

RUN #3

STAD-DATE: sta22222222_1968_0709
DATA DIR: d:\jvlabel\SWAP\UNIT\precip_loss_optimization\towEB\BOTB\EXAMP1
AREA [mi^2] PRECIPITATION 1.94

TOTAL RAIN VOLUME [inches] 6.2667
EXCESS RAIN VOLUME [inches] 2.6397
PERCENT RAIN VOLUME LOSS 57.8765

DISCHARGE

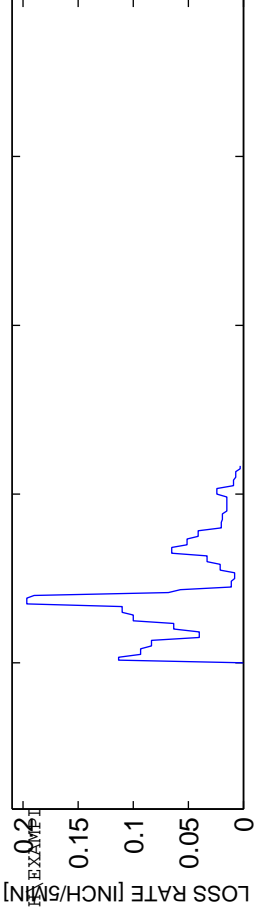
MEAN OBS Q [CFS] 170.2986
MEAN SIM Q [CFS] 136.856
RMS Q RESIDUALS [CFS] 78.7578
Q RELATIVE BIAS -0.19638
Q NASH-SUTCLIFFE EFFICIENCY 0.91166
Q SIM vs OBS R² 0.93161
Q SIM vs OBS SLOPE 0.93839
Q SIM vs OBS INTERCEPT 41.8745

VOLUME

MEAN OBS V [CFS] 1.7867
MEAN SIM V [CFS] 1.5145
RMS V RESIDUALS [CFS] 0.38637
V RELATIVE BIAS -0.15238
V NASH-SUTCLIFFE EFFICIENCY 0.92919
V SIM vs OBS R² 0.99002
V SIM vs OBS SLOPE 1.1919
V SIM vs OBS INTERCEPT -0.018389

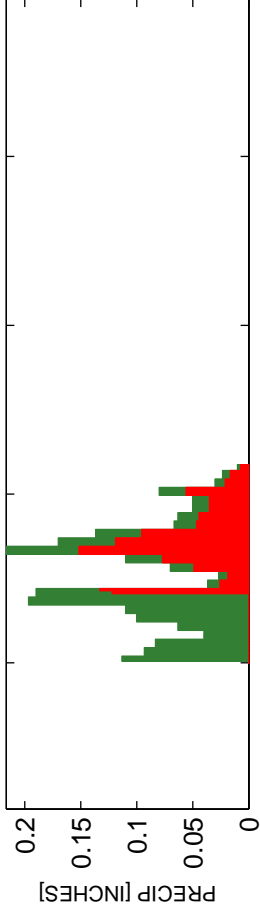
OPTIMIZATION RESULTS -----
SIM/OBS TOTAL VOLUME RATIO 0.80318
MINIMIZED OBJECTIVE FUNCTION VALUE 1792605.5935
C_{opt} : 2.4923 0.69938

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

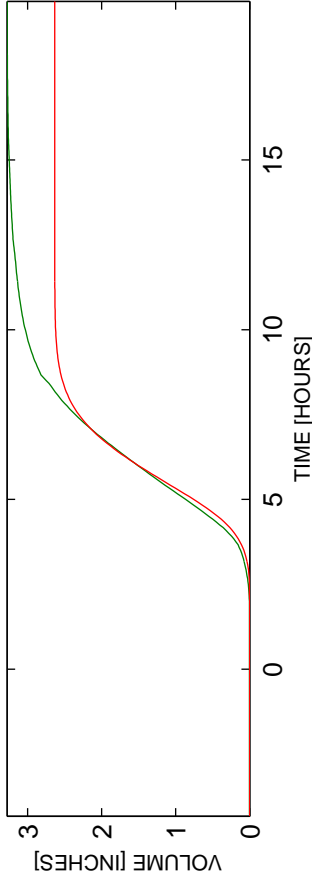


$$\Phi = \sum (Q_{true} - Q_{est})^2 \text{ (fbnd)}$$

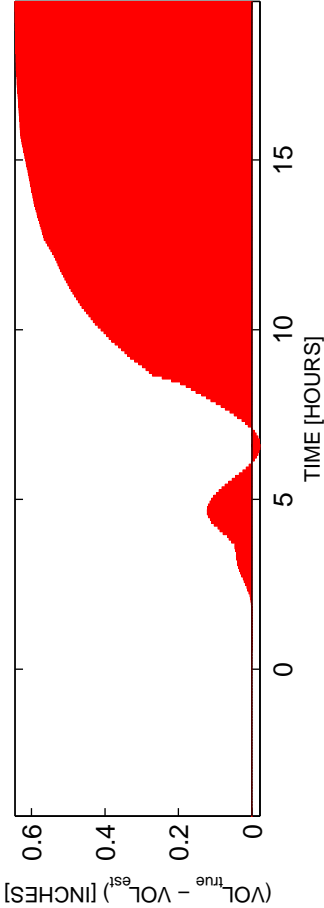
OBS AND MODELED RAINFALL: RAW DATA USED



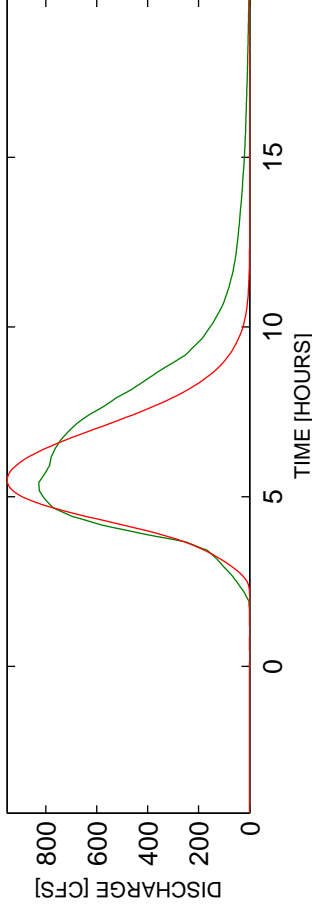
OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

