Subject: RGB image to 8 bit ??
Posted by Richard Tyc on Thu, 09 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

I am a little confused with the following issue:

I am trying to animate a sequence of images from a IDLgrWindow. The window image is drawn into a buffer object and then read later to retrieve it.

ie.
oImgBuf = sState.oBuf->read()
oImgBuf->getproperty,data=animImage

At this point, the image is a bytarr[3,512,512]

In order to load it into Xinteranimate, it needs to be in bytarr[512,512] form ?

So, how do you convert a RGB triple image into a single 8-bit image while retaining
the colors (although lower resolution of color)

Do I have to convert each R,G,B triple into a 24 bit integer and then bytscl it between 0-255 (then load anappropriate color table) ?

I was doing th following which produce a grey scale output (with color table 0)

Xinteranimate, Frame = nimg, image=reform(animImage[0,*,*])

Thanks

Rich

File Attachments

1) richt.vcf, downloaded 123 times

Subject: Re: RGB image to 8 bit ??
Posted by davidf on Fri, 10 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

Liam Gumley (Liam.Gumley@ssec.wisc.edu) writes:

> That said, I also think a 24-bit capable version of XInteranimate would
> be useful.

You know, as soon as I sent that post yesterday I started worrying that I may had gotten it wrong. I remember wanting to display 24-bit images in XInteranimate, and I remember looking at the code, and I remember that whatever I did was very simple, but I couldn't q-u-i-t-e remember what I actually did. So I went back this morning and looked at the code. And it turns out I did *nothing*!

That's right. XInterAnimate is *already* 24-bit image compliant. [Sorry, RSI. :-(]

Actually, it is the fact that XInterAnimate uses the Device Copy technique of transferring each image frame from its pixmaps to the display window that makes it so. This technique doesn't care *what* is in the window, it just transfers the "bits", if you like.

So, you use XInterAnimate with 24-bit images, all you have to do is load them properly:

```
XInterAnimate, /ShowLoad, Set=[512, 512, 15]
For J=0, 14 DO BEGIN
   TV, image24[j], True=1
   XInterAnimate, Frame=j, Window=!D.Window
EndFor
XInterAnimate
```

It is true that you can't use the IMAGE keyword, and that is a shame, but this may be the preferred solution anyway, since you don't have to do any COLOR_QUANing at all to use it.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: RGB image to 8 bit ??
Posted by Richard Tyc on Mon, 13 Sep 1999 07:00:00 GMT
View Forum Message <> Reply to Message

I ended up taking your first advice and created Xinteranimate24 which was
very simple. In the CW_Animate_Load procedure I needed to add the true
keyword (I actually created CW_ANIMATE_LOAD24 which Xinteranimate24 calls)
and change some array subscripts on image size where it was grabbing size[1]
and size[2] for xsize and ysize which now requires size[2] and size[3] since
size[1] is 3.

I'll try your idea as well.

Thanks

Rich

David Fanning wrote in message ...
> Liam Gumley (Liam.Gumley@ssec.wisc.edu) writes:
>
>> That said, I also think a 24-bit capable version of XInteranimate would
>> be useful.
>
> You know, as soon as I sent that post yesterday I started worrying
> that I may had gotten it wrong. I remember wanting to display
> 24-bit images in XInteranimate, and I remember looking at the
> code, and I remember that whatever I did was very simple, but
> I couldn't q-u-i-t-e remember what I actually did. So I went
> back this morning and looked at the code. And it turns out
> I did *nothing*!
>
> That's right. XInterAnimate is *already* 24-bit image
> compliant. [Sorry, RSI. :-(]
>
> Actually, it is the fact that XInterAnimate uses the
> Device Copy technique of transferring each image frame
> from its pixmaps to the display window that makes it
> so. This technique doesn't care *what* is in the window,
> it just transfers the "bits", if you like.
>
> So, you use XInterAnimate with 24-bit images, all you have
> to do is load them properly:
>
>   XInterAnimate, /ShowLoad, Set=[512, 512, 15]
>   For J=0, 14 DO BEGIN
>   TV, image24[j], True=1
>   XInterAnimate, Frame=j, Window=!D.Window
>   EndFor
>   XInterAnimate
>
> It is true that you can't use the IMAGE keyword, and that
> is a shame, but this may be the preferred solution anyway,

> since you don't have to do any COLOR_QUANing at all to use
> it.
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting
> Phone: 970-221-0438 E-Mail: davidf@dfanning.com
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: RGB image
Posted by Liam E. Gumley on Thu, 10 Jan 2002 20:18:36 GMT
View Forum Message <> Reply to Message

Dominik Paul wrote:
> I tried a lot of thinks to display an RGB picture. It is in an array pic[3,
> 100, 100] with the 3 color channels and the size 100 square 100.
> Does somebody know a posibility to draw this 3 channels in one picture like
> an real RGB picture.

Grab IMDISP from

http://www.gumley.com/PIP/Free_Software.html

Cheers,
Liam.
Practical IDL Programming
http://www.gumley.com/

Subject: Re: RGB image
Posted by David Fanning on Thu, 10 Jan 2002 20:27:23 GMT
View Forum Message <> Reply to Message

Dominik Paul (dpaul@ukl.uni-freiburg.de) writes:

> I tried a lot of thinks to display an RGB picture. It is in an array pic[3,
> 100, 100] with the 3 color channels and the size 100 square 100.
> Does somebody know a posibility to draw this 3 channels in one picture like
> an real RGB picture.
> Help would be very nice.

I would suggest one of these methods:

TVImage, picture
IMDisp, picture
PlotImage, picture

You can find them in the usual places. :-)

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: RGB image
Posted by Dick Jackson on Fri, 11 Jan 2002 17:03:47 GMT
View Forum Message <> Reply to Message

"Dominik Paul" <dpaul@ukl.uni-freiburg.de> wrote in message
news:a1kkuo$170$1@n.ruf.uni-freiburg.de...
> Hi there,
>
> I tried a lot of thinks to display an RGB picture. It is in an array
pic[3,
> 100, 100] with the 3 color channels and the size 100 square 100.
> Does somebody know a posibility to draw this 3 channels in one picture
like
> an real RGB picture.

I may be missing something that my learned colleagues Liam and David are
seeing, but perhaps what you want is simply:

TV, /True, pic

Cheers,
--
-Dick

Dick Jackson / dick@d-jackson.com
D-Jackson Software Consulting / http://www.d-jackson.com
Calgary, Alberta, Canada / +1-403-242-7398 / Fax: 241-7392

Subject: Re: RGB image
Posted by David Fanning on Fri, 11 Jan 2002 17:18:31 GMT
View Forum Message <> Reply to Message

Dick Jackson (dick@d-jackson.com) writes:

> I may be missing something that my learned colleagues Liam and David are
> seeing, but perhaps what you want is simply:
>
> TV, /True, pic

Well, at least until you want PostScript output. :-)

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: RGB image
Posted by David Fanning on Fri, 11 Jan 2002 17:20:26 GMT
View Forum Message <> Reply to Message

David Fanning (david@dfanning.com) writes:

> Well, at least until you want PostScript output. :-)

Whoops! Should have been *understandable* PostScript
output.

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155
