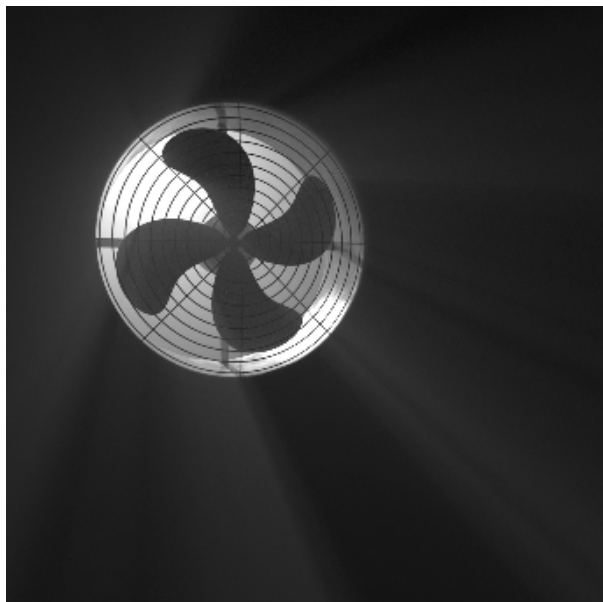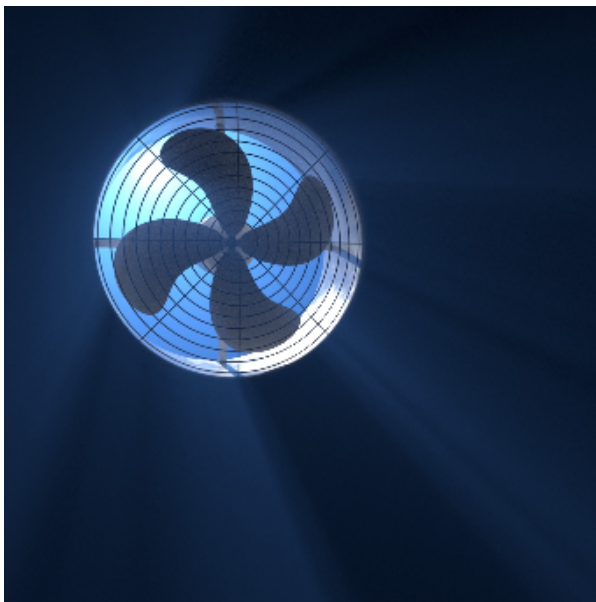# 3Delight Atmosphere

The *3Delight Atmosphere* shader allows rendering of atmospheric effects such as fog and smoke. The shader interacts with all lighting elements of the scene (environment, area lights, directional lights, mesh lights, etc...) and will be part of any *Deep EXR* file produced by the render.
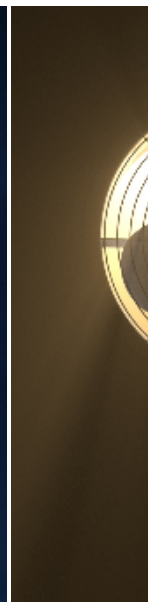
Color

This controls the general colour of the atmosphere.

Gray 0.5   R 0.075 / G 0.25 / B 0.75   R 0.8 / G 0.5 / B

Density

Specifies the density of the atmosphere. Density is related to the amount of particles/molecules that block light. Increasing density makes objects disappear with distance. Density's effect is also related to the *scale of the scene.* Scenes of a small scale need a higher *Density* to render the same effect as scene built using a larger scale.
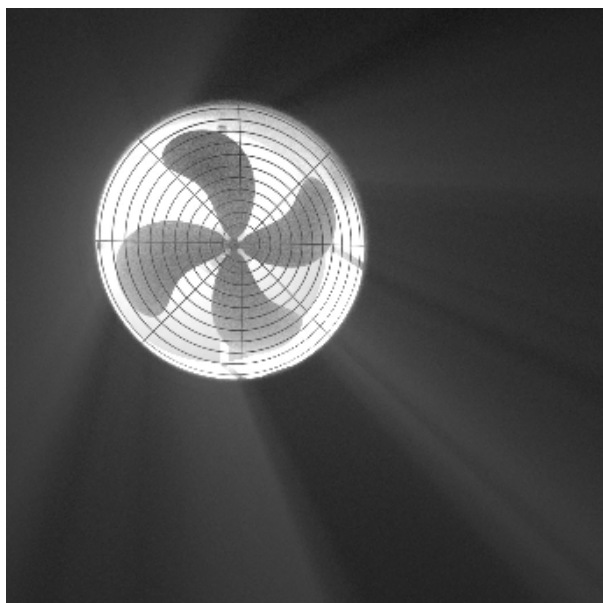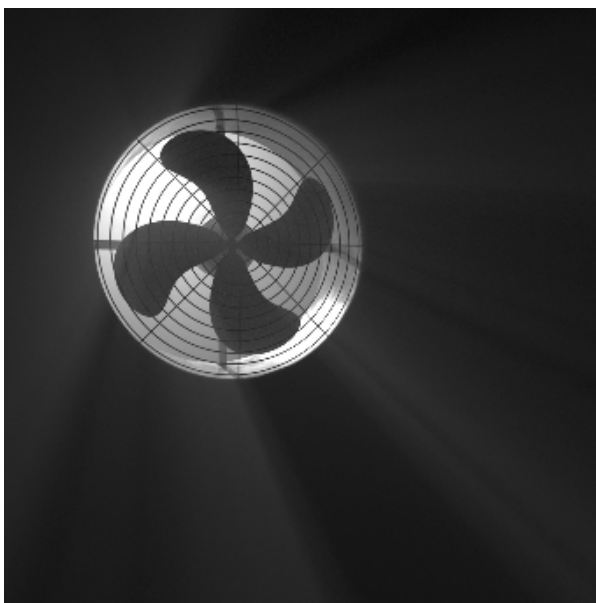
0.01   0.1   0.3

Super Reflective

This parameter enables rendering of volumes that reflect much more light that they absorb. This non-physical behaviour allows for more artistic freedom. For example, it is possible to obtain distinctive *glow* around lights while avoiding the steep absorption of a high *Density* that makes objects invisible in the atmosphere. The default value of 0 ensures a physically plausible render.

The parameters of this shader have been designed to allow an artist-friendly specification of atmosphere's *look*. The colour dialed in the UI will be the colour of the atmosphere. The often used *absorption* and *scattering* parameters provide non intuitive results since they require the use of visually unrelated colours in the UI.

This shader simulates fog using *single scattering* only. For multiple-scattering, it is recommended to create a VDB volume with constant density and use VDB Volume shader.