
Subject: Bugs with hardware rendering

Posted by [penteado](#) on Mon, 14 Feb 2011 18:21:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

Are there any fixes (or predictions to when there will be) for these two bugs on hardware rendering?

1) With IDL 8, software rendering does not work from the IDLDE:

```
IDL> print,!version
```

```
{ x86_64 linux unix linux 8.0.1 Oct 7 2010 64 64}
```

```
IDL> p=plot(/test)
```

```
% Loaded DLM: XML.
```

```
% IDLITWINDOW::ONEXPOSE: Failure to acquire window rendering context.
```

```
% Unable to acquire device context.
```

```
% Error occurred at: GRAPHIC 22 /usr/local/itt/idl/idl80/
```

```
lib/graphics/graphic_error.pro
```

```
% PLOT 57 /usr/local/itt/idl/idl80/
```

```
lib/graphics/plot.pro
```

```
% $MAIN$
```

```
% Execution halted at: $MAIN$
```

But all is well with software rendering from the command line, and hardware rendering on both. This is particularly troublesome because it generates an inability to use the DE remotely. And troublesome because of the next bug:

2) Surface rendering is markedly different between hardware and software, *for certain data*. Very bad for making surfaces, as one cannot set the lights properly in hardware rendering, as they will be different on files created, and even the output of `copywindow()`. I had to resort to doing a screen capture to make a bitmap.

This code shows problem (2). Note that the difference between the two surfaces is just a constant factor (1d-15):

```
dx=1000
```

```
dy=1000
```

```
z1=randomu(seed,dx,dy,/normal,/double)
```

```
z1[*,dy/2]=1000d0+randomu(seed,dx,/normal,/double)*500d0
```

```
z2=z1*1d-15
```

```
s1=surface(z1,layout=[2,1,1])
```

```
s2=surface(z2,layout=[2,1,2],/current)
```

```
s_win=s1.copywindow()
```

```
im=image(s_win)
```

A screen capture of the hardware rendering of the s1,s2 objects is at

http://www.ppenteado.net/idl/surface_bug_capture.png

While the contents of the im object (made with the save method, with an output that looks the same as I see on the screen) is at

http://www.ppenteado.net/idl/surface_bug_copywindow.png

In software rendering, what shows in the screen is the same as what is made by the copywindow() and save methods.
