Subject: Re: plot axis problem?

Posted by Wox on Wed, 01 Aug 2007 08:18:06 GMT

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On Wed, 01 Aug 2007 05:40:26 -0000, metachronist <rkombiyil@gmail.com> wrote:

- > IDL Gurus,
- > I think this is too trivial.. but anyways I can't get it right :(

>

- > IDL> time=[22.,23.,0.,1.,2.,3.,4.,5.,6.,7.]
- > IDL> field=[4.2,56.7,89.34,22.,0.,43.5,10.,2.,33.,-10.5]

>

- > So the time values start at 2200hrs and then go past midnight and then
- > to 0700hrs in the morning. How would I "force" the 'x' axis (time) to
- > start at 22hrs goto (midnight) Ohrs and then increase to 7hrs? I
- > found out that setting xrange wouldn't help either since the decrease
- > (increase in terms of time) from 2200hrs --> 2400hrs(0hrs) is IDL way?
- > Like (22,20,18,....0,2,...8) , as a result, nothing gets plotted :(
- > Thanks for any suggestions,
- > /rk

Well, you could change the thick names:

time=[22.,23.,0.,1.,2.,3.,4.,5.,6.,7.] field=[4.2,56.7,89.34,22.,0.,43.5,10.,2.,33.,-10.5]

n=n_elements(time)

ind=where(time[1:*] It time[0:n-2],ct)

time2=time

for i=0,ct-1 do time2[ind[i]+1:*]+=24

plot,time2,field,XTICKN=strtrim(fix(time),2)+'hrs'

Subject: Re: plot axis problem?

Posted by Wox on Wed, 01 Aug 2007 12:03:01 GMT

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On Wed, 01 Aug 2007 10:18:06 +0200, Wox <nomail@hotmail.com> wrote:

> Well, you could change the tick names

By accident I also stumbled on this:

http://star.pst.qub.ac.uk/idl/Displaying_DateTime_Data_on_Ax is_Objects.html

Subject: Re: plot axis problem? Posted by rkombiyil on Wed, 01 Aug 2007 15:14:31 GMT

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On Aug 1, 9:03 pm, Wox <nom...@hotmail.com> wrote:

- > On Wed, 01 Aug 2007 10:18:06 +0200, Wox <nom...@hotmail.com> wrote:
- >> Well, you could change the tick names

>

> By accident I also stumbled on this:http://star.pst.qub.ac.uk/idl/Displaying_DateTime_Data_on_Axis_Object...

Well, thanks for taking time off to help and the link! Two things, if I may.

#1. The above code needs a minor modification to plot correctly, since $n_{elements(time)} = 10$, I would need to add:

<code>

plot,time2,field,xticks=9,XTICKN=strtrim(fix(time),2)+'hrs'

</code>

to plot correctly.

#2. My time arrays are rather large. I actually did a reverse when I ran into this problem, as in setting:

<code>

time_array[where(time_array ge 24.)]=time_array[where(time_array ge 24.)]-24.

</code>

Anyway, I should admit that it was clever of you to think of changing the ticknames, reminds me that I should RTFM more.. I haven't thought of that at all. Since the whole point was to make it more "human readable" as in resetting time to be 000hrs at midnight and then increase, I guess for plot purposes, your method would suffice! Because all I need is to display as above, nothing changes, except the format of the time displayed:-)

Thanks, /rk