

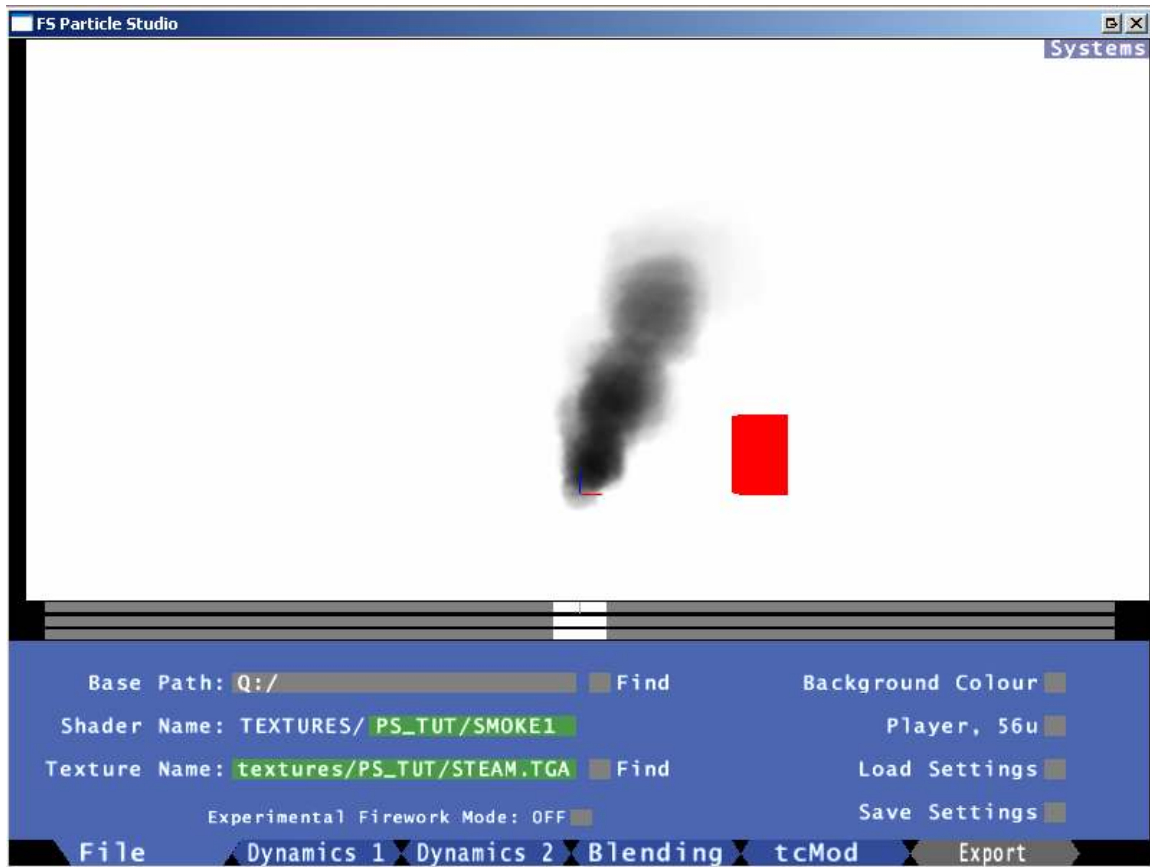
Frozen Sand Particle Studio Examples

Thursday, February 18, 2010

This is super rough – I may improve it.

Note: All the sample files used here have a basepath of **q:**; I recommend that you open a command prompt and type **subst q: c:\path\to\baseq3** so that you can extract and run all the sample files to your base path.

Smoke



Z Waveform: Sawtooth.

X/Y Waveform: Sawtooth.

Start and end angles control the direction the smoke will move horizontally – as if the wind is blowing it. The radius controls the distance it will go sideways.

Blend: GL_SRC_ALPHA GL_ONE_MINUS_SRC_ALPHA

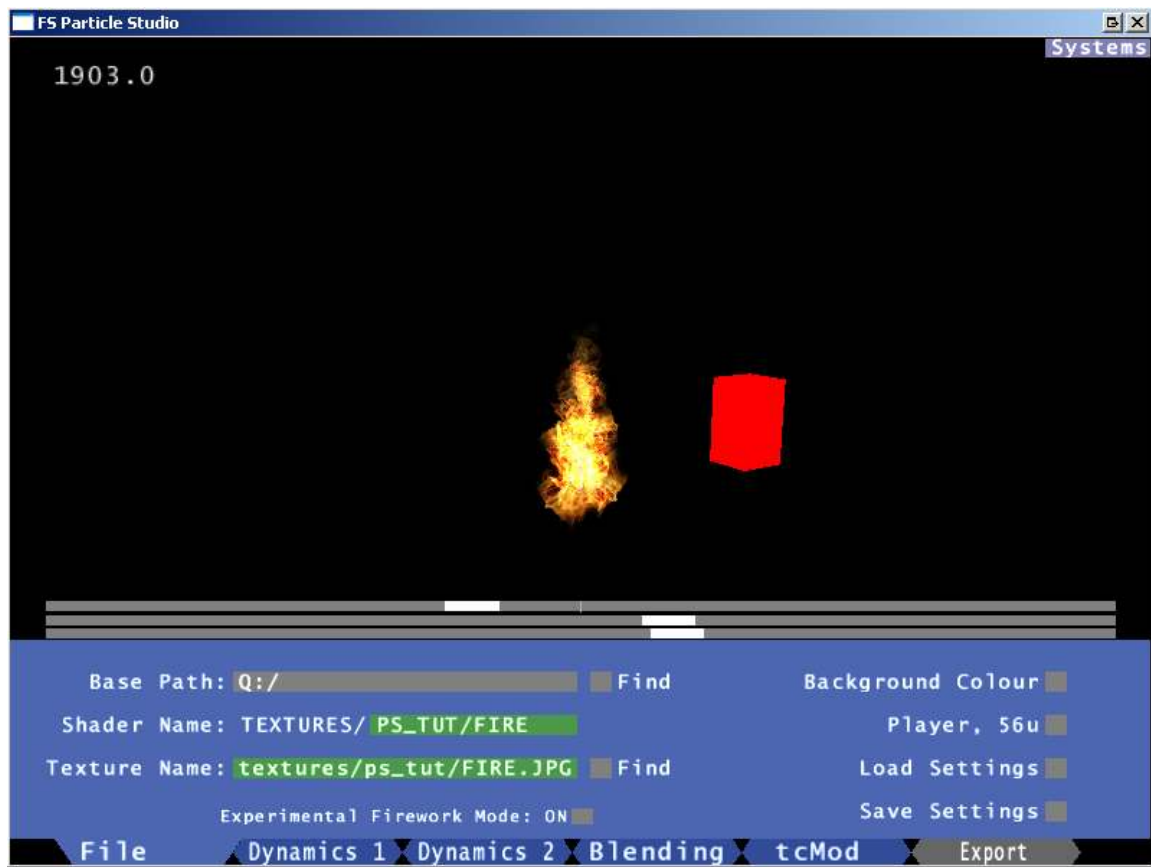
RGBGen: Const 0 – force the image to be black.

Alphagen: Sawtooth 1.733 to 0 – A gradual fade to invisible, a start value above 1 forces the smoke to stay thick during the first few moments before it fades.

Scale: A start scale of 0.25 and final scale of 1 makes the smoke particles grow as they rise.

A slight rotation makes the smoke particles appear dynamic and more realistic.

Fire



Z Waveform: Sawtooth.

X/Y Waveform: Inverse Sawtooth.

Blend: GL_SRC_ALPHA GL_ONE – this allows both alpha and rgb control of the flame's brightness.

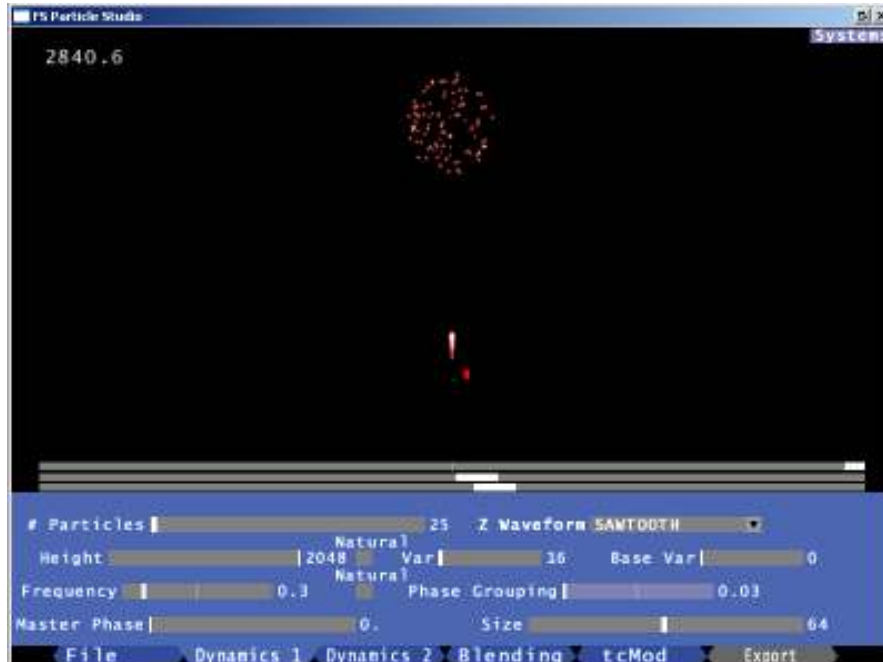
RGBGen: Sawtooth 1 to 0 – This slowly fades out the flames as they rise upwards.

Alphagen: Sawtooth 0 to 6 – This rapidly ramps up the alpha to quickly fade in the flames.

Scale: A start scale of 1 sawtooth ramping up to a final scale of 0.3 makes the flames shrink as they move away from the emitter.

Again, slight rotation makes the flame particles appear dynamic and more realistic.

Firework



The 'bang' system

Enable experimental firework mode.

Z Wave form: Sawtooth

Height: 0

Height Var: 2048

Frequency: 0.3

Phase Grouping: 0.03

X/Y Waveform: Sawtooth

Radius: 2048

Start Angle: 0

End Angle: 359

Blend: GL_SRC_ALPHA GL_ONE

RGB1: 6

RGB2: -5

RGB Phase: 0.25

Waveform: Sawtooth

Alpha1: 1

Alpha2: -1

Waveform: Square

Scale1: 0.2

Scale2: 4

Waveform: Sawtooth

The 'wooosh' system

Disable experimental firework mode.

Z Wave form: Sawtooth

Height: 4096

Height Var: 16

Frequency: 0.3

Phase Grouping: 0.03

Master Phase: 0.5

X/Y Waveform: Sine

Radius: 64

Start Angle: 358

End Angle: 359

Blend: GL_ONE GL_ONE

RGB1: 1

RGB2: 0

RGB Phase: 0

Waveform: Square

Alpha1: 1

Alpha2: -1

Waveform: Const

Scale1: 1

Scale2: 1

Waveform: Sawtooth