Subject: Re: log scale colorbar in IDL 8.0
Posted by pgrigis on Wed, 18 May 2011 15:28:18 GMT
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On May 18, 10:35 am, David Fanning <n...@idlcoyote.com> wrote:
> Kim writes:
>
>> Hello,
>
>> I have just started using the new graphics routines in IDL 8.0/8.1 and
>> am trying to incorporate them into an extensive set of customized
>> plotting and image type routines. I am able to use the IMAGE function
>> to display some log-normally distributed data, however I am unable to
>> create a colorbar that reflects the log-transformed data.
>
>> Here is a simplified example:
>> ; Read the data array
>> ; Convert the scaled float array (using ALOG10) to a byte array
>> im = IMAGE(bytedata)
>> cb =
>> COLORBAR(target=im,tickvalues=[0.01,0.03,0.1,0.3,1.0,3.0,10. 0,30.0],tickname=['.
>> 01','.03','.1','.3','1','3','10','30'], title='Log Data')
>
>> Some specific questions:
>> 1) How do you scale the color bar so that it reflects the scaled data?
>> 2) If tickvalues are supplied, can you also input ticknames? In the
>> above example, the supplied ticknames are not used and instead the
>> ticknames are derived from the tickvalues. The only way I have been
>> able to use the ticknames is to remove the tickvalues keyword.
>> 3) Is it possible to set minimum and maximum color or value ranges?
>> For example, in one of my commonly used rgb_tables, the 0 value is
>> black and above 250 are various shades of gray. How do I set it so
>> that mincolor=1 and maxcolor=250?
>> 4) Is it possible to create a colorbar that is independent of some
>> specified data? It would be very useful to be able to create a
>> colorbar just using a user supplied data range instead of being
>> directly linked to a specfic data field. There are times when I need
>> to create stand alone colorbars and I can't figure out how to do this
>> with the COLORBAR function.
>
> No takers!?
>
> I'd propose another contest to write a log-scaled color bar function
> in the iTool style, but I'm not sure I could handle another three
> months of complete silence. :-)
>
> Cheers,
>

> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Do the coyote graphics commands have options to display
images with logarithmic axes? If not, they should, it's
a very useful feature...

Ciao,
Paolo