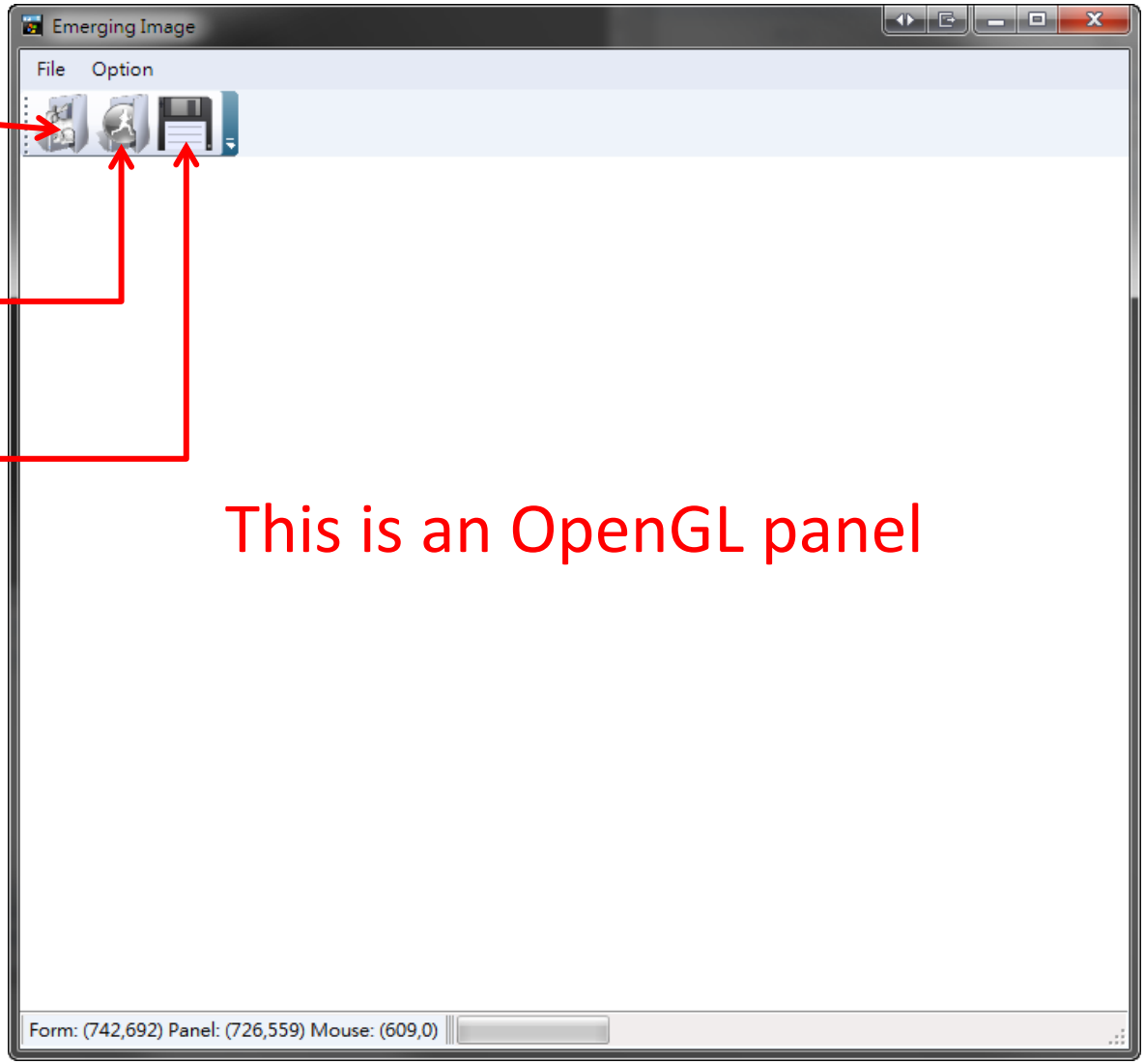
Emerging System
User Manual

System I/O

Open single model and
Enter “Emerging Image(EI)” mode

Open keyframe models and
Enter “Emerging Video(EV)” mode

Save result as emerging image(s)



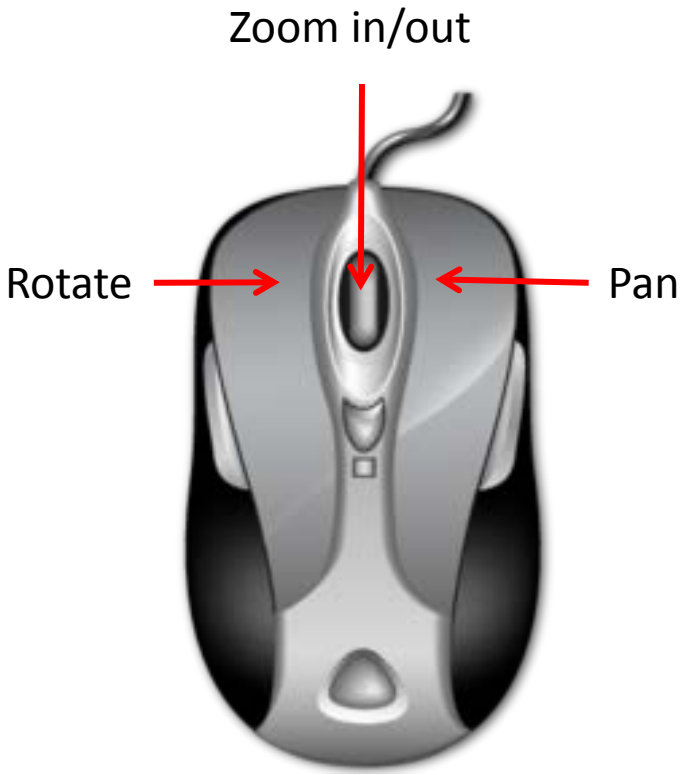
System I/O

- Open single model (EI mode)
  - File->Open->EI Data
  - Drag *.obj file to OpenGL panel
- Open keyframe models (EV mode)
  - File->Open->EV Data
  - Drag *.ev file to OpenGL panel
- Save result(s)
  - File->Save->Image(s)
  - In EI mode, the output is an emerging image (*.eps)
  - In EV mode, emerging image of each frame will be saved to the target folder

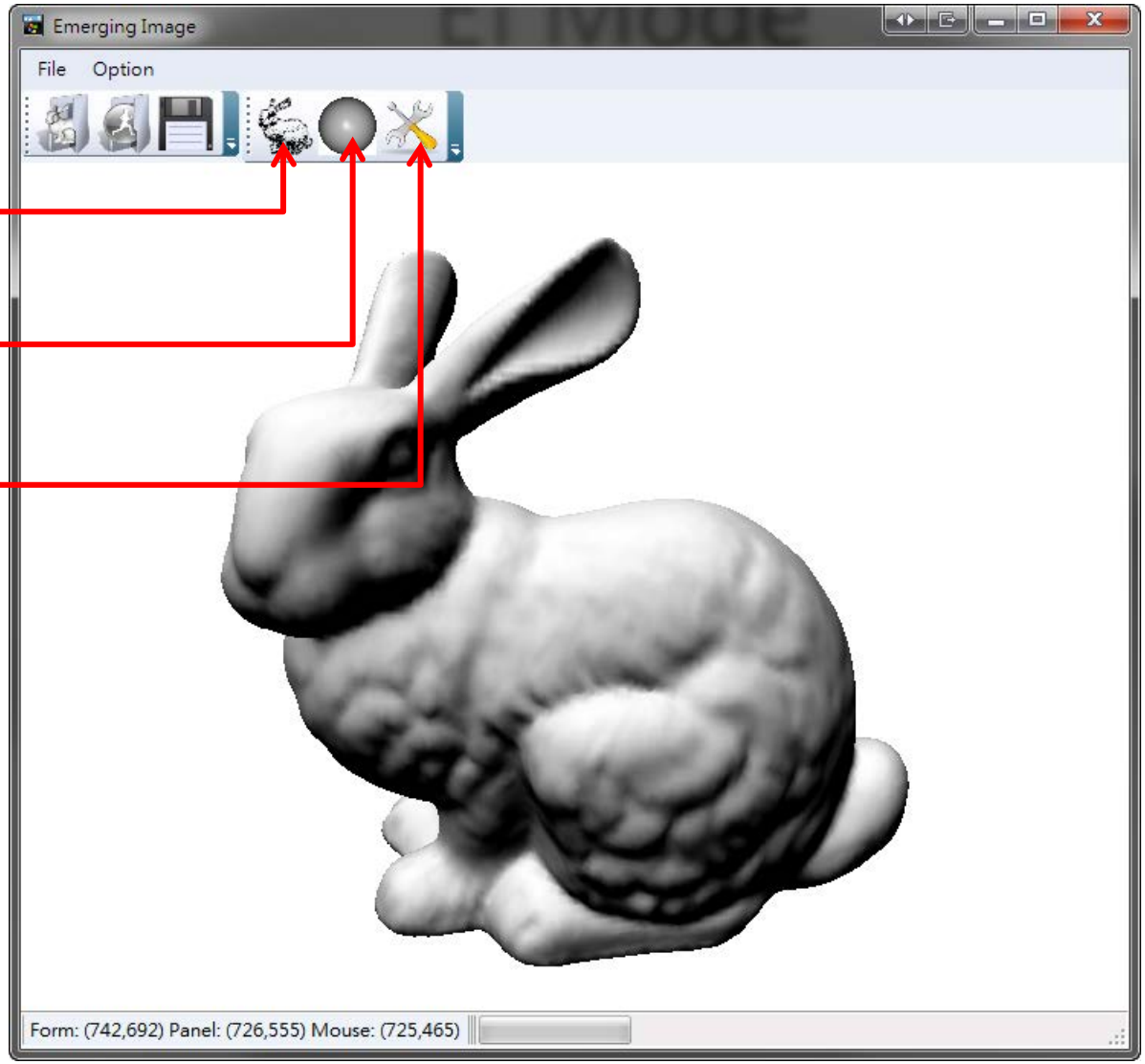
System I/O

- Open camera setting
  - File->Open->Camera
  - Drag *.view file to the main panel
- Save camera setting
  - File->Save->Camera
- Open light setting
  - File->Open->Light
  - Drag *.view file to the light panel 
- Save light setting
  - File->Save->Light

OpenGL Panel Manipulation



EI Mode

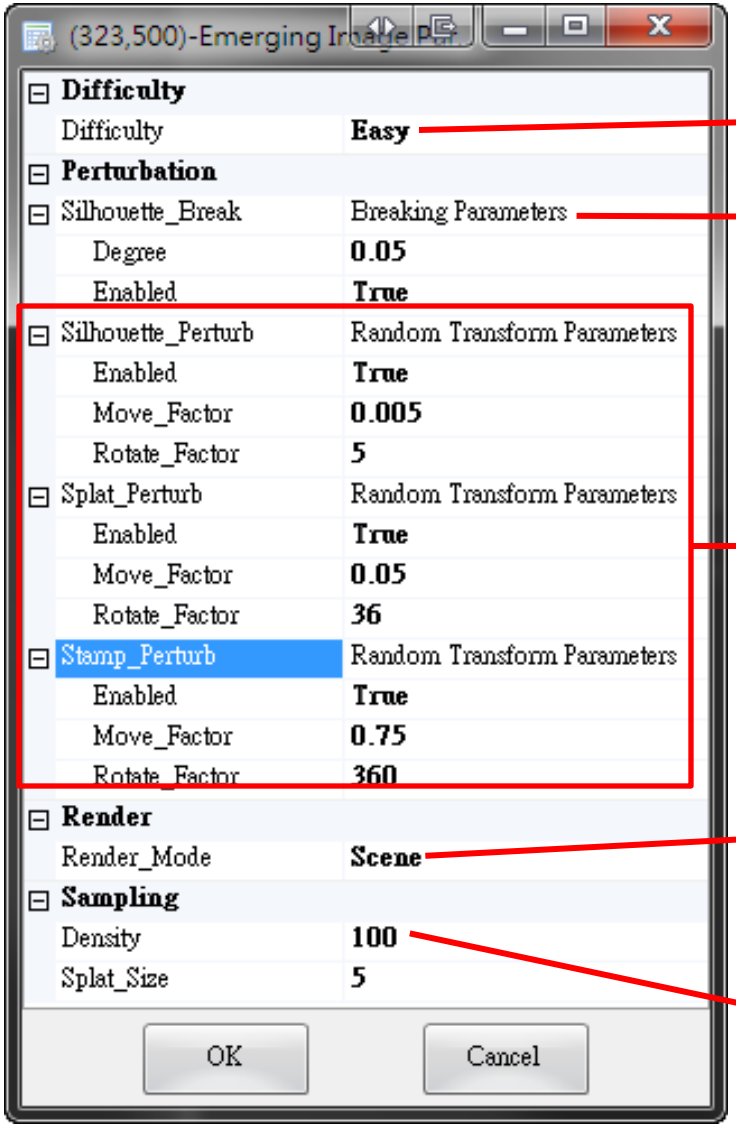


Generate emerging image

Adjust the light position
(Use left mouse button)

Parameter dialog

EI Parameters



Difficulty levels. Value= Easy, Medium and Hard

Breaking the silhouette. Value=0.0(Disabled)~0.5

Rand. perturbation.
Move_Factor is the fraction of displacement
Rotate_Factor is the angle of rand. rotation between [angle, -angle]

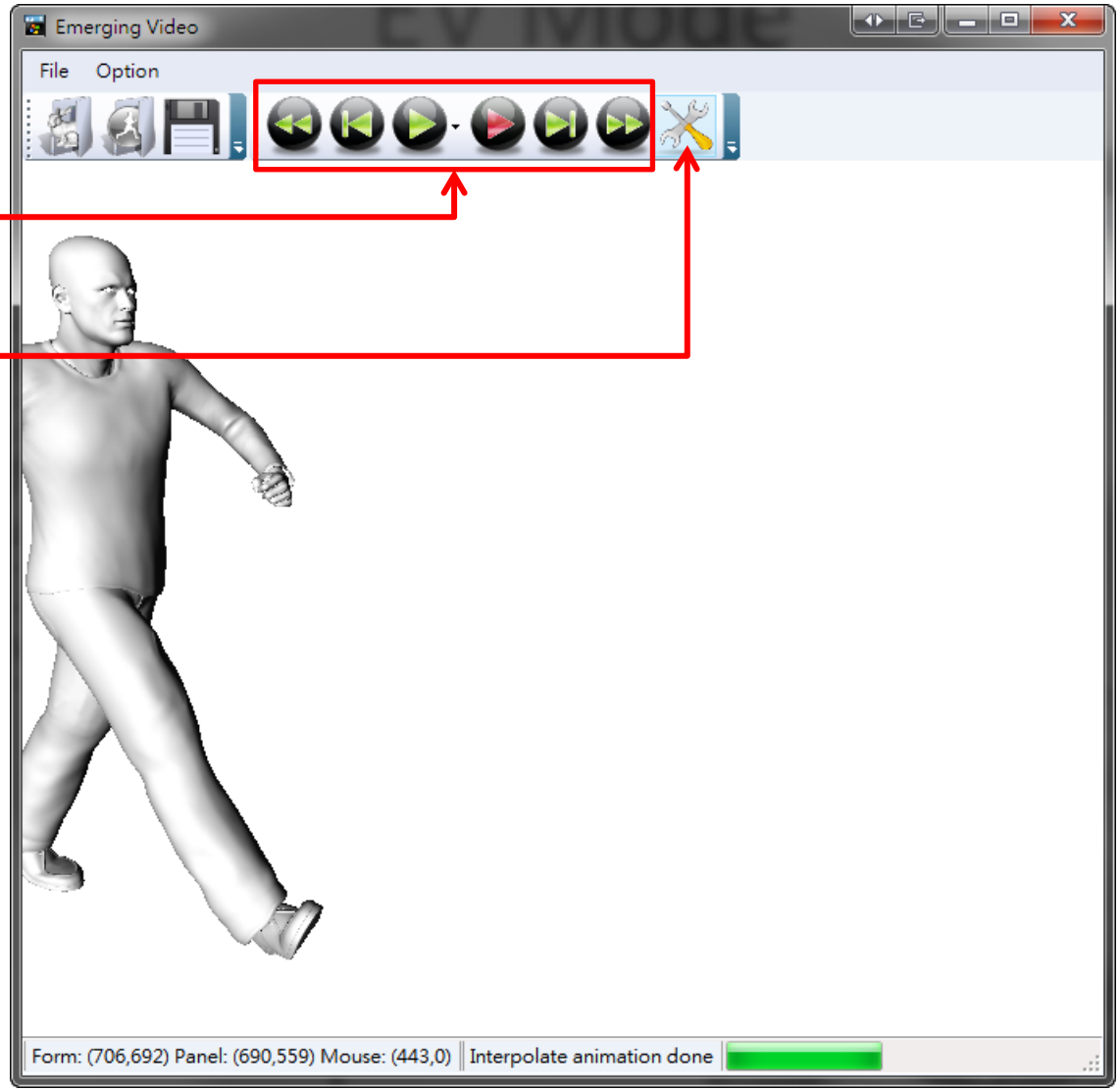
Rendering states.
Scene= normal rendering
Develop= normal+emerging
Emerge= emerging

Splats density (0~100) and size (2~8)

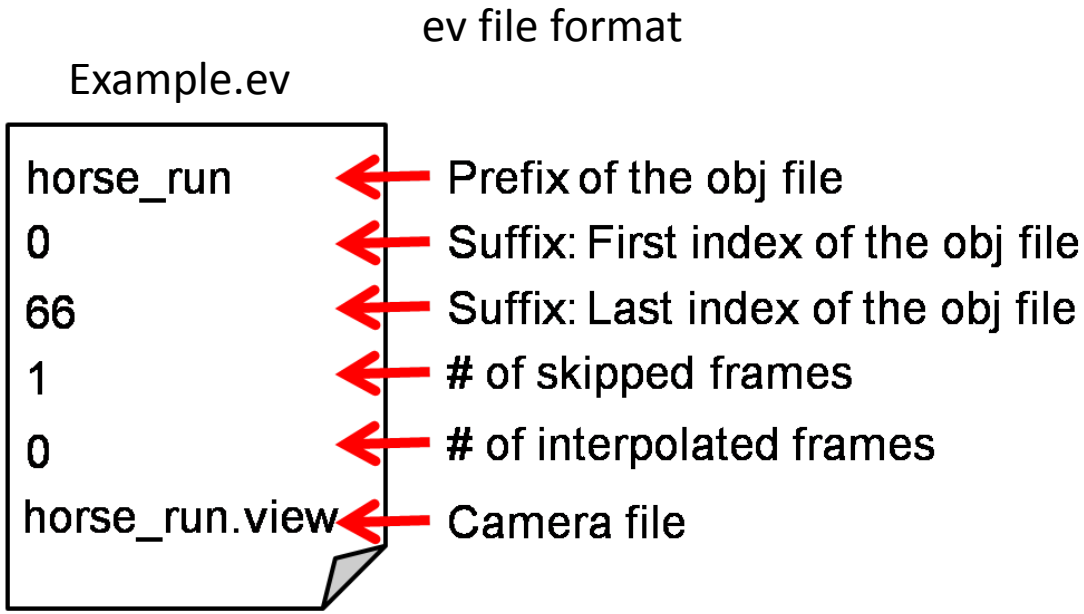
EV Mode

Animation player

Parameter dialog



ev File Format

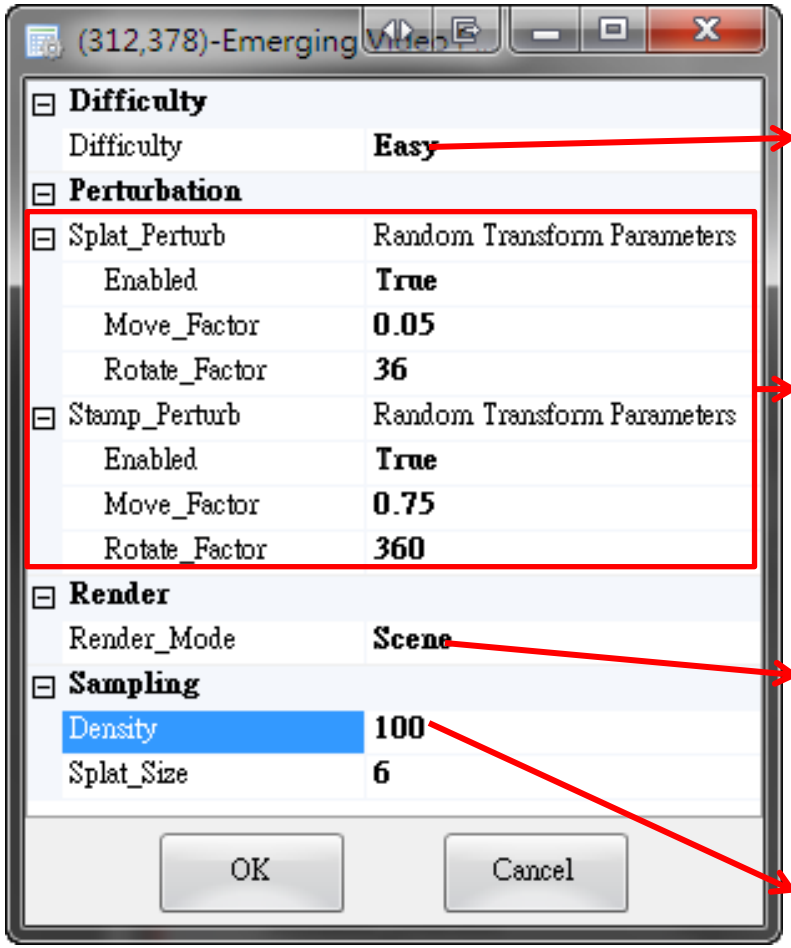


In this example, the program will read the following keyframe models, **horse_run_0.obj, horse_run_2.obj, …, horse_run_65.obj, horse_run_66.obj**, and read the camera file "**horse_run.view**".
Note that all obj files and view file must be put in the same folder as ev file.

- Generate emerging video
  - Open the parameter dialog and set Render_Mode to “Emerge” or “Develop”
  - Play the animation
  - (Optional) if you want to save emerging image of each frame, click  and pick a target location.
- Simple animation player

B1: Rewind the animation by one frame.
B2: Go to the first frame of the animation.
B3: Play the animation.
B4: Record the animation. When the button is pressed, the program will save the result (normal/emerging rendering) into a image file (bmp/eps).
B5: Go to the last frame of the animation.
B6: Forward the animation by one frame.

Parameters



Difficulty levels (Easy, Medium and Hard).

Rand. perturbation.
Move_Factor is the fraction of displacement
Rotate_Factor is the angle of rand. rotation between [angle, -angle]

Rendering states.
Scene= normal rendering
Develop= normal+emerging
Emerge= emerging

Splats density (0~100) and size (2~8)

Tested Platform/Environment

- Win XP, Win Vista and Win 7
- Support .Net framework 1.0 or above
- Support OpenGL 1.2 or above