Subject: Re: block fill image Posted by ben.bighair on Fri, 05 Sep 2008 13:50:16 GMT View Forum Message <> Reply to Message

On Sep 5, 7:58 am, maffie <matthias.demuz...@geo.kuleuven.be> wrote:

> Dear all,

>

- > I would like to make an image, presenting cluster classes on the x-
- > axes, and different variables on the Y-axes. Each combination (Xi,Yi)
- > should be represented by a block, whereby its color fill should
- > represent a standard deviation, and with the mean written in the box
- > as text.

>

Hi,

I think you could simply create the image and populate each pixel with the standard deviation. Then the trick is to use an image display routine that will use nearest neighbor interpolation - try David Fanning's TVSCALE or Liam Gumley's IMDISP for example. You'll want to carefully control the color scheme for which each of these gives you plenty of options. The subsequent annotations can be done using XYOUTS like this..

```
\label{eq:dy} \begin{split} \text{dy} &= (y[1]\text{-}y[0])/2.\\ \text{for } i = 0\text{L, nx-1 do begin}\\ \text{for } j = 0\text{L, ny-1 do begin}\\ \text{XYOUTS, x[i], y[j] + dy, stddev[i,j], ALIGN = 0.5, ....}\\ \text{endfor ; j loop}\\ \text{endfor ; i loop} \end{split}
```

You may want to add an offset in the Y direction for the image - that is what the dy is about.

Cheers, Ben

Subject: Re: block fill image

Posted by Juggernaut on Fri, 05 Sep 2008 14:29:08 GMT

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On Sep 5, 9:50 am, "ben.bighair" <ben.bigh...@gmail.com> wrote:
> On Sep 5, 7:58 am, maffie <matthias.demuz...@geo.kuleuven.be> wrote:
> >> Dear all,
>

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>> I would like to make an image, presenting cluster classes on the x-
>> axes, and different variables on the Y-axes. Each combination (Xi,Yi)
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> Hi.
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> carefully control the color scheme for which each of these gives you
> plenty of options. The subsequent annotations can be done using
> XYOUTS like this..
>
> dy = (y[1]-y[0])/2.
> for i = 0L, nx-1 do begin
> for j = 0L, ny-1 do begin
    XYOUTS, x[i], y[j] + dy, stddev[i,j], ALIGN = 0.5, ....
   endfor; i loop
> endfor; i loop
> You may want to add an offset in the Y direction for the image - that
> is what the dy is about.
>
> Cheers,
> Ben
```

polyfill is another IDL procedure that you may be interested in if you are wanting to make blocks of different colors on the plot

```
Subject: Re: block fill image
Posted by matthias.demuzere on Sat, 06 Sep 2008 10:39:25 GMT
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```

Thank you all for the comments.

Now, I have tried to TVscale of David, but I always get an error message "that the procedure can not be found", although it is called from a library IDL knows. When looking in to the TVSCALE script, I get an error message in the following:

; Set up common block parameters, but only if device supports windows.

; Only if the QUIET keyword is not set.

IF ~Keyword_Set(quiet) THEN BEGIN

IF (!D.FLAGS AND 256) NE 0 THEN BEGIN

_tvimage_xsize = imgXsize

```
_tvimage_ysize = imgYsize
_tvimage_winID = !D.Window
_tvimage_winxsize = !D.X_Size
_tvimage_winysize = !D.Y_Size
_tvimage_position = position
_tvimage_current = 1
ENDIF
ENDIF
```

Does anybody has an idea what I am doing wrong here?

Cheers, Matthias

Subject: Re: block fill image Posted by kfish on Tue, 30 Sep 2008 15:04:32 GMT View Forum Message <> Reply to Message

```
On Sep 5, 10:29 am, Bennett < juggernau...@gmail.com> wrote:
> On Sep 5, 9:50 am, "ben.bighair" <ben.bigh...@gmail.com> wrote:
>
>
>
>
>
>> On Sep 5, 7:58 am, maffie <matthias.demuz...@geo.kuleuven.be> wrote:
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\Rightarrow dy = (y[1]-y[0])/2.
>> for i = 0L, nx-1 do begin
```

```
>> for j = 0L, ny-1 do begin
>> XYOUTS, x[i], y[j] + dy, stddev[i,j], ALIGN = 0.5, ....
>> endfor ; j loop
>> endfor ; i loop
>
>> You may want to add an offset in the Y direction for the image - that
>> is what the dy is about.
>
>> Cheers,
>> Ben
>
> polyfill is another IDL procedure that you may be interested in if you
> are wanting to make blocks of different colors on theplot- Hide quoted text -
> - Show quoted text -
```

I'm just learning IDL and am having a heck of a time figuring out how to make just a simple block plot. What I'd like to do, for example, is plot temperature by depth on the x and y and have another variable, fish growth, color coded in each temp-depth cell. I'm assuming I can do this with polyfill or contour, but haven't been able to figure out how. I'd appreciate any help I can get on this. Thanks!

Subject: Re: block fill image Posted by David Fanning on Tue, 30 Sep 2008 16:08:36 GMT View Forum Message <> Reply to Message

kfish writes:

- > I'm just learning IDL and am having a heck of a time figuring out how
- > to make just a simple block plot. What I'd like to do, for example,
- > is plot temperature by depth on the x and y and have another variable,
- > fish growth, color coded in each temp-depth cell. I'm assuming I can
- > do this with polyfill or contour, but haven't been able to figure out
- > how. I'd appreciate any help I can get on this.

I sympathize, because what you want to do, although it seems simple, is actually quite complex using IDL. You will probably have to build roll your own, unfortunately.

I've done something very much like what you are going to want to do, though, in the program HistoPlot. You can read more about it here:

http://www.dfanning.com/graphics_tips/histoplot.html

I think if you look at the code (and I haven't looked at it this morning) you will find it meticulously documented (good luck!). Well, anyway, it is a place to start. :-)

Cheers,

David

--

David Fanning, Ph.D.
Covote's Guide to IDI Program

Coyote's Guide to IDL Programming (www.dfanning.com) Sepore ma de ni thui. ("Perhaps thou speakest truth.")