Subject: What is going on with the minor ticks on log plots?????
Posted by Joe[2] on Wed, 26 Aug 1998 07:00:00 GMT

Hi,

I'm running v5.1 under NT and have noticed the following bad
behavior. While using the /XLOG key along with even powers of
10 for XRANGE and XTICKS set to the proper number of decades
and xminor set to zero. I either do or do not get the expected
minor ticks at (2,3,4,5,6,7,8,9). After some experimentation, it
became apparent that the range specified by XRANGE had to
fall wholly within the range from 1.000 to 1.e10.

That is
  plot,[1],/nodata,/xlog,xrange=[1,1000],xticks=3,xminor=0
works, but
  plot,[1],/nodata,/xlog,xrange=[0.1,100],xticks=3,xminor=0
   plot,[1],/nodata,/xlog,xrange=[1.e8,1.e11],xticks=3,xminor=0
do not!

This strikes me as being arbitrary behavior and, therfore,
a BUG in IDL. This may actually be a very old bug going back
several versions of IDL. Does this happen on other platforms?
It also appears on IDL for Digital Unix as far as I know.

Is there a way around this to force the proper minor ticks no
matter the bounds of XRANGE. I have not tested this on YRANGE
but assume there is similar behavior.

Thanks,

    JMZ