

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] 3.2475
PERCENT RAIN VOLUME LOSS 48.1786

DISCHARGE

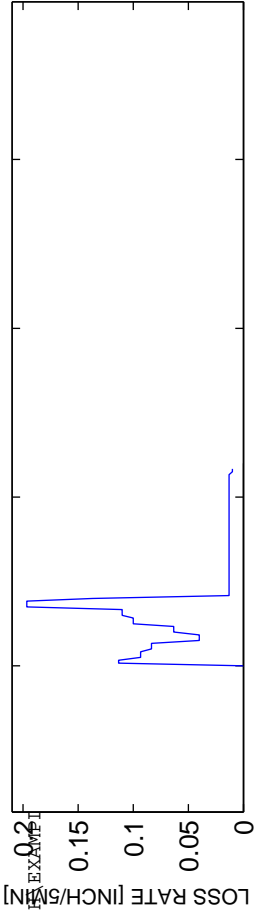
MEAN OBS Q [CFS] 170.2986
MEAN SIM Q [CFS] 168.3639
RMS Q RESIDUALS [CFS] 115.8945
Q RELATIVE BIAS -0.011361
Q NASH-SUTCLIFFE EFFICIENCY 0.80871
Q SIM vs OBS R² 0.9142
Q SIM vs OBS SLOPE 0.74649
Q SIM vs OBS INTERCEPT 44.6162

VOLUME

MEAN OBS V [CFS] 1.7867
MEAN SIM V [CFS] 1.8755
RMS V RESIDUALS [CFS] 0.19147
V RELATIVE BIAS 0.049688
V NASH-SUTCLIFFE EFFICIENCY 0.98261
V SIM vs OBS R² 0.98745
V SIM vs OBS SLOPE 0.96768
V SIM vs OBS INTERCEPT -0.02816

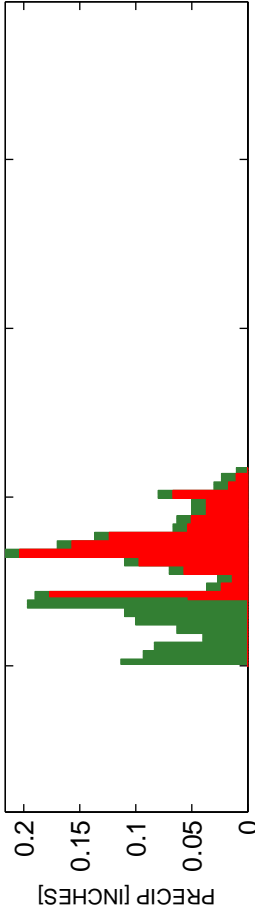
OPTIMIZATION RESULTS -----
SIM/OBS TOTAL VOLUME RATIO 0.98809
MINIMIZED OBJECTIVE FUNCTION VALUE 3881712.7651
C_{opt}: 2.4104 0.013085

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

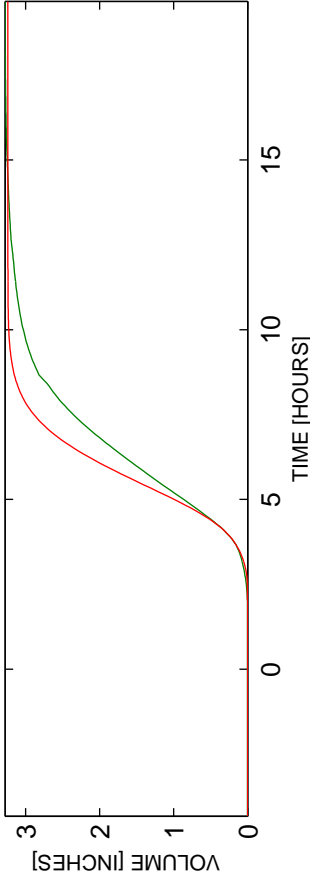


$$\Phi = \sum (Q_{\text{true}} - Q_{\text{est}})^2 \text{ (grid)}$$

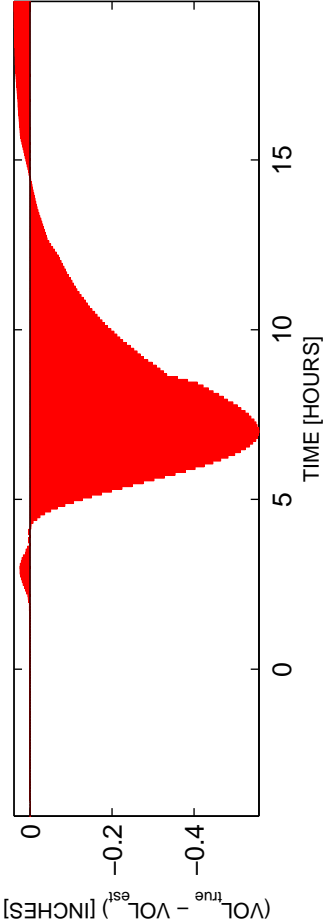
OBS AND MODELED RAINFALL: RAW DATA USED



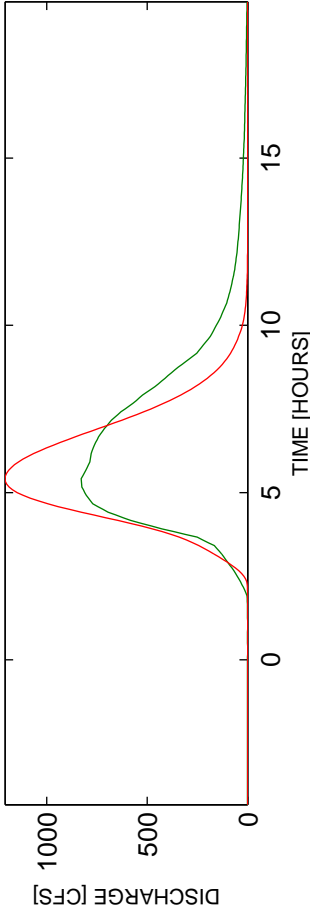
OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

