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Subject: Re: Color table questions  
Posted by [R.Bauer](#) on Sat, 21 Feb 2004 23:01:17 GMT  
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Michael Wallace wrote:

> Haje Korth wrote:  
>> Mike,  
>> You should toss that rainbow colorbar if you do science. This color bar  
>> is highly non-linear to the human eye and you tend to emphasize features  
>> that a completely non-physical, but rather due to changes in the gradient  
>> of the color bar it self. I did actually some research on that a while  
>> ago. I found one article that illustrates the topic well:  
>>  
>> B. E. Rogowitz and L. A. Treinish, How to NOT lie with visualisation,  
>> Computers in Physics, vol10, no 3, 1996. (Make sure you get a color copy,  
>> otherwise you will not be able to verify what the authors are talking  
>> about.)  
>>  
>> The topic says it all: Pretty pictures alone do not guarantee good  
>> science! I am not trying to be arrogant (not my nature), this is just a  
>> simple statement that I had to find out the hard way myself.  
>  
> Yes! That's exactly why I want to toss out the rainbow color bar --  
> because it is very non-linear to the human eye. So, simply put, I'd  
> like a colorbar that is linear (or as close as reasonable) to the human  
> eye but still includes several distinct colors. I only mentioned the  
> rainbow color bar because it includes several colors which flow together  
> nicely. What it doesn't have is linear spacing between colors.  
>  
> I'm asking the question because, other than simple gradients, I haven't  
> completely figured out how to make not only a good looking colorbar, but  
> one that's also linear. I would have thought that someone else out  
> there might also want to do this...  
>  
> As for the article you mention, that should be on the reading list of  
> anyone who does science data analysis with colors. Here's an on-line  
> version:  
> <http://www.research.ibm.com/dx/proceedings/pravda/truevis.htm>  
>  
> Mike

Dear Mike,  
we have some nice colortables in our library,  
for example: ct\_blue\_green\_yellow\_red

You find them in the library catalogue.  
[http://www.fz-juelich.de/icg/icg-i/idl\\_icglib/idl\\_source/idl\\_html](http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl_html)

idl\_work\_libraries.htm

Please have look at the following site too:

[http://www.fz-juelich.de/icg/icg-i/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html)

regards

Reimar

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