Subject: Re: Try this
Posted by steinhh on Wed, 23 Sep 1998 07:00:00 GMT
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In article <MPG.1071fa8a1e63e2a49896c8@news.frii.com>
davidf@dfanning.com (David Fanning) writes:
>
> Ray Sterner (sterner@tesla.jhuapl.edu) writes:
>
>> Try this:
>>
>> x=dindgen(1000)/999.*20.
>> for f=0.,10.,.02 do begin plot,/xstyl,x+f*1D6,sin(x) & empty & endfor
>
> Totally cool! :-)

Weird yes, but definitively not cool for those who *want* to plot
those data points!

It took me a while to see what was going on here, but
after running Ray's lines, do:

```
plot,(x+1D7)(0:200),/xstyle,/ystyle,psym=3
```

Now, a DOUBLE should have more dynamic range than to say that
e.g., (x+1D7)(50) is *equal* to (x+1D7)(51). Luckily, it does:

```
IDL> print,(x+1d7)([50,51]),form='(g20)'
  10000001.00100100
  10000001.02102102
```

However, it appears that the PLOT command internally just works
with FLOAT precision:

```
IDL> print,FLOAT((x+1d7)([50,51])),form='(g20)'
       1.000000e+07
       1.000000e+07
```

This could have been OK if some "zero point" value (typically the
value of one of the tickmarks) had been subtracted in the process of
converting to float. As it stands, this will have to be done
by the user/programmer.

Regards,

Stein Vidar
(OK, so the visual effect *was* kind of cool :-)