
Subject: Re: bug in plotting with large long integers
Posted by [Axel vom Endt](#) on Wed, 24 Mar 1999 08:00:00 GMT
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David Ritscher wrote:

>
> I just came across an interesting bug in IDL and PV-Wave:
>
> plot, /ynozero, lindgen(2000) + long(1e9)
>
> It seems to be thrown off by numeric problems, resulting in a staircase
> instead of a straight line.
>
> David Ritscher

Yes, but this behaviour is documented in the online help of PLOT:

"This argument is converted to single-precision floating-point before plotting. Plots created with PLOT are limited to the range and precision of single-precision floating-point values."

Your long(1e9) is converted to float. Try

```
IDL> print, float(long(1e9) + 1L) - long(1e9)  
0.00000
```

Hope that helps

Axel
