Subject: map_proj_init
Posted by jtmcahill on Fri, 10 Jun 2011 19:53:29 GMT
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Ok, I'm at the end of my rope. I'm trying to take an image that is already projected in polar stereographic and convey this to IDL so I can take the cartesian coordinates and have it compute lat/lon so I can map it in IDL with gridding etc. I'm using map_proj_init where the limits that go in are [-90, -180, -68.9075, 180]. But, the limits that come out are [-68.907499, -135.00000, -68.907499, 45.000004]. Is IDL just incapable of mapping a body other than Earth? I doubt it, but I've yet to prove otherwise.

```
; upper-left corner of the image and the image pixel size are in
meters.
   proj='stereographic'
   ul_map = [-457439.9690636, 457439.9690636]; upper left corner x and
y
   pixel_size = [240.0,240.0]; 240 m/pixel
   lunar_radius = 1737400.0

   ; Set up parameters to display image in its native projection.
   xsize = n_samples*pixel_size[0]
   ysize = n_lines*pixel_size[1]
   startx = ul_map[0]
   starty = ul_map[1] - ysize

   ; The corners of the image are determined in their native
projection, then converted from Cartesian to geographic lat-lon
coordinates, which is required for the LIMIT keyword.
   limit = [-90, -180, -68.9075, 180]
   xyrange = [ul_map[0], ul_map[1]-ysize, ul_map[0]+xsize, ul_map[1]]
   map_utm = map_proj_init(proj,limit=limit,sphere_radius=lunar_radius,
$
    center_latitude=(-90),ellipsoid=19)
   limit = map_proj_inverse(xyrange[[0,2]], xyrange[[1,3]],
map_structure=map_utm)
   limit = reform(reverse(limit), n_elements(limit))
```

I know it's Friday, but if anyone can find a moment to take a look I'd appreciate it.

Thanks...