
Subject: Re: Simple format code issue.

Posted by [polystethylene](#) on Wed, 09 Dec 2009 20:07:09 GMT

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You know what, I'm just being stupid.

It is being held to the desired precision isn't it? I'm just not printing it out at the desired precision. What a fool.

Sorry guys - nothing to see here, please disperse :D

Subject: Re: Simple format code issue.

Posted by [penteado](#) on Wed, 09 Dec 2009 20:09:24 GMT

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On Dec 9, 6:02 pm, polystethylene <polystethyl...@hotmail.com> wrote:

> This one should be a doddle to resolve; but I can't for the life of me

> see what I'm doing wrong.

>

> I have 2 columns of data like this:

>

> 5147.475098 0.987662

> 5147.476562 0.985164

> 5147.478516 0.975080

> 5147.479980 0.991375

> 5147.481445 0.982826

> 5147.482910 0.987368

>

> etc...

>

> I would normally read this in with a format code like this:

>

> (2x,F0,3x,F0) - or sometimes drop the x's as you don't really need
> them...

>

> Anyway, this code reads the data in to 8 sig fig (1st column), and 6
> sig fig (second column)

>

> So then I tried a code of (F10.6, F0)... and I get the same issue - I
> can't get more than 4 d.p precision...

>

> I tried it with Doubles as well; but no luck. This has got to be
> simple right? Format codes are a weakness of mine, so I'm totally
> stumped.

>

> Any ideas?

>

> Cheers,
> Stefan

What makes you think you do not have more than 4 digits? This description makes it sound like the sky is falling.

Anyway, if you have nicely formatted columns like that in your file, you probably do not even need to specify a format, depending on how you read it.

Can you tell us exactly what you use to read the file and why you think there is a problem?

Subject: Re: Simple format code issue.
Posted by [Kenneth P. Bowman](#) on Wed, 09 Dec 2009 21:09:18 GMT
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In article
<a40dd69e-ed04-4a18-969e-5c41c9acffc7@d10g2000yqh.googlegroups.com>,
polystethylene <polystethylene@hotmail.com> wrote:

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>
> Any ideas?
>
> Cheers,
> Stefan

If you really want 11 digits of precision, make sure you are reading into double precision floating point variables.

Ken Bowman

Subject: Re: Simple format code issue.

Posted by [polystethylene](#) on Wed, 09 Dec 2009 23:06:07 GMT

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That's a good tip. Is it therefore the case that I could read in a value to 11 digits of precision - but that it won't be correct if I use floats instead of doubles?

It was as I suspected - I saw the values in the 'variables' tab in the debug window of the workspace, which only showed the values to 4.d.p, when really they were to 6dp/10sf all along.

Thanks for the responses; as ever this place is full of helpful people. Always nice to get a response from someone who's book I own as well :D

Subject: Re: Simple format code issue.

Posted by [penteado](#) on Wed, 09 Dec 2009 23:20:10 GMT

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On Dec 9, 9:06 pm, polystethylene <polystethyl...@hotmail.com> wrote:

> That's a good tip. Is it therefore the case that I could read in a
> value to 11 digits of precision - but that it won't be correct if I
> use floats instead of doubles?

Yes, it is the case. Floats are only good to some 6 digits, and exponents to about 37. Doubles go to about 15 digits.

You may find useful to see

http://www.dfanning.com/math_tips/sky_is_falling.html
