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Subject: Re: plot label help

Posted by [Martin Schultz](#) on Fri, 10 Oct 1997 07:00:00 GMT

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Rick McDaniel wrote:

```
>
> Here's the one I wrote. It's not a thing of beauty. It works great but
> has one flaw. Instead of printing 10^0, it justs prints 10. The other
> exponents print out fine. Again any help appreciated.
>
> FUNCTION LOGTICKS, axis, index, value
>
> IF value/10.0^9 EQ 1.0 THEN n = 9
> IF value/10.0^8 EQ 1.0 THEN n = 8
> IF value/10.0^7 EQ 1.0 THEN n = 7
[cut]
```

This indeed looks weird! Try the following:

```
IDL> x = 10^(findgen(20)-8)
IDL> print,fix(alog10(x))
      -8      -7      -6      -5      -4      -3      -2      -1      0
      1       2       3       4       5       6       7       8       9
      10      11
```

You can also use something like ceil(alog10(val)) in order to get integer exponents  
for values ne 10, 100, 1000, etc.

```
>
> RETURN, STRING(n, $
>           FORMAT="('10!E',i2.0)")
> END
>
```

If you use format=i2 instead of i2.0, the 0 will be printed ! Also, to improve the look of your numbers you may want to try  
return, strcompress(string(n, format="('10!E',i2)")) , /remove\_all)  
This eliminates the blanks in e.g. 10!E 4.

Cheers,  
Martin.

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