan 2011 19:16:45 GMT

[View Forum Message](#) <> [Reply to Message](#)

Paolo writes:

```
> This falls into the "sky is falling" category, although with
> a slight different twist.
>
> http://www.dfanning.com/math_tips/sky_is_falling.html
>
> Signed zeros are allowed in the IEEE 754 standard for floating point
> arithmetic.
>
> IDL> print,-2.0*0
>    -0.00000
> IDL> print,2.0*0
>    0.00000
>
> If you don't like that in the plot (and I agree that it looks ugly),
> you should
> manually change that tick label using the xtickname keyword.
>
> However, that is painful to do, so you could try the following hack:
>
> xrange=[-0.6,0.6]
> plot,[0,0],/nodata,/xstyle,xrange=xrange,title='this looks bad'
>
> ;workaround
> epsilon=1e-6
> xrange=[-0.6,0.6]
> xrange=xrange+epsilon*[-1,2]
> plot,[0,0],/nodata,/xstyle,xrange=xrange,title='better now'
>
>
> You see what happened there? Care to guess why it worked?
```

Here is another solution.

FUNCTION zeroAxis, axis, index, value

```
    absvalue = Abs(value)
    PRINT, value, absvalue, Format='(2(F0.8,2x))'
    IF absvalue LT 0.001 THEN value = 0.0
    IF value LT 0 THEN BEGIN
        strValue = '-' + String(absvalue, Format='(F0.1)')
    ENDIF ELSE BEGIN
        strValue = String(absvalue, Format='(F0.1)')
```

ENDELSE

RETURN, strValue

END

```
x = -.6+indgen(13)*.1  
plot, x, findgen(11), /nodata, $  
  xstyle=1, xtickformat='ZeroAxis'
```

END

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
