Subject: 3D Surface Problem
Posted by Ken Mankoff on Fri, 05 Apr 2002 23:16:13 GMT
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Hi All,

I am using IDL Object Graphics to combine a Digital Elevation Model (DEM) with a photograph in an attempt to get a pseudo-realistic 3D view of a surface.

I have it mostly working, but have a shear effect that I cannot get rid of... I do not fully understand this whole 3D viewpoint thingey. Also, my images shapes vary. Sometimes they cover a 1x1 degree lat/lon grid, other times its a 1x10 (it is not always two squares I am putting together, although the DEM and the image are always the same shape). Also, the DEM sometimes has a range of a few hundred meters, and other times a few thousand meters...

To see what I am writing about specifically, please go here:
http://lasp.colorado.edu/mars/
and look at some 3D views (Viking, TES, or Geology)
* The "Olympus Mons" and "Valles Marineris" sites are decent.
* The bug is more obvious if you look at "Becquerel Crater"
* It is terrible if you look at "Viking 1", "Viking 2", or
"Chryse Planitia (South)"

Ideally, I would love a function to do this for me that is canned and pre-written. (I will give the author credit on the site, if you are interested in helping, let me know!). But I expect to have to code it up myself. Can anyone see from these images what I am doing wrong? If it will help if I give a code example, let me know and I will post that...

Thanks,
Ken.

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