Subject: Converting 24 bit images to 8 bit images with a specific colour table
Posted by philaldis on Thu, 06 May 1999 07:00:00 GMT
View Forum Message <> Reply to Message

Well, the subject says it all, really.

If I have a 24bit image and I want to convert it to an 8bit image
which uses a particular table, so find nearest values.

This is of particular use, when you're writing multiple gifs from 24
bit images, because color_quan, will obviously not work, because the
colour table has to be global.

The only way I can think to do it is very slow and certainly not using
IDL array operations. For simplicity I'll asume that the image is
interleaved true=1, i.e. 3 x n x m

```
FUNCTION ConvertTo8Bit, image, r, g, b, TRUE=true

colours = BytArr(3,256)
colours[0,*] = r
colours[1,*] = g
colours[2,*] = b
convertedImage = BytArr((Size(image, /DIMENSIONS))[1],(Size(image,
/DIMENSIONS))[2])
multiplier = REPLICATE(1B, 256)
FOR i=0, (Size(image, /DIMENSIONS))[1]-1 DO BEGIN
 FOR j=0, (Size(image, /DIMENSIONS))[2]-1 DO BEGIN
  temp = TOTAL(ABS(colours-([image[0,i,j],image[1,i,j],
image[2,i,j]]#multiplier)), 1)
  temp1 = (WHERE(temp EQ Min(temp)))[0]
  convertedImage[i,j] = temp1
 ENDFOR
ENDFOR
RETURN, convertedImage
END
```

There must be a better way to do it.....

Cheers,
Phil Aldis