Subject: Re: labels for multiple x axis
Posted by Mark Hadfield on Thu, 06 Jan 2005 21:23:10 GMT
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Mark Hadfield wrote:
> Lasse Clausen wrote:
>
>> I am using the following code to produce a nice, extensively boring
>> plot.
>>
>> PLOT,FINDGEN(100),XTICKS=2,XTICKUNITS=['NUMERIC','NUMERIC'], $
>> POSITION=[.05,.2,.95,.8]
>>
>> The question is: How do I get IDL to use the XTICKS keyword for the
>> second axis as well? Because it uses 3 ticks for the first, but 6
>> ticks for the second axis.
>
> Ditch the 2-element array for XTICKUNITS, thus:
>
> PLOT,FINDGEN(100),XTICKS=2,XTICKUNITS='NUMERIC',$
> POSITION=[.05,.2,.95,.8]
>
> Array values for XTICKUNITS are only relevant for multi-level axes,
> which are something else entirely. (If you run your command without the
> POSITiON keyword, you will see a second x axis at the bottom of the plot.).

Lasse replied to me by email (because he couldn't reply on the newsgroup
for some reason). To keep things on the record, I am quoting his reply
and responding here

> Oh, I think you got me wrong there. I *want* a multi-level x axis.
> But I want both of the multi-level axis to have the same amount of
> xticks (namely 3). But what IDL does is that is put 3 ticks on the
> first x axis (as defined by xticks), then 6 on the second one.
> And it seems as if I cannot influence the number of ticks on the
> second of the multi-level axis. And by the way, the position keyword
> is set to be able to see the secondary x-axis in its full beauty.

Oh. The obvious way to do what you want is to set XTICKS=[2,2], but IDL
won't let you do that:

```
 PLOT,FINDGEN(100),XTICKS=[2,2],XTICKUNITS=['NUMERIC','NUMERI C'], $
     POSITION=[.05,.2,.95,.8]
% PLOT: Expression must be a scalar or 1 element array in this context:
<LONG      Array[2]>
```

By the way, have you noiiced with your original command that the upper X
axis has tick labels "0", "50" & "100" (which is reasonable) and the

lower X axis has labels "0", "50", "100", "60", "80", "100" (which is rubbish)?

IMHO IDL multi-level axes are incompletely thought out & carelessly implemented and so are not worth bothering with.

--
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