
Subject: Re: PV-Wave plotting adventures
Posted by [Richard G. French](#) on Wed, 02 Jun 1999 07:00:00 GMT
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I think all of this behavior stems from IDL using SINGLE precision constants for plot scales, and I certainly agree that after all these years, it is time to fix this behavior. There have been posts on this newsgroup for some time about the problems this causes, and for the life of me it is hard to see how single precision plot scales can still be justified. Maybe when memory was at a premium and computers were slow, it made sense to do things in single precision, but being stuck with single precision scales is a much worse predicament! I'd love to learn that there is a way around this annoying behavior.

Dick French

Subject: Re: PV-Wave plotting adventures
Posted by [mgs](#) on Wed, 02 Jun 1999 07:00:00 GMT
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In article <37556853.E138DD23@ssec.wisc.edu>, Liam Gumley
<Liam.Gumley@ssec.wisc.edu> wrote:

> Martin LUETHI GL A8.1 2-4092 wrote:
>> Here is a little caveat for all users of PV-Wave plotting routines (I hope
>> this is fixed in IDL!). The errors appeared in PV-WAVE v6.10 (Solaris) but as
>> far as I remember were in all earlier versions (however I did not fully
>> realize the reason of this sometimes strange behaviour...)
> [examples deleted]
>
> The following example produces interesting results in IDL 5.2:
>
> window,/free,xs=500,ys=800
> !p.multi=[0,1,3,0,0]
> !p.charsize=2.0
> dx=1.0d-4
> plot,[0],[0],xrange=[x0,x0+dx],yrange=[x0,x0+dx],xstyle=1,ys tyle=1
> dx=1.0d-3
> plot,[0],[0],xrange=[x0,x0+dx],yrange=[x0,x0+dx],xstyle=1,ys tyle=1
> dx=1.0d-2
> plot,[0],[0],xrange=[x0,x0+dx],yrange=[x0,x0+dx],xstyle=1,ys tyle=1
>
> The non-uniform tick spacing on the Y axis of the middle plot is quite
> novel.
>
> Cheers,
> Liam.

Grid spacing on the top plot is non-uniform for MacOS and Windows with $x_0=100.0d0$, and non-uniform on the middle plot with $x_0=1000.0d0$. Is that also true with UNIX variants?

```
IDL> Help, !Version, /Str
```

```
** Structure !VERSION, 5 tags, length=40:
```

```
ARCH      STRING  'PowerMac'
OS        STRING  'MacOS'
OS_FAMILY STRING  'MacOS'
RELEASE   STRING  '5.2'
BUILD_DATE STRING  'Oct 30 1998'
```

```
IDL> Help, !Version, /Str
```

```
** Structure !VERSION, 5 tags, length=40:
```

```
ARCH      STRING  'x86'
OS        STRING  'Win32'
OS_FAMILY STRING  'Windows'
RELEASE   STRING  '5.2'
BUILD_DATE STRING  'Oct 30 1998'
```

--

Mike Schienle

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Interactive Visuals, Inc.

Remote Sensing and Image Processing

Analysis and Application Development

Subject: Re: PV-Wave plotting adventures

Posted by [Liam Gumley](#) on Wed, 02 Jun 1999 07:00:00 GMT

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Liam Gumley wrote:

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>

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> novel.

A definition for x_0 would be helpful: try either of

x0=1000.0d0
x0=100.0d0

--

Liam E. Gumley
Space Science and Engineering Center, UW-Madison
<http://cimss.ssec.wisc.edu/~gumley>

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Posted by [Liam Gumley](#) on Wed, 02 Jun 1999 07:00:00 GMT
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The non-uniform tick spacing on the Y axis of the middle plot is quite novel.

Cheers,
Liam.

--

Liam E. Gumley
Space Science and Engineering Center, UW-Madison
<http://cimss.ssec.wisc.edu/~gumley>
