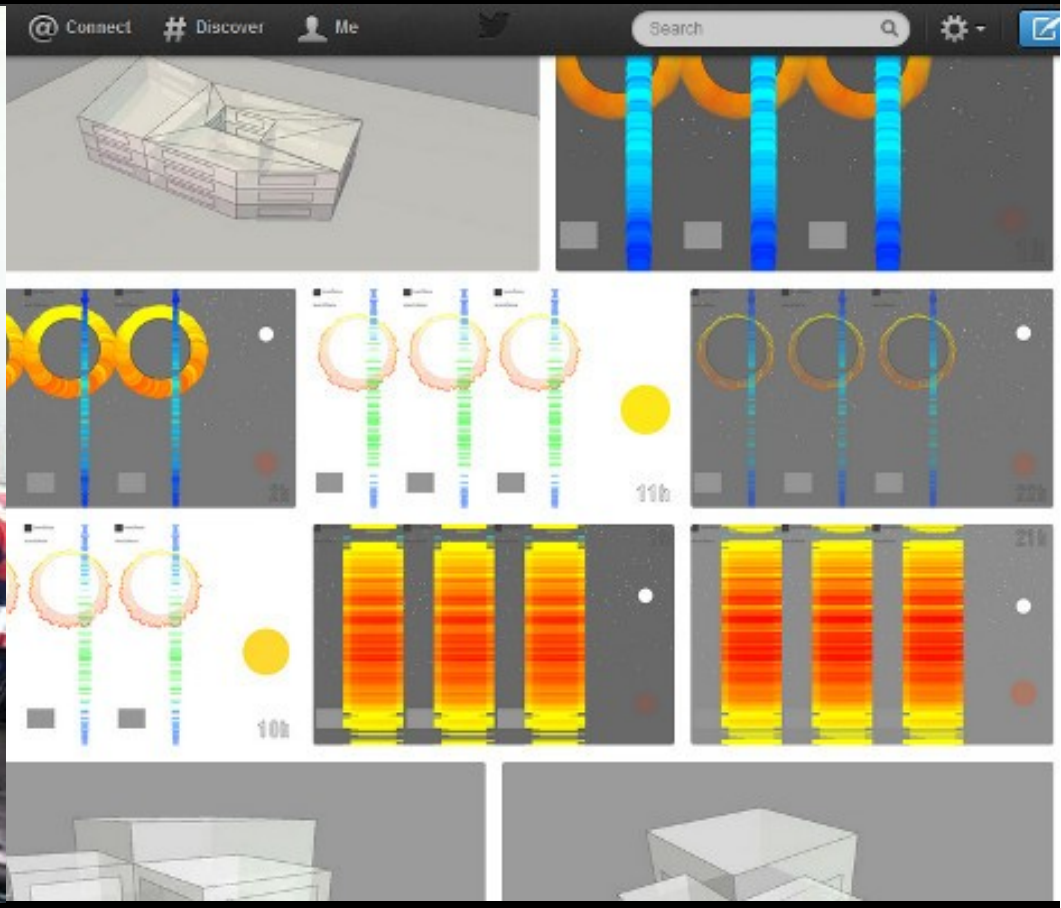
Digital Steganography

a new file type for 3D models?



@simulationBot
how to tweet a 3D model?

Digital Steganography

http://arstechnica.com/security/2014/05/08/how-to-stash-secret-messages-in-tweets-using-point-and-click-steganography/

http://arstechnica.com/business/2012/05/02/steganography-how-al-qaeda-hid-secret-documents-in-a-porn-video/

http://9ol.es/PiggyPack.html

http://steghide.sourceforge.net

original

RED	**GREEN**	**BLUE**
11001100	11111100	00101010
204	**252**	**42**

edited

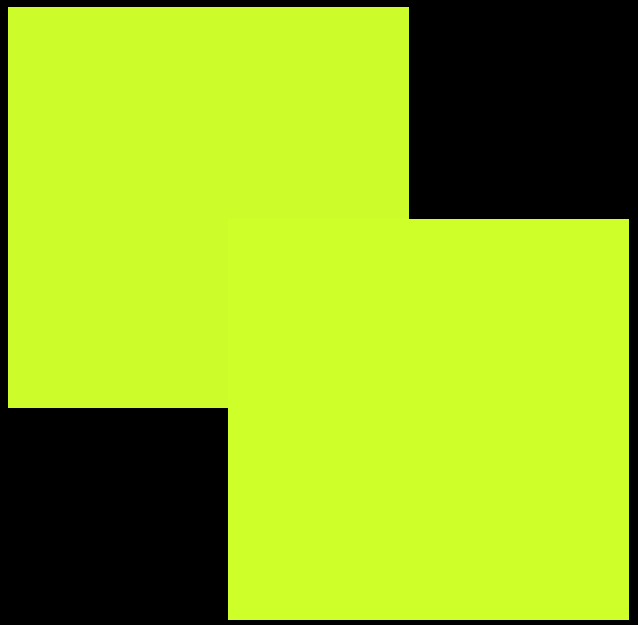
RED	**GREEN**	**BLUE**
11001111	11111111	00101001
207	**255**	**41**

concealed data

111101

49

0 – 63



original

RED	**GREEN**	**BLUE**
11001100	11111100	00101010
204	**252**	**42**

edited

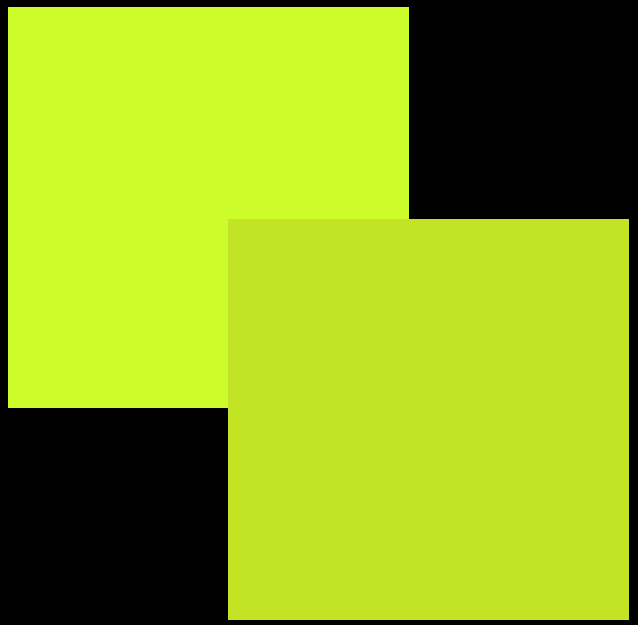
RED	**GREEN**	**BLUE**
1100**0011**	1111**0011**	0010**0101**
195	**227**	**37**

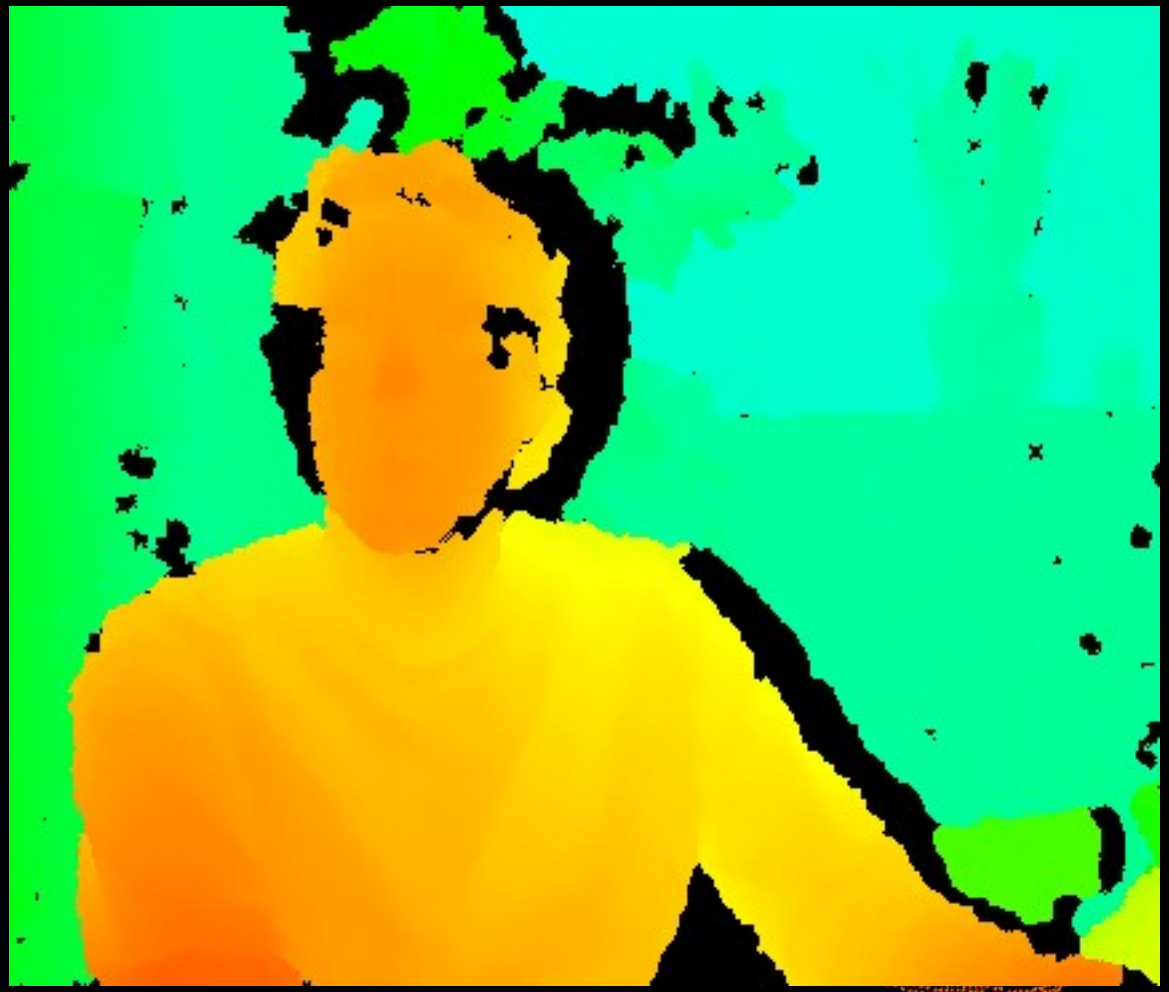
concealed data

001100110101

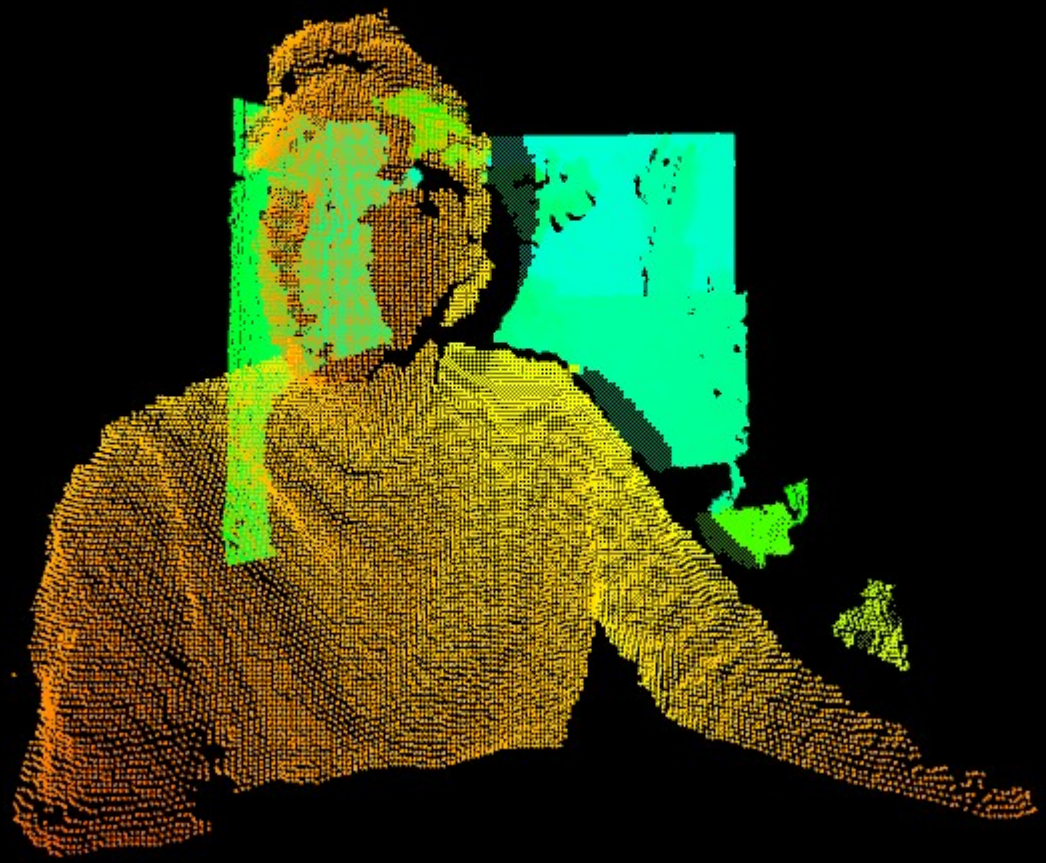
821

0 - 4095

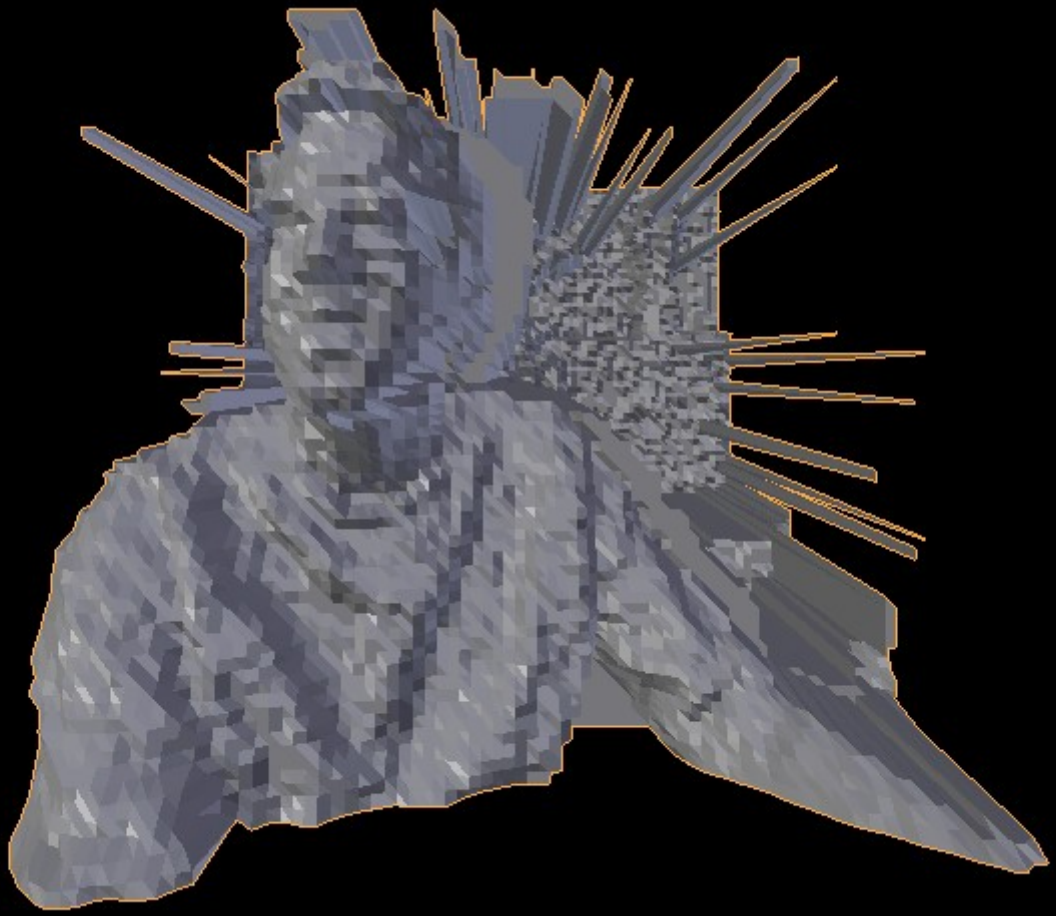




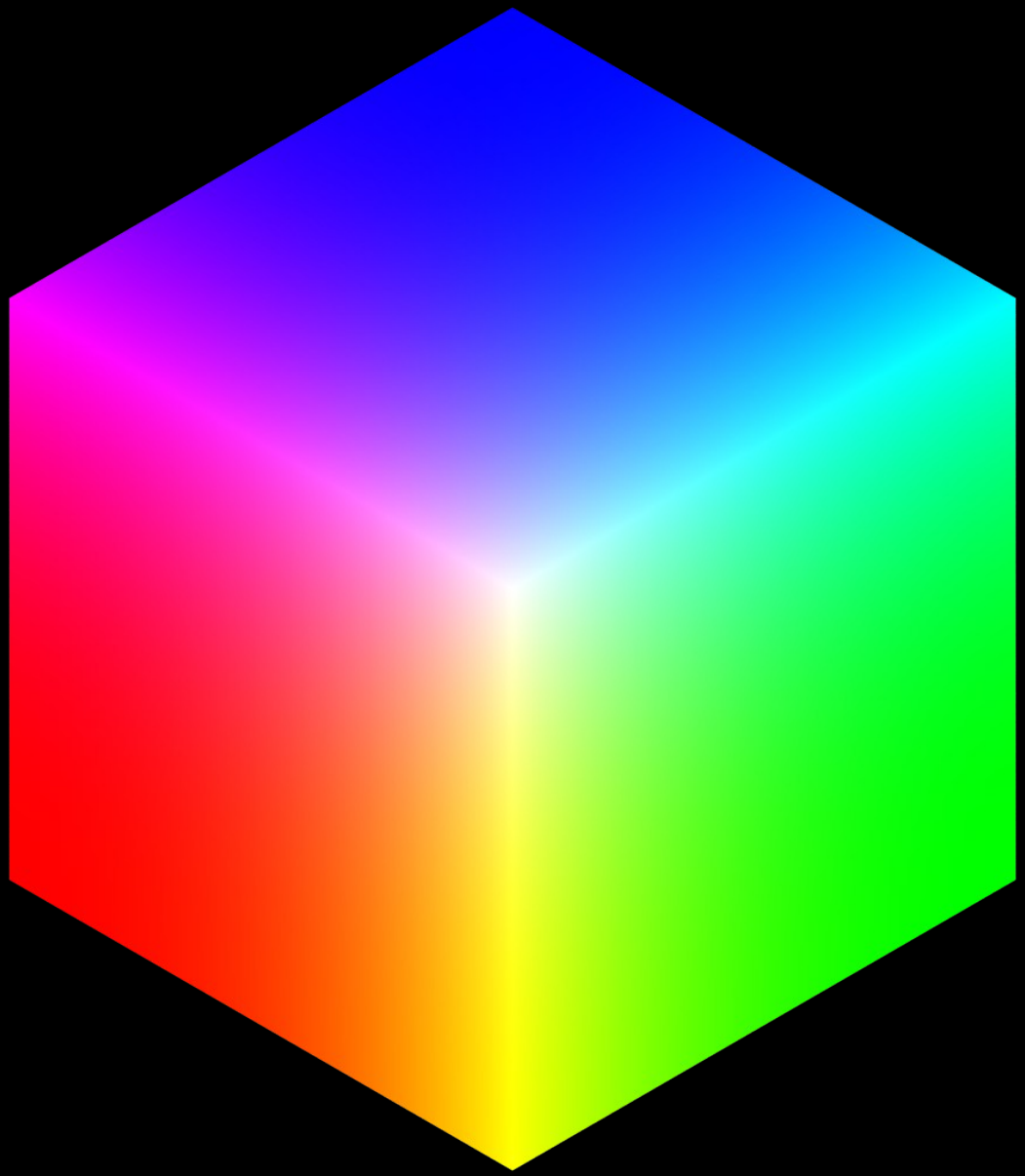
GenderBlending, Constant
Brussels
Nov 2014

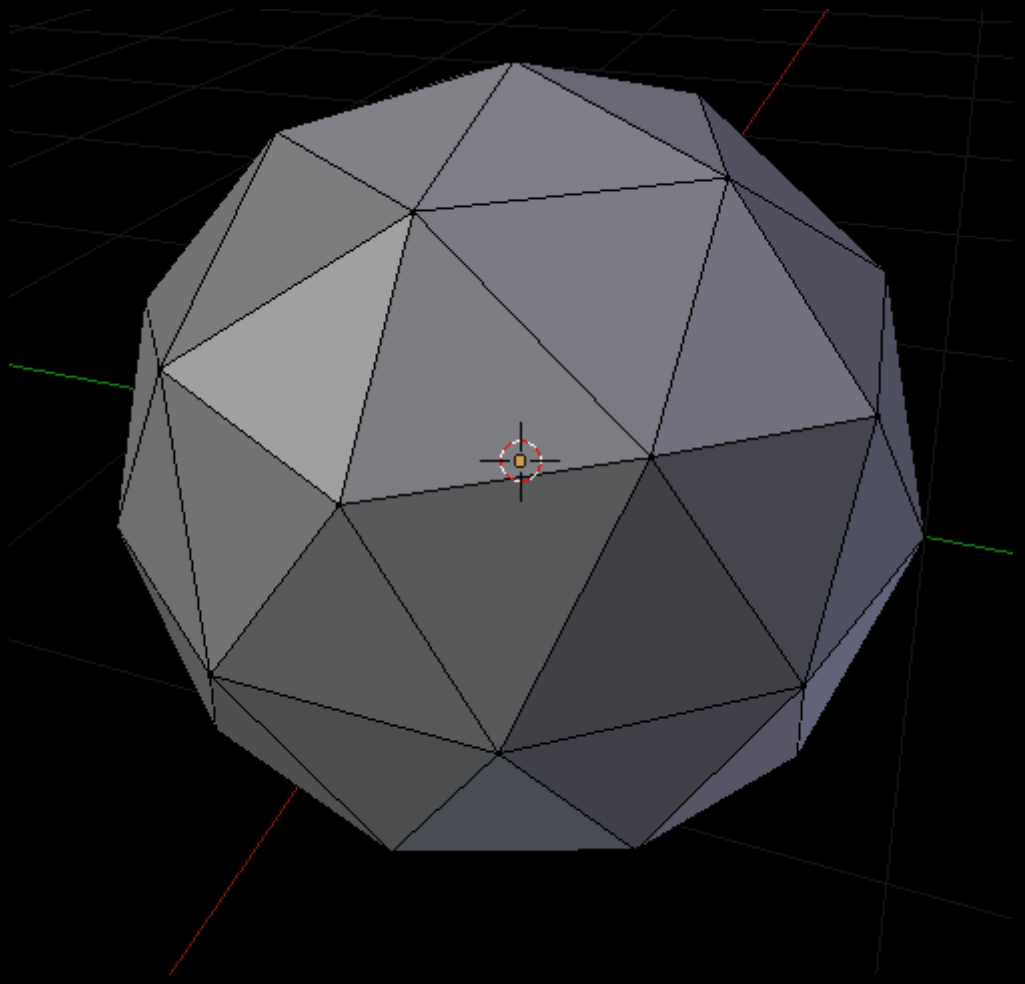


GenderBlending, Constant
Brussels
Nov 2014



GenderBlending, Constant
Brussels
Nov 2014





outer loop
vertex 46.875000 -75.781250 24.218746
vertex 43.750000 -76.562500 16.406246
vertex 50.000000 -68.750000 9.374997
endloop

1 PIXEL = 1 VERTEX

3 PIXEL = 1 FACE

DIRECT MAPPING

XYZ = RGB

MODEL SPACE

0-255 units

FACE

vertex vertex vertex

x y z x y z x y z

3 PIXEL = 1 COORDINATE

9 PIXELS = 1 FACE

DECIMAL RGB AS STRING
“0-255” & “0-99” & “0-99”

MODEL SPACE
0 – 2,559,999 units

3 PIXEL = 1 COORDINATE

9 PIXELS = 1 FACE

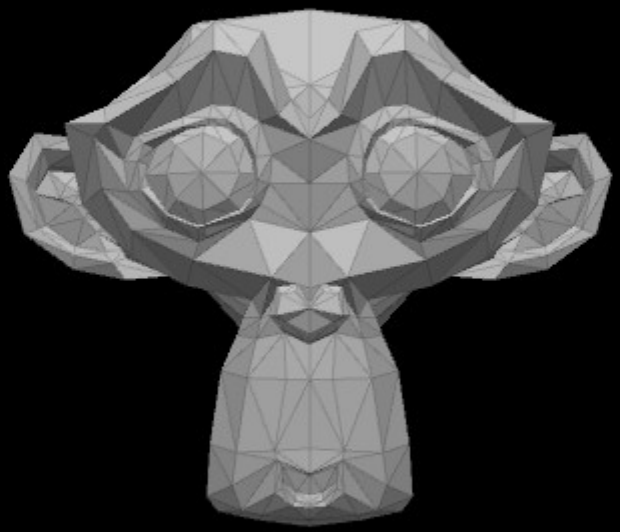
24bit Pixel
100011100011010111000011

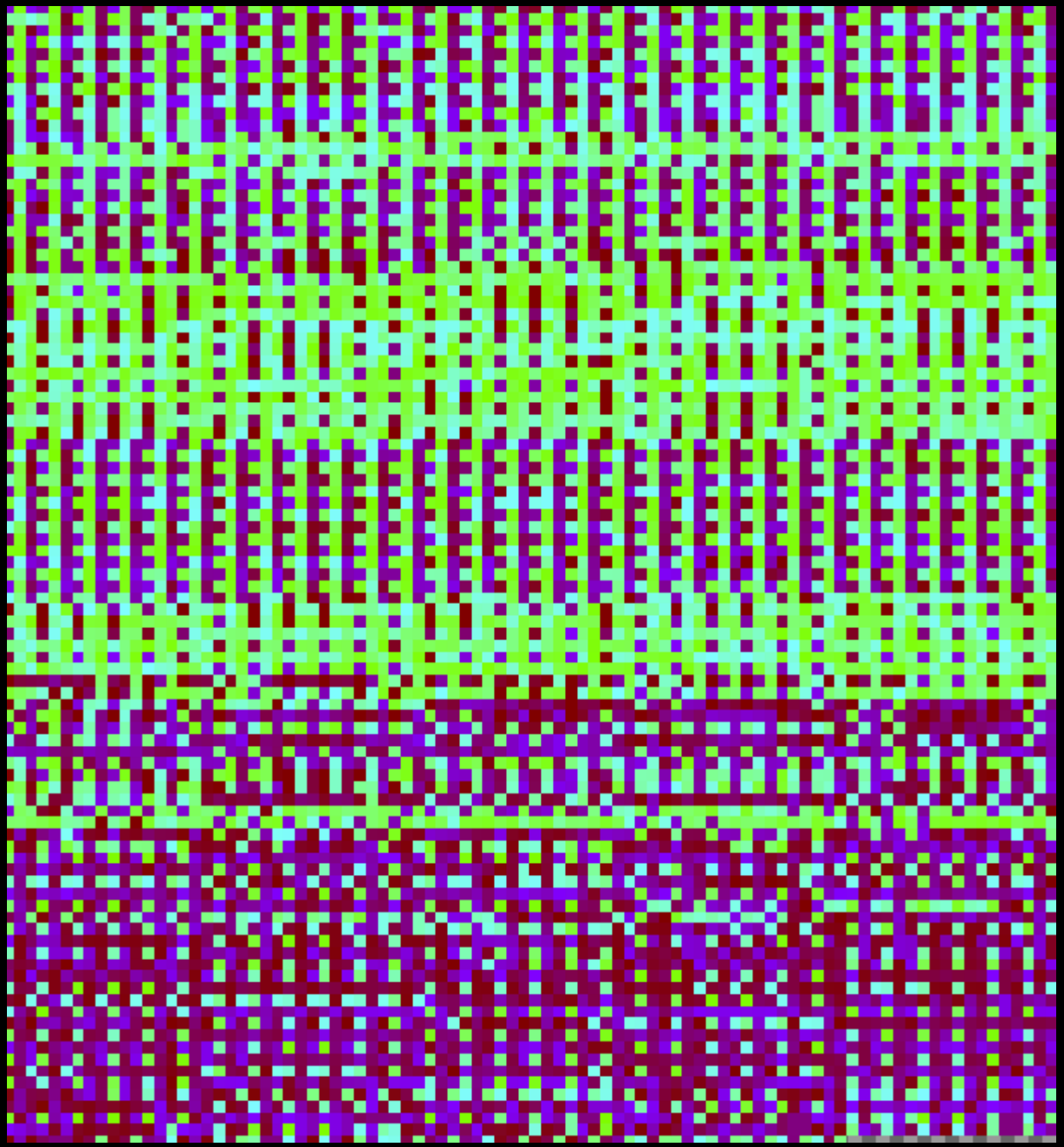
MODEL SPACE
0 – 16,777,215 units

FACE

vertex vertex vertex

x y z x y z x y z





simBot BETA
@simulationBot

Following

...what you lookin' at?? #pixMod #yourNameHere #mesh1ASCII

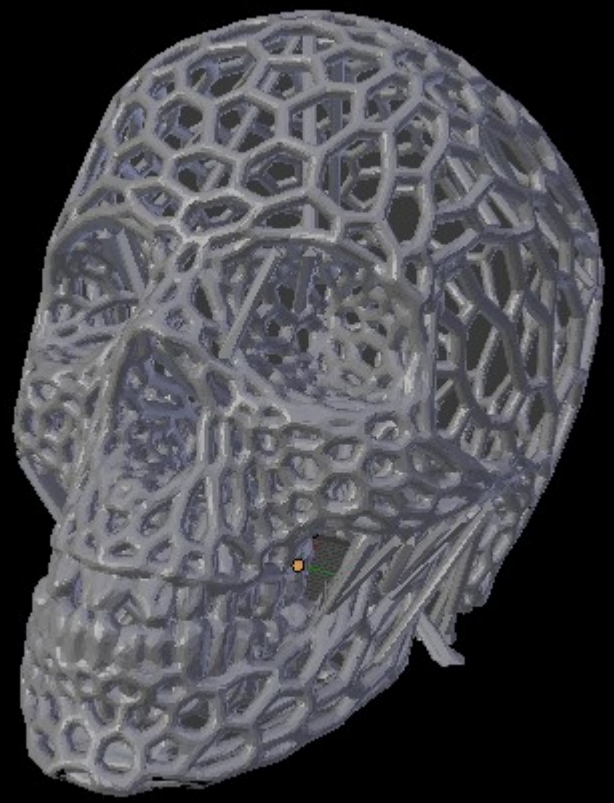
2:12 PM - 30 Apr 2015

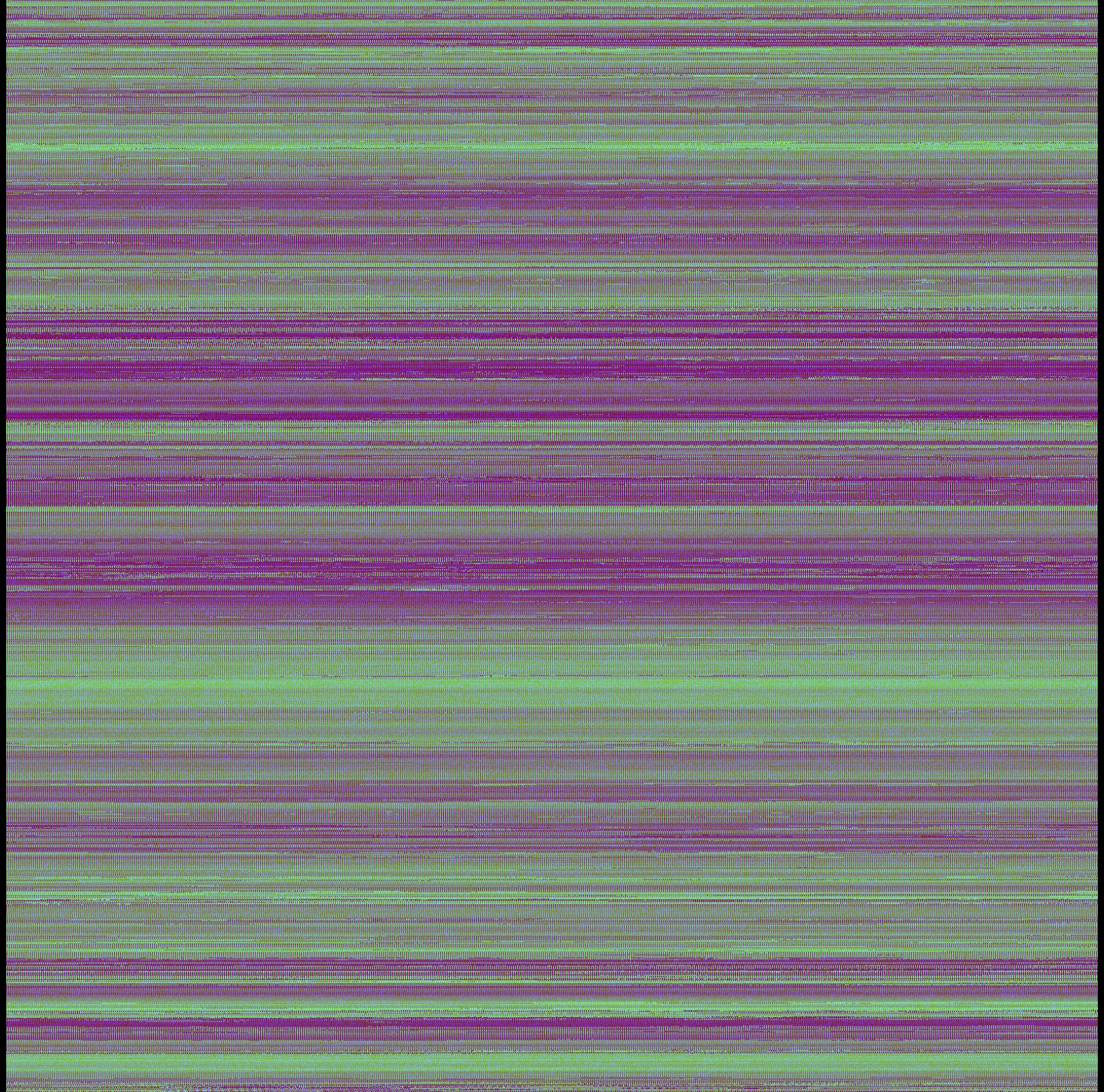
Reply to @simulationBot

ASCII STL
156.8kb

NON-ASCII STL
48kb

IMAGE FILE PNG
6.7kb

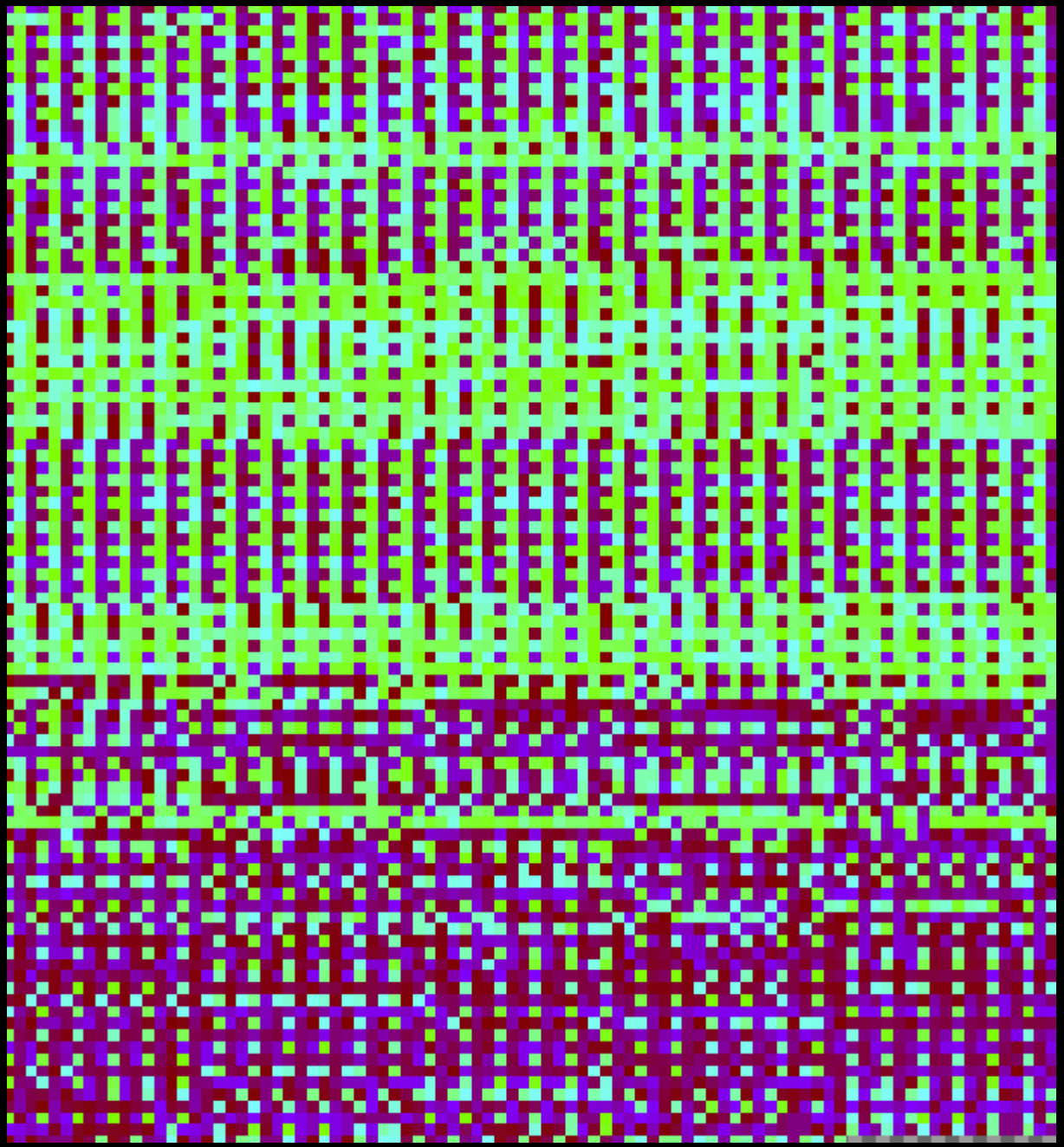


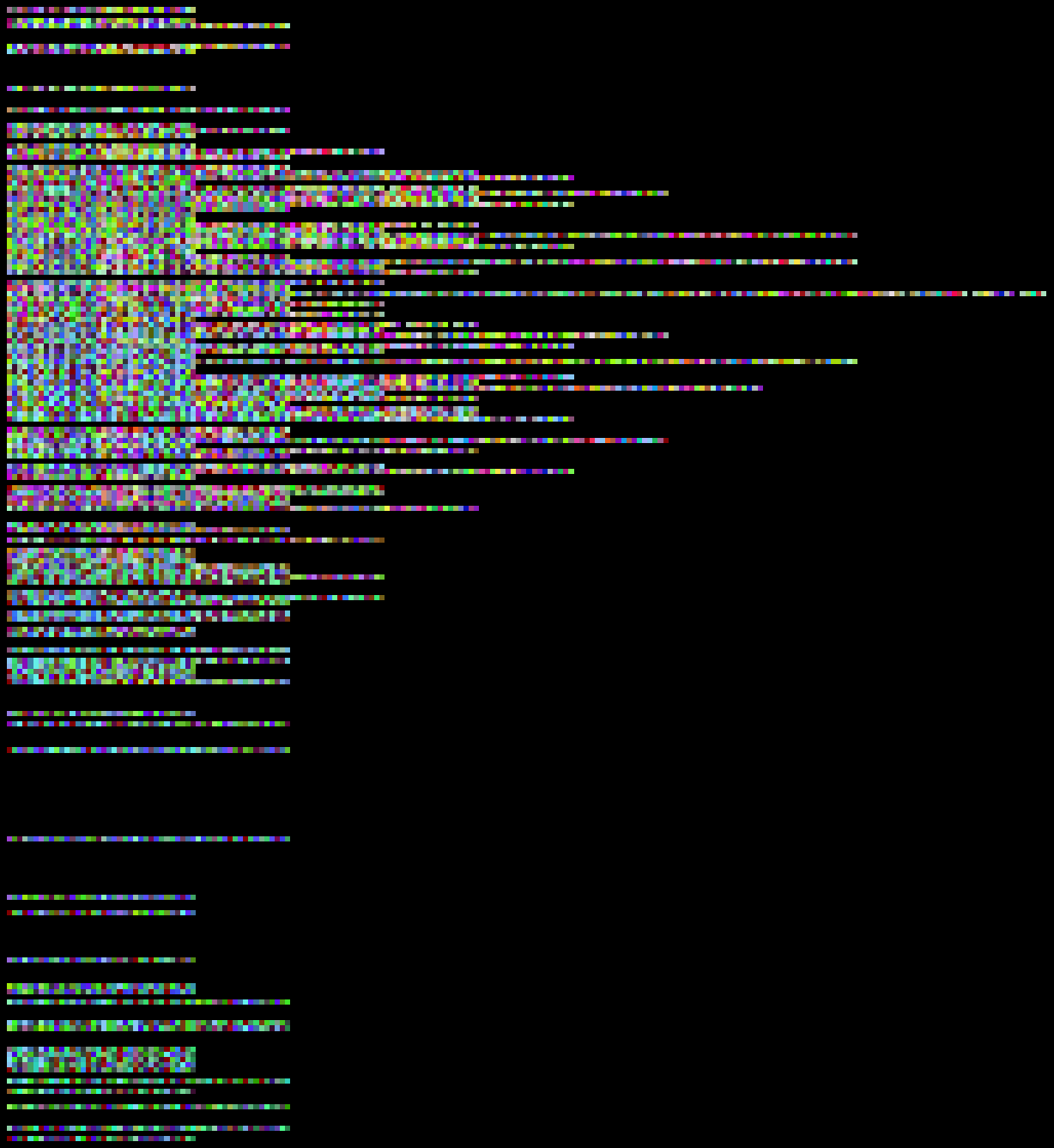


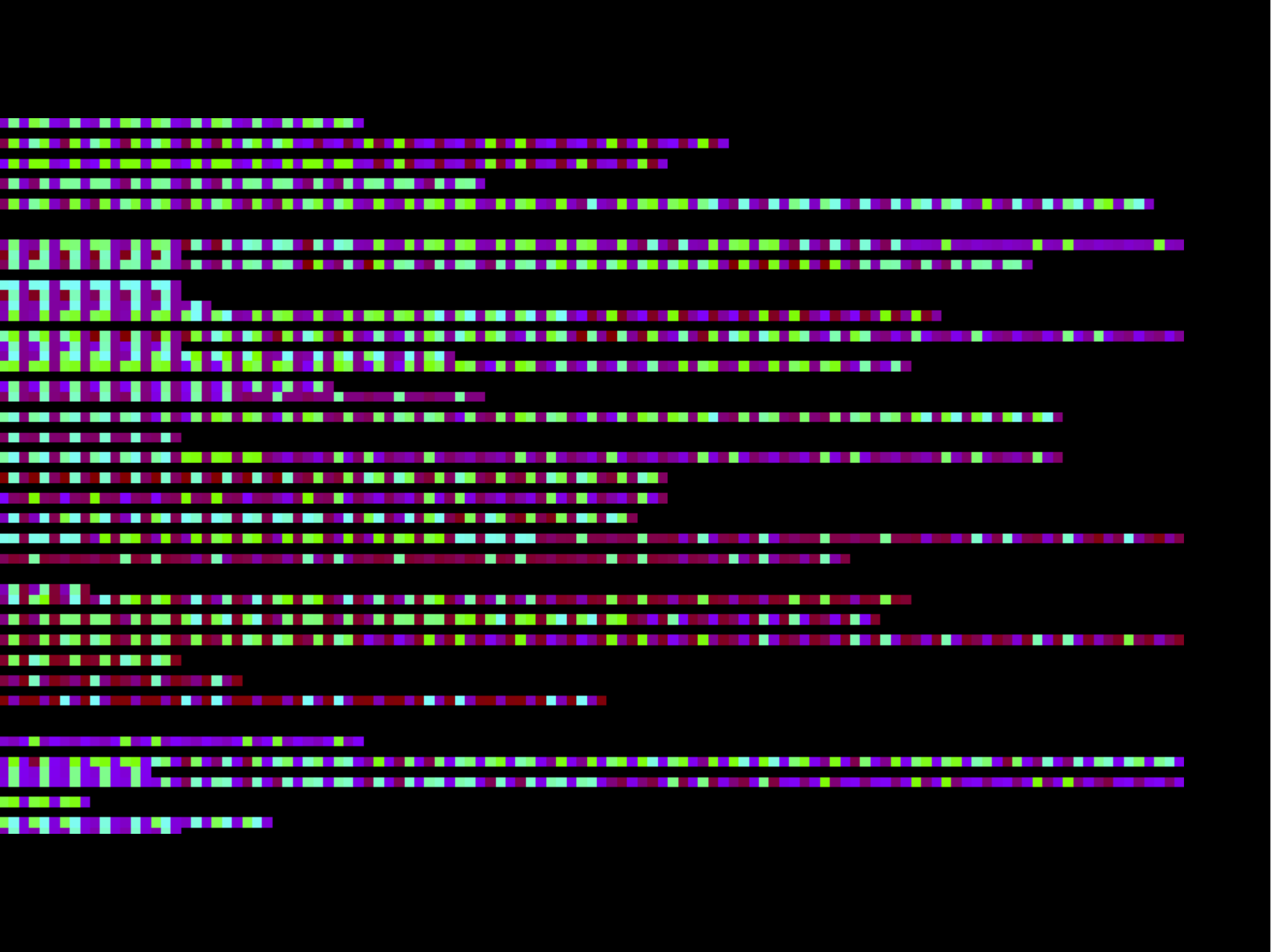
ASCII STL
42.9mb

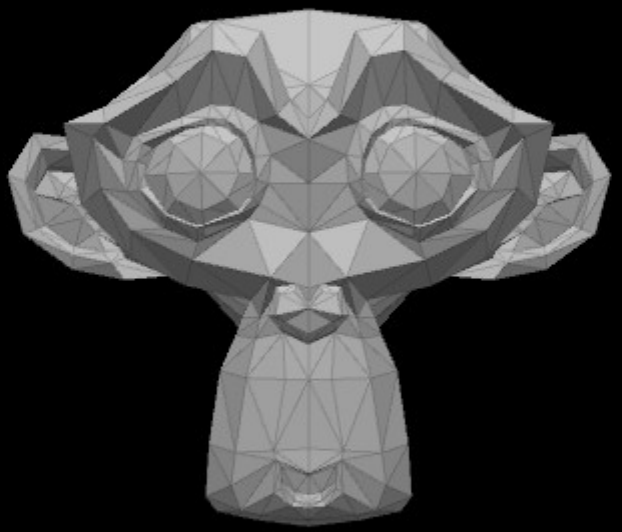
NON-ASCII STL
13.9mb

'PIXEL SQUARE' PNG
2.9mb





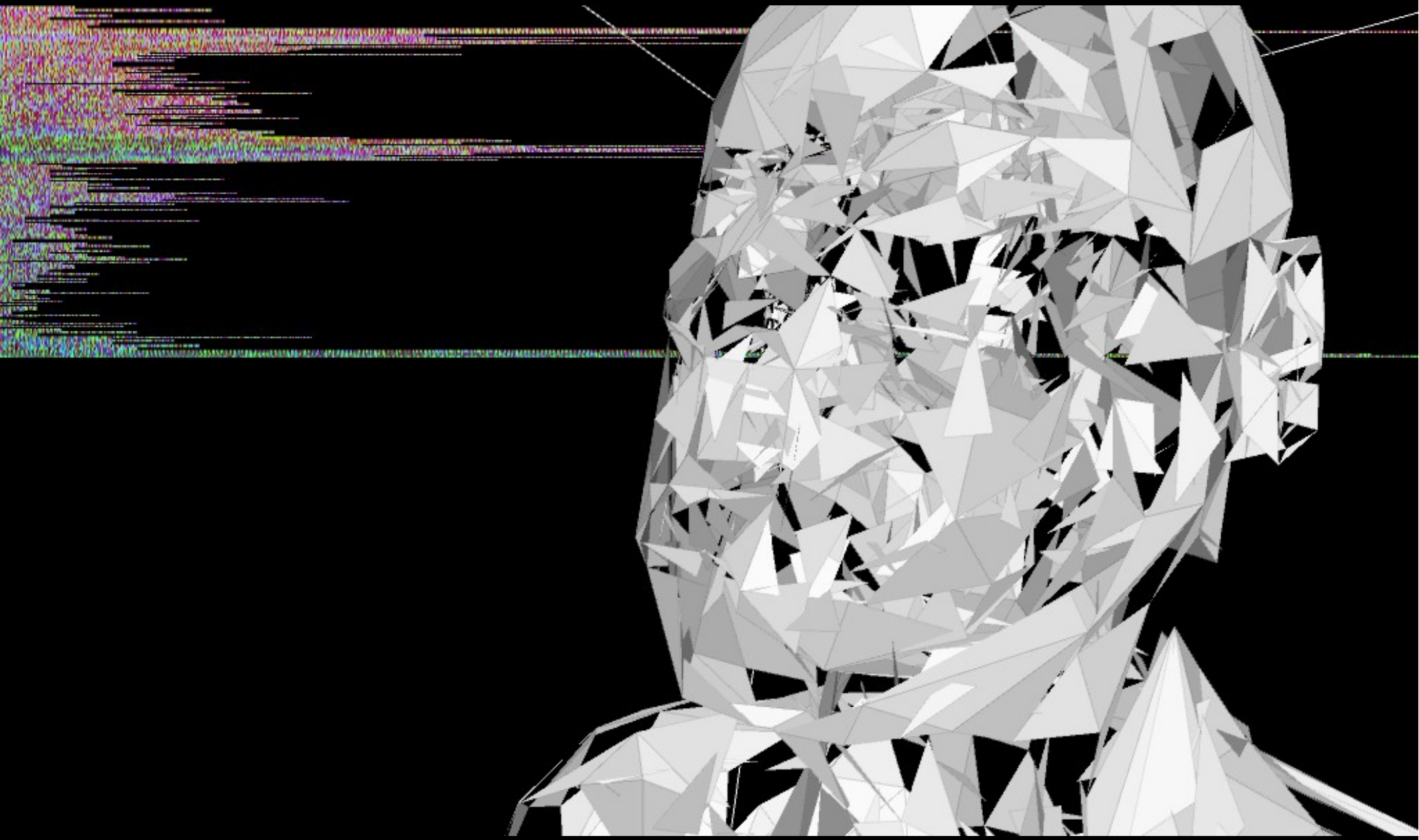




ASCII STL
156.8kb

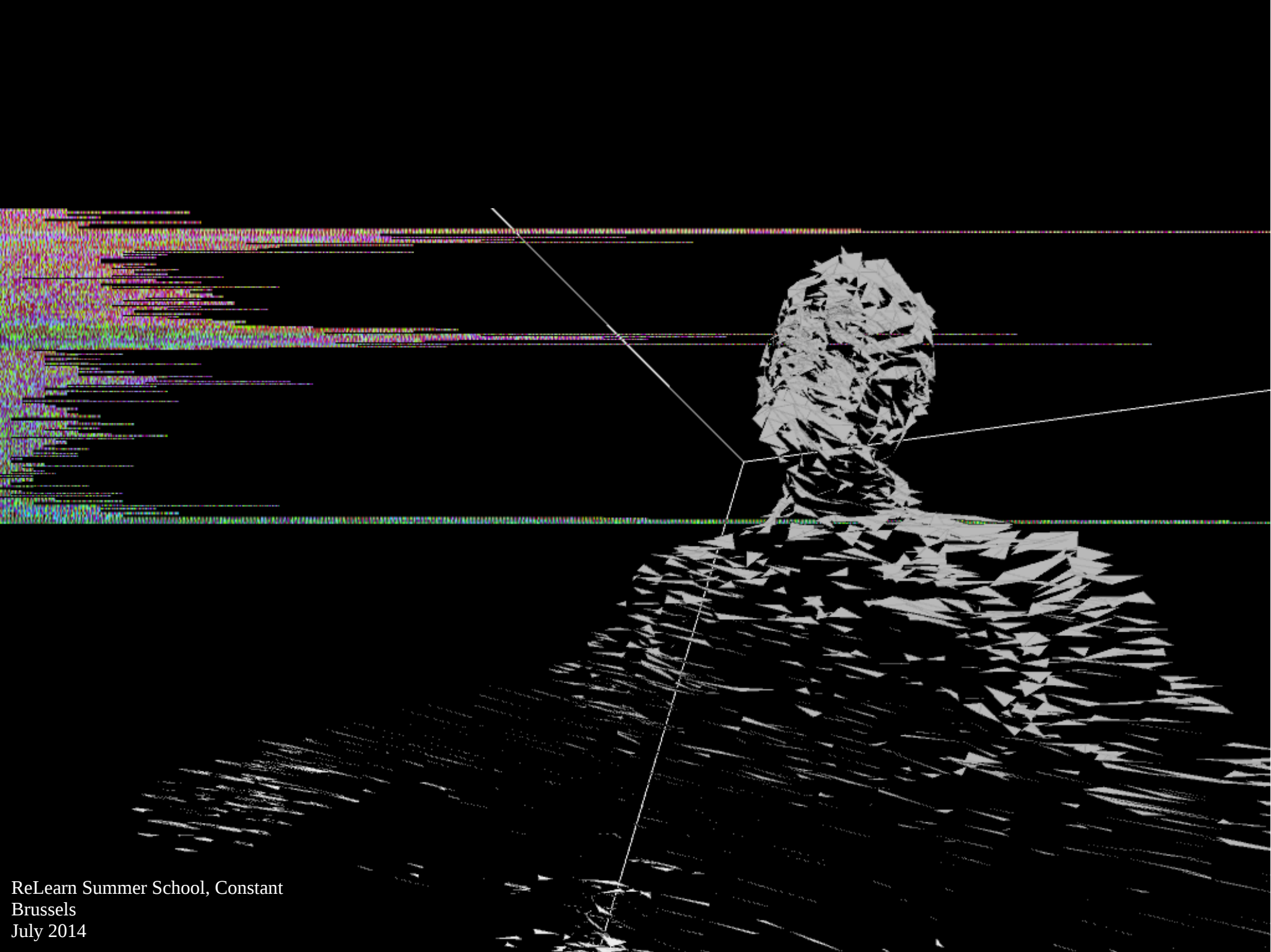
NON-ASCII STL
48kb

'PIXEL GRAPH' PNG
8.1kb



ReLearn Summer School, Constant
Brussels
July 2014

ReLearn Summer School, Constant
Brussels
July 2014



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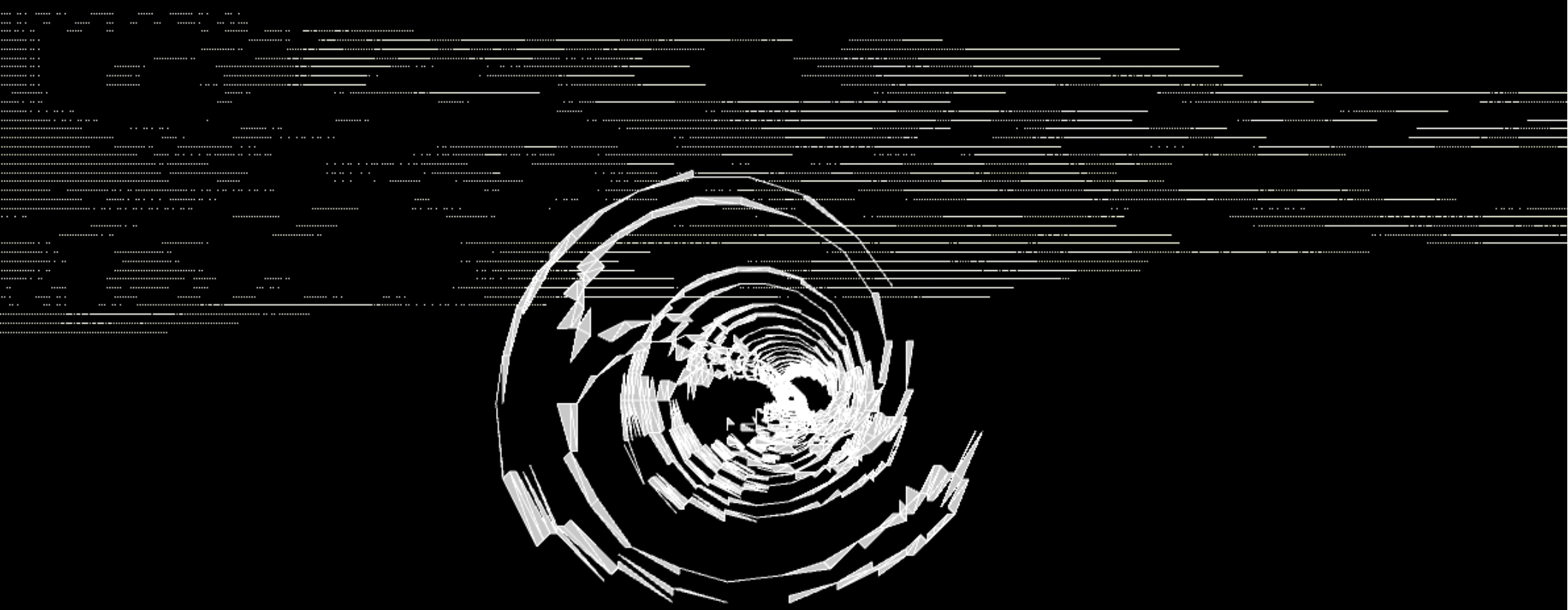
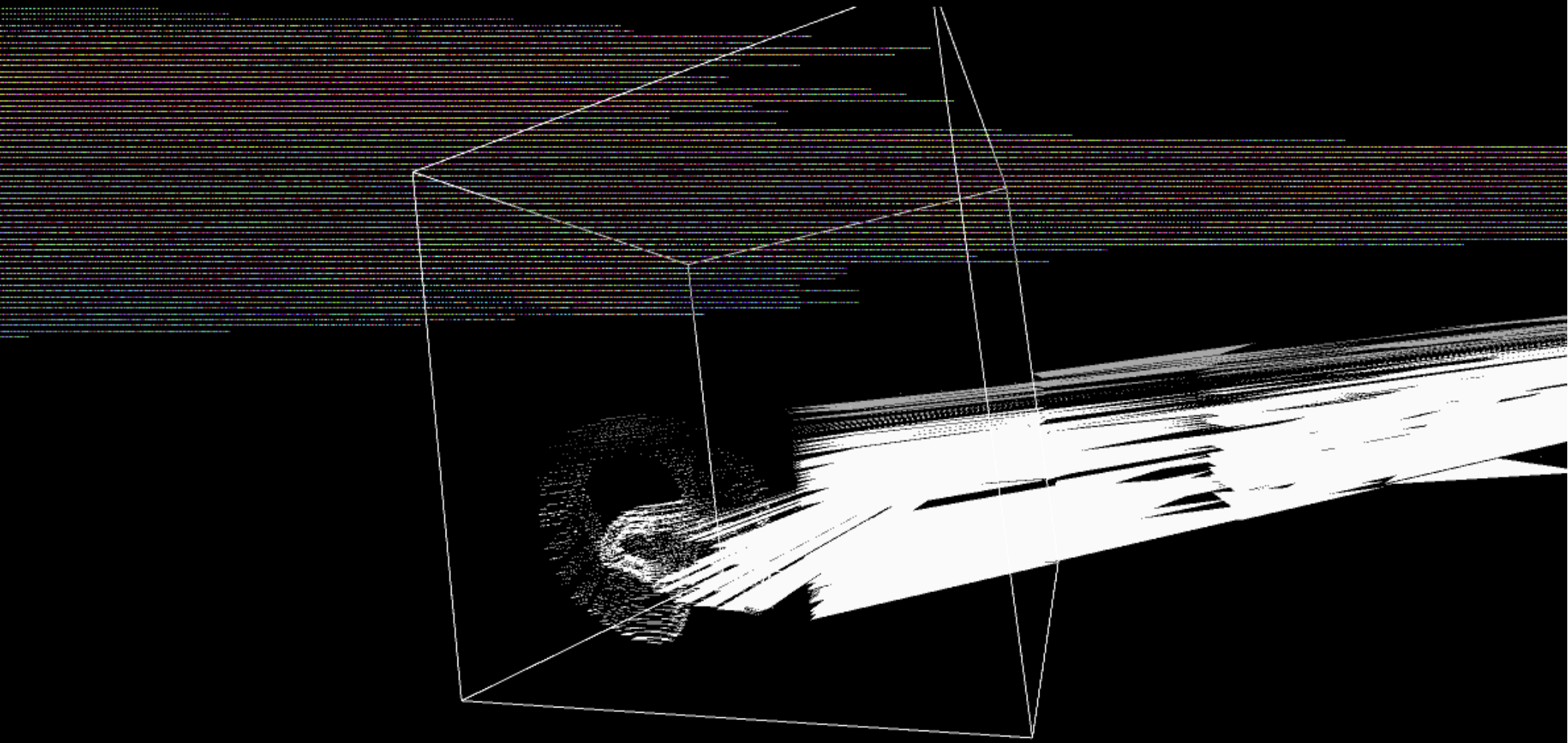
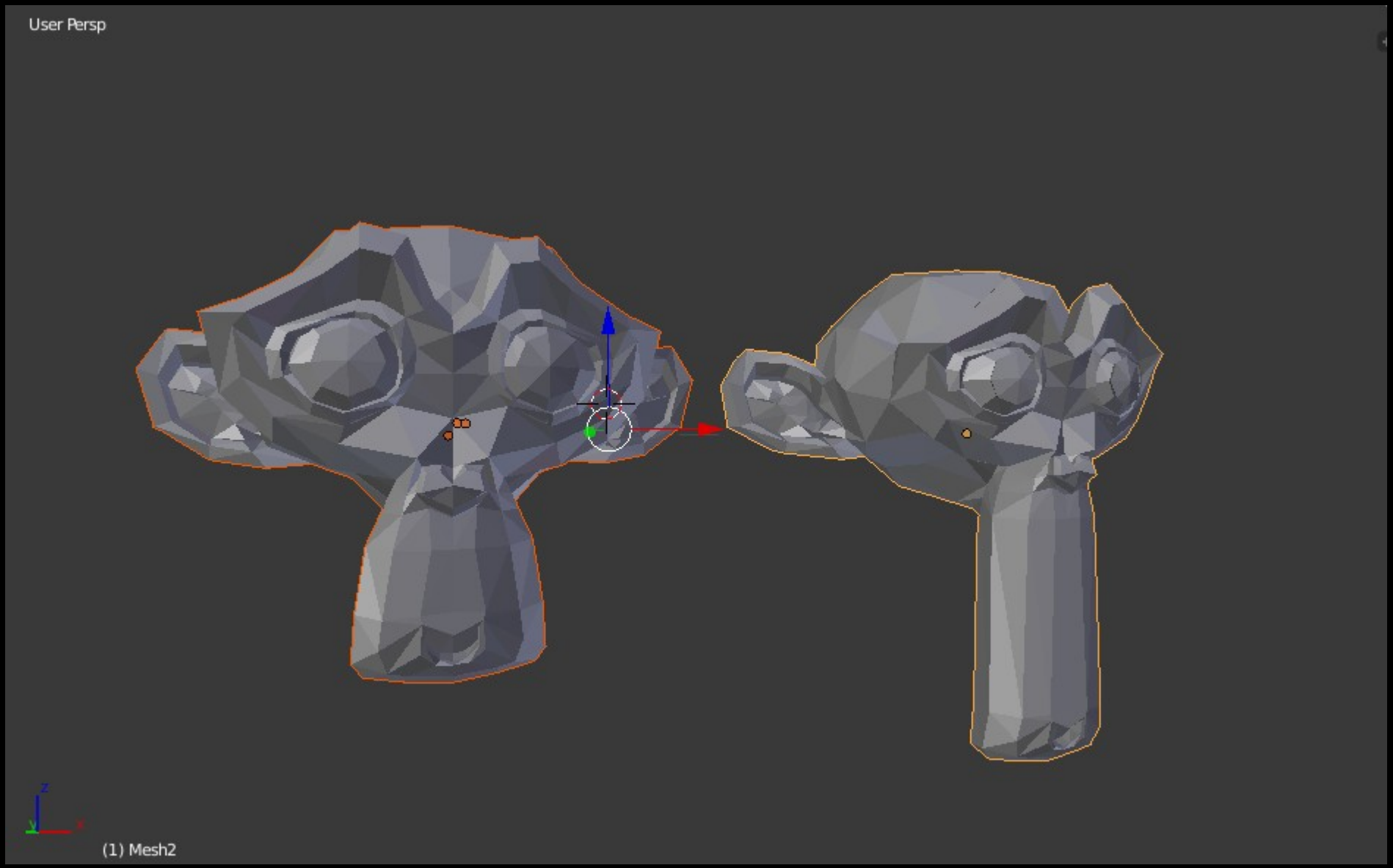
July 2014



ReLearn Summer School, Constant
Brussels
July 2014



ReLearn Summer School, Constant
Brussels
July 2014

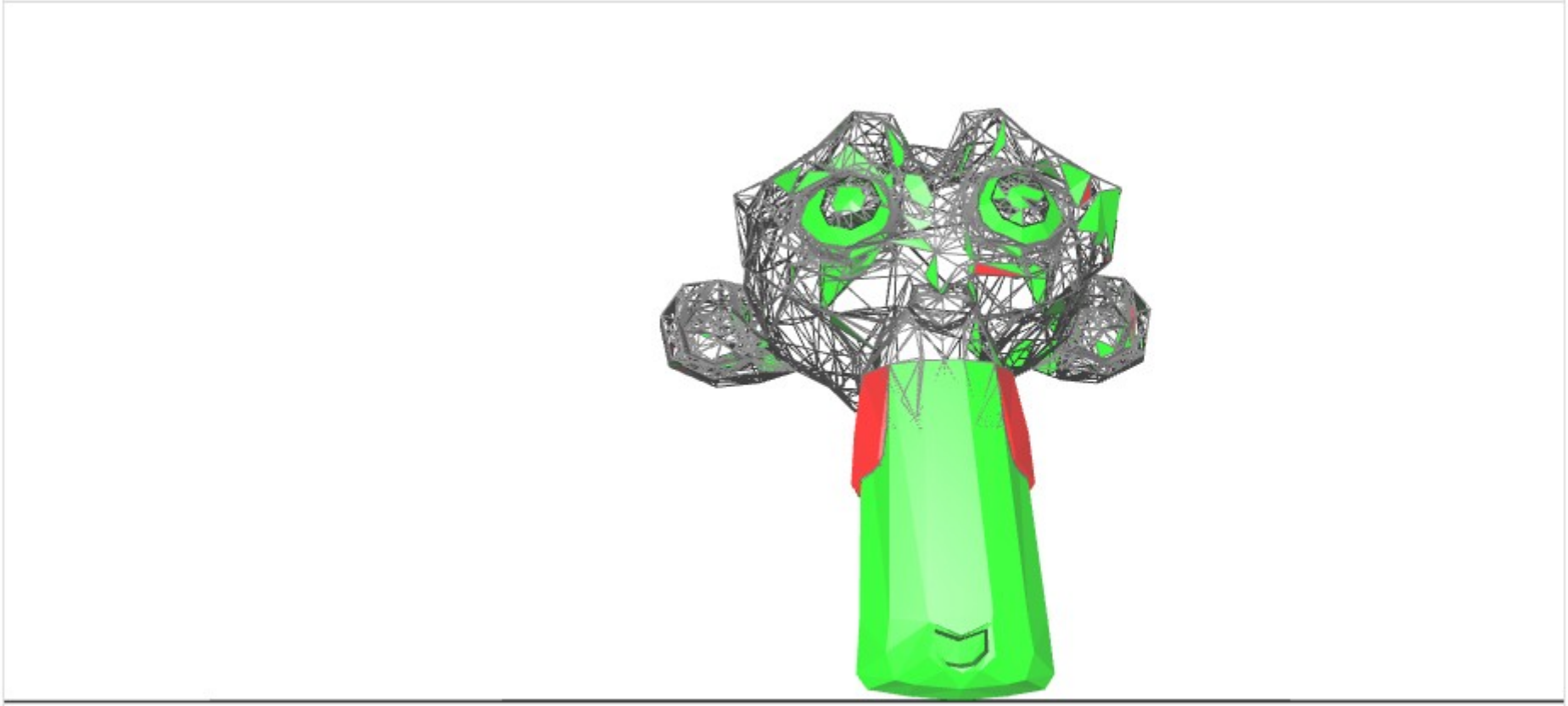

User Persp
(1) Mesh2

Showing 1 changed file with **326 additions** and **326 deletions**.

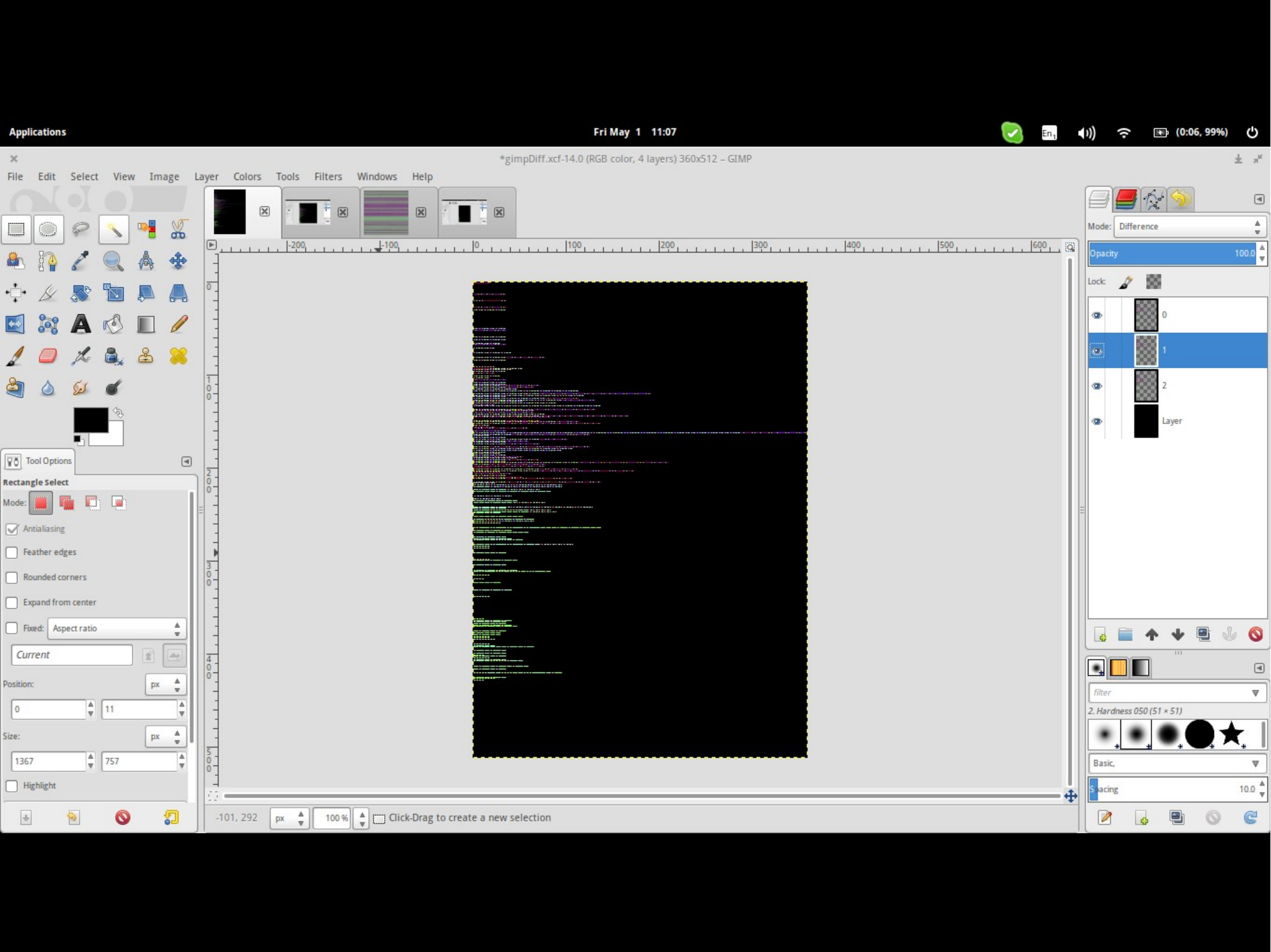
Unified | Split

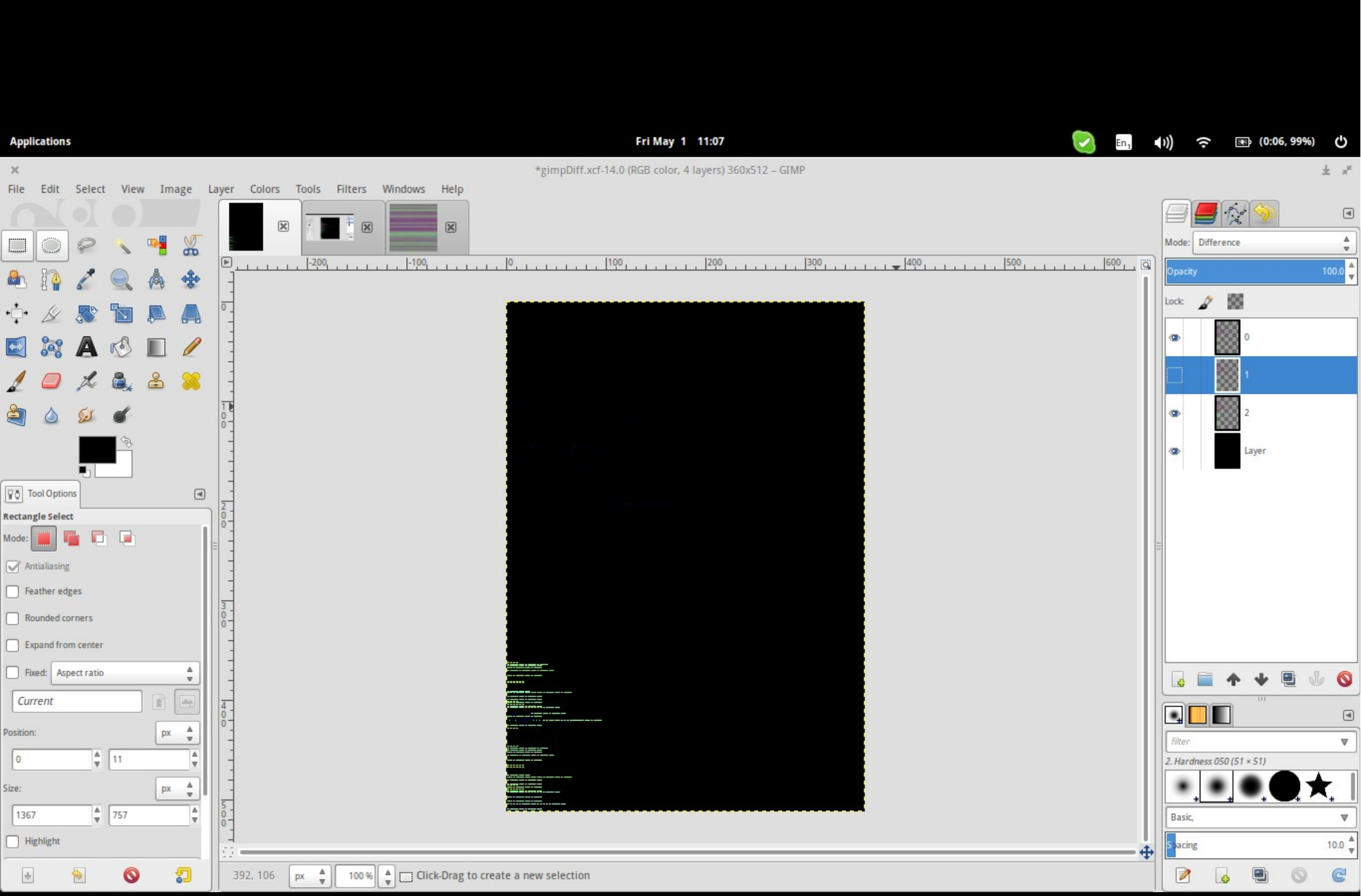
652 mesh1.stl

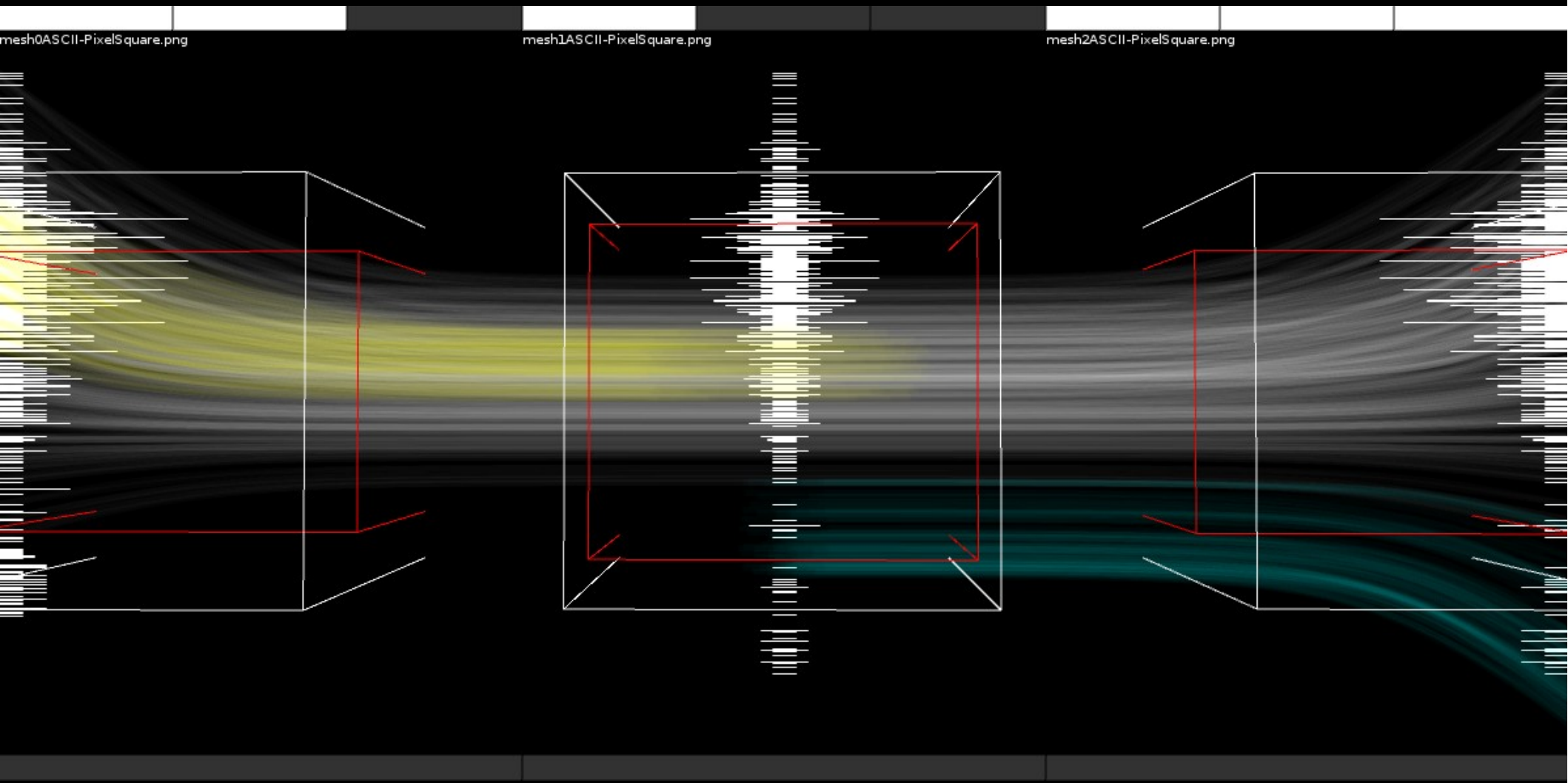
View



Revision Slider | **Highlight**


Applications
Fri May 1 11:07
(0:06, 99%)
*gimpDiff.xcf-14.0 (RGB color, 4 layers) 360x512 – GIMP
File Edit Select View Image Layer Colors Tools Filters Windows Help
Tool Options
Rectangle Select
Mode:
Antialiasing
Feather edges
Rounded corners
Expand from center
Fixed: Aspect ratio
Current
Position:
px
0
11
Size:
1367
757
Highlight
Mode: Difference
Opacity 100.0
Lock:
0
1
2
Layer
filter
2. Hardness 050 (51 × 51)
Basic,
Spacing 10.0
-101, 292
100 %
Click-Drag to create a new selection

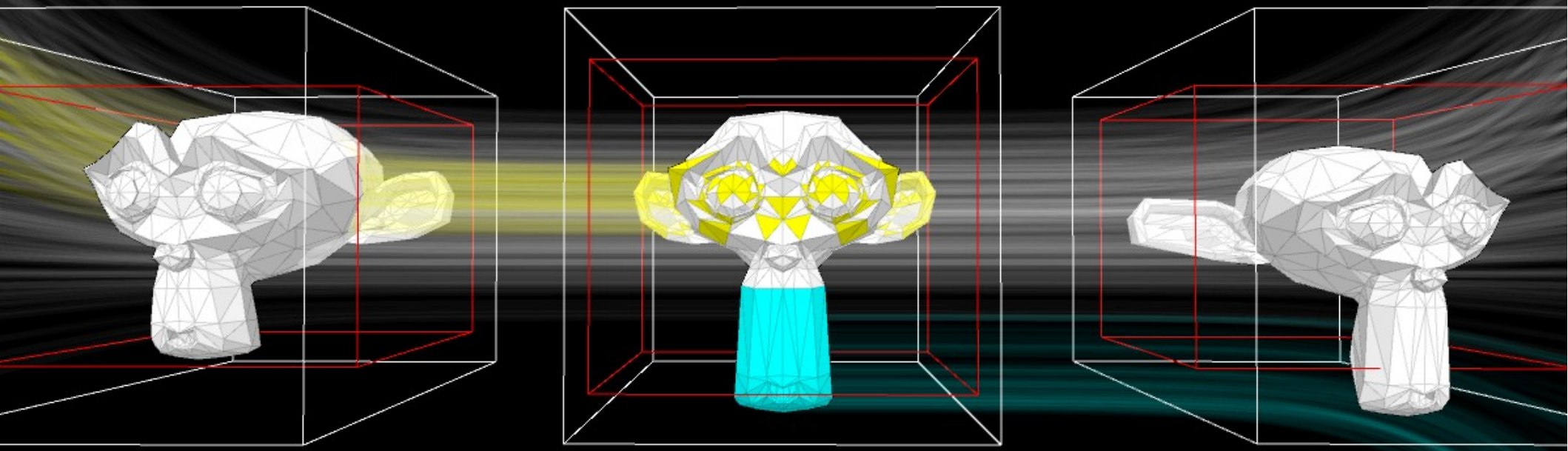

Applications
Fri May 1 11:07
(0:06, 99%)
*gimpDiff.xcf-14.0 (RGB color, 4 layers) 360x512 – GIMP
File Edit Select View Image Layer Colors Tools Filters Windows Help
Tool Options
Rectangle Select
Mode:
Antialiasing
Feather edges
Rounded corners
Expand from center
Fixed: Aspect ratio
Current
Position:
px
0
11
Size:
px
1367
757
Highlight
Mode: Difference
Opacity 100.0
Lock:
0
1
2
Layer
filter
2. Hardness 050 (51 × 51)
Basic,
Spacing 10.0
392, 106
px
100 %
Click-Drag to create a new selection


mesh0ASCII-PixelSquare.png
mesh1ASCII-PixelSquare.png
mesh2ASCII-PixelSquare.png

mesh0ASCII-PixelSquare.png

mesh1ASCII-PixelSquare.png

mesh2ASCII-PixelSquare.png



https://github.com/phiLangley