Subject: Re: printing with a format in exponent!
Posted by penteado on Mon, 10 Oct 2011 20:07:05 GMT
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http://www.idlcoyote.com/math_tips/sky_is_falling.html

On Oct 10, 4:26 pm, Kim <adisn...@hotmail.com> wrote:
> I'm quite confused why the formation option does not print as it
> should.
>
> In the IDL terminal, I simply typed the following
>
> IDL> print, 1.58058980019603E+07, format='(E20.14)'
>
> However, it prints
>
> IDL> 1.580589800000E+07
>
> It is really important for the format to work because my calculation
> goes up to 12th decimal point.
>
> Does anyone know why this is and how I can fix this problem?

Subject: Re: printing with a format in exponent!
Posted by Jeremy Bailin on Tue, 11 Oct 2011 04:06:55 GMT
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On 10/10/11 4:07 PM, Paulo Penteado wrote:
>
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>
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>> It is really important for the format to work because my calculation
>> goes up to 12th decimal point.

>>
>> Does anyone know why this is and how I can fix this problem?

To elaborate slightly, you'll need to be using double precision if you
need to be precise to the 12th decimal point:

IDL> print, 1.58058980019603e7, format='(E20.14)'
1.58058980000000E+07
IDL> print, 1.58058980019603d7, format='(E20.14)'
1.58058980019603E+07

Although be careful... just because you are using doubles, your
calculation may not preserve the maximum degree of machine precision.

-Jeremy.
