

RUN #4

STAD-DATE: sta22222222_1969_0214
DATA DIR: d:\jvlabel\SWAP\UNIT\precip_loss_optimization\toweb\BOTHEXAMPLE
AREA [mi^2] PRECIPITATION 1.94

TOTAL RAIN VOLUME [inches] 1.2333
EXCESS RAIN VOLUME [inches] 0.71044
PERCENT RAIN VOLUME LOSS 42.3965

DISCHARGE

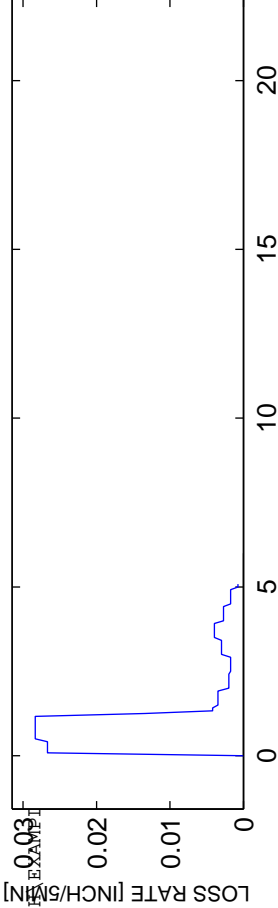
MEAN OBS Q [CFS] 37.3791
MEAN SIM Q [CFS] 36.8326
RMS Q RESIDUALS [CFS] 47.1294
Q RELATIVE BIAS -0.014619
Q NASH-SUTCLIFFE EFFICIENCY -0.48799
Q SIM vs OBS R₂ 0.549
Q SIM vs OBS SLOPE 0.42119
Q SIM vs OBS INTERCEPT 21.8656

VOLUME

MEAN OBS V [CFS] 0.42808
MEAN SIM V [CFS] 0.50599
RMS V RESIDUALS [CFS] 0.12147
V RELATIVE BIAS 0.182
V NASH-SUTCLIFFE EFFICIENCY 0.81219
V SIM vs OBS R₂ 0.89751
V SIM vs OBS SLOPE 0.91346
V SIM vs OBS INTERCEPT -0.034122

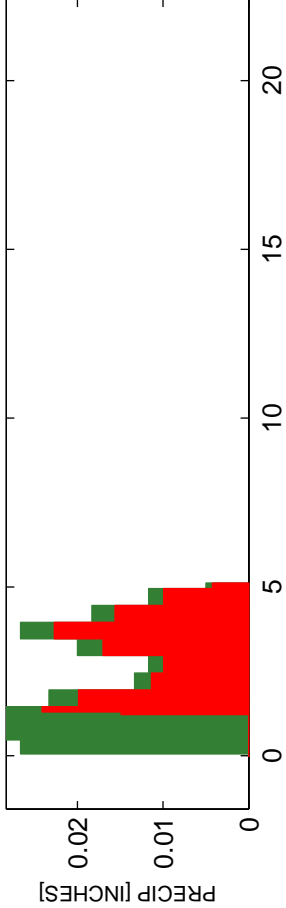
OPTIMIZATION RESULTS -----
SIM/OBS TOTAL VOLUME RATIO 0.98751
MINIMIZED OBJECTIVE FUNCTION VALUE 641920.1333
C_{opt}: 0.39915 0.85167

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

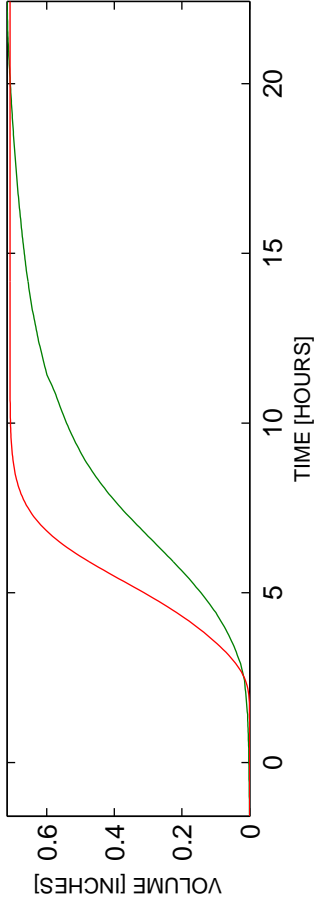


$$\Phi = \sum (Q_{true} - Q_{est})^2 \text{ (grid)}$$

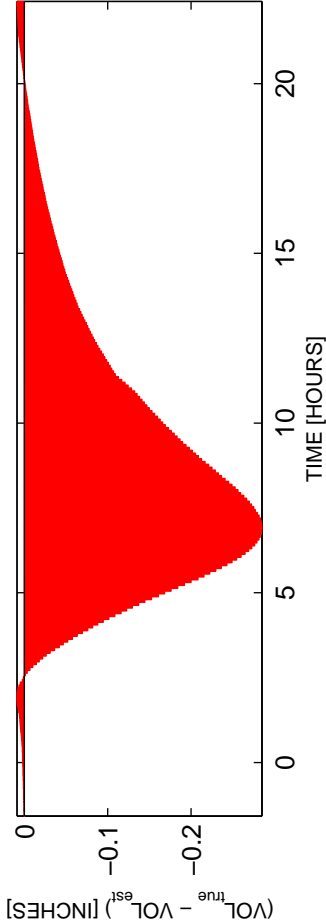
OBS AND MODELED RAINFALL: RAW DATA USED



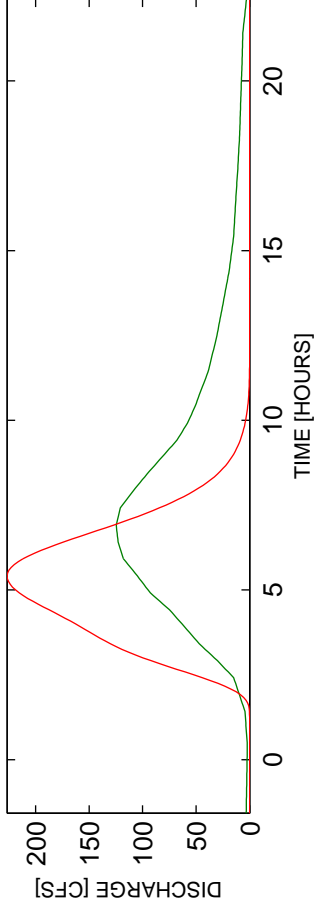
OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

