Subject: Re: display many color images Posted by davidf on Sun, 26 Jan 1997 08:00:00 GMT

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Ding Wu <dwu@larry.cc.emory.edu> writes:

> Anyone knows how to display many color images simultaneously.

>

- > Splitting the color table will badly damage the color, and almost
- > impossible for many, say 20, images.

>

- > I am thinking writing something using fixed the color table, using 256
- > colors to approximate all the colors, then images pixels looking for its
- > most close representations in the color table. It defenitely changes the
- > colors of the image, just fools human's eyes.

I gave Ding a rather flippant suggestion about purchasing a 24-bit graphic card in an earlier post, but Paul Sorenson sent me a suggestion that had never occurred to me. (This is something Paul has a knack for doing!) He suggested this might be accomplished by using the COLOR\_QUAN procedure with the CUBE keyword set.

Since I didn't even know the COLOR\_QUAN procedure \*had\* a CUBE keyword, I read up on it. This is a really good suggestion! But, unfortunately, in the little example program I wrote below, I am not too keen on the result. I think the problem is that the COLOR\_QUAN procedure cannot dither the resulting images when it calculates the image values from the color cube. This results in images that look "spotty" to me.

But I thought others might be interested in this novel approach. I did the color table loading in the Z-buffer to take advantage of its 256 colors

Thanks again to Paul.

David

\*\*\*\*\*\*\*\*\*

PRO EXAMPLE image = BYTSCL(DIST(256), TOP=255) thisDevice = !D.NAME SET\_PLOT, 'Z'

; Gray-scale Colors

LOADCT, 0 TVLCT, r, g, b, /GET image1 = COLOR\_QUAN(r(image), g(image), b(image), r, g, b, CUBE=6) ; Standard Gamma II Colors LOADCT, 5 TVLCT, r, g, b, /GET image2 = COLOR\_QUAN(r(image), g(image), b(image), r, g, b, CUBE=6) ; Blue-Red Colors LOADCT, 11 TVLCT, r, q, b, /GET image3 = COLOR\_QUAN(r(image), g(image), b(image), r, g, b, CUBE=6) SET\_PLOT, thisDevice ; Load the COLOR\_QUAN colors. TVLCT, r, g, b WINDOW, 1, XSize=256, YSize=256 TV, BYTSCL(image1, TOP=215)

WINDOW, 2, XSize=256, YSize=256 TV, BYTSCL(image2, TOP=215)

WINDOW, 3, XSize=256, YSize=256 TV, BYTSCL(image3, TOP=215)

**END** \*\*\*\*\*\*\*\*\*\*\*\*\*

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> Better idea, or any written codes, please.

I think purchasing a 24-bit video card would be a LOT less work! :-)

## David

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