

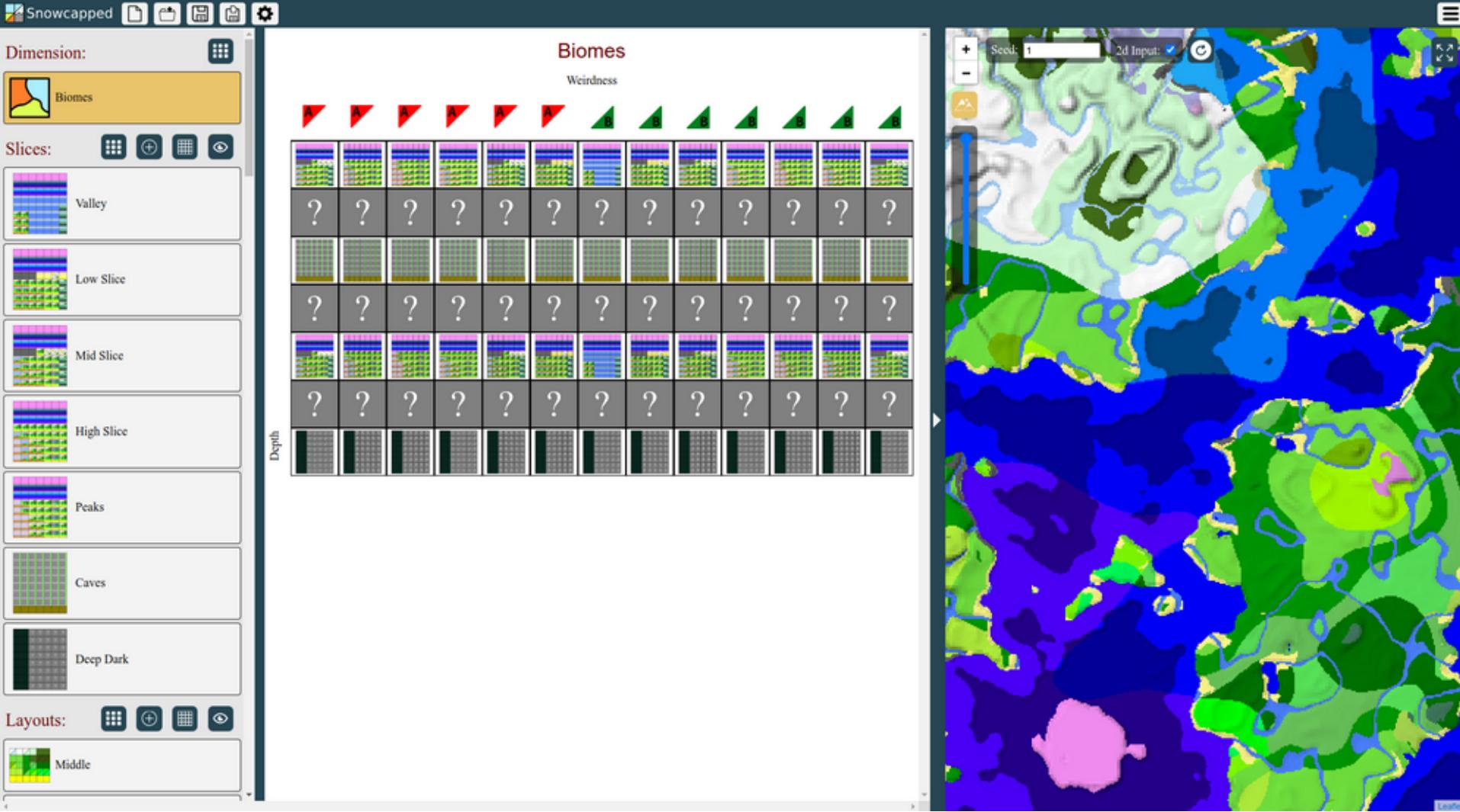
# Introduction to Snowcapped

An editor for multi-noise **biome sources**



by jacobsjo

<https://snowcapped.jacobsjo.eu>



# Outline

- 1 Recap on Terrain Generation
- 2 Creating a Biome-Layout Step-by-Step

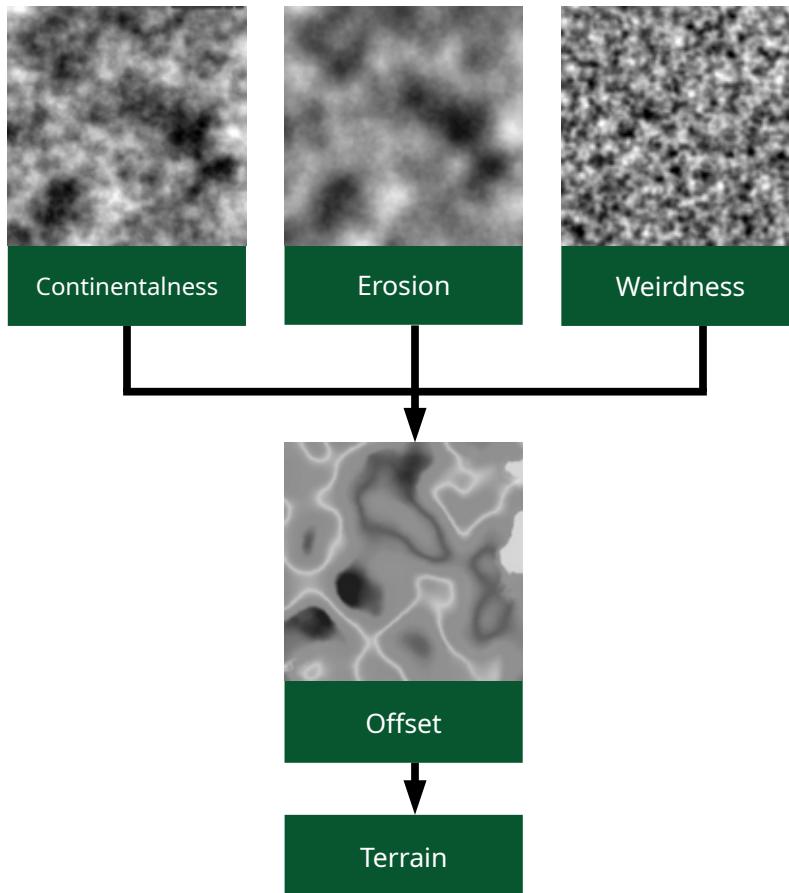
# Recap on Terrain Generation

Let's take a look at some vanilla terrain

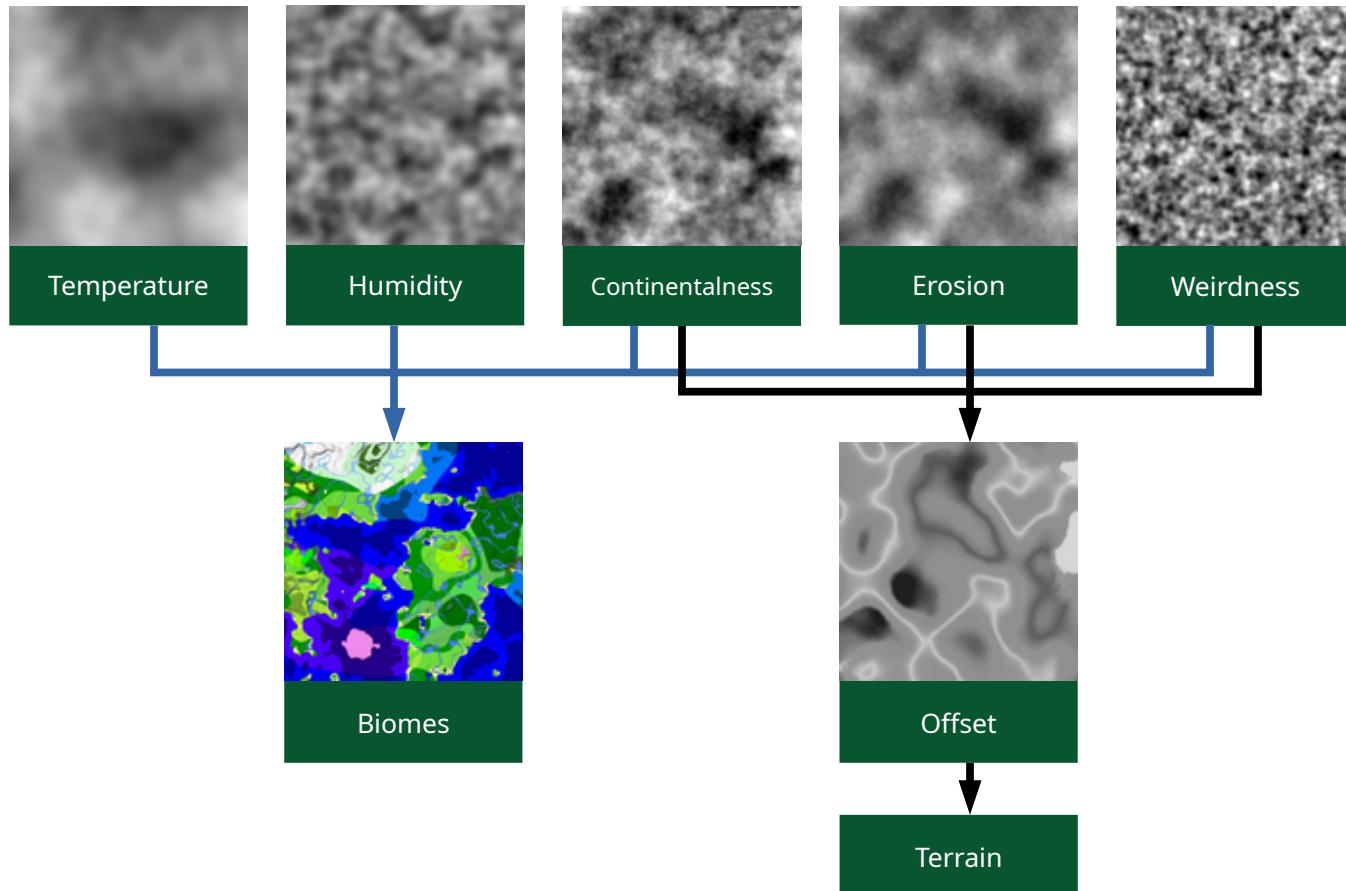




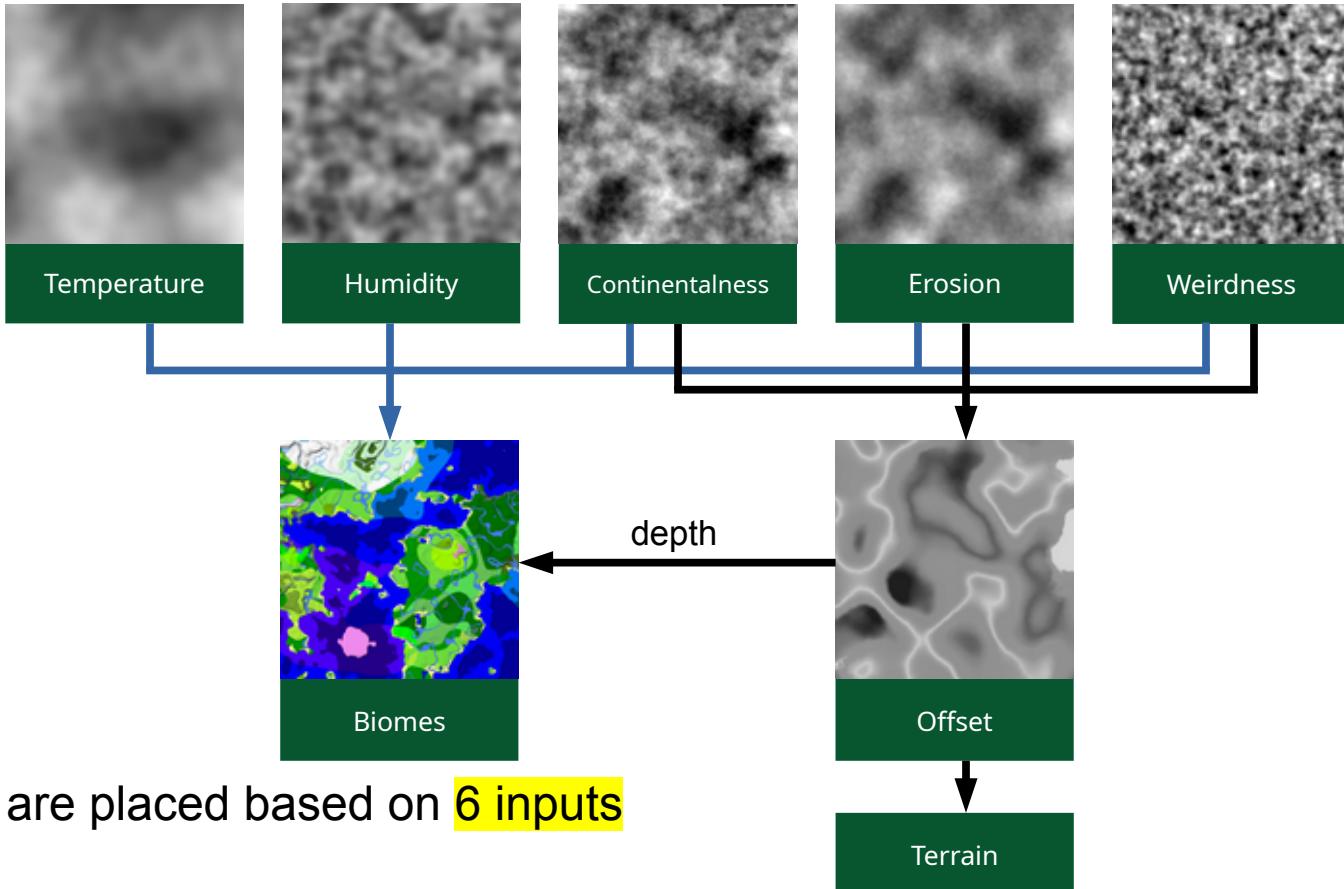
# How is terrain generated? (in vanilla)



# How is terrain generated?

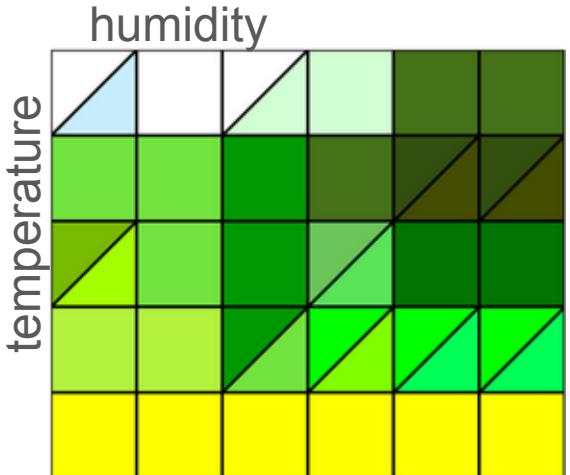


# How is terrain generated?

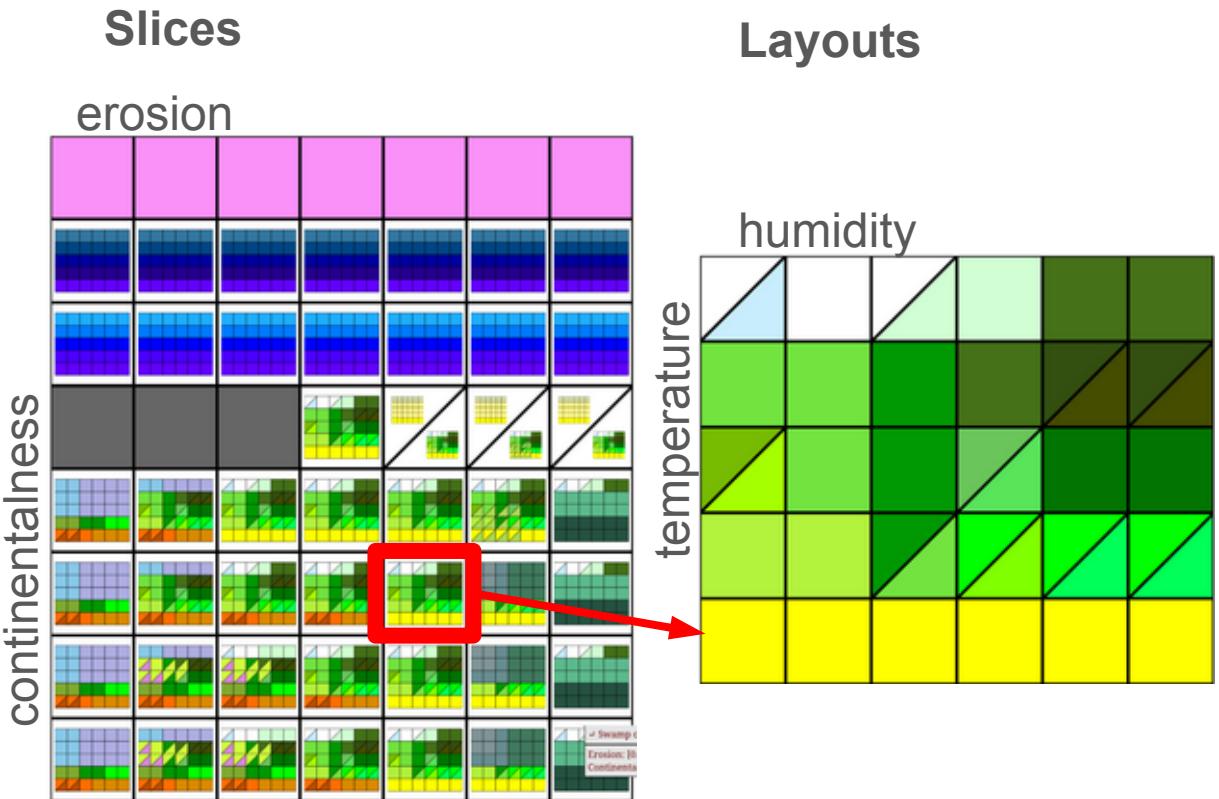


# How to handle the 6d space

Layouts



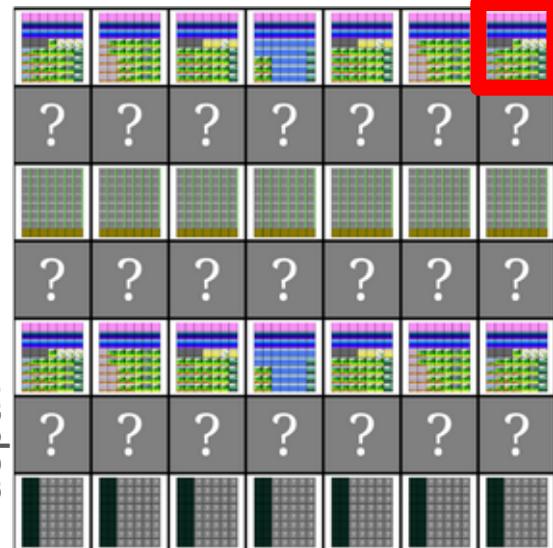
# How to handle the 6d space



# How to handle the 6d space

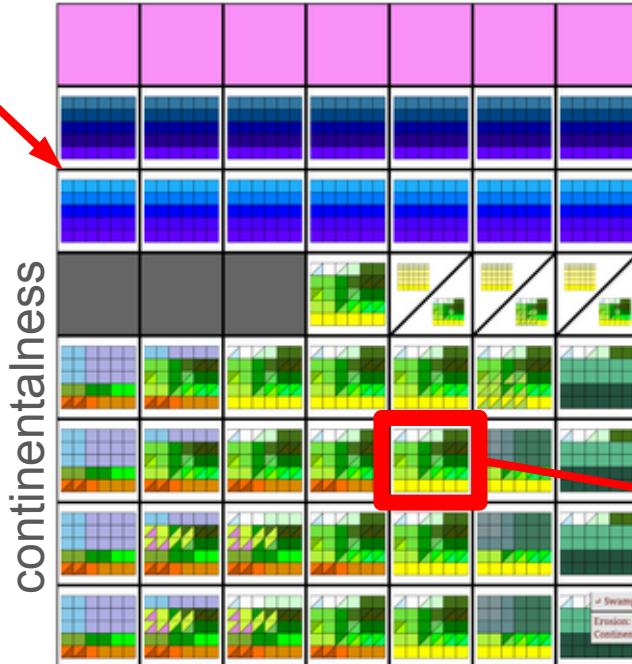
“Biomes”

weirdness



Slices

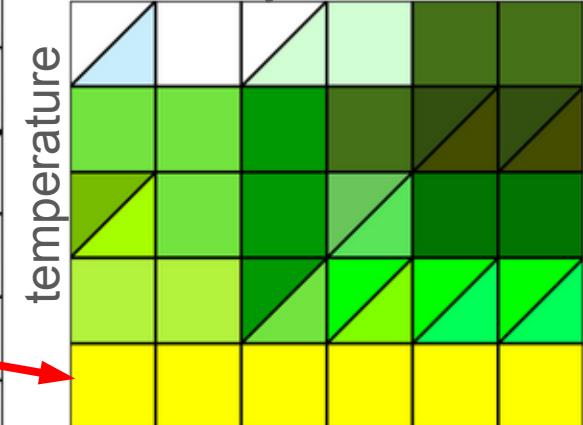
erosion



continentalness

Layouts

humidity



temperature

Swamp  
Erosion: 8  
Continents

# Painting terrain with biomes

Using a simplified terrain, we will now define a biome layout to match - Step-by-Step



You can download intro\_to\_snowcapped\_dp.zip from:

<https://github.com/jacobsjo/datapack-examples/tree/main/intro-to-snowcapped>

Snowcapped

Dimension: Biomes

Empty

Vanilla Overworld (1.19)

Vanilla Overworld (1.20+)

Vanilla Overworld (1.21.2 Winter Drop)

Slices:

- Valley
- Low Slice
- Mid Slice
- High Slice
- Peaks
- Caves
- Deep Dark

Layouts:

Middle

Biomes

Weirdness

A A A A B B B B B B

Depth

The interface shows a grid of 10 columns and 6 rows for biome generation. The first column contains icons for various dimensions. Columns 2 through 10 contain icons for different biome types. Row 1 has icons labeled 'A' (red) and 'B' (green). Rows 2 through 6 have question marks ('?') in all columns. Below the grid, there's a vertical 'Depth' bar with 10 segments. On the right side, there's a map preview showing terrain with various colors representing different biomes.



Target datapack version: 48

Dimension Name: minecraft:overworld

Noise Settings: minecraft:overworld

Dimension Type: minecraft:overworld

Enable Splines-Editor:

Export biome Colors:

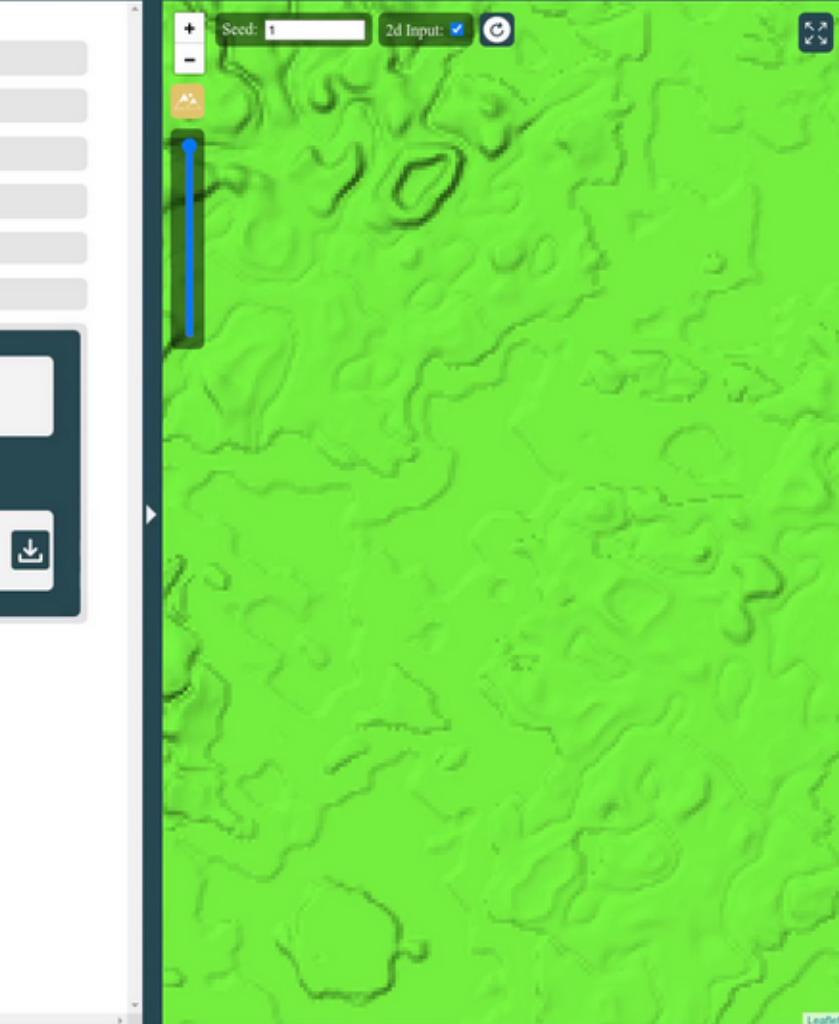
## Datapacks:



vanilla\_datapack\_1\_19.zip  
The default data for Minecraft



minecraft\_overworld.zip  
The data modified using Snowcapped





Target datapack version: 48

Dimension Name: minecraft:overworld

Noise Settings: minecraft:overworld

Dimension Type: minecraft:overworld

Enable Splines-Editor:

Export biome Colors:

## Datapacks:

- vanilla\_datapack\_1\_19.zip  
The default data for Minecraft
- into\_to\_snowcapped\_dp  
Smithed Summit - Intro to Snowcapped Example Datapack
- minecraft\_overworld.zip  
The data modified using Snowcapped



Dimension:

Biomes

Slices:

Layouts:

Biomes:

pia

minecraft:plains

Unused Vanilla Biomes

minecraft:snowy\_plains

minecraft:sunflower\_plains

minecraft:savanna\_plateau

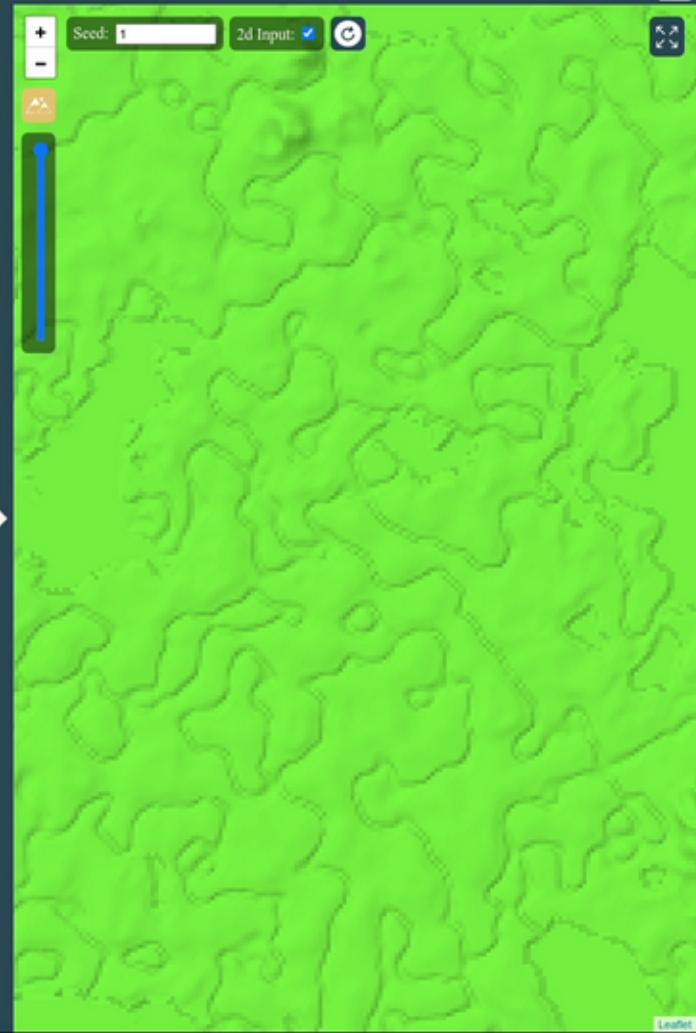
Biomes

Weirdness

A

Depth

minecraft:plains  
Weirdness: [-1.000, 1.000]  
Depth: [-1.000, 1.000]



Dimension:

Slices:

Layouts:

Biomes:

Search...

minecraft:plains

minecraft:desert

Unused Vanilla Biomes

minecraft:mushroom\_fields

minecraft:deep\_frozen\_ocean

minecraft:deep\_cold\_ocean

minecraft:deep\_ocean

minecraft:deep\_lukewarm\_ocean

minecraft:frozen\_ocean

minecraft:cold\_ocean

minecraft:ocean

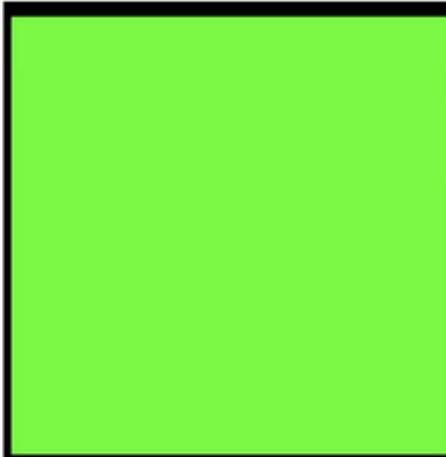
minecraft:warm\_ocean

minecraft:lukewarm\_ocean

minecraft:frozen\_river

## Biomes

Weirdness





Dimension:

Biomes

Slices:

Layouts:

Middle

Humidity

Biomes:

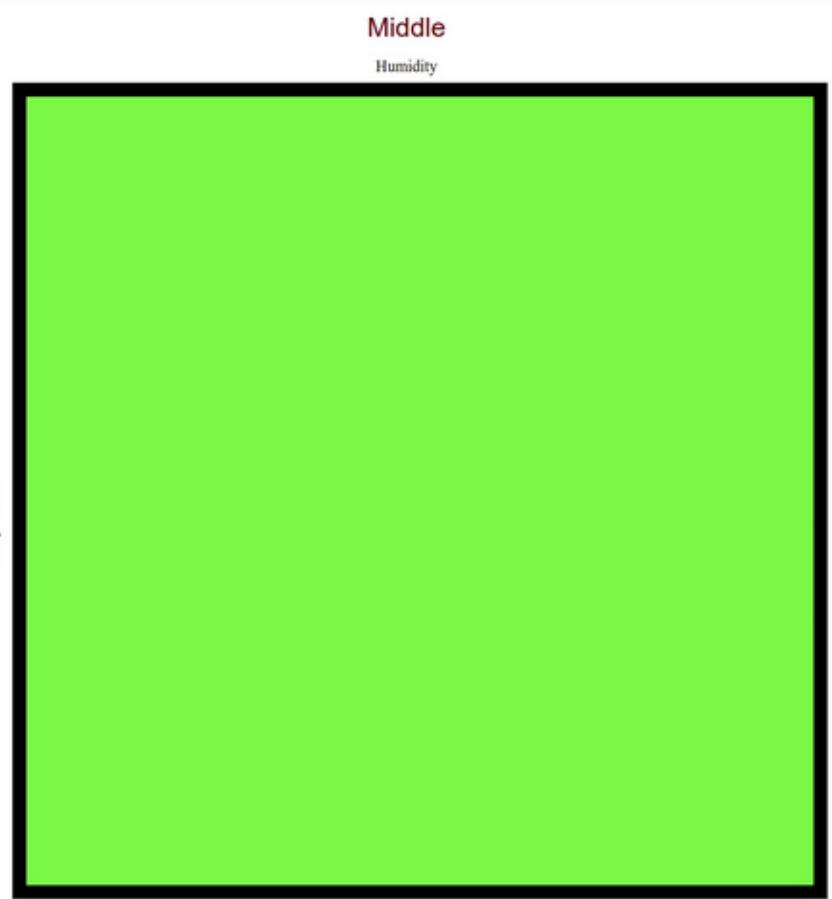
Search...

minecraft:plains

minecraft:desert

Unused Vanilla Biomes

- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean
- minecraft:deep\_cold\_ocean
- minecraft:deep\_ocean
- minecraft:deep\_lukewarm\_ocean
- minecraft:frozen\_ocean
- minecraft:cold\_ocean
- minecraft:ocean
- minecraft:warm\_ocean
- minecraft:lukewarm\_ocean



Dimension:



Biomes

Slices:



Layouts:



Middle

Biomes:



Search...



minecraft:plains

minecraft:desert

Unused Vanilla Biomes



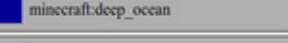
minecraft:mushroom\_fields



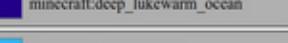
minecraft:deep\_frozen\_ocean



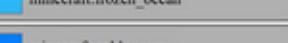
minecraft:deep\_cold\_ocean



minecraft:deep\_ocean



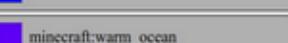
minecraft:deep\_lukewarm\_ocean



minecraft:frozen\_ocean



minecraft:cold\_ocean



minecraft:ocean



minecraft:warm\_ocean



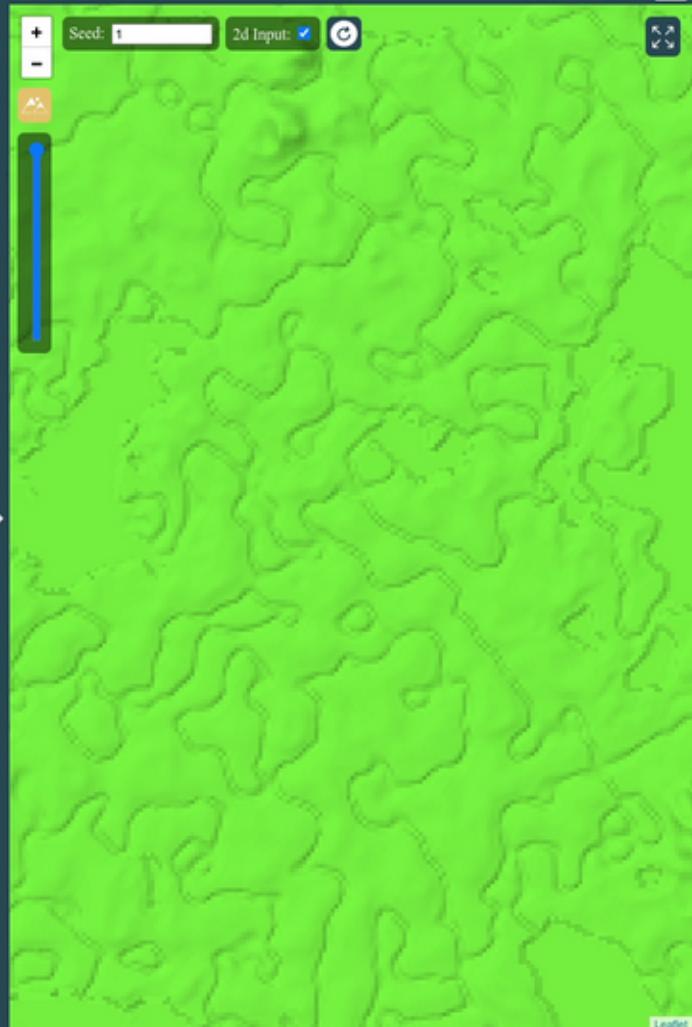
minecraft:lukewarm\_ocean

## Layout Grid

Humidity



Temperature





Dimension:

Biomes

Slices:

Layouts:

Middle

Biomes:

Search...

- minecraft:plains
- minecraft:desert

Unused Vanilla Biomes

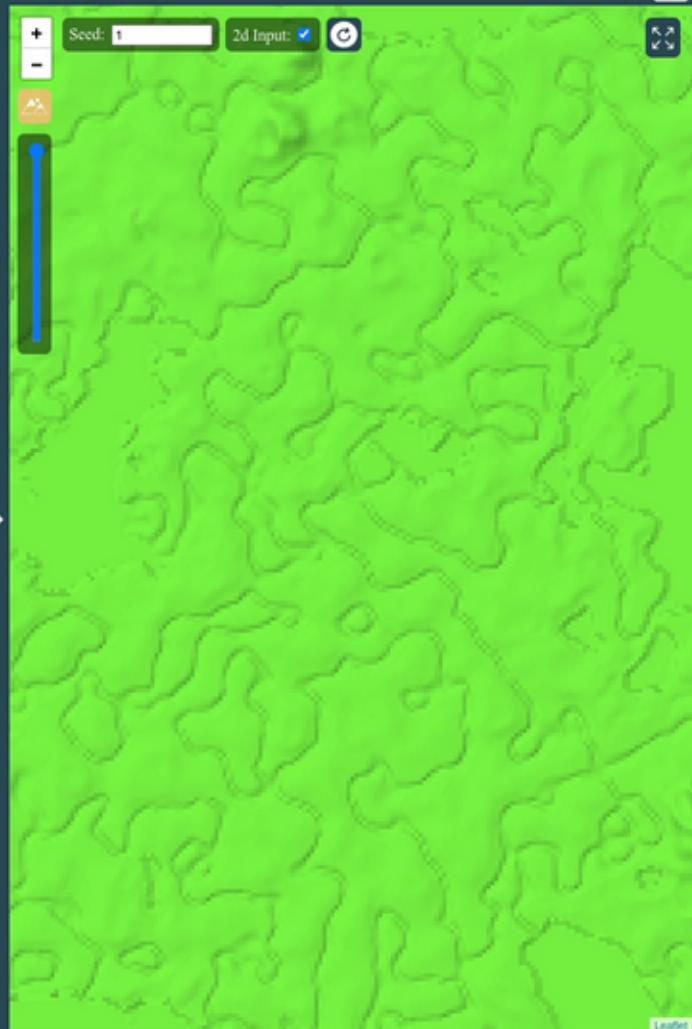
- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean
- minecraft:deep\_cold\_ocean
- minecraft:deep\_ocean
- minecraft:deep\_lukewarm\_ocean
- minecraft:frozen\_ocean
- minecraft:cold\_ocean
- minecraft:ocean
- minecraft:warm\_ocean
- minecraft:lukewarm\_ocean

## Layout Grid

Humidity



Temperature



Dimension:

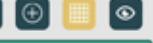


Biomes

Slices:



Layouts:

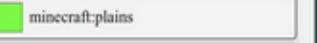


Middle

Biomes:



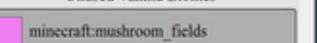
Search...



minecraft:plains

minecraft:desert

Unused Vanilla Biomes



minecraft:mushroom\_fields



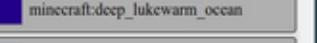
minecraft:deep\_frozen\_ocean



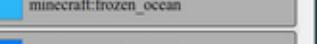
minecraft:deep\_cold\_ocean



minecraft:deep\_ocean



minecraft:deep\_lukewarm\_ocean



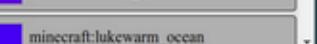
minecraft:frozen\_ocean



minecraft:cold\_ocean



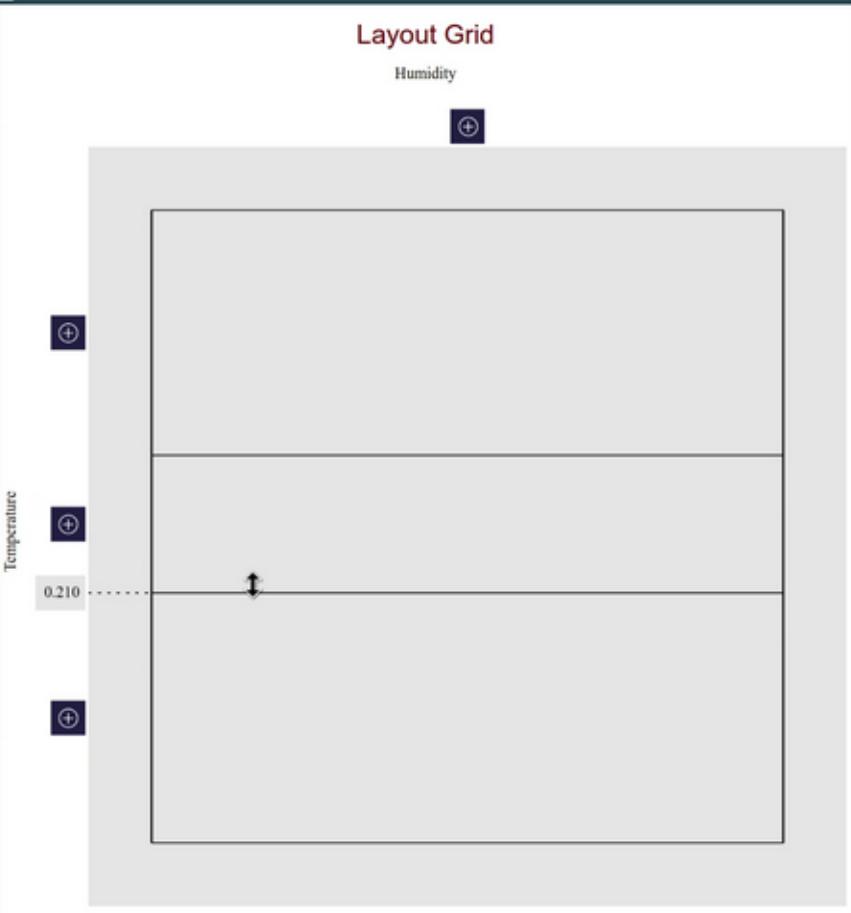
minecraft:ocean

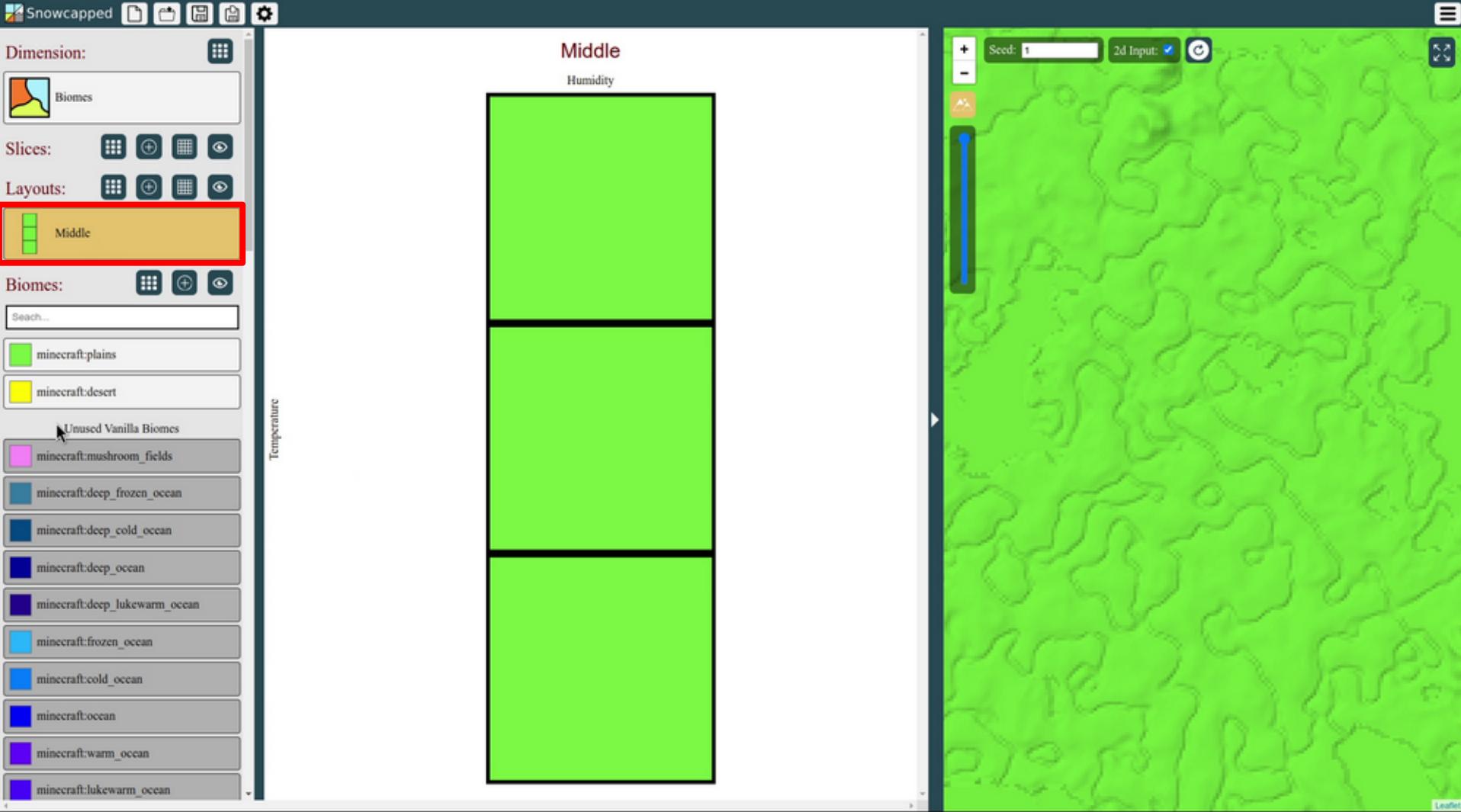


minecraft:warm\_ocean



minecraft:lukewarm\_ocean









Dimension:

Biomes

Slices:

Layouts:

Biomes:

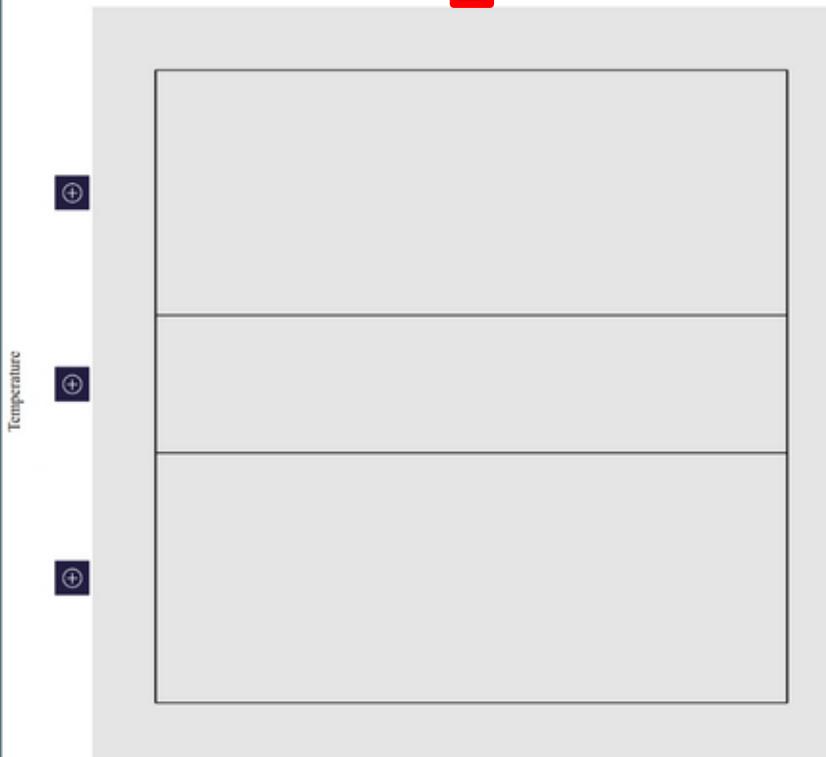
- sno
- minecraft:snowy\_plains

Unused Vanilla Biomes

- minecraft:snowy\_taiga
- minecraft:snowy\_beach
- minecraft:snowy\_slopes

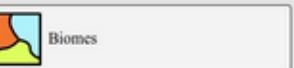
## Layout Grid

Humidity





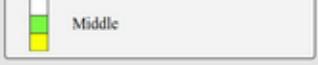
Dimension:



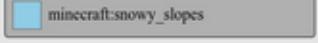
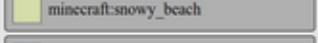
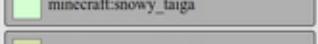
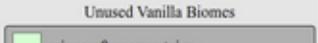
Slices:



Layouts:



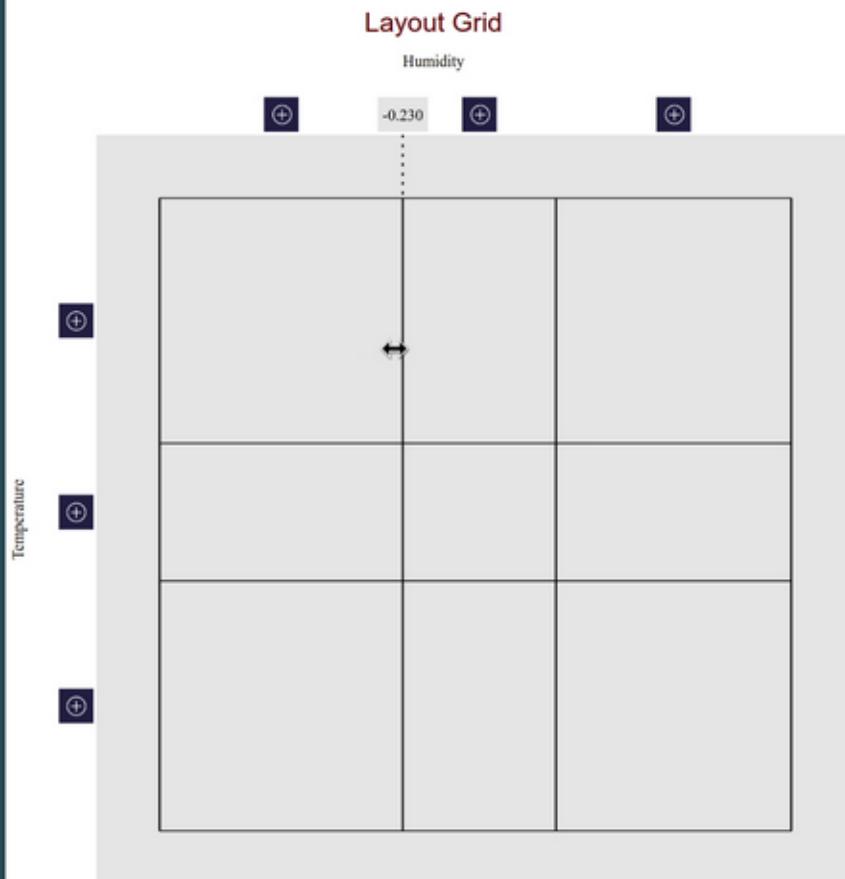
Biomes:



## Layout Grid

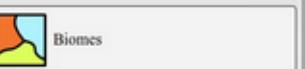
Humidity

-0.230





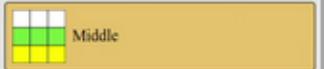
Dimension:



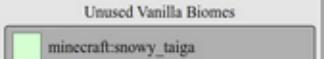
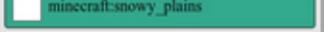
Slices:



Layouts:

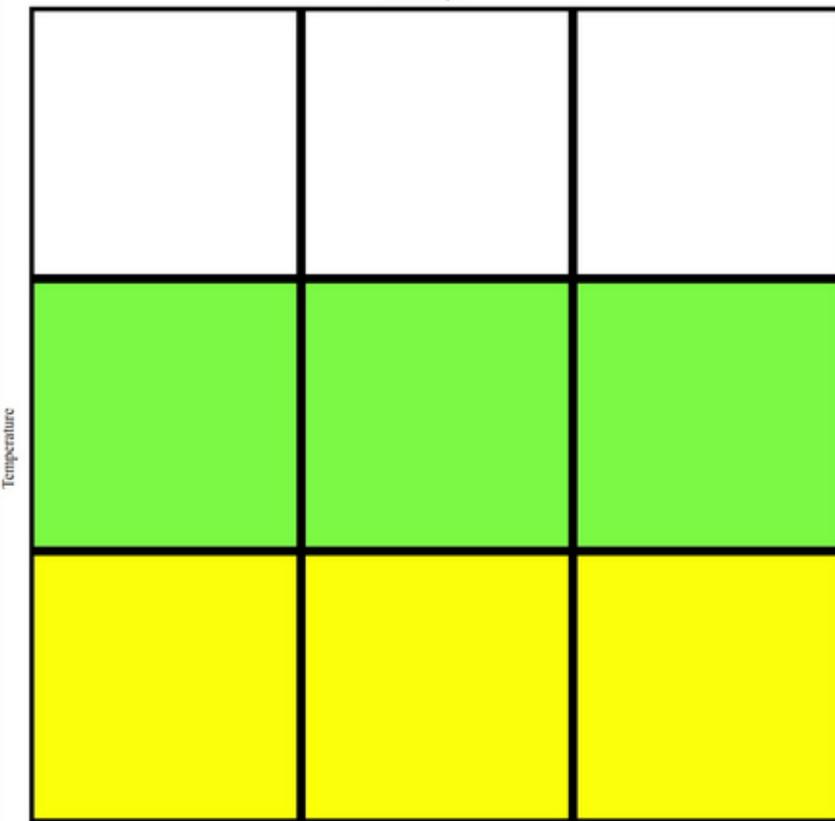


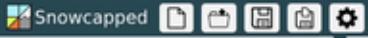
Biomes:



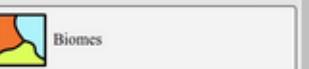
## Middle

Humidity





Dimension:



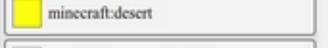
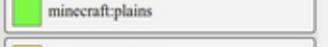
Slices:



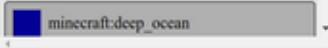
Layouts:



Biomes:

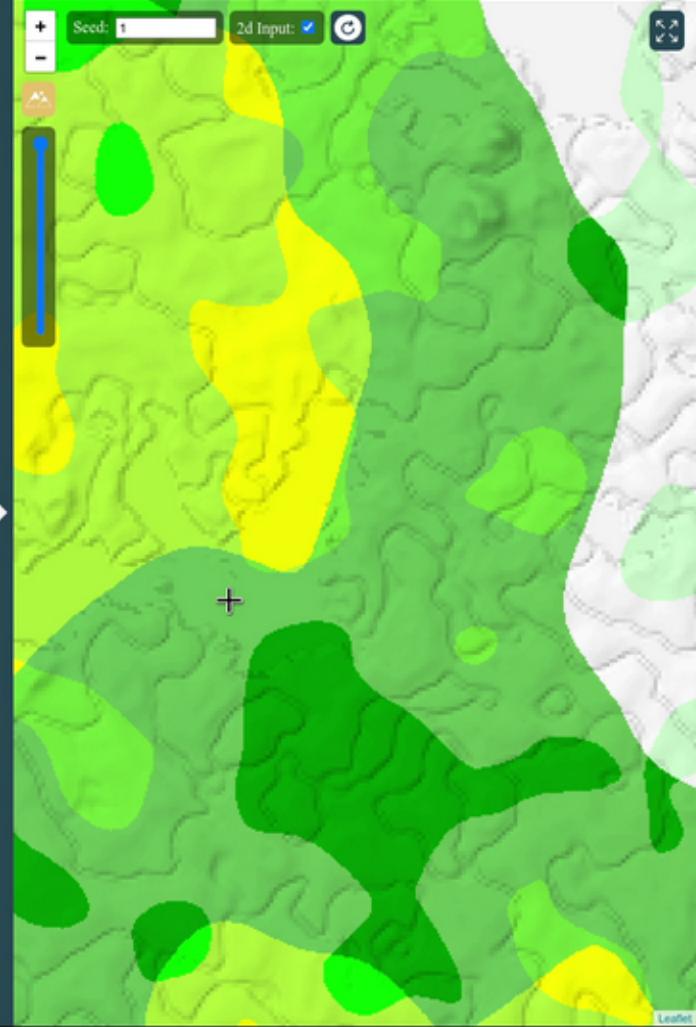
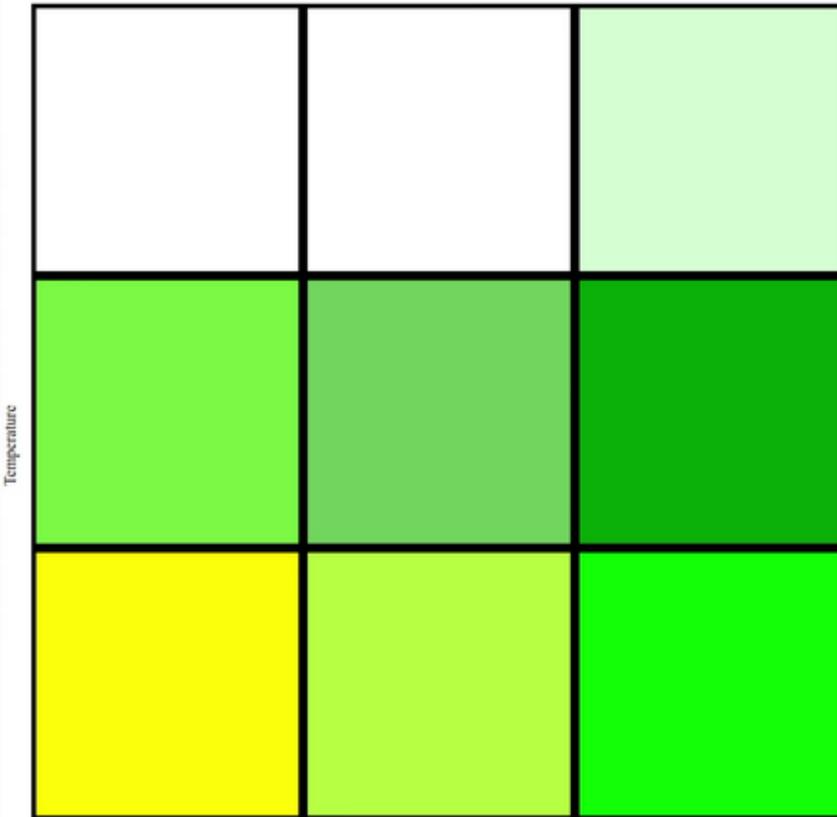


Unused Vanilla Biomes



## Middle

Humidity





Target datapack version 48

Dimension Name: minecraft:overworld

Noise Settings: minecraft:overworld

Dimension Type: minecraft:overworld

Enable Splines-Editor:

Export biome Colors:

Datapacks:



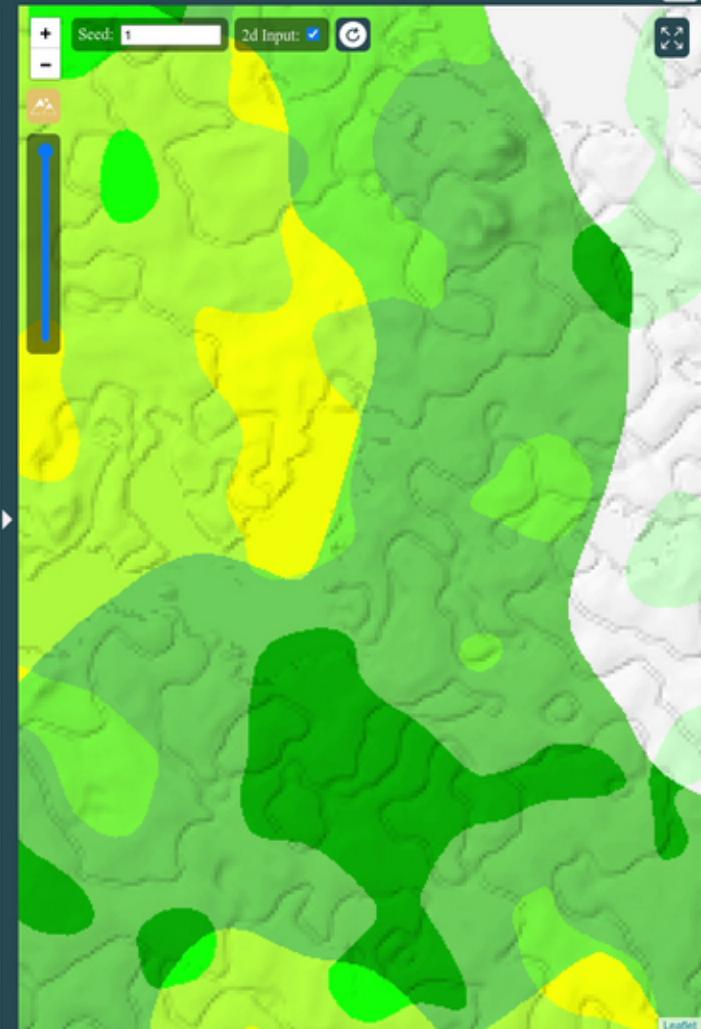
vanilla\_datapack\_1\_19.zip  
The default data for Minecraft



intro\_to\_snowcapped\_dp  
Smithed Summit - Intro to Snowcapped Example Datapack



minecraft\_overworld.zip  
The data modified using Snowcapped







Snowcapped

[Ctrl]+[Left Click] Open Layout [Ctrl]+C Copy Teleport Command

Dimension:

Biomes

Slices:

Layouts:

Middle

Humidity

Temperature

Biomes:

- Search...
- minecraft:plains
- minecraft:desert
- minecraft:snowy\_plains
- minecraft:jungle
- minecraft:savanna
- minecraft:forest
- minecraft:birch\_forest
- minecraft:snowy\_taiga

Unused Vanilla Biomes

- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean
- minecraft:deep\_cold\_ocean
- minecraft:deep\_ocean

Seed: t 2d Input:

X: -1747, Y: 52, Z: -6280  
C: -0.76, E: 0.21, W: 0.02  
T: 0.26, H: 0.09, D: -0.03  
• Middle (Layout)  
minecraft:savanna

This screenshot shows the Snowcapped mod interface. On the left, there's a sidebar with various controls: Dimension selection, Biomes (with a preview icon), Slices, Layouts, and a search bar for biomes. Below these are lists of 'Biomes' and 'Unused Vanilla Biomes' with color-coded preview squares. The main area is titled 'Middle' and contains a 3x3 grid of colored squares representing different biomes: white (top row), green (middle row), and yellow (bottom row). The columns are labeled 'Humidity' and 'Temperature'. To the right is a world map showing terrain features like hills and plains, overlaid with green and yellow regions corresponding to the biome grid. A tooltip provides coordinates and specific values for the highlighted 'Middle' layout. The top of the screen has standard operating system icons and keyboard shortcuts for opening layouts and copying teleport commands.

Dimension:

Biomes

Slices:

Layouts:

Middle

Humidity

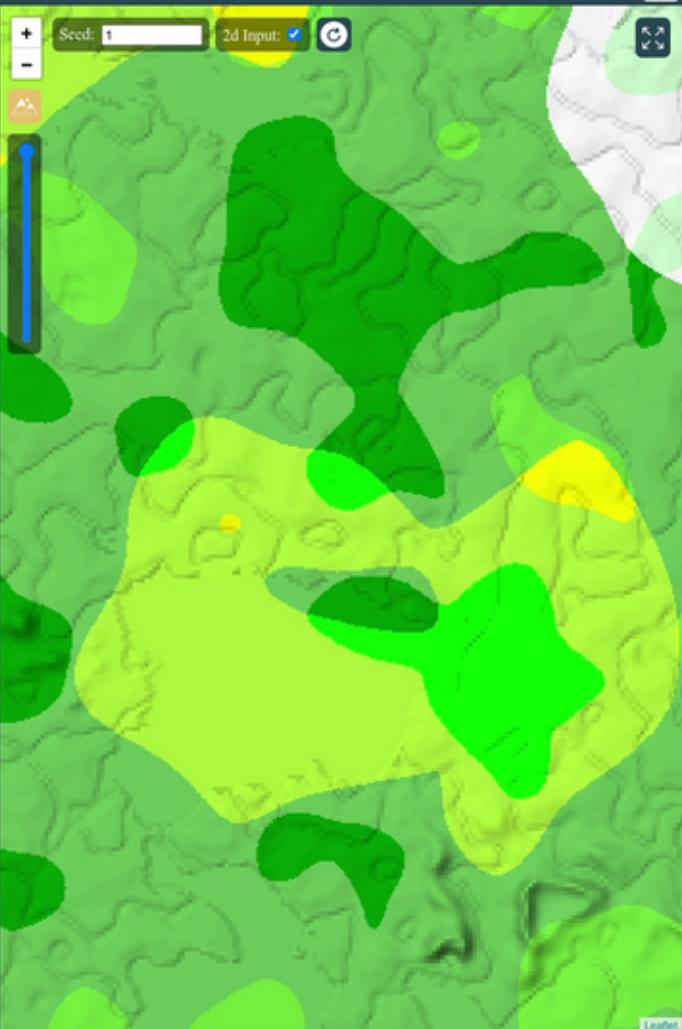
Temperature

Biomes:

- minecraft:plains
- minecraft:desert
- minecraft:snowy\_plains
- minecraft:jungle
- minecraft:savanna
- minecraft:forest
- minecraft:birch\_forest
- minecraft:snowy\_taiga

Unused Vanilla Biomes

- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean
- minecraft:deep\_cold\_ocean
- minecraft:deep\_ocean





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

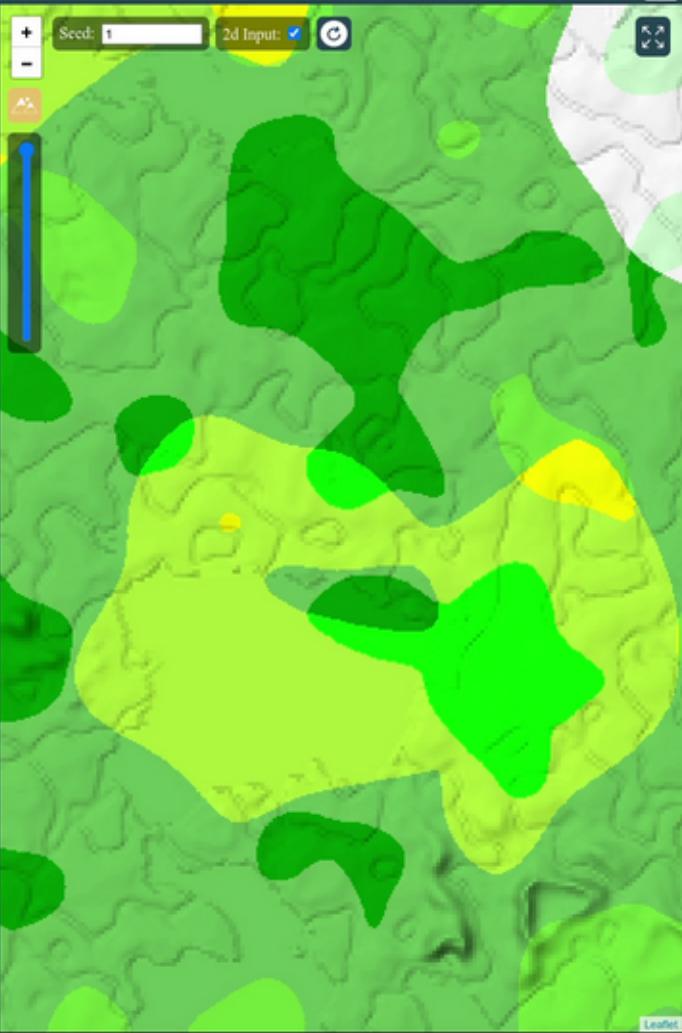
Biomes:

Search...

- minecraft:plains
- minecraft:desert
- minecraft:snowy\_plains
- minecraft:jungle
- minecraft:savanna
- minecraft:forest
- minecraft:birch\_forest
- minecraft:snowy\_taiga

Unused Vanilla Biomes

- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

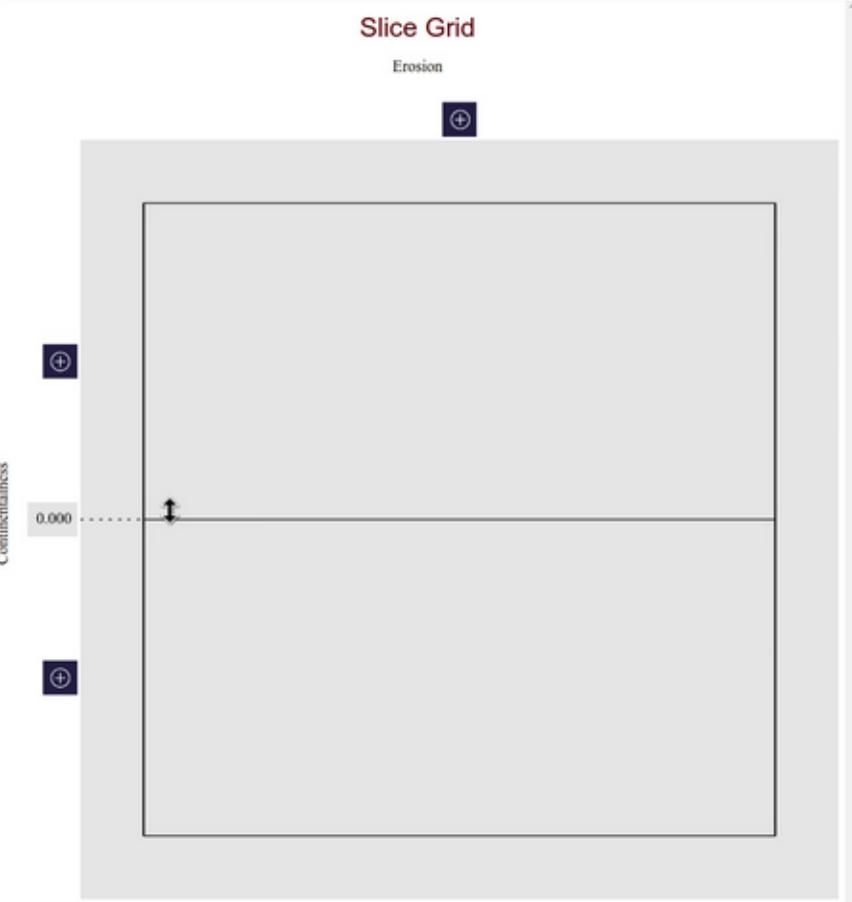
Biomes:

Search...

- minecraft:plains
- minecraft:desert
- minecraft:snowy\_plains
- minecraft:jungle
- minecraft:savanna
- minecraft:forest
- minecraft:birch\_forest
- minecraft:snowy\_taiga

Unused Vanilla Biomes

- minecraft:mushroom\_fields
- minecraft:deep\_frozen\_ocean





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

Biomes:

ocean

minecraft:ocean

Unused Vanilla Biomes

minecraft:deep\_frozen\_ocean

minecraft:deep\_cold\_ocean

minecraft:deep\_ocean

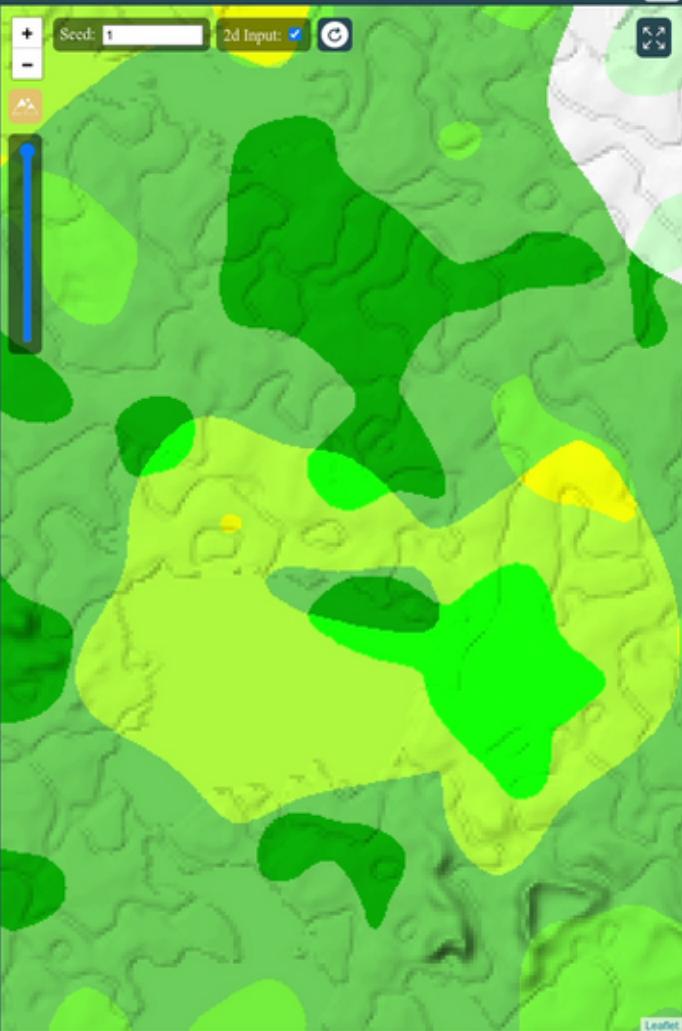
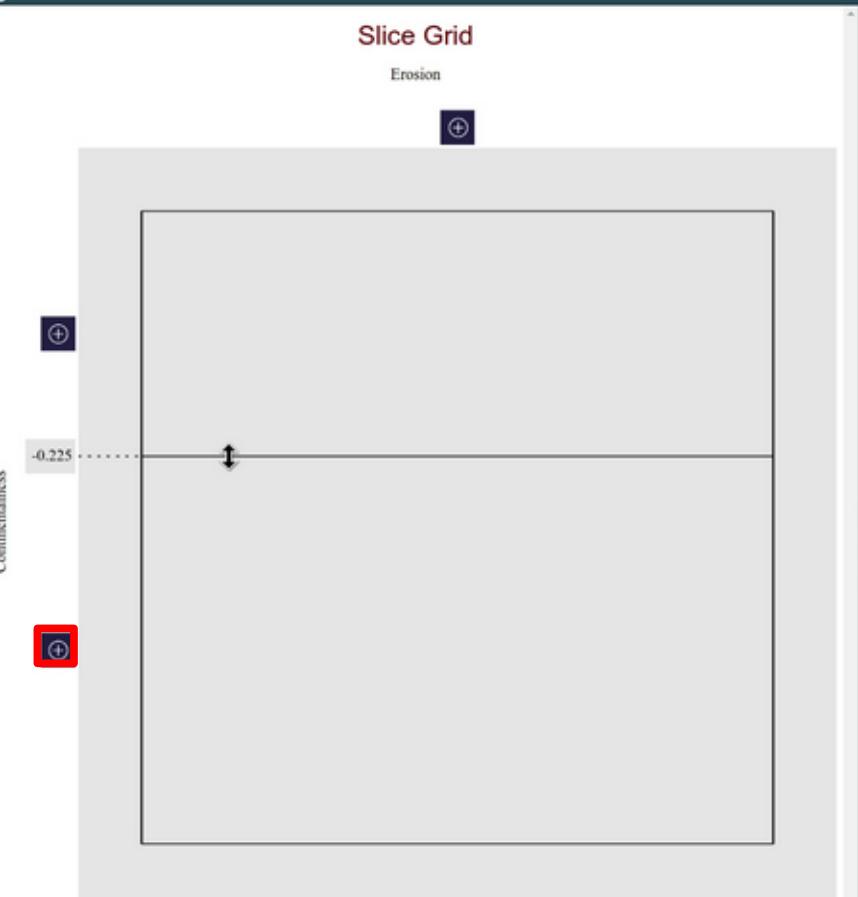
minecraft:deep\_lukewarm\_ocean

minecraft:frozen\_ocean

minecraft:cold\_ocean

minecraft:warm\_ocean

minecraft:lukewarm\_ocean





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

Biomes:

oceaa

minecraft:ocean

Unused Vanilla Biomes

minecraft:deep\_frozen\_ocean

minecraft:deep\_cold\_ocean

minecraft:deep\_ocean

minecraft:deep\_lukewarm\_ocean

minecraft:frozen\_ocean

minecraft:cold\_ocean

minecraft:warm\_ocean

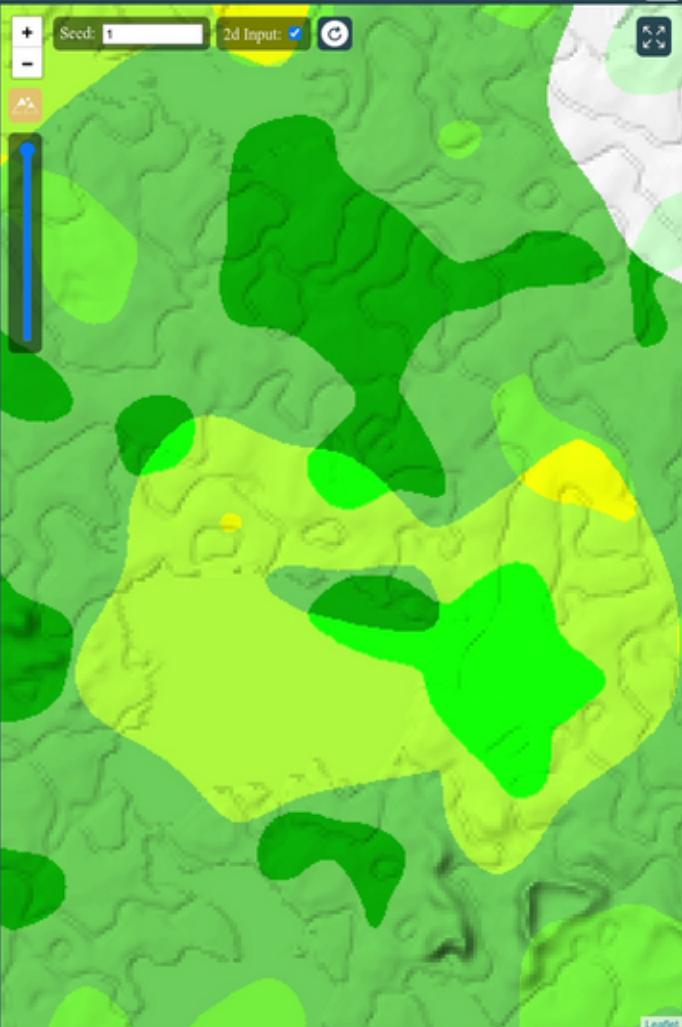
minecraft:lukewarm\_ocean

## Slice Grid

Erosion



Continentalness





Snowcapped

Dimension: Biomes

Slices: New Slice

Layouts: Middle

Biomes: Search... minecraft:plains minecraft:desert minecraft:snowy\_plains minecraft:jungle minecraft:savanna minecraft:forest minecraft:birch\_forest minecraft:snowy\_taiga

Unused Vanilla Biomes: minecraft:mushroom\_fields minecraft:deep\_frozen\_ocean

New Slice

Erosion

Continentalness

Seed: 1 2d Input:

Snowcapped

[Left Click] Paint [Ctrl]+[Left Click] Paint only for one Mode [Right Click] Open [Delete] Remove

Dimension:

Biomes

Slices:

New Slice

Erosion

Continentalness

Layouts:

Middle

Biomes:

bea

minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach

New Slice

Erosion

Continentalness

Middle (Layout)

Erosion: [-1.000, 1.000]  
Continentalness: [-0.225, -0.120]

Seed: t 2d Input:

The screenshot displays the Snowcapped software interface, which is used for generating and manipulating terrain slices. On the left, there are four main sections: 'Biomes' (listing 'bea', 'minecraft:beach', 'Unused Vanilla Biomes', and 'minecraft:snowy\_beach'), 'Slices' (containing a single entry 'New Slice'), 'Layouts' (containing a single entry 'Middle'), and 'Biomes' again (containing 'bea'). In the center, a 3D perspective view shows a vertical stack of three rectangular slices: a blue top slice labeled 'Erosion', a yellow middle slice labeled 'Continentalness', and a bottom slice divided into a 3x3 grid of colored squares (white, light green, yellow, medium green, dark green). A tooltip for the bottom slice indicates 'Middle (Layout)' with 'Erosion: [-1.000, 1.000]' and 'Continentalness: [-0.225, -0.120]'. On the right, a 2D map view shows a coastal area with green landmasses, blue oceans, and a small yellow dot representing a specific location. A vertical color bar on the far left of the map indicates elevation or depth. At the top of the interface, there are standard file operations (Save, Open, etc.) and mode selection buttons.



Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

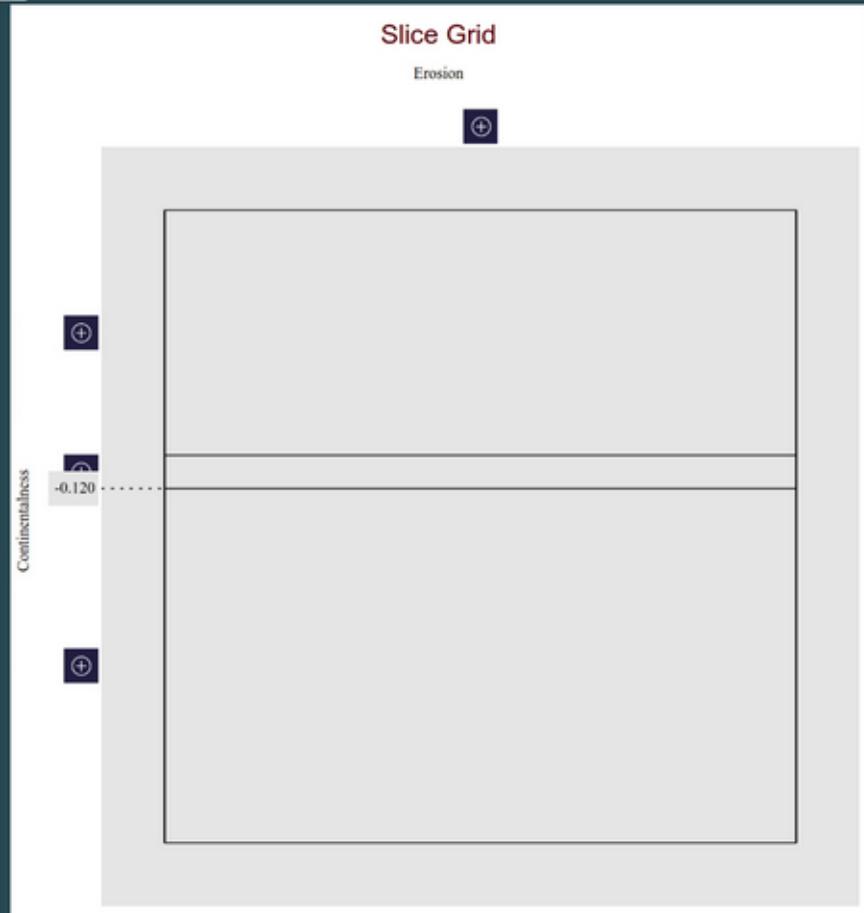
Biomes:

bea

minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

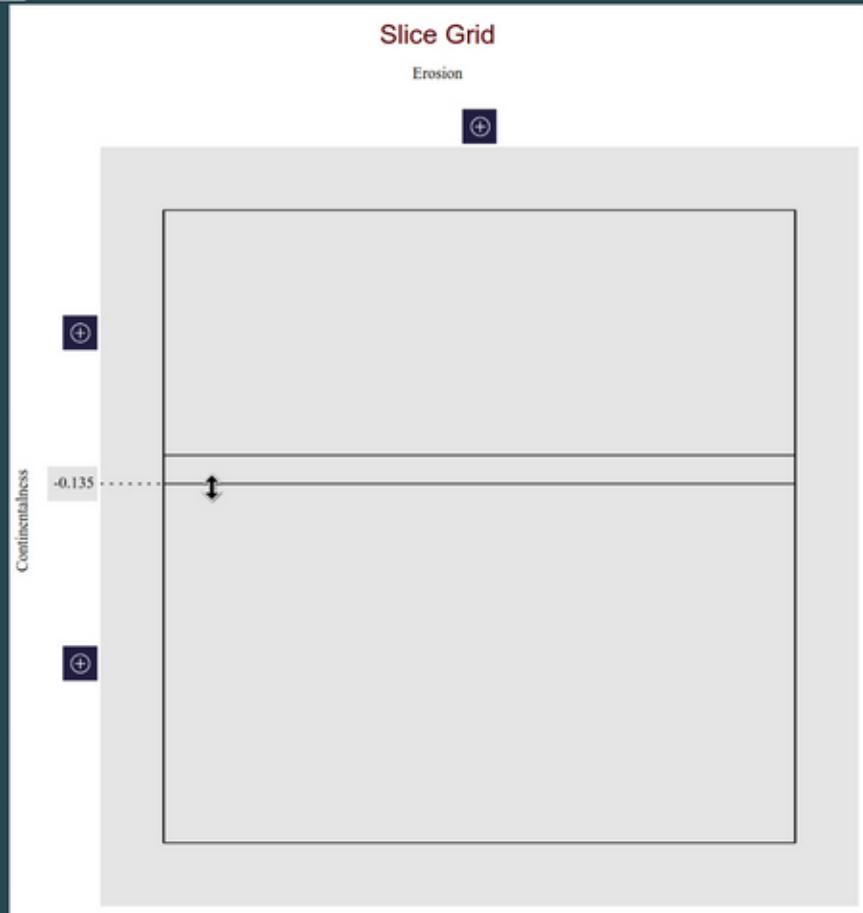
Biomes:

bea

minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach









Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

Biomes:

bea

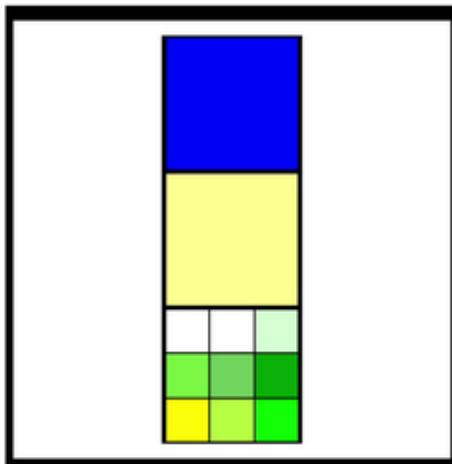
minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach

## Biomes

Weirdness



Snowcapped

Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

Biomes:

bea

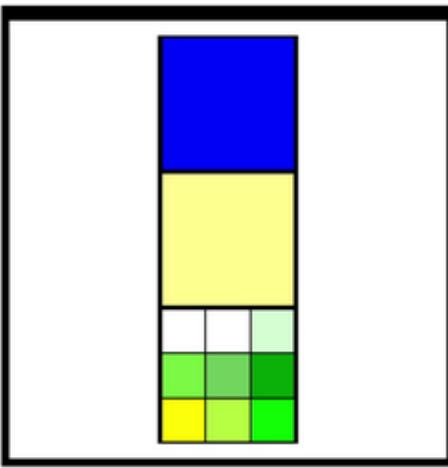
minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach

## Biomes

Weirdness





Dimension: Biomes

Slices: New Slice

Layouts: Middle

Biomes: bea  
 minecraft:beach  
Unused Vanilla Biomes  
 minecraft:snowy\_beach

## Biome Grid

Weirdness



Depth





Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

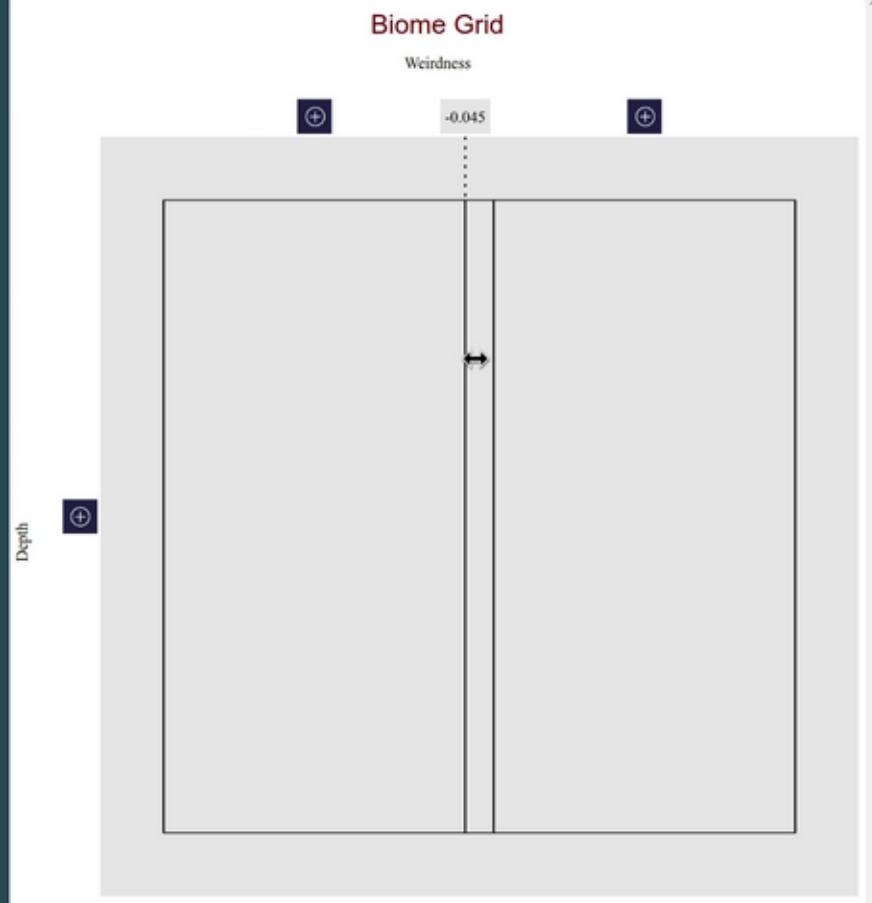
Biomes:

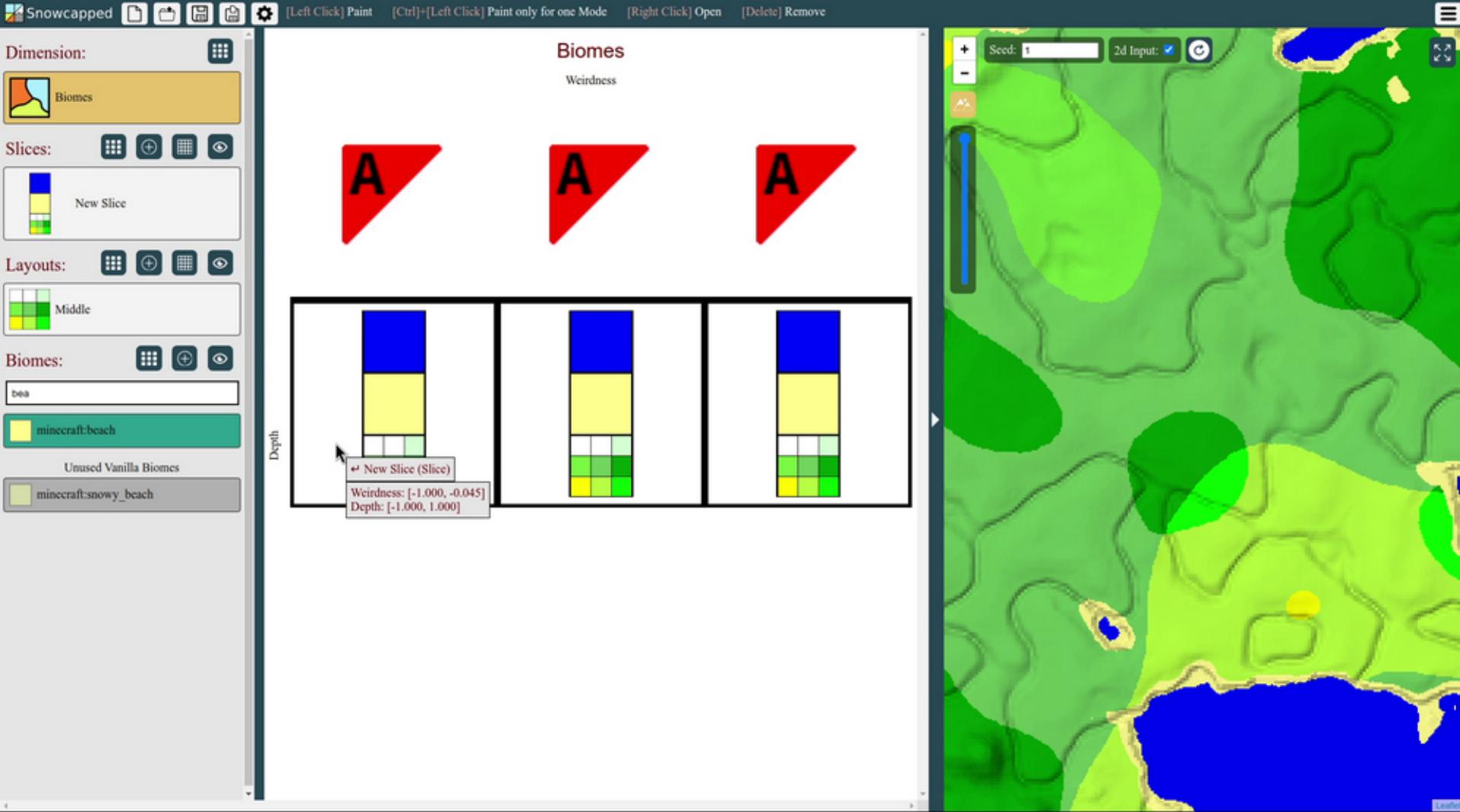
bea

minecraft:beach

Unused Vanilla Biomes

minecraft:snowy\_beach





Snowcapped

[Left Click] Paint [Ctrl]+[Left Click] Paint only for one Mode [Right Click] Open [Delete] Remove

Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

Biomes:

rtv

minecraft:river

Unused Vanilla Biomes

minecraft:frozen\_river

Biomes

Weirdness

A A A

Depth

New Slice (Slice)

Weirdness: [-0.045, 0.045]

Depth: [-1.000, 1.000]

Seed: t 2d Input:

The screenshot shows the Snowcapped mod interface for Minecraft. On the left, there's a sidebar with tabs for 'Biomes' (selected), 'Slices', 'Layouts', and 'Biomes'. Under 'Biomes', 'rtv' and 'minecraft:river' are selected, with 'minecraft:river' highlighted in green. Below that, 'Unused Vanilla Biomes' and 'minecraft:frozen\_river' are listed. In the center, there's a 'Biomes' section with a title 'Weirdness' and three red flags labeled 'A'. Below them is a grid of three vertical bars representing different biome slices. The middle bar is highlighted with a red border and has a tooltip showing 'New Slice (Slice)' and 'Weirdness: [-0.045, 0.045] Depth: [-1.000, 1.000]'. On the right, a generated map shows various green and blue regions representing different biomes and depths.



Dimension:

Biomes

Slices:

New Slice

Layouts:

Middle

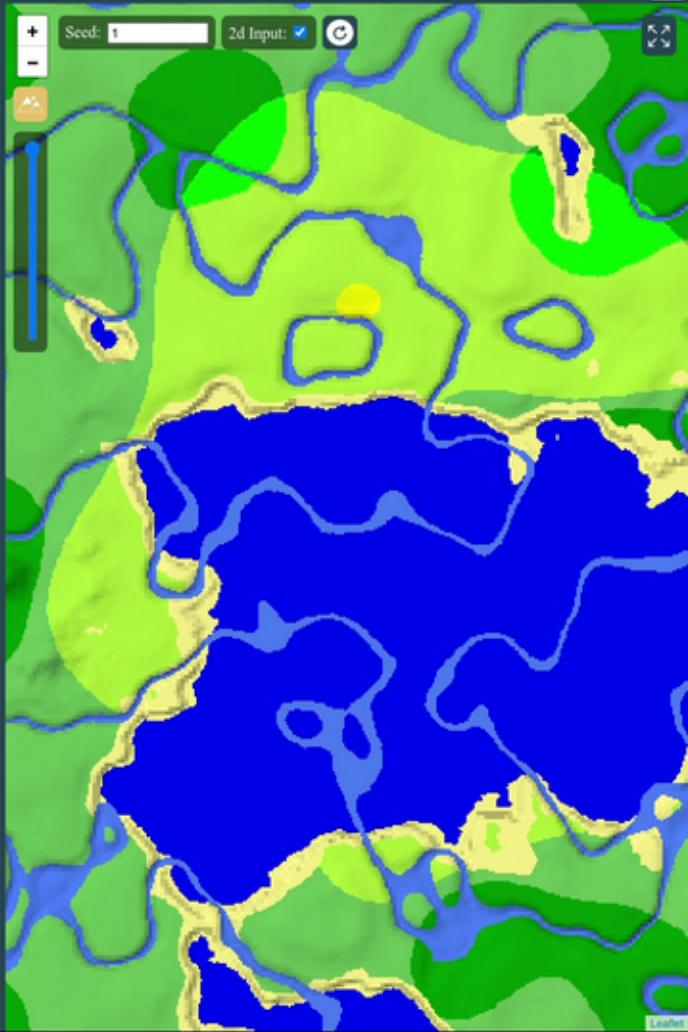
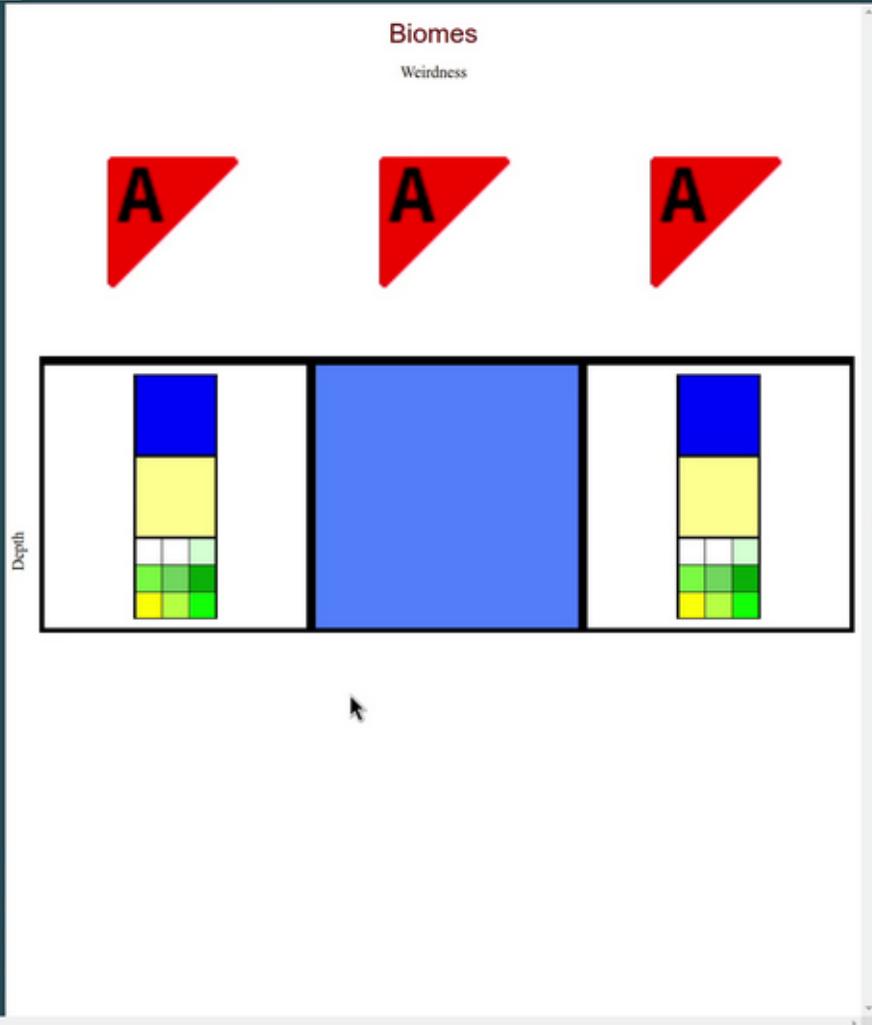
Biomes:

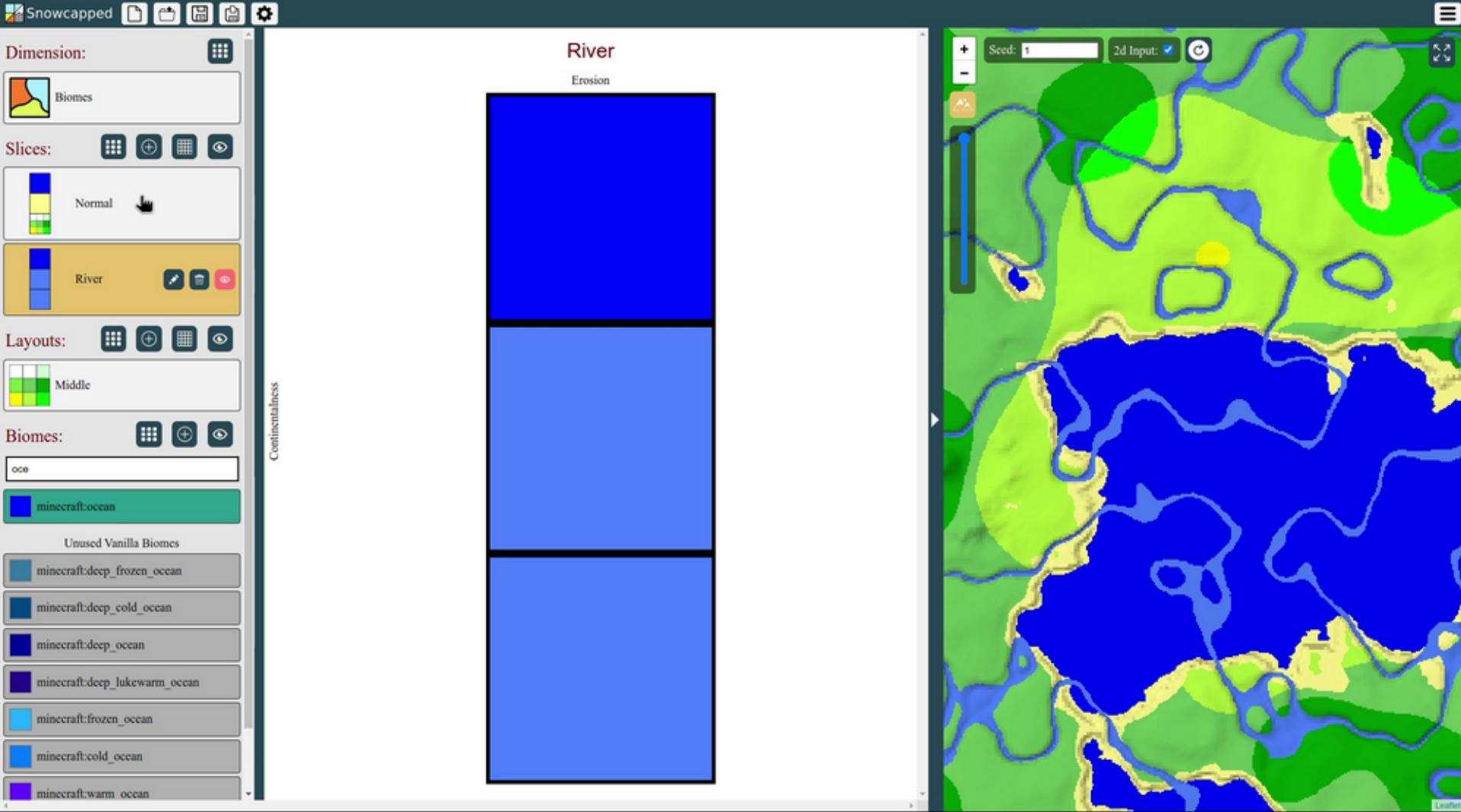
rtv

minecraft:river

Unused Vanilla Biomes

minecraft:frozen\_river





Snowcapped

Dimension:

Biomes

Slices:

Normal

River

Layouts:

Middle

Biomes:

oce

minecraft:ocean

Unused Vanilla Biomes

- minecraft:deep\_frozen\_ocean
- minecraft:deep\_cold\_ocean
- minecraft:deep\_ocean
- minecraft:deep\_lukewarm\_ocean
- minecraft:frozen\_ocean
- minecraft:cold\_ocean
- minecraft:warm\_ocean

Biomes

Weirdness

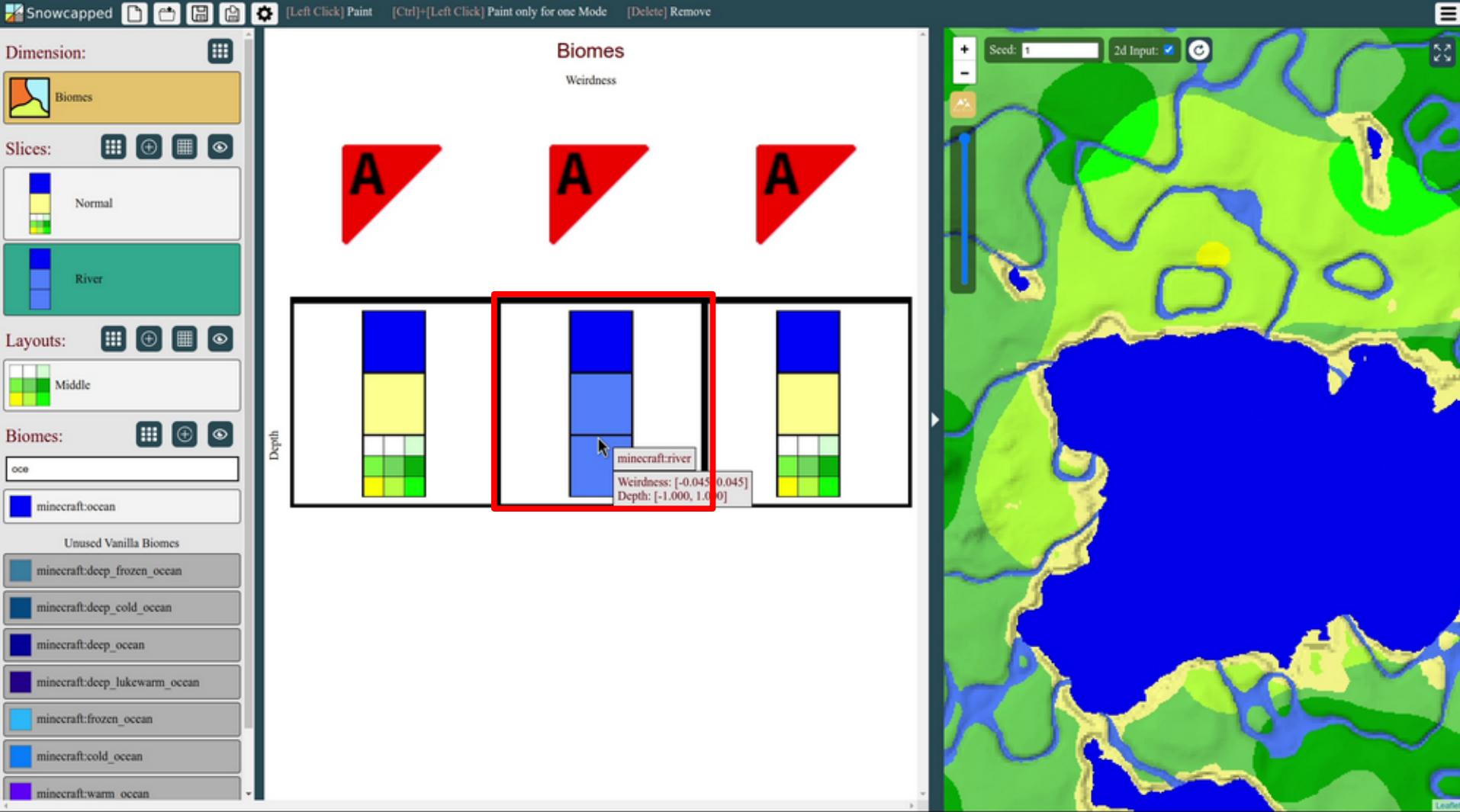
A A A

Depth

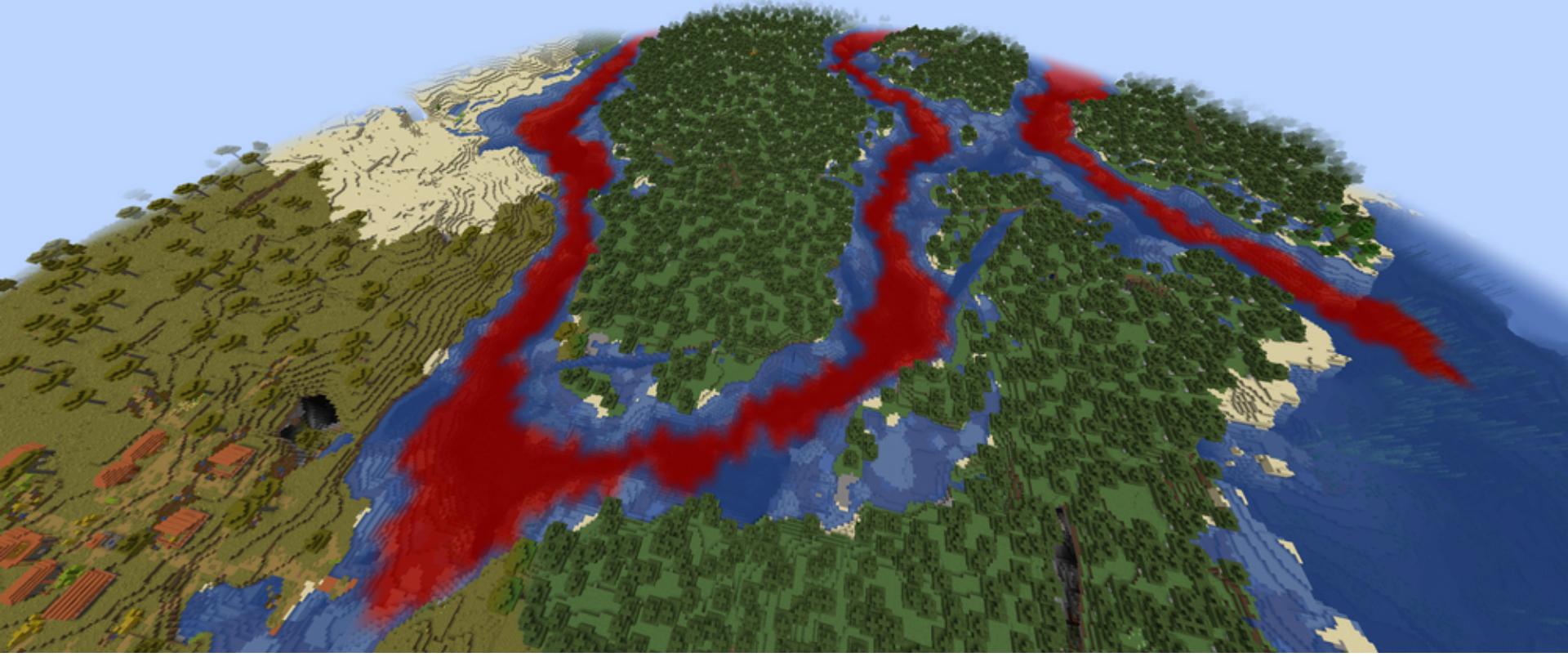
Seed: t 2d Input:

Biome Map (Right):

This map shows a complex distribution of biomes across a terrain. It features large areas of green (grassland) and blue (water/ocean). Several rivers are depicted as yellow lines winding through the land. A prominent blue area in the center-right represents a deep ocean biome. The terrain includes various elevation levels and small hills.









Target datapack version: 48

Dimension Name: minecraft:overworld

Noise Settings: minecraft:overworld

Dimension Type: minecraft:overworld

Enable Splines-Editor:

Export biome Colors:

Datapacks:



vanilla\_datapack\_1\_19.zip  
The default data for Minecraft



intro\_to\_snowcapped\_dp  
Smithed Summit - Intro to Snowcapped Example Datapack

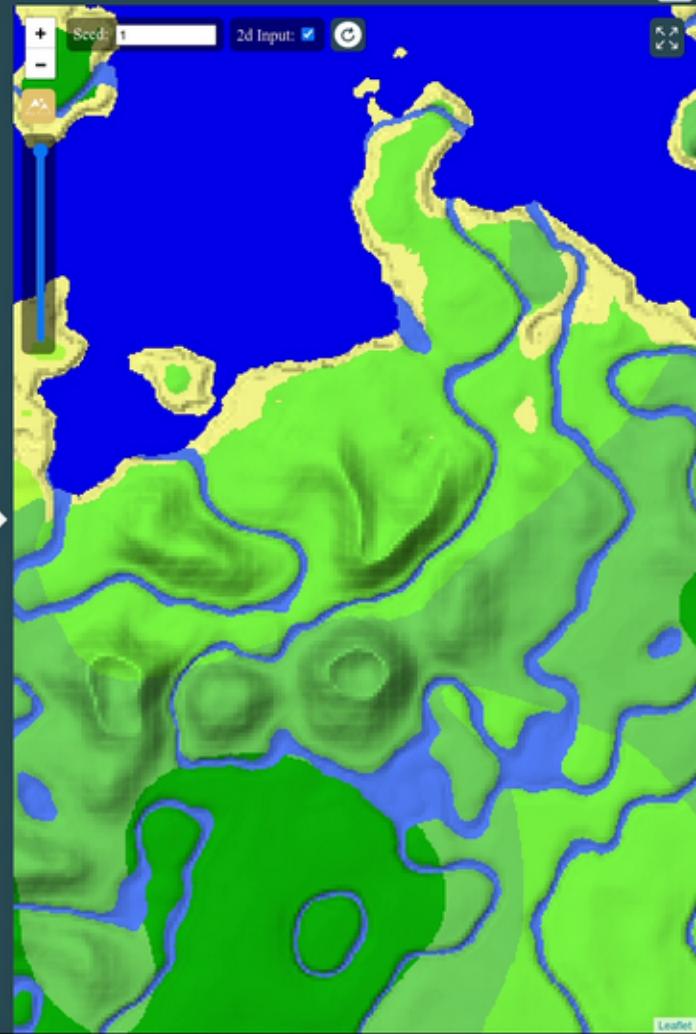
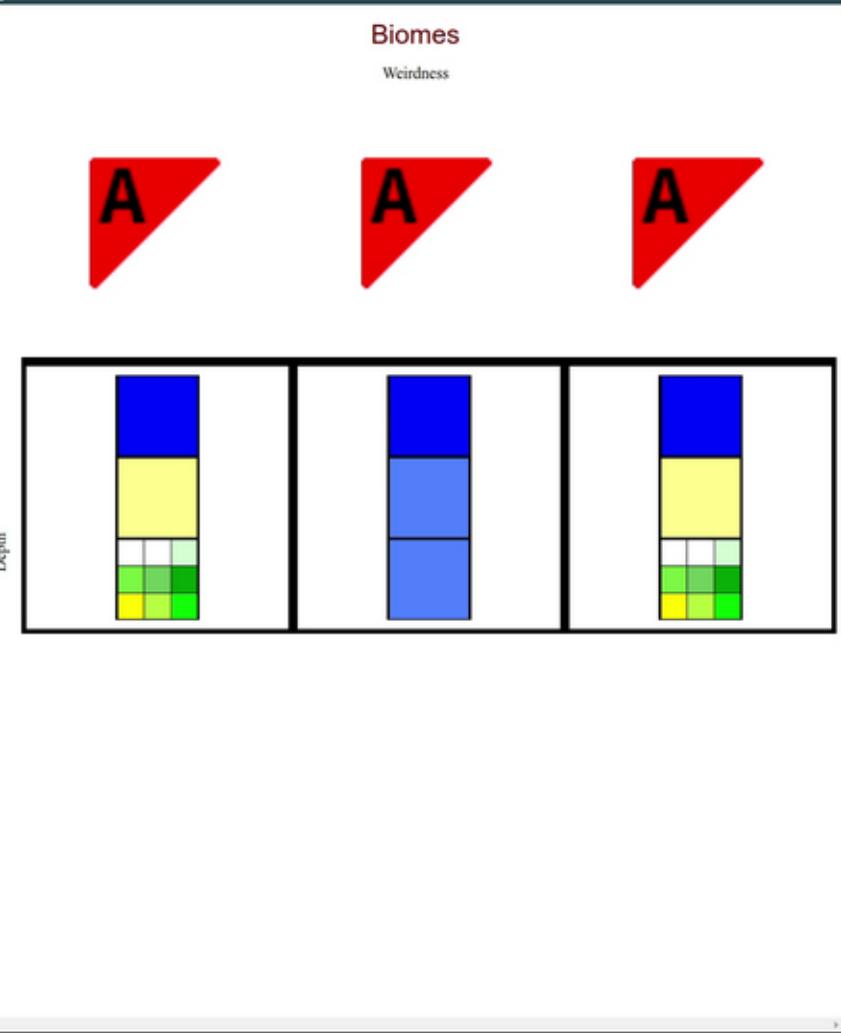


minecraft\_overworld.zip  
The data modified using Snowcapped



Snowcapped

The screenshot shows the configuration interface for the Biomes mod. On the left, there are four main sections: 'Dimension:' (with a dropdown menu), 'Biomes' (selected tab), 'Slices:', and 'Layouts:'. Under 'Biomes', there's a 'Normal' slice (blue, yellow, green) and a 'River' slice (blue, green). Under 'Layouts', there's a 'Middle' layout (green, blue, green). Under 'Biomes', there's a 'minecraft:ocean' biome listed. A scrollable list of 'Unused Vanilla Biomes' includes: 'minecraft:deep\_frozen\_ocean', 'minecraft:deep\_cold\_ocean', 'minecraft:deep\_ocean', 'minecraft:deep\_lukewarm\_ocean', 'minecraft:frozen\_ocean', 'minecraft:cold\_ocean', and 'minecraft:warm\_ocean'. At the top right, there are buttons for 'Seed:', '2d Input:', and a refresh icon.





Dimension:



Slices:



Normal



Layouts:



Middle



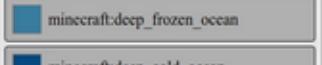
Biomes:



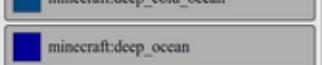
oce



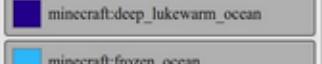
Unused Vanilla Biomes



minecraft:deep\_cold\_ocean



minecraft:deep\_lukewarm\_ocean



minecraft:cold\_ocean



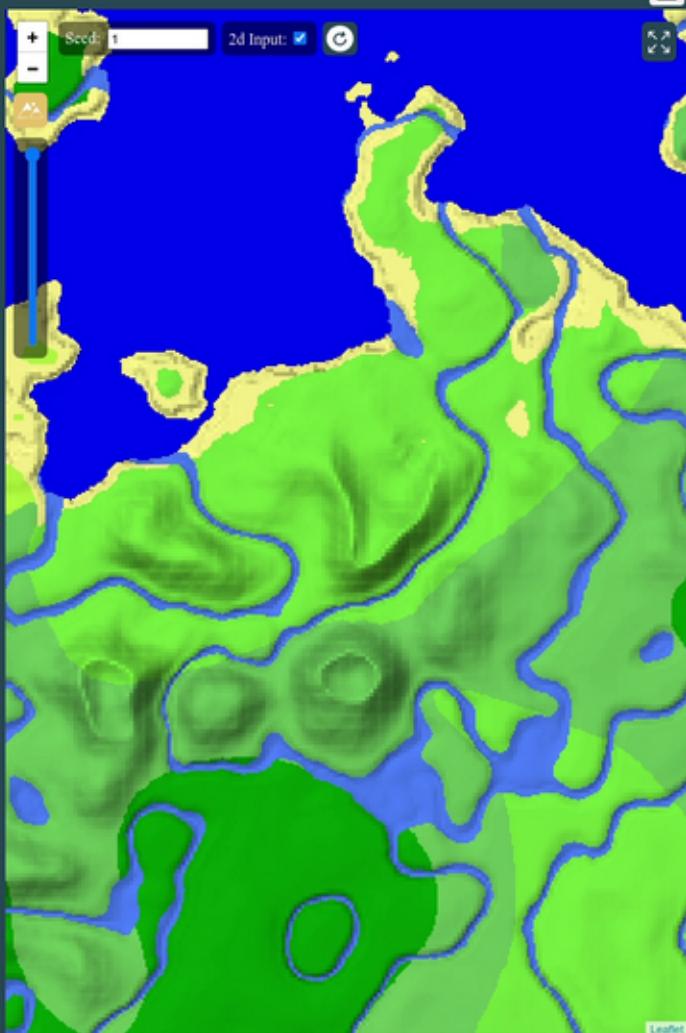
## Biome Grid

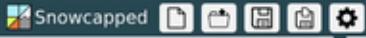
Weirdness

-1.000

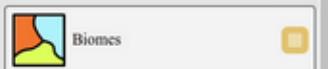


Depth





Dimension:



Slices:



Normal



Layouts:



Middle

Biomes:



oce

minecraft:ocean

Unused Vanilla Biomes

minecraft:deep\_frozen\_ocean

minecraft:deep\_cold\_ocean

minecraft:deep\_ocean

minecraft:deep\_lukewarm\_ocean

minecraft:frozen\_ocean

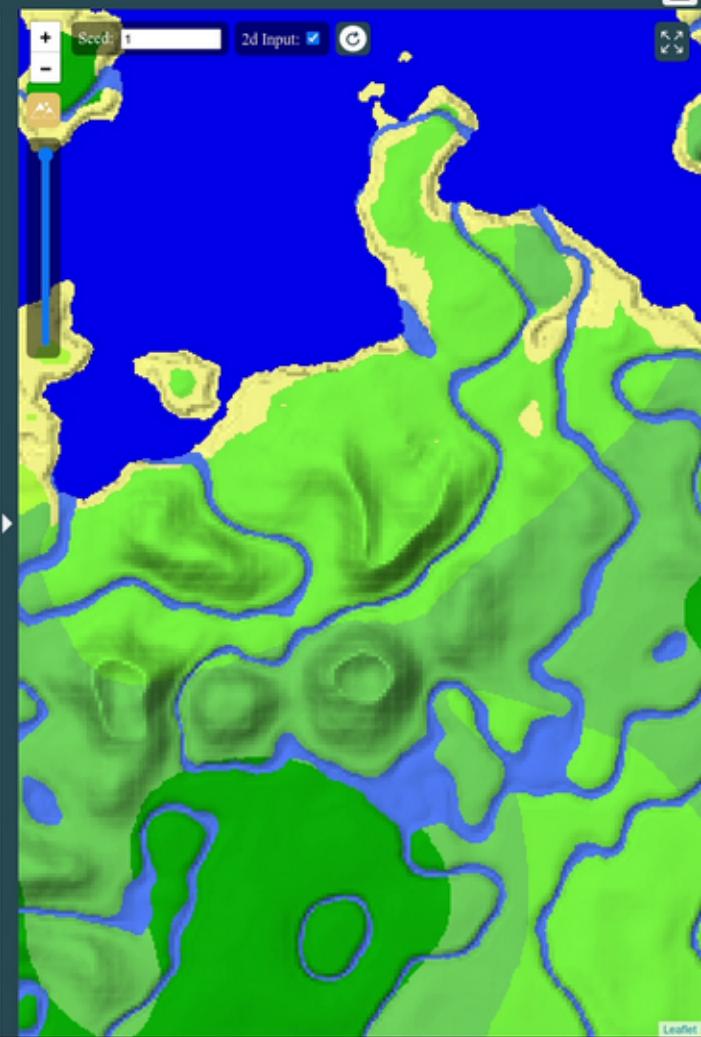
minecraft:cold\_ocean

minecraft:warm\_ocean

## Biome Grid

Weirdness

0.710





Dimension:



Slices:

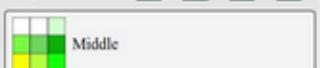


Normal



River

Layouts:



Middle

Biomes:



oce



minecraft:ocean

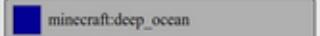
Unused Vanilla Biomes



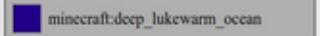
minecraft:deep\_frozen\_ocean



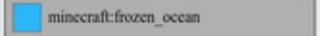
minecraft:deep\_cold\_ocean



minecraft:deep\_ocean



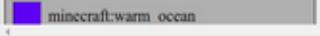
minecraft:deep\_lukewarm\_ocean



minecraft:frozen\_ocean



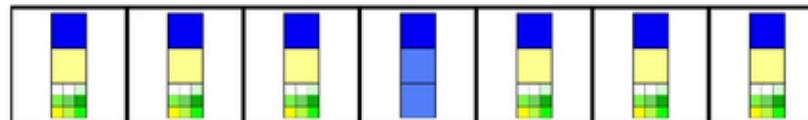
minecraft:cold\_ocean



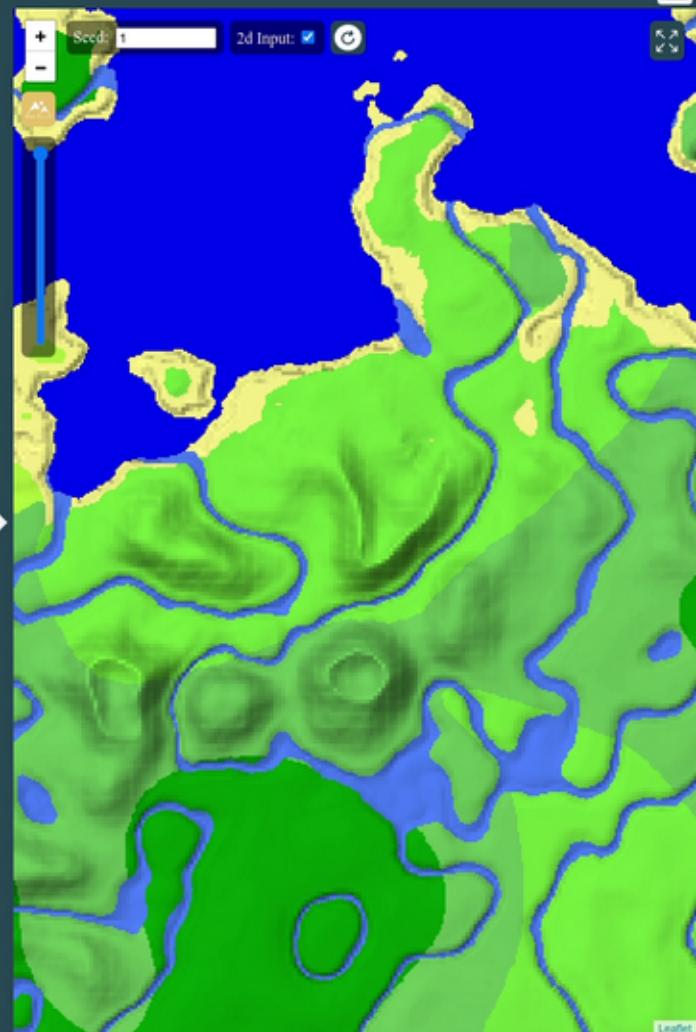
minecraft:warm\_ocean

## Biomes

Weirdness



Depth





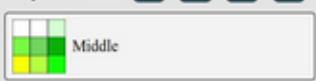
Dimension:



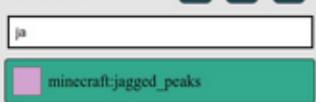
Slices:



Layouts:



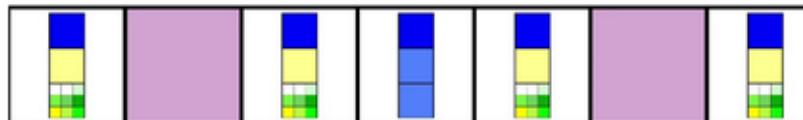
Biomes:



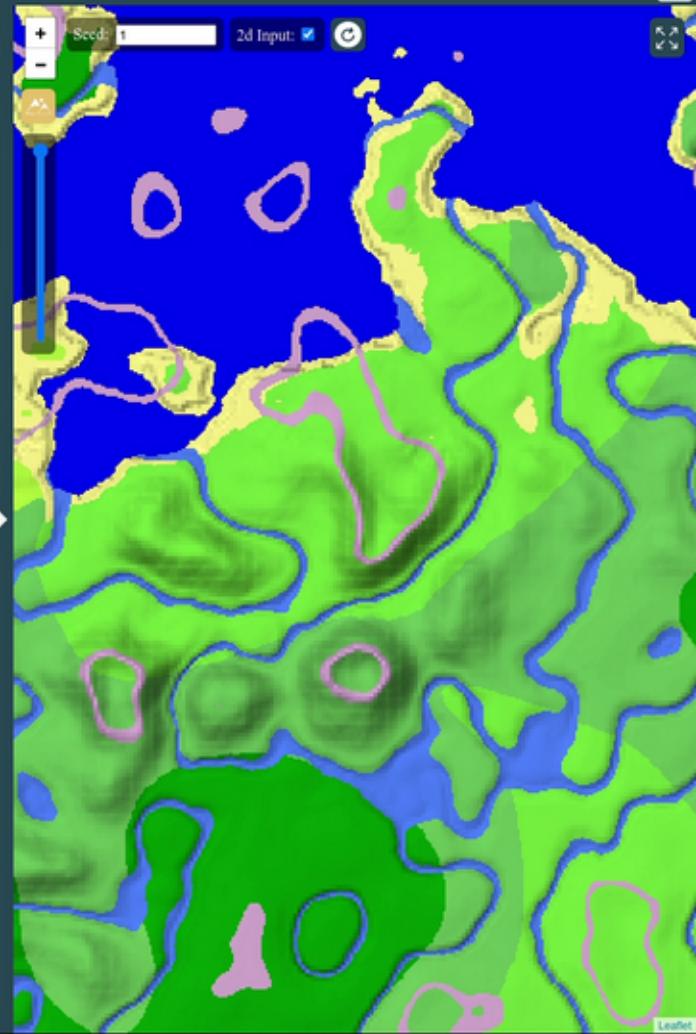
Unused Vanilla Biomes

## Biomes

Weirdness



Depth



Snowcapped

[Left Click] Paint [Ctrl]+[Left Click] Paint only for one Mode

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Mountain

Erosion

Continentalness

?

?

Unassigned

Erosion: [-1.000, 1.000]  
Continentalness: [-0.135, 1.000]

Seed: 1 2d Input:

The screenshot shows the Snowcapped software interface. On the left, there are several panels: 'Biomes' (with a preview icon), 'Slices' (listing 'Normal', 'River', and 'Mountain'), 'Layouts' (listing 'Middle'), 'Biomes' (listing 'ja' and 'minecraft:jagged\_peaks'), and 'Unused Vanilla Biomes'. In the center, there's a large preview window titled 'Mountain' with a sub-section 'Erosion' and 'Continentalness'. This section contains two large question marks and a small 'Unassigned' area at the bottom right with a tooltip showing 'Erosion: [-1.000, 1.000]' and 'Continentalness: [-0.135, 1.000]'. On the right, there's a detailed 3D-style terrain map with various colored regions (blue, green, yellow) and purple contour lines, with a vertical toolbar above it.



Dimension:

Biomes

Slices:

- Normal (selected, highlighted with a red border)
- River
- Mountain

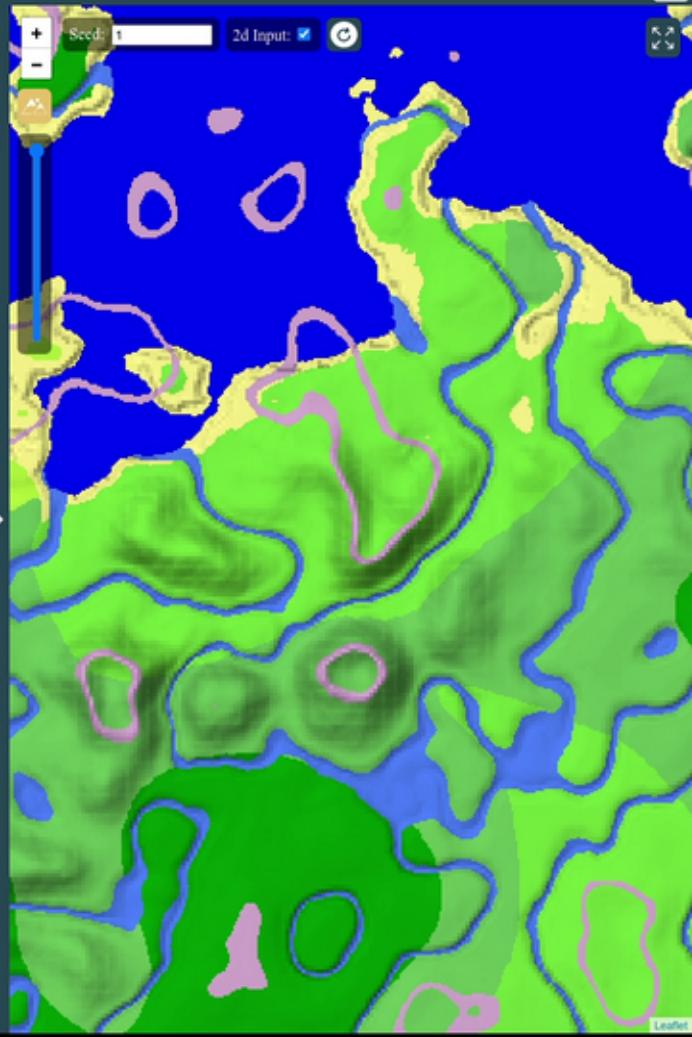
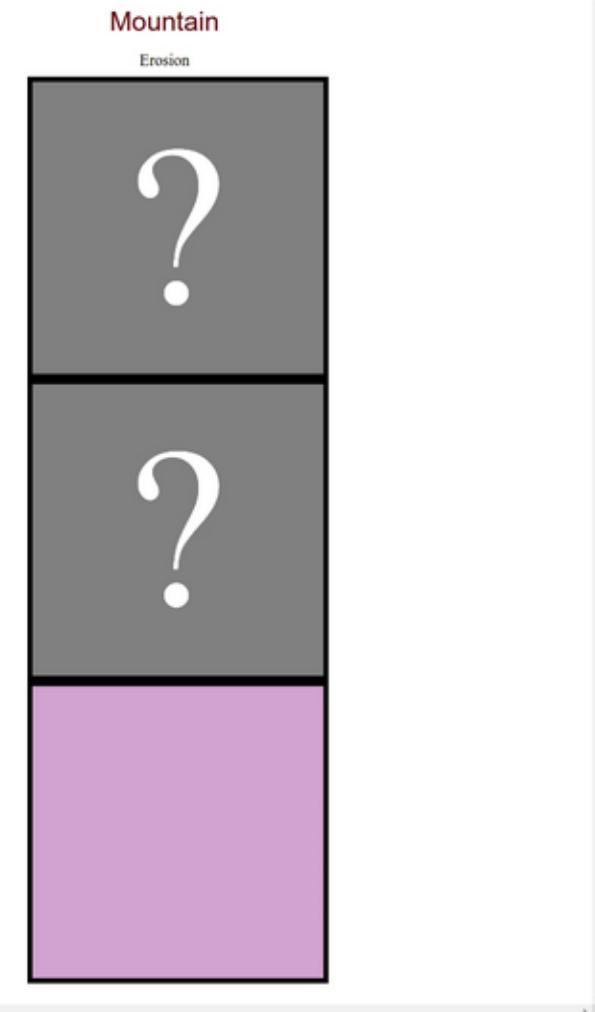
Layouts:

Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes



Snowcapped

[Left Click] Paint [Ctrl]+[Left Click] Paint only for one Mode

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Mountain

Erosion

N

Unassigned

Erosion: [-1,000, 1,000]  
Continentalness: [-1,000, -0.225]

Seed: 1 2d Input:

Continentalness



Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

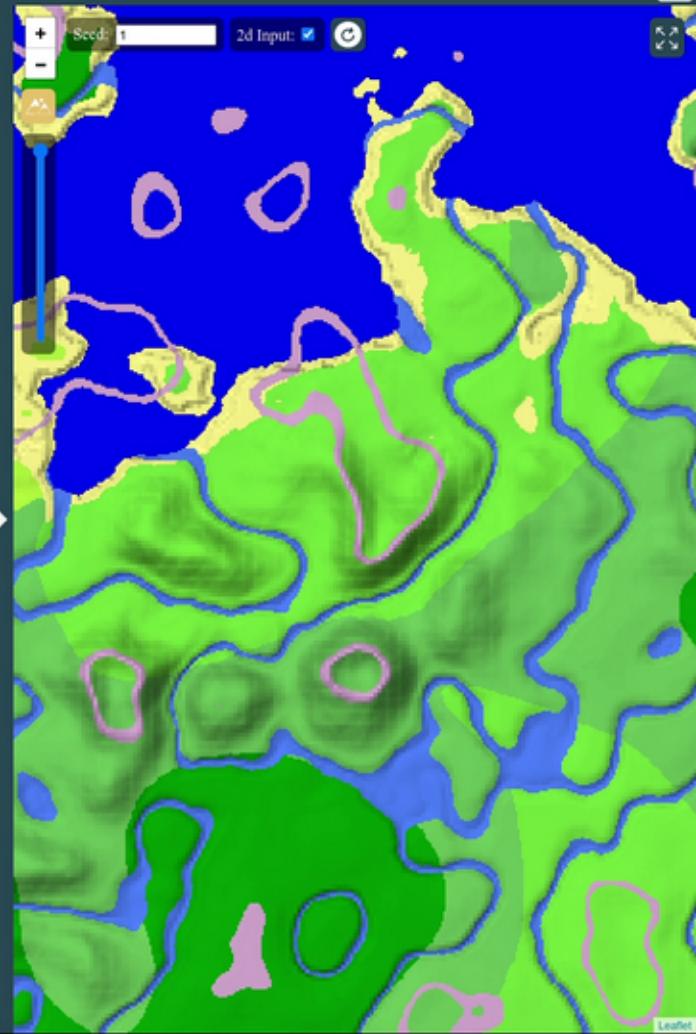
- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Biomes

Weirdness

Depth





Snowcapped

[Left Click] Open Slice [Ctrl]+[C] Copy Teleport Command

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Biomes

Weirdness

A A A A A A B

Normal River Mountain

Depth

+

Seed: t 2d Input:

X: -3936, Y: 84, Z: -15012  
C: -0.05, E: -0.27, W: -0.63  
T: 0.15, H: -0.53, D: -0.03

Mountain (Slice)   
minecraft:jagged\_peaks





Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

### Slice Grid

Erosion

Continentiness

**[+]**

**[+]**

**[+]**





Dimension:

Biomes

Slices:

Normal

River

Mountain

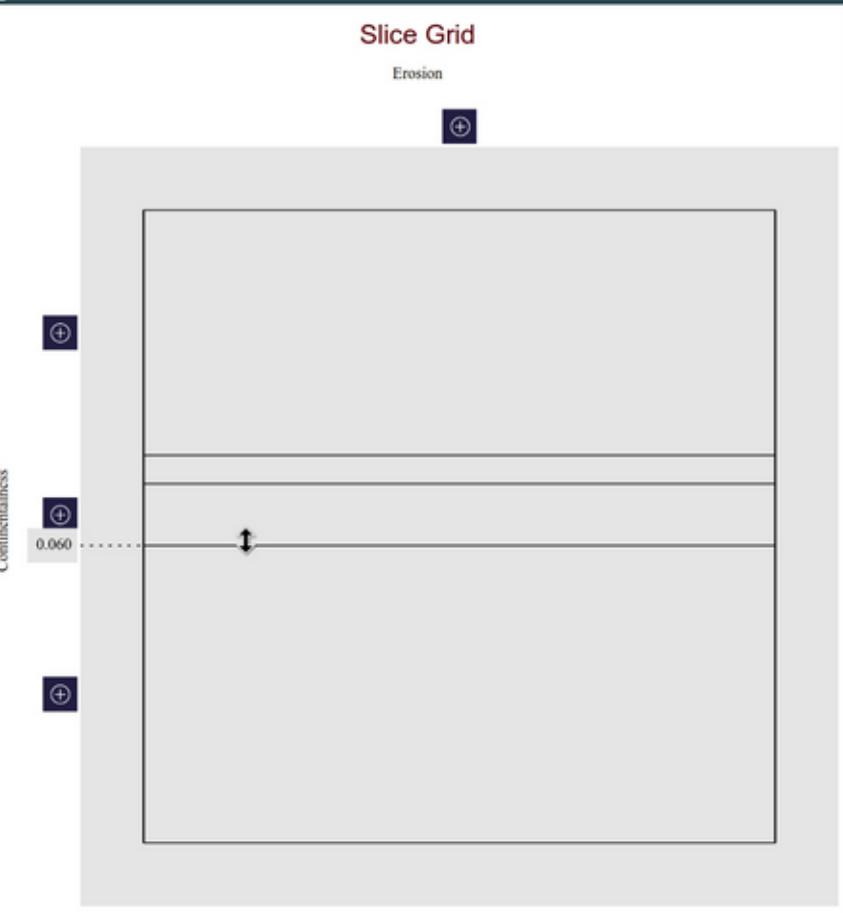
Layouts:

Middle

Biomes:

minecraft:jagged\_peaks

Unused Vanilla Biomes



Snowcapped [Left Click] Paint [Ctrl]+[Left Click] Paint only for one Mode [Delete] Remove

Dimension:

Biomes

Slices:

Normal

River

Mountain

Layouts:

Middle

Biomes:

ja

minecraft:jagged\_peaks

Unused Vanilla Biomes

Mountain

Erosion

N ↑

N ↑

Continentalness

minecraft:jagged\_peaks

Erosion: [-1.000, 1.000]  
Continentalness: [-0.135, 0.175]

Seed: t 2d Input:



Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

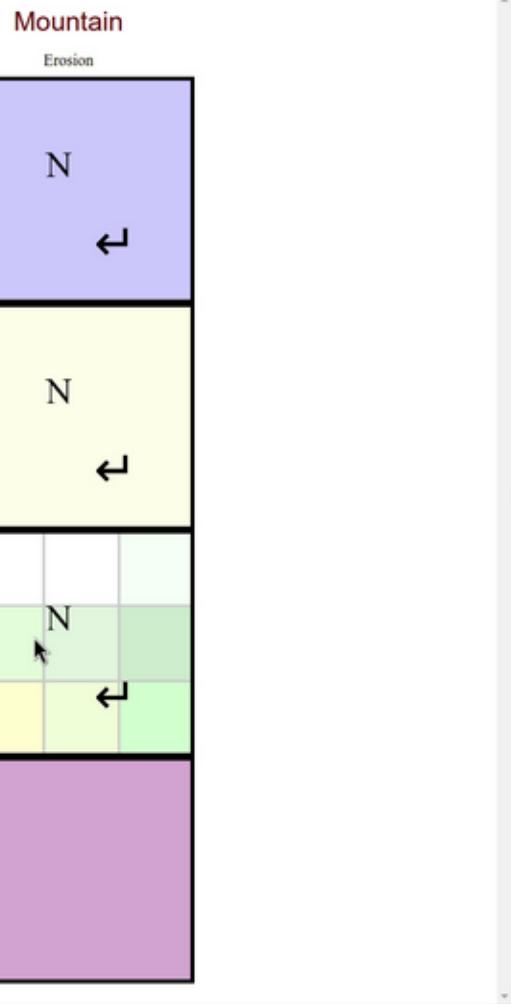
- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Continentalness



Snowcapped

[Left Click] Open Slice [Ctrl]+[C] Copy Teleport Command

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

Slice Grid

Erosion

Continentalness

Seed: t 2d Input:

X: -3241, Y: 80, Z: -13760  
C: 0.54 E: 0.08 W: -0.68  
T: -0.12, H: -0.39, D: -0.03

Mountain (Slice) minecraft:jagged\_peaks

This screenshot shows the Snowcapped mod interface. On the left, there are sections for 'Biomes' (with a preview icon), 'Slices' (Normal, River, Mountain), 'Layouts' (Middle), and 'Biomes' (ja, minecraft:jagged\_peaks). Below these are 'Unused Vanilla Biomes'. In the center, the 'Slice Grid' section displays a large gray rectangle with three horizontal gray bars above it, labeled 'Continentalness' on the left. There are three '+' buttons on the left side of the grid. At the top of the grid area, it says 'Erosion' and has a small '+' button. On the right, a detailed map view shows terrain with green landmasses, blue water bodies, and yellowish-green coastal areas. A specific mountain slice is highlighted with a red border and a tooltip providing coordinates and parameters. The top right of the map has a 'Seed' input field ('t'), a '2d Input' checkbox, and a refresh/circular arrow button.



Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes

### Slice Grid

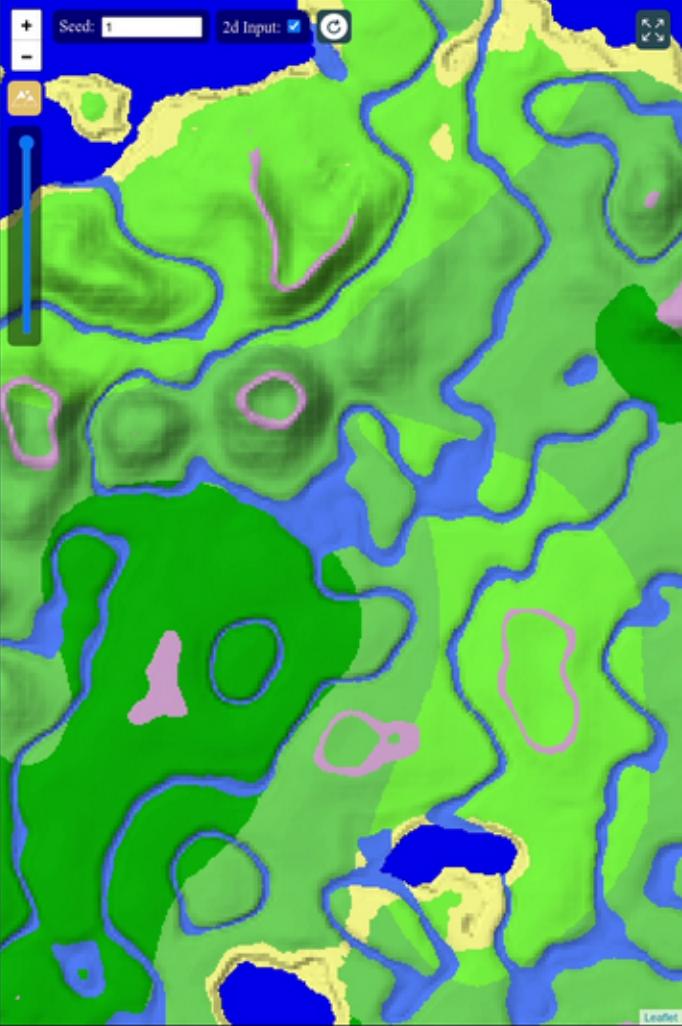
Erosion

Continentiness

+

+

+





Dimension:

Biomes

Slices:

Normal

River

Mountain

Layouts:

Middle

Biomes:

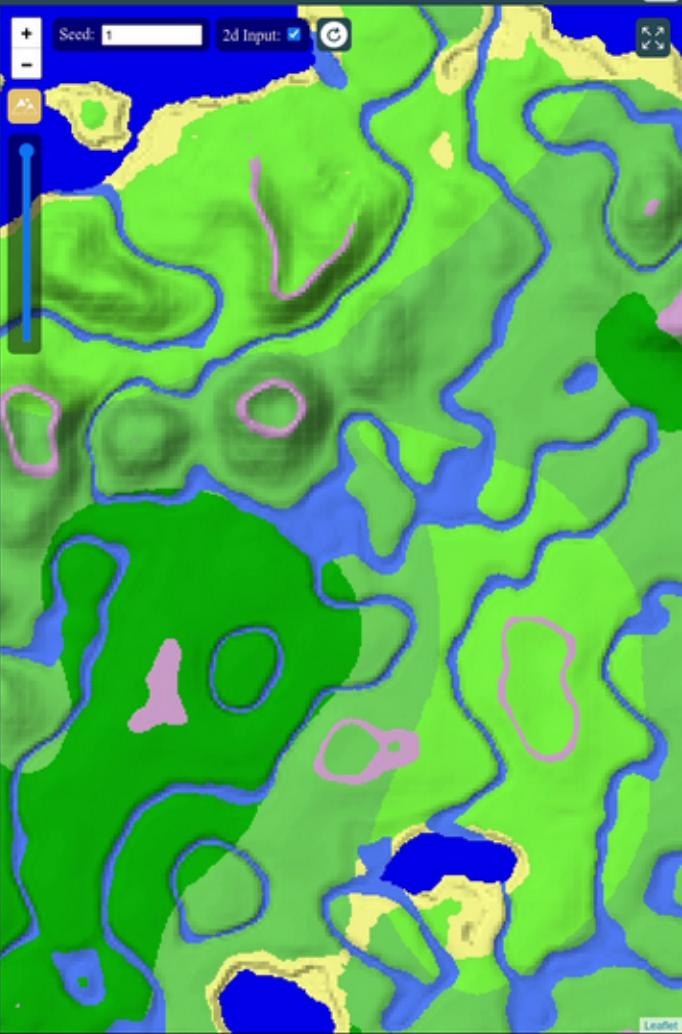
minecraft:jagged\_peaks

Unused Vanilla Biomes

### Slice Grid

Erosion

Continentiness





Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

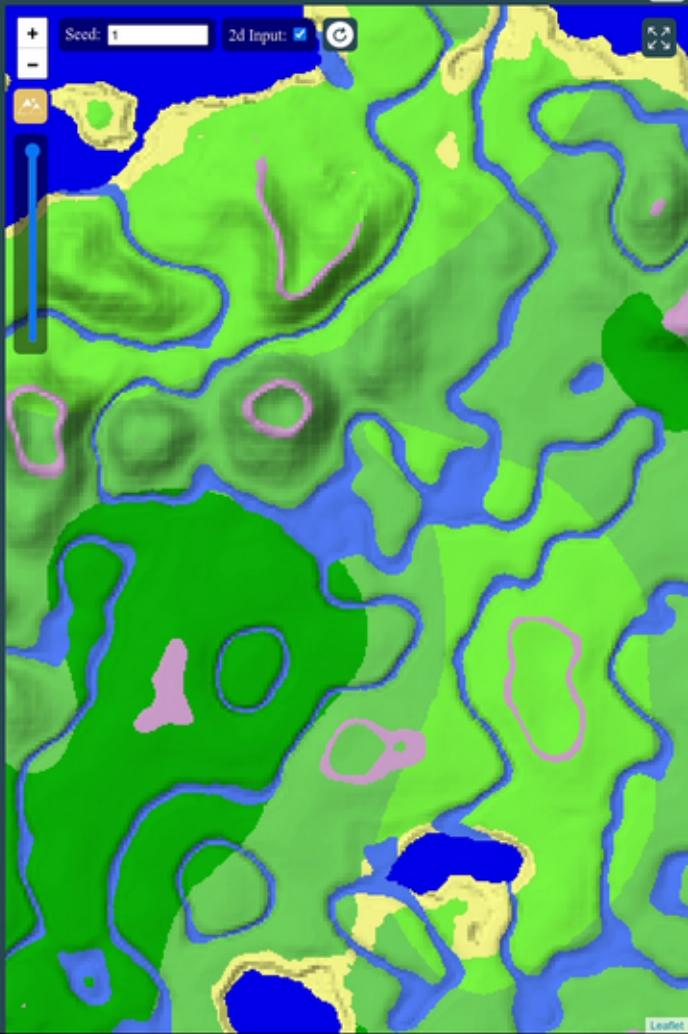
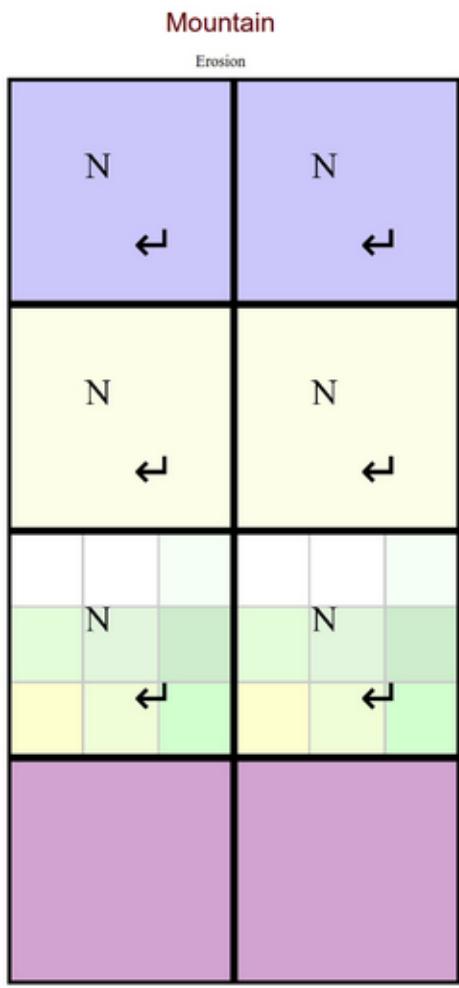
Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes





Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

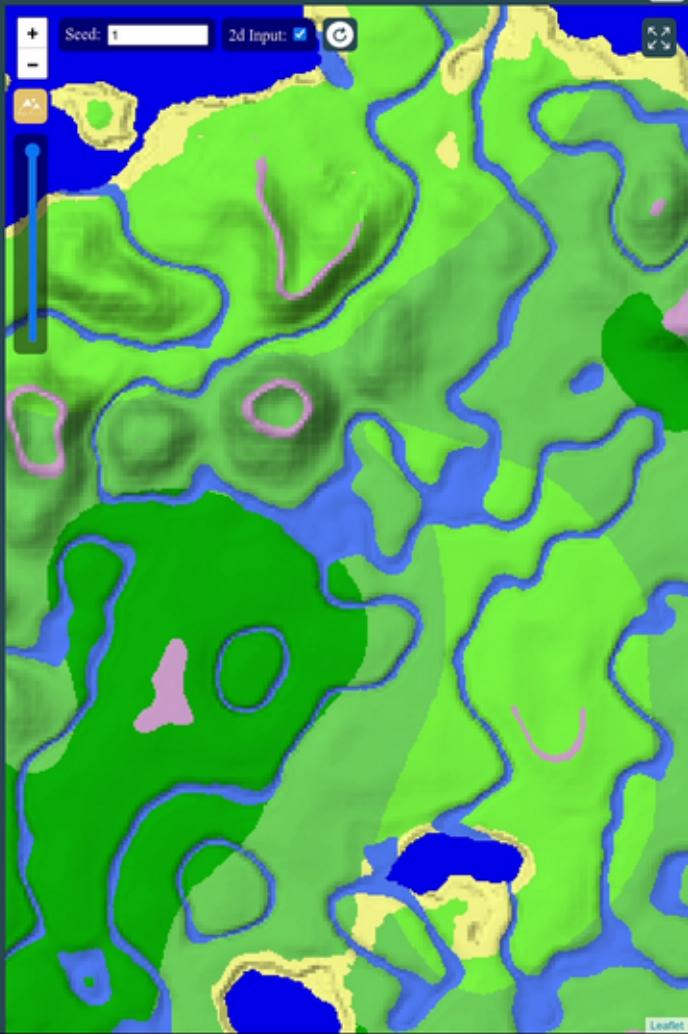
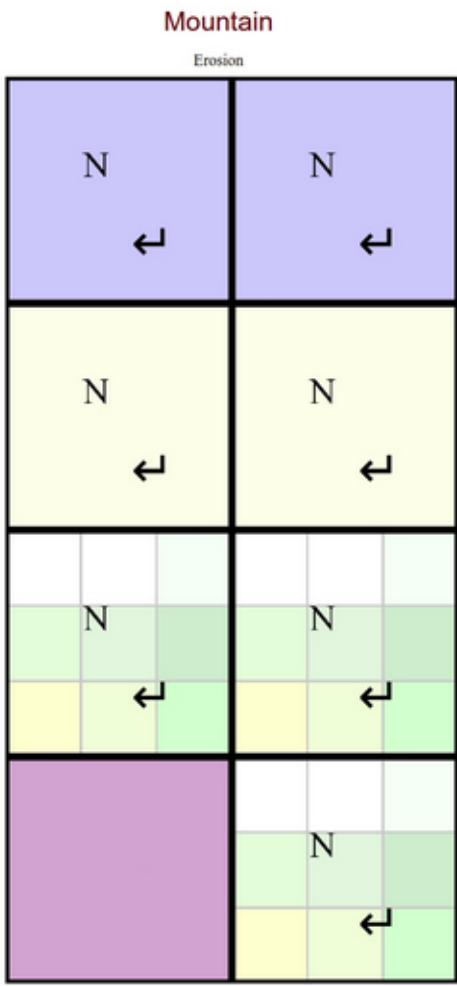
Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes





Dimension:

Biomes

Slices:

Normal

River

Mountain

Layouts:

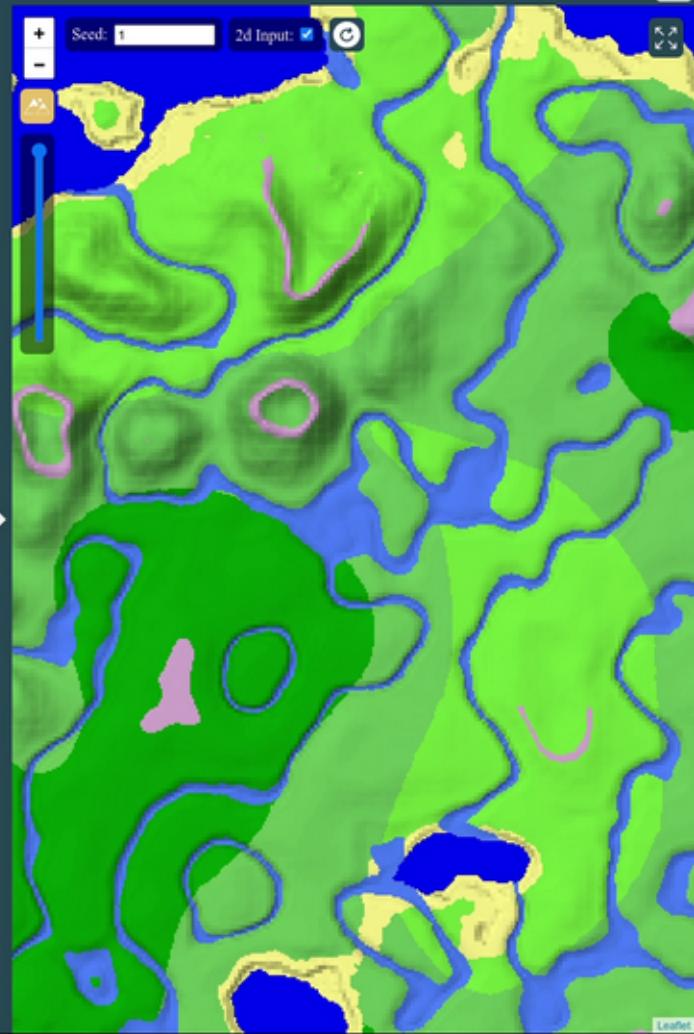
Middle

Biomes:

Unused Vanilla Biomes

### Slice Grid

Erosion





Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

- Middle

Biomes:

- ja
- minecraft:jagged\_peaks

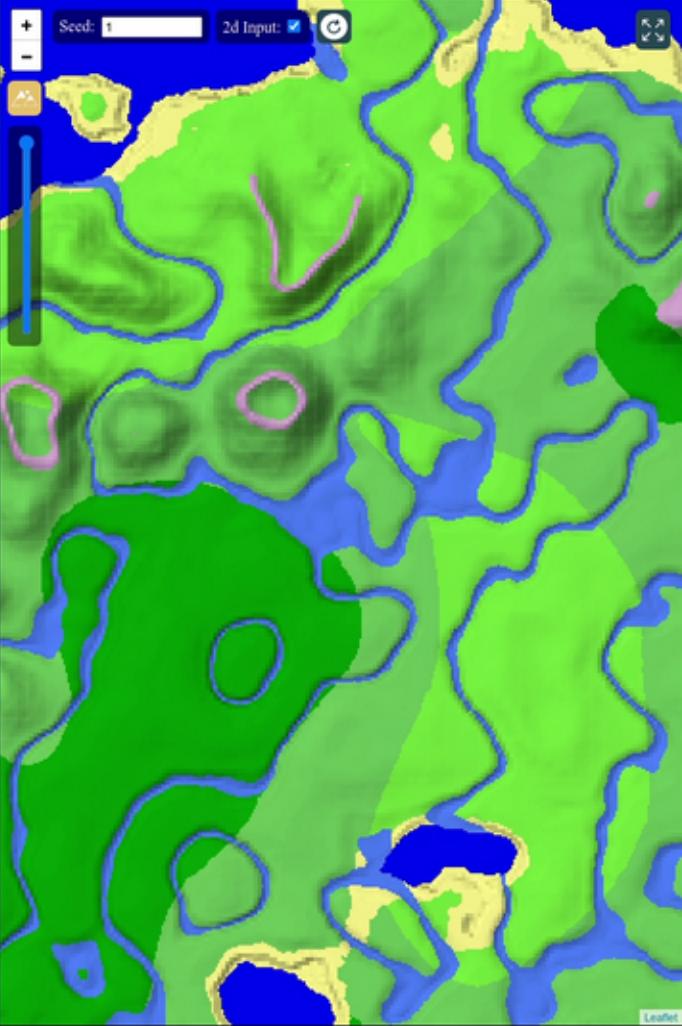
Unused Vanilla Biomes

### Slice Grid

Erosion

-0.355

Continentalness











Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

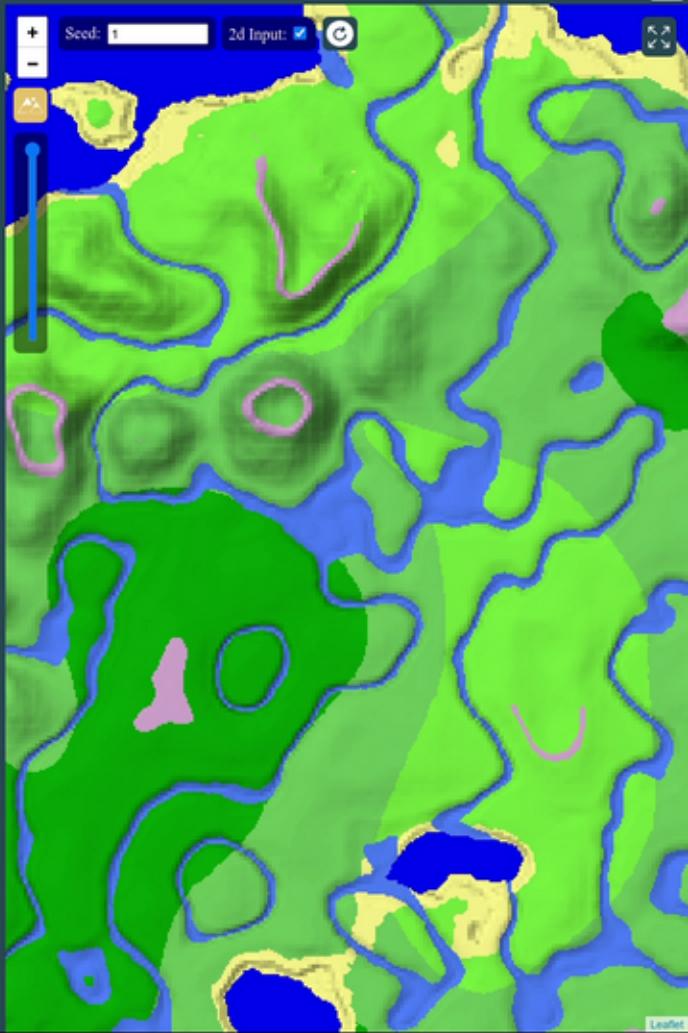
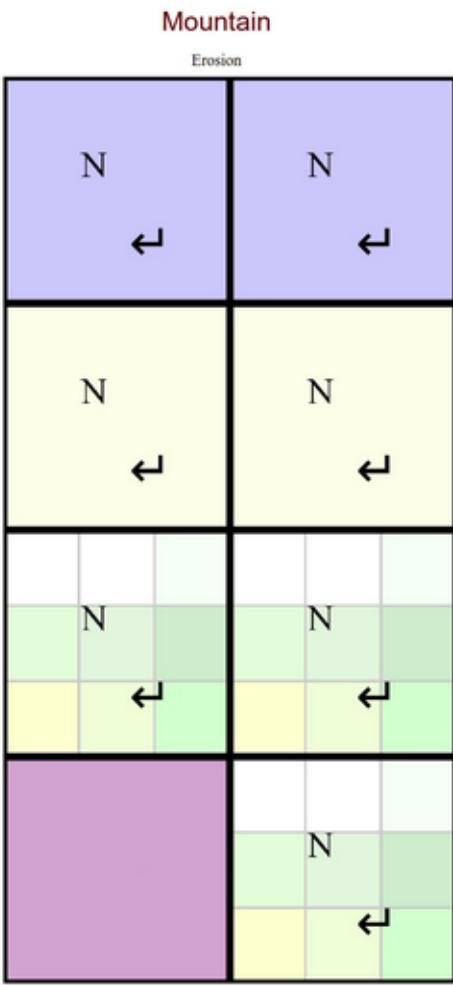
Layouts:

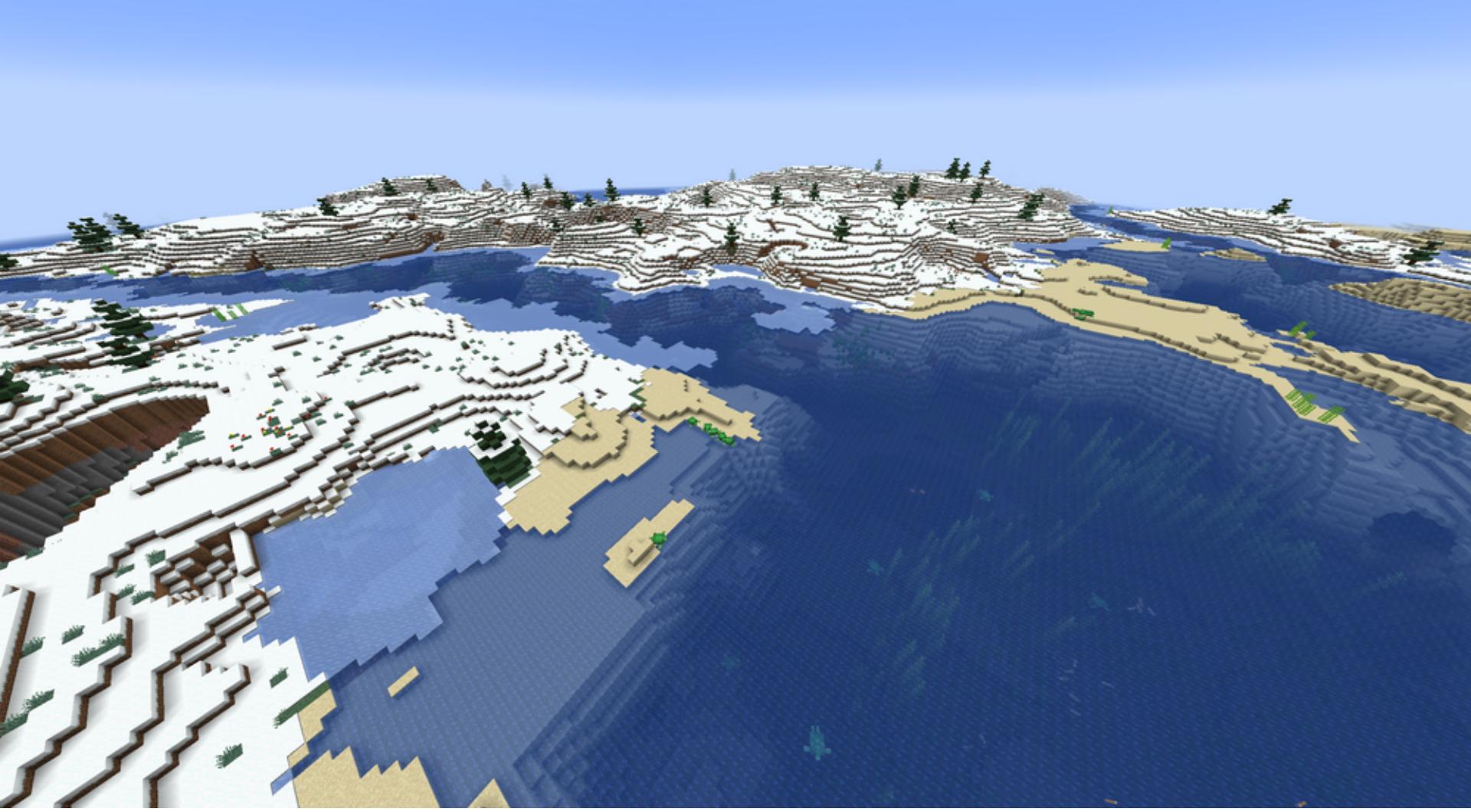
- Middle

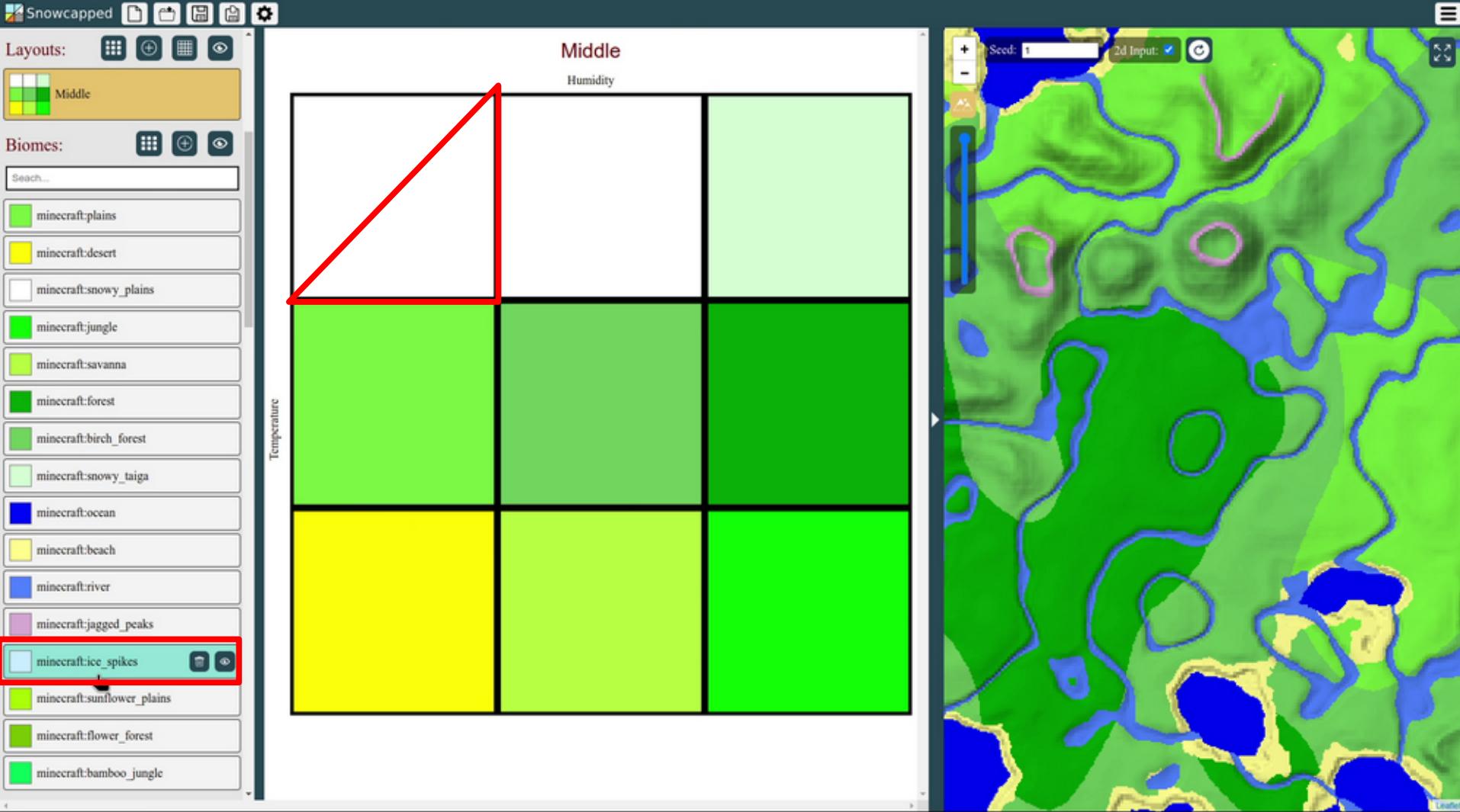
Biomes:

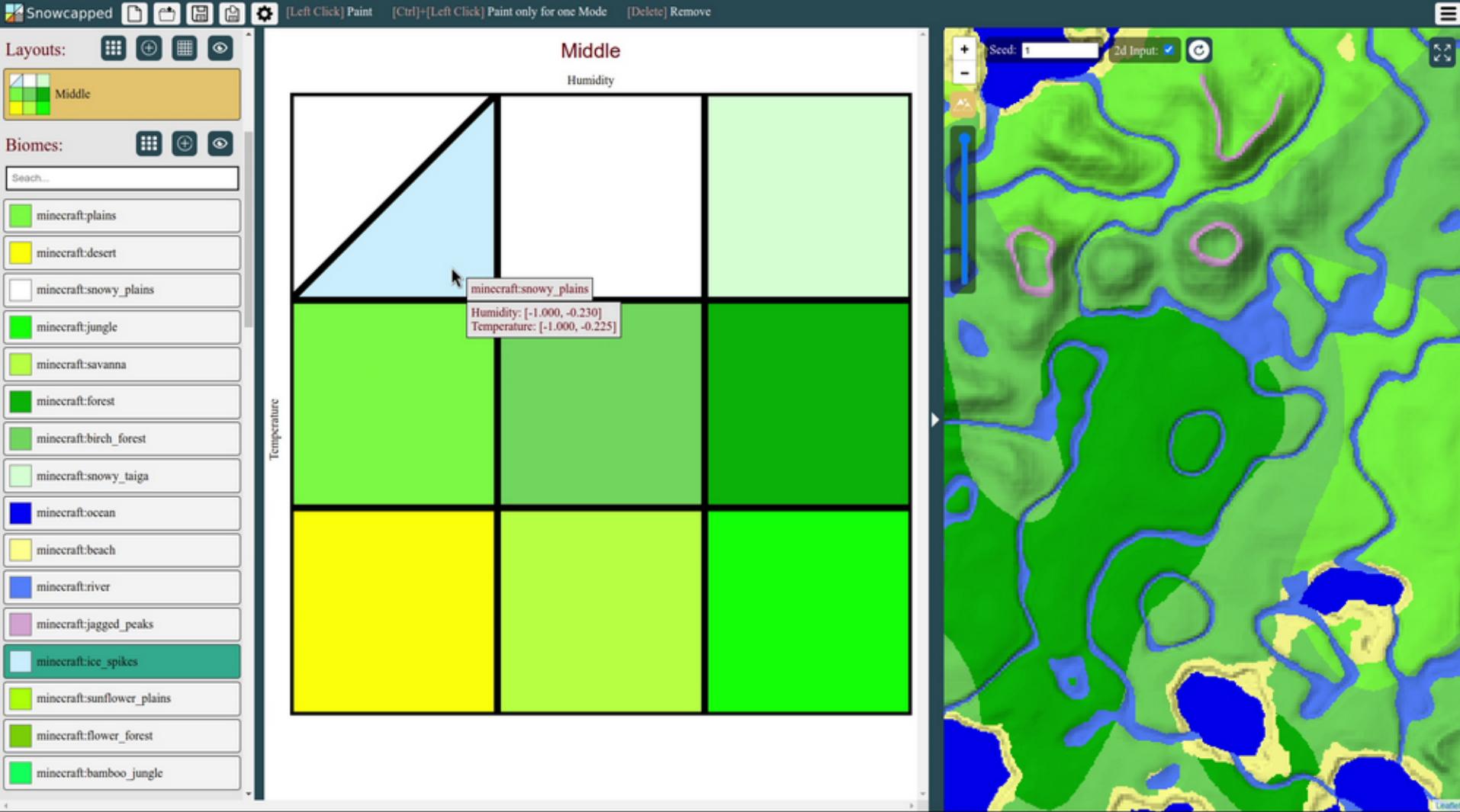
- ja
- minecraft:jagged\_peaks

Unused Vanilla Biomes









Snowcapped

Layouts:

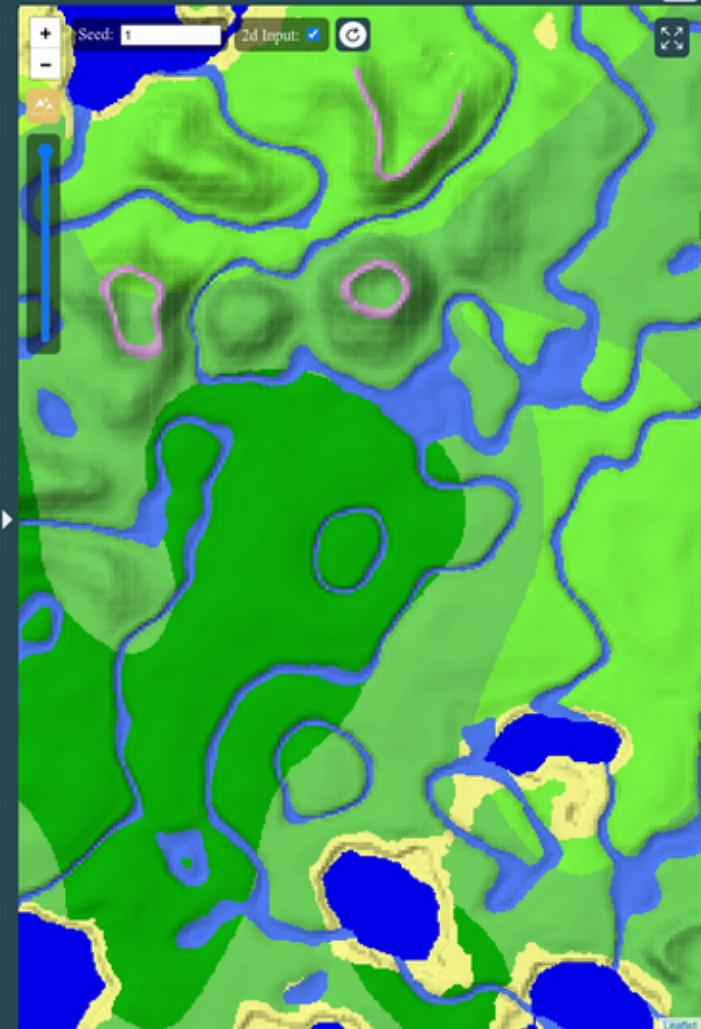
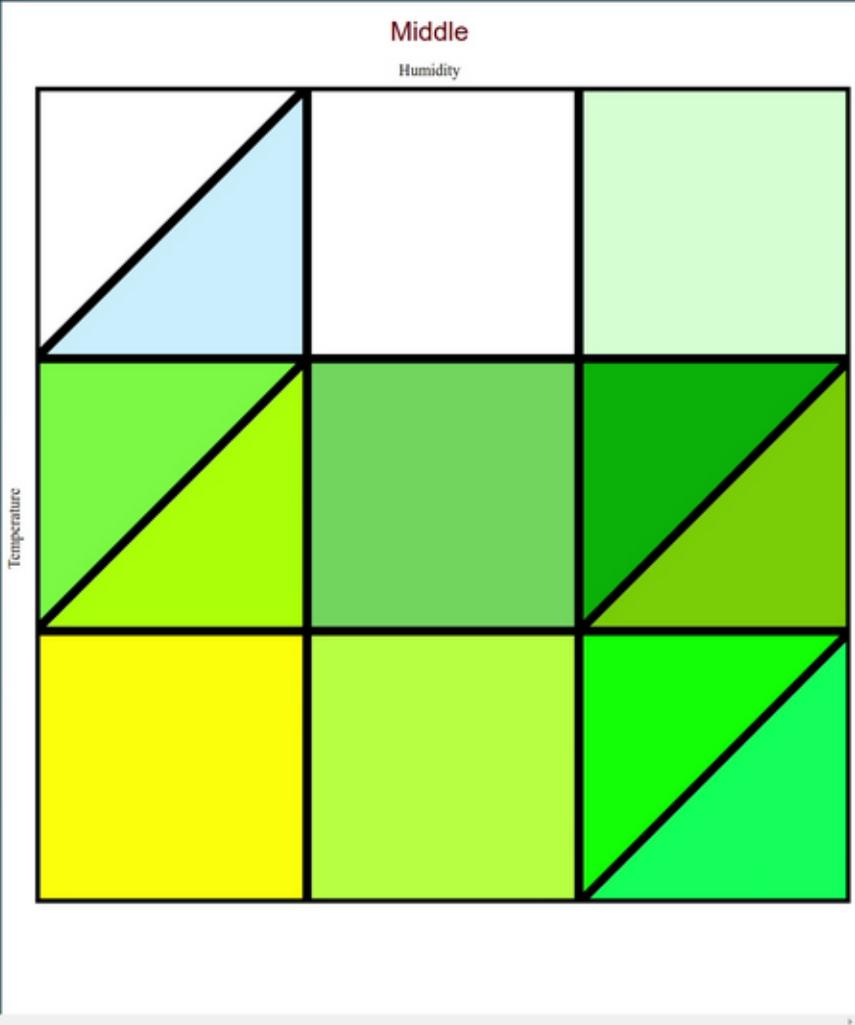
Middle

Biomes:

Search...

- minecraft:plains
- minecraft:desert
- minecraft:snowy\_plains
- minecraft:jungle
- minecraft:savanna
- minecraft:forest
- minecraft:birch\_forest
- minecraft:snowy\_taiga
- minecraft:ocean**
- minecraft:beach
- minecraft:river
- minecraft:jagged\_peaks
- minecraft:ice\_spikes
- minecraft:sunflower\_plains
- minecraft:flower\_forest
- minecraft:bamboo\_jungle

minecraft:ocean



Snowcapped

[Delete] Remove

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

Biomes:

Search...  
minecraft:plains  
minecraft:desert  
minecraft:snowy\_plains  
minecraft:jungle  
minecraft:savanna  
minecraft:forest

Biomes

Weirdness

A A A A A A A

Normal River Mountain

Depth

Seed: t 2d Input:

The screenshot shows a terrain generation application with three main panels. The left panel contains a sidebar with various settings: 'Dimension' (Biomes), 'Slices' (Normal, River, Mountain), 'Layouts' (Middle), and 'Biomes' (Search bar and a list of biomes: plains, desert, snowy\_plains, jungle, savanna, forest). The middle panel is titled 'Biomes' and 'Weirdness', featuring a row of seven icons labeled 'A' and a grid of seven smaller icons representing different biome configurations. The right panel displays a generated map with green landmasses, blue bodies of water, and yellowish-green swamps. A vertical toolbar on the far left of the right panel includes zoom controls (+, -), a seed input field ('t'), a '2d Input' checkbox, and a refresh button.

Snowcapped

[Delete] Remove

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

Biomes:

Search...  
minecraft:plains  
minecraft:desert  
minecraft:snowy\_plains  
minecraft:jungle  
minecraft:savanna  
minecraft:forest

Biomes

Weirdness

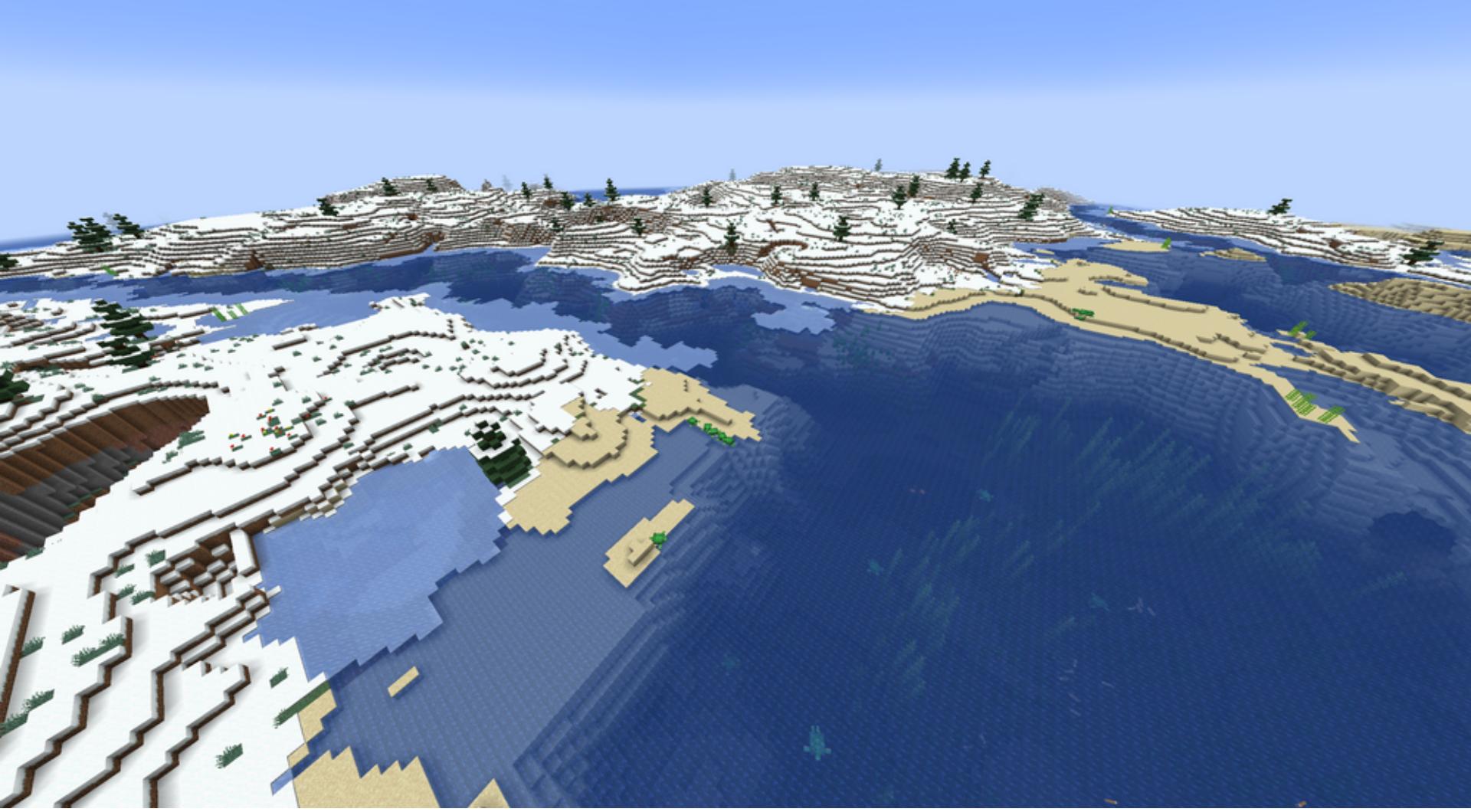
A A A A B B B

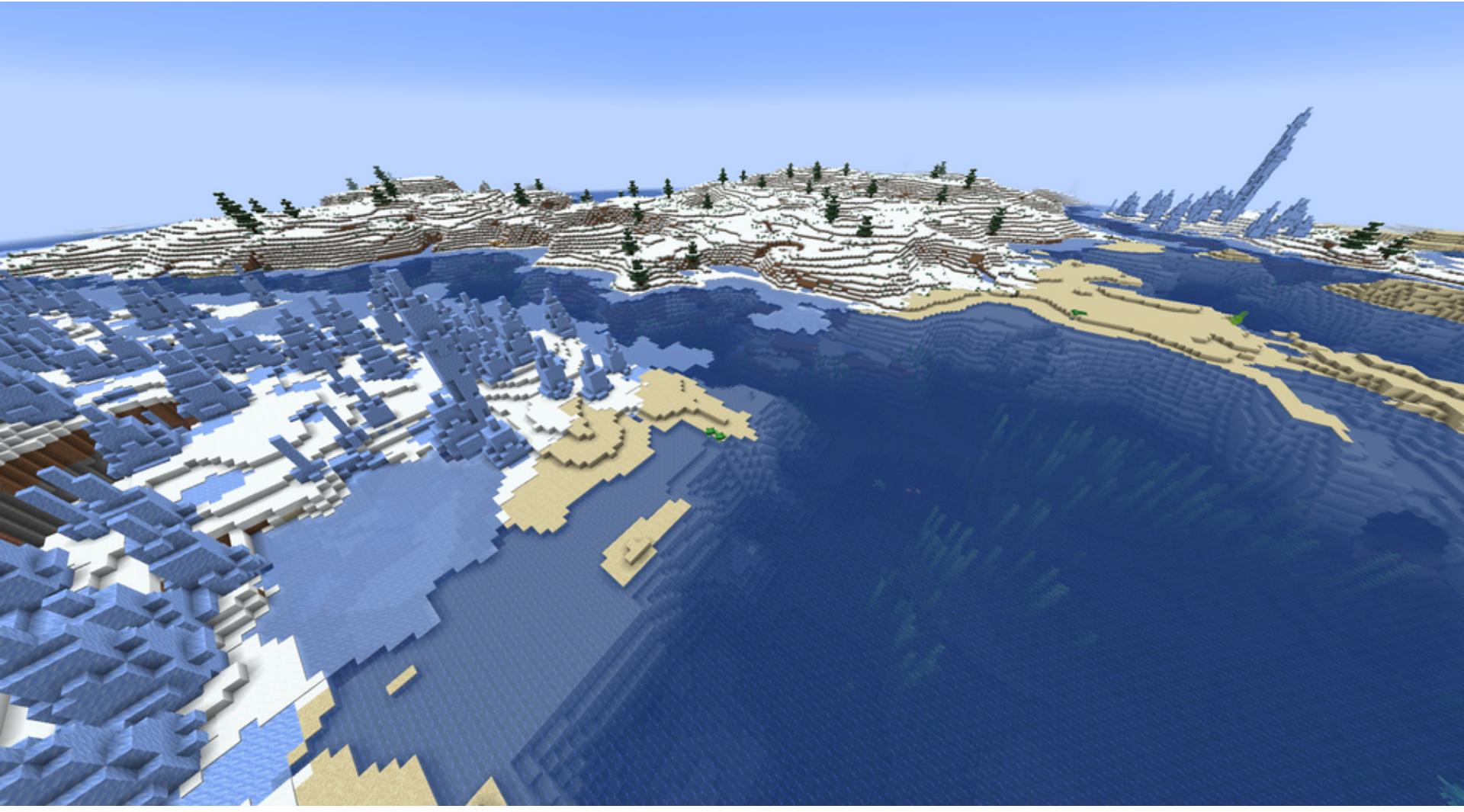
Normal River Mountain

Depth

Seed: t 2d Input:

The screenshot shows the Biomes Editor application window. On the left, there are several panels: 'Biomes' (selected), 'Slices' (with options for Normal, River, and Mountain), 'Layouts' (with a 'Middle' option), and 'Biomes' (with a search bar and a list of Minecraft biomes). In the center, there's a 'Biomes' section with a 'Weirdness' slider and a preview area showing seven categories labeled A and B, each with a small icon and a 7x7 grid preview. Below this is a 'Depth' section. On the right, a large 3D perspective view of a terrain map is displayed, showing various colored regions representing different biomes. A vertical toolbar on the far right includes a seed input field ('t'), a '2d Input' checkbox, and other controls.





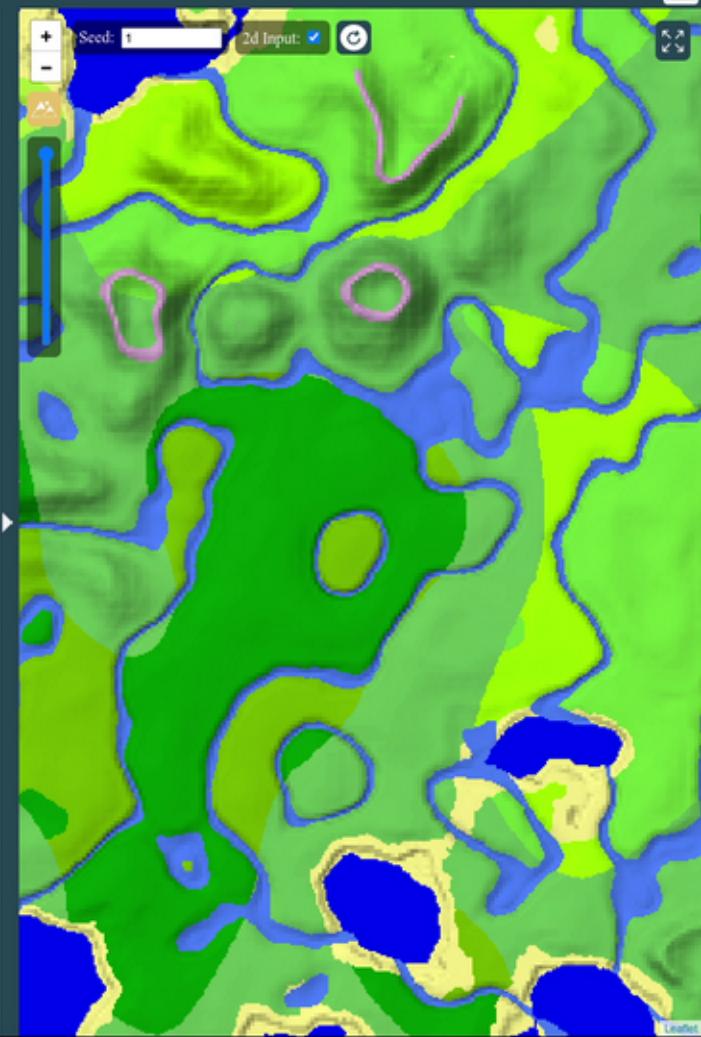
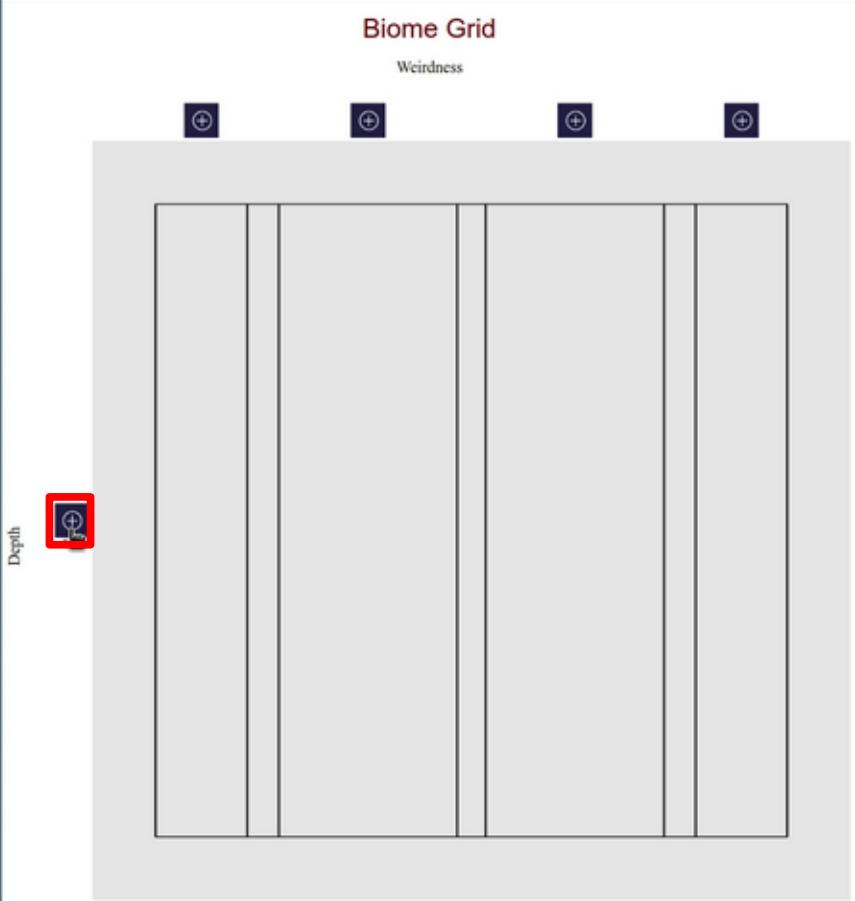


Dimension: Biomes

Slices: Normal River Mountain

Layouts: Middle

Biomes: Search... minecraft:plains minecraft:desert minecraft:snowy\_plains minecraft:jungle minecraft:savanna minecraft:forest



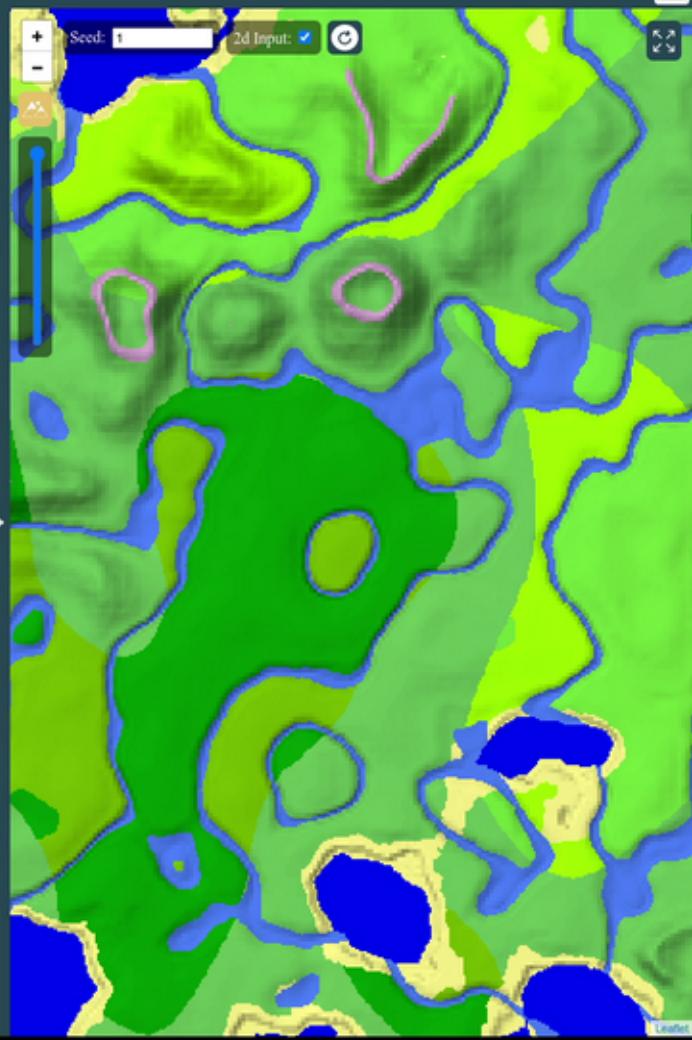
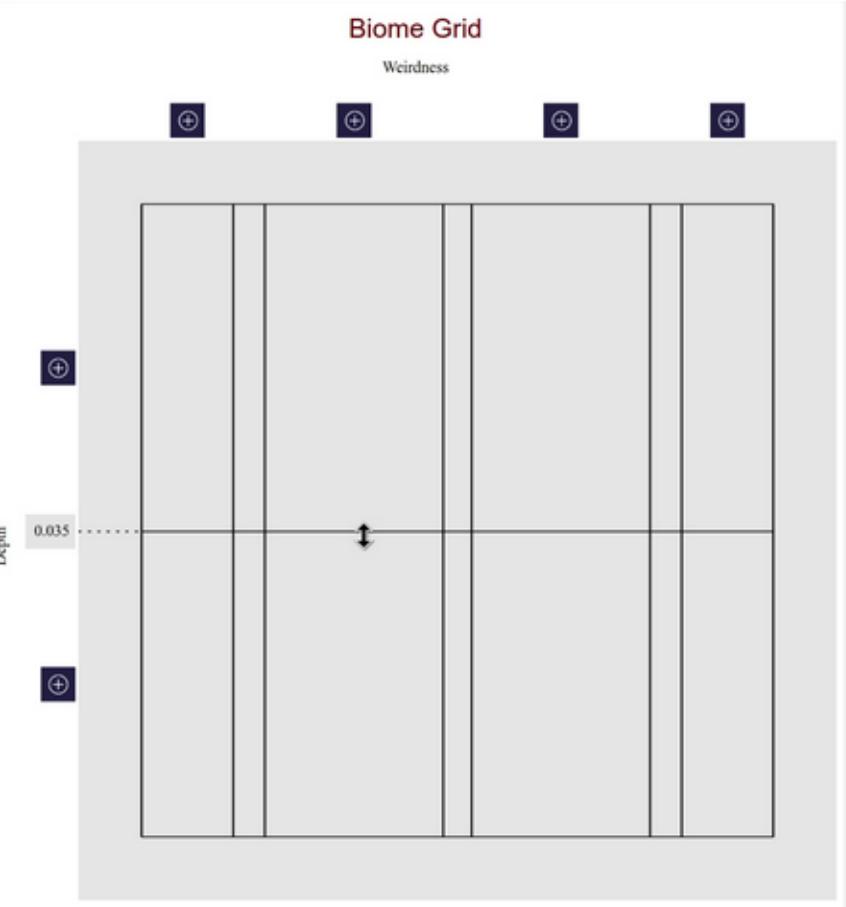


Dimension: Biomes

Slices: Normal River Mountain

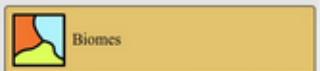
Layouts: Middle

Biomes: Search... minecraft:plains minecraft:desert minecraft:snowy\_plains minecraft:jungle minecraft:savanna minecraft:forest

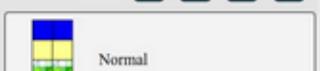




Dimension:



Slices:



Normal



River

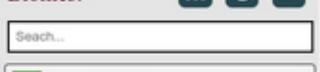


Mountain

Layouts:



Biomes:



Search...

minecraft:plains

minecraft:desert

minecraft:snowy\_plains

minecraft:jungle

minecraft:savanna

minecraft:forest

minecraft:taiga

## Biomes

Weirdness

A

A

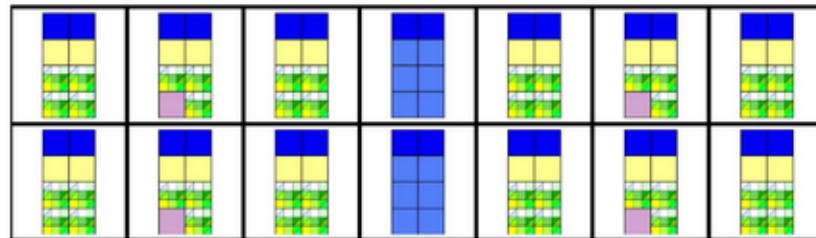
A

A

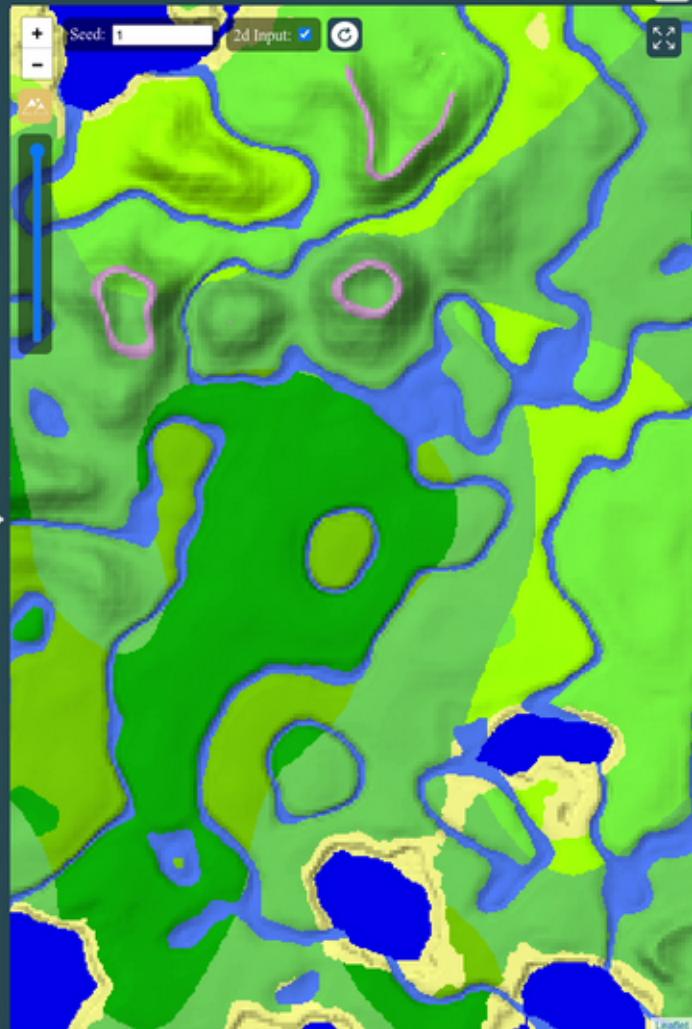
B

B

B



Depth



Snowcapped

[Ctrl]+[C] Copy Teleport Command

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

Middle

Biomes:

- lu
- minecraft:lush\_caves

Unused Vanilla Biomes

- minecraft:deep\_lukewarm\_ocean
- minecraft:lukewarm\_ocean

Biomes

Weirdness

A A A A B B B


Depth

Seed: 1 2d Input:

Snowcapped

[Ctrl]+[C] Copy Teleport Command

Dimension:

Biomes

Slices:

- Normal
- River
- Mountain

Layouts:

Middle

Biomes:

- lu
- minecraft:lush\_caves

Unused Vanilla Biomes

- minecraft:deep\_lukewarm\_ocean
- minecraft:lukewarm\_ocean

Biomes

Weirdness

A A A A B B B


Depth

Seed: t 2d Input:

X: -4342, Y: 68, Z: -14515  
C: 0.27, E: -0.42, W: -0.26  
T: 0.17, H: -0.40, D: 0.05  
minecraft:lush\_caves

Lu

minecraft:lush\_caves

minecraft:deep\_lukewarm\_ocean

minecraft:lukewarm\_ocean

Biomes

Weirdness

A A A A B B B


Depth

Seed: t 2d Input:

X: -4342, Y: 68, Z: -14515  
C: 0.27, E: -0.42, W: -0.26  
T: 0.17, H: -0.40, D: 0.05  
minecraft:lush\_caves

Lu

minecraft:lush\_caves

minecraft:deep\_lukewarm\_ocean

minecraft:lukewarm\_ocean

Biomes

Weirdness

A A A A B B B


Depth

Seed: t 2d Input:

X: -4342, Y: 68, Z: -14515  
C: 0.27, E: -0.42, W: -0.26  
T: 0.17, H: -0.40, D: 0.05  
minecraft:lush\_caves

Lu

minecraft:lush\_caves

minecraft:deep\_lukewarm\_ocean

minecraft:lukewarm\_ocean

# That's it :)

Now its your turn to continue from here:

- Add more normal biomes
- Add slope biomes
- Add frozen rivers, beaches and oceans
- Add more cave biomes

# Q & A

## Snowcapped

<https://snowcapped.jacobsjo.eu>

## Datapack and files from today

<https://github.com/jacobsjo/datapack-examples/tree/main/intro-to-snowcapped>

## Visit my Booth

Worldgen Tools - Booth 33, in the Aspen Forest

## Other Links

Documentation: <https://github.com/jacobsjo/snowcapped/wiki>

GitHub: <https://github.com/jacobsjo/snowcapped>

My other tools: <https://jacobsjo.eu> (or visit my booth)

MC Config Discord: <https://discord.gg/xK8x9ae8Vs>

