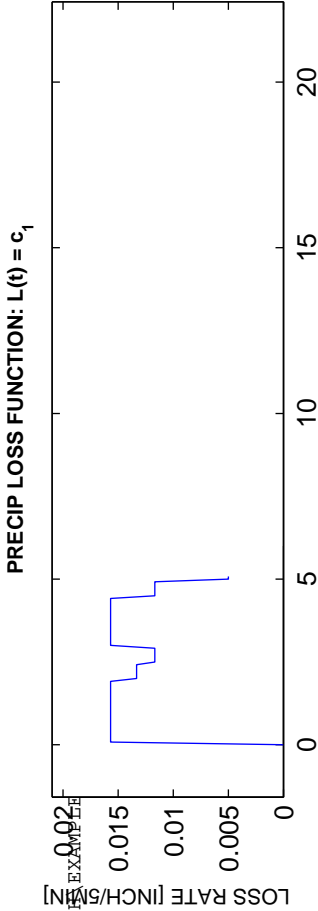


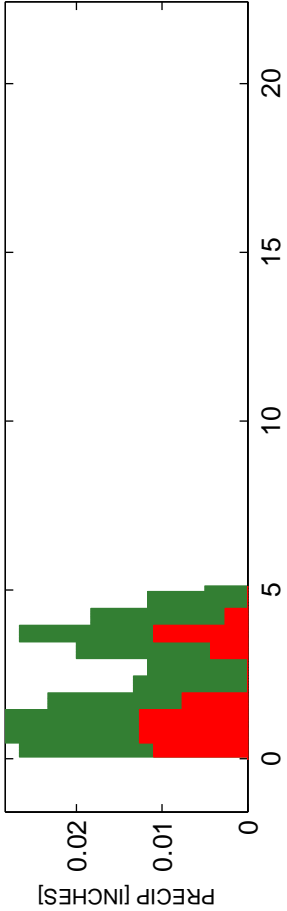
RUN #4

STAD-DATE: sta22222222\_1969\_0214  
DATA DIR: d:\jvlabel\SWAP\UNIT\precip\_loss\_optimization\toweb\BOTHEXAMPLES  
AREA [mi^2] ..... PRECIPITATION ..... 1.94  
-----  
TOTAL RAIN VOLUME [inches] ..... 1.2333  
EXCESS RAIN VOLUME [inches] ..... 0.3601  
PERCENT RAIN VOLUME LOSS ..... 70.803  
-----  
DISCHARGE  
-----  
MEAN OBS Q [CFS] ..... 37.3791  
MEAN SIM Q [CFS] ..... 18.669  
RMS Q RESIDUALS [CFS] ..... 45.0485  
Q RELATIVE BIAS ..... -0.50055  
Q NASH-SUTCLIFFE EFFICIENCY ..... -0.35949  
Q SIM vs OBS R<sup>2</sup> ..... 0.12281  
Q SIM vs OBS SLOPE ..... 0.41315  
Q SIM vs OBS INTERCEPT ..... 29.666  
-----  
VOLUME  
-----  
MEAN OBS V [CFS] ..... 0.42808  
MEAN SIM V [CFS] ..... 0.27548  
RMS V RESIDUALS [CFS] ..... 0.23046  
V RELATIVE BIAS ..... -0.35648  
V NASH-SUTCLIFFE EFFICIENCY ..... 0.32399  
V SIM vs OBS R<sup>2</sup> ..... 0.78974  
V SIM vs OBS SLOPE ..... 1.8624  
V SIM vs OBS INTERCEPT ..... -0.084986  
-----  
OPTIMIZATION RESULTS -----  
SIM/OBS TOTAL VOLUME RATIO ..... 0.50053  
MINIMIZED OBJECTIVE FUNCTION VALUE ..... 586488.1243  
C<sub>opt</sub>: 0.015689

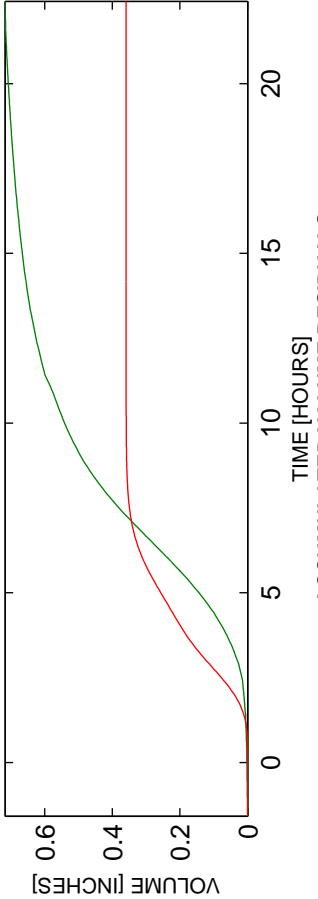


$$\Phi = \Sigma(Q_{\text{true}} - Q_{\text{est}})^2 \text{ (fbnd)}$$

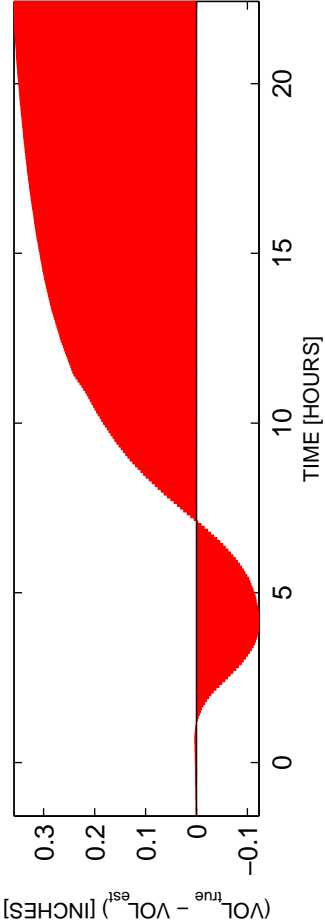
OBS AND MODELED RAINFALL: RAW DATA USED



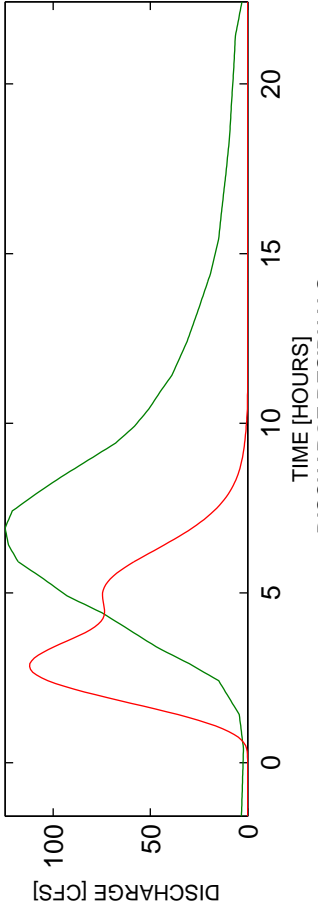
OBS AND ESTIMATED ACCUMULATED VOLUME



ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

