

**Snow Surface Shader - surf\_snow.slo**

#### **amb** - Ambient Color



The “ambient” color of the snow. This “fills” in where diffuse lighting is in shadow, and fakes a subsurface look to the snow, hence the default blue color.

#### **Ka** - Ambient Strength



Control the strength of the ambient color.

#### **Ks** - Specular Strength



Controls the strength of the specular highlights from the light sources.

#### **specRoughness**



The roughness of the material as it responds to specular hilights from the light sources. When specRoughness=0 the material is very shiny (ex: glass), when specRoughness=1 the material is more diffused and will have a rougher specular reflection from the light sources.

#### **specEnvGain**



The strength of the reflection from the environment map.

#### **specEnvBlur**



Pre-blurs the environment map before looking it up as a reflection. This simulates the roughness of the surface, similar to specRoughness. The rougher the surface, the more you will want to pre-blur your environment map.

#### **Kd** - Diffuse Strength



Controls the strength of the Diffuse contribution from the light sources.

#### **diffRoughness**



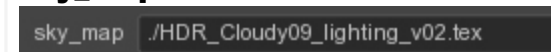
Controls the roughness of the diffuse contribution from the light sources. This uses an Oren-Nayer diffuse model that has roughness. Note: Lambert diffuse roughness is set at hemisphere sampling (180 degrees, or  $\pi/2$ ).

#### **specularColor**



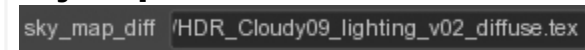
Tints the specular reflection color from the light sources. Default is white, which reads the light source color as defined in the lights.

#### **sky\_map**



The environment map for reflections lookup. Needs to be a Renderman .tex file. To convert on the command line, type `txmake -float -envlati envmap.tif envmap.tex`

#### **sky\_map\_diff**



The convolved, or blurred, environment map to lookup for diffuse shading. This map can be quite small in resolution, 256px wide, because it is pre-blurred for the lookup.

Questions? Shoot us an email at [info@lollipopshaders.com](mailto:info@lollipopshaders.com)  
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