
Subject: Re: Explain Contour Plot to Me

Posted by [lecacheux.alain](#) on Sun, 11 Sep 2011 16:53:58 GMT

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On 11 sep, 15:59, David Fanning <n...@dfanning.com> wrote:

> alx writes:

>> Your example illustrates two flaws in NG that ITTVIS should correct as
>> soon as possible (or, possibly, for which I was not yet able to find
>> any right answers in ITTVIS documentation ...).

>> The first one is the fact that the OVERPLOT keyword overrides the font
>> and axis styles of the overplotted plot, which is a real nonsense. In
>> your case, the font size attributed to the "ctrOver" plot does
>> actually change the one of the "ctr" plot. My work around would be:
>> drawing "ctrOver" first without any axis, then "ctr" (I get the
>> correct font size, while keeping a smaller font for the isocontour
>> labels), finally pushing ctrOver in front by using the "Order" method.

>

> I hadn't thought of overplotting *before* I had drawn the plot,
> but, as I say, I am having trouble adapting to the "new graphics"
> way of doing things and I am trying to be more flexible. I'll
> give this a try.

>

>> The second flaw, even more annoying, is the way in which the NG
>> "Colorbar" function defines its color range: by using the true min and
>> max of the (Y or Z) values of the underlying object (here your DATA
>> array, through TARGET=ctr keyword). You get 0.0134482 and 0.984703,
>> instead of 0 and 1. Setting ZRANGE=[0,1] does not work better. My
>> workaround would be: creating a new contour object (here "ctrFake")
>> with modified data having the desired range, using it as the target of
>> the colorbar, then pushing it back or deleting it.

>

> Even though your (fake) color bar seems to be labeled
> correctly now, the colors don't line up with the
> annotations. I think we can safely conclude that
> it is impossible to create a color bar that actually
> represents the data in this very simple way.

>

> If it were, say, Matlab graphics routines that behaved like
> this I am sure we would all agree that the software "doesn't
> friggin' work!" Since it's IDL, though, I guess I'll get
> out my checkbook and write a \$500 maintenance check
> for another load of this manure.

>

> Cheers,

>

> David

>

> P.S. Please understand, my criticism of the software does

> not imply criticism of the many fine and bright people working
> at ITTVIS. I do not know what is wrong there, though, that
> causes this kind of software to be produced. But ITTVIS
> needs to fix this, and quickly, or IDL as a product
> will be dead and gone.
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

> Even though your (fake) color bar seems to be labeled
> correctly now, the colors don't line up with the
> annotations.

The color bar should appear correctly after changing "cb =
colorbar(target=ctr, \$...)" to "cb = colorbar(target=ctrFake, \$...".
Sorry for the typo in my previous message.

By the way, let me say that I agree with what you said in your P.S.
But I do not think that the NG software is as bad as you are feeling:
NG offers, in principle, much more possibilities than DG and ...
Matlab's graphics ! However, some tuning by ITTVIS is certainly
urgently needed as well as, mainly, a much better documentation !
alain.
