Subject: Re: Is there a way to plot with axis breaks in IDL?
Posted by biophys on Sun, 11 Apr 2010 07:17:13 GMT

I recall I did something without using xyouts years ago when I was TA-
ing a physics class. It can do multiple breaks along both x and y axis
as well as overplot etc. I can dig it out from my old hard drive if
people are interested.

Cheers,
Yun

On Apr 8, 12:33 am, "fututre.keyboard" <future.keybo...@gmail.com>
wrote:
> Thanks for the implementation. It takes only a little tweak to make
> the plot useful. What I need to pay attention when tweaking are the
> tick- related stuff. The other thing is that I have to suppress the x-
> title/title and use xyouts to get a centered x-title/title. Although I
> don't need to break up y-axis, I would imagine a hard time to xyouts y-
> title in a usual orientation.
>
> E
>
> On Apr 3, 11:21 am, mankoff <mank...@gmail.com> wrote:
>
>
>
>> On Apr 2, 6:12 am, David Fanning <n...@dfanning.com> wrote:
>
>>> I've made plots like this before. It is not particularly
>>> difficult to do *a* plot. It is more difficult to write
>>> this kind of functionality in a general way.
>
>> I think I just came up with a fairly generic implementation
here:http://code.google.com/p/kdm-idl/source/browse/trunk/pl otbreak.pro
>
>> For example I was able to produce the following graphic (including
>> equivalent of OPLOT command) with the following two lines of
code.http://kenmankoff.com/tmp/plotbreak.png
>
>>   plotbreak, time, p, $
>>   position=pos, $
>>   xrange0=[0,1000], $
>>   xrange1=[1000,3000], $
>>   breakpct=66, $
>>   key0={ytitle:'Population (Phytoplankton)', $
>>   xtitle:'Time (days)', $
>>   xtickn:['0','20','40','60','80',' '],$

```
>>              title:'Predator v. Prey', $
>>              thick:2}, $
>>          key1={xtitle:'Time (days)', $
>>              yst:5,thick:2,$
>>              xtickn:['100','150','200','250','300'] }
>
>>   plotbreak, time, z, $
>>          position=pos, $
>>          breakpct=66, $
>>          xrange0=[0,1000], $
>>          xrange1=[1000,3000], $
>>          key0={NOERASE:1,color:253,thick:3,yst:5,xst:5}, $
>>          key1={color:253,thick:3,xst:5,$
>>              ytitle:'Population (Zooplankton)'}
>
>> A truly generic algorithm, which would be difficult, would be
>> recursive and let me specify BREAKPCT=[10,30,80,90,95] rather than
>> just as a single percentage (66% in the above example). It should also
>> be recursive in X and Y. That algorithm, when complete, could then
>> easily be used to draw, for example, a calendar with the weekends
>> (first and last column) thinner than the middle weekdays. I'll leave
>> that as an exercise to the reader.
>
>>   -k.
```