
Subject: convert read_bpm(file, R, G, B) to N x M x 3 array?

Posted by [Mike\[2\]](#) on Wed, 28 Feb 2007 17:24:38 GMT

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Dear IDL gang,

If I read a color bitmap file like this:

```
bmp = READ_BMP(filename, R, G, B)
```

bmp is an N x M array with values that are indices of the RGB arrays. For example, if `bmp[5,10] = 3`, the color triple for that pixel is `R[3], G[3], B[3]`. To convert this to an N x M x 3 for widget_button values, I've used a brute force method:

```
bmp = read_bmp(filename, R, G, B)
```

```
s = size(bmp, /structure)
```

```
Nx = s.dimensions[0]
```

```
Ny = s.dimensions[1]
```

```
Nc = n_elements(R)
```

```
bmpR = bytarr(Nx, Ny)
```

```
bmpG = bytarr(Nx, Ny)
```

```
bmpB = bytarr(Nx, Ny)
```

```
for c = 0, Nc-1 do begin
```

```
  i = where(bmp eq c, count)
```

```
  if count gt 0 then begin
```

```
    bmpR[i] = R[c]
```

```
    bmpG[i] = G[c]
```

```
    bmpB[i] = B[c]
```

```
  endif
```

```
endfor
```

```
result = [[[bmpR]], [[bmpG]], [[bmpB]]]
```

It seems like there ought to be a more IDLy way to do this, but my juggling skills are failing me. Can anyone suggest something that takes fewer lines of code and is more consistent with The IDL Way?

Mike
