
Subject: Re: simplest contour & .png

Posted by [David Fanning](#) on Thu, 26 Apr 2012 14:12:18 GMT

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Leslie Moy writes:

> It seems like it should be easy...

Oh, it **always** seems so. :-)

> I have a 2D array C(20,20) and i want to make a simple figure with
> 20x20 colored boxes. I started with a CG contour template but have two
> questions.

>

> 1. i assumed there must be a command to Not make it contour and just
> put in a colored box. is there such a thing? or am i starting out
> wrong with 'contour'?

There is such a thing, but it is called an "image".

> 2. i want to output to a .png file. but i get two figures with my code
> below - one of the contour plot, the other of the colorbar. normally i
> would think to add in /overplot to cgcolorbar but that gives me an
> error.

The keyword you are looking for is AddCmd, not Overplot. You want to
"add" the "command" to the resizable cgWindow.

>

```
> cgwindow  
> nlevels=12  
> loadct,33,ncolors=nlevels,bottom=1  
> step=(max(C)-min(C))/nlevels  
> levels=indgen(nlevels)*step+min(C)  
> setdecomposedstate,0,currentstate=currentstate
```

No reason whatsoever to set yourself up in indexed color mode if you are using Coyote Graphics routines. They will work best in decomposed color mode and, in fact, most of them work in that mode anyway. Including the cgContour command. So this SetDecomposedState command has NO effect whatsoever.

>

```
> cgcontour,C,/fill,Levels=levels,position=[0.125,0.125,0.95,0.8],$  
>   background=cgcolor('white'),color=cgcolor('black'),$  
>   xstyle=1,ystyle=1,c_colors=indgen(nlevels)+1,/window
```

>

```
> setdecomposedstate,currentstate
> cgcolorbar,range=[min(C),max(C)],divisions=12,xticklen=1,xminor=0,$
>     annotatecolor='black',ncolors=12,bottom=1, $
>
> position=[0.125,0.915,0.955,0.95],charsize=1.00,format='(F0. 4)'
>
> cgcontrol,create_png='tt.png'
```

The code you want probably looks more like this:

```
cgLoadCT, 33
cgImage, C, /Scale, /Axes, Position=[0.125,0.125,0.95,0.8], /Window
cgColorbar, Range=[min(C),max(C)],Divisions=12, XTicklen=1, $
    XMinor=0, Position=[0.125,0.915,0.955,0.95],$
    Charsize=1.00, Format='(F0.4)', /AddCmd
cgControl, Output='tt.png'
```

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.")

Subject: Re: simplest contour & .png

Posted by [David Fanning](#) on Thu, 26 Apr 2012 14:17:46 GMT

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David Fanning writes:

```
> The code you want probably looks more like this:
>
> cgLoadCT, 33
> cgImage, C, /Scale, /Axes, Position=[0.125,0.125,0.95,0.8], /Window
> cgColorbar, Range=[min(C),max(C)],Divisions=12, XTicklen=1, $
>     XMinor=0, Position=[0.125,0.915,0.955,0.95],$
>     Charsize=1.00, Format='(F0.4)', /AddCmd
> cgControl, Output='tt.png'
```

Now that I think about it, if you really just want 12 colors, the code probably looks more like this:

```
cgLoadCT, 33, NColors=12
```

```
cgImage, BytScl(C, TOP=11), /Axes, Position=[0.125,0.125,0.95,0.8], $  
/Window  
cgColorbar, Range=[min(C),max(C)], /Discrete, $  
Postion=[0.125,0.915,0.955,0.95],$  
Charsize=1.00, Format='(F0.4)', NColors=12, /AddCmd  
cgControl, Output='tt.png'
```

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: simplest contour & .png
Posted by [Leslie Moy](#) on Thu, 26 Apr 2012 14:44:32 GMT
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On Apr 26, 10:17 am, David Fanning <n...@idlcoyote.com> wrote:

> David Fanning writes:

>> The code you want probably looks more like this:

```
>  
>> cgLoadCT, 33  
>> cgImage, C, /Scale, /Axes, Position=[0.125,0.125,0.95,0.8], /Window  
>> cgColorbar, Range=[min(C),max(C)], Divisions=12, XTicklen=1, $  
>> XMinor=0, Position=[0.125,0.915,0.955,0.95],$  
>> Charsize=1.00, Format='(F0.4)', /AddCmd  
>> cgControl, Output='tt.png'
```

```
>  
> Now that I think about it, if you really just want 12  
> colors, the code probably looks more like this:
```

```
>  
> cgLoadCT, 33, NColors=12  
> cgImage, BytScl(C, TOP=11), /Axes, Position=[0.125,0.125,0.95,0.8], $  
> /Window  
> cgColorbar, Range=[min(C),max(C)], /Discrete, $  
> Postion=[0.125,0.915,0.955,0.95],$  
> Charsize=1.00, Format='(F0.4)', NColors=12, /AddCmd  
> cgControl, Output='tt.png'
```

```
>  
> 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.")

It works if I get rid of '/discrete' to the cgcolorbar command.
Also, i use 'create_png' not 'output'. My version didn't recognize
'output'. Is this a new command? (I haven't updated in a while).

Btw, why is choosing 12 colors significant? (I chose it because that
was the value you have in your book's example). When would i have to
use your first suggestion?

My first post! Thank you very very much.

Leslie

Subject: Re: simplest contour & .png
Posted by [Leslie Moy](#) on Thu, 26 Apr 2012 14:45:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Apr 26, 10:17 am, David Fanning <n...@idlcoyote.com> wrote:

> David Fanning writes:
>> The code you want probably looks more like this:
>
>> cgLoadCT, 33
>> cgImage, C, /Scale, /Axes, Position=[0.125,0.125,0.95,0.8], /Window
>> cgColorbar, Range=[min(C),max(C)], Divisions=12, XTicklen=1, \$
>> XMinor=0, Position=[0.125,0.915,0.955,0.95], \$
>> CharSize=1.00, Format='(F0.4)', /AddCmd
>> cgControl, Output='tt.png'
>
> Now that I think about it, if you really just want 12
> colors, the code probably looks more like this:
>
> cgLoadCT, 33, NColors=12
> cgImage, ByteScl(C, TOP=11), /Axes, Position=[0.125,0.125,0.95,0.8], \$
> /Window
> cgColorbar, Range=[min(C),max(C)], /Discrete, \$
> Position=[0.125,0.915,0.955,0.95], \$
> CharSize=1.00, Format='(F0.4)', NColors=12, /AddCmd
> cgControl, Output='tt.png'
>
> 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.")

It works if I get rid of '/discrete' to the cgcolorbar command.
Also, i use 'create_png' not 'output'. My version didn't recognize
'output'. Is this a new command? (I haven't updated in a while).

Btw, why is choosing 12 colors significant? (I chose it because that
was the value you have in your book's example). When would i have to
use your first suggestion?

My first post! Thank you very very much.

Leslie

Subject: Re: simplest contour & .png
Posted by [David Fanning](#) on Thu, 26 Apr 2012 15:08:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

Leslie Moy writes:

> It works if I get rid of '/discrete' to the cgcolorbar command.
> Also, i use 'create_png' not 'output'. My version didn't recognize
> 'output'. Is this a new command? (I haven't updated in a while).

Yes, you must update frequently to stay on top of things. :-)

There are many ways to hear about updates: Twitter, RSS Feeds,
Facebook, and Google +. All will alert you to new features,
articles, and code. The best way to keep current is to use
the SVN repository here:

<http://idl-coyote.googlecode.com/svn/>

The most current versions are in /trunk/coyote.

> Btw, why is choosing 12 colors significant? (I chose it because that
> was the value you have in your book's example). When would i have to
> use your first suggestion?

It's not significant. It's what I thought you wanted.
Choose any number you like, up to 256.

> My first post! Thank you very very much.

Hooray! ;-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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Subject: Re: simplest contour & .png

Posted by [Paul Van Delst\[1\]](#) on Mon, 30 Apr 2012 14:49:25 GMT

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

On 04/26/12 11:08, David Fanning wrote:

> Leslie Moy writes:

>

>> It works if I get rid of '/discrete' to the cgcolorbar command.

>> Also, i use 'create_png' not 'output'. My version didn't recognize

>> 'output'. Is this a new command? (I haven't updated in a while).

>

> Yes, you must update frequently to stay on top of things. :-)

>

> There are many ways to hear about updates: Twitter, RSS Feeds,

> Facebook, and Google +. All will alert you to new features,

> articles, and code. The best way to keep current is to use

> the SVN repository here:

>

> <http://idl-coyote.googlecode.com/svn/>

Does the "coyote_library_1.12.5" tag include these latest updates?

I.e. from:

http://idl-coyote.googlecode.com/svn/tags/coyote/coyote_library_1.12.5

?

The google-code repo browser is pretty brain dead regarding timeline browsing and the "committed changes" list doesn't have any entries for tag creation.

Your library is part of our repository as well and, as such, I'd rather provide a tagged version than

one from trunk.

The last tagged version mentioned on your project page is v1.11.0 (from 03 March)

cheers,

paulv

p.s. I really like the "Issues" page on your google code site. Of the idl-coyote project it states:
"This project
currently has no issues." Man... I lay awake at night dreaming about reaching that stage with my
software projects.

:oD

>
> The most current versions are in /trunk/coyote.
>
>> Btw, why is choosing 12 colors significant? (I chose it because that
>> was the value you have in your book's example). When would i have to
>> use your first suggestion?
>
> It's not significant. It's what I thought you wanted.
> Choose any number you like, up to 256.
>
>> My first post! Thank you very very much.
>
> Hooray! ;-)
>
> Cheers,
>
> David
>
>
