

CURRENT PROGRESS:

- Obtained and prepared model input data to setup the Hillslope River Routing (HRR) model over the Ohio River Basin (Fig. 1).
- Calibrated HRR for 26 gauges inside the basin over a calibration period of about 6 years using
 - i. USGS observed discharge data (continuous)
 - ii. Synthetic SWOT discharge data (intermittent)
 - iii. USGS discharge data at SWOT dates (intermittent)
- Computed the 100-year streamflow estimates at each gauge for each calibration option, and compared the results.

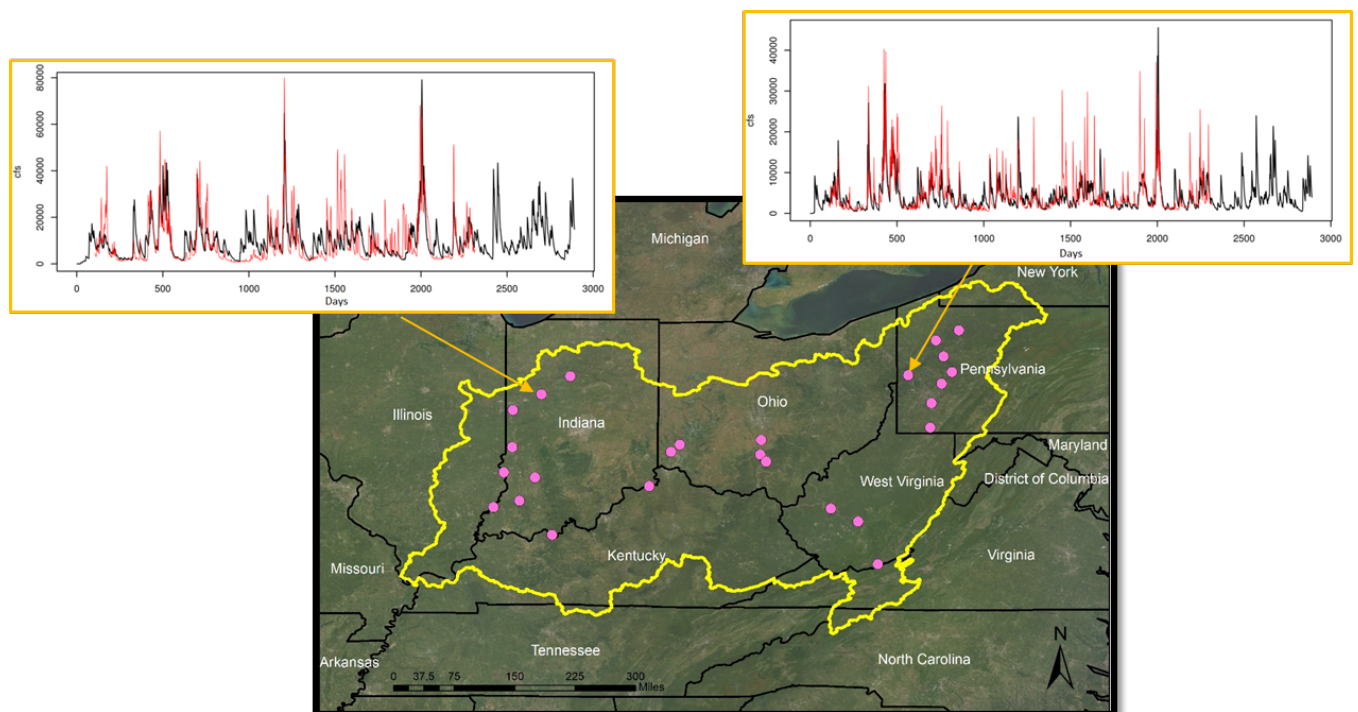


Figure 1. Ohio River Basin boundaries (yellow), the 26 USGS gauges used for calibration (pink), and the calibration figures for two gauges (red: observed; black: simulated).

NEXT STEPS:

- Calibrate HRR over additional gauges inside the Ohio River Basin.
- Use a synthetic event with the calibrated HRR to produce flood maps over a region of interest, one flood map for each of the three different calibrations.
- Compare the flood maps derived from the three different calibrations to help in the assessment of the synthetic SWOT data products.