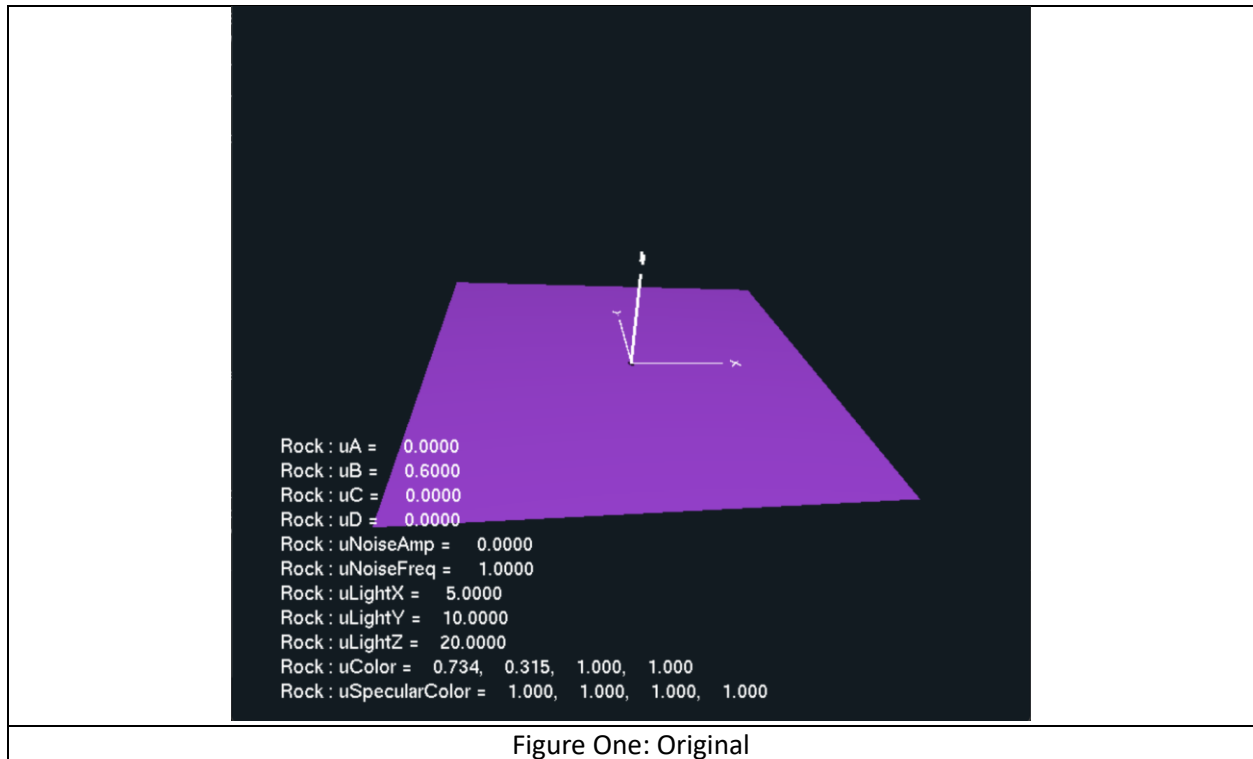CS 557 Assignment Three: Displacement Mapping, Bump Mapping, and Lighting

Name: Chiayu Tu

Email: tuchi@oregonstate.edu

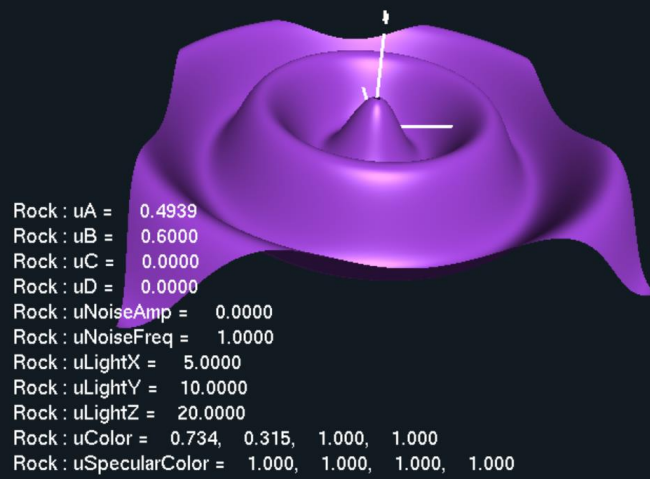Link: CS557 Assignment Three - OSU MediaSpace (oregonstate.edu)

Project Screenshot:

Figure One: Original

Rock : uA =   0.4939
Rock : uB =   0.6000
Rock : uC =   0.0000
Rock : uD =   0.0000
Rock : uNoiseAmp =   0.0000
Rock : uNoiseFreq =   1.0000
Rock : uLightX =   5.0000
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000

Figure Two: Changing uA

Rock : uA =   0.4939
Rock : uB =   1.8909
Rock : uC =   0.0000
Rock : uD =   0.0000
Rock : uNoiseAmp =   0.0000
Rock : uNoiseFreq =   1.0000
Rock : uLightX =   5.0000
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
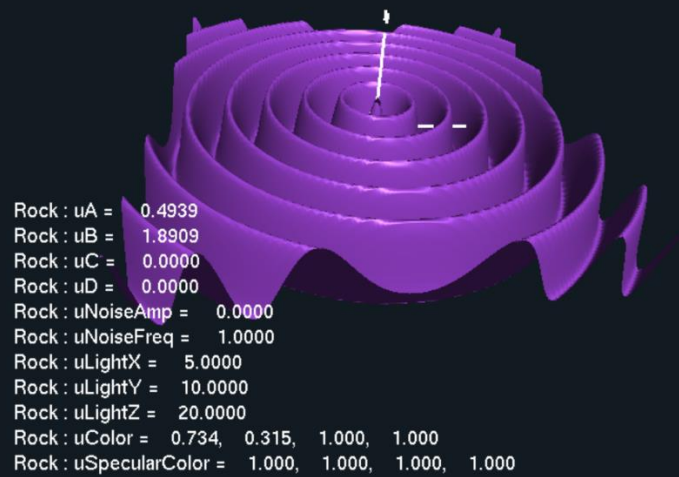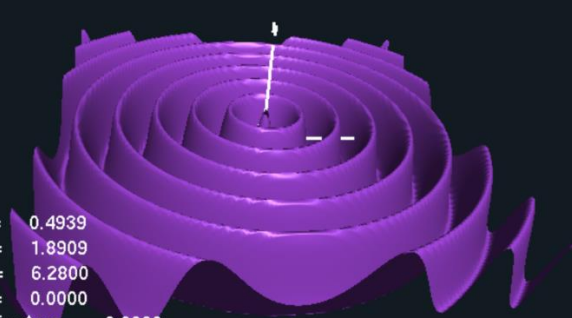Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000
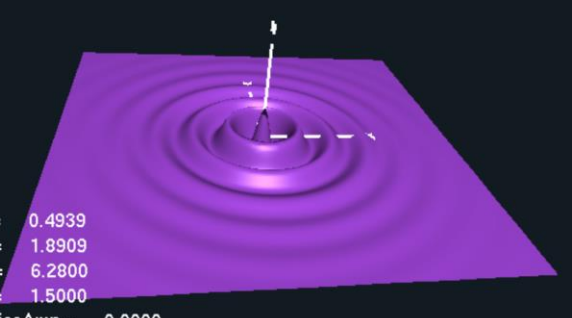
Figure Three: Changing uB

Rock : uA =   0.4939
Rock : uB =   1.8909
Rock : uC =   6.2800
Rock : uD =   0.0000
Rock : uNoiseAmp =   0.0000
Rock : uNoiseFreq =   1.0000
Rock : uLightX =   5.0000
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000

Figure Four: Changing uC

Rock : uA =   0.4939
Rock : uB =   1.8909
Rock : uC =   6.2800
Rock : uD =   1.5000
Rock : uNoiseAmp =   0.0000
Rock : uNoiseFreq =   1.0000
Rock : uLightX =   5.0000
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000

Figure Five: Changing uD

Rock : uA =   0.4939
Rock : uB =   1.8909
Rock : uC =   1.3785
Rock : uD =   0.3049
Rock : uNoiseAmp =   2.3476
Rock : uNoiseFreq =   1.0000
Rock : uLightX =   5.0000
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
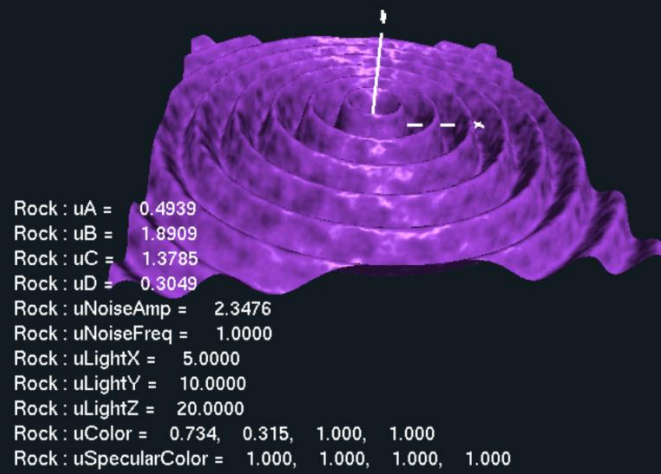Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000

Figure Six: Changing uNoiseAmp

Rock : uA =   0.4939
Rock : uB =   1.8909
Rock : uC =   1.3785
Rock : uD =   0.3049
Rock : uNoiseAmp =   2.3476
Rock : uNoiseFreq =   10.9500
Rock : uLightX =   1.8293
Rock : uLightY =   10.0000
Rock : uLightZ =   20.0000
Rock : uColor =   0.734,   0.315,   1.000,   1.000
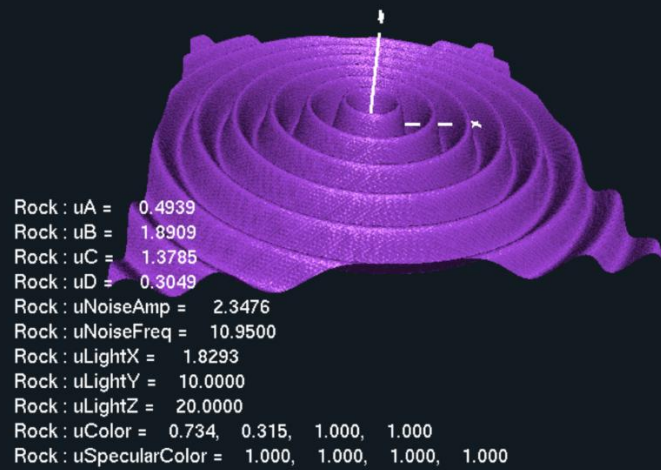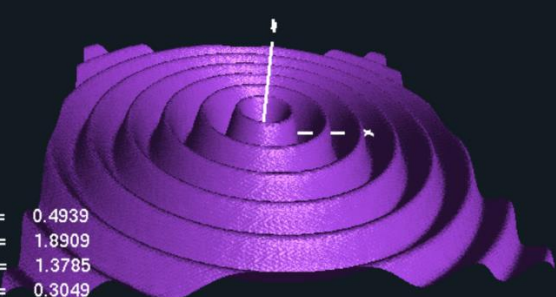Rock : uSpecularColor =   1.000,   1.000,   1.000,   1.000
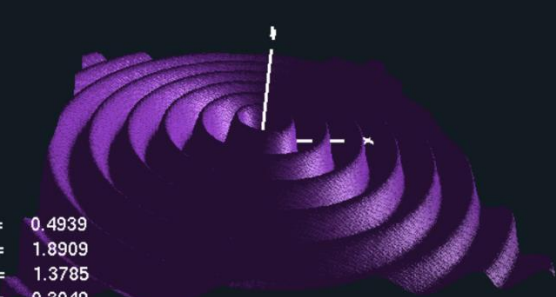
Figure Seven: Changing uNoiseFreq

Rock : uA = 0.4939
Rock : uB = 1.8909
Rock : uC = 1.3785
Rock : uD = 0.3049
Rock : uNoiseAmp = 2.3476
Rock : uNoiseFreq = 10.9500
Rock : uLightX = 10.9756
Rock : uLightY = −5.3658
Rock : uLightZ = 20.0000
Rock : uColor = 0.734, 0.315, 1.000, 1.000
Rock : uSpecularColor = 1.000, 1.000, 1.000, 1.000

Figure Eight: Changing uLightX&Y

Rock : uA = 0.4939
Rock : uB = 1.8909
Rock : uC = 1.3785
Rock : uD = 0.3049
Rock : uNoiseAmp = 2.3476
Rock : uNoiseFreq = 10.9500
Rock : uLightX = 10.9756
Rock : uLightY = −5.3658
Rock : uLightZ = −10.0000
Rock : uColor = 0.734, 0.315, 1.000, 1.000
Rock : uSpecularColor = 1.000, 1.000, 1.000, 1.000

Figure Nine: Changing uLightZ