Volcano

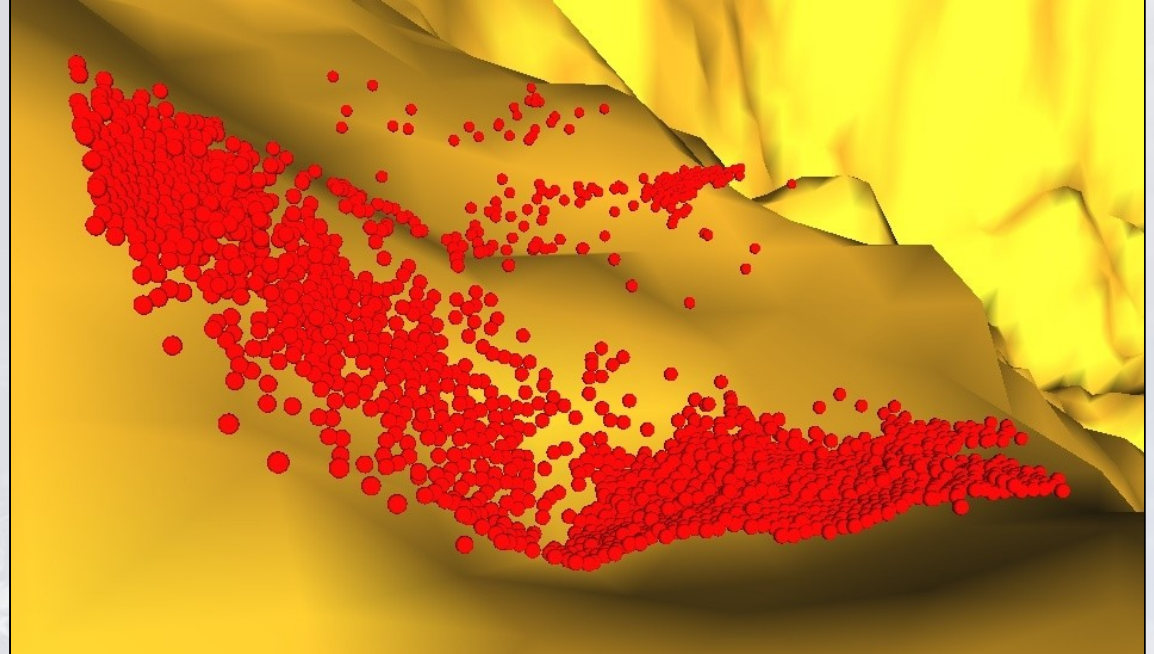Dilip Many, Pascal Goffin, Fabio Zünd 2007

LAVA

full SPH system

with:
- pressure force
- viscosity force
- gravity force
- terrain collision handling

problems encountered:
- density computation
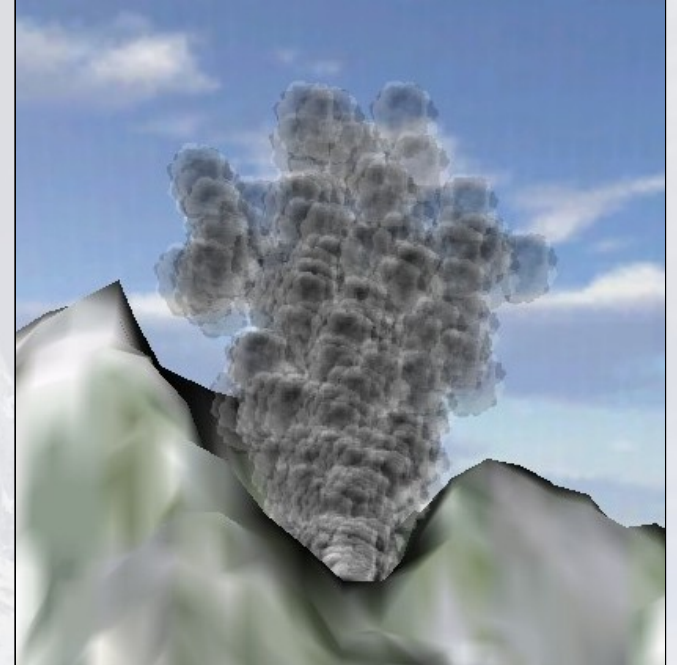- parameter tuning
- graphical representation

SMOKE

- based on a particle system
- leapfrog integration scheme used

with:
- random velocity
- random angle between 65° and 115°
- random number of particles per timestep
- particles motion influenced by gravity
- particles have a lifetime
- particle removed from the system after a given time or position

major problem:
- transparency

RENDER, SKYBOX

Skybox:
- Terragen
- Terrain
- Textures
- Camera
- Lights

Renderer:
- SoOffscreenRenderer
- QuickTime Pro