

Top Seven OSL Shaders for 3ds Max 2021

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Steven Schain

Designer / Trainer

Teaching 3ds since 3D Studio Dos R3.

Autodesk Certified Instructor since 1998.

Trainer – “The 3D Professor” (3ds Max, Inventor, Fusion 360, Maya, AutoCAD)

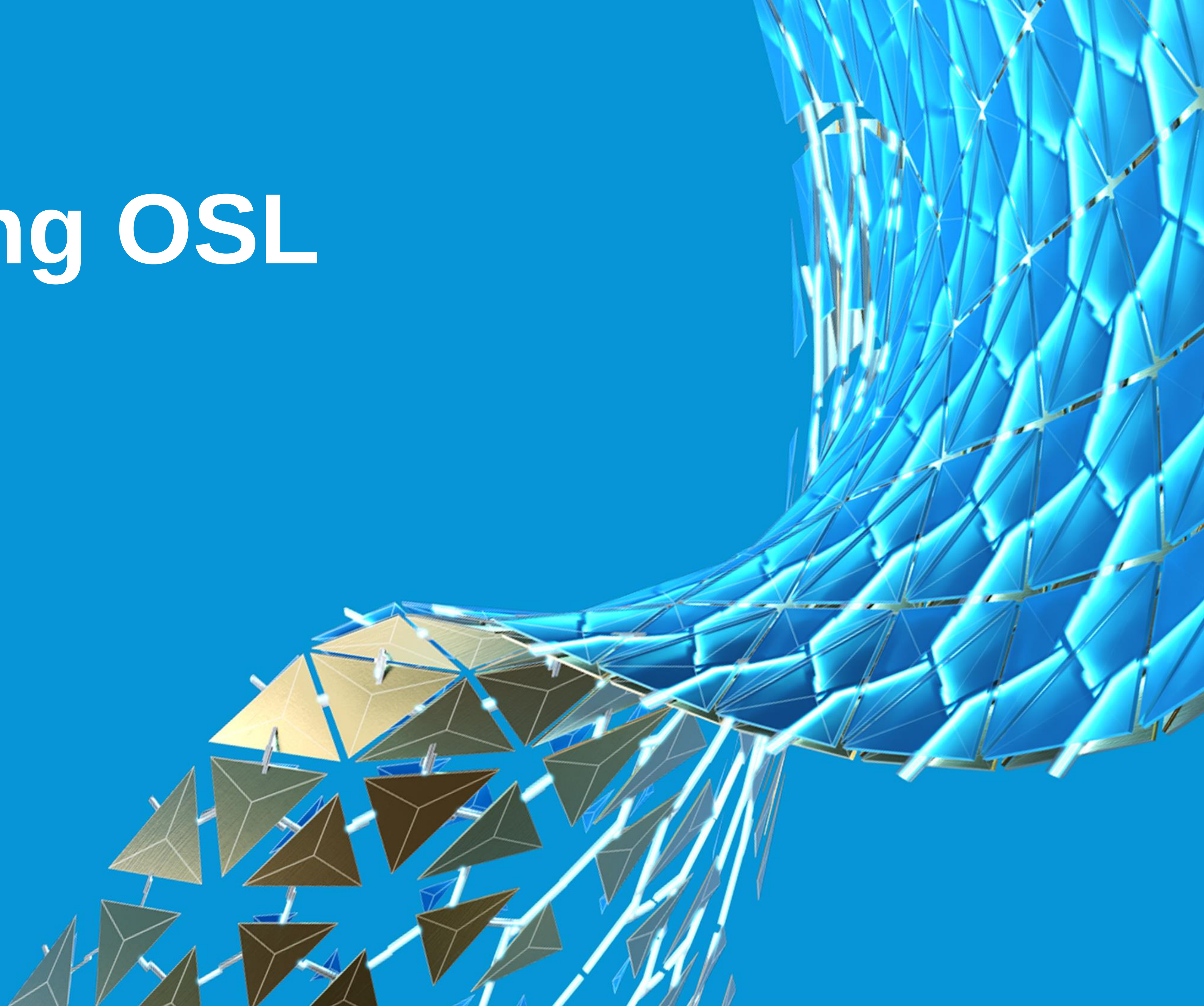
**Content developer for CADLearning since 2010
(M&E / Mechanical Design)**

9 Year AU veteran

Learning Objectives

- Identify 3ds Max OSL assets and third-party resources.
- Apply OSL Shaders to objects in 3ds Max 2021.
- Customize OSL shaders to create photorealistic materials.
- Identify 7 useful OSL shaders.

Introducing OSL





What is OSL?

- Open Shading Language
- Sony Pictures Imageworks
- Open Source

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imageworks / OpenShadingLanguage

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Advanced shading language for production GI renderers

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 lgritz Fixes to make recent osltoy changes not break against OIIO 1.8 (#926) ... Latest commit d76bfee 21 hours ago

.github	Minor formatting revision of PR and Issue templates	2 years ago
site	Minor changes to build with clang 7. (#917)	27 days ago
src	Fixes to make recent osltoy changes not break against OIIO 1.8 (#926)	21 hours ago

OSL Basics

- High level language
- Simpler to program
- Works with Arnold 5.0 & newer

OSL Shader Resources

GitHub

- [imageworks/OpenShadingLanguage](#)
- [ADN-DevTech/3dsMax-OSL-Shaders](#)
- [gkmotu/OSL-Shaders](#)

Facebook

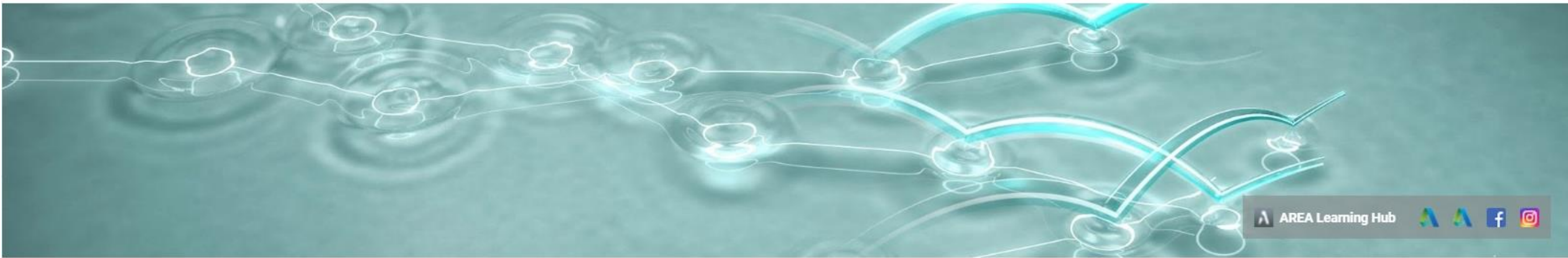
- [OSL Shaders group](#)

3ds Max OSL

- Changsoo Eun - [http://cganimator.com/3dsmax-2019-osl-shader-pack-1/](#)
- Zap Andersson - [https://github.com/ADN-DevTech/3dsMax-OSL-Shaders/tree/master/OSL](#)
- Mads Drøschler - [http://www.masd.dk/](#)

Learning OSL

- Youtube Learning Channel
- ZAP Andersson OSL Lessons
- Autodesk Area





Autodesk 3ds Max Learning Channel

260K subscribers

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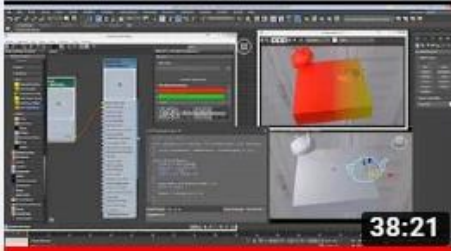
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Writing Shaders with OSL, Lesson 3

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Writing Shaders with OSL, Lesson 2

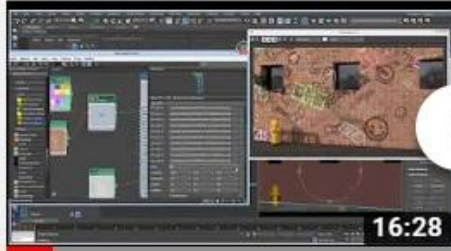
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Writing Shaders with OSL, Lesson 1

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OSL: Randomized Bitmaps Map

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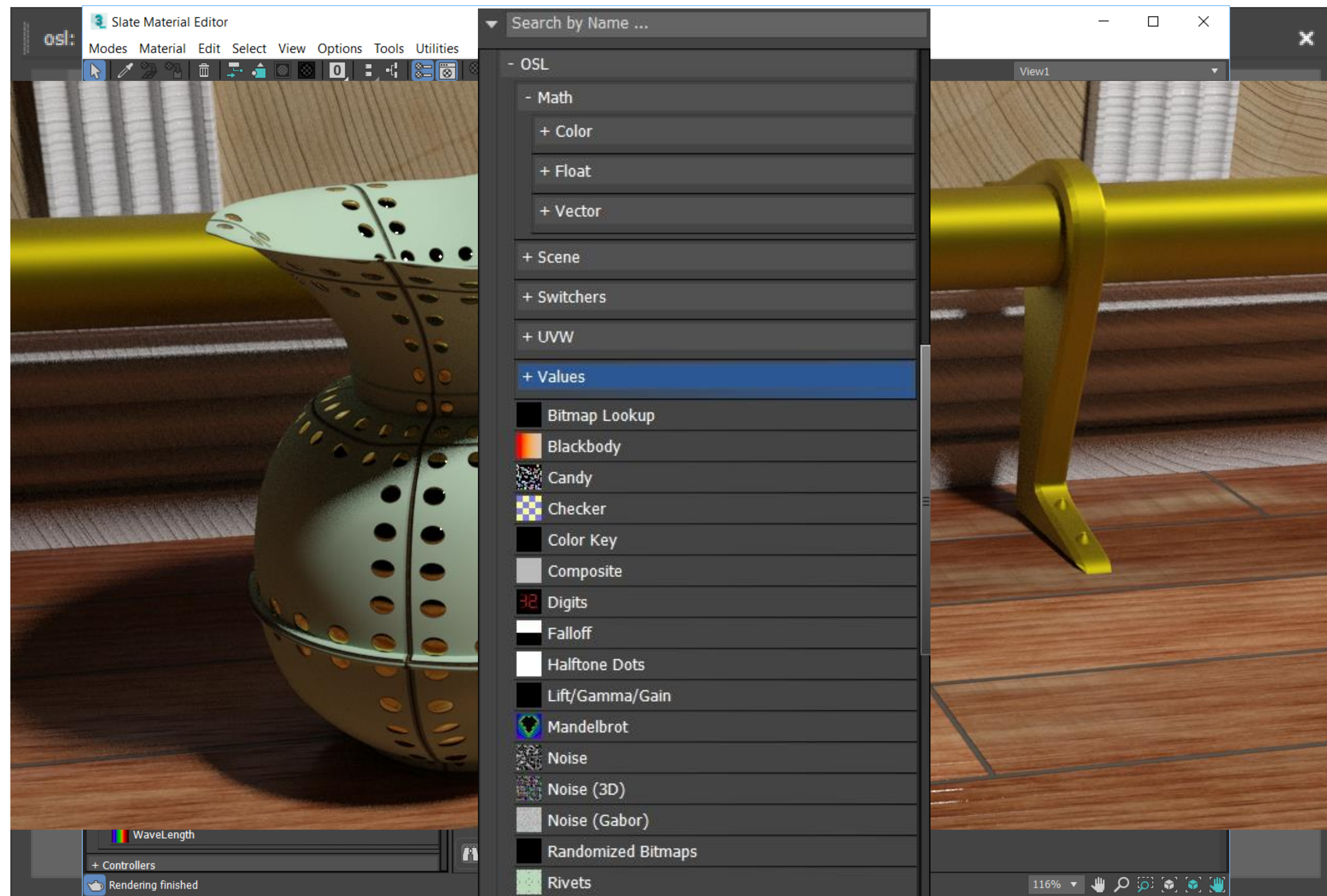
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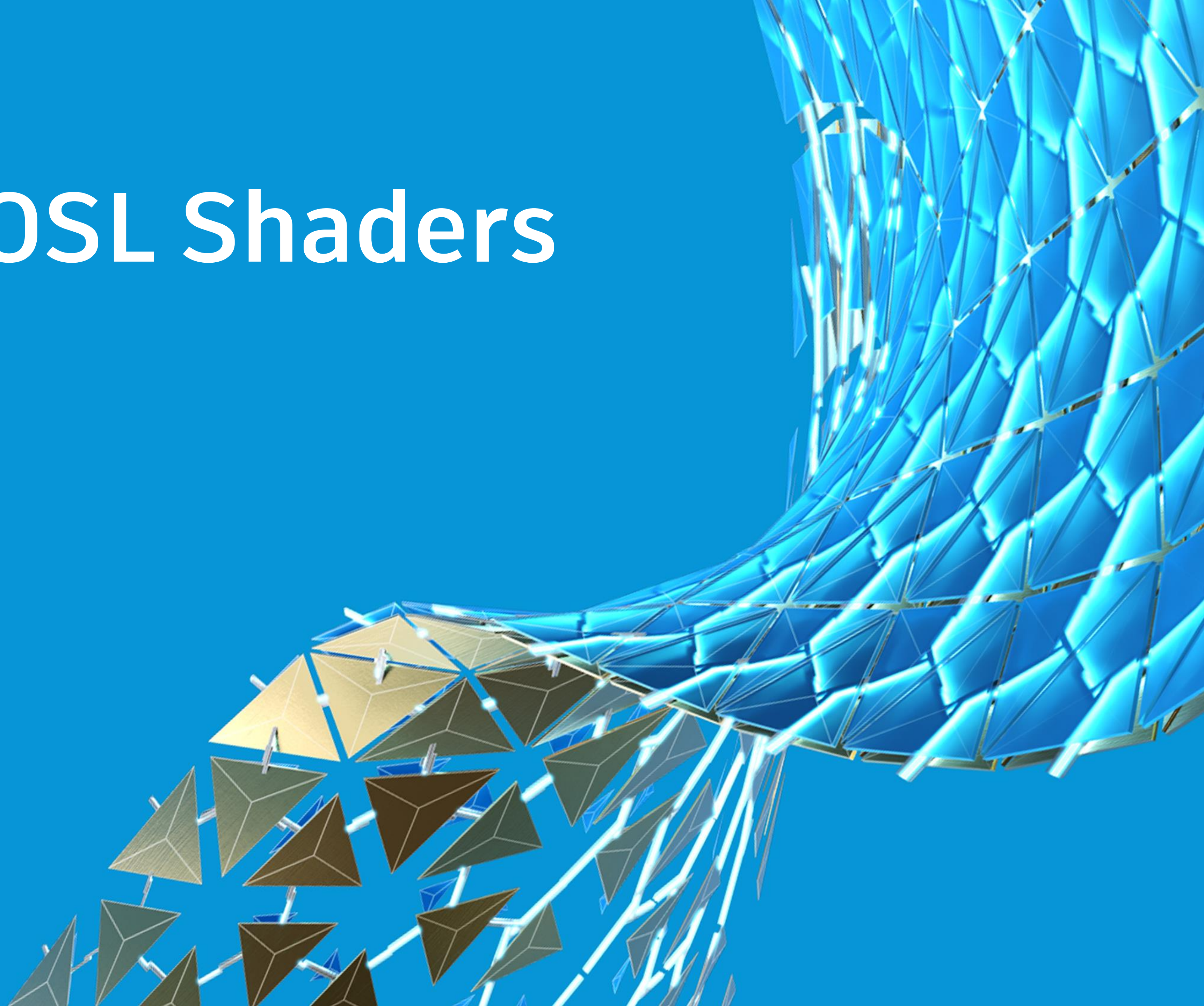
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Using OSL Shaders

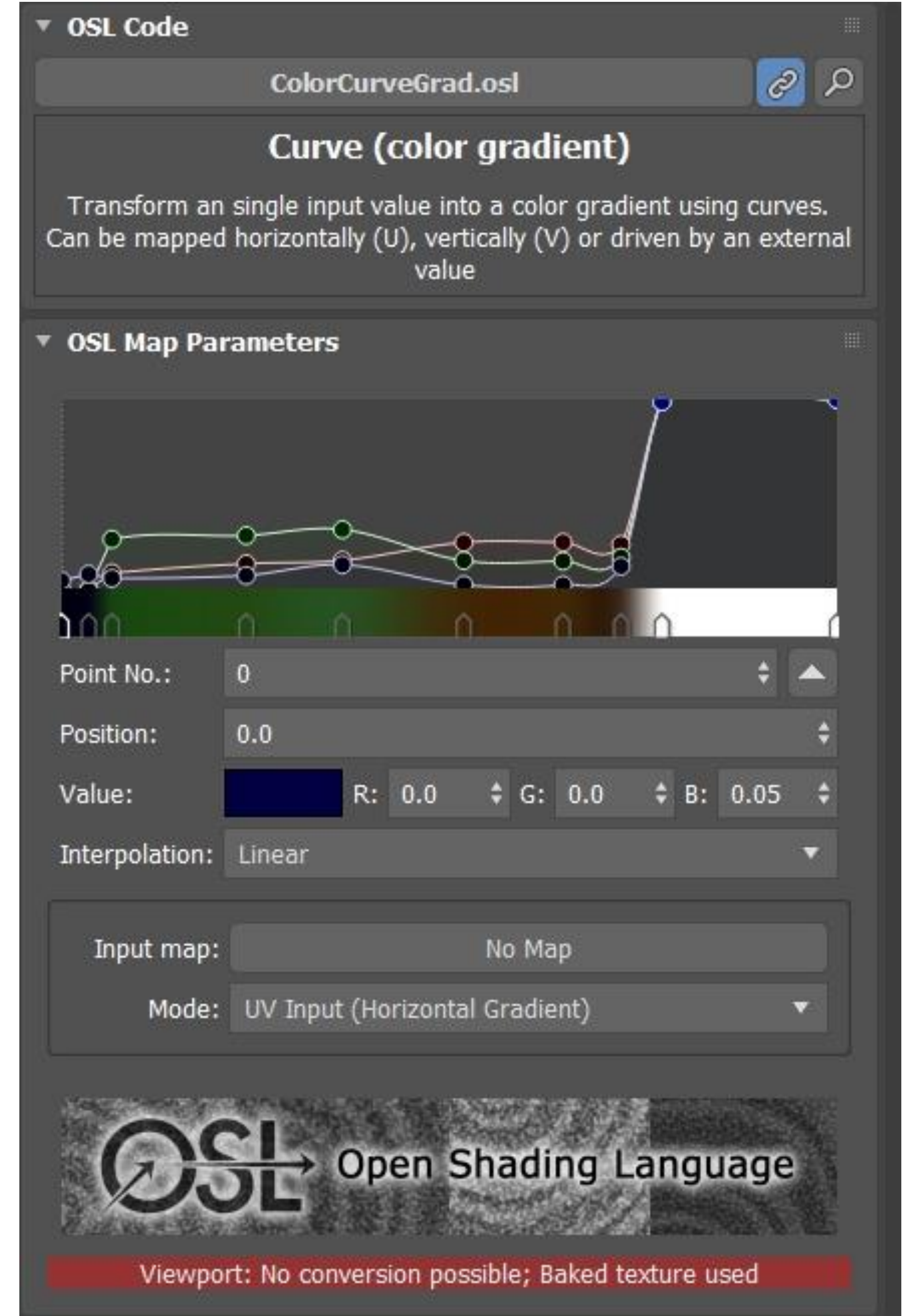
- OSL Map
- Direct Shader Instance
- Editable in Material Editor
- Render with Arnold
- Accurate Viewport Rendering

My Top 7 OSL Shaders

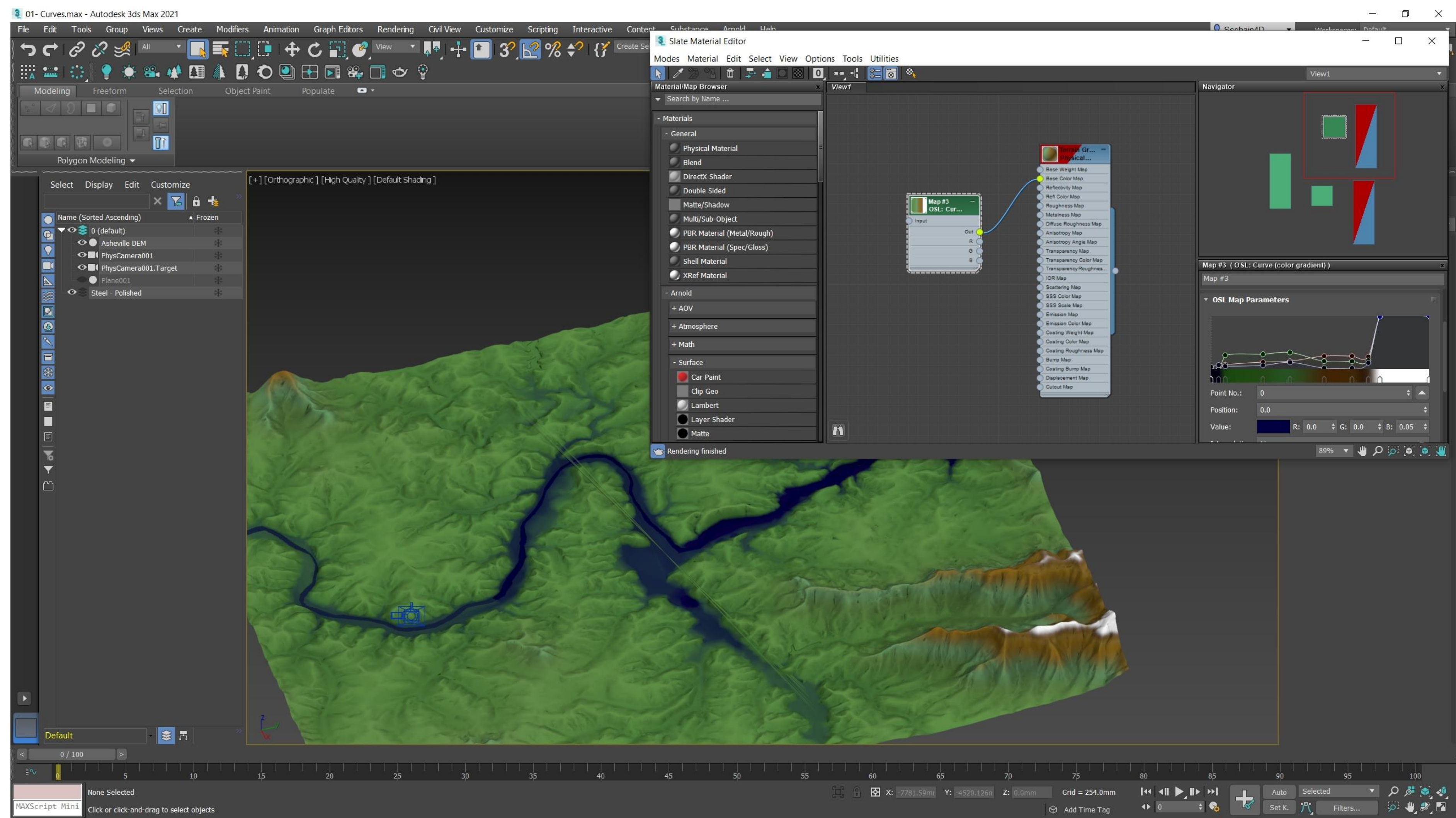


Curves Shaders

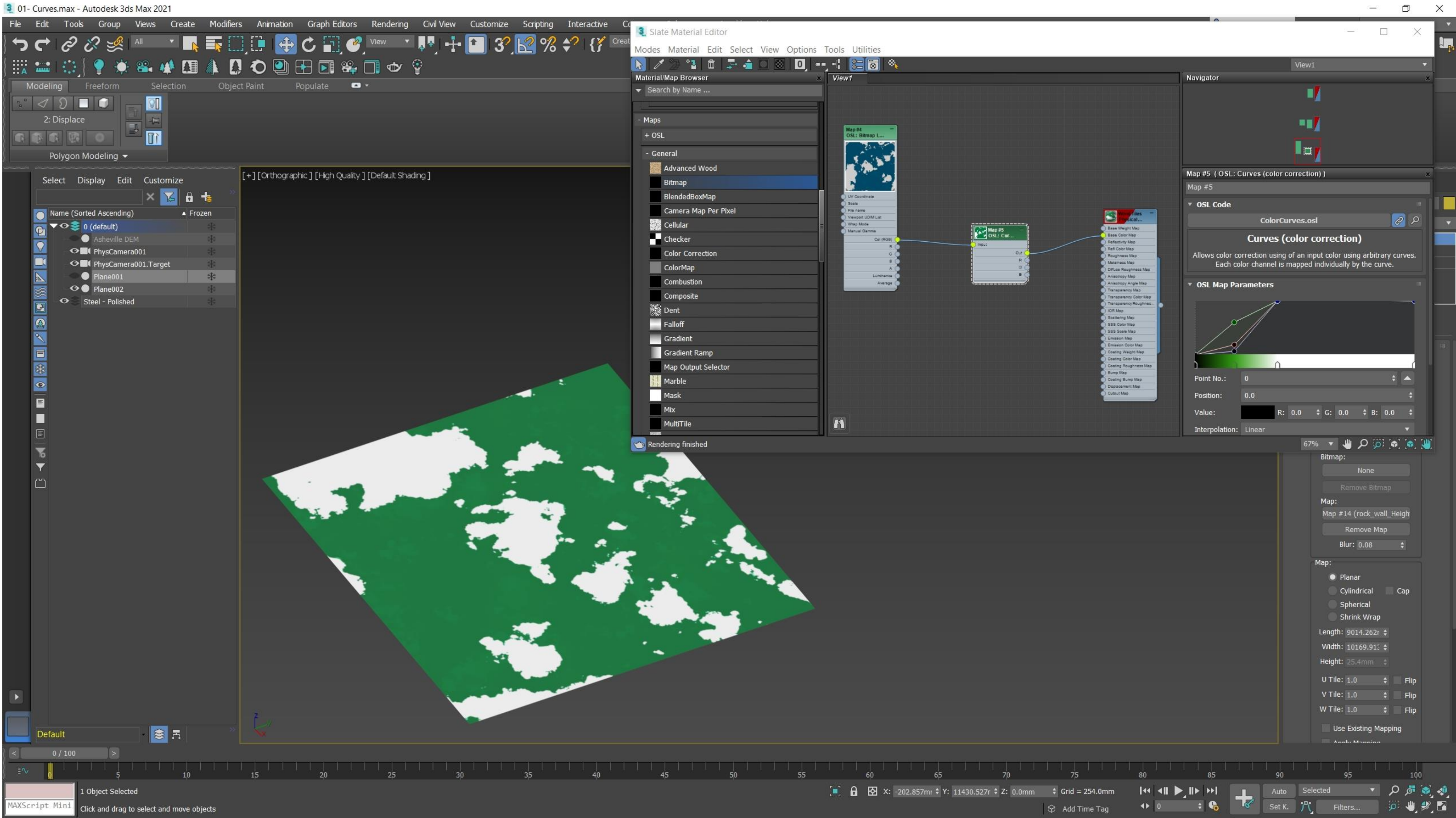
- Color Gradient
- Color Correction
- Float



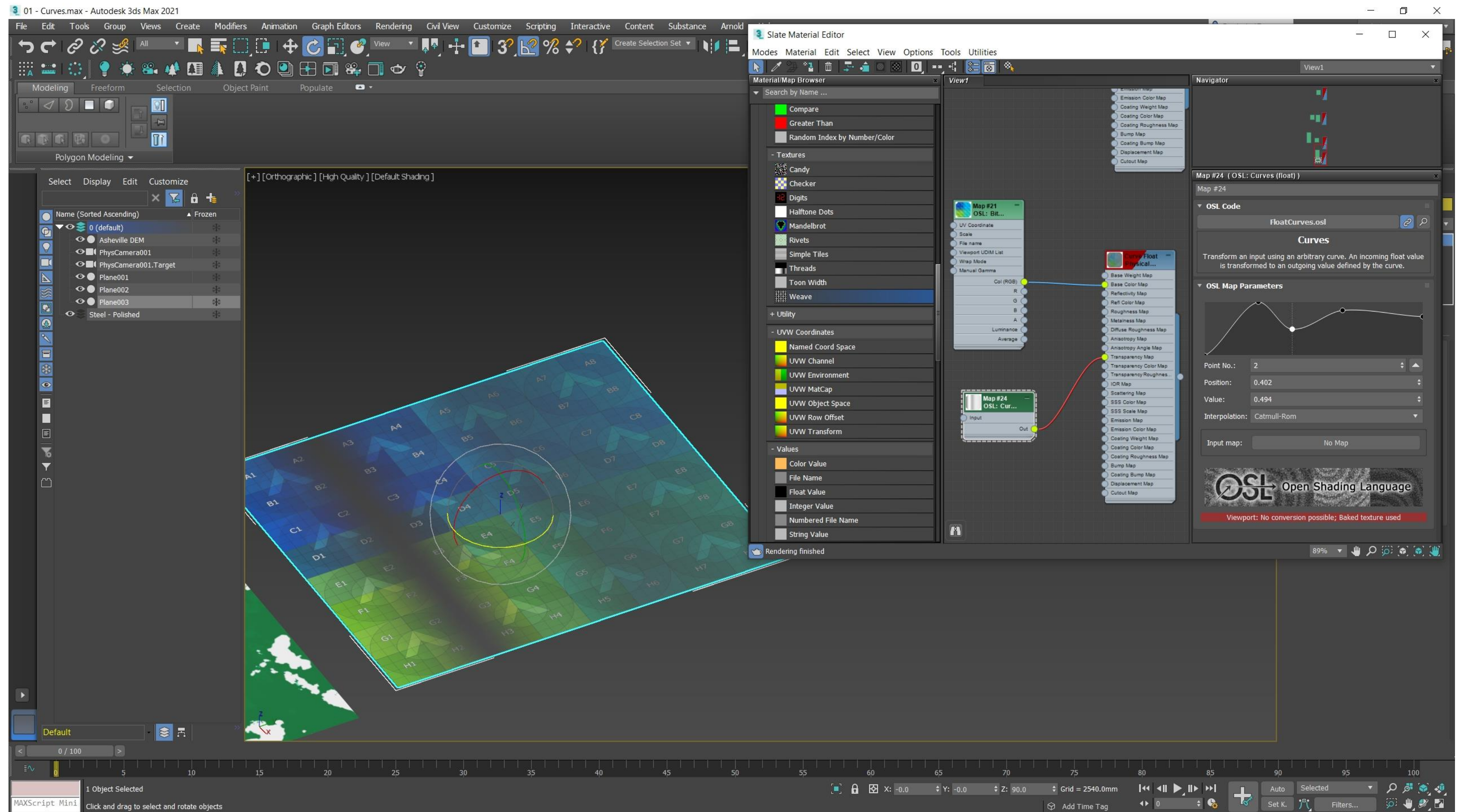
Curve (Color Gradient)



Curves (Color Correction)

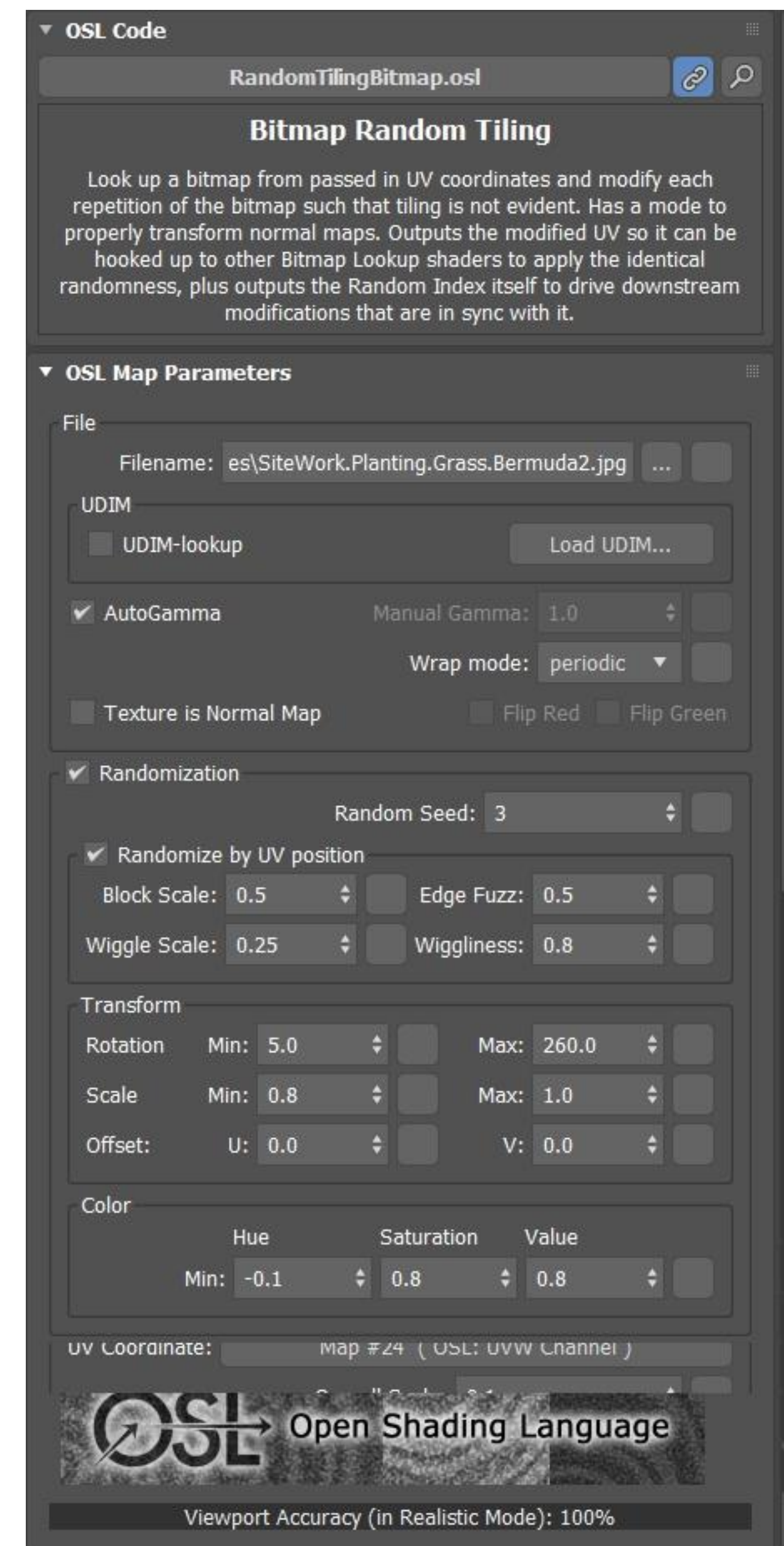


Curves (Float)

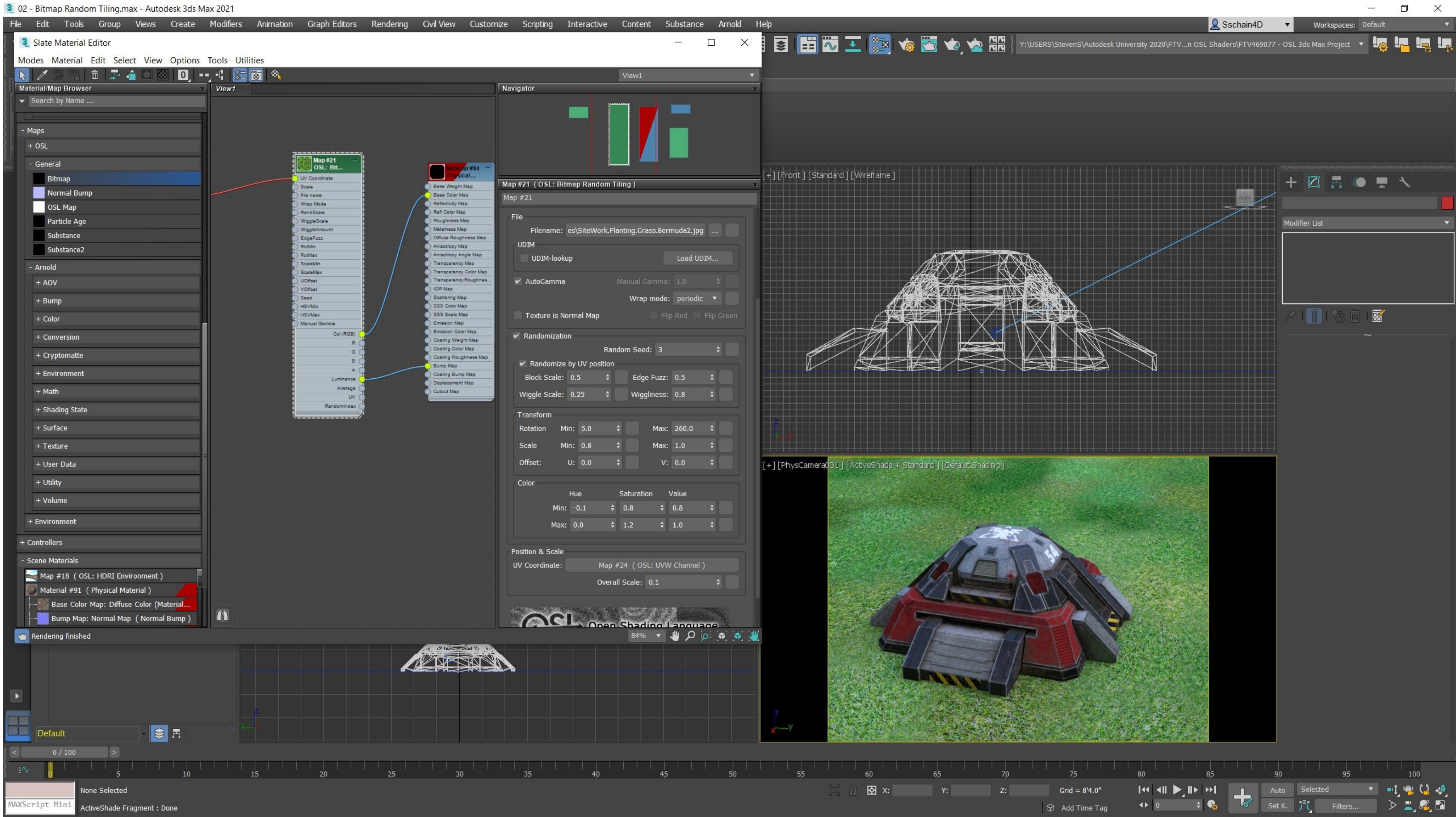


Bitmap Random Tiling

- Randomize image textures
- Create unique textures
- Vary color, size and other parameters

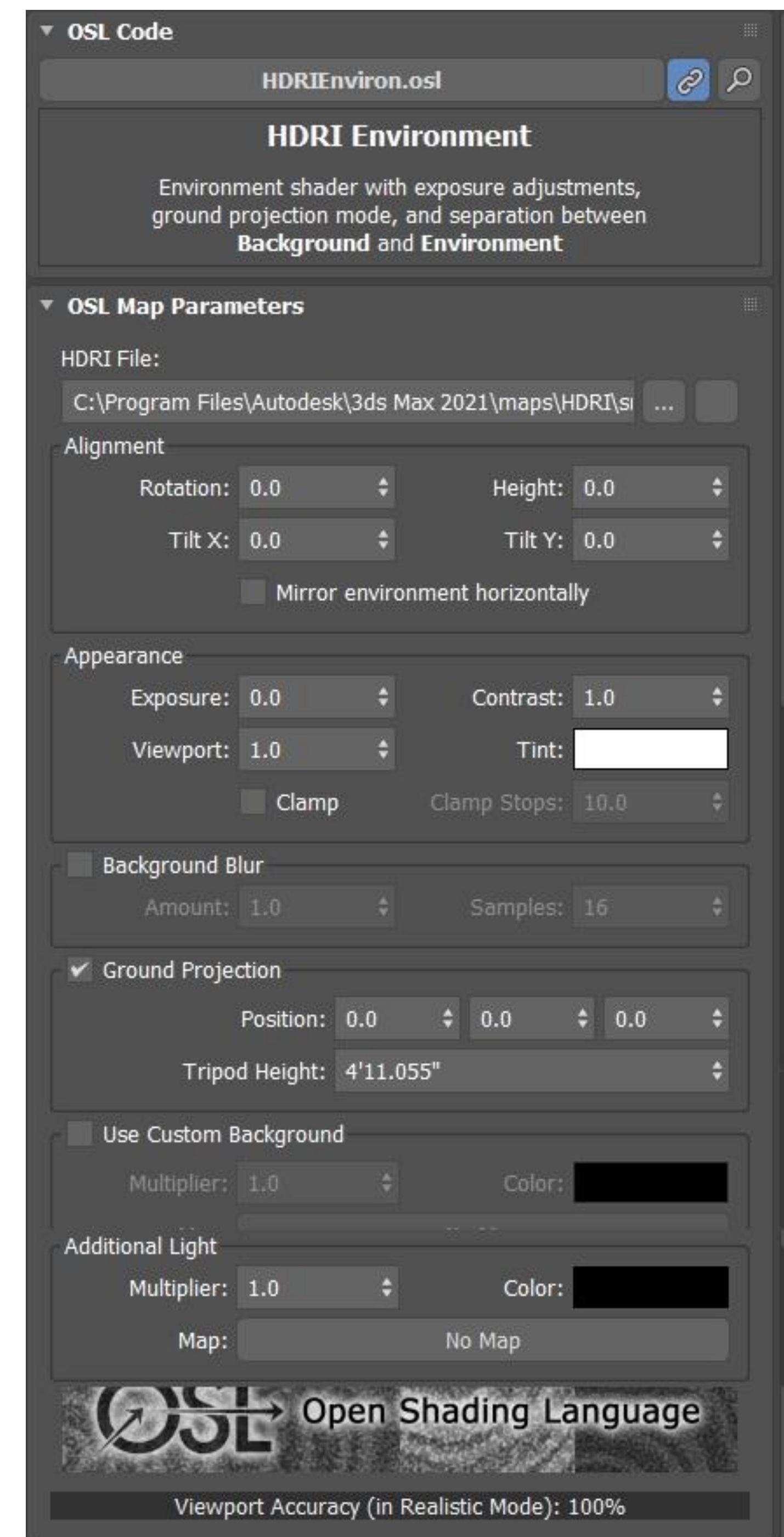


Random Bitmap Tiling

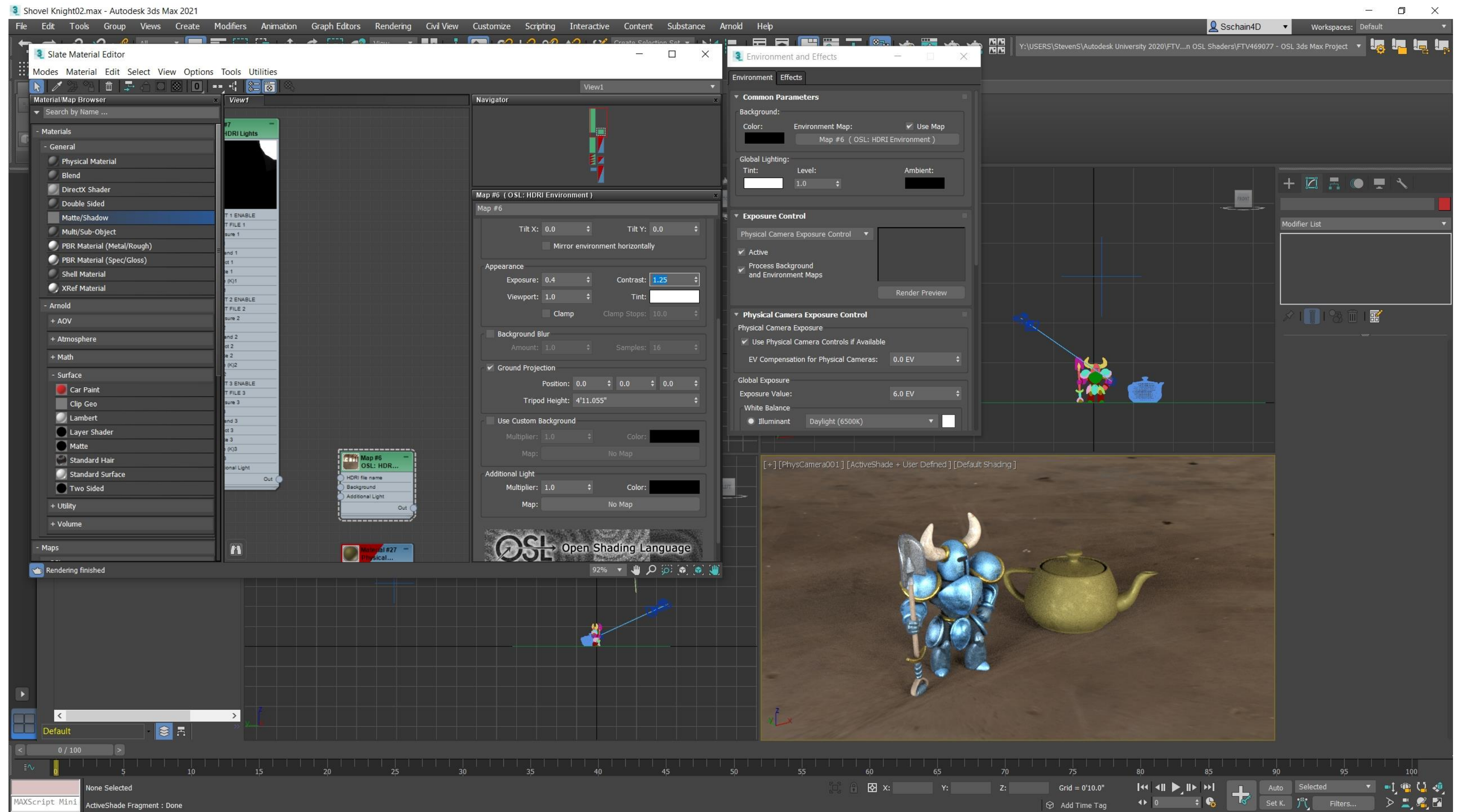


HDRI Shaders

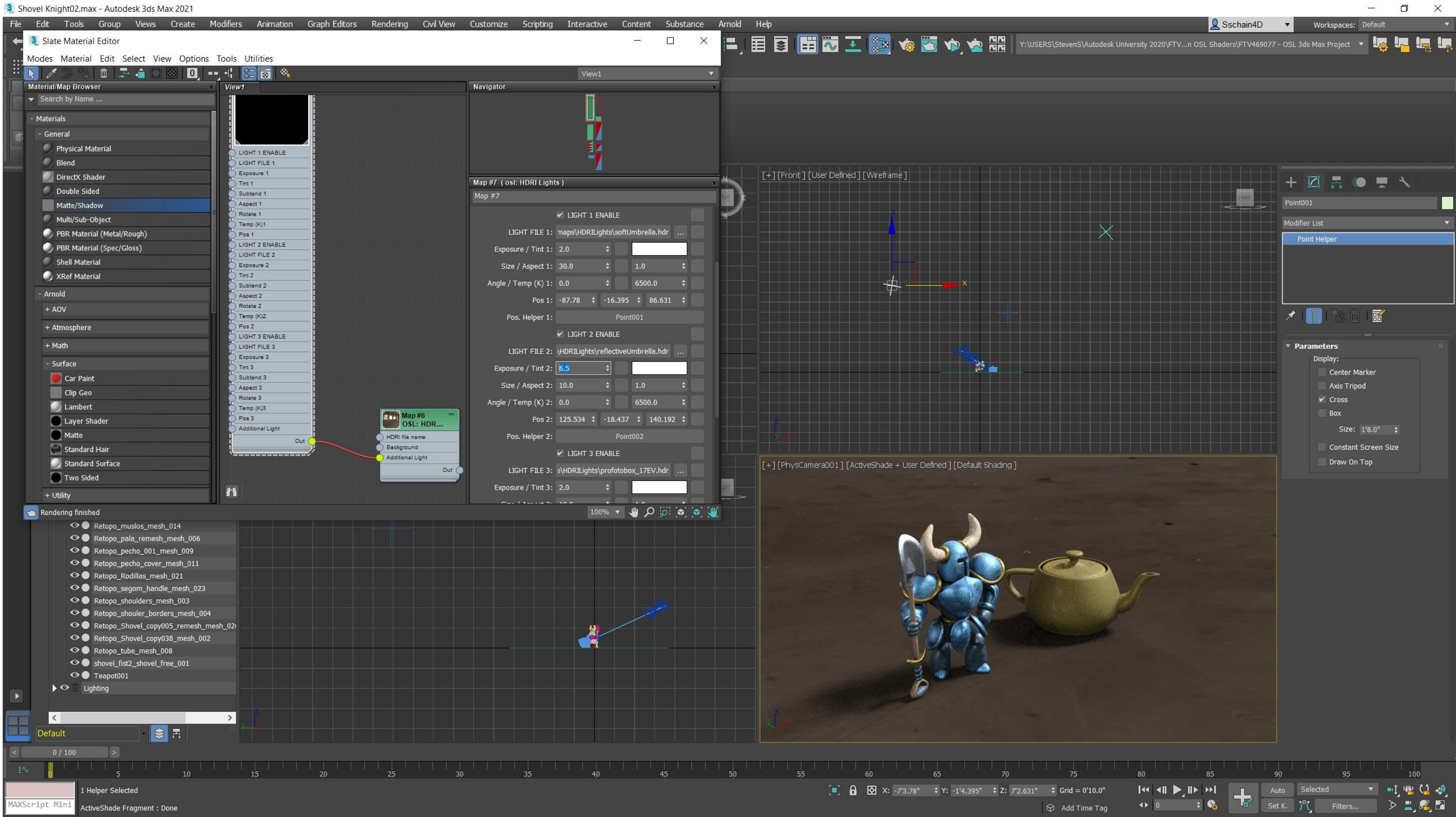
- HDRI Environment
- HDRI Lights



HDRI Environment

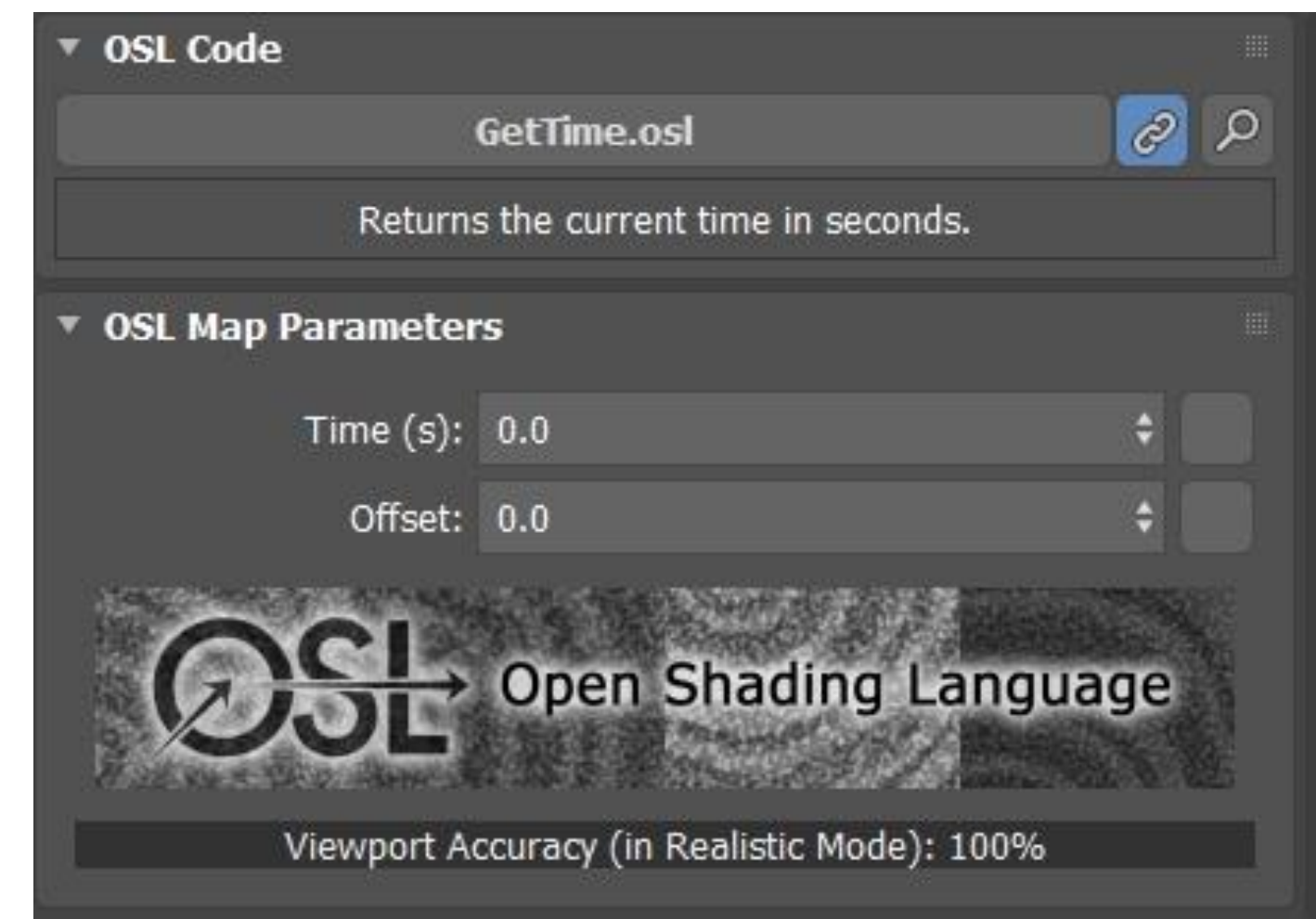


HDRI Lights

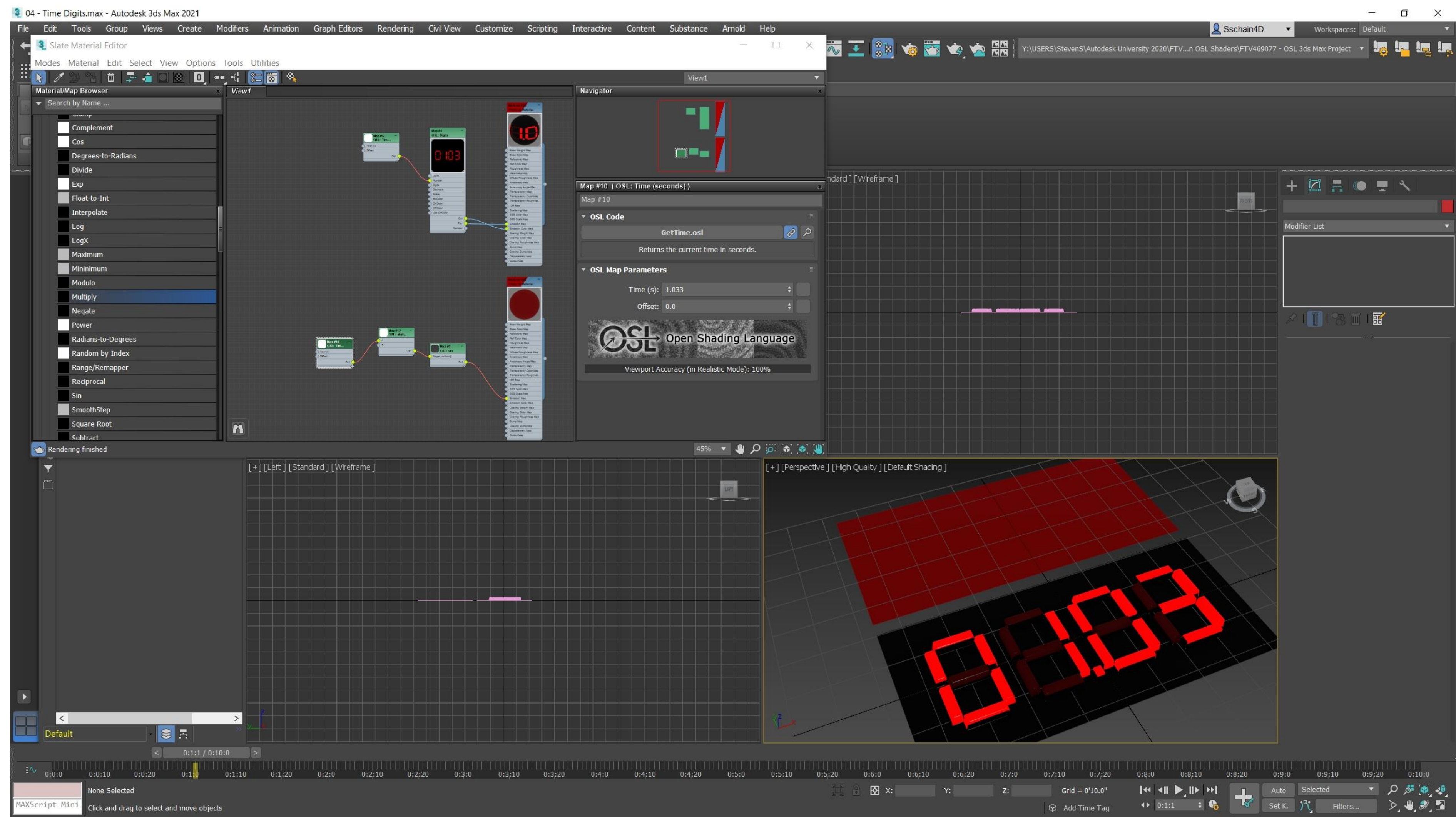


Time (Seconds)

- Read current time from timeline
- Set a time offset

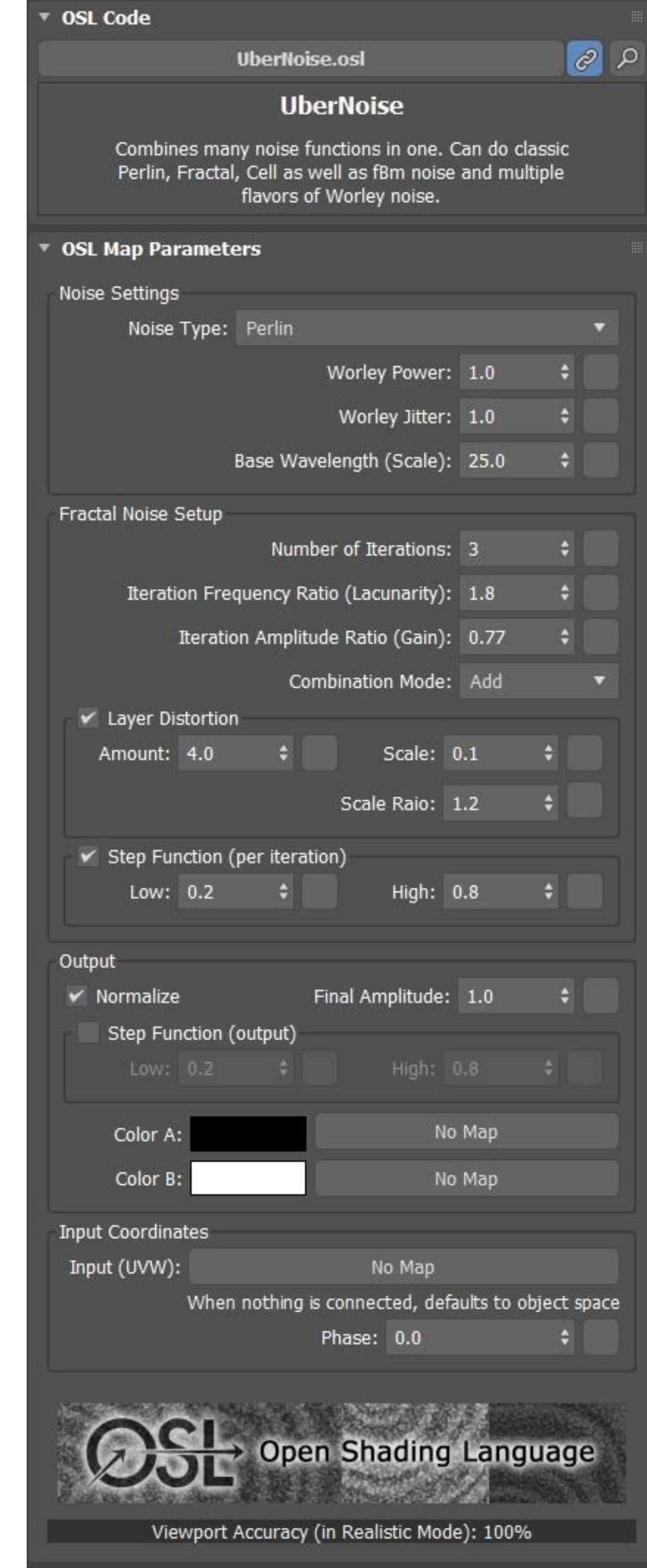


Time (Seconds)

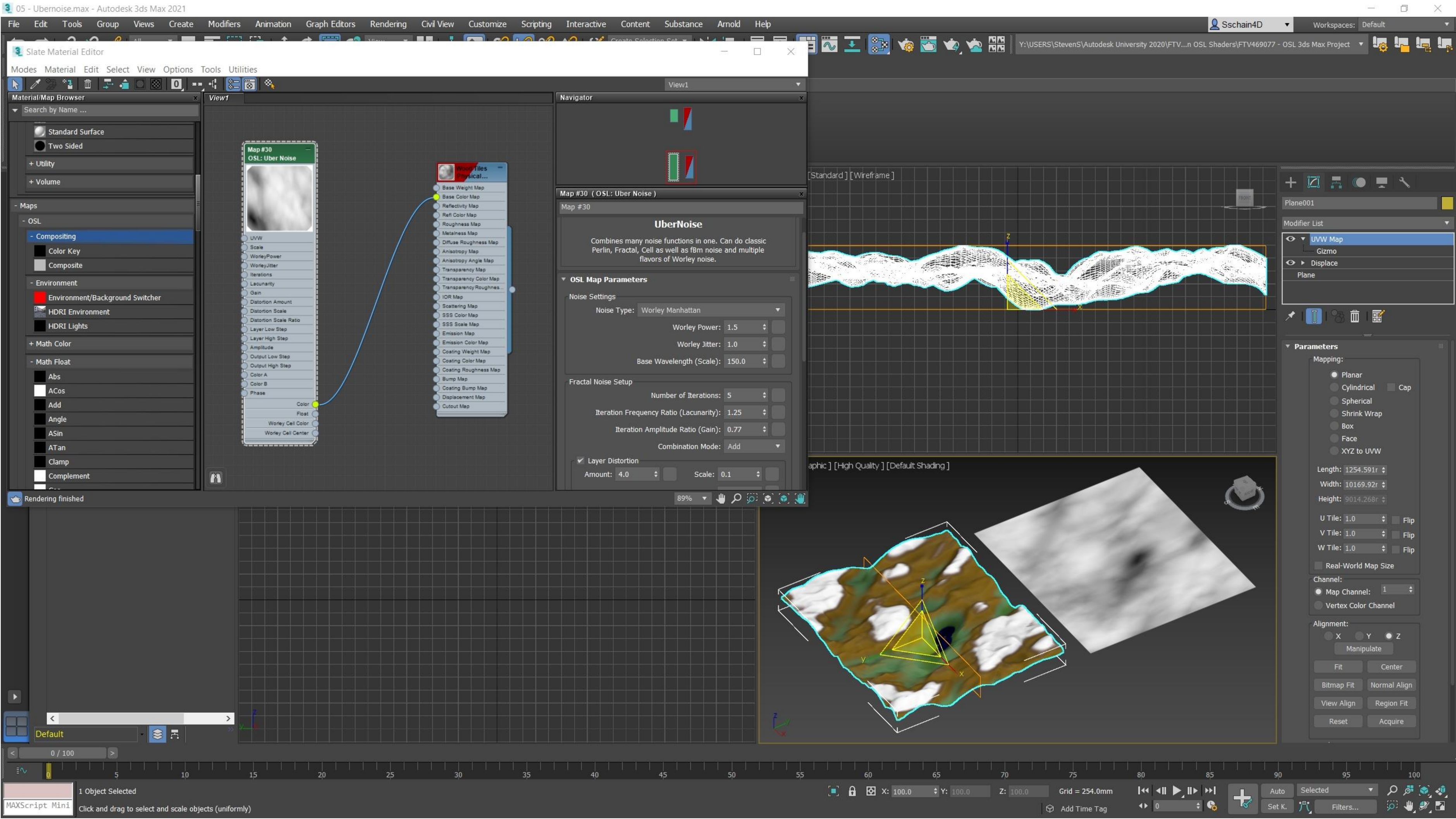


UberNoise

- Multiple noise types

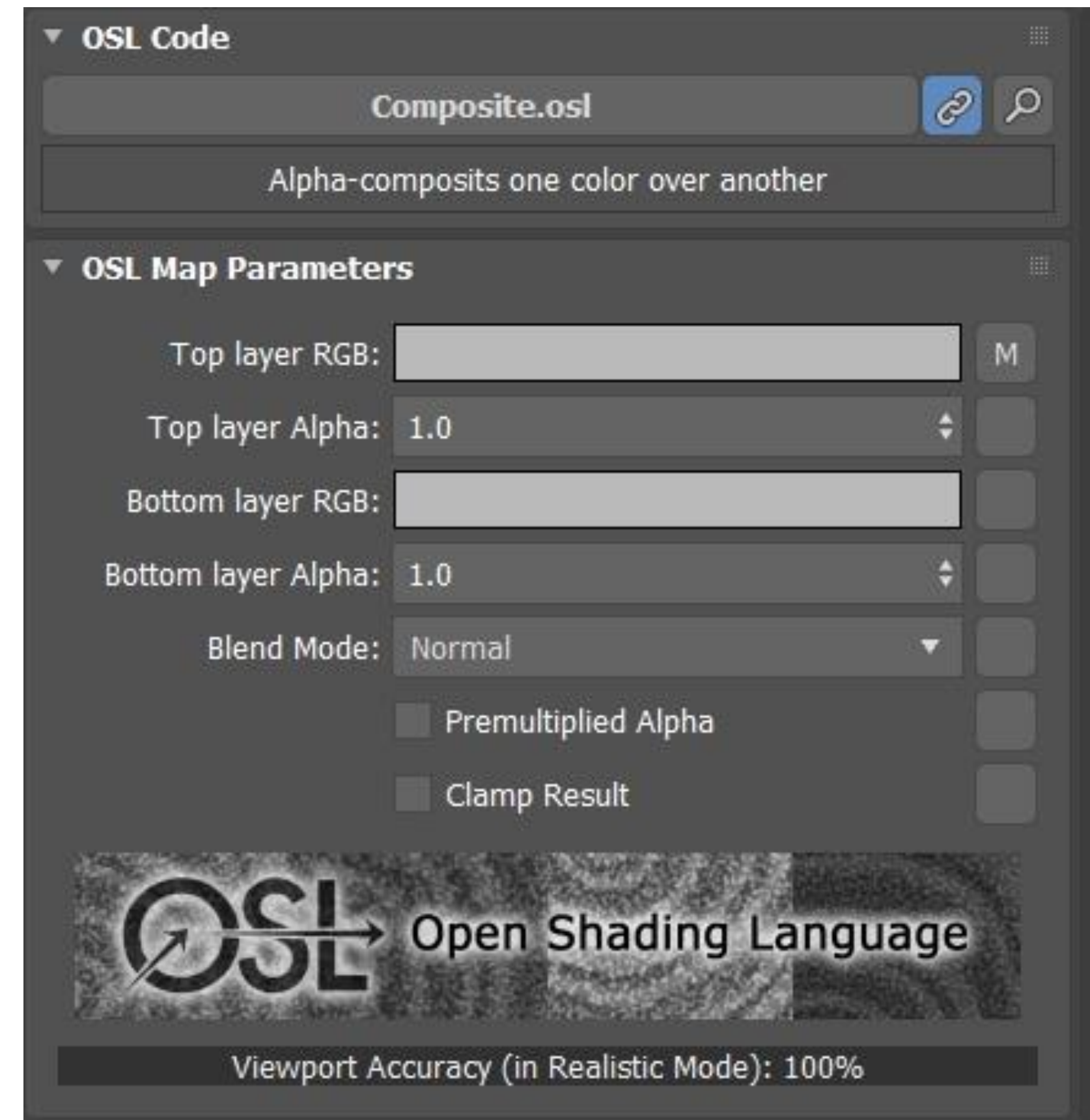


UberNoise

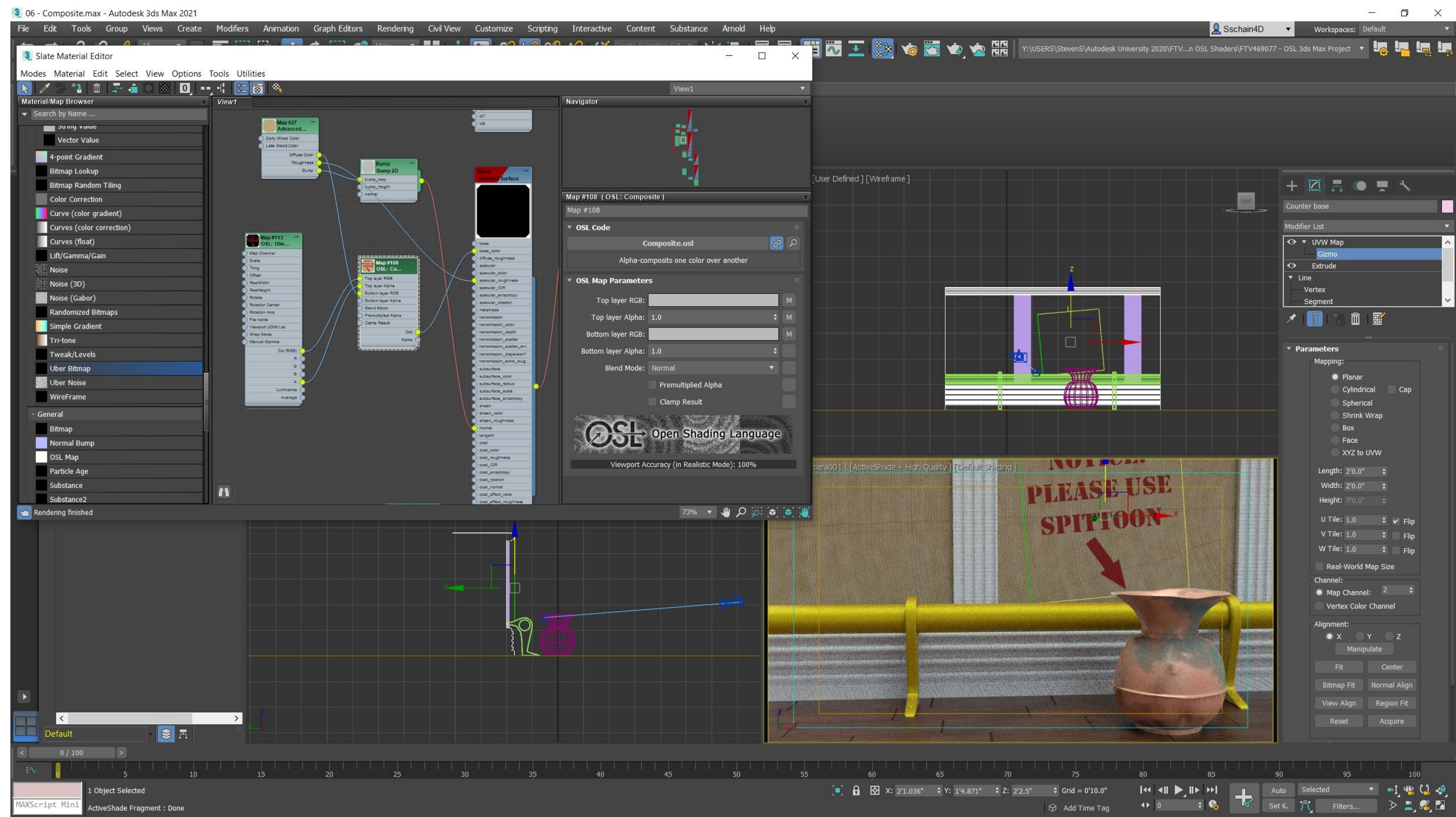


Composite

- Layer two images using RGB and Alpha

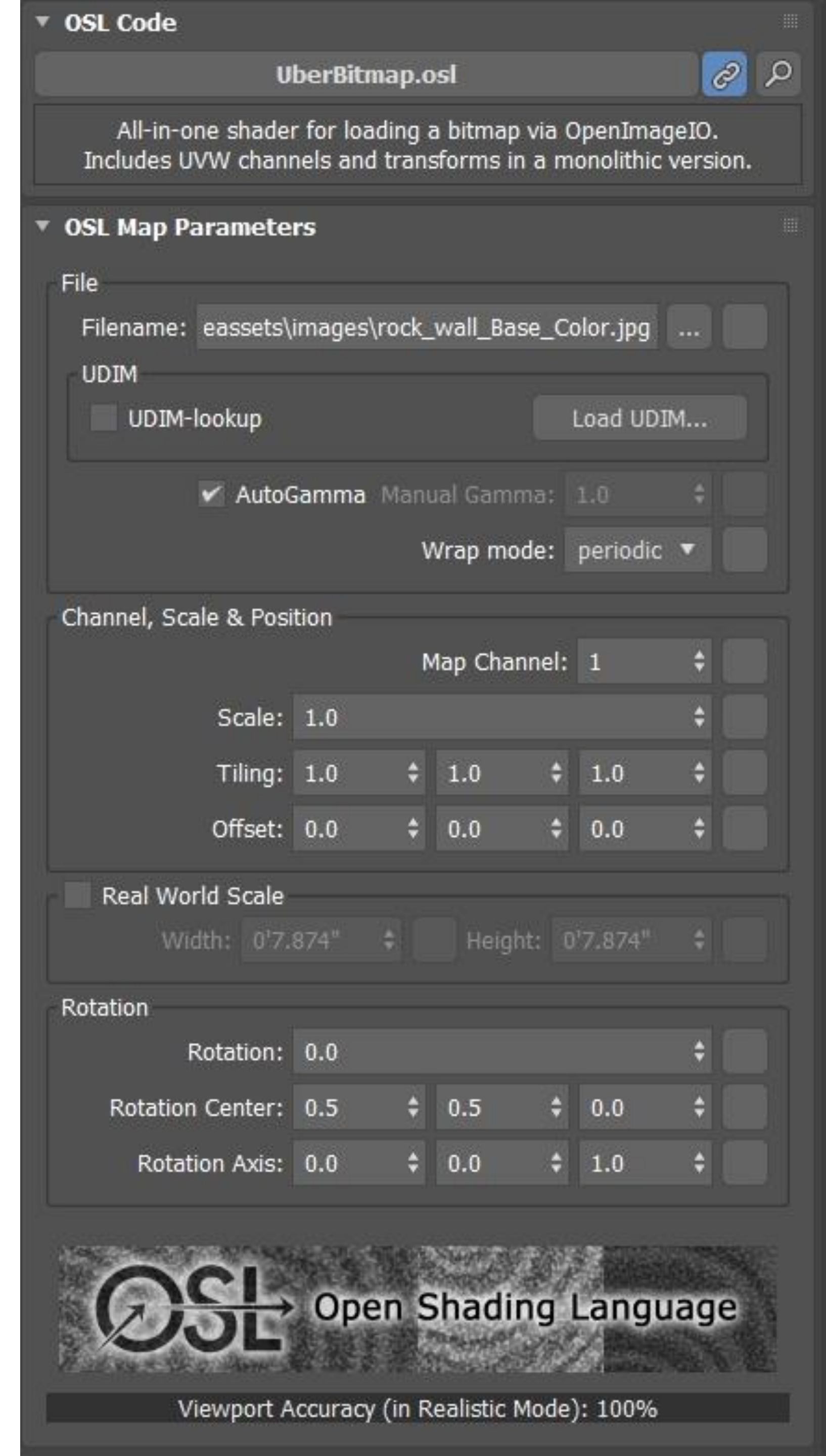


Composite

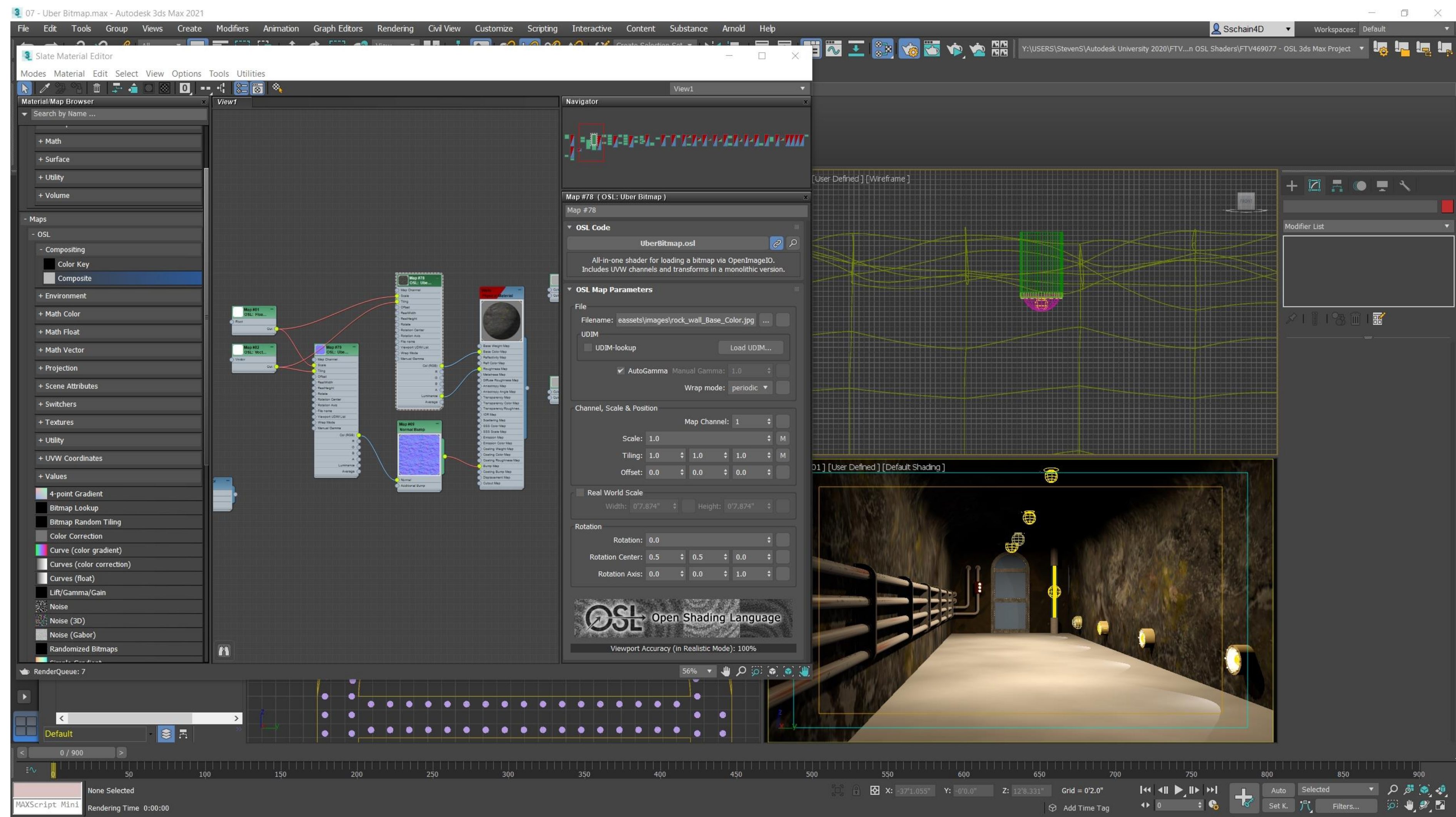


UberBitmap

- Uses OpenImageIO Library
- Monolithic bitmap shader
- Output RGB, Alpha, Luminance & Average



UberBitmap



Thank you for your time.

Steven Schain

Post-Production Supervisor /

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