

# Change Log

## Version 3.4.2

Fixed SgtTerrain unsplitting code.

## Version 3.4.1

Fixed SgtPointStarfield wrapping when using multiple cameras.

Added 'Orthographic Camera' demo scene.

Moved SgtStarSurface shader to vert/frag to avoid lighting issues.

Moved 'Animated Star' demo features to 'Star' demo scene.

Improved SgtStarSurface shader noise animation.

## Version 3.4.0

Added 'Solar Eclipse' demo scene.

## Version 3.3.9

Added Night Sky settings to SgtAtmosphere.

Fixed SgtTerrainSpawner giving different results depending on approach direction.

Fixed SgtTerrainSpawner.AlignToNormal.

## Version 3.3.8

Updated child state reversion code.

Replaced SgtRenderQueue with native enum.

## Version 3.3.7

Added 'Blend Mode' setting to SgtPointStarfield allowing for Alpha Testing.

Added 'Blend Mode' setting to SgtBelt allowing for Additive Blending.

Added SgtAtmosphereLights/Shadows components.

Added SgtBeltLights/Shadows components.

Added SgtCloudsphereLights/Shadows components.

Added SgtJovianLights/Shadows components.

Added SgtRingLights/Shadows components.

Moved SgtDepthTextureMode to main scripts directory.

Fixed SgtRingMesh 'Export Mesh' option.

Removed GC alloc from shader lights.

## Version 3.3.6

Added 'Dark Star' demo scene.

Added 'Animated Star' demo scene.

Added SgtStarSurfaceNoiseGen component.

Updated UI in all demo scenes.

## Version 3.3.5

Fixed bug where SgtTerrainSpawner.Prefabs list would be marked red when valid.

Added 'Seed' setting to SgtTerrainSpawner so it's no longer random.

Added procedural rotation to SgtTerrainObject.

## Version 3.3.4

Fixed 'drifting' of SgtStarfield, SgtCloudsphere, etc.

Modified 'Extract Cubemap' script to correctly swap the X axis faces.

Modified SgtTerrainSimplex component to sample multiple layers (octaves).

Rewrote SgtTerrain with a faster and better looking LOD algorithm.

Renamed SgtTerrainDisplacer to SgtTerrainHeightmap.

Split SgtAtmosphere's 'Fog' setting into 'Inner Fog' and 'Outer Fog'.

Added SgtDebrisGrid component for procedural debris placement.

Added SgtBox component for use with SgtDebrisGrid.

Added 'Debris Grid' demo scene.

Added 'Debris Grid (Shapes)' demo scene.

Added 'Terrain Heightmap Water' demo scene.

Added 'Terrain Procedural' demo scene.  
Added SgtTerrainRidgedSimplex component.  
Added SgtTerrainMaterial component for material LOD.  
Added SgtTerrainPlane component for simple collider planes.

### Version 3.3.3

Removed scattering calculations from SgtAtmosphereScattering component.  
Added ScatteringMie setting to SgtAtmosphere component.  
Added ScatteringRayleigh setting to SgtAtmosphere component.

### Version 3.3.2

Fixed cubic spline interpolation code for SgtFlareMesh.  
Added SgtAurora component.  
Added SgtAuroraMainTex component.  
Added SgtAuroraFadeNear component.  
Added 'Aurora' demo scene.  
Updated SgtKeyboardThruster component.  
Updated 'Simple Thruster' demo scene.  
Updated 'Simple Belt' demo scene.

### Version 3.3.1

Fixed two shader warnings.  
Added SunsetEase setting to jovian and cloudsphere components.  
Fixed SgtLightning disappearing when changing scenes.  
Minor text fixes.  
Updated star texture.

### Version 3.3.0

Added detail texture support to SgtRing.  
Added support for two scattering sources to SgtRing.  
Added RadiusBias setting to starfield and belt components.  
Added SgtFlare component.  
Added SgtFlareMesh component.  
Added SgtFlareMaterial component.  
Added SgtDepthCamera component for SgtFlare.  
Added SgtDepthRaycast component for SgtFlare.  
Added FadeNearTex setting to SgtStarfield.  
Added FadeFarTex setting to SgtStarfield.  
Added SgtStarfieldNear component.  
Added SgtStarfieldFar component.  
Added SgtAtmosphereDepth component.  
Added SgtAtmosphereLighting component.  
Added SgtAtmosphereScattering component.  
Added SgtRingMesh component.  
Added SgtRingLighting component.  
Added SgtRingFade component.  
Added SgtJovianLighting component.  
Added SgtJovianScattering component.  
Improved all demo scenes.  
Improved SgtSphereShadow color calculation.  
Improved SgtSphereShadow & SgtRingShadow gizmos.  
Improved starfield 'Softness' error to have a fix button.  
Fixed SgtSphereShadow calculation for spheres and oblate spheres at all rotations.  
Fixed fragment alpha output for all shaders.  
Renamed 'Eclipse' demo scene to 'Shadow Layer'.  
Renamed starfield 'Allow Pulse' to 'Pulse'.  
Renamed starfield 'Age' to 'PulseOffset'.  
Renamed starfield 'TimeScale' to 'PulseSpeed'.  
Renamed belt 'Age' to 'OrbitOffset'.  
Renamed belt 'TimeScale' to 'OrbitSpeed'.  
Moved SgtRing mesh generation to SgtRingSegmentMesh.  
Moved SgtStarfield FadeNear shader code to fragment shader.  
Moved SgtStarfield FadeFar shader code to fragment shader.  
Changed starfield stretch implementation to always use stretch vector.  
Changed starfield fade near implementation.  
Changed starfield fade far implementation.

Removed SgtDepth because Unity now allows you to manually change material render queue settings.  
Removed SgtAccretion and moved its features to SgtRing.  
Removed SgtRangeAttribute because it's no longer required.  
Removed SgtWrappedStarfield and moved its features to SgBoxStarfield,  
Removed 2D starfield wrapping because it can be replicated by modifying WrapSize.

## Version 3.2.4

Updated main build to Unity 5.4.  
Updated SgtTerrain position & normal finding code.  
Fixed SgtSpacetime rendering.  
Fixed corona/atmosphere flickering under certain conditions.  
Added terrain repel code to SgtKeyboardMove.

## Version 3.2.3

Fixed bugs with SgtComponentPool and SgtObjectPool.  
Fixed bug with SgtPatch mesh generation.  
Fixed bug with SgtTerrain normal and tangent generation at depth 6+.  
Reduced SgtTerrain GC alloc.  
Improved inspector code consistency.  
Improved SgtTerrain budget timing.  
Changed SgtTerrain budget and delay values to seconds instead of milliseconds.

## Version 3.2.2

Added SgtDebrisSpawner component.  
Added SgtTerrainSpawner component.  
Added 'Infinite Asteroids' demo scene.  
Added custom inspectors to all components.  
Added tooltips to all inspector fields.  
Added color gradient to SgtStaticStarfield.  
Fixed warning in Unity 5.4.  
Fixed Starfield & Belt not pooling excess models.  
Fixed component menu paths for all components.  
Fixed components (e.g. SgtJovian) breaking when being created from prefabs.  
Moved all inspector code to main source files and simplified them.  
Improved SgtTerrain code.  
Simplified pooling code.  
Removed unused code.

## Version 3.2.1

Replaced starfield Sprites with MainTex and Layout for faster generation.  
Moved SgtLightning code to SgtLightningSpawner for reduced GC usage.  
Removed almost all component array field initializers for reduced GC usage.  
Replaced almost all SgtProceduralMesh usage for manual mesh building for reduced GC usage, and speed.  
Replaced almost all Dirty mark/check code with manual updating for reduced Update load.  
Removed unnecessary SgtObserver requirements from some components.  
Modified SgtThrusterFlare to work in edit mode.  
Modified SgtNebulaStarfield to take a fixed amount of stars, for faster generation.  
Added SgtShadowLayer, allowing shadows on any MeshRenderer.  
Added pulse settings to SgtStar data.  
Improved visual quality of most example scenes.  
Fixed SgtSpacetime effects disappearing after save.

## Version 3.2.0

Fixed objects being pink when enabling them.  
Fixed editor error that pops up when changing play modes in Unity 5.3.4.

## Version 3.1.9

Added 'Gravitational Waves' demo scene.  
Added many new settings to SgtSpacetime & SgtSpacetimeWell.  
Removed shader muliti\_compile DUMMY usage.  
Fixed warnings in Unity 5.3.

## Version 3.1.8

Fixed mesh bounds with SgtDisplacedMesh.  
Fixed temp rotation resetting in some SgtThruster.

Improved SgtSingularity.  
Added documentation for SgtSingularity.

## Version 3.1.7

Fixed camera-specific transform changes for SgtCloudsphere, SgtStarfield, SgtProminnence, and SgtThruster.

## Version 3.1.6

Added empty versions of old files to prevent errors when upgrading.  
Added 'Jitter' setting to SgtNebulaStarfield.  
Fixed layer settings for all newly generated child GameObjects.

## Version 3.1.5

Fixed instruction count limit with SgtAtmosphereOuter shader.  
Fixed script warnings when building with Unity 5.2.  
Fixed SgtDisplacedMesh not working properly in builds.  
Removed SgtDisplacedTerrain component.  
Added SgtTerrainDisplacer component.  
Added SgtTerrainSimplex component.  
Added SgtTerrainCylindrical component.

## Version 3.1.4

Removed runtime GC allocs from SgtStarfield.  
Added SgtLightning and SgtLightningSpawner components.  
Added 'Lightning' demo scene.

## Version 3.1.3

Fixed warning in Unity 5.2.  
Fixed transparent shader alpha with HDR.  
Added SgtDisplacedMesh component.  
Added Displaced Mesh demo scene.  
Updated Displaced Terrain demo scene.  
Updated Eclipse demo scene.  
Updated Flying On Terrain demo scene.  
Moved all solar system objects to free solar system pack.  
Made demo UI code simpler.  
Made terrain code take up less CPU.  
Made SgtAtmosphere component easier to use.

## Version 3.1.2

Fixed a bug where the Follow Observers setting would interfere with PlayMaker.  
Made it so atmosphere, thrusters, etc will now update with the scene view cameras.

## Version 3.1.1

Fixed bug where the SgtThruster wouldn't work with multiple observers properly.  
Fixed bug where the SgtThruster would incorrectly hide behind moving rigidbodies.  
Added the 'SgtStaticStarfield' component.  
Added the 'Static Starfield' demo scene.  
Right click create menu now places new GameObjects under the selected one.

## Version 3.1.0

Hid 'Follow Observers' from the SgtWrappedStarfield inspector.  
Fixed issue where changing 'Ambient Intensity' would cause transparent objects (e.g. Jovian) to render incorrectly.  
Fixed 'Background Clouds' GameObjects in example scenes.

## Version 3.0.9

Improved thruster flickering to now use Time.TimeScale.  
Improved thruster flare to shrink/expand smoothly when occluded.  
Fixed starfield pulsing.  
Added the 'Simple Thruster' demo scene.

## Version 3.0.8

Moved main build to Unity 5.  
Fixed 'Create Editable Starfield Copy' to now copy all data.

Updated demo GUI to use new GUI.  
Made it so SgtStarfield.Color.a alters the final color of the starfield.  
Fixed issues where the scene would get marked as dirty when nothing changed.

## Version 3.0.7

Added 'SgtBoxStarfield' component.  
Added 'SgtSkysphere' component.  
Removed 'Add Force Relative' from the 'SgtThruster' component.  
Make it so SgtStarfield.Color effects final starfield opacity.

## Version 3.0.6

Added the 'SgtSnapToTerrain' component, allowing you to easily place stuff on displaced terrains.  
Added the 'SgtThruster' component, allowing you to easily create spaceship engines.  
Added the 'Flying On Terrain' demo scene.  
Simplified the SgtDisplacedTerrain calculations, making it much faster.

## Version 3.0.5

Added the 'SgtDepth' component, to allow gas giants to intersect with orbit paths.  
Added the 'Simple Orbit Paths' demo scene.

## Version 3.0.4

Fixed an issue where SgtObjectPool and SgtComponentPool GameObjects would linger on Mac.  
Added Stretch Override and Stretch Vector to SgtStarfield component.  
Fixed starfields in 'Advanced Belt' scene.  
Added 'Accumulate' setting to SgtSpacetime.  
Added 'Use All Wells' setting to SgtSpacetime.  
Added 'Require Same Layer/Same Tag/Name Contains' to SgtSpacetime.  
Added more mesh variants for planets, stars, etc.  
Increased the SgtSpacetime well limit from 7 to 12.  
Added the 'Softness' setting to SgtStarfield, allowing you to make soft particle stars (Pro Only).  
Added the 'SgtDepthTextureMode' component, allowing you to enable Depth rendering for cameras (Pro Only).  
Added the 'Soft Starfield (Pro Only)' demo scene.  
Added more info to some demo scenes.

## Version 3.0.3

Added Render Queue & Render Queue Offset to all applicable component.  
Added Auto Regenerate setting to starfields and belts to allow for faster tweaking.  
Fixed nebula bug when using compressed textures.  
Fixed instruction count limit issue for SgtAtmosphereInner.  
Fixed missing properties from some inspectors.  
Fixed starfields and belts sometimes disappearing when changing scenes.

## Version 3.0.2

Fixed Advanced Belt demo scene.  
Removed pool objects from edit mode.  
Added starfield pulsing.  
Added horizontal brightness & power to SgtNebulaStarfield.

## Version 3.0.1

Fixed band across gas giants with ring shadows.  
Added 'Extract Shadowmap' to texture importer context menu.  
Simplified 'Mie Sharpness' scattering setting.  
Added 'Ground Scattering' to atmospheres.

## Version 3.0.0

Complete rewrite of everything.  
Added the **Accretion** component.  
Added the **Advanced Belt** component.  
Added the **Atmosphere** component.  
Added the **Cloudsphere** component.  
Added the **Corona** component.  
Added the **Custom Belt** component.  
Added the **Custom Starfield** component.  
Added the **Displaced Terrain** component.

Added the **Elliptical Starfield** component.  
Added the **Jovian** component.  
Added the **Nebula Starfield** component.  
Added the **Observer** component.  
Added the **Patch** component.  
Added the **Prominence** component.  
Added the **Ring** component.  
Added the **Ring Shadow** component.  
Added the **Simple Belt** component.  
Added the **Singularity** component.  
Added the **Spacetime** component.  
Added the **Spacetime Well** component.  
Added the **Sphere Shadow** component.  
Added the **Spiral Starfield** component.  
Added the **Terrain** component.  
Added the **Wrapped Starfield** component.  
Added the **Accretion Disc** demo scene.  
Added the **Advanced Belt** demo scene.  
Added the **Background Starfield** demo scene.  
Added the **Custom Starfield** demo scene.  
Added the **Displaced Earth** demo scene.  
Added the **Displaced Terrain Debug** demo scene.  
Added the **Earth** demo scene.  
Added the **Eclipse** demo scene.  
Added the **Elliptical Starfield** demo scene.  
Added the **Gravity** demo scene.  
Added the **Infinite Dust** demo scene.  
Added the **Infinite Starfield 2D** demo scene.  
Added the **Infinite Starfield 3D** demo scene.  
Added the **Infinite Starfield 3D Warp** demo scene.  
Added the **Nebula** demo scene.  
Added the **Procedural Star System** demo scene.  
Added the **Saturn** demo scene.  
Added the **Simple Belt** demo scene.  
Added the **Simple Orbits** demo scene.  
Added the **Singularity (Pro Only)** demo scene.  
Added the **Spacetime Bombs** demo scene.  
Added the **Spacetime Wells** demo scene.  
Added the **Spiral Starfield** demo scene.  
Added the **Sun** demo scene.  
Added the **Supernova** demo scene.