
Subject: Re: GridData Conundrum

Posted by [Klemen](#) on Mon, 19 Apr 2010 13:32:07 GMT

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Hi David, I have no problems with GRIDDATA; take a look at the code.
The only problem I had was the triangulate function - you might have
problems with collinear points on the poles if you don't remove
them).

Cheers, Klemen

```
pro tmp_fanning_map
```

```
;input size in x and y direction
```

```
sx = 144
```

```
sy = 73
```

```
;read input data
```

```
im=fltarr(sx,sy)
```

```
openr,1,"usegriddata.dat"
```

```
readu,1,im
```

```
close,1
```

```
im=reverse(im,2)
```

```
;generate input lon and lat array
```

```
im_lat = rebin(reform(findgen(sy)/(sy-1)*180.-90., 1, sy), sx, sy)
```

```
im_lon = rebin(findgen(sx)/sx*360., sx, sy)
```

```
;reduce the dimension in y directon (otherwise problems with colinear  
points on the poles)
```

```
sy = sy - 2
```

```
im_lon = im_lon[* ,1:sy]
```

```
im_lat = im_lat[* ,1:sy]
```

```
im = im[* ,1:sy]
```

```
;Polar projection on WGS84
```

```
map=map_proj_init(106, DATUM=8, /GCTP, center_lon=-45.,  
center_lat=90.)
```

```
;transform input coorduiante arrays into vector
```

```
v_x = transpose(im_lon[*])
```

```
v_y = transpose(im_lat[*])
```

```
point_prj = MAP_PROJ_FORWARD(v_x, v_y, MAP_STRUCTURE=map)
```

```
;Make triangles
```

```
TRIANGULATE, point_prj[0,*], point_prj[1,*], Trng, TOLERANCE=1.
```

```
im_prj = GRIDDATA(point_prj[0,*], point_prj[1,*], im[*], $
```

```
/NEAREST_NEIGHBOR, DELTA=[25000.,25000.], TRIANGLES=Trng, $
```

```
DIMENSION=[304,448], START=[-3850000., -5350000.])
```

```
im_prj = reverse(im_prj, 2)  
save, im_prj, file='faning.sav'
```

```
device,decomposed=0  
loadct,11
```

```
tvsc1,im_prj  
end
```
