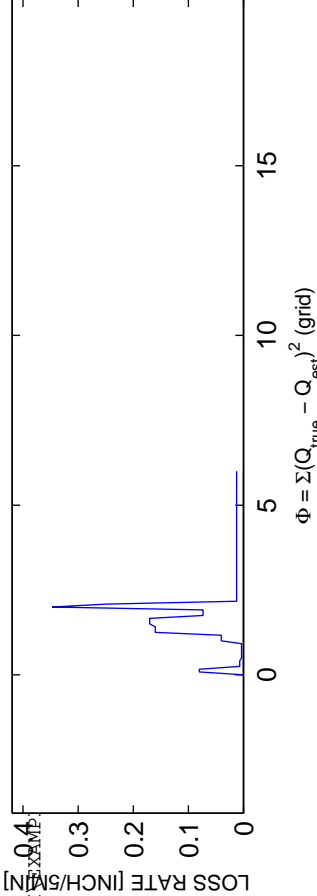


RUN #1

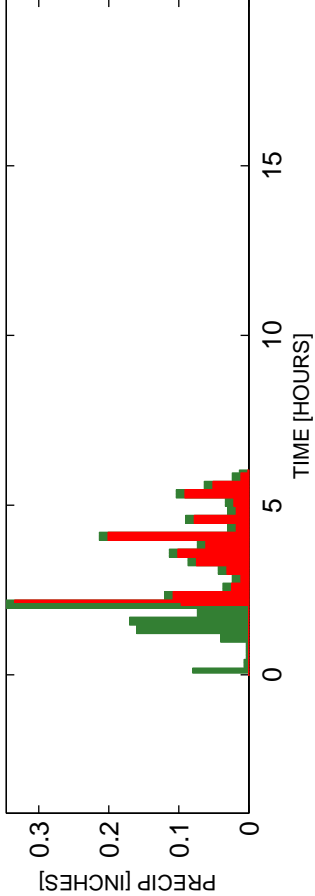
STAD-DATE: stal1111111\_1968\_0709  
DATA DIR: d:\jvlabel\SWAP\UNIT\precip\_loss\_optimization\towEB\BOTH\EXAMP  
AREA [mi²] ..... PRECIPITATION ..... 1.33  
-----  
TOTAL RAIN VOLUME [inches] ..... 5.8333  
EXCESS RAIN VOLUME [inches] ..... 3.131  
PERCENT RAIN VOLUME LOSS ..... 46.3263  
-----  
DISCHARGE  
-----  
MEAN OBS Q [CFS] ..... 112.4013  
MEAN SIM Q [CFS] ..... 111.3329  
RMS Q RESIDUALS [CFS] ..... 90.7653  
Q RELATIVE BIAS ..... -0.0095057  
Q NASH-SUTCLIFFE EFFICIENCY ..... 0.7623  
Q SIM vs OBS R² ..... 0.88342  
Q SIM vs OBS SLOPE ..... 0.72981  
Q SIM vs OBS INTERCEPT ..... 31.1498  
-----  
VOLUME  
-----  
MEAN OBS V [CFS] ..... 1.9698  
MEAN SIM V [CFS] ..... 1.9901  
RMS V RESIDUALS [CFS] ..... 0.12583  
V RELATIVE BIAS ..... 0.010301  
V NASH-SUTCLIFFE EFFICIENCY ..... 0.99163  
V SIM vs OBS R² ..... 0.99257  
V SIM vs OBS SLOPE ..... 0.97375  
V SIM vs OBS INTERCEPT ..... 0.031953  
-----  
OPTIMIZATION RESULTS -----  
SIM/OBS TOTAL VOLUME RATIO ..... 0.99047  
MINIMIZED OBJECTIVE FUNCTION VALUE ..... 2380878.3294  
C<sub>opt</sub>: 2.1147 0.012244

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

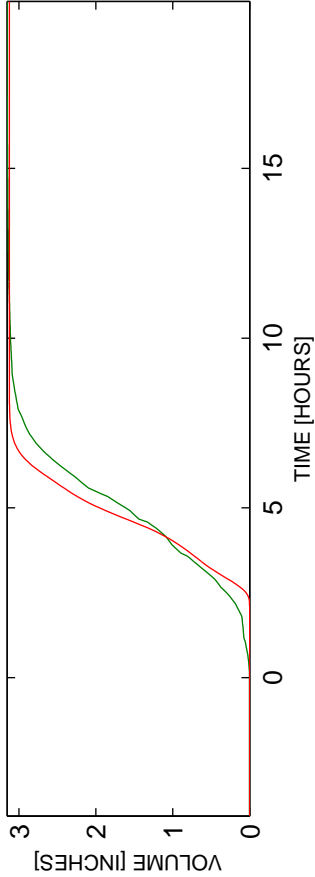


$$\Phi = \Sigma(Q_{true} - Q_{est'})^2 \text{ (grid)}$$

OBS AND MODELED RAINFALL: RAW DATA USED

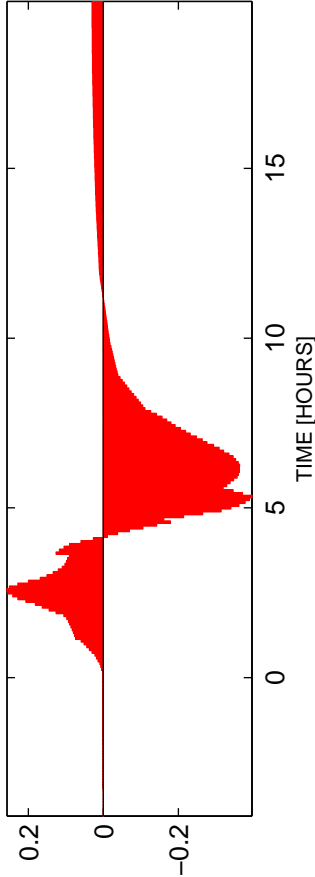


OBS AND ESTIMATED ACCUMULATED VOLUME

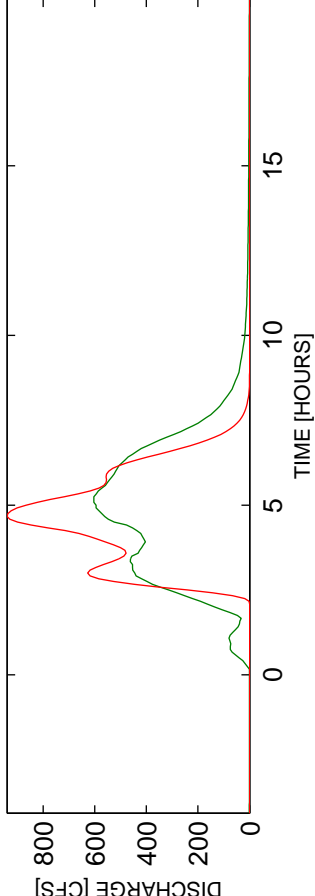


$$(VOL_{true} - VOL_{est'}) \text{ [inches]}$$

ACCUMULATED VOLUME RESIDUALS



OBS AND ESTIMATED DISCHARGES



DISCHARGE RESIDUALS

