LSky Documentation V2.0.3a

About.

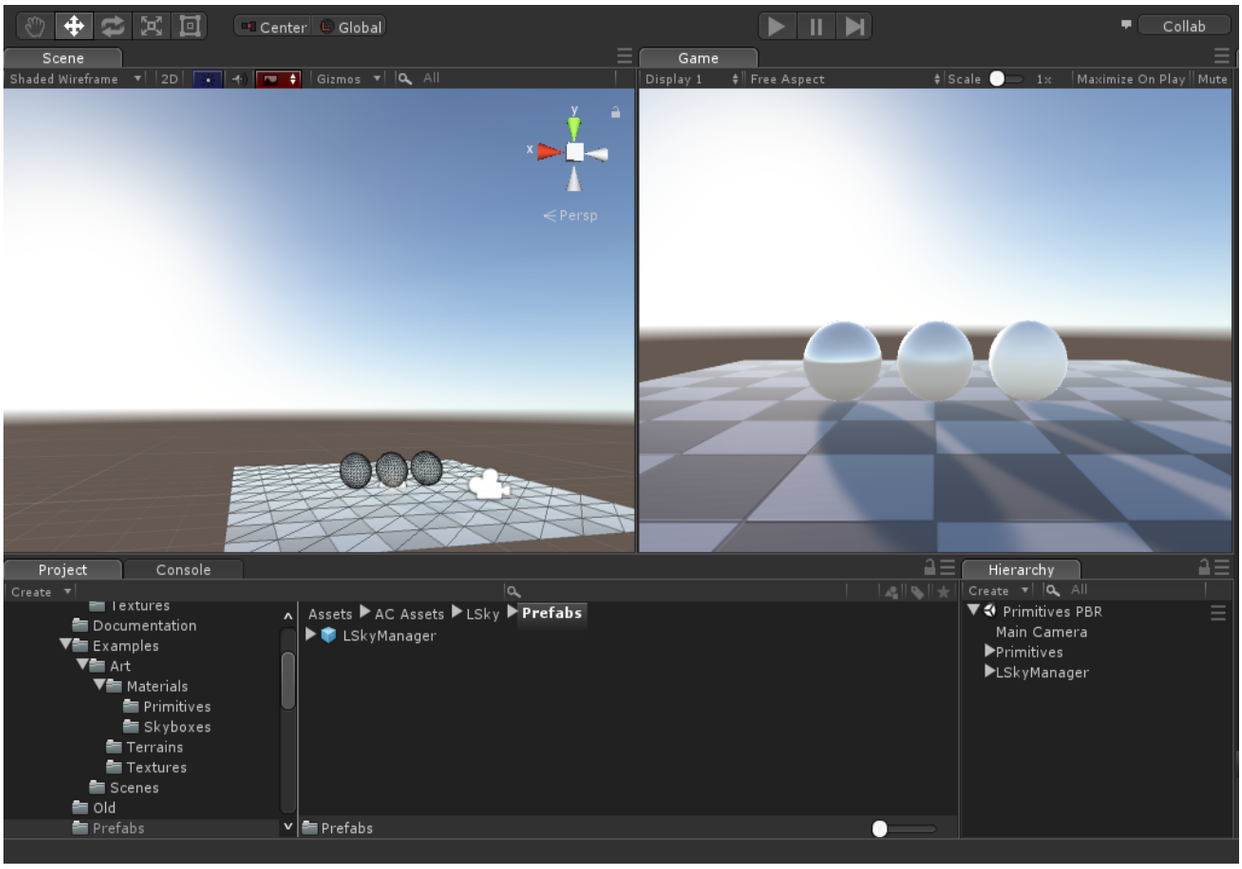
Dynamic sky basic solution.

Notice: *The asset is not optimized for mobile devices, Henyey Greenstein calculations, moon texture, outer space and color correction are performed per pixel.*

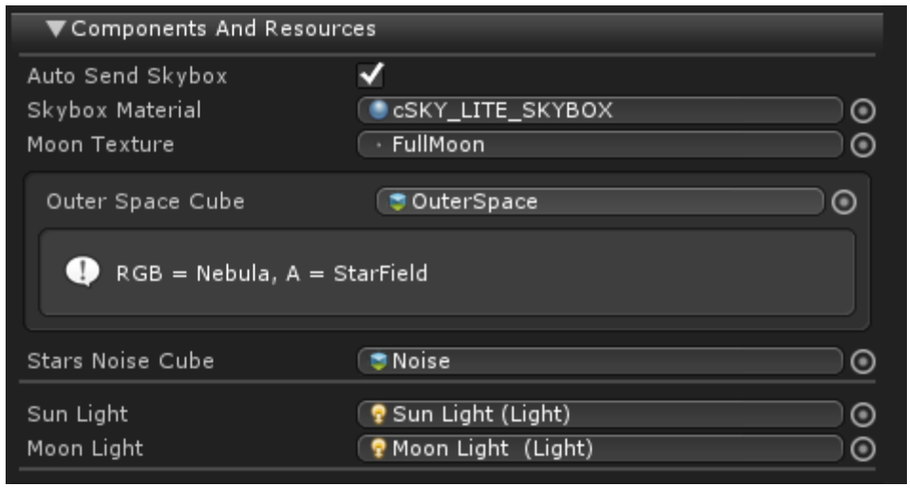
Notice2: *No tested in VR.*

Getting Started.

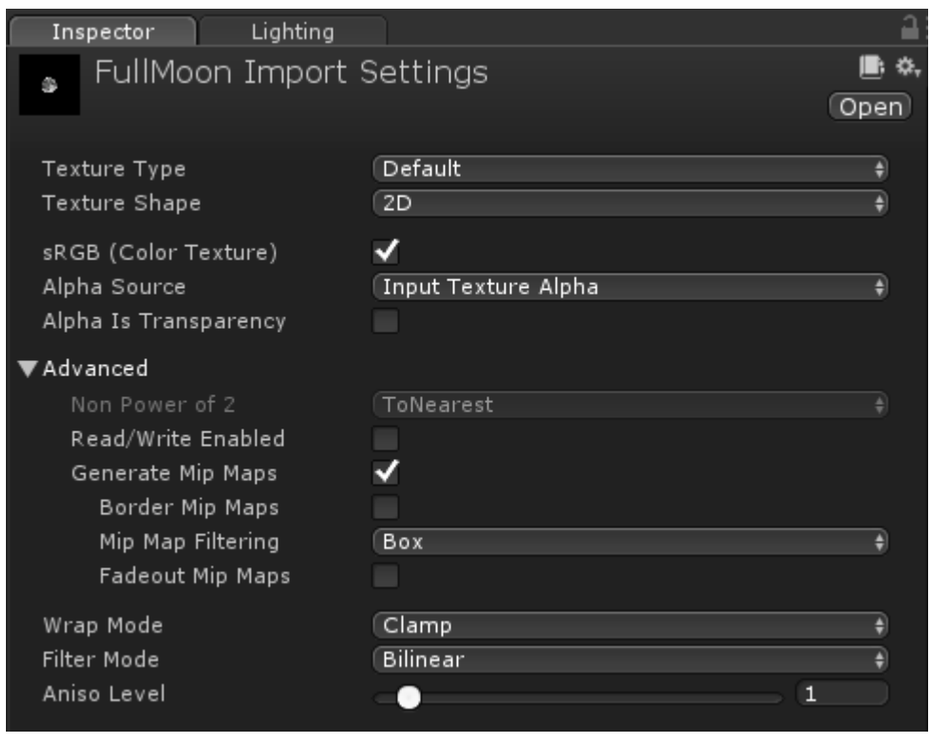
- ***Drag the prefab "Assets/AC Assets/LSky/Prefabs/LSkyManager" into your hierarchy.***
- **Note:** ***Be sure that there are no additional directional lights in the scene.***



Components And Resources.



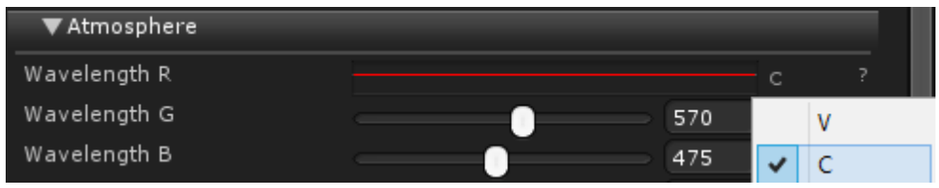
- **Apply Skybox :** *Automatically assigns the skybox in Lighting window.*
- **Note:** *It is necessary to assign all the elements.*
- **Moon Texture Settings.**



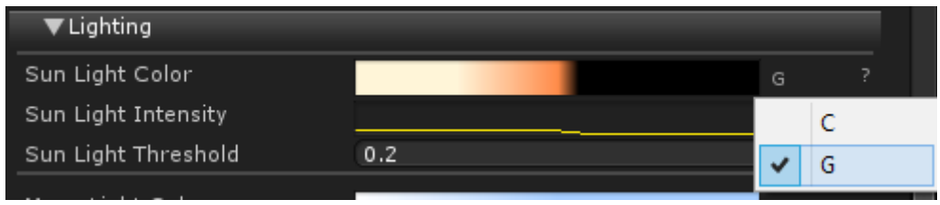
Curves And Gradient System.

LSky has a system of curves and gradients to control sky values, lighting, etc. during the cycle of rotation of the sun and moon.

➢ ***To use a curve or gradient you have to select the Curve option for curves and Gradient for gradients***



Curve

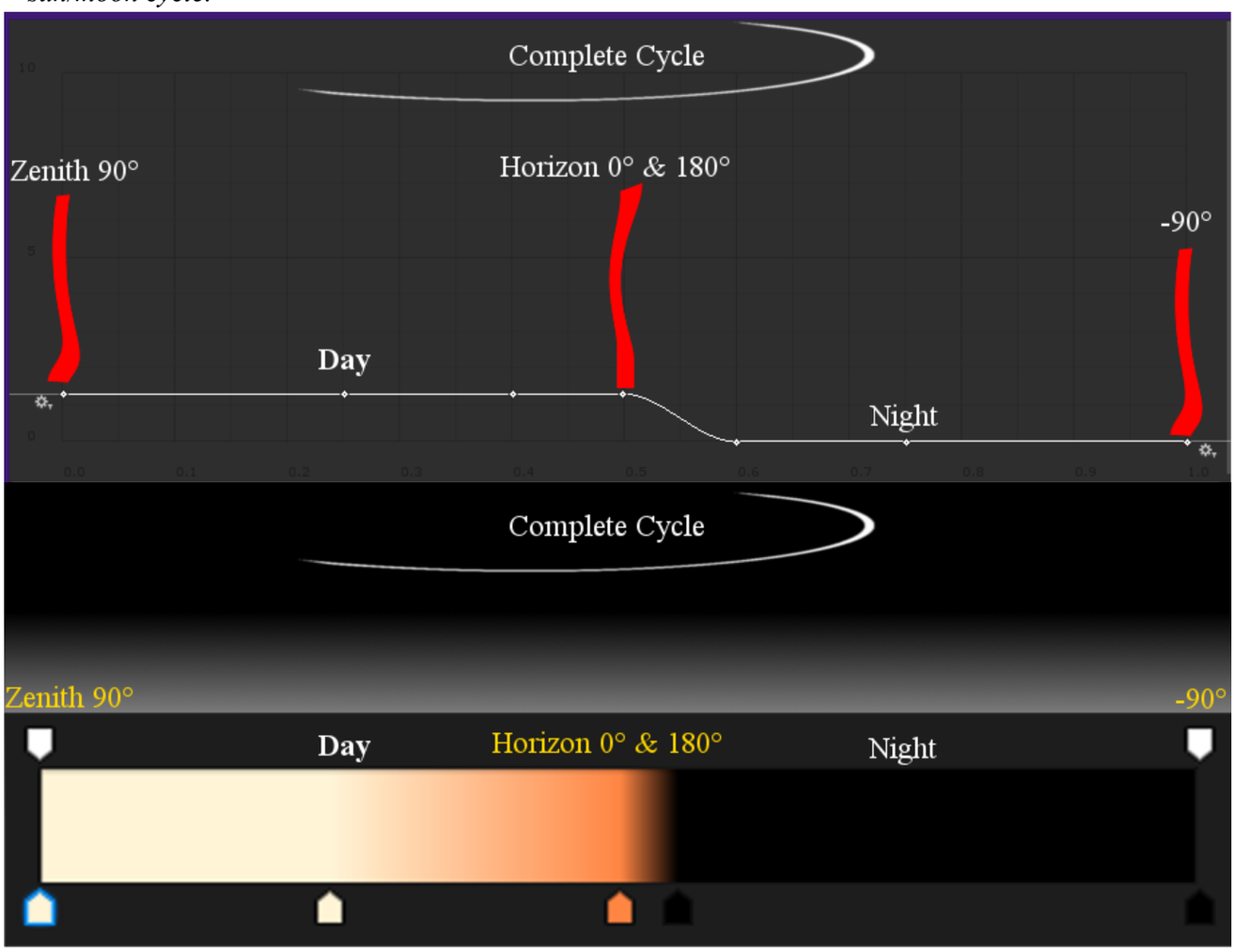


Gradient

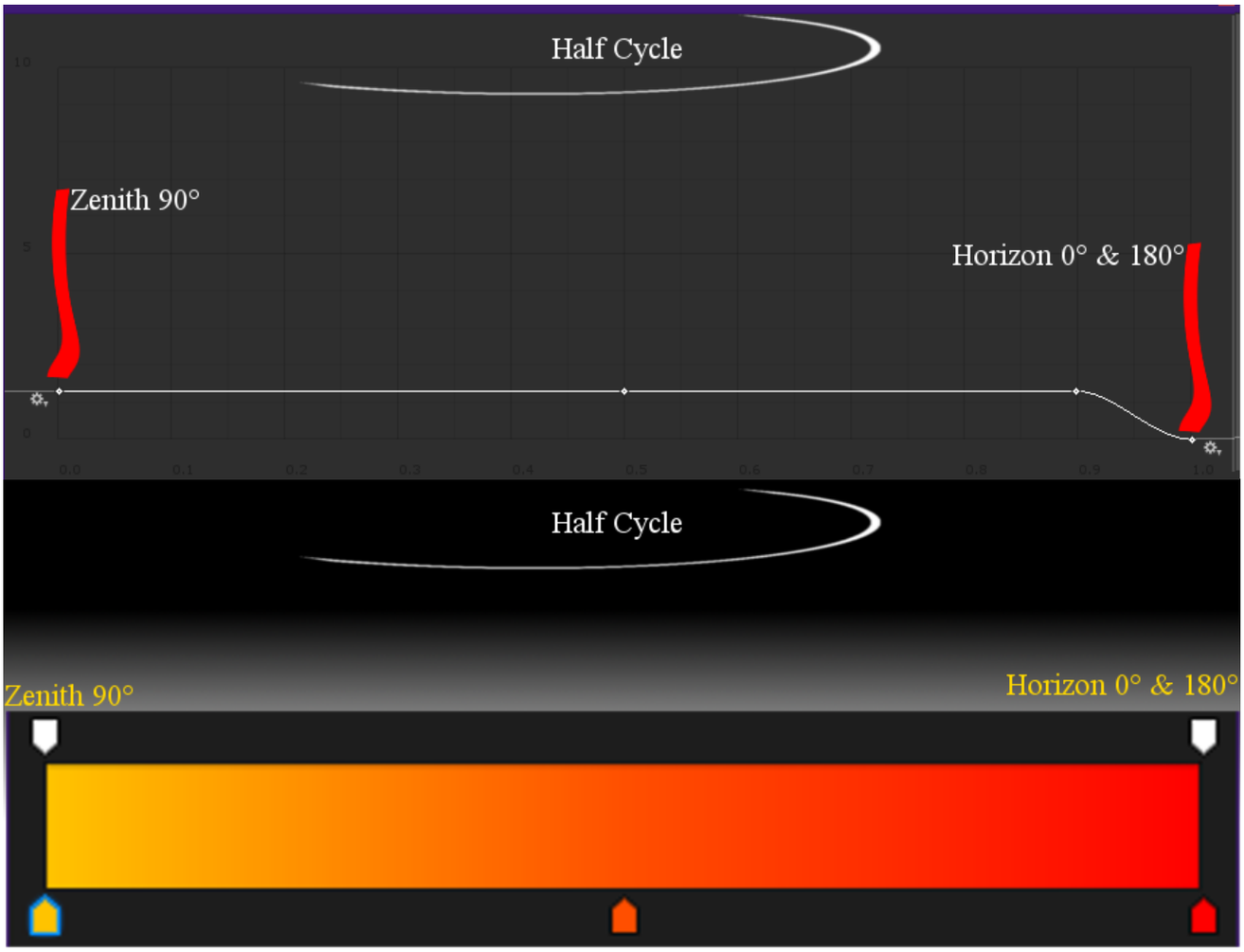
Configure Curves And Gradients.

There is an interrogation symbol located to the right of each parameter which indicates the type of evaluation time

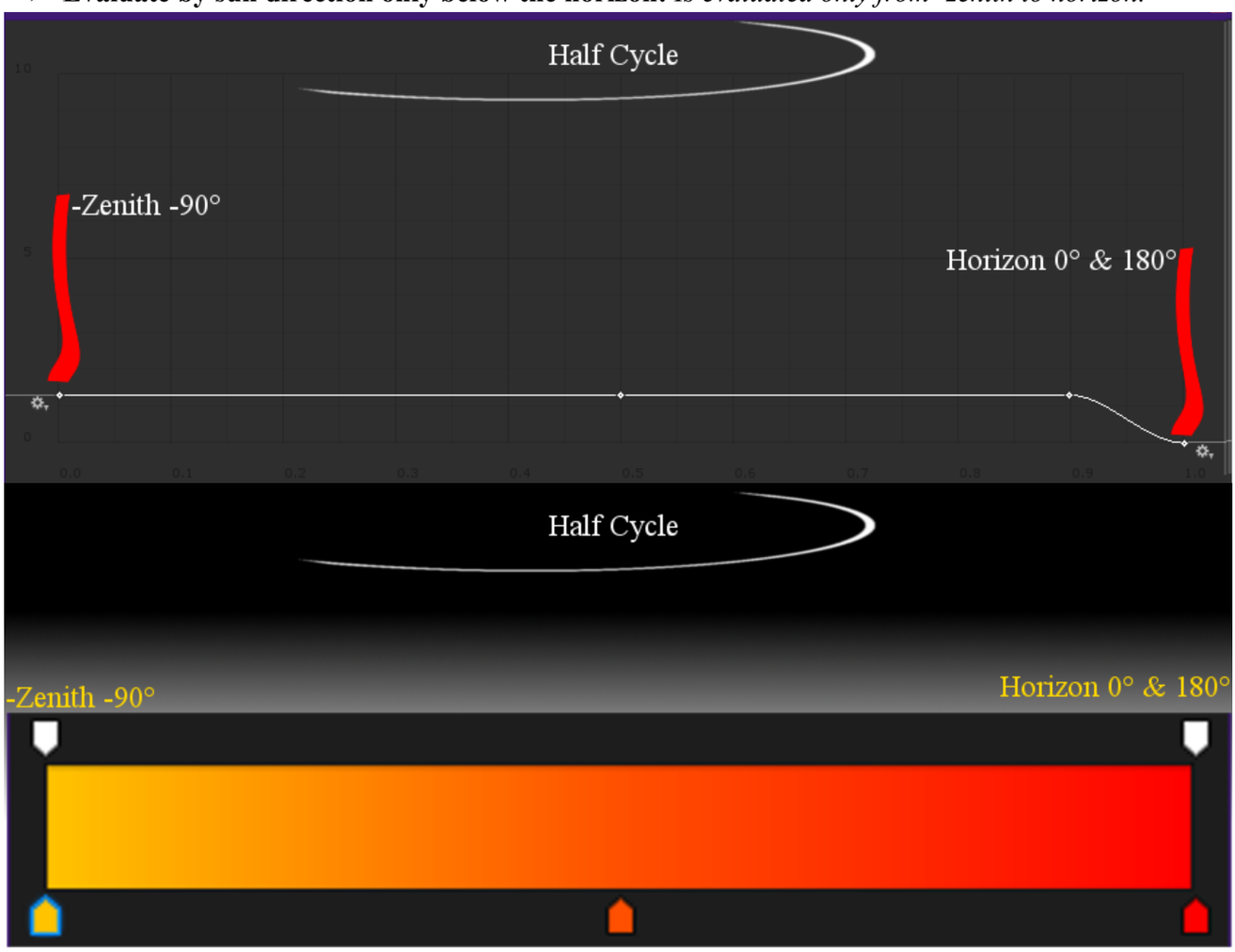
➢ **Evaluate time by sun/moon direction in complete cycle :** *Evaluate the curve or the gradient complete sun/moon cycle.*



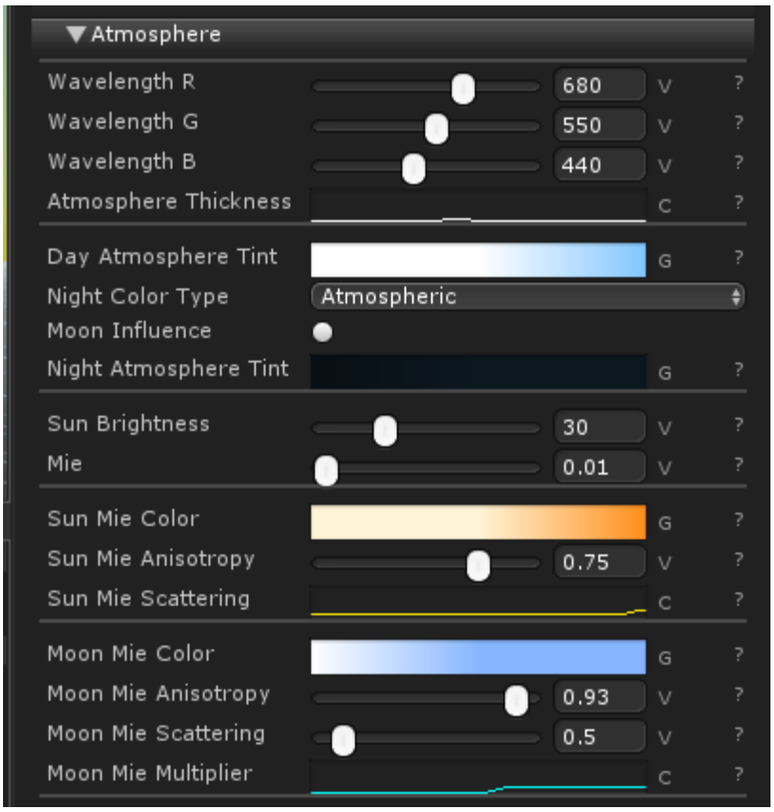
➢ **Evaluate by sun/moon direction only above the horizon:** *Is evaluated only from zenith to horizon.*



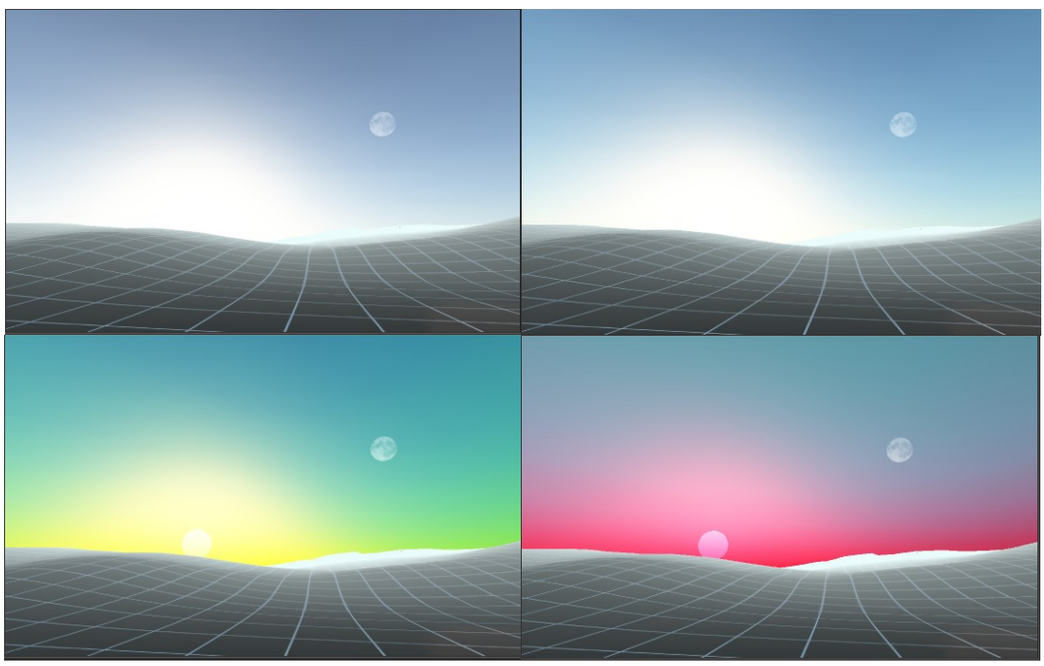
➢ **Evaluate by sun direction only below the horizon:** *Is evaluated only from -zenith to horizon.*



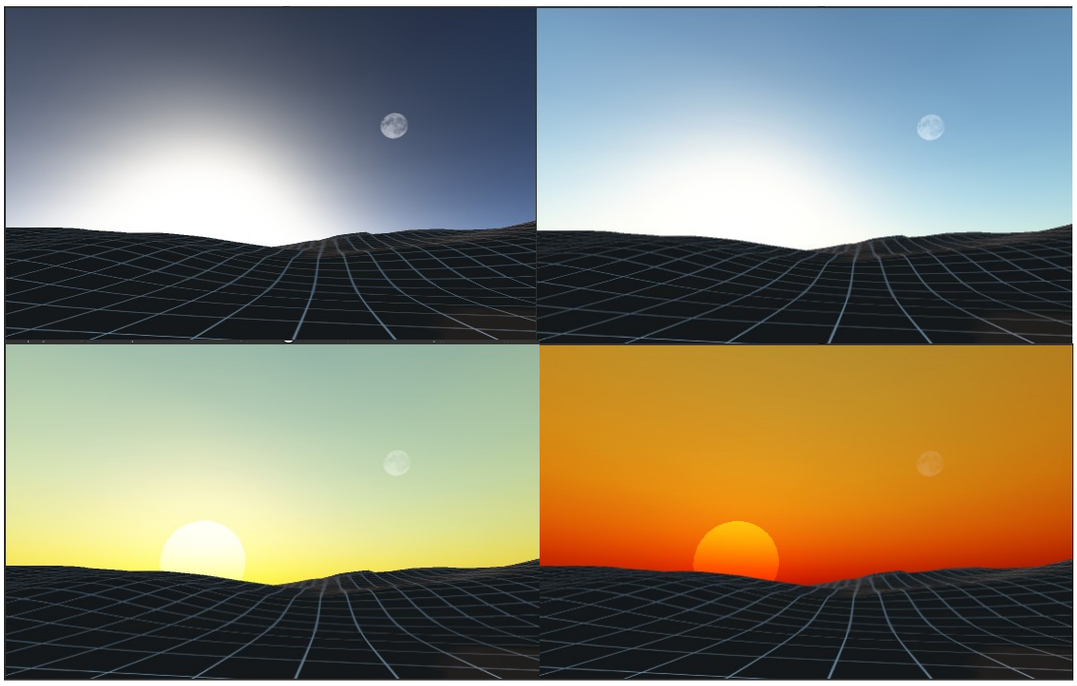
Atmosphere.



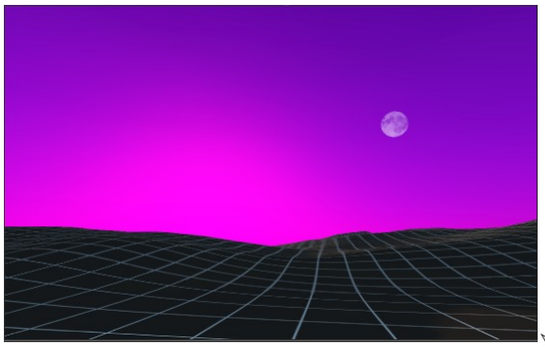
- **Wavelegths:** *Are the parameters that cause the color of the sky.*



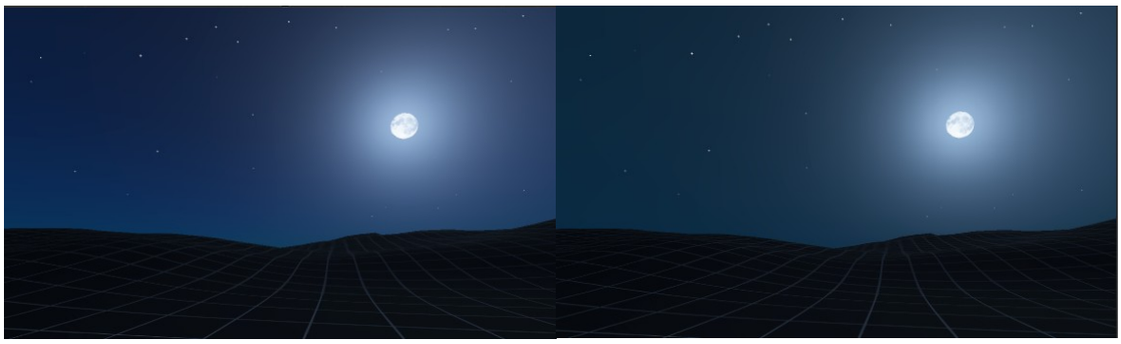
Atmospheric Thickness: *Controls the density of the atmosphere.*



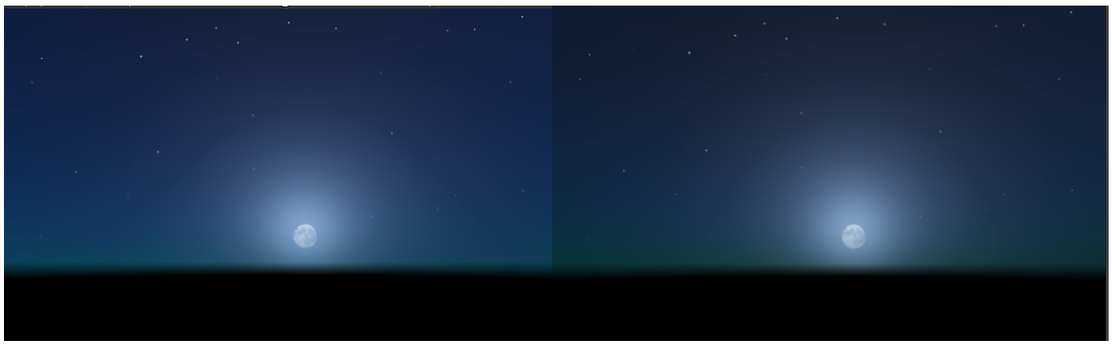
- **Day Atmosphere Tint:** *This is the color multiplier of the atmosphere during the day.*



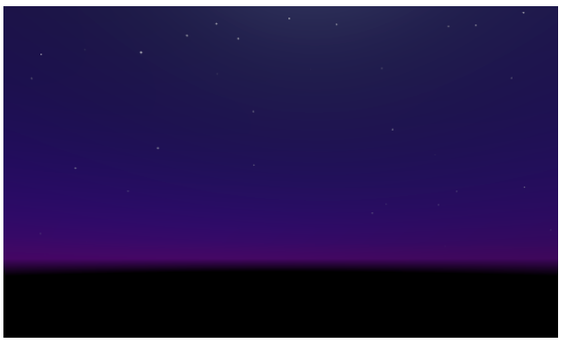
- **Night Color Type:** *atmospheric or simple night color.*



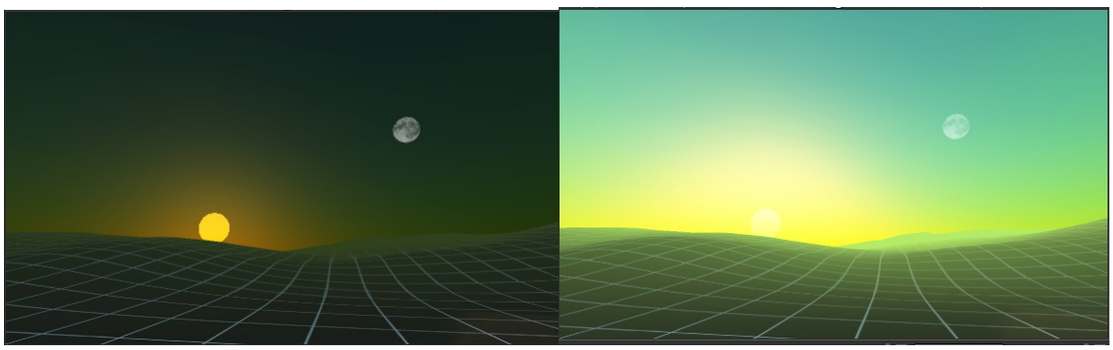
- **Moon Influence:** *The moon affects the atmosphere.*



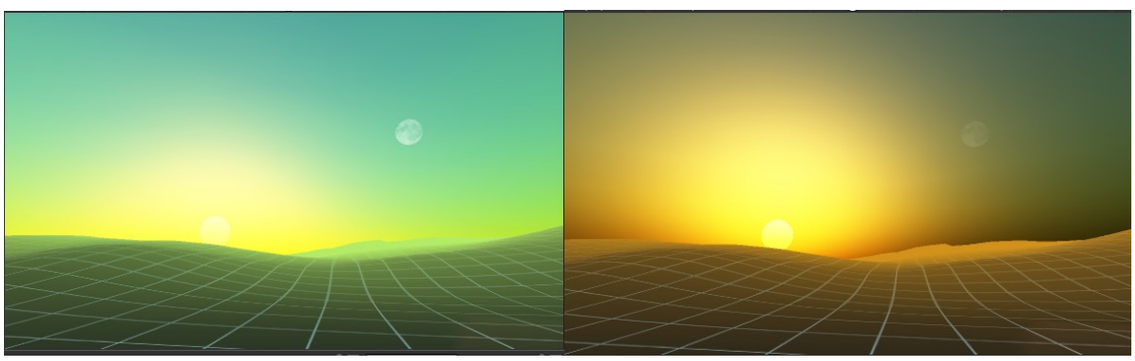
- **Night Atmosphere Tint:** *This is the color multiplier of the atmosphere during the night.*



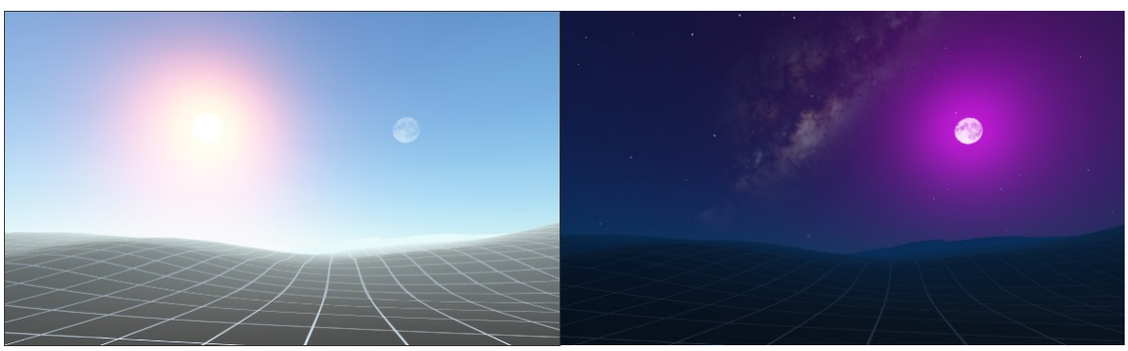
- **Sun Brightness:** *The brightness of the sun.*



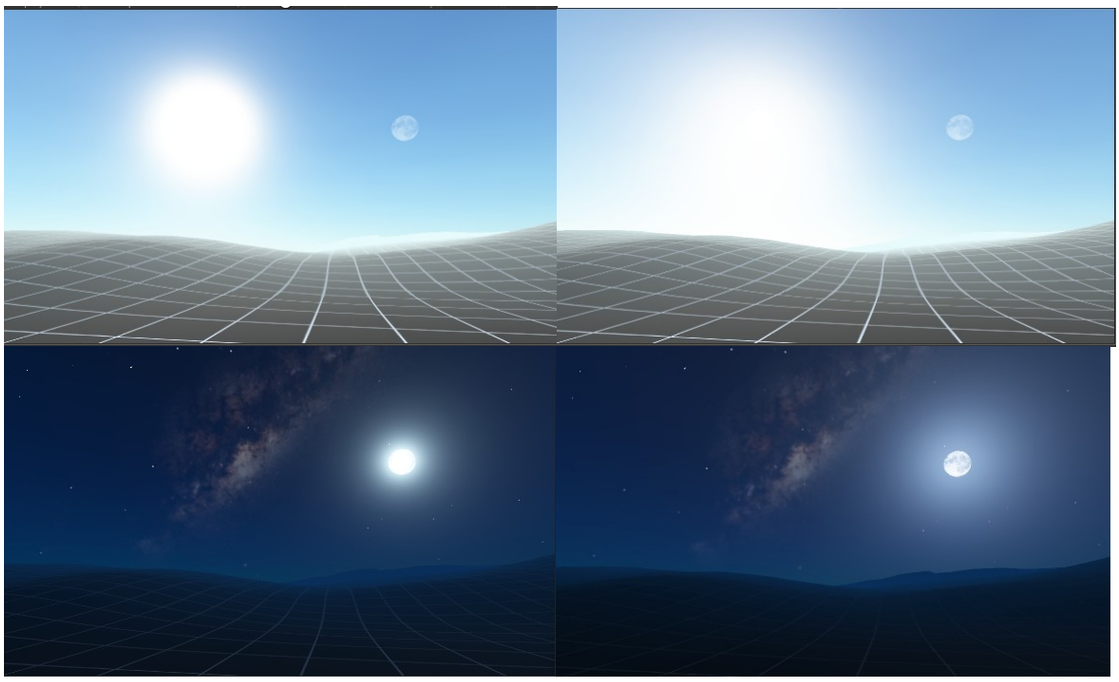
- **Mie:** *Mie value.*



- **Sun/Moon Mie Color:** *The color of the Mie phase.*

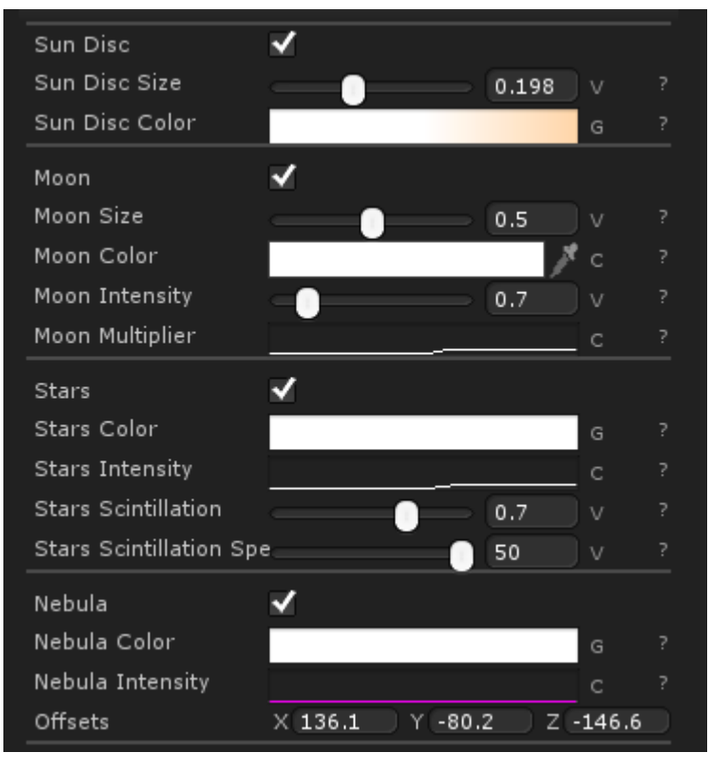


- **Sun/Moon Mie Anisotropy:** *Henyey Greenstein g value.*

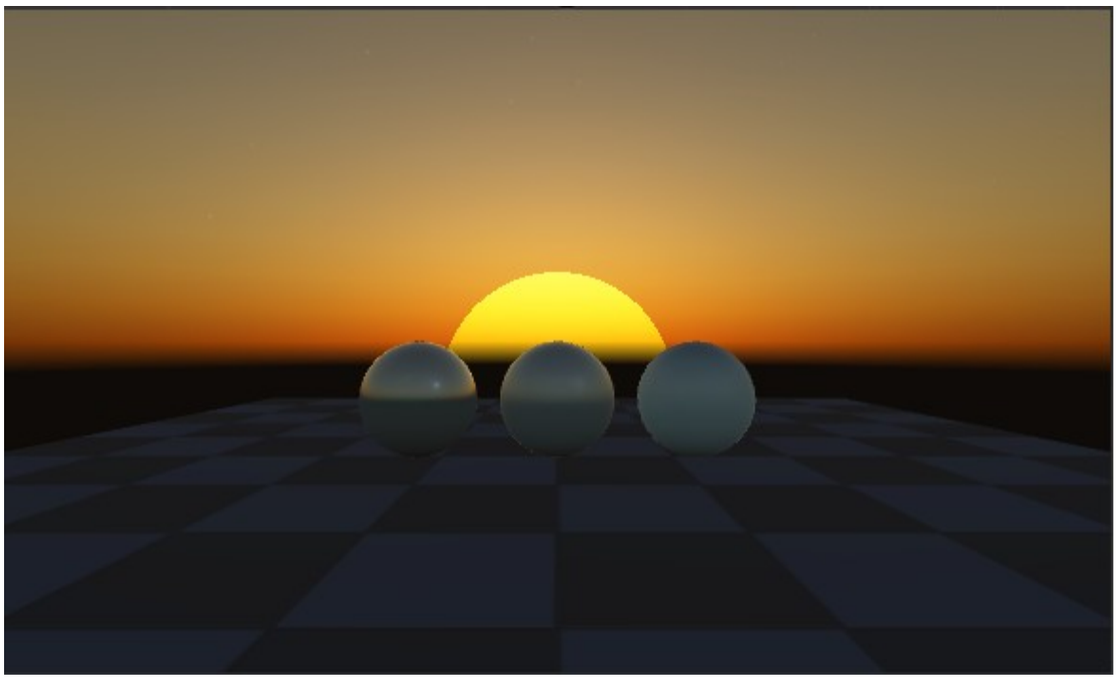


- **Sun/Moon Mie Scattering:** *Mie phase intensity.*
- **Moon Mie Multiplier:** *Mie multiplier during the complete cycle of the sun.*

Celestials.



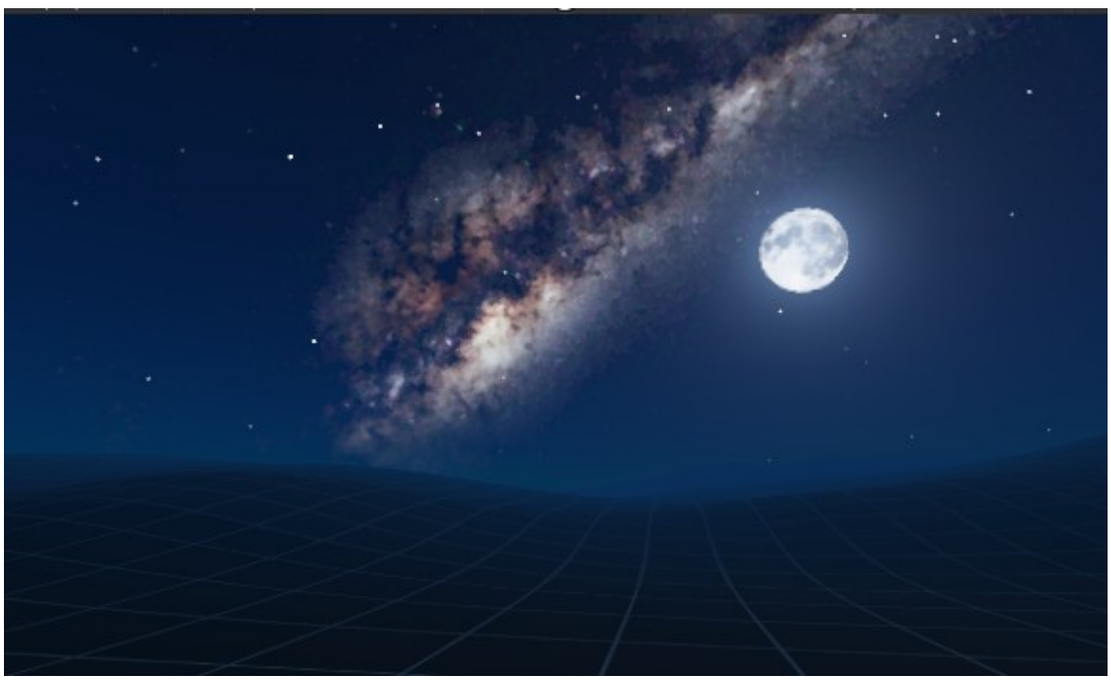
- **Sun Disc:** *Enable sun disc.*
- **Sun Disc Size:** *Size of the sun disc.*
- **Sun Disc Color:** *Color of the sun disc.*



- **Moon:** *Enable moon texture.*
- **Moon Size:** *Size of the moon.*
- **Moon Color:** *Color of the moon.*
- **Moon Intensity:** *Intensity of the moon.*
- **Moon Multiplier:** *Moon intensity multiplier during the complete cycle of the sun.*

- ***Stars:*** *Enable stars field.*
- ***Stars Color:*** *Color of the stars field.*
- ***Stars Intensity:*** *Intensity of the stars.*
- ***Stars Scintillation:*** *Stars Twinkle.*
- ***Stars ScintillationSpeed:*** *Speed of the twinkle of the stars.*

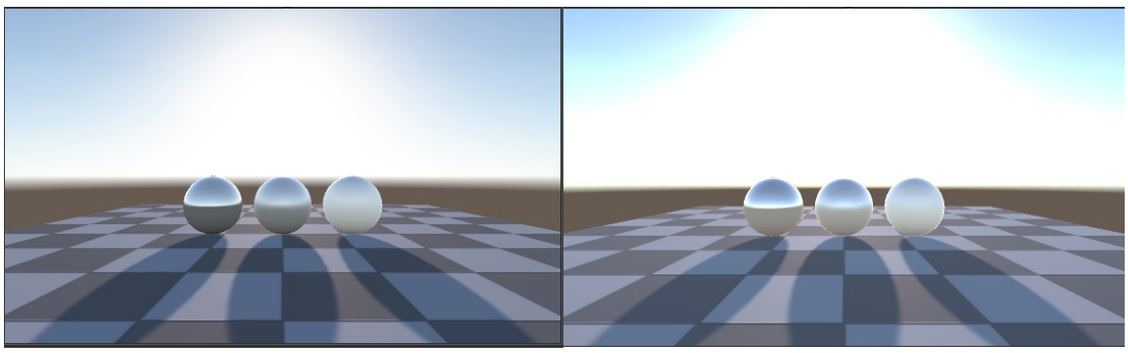
- **Nebula:** *Enable nebula.*
- **Nebula Color:** *Color of the nebula.*
- **Nebula Intensity:** *Intensity of the nebula.*



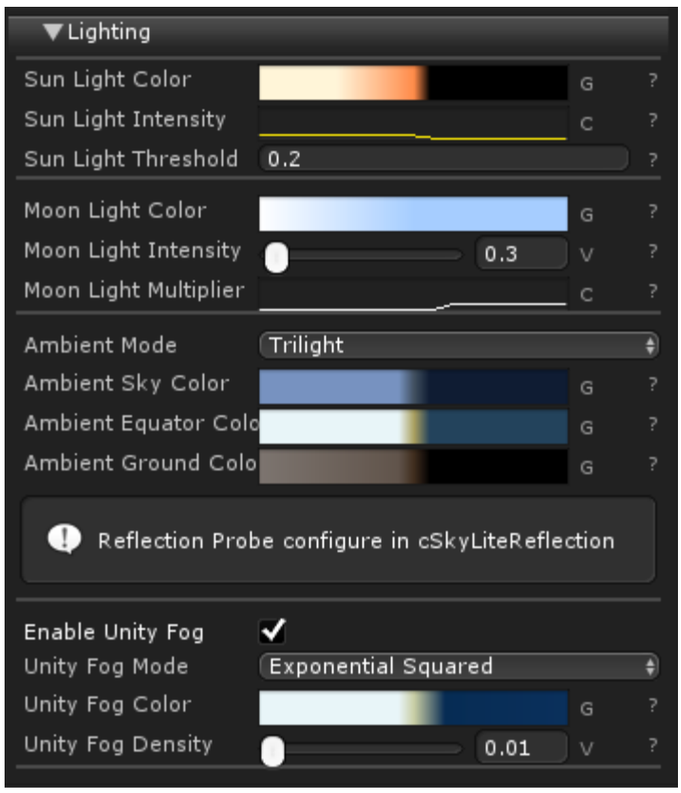
- **Offsets:** *Outer space rotation offsets.*

Color Correction.

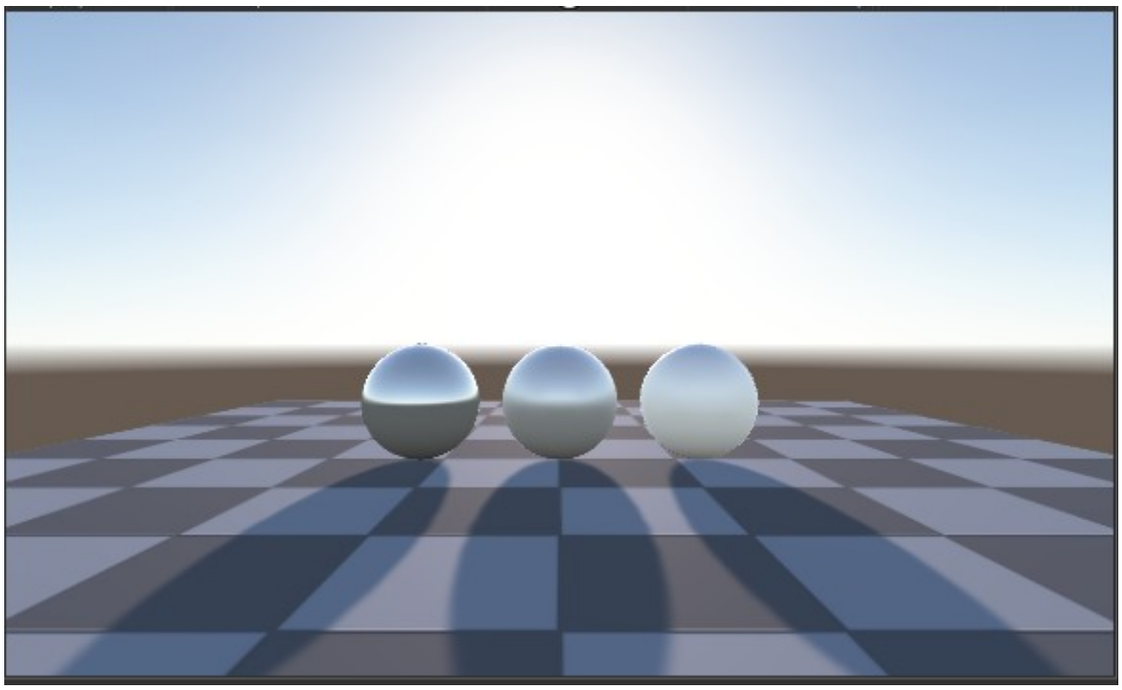
- **HDR:** *Enable HDR, only use if used tonemaping image effects.*
- **Exposure:** *HDR Exposure.*
- **Color Space:** *The color space.*
- **Note:** *Apply color correction (color^3/2) and apply fast tonemaping.*



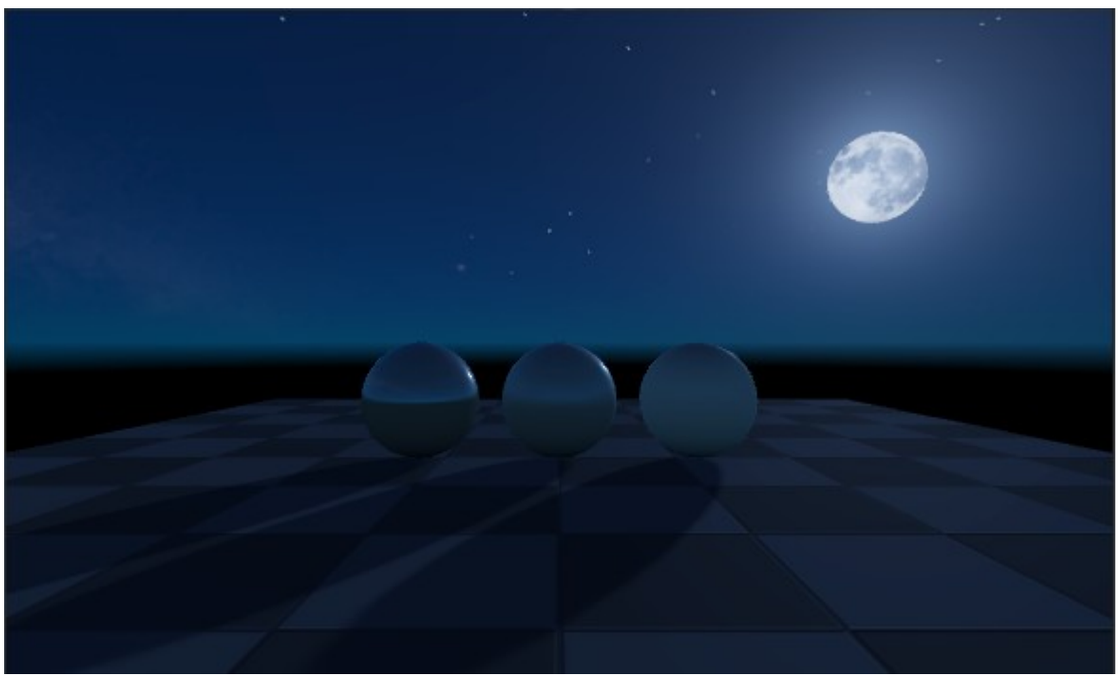
Lighting.



- **Sun Light Color:** *Color og the sun light.*
- **Sun Light Intensity:** *Intensity of the sun light.*
- **Sun Light Threshold:** *Enable/disable sun light threshold.*

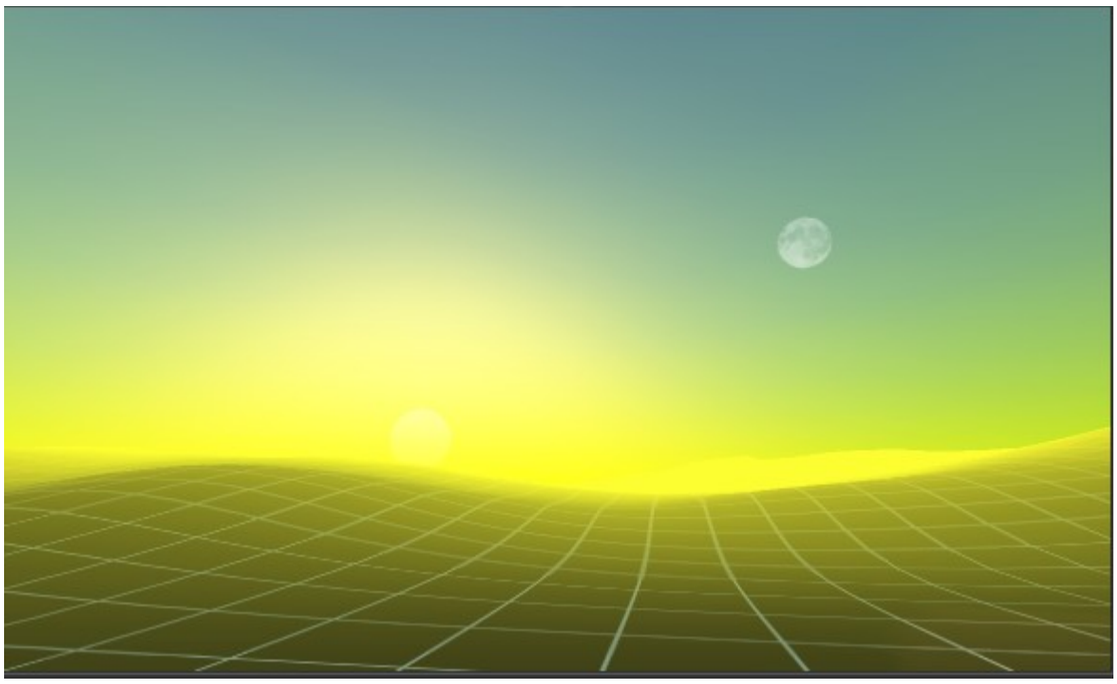


- **Moon Light Color:** *Color of the moon light.*
- **Moon Light Intensity:** *Intensity of the moon light.*
- **Moon Light Multiplier:** *Moon light intensity multiplier during the complete cycle of the sun.*
- **Note:** *Moon light is enbale if sun light is disabled.*



- **Ambient Mode:** *Mode of the environment lighting.*
- **Ambient Intensity:** *Intensity multiplier of the environment lighting.*
- **Ambient Sky Color:** *Top environment lighting color.*
- **Ambient Equator Color:** *Horizon environment lighting color.*
- **Ambient Ground Color:** *Ground environment lighting color and skybox ground color.*

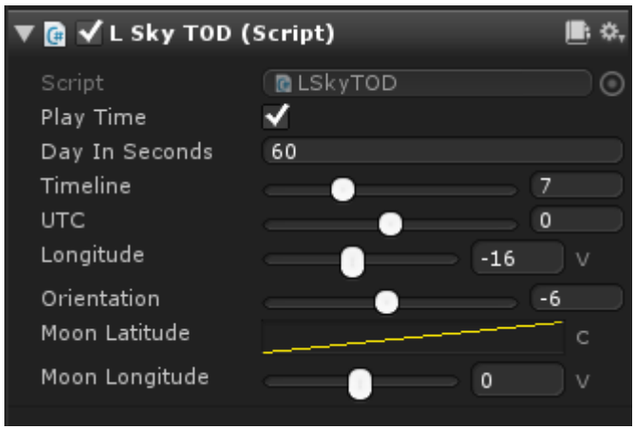
- **Enable Unity Fog:** *Enable defautl fog.*
- **Note:** *The parameters are the same as the default fog.*



LSkyProbeRefresh

- ***For now the only function of this class is to refresh the reflection probe.***
- ***More lighting information:***
  - ***See https://docs.unity3d.com/Manual/class-ReflectionProbe.html***
  - ***See https://docs.unity3d.com/Manual/LightingOverview.html***
- ***Custom Reflection.***
  - ***Do you want to reflect only the color of the sky?.***
  - ***1- Disable the apply sky option***
  - ***Manually assign a material with the shader "AC/Lsky/Skybox Reflection" in the lighting window.***
  - ***Assign the skybox component to your cameras and a material with the "AC/Lsky/Skybox" shader.***

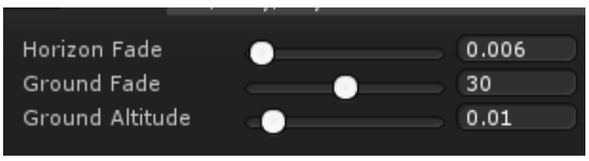
Time Of Day.



Class that controls the time of day, rotations of celestial bodies, etc.

- **Play time:** *Allow progress time.*
- **Day In Seconds :** *An easy way to set minutes is 60 * minutes, example: 60 * 15 = 900.*
- **UTC:** *Universal Time Coordinated.*
- **Longitude:** *World longitude.*
- **Orientation:** *Y axis rotation.*
- **Moon Latitude:** *moon x axis.*
- **Moon Longitude:** *moon longitude.*

Material Params.



- ***Horizon Fade*** *is now configured from the material. (Left capture)*
- *Ground fade and altutude params.(Right capture)*