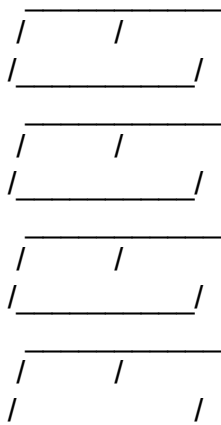

Subject: Perspective view of a 2-d plot

Posted by [Clay Blankenship](#) on Tue, 16 Sep 2003 21:57:27 GMT

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I'm sure there must be a way to do this in IDL but I don't know what it is.
I want to do 4 stacked 2-d plots using MAP_SET and PLOTS, looking something like this:



I want to make specific humidity plots at 4 different levels in the atmosphere. I already do these individually but want to try visualizing them this way.

Thanks,
Clay

--

Clay Blankenship Change 'Z' to 's' to reply
Naval Research Laboratory
Monterey, CA

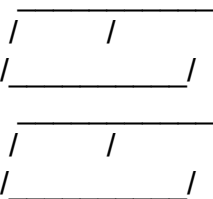
Subject: Re: Perspective view of a 2-d plot

Posted by [David Fanning](#) on Wed, 17 Sep 2003 13:44:17 GMT

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Clay Blankenship writes:

> I'm sure there must be a way to do this in IDL but I don't know what it is.
> I want to do 4 stacked 2-d plots using MAP_SET and PLOTS, looking something
> like this:

>
> 

```

>
>  /      /
>  /      /
>
>  /      /
>  /      /
>
> I want to make specific humidity plots at 4 different levels in the
> atmosphere. I already do these individually but want to try visualizing
> them this way.

```

I can't really tell what you are looking for here. If you just want four plots in the window, setting !P.MULTI is the way to go:

```

!P.MULTI=[0,1,4]
Map_Set, ...
Oplot,...
Map_Set, /Advance ...
Oplot,...
Map_Set, /Advance ...
Oplot,...
Map_Set, /Advance ...
Oplot,...
!P.MULTI=0

```

If you want "stacked" plots, so that the upper border of the lower plot is the lower border of the upper plot, then you are going to have to become proficient in the use of keywords. Here are a few you are going to have to know how to use for sure: POSITION, NOERASE, and [XY]STYLE. You are probably also going to have to know a trick for turning off axis annotation occasionally. I use XTICKFORMAT='(A1)'.

Here is an example of a "stacked" plot, although it doesn't use MAP_SET, which might introduce its own complications. :-)

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

Cheers,

David

--

David W. Fanning, Ph.D.

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Perspective view of a 2-d plot
Posted by [Clay Blankenship](#) on Wed, 17 Sep 2003 16:19:47 GMT
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David Fanning wrote:

```
> Clay Blankenship writes:
>
>> I'm sure there must be a way to do this in IDL but I don't know what it
>> is. I want to do 4 stacked 2-d plots using MAP_SET and PLOTS, looking
>> something like this:
>>
>>  /_____/
>>  /_____/
>>
>>  /_____/
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>>
>>  /_____/
>>  /_____/
>>
>> I want to make specific humidity plots at 4 different levels in the
>> atmosphere. I already do these individually but want to try visualizing
>> them this way.
>
> I can't really tell what you are looking for
> here. If you just want four plots in the window,
> setting !P.MULTI is the way to go:
>
```

Thanks for the reply. I should have been more explicit in saying I am trying to do a perspective view of 4 parallel planes from somewhere above and off to the side. I figured out a way to do it using the t3d command and keyword.

```
for lev=1,4 do begin
  z=.25*(lev-1)
  xoff=.15-.05*lev
  t3d,/reset,rot=[-65,20,0],translate=[xoff,0,z]
  map_set,latcen,loncen,/cyl,/grid,/cont,$
    limit=[lat1,lon1,lat2,lon2], $
    /label,latlab=lon2-2,lonlab=lat2-2,$
    position=p,/noerase,/t3d
endfor
```

I had to fiddle with the z offset to get them to line up vertically since I

couldn't figure out the right rotation to use.

I also got a reply from Jim Pendleton of RSI explaining how to do it using Direct Graphics and Object Graphics.

Clay

--

Clay Blankenship Change 'Z' to 's' to reply
Naval Research Laboratory
Monterey, CA
