
Subject: Re: formatting yticks over orders of mag.
Posted by [Paul van Delst](#) on Fri, 12 May 2000 07:00:00 GMT
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Paul van Delst wrote:

>
> Hi,
>
> Is there a way in PLOT, /YLOG to format the yticks "dynamically". E.g.
> If my y-values range from 0.001 to 10000, can the ytick labels be forced
> to be
>
> 0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000
>
> rather than
>
> 0.001, 0.010, 0.100, 1.000, 10.000, 100.000, 1000.000, 10000.000
>
> The latter requires me to change my XMARGIN keyword so that I can see
> the y-axis label to such an extent that there's not much plot area left
> (due to the 10000.000). I would rather not do the 10^n format since it
> doesn't give the same impression of magnitude change (plotology :o). I
> looked at the YICKFORMAT documentation but that seems to apply to *all*
> the ytick values. I am wrong about this?

Well, I tried the most simple-minded thing and bugger me if it didn't work. Cool.

I used the following with YTICKFORMAT='ylogticks' in the PLOT command:

```
FUNCTION ylogticks, axis, index, value
```

```
    exponent = LONG( ALOG10( value ) )
```

```
    CASE 1 OF
```

```
        ( exponent LT 0 ): format = '( f' + $  
                                STRTRIM( ABS( exponent ) + 2, 2 ) + $  
                                '.' + $  
                                STRTRIM( ABS( exponent ), 2 ) + $  
                                ' )'
```

```
        ( exponent GE 0 ): format = '( i' + $  
                                STRTRIM( ABS( exponent ) + 1, 2 ) + $  
                                ' )'
```

```
    ENDCASE
```

RETURN, STRING(value, FORMAT = format)

END

and it worked just like I wanted.

Sorry for wasting peoples time,

paulv

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