Subject: Re: Axis labeling trickery
Posted by Paul Levine on Sat, 07 Sep 2013 19:47:03 GMT
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On 2013-09-07 18:50:22 +0000, Phillip Bitzer said:

> On Friday, September 6, 2013 6:18:06 PM UTC-5, Paul Levine wrote:
>
>> Example 1:
>> time = timegen(120,start=julday(1,1,2003), units='M', step_size=1)
>>
>> data = 20*randomu(seed,n_elements(time))-10
>>
>> void = Label_Date(Date_Format='%Y')
>>
>> cgPlot, time, data, xrange=[julday(1,1,2003),julday(12,31,2012)],
>>
>> XTickFormat='Label_Date', XTicks = 10
>>
>
> Looks like this example gives me something different - 2003-2012 is the
> range of the labels. No 2013, but 2004 and 2008 are duplicated and 2005
> is missing. XTicks=9 gives the correct labels, though (ten year span =>
> 9 tick intervals and 10 tickmarks).
>
> Just for reference:
> IDL> print, !VERSION
> { x86_64 darwin unix Mac OS X 8.2.2 Jan 23 2013 64 64}

I mixed up a line in my example, so the results (same as what you got) are different than what I described. What I should have written was to have the end of xrange be julday(1,1,2013) rather than julday(12,31,2012), which would have produced what I described, so:

```
time = timegen(120,start=julday(1,1,2003), units='M', step_size=1)
data = 20*randomu(seed,n_elements(time))-10
void = Label_Date(Date_Format='%Y')
cgPlot, time, data, xrange=[julday(1,1,2003),julday(1,1,2013)],
XTickFormat='Label_Date', XTicks = 10
```

Either way, though, the problem with setting XTicks = 9 is that while the year labels print what I want, the tick marks themselves are no longer spaced one year apart on January 1 of each year. Running the same code above but with Date_Format='%M %D %Y') and XTicks=9 illustrates why I need 10 rather than 9 tick intervals.