

Creating a Map from an Existing Source

Outside of Wilbur

1. Select your source material and with image editing software make some masks¹.
Note: You can make as many masks as you want, I feel that having an extra mask between hills and mountains helps make the geology look more “natural”

Sea Mask: Dictates the basic shape of the landscape. Black being the sea, white being the landmasses.

Hill Mask: Dictates the general geography the white areas show what parts of the land will be raised.

Mountain Mask: The white areas show the parts that are going to be the highest mountain areas.

2. These masks are done in the final desired resolution of the map, in this case 7200 pixels wide by 3600 pixels high.

For reference, these are the sizes of the various intermediate maps used in this tutorial. Each half the size of the next

Iteration	Width	Height
First	450	225
Second	900	450
Third	1800	900
Fourth	3600	1800
Fifth	7200	3600

Start Wilbur

•Creating a Base

1. Navigate to the Surface Tab
 - a. Select Size from the dropdown menu
 - b. In the window that opens set Width to 450 and Height to 305
2. Navigate to the Select Tab
 - a. Select Load Selection
 - b. Select the LandSea Mask
3. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Set Value from the dropdown menu
 - c. In the window that opens set value to 10
 - d. In the same window set the operation to Replace
4. Navigate to the Select Tab
 - a. Select Load Selection
 - b. Select the Hill Mask
5. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Set Value from the dropdown menu
 - c. In the window that opens set value to 500
 - d. In the same window set the operation to Replace
6. Navigate to the Select Tab
 - a. Select Load Selection
 - b. Select the Mountain Mask
7. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Set Value from the dropdown menu
 - c. In the window that opens set value to 2000

¹ Two-tone black and white images

- d. In the same window set the operation to Replace

●Extrapolating Geometry

1. Navigate to the Select Tab
 - a. Select Load Selection
 - b. Select the LandSea Mask
2. Navigate to the Filter Tab
 - a. Select Noise
 - b. Select Absolute Magnitude Noise from the dropdown menu
 - c. In the window that opens set the Magnitude to 10
3. Navigate to the Filter Tab
 - a. Select Height Clip
 - b. In the window that opens set the Maximum to 100,000
 - c. In the same window set the Minimum to 1
4. Navigate to the Filter Tab
 - a. Select Erosion
 - b. Select Precipitation-Based from the dropdown menu
 - c. In the window that opens set the Passes to 10
5. Navigate to the Filter Tab
 - a. Select Erosion
 - b. Select Incise Flow from the dropdown menu
 - c. In the window that opens set the Amount to 2
 - d. In the same window set the Exponent to .2

●Scale and/or Repeat

1. Navigate to the Surface Tab
 - a. Select Resample from the dropdown menu
 - b. Select Simple
 - c. In the window that opens set the Width to 900 and Height to 450

(Or the next scale on our list)

2. Navigate to the Select Tab
 - a. Select Load Selection
 - b. Select the LandSea Mask
 - c. Select Inverse Selection
3. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Set Value from the dropdown menu
 - c. In the window that opens set value to -1
4. Navigate to the Select Tab
 - a. Select Inverse Selection
5. Navigate to the Filter Tab
 - a. Select Noise
 - b. Select Absolute Magnitude Noise from the dropdown menu
 - c. In the window that opens set the Magnitude to 20
6. Navigate to the Filter Tab
 - a. Select Height Clip
 - b. In the window that opens set the Maximum to 100,000
 - c. In the same window set the Minimum to 1
7. Navigate to the Filter Tab
 - a. Select Erosion
 - b. Select Precipitation-Based from the dropdown menu
 - c. In the window that opens set the Passes to 10
8. Navigate to the Filter Tab
 - a. Select Erosion
 - b. Select Incise Flow from the dropdown menu

- c. In the window that opens set the Amount to 2
 - d. In the same window set the Exponent to .2
9. Navigate to the Filter Tab
 - a. Select Erosion
 - b. Select Precipitation-Based from the dropdown menu
 - c. In the window that opens set the Passes to 5

Higher detail

After the image resolution becomes higher than 1500 by 750 is too large to keep running the Precipitation-Based erosion at 10 passes, though not exactly required depending on your computer its recommended to drop the passes to 5. For the final stages of detailing set the incise flow amount to 1 and the exponent value to .4

10. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Fill Basins
 - c. Set Value between .25 to 1 in the window that opens.
11. Navigate to the Filter Tab
 - a. Select Noise
 - b. Select Absolute Magnitude Noise from the dropdown menu
 - c. In the window that opens set the Magnitude to 20
12. Navigate to the Filter Tab
 - a. Select Height Clip
 - b. In the window that opens set the Maximum to 100,000
 - c. In the same window set the Minimum to 1
13. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Fill Basins
 - c. Set Value between .25 to 1 in the window that opens.
14. Navigate to the Filter Tab
 - a. Select Fill
 - b. Select Mathematical
 - c. Select Offset
 - d. In the window that opens set the Value to 40.

And so on, resampling by 2 and then processing that new surface with noise, fill basins, incise flow, and erosion.