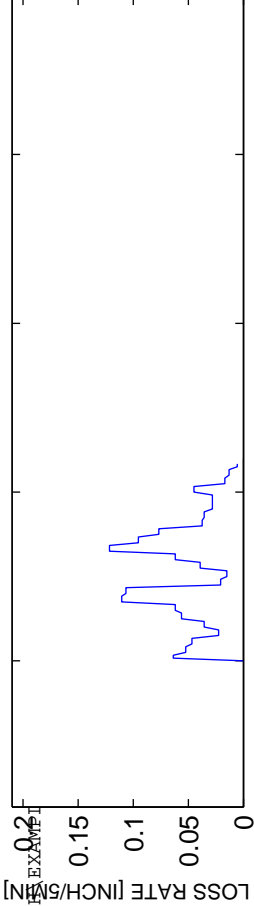


RUN #3

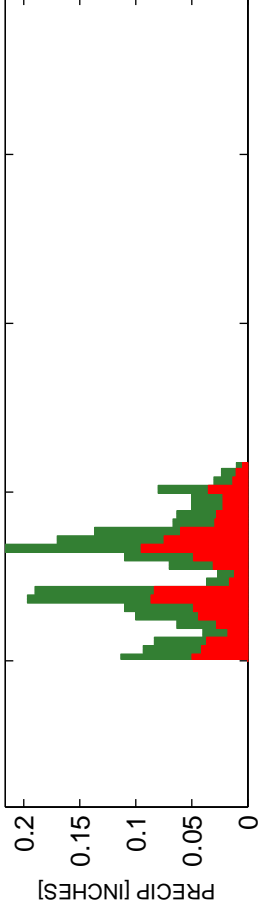
STAD-DATE: sta22222222\_1968\_0709  
DATA DIR: d:\jvlabel\SWAP\UNIT\precip\_loss\_optimization\towEB\BOTB\EXAMP1  
AREA [mi^2] ..... PRECIPITATION ..... 1.94  
-----  
TOTAL RAIN VOLUME [inches] ..... 6.2667  
EXCESS RAIN VOLUME [inches] ..... 2.7494  
PECENT RAIN VOLUME LOSS ..... 56.1259  
-----  
DISCHARGE  
-----  
MEAN OBS Q [CFS] ..... 170.2986  
MEAN SIM Q [CFS] ..... 142.5435  
RMS Q RESIDUALS [CFS] ..... 152.8479  
Q RELATIVE BIAS ..... -0.16298  
Q NASH-SUTCLIFFE EFFICIENCY ..... 0.66728  
Q SIM vs OBS R^2 ..... 0.68227  
Q SIM vs OBS SLOPE ..... 0.92876  
Q SIM vs OBS INTERCEPT ..... 37.9095  
-----  
VOLUME  
-----  
MEAN OBS V [CFS] ..... 1.7867  
MEAN SIM V [CFS] ..... 1.6871  
RMS V RESIDUALS [CFS] ..... 0.38301  
V RELATIVE BIAS ..... -0.055731  
V NASH-SUTCLIFFE EFFICIENCY ..... 0.93042  
V SIM vs OBS R^2 ..... 0.95599  
V SIM vs OBS SLOPE ..... 1.1734  
V SIM vs OBS INTERCEPT ..... -0.19293  
-----  
OPTIMIZATION RESULTS -----  
SIM/OBS TOTAL VOLUME RATIO ..... 0.83656  
MINIMIZED OBJECTIVE FUNCTION VALUE ..... 6751753.6759  
C<sub>opt</sub>: 0.43874

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

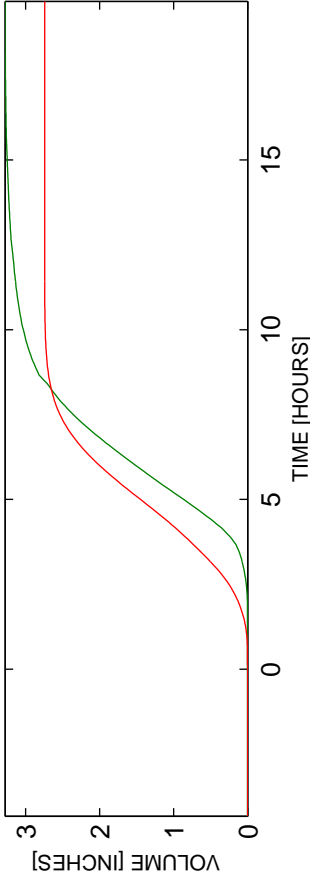


$$\Phi = \sum (Q_{true} - Q_{est})^2 \text{ (fbnd)}$$

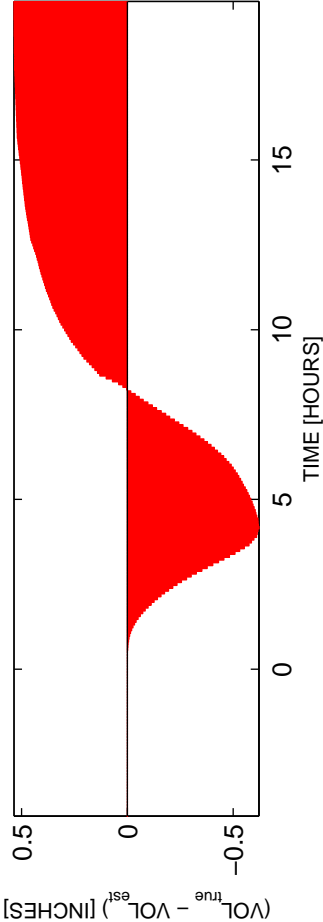
OBS AND MODELED RAINFALL: RAW DATA USED



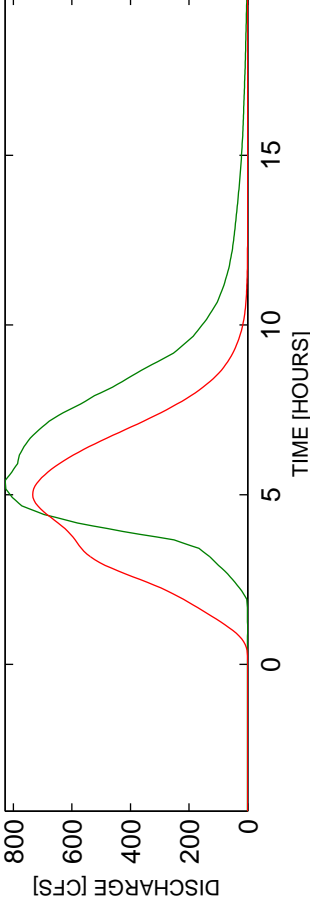
OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

