Soil Display: Dye Concentration Manual

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Modeling and Simulation

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To Begin the Code:

1. Start up the user interface, as well as the spyder, or jupyter software
2. In order to retrieve the h values for the qx calculations, you have to run the free surface code, and then run the dye concentration code
3. once both codes are running there should be concentration values being computed
4. In order to show variable in the concentrations the delta x value may be manipulated to alter the concentration
5. Any alterations to the Velocity values would have to be incorporated within the free-surface code, not the dye concentration code due to the h values being responsible for determining the qx value and thus the Vx value
6. The porosity of the material within the soil display may be altered as well. This is done by looking at the top of the code, and changing the number next to the n value (porosity)
7. Once the user has made all of the alterations to the code that they wish to see, the green play button at the top of the screen can be clicked to run the code, and produce the dye concentrations