
Subject: COLORBAR label too long
Posted by [rchughes](#) on Fri, 17 Aug 2007 17:41:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear All,

I have created a nice-looking plot with a color bar on the top but the labels extend too far past the end of the bar. My plot is positioned in the bottom 80% of the window and the color bar is in the top 20% (using the POSITION keywords). The array of values I give to the COLORBAR procedure extends beyond the end of the bar.

Here is a diagram of what happens:

```
1 2 3 4 5 6 7 8 9 0  <-labels
-----
-----                <-colorbar

|         |           <-plot
|         |
|         |
|         |
|         |
```

Here is my code:

```
PLOT, FINDGEN(10), POSITION=[0.05, 0.05, 0.95, 0.82]
```

```
ticks = (SINDGEN((clrTableLength/5)+1)*5)-(clrTableLength/2)
```

```
COLORBAR, BOTTOM=0, NCOLORS=clrTableLength, /TOP, $
TICKNAMES=ticks, COLOR=black, DIVISIONS=(clrTableLength/5), $
POSITION=[0.07, 0.87, 0.93, 0.95]
```

'clrTableLength' is the length of a color table I created. Currently I am using a table of length 100 (i.e. clrTableLength=100)

Thanks,
Ryan.

P.S. David Fanning if you are reading this, I cannot access your web page to see if you have any documentation on this at the moment because all external network connections are down except internal pages and any Google affiliated pages. (Please don't ask me why this is, I don't know)

Subject: Re: COLORBAR
Posted by [David Fanning](#) on Fri, 09 Nov 2007 17:59:59 GMT

phillipbitzer@gmail.com writes:

> For anyone who's used D Fanning's colorbar program-
>
> When using colorbar pro, how can I get the values of the tickmarks (!
> x.tickv doesn't work - return an array of 0's)?
>
> Here's the underlying reason, when annotating the color bar, the
> program (seems to one be able to) annotates the major tick marks. I
> actually would like my tick labels not on the major tick marks, but
> "in the middle" of the color. I think this would correspond to (only)
> labelling the minor tick marks.
>
> Maybe a visual would help me be more clear:
>
> Instead of labelling:
> here here here
> |-----|-----|
>
> I would like:
> here here
> |-----|-----|
>
> I've been fooling around with the parameters, but to no avail. Anyone
> else have this need/want before? Anyone have any ideas to accomplish
> this?

The COLORBAR program, for historical reasons, as well as for ease of programming, uses a PLOT command to do the annotation. So, what you want to do is not possible with that code.

And because of recent changes, I can't even offer an undocumented keyword solution that will completely scrub the bar of annotations, so you could write your own axis labeling routine. :-(

I'd recommend just writing your own colorbar routine. You can use PLOTS to draw your boxes on the colorbar image, and you can annotate it however you like with XYOUTS.

Cheers,

David

--

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.")

Subject: Re: COLORBAR

Posted by [phillipbitzer](#) on Fri, 09 Nov 2007 18:07:22 GMT

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

On Nov 9, 11:59 am, David Fanning <n...@dfanning.com> wrote:

> phillipbit...@gmail.com writes:

>> For anyone who's used D Fanning's colorbar program-

>

>> When using colorbar pro, how can I get the values of the tickmarks (!

>> x.tickv doesn't work - return an array of 0's)?

>

>> Here's the underlying reason, when annotating the color bar, the

>> program (seems to one be able to) annotates the major tick marks. I

>> actually would like my tick labels not on the major tick marks, but

>> "in the middle" of the color. I think this would correspond to (only)

>> labelling the minor tick marks.

>

>> Maybe a visual would help me be more clear:

>

>> Instead of labelling:

>> here here here

>> |-----|-----|

>

>> I would like:

>> here here

>> |-----|-----|

>

>> I've been fooling around with the parameters, but to no avail. Anyone

>> else have this need/want before? Anyone have any ideas to accomplish

>> this?

>

> The COLORBAR program, for historical reasons, as well as for

> ease of programming, uses a PLOT command to do the annotation.

> So, what you want to do is not possible with that code.

>

> And because of recent changes, I can't even offer an undocumented

> keyword solution that will completely scrub the bar of annotations,

> so you could write your own axis labeling routine. :-(

>

> I'd recommend just writing your own colorbar routine. You can use

> PLOTS to draw your boxes on the colorbar image, and you can annotate it

> however you like with XYOUTS.

>

> Cheers,

>

> David

> --

> 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.")

Thought (afraid?) that was going to be case. Thanks!

Subject: Re: COLORBAR

Posted by [phillipbitzer](#) on Fri, 09 Nov 2007 19:35:35 GMT

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

On Nov 9, 11:59 am, David Fanning <n...@dfanning.com> wrote:

> phillipbit...@gmail.com writes:

>> For anyone who's used D Fanning's colorbar program-

>

>> When using colorbar pro, how can I get the values of the tickmarks (!

>> x.tickv doesn't work - return an array of 0's)?

>

>> Here's the underlying reason, when annotating the color bar, the

>> program (seems to one be able to) annotates the major tick marks. I

>> actually would like my tick labels not on the major tick marks, but

>> "in the middle" of the color. I think this would correspond to (only)

>> labelling the minor tick marks.

>

>> Maybe a visual would help me be more clear:

>

>> Instead of labelling:

>> here here here

>> |-----|-----|

>

>> I would like:

>> here here

>> |-----|-----|

>

>> I've been fooling around with the parameters, but to no avail. Anyone

>> else have this need/want before? Anyone have any ideas to accomplish

>> this?

>

> The COLORBAR program, for historical reasons, as well as for

> ease of programming, uses a PLOT command to do the annotation.

> So, what you want to do is not possible with that code.

>

> And because of recent changes, I can't even offer an undocumented

> keyword solution that will completely scrub the bar of annotations,

> so you could write your own axis labeling routine. :-(

>

> I'd recommend just writing your own colorbar routine. You can use

> PLOTS to draw your boxes on the colorbar image, and you can annotate it

> however you like with XYOUTS.

```
>
> Cheers,
>
> David
> --
> 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.")
```

OK, so if anyone's interested, I've got a little workaround.
Basically, it's slightly mod-ing of colorbar so that it works (I'm
doing a vertical bar, with /right set)- the keyword I was looking for
is [xyz]tick_get:

```
PLOT,[minrange,maxrange], [minrange,maxrange], /NODATA,
XTICKS=1, $

    YTICKS=divisions, XSTYLE=1, YSTYLE=1, $

    POSITION=position, COLOR=color, CHARSIZE=charsize, /NOERASE,
$

    YTICKFORMAT='(A1)', XTICKFORMAT='(A1)', YTICKLEN=ticklen , $

    YRANGE=[minrange, maxrange], FONT=font, _EXTRA=extra,
YMINOR=minor, ytick_get=Y_tick_values

mid = FINDGEN(divisions)
FOR i=0, N_ELEMENTS(y_tick_values)-2 DO BEGIN
    mid[i] = (y_tick_values[i]+y_tick_values[i+1])/2
ENDFOR

    AXIS, YAXIS=1, YTICKV=mid, $
    YTICKFORMAT=format, YTICKS=divisions, $

    YTICKLEN=ticklen, YSTYLE=1, COLOR=color, CHARSIZE=charsize,
$

    FONT=font, YTITLE=title, _EXTRA=extra, YMINOR=minor,
YTICKNAME=ticknames
```
