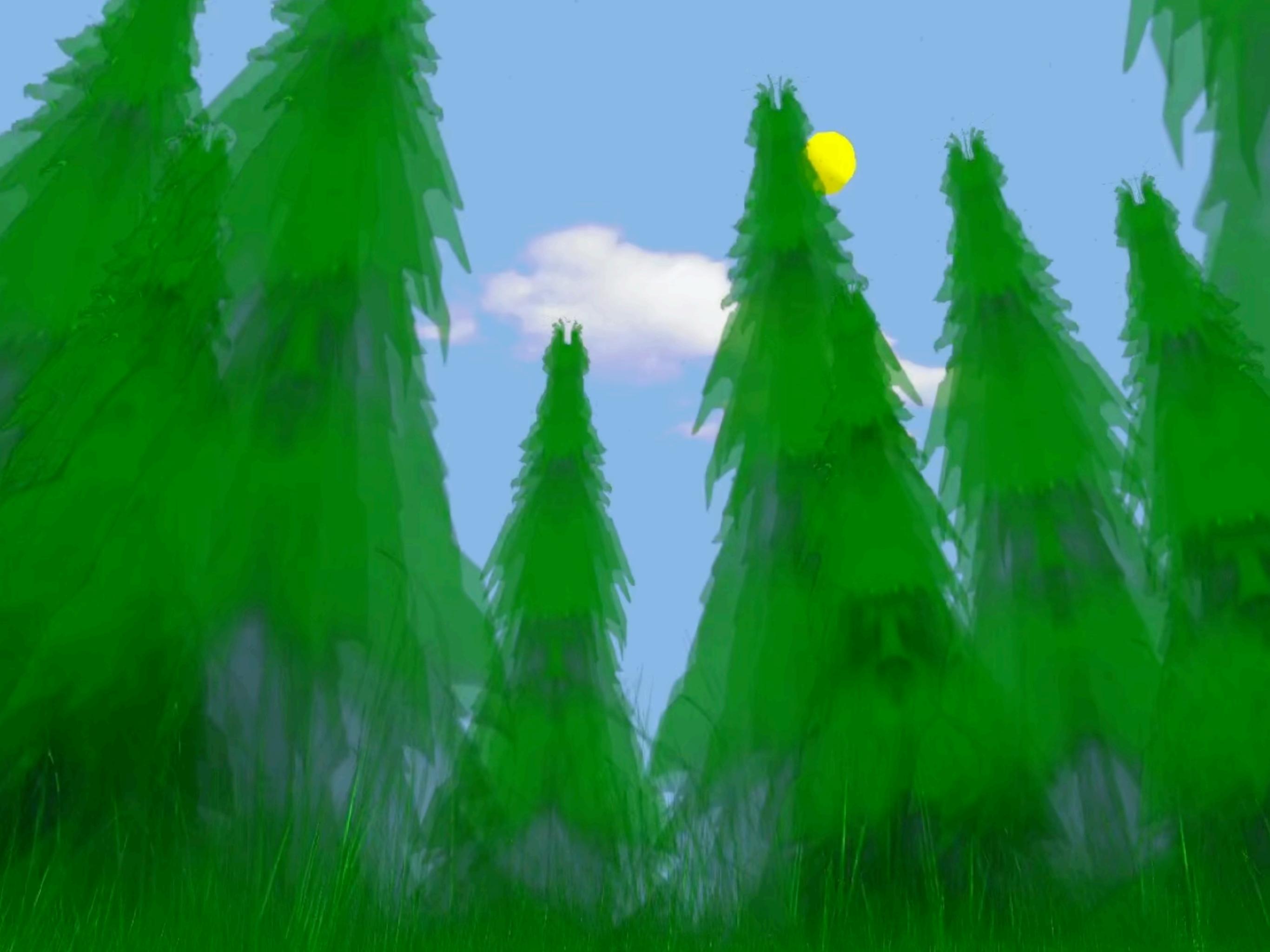


# Computer Graphics Project Presentation

As the Wind

Yiming Tang 2021.12.16





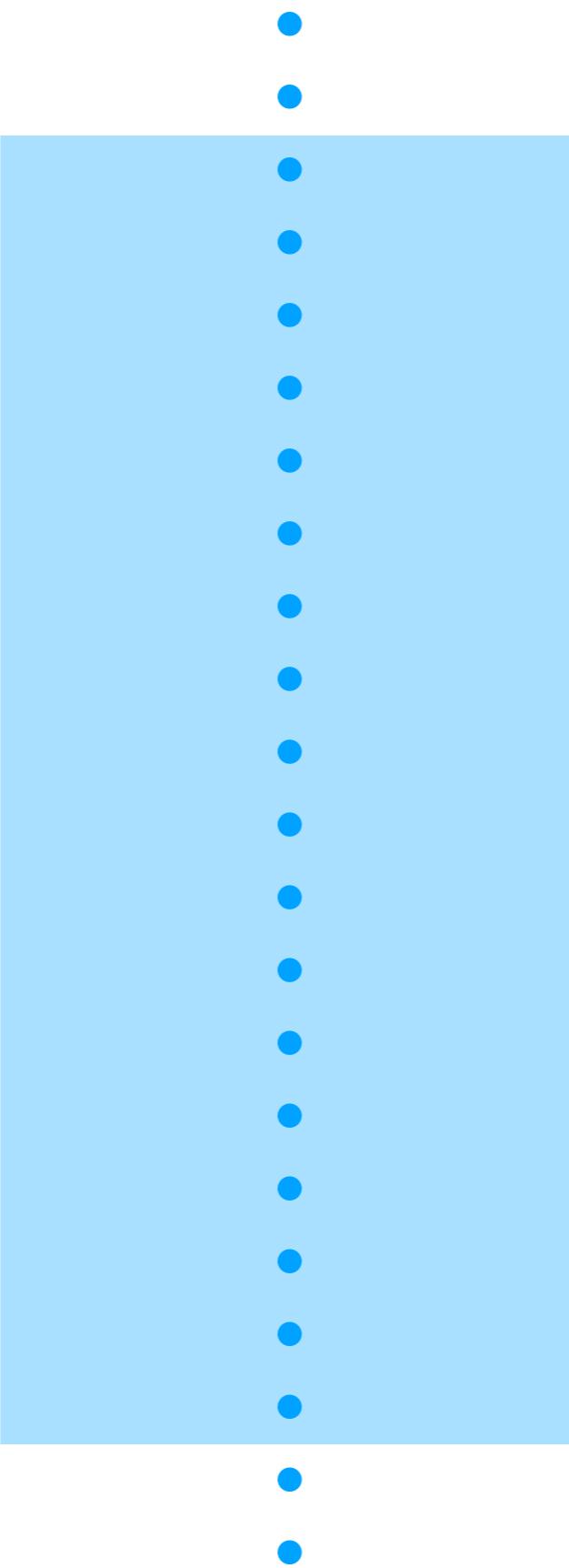


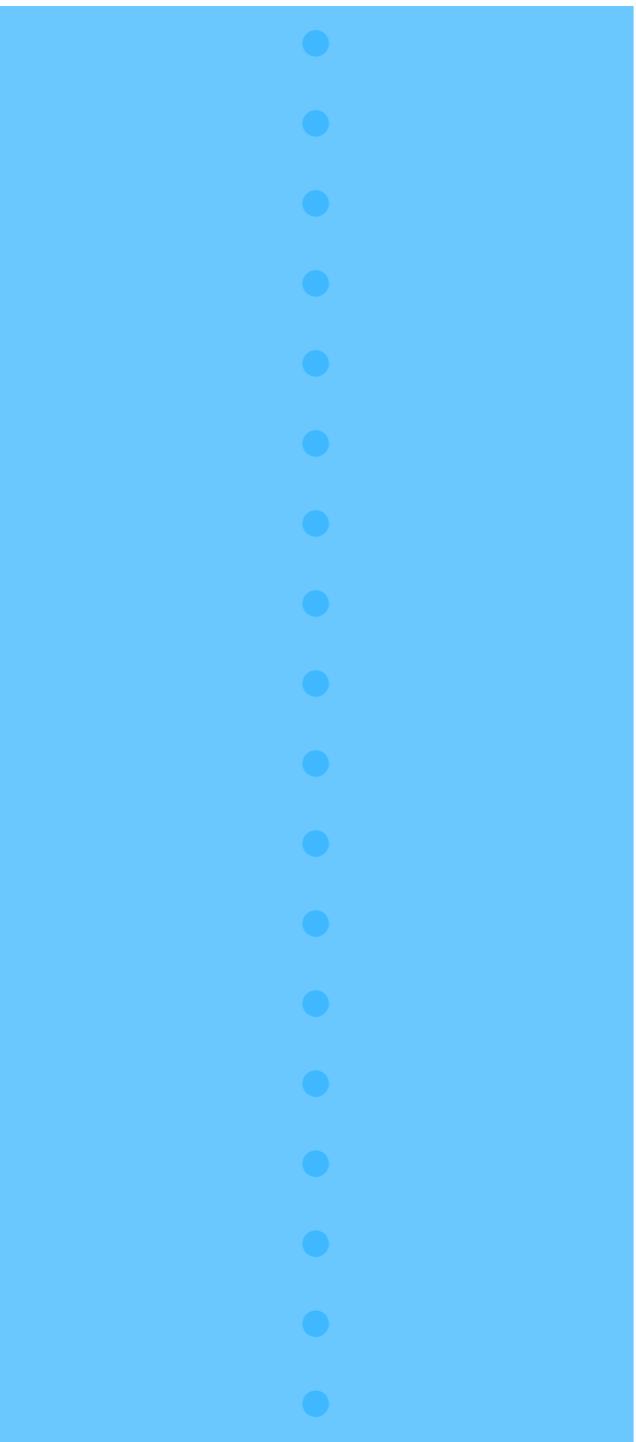






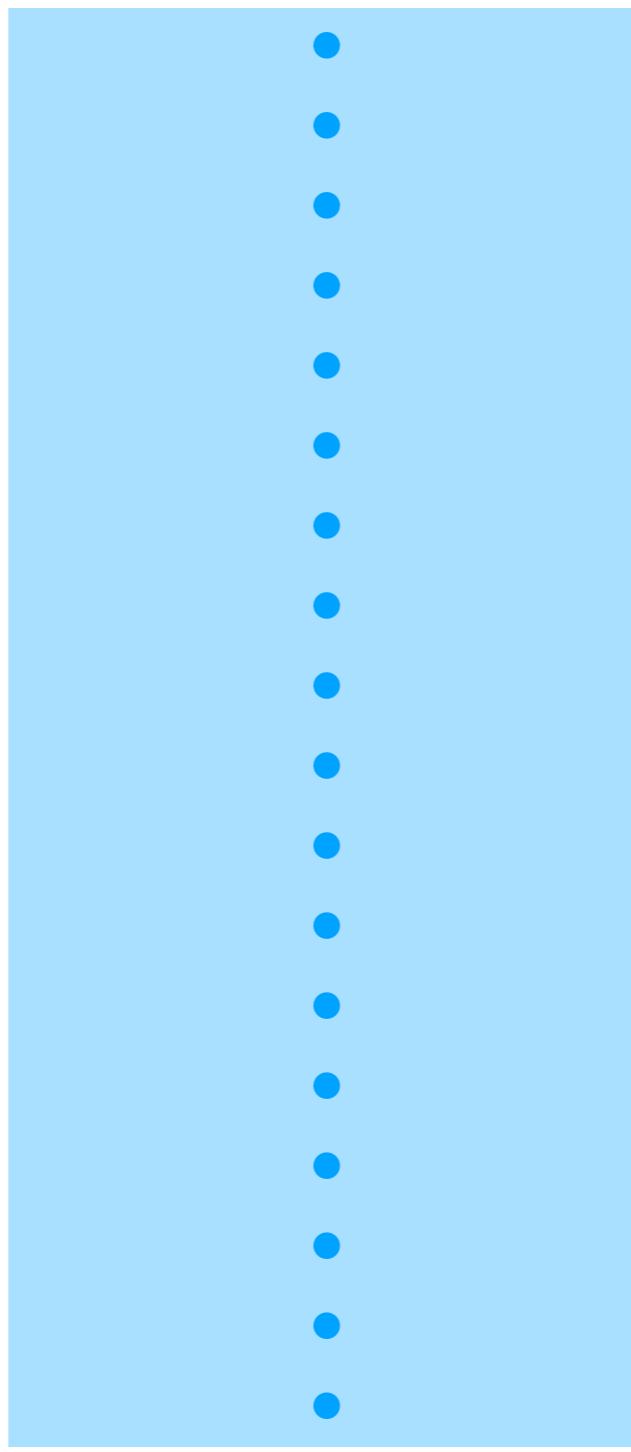


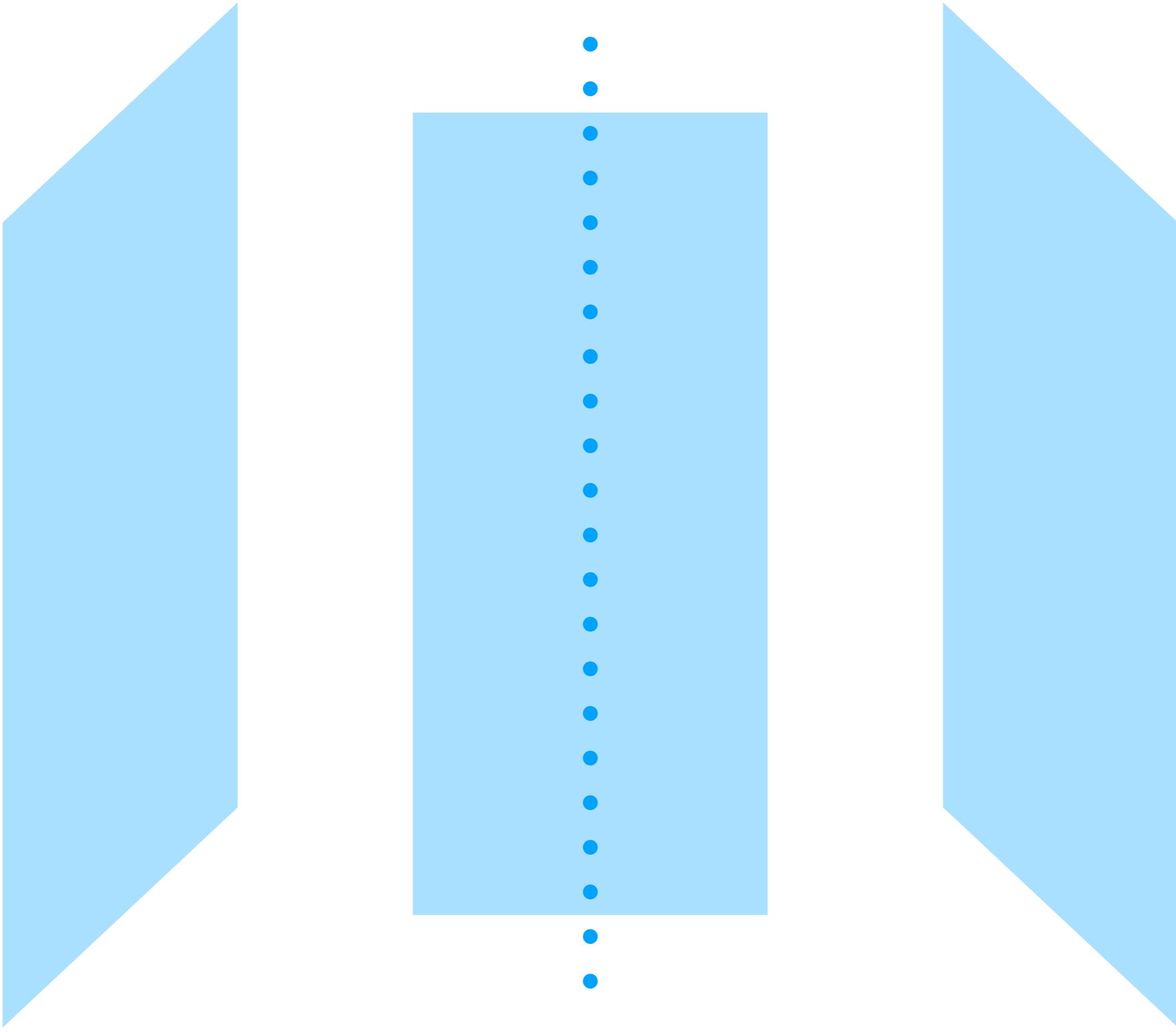


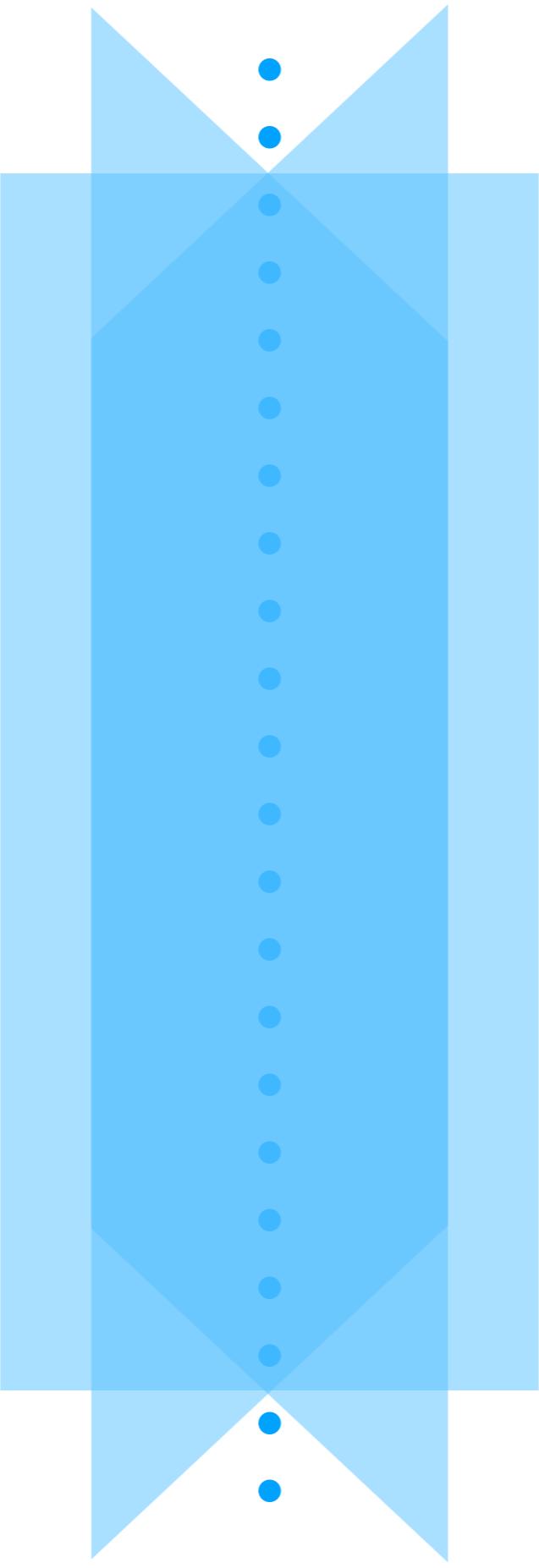


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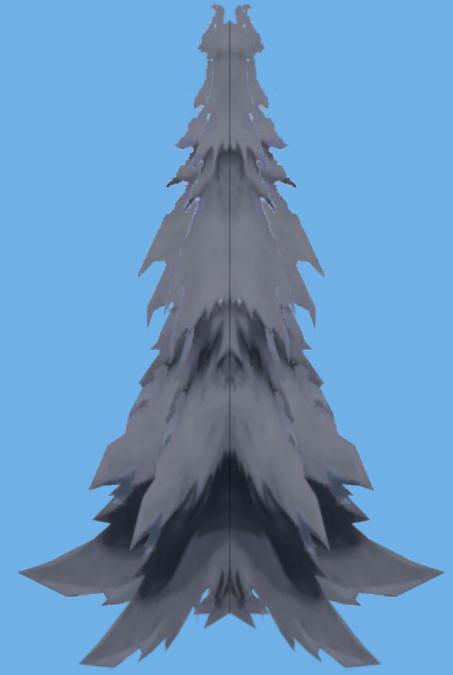




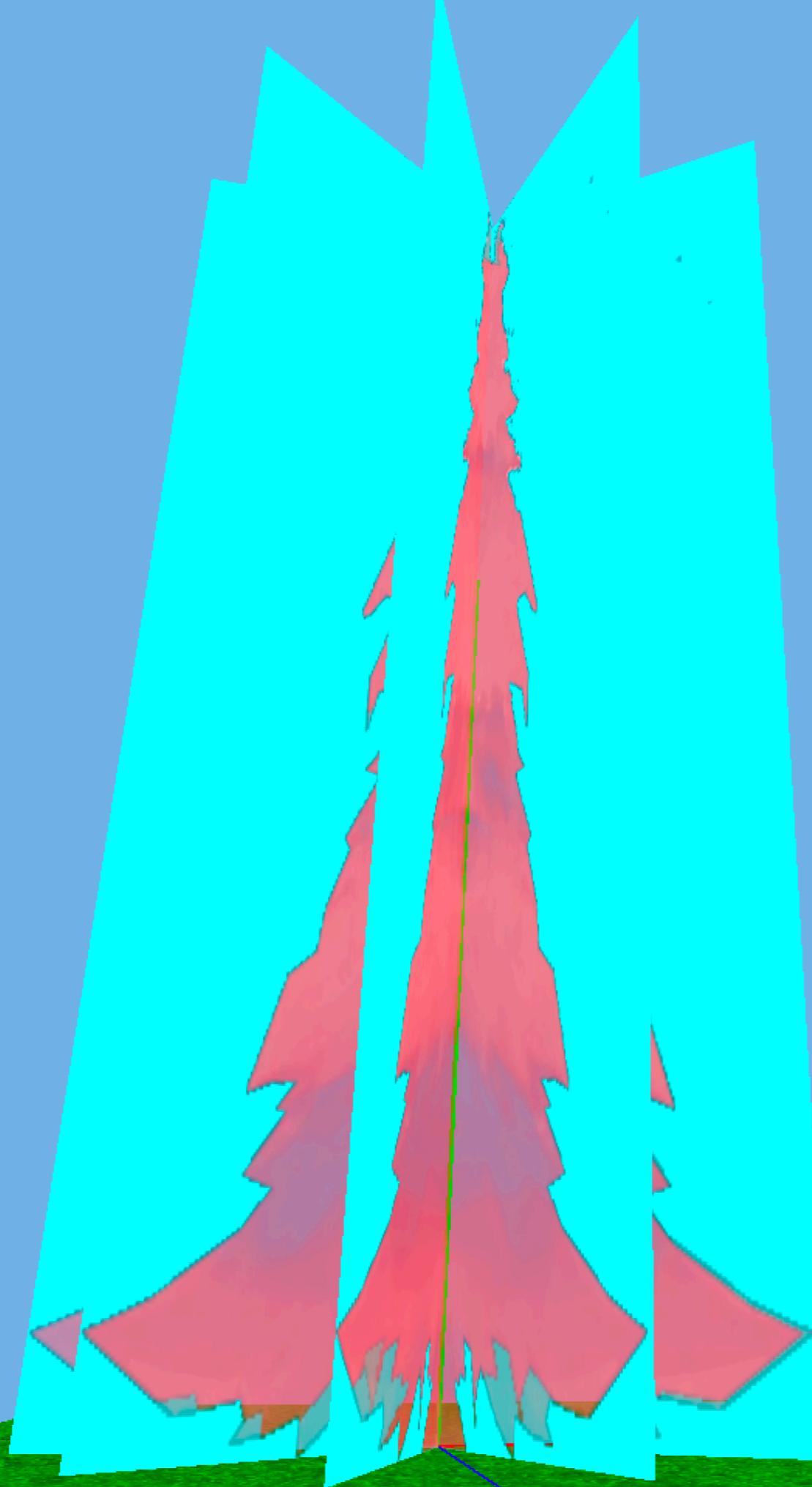
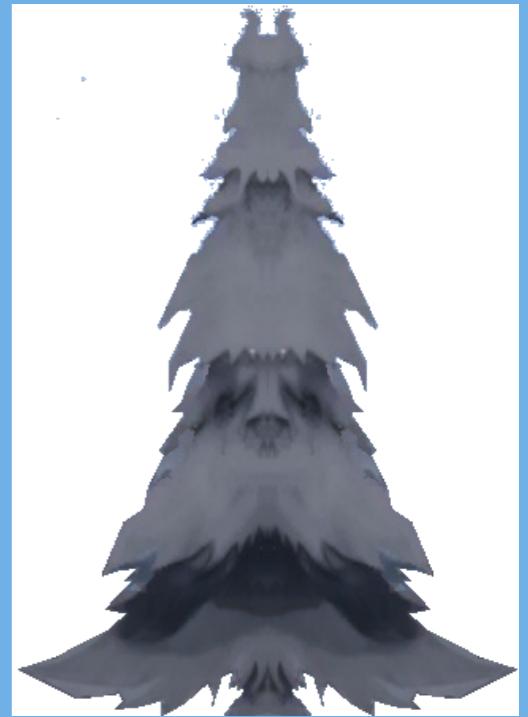




```
void Tree::drawTree(GLfloat x, GLfloat y, GLfloat z){  
    // This function draws a tree with texture.  
    glColor3f(1, 1, 1);  
  
    glPushMatrix();  
    glTranslatef(x, y, z);  
    for(int i=0;i<360;i+=360/10){ // 10 is the best angle  
        glPushMatrix();  
        glRotatef(i, 0, 1, 0);  
        drawRec(4, 16);  
        glPopMatrix();  
    }  
    glPopMatrix();  
  
    glColor3f(1, 1, 1);  
}
```



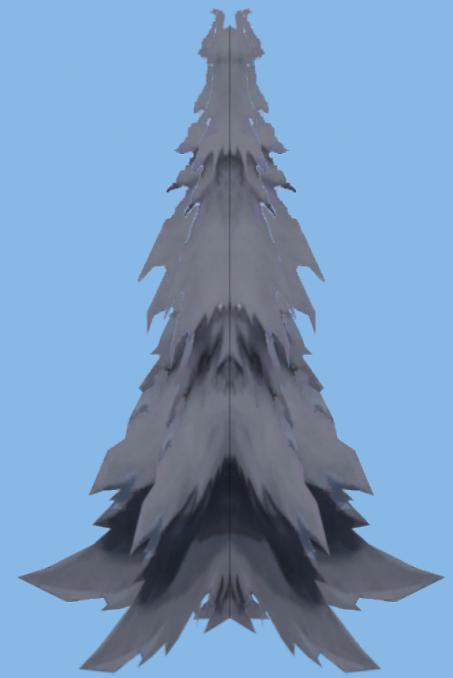
**glColor3f(1, 1, 1);**





**glColor3f(1, 1, 1);**





**glColor3f(1, 1, 1);**



# At least it's a green tree!

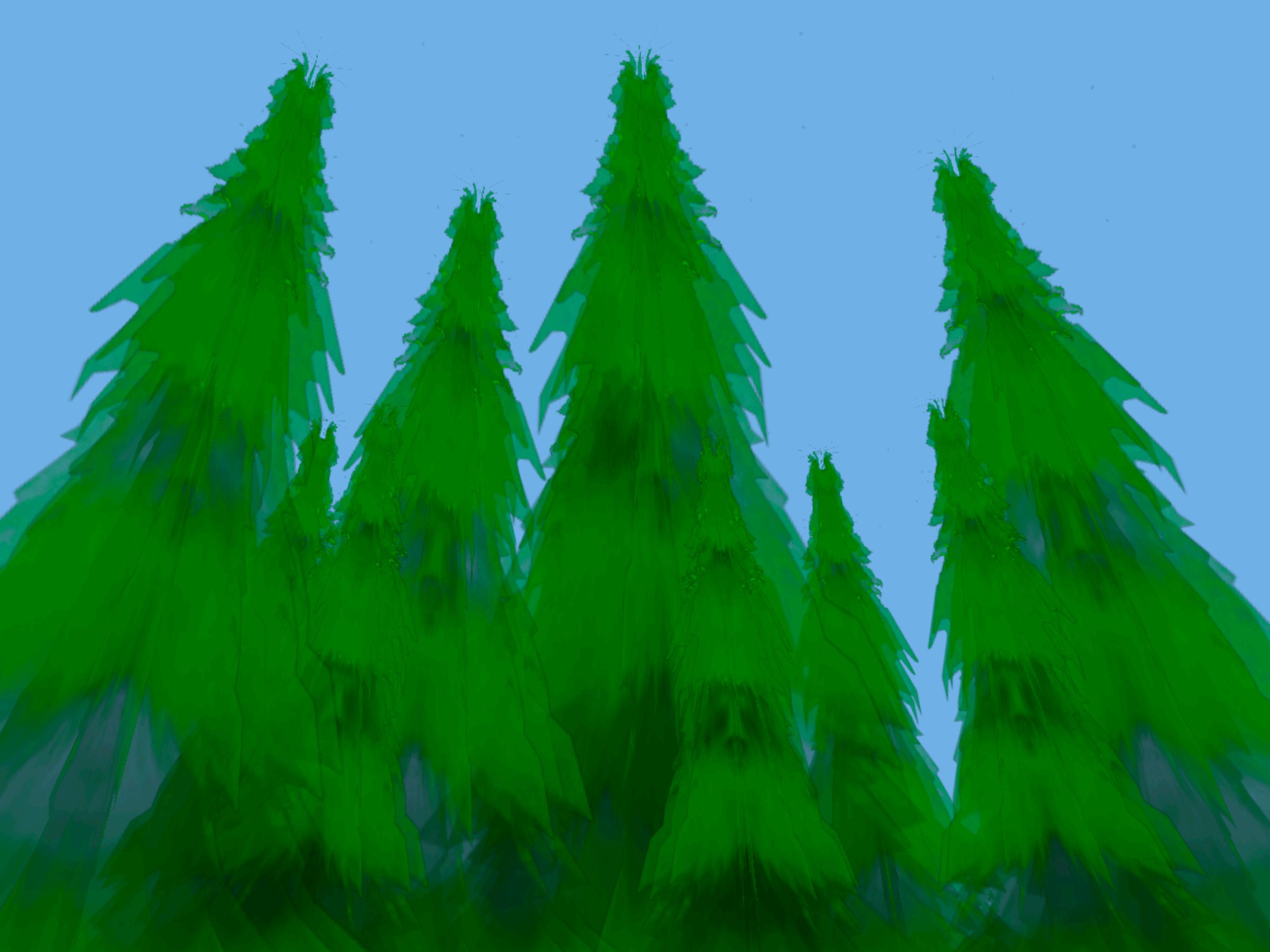
```
glColor3f(0, 1, 0);
```



# At least it's a green tree!

```
glColor3f(0, 1, 0);
```









```
void Grass::Display(void){  
  
    glColor3f(0, 1, 0);  
    glPushMatrix();  
    glTranslatef(0, 0, 0);  
    glRotatef/animateRotation,0,1,0);  
  
    glDisable(GL_DEPTH_TEST);  
  
    for(int x=0;x<15;x++){  
        for(int z=0;z<10;z++){  
            // Grass  
            glPushMatrix();  
            glTranslatef(x, 0, z);  
            glRotatef/0.4*sin((animateTime-2*z+3*x)*(2-x))+1*sin(animateTime*3), 0, 0, 1);  
            glRotatef/3*sin((animateTime+2*z-3*x)*(5+z))+2*sin(animateTime*13), 1, 0, 0);  
            for(int i=0;i<360;i+=360/6){  
                glPushMatrix();  
                glRotatef(i, 0, 1, 0);  
                drawRec/0.8, 2);  
                glPopMatrix();  
            }  
            glPopMatrix();  
        }  
  
        glEnable(GL_DEPTH_TEST);  
        glPopMatrix();  
    }  
}
```

$$0.4\sin((animateTime - 2z + 3x) \times (2 - x)) + \sin(3animateTime)$$

$$3\sin((animateTime + 2z - 3x) \times (5 + z)) + 2\sin(13animateTime)$$

