







```
perlin/simplex(Vec2(...))
```

2D Noise

Each (x,y) value is similar to surrounding

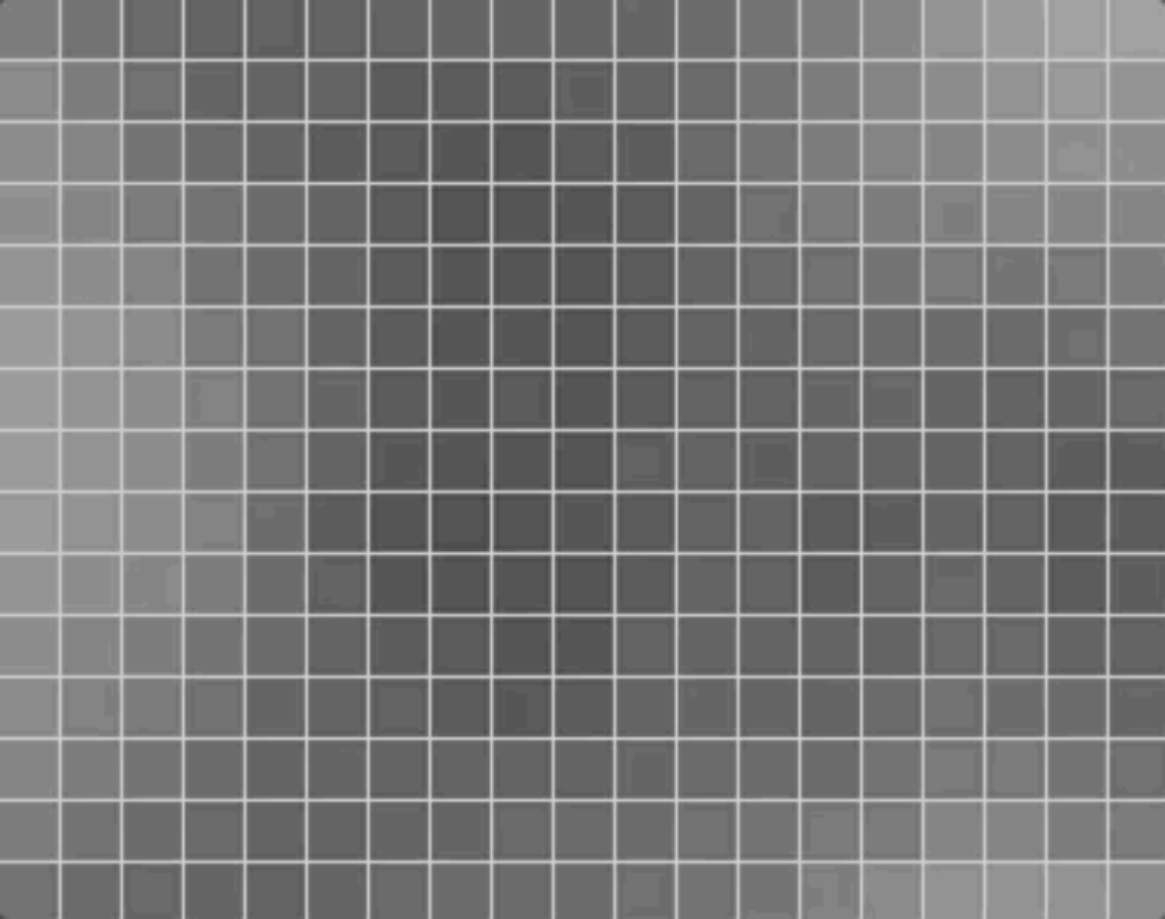
```
perlin/simplex(Vec3(...))
```

```
perlin/simplex(Vec4(...))
```

3D+ Noise

2D noise “slices” + 3rd/4th dimension of time!

glm + noise

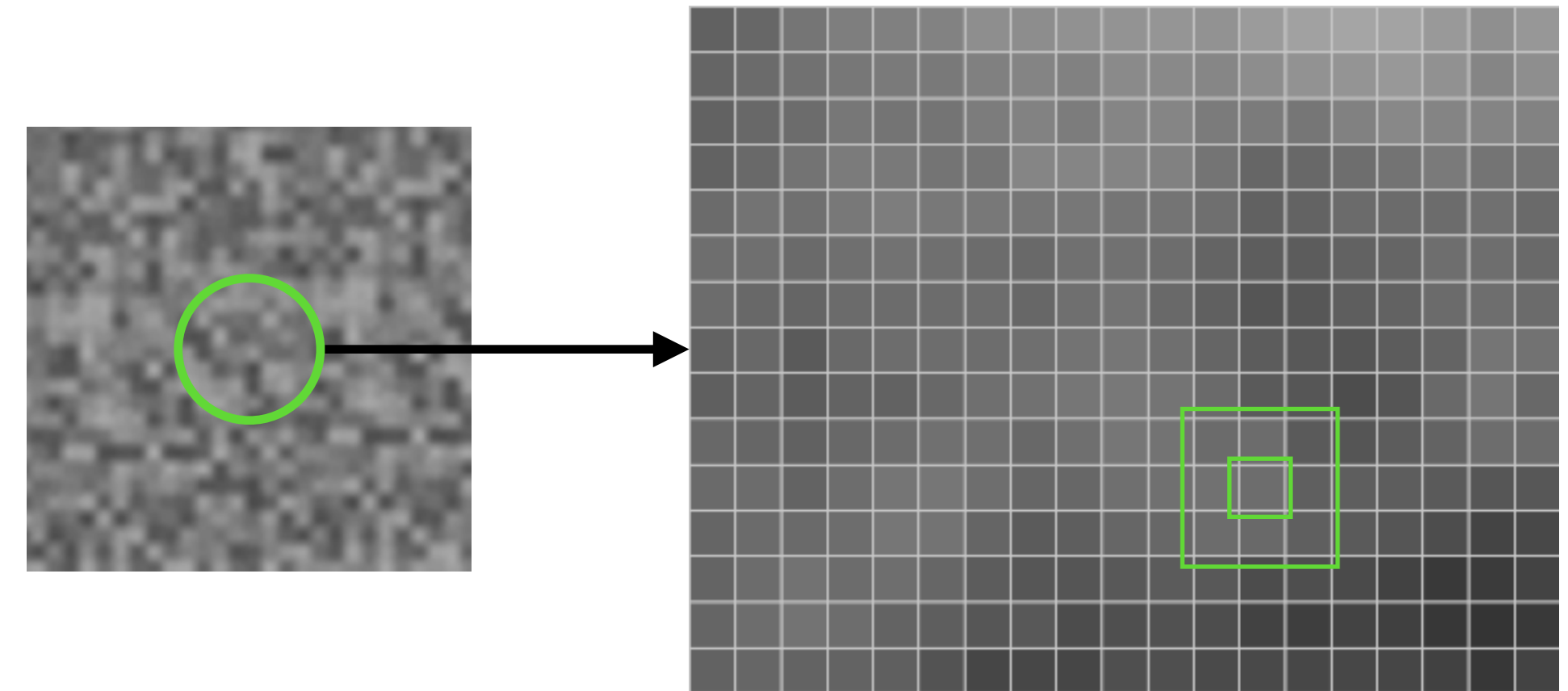


# glm + noise

```
perlin/simplex(Vec2(...))
```

2D Noise

Each (x,y) value is similar to surrounding

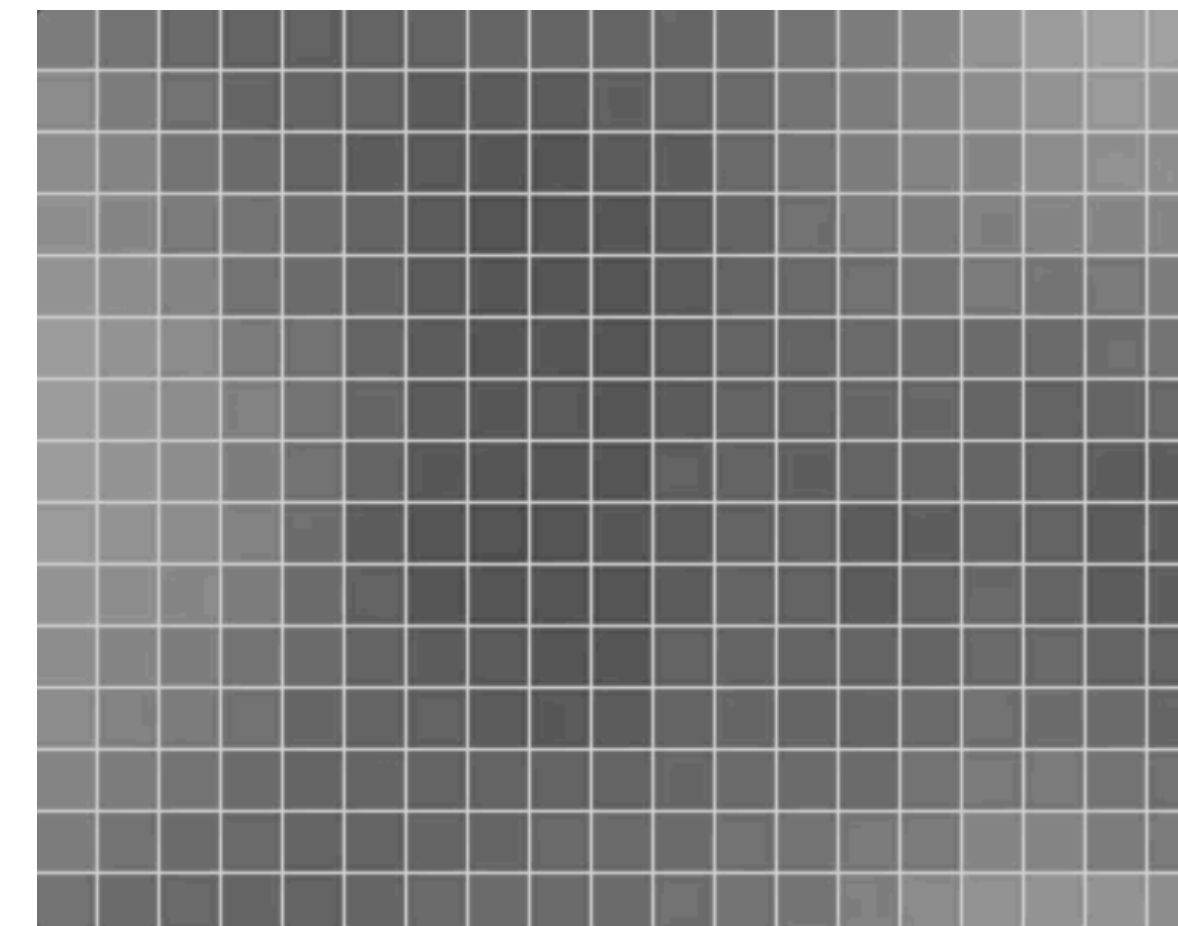


```
perlin/simplex(Vec3(...))
```

```
perlin/simplex(Vec4(...))
```

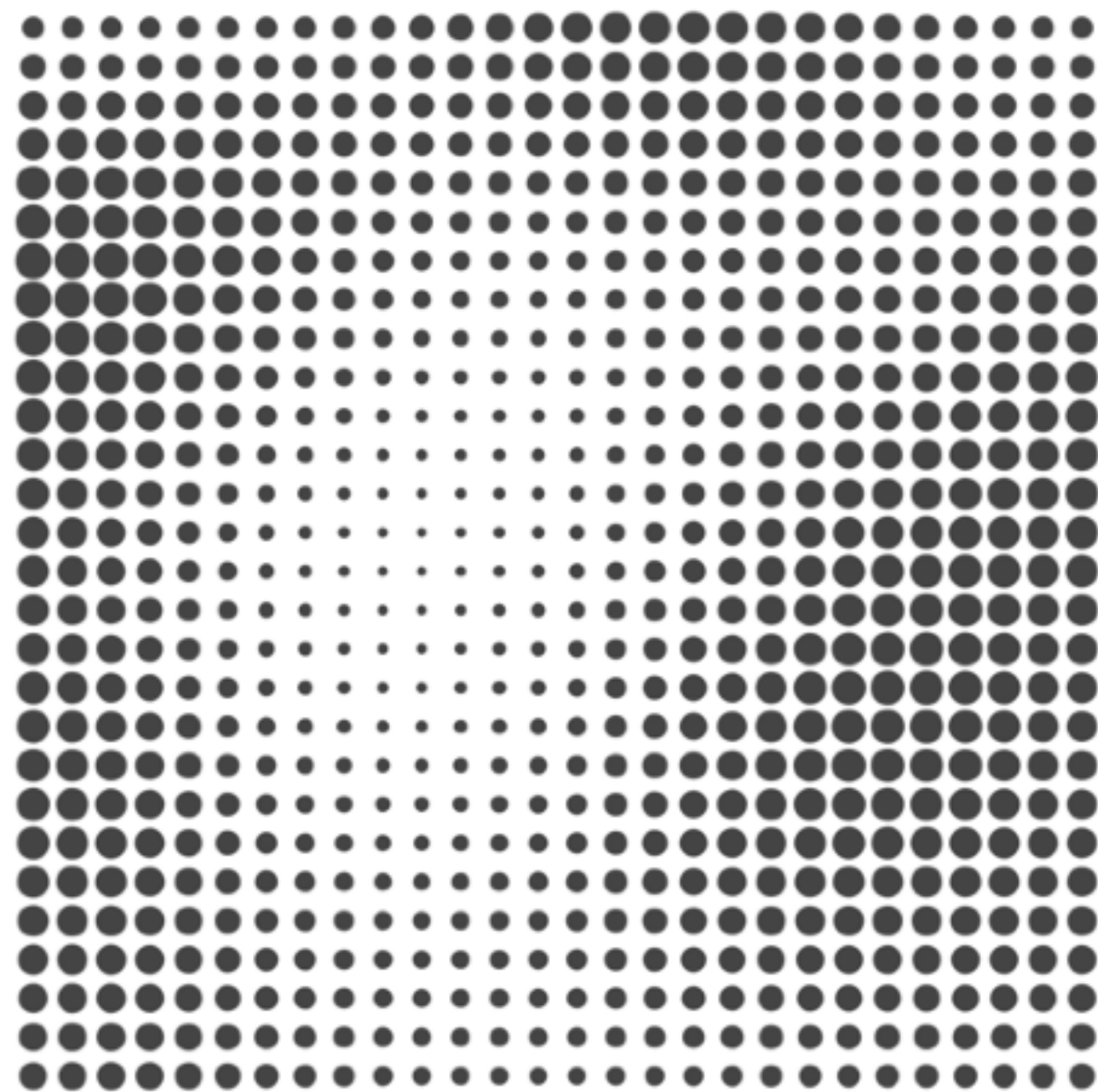
3D+ Noise

2D noise “slices” + 3rd/4th dimension of time!



# Noisy Grids

- output range of noise =  $[-1, 1]$
- changing radius with noise



```
val noise2d = glm.simplex(  
    Vec2(u, v)  
)
```

```
drawCircle(  
    radius = map(  
        noise2d,  
        -1f, 1f,  
        3f, 17f  
    ),  
    ...  
)
```