C SKY VI,O SKY SPHERE COMPONENT

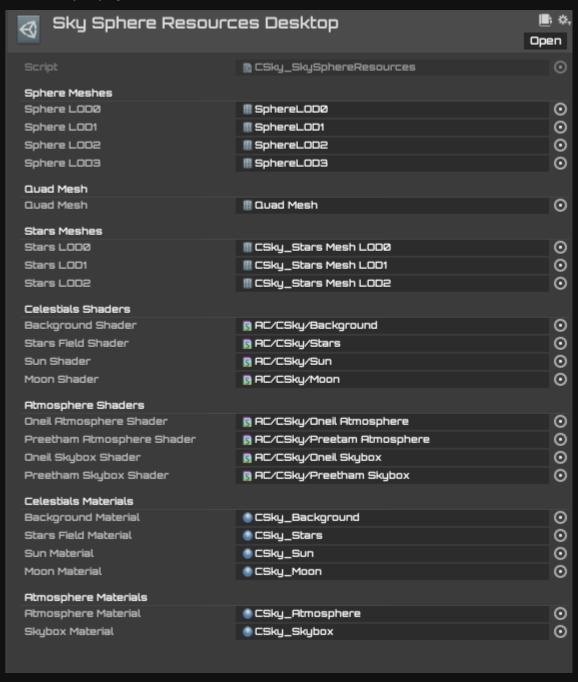


Sky Sphere Component.

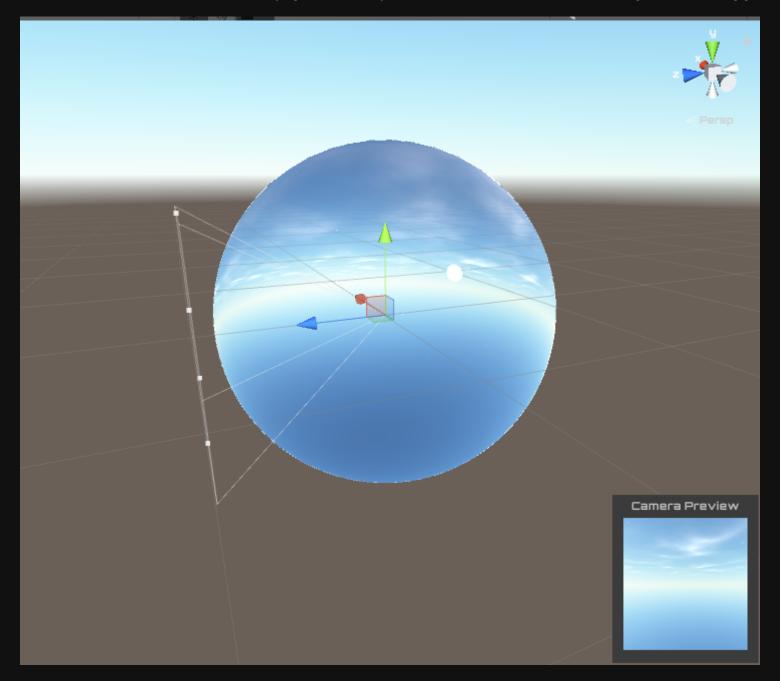
• This is the main component of sky.

Resources And Components:

• Resources: This component contains all the necessary resources to create the Sky Sphere. you can create a new component by right clicking Create/AC/CSky/Sky Sphere Resources.

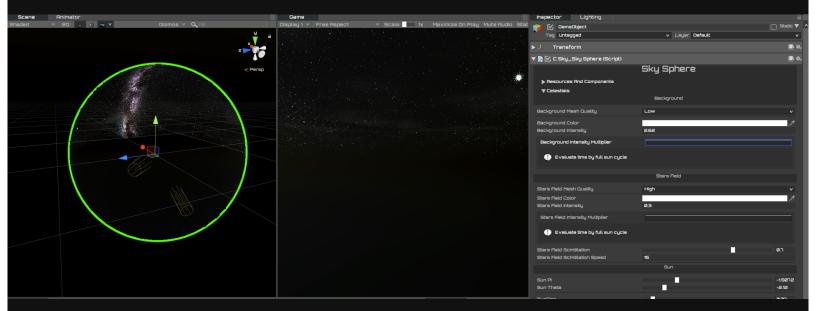


• Camera: The camera in current use, the Sky Sphere will always follow the main camera and its size will depend on its far clip plane.

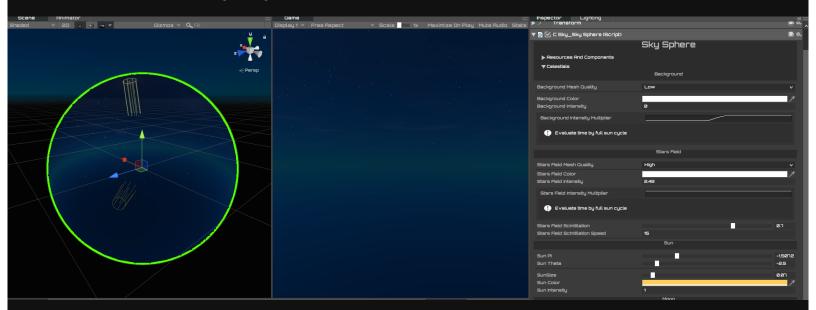


Celestials.

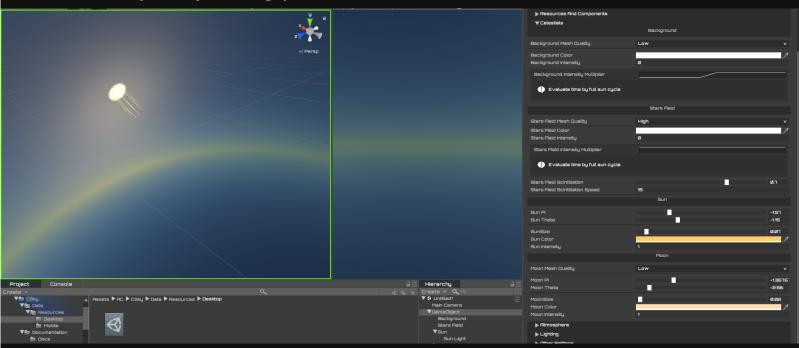
- Background: It is the background of the Sky Sphere, this component is suitable for assigning a cubemap of the milk way.
 - Background Mesh Quality: Quality of the sphere mesh, it is advisable to keep it low.
 - Background Color: Tint of the background.
 - Background Intensity: Intensity of the background.
 - Background Intensity Multiplier: This intensity multiplier depends on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.



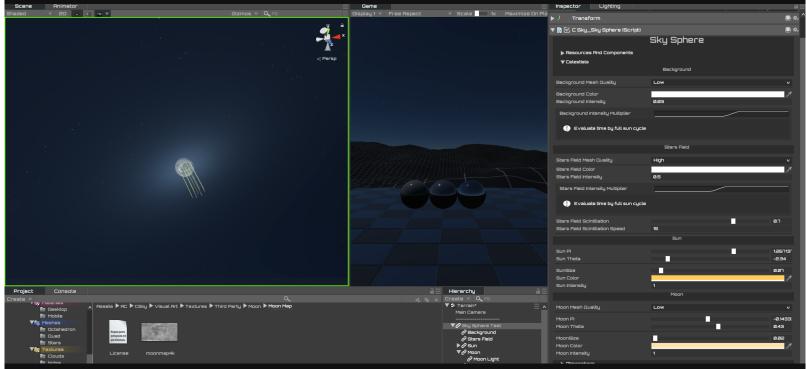
- Stars Field: This is the field of stars, currently the positions are based on real data, however there is still a need to improve this section
 - o Stars Field Mesh Quality: Number of stars, each star is contained in a quad mesh.
 - Stars Field Color: Tint of the stars field.
 - Stars Field Intensity: Intensity of the stars field.
 - Stars Field Multiplier: This intensity multiplier depends on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.
 - o Stars Field Scintillation: Intensity with which stars flicker.
 - Stars Field Scintillation Speed; Speed with which stars flicker.



- Sun: The sun component has a sun graphic on a quad mesh and a directional light as a children.
 - Sun Pi: Horizontal position of the sun.
 - Sun Theta: Vertical position of the sun.
 - Sun Size: Size of the sun quad.
 - Sun Color: Color of the sun graphic.
 - Sun Intensity: Intensity of the sun graphic.

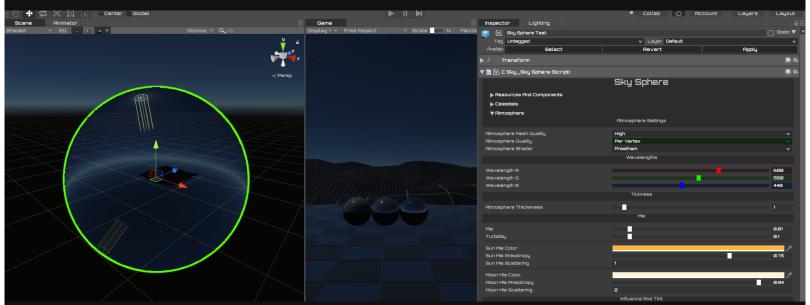


- Moon: The moon component has a moon map texture on a sphere mesh and a directional light as a children.
 - Moon Mesh Quality: Quality of the moon sphere mesh, it is advisable to keep it low.
 - Moon Pi: Horizontal position of the moon.
 - Moon Theta: Vertical position of the moon.
 - Moon Size: Size of the moon sphere
 - Moon Color: Color of the moon.
 - Moon Intensity: Intensity of the moon.

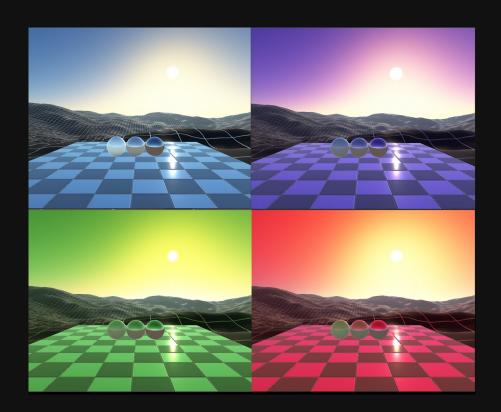


Atmosphere

- Atmosphere Settings:
 - o Atmosphere Mesh Quality: Quality of the atmosphere sphere mesh.
 - Atmosphere Quality: The calculations of the atmospheric scattering can be done by vertex or by pixel, <u>it</u> is recommended that the calculations are always done by vertex for better optimization.
 - Atmosphere Model: We can select between the two best-known models of atmospheric scattering, later on they will possibly be added more.

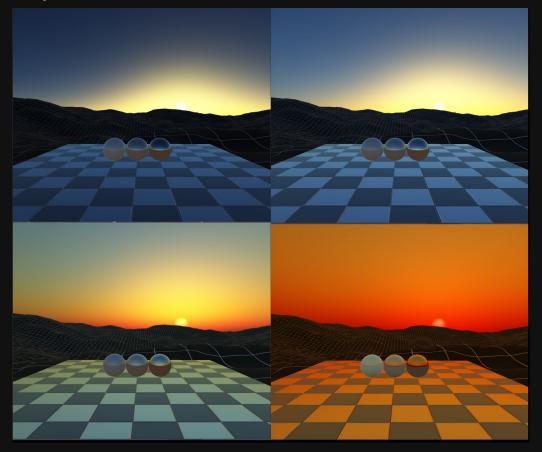


- Wavelegth: it is what defines the color of the sky.
 - Wavelegth R : Red range.
 - Wavelegth G: Green range.
 - Wavelegth B : Blue range.

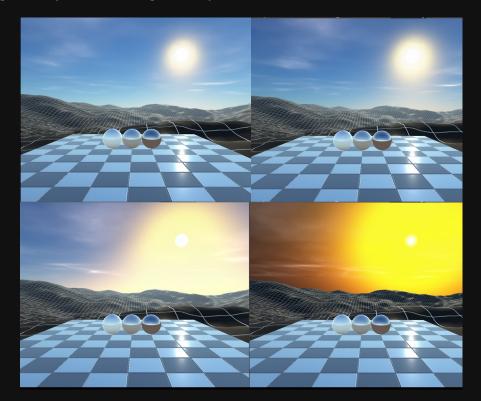


- Thickness: This is the density of the atmosphere.

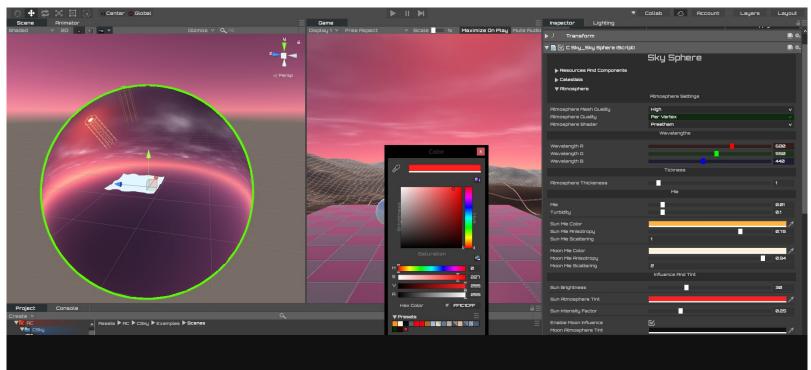
 Thickness: Density value.



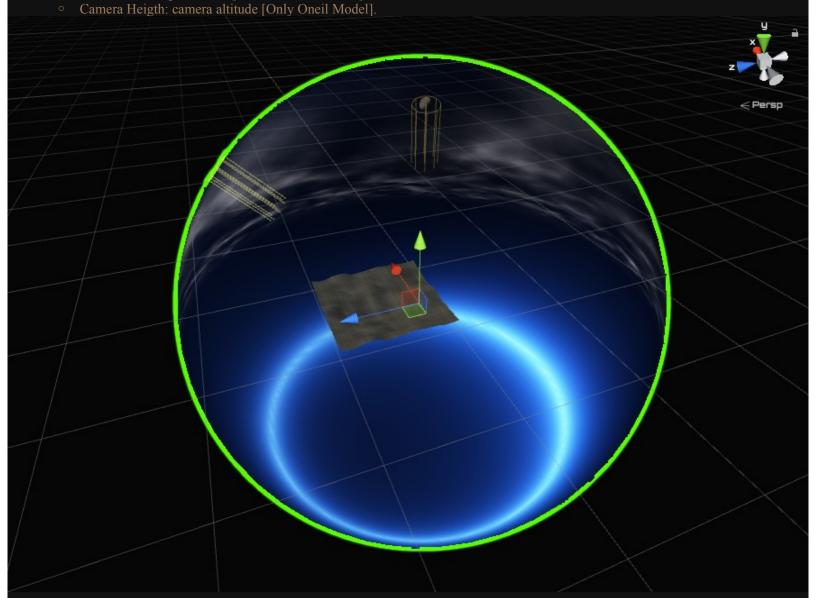
- Mie: The mie scattering.
 - Mie: Mie scattering value.
 - Turbidity: The turbidity of particles [Only Preetham Model].
 - Sun Mie Color: Color of the Mie Scattering caused by sun.
 - Sun Mie Anisotropy: Anisotropy value caused by sun.
 - Sun Mie Scattering: Intensity of the scattering caused by sun.
 - Moon Mie Color: Color of the Mie Scattering caused by moon.
 - Moon Mie Anisotropy: Anisotropy value caused by moon.
 - Moon Mie Scattering: Intensity of the scattering caused by moon.



- Influence And Tint: influence of the sun and moon on the atmosphere.
 - Sun Brightness: Brightness exerted by the sun.
 - Sun Atmosphere Tint: Tint of the atmosphere exerted by the sun.
 - Sun Intensity Factor: It establishes the intensity of the light exerted by the sun on the atmosphere depending on the angle. [Only Preetham model].
 - Moon Influence: The moon has influence on the atmosphere.
 - Moon Atmosphere Tint: Tint of the atmosphere exerted by the moon.
 - Moon Intensity Factor: It establishes the intensity of the light exerted by the moon on the atmosphere depending on the angle.
 [Only Preetham model].



- Other Settings: Other configurations of the atmosphere.
 - Atmosphere exponent: Color corrector for atmosphere.
 - Horizon Offset: The horizon height.
 - Rayleigth Zenith Length: Value [Only Preetham model]
 - Mie Zenith Length: Value: [Onlu Preetham model]



Lighting.

- Sun Light: Controls the directional light of the sun.
 - Sun Light Color: Color of the sun light.
 - Sun Light Intensity: Intensity of the sun light.
 - Sun Light Intensity Multiplier: This intensity multiplier depends on the angle of the sun, it is evaluated during the above horizon cycle of the sun in 180 degrees.
 - Sun Light Threshold: The threshold of the horizon on which the sunlight is deactivated.
- Moon Light: Controls the directional light of the moon.
 - Moon Light Color: Color of the moon light.
 - Moon Light Intensity: Intensity of the moon light.
 - Moon Light Intensity Multiplier: This intensity multiplier depends on the angle of the moon, it is evaluated during the above horizon cycle of the moon in 180 degrees.
 - o Disable Moon Light In Day: The light of the moon is disabled when the sunlight is on.
 - Moon Light Intensity Corrector: This intensity multiplier depends on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees, it is necessary to avoid abrupt changes in the light of the moon.

Environment.

- Update Environment: The environment is updated.
- Send Skybox: Assign the skybox,
- Ambient Mode: The ambient mode.
- Ambient Intensity: Intensity of the ambien.
- Ambient Sun Ground Color: Color of the ground, the color depend on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.
- Ambient Sun Sky Color: Color of the sky top, the color depend on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.
- Ambient Equator Color: Color of the horizon, the color depend on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.
- Ambient Moon Ground Color, Ambient Moon Sky Color, Ambient Moon Equator Color: The colors are added to the current environment colors, the colors depend on the angle of the moon, it is evaluated during the full cycle of the moon in 360 degrees.

Jog.

- Enable Unity Fog: Enable render setting fog.
- Unity Fog Mode: Mode of the fog.
- Unity Sun Fog Color: The color depend on the angle of the sun, it is evaluated during the full cycle of the sun in 360 degrees.
- Unity Moon Fog Color: The color is added to the current fog color, the color depend on the angle of the moon, it is evaluated during the full cycle of the moon in 360 degrees.

Other Settings.

- Color Correction: General color corrections.
 - HDR: Support HDR for example color gradng.
 - Exaposure: Exposure of the Sky.
- Eclipse: Configurations for eclipses.
 - The threshold at which the eclipse begins to affect the intensity of the sky, light, etc.