

# Using TrueHDRI on Blender

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14 Nov 2024 Update : Added instructions for setting environment textures in Blender 3.0 and later.

## 1. Introduction

TrueHDRI assets enable artists to create a highly reliable LookDev environment. This document will detail a method to import TrueHDRIs into Blender as lighting assets.

## 2. Asset Preparation

The HDRI assets can be downloaded from the official TrueHDRI website.

Select "Unclipped", "sRGB", and "OpenEXR" for the download settings as these are the standard and easiest to use settings. \*This manual will not go over LightData. Clipped and LightData lighting methods will be covered in a separate document.

Eitai Bridge (Day)

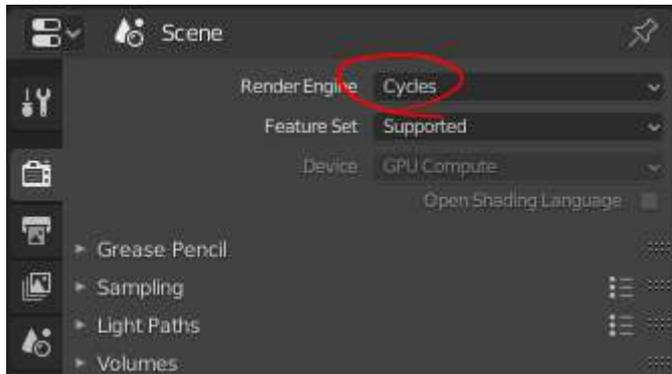


[https://www.bandainamcostudios.com/projects/truehdri/library/eitaibridge\\_20190111\\_1215](https://www.bandainamcostudios.com/projects/truehdri/library/eitaibridge_20190111_1215)

Download EitaiBridge\_20190111\_1215 from the link above.

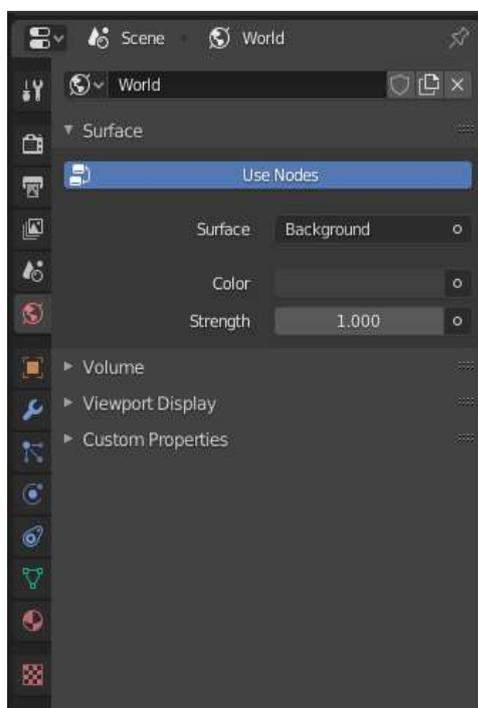
### 3. Rendering Engine Settings

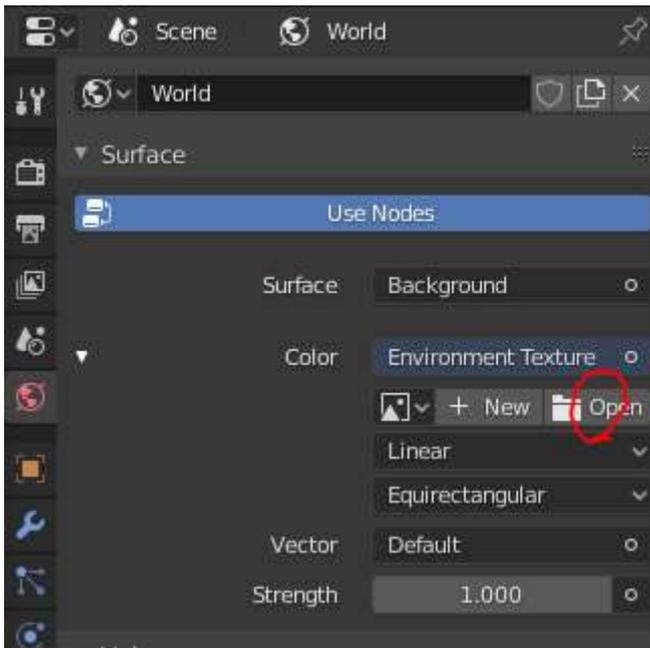
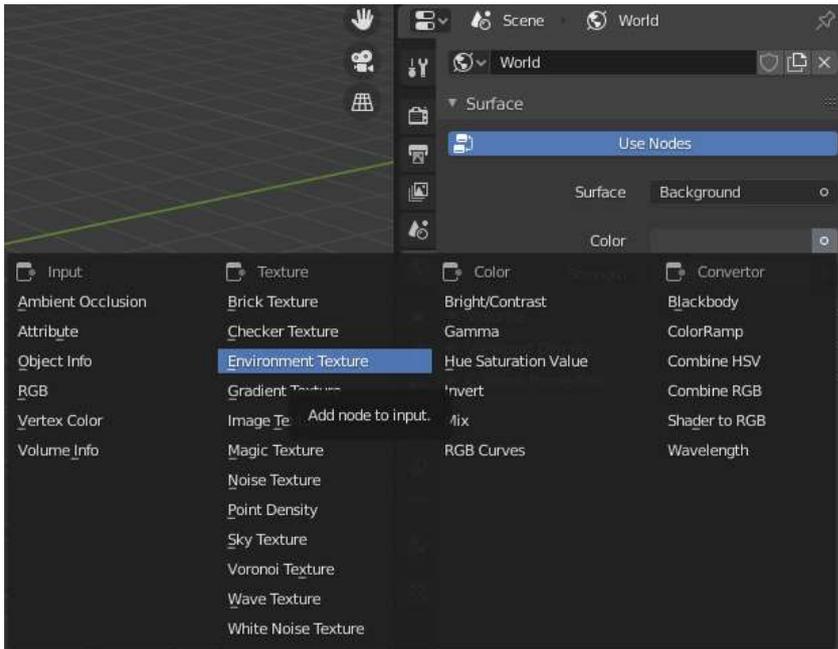
Launch Blender and set the render engine to "Cycles" in the render properties.



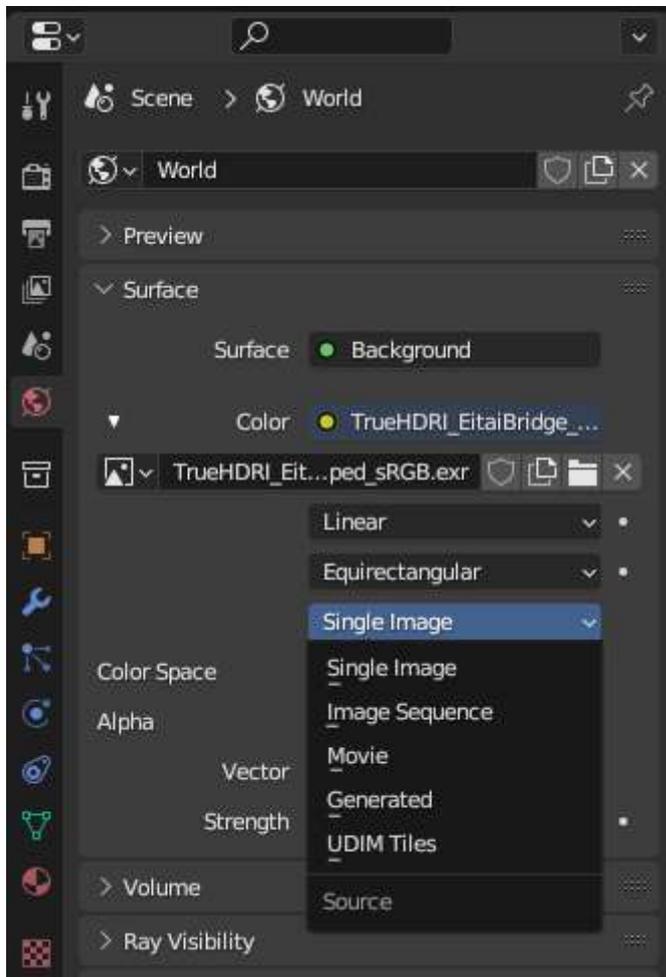
### 4. Loading the TrueHDRI Files

From World Properties, go to the Color property and select "Environment Texture". Then, press the Open button and find the TrueHDRI file. This sets the environment texture.

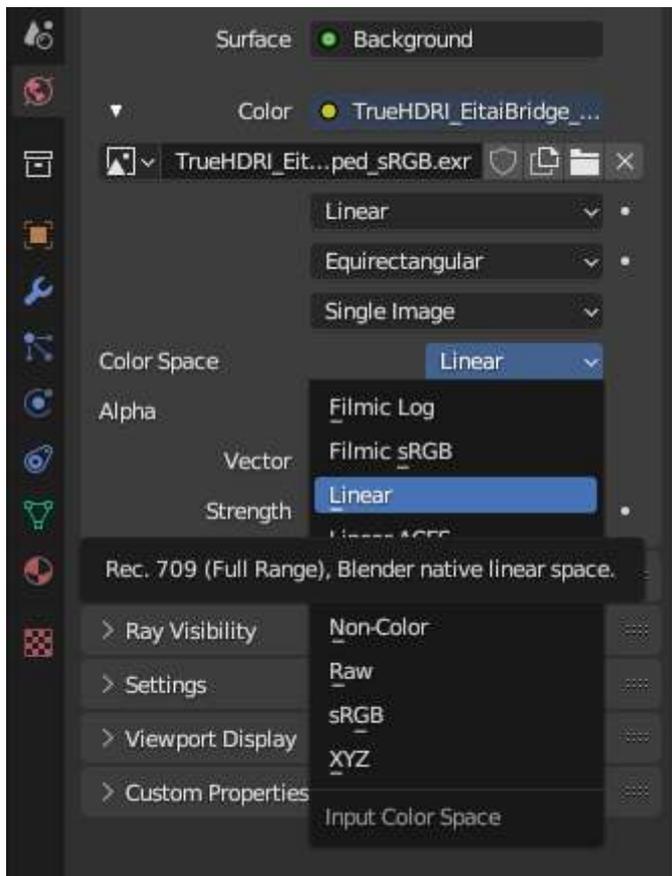




**Note:** In Blender 3 and later, the default texture type “UDIM tiles” should be set to “Single Image”.

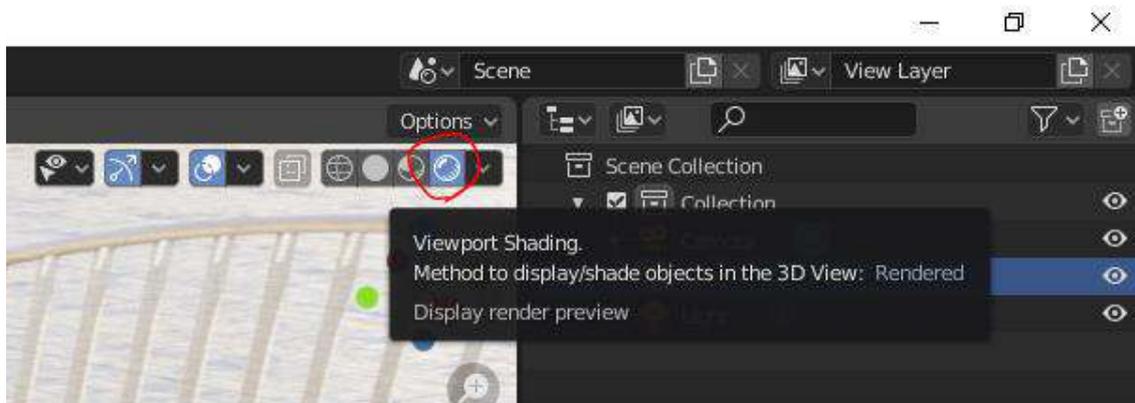


Also, Set the Colour Space to 'Linear'.



## 5. Change the Shading in the 3D Viewport

Change Viewport Shading to Rendered.

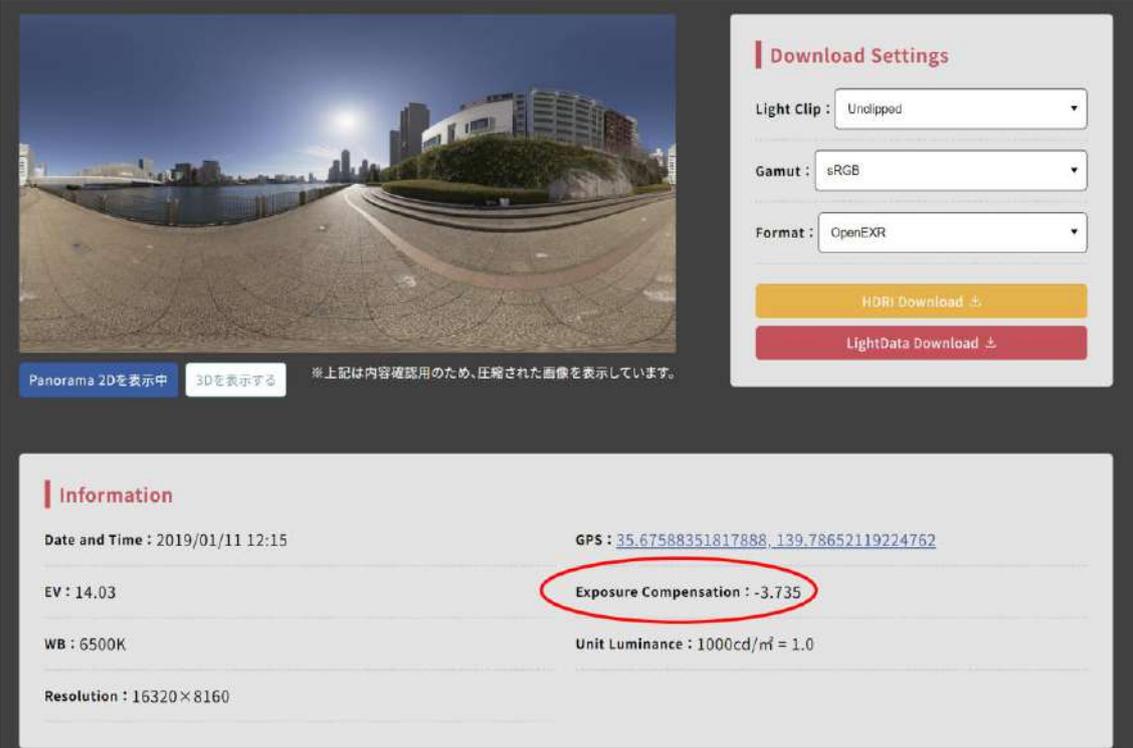


## 6. Color Management Settings

Under Render Properties, set View Transform to "Standard", and Gamma to "1.0".

If the environment is too bright or too dark, adjust the exposure to an appropriate value.

\*Please enter the "Exposure Compensation" value listed on the TrueHDRI download page as the standard for exposure.



The screenshot displays a web interface for downloading TrueHDRI data. It features a panoramic image of a city waterfront, a settings panel, and an information panel.

**Download Settings**

- Light Clip : Unclipped
- Gamut : sRGB
- Format : OpenEXR

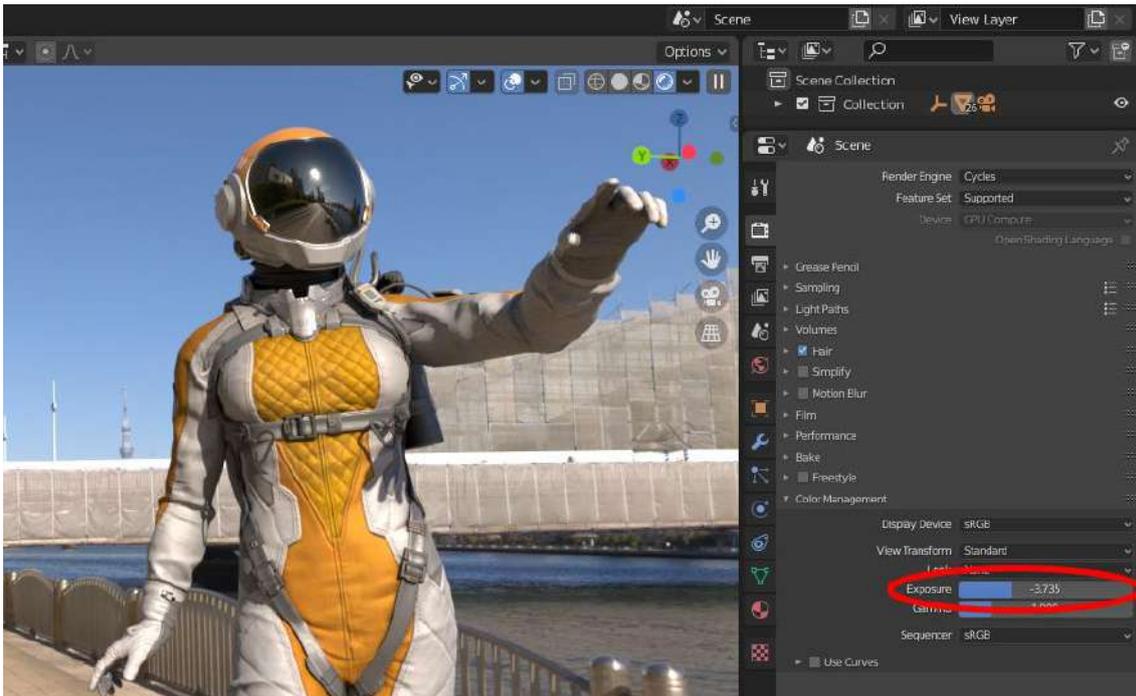
Buttons: HDRI Download ↓, LightData Download ↓

**Information**

Date and Time : 2019/01/11 12:15	GPS : <a href="#">35.67588351817888</a> , <a href="#">139.78652119224762</a>
EV : 14.03	Exposure Compensation : -3.735
WB : 6500K	Unit Luminance : 1000cd/m <sup>2</sup> = 1.0
Resolution : 16320 × 8160	

Buttons: Panorama 2Dを表示中, 3Dを表示する

※上記は内容確認用のため、圧縮された画像を表示しています。



This completes the LookDev environment with bright sunlight. Place models of your characters or other objects to see if their shape or texture settings are as you intended them. This environment is particularly suited for PBR material settings as the lighting is physically correct.

## 7. Rotate the Environment

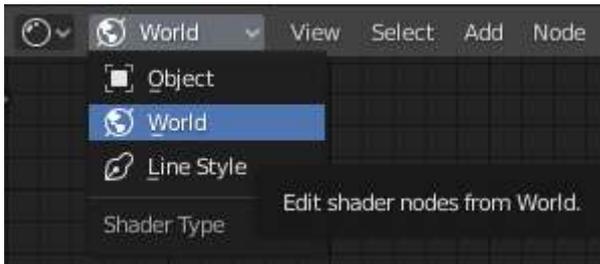
Rotating the environment can help make model checks easier.

To rotate your environment, select "Shader Editor" from the editor.

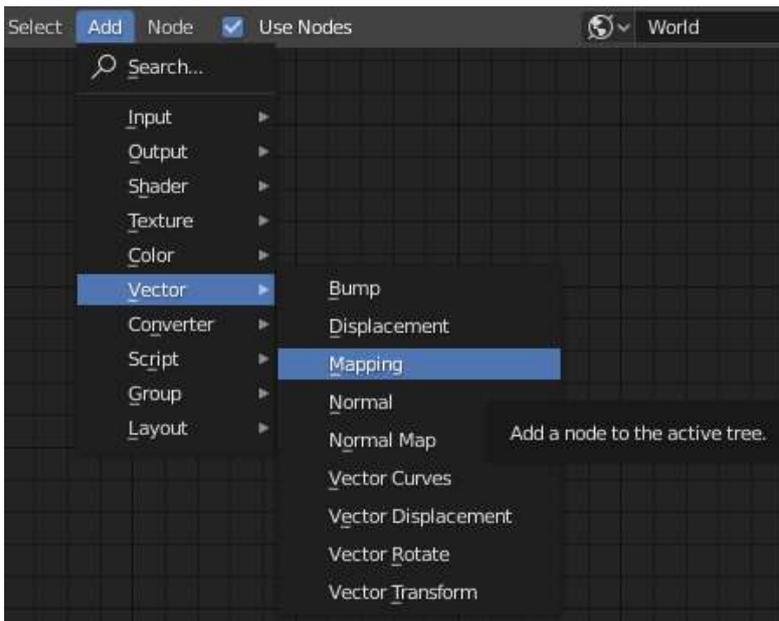


Select "World" for the shader type.

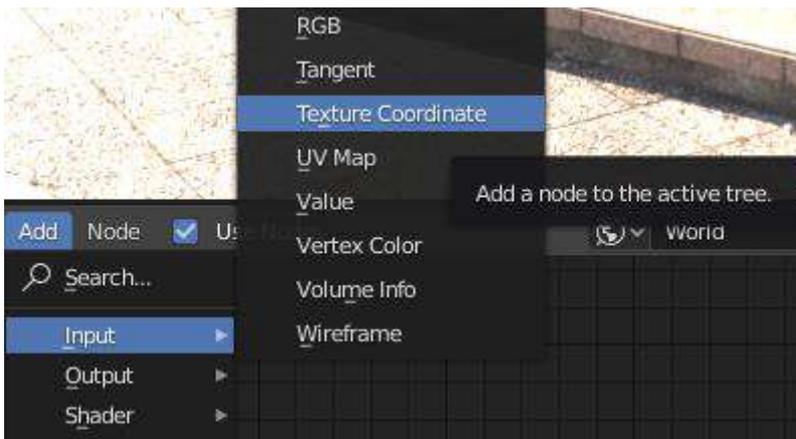
This will show the shader nodes of the environment texture.



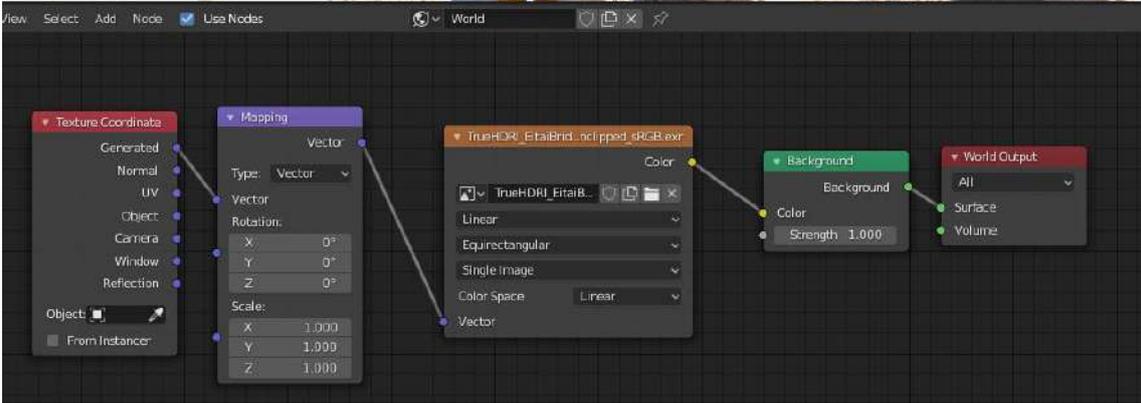
Add a mapping node by selecting "Mapping" from the Add-Vector menu.



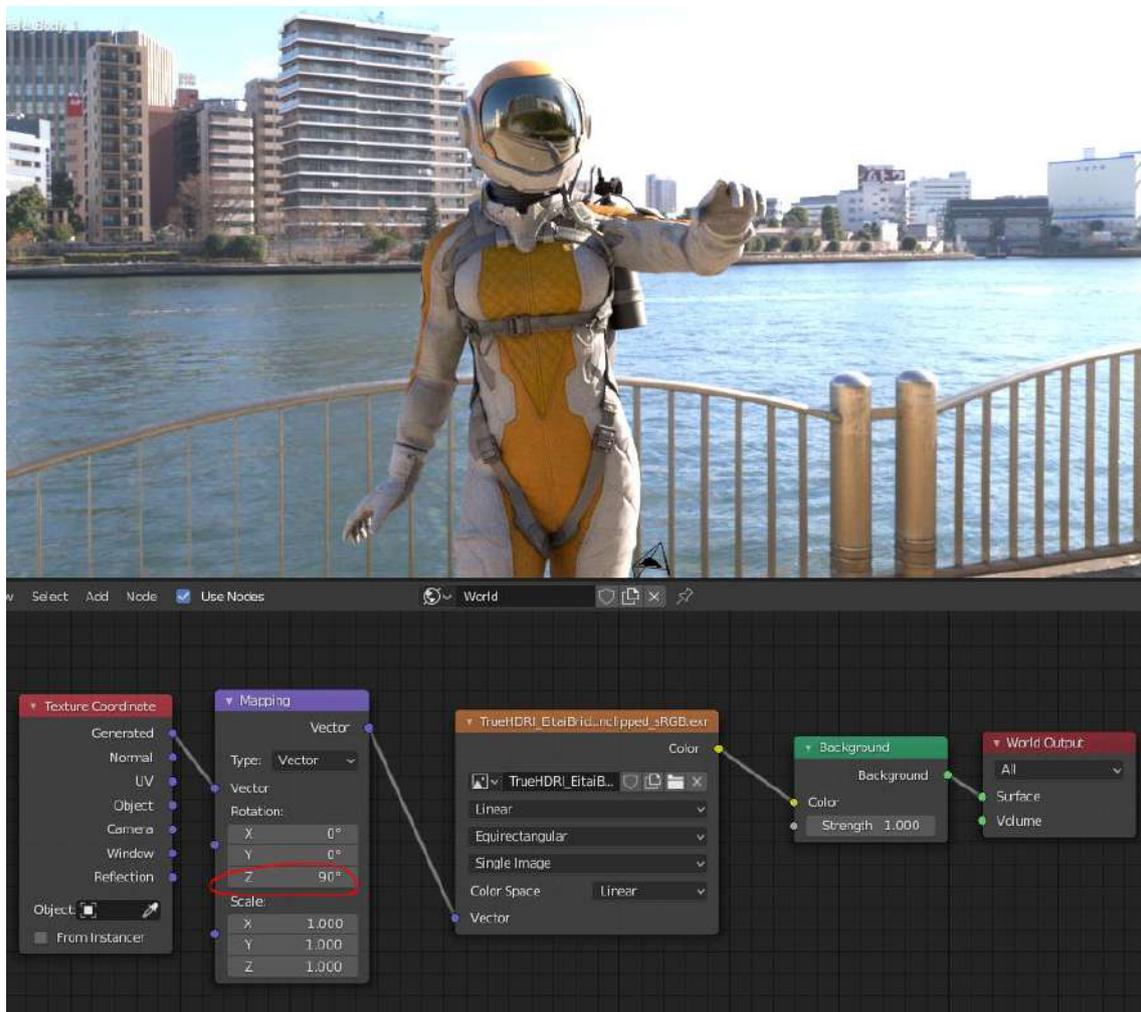
Also, add a "Texture Coordinate" node from the Add-Input menu.



Connect the nodes you added to be like the image below, and change the Type of the Mapping node to "Vector".



You can rotate the environment texture by changing the Rotation Z value on the Mapping node.



## 8. Changing to a Different TrueHDRI

Changing to a different TrueHDRI asset will let you check your models and materials under different lighting conditions.

Let's download two more assets from the official TrueHDRI website.

BNS Cafeteria

**BnsCafe\_20190318\_1047**

Indoor Daytime Sunny Lumber Bulb Window Table Chair

Panorama 2Dを表示中 3Dを表示する ※上記は内容確認用のため、圧縮された画像を表示しています。

**Download Settings**

Light Clip: Unclipped

Gamut: sRGB

Format: OpenEXR

HDRI Download

LightData Download

[https://www.bandainamcostudios.com/projects/truehdri/library/bnscafe\\_20190318\\_1047](https://www.bandainamcostudios.com/projects/truehdri/library/bnscafe_20190318_1047)

Mifune Bridge (Night)

**MifuneBridge\_20190311\_2140**

Outdoor River Urban Nighttime Building Water NeonSign

Panorama 2Dを表示中 3Dを表示する ※上記は内容確認用のため、圧縮された画像を表示しています。

**Download Settings**

Light Clip: Unclipped

Gamut: sRGB

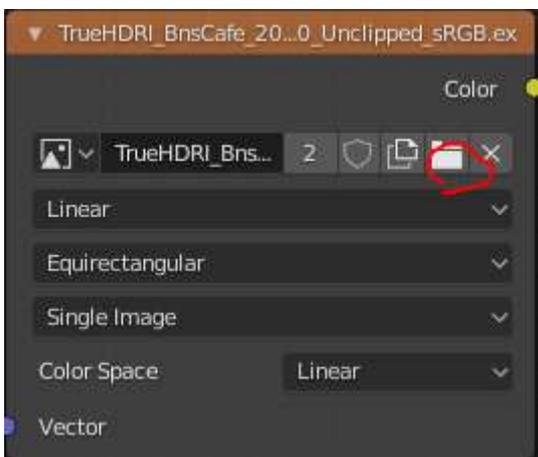
Format: OpenEXR

HDRI Download

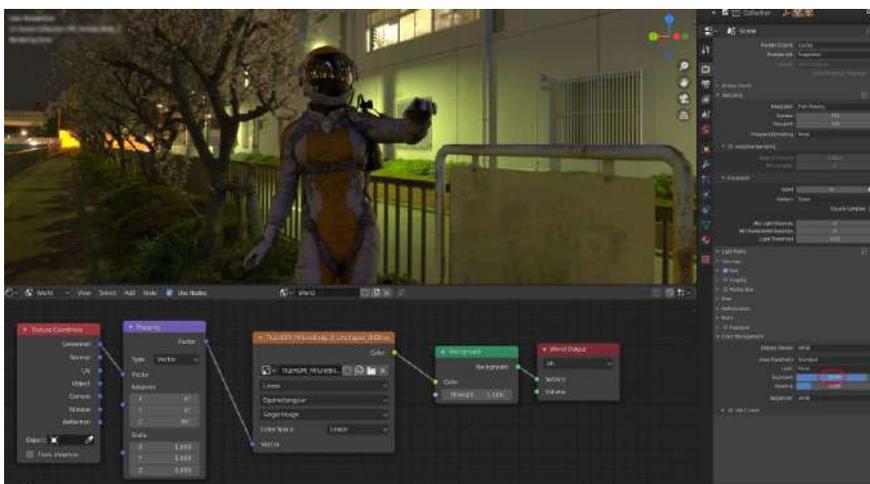
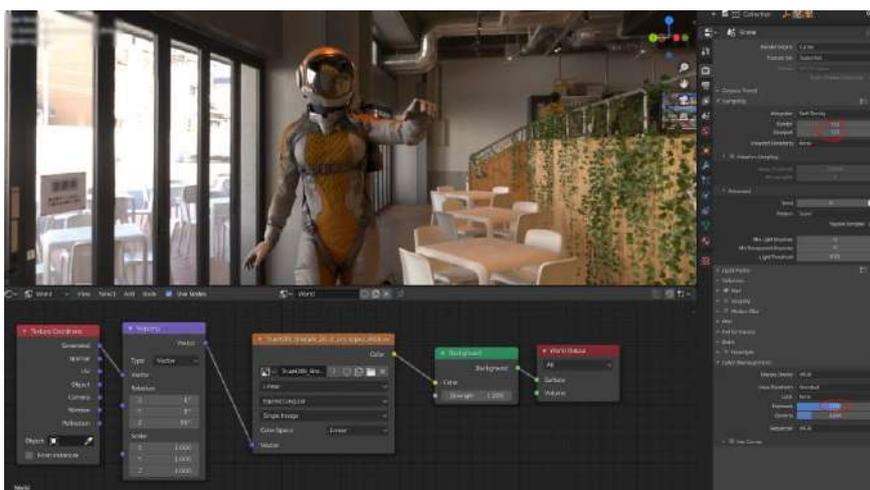
LightData Download

[https://www.bandainamcostudios.com/projects/truehdri/library/mifunebridge\\_20190311\\_2140](https://www.bandainamcostudios.com/projects/truehdri/library/mifunebridge_20190311_2140)

Change the file in the Environment Texture node to another TrueHDRI file (BNScafe or Mifunebridge).



This changes the environment texture. When using Cycles, change the Sampling and Exposure vales as necessary.



## **In Conclusion**

LookDev environments using TrueHDRI will be able to recreate a realistic light range in a CG space. TrueHDRI is useful in creating a standard environment for lighting in materials not only for personal projects, but also for team-based CG productions as it is easy to compare colors and brightnesses in a variety of spaces. We hope that you will bring out the potential of TrueHDRI as you use them in your own creations.