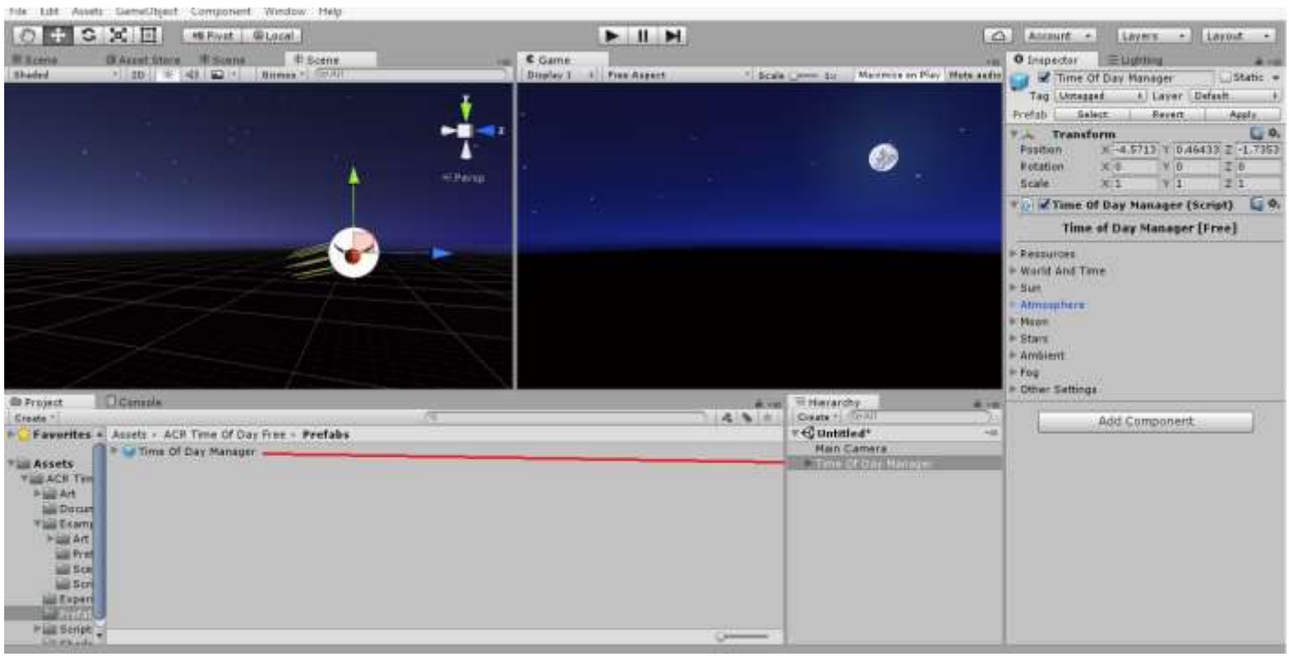
ACR Time Of Day Free [v1.2.3].

About.

- With this package you can create Basic Day/Night cycle, also it includes a system of curves and gradients to control the parameters of the lighting, sky, moon, stars, fog,etc,
- Download moon textures : http://acxjcr.wixsite.com/acr0/unity-5-tod-free-asset

Getting Started.

- Drag the prefab “Assets/ACR Time Of Day Free/Prefabs/Time Of Day Manager” into your hierarchy.
- **Note:** Make sure that there are no additional lights in the scene.



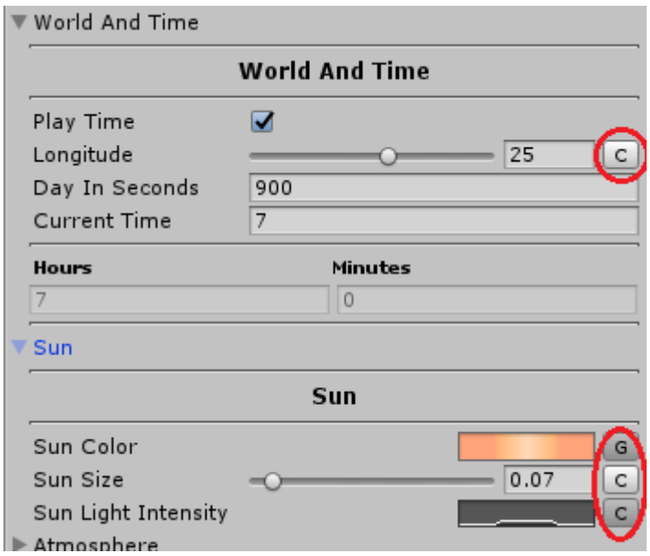
Or

- Drag the script “Assets/ACR Time Of Day Free/Scripts/TimeOfDayManager” to empty gameObject and assign the required components and resources.

- **Note:** Direction of the shader “ACR/TimeOfDay/Custom/Skybox/Procedural”

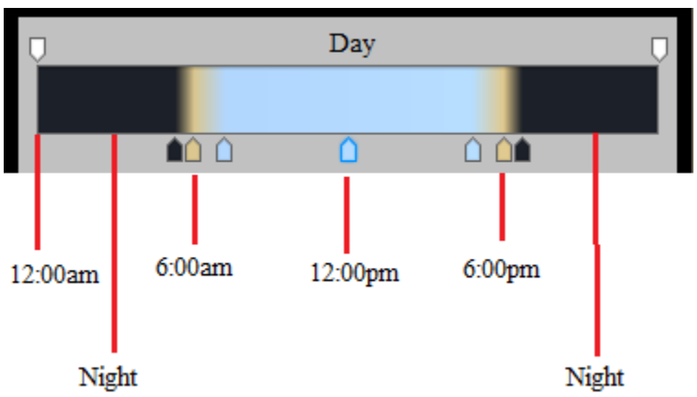
Curves and Gradients.

- You can choose to use curves or gradients:
  - Press “C” button to actívate curves.
  - Press “G” button to activate gradients.



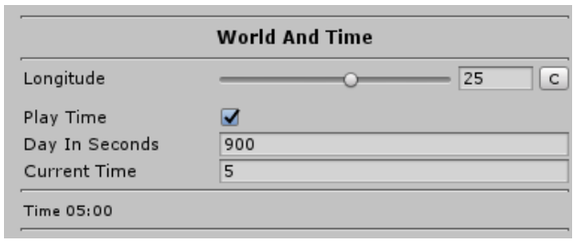
- You can be guided with the images to set the curves and gradients.

0 = 12:00am, 0.25 = 6:00am, 0.5 = 12:00pm, 0.75 = 6:00pm.



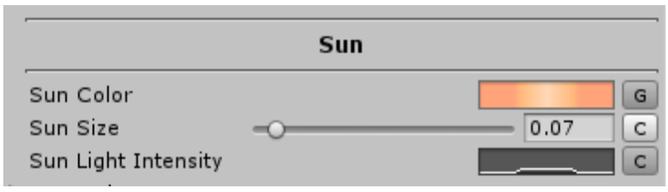
0 = 12:00am, 25 = 6:00am, 50 = 12:00pm, 75 = 6:00pm.

World And Time.



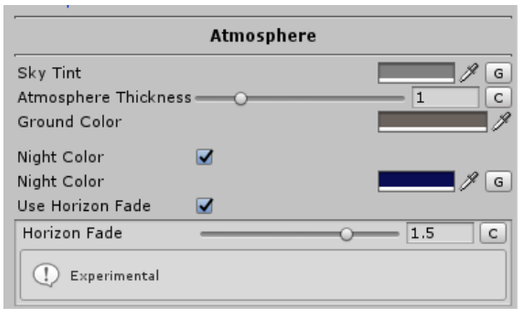
- **Longitude:** This is the longitude of the world.
- **Day In Secods:** The day in seconds(60 = 1minute, 3600 = 1hour, 86400 = 24 hours).
- **Current Time:** This is the timeline.

Sun.

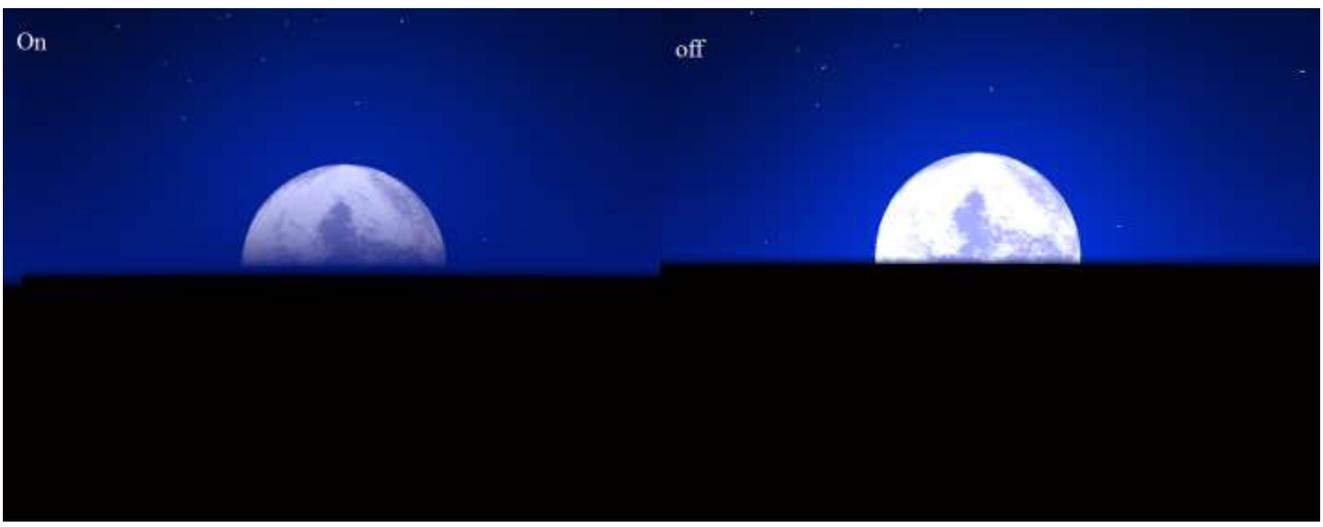


- **Sun Color:** This is the color of the sun and sun directional light.
- **Sun Size:** This is the size of the sun.
- **Sun Light Intensity:** This is the intensity of the sun directional light.

Atmosphere.

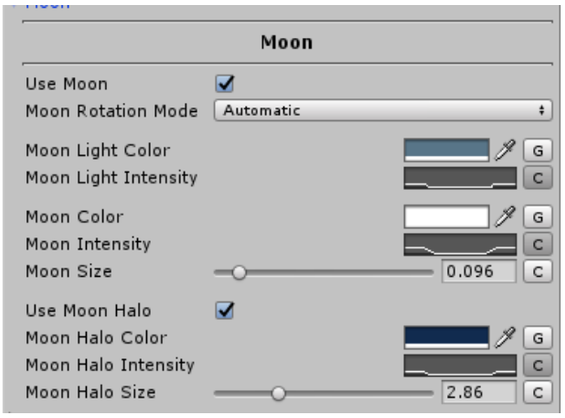


- **Sky Tint:** This is sky tint, It affects the wavelength.
- **Atmosphere Thickness:** This is thickness of the atmosphere, It affects the Rayleigh.
- **Ground Color:** This is the ground color.
- **Night Color:** This is sky color at night.
- **Horizon Fade :** This is the fade of the moon and stars on the horizon.



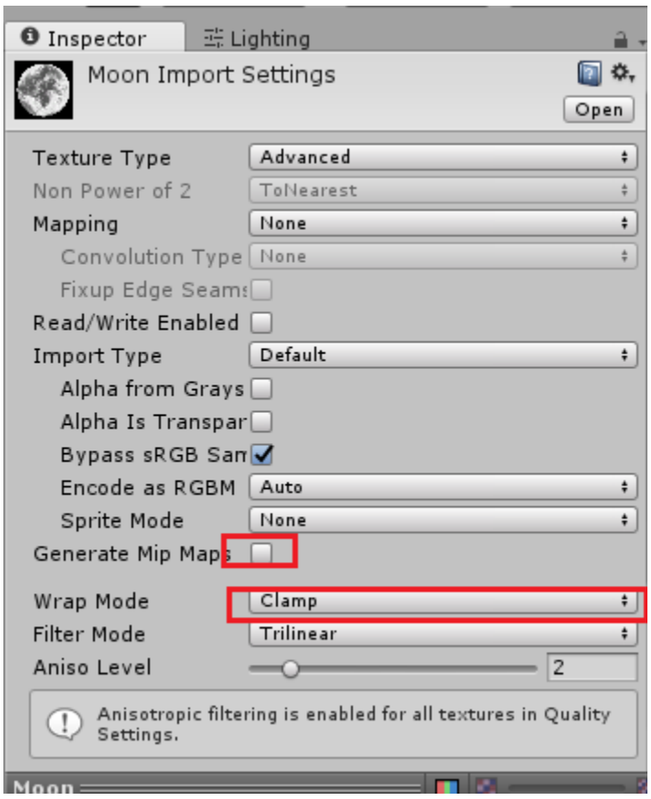
Horizon Fade.

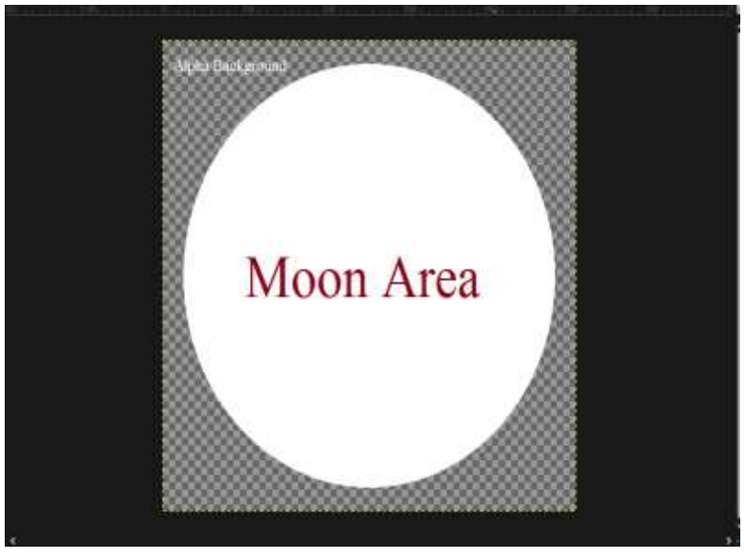
Moon.



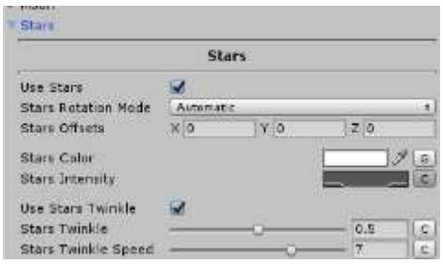
- **Moon Rotation Mode:**
  - **Automatic :** Rotate moon in the opposite direction to the sun.
  - **Custom** : Custom rotation moon.
    - **Moon Longuitude:** This is the longuitude of the moon.
    - **Moon Latitude:** The is the latitude of the moon.
- **Moon Light Color:** This is the color of the moon directional light.
- **Moon Light Intensity:** This is the Intensity of the moon directional light.
- **Moon Color:** This is the color of the moon texture.
- **Moon Size:** This is the size of the moon texture.
- **Moon Halo Color:** This is the color of the moon halo.
- **Moon Intensity:** This is the intensity of the moon texture.
- **Moon Halo Size:** This is the size of the moon halo.

Moon Texture Settings.



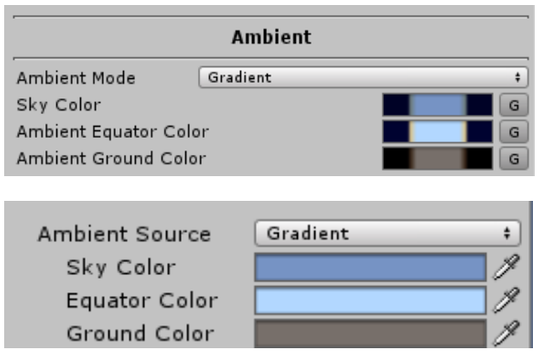


Stars.



- **UseStars:** Enable/Disable the stars.
- **Stars Rotation Mode:** Rotaion mode of the stars.
- **Stars Offset:** Offsets of the stars cubemap.
- **Stars Color:** This is the color of the stars cubemap.
- **Stars Intensity:** This is the intensity of the stars cubemap.
- **UseStarsTwinkle :** Enable/Disable stars twinkle.
- **Stars Twinkle :** This is the twinkling of stars.
- **Stars Twinkle Speed :** This is the twinkling speed of stars.

Ambient.

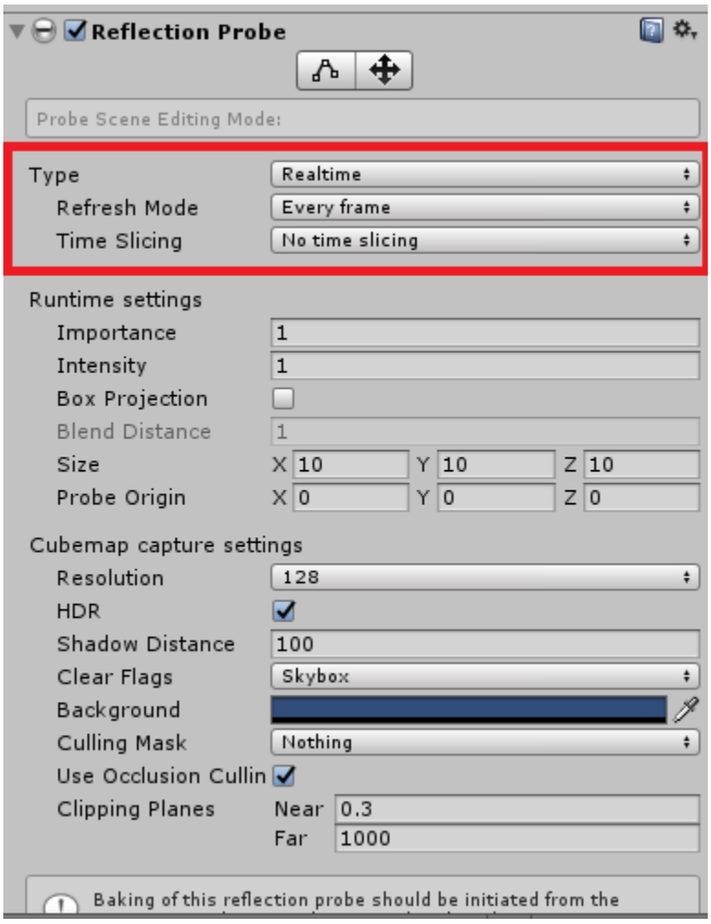


- Here they are controlled properties of the ambient using curves and gradients.

See: https://docs.unity3d.com/Manual/GlobalIllumination.html

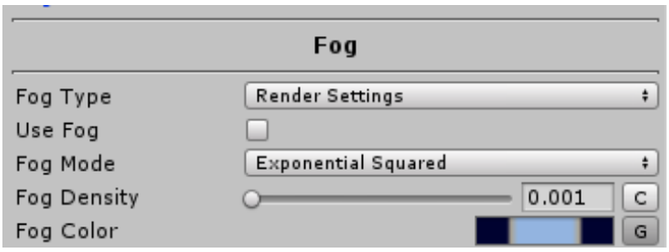
Reflection Probe.

- Settings for reflection probe.



See https://docs.unity3d.com/Manual/class-ReflectionProbe.html

Fog.

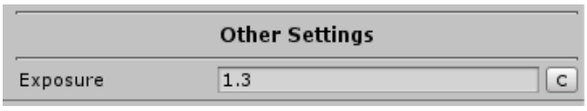


- **Fog Type :**
  - Render Settings : Render settings fog values.
  - Evaluate Only Only evaluate curves and gradients of the fog.
  - Off : Enable/Disable fog.

- Here they are controlled properties of the fog using curves and gradients.

See: https://docs.unity3d.com/Manual/GlobalIllumination.html

Other Settings



- **Exposure:** This is HDR exposure.

Scripting.

Namespace.

To access the class " Time Of Day Manager", you must use this namespace.

- **ACR.TimeOfDayFree**

Example :

```
using UnityEngine;
using System.Collections;
using ACR.TimeOfDayFree;

public class Test : MonoBehaviour
{

}
```

TimeOfDayManager.

Impotant Properties.

- **CGTime:** This property is used to evaluate the curves and gradients,

Example :

```
AnimationCurve exampleCurve = new AnimationCurve();

void Update()
{
    float exampleFloat  = exampleCurve.Evaluate(CGTime);
}
```

- **CurrentTime:** This is the current time or timeline, the range is 0 – k_DayDuration (default is 24).
- **Hour :** This is the current hour.
- **Minute :** This is the current minute.
- **TimeString :** For UI time.

Public Properties And Variables.

Variables.

- skyMaterial.
- moonTexture
- starsCubemap.
- starsNoiseCubemap.
- playTime.
- useWorldLongitudeCurve.
- worldLongitudeCurve.
- dayInSeconds.
- currentTime.
- useSunColorGradient.

- sunColorGradient.
- useSunSizeCurve.
- sunSizeCurve.
- useSunLightIntensityCurve.
- sunLightIntensityCurve.
- useSkyTintGradient.
- useAtmosphereThicknessCurve.
- atmosphereThicknessCurve.
- groundColor.
- useNightColor.
- useNightColorGradient.
- nightColorGradient.
- useHorizonFade.
- useHorizonFadeCurve.
- horizonFadeCurve.
- useMoon.
- moonRotationMode.
- useMoonLongitudeCurve.
- moonLongitudeCurve
- useMoonLatitudeCurve.
- moonLatirudeCurve.
- useMoonLightColorGradient.
- moonLightColorGradient.
- useMoonLightIntensityCurve.
- moonLightIntensityCurve.
- useMoonColorGradient.
- moonColorGradient.
- useMoonIntensirtCurve.
- moonIntensityCurve.
- useMoonSizeCurve.
- moonSizeCurve.
- useMoonHalo.
- useMoonHaloGradient.
- moonHaloGradient.
- useMoonHaloSizeCurve
- moonHaloSizeCurve.
- useMoonHaloIntensityCurve.
- moonHaloIntensityCurve.
- useStars.
- starsRotationMode.
- starsOffets-
- useStarsColorGradient.
- starsColorGradient.
- useStarsIntesnityCurve.
- starsIntensityCurve.
- useStarsTwinkle.
- useStarsTwinkleCurve.
- starsTwinkleCurve,
- useStarsTwinkleSpeed.
- starsTwinkleSpeed.
- useAmbientSkyColorGradient.
- ambienSkyColorGradient.
- useAmbientEquatorColorGradient.
- ambientEquiatorColorGradient.
- useAmbientGroundColorGradient.
- ambientGroundColorGradient.
- useAmbientIntensityCurve.
- ambientIntensityCurve.
- fogMode.
- useRenderSettingsFog.
- useFogDensityCurve.

- fogDensityCurve.
- useFogStartDistanceCurve.
- fogStartDistanceCurve
- useFogEndDistanceCurve.
- fogEndDistanceCurve
- useFogColorCurve
- fogColorCurve.
- useExposureCurve.
- exposureCurve.

Properties.

- WorldLongitude.
- WorldRotation(private set).
- Hour.
- Minute.
- TimeString.
- CGTime.
- SunColor.
- SunSize.
- SunLightIntensity.
- SunDirection.
- SunEnable.
- SkyTint.
- AtmosphereTickness.
- NightColor.
- HorizonFade.
- MoonLightColor.
- MoonLightIntensity.
- MoonColor.
- MoonIntensity.
- MoonSize.
- MoonHaloColor.
- MoonHaloSize.
- MoonHaloIntensity.
- MoonDirection.
- MoonLightEnable.
- StarsColor.
- StarsIntensity.
- StarsTwinkle.
- StarsTwinkleSpeed.
- AmbientSkyColor.
- AmbientEquatorColor.
- AmbientGroundColor.
- AmbientIntensity.
- FogDensity.
- FogStartDistance.
- FogEndDistance.
- FogColor.
- Exposure.