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Subject: Re: Changing the order of true color images  
Posted by [Martin Downing](#) on Tue, 15 Jan 2002 10:01:10 GMT  
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Hi Ronn,

Flipping an image in Y really is very trivial C code, but maybe if you are not used to image data it seems hard. I'll do it for 2d for you below, extending to 3d when pixel interleaved will be just a matter of setting

```
sx = dim_x*3
```

excuse any syntax errors as I'm writing this on the fly and am a little rusty on my C code :), but I'd hope anyone using C could correct it!

ps: Byte == unsigned char

```
void flipY(Byte *image, int sx, int sy) // image block , x_size, y_size
```

```
{  
  int i,j, hy;  
  Byte tmp; // temp storage for  
  hy = sy/2; // halfway through the image
```

```
  for (j = 0;j <hy;j++) {  
    for (i = 0;i <sx;i++) {  
      // SWAP PIXELS [i,j] <=> [i,sy-j]  
      tmp = image[i+sx*j];  
      image[i+sx*j]= image[i+sx*(sy-j)];  
      image[i+sx*(sy-j)] = tmp;  
    } // END FOR I  
  } // END FOR J
```

```
} // END FUNCTION
```

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Martin Downing,  
Clinical Research Physicist,  
Grampian Orthopaedic RSA Research Centre,  
Woodend Hospital, Aberdeen, AB15 6LS.  
[m.downing@abdn.ac.uk](mailto:m.downing@abdn.ac.uk)

"ronn kling" <[ronn@rlkling.com](mailto:ronn@rlkling.com)> wrote in message  
news:B868C3C9.409F%[ronn@rlkling.com](mailto:ronn@rlkling.com)...

> ?

>>

>> Have you tried the TRANSPOSE function?

>>

>> For example, to change the dimensions from (3, m, n) to (m, n, 3):

```
>>
>> a = transpose(temporary(a), [1, 2, 0])
>>
> Hi Liam,
>
> I guess I should have been clearer... Right now I can rotate the image
once
> I get it back into IDL, but I would prefer to rotate it on the C side.
Speed
> isn't the issue, having a clean interface for the user is.
>
> I know it is just loops and such, but I was hoping that someone had
already
> solved it.
>
> Thanks,
> Ronn
>
>
> --
> Ronn Kling
> KRS, inc.
> email: ronn@rlkling.com
> "Application Development with IDL" programming book updated for IDL5.5!
> "Calling C from IDL, Using DLM's to extend your IDL code" NEW BOOK!
> http://www.rlkling.com/
>
>
```

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