
Subject: Full-Disk Orthographic to Cylindrical Projection
Posted by [Tyler Behm](#) on Mon, 11 Mar 2013 17:48:55 GMT
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I have full-disk ground-based solar images. They can be thought of as satellite-projection maps of the Sun. I am trying to work my way up to projecting these images to cylindrical by starting with the easier case of full-disk Earth orthographic projections.

I have been using IDL's `map_set` to produce orthographic images of the Earth. When I use `map_proj_init` or `poly_warp` to transform this orthographic Earth image into a cylindrical projection, it is definitely not correct. I think that IDL is also warping the corners of the orthographic image which are outside the mapping. How can I transform only the circular disk of the Earth (or Sun)?

```
window, 0, xsize=600, ysize=600
map_set, /orthographic, /grid, /conti, /hori, xmar=0, ymar=0, /iso
ortho=tvrd()
omap=!map
cmap=map_proj('Cylindrical')
cylin=map_proj_image(ortho, omap.uv_box, image_str=omap, map_str=cmap)
tvscf, cylin
```

Thank you in advance.
