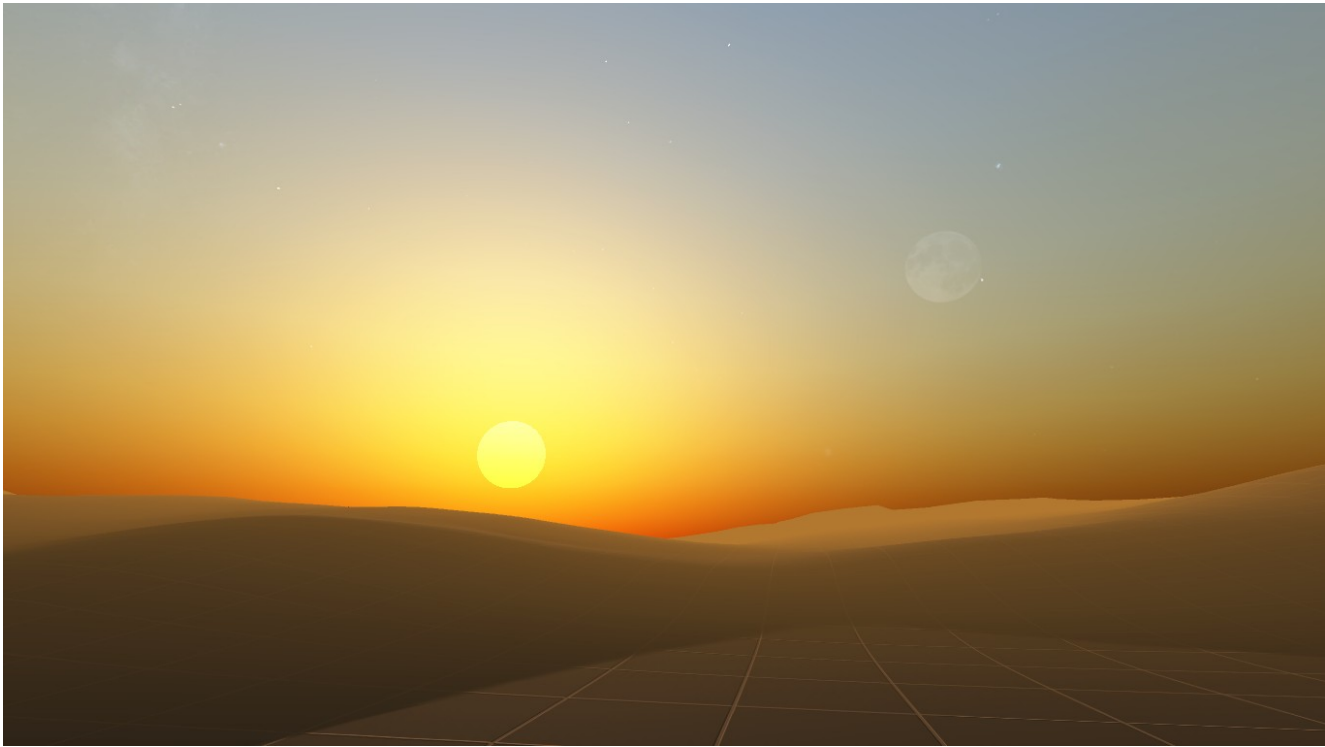# LSky Documentation V2.0

About.

Dynamic sky free solution, the package is an improved version of the "Time Of Day System Free", with some of the features of my dynamic sky system "cSky"(Coming Soon).

Notice: *The asset is not optimized for mobile devices, Henyey Greenstein calculations, moon texture, outer space and color correction are performed per pixel.*
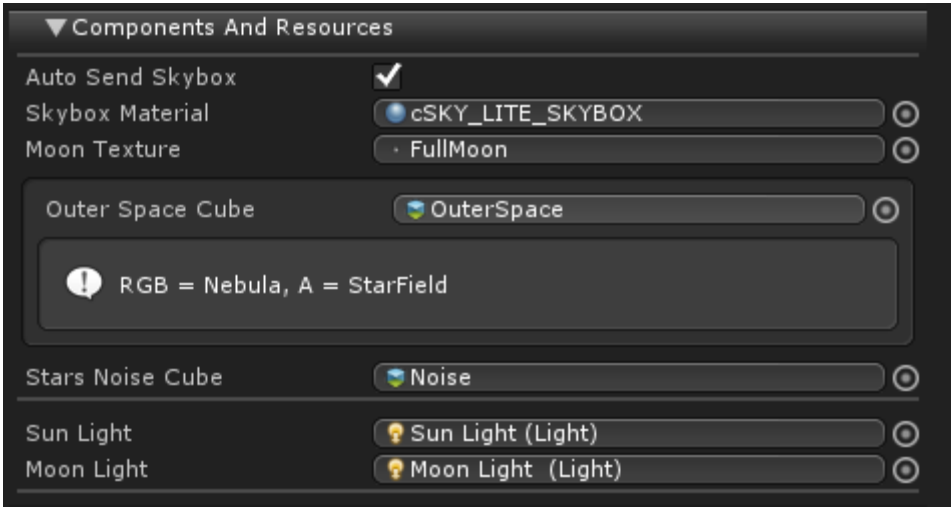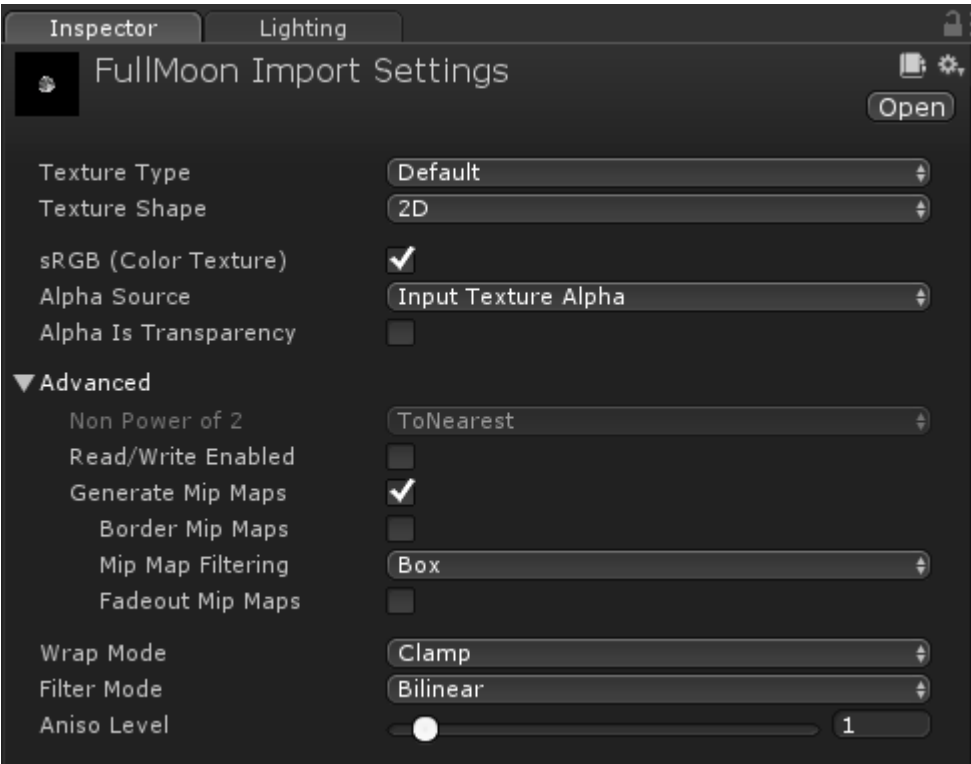
Notice2: *No tested in VR.*

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.*
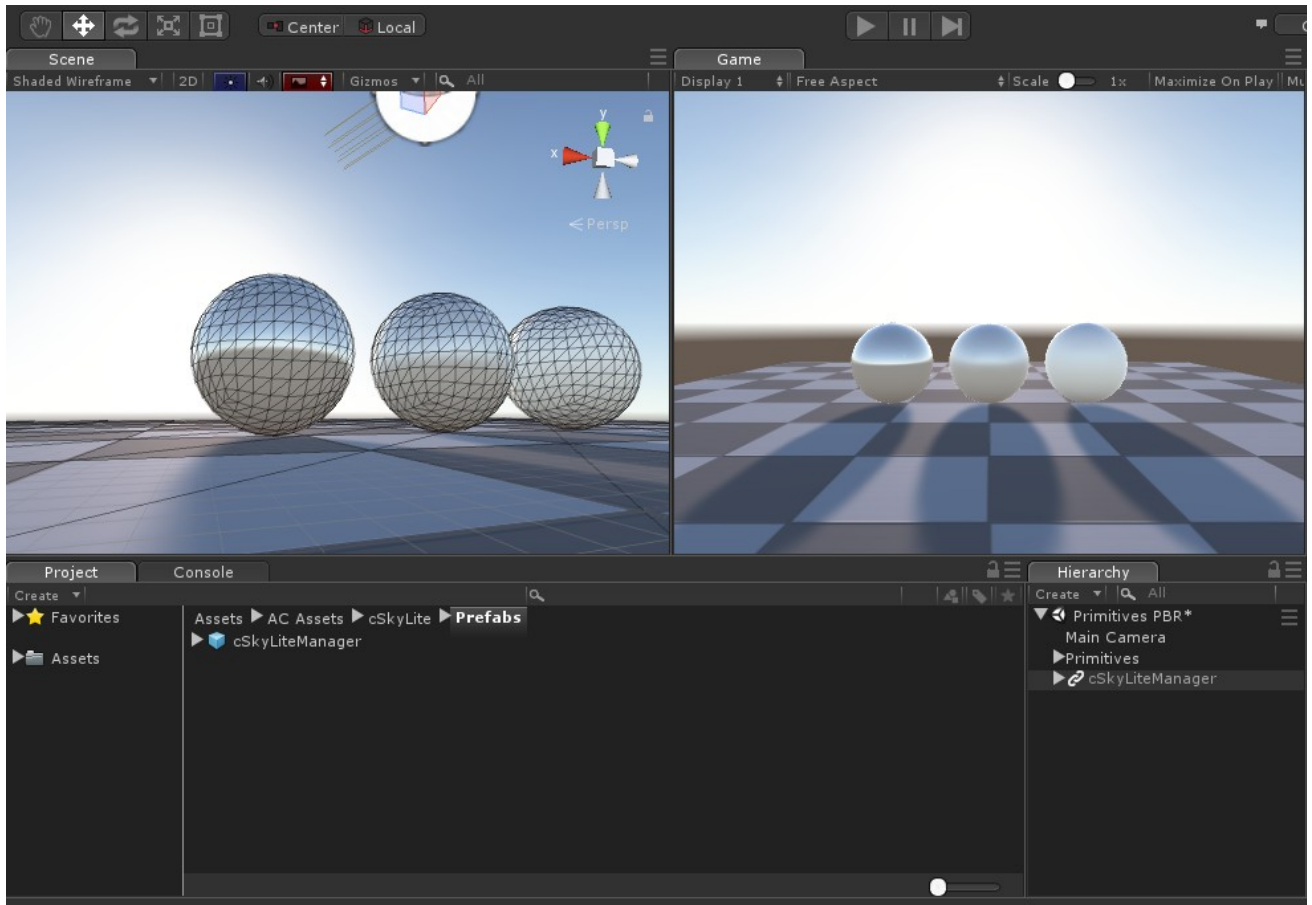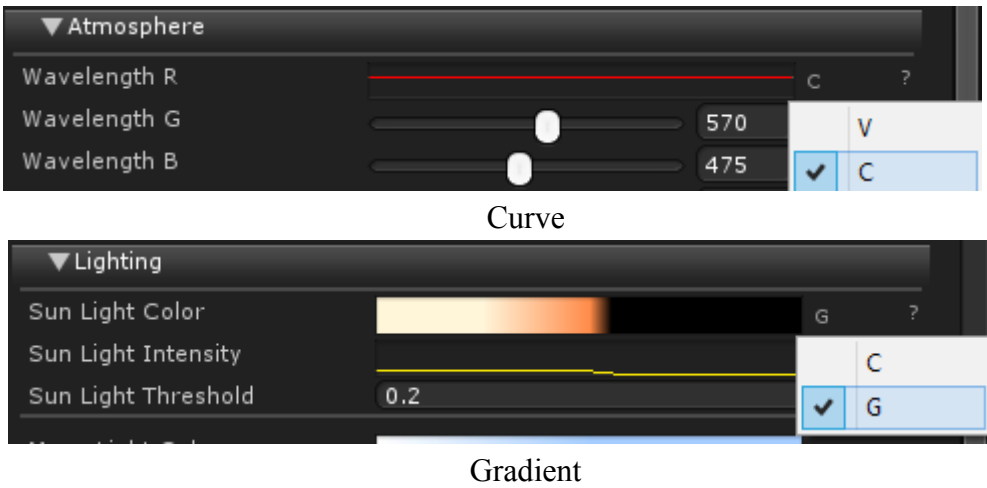
Components And Resources.

- ➢ **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*

▼ Atmosphere				
Wavelength R			C	?
Wavelength G		570	V	
Wavelength B		475	✓	C

Curve

| ▼ Lighting				
Sun Light Color		G	?	
Sun Light Intensity			C	
Sun Light Threshold	0.2		✓	G

Gradient

Configure Curves And Gradients.

There is an interrogation symbol located to the right of each parameter which indicates the type of evaluation time
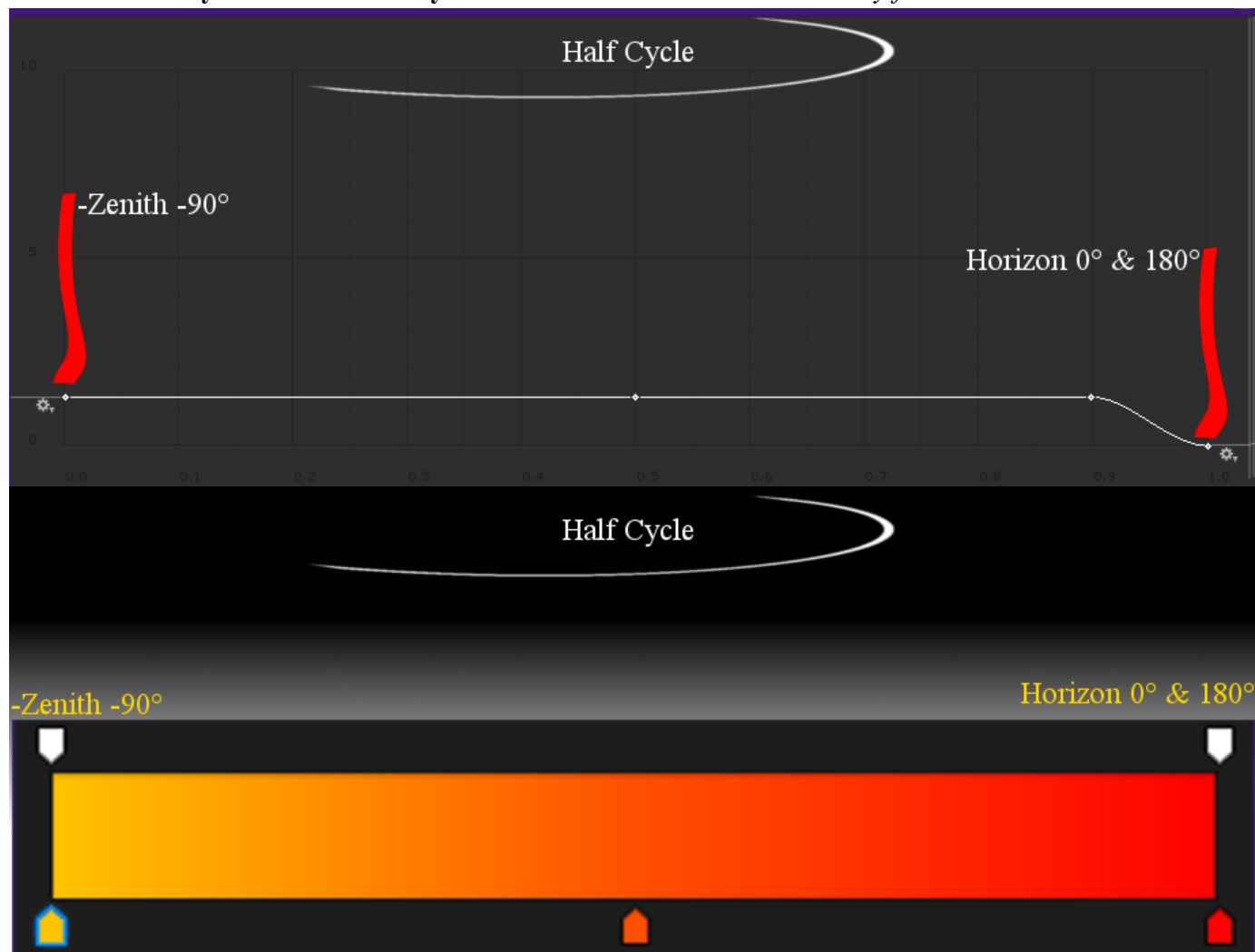
Moon Mie Multiplier		C	?
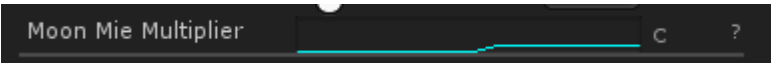
➤ **Evaluate time by sun/moon direction in complete cycle :** *Evaluate the curve or the gradient complete sun/moon cycle.*
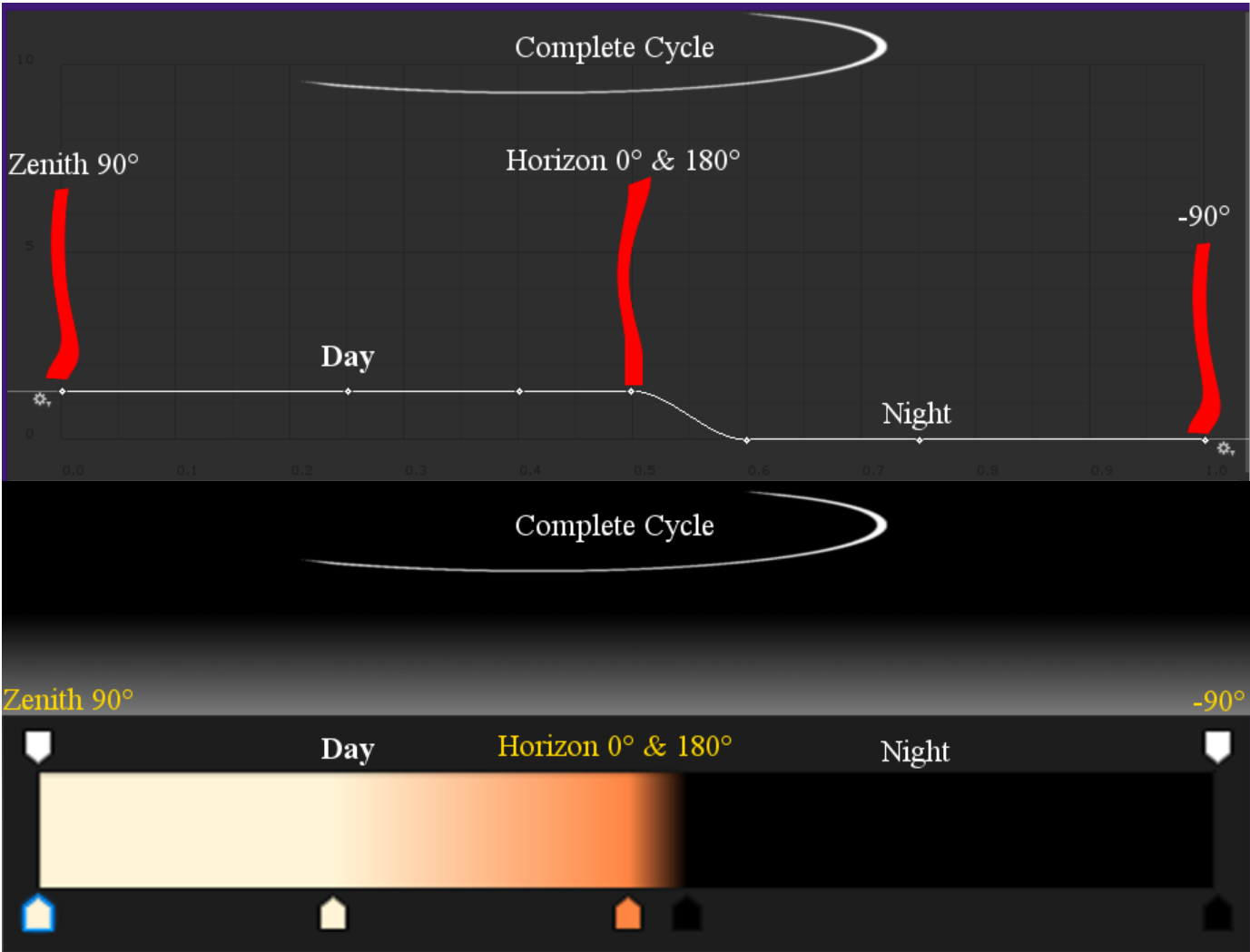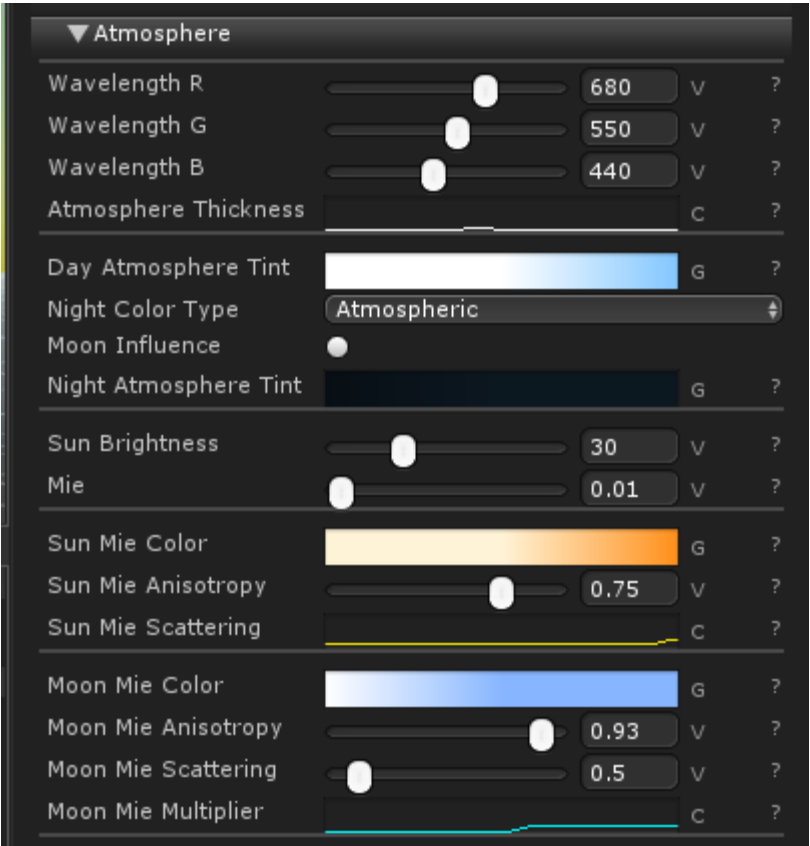
➢ **Evaluate by sun/moon direction only above the horizon:** *Is evaluated only from zenith to horizon.*
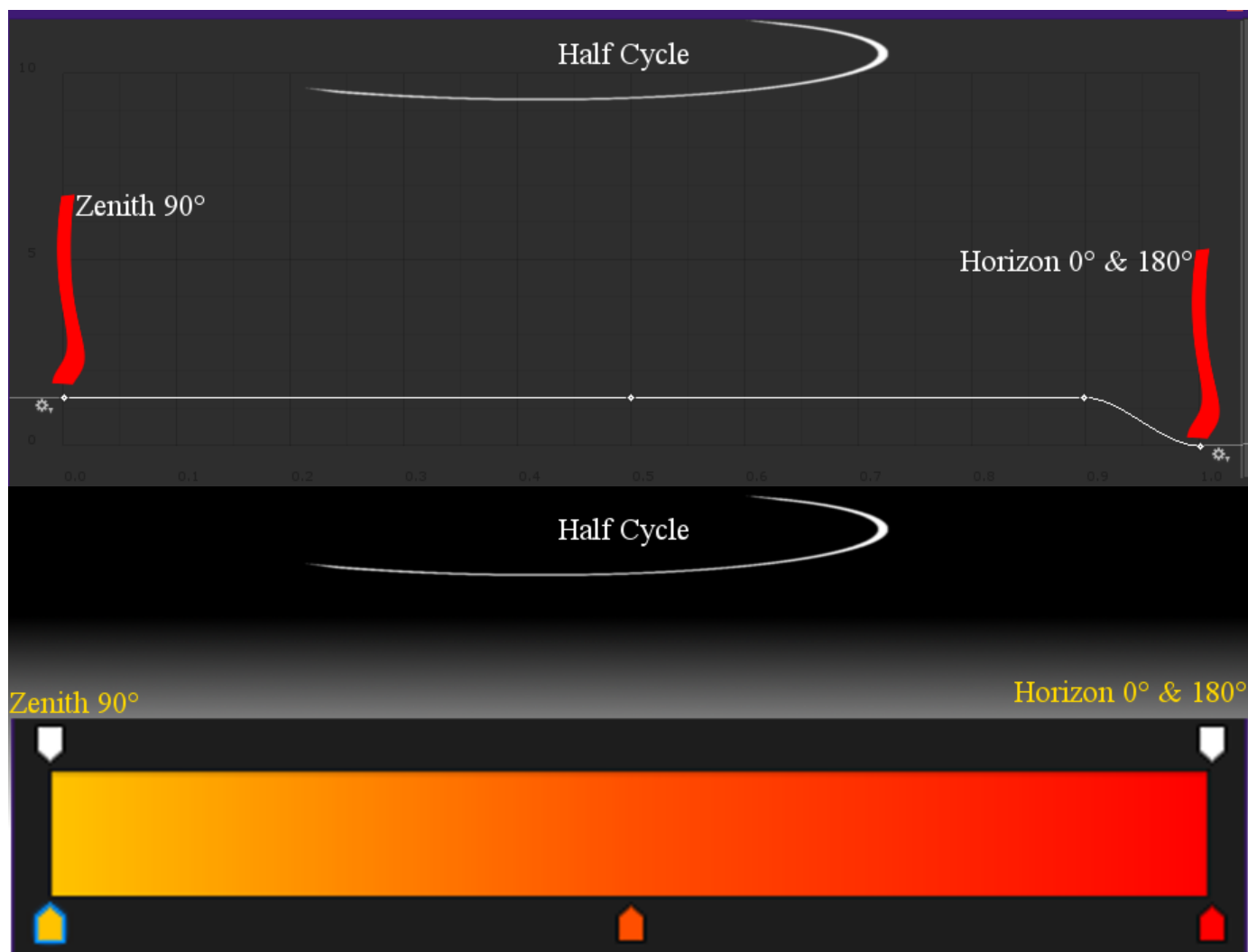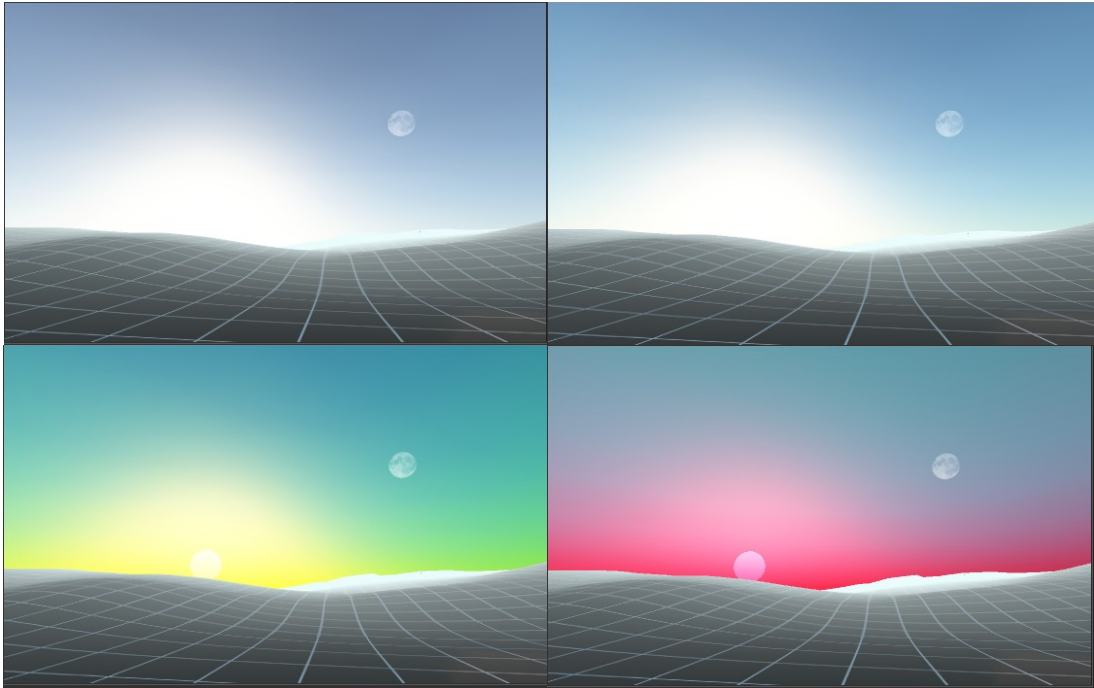

➢ **Evaluate by sun direction only below the horizon:** *Is evaluated only from -zenith to horizon.*
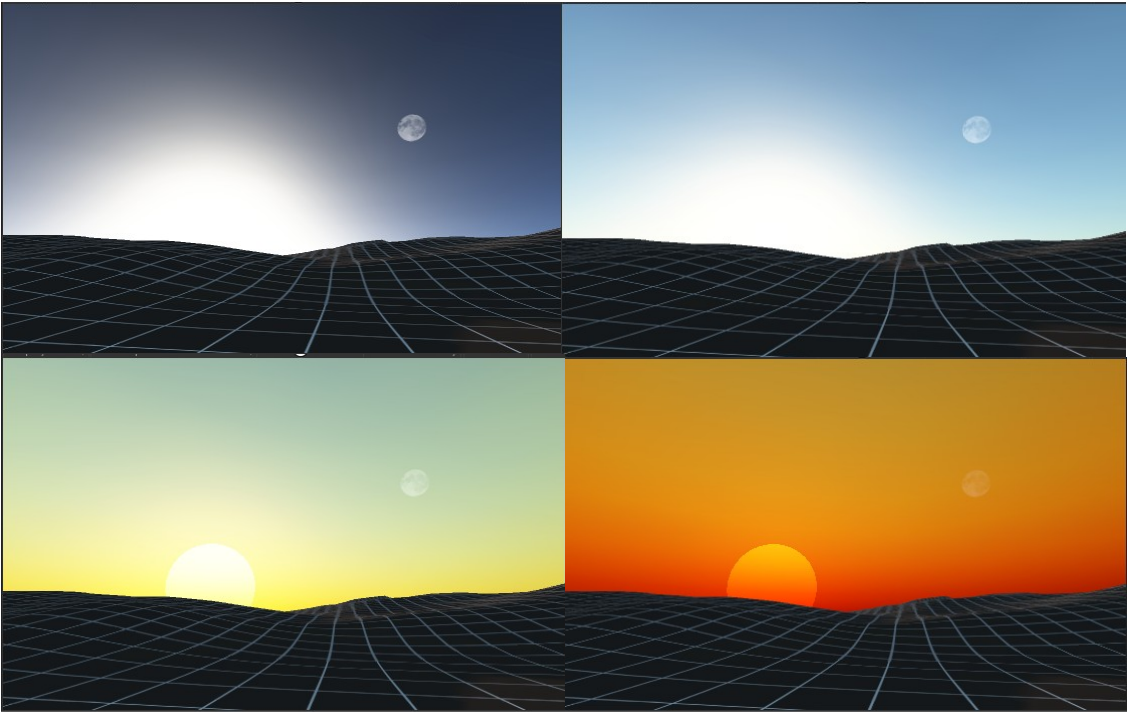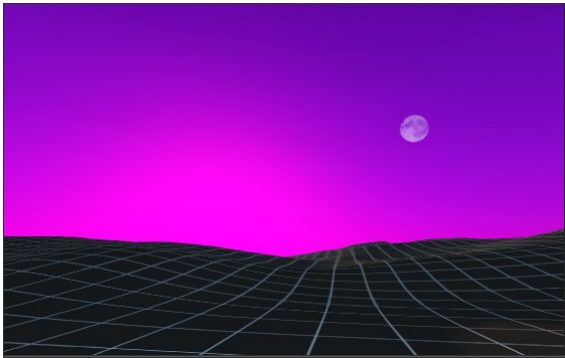
Atmosphere.

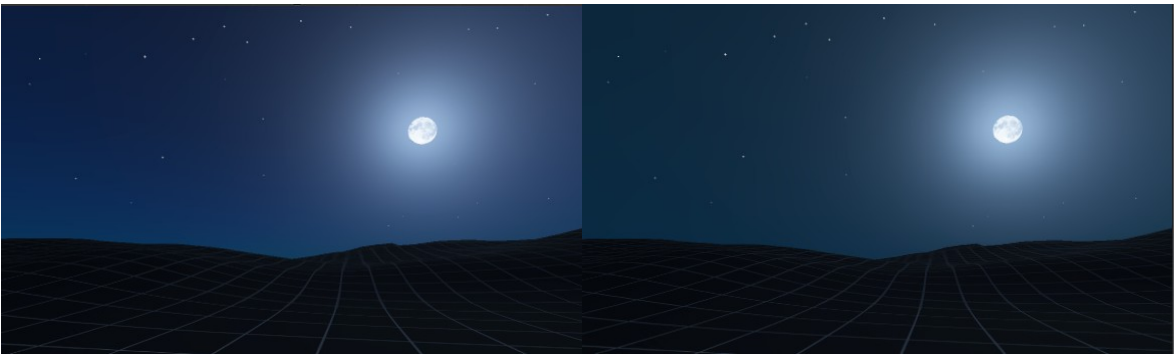➢ **Wavelegths:** *Are the parameters that cause the color of the sky.*

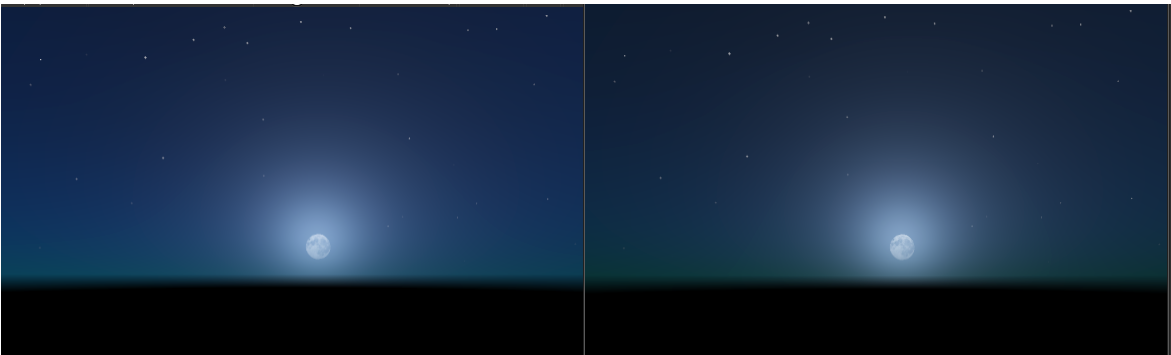**Atmospheric Thickness:** *Controls the density of the atmosphere.*

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

➢

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

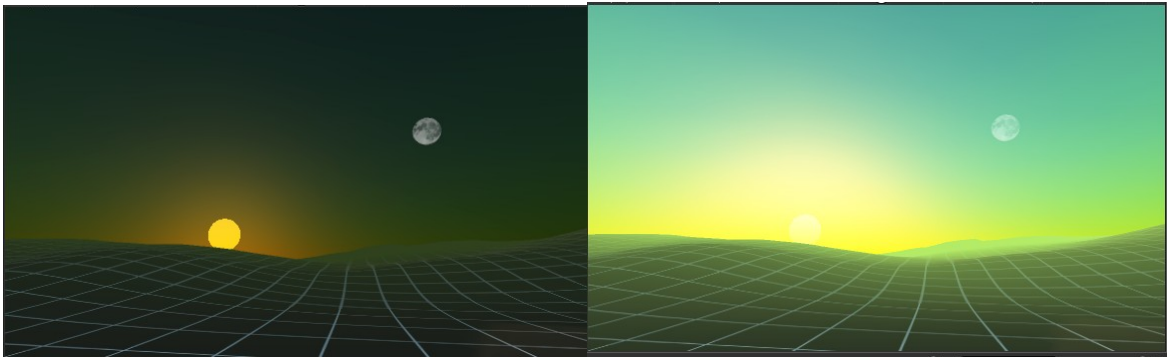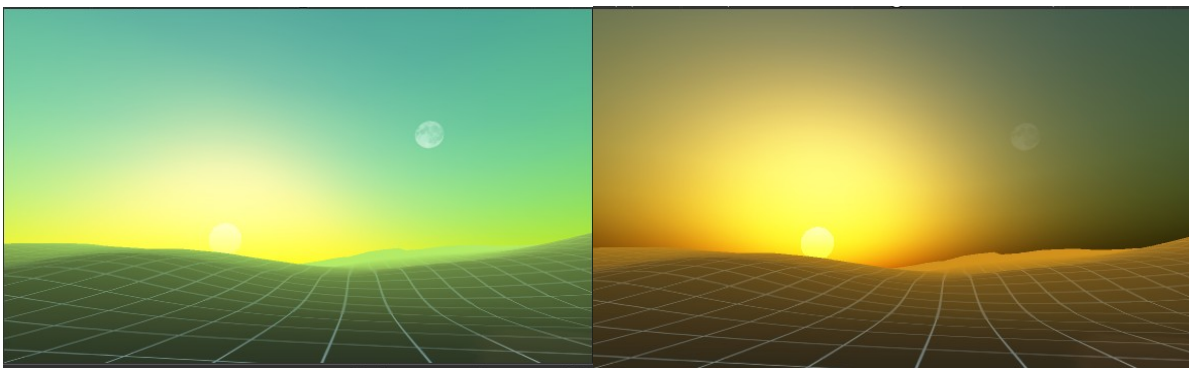➢ **Moon Influence:** *The moon affects the atmosphere.*

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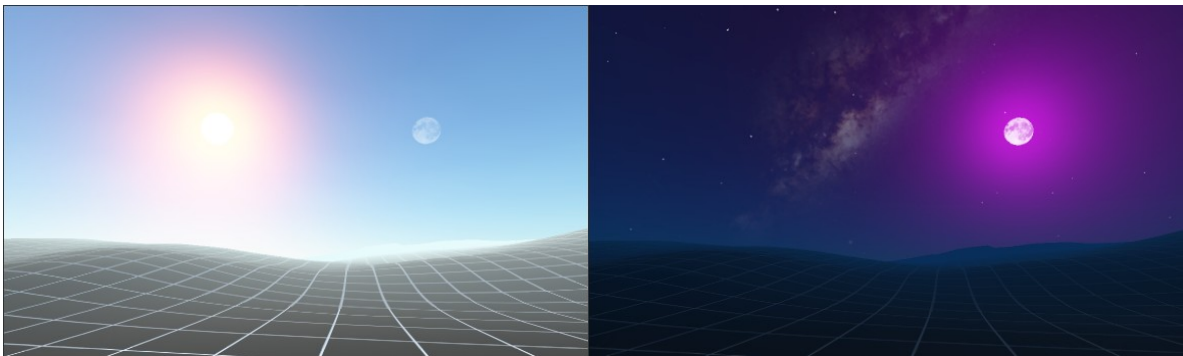

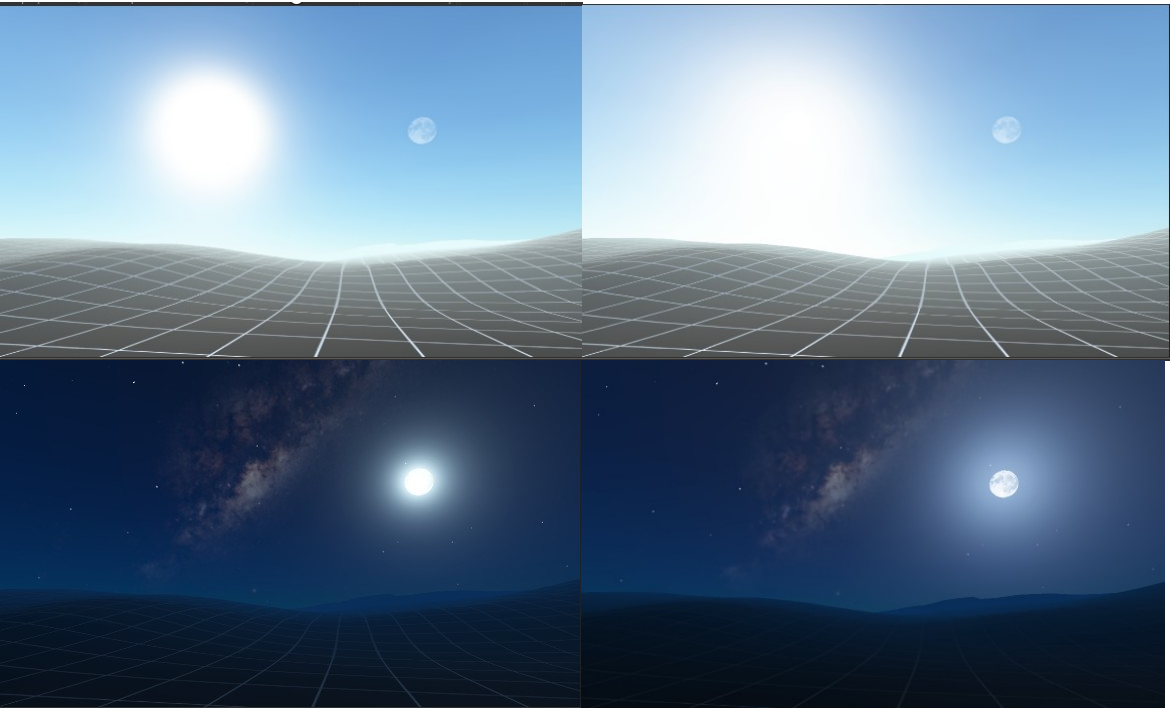➢ **Sun Brightness:** *The brightness of the sun.*

➢ **Mie:** *Mie value.*

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

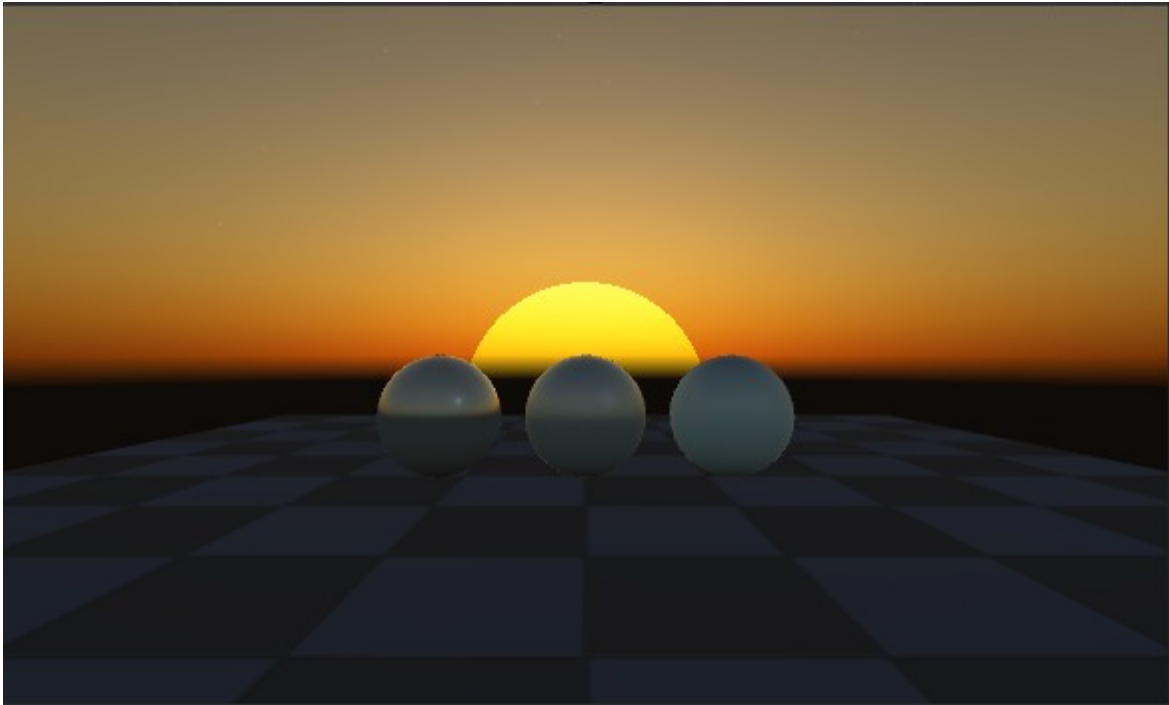➢ **Sun/Moon Mie Anisotropy:** *Henyey Greenstein g value.*

➢ **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.*
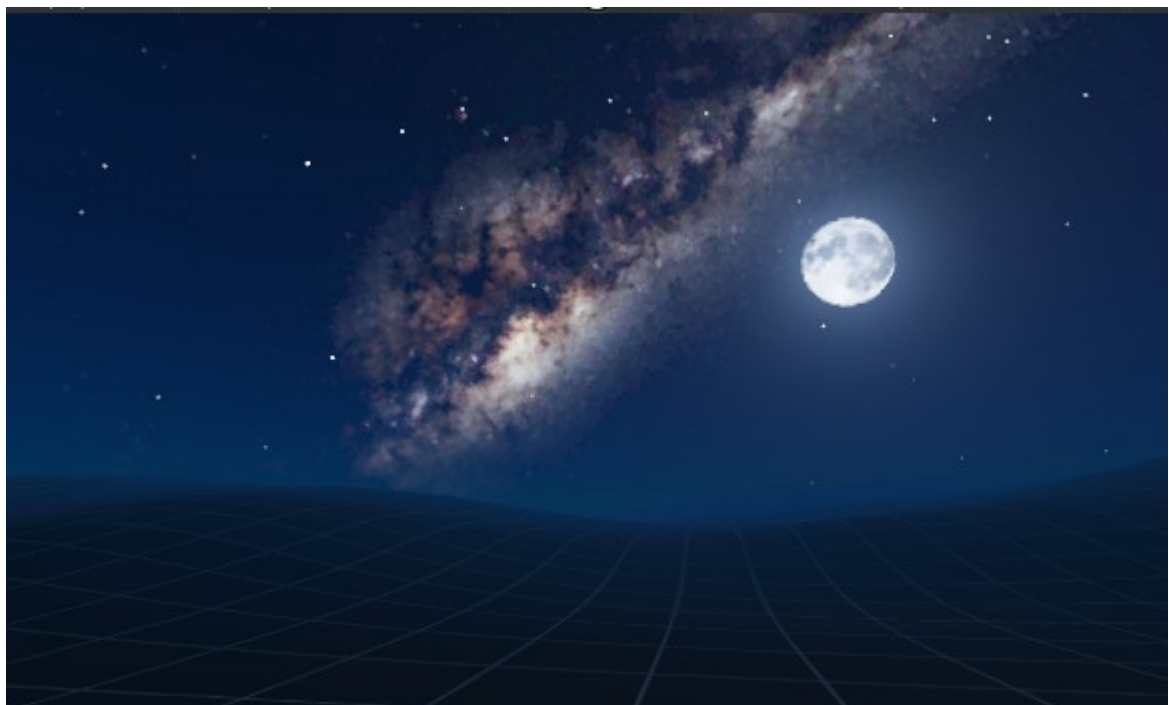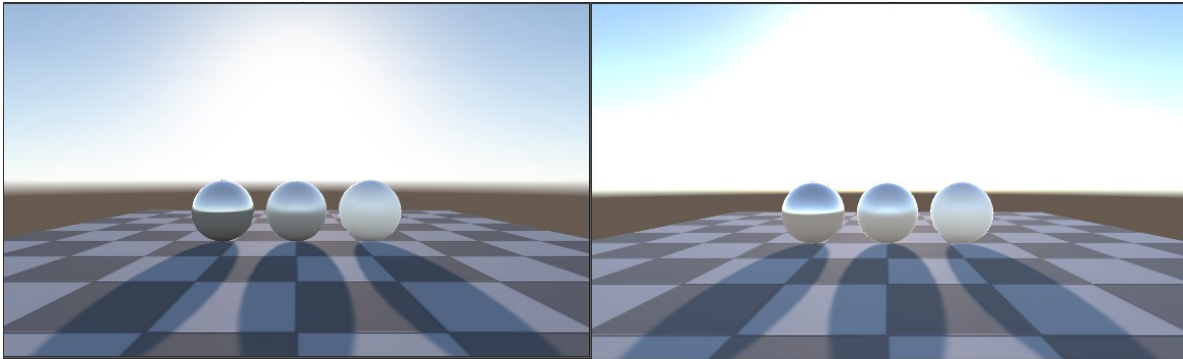

- ➢ **Offsets:** *Outer space rotation offsets.*

Color Correction.
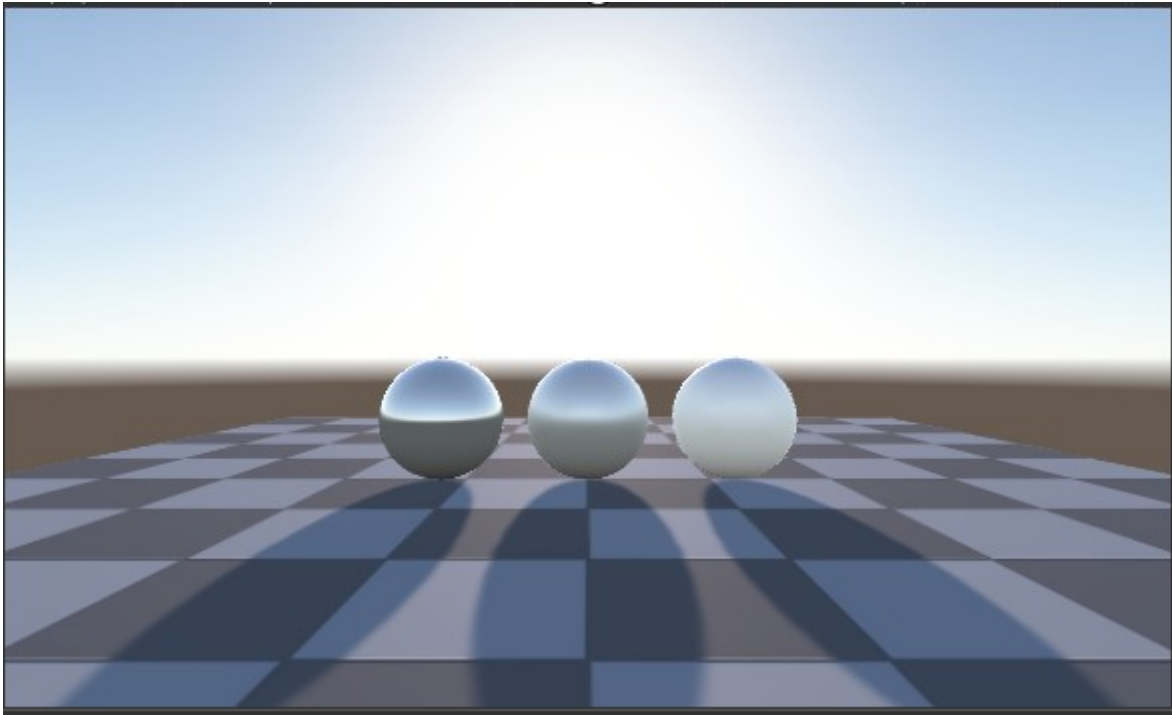

- ➢ **HDR:** *Enable HDR, only use if used tonemaping image effects.*
- ➢ **Exposure:** *HDR Exposure.*
- ➢ **Color Space:** *The color space.*
- ➢ **Note:** *Apply color correction (color^3/2) and apply fast tonemaping.*

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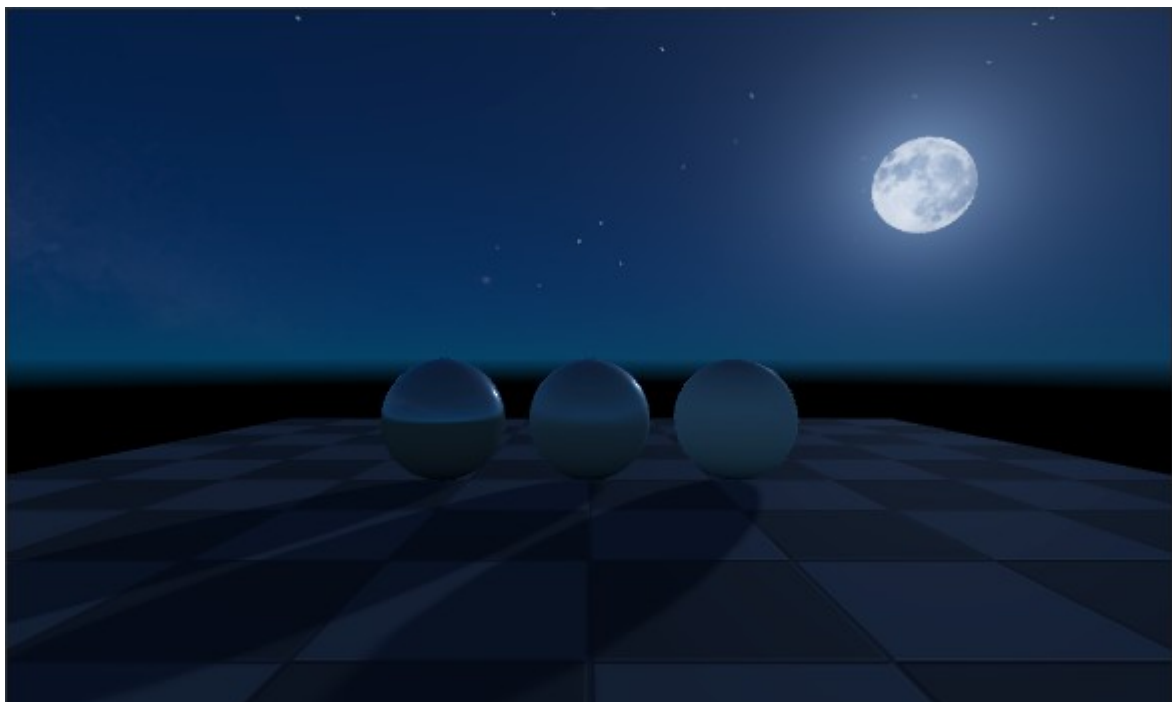
- ➢ **Ambient Mode:** *Mode of the environment lighting.*
- ➢ **Ambient Intensity:** *Intensity multiplier of the environment lighting.*
- ➢ **Ambient Sky Color:** *Top environment lighting color.*
- ➢ **Ambient Equator Color:** *Horizon environment lighting color.*
- ➢ **Ambient Ground Color:** *Ground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

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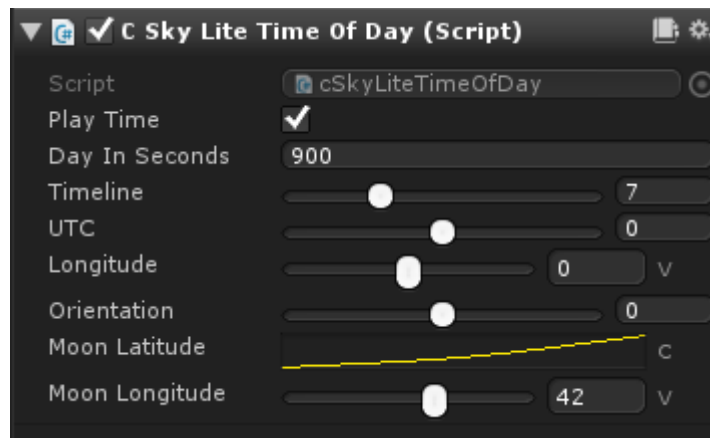➢ **Note:** *The parameters are the same as the default fog.*
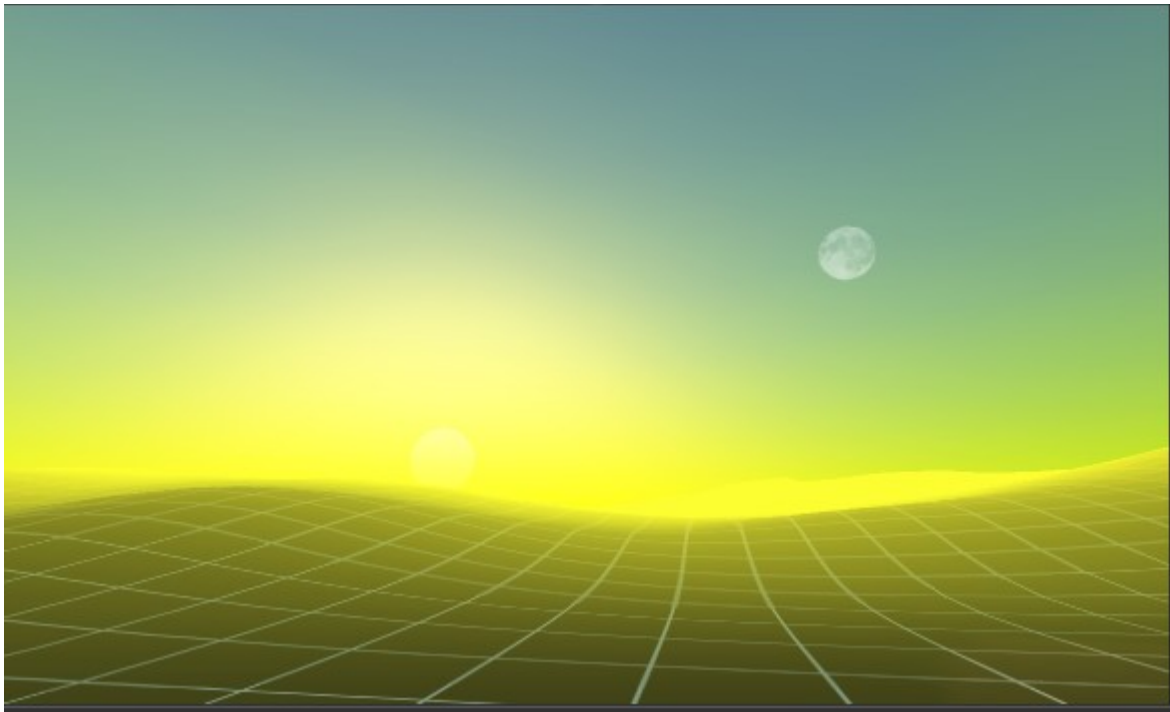
LSkyReflection.

➢ *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*

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.*