

リスト 7.4	3DTexture.frag
<pre> varying vec3 P; varying vec3 N; uniform sampler3D smpl3D; void main(void) { vec3 L = normalize(gl_LightSource[0].position.xyz - P); N = normalize(N); vec4 ambient = gl_FrontLightProduct[0].ambient; float dotNL = dot(N, L); vec4 diffuse = gl_FrontLightProduct[0].diffuse * max(0.0, dotNL); vec3 V = normalize(-P); vec3 H = normalize(L + V); float powNH = pow(max(dot(N, H), 0.0), gl_FrontMaterial.shininess); if(dotNL <= 0.0) powNH = 0.0; vec4 specular = gl_FrontLightProduct[0].specular * powNH; gl_FragColor = (ambient + diffuse) * texture3D(smpl3D, gl_TexCoord[0].stp) + specular; } </pre>	