Dynamic Shape 2.0
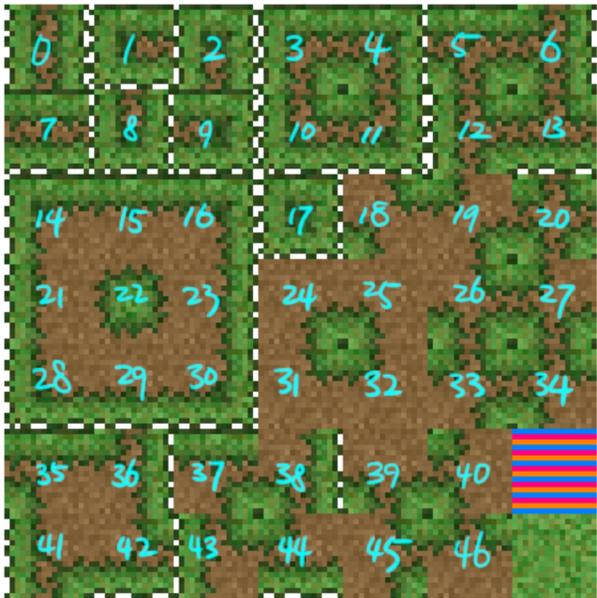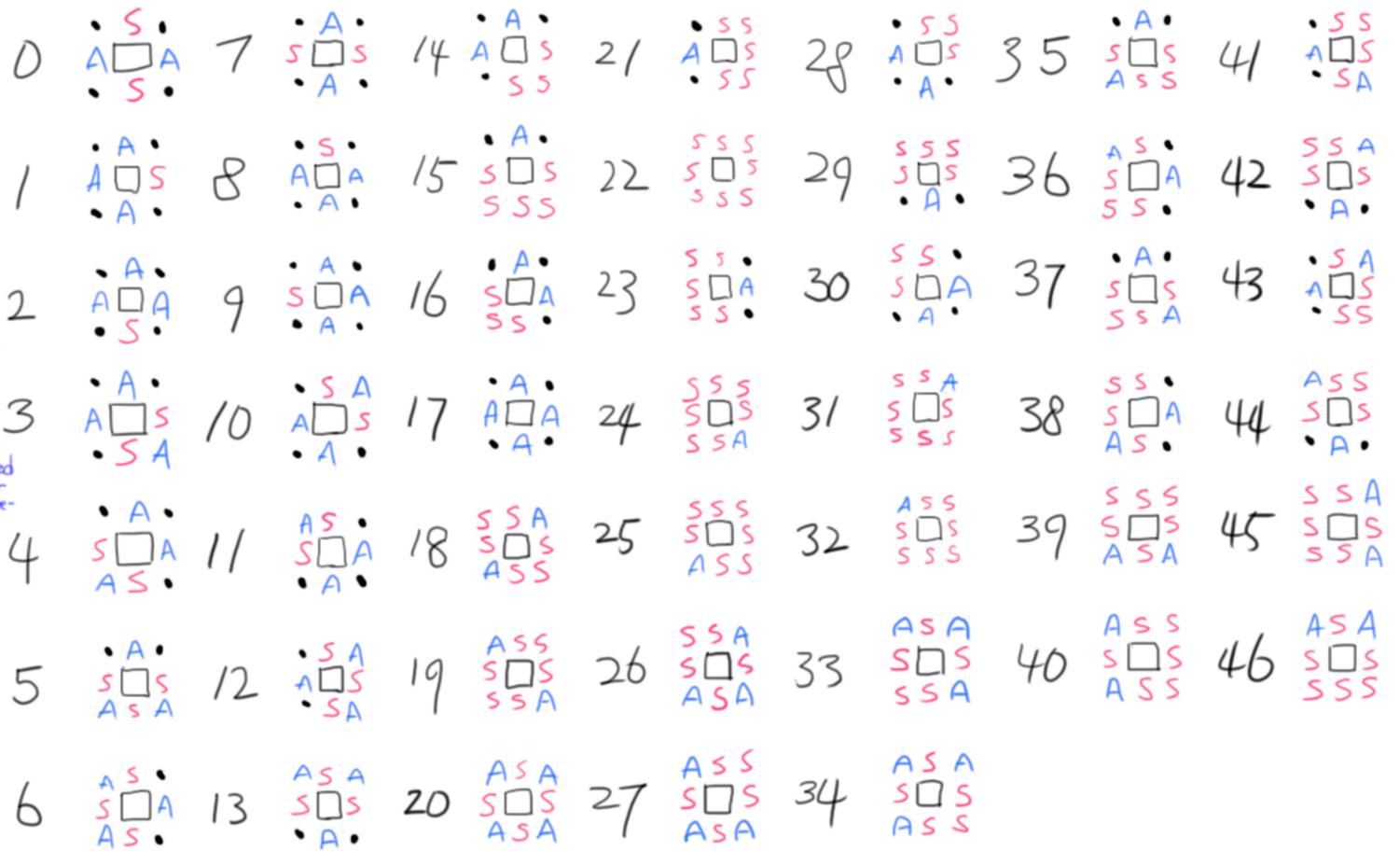
2019-02-26

Bits: 32 64 128
16 □ 1
8 4 2

A: Air (0)
S: Block (1)
· : Don't care (0 and 1)

Connect when...

RENDER TAGS
0
:
15 Untreated tile for future reference

M S ··· L S
B   B

Render Tags

0 : Connection type
  0 - Connect Mutual
  1 - Connect Self ⎤ Not covered
  2 - Wall Sticker ⎦ in this doc
  3 - Wall Sticker Connect Self

1 : Mask type
  0 - Don't use (no variation)
  1 - 16 tiles (former one)
  2 - 47 tiles (this doc)
  3 - Torch-behaviour
  4 - Platform-behaviour

NOTE:
Dimension of the image also determines the tag:
16×16 for (1,0), 64×16 for (2,3), 128×16 for (3,4).

```
val lut =
(17,1,17,1,2,3,2,14,17,1,17,1,2,3,2,14,9,7,9,7,4,5,4,35,9,7,9,7,16,37,16,15,17,1,17,1,2,3,2,14,17,1,17,1,2,3,2,14,9,7,9,7,4,5,4,35,9,7,9,7,16,37,16,15,8,10,8,10,0,12,0,43,8,10,8,10,0,12,0,43,11,13,11,13,6,20,6,34,11,13,11,13,36,33,36,46,8,10,8,10,0,12,0,43,8,10,8,10,0,12,0,43,30,42,30,42,38,26,38,18,30,42,30,42,23,45,23,31,17,1,17,1,2,3,2,14,17,1,17,1,2,3,2,14,9,7,9,7,4,5,4,35,9,7,9,7,16,37,16,15,17,1,17,1,2,3,2,14,17,1,17,1,2,3,2,14,9,7,9,7,4,5,4,35,9,7,9,7,16,37,16,15,8,10,8,28,8,28,0,41,0,21,8,10,8,28,8,28,0,41,0,21,11,44,11,44,6,27,6,40,11,44,11,44,36,19,36,32,8,28,8,28,0,41,0,21,8,28,8,28,0,41,0,21,30,29,30,29,38,39,38,25,30,29,30,29,23,24,23,22)
```

Implementation

Nearby tile info
(Int 0-255)
↓
lut[ ]
↓
Choose tile from Atlas where:
tileID × 47 + lut[ ]
↓
OpenGL →

112
112
18.tga
→
4096
4096
atlas pixmap
←
224
224
atlas summer | atlas autumn
atlas spring | atlas winter

→ To Texture → Renderer

↓
BlockID-to-AtlasID map
Contains:
- Tile position in Atlas (AtlasID)
- Mask type (how many tiles available)
- Connection type

OPTIONAL
Cache to Savegame as TARGA-Gzip