Subject: Re: formatting exponential notation
Posted by David Fanning on Fri, 10 Mar 2006 16:03:35 GMT
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Steve.Morris@libero.it writes:

> I need a quick advice on the way to write number in the exponent format
> I want.
> For example, I want the number printed on my screen in the following
> form
> -2.3435e-5
>
> i.e. 4 digits after the point and as function of e-5
>
> Any suggestion? I have tryed to use the format='(EX.X)' but without
> much of a success .... :(

There must be some kind of convergence going on in the
Universe today. Just yesterday I got sick and tired of
always having to figure out how to format numbers into
strings for my widget programs. I just want to print
the value of the image under the cursor! But I don't
know if the "image" is a byte array, a float array, or
even one of those damn FITS files as a double array!

Thus, I can't figure out how big to make the text widget
that holds all these numbers. Yuck!

So, anyway, long story short, I wrote a program called
NUMBER_FORMATTER to to this for me. For my purposes, it
works great. After I saw this post, I thought I would make
it available on my web page.

http://www.dfanning.com/programs/number_formatter.pro

It would work something like this for this example. In
the normal case it would use the number of significant
digits in a float. But with the DECIMALS keyword, you
can specify how many decimal places you would like in the
result. It always trims the exponent of leading zeros.
So e-008 comes out e-8, which I like better.

```
IDL> number = -2.343583743e-5
IDL> Print, Number_Formatter(number)
-2.343584e-5
IDL> Print, Number_Formatter(number, DECIMALS=4)
-2.3435e-5
```

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
