Subject: Contour labels not aligned with contours Posted by Sir Loin Steak on Thu, 08 May 2014 18:58:46 GMT

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Hi all,

Has anyone encountered a problem before where the contour labels are not aligned with the spaces left in the actual contours? It has been happening to me for the past few weeks, but I can't think that anything has changed with my system.

The problem only occurs when outputting to a postscript file which has different x and y lengths. I've put a couple of examples here: http://physics.open.ac.uk/~lsteele/contour\_label.png

As can be seen in the top plot, the labels on the vertical line sections aren't centered on the contour as they are in the bottom plot. Does anyone know if this can be amended?

The test code I used for each plot is:

Subject: Re: Contour labels not aligned with contours Posted by David Fanning on Thu, 08 May 2014 19:23:17 GMT View Forum Message <> Reply to Message

ljs15@fsmail.net writes:

> Has anyone encountered a problem before where the contour labels are not aligned with the spaces left in the actual contours? It has been happening to me for the past few weeks, but I can't think that anything has changed with my system.

>

> The problem only occurs when outputting to a postscript file which has different x and y lengths. I've put a couple of examples here: http://physics.open.ac.uk/~lsteele/contour\_label.png

>

> As can be seen in the top plot, the labels on the vertical line sections aren't centered on the contour as they are in the bottom plot. Does anyone know if this can be amended?

I think you had something else going on when you created the top figure. Try exiting IDL (or doing a .reset), then running the code again.

Let us know. :-)

Cheers.

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.idlcoyote.com/

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

Subject: Re: Contour labels not aligned with contours Posted by Sir Loin Steak on Thu, 08 May 2014 20:19:26 GMT

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On Thursday, 8 May 2014 20:23:17 UTC+1, David Fanning wrote:

> ljs15@fsmail.net writes:

> >

>> Has anyone encountered a problem before where the contour labels are not aligned with the spaces left in the actual contours? It has been happening to me for the past few weeks, but I can't think that anything has changed with my system.

>> >

>> The problem only occurs when outputting to a postscript file which has different x and y lengths. I've put a couple of examples here: http://physics.open.ac.uk/~lsteele/contour\_label.png

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>> As can be seen in the top plot, the labels on the vertical line sections aren't centered on the contour as they are in the bottom plot. Does anyone know if this can be amended?

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

I thought it might be a problem with something I'd done previously, so I did exit IDL and then plotted the two pictures after logging in again, one after the other (I did each twice, i.e. the 10x4 inch image, then 4x4, then 10x4 then 4x4). Each time, only the labels in the 4x4 image were centred. :-S

Subject: Re: Contour labels not aligned with contours Posted by David Fanning on Thu, 08 May 2014 20:51:45 GMT View Forum Message <> Reply to Message

ljs15@fsmail.net writes:

> I thought it might be a problem with something I'd done previously, so I did exit IDL and then plotted the two pictures after logging in again, one after the other (I did each twice, i.e. the 10x4 inch image, then 4x4, then 10x4 then 4x4). Each time, only the labels in the 4x4 image were centred.

Humm. Weird. Doesn't happen like that for me. What version of IDL are you using? On what machine?

Cheers,

David

--

David Fanning, Ph.D.
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Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Contour labels not aligned with contours Posted by Sir Loin Steak on Fri, 09 May 2014 09:19:17 GMT View Forum Message <> Reply to Message

Right, I've done some more investigating...

The problem seems to be related to the character size used to label the contour labels. I've done two more test plots, using the code below. The results are here: http://physics.open.ac.uk/~lsteele/contour\_test.png

In the first plot I set c\_charsize=0.2, while in the second plot I set c\_charsize=0.5. As you can see, the labels look ok in the second plot, but are not aligned with the contours in the first plot.

The problem is, I need to produce the eps plot for a journal article, and it needs to be output in the correct size (in this case 2.5 inches square). As such, I have to use small c\_charsize values to make the labels legible, and not cover up any shading which is plotted underneath the contours.

Does anyone know of a way around this?

Cheers,

Liam

Test code:

```
x = sin(findgen(50)/49*!pi)*5
y = cos(findgen(50)/49*!pi/2)*5
array = x#y

set_plot, 'ps'
!p.font=0
device, /encap, xsize=2.5, ysize=2.5, /inches, filename='test.eps'
pos = cglayout([1,1], oxmargin=[3,1], oymargin=[2,1])

clevels = findgen(13)*2
contour, array, findgen(50), findgen(50), levels=clevels, $
```

c\_label=intarr(13)+1, charsize=0.6, c\_charsize=0.2, \$ color=cgcolor('black'), position=pos[\*,0]

Subject: Re: Contour labels not aligned with contours

device, /close

Posted by Sir Loin Steak on Fri, 09 May 2014 09:21:19 GMT View Forum Message <> Reply to Message On Friday, 9 May 2014 10:19:17 UTC+1, Ij...@fsmail.net wrote: > Right, I've done some more investigating... > > > > The problem seems to be related to the character size used to label the contour labels. I've done two more test plots, using the code below. The results are here: http://physics.open.ac.uk/~lsteele/contour\_test.png > > > > In the first plot I set c charsize=0.2, while in the second plot I set c charsize=0.5. As you can see, the labels look ok in the second plot, but are not aligned with the contours in the first plot. > > > > The problem is, I need to produce the eps plot for a journal article, and it needs to be output in the correct size (in this case 2.5 inches square). As such, I have to use small c\_charsize values to make the labels legible, and not cover up any shading which is plotted underneath the contours. > > > Does anyone know of a way around this? > > > > Cheers, > > > Liam > > > Test code: > >

```
> x = \sin(\text{findgen}(50)/49*!pi)*5
  y = \cos(\text{findgen}(50)/49*!\text{pi/2})*5
>
  array = x#y
>
>
>
  set_plot, 'ps'
>
  !p.font=0
>
  device, /encap, xsize=2.5, ysize=2.5, /inches, filename='test.eps'
>
>
  pos = cglayout([1,1], oxmargin=[3,1], oymargin=[2,1])
>
>
>
  clevels = findgen(13)*2
>
>
  contour, array, findgen(50), findgen(50), levels=clevels, $
>
        c_label=intarr(13)+1, charsize=0.6, c_charsize=0.2, $
>
>
>
        color=cgcolor('black'), position=pos[*,0]
>
>
> device, /close
```

Oh, and I've tested this using IDL 7.0 and 8.2, and it happens in both versions.

Subject: Re: Contour labels not aligned with contours Posted by David Fanning on Fri, 09 May 2014 13:06:15 GMT View Forum Message <> Reply to Message

ljs15@fsmail.net writes:

> The problem seems to be related to the character size used to label the contour labels. I've done two more test plots, using the code below. The results are here: http://physics.open.ac.uk/~lsteele/contour\_test.png

> In the first plot I set c\_charsize=0.2, while in the second plot I set c\_charsize=0.5. As you can see, the labels look ok in the second plot, but are not aligned with the contours in the first plot.

> The problem is, I need to produce the eps plot for a journal article, and it needs to be output in the correct size (in this case 2.5 inches square). As such, I have to use small c\_charsize values to

make the labels legible, and not cover up any shading which is plotted underneath the contours.

>

> Does anyone know of a way around this?

If it were me, I would produce the graphic in a normal size, using normal values for character size, etc. Then I would tell the idiots at the journal to get their act together and do some reading up on PostScript files. They can make the damn thing any size they want. Why are the making you do all the work, for God's sake! :-)

Cheers,

## David

--

>>

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.idlcoyote.com/

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

Subject: Re: Contour labels not aligned with contours Posted by Sir Loin Steak on Fri, 09 May 2014 15:32:21 GMT

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On Friday, 9 May 2014 14:06:15 UTC+1, David Fanning wrote:

> ljs15@fsmail.net writes:

> 
> 
> 
> The problem seems to be related to the character size used to label the contour labels. I've done two more test plots, using the code below. The results are here:

http://physics.open.ac.uk/~lsteele/contour\_test.png
> 
> 
> 
> In the first plot I set c. charsize=0.2, while in the second plot I set c. charsize=0.5. As you cannot be seen the code below.

>> In the first plot I set c\_charsize=0.2, while in the second plot I set c\_charsize=0.5. As you can see, the labels look ok in the second plot, but are not aligned with the contours in the first plot. >

>> The problem is, I need to produce the eps plot for a journal article, and it needs to be output in the correct size (in this case 2.5 inches square). As such, I have to use small c\_charsize values to make the labels legible, and not cover up any shading which is plotted underneath the contours.

> >> >> >> Does anyone know of a way around this?

```
>
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  are the making you do all the work, for God's sake! :-)
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>
>
 Cheers,
>
>
> David
  David Fanning, Ph.D.
  Fanning Software Consulting, Inc.
  Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
```

That is indeed what I have resorted to doing! (I just doubled the page size, character size etc.) It still seems strange that IDL won't align the labels nicely when using a small c\_label size. Ah well!