Subject: Re: Stacking Map Projections for 3D depiction
Posted by penteado on Wed, 09 Sep 2009 20:53:03 GMT
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On Sep 9, 5:42 pm, Katelynn <greer.katel...@gmail.com> wrote:
> I have a series of stereographic SABER temperature plots (so 2D) on
> different pressure surfaces and want to present them in a way such
> that the vertical relationships between two different surfaces can
> been seen. Up until now, I have been generating the pressure surfaces
> (or as I call them slices) in IDL and then manipulating them
> individually in Adobe Illustrator by using some shear commands that
> make the slices appear that they are hovering over each other (like a
> deck of cards with an inch of air between each card). This is time
> consuming (especially for many such plots, not to mention being a
> rather inelegant solution) and I have been trying to recreate the 3D
> stacked map projections using IDL. I have looked on several forums
> and on google for potential solutions in map projections and 3D
> plotting, but seem unable to find what I need (I don't even know if
> what I'm doing has a proper name). Do you have any ideas or solutions
> for presenting data in this way?
>
> Any help/ideas are greatly appreciated.

Are the slices images or plots? If plots, are they contour plots? What
are the approximate number of slices and their dimensions?

Subject: Re: Stacking Map Projections for 3D depiction
Posted by penteado on Wed, 09 Sep 2009 23:59:34 GMT
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On Sep 9, 5:42 pm, Katelynn <greer.katel...@gmail.com> wrote:
> I have a series of stereographic SABER temperature plots (so 2D) on
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> plotting, but seem unable to find what I need (I don't even know if
> what I'm doing has a proper name). Do you have any ideas or solutions
> for presenting data in this way?
>

> Any help/ideas are greatly appreciated.

Try running this sequence, and see if the result is what you are looking for:

```
iimage,dist(200),zvalue=0.
iimage,dist(200),zvalue=200.,/over,rgb_table=1
icontour,dist(200),zvalue=100.,/over,color=[255,0,0]
iplot,200*dindgen(20)/(19d0),100+100*cos(dindgen(20)*!
 dpi*4/19d0),replicate(300,20),/over,color=[0,255,0],thick=3.
```

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Subject: Re: Stacking Map Projections for 3D depiction
Posted by greer.katelynn on Thu, 10 Sep 2009 15:00:44 GMT
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On Sep 9, 2:53 pm, pp <pp.pente...@gmail.com> wrote:

> Are the slices images or plots? If plots, are they contour plots? What
> are the approximate number of slices and their dimensions?

They are colored contour plots that I've put on a stereographic map projection. In terms of slices, right now I'm just dealing with two slices, but might add more depending on what I am trying to show. I figure that once I've got two slices figured out, it shouldn't be that difficult for me to add more. In terms of dimensions, are you asking about the data limits(lat=[40 90], lon [-180 180]), the number of pixels or?

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