Subject: [Q] PLOTS/POLYFILL clipping in map
Posted by Iarla Kilbane-Dawe on Thu, 01 Aug 1996 07:00:00 GMT
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Hello,

does anyone have any experience of using the clip keyword with plot and polyfill when a map projection is in use which has been restricted using the limits keyword? We don't seem to be able to get things to plot inside the chosen region if any of the vector lies outside it. Equally, we haven't been able to get the routines to clip filled polygons at the edge of the region.

Does anyone have any advice please?

Many thanks in advance.

Iarla.

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Subject: Re: [Q] PLOTS/POLYFILL clipping in map
Posted by Robert.M.Candey on Thu, 01 Aug 1996 07:00:00 GMT
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In article
<Pine.SOL.3.91.960801125009.23811K-100000@Cacofonix.atm.ch.cam.ac.uk>,
Iarla Kilbane-Dawe <iarla@atm.ch.cam.ac.uk> wrote:

> Hello,
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> does anyone have any experience of using the clip keyword with
> plot and polyfill when a map projection is in use which has been
> restricted using the limits keyword? We don't seem to be able to get
> things to plot inside the chosen region if any of the vector lies outside
> it. Equally, we haven't been able to get the routines to clip filled
> polygons at the edge of the region.
>
> Does anyone have any advice please?
>
> Many thanks in advance.
>

> Iarla.

I haven't found the clip keyword to work either, I think since the edge of a polygon that goes over the side of the plot on one side is often still in bounds on the other side. I use the following to check each polygon (in this case using triangles returned from triangulate) and not plot if the polygon is large in normalized coordinates:

```
pAll = convert_coord(Lon, Lat, /data, /to_normal)
pLon = pAll(0,*) & pLat = pAll(1,*)
for i=0L,n_elements(triangles(0,*))-1 do begin
  tri1 = triangles(*,i)
  Lon3 = Lon(tri1) & Lat3 = Lat(tri1)
  Zb1   = Zb(tri1(0))
  if (total(abs(pLon(tri1)-shift(pLon(tri1),1))) lt 0.1) and $
     (total(abs(pLat(tri1)-shift(pLat(tri1),1))) lt 0.1) then $
    polyfill, Lon3, Lat3, color=Zb1(0), noclip=0
endfor
```

This is for full polar plots and may not be the solution for restricted regions.

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