
Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [David Fanning](#) on Tue, 10 Jun 2003 23:18:31 GMT
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Dan Dye writes:

```
> I don't use the z graphics buffer much but I've been dropped into the
> deep end by my temp ION license. I have an image, 'picC'
>
> picC=congrid(pic,3,400,400) ;where 3=[r,g,b]
>
> normally, I would tv this image:
>
> tv, picC, true=1
>
> but this returns only a small portion of the lower right corner of the
> image with a strange interference pattern. I consulted the
> Fanning/Lumley/RSI documentation and found that the z buffer doesn't
> accept truecolor so I'm pretty amazed that I got anything plotted at
> all.
>
> tv, picC[0,*,*]
> gives me a nice pseudoColor of the first band and at the full size.
>
> How can I get this image tv'd as and rgb?
```

If it were me, I'd be using TVImage or ImDisp, or
one of those other programs you were reading about,
since they all do this automatically. :-)

Cheers,

David

--

David 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/>

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [ddye](#) on Wed, 11 Jun 2003 13:25:13 GMT
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Thanks David. I did glean from TVImage the "Color_Quan" function.

-----< snip >-----

The COLOR_QUAN function quantizes a TrueColor image and returns a pseudo-color image and palette to display the image on standard pseudo-color displays. The output image and palette can have from 2 to 256 colors.

COLOR_QUAN solves the general problem of accurately displaying decomposed, TrueColor images, that contain a palette of up to 224 colors, on pseudo-color displays that can only display 256 (or fewer) simultaneous colors.

-----< snip >-----

```
tv, Color_Quan(picC,1,R,G,B,COLORS=255)
```

This would seem to be the trick but the result looks poor compared to the truecolor image....

David W. Fanning <david@dfanning.com> wrote in message
news:<MPG.1950152f3957eac9989682@news.frii.com>...

> Dan Dye writes:

>

>> I don't use the z graphics buffer much but I've been dropped into the
>> deep end by my temp ION license. I have an image, 'picC'

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> If it were me, I'd be using TVImage or ImDisp, or
> one of those other programs you were reading about,
> since they all do this automatically. :-)

>

> Cheers,
>
> David

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [David Fanning](#) on Wed, 11 Jun 2003 13:41:08 GMT
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Dan Dye writes:

> Thanks David. I did glean from TVImage the "Color_Quan" function.
>
> -----< snip >-----
> The COLOR_QUAN function quantizes a TrueColor image and returns a
> pseudo-color image and palette to display the image on standard
> pseudo-color displays. The output image and palette can have from 2 to
> 256 colors.
>
> COLOR_QUAN solves the general problem of accurately displaying
> decomposed, TrueColor images, that contain a palette of up to 224
> colors, on pseudo-color displays that can only display 256 (or fewer)
> simultaneous colors.
> -----< snip >-----
>
> tv, Color_Quan(picC,1,R,G,B,COLORS=255)
>
> This would seem to be the trick but the result looks poor compared to
> the truecolor image....

Well, in IDL (as in life) it is hard to have your
cake and eat it too.

Cheers,

David

P.S. Let's just say if your image has 16.7 million colors and
you have to pick 224 to display it, compromises will have to
be made. :-(

--

David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [Liam E. Gumley](#) on Wed, 11 Jun 2003 14:42:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Dan Dye" <ddye@flenvironmental.org> wrote in message
news:dfc65bba.0306101448.45816068@posting.google.com...
> I don't use the z graphics buffer much but I've been dropped into the
> deep end by my temp ION license. I have an image, 'picC'
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> all.
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> tv, picC[0,*,*]
> gives me a nice pseudoColor of the first band and at the full size.
>
> How can I get this image tv'd as and rgb?

Could you restate your problem in terms of what you are trying to achieve?
I'm curious as to why you want to use the Z-buffer (I know nothing about
ION).

Any who is this Lumley person?

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

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [David Fanning](#) on Wed, 11 Jun 2003 15:06:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

David W. Fanning writes:

> P.S. Let's just say if your image has 16.7 million colors and
> you have to pick 224 to display it, compromises will have to
> be made. :-(

I got to thinking about this after I wrote it.
There actually **is** good news here.

I was celebrating my 25th wedding anniversary yesterday
and it occurred to me that the compromises you have to
make to get your colors just about right are at
least 10-fold less onerous than the compromises
you have to make to keep a marriage together for a
long time. :-)

Cheers,

David

--

David W. Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [Craig Markwardt](#) on Thu, 12 Jun 2003 01:15:03 GMT
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David W. Fanning <david@dfanning.com> writes:

>
> I was celebrating my 25th wedding anniversary yesterday
> and it occurred to me that the compromises you have to
> make to get your colors just about right are at
> least 10-fold less onerous than the compromises
> you have to make to keep a marriage together for a
> long time. :-)

Does this work?

MARRIAGE, DECOMPOSED=0

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: ION_IMAGE 8bit/24bit color
Posted by [ddye](#) on Thu, 12 Jun 2003 17:48:57 GMT
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- > Could you restate your problem in terms of what you are trying to achieve?
- > I'm curious as to why you want to use the Z-buffer (I know nothing about
- > ION).
- >
- > Any who is this Lumley person?

Giam Lumley right? Oh, maybe not... Sorry Liam.

From my very limited understanding of ION, it passes image information from IDL to the webpage via the Z buffer. If it is possible to use truecolor in ION generated images I would very much like to hear about it but I now have acceptable results by adding "cube=6"

```
read_jpeg, fname, image24bit ;wedding day quality image
image24bit = congrid(image24bit,3,400,400)
loadct, 13
image8bit=Color_Quan(image24bit,1,R,G,B,COLORS=255, cube=6)
TVLCT, r, g, b
TV, image8bit ;image after 25 years of marriage
```

-d
