Testing model

The very basic hydrologic model (VBH):

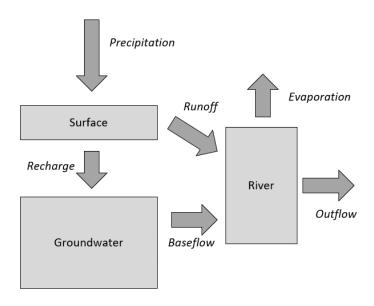


Figure 1: Storages and fluxes in VBH model

There are three storages and 6 fluxes in the standard VBH model. The storages:

- 1. Surface
- 2. River
- 3. Ground

The fluxes:

- 1. Precipitation (added to surface)
- 2. Runoff (direct surface to river)
- 3. Recharge (infiltrated to groundwater)
- 4. Baseflow (groundwater to river)
- 5. Evaporation (removed from river)
- 6. Outflow (from river out of model domain)

The script will move water through the storages for every input interval: 10 precipitation input values listed at the top of the script will let the model run 10 time-steps. Initial values for the storages are set at the top of the script as well. Inputs and initial values should be greater than or equal to zero to avoid nonsensical results.

As this is a testing model, no units are specified. All precipitation inputs are assumed to be equal intervals, and fluxes have units of (storage mass unit)/(precipitation time interval).