Subject: make_array function bug
Posted by Ken G on Mon, 23 Jun 2014 23:10:18 GMT
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I discovered an odd bug in make_array()

Try this
plot, make_array(99999L, start=10d, /index, increment=2d, /double)

Then this
plot, make_array(99999L+1L, start=10d, /index, increment=2d, /double)

It looks to me like there's a typecasting problem going on inside the routine, causing problems! I see that the increment keyword was added in 8.3, so there could be a newish bug there.

In this example, once the number of elements grows to 100k, the output is a sawtooth, no longer smooth.

Subject: Re: make_array function bug
Posted by Lajos Foldy on Wed, 25 Jun 2014 08:41:21 GMT
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On Tuesday, June 24, 2014 1:10:18 AM UTC+2, Ken G wrote:
> I discovered an odd bug in make_array()
>
> Try this
>
> plot, make_array(99999L, start=10d, /index, increment=2d, /double)
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> It looks to me like there's a typecasting problem going on inside the routine, causing problems! I see that the increment keyword was added in 8.3, so there could be a newish bug there.

Seems to be a bug in multithreading, the start values for the threads are set incorrectly. It works as expected with 'cpu, tpool_nthreads=1'.

regards,
Lajos

Subject: Re: make_array function bug
Posted by Fabzi on Wed, 25 Jun 2014 09:05:16 GMT

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Good catch!

You should definitely open a bug report for this one...

Subject: Re: make_array function bug
Posted by chris_torrence@NOSPAM on Thu, 03 Jul 2014 09:30:28 GMT
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On Wednesday, June 25, 2014 6:05:16 PM UTC+9, Fabien wrote:
> Good catch!
>
>
>
> You should definitely open a bug report for this one...

Ack. That's too funny. I just discovered this bug at around the same time. It also affects the [0:n:inc] method of creating arrays.

I'll fix it for the next release of IDL.

Cheers,
Chris