Subject: tvrd failure on v5 on win95
Posted by Mirko Vukovic on Tue, 03 Jun 1997 07:00:00 GMT
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ok I just wasted about 4 hours on the following problem on idlv5, windows95 and pentium.

Basically, tvrd is not returning the image. Here is a piece of code:

```
surfdata = shift(dist(20),10,10)
  surfdata = bytscl(exp(-(surfdata/5)^2))



  loadct,25 ;,ncolo=100
  shade_surf,surfdata,shades=surfdata
  clr_surf = tvrd()

  loadct,0
end
```

(some of you may recognize it as part of Struan's surface plotting tutorial).

depending on the color table loaded with LOADCT (I tried 6 and 25), clr_surf contains a severely defficient image. Do a tv,clr_surf, and you will get either only the axes drawn (for color table 25) or a surface image but with colors that do not correspond to the original (for color table 6)

If you look at the histogram of the image you will see that only few of the 255 available values are used (two for color table 25 and several for table 6).

I tried playing with device,decomposed=x, retaining done by IDL, but to no avail. I also tried not using the top 20 colors (as this is used by windows), but this did not help much.

Any clues?

Tia,

--
Mirko Vukovic, Ph.D 3075 Hansen Way M/S K-109
Varian Associates Palo Alto, CA, 94304
415/424-4969 mirko.vukovic@varian.grc.com

Subject: Re: tvrd failure on v5 on win95
Posted by David Foster on Wed, 04 Jun 1997 07:00:00 GMT
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Mirko Vukovic wrote:
>
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> windows95 and pentium.
>
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> (some of you may recognize it as part of Struan's surface plotting
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> the 255 available values are used (two for color table 25 and several
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> I tried playing with device,decomposed=x, retaining done by IDL, but to
> no avail. I also tried not using the top 20 colors (as this is used by
> windows), but this did not help much.
>

Mirko -

I had many problems with TVRD() with IDL 4.0.1 and earlier, under
Solaris 2.X.
I wrote a routine I called SAFE_TVRD(), that uses the DEVICE, COPY=[]
command
to read from the window. This routine solved the problem we were having.
I have

mailed it to you; hopefully it may help with your problem. It is a bit slower,
because it has to create an extra pixmap window first, but if it works...

It was confirmed by RSI tech support that there were problems with TVRD() under
Solaris 2.X/OpenWindows, even when backing store was provided by IDL (yes, I tried
that first). There were problems with TVRD() if the window was obscured or iconified, or if the graphics window was a scrollable draw widget.

I haven't verified yet whether any of these problems persist with IDL 5.0. I DO
know that SAFE_TVRD() is still safe! ;-)

Dave
--

~~~~~~ ~~~~~~~
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~~~~~~ ~~~~~~~

"I have this theory that if we're told we're bad,
then that's the only idea we'll ever have.
But maybe if we are surrounded in beauty,
someday we will become what we see." - Jewel Kilcher

Subject: Re: tvrd failure on v5 on win95
Posted by Mirko Vukovic on Wed, 04 Jun 1997 07:00:00 GMT
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Struan Gray wrote:
>
> Mirko Vukovic, mirko.vukovic@grc.varian.com writes:
>
>> (some of you may recognize it as part of Struan's
>> surface plotting tutorial).
>
> I thought it looked familiar :-)
>
>> _depending_ on the color table loaded with LOADCT (I
>> tried 6 and 25), clr_surf contains a severely defficient

>> image. Do a tv,clr_surf, and you will get either only the
>> axes drawn (for color table 25) or a surface image but with
>> colors that do not correspond to the original (for color
>> table 6)
>
> It could be a bug in v5.0 but I would guess you are doing this on
> a 16-bit or 24-bit display where TVRD doesn't return the colour index
> used to plot the image, but instead gives you whichever of the red,
> green and blue values for each pixel is largest. With some colour
> tables this can give very different results from what you get on an
> 8-bit display.

I'll look into that, but I am doubtfull, since I am already specifying
device,/decomposed=0 (to enforce the 8bit mode).

thanks
--
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Subject: Re: tvrd failure on v5 on win95
Posted by William Thompson on Thu, 05 Jun 1997 07:00:00 GMT
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David Foster wrote:

...

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> Solaris 2.X.
> I wrote a routine I called SAFE_TVRD(), that uses the DEVICE, COPY=[]
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> to read from the window. This routine solved the problem we were having.
> I have
> mailed it to you; hopefully it may help with your problem. It is a bit
> slower,
> because it has to create an extra pixmap window first, but if it
> works...

Could you also post that routine?

Thanks,

Bill Thompson
