

# #NVJOB Dynamic Sky

#NVJOB Dynamic Sky is a fast and easy shader for the sky and horizon, working on mobile and desktop platforms. This shader works in a non-standard way, the color range of the shader goes beyond the standard color range and is within the HDR. Therefore, to work on mobile platforms, you must enable HDR (by default, HDR is turned off).

This is not just a static skybox, but a dynamic sky (clouds move and change shape) that can be customized for any task. You can create any sky, under different weather, day and night sky, or even make a fantasy sky.

## Features:

- The ability to create any sky.
- Works well on mobile platforms (HDR required).
- The sky can be baked in lighting and in reflection.
- Control the direction of Sky movement.
- Support for all functions in Forward Rendering and Deferred Rendering.
- Very high performance.

## Information:

This shader does not work with SRP (HDRP, URP)!

For the shader to work properly, a dome model with prepared UV is required (model of the dome is in the asset).

There are examples in the asset that allow you to quickly understand how to use the "sky" in your project.

If you use mobile platforms, enable HDR for proper operation (Project Settings / Graphics).

I recommend importing this asset into a new project. Study the operation of the asset and copy the components you need to your project.

For Unity version of at least 2019.1.8 (Built-in Render Pipeline)

#NVJOB Simple Water Shaders

<https://nvjob.github.io/unity/nvjob-dynamic-sky-lite>

Nicholas Veselov (#NVJOB)

[nvjob.github.io](https://nvjob.github.io)

# Component Settings (Dynamic Sky)

#NVJOB Dynamic Sky (v2.5)

---

**Sky Movement:**

---

2D Sky ☐

Scrolling the sky for 2D scenes.

---

Rotate Speed

Rotate Distance

---

**Player**

Optional. To move the sky behind the player. X and Z axis only.

## Sky Movement

- 2D Sky - scrolling the sky for 2D scenes.
- Rotate Speed - speed of rotation of the direction vector of the Albedo motion.
- Rotate Distance - duration of movement in the direction of the direction of movement of the Albedo.
- Player - To move the sky behind the player. X and Z axis only. If you have a small location, you do not have to move the Sky behind the player. But if you have a large location, to feel the infinity of the sky, use this option.

# Shaders Settings (Dynamic Sky)

#NVJOB Dynamic Sky (v2.5)

Sky Type:

Sky Type

Cloud 1

Clouds Type 1 (General texture mixing):

Texture 1

Select

Texture 1 Tiling

5

Intensity

1.5

Motion Vector X

0.7

Motion Vector Y

1.2

Texture 2

Select

Texture 2 Tiling

7

Intensity

1.4

Motion Vector X

1.2

Motion Vector Y

-0.7

Texture 3

Select

Texture 3 Tiling

1.7

Intensity

-0.57

Motion Vector X

-1.2

Motion Vector Y

-1.2

Color

HDR

Intensity Input

1.6

Fluffiness

0.5

Intensity Output

0.79

Render Queue

AlphaTest+51

2501

Enable GPU Instancing

☐

Double Sided Global Illumination

☐

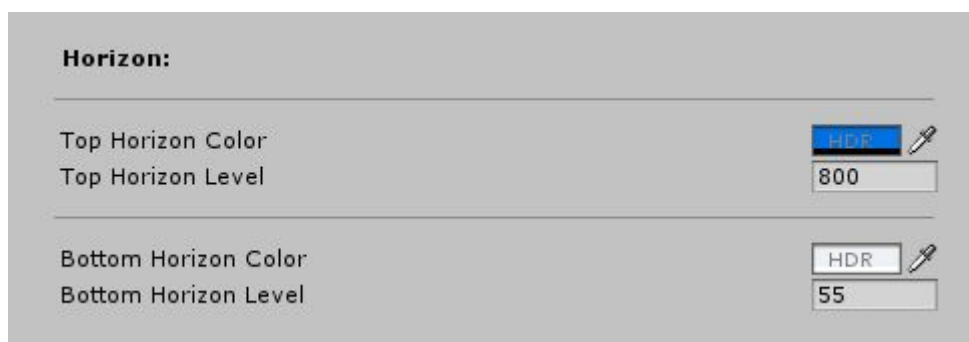
## Sky Type

• Sky Type - is the choice of the type of element for the Sky. Shader has two types of Clouds (Cloud 1, Cloud 2) and one Horizon. Clouds differ from each other in the type of texture mixing. In different scenes, this or that type of Clouds is best suited.

## Clouds Type 1 (or Clouds Type 2)

- Texture 1 - is texture of clouds 1.
- Texture 1 Tiling - texture 1 tiling.
- Intensity - texture intensity 1.
- Motion Vector X - this is motion vector of texture 1 along the x axis.
- Motion Vector Y - this is motion vector of texture 1 along the Y axis.
- Texture 2 - is texture of clouds 2. Multiplied by the first texture.
- Texture 2 Tiling - texture 2 tiling.
- Intensity - texture intensity 2.
- Motion Vector X - this is motion vector of texture 2 along the x axis.
- Motion Vector Y - this is motion vector of texture 2 along the Y axis.
- Texture 3 - is texture of clouds 3. Multiplied by the first and second texture.
- Texture 3 Tiling - texture 3 tiling.
- Intensity - texture intensity 3.
- Motion Vector X - this is motion vector of texture 3 along the x axis.
- Motion Vector Y - this is motion vector of texture 3 along the Y axis.
- Color - primary color. The primary color is important as is transparency. Using color transparency, you can change the effect of self-shadowing clouds. Also, the main color of the clouds depends on the Background color on the camera.
- Intensity Input - intensity of the mixed textures, before normalizing and changing the contrast.
- Fluffiness - fluffiness of clouds, it works on the principle of contrast.
- Intensity Output - this is overall intensity, takes the color range of the texture to HDR.

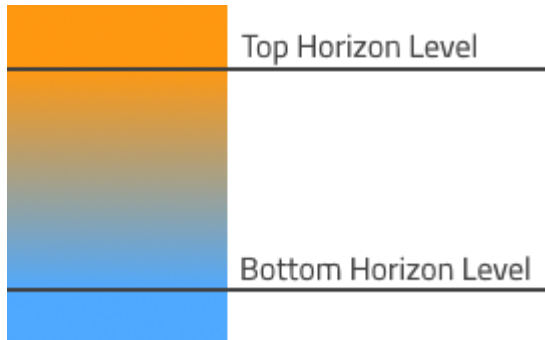
## Horizon



The screenshot shows a settings panel titled "Horizon:". It contains two sections. The first section has "Top Horizon Color" with a blue color swatch and an "HDR" button, and "Top Horizon Level" with a numeric input field set to "800". The second section has "Bottom Horizon Color" with a grey color swatch and an "HDR" button, and "Bottom Horizon Level" with a numeric input field set to "55".

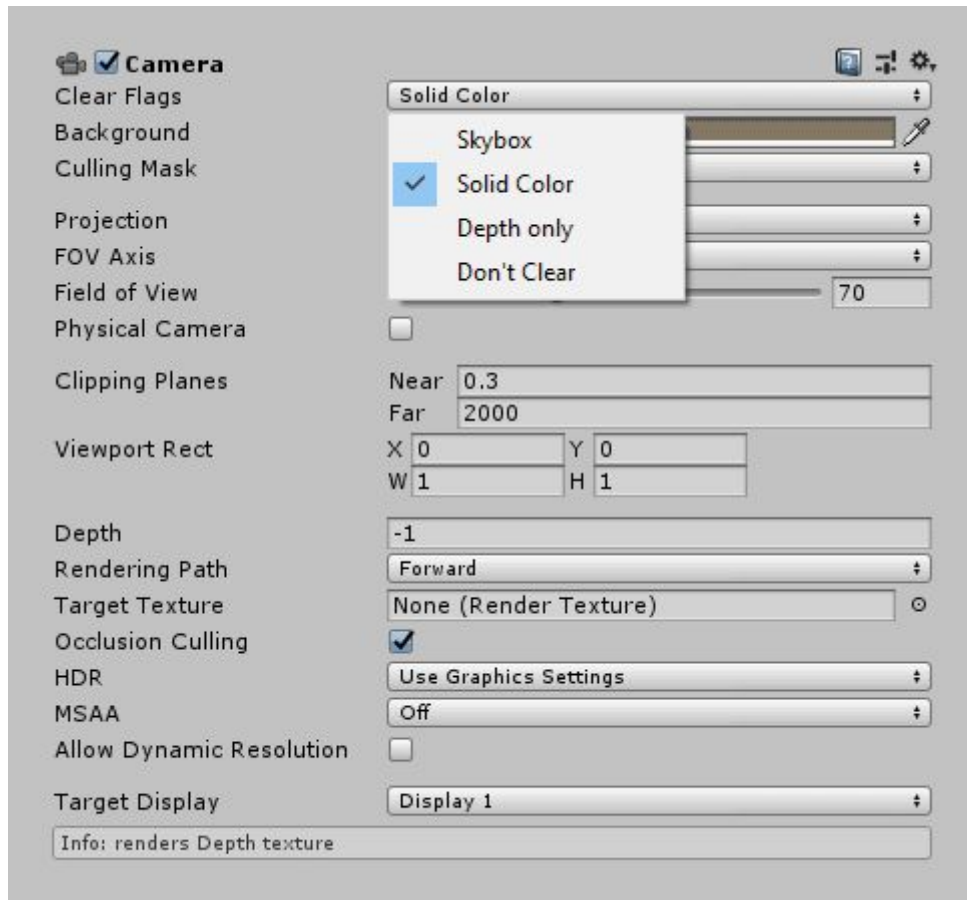
- Top Horizon Color - color of the top of the horizon. To display clouds, the transparency of this color should be maximal.
- Top Horizon Level - level of the top horizon, this is the real coordinate along the y axis in world space.
- Bottom Horizon Color - color of the bottom of the horizon. To hide the clouds, the transparency of this color should be minimal. As a rule, the color of the bottom of the horizon should be the same as the color of the fog.

- Bottom Horizon Level - level of the bottom horizon, this is the real coordinate along the y axis in world space.



# Settings Camera in Scene

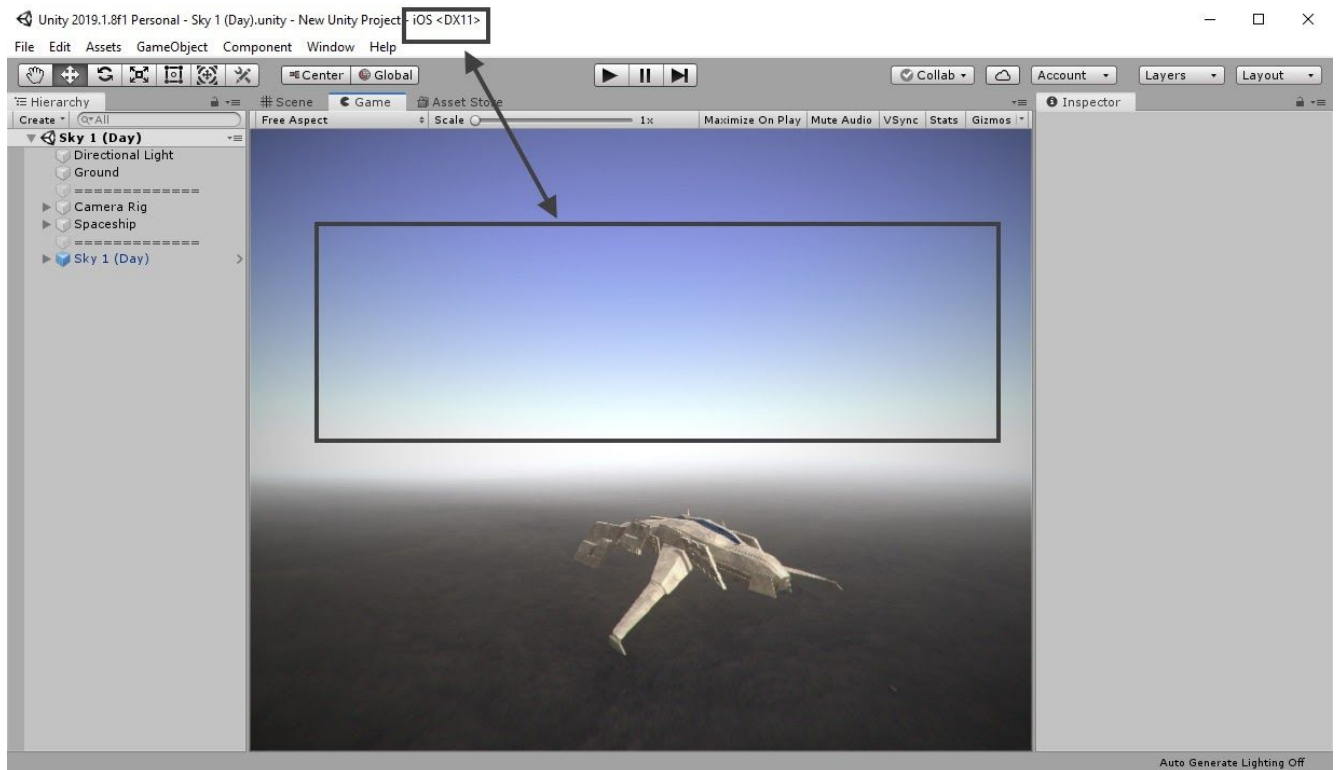
For the shader to work, you need to make small camera settings.



Change "Clear Flags" to "Solid Color".

Color of the clouds also depends on the background color on the camera.

# IOS and Android



Therefore, to work on mobile platforms, you must enable HDR (by default, HDR is turned off).

