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Subject: Re: map\_set stereographic projection  
Posted by [James Kuyper](#) on Fri, 28 Apr 2006 17:24:31 GMT  
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mattie wrote:

> kuyper@wizard.net writes:

>

>> dvila wrote:

...

>> ; These are the u-v values corresponding to pixel centers along each  
>> edge.

>> topv = (uv[1,1]+uv[1,2])\*0.5

>> botv = (uv[1,0]+uv[1,3])\*0.5

>> leftu = (uv[0,0]+uv[0,1])\*0.5

>> rightu = (uv[0,2]+uv[0,3])\*0.5

>

>

> Aren't these the u-v values corresponding to the \_center\_ of the

> gridcell along each edge? (assuming the initial data gave the

> centerpoints of the gridcell.)

Yes, that's what my comment line says.

...

>> ; U-V coordinates of midpoints of outer edges

>> u = [leftu-0.5\*xscale, 0.5\*(leftu+rightu), rightu+0.5\*xscale, \$

>> 0.5\*(leftu+rightu)]

>> v = [0.5\*(botv+topv), topv+0.5\*yscale, 0.5\*(botv+topv),

>> botv-0.5\*yscale]

>> lonlat = MAP\_PROJ\_INVERSE(u, v, MAP\_STRUCTURE=stereo)

>> limit = [lonlat[1,\*],lonlat[0,\*]]

>

> Again, I'm not sure, but don't you have to add half a gridcell to each

> direction to get the outter limit of each grid cell?

Yes, that is precisely why I wrote such things as "leftu-0.5\*xscale",  
etc.