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,
>
> 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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