Coupling the ParFlow Integrated Hydrology Model within the NASA Land Information System: A case study over the Upper Colorado River Basin

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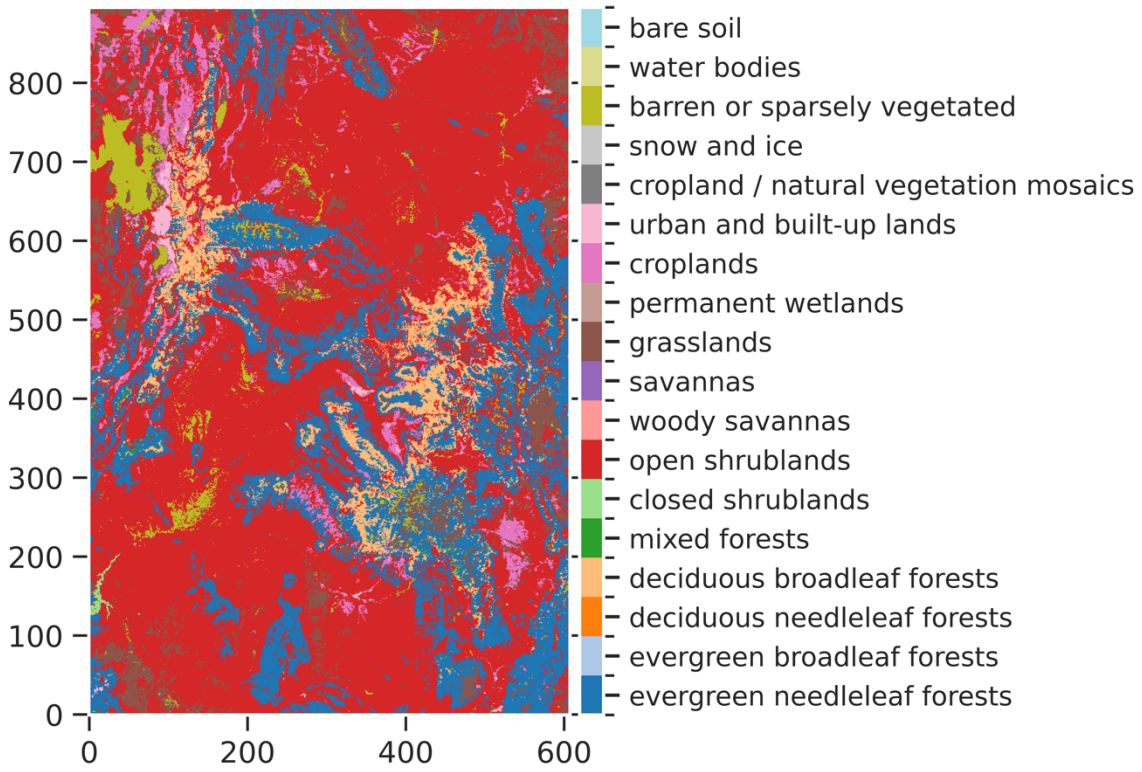Corresponding author: Peyman Abbaszadeh, pabbaszadeh@princeton.edu, pabbaszadeh@pdx.edu

Figure S1. Land use land cover classification over the UCRB domain.
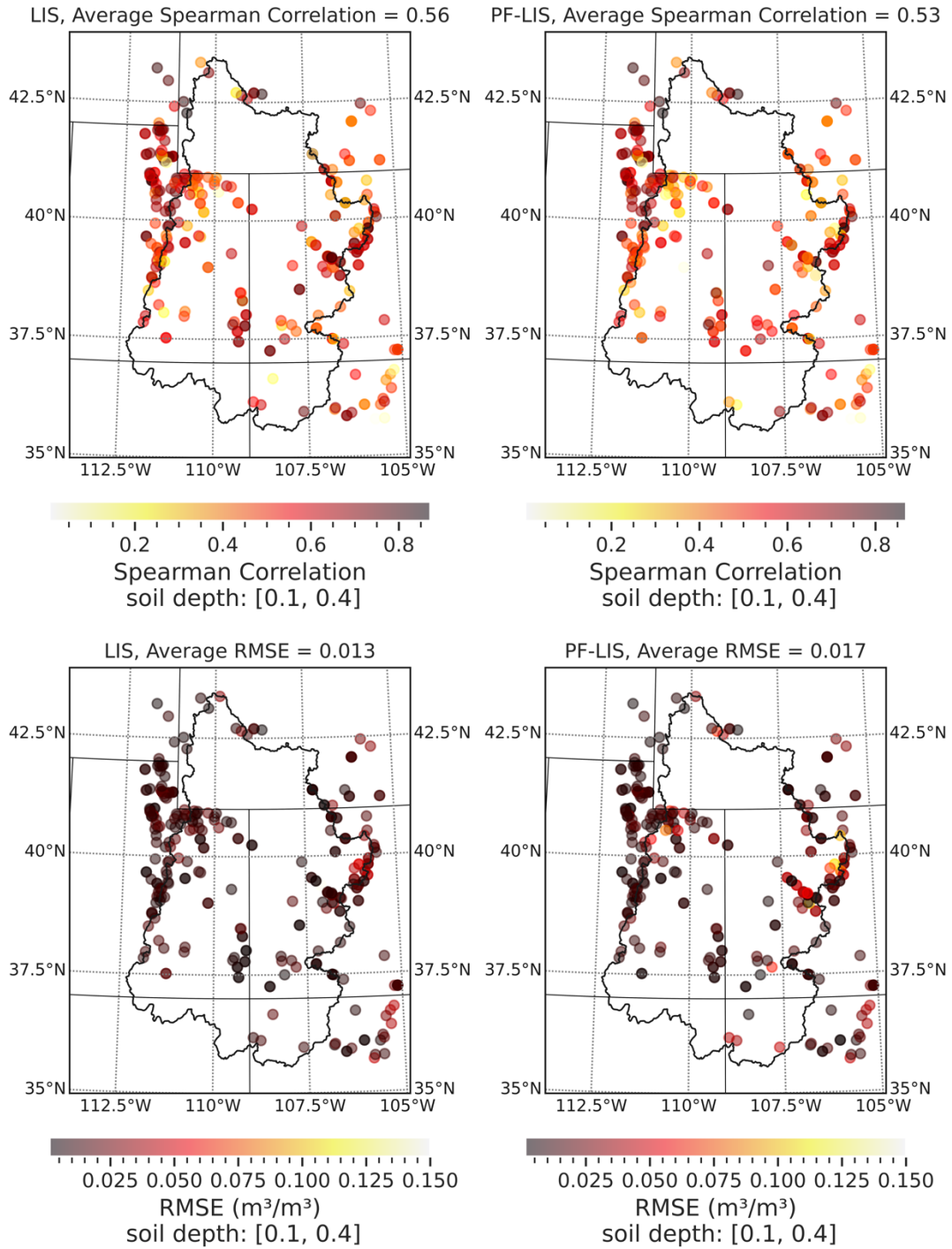
Figure S2. The Spearman's correlation coefficient and RMSE between the simulated and observed soil moisture at the soil depth of 0.1-0.4 m. This result is reported based on 20-year model simulation and observation data, from January 2002 to December 2022.
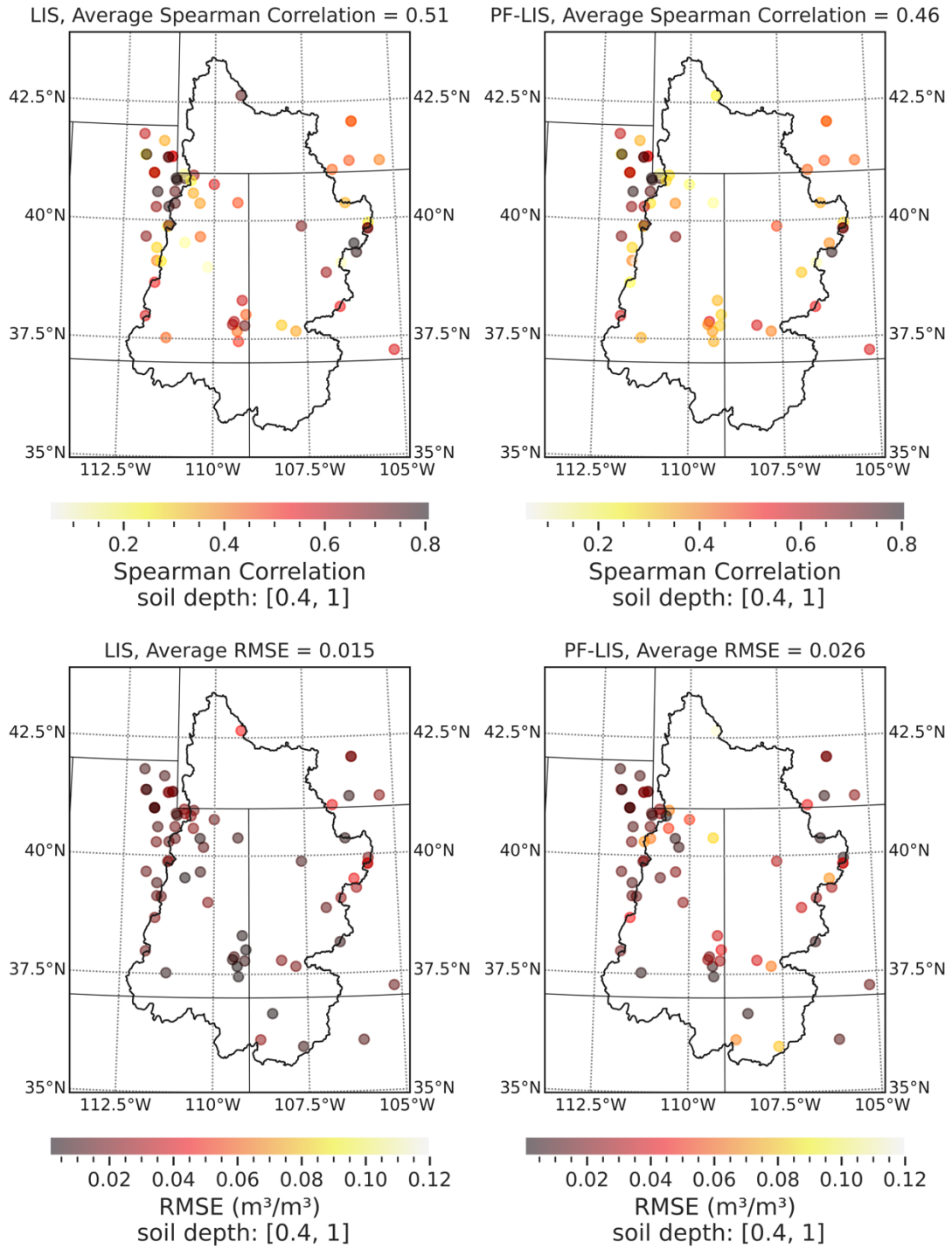
Figure S3. The Spearman's correlation coefficient and RMSE between the simulated and observed soil moisture at the soil depth of 0.4-1 m. This result is reported based on 20-year model simulation and observation data, from January 2002 to December 2022.
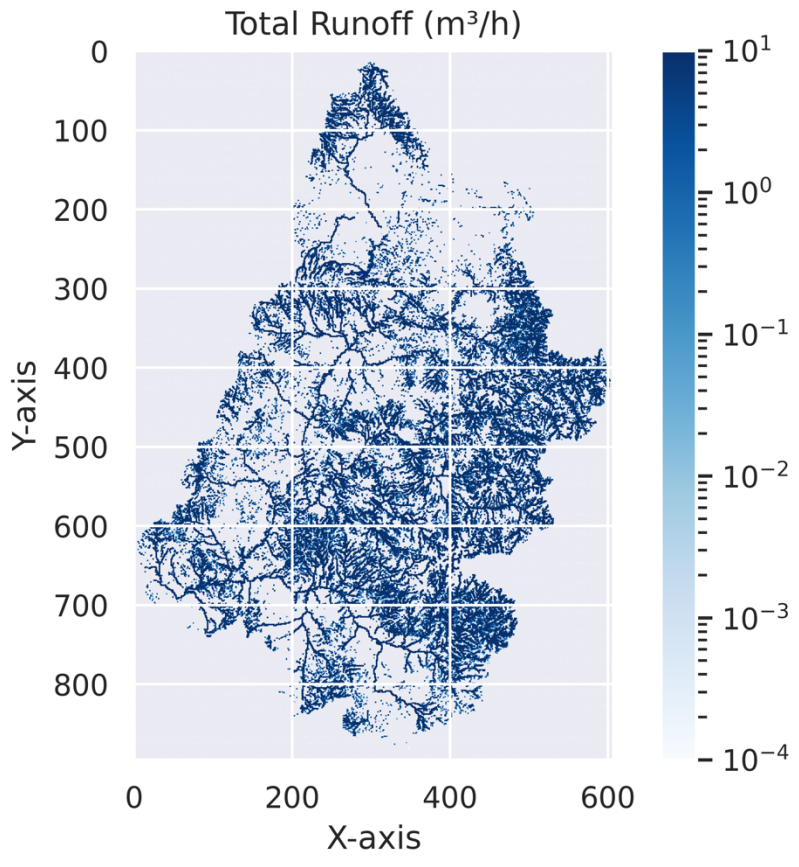
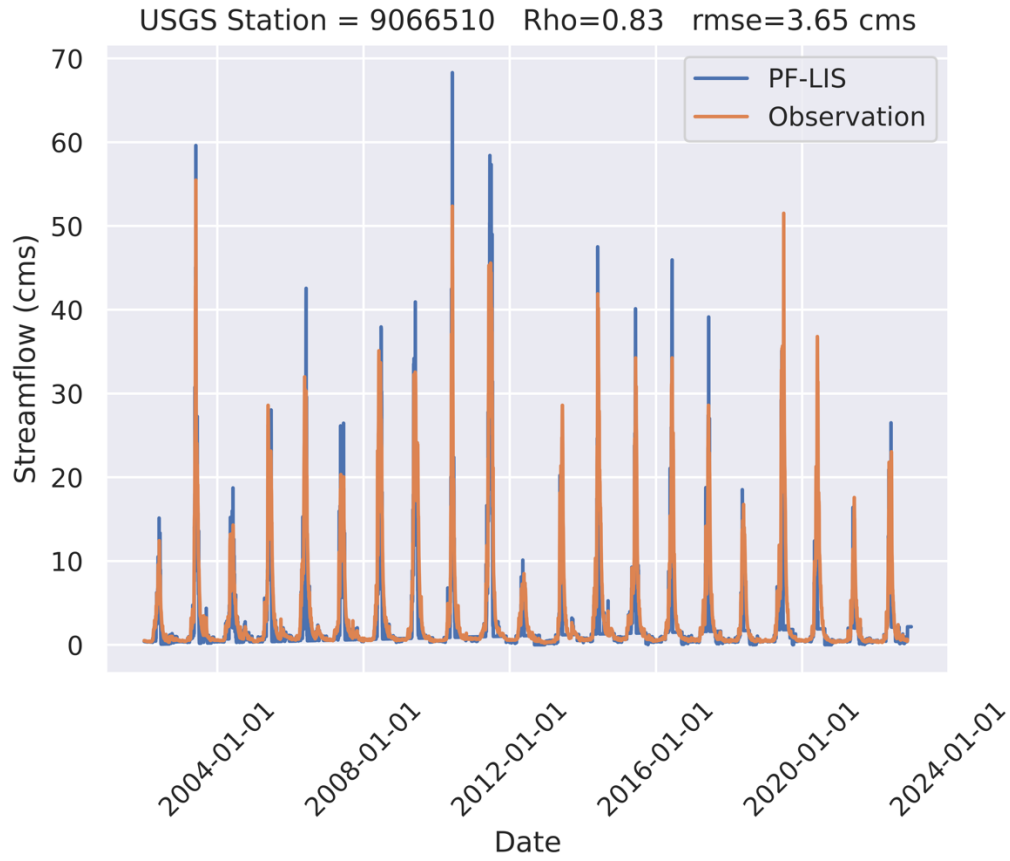*Figure S4. An example of total runoff data calculated over the UCRB.*

Figure S5. Streamflow simulation from PF-LIS model against streamflow observation from USGS 9066510 Gore Creek at Mouth Near Minturn, CO, over the period of 20 years.