

Lab 7: Model Implementation and Testing

Hydrological model implementation, time-stepping algorithms, validation strategies

CEVE 543 Fall 2025

2025-10-17

1 Objectives

1. Implement hydrological model time-stepping algorithms
2. Code the run_hydromodel function with proper structure
3. Test model implementation and validate results
4. Establish foundation for calibration exercises

2 Before

! Instructions

Do this before the lab date so that lab itself can go more smoothly.

3 Background and Reading

4 Tasks

Modify the code section below to address the following tasks.

1. Implement hydrological model time-stepping algorithms with mass balance
2. Code the run_hydromodel function following proper software structure
3. Test model implementation against known benchmarks and validate results
4. Establish foundation for upcoming calibration and uncertainty exercises

5 Code

Bibliography