

***Abstract: A visually plausible virtual cloud generation***

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**Abstract**

We have a set of research results on cloud modeling. Although they have mainly focused on the modeling and rendering of more realistic clouds, nowadays flight simulation games or even full-scale flight simulators often need a quantity of visually plausible clouds rather than realistic ones. Furthermore, we also need to save graphics designer's efforts, especially for small production companies. Contrary to the previous works, we aimed at the mass production of clouds, and represent a new method for modeling various kinds of visually plausible clouds with as little effort as possible. These clouds are displayed in real time with low computing power consumption. Based on the hierarchical particles, our system starts from locating relatively large spherical particles in the space. Using specifically shaped clouds through controlling the seed particle locations.

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