
Subject: Re: Working with color, cursor, and png to extract information

Posted by [David Fanning](#) on Mon, 04 Feb 2008 20:31:19 GMT

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Brian Larsen writes:

- > What I want to do:
- > - Start with a png image from old research (like
- > http://www.dfanning.com/programs/docs/read_toms_aerosol.jpg)
- > - read in the png (yes I know the example is a jpg, but it should be
- > the same procedure)
- > - extract the "value" at each pixel in the image based on the colorbar

The problem is that this image is not a reflection of "values", it is a reflection of colors used to represent those values. And those colors are not built into the palette, which as you see is just strictly gray scale, but into the fabric of the image itself. This is not the kind of image you can do science with, I guess is what I am saying.

An image is encoded with a scheme that can represent 16.7 million colors. A color table typically contains 256 colors. But, *which* 256!? Obviously, there is no one-to-one relationship.

Suppose you do a statistical analysis and find that out of the 16.7 million possible triples, you only have 16 in your image, representing 16 colors. You still don't know the foggiest thing about the *values* those colors represent, unless you have information you are not sharing with us. That is to say, the "meaning" of those color triples is not encoded in the image in any way. Presumably when you look for a "value", you are looking for a physically meaningful number. There are no such numbers in a 24-bit image.

Cheers,

David

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
