
Subject: Re: Tick formatting

Posted by [gary.hodgesREMOVE](#) on Fri, 01 Feb 2002 21:33:43 GMT

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gary.hodgesREMOVE@cires.colorado.edu wrote:

: I'm getting an extra zero, i.e., 0 0 15 30, and the values are right
: displaced under the tickmark. This is my best reproduction...

```
: | | | | | | | | | | | | | |
: 0 0 15 30 45 60 75 90 75 60 45 30 15 0
```

: I've set the following:

```
: !X.TICKS=13
: !X.TICKV=[0,15,30,45,60,75,90,105,120,135,150,165,180]
: !X.TICKNAME=[0,15,30,45,60,75,90,75,60,45,30,15,0]
```

I have tricked IDL into producing the tick labels in the format I want by changing the !X.TICKNAME to:

```
!X.TICKNAME=['0','15','30','45','60','75','90','75','60','45 ','30','15','0']
```

I'd still like to know the correct way.

Gary

Subject: Re: Tick formatting

Posted by [David Fanning](#) on Fri, 01 Feb 2002 22:06:36 GMT

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Gary Hodges(gary.hodgesREMOVE@cires.colorado.edu) writes:

```
> I have tricked IDL into producing the tick labels in the format I want by
> changing the !X.TICKNAME to:
>
> !X.TICKNAME=['0','15','30','45','60','75','90','75','60','45 ','30','15','0']
>
> I'd still like to know the correct way.
```

I'm not sure that is much of a trick. More like what the documentation called for, it seems to me. :-)

But shouldn't !X.Ticks be 12 and not 13? Then you wouldn't have to use the !X.TickV variable at all, I think.

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: Tick formatting

Posted by [gary.hodgesREMOVE](#) on Fri, 01 Feb 2002 22:54:01 GMT

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David Fanning <david@dfanning.com> wrote:

: Gary Hodges(gary.hodgesREMOVE@cires.colorado.edu) writes:

:> I have tricked IDL into producing the tick labels in the format I want by

:> changing the !X.TICKNAME to:

:>

:> !X.TICKNAME=['0','15','30','45','60','75','90','75','60','45 ','30','15','0']

:>

:> I'd still like to know the correct way.

: I'm not sure that is much of a trick. More like what

: the documentation called for, it seems to me. :-)

I saw that info a bit ago. I guess since it was almost working the first way, I assumed the array was correctly constructed.

: But shouldn't !X.Ticks be 12 and not 13? Then you

: wouldn't have to use the !X.TickV variable at all,

: I think.

I saw that n and n+1 stuff... OK, I'm looking at it again and it is tick _intervals_. I think I still need TICKV since I want the first tick at 0, not -5. How would it know to start there otherwise?

Gary

Subject: Re: Tick formatting

Posted by [Mark Hadfield](#) on Sun, 03 Feb 2002 20:53:38 GMT

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<gary.hodgesREMOVE@cires.colorado.edu> wrote in message

```

news:a3esa9$eri$1@news.nems.noaa.gov...
> I've almost got what I'm after...
>
> I'm plotting data that runs from zero to 180 degrees. I'd like my
> ticks/labels to go zero -> 90 -> zero. The X axis will actually run
from -5
> to 185, but I would like the ticks and labels to start and end at the zero
> and 180 positions. What I want to end with should look like (ticks
centered
> on numbers of course):
>
> | | | | | | | | | | | |
> 0 15 30 45 60 75 90 75 60 45 30 15 0
>
> I'm getting an extra zero, i.e., 0 0 15 30, and the values are right
> displaced under the tickmark. This is my best reproduction...
>
> | | | | | | | | | | | |
> 0 0 15 30 45 60 75 90 75 60 45 30 15 0
>
> I've set the following:
>
> !X.TICKS=13
> !X.TICKV=[0,15,30,45,60,75,90,105,120,135,150,165,180]
> !X.TICKNAME=[0,15,30,45,60,75,90,75,60,45,30,15,0]

```

As a general rule, you can get more robust and simpler code if you avoid specifying TICKNAME directly. Try to use TICKFORMAT instead. Define a function something like this:

```

function myticks, direction, index, value, level
  compile_opt IDL2
  ;; Warning: not tested!
  return, strtrim(round(value < (180-value)))
end

```

and specify !X.TICKFORMAT='myticks'. This doesn't avoid the need to also specify !X.TICKS and/or !X.TICKV but it avoids the risk that your tick labels will look right but actually be incorrect.

Mark Hadfield
m.hadfield@niwa.co.nz <http://katipo.niwa.co.nz/~hadfield>
National Institute for Water and Atmospheric Research
