

G572 Lecture Notes 4: Estimating Recharge

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1 Lecture Notes

This week, we are going to learn a little more about how to work with Pandas DataFrames to estimate some vertical fluxes (recharge and leakage) in an aquifer.

The material for this week can be access on GitHub: <https://github.com/dbabrams/G572-Lecture-Notes-4>.

2 Lecture Videos

You may find some of the following lecture videos helpful in completing this assignment (all videos are from previous semesters but the content is still relevant to this year):

Review of Darcy's Law: https://mediaspace.illinois.edu/media/t/1_j2yfb0bl

Recharge and Leakage in an aquifer: https://mediaspace.illinois.edu/media/t/1_60ntuwqn

Green River Lowlands discussion: https://mediaspace.illinois.edu/media/t/1_giqpjbog

Example Python code to estimate recharge: https://mediaspace.illinois.edu/media/t/1_yrksrt5b

Please note that you might observe minor differences in the Jupyter Notebook discussed in that last video from what is posted on GitHub. However, the majority of the concept and codes is the same.

3 This Week's Homework Assignment

Please see Homework 4a on GitHub:

<https://github.com/dbabrams/G572-Lecture-Notes-4>

Please submit all material via your own private GitHub repository by February 23rd at 5:00 pm. You may use the same repository as for the last assignment. Note that next week, there will be a Homework 4b that supplements this week's homework, so keep that in mind when considering your schedule to complete this work.