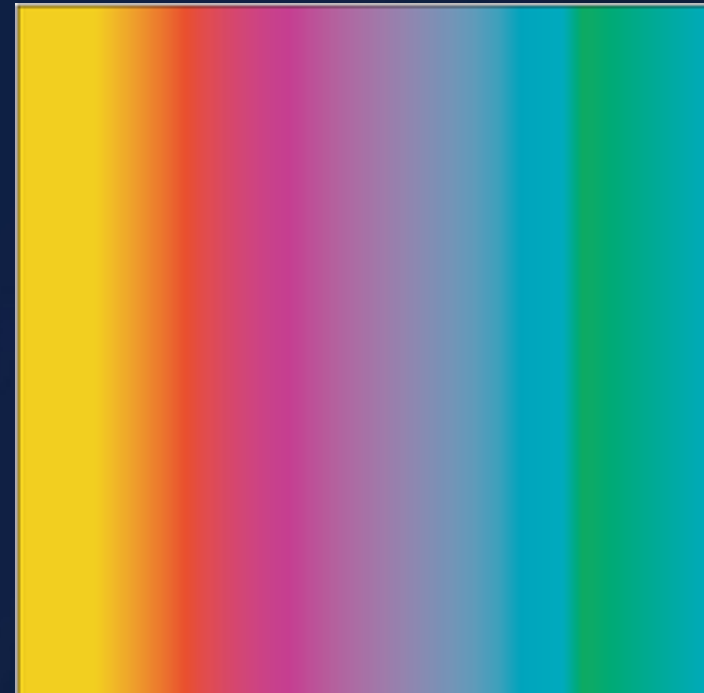


Homework 4

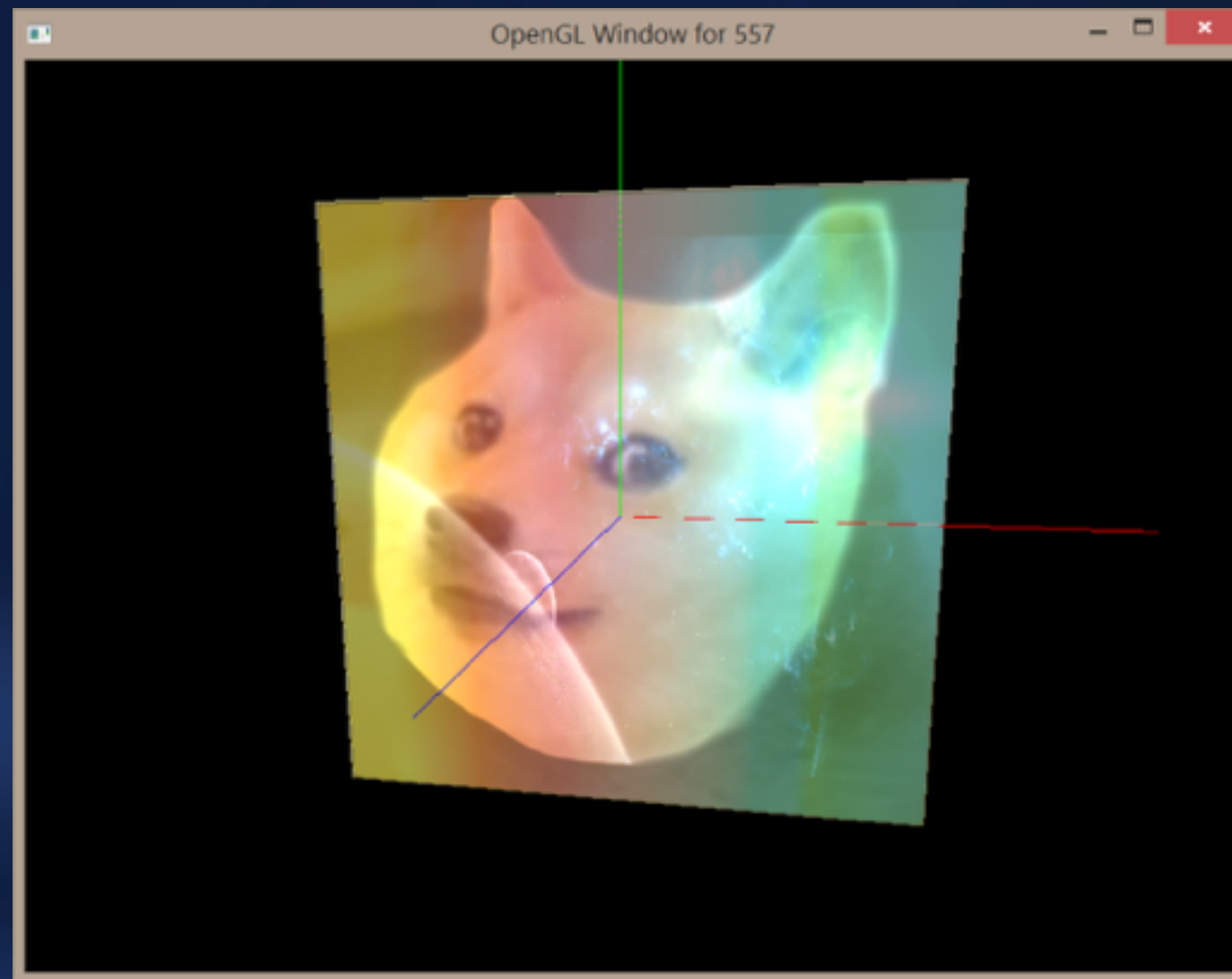
Group Members: Adam Kohl, Jiazhong Zhou

Texture Images



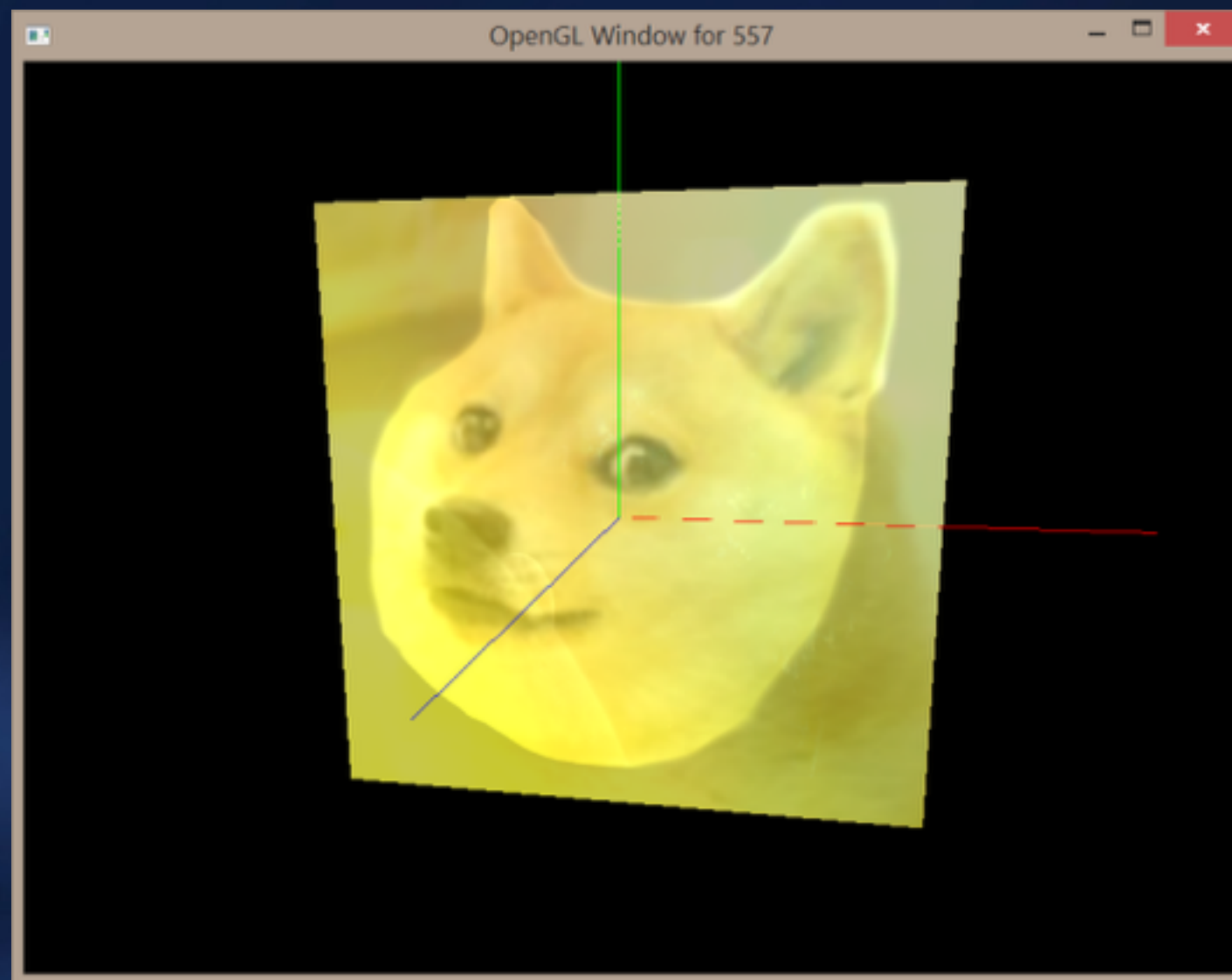
Blend Function I

```
if(g_change_texture_blend == 0)
{
    //color = 0.5*pass_Color + tex_color;
    color = 0.1*pass_Color + 0.5*tex_color + 0.5*tex_color_light + 0.5*tex_color_extra;
}
```



Blend Function 2

```
if(g_change_texture_blend == 0)
{
    //color = 0.5*pass_Color + tex_color;
    color = 0.5*pass_Color + 0.1*tex_color + 0.1*tex_color_light + 0.5*tex_color_extra;
}
```



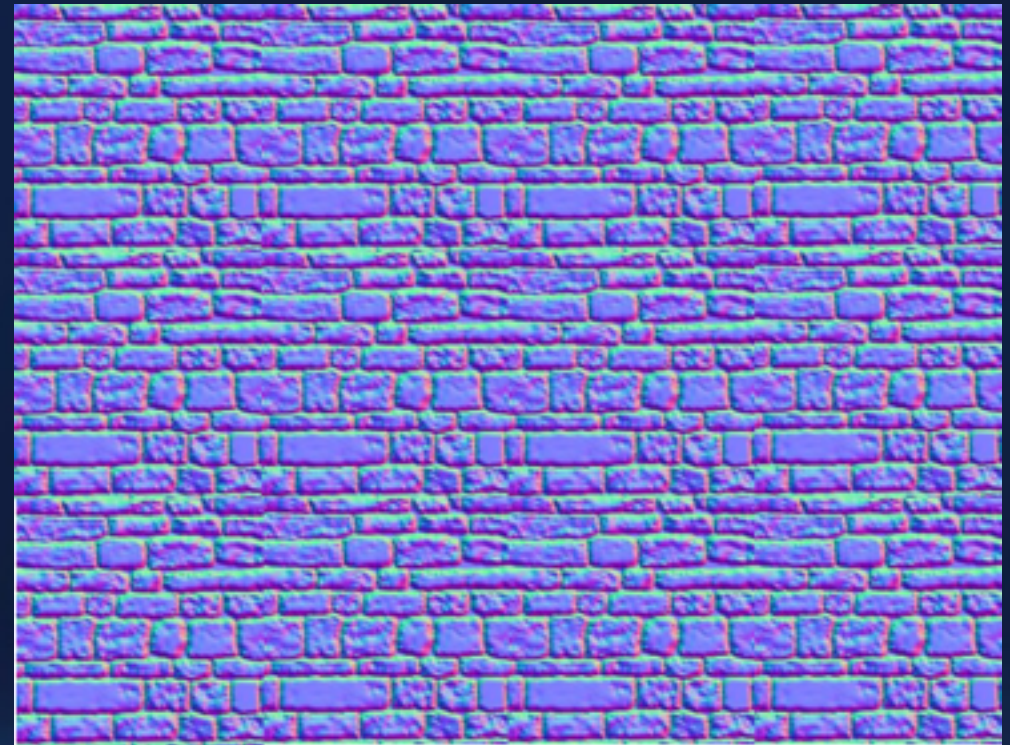
Problem 2

Texture Images

Landscape



Normal Map



Fragment Shader Code

```
#version 410 core

uniform sampler2D texture_background; //landscape
uniform sampler2D texture_foreground; //noisemap

in vec2 pass_TexCoord; //this is the texture coord
in vec4 pass_Color;
out vec4 color;

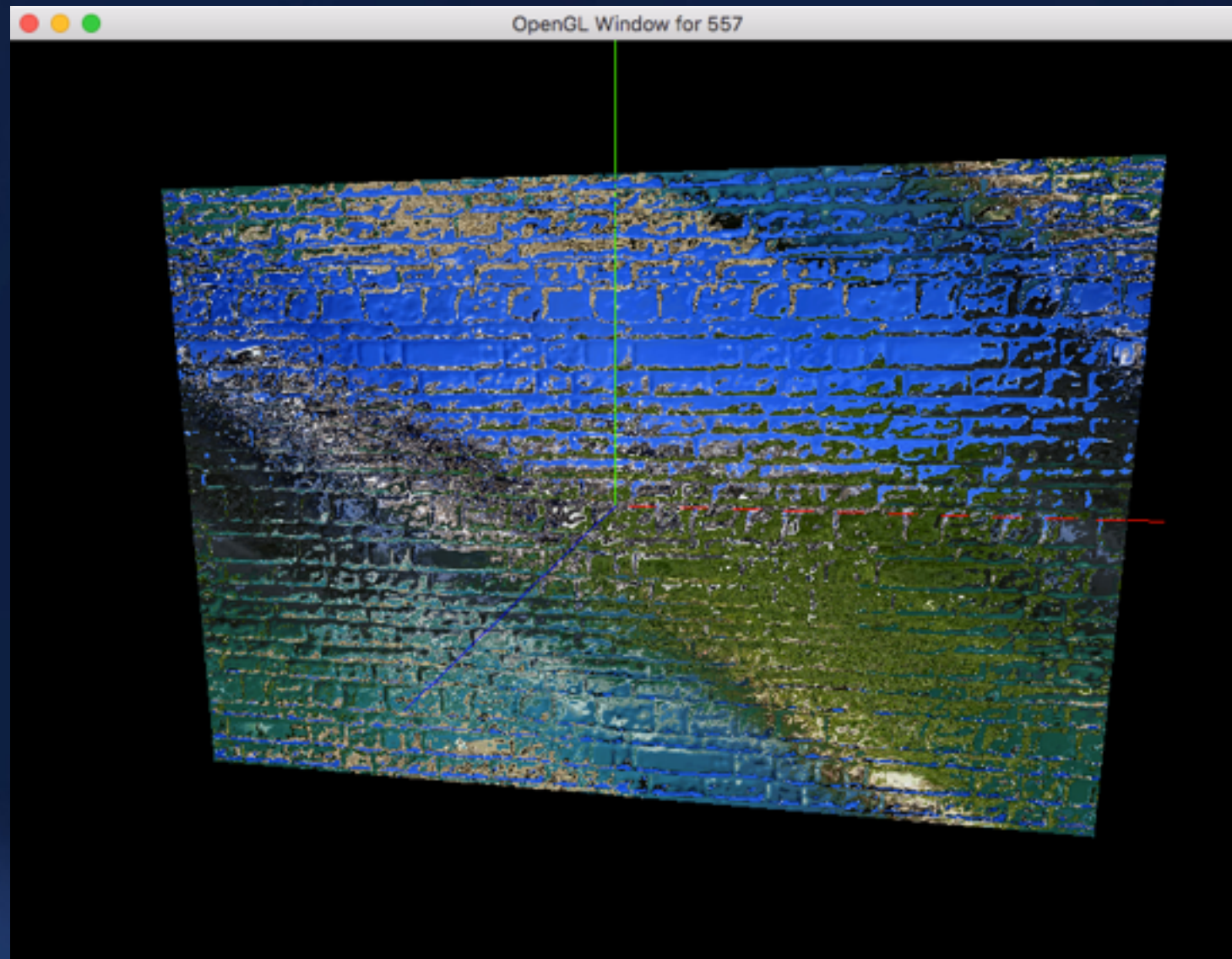
uniform int texture_blend;

void main(void)
{
    vec2 noiseVec;

    noiseVec = normalize(texture(texture_foreground, pass_TexCoord).xy);
    noiseVec = (noiseVec * 2.0 - 1) * .0085; |

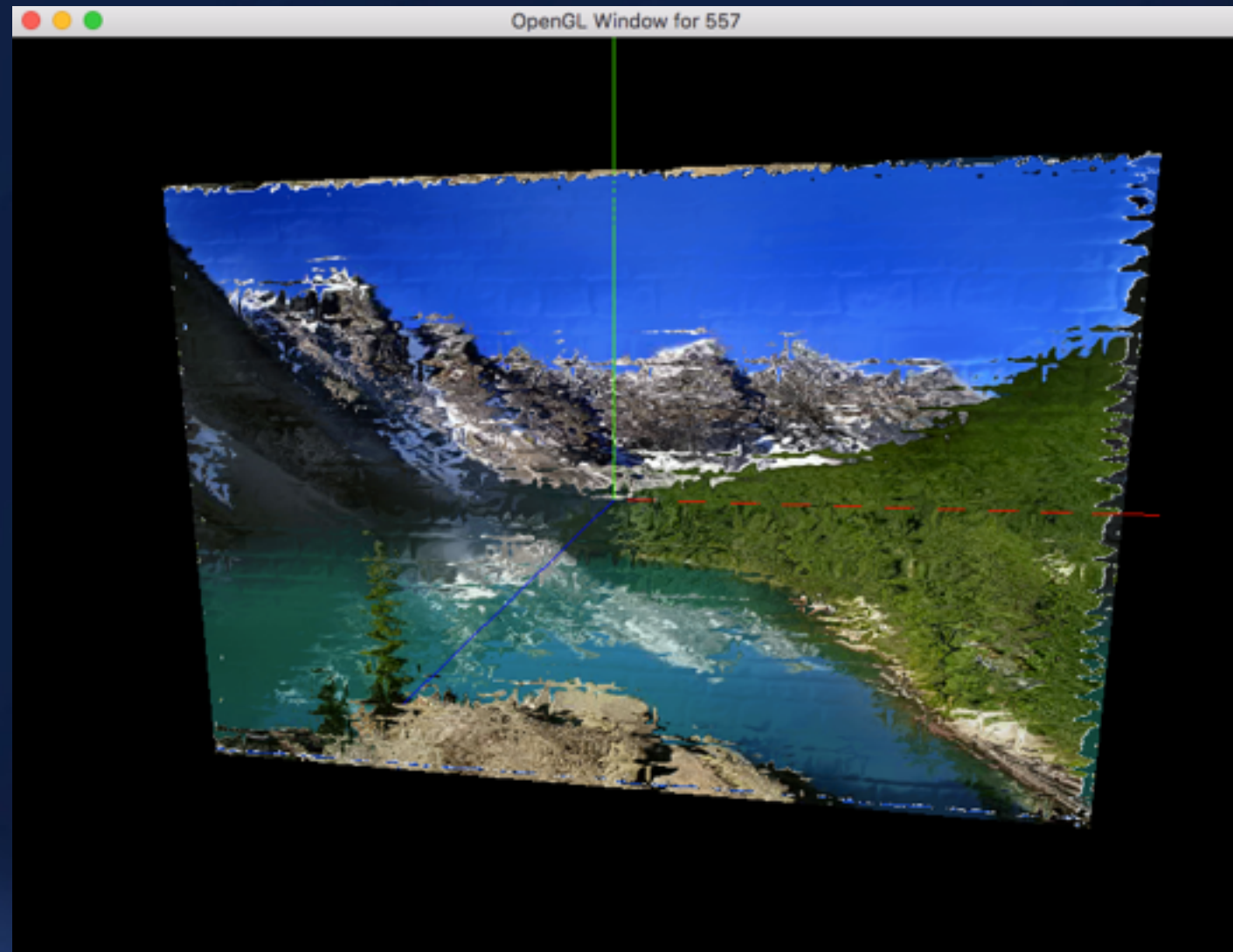
    color = texture(texture_background, pass_TexCoord + noiseVec);
}
```


Observations



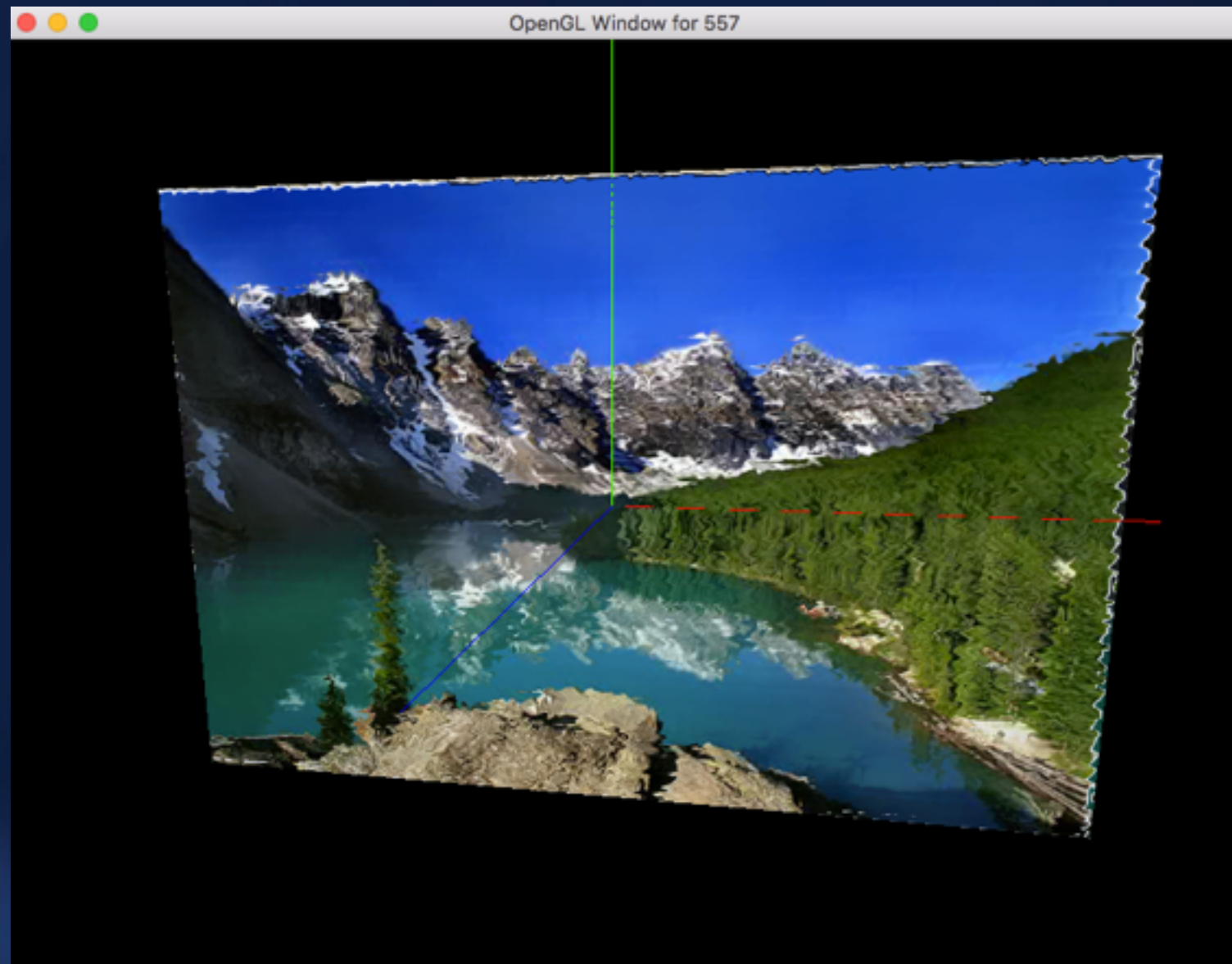
Scaling Factor of 0.25

Observations



Scaling Factor of 0.025

Observations



Scaling Factor of 0.0085

Challenges / Questions?