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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:

```
>
> 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?
```

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.

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