Subject: Trouble showing lunar poles
Posted by Gaurav on Tue, 16 Dec 2008 07:05:59 GMT
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Dear all,
I am trying to code an application to display the lunar imagery warped on a sphere. The images that I am using are 100 metre resolution images obtained from the Clementine mission.

The images pertaining to the non polar regions (in geographic projection) of the moon can be easily warped on a sphere using the sphere(4) surface type option in MESH_OBJ. But for the polar regions, the image in the same projection becomes very bulky (of the order of 1.5 GBs).

The dataset also contains a mosaic of the polar region that shows the region above 80 degrees latitude as it would look from a point right above the poles. A snapshot of the north pole image is at:

http://img208.imageshack.us/img208/7199/moonnpolels0.jpg

Now, this image is not very bulky and I would love to use it. The trouble is, I don't know how. As I would move towards the centre of the image from any edge, the latitude values would increase whereas the longitude values change in a circular fashion-quite different from regular non-polar images where all the four corners have distinct coordinates. Do I use polar surface type in MESH_OBJ, and if so, how? In short if one had to warp an image at the poles of a sphere, how would one go about it.

I tried to look it up in old posts but I presume I am not being able to phrase my query properly. Any code snippets or pointers would be highly appreciated.

Regards,
Gaurav