
Subject: Re: how to make a mask from a picture and how to put...

Posted by [David Fanning](#) on Thu, 04 Mar 2004 17:25:03 GMT

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

Thomas Nehls writes:

```
> thank you that is interesting, but:
>
> I especially want to avoid drawing by hand! I already have my black and
> white image bw (1,400,400) which results by some calculations from the
> original image "org"(3,400,400).
> Now I want to multiply these two images in that way, that everywhere
> where my "bw" is black (or white, whatever) should be black in the
> resulting image "res". the following loop did not work...
> for x=400, Y=400
>   for X = 1:400
>     for Y =1:400
>       res(Z=0:3,X,Y) = bw(X,Y) * org(Z=0:3,X,Y)
>     end
>   end
> end
> Do you understand what I want to do?
```

Yes, but I was hoping you would be able to read between the lines a bit. (I don't know why I thought this. I haven't had a bit of luck this week! But there you go, an eternal optimist!)

OK, I would REFORM your B&W image into a 2D array, not a 3D. You will just get confused with that extra 1 dimension hanging around. (Or, at least, I do.)

```
image = Reform(bw)
```

I'm going to assume black image pixels are 0, everything else is something other than 0.

```
mask = image GT 0
```

Mask now contains a 1 where you want the "light" to shine through and 0 where you want to block it. If your situation is the other way around, subtract 1 from mask.

Now you have to apply the mask to the three image planes. Let's rearrange your pixel interleaved image into a band interleaved so we don't have that pesky 1 dimension to deal with:

```
maskedImage = Transpose(res, [1,0,2])
```

Now apply the mask to each color plane:

```
FOR j=0,2 DO maskedImage[0,0,j] = maskedImage[0,0,j]*mask
```

If you *have* to have a pixel-interleaved image:

```
maskedImage = Transpose(maskedImage, [2,0,1])  
TV, maskedImage, True=1
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

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