Streamflow Data Assimilation System

- Atmospheric forcing
- Land surface model (Noah-MP)
- Overland and subsurface routing
- Spatial aggregation

Parametric noise model

- Channel and reservoir models
  - Flux from overland and subsurface routing (cms)
  - Channel parameters
  - Groundwater bucket model
    - Flux from bottom of soil columns (cms)

DART

USGS streamflow observations

- Streamflow (cms)
- Bucket head (m)