

RUN #1

STAD-DATE: stal1111111_1968_0709
DATA DIR: d:\jvlabel\SWAP\UNIT\precip_loss_optimization\towEB\BOTB\EXAMP1
AREA [mi²] PRECIPITATION 1.33

TOTAL RAIN VOLUME [inches] 5.8333
EXCESS RAIN VOLUME [inches] 2.4802
PERCENT RAIN VOLUME LOSS 57.4817

DISCHARGE

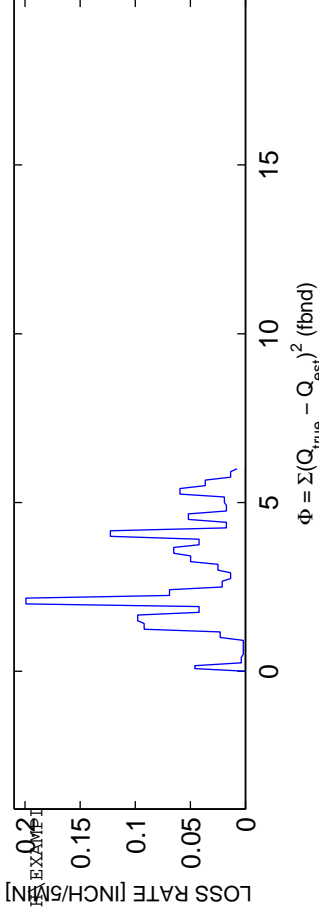
MEAN OBS Q [CFS] 112.4013
MEAN SIM Q [CFS] 88.1938
RMS Q RESIDUALS [CFS] 103.8291
Q RELATIVE BIAS -0.21537
Q NASH-SUTCLIFFE EFFICIENCY 0.68895
Q SIM vs OBS R² 0.71044
Q SIM vs OBS SLOPE 0.9257
Q SIM vs OBS INTERCEPT 30.7603

VOLUME

MEAN OBS V [CFS] 1.9698
MEAN SIM V [CFS] 1.6551
RMS V RESIDUALS [CFS] 0.48882
V RELATIVE BIAS -0.15978
V NASH-SUTCLIFFE EFFICIENCY 0.87368
V SIM vs OBS R² 0.96988
V SIM vs OBS SLOPE 1.27
V SIM vs OBS INTERCEPT -0.13205

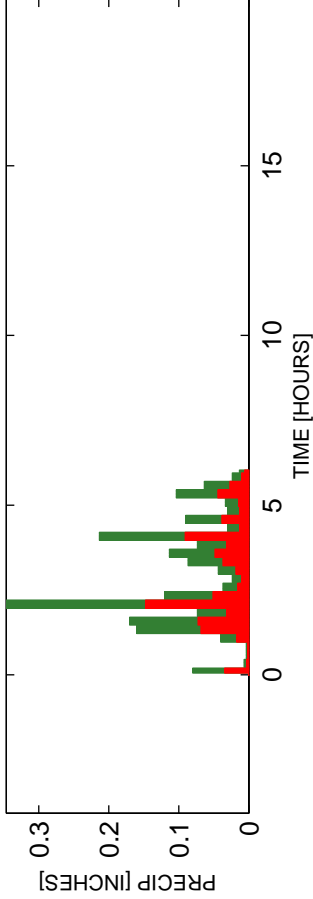
OPTIMIZATION RESULTS -----
SIM/OBS TOTAL VOLUME RATIO 0.78462
MINIMIZED OBJECTIVE FUNCTION VALUE 3115559.6037
C_{opt}: 0.42518

PRECIP LOSS FUNCTION: $P_{xs}(t) = c_1 P_{tot}(t) [0 < c_1 \leq 1]$

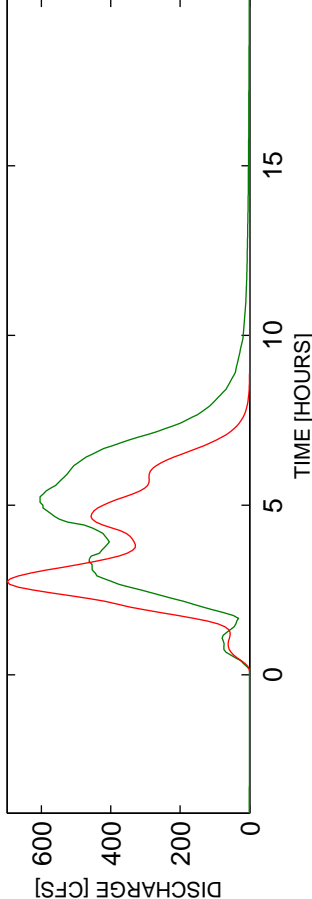


$$\Phi = \Sigma(Q_{true} - Q_{est})^2 \text{ (fbnd)}$$

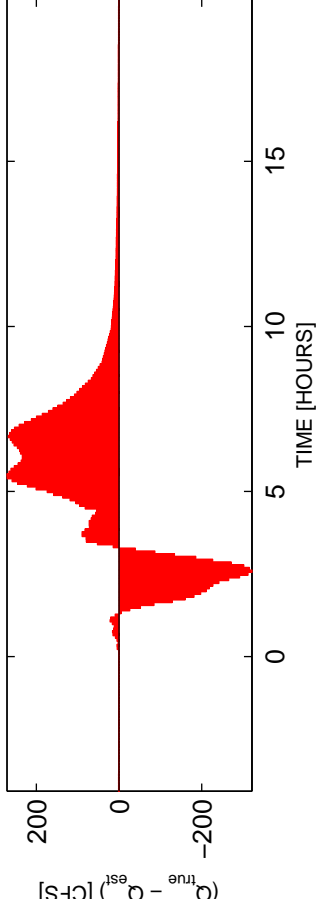
OBS AND MODELED RAINFALL: RAW DATA USED



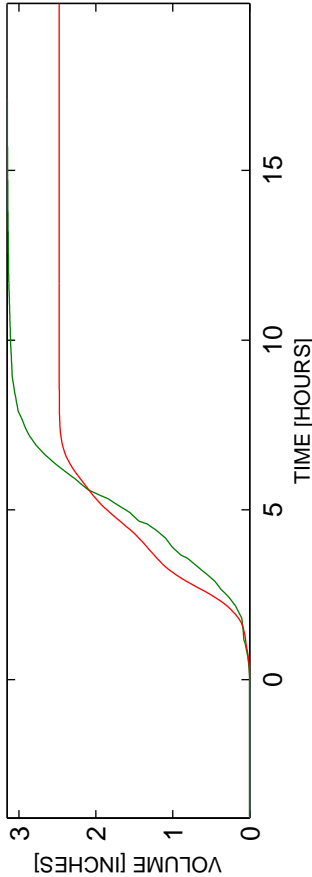
OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS



OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS

