
Subject: Time axis labelling (1 major label every 7 days with 6 minor ticks)

Posted by [Patrique](#) on Mon, 19 May 2008 09:33:04 GMT

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Dear all,

I'm currently trying to figure out how to make IDL to draw a time axis reaching from 14 Jan to 18 Feb 2008 (exactly 5 weeks) with major ticks each 7 days and 6 minor ticks in between so that there is a tick label each full week. I already tried a lot of different things, but nothing really worked. In my IDL Version (6.4) even the spacing of the tick marks varies along the x axis when running the example below.

Can someone of you give me any hint on how to manage this issue ?

pro test

;xaxis: start on 14 Jan, end on 18 Feb

time = FINDGEN(36)+JULDAY(01,14,2008,00,00)

;yaxis values

Values = RANDOMN(seed,36)

;axis formatting

!X.TICKFORMAT = ['LABEL_DATE']

!X.TICKUNITS =['Time']

dummy=LABEL_DATE(DATE_FORMAT = '%D.%N.%Y!C%H:%I')

;plotting

PLOT,time,values, XSTYLE=1, YSTYLE=1, XTICKS=5

end

Best regards and thanks for your help,

Patric.

Subject: Re: time axis labelling

Posted by [David Fanning](#) on Mon, 26 Mar 2012 15:19:33 GMT

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anil writes:

> I have a contour plot (y axis is ocean depth, x axis is time and
> temperature of the water column is contoured) in which i have 123
> irregular time(data) points. I want to read in column data (which is
> no problem) from a file :
> 09 09 2002
> 09 17 2002
>
>

> 12 23 2005 etc... I want to read these columns as month, day ,year
> seperately and then generate time labels for the x axis of my plot
> such as : 09/09/2002 .
>
> There is no regular spacing in between the dates, which is what i
> could not figure out.
> I want to have tickmarks on each date(data point), so my plot will be
> easy to follow.

I don't know if you have noticed, but that's a fairly long string you want to put on there for the date. If you have more than 5 dates on your plot, it's going to be hard to follow no matter what you do. :-)

I'd recommend you suppress the tick annotations on your contour plot entirely, and then put the labels on with cgText, in a rotated fashion, so you have a chance of fitting them onto the plot in a way that is readable. You can see an example of how this is done with the labels in the discrete color bar program cgDCBar.

You could even put small tick marks in the right locations with cgPlotS.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: time axis labelling
Posted by [anil](#) on Mon, 26 Mar 2012 18:25:56 GMT
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On Mar 26, 6:19 pm, David Fanning <n...@idlcoyote.com> wrote:

> anil writes:
>> I have a contour plot (y axis is ocean depth, x axis is time and
>> temperature of the water column is contoured) in which i have 123
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```

>> 09 17 2002
>> ... ..
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> David
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```

Maybe I told the story missing or wrong. I understand your point which seems it will solve the problem. But I have to show all the tickmarks(one tick per each time/data) because later on i will put vertical dashed lines, so i can see my exact data/time points in the contour plot.I have to have all the ticks. Then have the dates as labels.

Subject: Re: time axis labelling
 Posted by [anil](#) on Mon, 26 Mar 2012 18:42:26 GMT

On Mar 26, 6:19 pm, David Fanning <n...@idlcoyote.com> wrote:

```
> anil writes:
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the xticks command does not allow me to have 100 ticks in an axis. but i need to have a tick mark at each data point/date. Then i need to add the dates as labels. but the problem is that i can not arrange the

tickmarks. any solution to this?

Subject: Re: time axis labelling

Posted by [David Fanning](#) on Mon, 26 Mar 2012 19:40:12 GMT

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anil writes:

> the xticks command does not allow me to have 100 ticks in an axis. but
> i need to have a tick mark at each data point/date. Then i need to
> add the dates as labels. but the problem is that i can not arrange the
> tickmarks. any solution to this?

Yes, don't put any tick marks on your contour plot. Rather, put the ticks and the labels on with `cgPlotS` and `cgText`, respectively, as outlined in my first response. An example is in `cgDCBar`. :-)

Cheers,

David

--

David Fanning, Ph.D.

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