
Subject: Re: truncation when reading variables from netcdf file?

Posted by [penteado](#) on Fri, 16 Sep 2011 02:11:05 GMT

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On Sep 15, 10:32 pm, Ashley Berg <ashley.b...@gmail.com> wrote:

> When reading a variable from a netcdf file in IDL, does IDL truncate
> the numbers when it saves them into an array? For example, I am
> reading in a floating array from a netcdf file, and the numbers in the
> file all go to 16 decimal places. I save the numbers into a double
> array, but even double-precision numbers only go to about 14 decimal
> places, right?

Can IDL even read a datatype that is not one of the standard types?

The standard types need no conversion, since there are identical correspondents in IDL.

Subject: Re: truncation when reading variables from netcdf file?

Posted by [David Fanning](#) on Fri, 16 Sep 2011 03:33:37 GMT

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Ashley Berg writes:

> When reading a variable from a netcdf file in IDL, does IDL truncate
> the numbers when it saves them into an array? For example, I am
> reading in a floating array from a netcdf file, and the numbers in the
> file all go to 16 decimal places. I save the numbers into a double
> array, but even double-precision numbers only go to about 14 decimal
> places, right?

If you ask a computer to print a number to 16 or 32 or 48 decimal places, it will happily do so. Now, whether those number MEAN anything or not, is another question entirely.

If you have doubles in your file, and you read them as doubles, you will have no problems. If you have floats and read them as floats, you will also be fine. :-)

Many IDL programmers start their journey into numbers by starting with this article and proceeding from there:

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

Cheers,

David

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David Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
