Appendix A.1 Constant width plot input file bat18_3o.fw

```
Data file is for a rainfall simulation plot (plot version)
RUM 93 batter large scale plot  Monitoring
18/3/93 1745hrs
PLOT
# No of elements, No of reservoirs, no of u/S elements
   10                  0                  1
# No of U/S element draining into D/S elements
#
# zero time (hrs), timestep (minutes), time of duration of storm (hrs)
#
0. 0.1  2.
# ----------------------------------------
#  OUTPUT PARAMETERS
# ----------------------------------------
# no of pts for output discharge,psteps
1 1
# subareas at which discharge requested
10
#  maximum discharge on output graph
0.002
#
INCIDENCES
 0   1   2   3   4   5   6   7   8  9
PARAMETERS
# Kind of element
  0
#  No Area Length   U/S       D/S     SWSupply Gamma Sorpt Phi GWsupply
#                   Elevation Elevation
# ------------------------------------------------------------------
   1  60.03  3.765   9.2       8.4      1.0     1.0   1.0  1.0   1.0
   2  60.03  3.765   8.4       7.5      1.0     1.0   1.0  1.0   1.0
   3  60.03  3.765   7.5       6.7      1.0     1.0   1.0  1.0   1.0
   4  60.03  3.765   6.7       5.9      1.0     1.0   1.0  1.0   1.0
   5  60.03  3.765   5.9       5.1      1.0     1.0   1.0  1.0   1.0
   6  60.03  3.765   5.1       4.4      1.0     1.0   1.0  1.0   1.0
   7  60.03  3.765   4.4       3.6      1.0     1.0   1.0  1.0   1.0
   8  60.03  3.765   3.6       2.9      1.0     1.0   1.0  1.0   1.0
   9  60.03  3.765   2.9       2.1      1.0     1.0   1.0  1.0   1.0
   10 60.03  3.765   2.1       1.3      1.0     1.0   1.0  1.0   1.0
#  Hillslope and Channel conveyances
#  ------------------------------------
#     1st set are hillslope conveyances
#     2nd set are  channel  conveyances
#  ------------------------------------
#  Element No, No of conveyances
#  CR, EM, CONVEY
```

```
#
CONVEYANCES
1 2
0.158        1.       0.
0.158        1.       1000.
#
#  Parameter Multpliers
#  Ch-CR  Ch-EM  SWSupply SWGamma Sorptivity   Phi  GWSupply  timing(sec)
MULTIPLIERS
   7.8    1.33    0.03      0.375  0.00001     6.5     1000.    0.0
1
0.0 0.0
# -------------
# No of pluvios
# -------------
RAINFALL #1
    1
CUMPLUVIO bat18_3o.rf
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
# ---------------------------------
#  No of known initial flows at stations
# ---------------------------------
INITIALQ
title line 1
title line 2
title line 3
    1
# stations at which flows known and initial flow (cumecs)
   10 0.0
#  No of stations with known inflows
INFLOWQ NONE
#  Hydrograph to calibrate with (no of values)
CALIB #1 bat18_3o.ro
END
```

Appendix A.2 Rainfall input file bat18_3o.rf

```
#    3 lines of titles
RUM93 monitoring
Batter site, large scale plot
Rainfall 17:46:30hrs 18/03/93
#    number of data points
        23
# time        rainfall
#  (h)        (mm)
0             0
0.008333          1
0.016667          1
0.025         2
0.033333          2
0.041667          3
0.05              4
0.058333          5
0.066667          5
0.075         6
0.083333          7
0.091667          8
0.1               9
0.108333          11
0.116667          12
0.125         13
0.133333          14
0.4           14
0.408333          15
0.625         15
0.633333          16
1.383333          16
2             16
```

Appendix A.3 Runoff input file bat18_3o.ro

```
#    3 lines of titles
RUM93 monitoring
Batter site, large scale plot
Runoff 17:46:30hrs 18/03/93
#    number of data points
       101
# time       runoff
#  (h)       (m3s-1)
0             0
0.05              0
0.058333   0.00046
0.066667   0.001647
0.075      0.003181
0.083333   0.004727
0.091667   0.007187
0.1               0.00988
0.108333   0.011657
0.116667   0.011199
0.125      0.01191
0.133333   0.007624
0.141667   0.00699
0.15       0.009459
0.158333   0.007624
0.166667   0.006321
0.175             0.005
0.183333   0.004003
0.191667   0.003093
0.2        0.002529
0.208333   0.002093
0.216667   0.001647
0.225      0.001383
0.233333   0.00121
0.241667   0.001048
0.25       0.000945
0.258333   0.000755
0.266667   0.000678
0.275      0.000564
0.283333   0.000525
0.291667   0.00046
0.3        0.000424
0.308333   0.000364
0.316667   0.00034
0.325      0.00034
0.333333   0.000308
0.341667   0.000308
0.35       0.000278
0.358333   0.000278
0.366667   0.000221
0.375      0.000221
0.383333   0.000194
0.391667   0.000194
0.4        0.000169
0.408333   0.000169
0.425      0.000169
0.433333   0.000169
0.441667   0.000144
0.45       0.000144
0.458333   0.000121
0.466667   0.000144
0.475      0.000121
0.483333   0.000121
0.491667   0.000144
0.5        0.000144
0.508333   0.000121
0.516667   0.000121
0.525      0.000144
0.533333   0.000121
0.541667   0.000144
0.55       0.000144
0.558333   0.000121
0.566667   0.000144
0.575      0.000121
0.583333   0.000144
0.591667   0.000169
0.6        0.000144
0.608333   0.000144
0.616667   0.000169
0.625      0.000169
0.633333   0.000194
0.641667   0.000194
0.65       0.000221
0.658333   0.000249
0.666667   0.000249
0.675      0.000249
0.683333   0.000249
0.691667   0.000249
0.7        0.000278
0.708333   0.000278
0.716667   0.000249
0.725      0.000278
0.733333   0.000249
0.783333   0.000249
0.791667   0.000221
0.8        0.000194
0.833333   0.000194
0.841667   0.000169
0.866667   0.000169
0.875      0.000144
0.941667   0.000144
0.95       0.000121
1.016667   0.000121
1.025      9.9E-05
1.125      9.9E-05
1.133333   8.3E-05
1.358333   8.3E-05
1.366667   6.4E-05
1.383333   6.4E-05
2.0        0
```

Appendix A.4 Output plot file bat18_3n.prt

```
>>> Nlfit Version 2.07g <<<
 +---------------------------------------------------------------------+
 !                                                                     !
 +---------------------------------------------------------------------+

 Model identification string: FW MODEL V3.0
 Posterior moments file is bat18_3n.pmf

 **********************************************************************
 No of fitted parameters =  4, No of observations =  101
 Observation range: Minimum =    1
                    Maximum =  101

 Number of explicitly censored observations =    0
 All observed responses less than        0.     were censored
 All observed responses less than or equal to -1.0e20 are flagged as MISSING and were censored

 Residual mean=  -0.10020E-01

 Gauss-Marquardt method: Marquardt lambda=      0.

 Convergence monitor=  0.337791E-02

 Fitted parameter     Current       Change about current value
  #   Name           value         delta                 t stat
  1   Cr               15.6806     -0.781283E-02  -0.197589E-02
  2   em             1.82945     -0.213318E-03  -0.237722E-02
  3   Sorptivity       1.53704      0.170886E-02   0.195514E-02
  4   Phi            52.7281     -0.102595E-01  -0.185241E-02

 Correlation matrix of fitted parameters:
  1.00000
  0.97369   1.00000
 -0.15253  -0.25186   1.00000
  0.04548   0.10074  -0.93143   1.00000

 Durbin-Watson statistic=    0.7815   Serial correlation=  0.6093

 **********************************************************************
 Maximized log-likelihood is  794.773
 Derivative status: Forward difference with 0.100E-05 std dev perturbation

Gauss-Marquardt method: Marquardt lambda =        0.

 Summary of posterior distributions
 Model parameters:
 Fit#  Name       Transform       Mean       Std dev     Untransformed
 ------------------------------------------------------------------------
   1  Cr               None        15.6806       3.95408             15.6806
   2  em               None        1.82945      0.897344E-01         1.82945
  **  Cs               None       0.300000E-02                      0.300000E-02
  **  Gamma            None       0.375000                        0.375000
   3  Sorptivity None          1.53704       0.874035            1.53704
   4  Phi              None        52.7281       5.53844             52.7281
  **  Cg               None        1000.00                         1000.00
  **  (Disabled)       None       0.100000E-03                      0.100000E-03
  **  Timing #1        None       0.100000E-03                      0.100000E-03
  **  InitWet #1       None       0.100000E-03                      0.100000E-03

  Fit  Response       Parameter      Mean       Std dev
   #    # Name         Type  #
 ---------------------------------------------------------------
  **   1 18/03/93     Lambda           0.
```

```
  **   1                K      0.100000E-02
**************************************************************
              +-----------------------------------------------+
              !  Response equation number= 1  Name: 18/03/93    !
              +-----------------------------------------------+
 Performance indices for untransformed response data
            Observed      Predicted
    Mean     0.1373E-02     0.1340E-02
  Std dev    0.2754E-02     0.2697E-02

Coefficient of determination = 0.926 (adjusted coefficient of determination = 0.924)
Coefficient of efficiency    = 0.926
Residual mass coefficient    = 0.982
*****************************************************************
 >>>> Error vs predicted response plot <<<<
Mean= 0.33615E-04 Variance= 0.58295E-06 Std dev= 0.76351E-03 Skew=  -1.079 Skew std error= 0.240

Residual versus predicted response plot
      ............................................................................
   4.357                                  +                                 .
      .                         +                                         .
      .                                                                   .
      .                                                                   .
      .                   +                                               .
   1.766                              +         +          +                .
      .             +      +    +                                +       .
      .           +  +  +                                                .
      .***222+++-+++-------------------------------------------------------------------+----+.
      .   +                                                              .
  -0.825       +                                                            .
      .        +                                                          .
      .                                                                   .
      .                                                                   .
      .                                                                   .
  -3.416                                                                    .
      .                                                  +              .
      .                                                                 .
      .                                                              + .
      !.........!.........!.........!.........!.........!.........!.........!.........!...........
     0.0      13.4      26.8      40.2      53.6      66.9      80.3      93.7     107.1
                                        X-axis multiplier= 0.10000E-03


>>> Time series plot of observed and predicted values for response 1 <<<

Time            Response                           O = observed; P = predicted
Step  Observed     Predicted   Difference          |----------i---------i---------i---------i---------i|
   1      0.          0.            0.              |O                                       |
   2      0.     0.95288E-03 -0.95288E-03          |O--P                                         |
   3  0.46000E-03  0.16736E-02 -0.12136E-02        |-O----P                                       |
   4  0.16470E-02  0.15756E-02  0.71378E-04        |------O                                        |
   5  0.31810E-02  0.22789E-02  0.90211E-03        |---------P  O                                  |
   6  0.47270E-02  0.33042E-02  0.14228E-02        |-------------P     O                           |
   7  0.71870E-02  0.45367E-02  0.26503E-02        |------------------P          O                 |
   8  0.98800E-02  0.65531E-02  0.33269E-02        |--------------------------P            O         |
   9  0.11657E-01  0.10981E-01  0.67617E-03        |---------------------------------------------P  O  |
  10  0.11199E-01  0.11372E-01 -0.17306E-03        |----------------------------------------------OP   |
  11  0.11910E-01  0.11916E-01 -0.60582E-05        |-------------------------------------------------O |
  12  0.76240E-02  0.11815E-01 -0.41908E-02        |-------------------------------O-----------------P |
  13  0.69900E-02  0.10092E-01 -0.31021E-02        |----------------------------O------------P        |
  14  0.94590E-02  0.82691E-02  0.11899E-02        |----------------------------------P    O          |
  15  0.76240E-02  0.65607E-02  0.10633E-02        |---------------------------P   O                |
  16  0.63210E-02  0.51526E-02  0.11684E-02        |---------------------P    O                    |
  17  0.50000E-02  0.41321E-02  0.86786E-03        |----------------P   O                         |
  18  0.40030E-02  0.33764E-02  0.62663E-03        |-------------P  O                             |
  19  0.30930E-02  0.27836E-02  0.30936E-03        |-----------PO                                 |
```

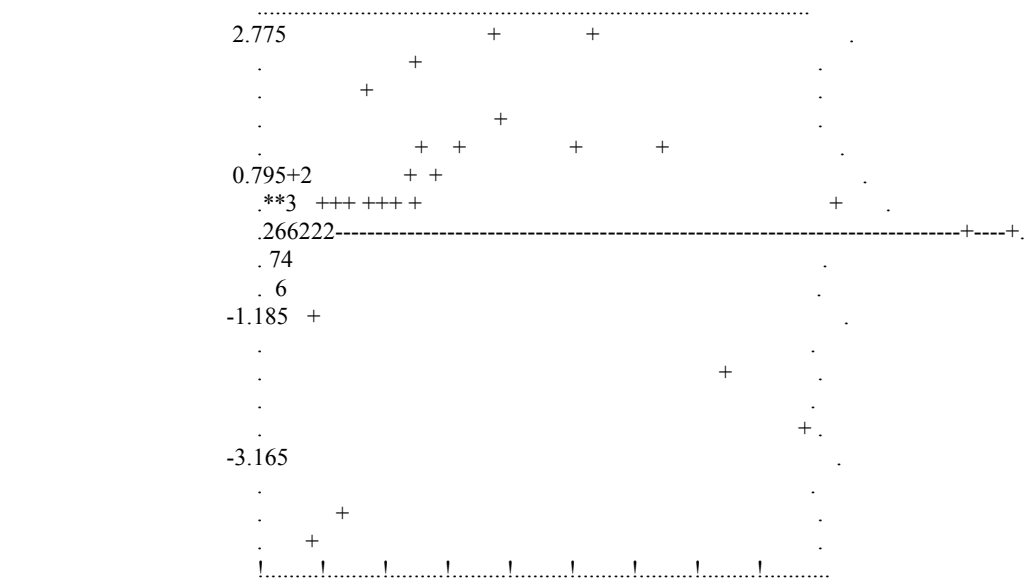
```
20  0.25290E-02  0.23089E-02  0.22015E-03     |---------PO                          |
21  0.20930E-02  0.19280E-02  0.16498E-03     |-------PO                           |
22  0.16470E-02  0.16228E-02  0.24215E-04     |------O                            |
23  0.13830E-02  0.13776E-02  0.53726E-05     |-----O                             |
24  0.12100E-02  0.11796E-02  0.30375E-04     |----O                              |
25  0.10480E-02  0.10185E-02  0.29495E-04     |---O                               |
26  0.94500E-03  0.88633E-03  0.58666E-04     |---O                               |
27  0.75500E-03  0.77696E-03 -0.21963E-04     |--O                                |
28  0.67800E-03  0.68568E-03 -0.76777E-05     |--O                                |
29  0.56400E-03  0.60888E-03 -0.44884E-04     |-OP                                |
30  0.52500E-03  0.54377E-03 -0.18772E-04     |-O                                 |
31  0.46000E-03  0.48816E-03 -0.28159E-04     |-O                                 |
32  0.42400E-03  0.44035E-03 -0.16348E-04     |-O                                 |
33  0.36400E-03  0.39898E-03 -0.34979E-04     |-O                                 |
34  0.34000E-03  0.36297E-03 -0.22971E-04     |OP                                 |
35  0.34000E-03  0.33146E-03  0.85359E-05     |O                                  |
36  0.30800E-03  0.30375E-03  0.42478E-05     |O                                  |
37  0.30800E-03  0.27926E-03  0.28741E-04     |O                                  |
38  0.27800E-03  0.25752E-03  0.20479E-04     |O                                  |
39  0.27800E-03  0.23815E-03  0.39855E-04     |O                                  |
40  0.22100E-03  0.22081E-03  0.19396E-06     |O                                  |
41  0.22100E-03  0.20524E-03  0.15763E-04     |O                                  |
42  0.19400E-03  0.19121E-03  0.27931E-05     |O                                  |
43  0.19400E-03  0.17852E-03  0.15478E-04     |O                                  |
44  0.16900E-03  0.16702E-03  0.19775E-05     |O                                  |
45  0.16900E-03  0.41157E-03 -0.24257E-03     |OP                                 |
46  0.16900E-03  0.33119E-03 -0.16219E-03     |O                                  |
47  0.16900E-03  0.36962E-03 -0.20062E-03     |OP                                 |
48  0.16900E-03  0.29781E-03 -0.12881E-03     |O                                  |
49  0.14400E-03  0.27319E-03 -0.12919E-03     |O                                  |
50  0.14400E-03  0.29576E-03 -0.15176E-03     |O                                  |
51  0.12100E-03  0.30014E-03 -0.17914E-03     |O                                  |
52  0.14400E-03  0.27061E-03 -0.12661E-03     |O                                  |
53  0.12100E-03  0.23202E-03 -0.11102E-03     |O                                  |
54  0.12100E-03  0.20703E-03 -0.86033E-04     |O                                  |
55  0.14400E-03  0.20088E-03 -0.56879E-04     |O                                  |
56  0.14400E-03  0.20682E-03 -0.62821E-04     |O                                  |
57  0.12100E-03  0.21478E-03 -0.93779E-04     |O                                  |
58  0.12100E-03  0.21730E-03 -0.96304E-04     |O                                  |
59  0.14400E-03  0.21174E-03 -0.67742E-04     |O                                  |
60  0.12100E-03  0.19925E-03 -0.78250E-04     |O                                  |
61  0.14400E-03  0.18278E-03 -0.38779E-04     |O                                  |
62  0.14400E-03  0.16553E-03 -0.21534E-04     |O                                  |
63  0.12100E-03  0.15011E-03 -0.29107E-04     |O                                  |
64  0.14400E-03  0.13813E-03  0.58666E-05     |O                                  |
65  0.12100E-03  0.13025E-03 -0.92467E-05     |O                                  |
66  0.14400E-03  0.12623E-03  0.17766E-04     |O                                  |
67  0.16900E-03  0.12531E-03  0.43691E-04     |O                                  |
68  0.14400E-03  0.12640E-03  0.17598E-04     |O                                  |
69  0.14400E-03  0.12842E-03  0.15581E-04     |O                                  |
70  0.16900E-03  0.13045E-03  0.38555E-04     |O                                  |
71  0.16900E-03  0.13184E-03  0.37156E-04     |O                                  |
72  0.19400E-03  0.37518E-03 -0.18118E-03     |OP                                 |
73  0.19400E-03  0.32141E-03 -0.12741E-03     |O                                  |
74  0.22100E-03  0.36561E-03 -0.14461E-03     |OP                                 |
75  0.24900E-03  0.30019E-03 -0.51187E-04     |O                                  |
76  0.24900E-03  0.29185E-03 -0.42847E-04     |O                                  |
77  0.24900E-03  0.32048E-03 -0.71484E-04     |O                                  |
78  0.24900E-03  0.31858E-03 -0.69578E-04     |O                                  |
79  0.24900E-03  0.28298E-03 -0.33975E-04     |O                                  |
80  0.27800E-03  0.24546E-03  0.32540E-04     |O                                  |
81  0.27800E-03  0.22635E-03  0.51649E-04     |O                                  |
82  0.24900E-03  0.22589E-03  0.23107E-04     |O                                  |
83  0.27800E-03  0.23395E-03  0.44053E-04     |O                                  |
84  0.24900E-03  0.23981E-03  0.91867E-05     |O                                  |
85  0.24900E-03  0.15799E-03  0.91012E-04     |O                                  |
```

```
 86  0.22100E-03  0.14726E-03  0.73743E-04      |O                                  |
 87  0.19400E-03  0.14084E-03  0.53161E-04      |O                                  |
 88  0.19400E-03  0.14043E-03  0.53566E-04      |O                                  |
 89  0.16900E-03  0.14145E-03  0.27547E-04      |O                                  |
 90  0.16900E-03  0.13873E-03  0.30273E-04      |O                                  |
 91  0.14400E-03  0.13590E-03  0.81004E-05      |O                                  |
 92  0.14400E-03  0.10113E-03  0.42865E-04      |O                                  |
 93  0.12100E-03  0.96838E-04  0.24162E-04      |O                                  |
 94  0.12100E-03  0.68728E-04  0.52272E-04      |O                                  |
 95  0.99000E-04  0.65963E-04  0.33037E-04      |O                                  |
 96  0.99000E-04  0.42016E-04  0.56984E-04      |O                                  |
 97  0.83000E-04  0.40602E-04  0.42398E-04      |O                                  |
 98  0.83000E-04  0.18727E-04  0.64273E-04      |O                                  |
 99  0.64000E-04  0.18280E-04  0.45720E-04      |O                                  |
100  0.64000E-04  0.17430E-04  0.46570E-04      |O                                  |
101       0.      0.48127E-05 -0.48127E-05      |O                                  |
                              |----------i---------i---------i---------i---------i|
```

>>>> Residual plots for residual a <<<<

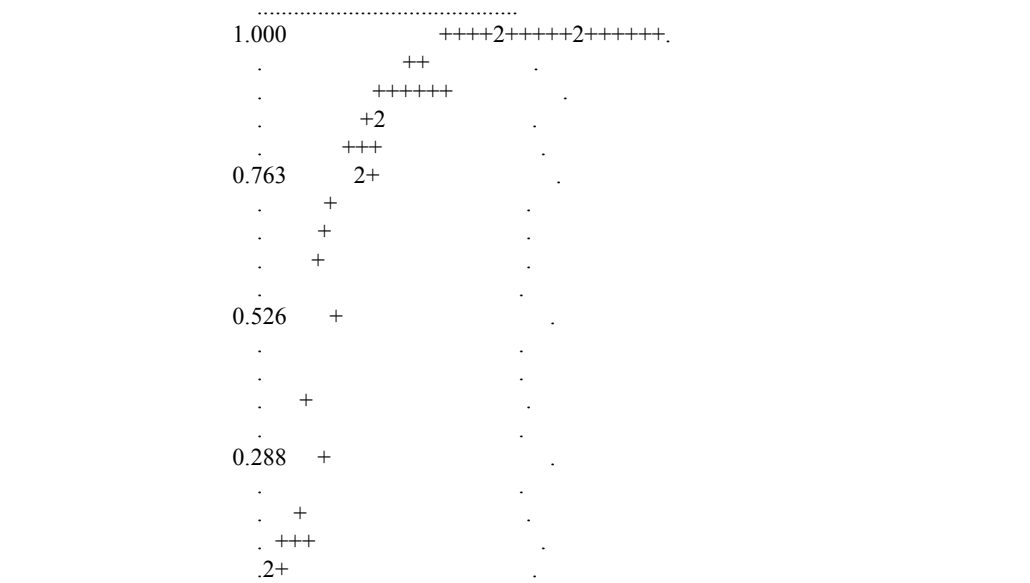
Mean=-0.10072E-01 Variance= 0.19867E-01 Std dev= 0.14095 Skew= -1.570 Skew std error= 0.241

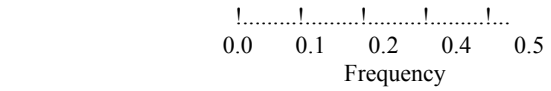
Residual versus predicted response plot



X-axis multiplier= 0.10000E-03

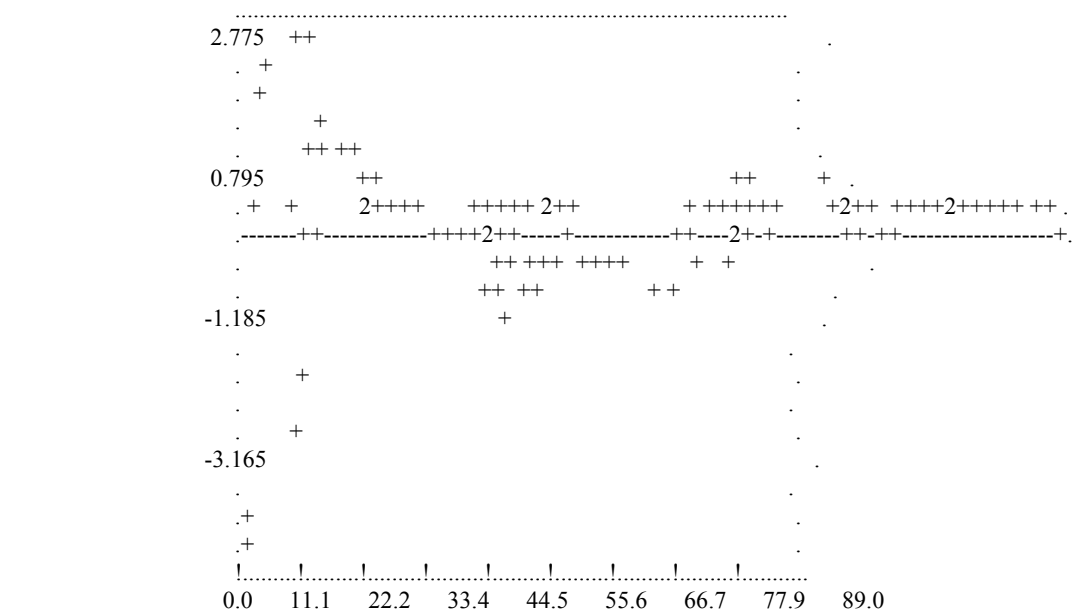
Cumulative periodogram (assumes constant error variance)





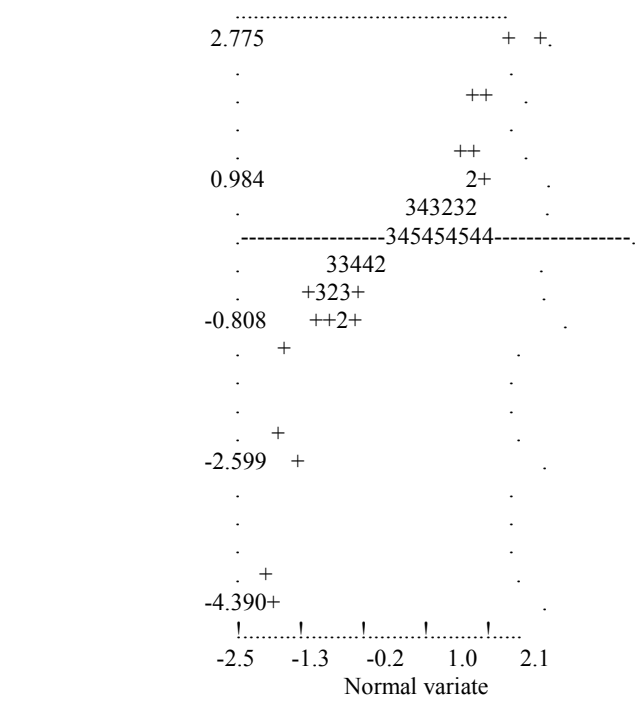
Hypothesis: errors are time-independent - test statistic = 0.4551
- 5% Exceedance value of test statistic = 0.1943

Plot of standardised residuals against time



Runs test Z-statistic = -7.592 Test statistic for in- or decreasing variance = 0.07
it is distributed as f with 48, 48 dof

Plot of standardised residuals vs N(0,1) variate



Hypothesis: Errors are normally-distributed - test statistic = 0.1822
- 5% Exceedance value of test statistic = 0.0888

>>>> Residual plots for residual a <<<<

Summary of standardised residuals above and below 2.000 standard deviations

Positive outliers		Negative outliers	
Obs no	Std residual	Obs no	Std residual
7	2.775	2	-4.748
8	2.589		
6	2.026		

Autocorrelation function

Lag	Autocorrelation			-1.0 -.8 -.6 -.4 -.2 0.0 .2 .4 .6 .8 1.0
	Estimate	95% limits on white noise		|....|....|....|....|....|....|....|....|....|....|....|
1	0.613	0.201	-0.201	| < |****>********** |
2	0.141	0.202	-0.202	| < |****> |
3	-0.063	0.203	-0.203	| < **| > |
4	-0.269	0.204	-0.204	| **<****| > |
5	-0.384	0.205	-0.205	| *****<****| > |
6	-0.239	0.206	-0.206	| *<****| > |
7	-0.052	0.207	-0.207	| < *| > |
8	0.040	0.209	-0.209	| < |* > |
9	0.251	0.210	-0.210	| < |****>* |
10	0.397	0.211	-0.211	| < |****>***** |
11	0.198	0.212	-0.212	| < |***** |
12	-0.004	0.213	-0.213	| < * > |
13	-0.054	0.214	-0.214	| < *| > |
14	-0.084	0.216	-0.216	| < **| > |
15	-0.078	0.217	-0.217	| < **| > |
				|.....|.....|

Note < and > denote approximate 95% limits on the white noise autocorrelation function

Partial autocorrelation function

Lag	Partial autocorrelation			-1.0 -.8 -.6 -.4 -.2 0.0 .2 .4 .6 .8 1.0
	Estimate	95% limits on white noise		|....|....|....|....|....|....|....|....|....|....|....|
1	0.613	0.201	-0.201	| < |****>********** |
2	-0.376	0.202	-0.202	| ****<****| > |
3	0.090	0.203	-0.203	| < |** > |
4	-0.384	0.204	-0.204	| *****<****| > |
5	-0.007	0.205	-0.205	| < * > |
6	0.061	0.206	-0.206	| < |** > |
7	-0.017	0.207	-0.207	| < * > |
8	-0.001	0.209	-0.209	| < * > |
9	0.305	0.210	-0.210	| < |****>*** |
10	-0.003	0.211	-0.211	| < * > |
11	-0.169	0.212	-0.212	| <****| > |
12	0.087	0.213	-0.213	| < |** > |
13	-0.002	0.214	-0.214	| < * > |
14	0.155	0.216	-0.216	| < |****> |
15	0.037	0.217	-0.217	| < |* > |
				|.....|.....|

Note < and > denote approximate 95% limits on the white noise partial autocorrelation function

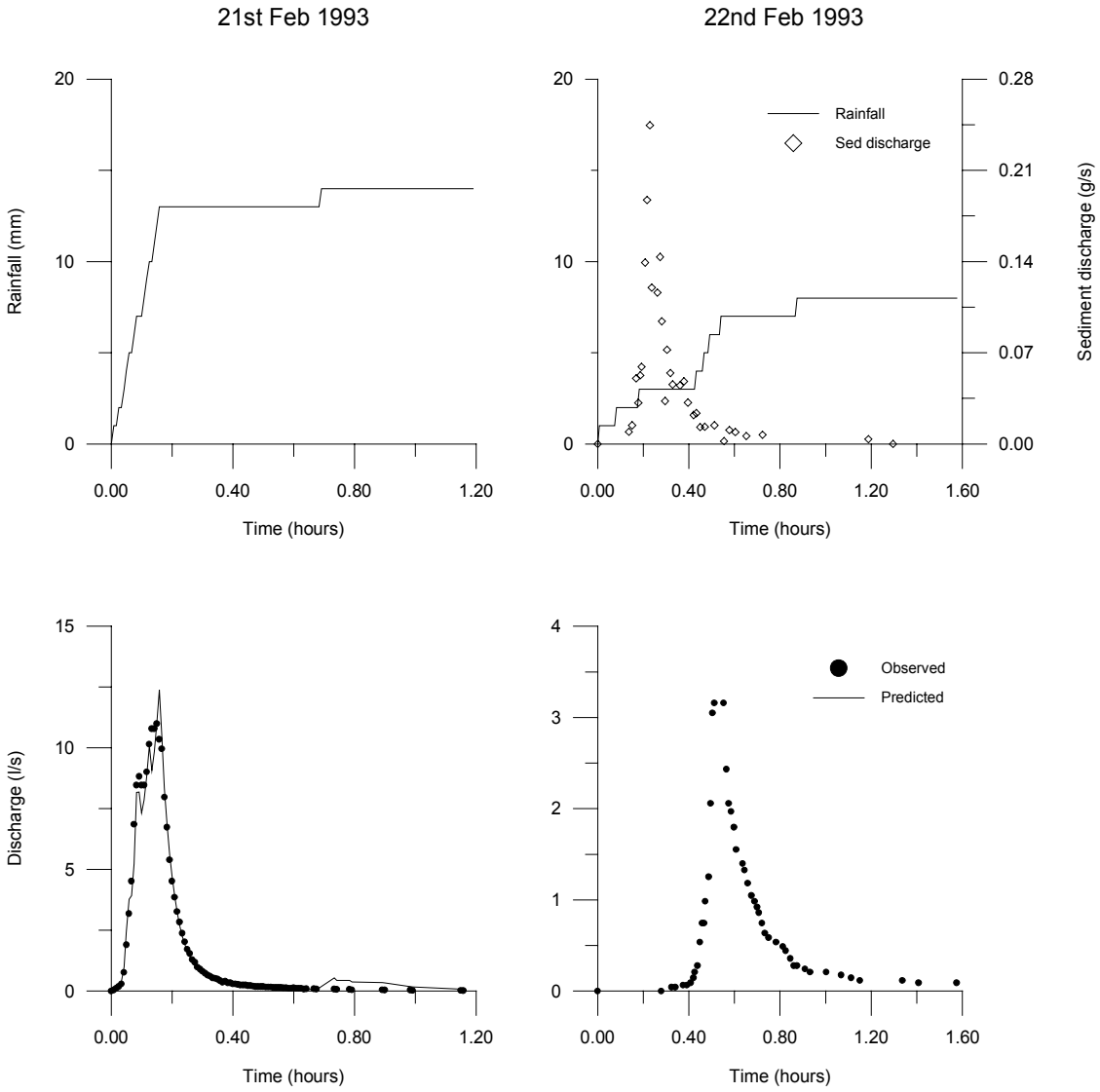
Appendix A.5 Output posterior moment file bat18_3n.pmf

```
POSTERIOR MOMENTS FILE – VERSION 3.0
FW MODEL V3.0

  10    4  101    0    1    1   0.1000000E-05    0
   1    1    0    0    1    1    0    0    0    0
  0.1568064E+02   0.1829452E+01   0.1537045E+01   0.5272812E+02
  0.3954076E+01
  0.9736893E+00   0.8973438E-01
 -0.1525285E+00  -0.2518574E+00   0.8740346E+00
  0.4548119E-01   0.1007364E+00  -0.9314282E+00   0.5538444E+01
  0.1568064E+02   0.1829452E+01   0.3000000E-02   0.3750000E+00   0.1537045E+01
  0.5272812E+02   0.1000000E+04   0.1000000E-03   0.1000000E-03   0.1000000E-03
   0    0    0    0    0    0    0    0    0    0
  0.1986732E-01
  0.0000000E+00
  0.1000000E-02

c_r    e_m    Cs    Gamma    Sphi    phi    Cg   (Disabled)
Timing #1 InitWet #1
   1
18/03/93
   0    0
  0.5058856E+02
   1  101   0.0000000E+00
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

Appendix B.1 Batter site



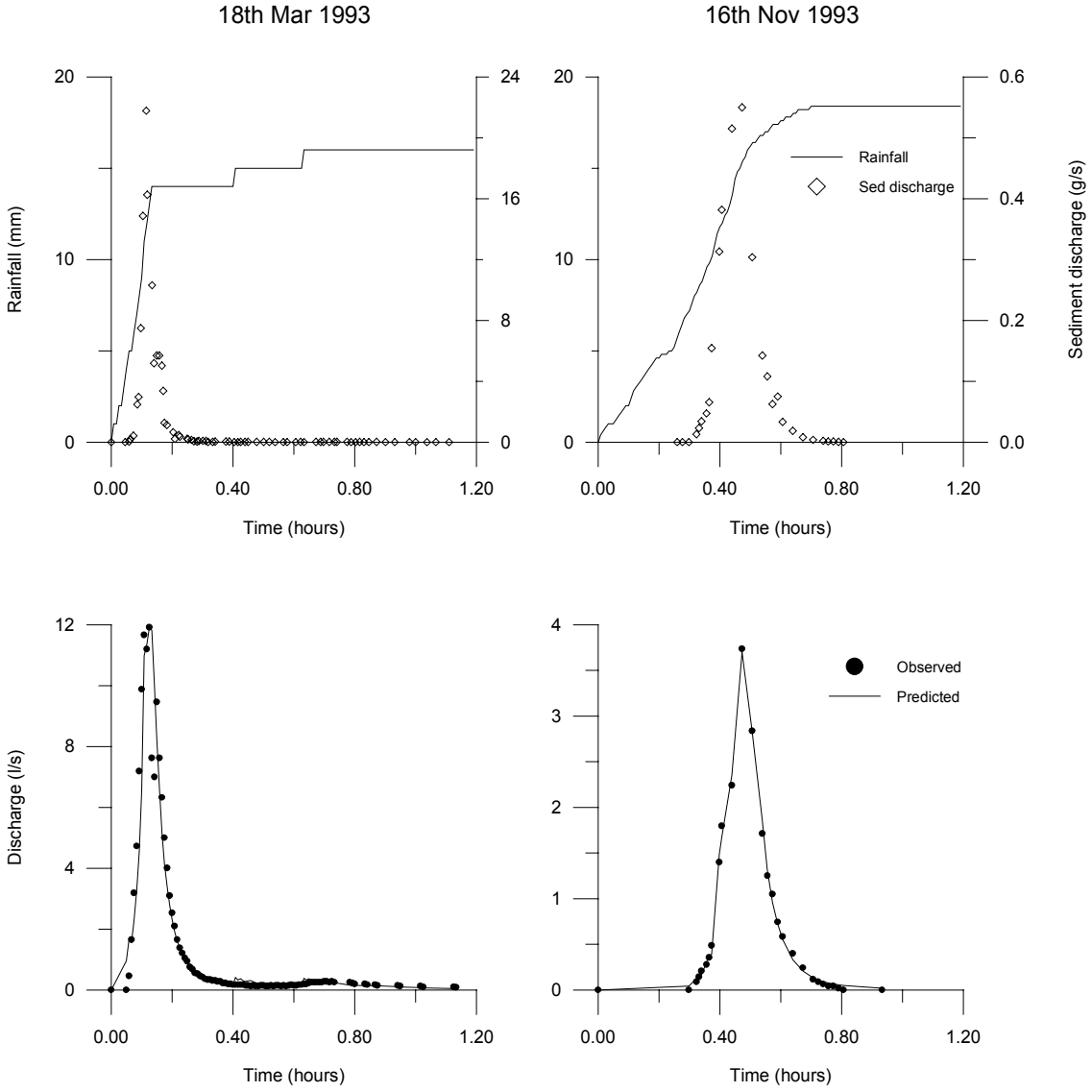
21st Feb 1993 22nd Feb 1993

NLFIT input files: bat21_2o.fw, bat21_2o.rf/ro Did not fit

NLFIT output files: bat21_2n.prt/pmf

Parameter	Mean	St Deviation
c_r	19.9	3.98
e_m	1.97	0.08
Sphi	1.56	0.80
phi	19.5	5.02

Appendix B.1 continued



18th Mar 1993

NLFIT input files: bat18_3o.fw, bat18_3o.rf/ro

NLFIT output files: bat18_3n.prt/pmf

Parameter	Mean	St Deviation
c_r	15.7	3.95
e_m	1.83	0.09
Sphi	1.54	0.87
phi	52.7	5.54

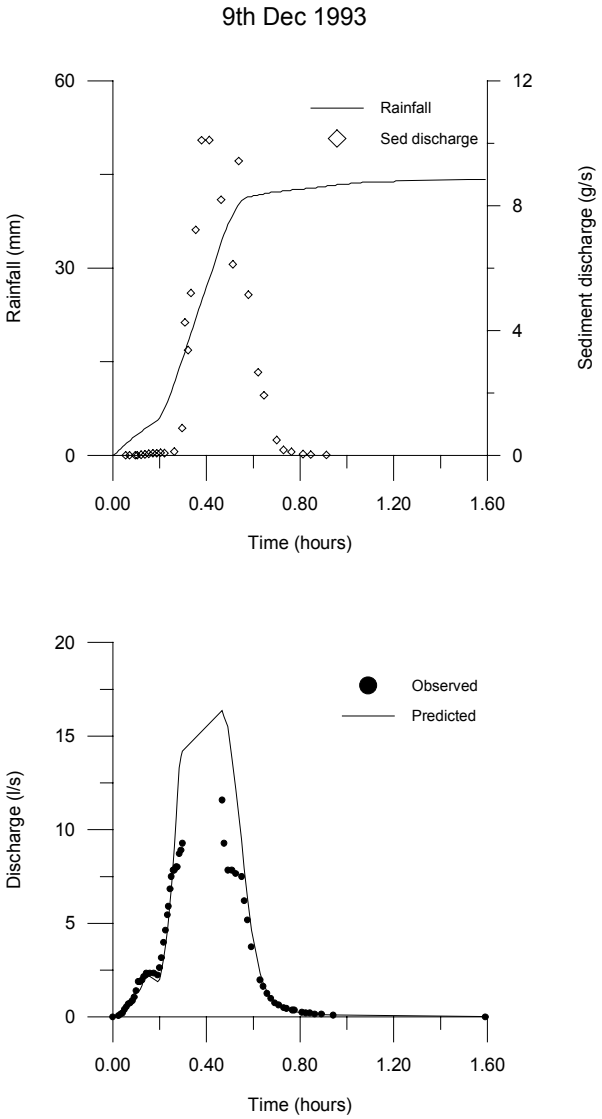
16th Nov 1993

NLFIT input files: bat17o11.fw, bat17o11.rf/ro

NLFIT output files: bat17o11n.prt/pmf

Parameter	Mean	St Deviation
c_r	5.63	0.85
e_m	1.47	0.05
Sphi	7.09	0.57
phi	12.2	1.52

Appendix B.1 continued



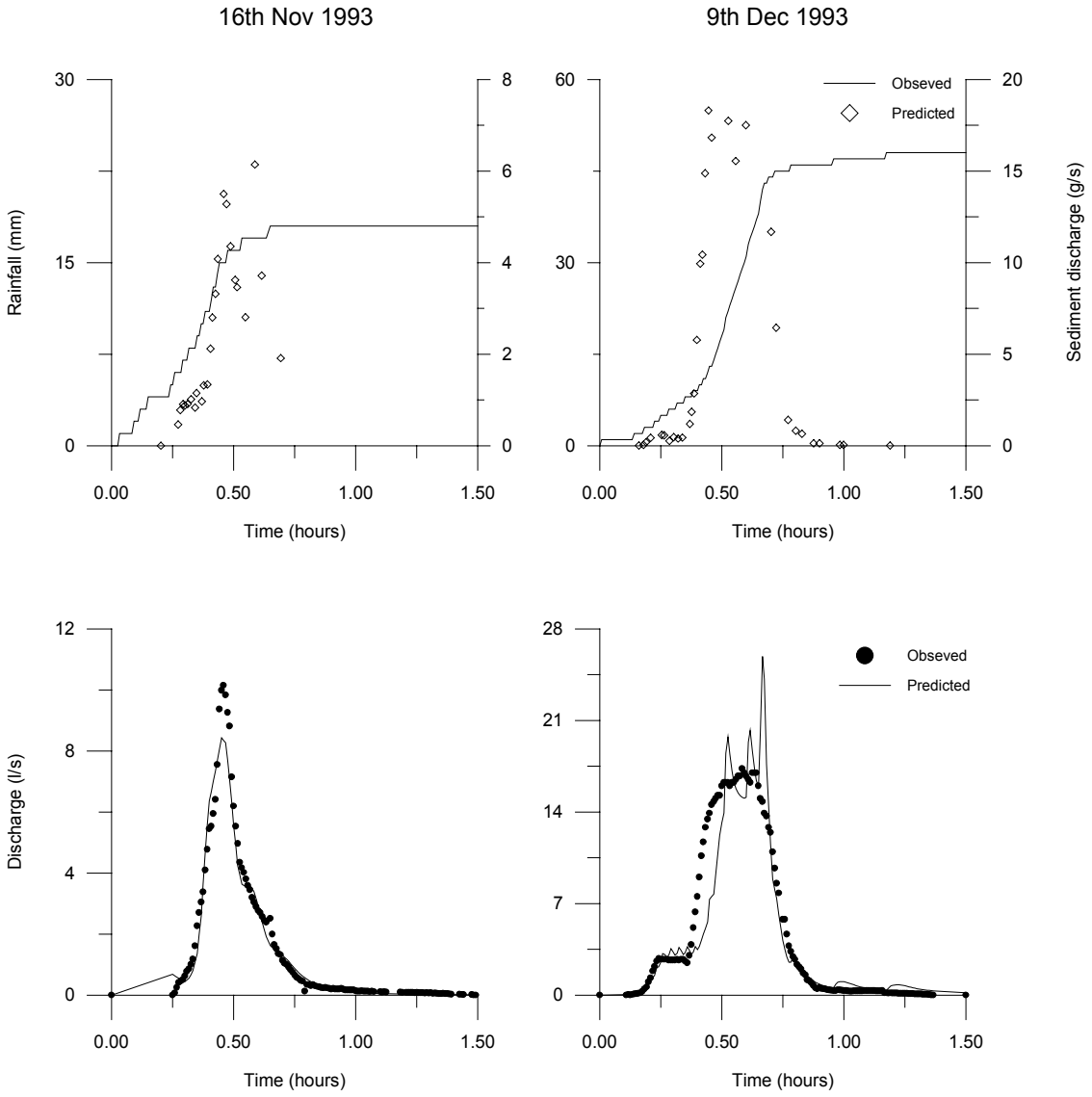
9th Dec 1993

NLFIT input files: bat10o12.fw, bat10o12.rf/ro

NLFIT output files: bat10o12.prt/pmf

Parameter	Mean	St Deviation
c_r	5.01	1.27
e_m	1.50	0.08
Sphi	0.0001	
phi	15.7	0.91

Appendix B.2 Cap site monitoring data



16th Nov 1993

NLFIT input files: cap16_11.fw, cap16_11.rf/ro

NLFIT output files: cap16_11n.prt/pmf

Parameter	Mean	St Deviation
c_r	2.94	0.46
e_m	1.32	0.05
Sphi	10.6	1.92
phi	1.02	6.46

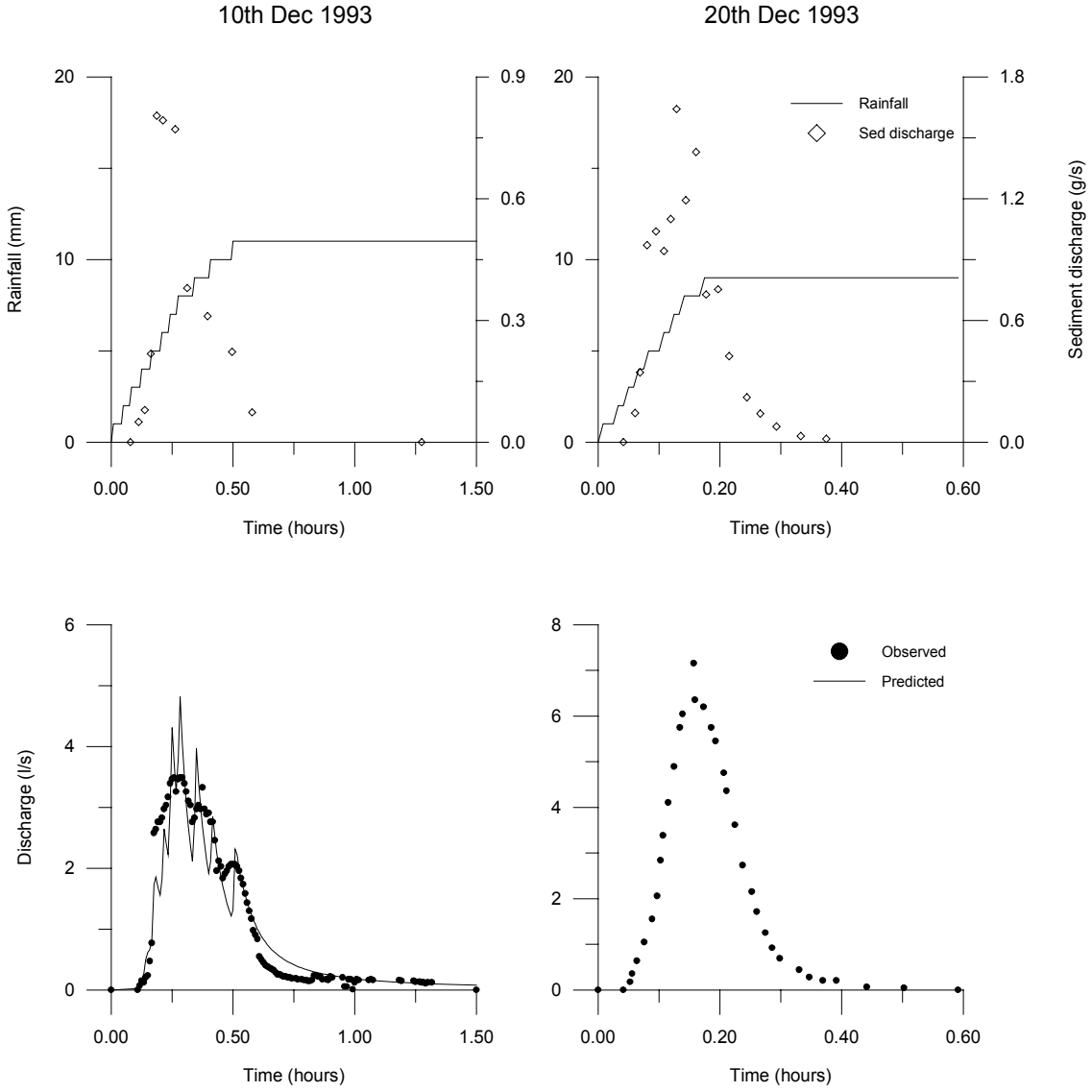
9th Dec 1993

NLFIT input files: cap10_12.fw, cap10_12.rf/ro

NLFIT output files: cap10_12n.prt/pmf

Parameter	Mean	St Deviation
c_r	68.0	35.3
e_m	2.11	0.15
Sphi	0.18	14.2
phi	29.0	27.9

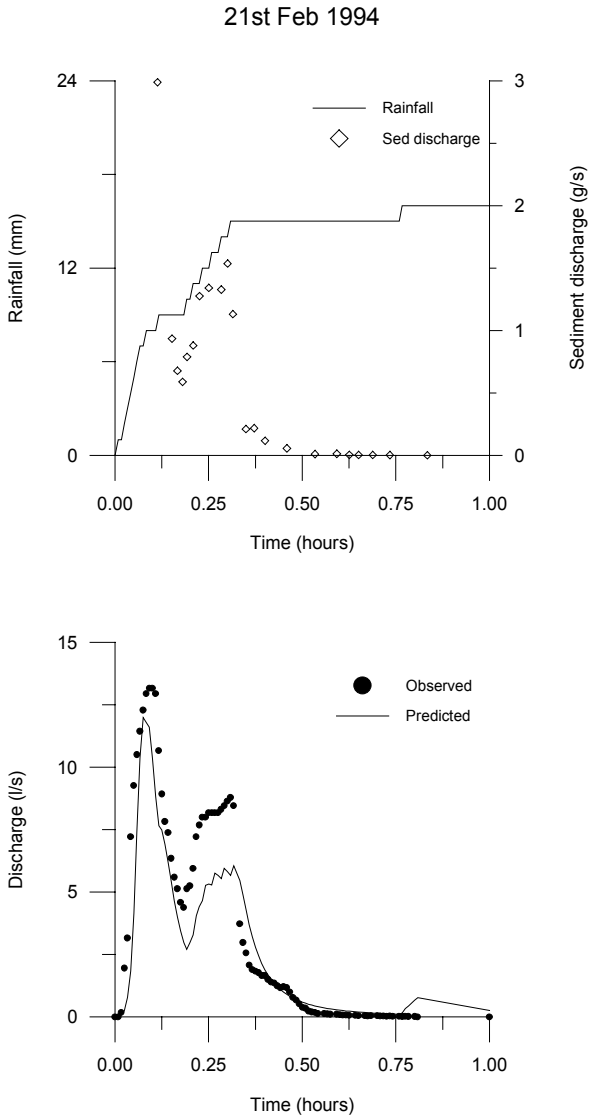
Appendix B.2 continued



	10th Dec 1993	20th Dec 1993
NLFIT input files:	cap10a12.fw, cap10a12.rf/ro	Did not fit
NLFIT output files:	cap10a12.prt/pmf	

Parameter	Mean	St Deviation
c_r	4563	5087
e_m	3.58	0.39
Sphi	2.84	1.49
phi	0.57	5.53

Appendix B.2 continued



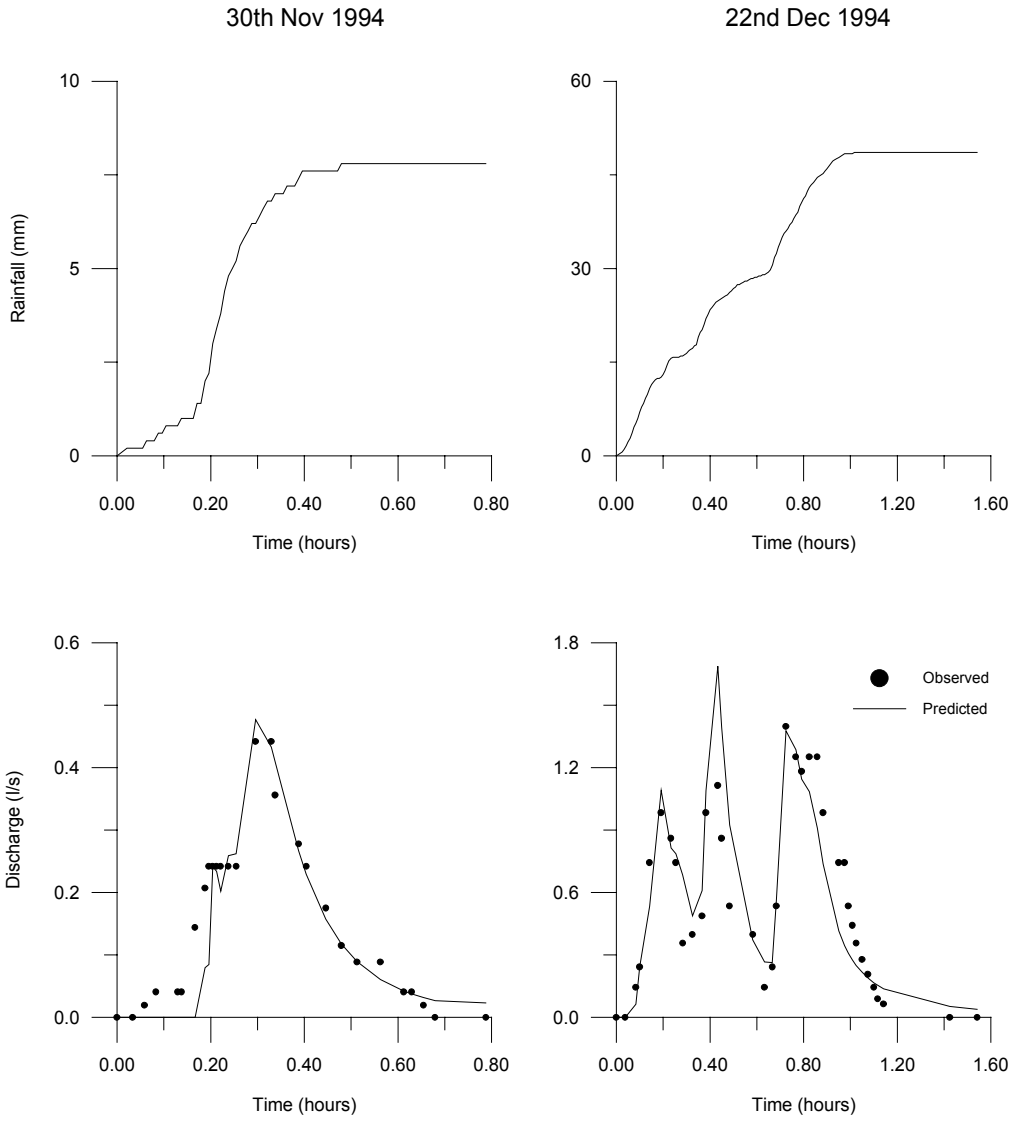
21st Feb 1994

NLFIT input files: cap21o02.fw, cap21o02.rf/ro

NLFIT output files: cap21o02n.prt/pmf

Parameter	Mean	St Deviation
c_r	10.5	4.91
e_m	1.65	0.11
Sphi	0.62	4.30
phi	4.81	16.8

Appendix B.3 Soil site monitoring data



30th Nov 1994

NLFIT input files: so1130.fw, so1130.rf/ro

NLFIT output files: so1130gw.prt/pmf

Parameter	Mean	St Deviation
c_r	1.50	1.08
e_m	1.21	0.15
Sphi	0.001	48.7
phi	47.5	126

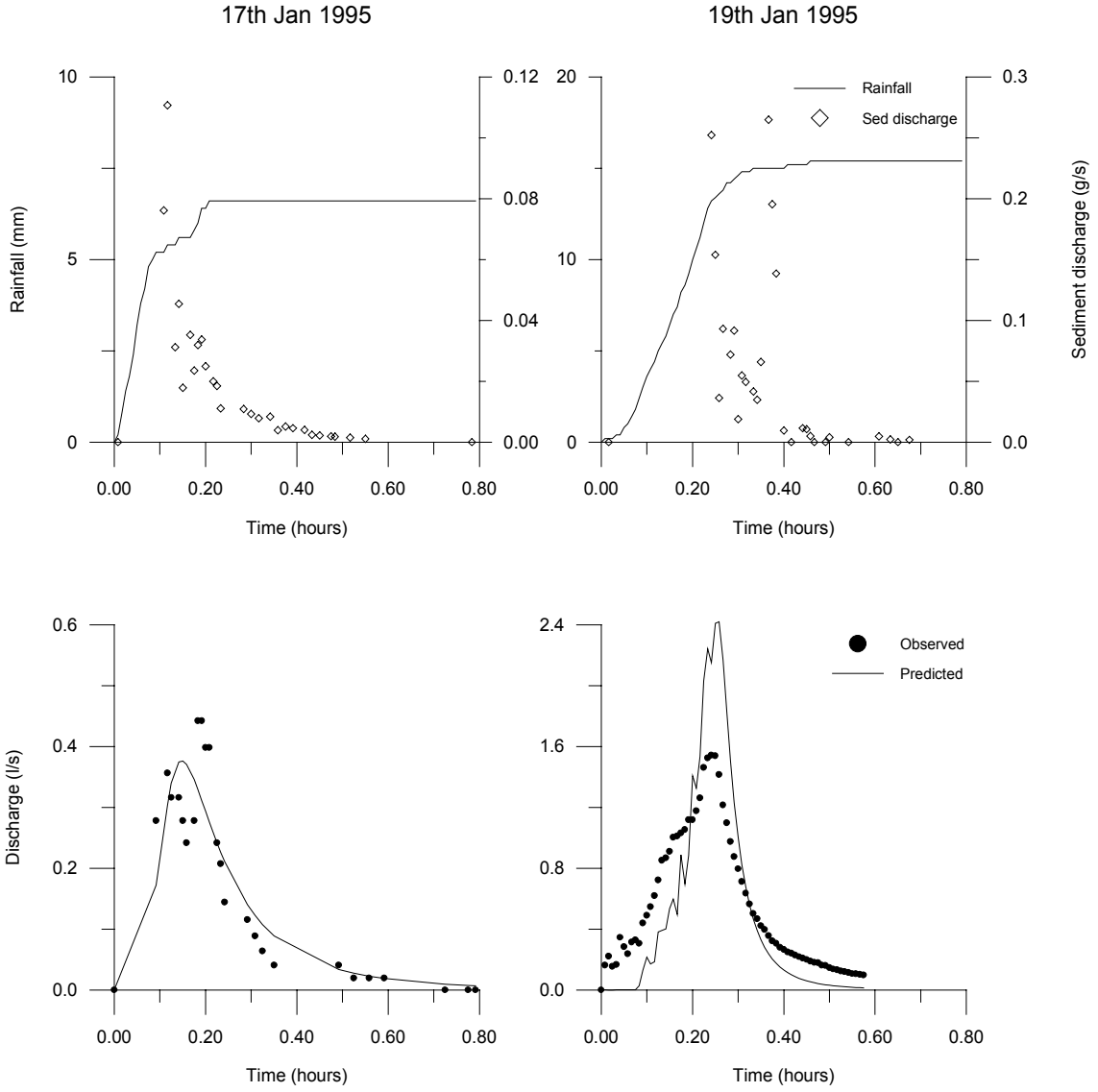
22nd Dec 1994

NLFIT input files: so1223.fw, so1223.rf/ro

NLFIT output files: so1223.prt/pmf

Parameter	Mean	St Deviation
c_r	37.9	53.9
e_m	2.00	0.39
Sphi	0.66	1.20
phi	70.3	3.74

Appendix B.3 continued



17th Jan 1995

NLFIT input files: so0118.fw, so0118.rf/ro

NLFIT output files: so0118gw.prt/pmf

Parameter	Mean	St Deviation
c_r	1.38	1.85
e_m	1.21	0.28
Sphi	0.001	203
phi	61.2	30.5

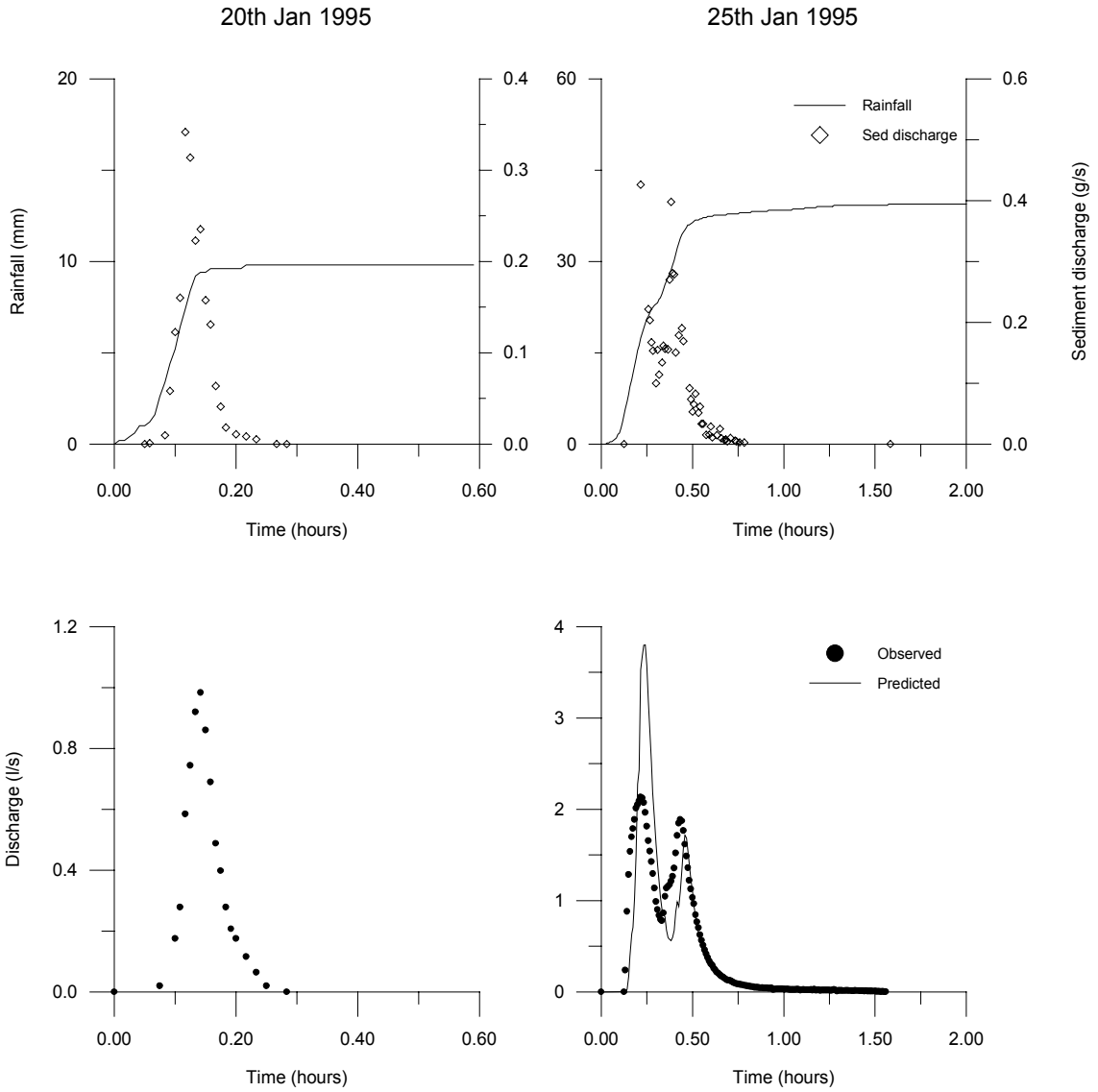
19th Jan 1995

NLFIT input files: so0120.fw, so0120.rf/ro

NLFIT output files: so0120gw.prt/pmf

Parameter	Mean	St Deviation
c_r	3.57	1.39
e_m	1.21	0.09
Sphi	0.001	11.8
phi	59.3	4.63

Appendix B.3 continued



20th Jan 1995

Did not fit

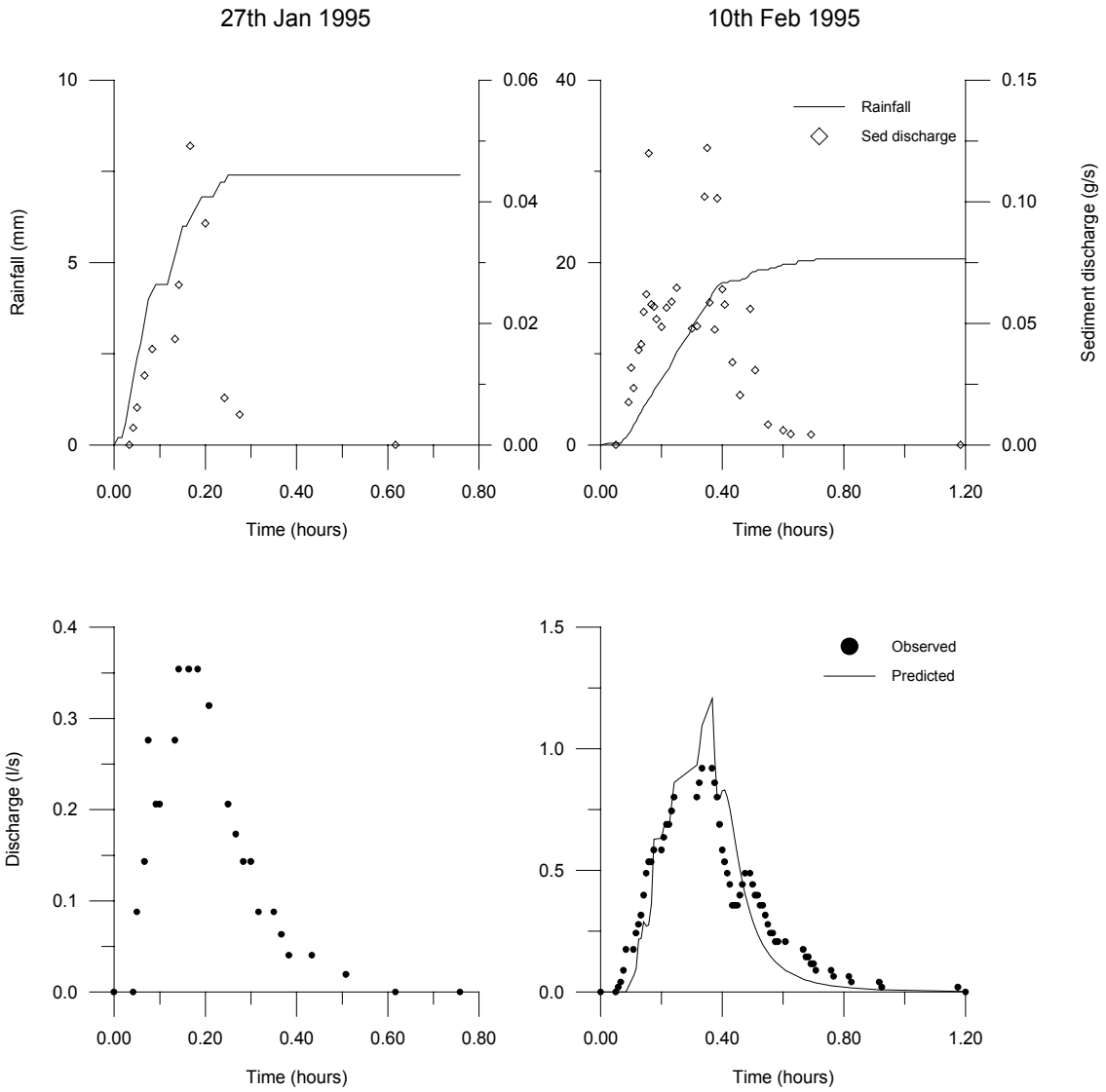
25th Jan 1995

NLFIT input files: so0126.fw, so0126.rf/ro

NLFIT output files: so0126.prt/pmf

Parameter	Mean	St Deviation
c_r	4.50	1.89
e_m	1.36	0.11
Sphi	8.48	0.84
phi	61.2	3.09

Appendix B.3 continued



27th Jan 1995

Did not fit

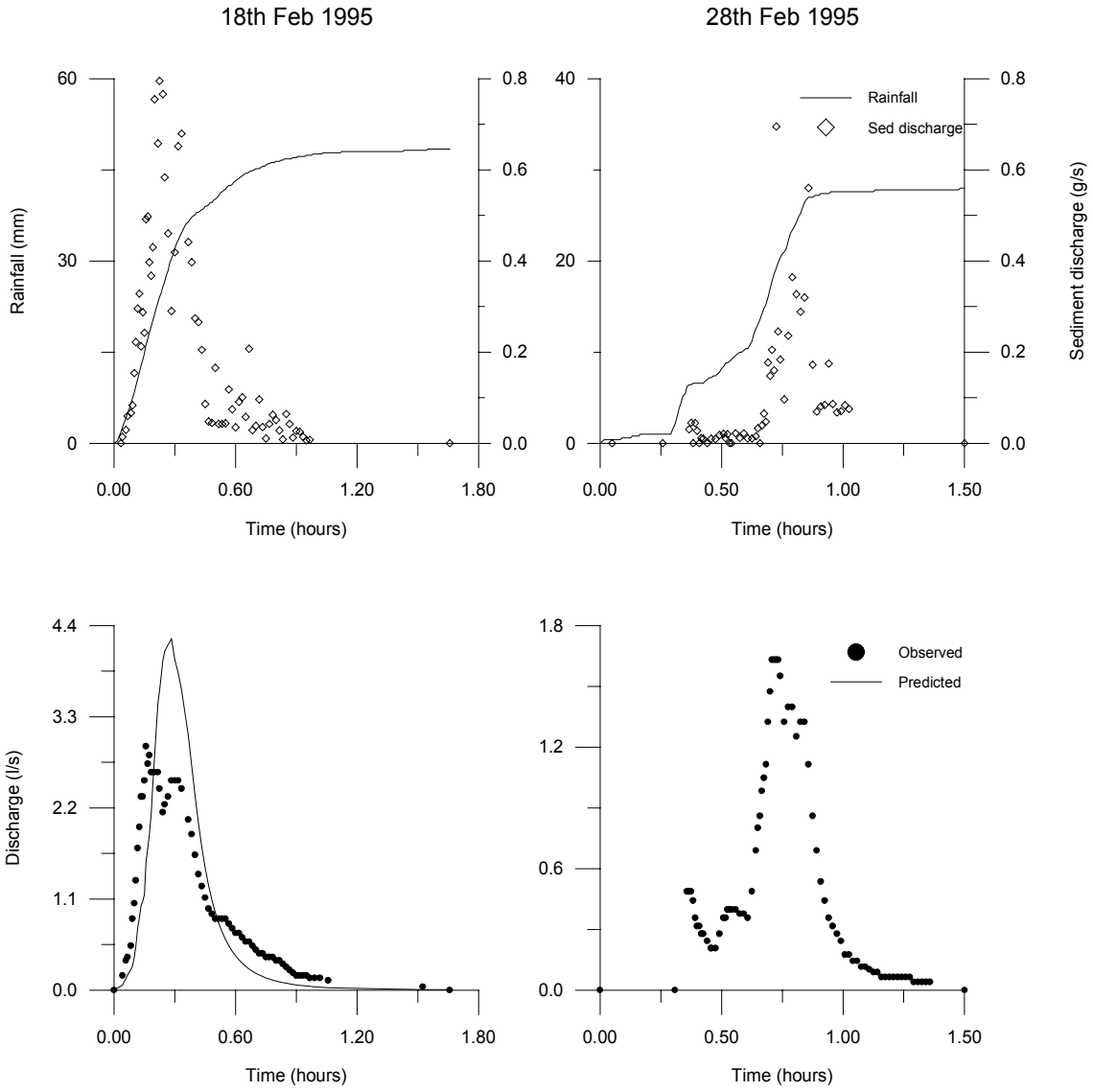
10th Feb 1995

NLFIT input files: so0210.fw, so0210.rf/ro

NLFIT output files: so0210.prt/pmf

Parameter	Mean	St Deviation
c_r	3.28	0.09
e_m	1.29	0.09
Sphi	0.001	0.17
phi	48.0	0.63

Appendix B.3 continued



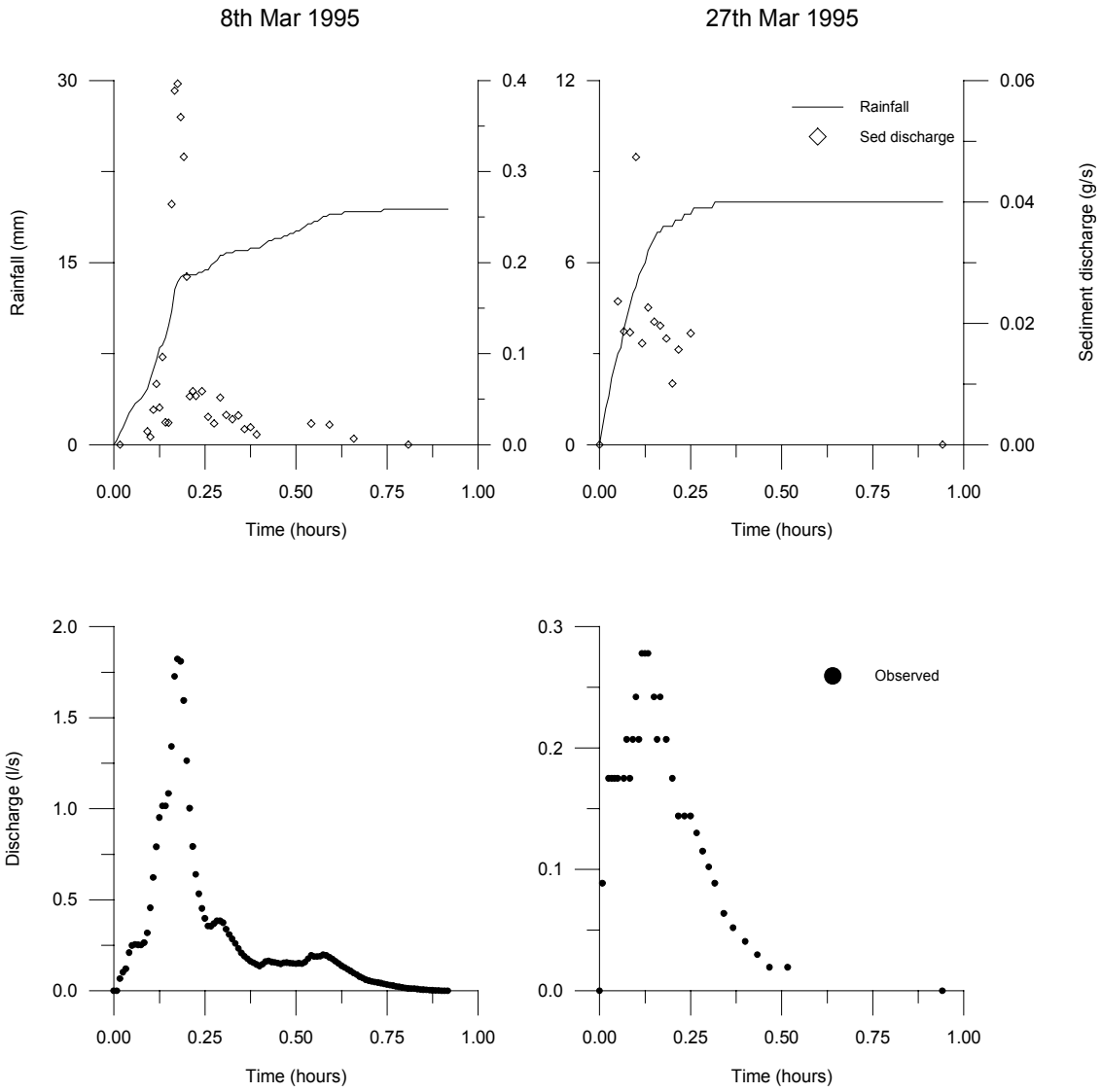
18th Feb 1995 28th Feb 1995

NLFIT input files: so0218.fw, so0218.rf/ro Did not fit

NLFIT output files: so0218gw.prt/pmf

Parameter	Mean	St Deviation
c_r	15.7	3.95
e_m	1.83	0.09
Sphi	1.54	0.87
phi	52.7	5.54

Appendix B.3 continued



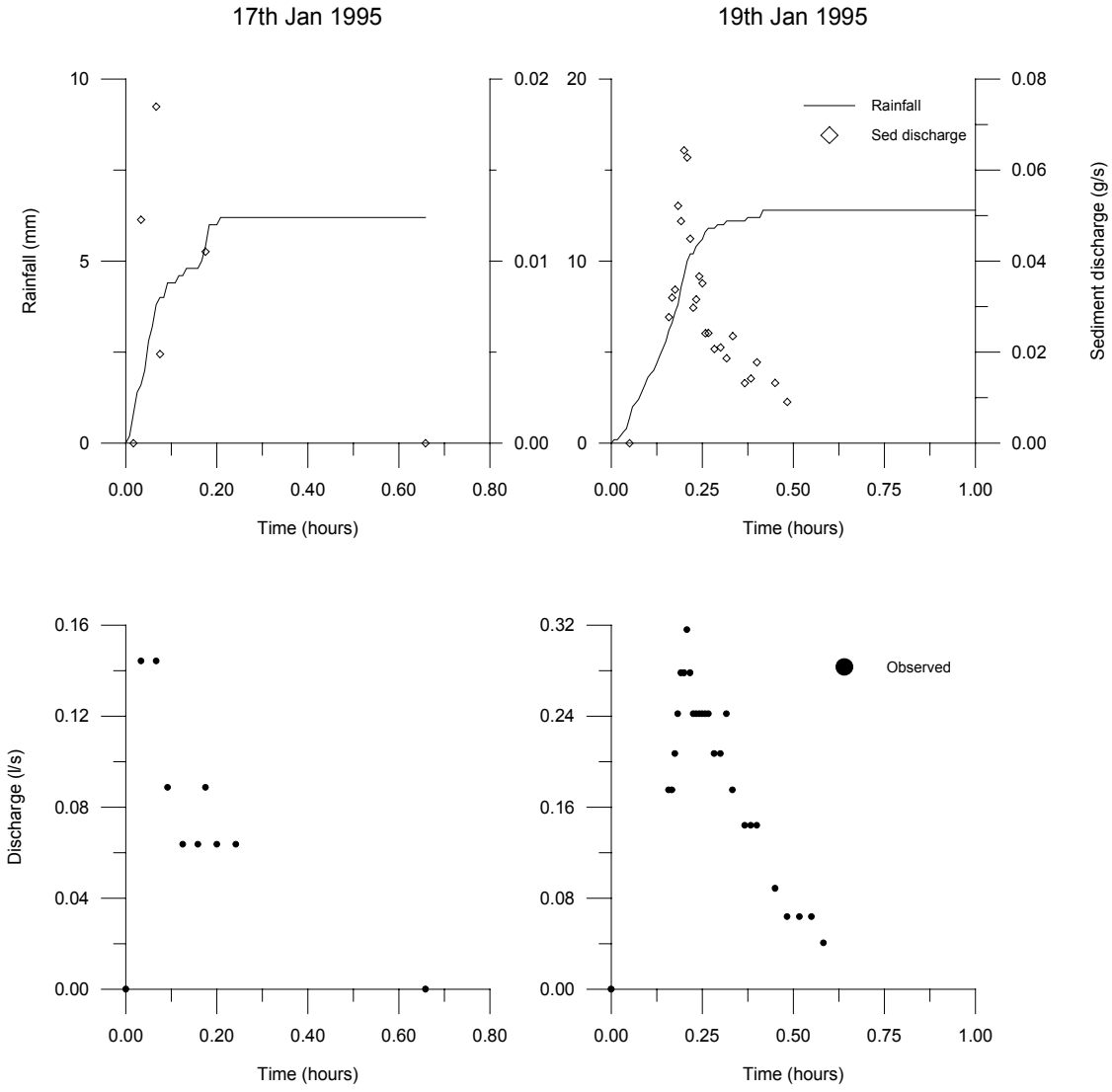
8th Mar 1995

Did not fit

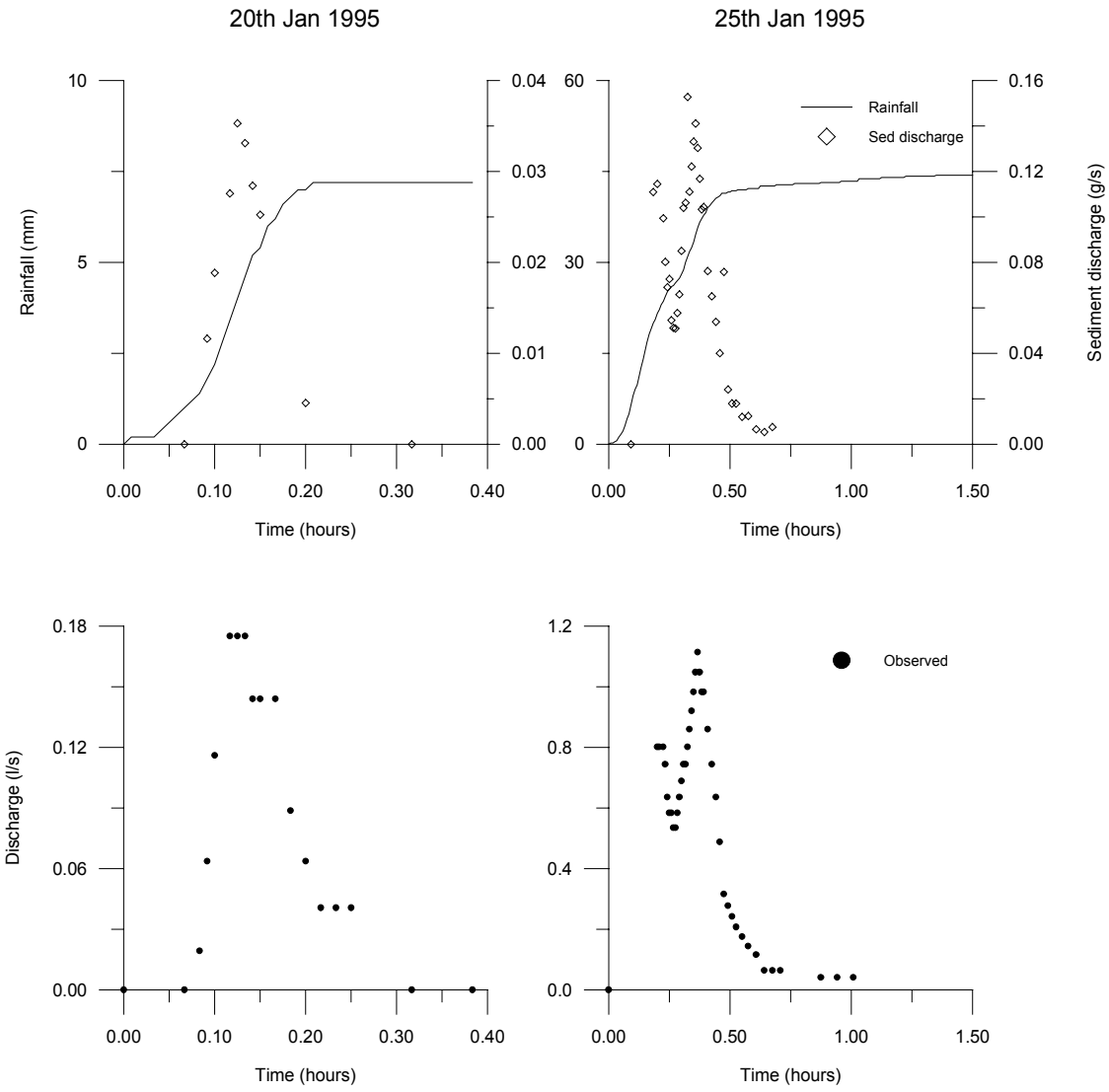
27th Mar 1995

Did not fit

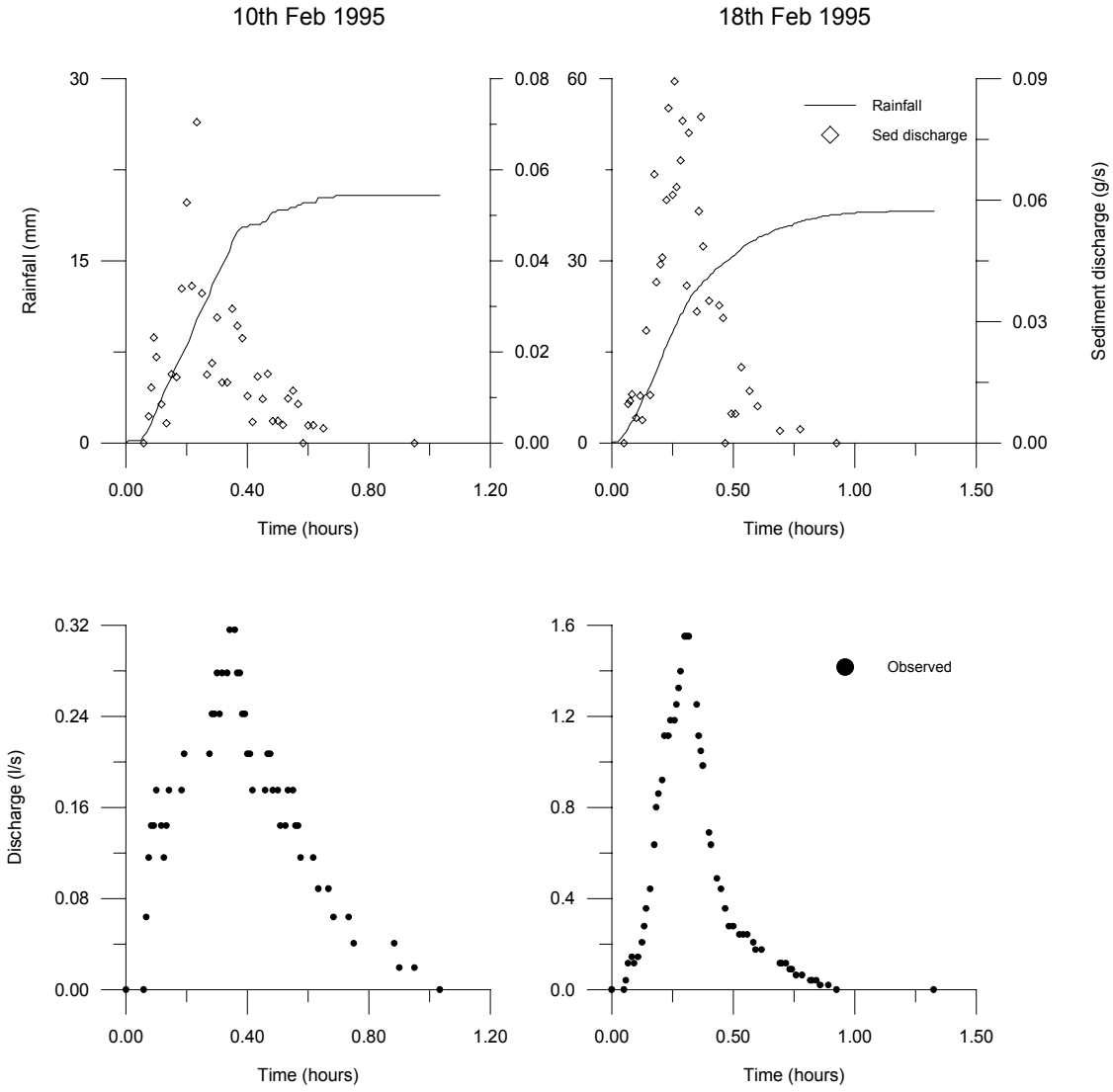
Appendix B.4 Fire site



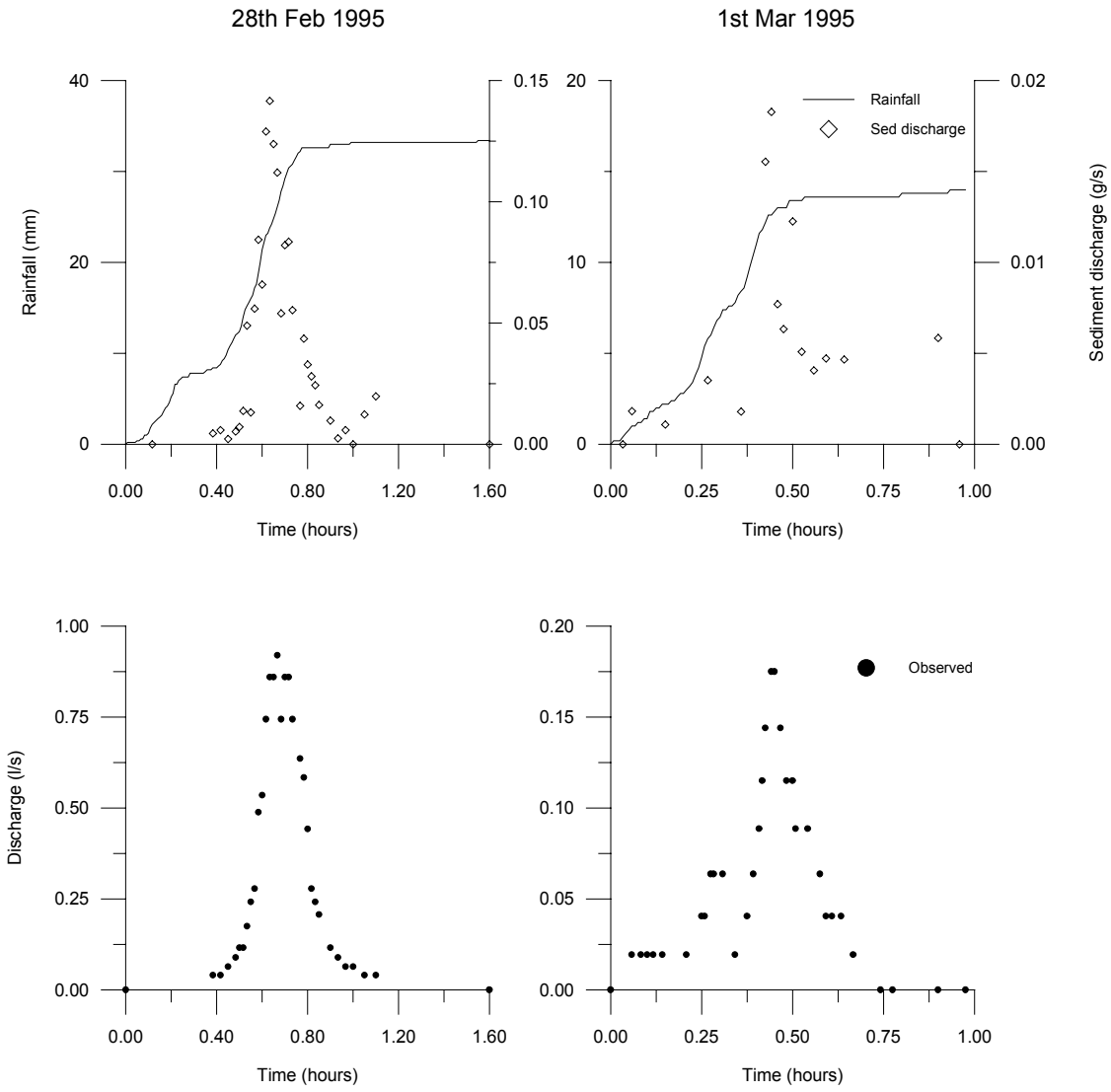
Appendix B.4 continued



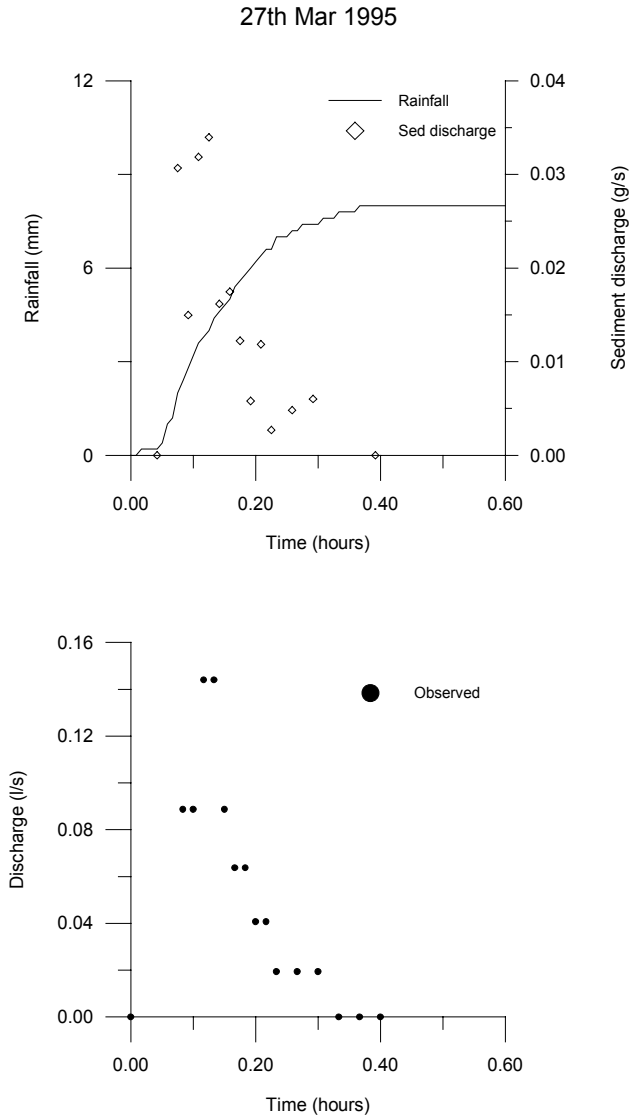
Appendix B.4 continued



Appendix B.4 continued

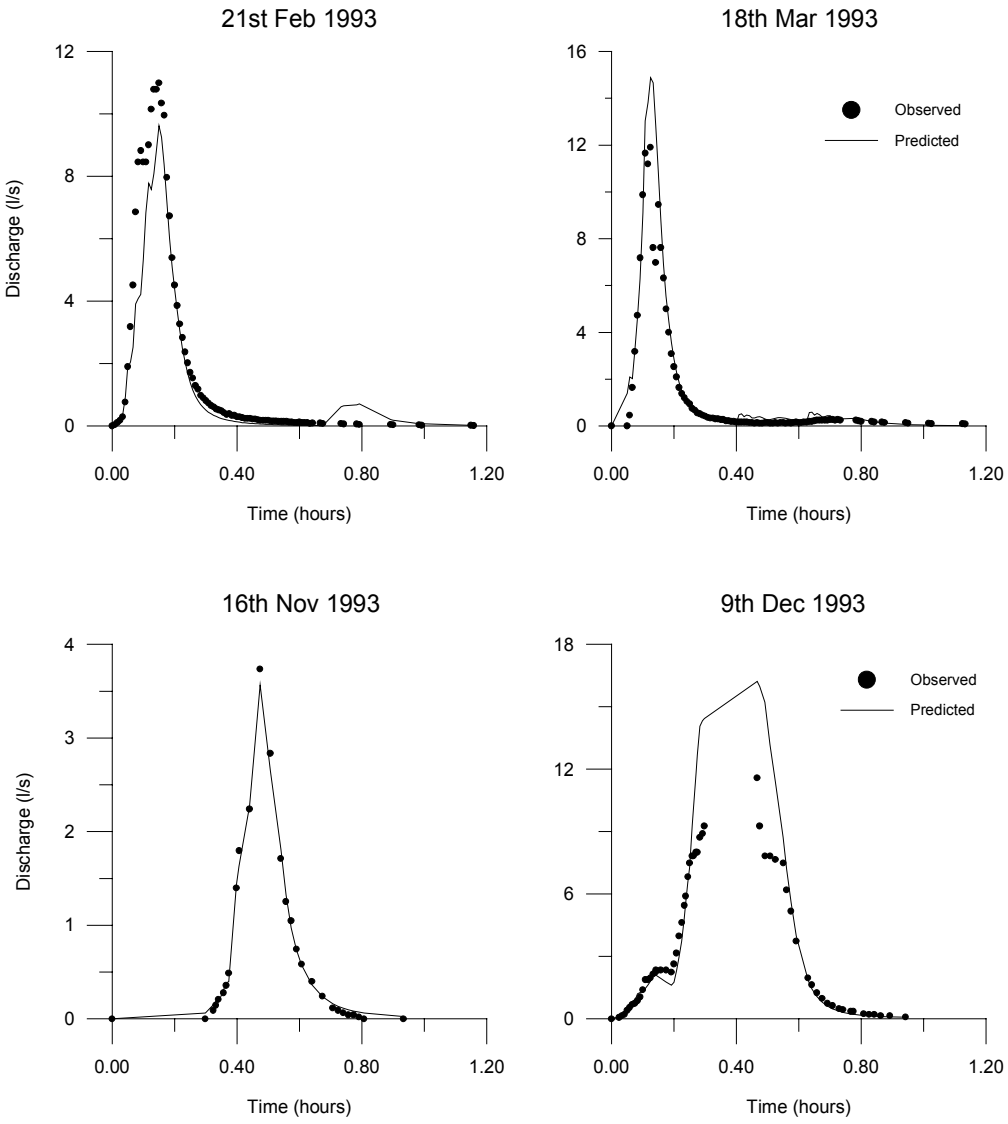


Appendix B.4 continued



Appendix C Simultaneously fitted hydrographs

Batter site



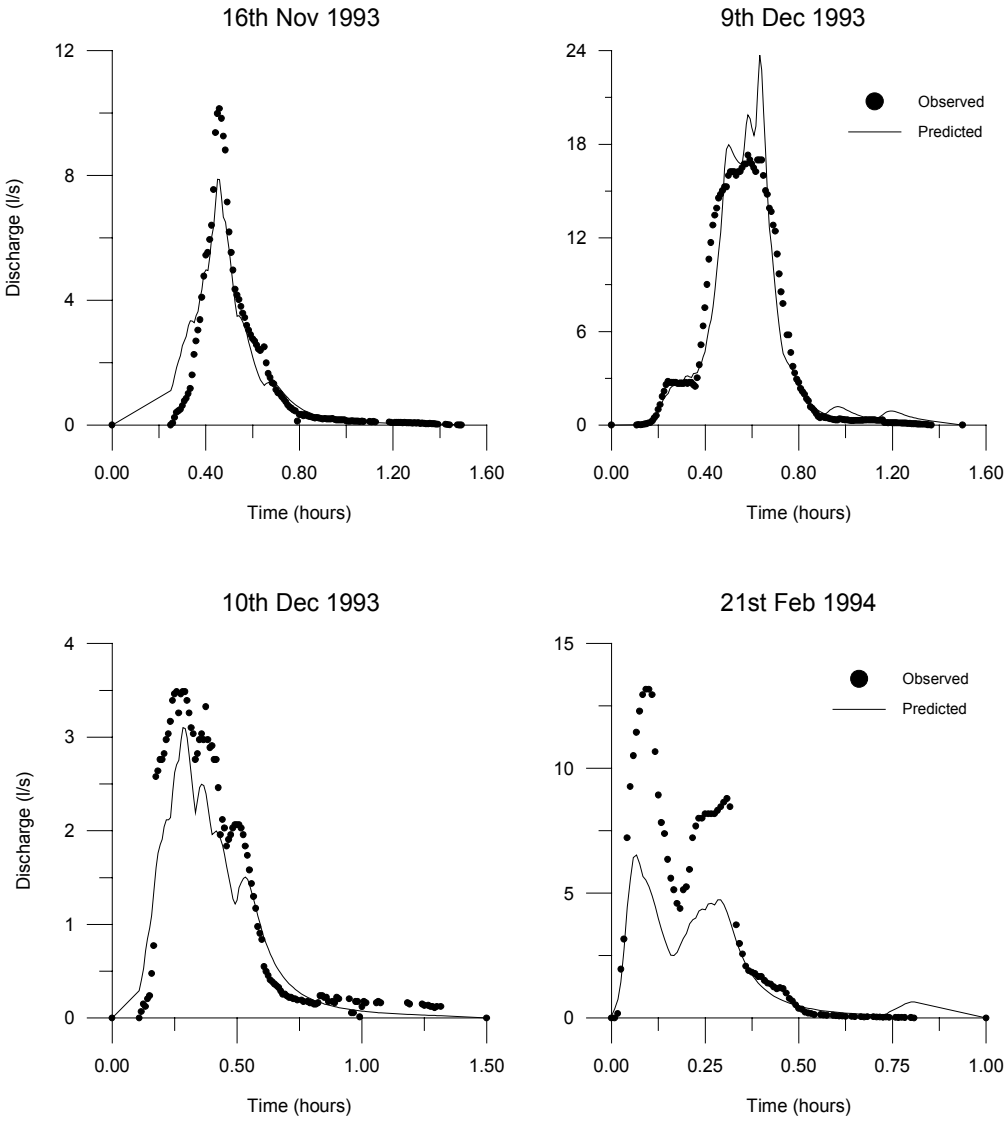
Simultaneous fit - Batter Site

NLFIT input files: b4storm.fw

NLFIT output files: b4storm.prt/pmf

Parameter	Mean	St Deviation
c_r	6.71	0.65
e_m	1.54	0.03
Sphi	5.48	0.36
phi	16.3	0.93

Cap site



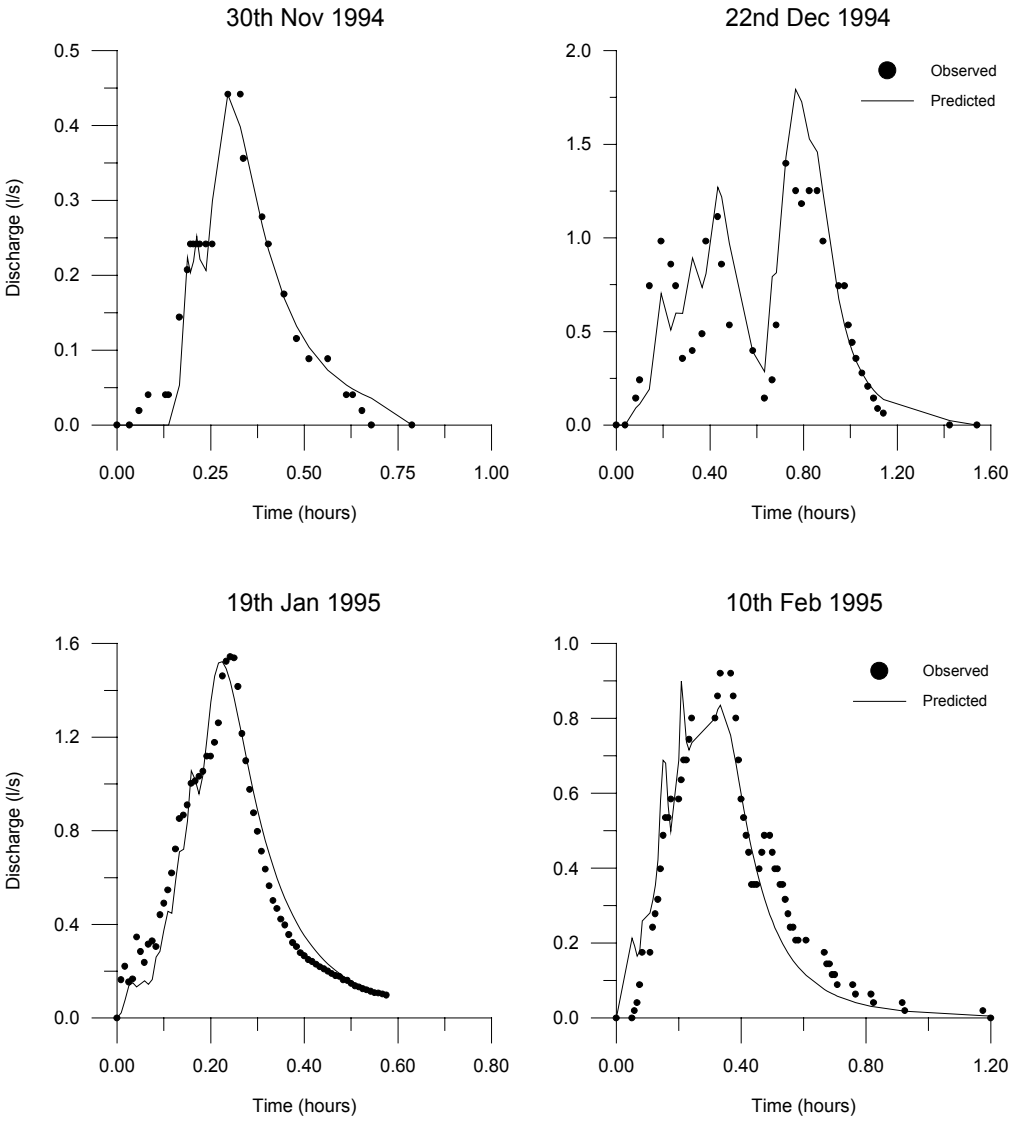
Simultaneous fit - Cap Site

NLFIT input files: cap9394n.fw

NLFIT output files: cap9394n.prt/pmf

Parameter	Mean	St Deviation
c_r	7.11	1.28
e_m	1.58	0.57
Sphi	5.31	0.58
phi	8.80	3.01

Soil site



Simultaneous fit - Soil Site

NLFIT input files: 4storm.fw

NLFIT output files: 4stormgw.prt/pmf

Parameter	Mean	St Deviation
c_r	1.25	0.08
e_m	1.21	0.02
Sphi	7.54	0.33
phi	47.2	0.21

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