
Subject: Re: Image structure

Posted by [David Fanning](#) on Sat, 27 Mar 2004 17:07:48 GMT

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Julio writes:

- > Let me explain what I'm thinking. Please tell me if it is possible.
- > The image is constructed through:
- >
- > Image = [(Band1), (Band2), (Band3), (Band4), (Band5)]
- >
- > However, sometimes I don't have all the bands. Supposing I have only
- > Bands 1 and 3, what value I must put in place of Band2, Band4 and
- > Band5, once I won't use them? The idea is to take these bands out from
- > the equation.
- >
- > I tried to put 0 in these places, but it doesn't work, once Bands 1
- > and 3 are two-dimensional matrices and 0 is not.
- >
- > Case statement may help, but I have too combinations. Could you please
- > explain what you mean?

I can't tell exactly what you are trying to do here,
but you have two choices, I think. If the "image" is
always to have five bands, then if you don't have
a particular band, you have to fake it.

Suppose these bands were 400 by 500 integer arrays,
and that band1 is absent:

```
IF N_Elements(band1) EQ 0 THEN band1 = BytArr(400,500)
...
Image = [(Band1), (Band2), (Band3), (Band4), (Band5)]
```

Now, band1 contains all zeros. (Or whatever value you
assign it that makes sense to you.)

If the image is composed of any band that happens to
be available, you have to be more inventive. How about
something like this:

```
image = IntArr(400,500,5)
good = IntArr(5)

IF N_Elements(band1) NE 0 THEN BEGIN
  image[:,*,0] = band1
  good[0] = 1
ENDIF
```

```
...
  IF N_Elements(band5) NE 0 THEN BEGIN
    image[*,*,4] = band5
    good[4] = 1
  ENDIF

  bands_exist = Where(good GT 0, count)
  IF count GT 0 THEN image = image[*,*,bands_exist] ELSE $
    Print, "No bands available"
```

Now image is a 400 by 500 by however-many-bands-actually-exist array.

Cheers,

David

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