

Proj 6

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I got no help.

No direct online source. I studied web pages but no copies from webpages.

In the NFF file, I use 't' option to use different options(textures).

t 1 ==> It uses marbly texture with perlin noise funciton.(Combination with trigonometry functions)

t 2 ==> It uses Tubulence.

t 3 ==> It uses a kind of bump mapping. It tweaks normals to display different textures.

t 4 ==> It uses displacement mapping.

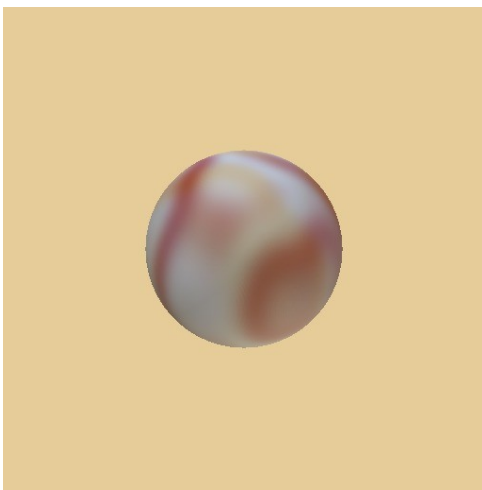
I used MYBALLS.NFF / MYBALLS2.NFF / MYBALLS3.NFF / MYBALLS4.NFF
Each file has different texture options.

Below is an example (t=1 option)

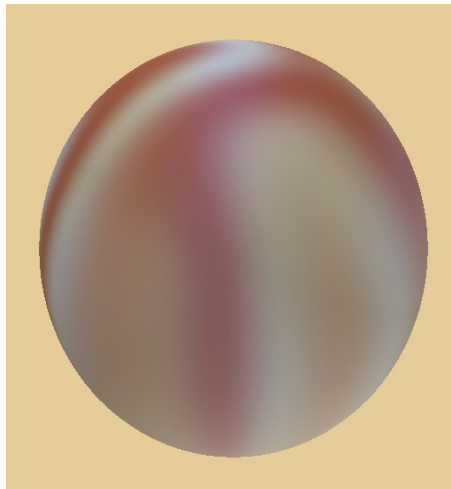
different sizes ==> Please notice that they have different textures.

It is because it uses texture mapping technique and maps to different coordinates in the texture maps.

It also uses more than 2 maps to properly interpolate the backside colors. (Supposedly refracted colros)

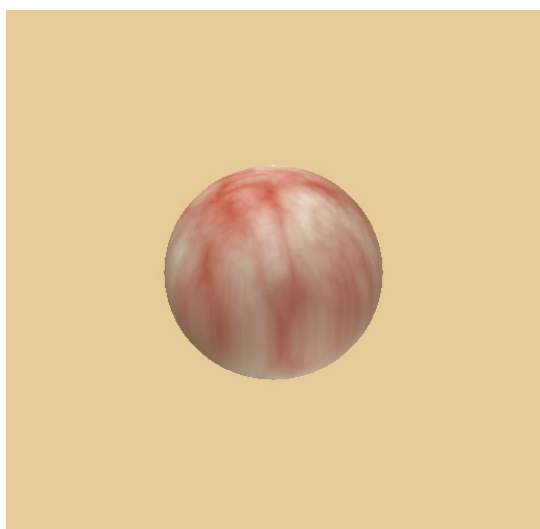


(r = 0.5)



(r = 1)

Below is by using turbulence texture maps.



Below is by using bump mapping. I intentionally tried to make horizontal texture to make it look like stars like Venus.



Below is by using Displacement mapping.

The reason for the discontinuity is because the displacement mapping exceeds the range of the defined texture map. However, it is very easy to just expand the texture map.

