

画像でバンプマッピング

例えば足元の写真を撮ります

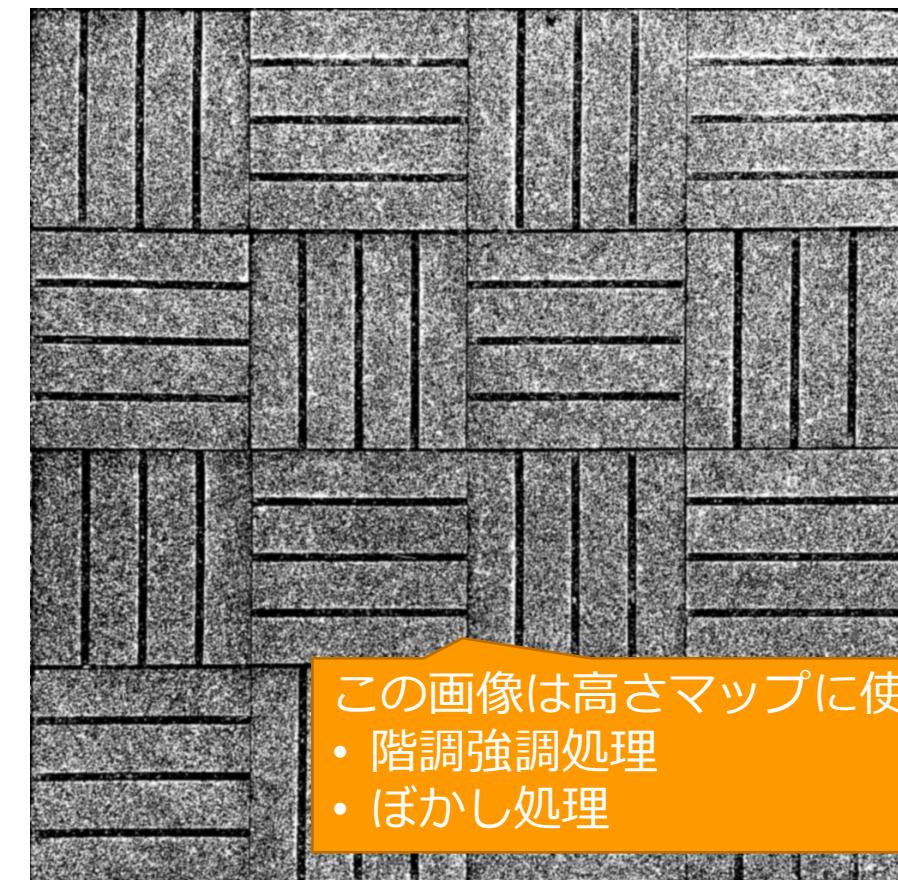


写真を加工します

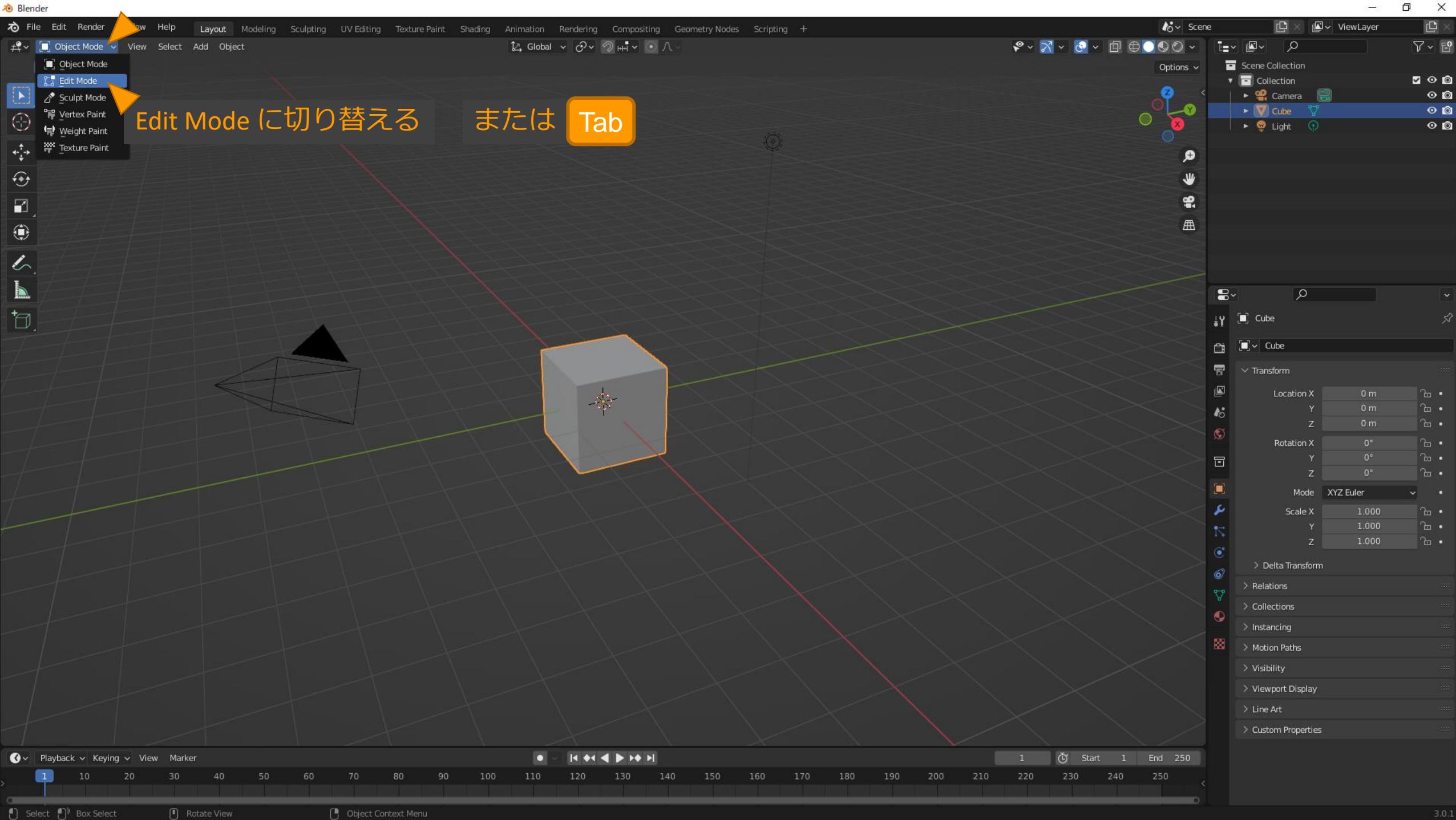
正方形に切り抜く

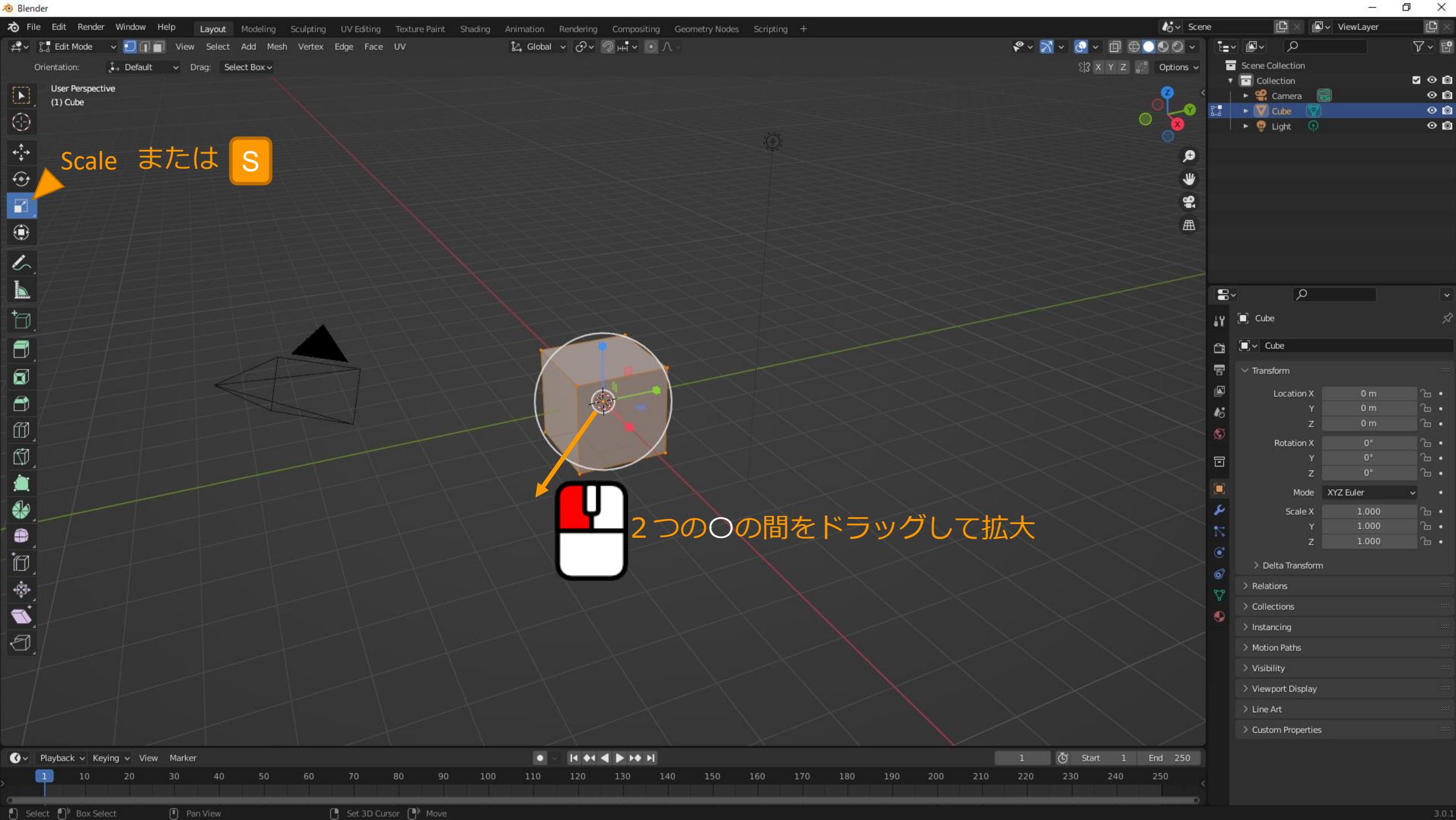


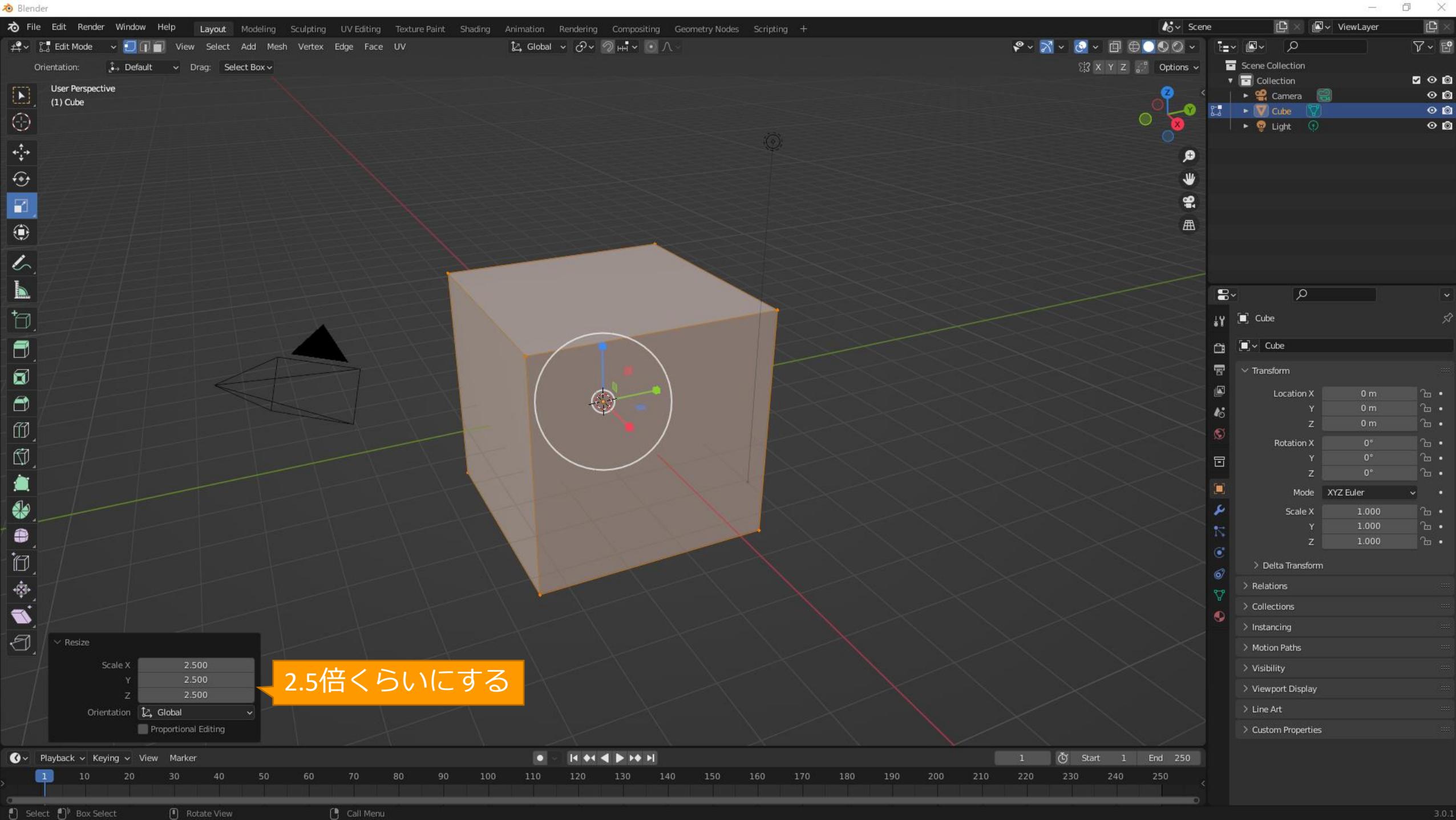
グレースケール化した画像も作る

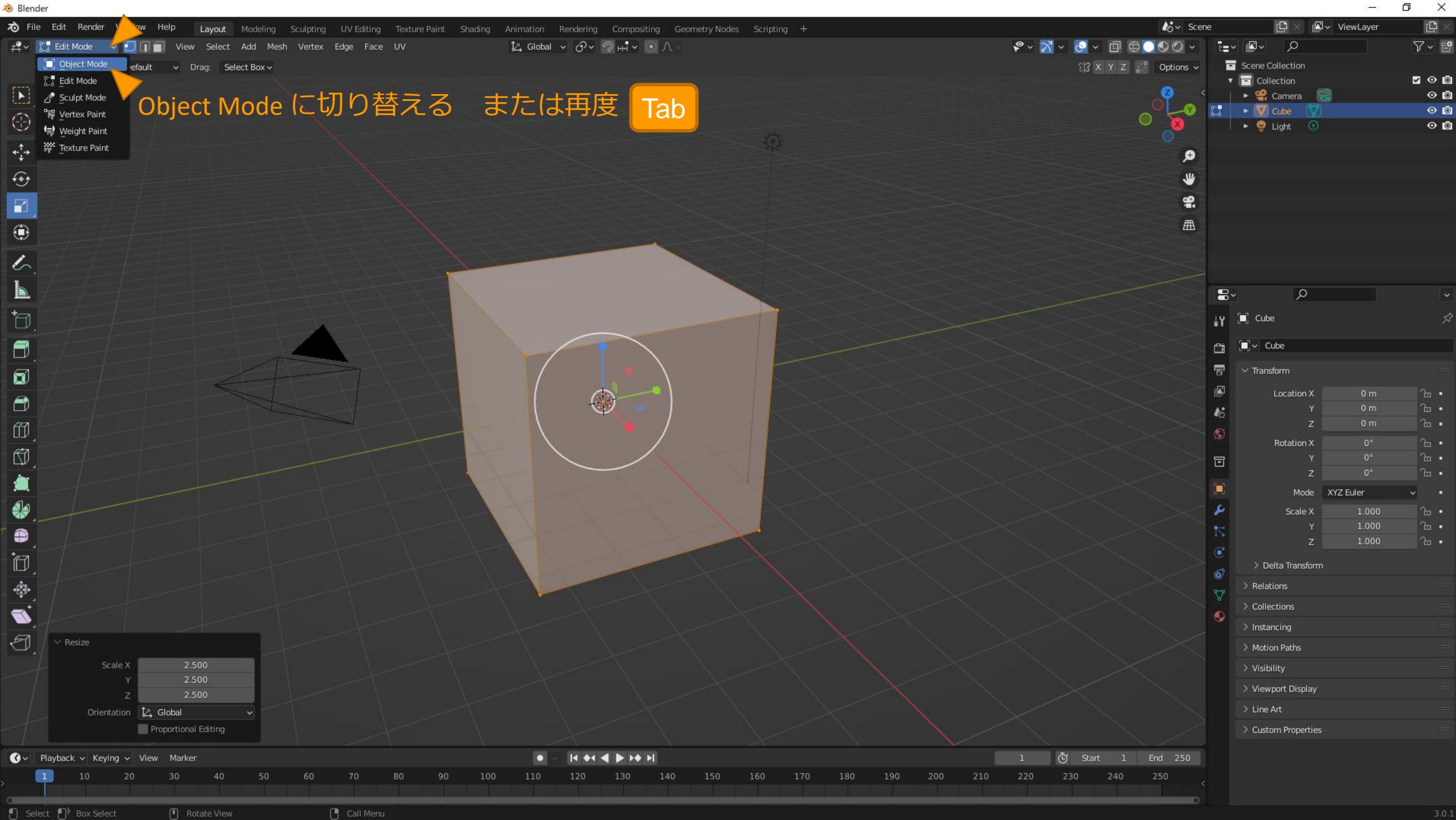


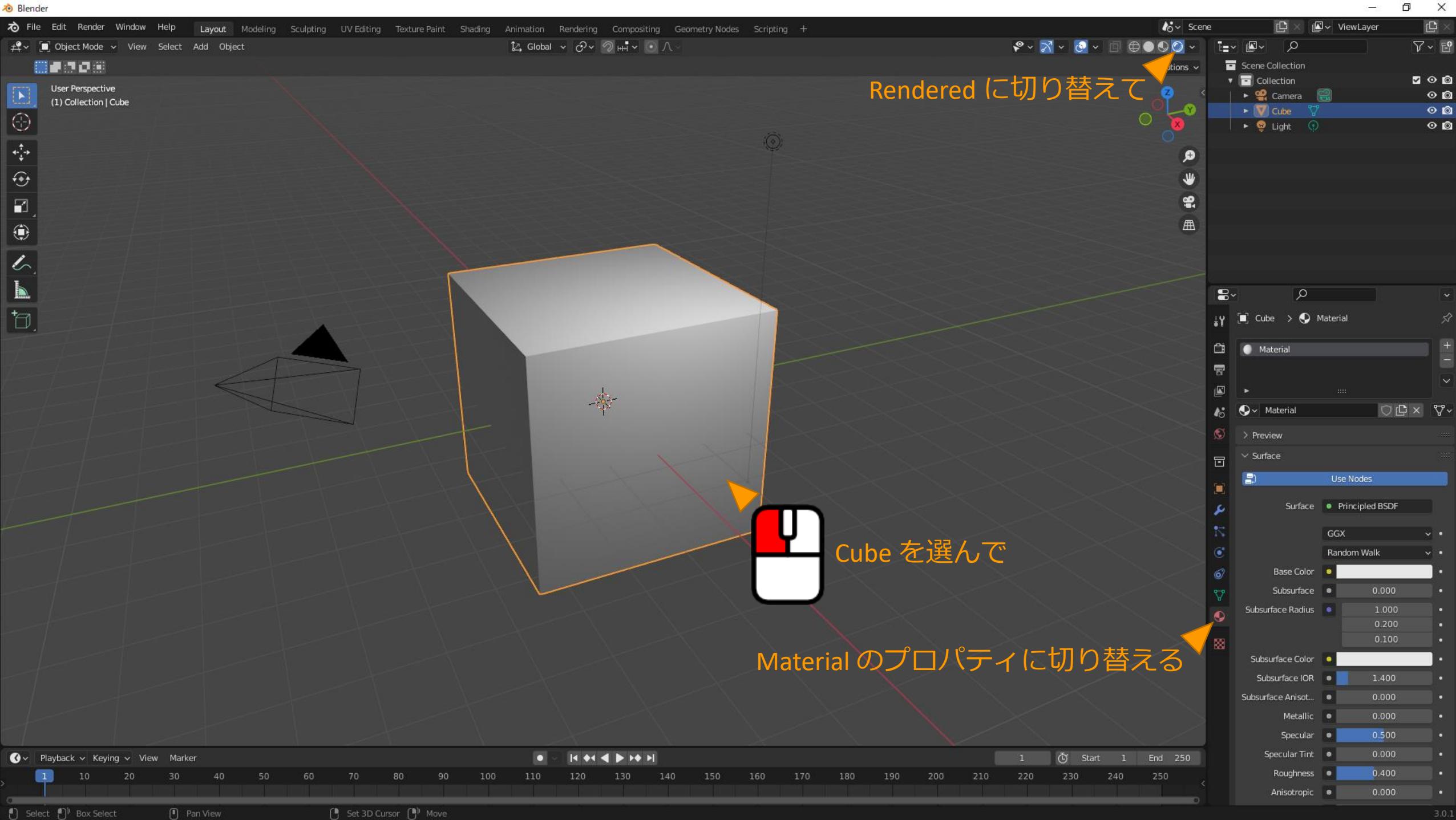
この画像は高さマップに使う
• 階調強調処理
• ぼかし処理

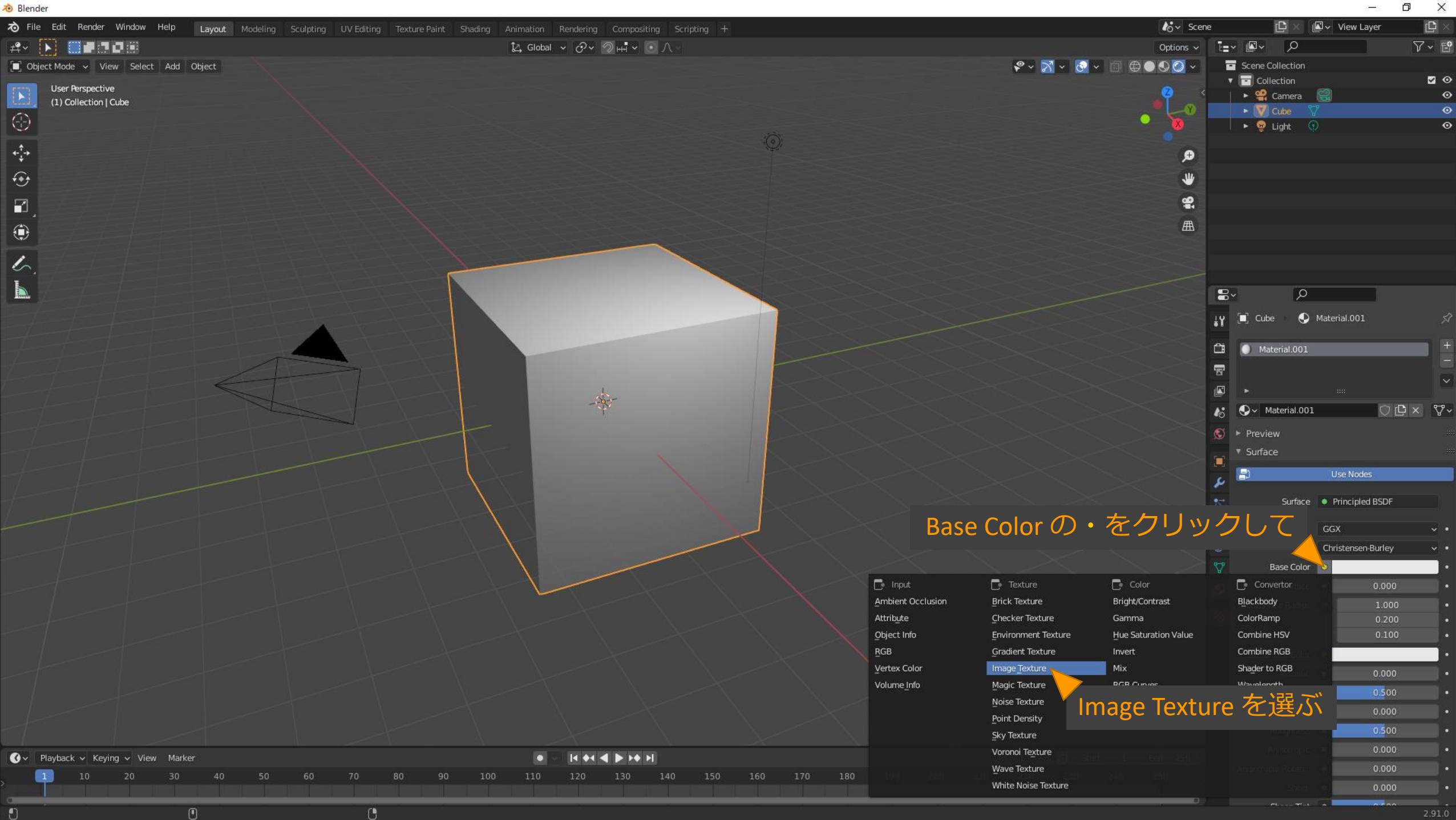


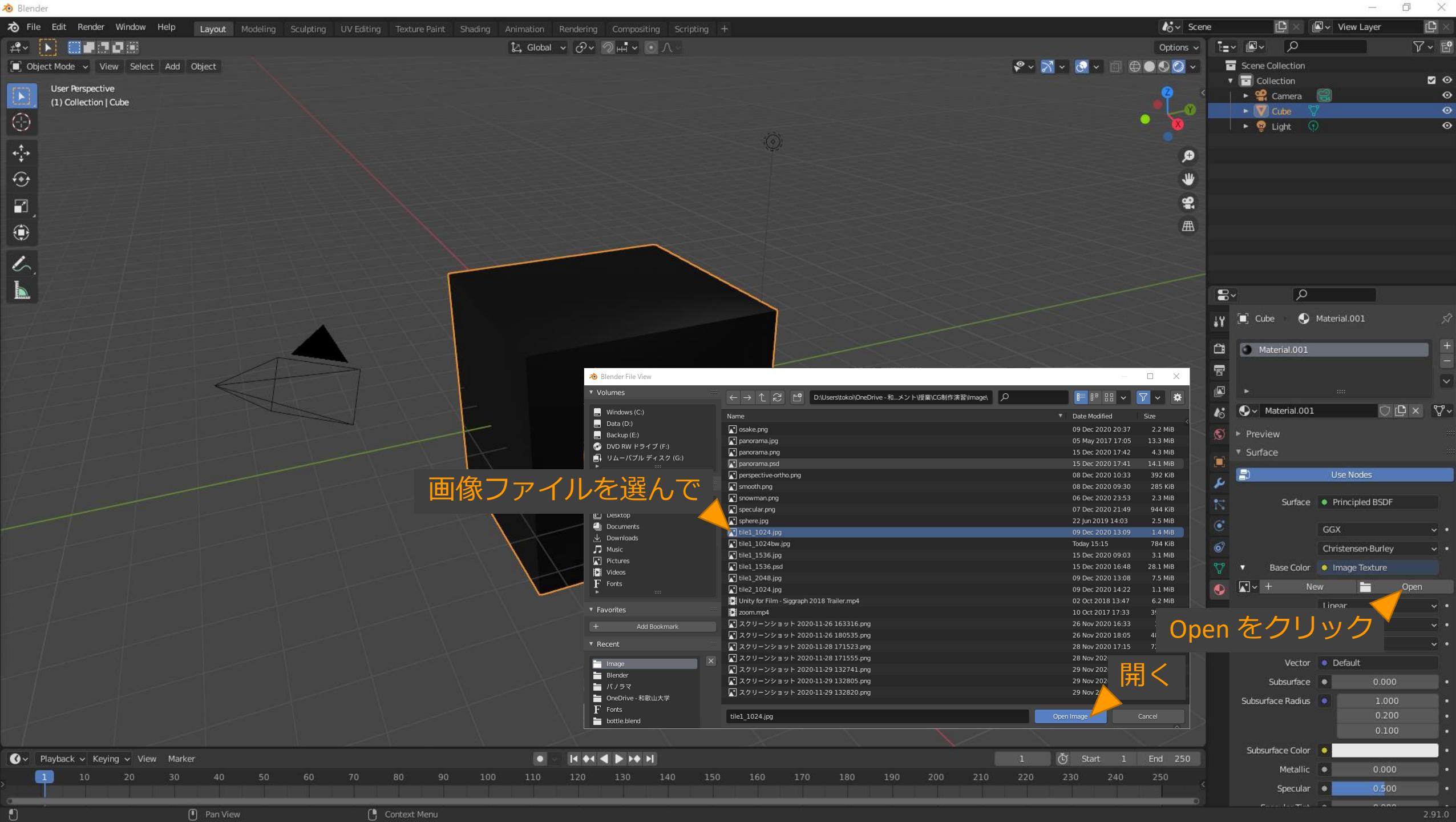


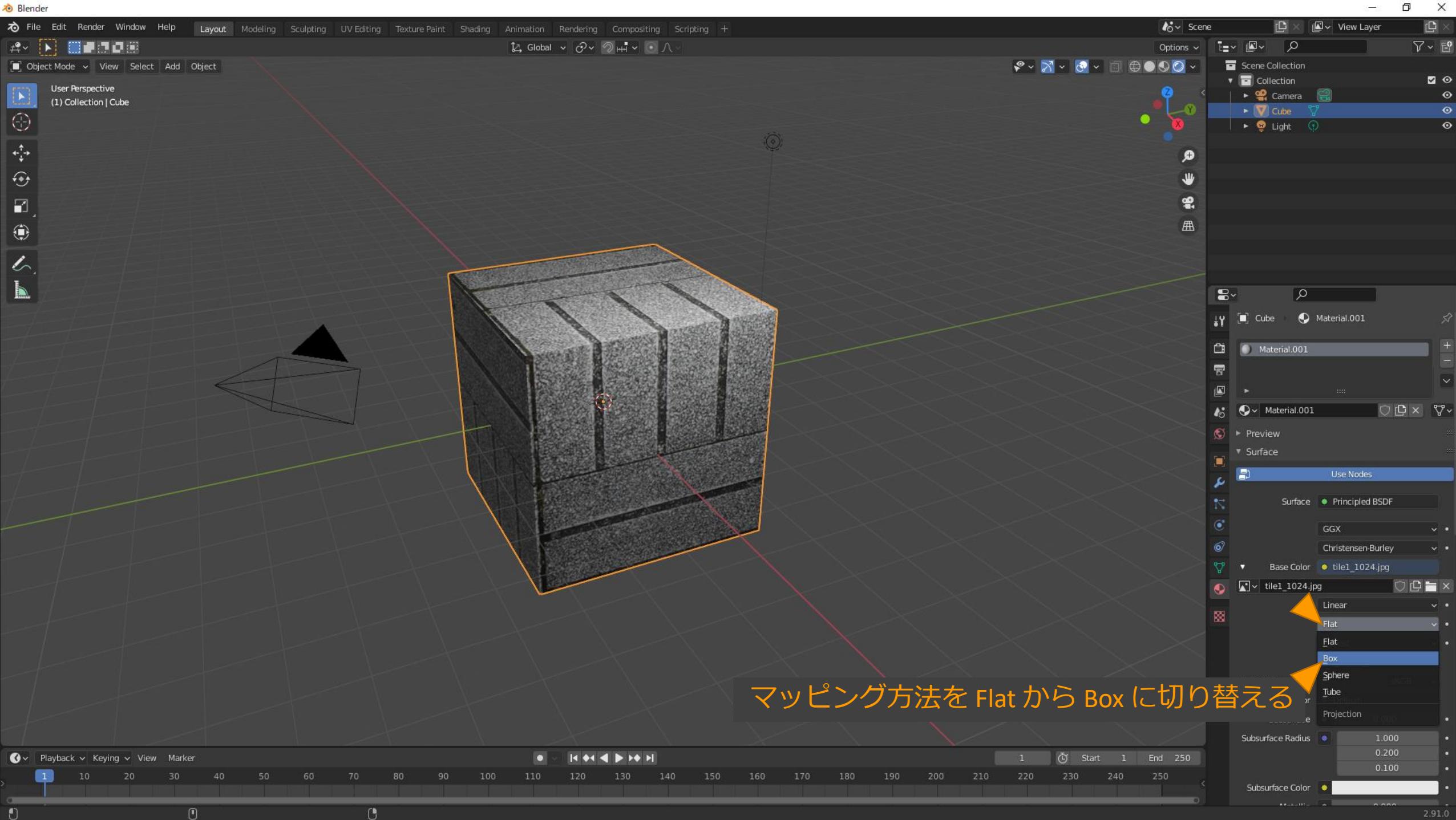


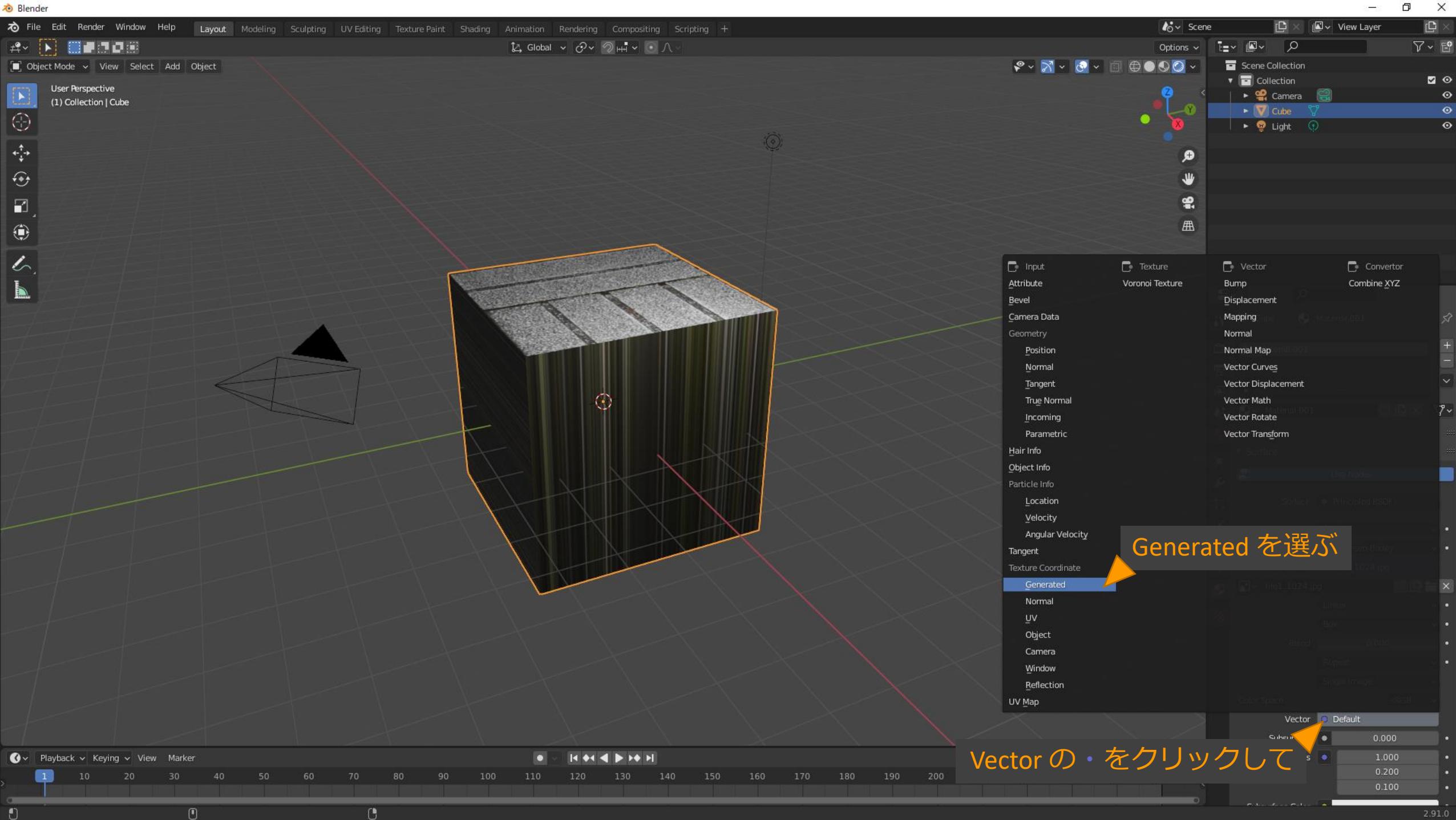


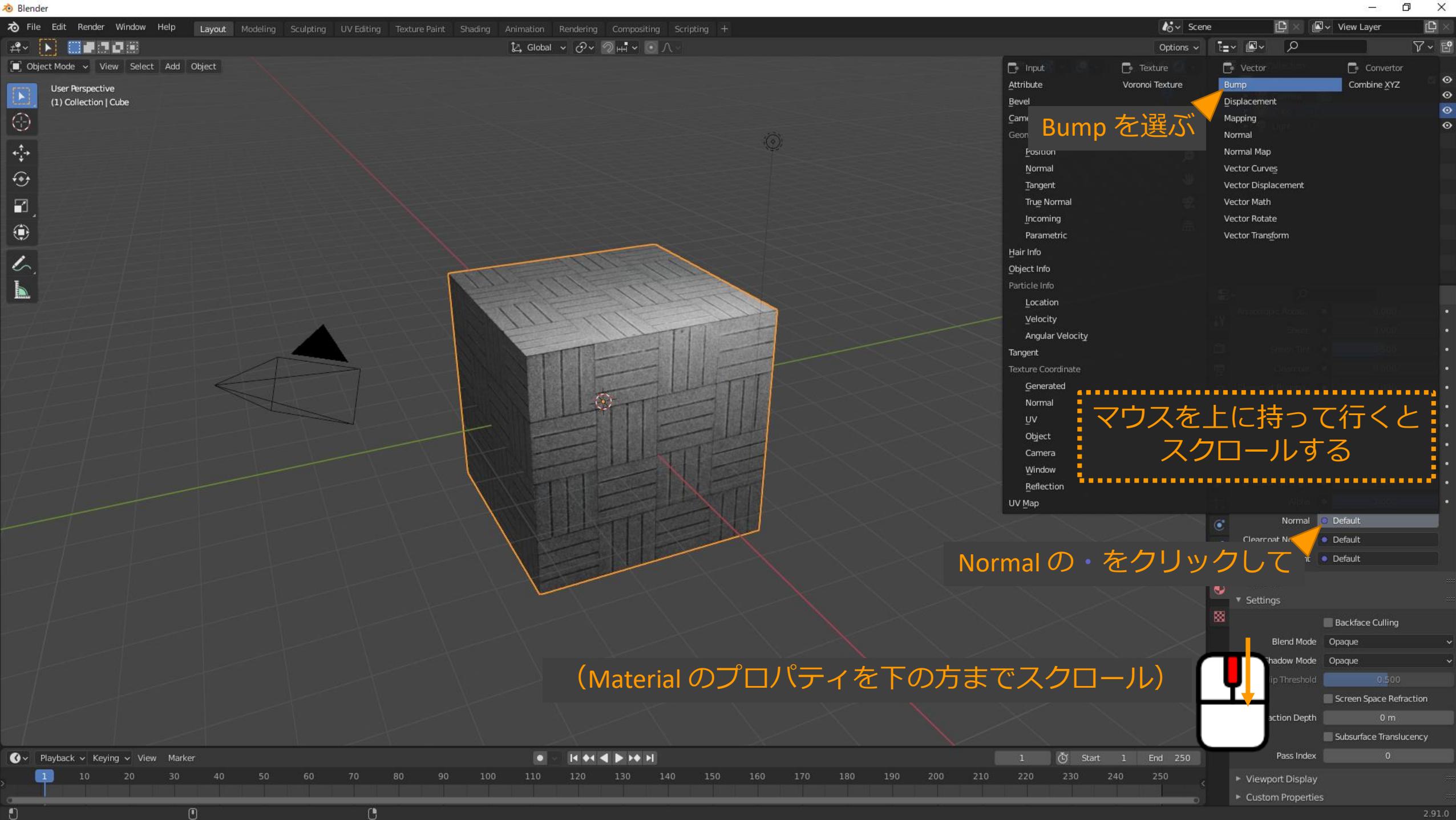


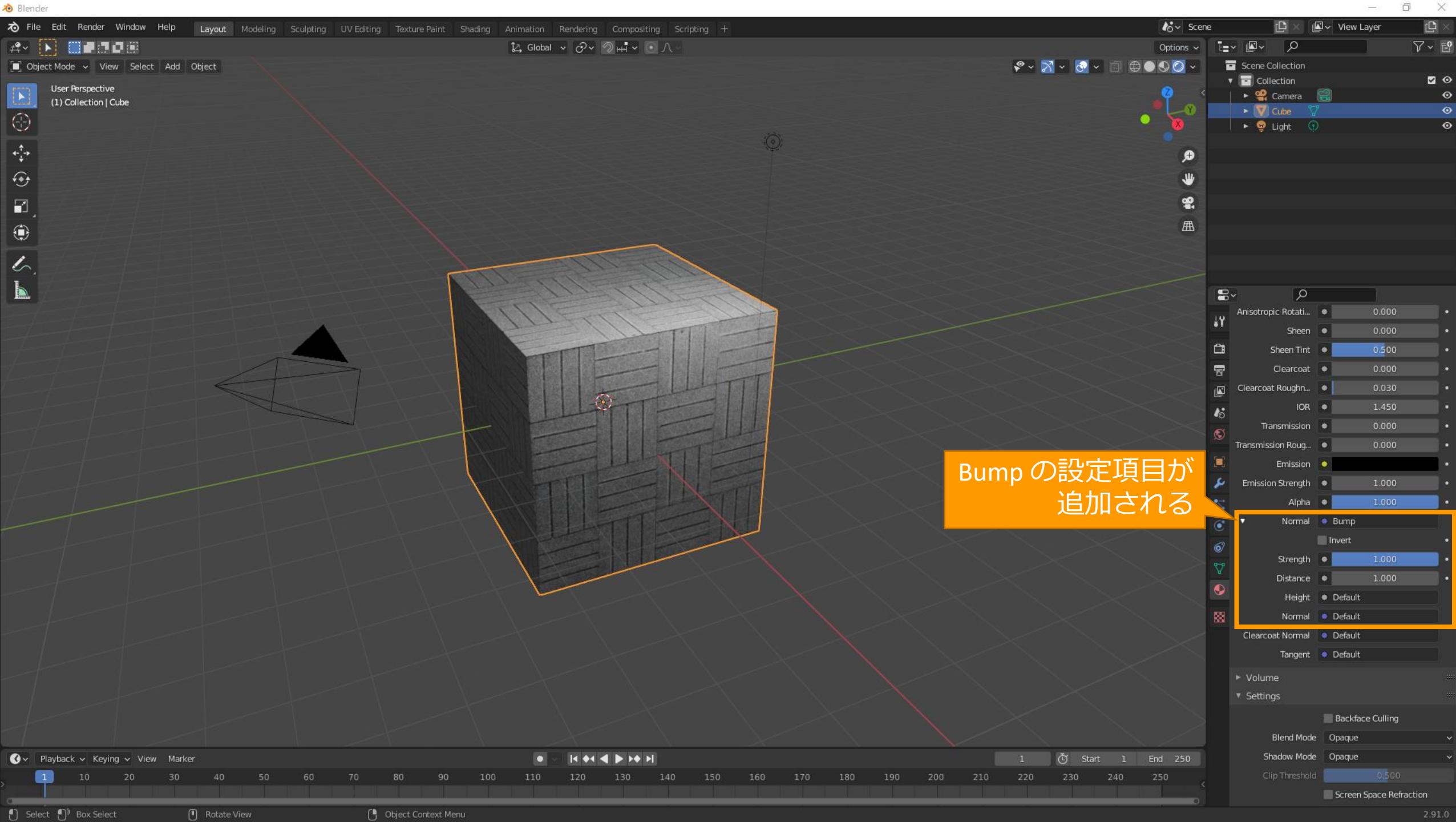


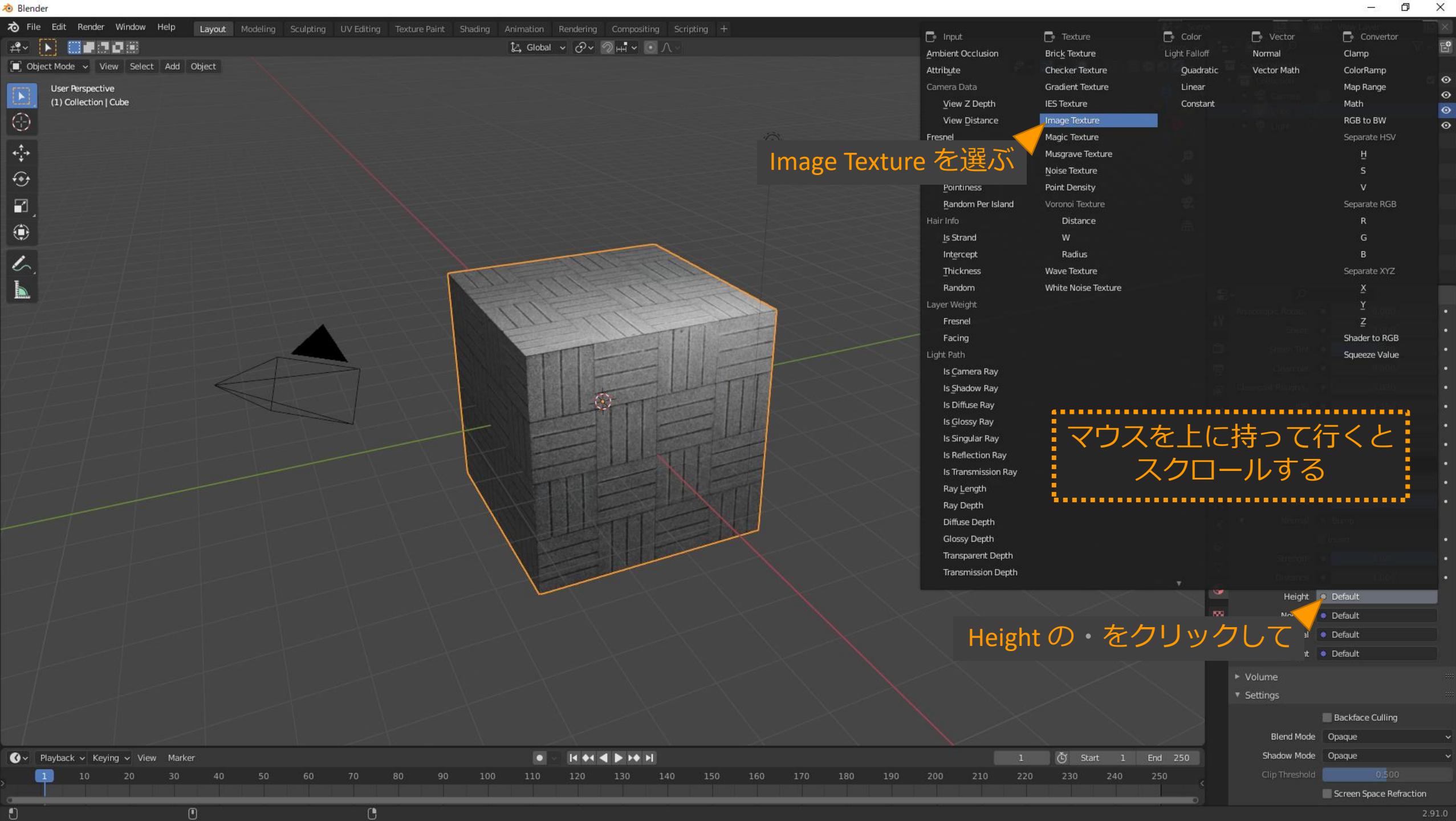


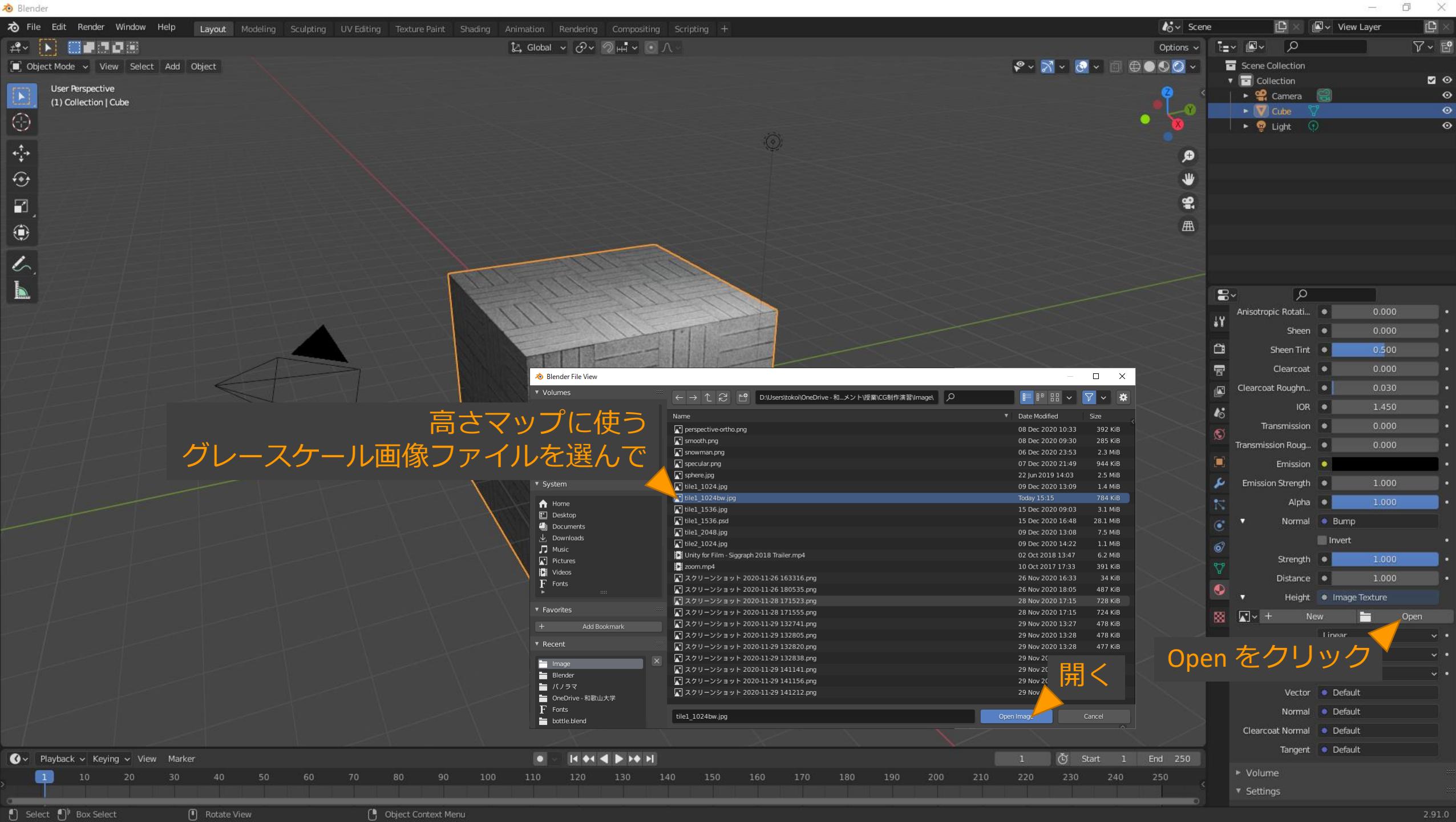


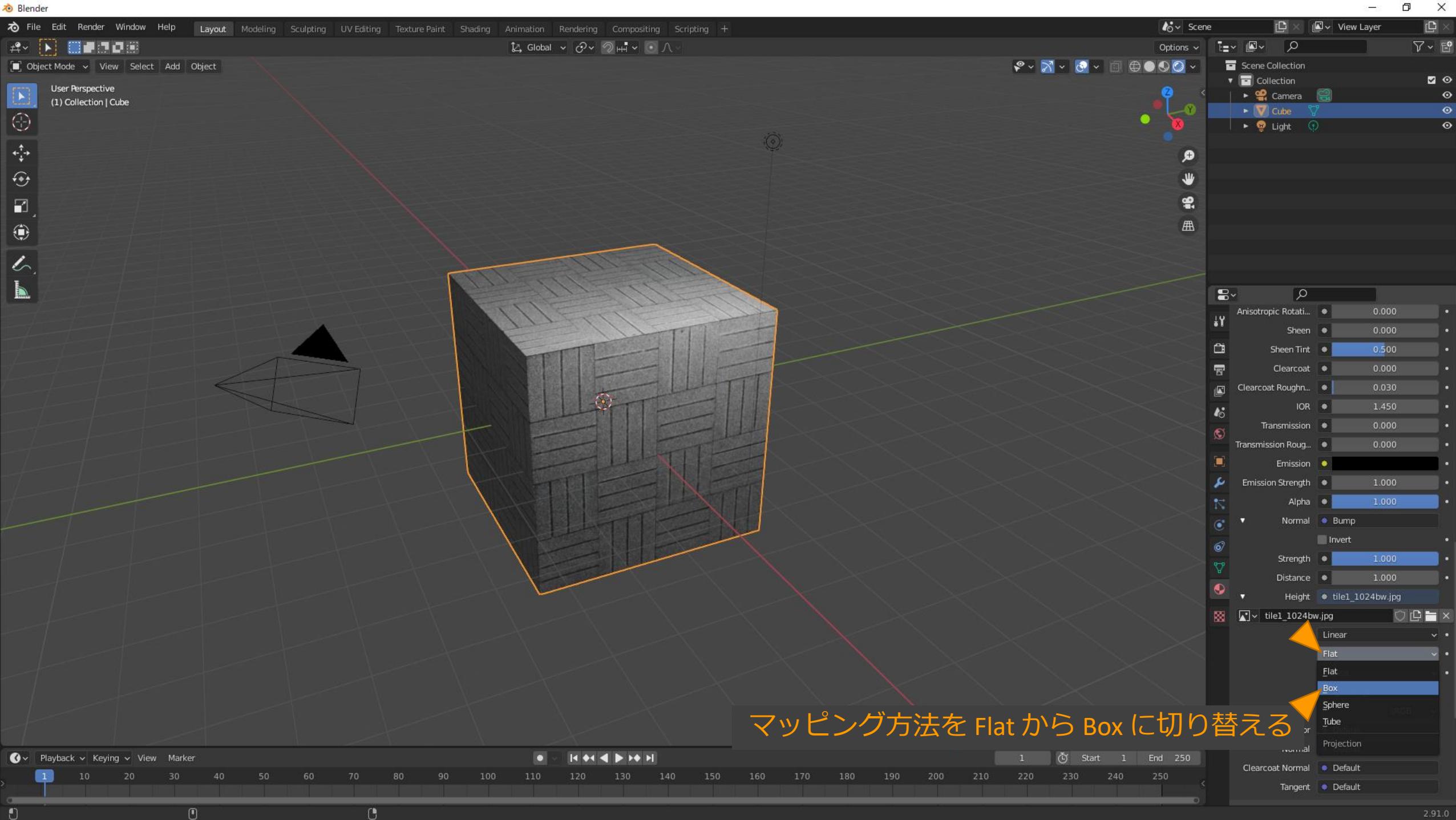


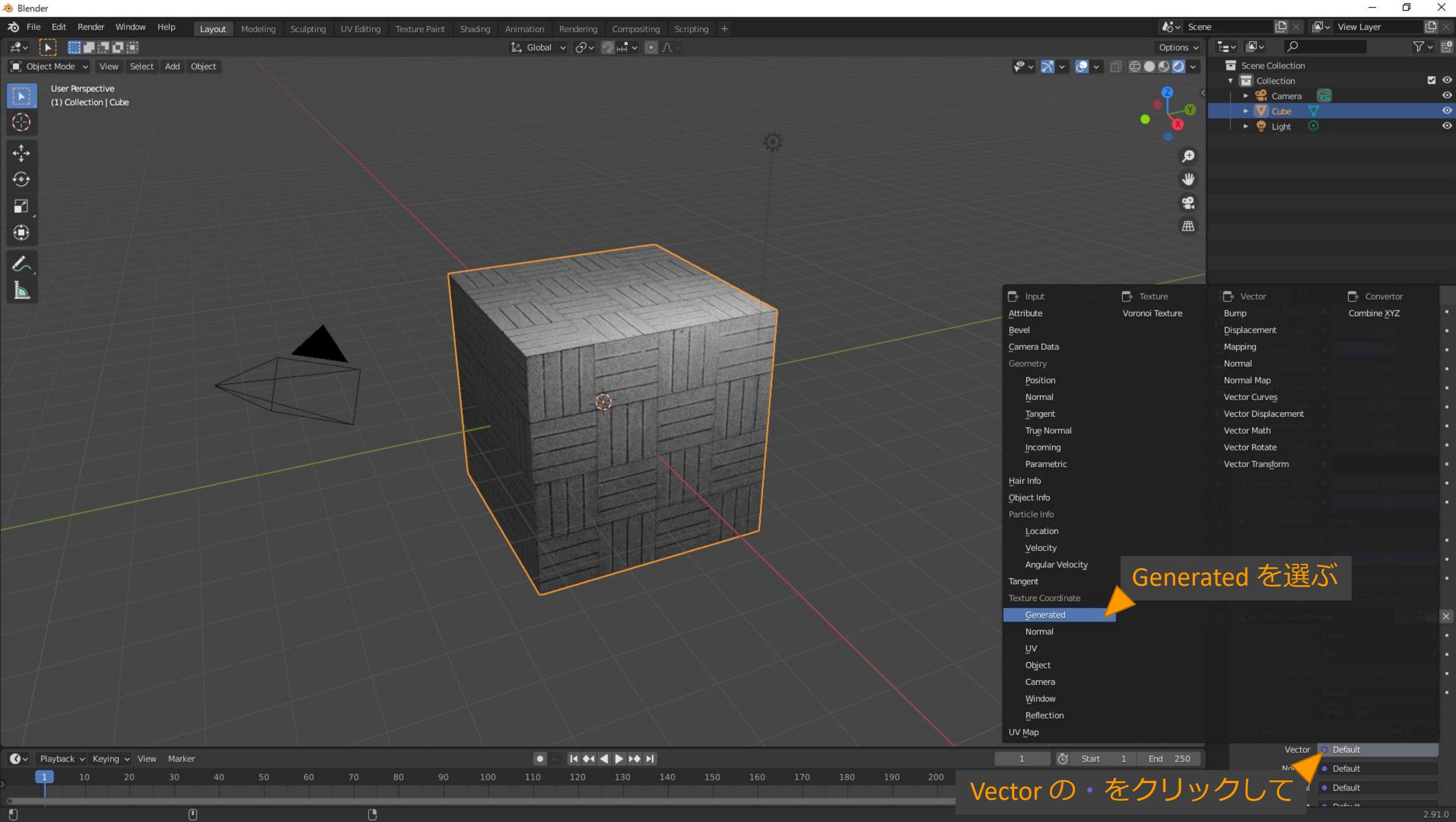






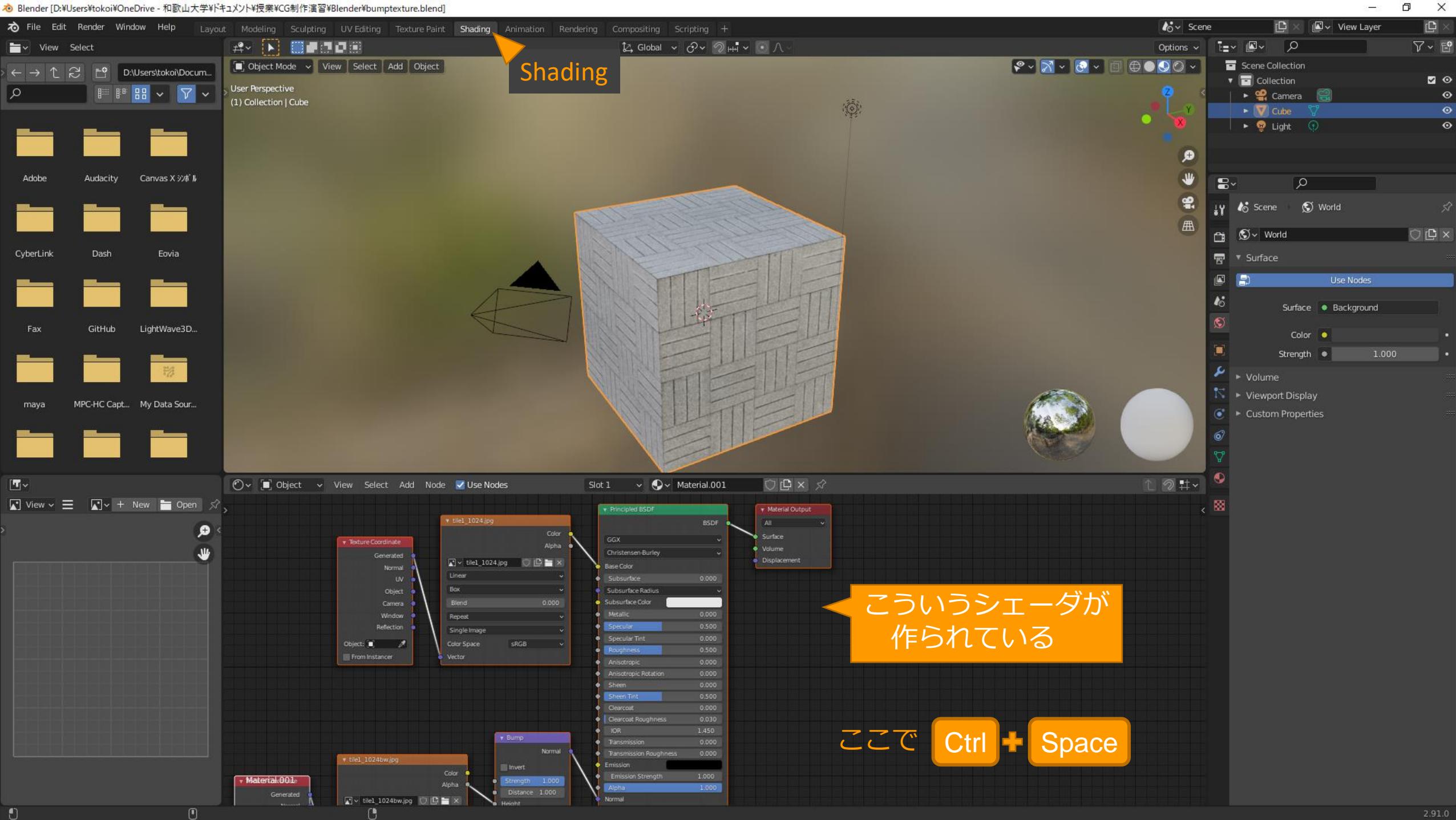


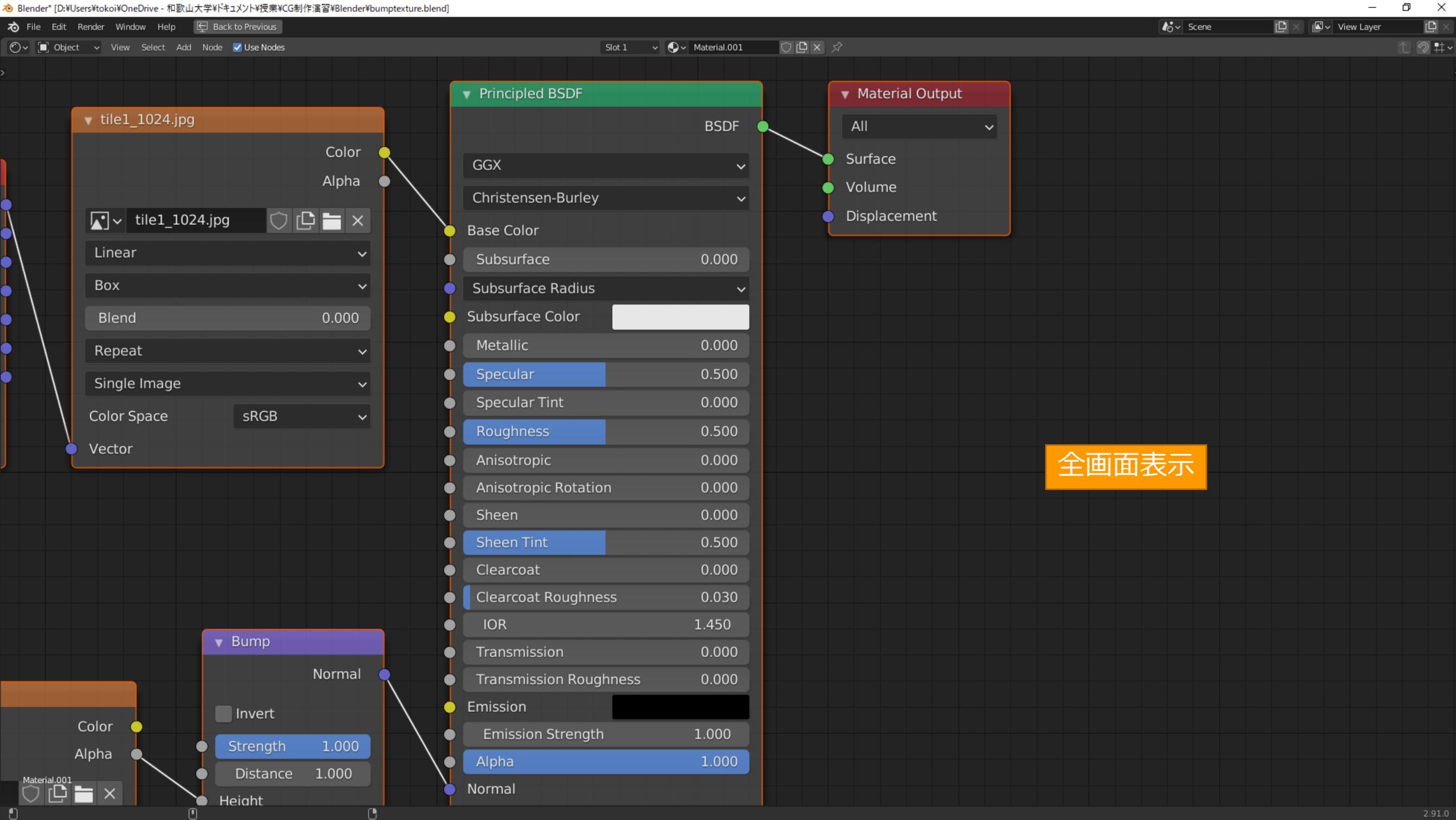


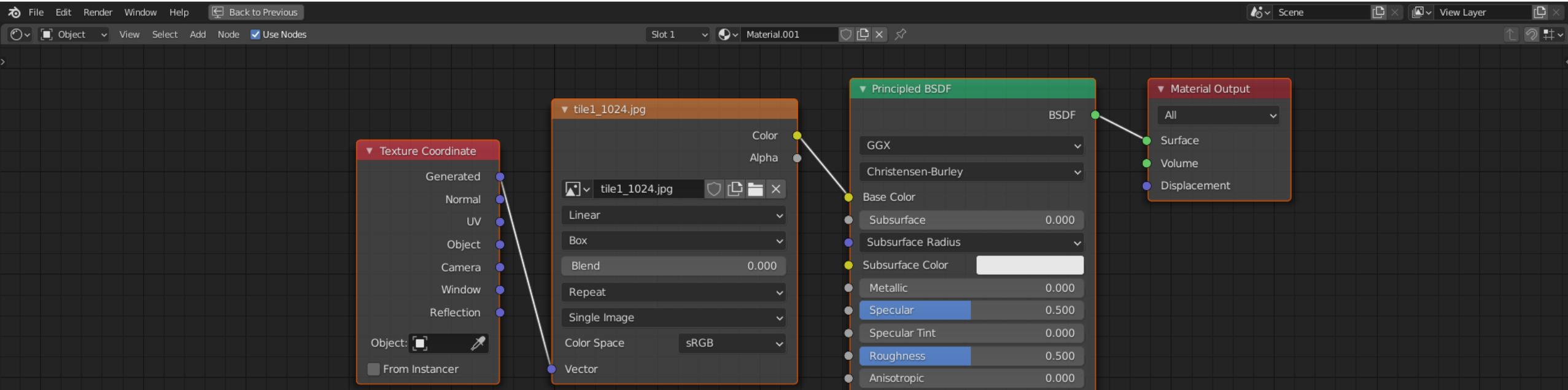


レンダリング結果

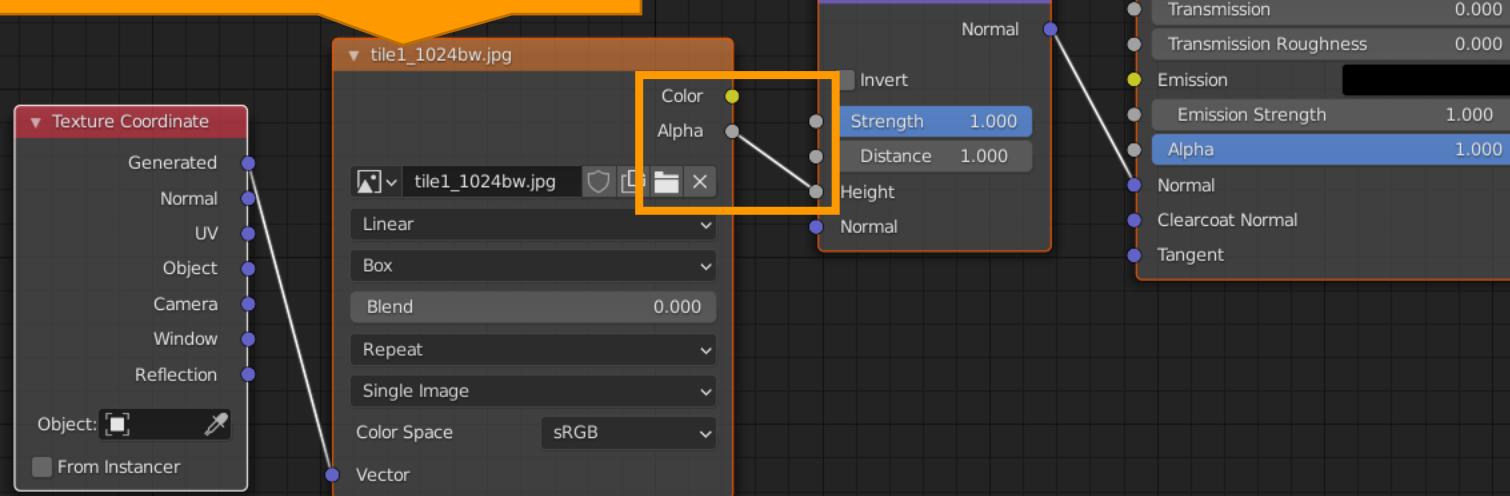
でこぼこが付いていない



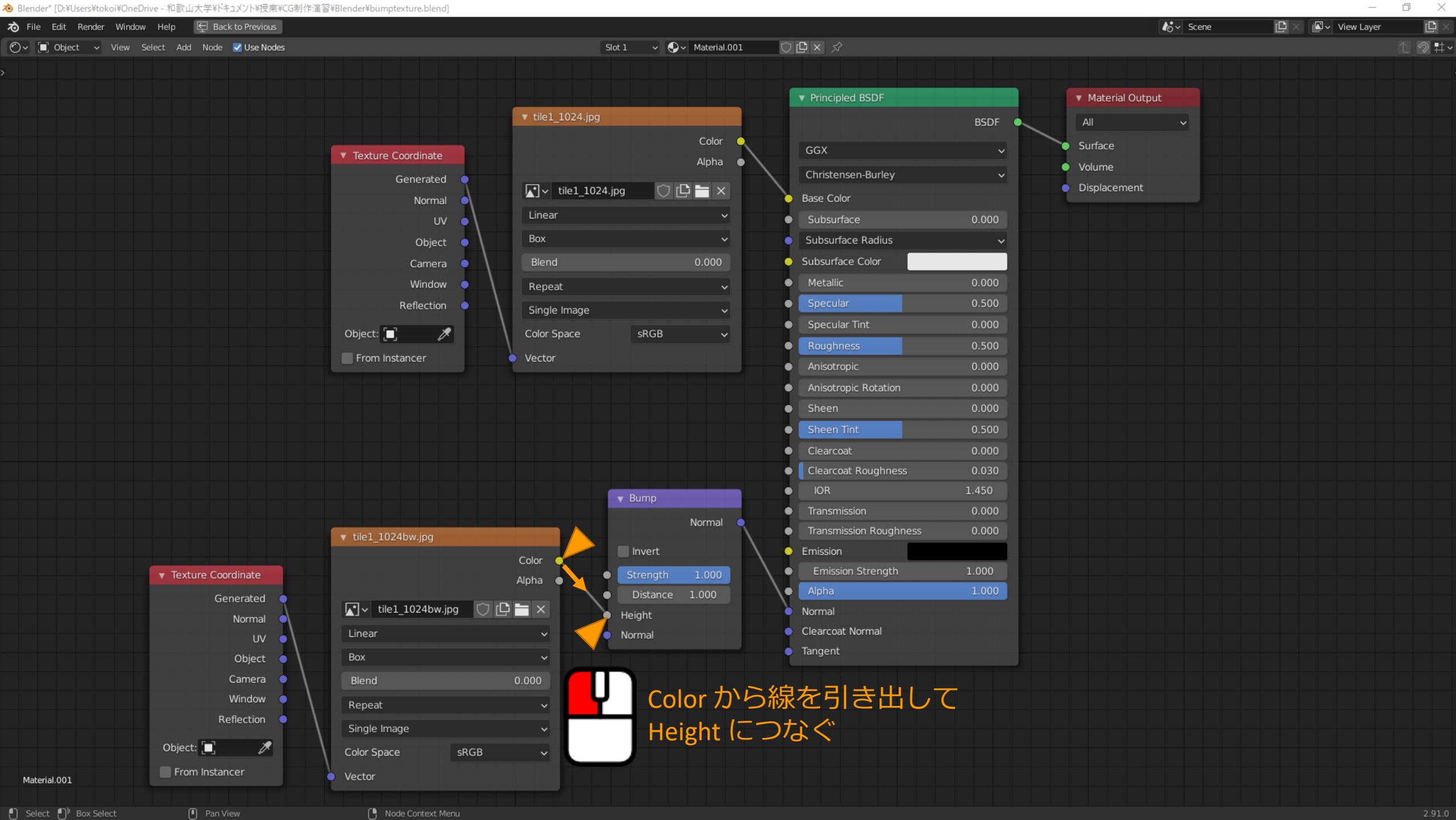


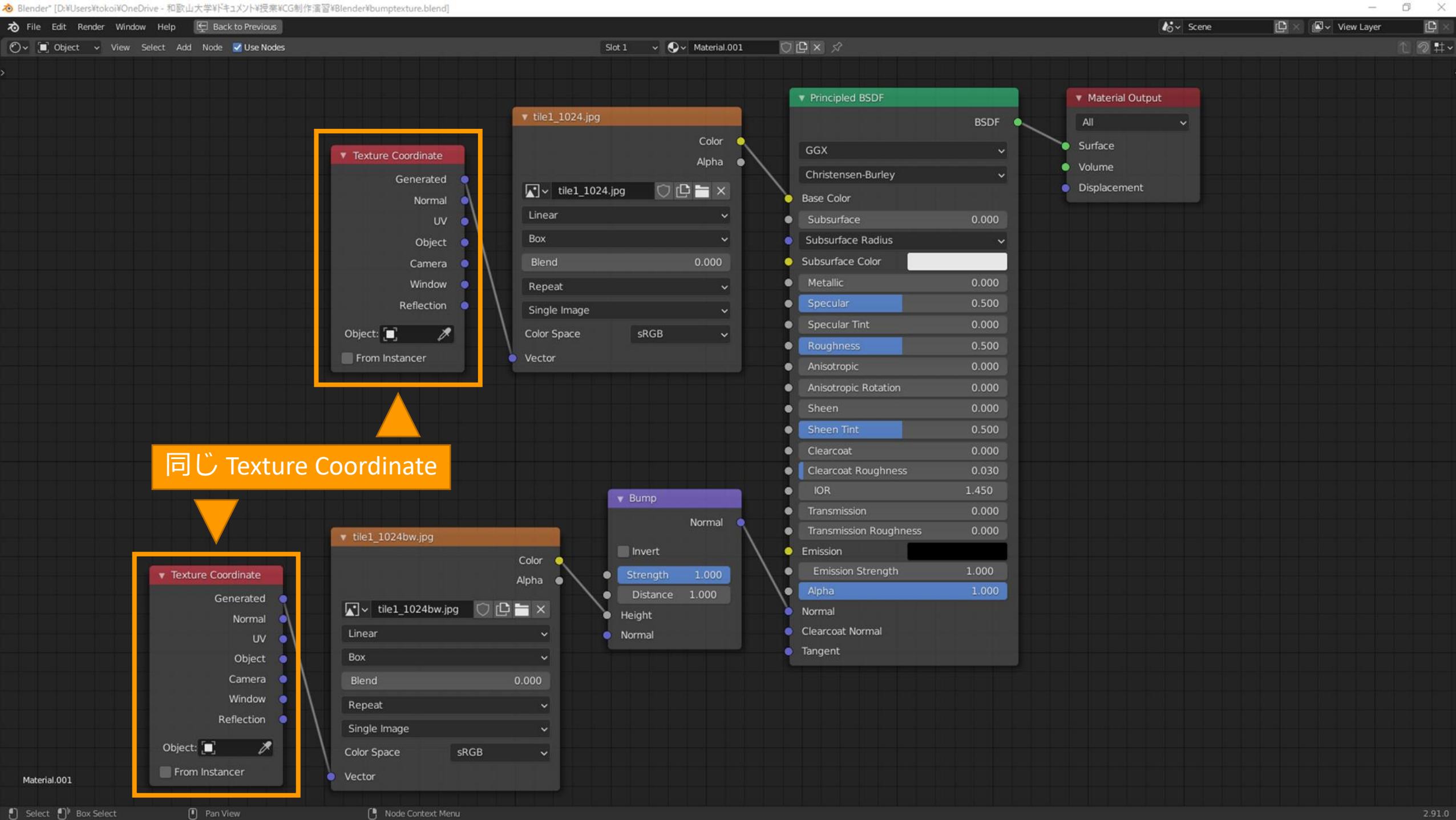


この画像の高さデータは
Alpha ではなく Color に入っている



全体が収まるように
縮小・再配置





The image shows the Blender Node Editor interface with a material setup for bump mapping.

Material Output: The output is set to "Surface".

Principled BSDF: The "Base Color" input is connected to the "Color" output of the "tile1_1024.jpg" texture node. The "Specular" input is set to 0.500. The "Roughness" input is set to 0.500.

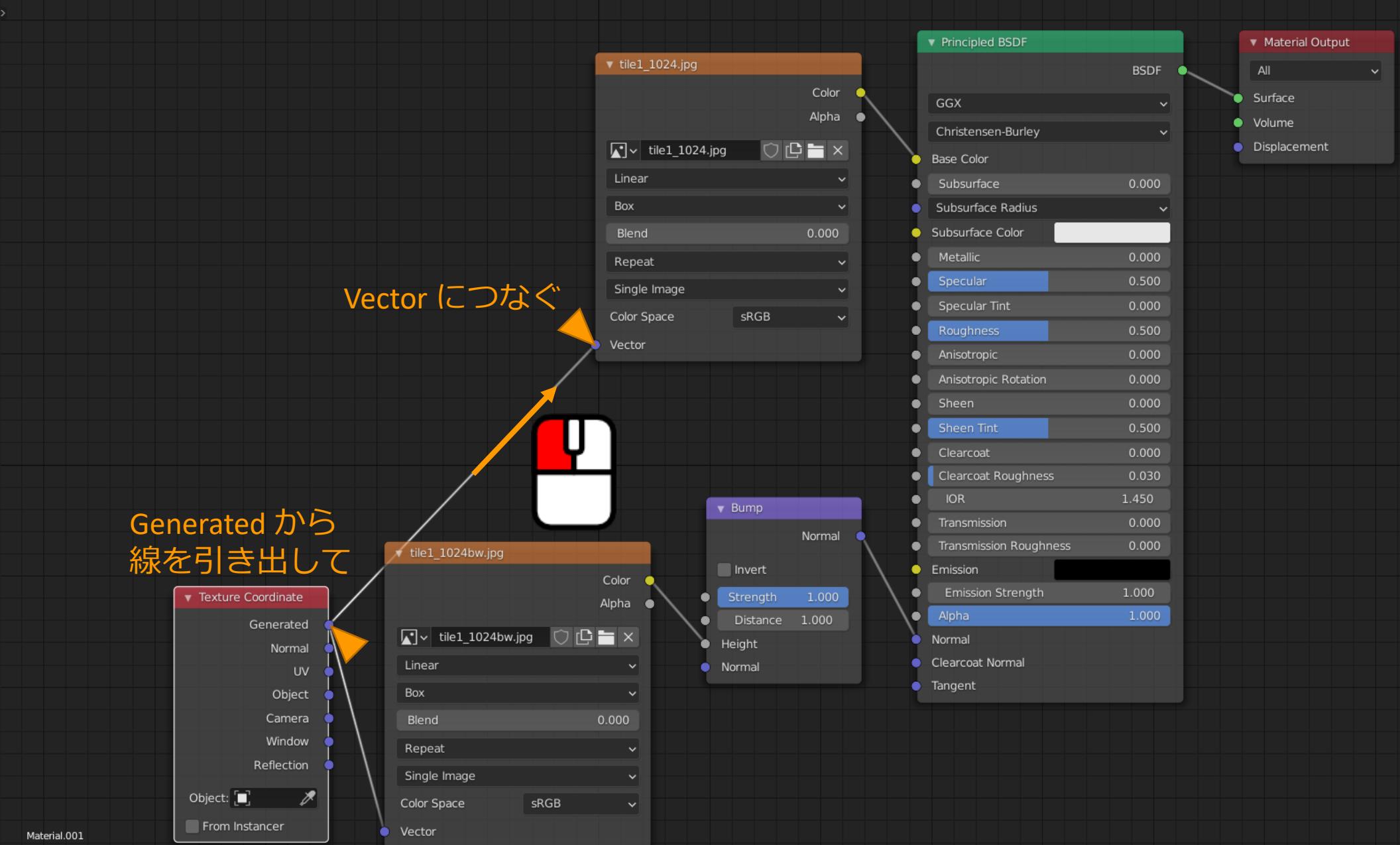
Bump Node: The "Normal" input is connected to the "Normal" output of the "tile1_1024bw.jpg" texture node. The "Strength" input is set to 1.000. The "Distance" input is set to 1.000. The "Height" input is connected to the "Vector" output of the "Texture Coordinate" node.

Texture Coordinate Nodes: There are two "Texture Coordinate" nodes. The top one is connected to the "Vector" input of the Principled BSDF node and the "Vector" input of the Bump node. The bottom one is connected to the "Vector" input of the Bump node. Both nodes have "Generated" selected as the coordinate type.

Textures:

- tile1_1024.jpg:** A color texture node with "Linear" interpolation, "Box" sampling, and "Blend" mode at 0.000. It has "Repeat" and "Single Image" options. The "Color Space" is set to "sRGB".
- tile1_1024bw.jpg:** An alpha texture node with "Linear" interpolation, "Box" sampling, and "Blend" mode at 0.000. It has "Repeat" and "Single Image" options. The "Color Space" is set to "sRGB".

Text Overlay: The text "こっちを選択して" (Select this) is overlaid on the image, pointing to the "Specular" input of the Principled BSDF node.



レンダリング結果

でこぼこが付いた



The image shows the Blender Node Editor interface with a material setup for bump mapping. The material is named "Material.001".

Nodes:

- Texture Coordinate Node:** Outputs Generated, Normal, UV, Object, Camera, Window, and Reflection.
- Image Texture Node (tile1_1024.jpg):** Outputs Color and Alpha. The Color output is connected to the Base Color input of the Principled BSDF node.
- Image Texture Node (tile1_1024bw.jpg):** Outputs Color and Alpha. The Color output is connected to the Strength input of the Bump node. The Alpha output is connected to the Alpha input of the Principled BSDF node.
- Bump Node:** Outputs Normal. The Strength value is set to 200. The Normal output is connected to the Normal input of the Principled BSDF node.
- Principled BSDF Node:** Sets GGX as the BSDF type. Other settings include Specular (0.500), Specular Tint (0.000), Roughness (0.500), Sheen (0.000), Sheen Tint (0.500), Clearcoat (0.000), Clearcoat Roughness (0.030), IOR (1.450), Transmission (0.000), Transmission Roughness (0.000), Emission (black), Emission Strength (1.000), and Alpha (1.000).
- Material Output Node:** Sets All as the output type, with Surface selected.

Text Overlay:

でこぼこの「強さ」は
Strength で調整できる

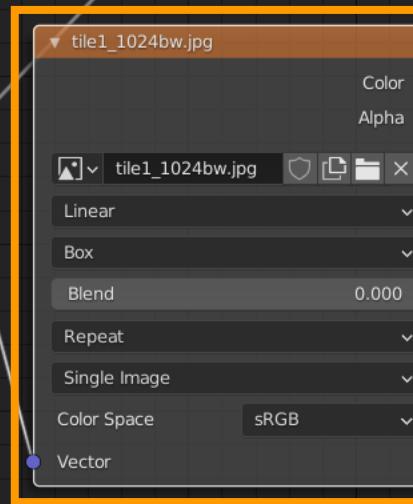
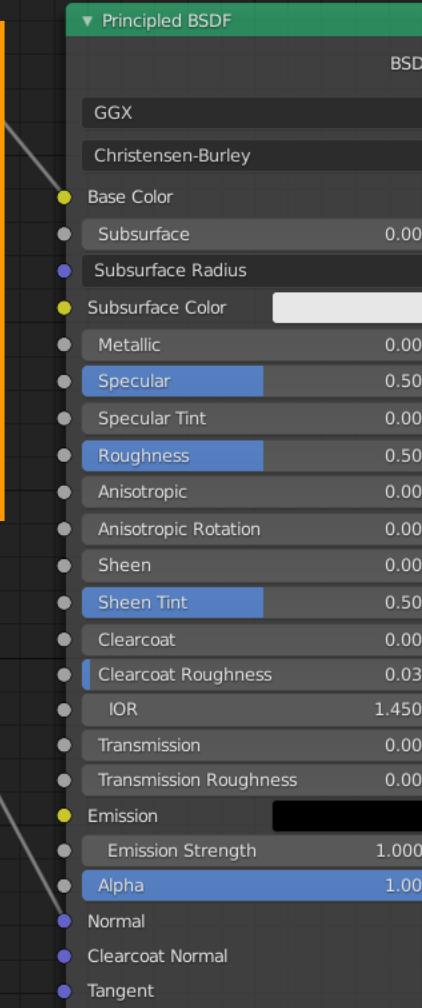
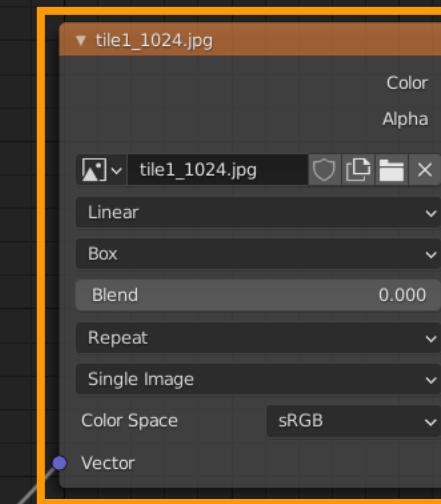
Material Properties:

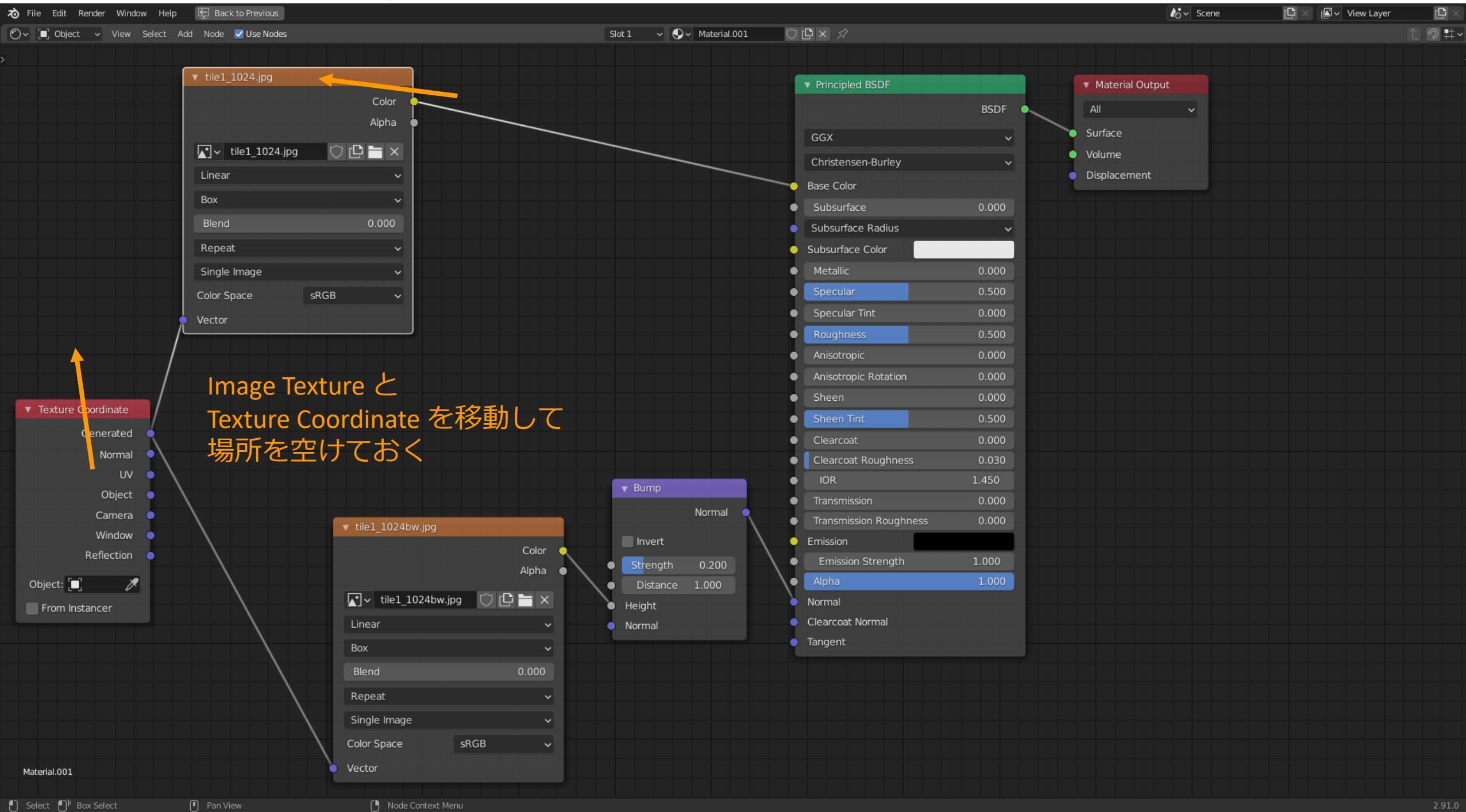
- BSDF:** GGX, Christensen-Burley
- Base Color:** (Color from tile1_1024.jpg)
- Subsurface:** 0.000
- Subsurface Radius:** 0.000
- Subsurface Color:** (Color from tile1_1024.jpg)
- Metallic:** 0.000
- Specular:** 0.500
- Specular Tint:** 0.000
- Roughness:** 0.500
- Anisotropic:** 0.000
- Anisotropic Rotation:** 0.000
- Sheen:** 0.000
- Sheen Tint:** 0.500
- Clearcoat:** 0.000
- Clearcoat Roughness:** 0.030
- IOR:** 1.450
- Transmission:** 0.000
- Transmission Roughness:** 0.000
- Emission:** (Black color box)
- Emission Strength:** 1.000
- Alpha:** 1.000
- Normal:** (Normal from Bump node)
- Clearcoat Normal:** (Normal from Bump node)
- Tangent:** (Normal from Bump node)

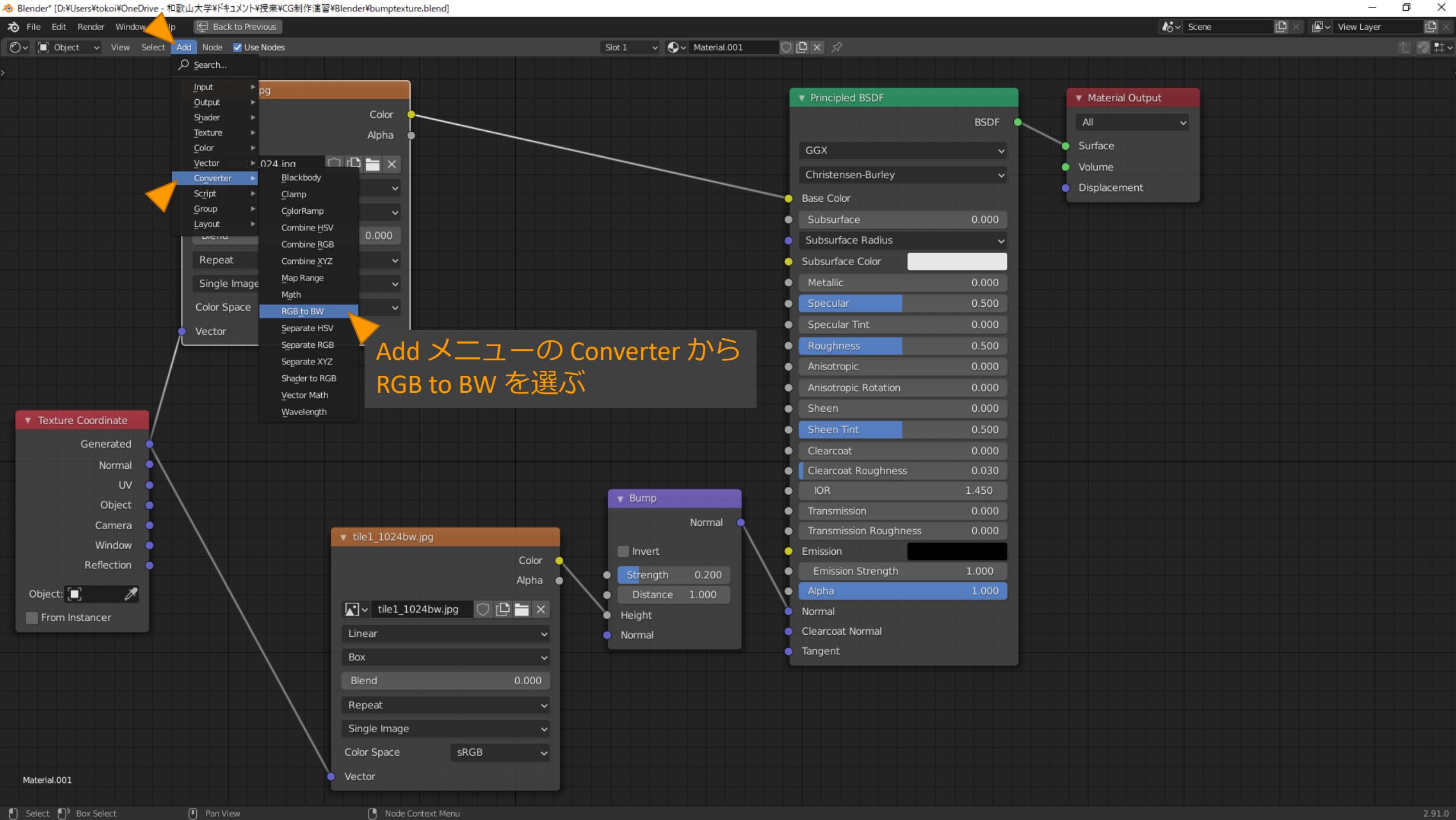
レンダリング結果

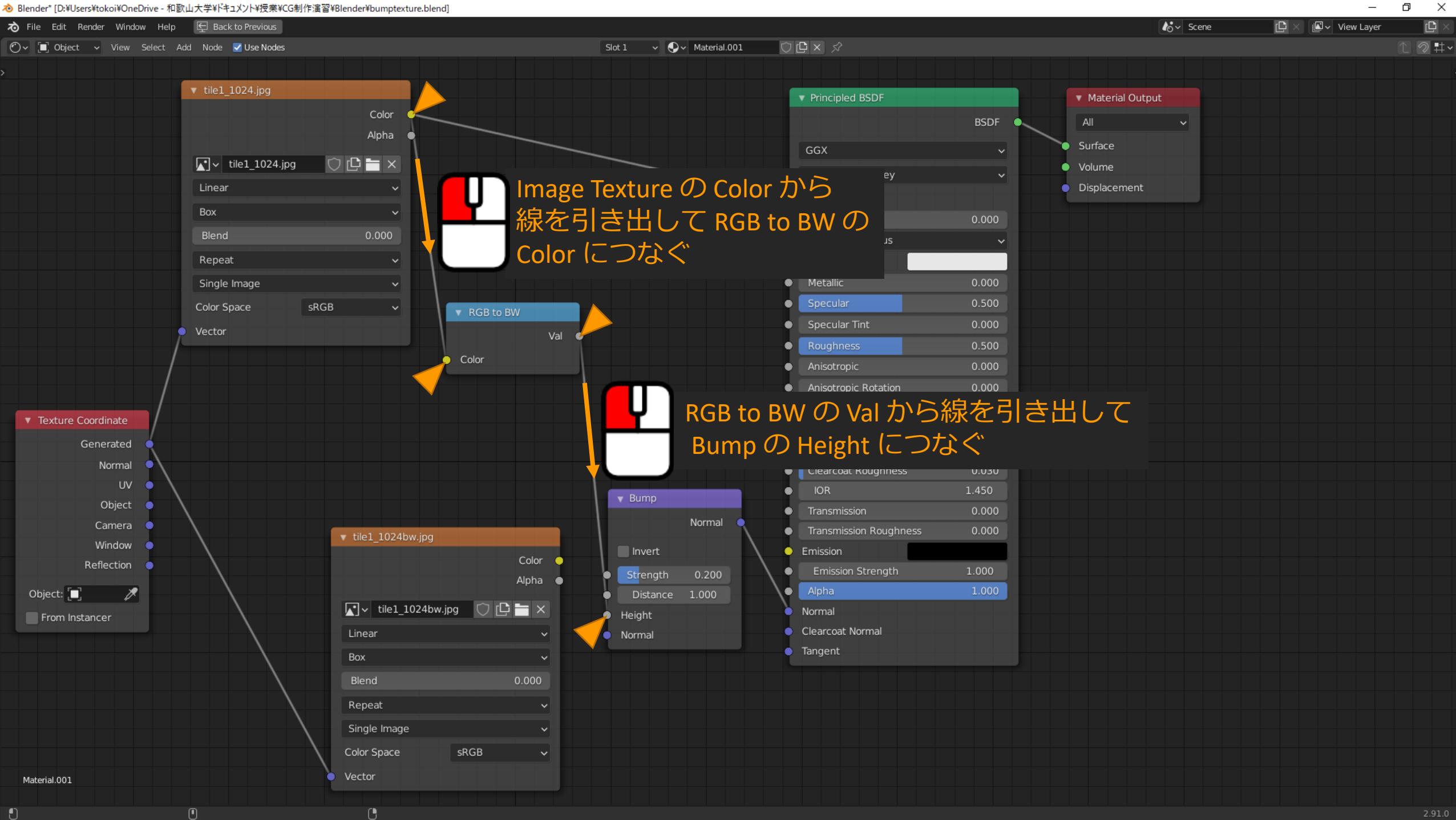
でこぼこが減った

似た画像を二つ使うのは
あんまり嬉しくない









File Edit Render Window Help Back to Previous

Slot 1 Material.001 Scene View Layer

Object View Select Add Node Use Nodes

tile1_1024.jpg

Color Alpha

tile1_1024.jpg Linear Box Blend 0.000 Repeat Single Image Color Space sRGB Vector

Texture Coordinate

Generated Normal UV Object Camera Window Reflection

Object: From Instancer

tile1_1024bw.jpg

Color Alpha

tile1_1024bw.jpg Linear Box Blend 0.000 Repeat Single Image Color Space sRGB Vector

RGB to BW

Val Color

Principled BSDF

BSDF GGX Christensen-Burley

Base Color Subsurface Subsurface Radius Subsurface Color

Metallic Specular Specular Tint

Roughness Anisotropic Anisotropic Rotation

Anisotropic Sheen Sheen Tint

Clearcoat Clearcoat Roughness

IOR Transmission Transmission Roughness

Emission Emission Strength

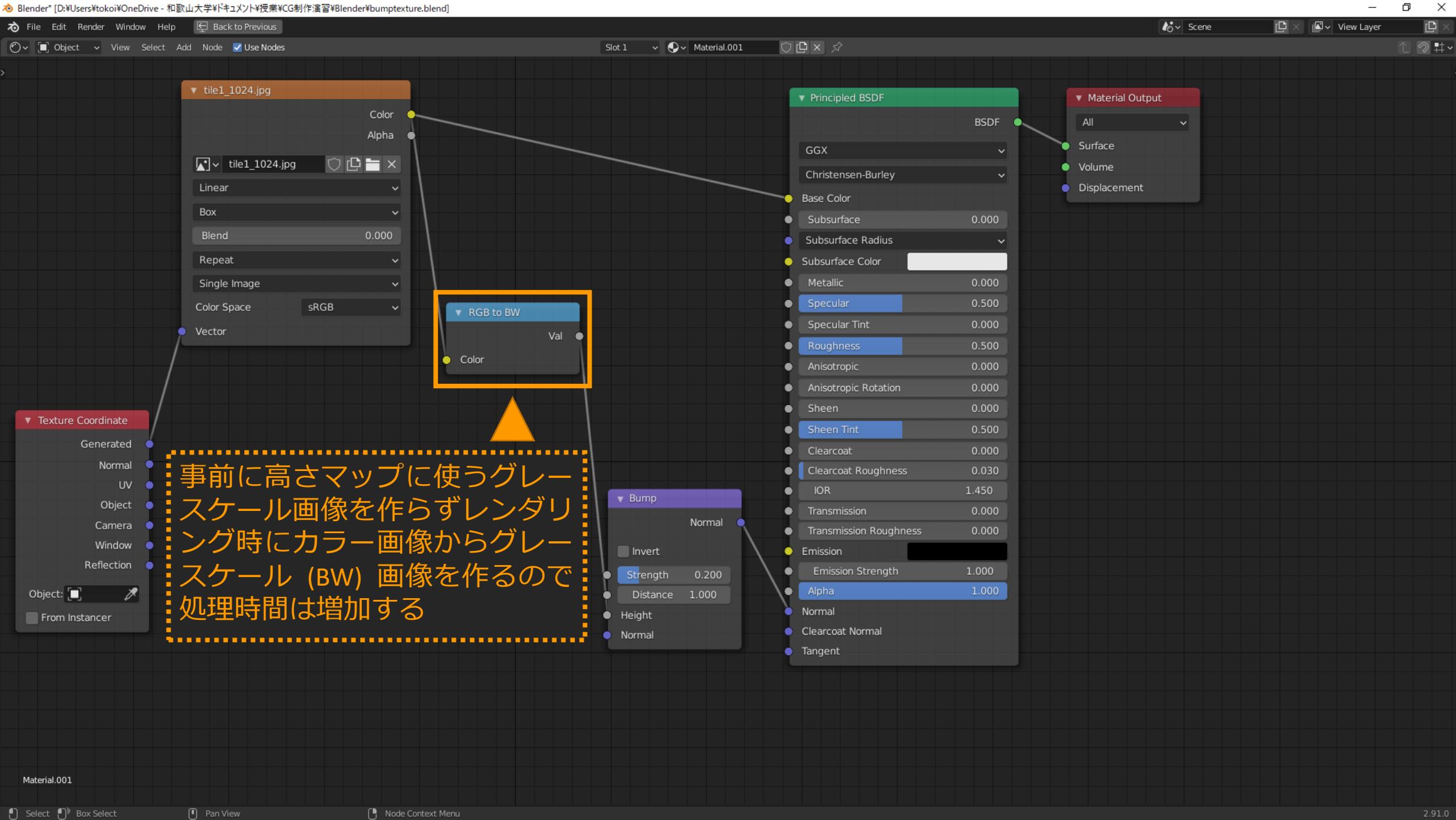
Alpha Normal Clearcoat Normal Tangent

Material Output

All Surface Volume Displacement

高さマップのテクスチャは
使わなくなる

こっちを選択して X



レンダリング結果

高さマップをばかしていないので
でこぼこが細かい