Lab meetings

Someday

Cho's goals

- ROSES
  - Work with the research office to improve the proposal
- ERDC
  - Start a pre-proposal
- SWE
  - Literature review
- AGU abstracts
  - POSE
  - SWE
- Dr. Srini for SWAT
- POSE GRASS workshop
- Asad
  - Revisit the culvert capacity discussion
- NMCAMP weekly maps

2024-07-08

Mahesh

- LSTM1D (spent 16 hours, 12 hours)
  - Throws an exception (TensorFlow cannot be interpreted as an integer)
- Literature review (spent 4 hours)
- GRASS (8 hours)

Asad

- CAMP
  - Culvert ID script
    - Sent to NMDOT
    - Waiting for their response about AGOL profiles
  - Frequency analysis
    - PeakFQ (10 hours)
  - Calculate the culvert capacity (10 hours): Hydraulic Design of Highway Culverts 3rd Edition
  - CAMP *report* (spent 2-3 hours)
  - DL-FIM (0 hours) dl4fim
- Publication ⇒ Thesis
  - Important
- AGU abstract
  - Data: NFHL REST Services

Abdullah

- WRRA
  - Scripting for weather forcing is complete
    - Started on Friday 7/5: Precipitation, min/max temperature, wind velocity into our VIC grid
  - Completed
    - Soil
    - LAI
  - TODOs
    - Global parameters (10 hours)
  - Working
    - Elevation in soil: Aggregate USGS 10m DEM and replace the elev column in the soil input file (10 hours)
- DISES
  - Field trip (20 hours)
    - Write down your questions for modeling
    - Ask very specific questions about data
    - Questions for stakeholders
      - Water supply sources for El Rito
      - Any water diversions in El Rito
  - Completed on Overleaf
    - Issue documentation
    - How to reproduce everything
- HEC-RAS 2D floodway (wants to publish it ASAP)
  - Chattahoochee model, but we changed the study site to Ruidoso, NM
  - Ruidoso
    - Hourly precipitation data for rain-on-grid modeling
    - If not possible, we'll use hourly hydrograph for the downstream of the USGS gage
  - Basic model ready
    - 1m DEM
    - Chattahoochee River (250m-long river section)
  - TODOs
    - Encroachment
    - Hydrograph
    - Study rhdf5 (R library)
- Working
  - AGU abstract

2024-06-24

Mahesh

- SWE
  - Complete the training (8 hours spent)
  - Literature review & summary (0 hours spent)
  - NSE (12 hours spent, 8 hours)
  - Forecasting for the proposal (12 hours, plan to finish it by Wednesday)
    - Expected output: A text file with observed and predicted SWE time series

Asad

- CAMP
    - Regression raster calculations (5 hours spent)
        - Done in GRASS GIS
    - Documentation (0 hours spent, 4 hours)
        - Spent time on publication (NO! NMDOT doesn't pay for your publication and thesis)
        - This time is for the CAMP *report*.
    - Frequency analysis (8 hours)
    - Calculate the culvert capacity (0 hours spent waiting for q*.tif, 8 hours): Hydraulic Design of Highway Culverts 3rd Edition
    - DL-FIM (0 hours) dl4fim
- Publication ⇒ Thesis
    - Important
- AGU abstract

Abdullah

- WRRA
    - Prepare VIC inputs (30 hours)
        - Completed
            - Soil
            - LAI
        - Working and TODOs
            - Weather forcing
            - Global parameters
            - Elevation in soil: Aggregate USGS 10m DEM and replace the elev column in the soil input file
    - Literature review for the proposal (0 hours)
        - 2-3 hours last week
- DISES: Documentation (10 hours)
    - On Overleaf
    - Last week's work
        - Issue documentation
        - How to reproduce everything
- HEC-RAS 2D floodway (wants to publish it this year)
    - Basic model ready
        - 1m DEM
        - Chattahoochee River (250m-long river section)
    - TODOs
        - Encroachment
        - Hydrograph
        - Study rhdf5 (R library)
- AGU abstract

2024-06-17

Cho's goals

- NSF ROSES

    - Complete section 3a
- ERDC
    - Select an appropriate program
    - Start a literature review
- POSE
    - macOS CMake

Abdullah's goals

- WRRA
    - Prepare VIC inputs (25 hours)
    - Literature review for the proposal (5 hours)
- DISES: Documentation (10 hours)
- HEC-RAS 2D floodway (wants to publish it this year)
    1. Identify the study area and resolution
    2. Make a HEC-RAS 2D model

Asad's goals

- CAMP
    - Complete the regression raster calculations (2 hours)
    - Documentation (10 hours)
    - Calculate the culvert capacity (8 hours)
- Publication ⇒ Thesis
    - Important

Mahesh's goals

- SWE
    - Complete the training (5 hours)
    - Literature review & summary (15 hours)