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CS557 - Computer Graphics Shaders

Project #2: Noisy Elliptical Dots

Description:

For this project, I built upon the foundation of Project 1. Since I am not using glman, I downloaded the 3D noise texture from the resources page. I implemented a separate function to read the texture and passed it to the shaders. The *NoiseAmp*and *NoiseFreq* parameters were passed as uniform variables using the same techniques applied in Project 1.

In this project, I made all five parameters (*uAd*, *uBd*, *uTol*, *uNoiseAmp*, and *uNoiseFreq*) variable. Keyframes for these parameters are controlled using the following keyboard keys:

- **t, T: *uAd***
- **u, U: *uBd***
- **v, V: *uTol***
- **w, W: *uNoiseAmp***
- **x, X: *uNoiseFreq***

All the following project requirements have been fulfilled:

- **uAd and uBd continue to work correctly:** The ellipse radii can be adjusted using keys 't' and 'u'
- **uTol continues to work correctly:** Tolerance can be adjusted using 'v'
- **Show correct changes in uNoiseAmp:** Noise Amp can be changed using key 'w'
- **Show correct changes in uNoiseFreq:** Noise Freq can be changed using key 'x'

Screenshot:

uNoiseAmp / UNoiseFreq	Tolerance
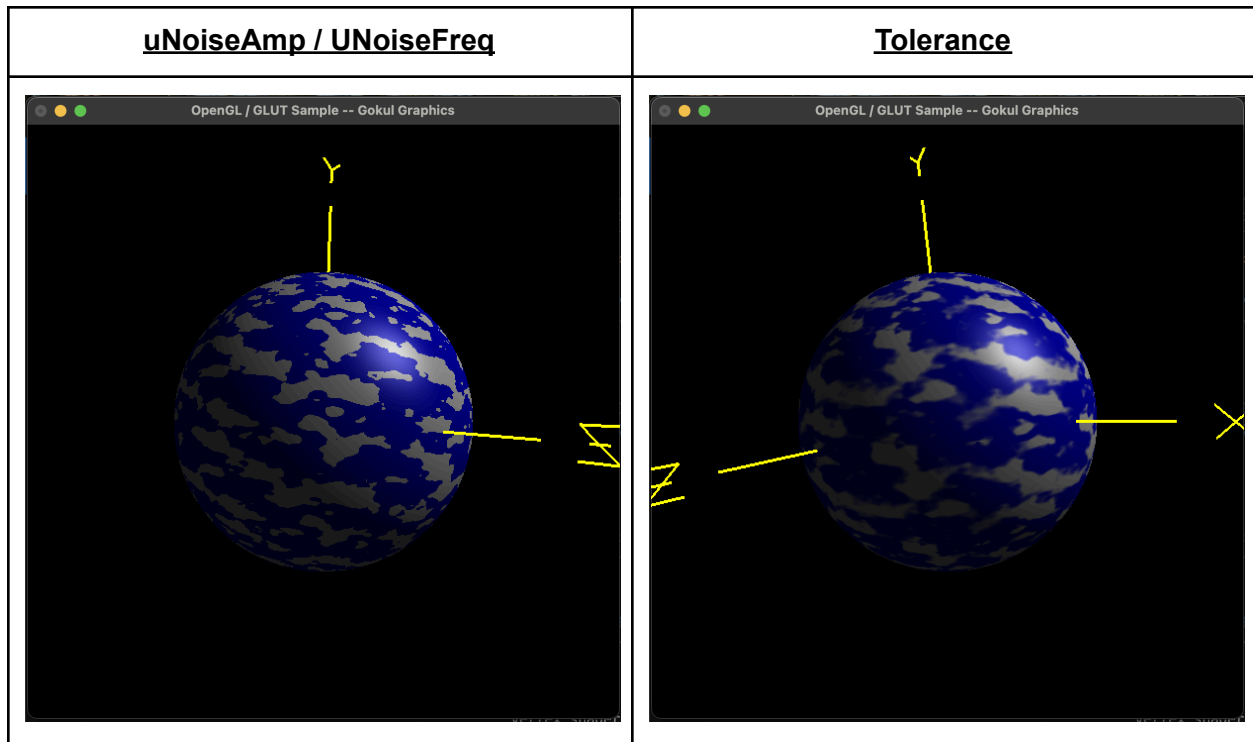
Video Link: https://media.oregonstate.edu/media/t/1_jm2xr56o