Subject: xtickformat type conversion
Posted by Matthew Argall on Fri, 25 Oct 2013 01:56:55 GMT
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CDF_TIME_TT2000 times are type LONG64. When I try to use these values to create a formatted tick label with, say, XTICKLABEL='my_tickformat_function', it automatically converts the times to double precision.

Is there any way to create my own tick-label function and have it preserve the LONG64 data type? (Something like 'HH:MM:SS!CYYYY-MM-DD'... Other date representations have drawbacks that I would like to avoid)

Does this mean that plotted values are also converted to either floats or doubles before being plotted?

Thanks

Subject: Re: xtickformat type conversion
Posted by David Fanning on Fri, 25 Oct 2013 11:56:36 GMT
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Matthew Argall writes:

> CDF_TIME_TT2000 times are type LONG64. When I try to use these values to create a formatted tick label with, say, XTICKLABEL='my_tickformat_function', it automatically converts the times to double precision.
>
> Is there any way to create my own tick-label function and have it preserve the LONG64 data type? (Something like 'HH:MM:SS!CYYYY-MM-DD'... Other date representations have drawbacks that I would like to avoid)

I can think of another drawback. How many of these long numbers to you think you could actually FIT on a plot with your tick formatting function? It seems to me converting to double precision values would make some sense. Then at least you can use exponential notation to shorten them enough to get them on a plot.

> Does this mean that plotted values are also converted to either floats or doubles before being plotted?

I don't know. But if I were writing a plotting function, carrying around 64-bit integers would probably be the last thing I would be thinking about.

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")