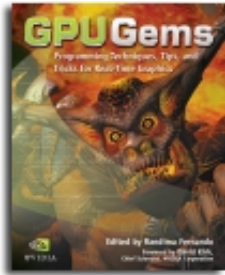


Chapter 39. Volume Rendering Techniques



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This chapter presents texture-based volume rendering techniques that are used for visualizing three-dimensional data sets and for creating high-quality special effects.

39.1 Introduction

Many visual effects are volumetric in nature. Fluids, clouds, fire, smoke, fog, and dust are difficult to model with geometric primitives. Volumetric models are better suited for creating such effects. These models assume that light is emitted, absorbed, and scattered by a large number of particles in the volume. See Figure 39-1 for two examples.