Subject: Re: add a period axis?
Posted by Craig Markwardt on Sat, 13 Oct 2001 03:27:56 GMT
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jeyadev@wrc.xerox.com (Surendar Jeyadev) writes:

> In article <MPG.162ed391d0e34c3c989704@news.frii.com>,
> David Fanning <david@dfanning.com> wrote:
>> jiali (jiali3@21cn.com) writes:
>>
>>> I wonder how to add another axis. First create a frequency-power plot:
>>>
>>> plot,fre,power,xrange=[1,10],yrange=[0,10],xtitle='Frequency '
>>>
>>> I hope to add an axis on the top but with period(=1/frequency) ticks. Maybe
>>> like following:
>>>
>>> aixs,1,10,/xaxis,xrange=[1,0.1], xtitle='Period',.....???
>>>
>>> Would you please help me to finish the above?
>>
>> Well, it will be something like this:
>>
>> plot,fre,power,xrange=[1,10],yrange=[0,10], $
>> xtitle='Frequency', xstyle=8, $
>> position=[0.15, 0.15, 0.95, 0.85]
>> axis, xaxis=1, xrange=[1,0.1], xtitle='Period', /save
>
> Awww! This is too easy! It does help that 1.0 lines up with 0.1, 2.0 with
> 0.2, ... etc. Things look nice. How about when you want to have
> xrange = [0,15], but you want the upper axis to be some specific values
> that are calculated from the lower axis. I run into this typically in
> trying to have two different ways of specifying the same underlying
> variable. For a no so moronic example, let the x axis be some length
> in metres. Now, for some people's benefit, I would like to have
> feet on the upper scale. But, it is ugly to have 1.5432, 2.1793, ...
> labels. One would like that hash marks to be laid at 1.5, 2.0, etc.
> Any chance of a routine out there?

Ummm, and this doesn't do the trick with no fuss or muss?

```
plot, findgen(10), xstyle=8, xrange=[0,10]    ;; X axis in meters
axis, xrange=[0,10]*3.281, xaxis=1, xstyle=1  ;; X axis in feet
```

Craig

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