Subject: Re: Using [XYZ]TICKFORMAT for dynamic formatting
Posted by David Gell on Wed, 20 May 2009 12:29:07 GMT
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On May 19, 10:09 am, Paul van Delst <paul.vande...@noaa.gov> wrote:
> Hello,
>
> Given the following xtickformat function,
>
> FUNCTION lowticks, axis, index, value
> RETURN, STRING(value, FORMAT = '("!C",f7.3)')
> END
>
> I am doing something like the following to get the x-axis tick labels on every other plot
> printed on the next line:
>
> !P.MULTI = [0,n_xplots,1]
> !X.OMARGIN = [10,3]
> !X.MARGIN = [0,0]
> !Y.OMARGIN = [2,0]
> !Y.MARGIN = [4,2]
>
> FOR i = 0, n_xplots-1 DO BEGIN
> IF (i EQ 1 OR i EQ 3) THEN BEGIN
> xtickformat = 'lowticks'
> ENDIF ELSE BEGIN
> xtickformat = ''
> ENDELSE
>
> PLOT, x, y, XTICKFORMAT = xtickformat
>
> ...etc...
>
> to prevent the end-of-axis tick labels from adjacent plots overwriting each other.
>
> The problem is that I want the format in the "lowticks" function, the "f7.3", to be the
> same as those automagically chosen by IDL in the plots where the xtickformat defaults.
>
> Does anyone know if there is any way to dynamically set the format string itself in this
> fashion? I.e. pass in the "f7.3" (or f4.1 or f5.2 etc) ?
>
> cheers,
>
> paulv

I usually do something like the following when I have to pass data to
a callback routine.
Change the lowticks routine as follows:

```
  FUNCTION lowticks, axis, index, value, format=format
    common qqlowticks, sFormat
    if n_elements(sFormat) eq 0 then sFormat='("!C",f7.3)'  ;;
initialize state memory
    if keyword_set(format) ne 0 then begin
        sFormat=format
        return, 0
    endif

    RETURN, STRING( value, FORMAT = sFormat
  END
```

Then, prior to using lowticks as the value of the xtickformat keyword argument, you set the
format string,

```
   nDummy=lowticks(format='(F7.3)'

   plot, ..., xtickformat=lowticks
```

Hope this helps.
