Subject: Re: color pixel by index Posted by David Fanning on Mon, 24 Sep 2007 20:09:27 GMT View Forum Message <> Reply to Message

rpertaub@gmail.com writes:

```
i think this is a fairly easy problem to which i dunno the answer.
Here goes:
I have 3 images, and used where function 3 times to find 3 specific
characterizations.
mask1=where(image ge thresh1)
mask2=where(image2 ge thresh2)
mask 3=where(image3 ge thresh3)
Now I have 3 sets of indices of pixels of my interest.
I want to use image 4 and color pixels indices 1 red, indices 2= blue, indices 3=green.
image[indices1]=red
image[indices2]=blue
image[indices3]=green
```

I would do it like this, since you may want to see the overlap in the indices:

> How do I do that?

```
s = Size(image, /Dimensions)

nelem = N_Elements(image)

image4 = BytArr(s[0], s[1], 3]

image4[mask1] = 255B

image4[mask3 + nelem] = 255B

image4[mask2 + (nelem*2)] = 255B

TV, image4, True=3
```

This presumes all three image used to construct the masks are the same size.

Cheers.

David

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

```
On Sep 24, 4:09 pm, David Fanning <da...@dfanning.com> wrote:
> rpert...@gmail.com writes:
>> i think this is a fairly easy problem to which i dunno the answer.
>> Here goes:
>> I have 3 images, and used where function 3 times to find 3 specific
>> characterizations.
>> mask1=where(image ge thresh1)
>> mask2=where(image2 ge thresh2)
>> mask 3=where(image3 ge thresh3)
>> Now I have 3 sets of indices of pixels of my interest.
>> I want to use image 4 and color pixels indices 1 red, indices 2= blue,
>> indices 3=green.
>
>> image[indices1]=red
>> image[indices2]=blue
>> image[indices3]=green
>> How do I do that?
> I would do it like this, since you may want to
> see the overlap in the indices:
>
    s = Size(image, /Dimensions)
>
    nelem = N Elements(image)
>
    image4 = BytArr(s[0], s[1], 3]
>
    image4[mask1] = 255B
>
    image4[mask3 + nelem] = 255B
    image4[mask2 + (nelem*2)] = 255B
>
    TV, image4, True=3
>
> This presumes all three image used to construct the masks
 are the same size.
>
 Cheers,
>
>
> David
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
```

Thanks so much!

However, this seems to combine the 3 masks onto one. I am trying to use the 3 masks combined onto a 4th image which ... i am essentially taking monochromator images at R,G,B and then color image, and want to false color my image using the 3 masks...not sure if I am making sense

Subject: Re: color pixel by index
Posted by David Fanning on Mon, 24 Sep 2007 21:00:58 GMT
View Forum Message <> Reply to Message

rpertaub@gmail.com writes:

- > However, this seems to combine the 3 masks onto one. I am trying to
- > use the 3 masks combined onto a 4th image which ...
- > i am essentially taking monochromator images at R,G,B and then color
- > image, and want to false color my image using the 3 masks...not sure
- > if I am making sense

Not to me, you aren't. Perhaps someone else can translate. :-)

Cheers.

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: color pixel by index
Posted by David Fanning on Mon, 24 Sep 2007 21:04:58 GMT
View Forum Message <> Reply to Message

rpertaub@gmail.com writes:

- > However, this seems to combine the 3 masks onto one. I am trying to
- > use the 3 masks combined onto a 4th image which ...
- > i am essentially taking monochromator images at R,G,B and then color
- > image, and want to false color my image using the 3 masks...not sure
- > if I am making sense

Maybe you just want image 4 to start out as image 4, and then my example will work. Instead of this:

image4 = Bytarr(s[0], s[1], 3)

```
Try this:
 image4 = [[[image4]],[[image4]],[[image4]]]
Then, the rest of it.
Cheers.
David
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Subject: Re: color pixel by index
Posted by David Fanning on Mon, 24 Sep 2007 21:15:29 GMT
View Forum Message <> Reply to Message
David Fanning writes:
> Maybe you just want image 4 to start out as image 4, and then
> my example will work. Instead of this:
>
    image4 = Bytarr(s[0], s[1], 3)
>
> Try this:
    image4 = [[[image4]],[[image4]],[[image4]]]
>
> Then, the rest of it.
Oh, that won't work. How about this:
 s = Size(image, /Dimensions)
 nelem = N_Elements(image)
 image4 = [[[image4]],[[image4]],[[image4]]]
 image4[mask1] = 255B
 image4[mask1 + nelem] = 0B
 image4[mask1 + (nelem*2)] = 0B
 image4[mask3] = 0B
 image4[mask3 + nelem] = 255B
 image4[mask3 + (nelem*2)] = 0B
 image4[mask2] = 0B
```

image4[mask2 + nelem] = 255B

```
image4[mask2 + (nelem*2)] = 255B
TV, image4, True=3
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: color pixel by index

Posted by David Fanning on Mon, 24 Sep 2007 21:18:38 GMT

View Forum Message <> Reply to Message

David Fanning writes:

- > image4[mask2] = 0B
- > image4[mask2 + nelem] = 255B
- > image4[mask2 + (nelem*2)] = 255B
- > TV, image4, True=3

Whoops! Of course this should be:

image4[mask2] = 0B image4[mask2 + nelem] = 0B image4[mask2 + (nelem*2)] = 255B TV, image4, True=3

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: color pixel by index

Posted by rpertaub@gmail.com on Mon, 24 Sep 2007 22:02:44 GMT

View Forum Message <> Reply to Message

On Sep 24, 5:18 pm, David Fanning <da...@dfanning.com> wrote:

- > David Fanning writes:
- >> image4[mask2] = 0B
- >> image4[mask2 + nelem] = 255B
- >> image4[mask2 + (nelem*2)] = 255B
- >> TV, image4, True=3

>

```
    > Whoops! Of course this should be:
    > image4[mask2] = 0B
    > image4[mask2 + nelem] = 0B
    > image4[mask2 + (nelem*2)] = 255B
    > TV, image4, True=3
    > --
    > David Fanning, Ph.D.
    > Fanning Software Consulting, Inc.
    > Coyote's Guide to IDL Programming:http://www.dfanning.com/
```

Thanks! I actually just started with: image4 = [[[image4]],[[image4]], [[image4]]] and did the rest as you mentioned initially and have exactly what I want...thanks so much for the help and deciphering my cry for help!! RP