

リスト 7.5

「slFractal3D.cpp」の「makeTexImage3D()」ルーチン

```
void makeTexImage3D(int texPattern)
{
    int i, j, k;
    GLubyte image[TEX_WIDTH * TEX_HEIGHT][3];
    CFractal fractal;
    fractal.widthX = TEX_WIDTH / 2;
    fractal.widthY = TEX_HEIGHT / 2;

    for (k = 0; k < TEX_DEPTH; k++)
    {
        if(texPattern == MANDEL1)
        {
            fractal.numRepeat = 30;
            fractal.posX = -0.1;
            fractal.posY = 0.9;
            fractal.scale = 0.02;
            fractal.initX = 0.0;
            fractal.initY = 0.002*(double)k;
            fractal.mandel(image);
        }
        else if(texPattern == MANDEL2)
        {
            fractal.numRepeat = 100;
            fractal.posX = -1.214;
            fractal.posY = -0.328;
            fractal.scale = 0.1 + 0.0001*(double)k;
            fractal.initX = 0.0;
            fractal.initY = 0.0;
            fractal.mandel(image);
        }
        //中略
        for (j = 0; j < TEX_HEIGHT; j++)
        {
            for (i = 0; i < TEX_WIDTH; i++)
            {
                texImage[k][j][i][0] = image[j*TEX_WIDTH+i][0];
                texImage[k][j][i][1] = image[j*TEX_WIDTH+i][1];
                texImage[k][j][i][2] = image[j*TEX_WIDTH+i][2];
            }
        }
    }
}
```