Subject: Re: -0.0
Posted by pgrigis on Thu, 20 Jan 2011 22:29:50 GMT
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On Jan 20, 2:22 pm, kisCA <ki...@hotmail.com> wrote:
> I like this "sky is falling" things :-)
>
> I guess that it could be a problem of precision with float...the range
> should be higher in positive value in order to have 0 on the positive
> side?
>
> Thanks!

Well yes. What happens is that when you do

plot,[0,0],xrange=[-0.6,0.6],xtickv=vvv

is that the plot range is given by

r=!X.crange

print,r,format='(f13.10)'
-0.6000000238
 0.5999999762

IDL presumably uses the following formula to create 7 tick marks:

tickv=r[0]+(r[1]-r[0])/6.0*findgen(7)

print,tickv,format='(f13.10)'
-0.6000000238
-0.4000000238
-0.2000000238
-0.0000000238
 0.1999999762
 0.3999999762
 0.5999999762

When rounded to something more useful for plots:

print,tickv,format='(f4.1)'
-0.6
-0.4
-0.2
-0.0
 0.2
 0.4
 0.6

That's how you get the negative zero.

Ciao,
Paolo
