
Subject: Polar contour on top of polar map ??

Posted by [meek](#) on Mon, 30 May 2005 15:59:02 GMT

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Please ! What is wrong with the the following program -
the polar map is fine, the contour is restricted by the
map limits, but is confined to less than half the
map area - a sector of about 60 degrees (terminated
at the pole, and with curved radii bondaries.)

I want the contour to overlay the map (or vice versa).

Thanks for any hint!

Chris

```
;polarma1.pro - fiddle with polar grid / contour
pp=!pi/180.
```

```
    print, '.ps (1) or screen(2)?'
    read, isel
    if isel eq 1 then set_plot, 'ps'
    if isel eq 2 then set_plot, 'win' ;screen
```

```
    !P.font=0
```

```
    if isel eq 1 then device,/color,/portrait,yoffset=3.,ysize=21.,,scale_factor=1 .0
```

```
nlat=16 ;make this even!
```

```
minlat=90-nlat*2.5
```

```
along=fltarr(144)
```

```
alat=fltarr(nlat)
```

```
zzz=fltarr(144,nlat)
```

```
for j=0,143 do along(j)=pp*(j*2.5); azimuth, radians
```

```
for i=0,nlat-1 do alat(i)=90-i*2.5 ;N lat
```

```
for i=0,nlat-1 do begin
```

```
    for j=0,143 do begin
```

```
        x= sin(2.*!pi*(i*2.5)/20.)
```

```
        y= sin(2.*!pi*(j*2.5)/60. +4)
```

```
        zzz(j,i)=100*(x+y)
```

```
    endfor
```

```
endfor
```

```
map_set, /noerase,/isotropic,/continent,90.,/azimuthal,$
```

```
/grid, lonel=30, latdel=5,$
```

```
pos=[0.01,0.01,.99,.99],$
```

```

        limit=[minlat,-180.,90.,180.],$ latmin,lonmin,latmax,lonmax
        xmargin=0.,ymargin=0.
        rad=fltarr(nlats)
        for i=0,nlats-1 do $
            rad(i)=alat(i)

        polar_contour,/overplot,zzz,along,rad,$
            levels=[-100.,-50.,-0.,+50.,+100.]

        if isel eq 1 then close ; so i can get idl.ps without exit idl
    end

```

Subject: RE: Polar contour on top of polar map ??
 Posted by [meek](#) on Tue, 07 Jun 2005 07:19:44 GMT
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To answer my own question, in case someone else is interested ...

Using contour (not polar_contour) works; but to avoid a small gap, the i/p matrix should go 1 azimuth bin beyond 360 deg. Also , for contour, the azimuths should be in degrees.
 Chris

In a previous article, meek@skyway.usask.ca wrote:

```

> Please ! What is wrong with the the following program -
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> map limits, but is confined to less than half the
> map area - a sector of about 60 degrees (terminated
> at the pole, and with curved radii bondaries.)
>
> I want the contour to overlay the map (or vice versa).
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> Thanks for any hint!
>
> Chris
> -----
> ;polarma1.pro - fiddle with polar grid / contour
> pp=!pi/180.
>
>     print,'.ps (1) or screen(2)?'
>     read,isel
>     if isel eq 1 then set_plot,'ps'
>     if isel eq 2 then set_plot, 'win' ;screen
>
>     !P.font=0
>     if isel eq 1 then device,/color,/portrait,yoffset=3.,ysize=21.,scale_factor=1 .0
> nlats=16 ;make this even!

```

```

> minlat=90-nlats*2.5
> along=fltarr(144)
> alat=fltarr(nlats)
> zzz=fltarr(144,nlats)
> for j=0,143 do along(j)=pp*(j*2.5); azimuth, radians
> for i=0,nlats-1 do alat(i)=90-i*2.5 ;N lat
> for i=0,nlats-1 do begin
>   for j=0,143 do begin
>
>     x= sin(2.*!pi*(i*2.5)/20.)
>     y= sin(2.*!pi*(j*2.5)/60. +4)
>
>     zzz(j,i)=100*(x+y)
>
>   endfor
> endfor
>
>
> map_set, /noerase,/isotropic,/continent,90.,/azimuthal,$
> /grid, lon del=30, lat del=5,$
>   pos=[0.01,0.01,.99,.99],$
>   limit=[minlat,-180.,90.,180.],$ latmin,lonmin,latmax,lonmax
>   xmargin=0.,ymargin=0.
> rad=fltarr(nlats)
> for i=0,nlats-1 do $
>   rad(i)=alat(i)
>
> polar_contour,/overplot,zzz,along,rad,$
>   levels=[-100.,-50.,-0.,+50.,+100.]
>
>   if isel eq 1 then close ; so i can get idl.ps without exit idl
> end

```
