

---

Subject: Re: about color table

Posted by [David Fanning](#) on Thu, 18 Jun 2009 22:01:15 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hu writes:

> I want to do something like this: I got an 2-D array with values range  
> from 0.0 to 1.0. and I want to display the array using different  
> colors. for example, if the value is greater than 0.8, the elements  
> will be displayed as red, if the values is between 0.5 and 0.8, the  
> color will be blue, and the relationship can be listed as follows:

>  
>> 0.8      red  
> 0.5-0.8   blue  
> 0.3-0.5   yellow  
> 0.2-0.3   green  
> <0.2      white

>  
> I know I need to set up a color table, and the book 'IDL Programming  
> techniques' demonstrate how to set up a color table, and I set up the  
> table including those above colors.

>  
> The question is , How can I set up the relationship between the color  
> table and the different ranges? I mean how to 'tell' the computer  
> display the array using this relationship?

```
TVLCT, FSC_Color(['white','green','yellow','blue','red'], /TRIPLE), 1
s = Size(array, /DIMENSIONS)
scaledData = BytArr(s[0], s[1])
I = Where(array LT 0.2, count)
IF count GT 0 THEN scaledData[I] = 1
I = Where(array GE 0.2 AND array LT 0.3, count)
IF count GT 0 THEN scaledData[I] = 2
I = Where(array GE 0.3 AND array LT 0.5, count)
IF count GT 0 THEN scaledData[I] = 3
I = Where(array GE 0.5 AND array LT 0.8, count)
IF count GT 0 THEN scaledData[I] = 4
I = Where(array GT 0.8, count)
IF count GT 0 THEN scaledData[I] = 5
TVImage, scaledData, /KEEP, /NOINTERP
```

Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming ([www.dfanning.com](http://www.dfanning.com))

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

---