QSplat Preprocessor User Manual

The application is launched using two command line arguments, one for the input file and one for the output file. If the command line arguments are not input, the program will close with an error. The exact form for the command is shown below.

"QSplat Preprocessor.exe" <input-file.pts> <output-file.qs>

QSplat PCR User Manual

Required Files: QSplat PCR.exe, freeglut.dll, glew32.dll, "Shader" directory.
Required Files under "Shader" directory: axis_f.glsl, axis_v.glsl, basic_f.glsl, basic_g.glsl, basic_v.glsl, blend_linked_f.glsl, blend_quad_linked_f.glsl, blend_quad_sort_g.glsl, blend_resolve_f.glsl, blend_resolve_v.glsl, blend_v.glsl, mock_f.glsl, mock_g.glsl, mock_v.glsl, point_f.glsl, point_v.glsl, quad_f.glsl, quad_g.glsl, quad_pc_f.glsl, quad_pc_g.glsl

The point cloud rendering application is a command-line application which is configured using command line arguments, and manipulated using a mouse and keyboard. The application can be launched with an optional command line argument for the input file. If this is not used to specify the input file, a sphere will be used as the default. The exact form of the command is shown below.

"QSplat PCR.exe" [-model <qsplat-file.qs>]

User Interface

Button	Function
Left-click	Hold and drag to rotate the scene. In Light Mode, rotates the direction or the light.
Right-click	Hold and drag to control the zoom. Up to zoom in. Down to zoom out.
Spacebar (Left-click Lower-Right Corner)	Cycle through rendering modes.
Escape	Quits application.
F (Double left-click)	Toggle between fullscreen and windowed.
R (Right-click Upper-Right Corner)	Toggles model rotation on/off.
L (Left-click Lower-Left Corner)	Toggles Light Mode on/off.
+ (Left-click Upper-Right Corner)	Increases the size of a point
- (Left-click Upper-Right Corner)	Decreases the size of a point

Note: This interface is Windows 8 touch compatible.

All arguments are listed in the table below.

Arguments	Function
-sphere	Loads a low-point sphere (default)
-stress	Loads a extreme high-point sphere
-lion	Loads model at "Model\lion_color.qs"
-model <qsplat-file.qs>	Loads model at <qsplat-file.qs>
<qsplat-file.qs>	Loads model at <qsplat-file.qs> (Note: any argument starting with "-" and not listed as a command is ignored)
-<combine of two of the following: x, y, z, X, Y, Z>	The first character is used for the look position and the second is used for the up direction. Capital Letter are negative (i.e. Z = -z = (0,0,-1)) (e.g. -xy, means the camera will by looking down the x-axis at the origin, with the y-axis being up)
-height <value>	Sets initial window height to <value> (default is 500)
-width <value>	Sets initial window width to <value> (default is 500)
-max_height <value>	Sets the maximum supported window height. This affects primarily affects blending (default is 1200)
-max_width <value>	Sets the maximum supported window width. This affects primarily affects blending (default is 1920)
-frame_rate <frame_rate>	Sets the maximum frame rate for the application in frame per second. (Default is 30 fps)
-update_rate <multiplier>	Sets the rate that the traverser updates the buffer as a multiple of the frame time (default is 1)
-blend_3D	Blending will use depth correct hexagons splats instead of billboards
-blend_Quad	Blending will use circles