# LSky Documentation v2.0,1



### About.

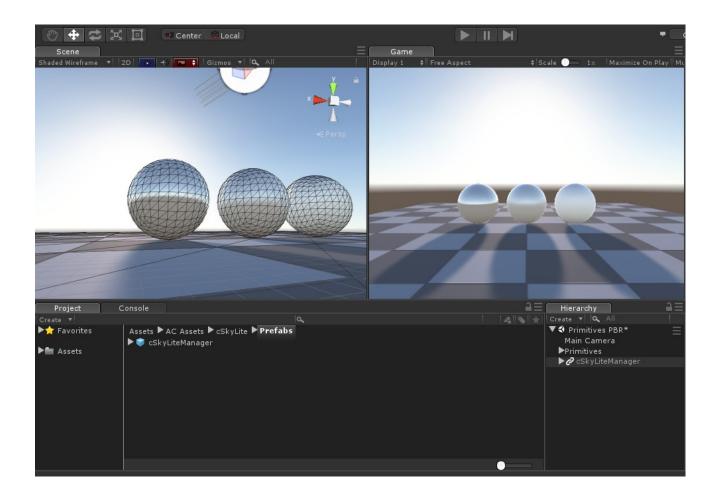
Dynamic sky basic solution, the package is an improved version of the "Time Of Day System Free", with some of the features of my dynamic sky system "cSky" (Coming Soon).

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

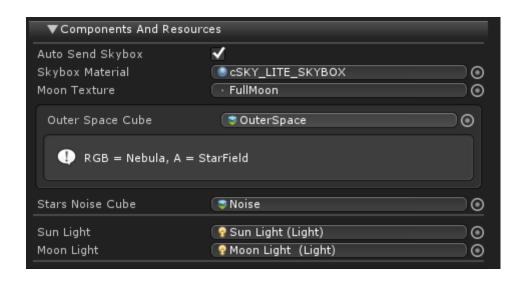
**Notice2:** *No tested in VR.* 

## **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.

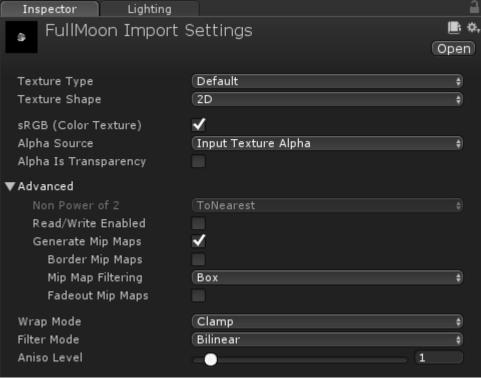


### **Components And Resources.**



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

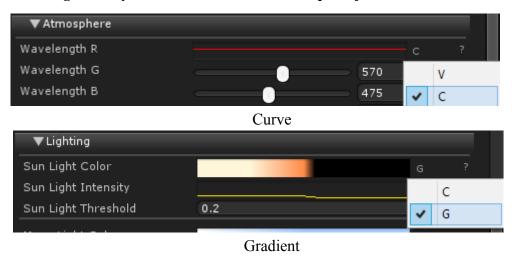




#### **Curves And Gradient System.**

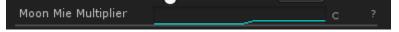
LSky has a system of curves and gradients to control sky values, lighting, etc. during the cycle of rotation of the sun and moon.

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

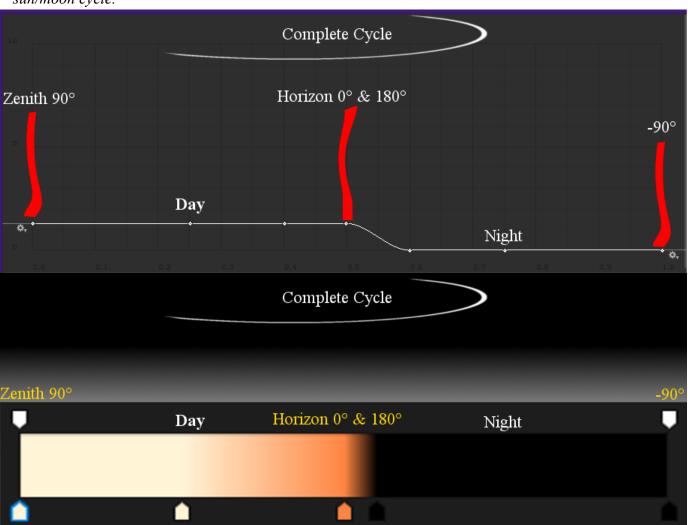


### **Configure Curves And Gradients.**

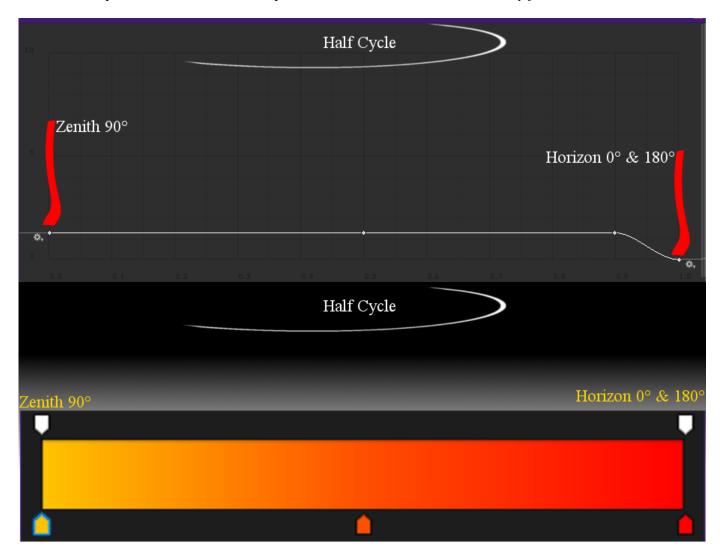
There is an interrogation symbol located to the right of each parameter which indicates the type of evaluation time



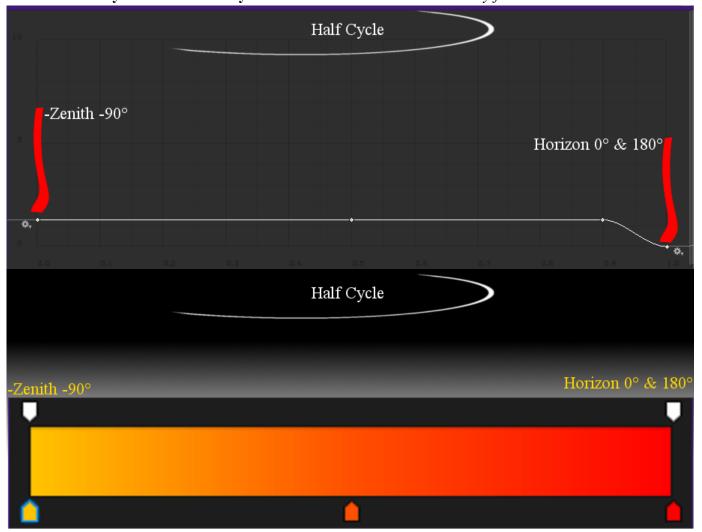
➤ Evaluate time by sun/moon direction in complete cycle : Evaluate the curve or the gradient complete sun/moon cycle.



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



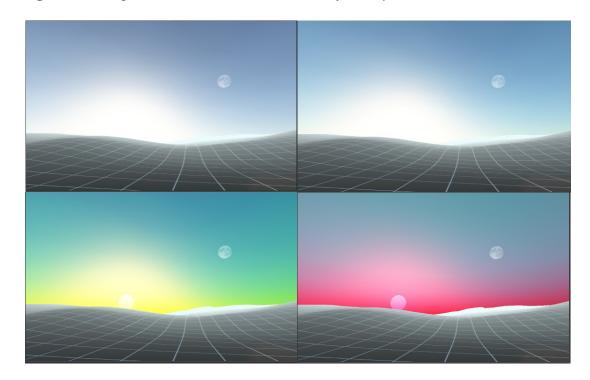
**Evaluate by sun direction only below the horizon:** *Is evaluated only from -zenith to horizon.* 



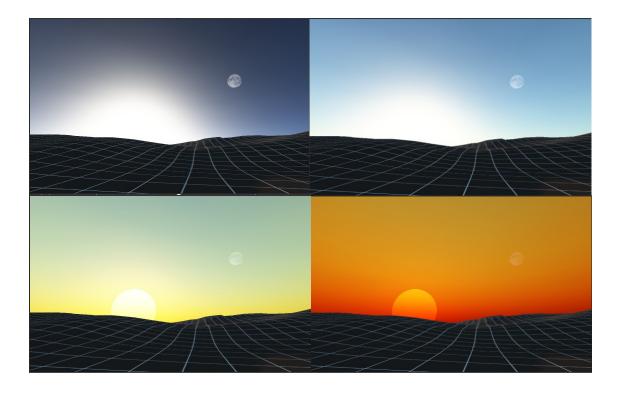
## Atmosphere.



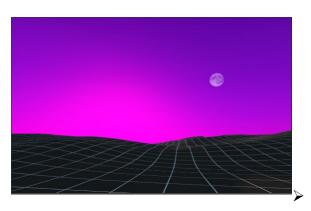
➤ Wavelegths: Are the parameters that cause the color of the sky.



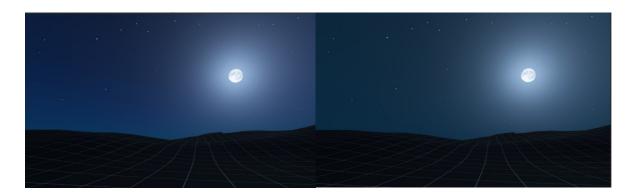
**Atmospheric Thickness:** Controls the density of the atmosphere.



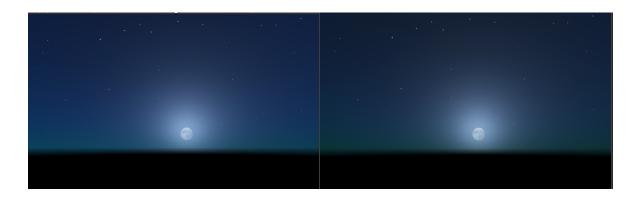
➤ Day Atmosphere Tint: This is the color multiplier of the atmosphere during the day.



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



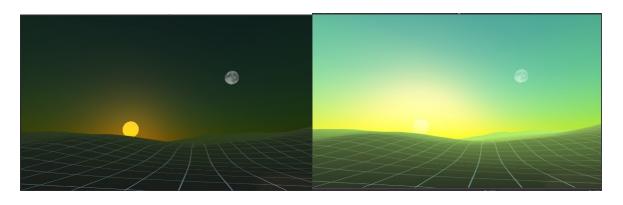
➤ Moon Influence: The moon affects the atmosphere.



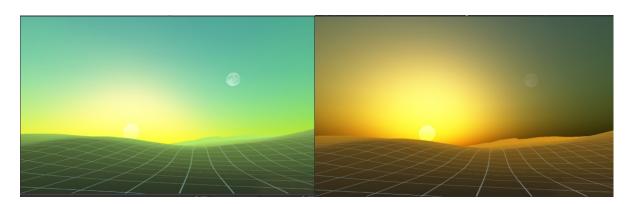
➤ **Night Atmosphere Tint:** *This is the color multiplier of the atmosphere during the night.* 



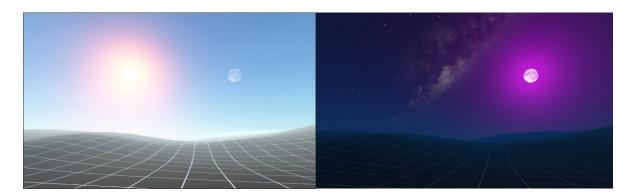
➤ Sun Brightness: The brightness of the sun.



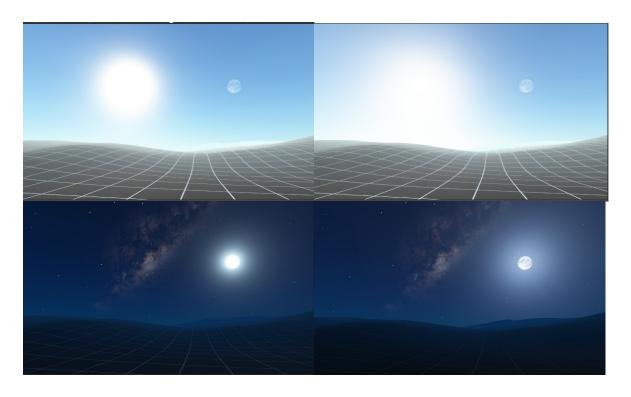
➤ Mie: Mie value.



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



➤ Sun/Moon Mie Anisotropy: Henyey Greenstein g value.



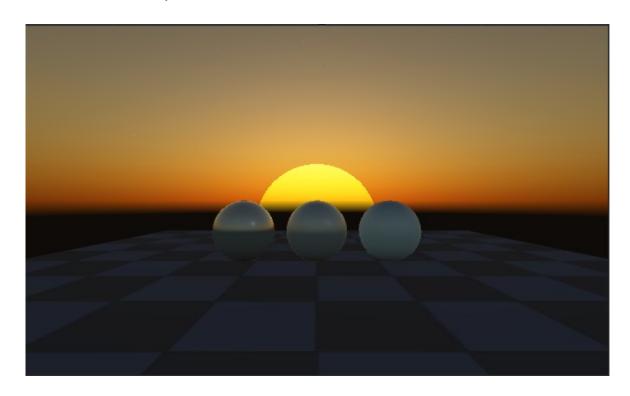
- **Sun/Moon Mie Scattering:** *Mie phase intensity.*
- ➤ **Moon Mie Multiplier:** *Mie multiplier during the complete cycle of the sun.*

### 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.

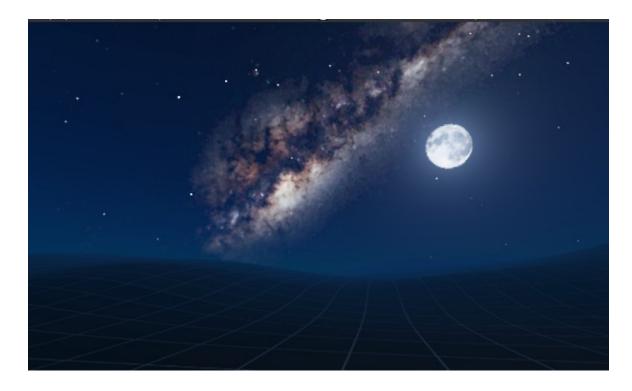
> Stars ScintillationSpeed: Speed of the twinkle of the stars.



> Nebula: Enable nebula.

➤ **Nebula Color:** Color of the nebula.

➤ Nebula Intensity: Intensity of the nebula.



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

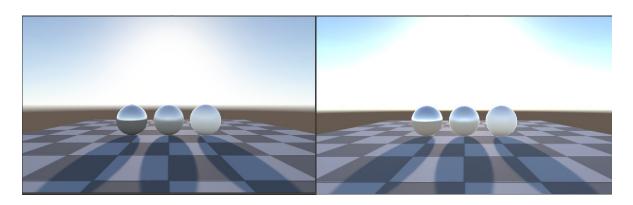
#### **Color Correction.**

▼ Color Correction			
HDR			
Exposure		<b>─ 1.3</b> ∨	
Color Space	Automatic		\$

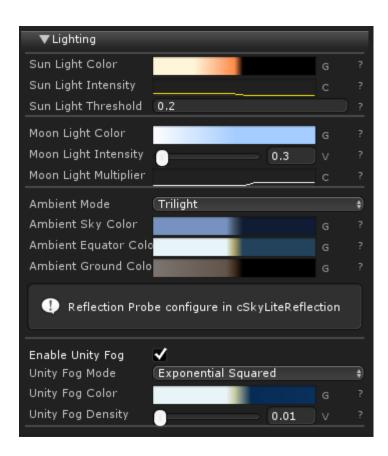
➤ HDR: Enable HDR, only use if used tonemaping image effects.

Exposure: HDR Exposure.Color Space: The color space.

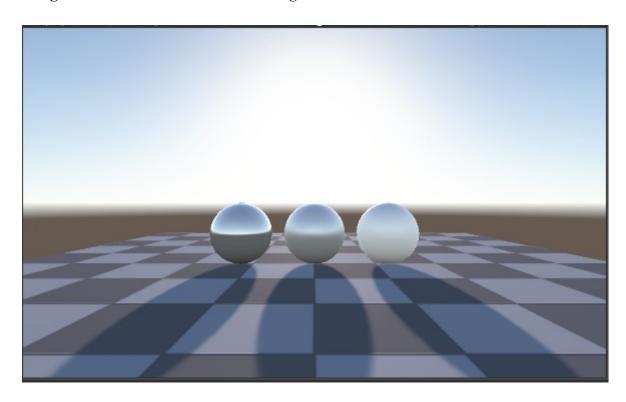
➤ **Note:** Apply color correction (color^3/2) and apply fast tonemaping.



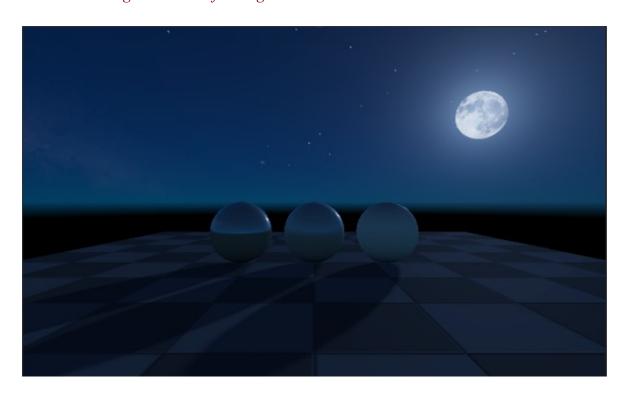
## Lighting.



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

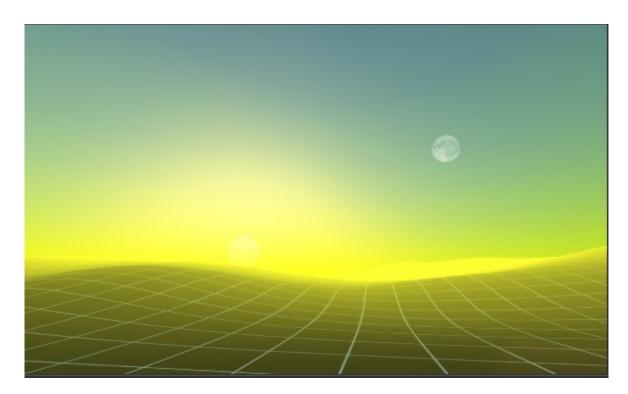


- ➤ Moon Light Color: Color of the moon light.
- ➤ Moon Light Intensity: Intensity of the moon light.
- ➤ Moon Light Multiplier: Moon light intensity multiplier during the complete cycle of the sun.
- ➤ **Note:** *Moon light is enbale if sun light is disabled.*



- ➤ 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.

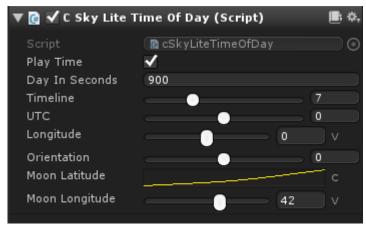


## LSkyReflection.



- For now the only function of this class is to refresh the reflection probe.
- > More lighting information:
  - > See <a href="https://docs.unity3d.com/Manual/class-ReflectionProbe.html">https://docs.unity3d.com/Manual/class-ReflectionProbe.html</a>
  - > See <a href="https://docs.unity3d.com/Manual/LightingOverview.html">https://docs.unity3d.com/Manual/LightingOverview.html</a>

## **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.