Subject: color mapping question
Posted by gennari on Thu, 29 Aug 1996 07:00:00 GMT

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Hi all,

I have a 256 color grayscale image and i'd like to overlay a
coastline with some color (red). How would I strech the grayscale
data values to fit 0-254 and reserve value 255 for a certain rgb
color? I'm Not having much luck with STRETCH,0,254 and then assigning
a rgb color to 255.

Thanks,
Scott

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2565 The Mall, Keller 304A
Honolulu, HI 96822   email gennari@Hawaii.Edu

Subject: Re: color mapping question
Posted by Liam Gumley on Thu, 29 Aug 1996 07:00:00 GMT

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Scott Gennari wrote:
> I have a 256 color grayscale image and i'd like to overlay a
> coastline with some color (red). How would I strech the grayscale
> data values to fit 0-254 and reserve value 255 for a certain rgb
> color? I'm Not having much luck with STRETCH,0,254 and then assigning
> a rgb color to 255.

Try something this:

```
;- load grey scale color table

loadct,0

;- display image scaled to full color range, leaving one color
;- free at top of lookup table

tv,bytscl(dist(256),top=!d.n_colors-2)

;- make top color in lookup table red

tvlct,r,g,b,/get
g(!d.n_colors-1)=0
```

```
b(!d.n_colors-1)=0
tvlct,r,g,b

;- overplot a line in red

plots,[0,0],[200,200],color=!d.n_colors,/device
```

Cheers,
Liam.

Subject: Re: color mapping question
Posted by Christian Soeller on Thu, 29 Aug 1996 07:00:00 GMT
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gennari@universe.Hawaii.edu (Scott Gennari) writes:

> I have a 256 color grayscale image and i'd like to overlay a
> coastline with some color (red). How would I strech the grayscale
> data values to fit 0-254 and reserve value 255 for a certain rgb
> color? I'm Not having much luck with STRETCH,0,254 and then assigning
> a rgb color to 255.

Even on a 256 color display IDL will in general only have a subset of all
those colors as a few are normally already allocated by other applications.
The actual number of colors available to IDl can be found in the sys var
!D.TABLE_SIZE. So you might try to scale your data to 0...!D.TABLE_SIZE-2
and assign the color number !D.TABLE_SIZE-1 to red (colors 0...!D.TABLE_SIZE-2
set to shades of grey from 0 to 255). You get the idea. See also documentation
for the TVSCL procedure.

Hope this helps,

 Christian

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Christian Soeller   mailto: csoelle@sghms.ac.uk
St. Georges Hospital Medical School   Dept. of Pharmacology
Cranmer Terrace   London SW17 0RE

Subject: Re: color mapping question
Posted by David Foster on Thu, 29 Aug 1996 07:00:00 GMT
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Christian Soeller wrote:
>

> gennari@universe.Hawaii.edu (Scott Gennari) writes:
>
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>> coastline with some color (red). How would I strech the grayscale
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> and assign the color number !D.TABLE_SIZE-1 to red (colors 0...!D.TABLE_SIZE-2
> set to shades of grey from 0 to 255). You get the idea. See also documentation
> for the TVSCL procedure.

I use the following routines I've written to do this. If any look
useful to you let me know and I'll mail them to you.

BYTE_SCALE.PRO : scale contents of array between specified upper
 and lower bounds

GRAYSCALE.PRO : Small popup widget with sliders to allow grayscale
 adjustments. Can specify reserved colors.

ADJUST_PALETTE.PRO : Adjust RGB values for individual color index.

ADJUST_COLORS.PRO : Widget that lets you interactively adjust the
 colors for any color index.

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