

RUN #3

STAD-DATE: sta22222222_1968_0709
DATA DIR: d:\jvlabel\SWAP\UNIT\precip_loss_optimization\towEB\BOTHEXAMP1
AREA [mi^2] PRECIPITATION 1.94

TOTAL RAIN VOLUME [inches] 6.2667
EXCESS RAIN VOLUME [inches] 2.6347
PERCENT RAIN VOLUME LOSS 57.9563

DISCHARGE

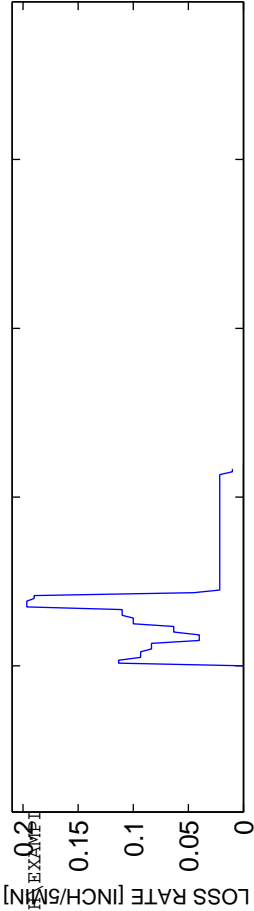
MEAN OBS Q [CFS] 170.2986
MEAN SIM Q [CFS] 136.5968
RMS Q RESIDUALS [CFS] 96.1345
Q RELATIVE BIAS -0.1979
Q NASH-SUTCLIFFE EFFICIENCY 0.86838
Q SIM vs OBS R² 0.9029
Q SIM vs OBS SLOPE 0.87526
Q SIM vs OBS INTERCEPT 50.741

VOLUME

MEAN OBS V [CFS] 1.7867
MEAN SIM V [CFS] 1.512
RMS V RESIDUALS [CFS] 0.39036
V RELATIVE BIAS -0.15373
V NASH-SUTCLIFFE EFFICIENCY 0.92772
V SIM vs OBS R² 0.98781
V SIM vs OBS SLOPE 1.186
V SIM vs OBS INTERCEPT -0.0066389

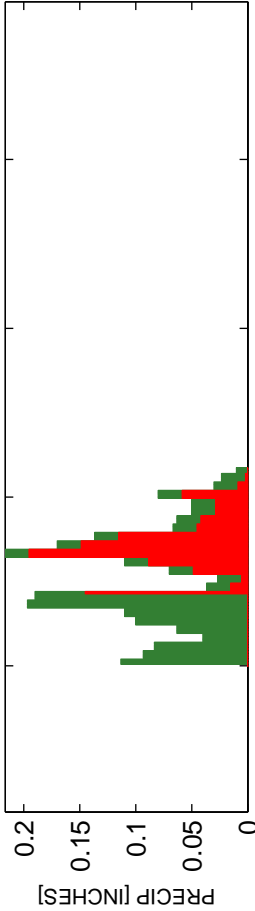
OPTIMIZATION RESULTS -----
SIM/OBS TOTAL VOLUME RATIO 0.80166
MINIMIZED OBJECTIVE FUNCTION VALUE 2670891.7744
C_{opt}: 2.6901 0.021438

PRECIP LOSS FUNCTION: $P_{xs}(t) = \text{init.abs. then const.loss}$

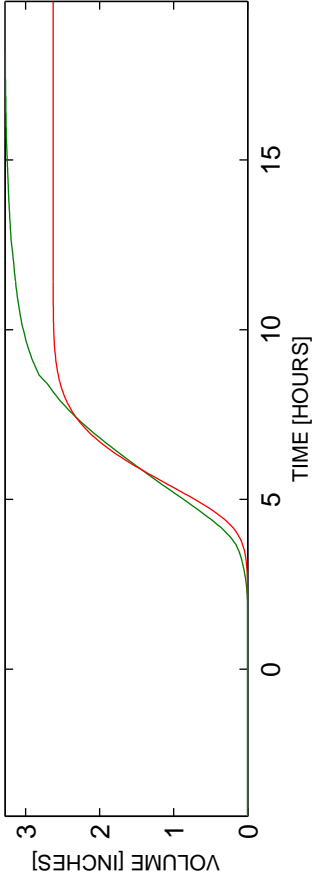


$$\Phi = \Sigma(Q_{\text{true}} - Q_{\text{est}})^2 \text{ (fbnd)}$$

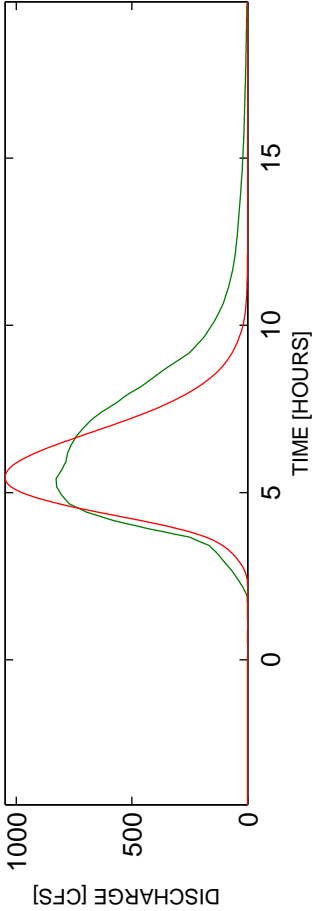
OBS AND MODELED RAINFALL: RAW DATA USED



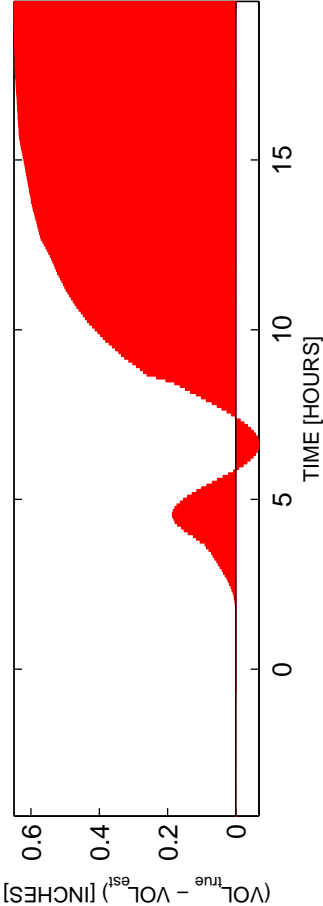
OBS AND ESTIMATED ACCUMULATED VOLUME



OBS AND ESTIMATED DISCHARGES



ACCUMULATED VOLUME RESIDUALS



DISCHARGE RESIDUALS

