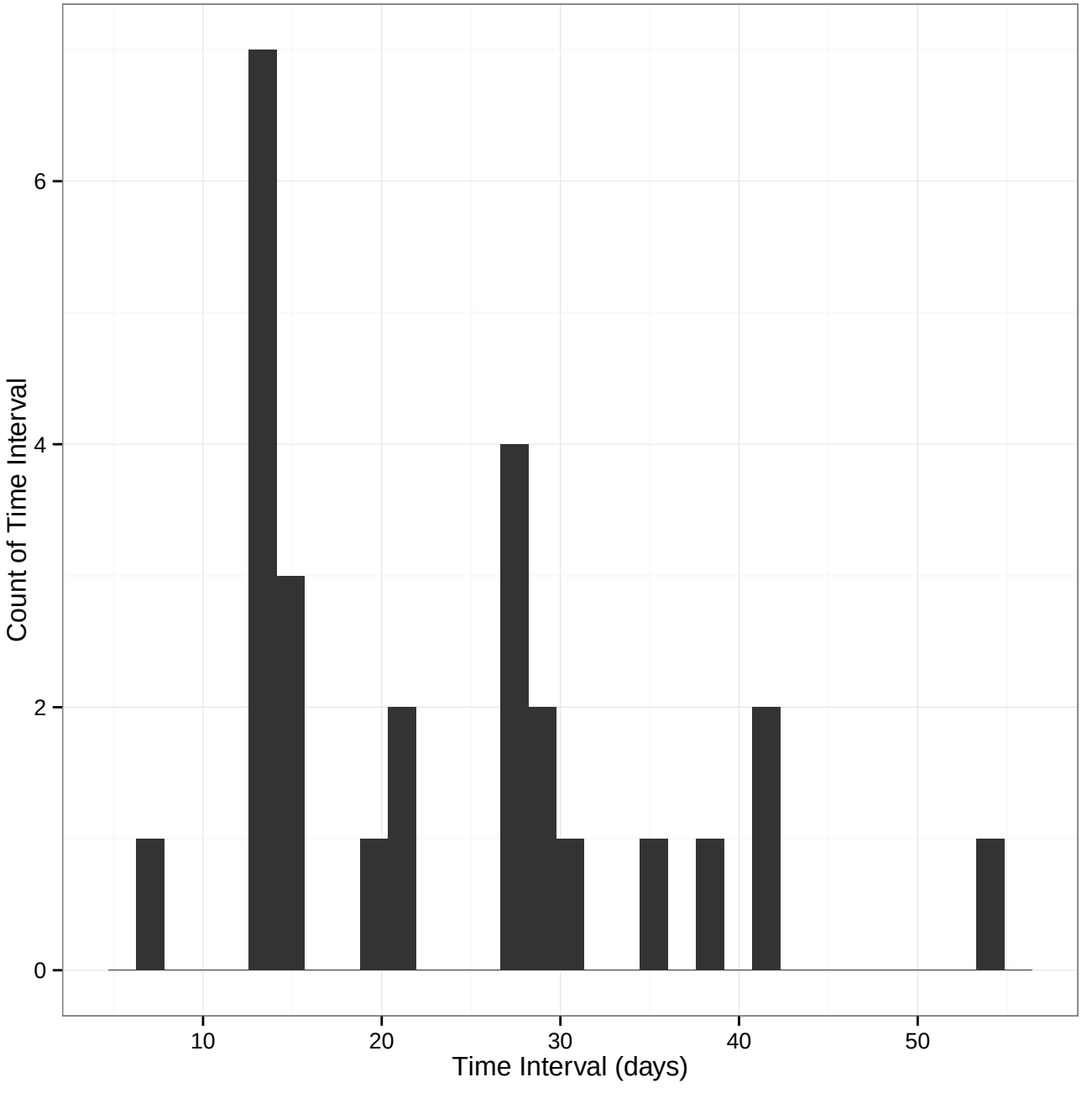
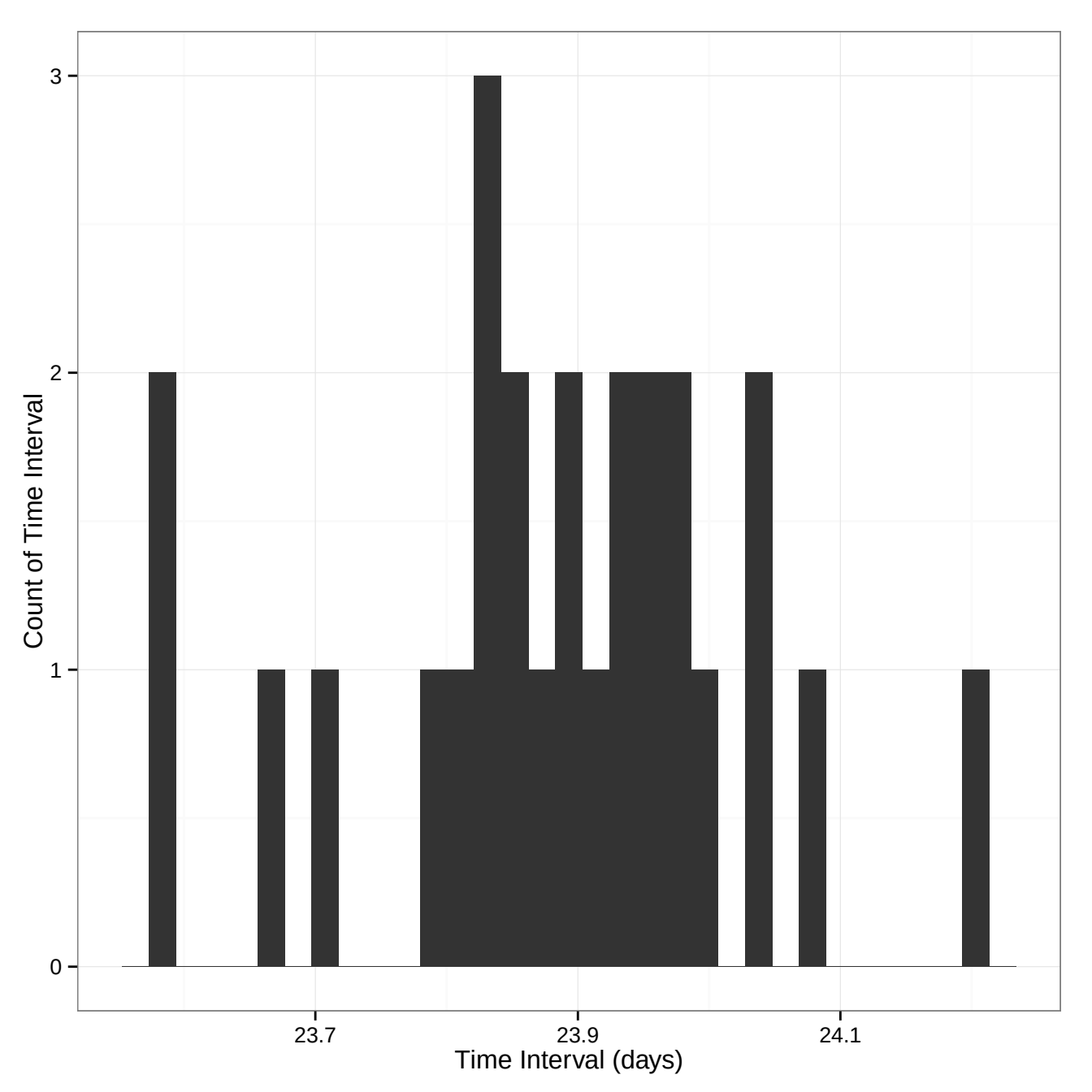
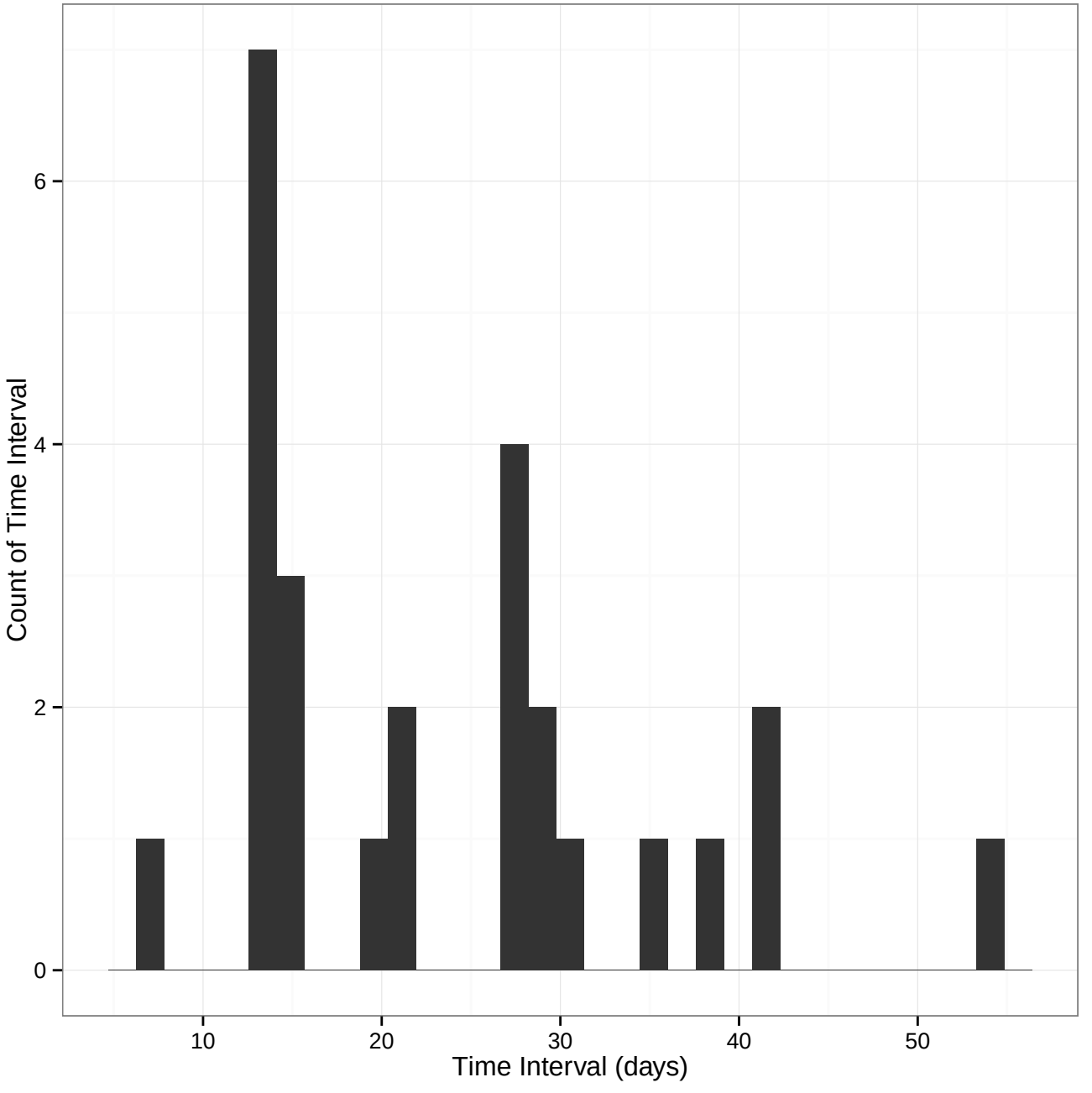
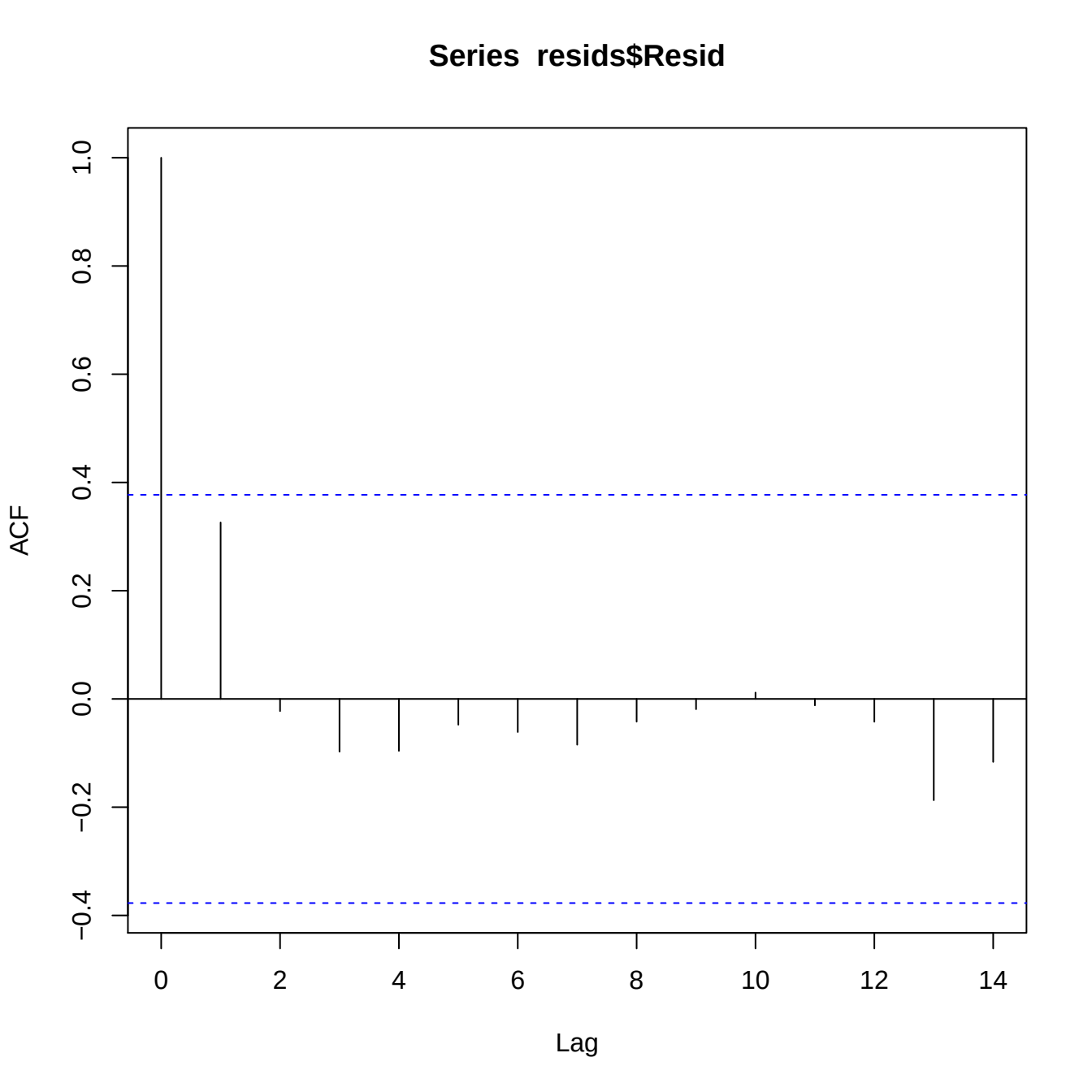
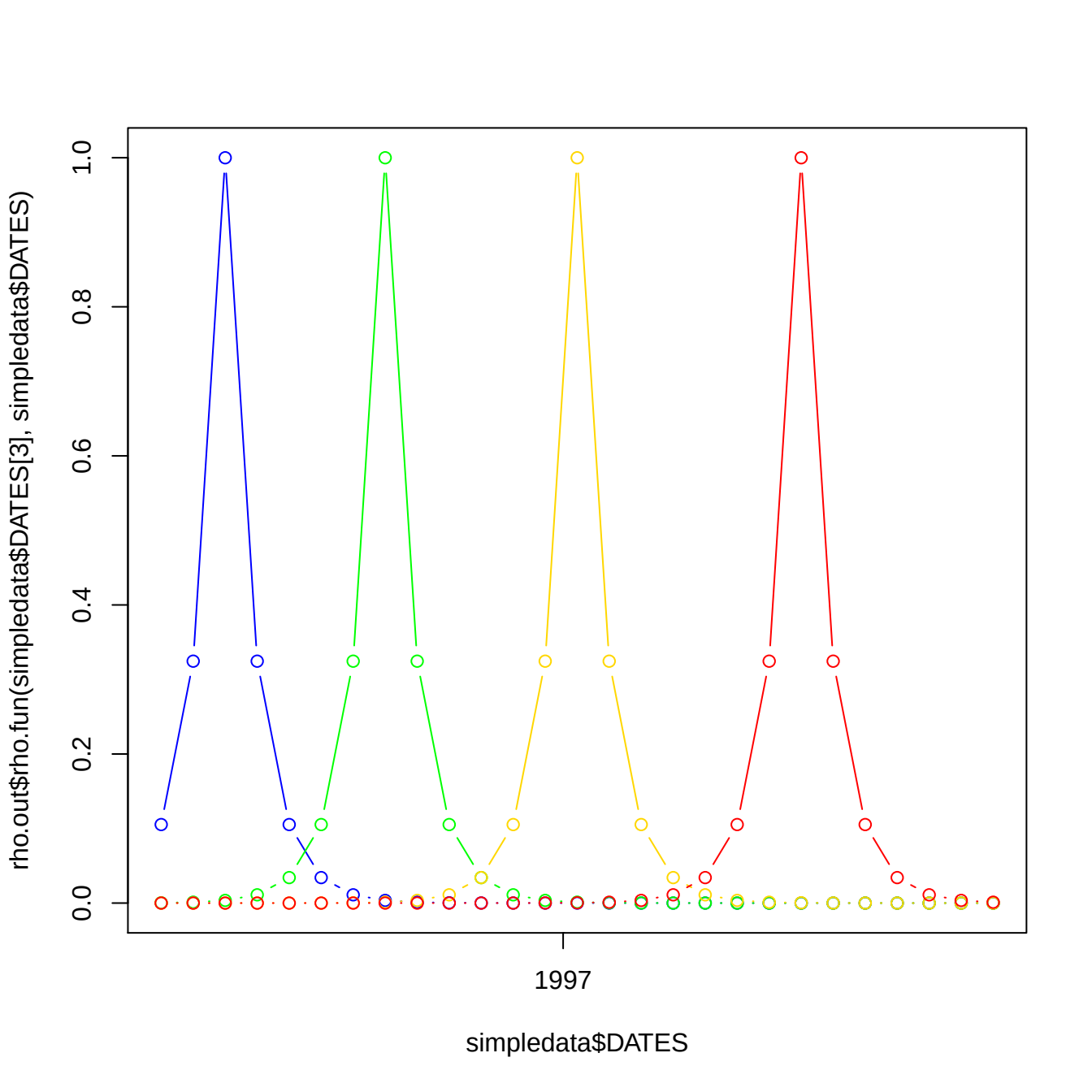
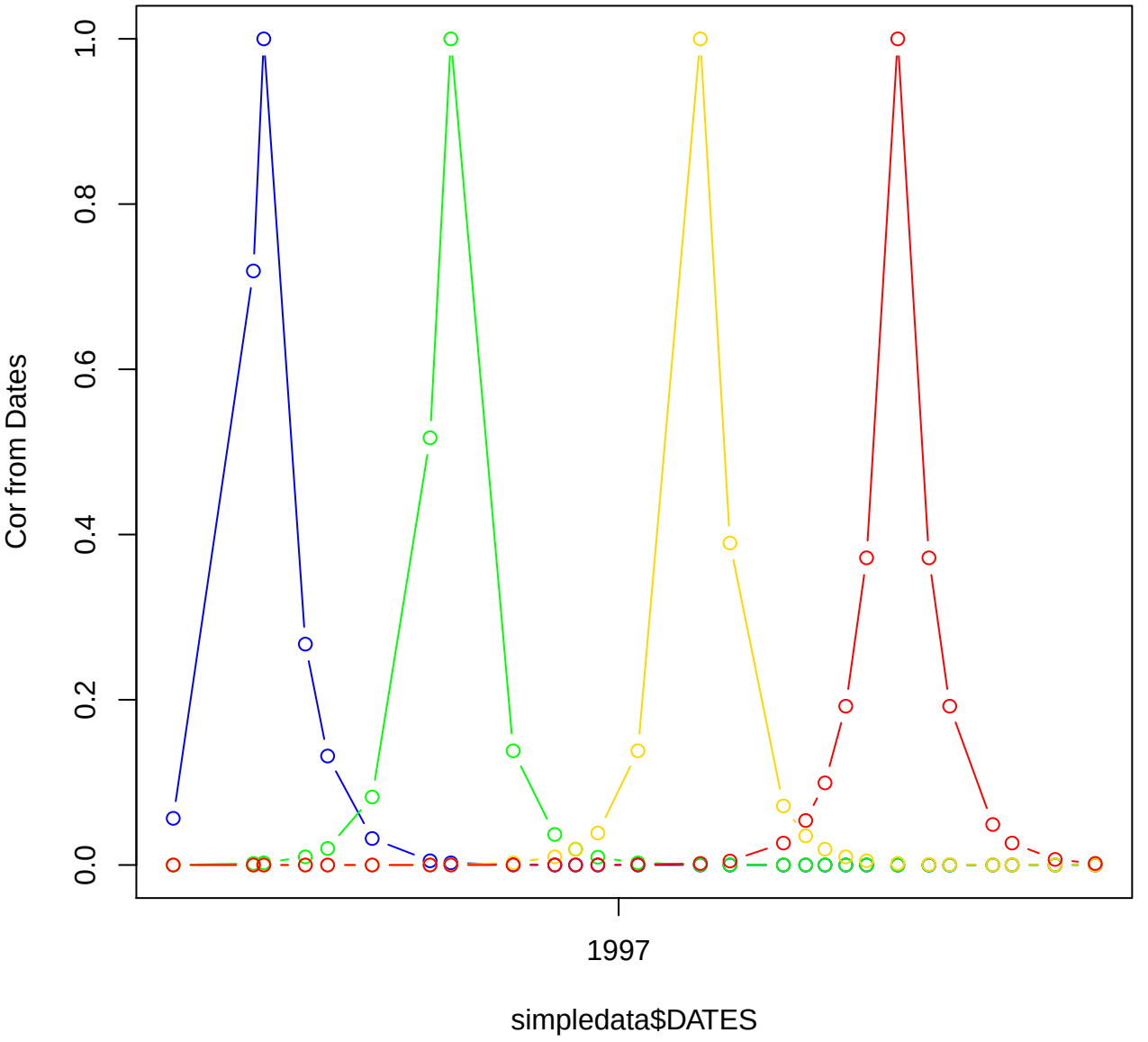

Count of Time Interval
0
2
4
6
10
20
30
40
50
Time Interval (days)

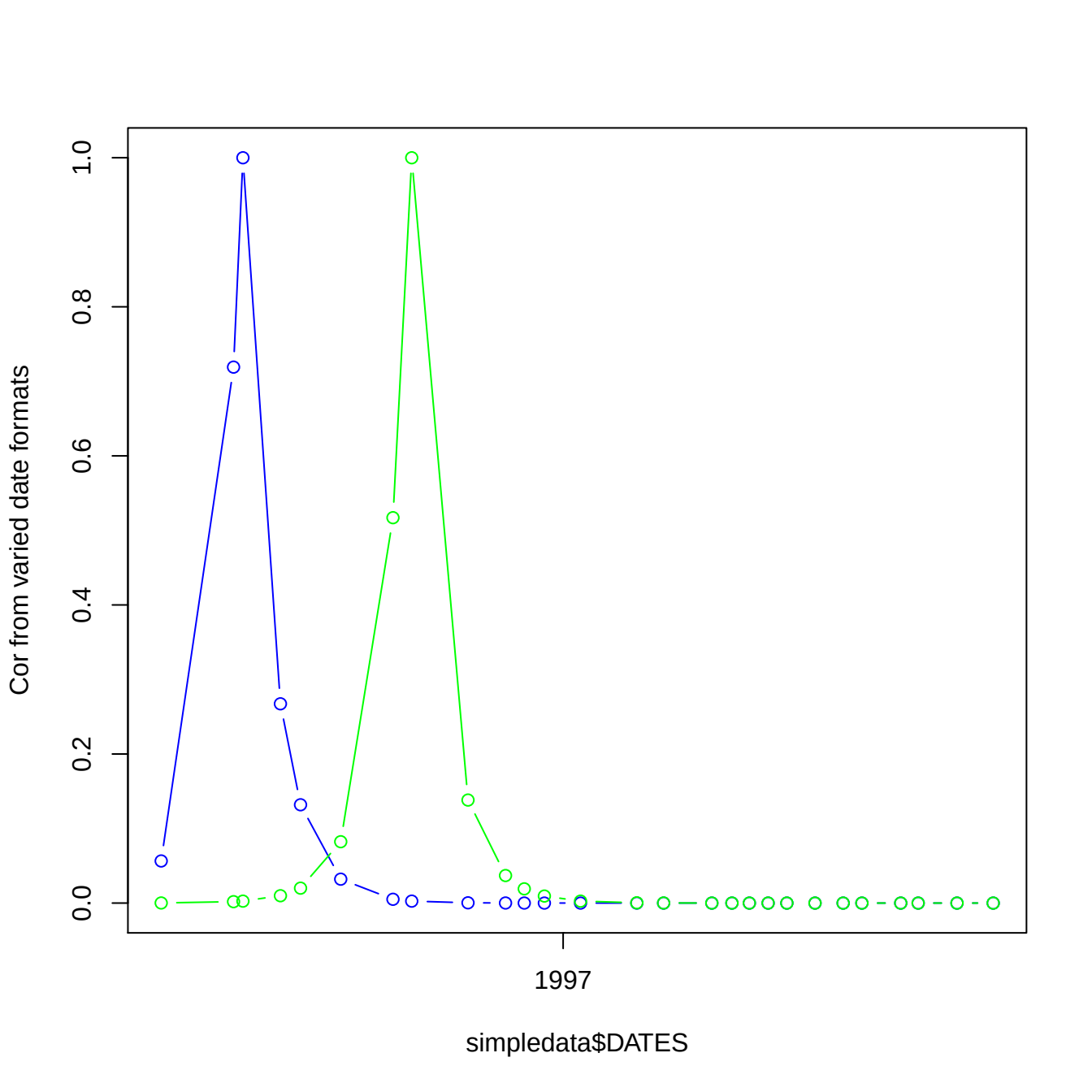

3
2
1
0
Count of Time Interval
23.7
23.9
24.1
Time Interval (days)

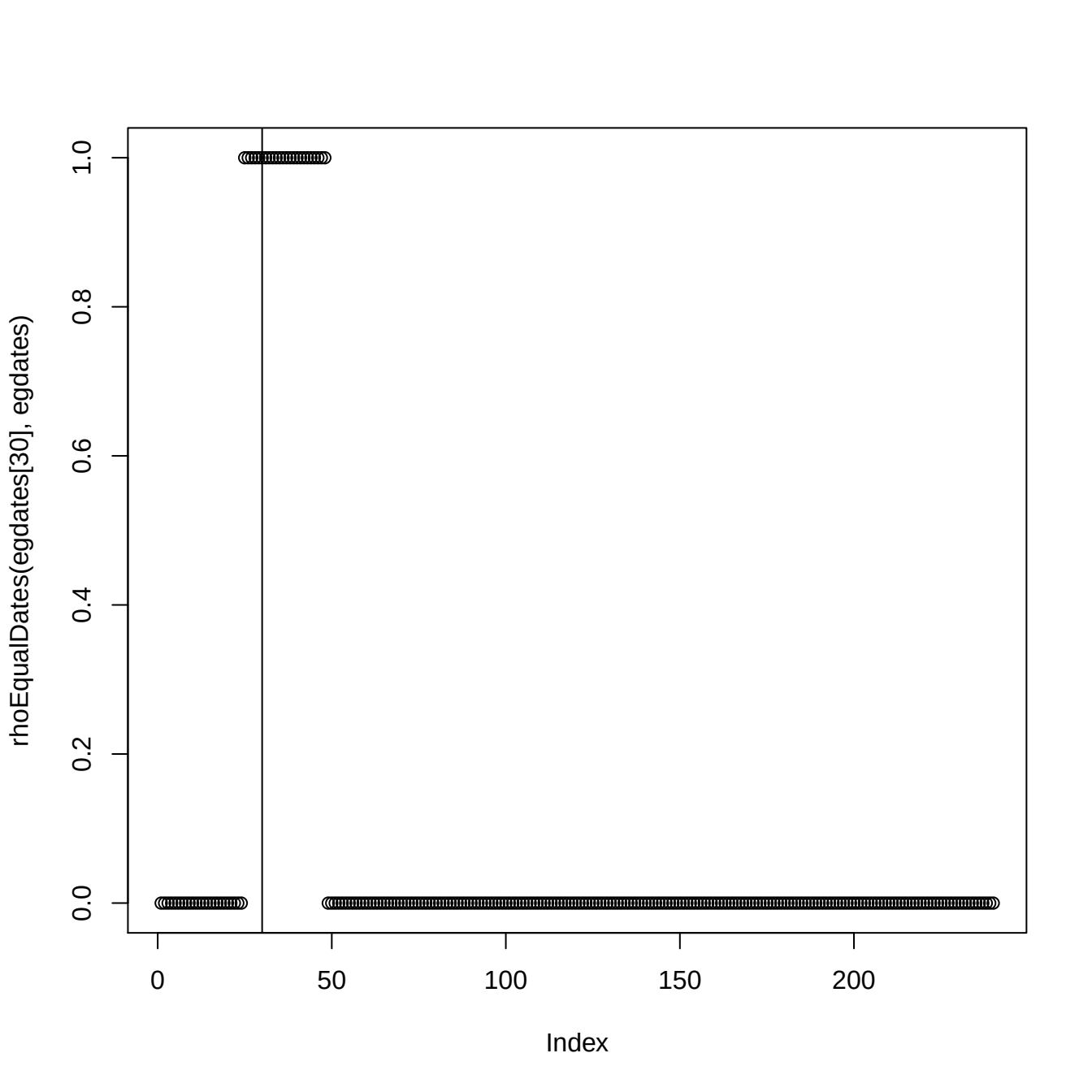

Count of Time Interval
0
2
4
6
10
20
30
40
50
Time Interval (days)

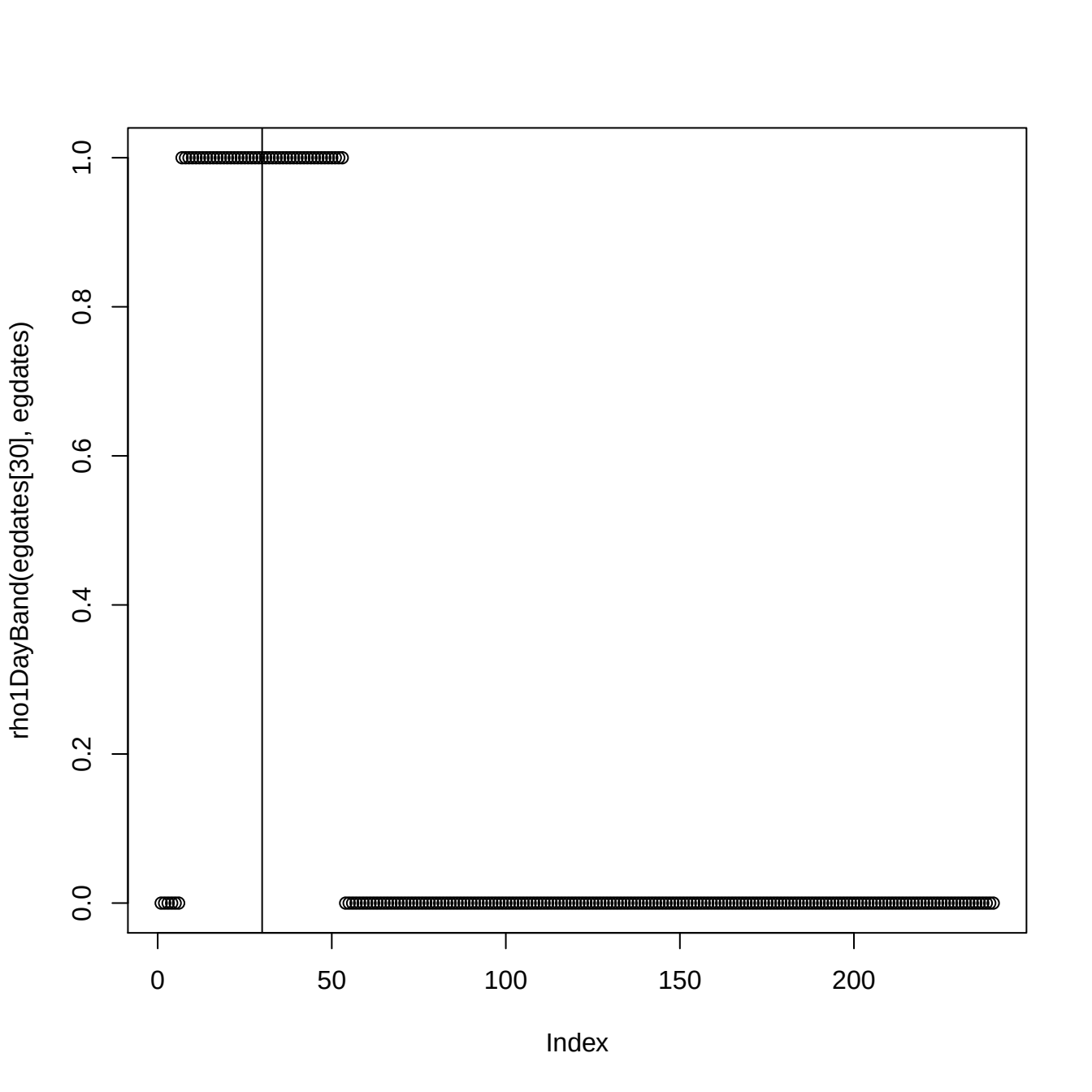

Series resids$Resid
ACF
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
0
2
4
6
8
10
12
14
Lag

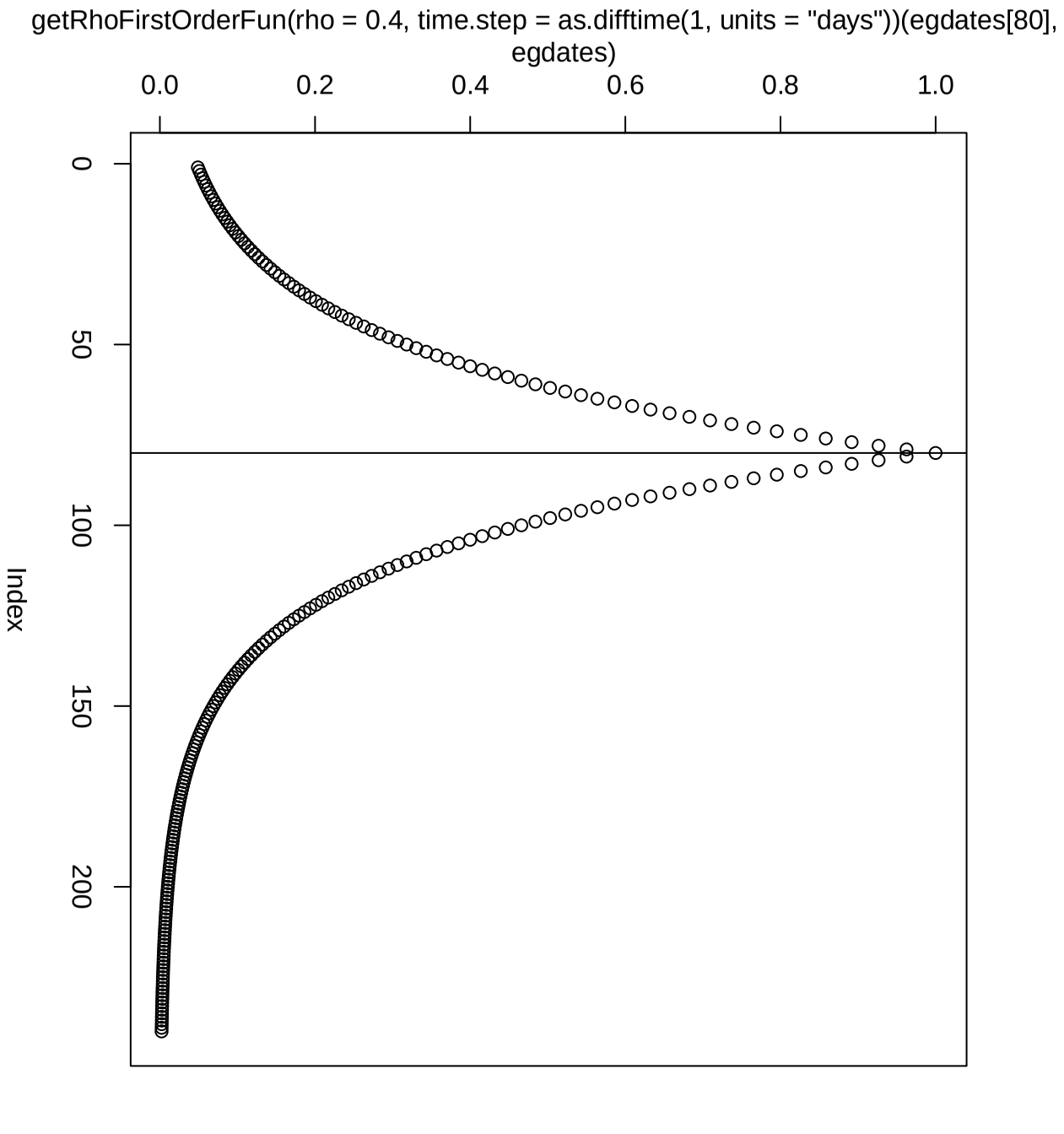

rho.out$rho.fun(simpledata$DATES[3], simpledata$DATES)
1.0
0.8
0.6
0.4
0.2
0.0
1997
simpledata$DATES

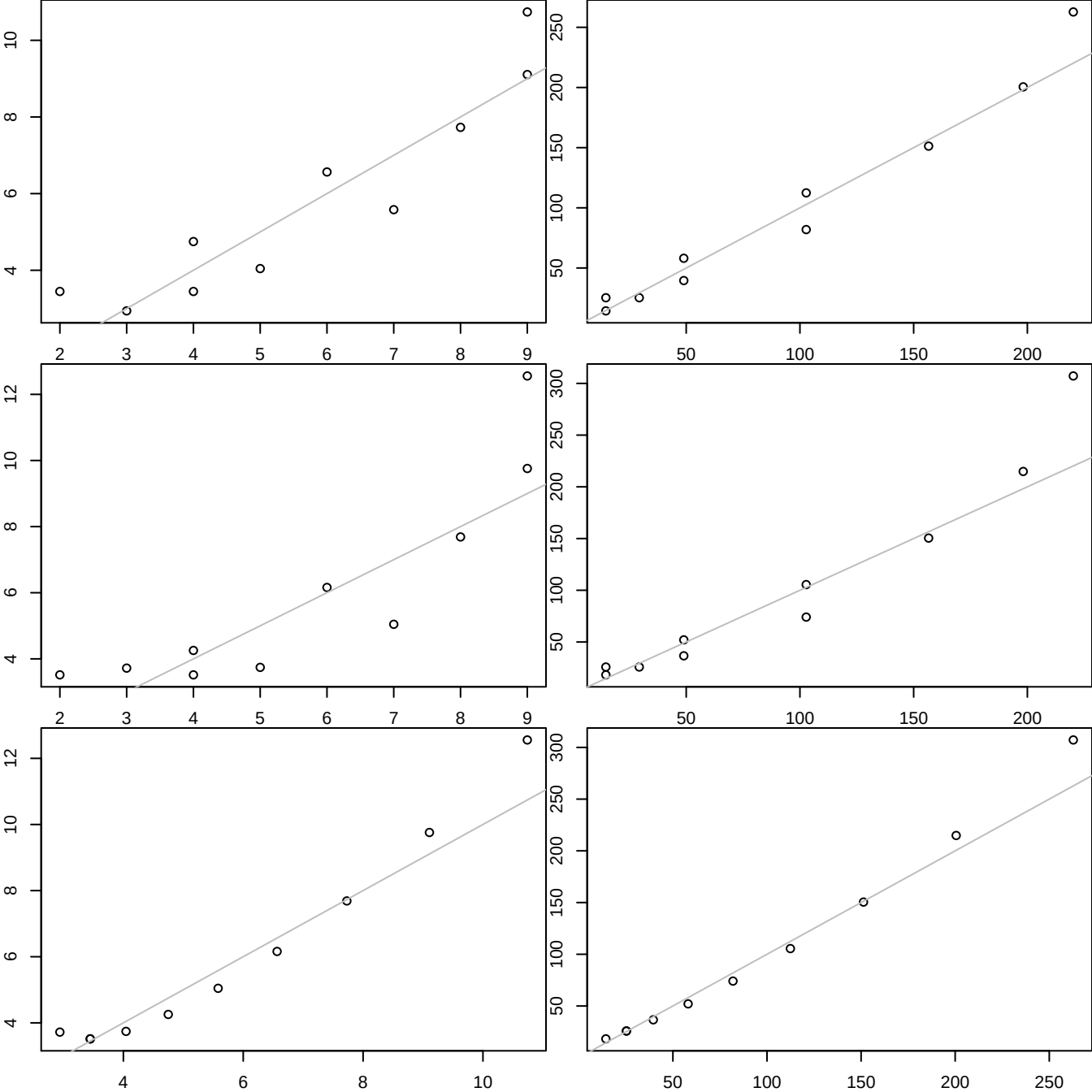

Cor from Dates
0.0
0.2
0.4
0.6
0.8
1.0
1997
simpledata$DATES

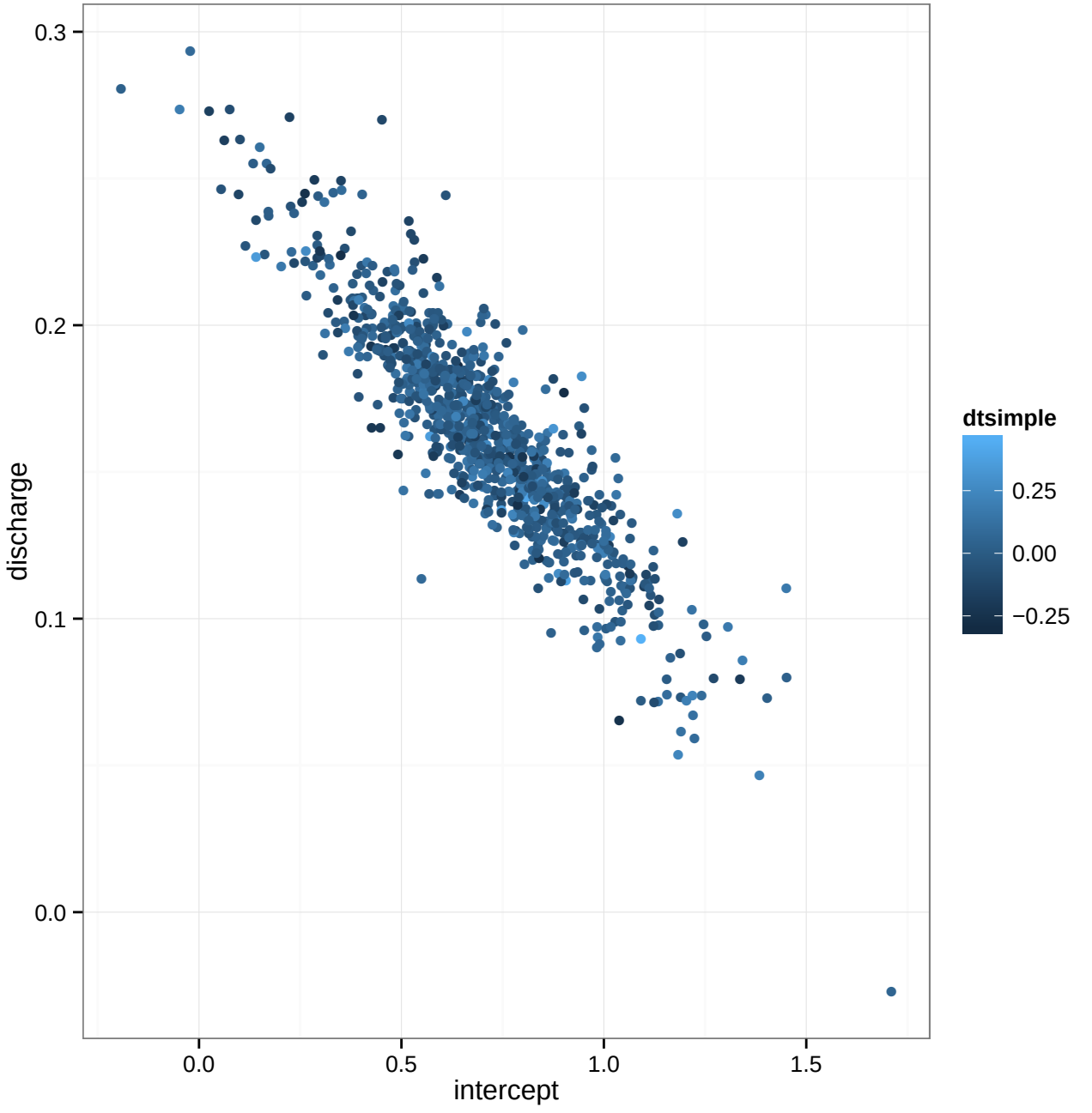

Cor from varied date formats
1.0
0.8
0.6
0.4
0.2
0.0
1997
simpledata$DATES

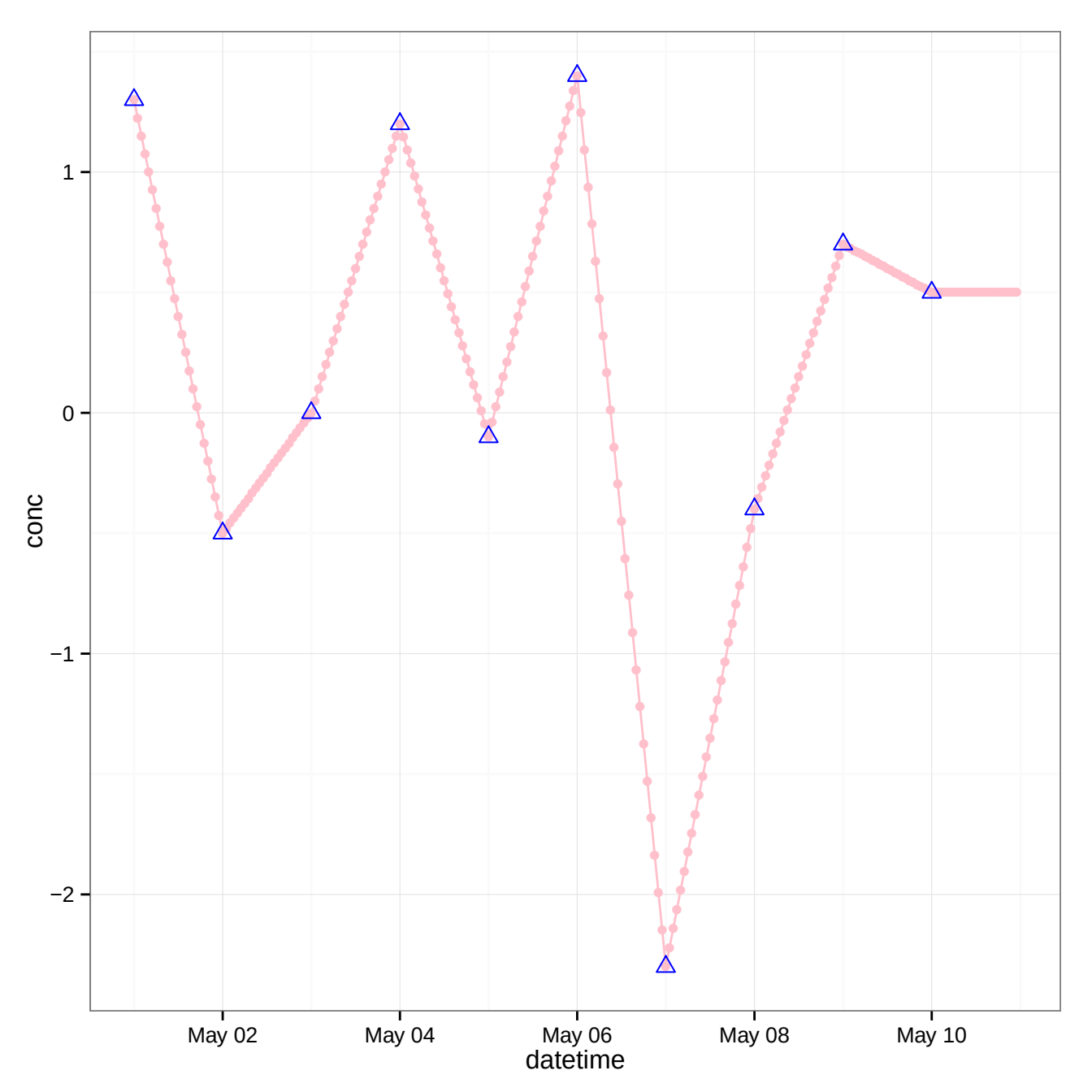

rhoEqualDates(egdates[30], egdates)
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
Index

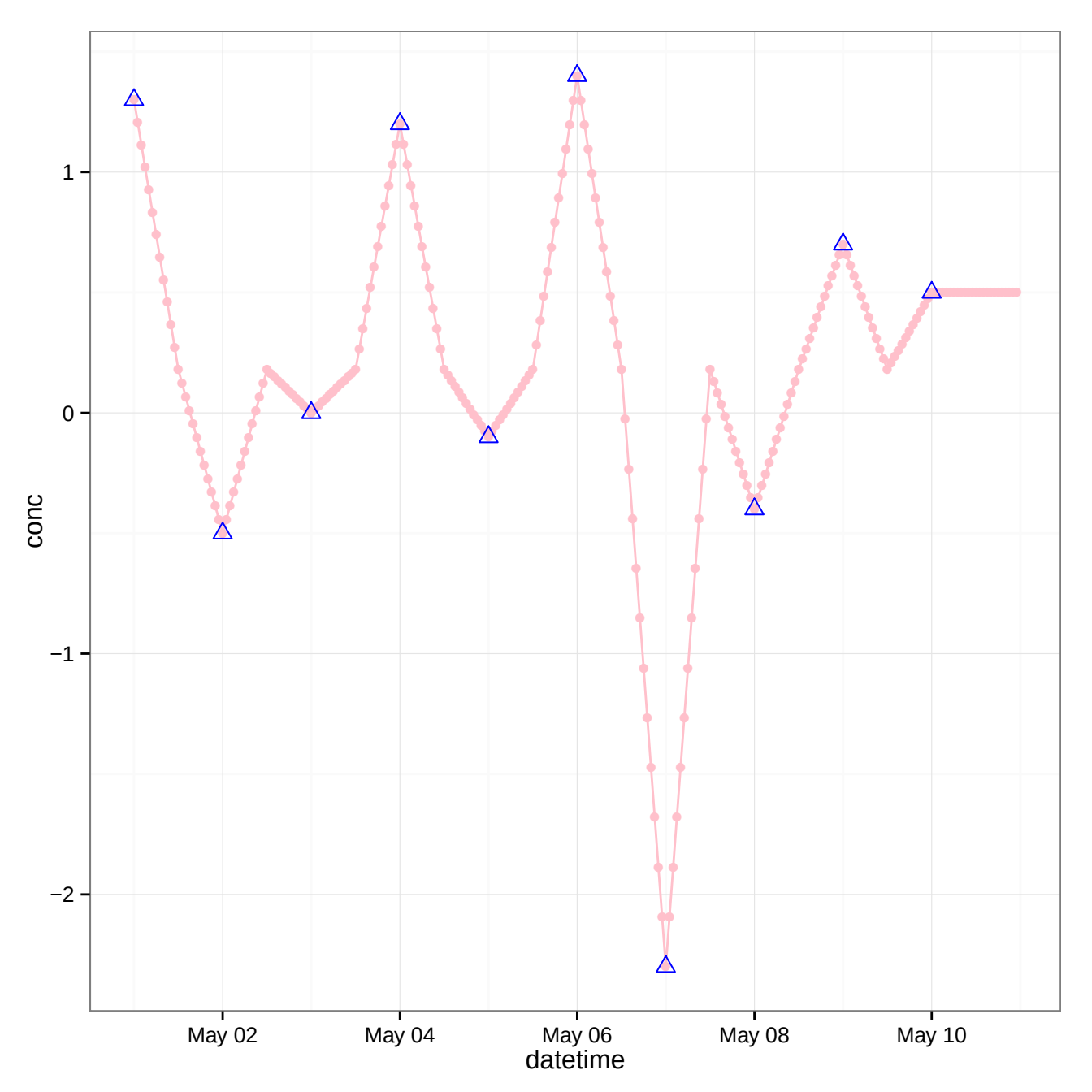

rho1DayBand(egdates[30], egdates)
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
Index

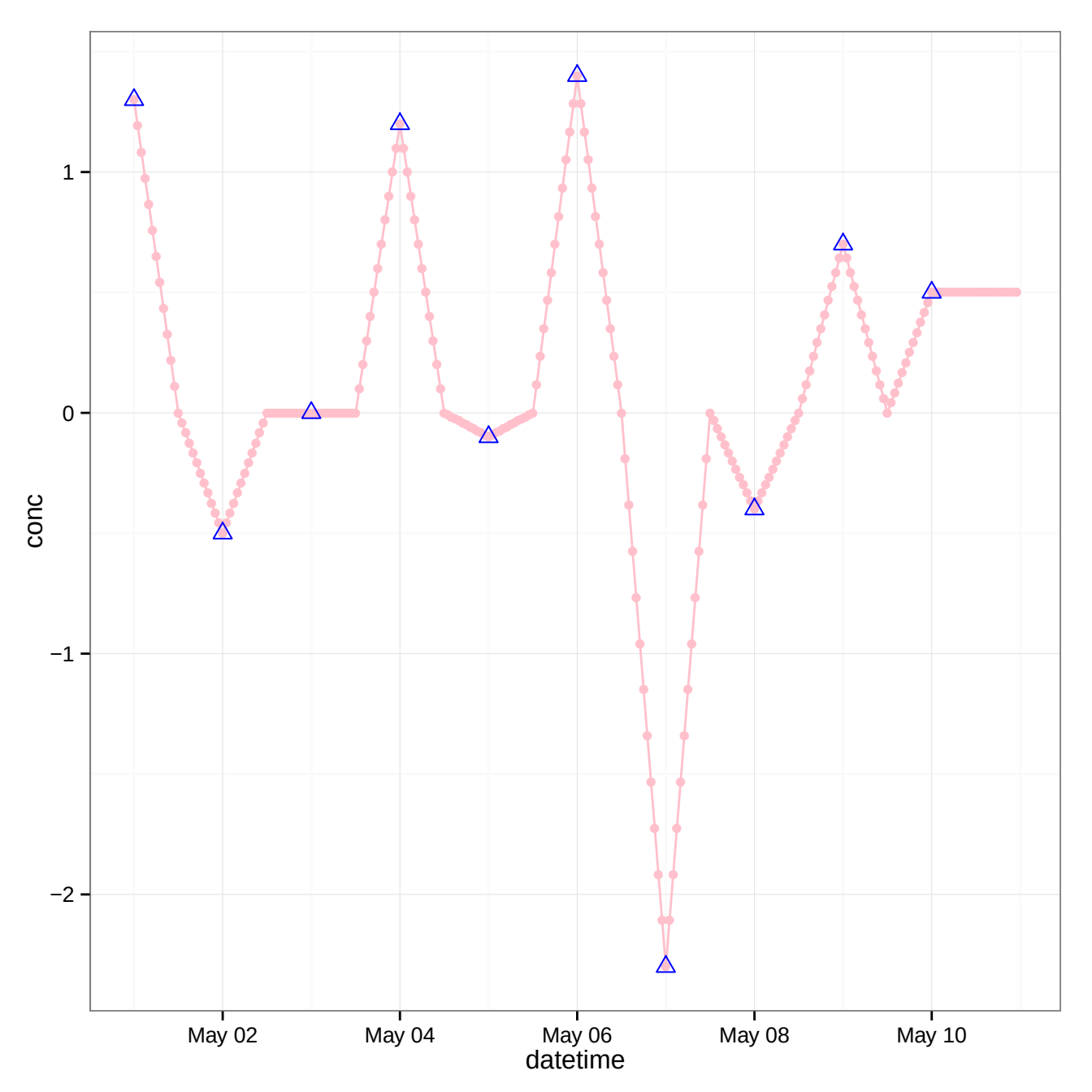

getRhoFirstOrderFun(rho = 0.4, time.step = as.difftime(1, units = "days"))(egdates[80], egdates)
0.0
0.2
0.4
0.6
0.8
1.0
Index
0
50
100
150
200

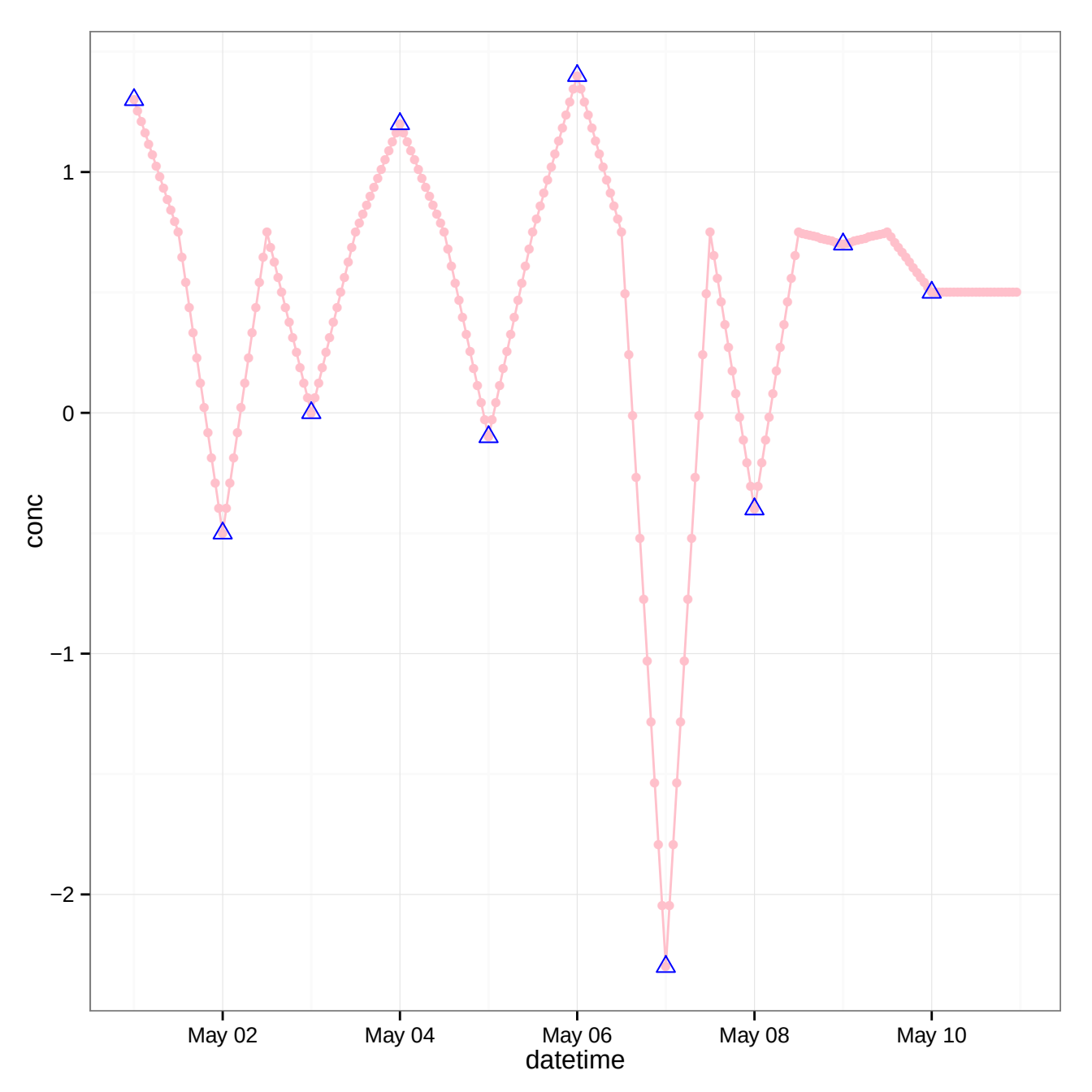


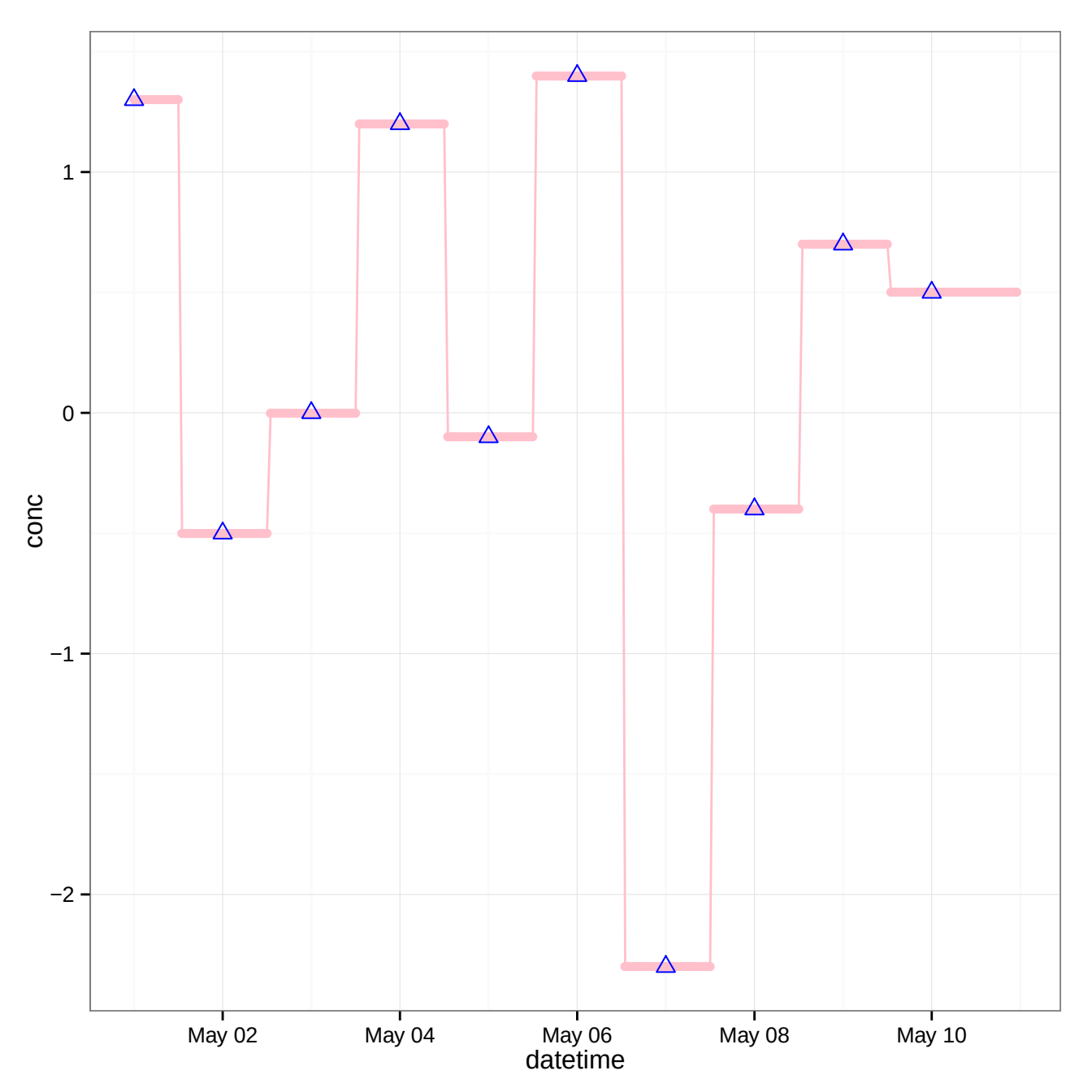

0.3
0.2
0.1
0.0
discharge
0.0
0.5
1.0
1.5
intercept
dtsimple
0.25
0.00
−0.25

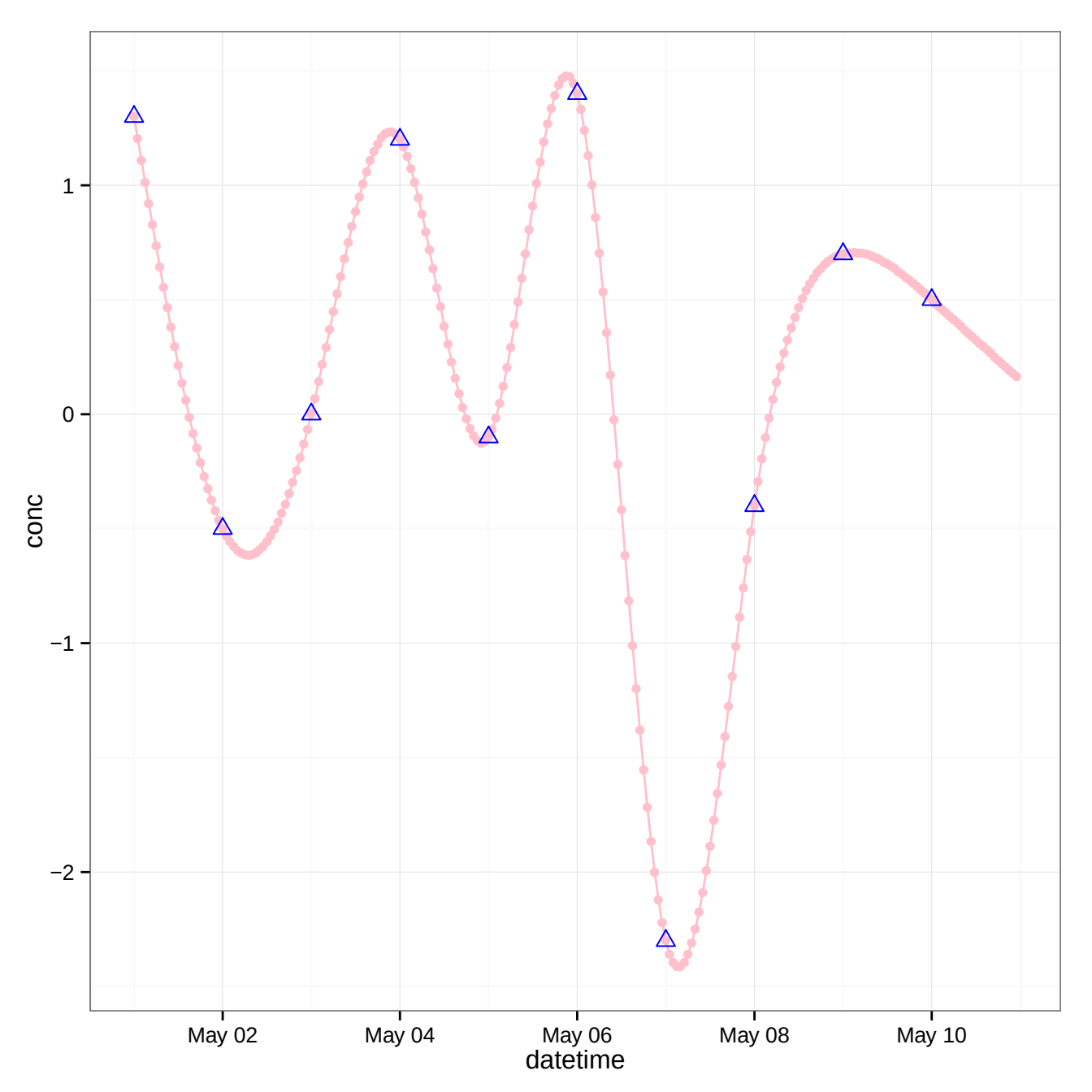

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

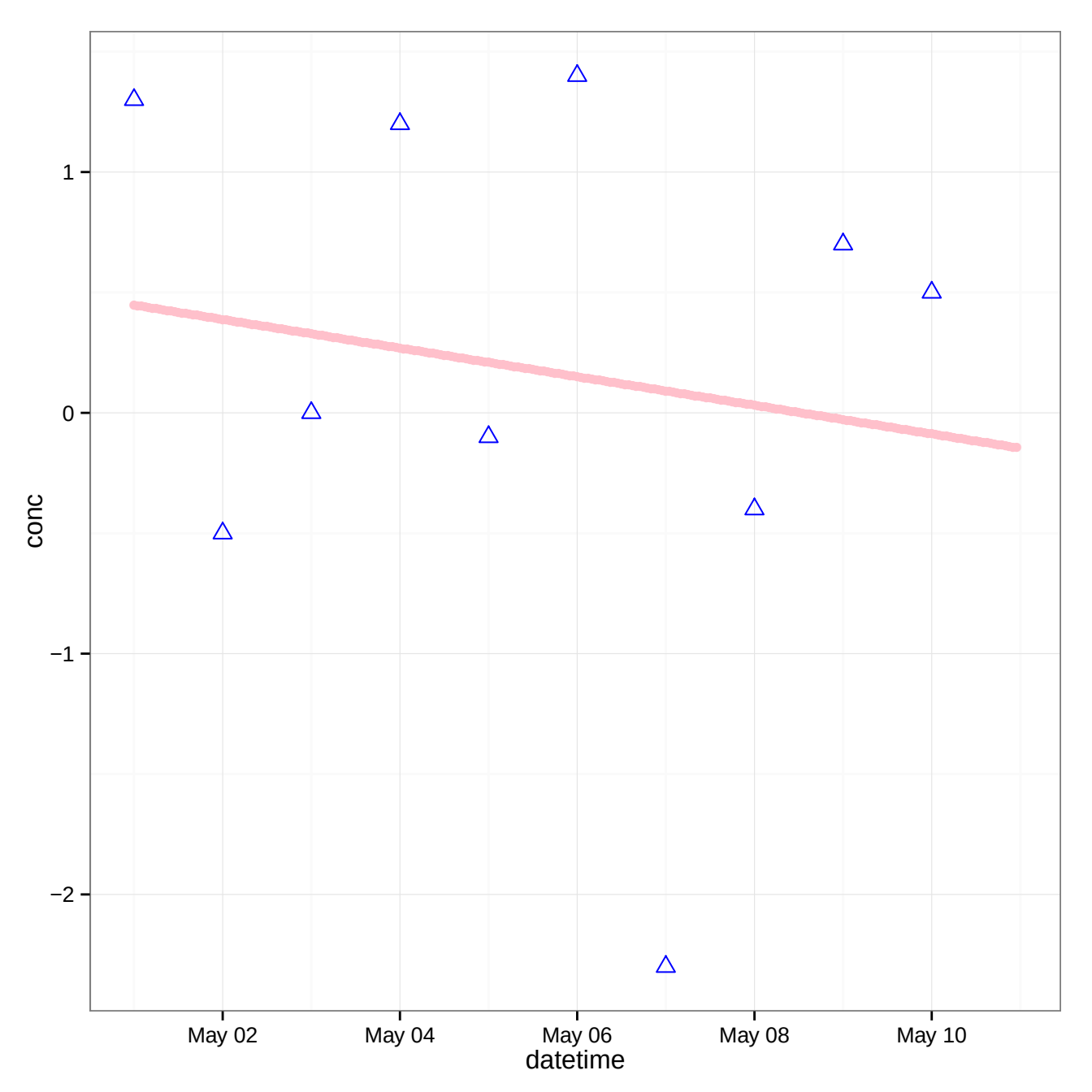

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

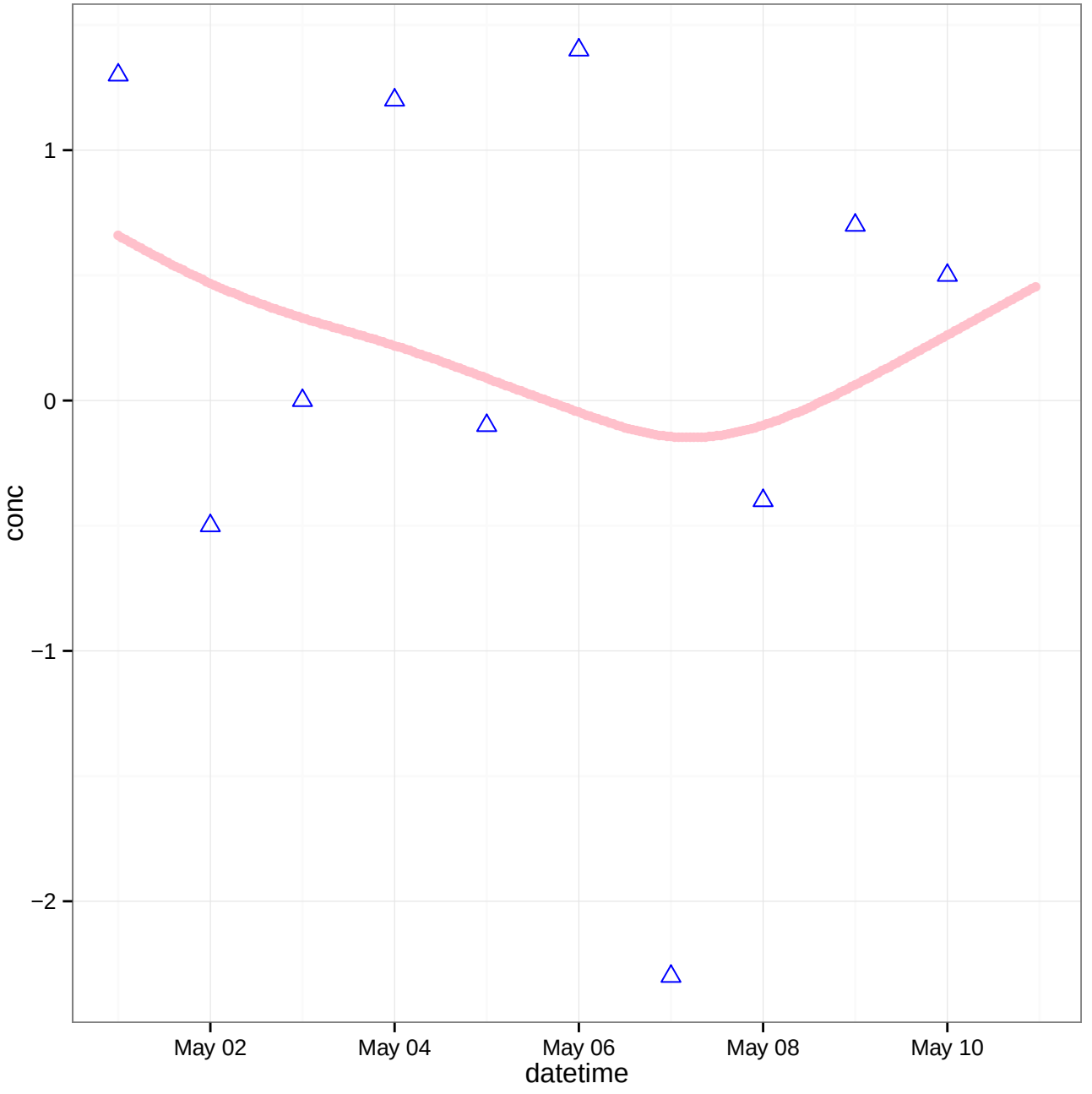

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

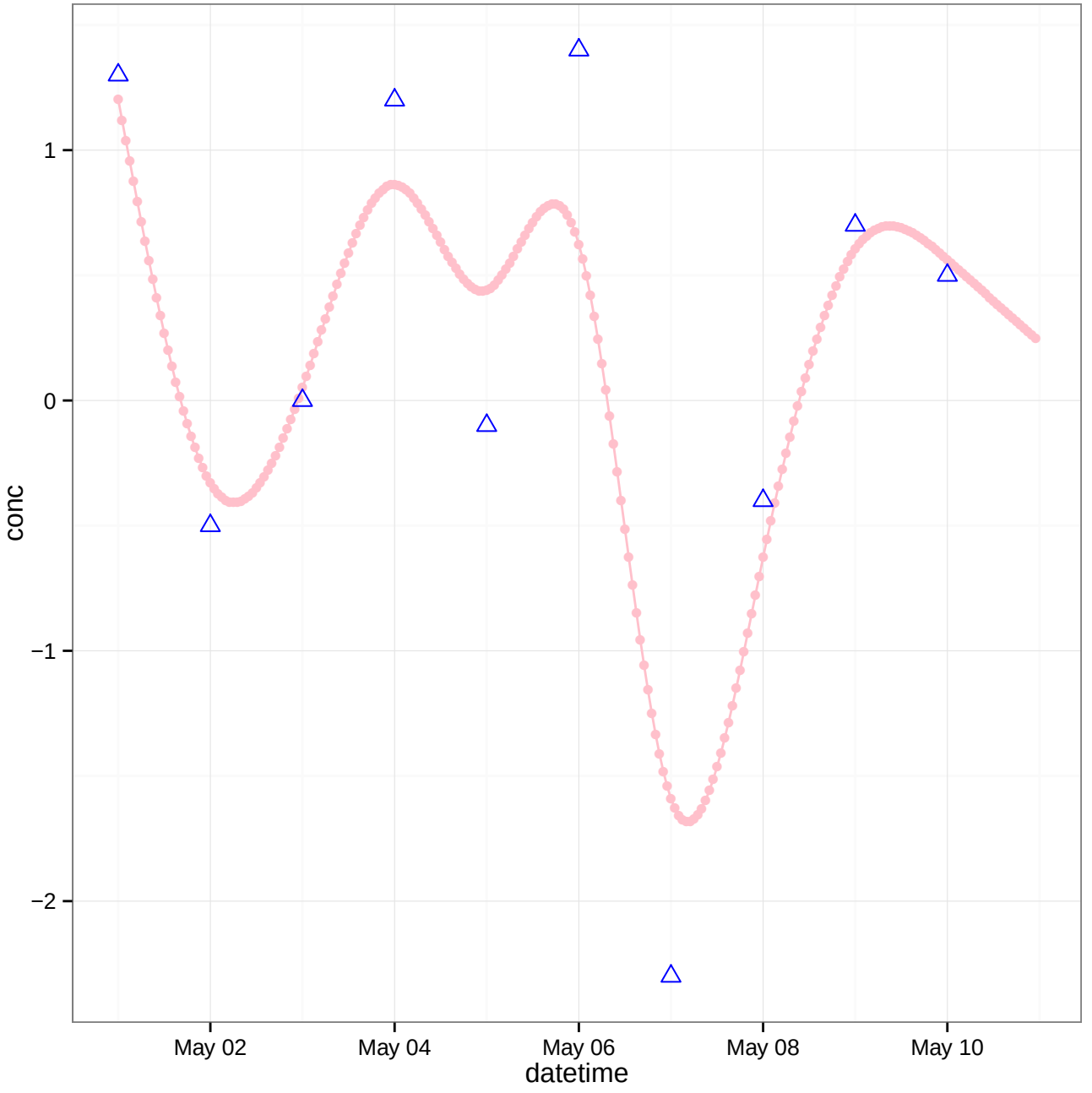

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

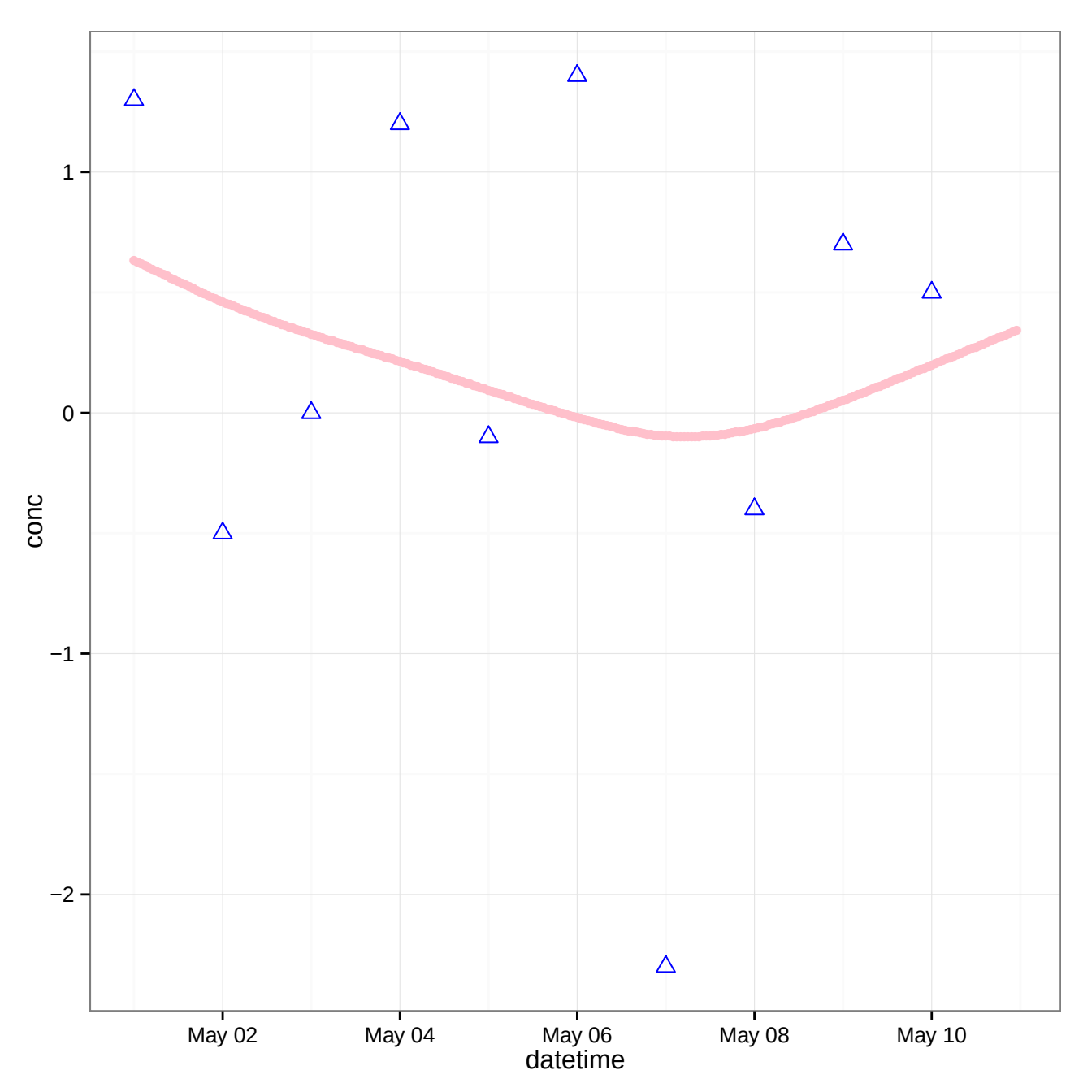

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

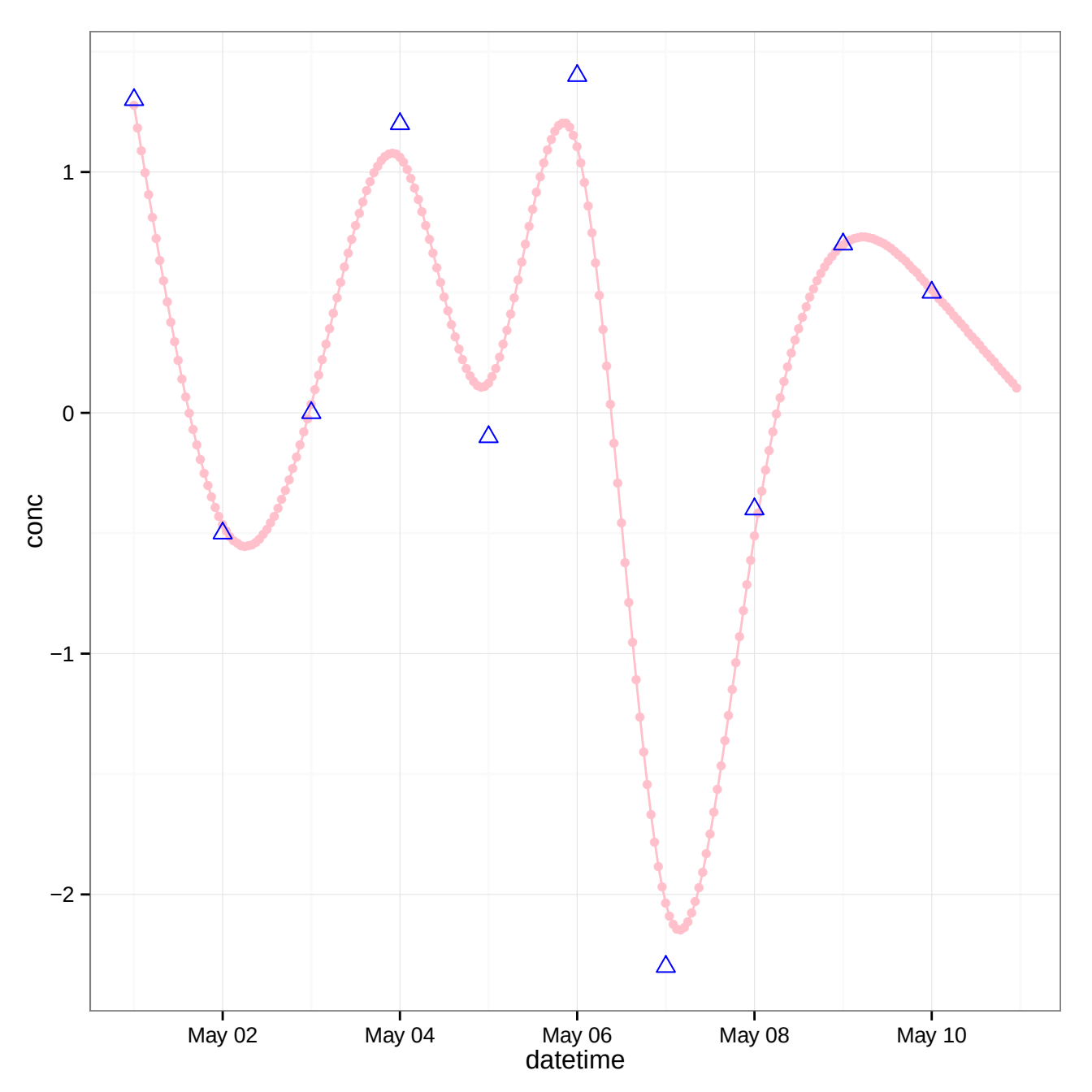

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

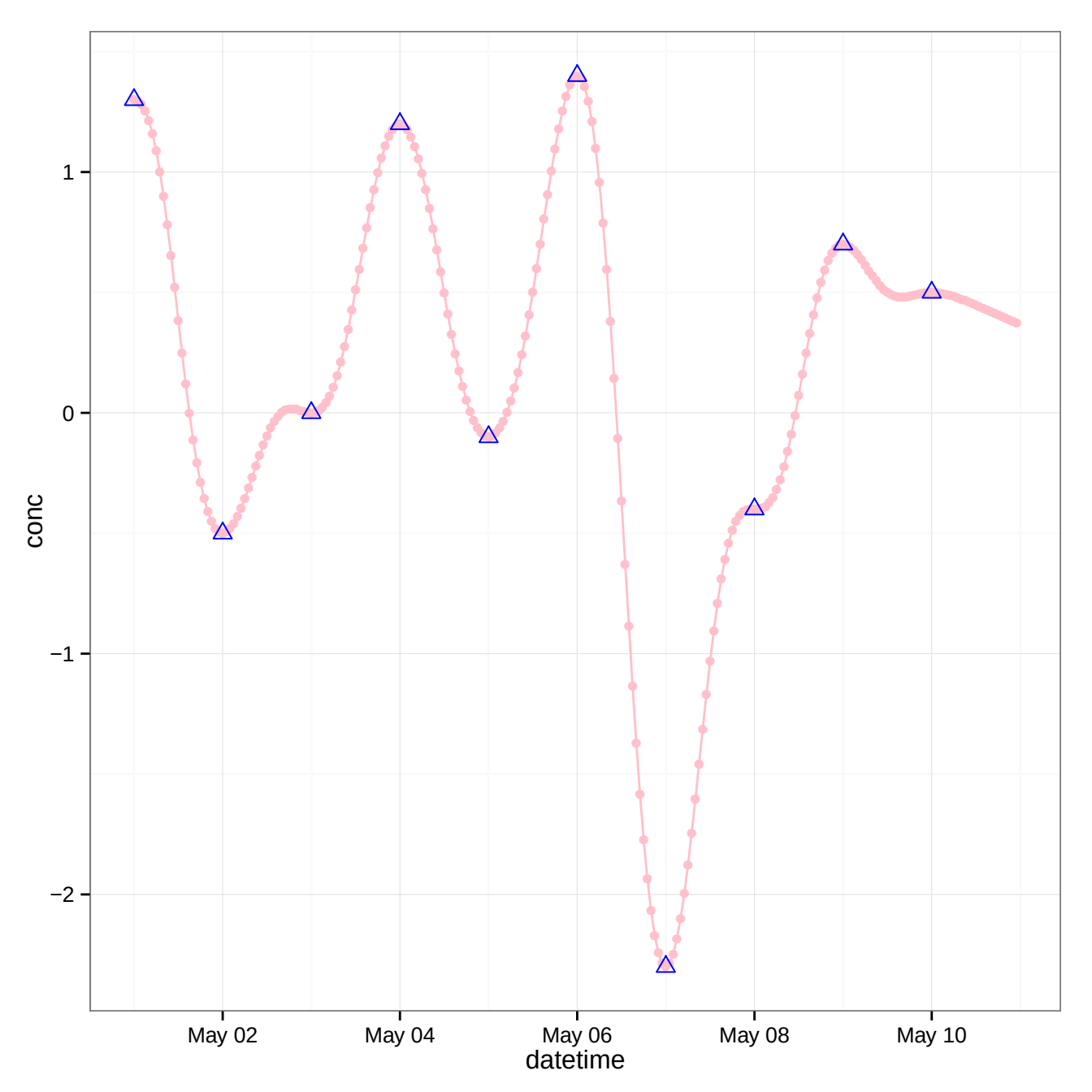

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

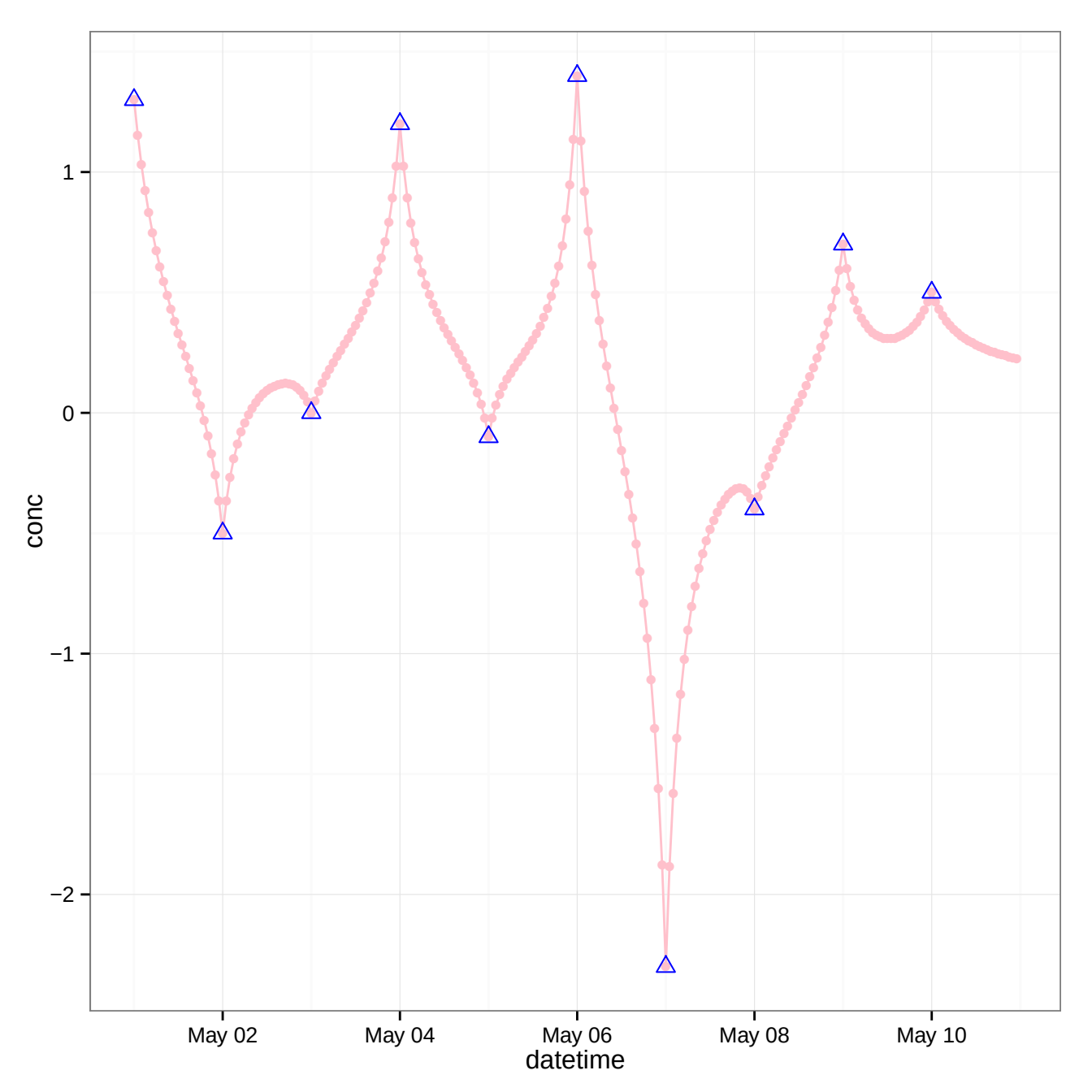

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

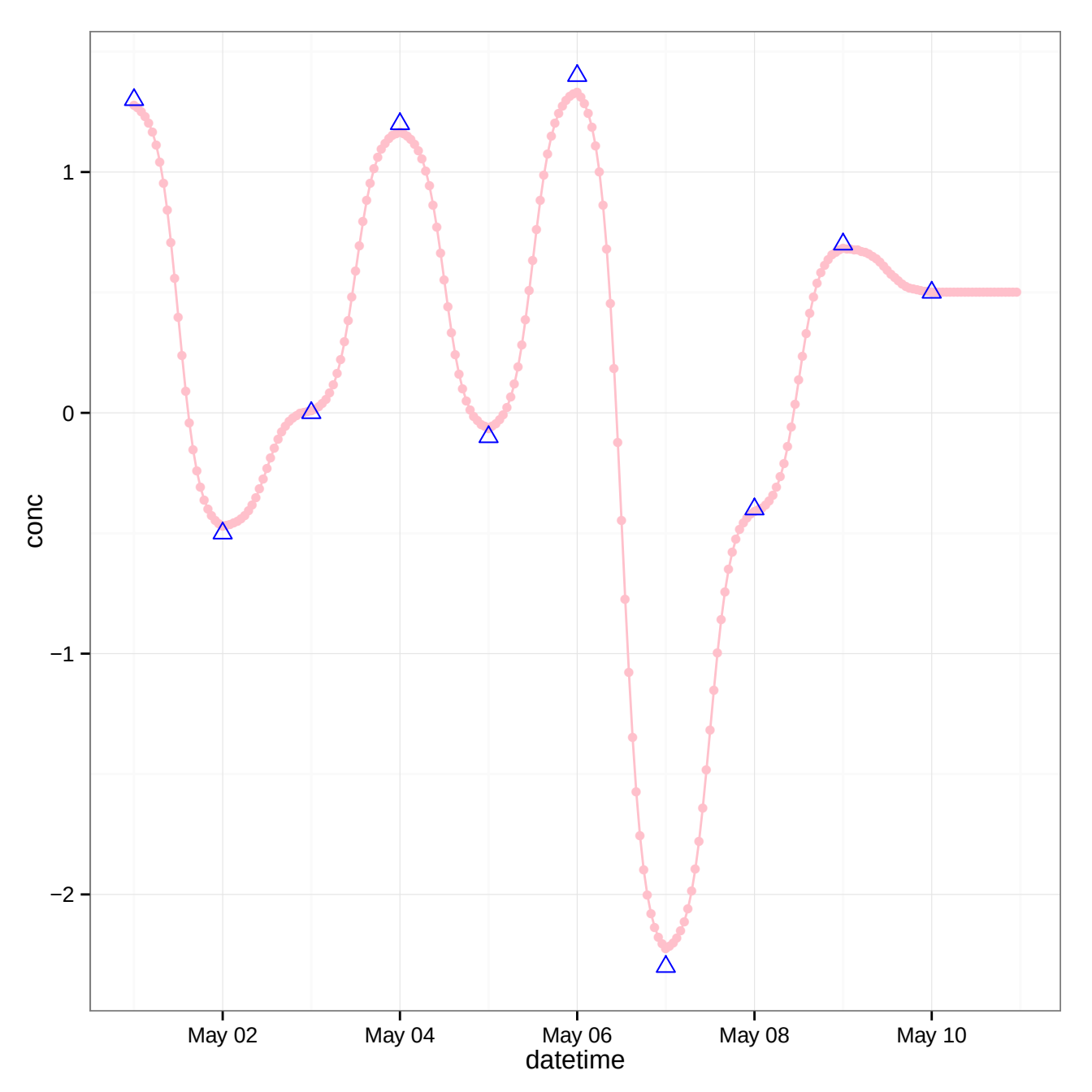

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

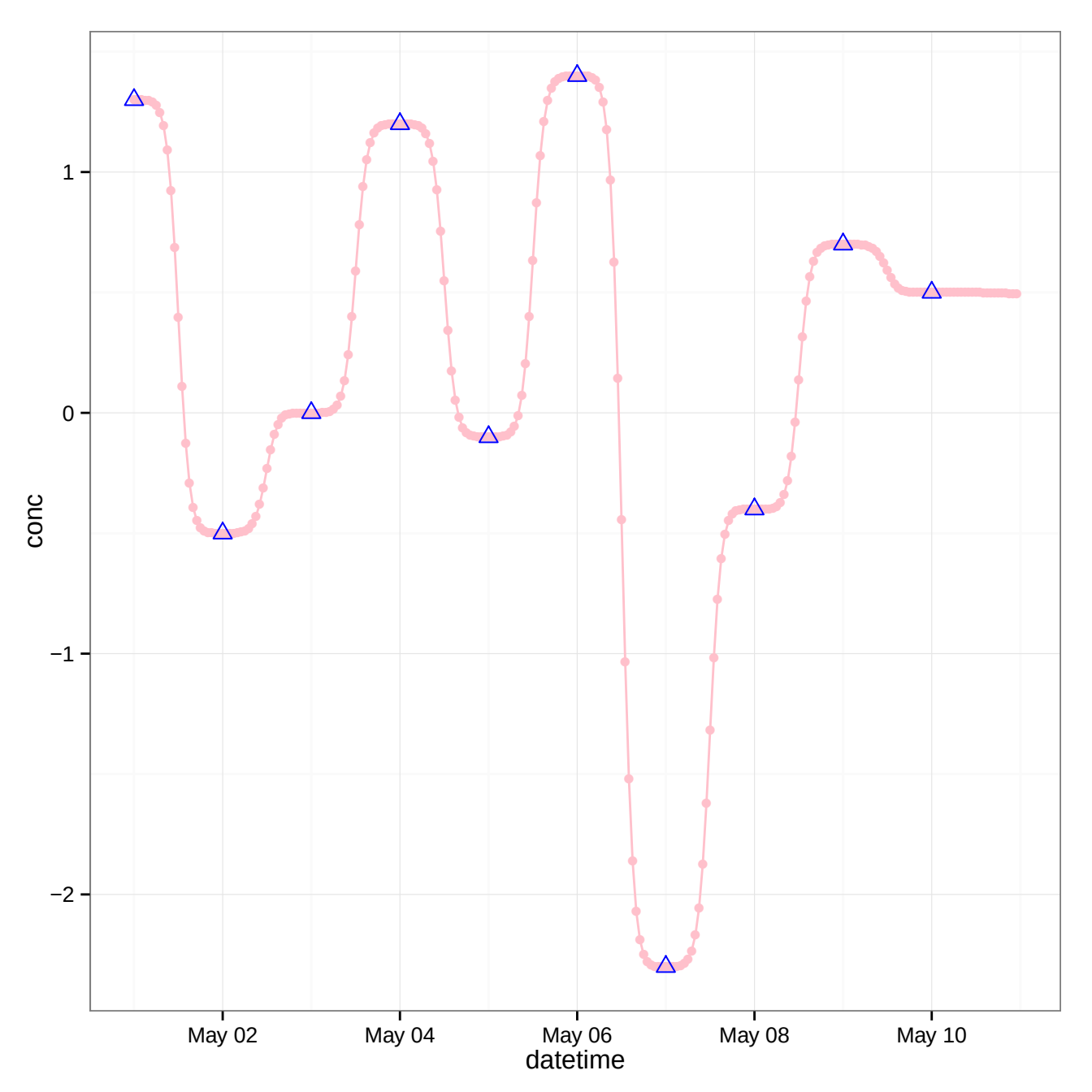

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

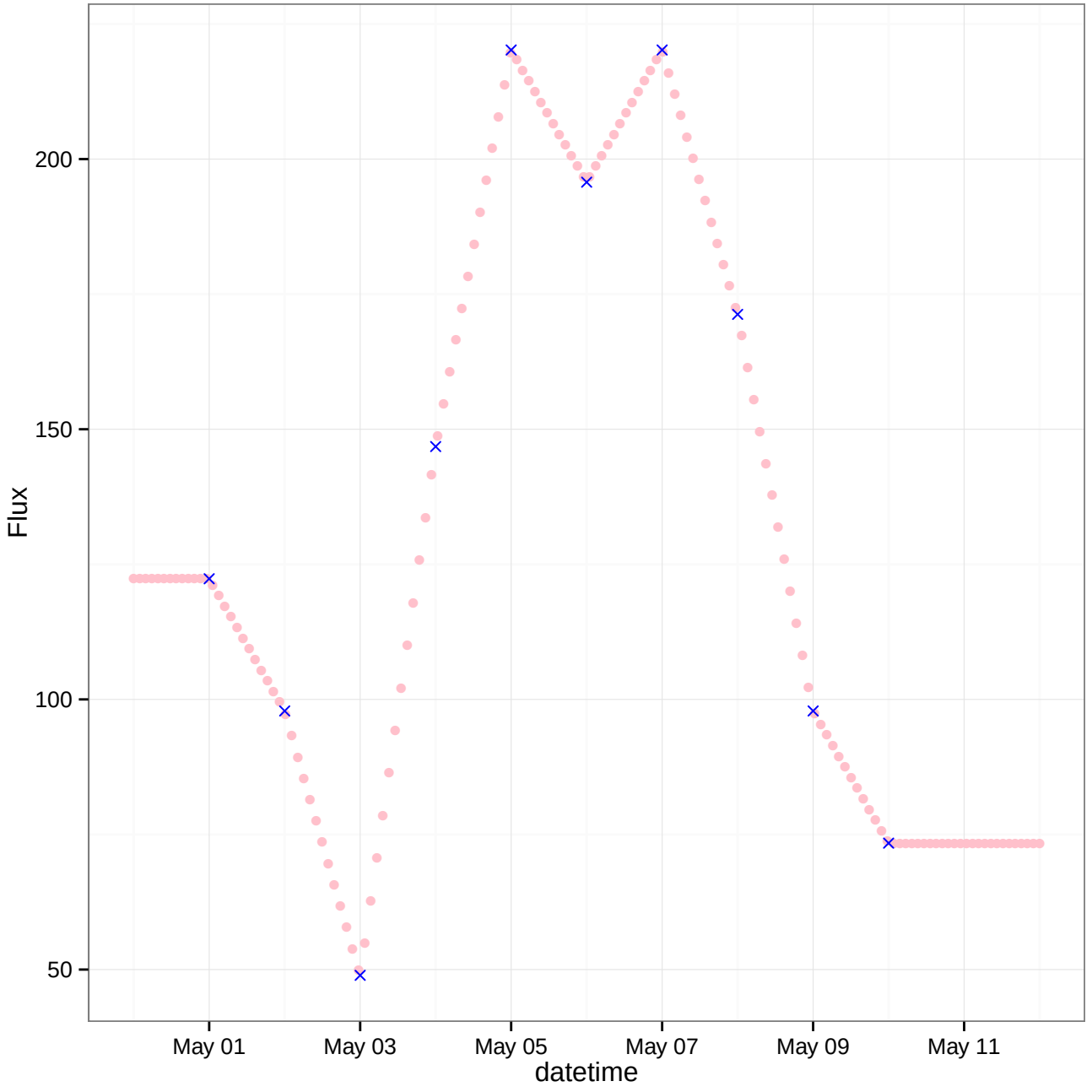

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

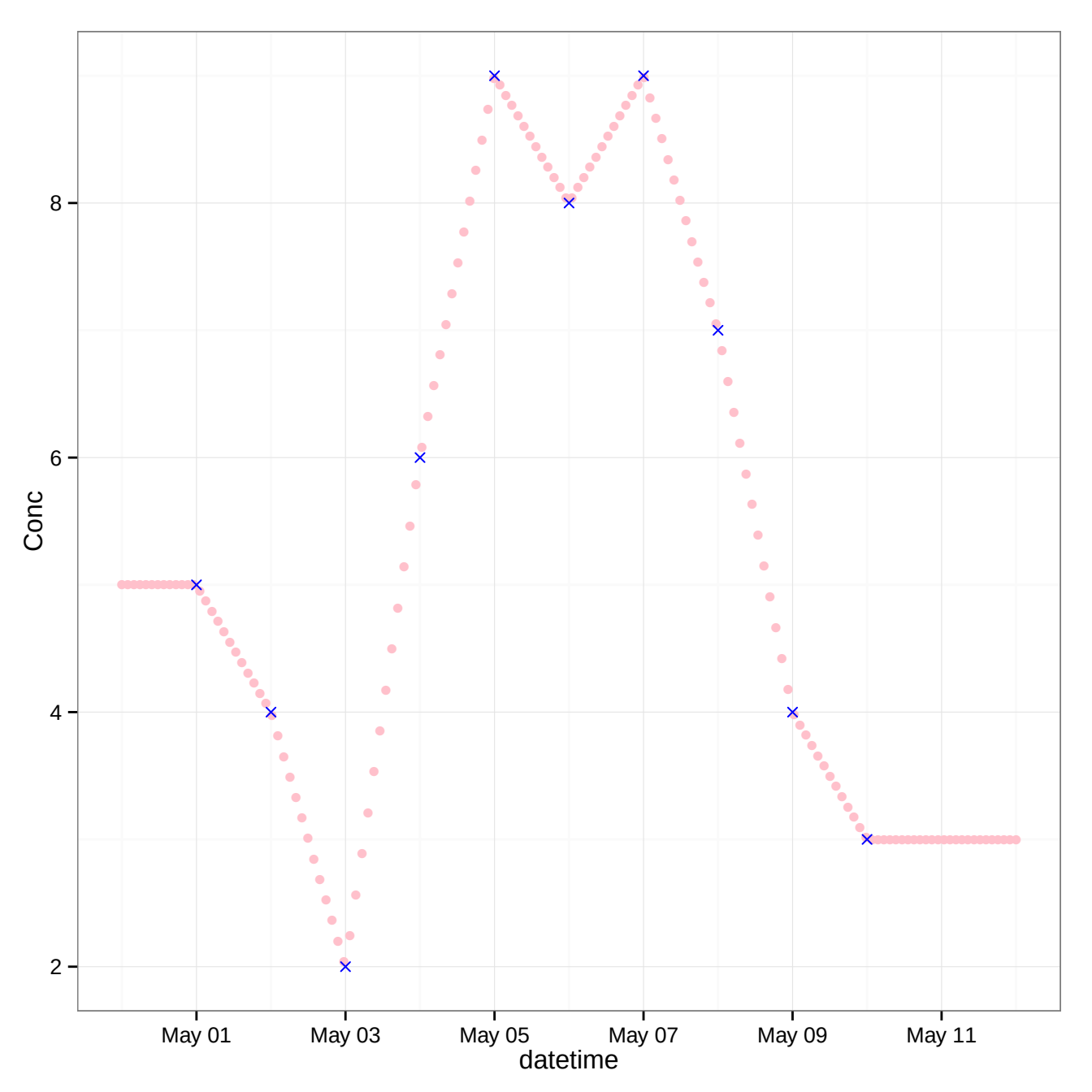

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

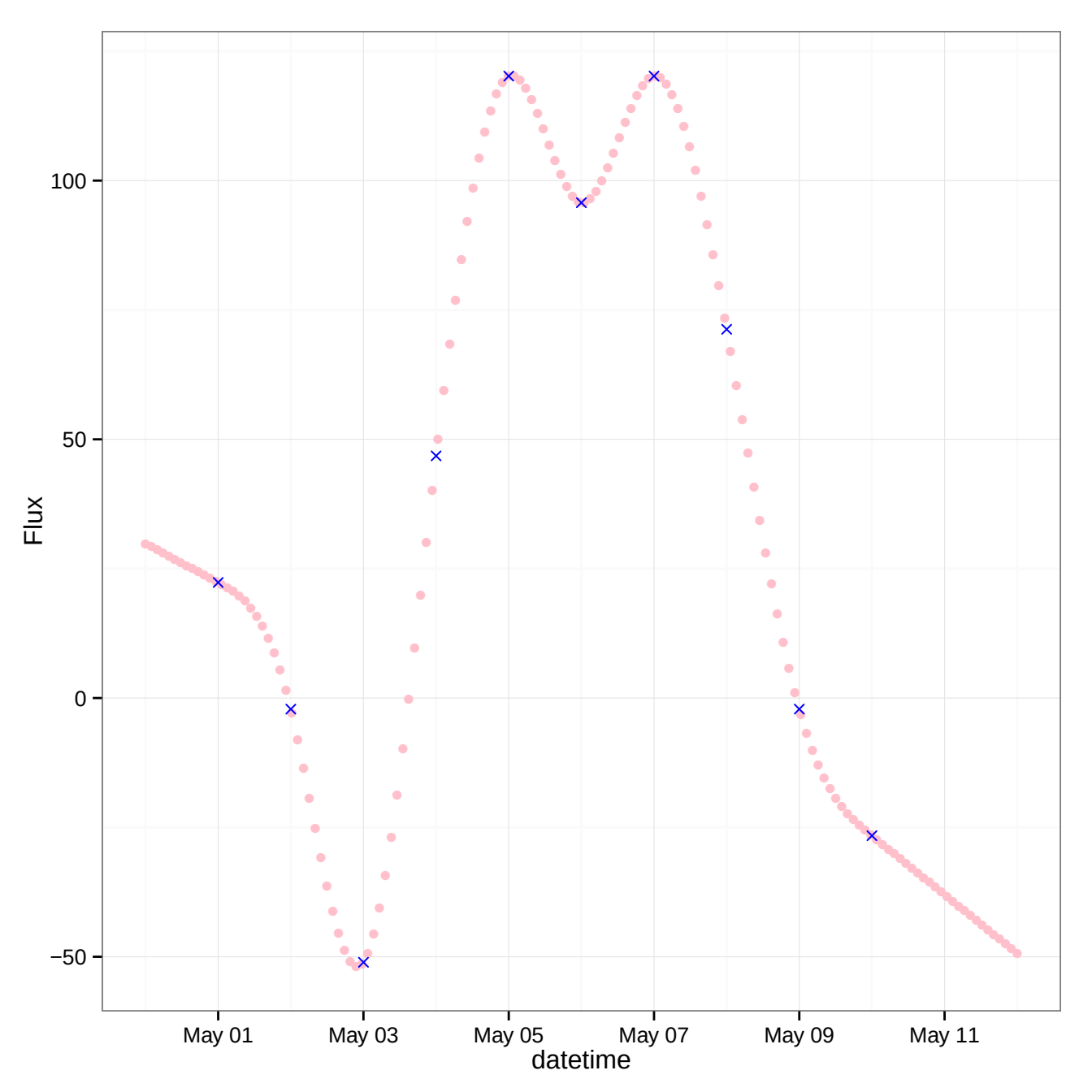

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

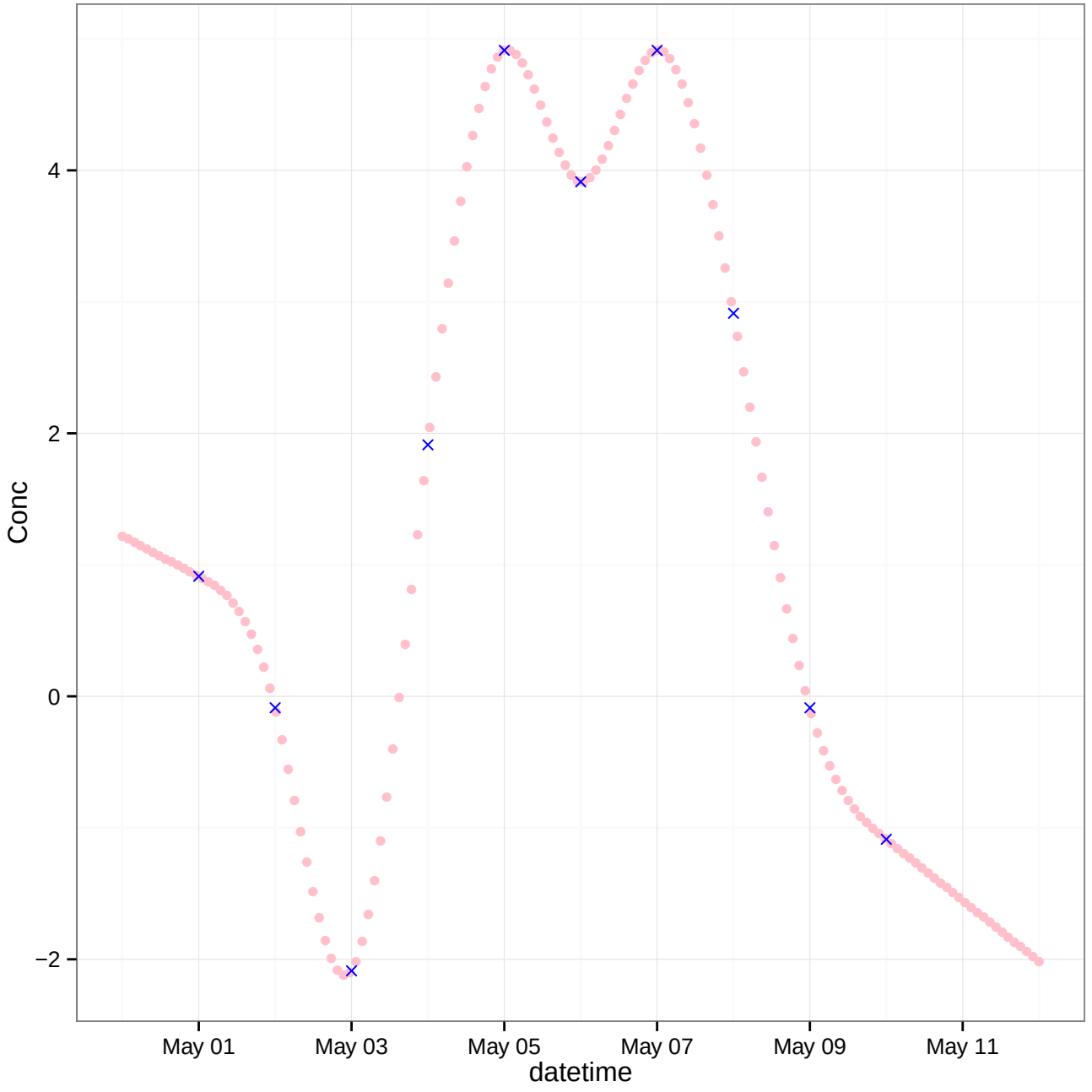

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

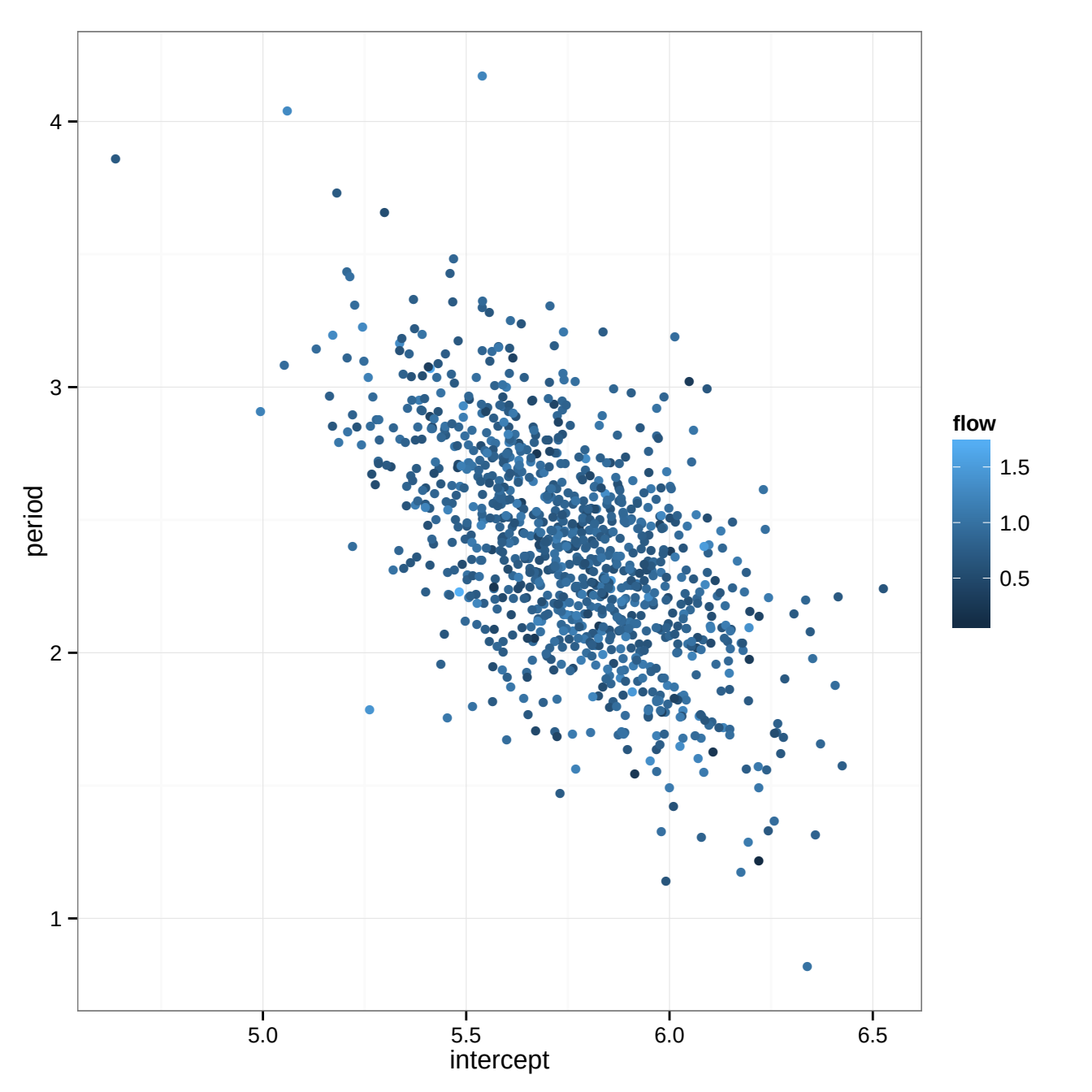

1
0
−1
−2
conc
May 02
May 04
May 06
May 08
May 10
datetime

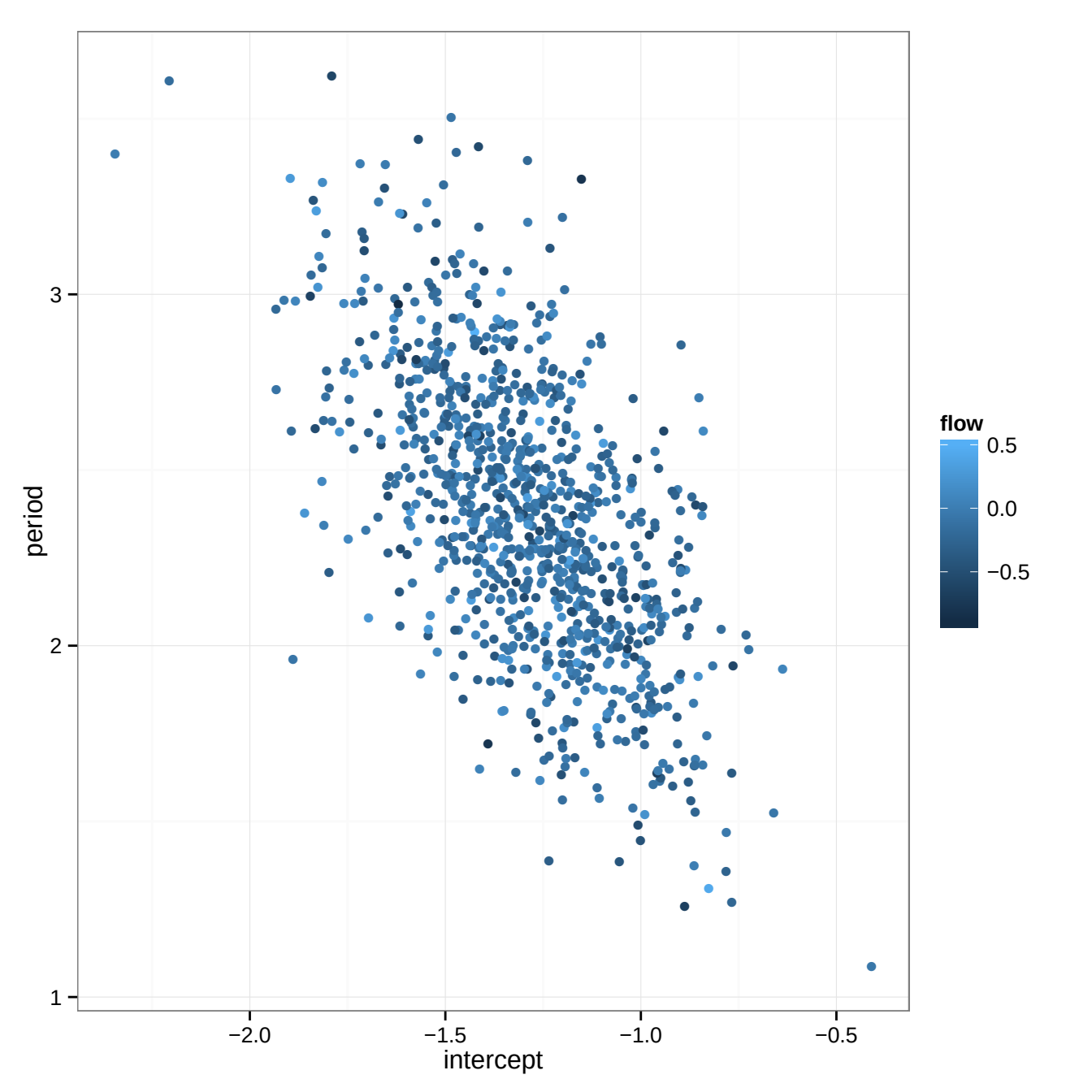

200
150
100
50
Flux
May 01
May 03
May 05
May 07
May 09
May 11
datetime

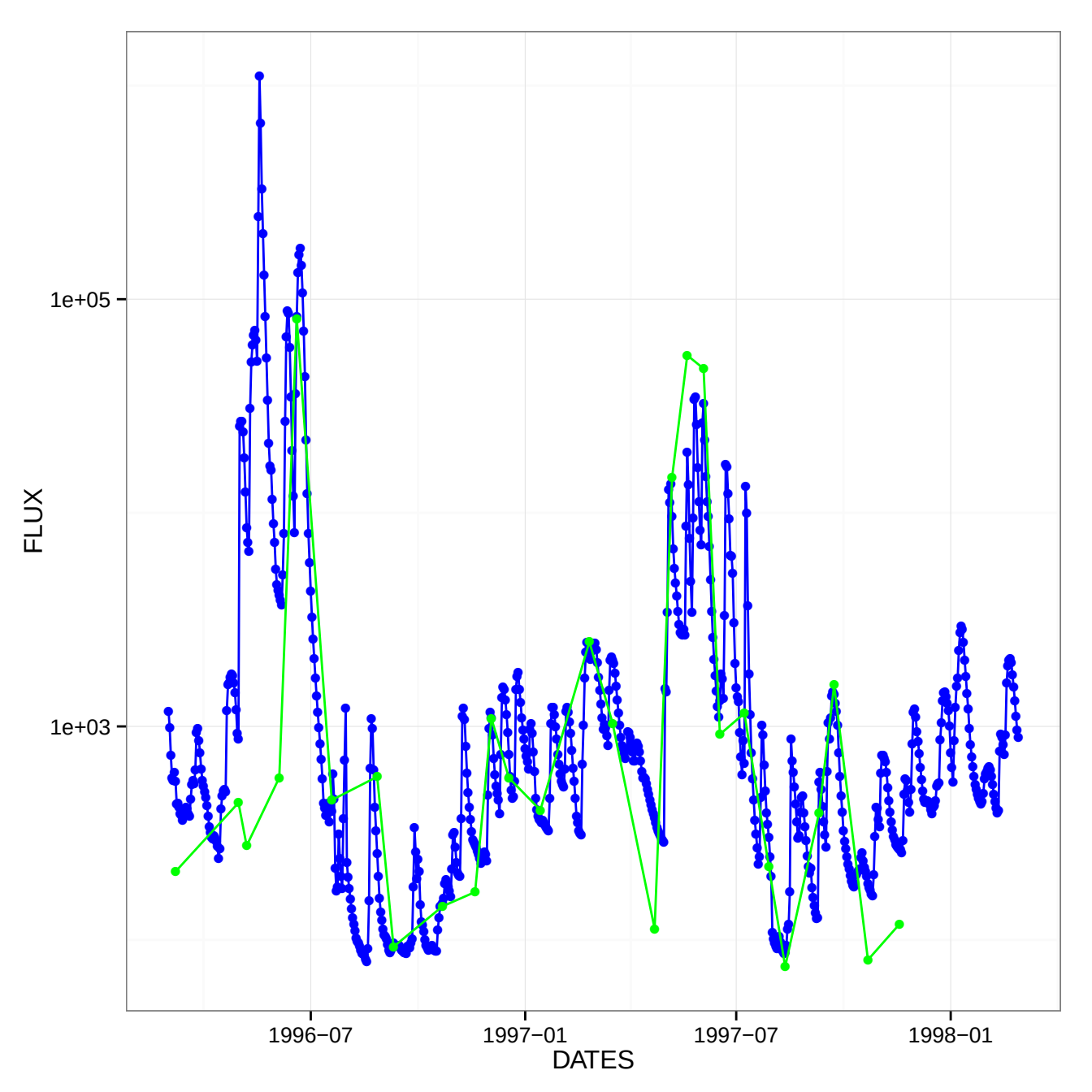

Conc
8
6
4
2
May 01
May 03
May 05
May 07
May 09
May 11
datetime

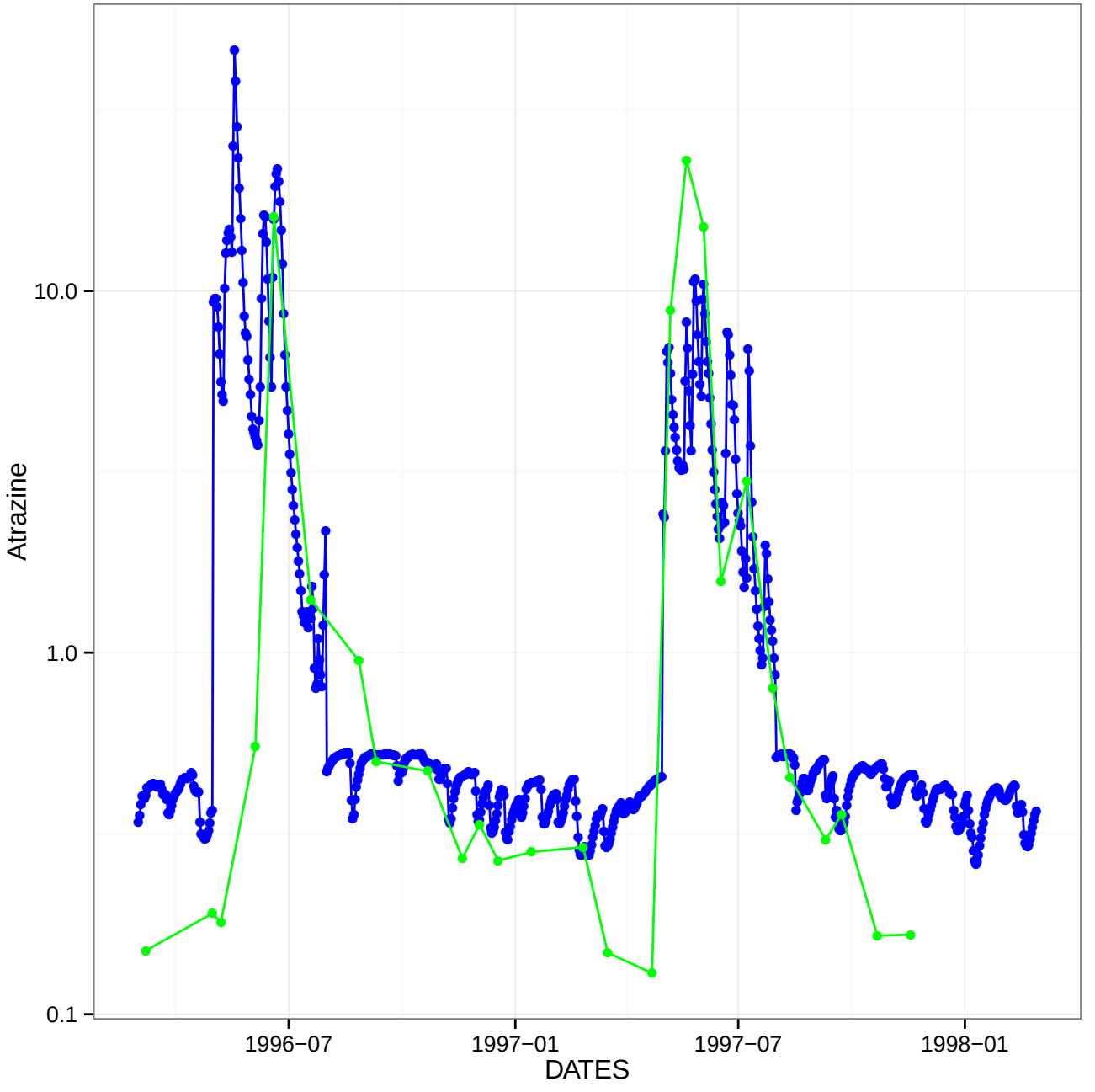

100
50
0
−50
Flux
May 01
May 03
May 05
May 07
May 09
May 11
datetime

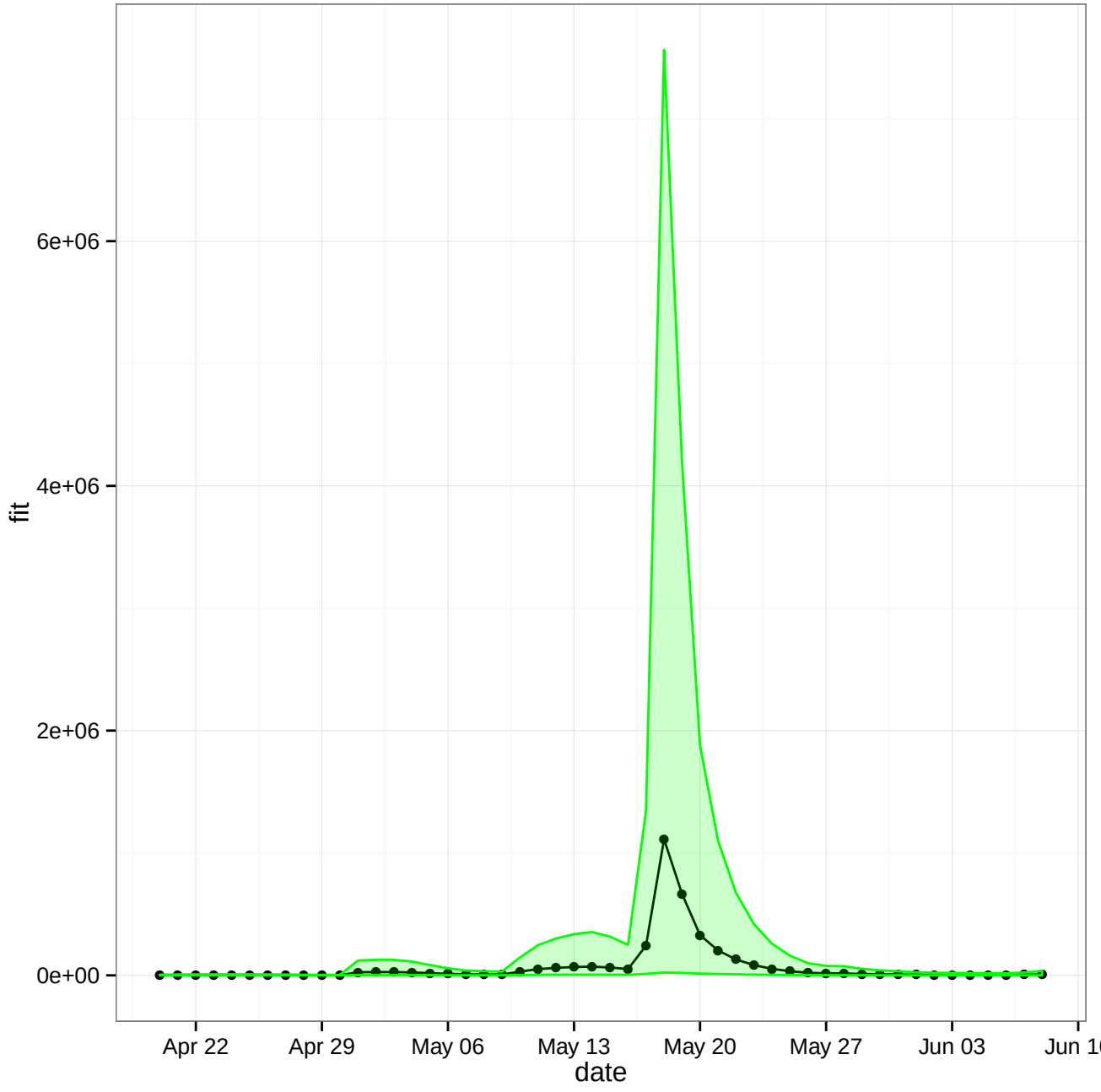

4
2
0
−2
Conc
May 01
May 03
May 05
May 07
May 09
May 11
datetime

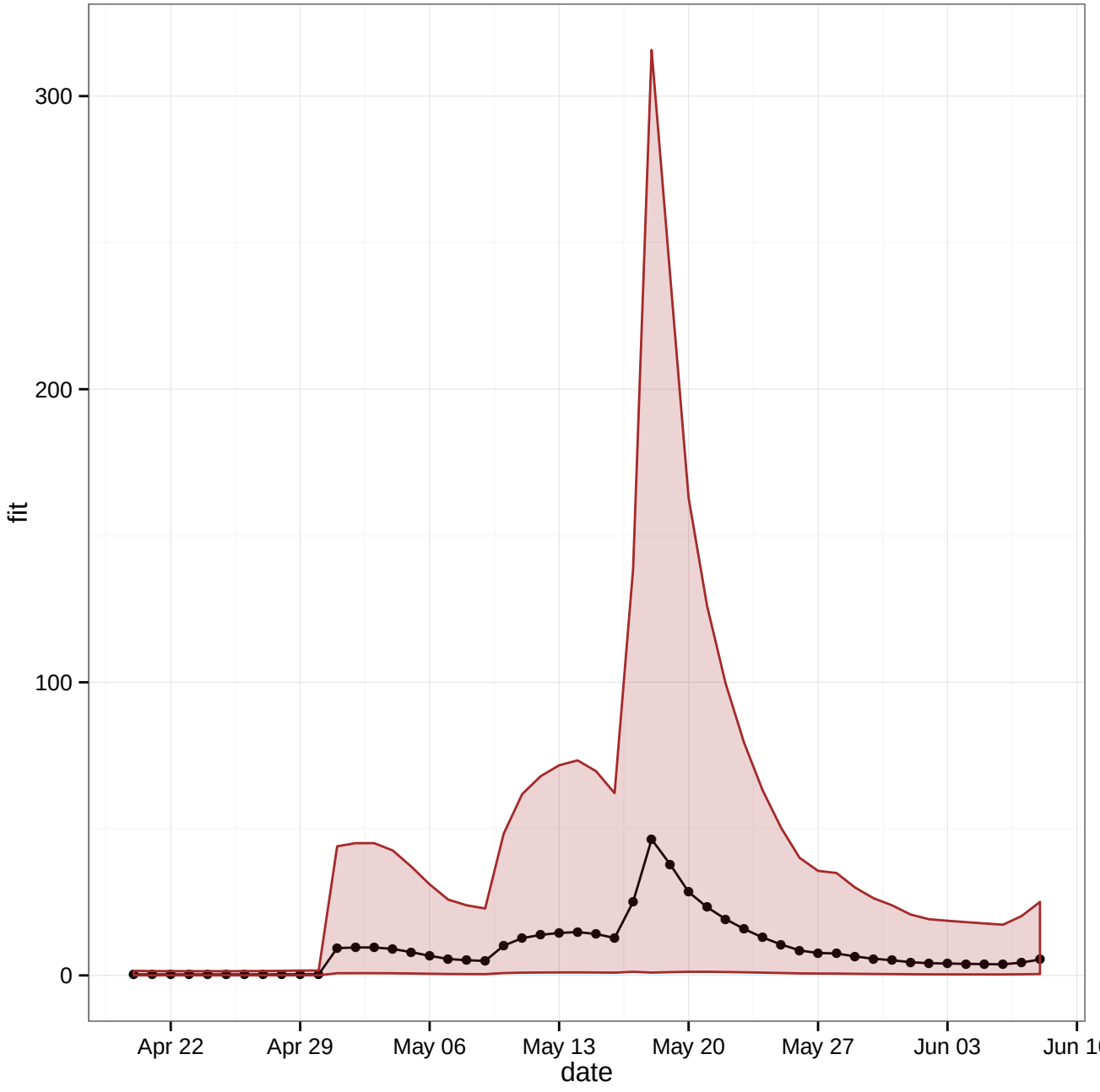

period
intercept
4
3
2
1
5.0
5.5
6.0
6.5
flow
1.5
1.0
0.5

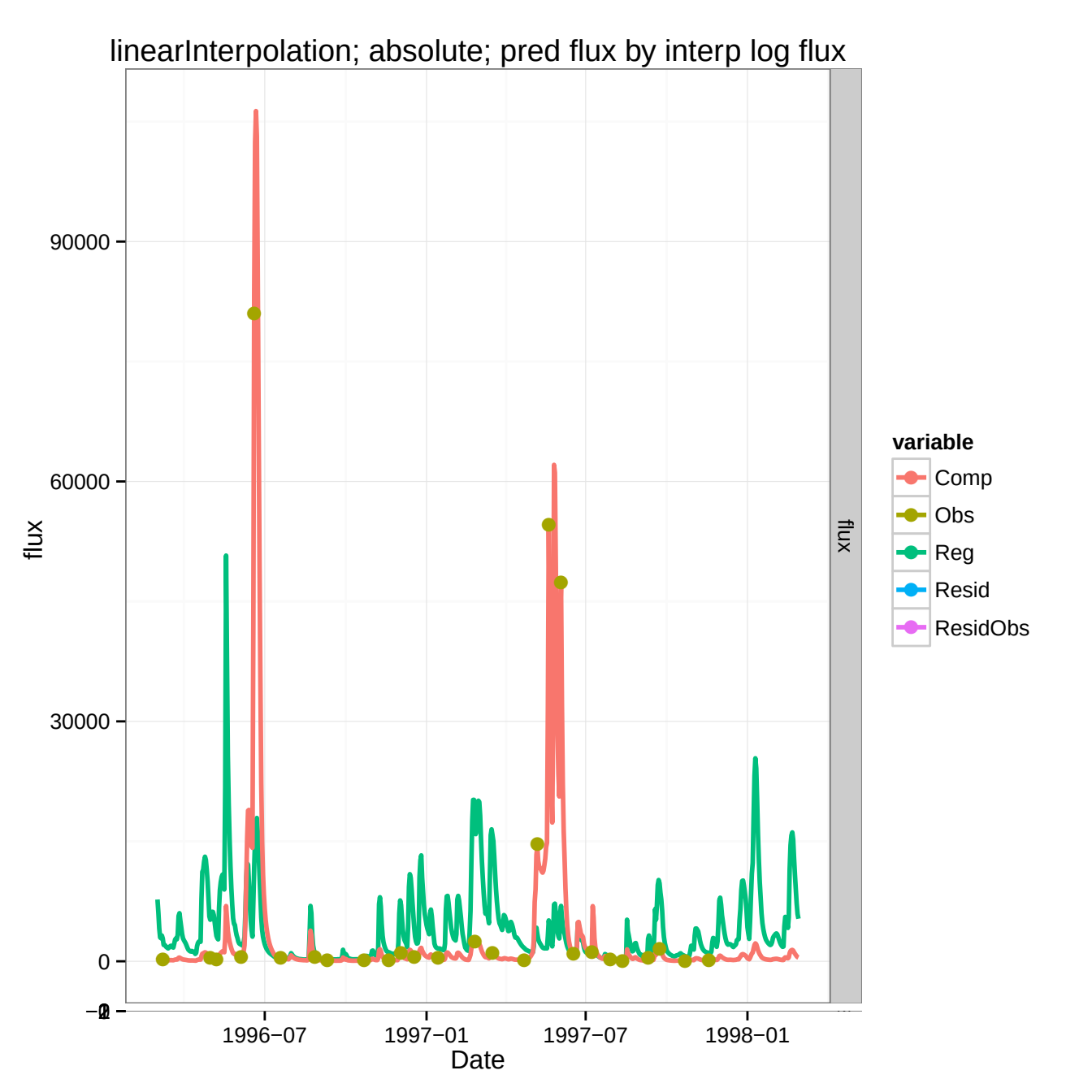

period
3
2
1
−2.0
−1.5
−1.0
−0.5
intercept
flow
0.5
0.0
−0.5

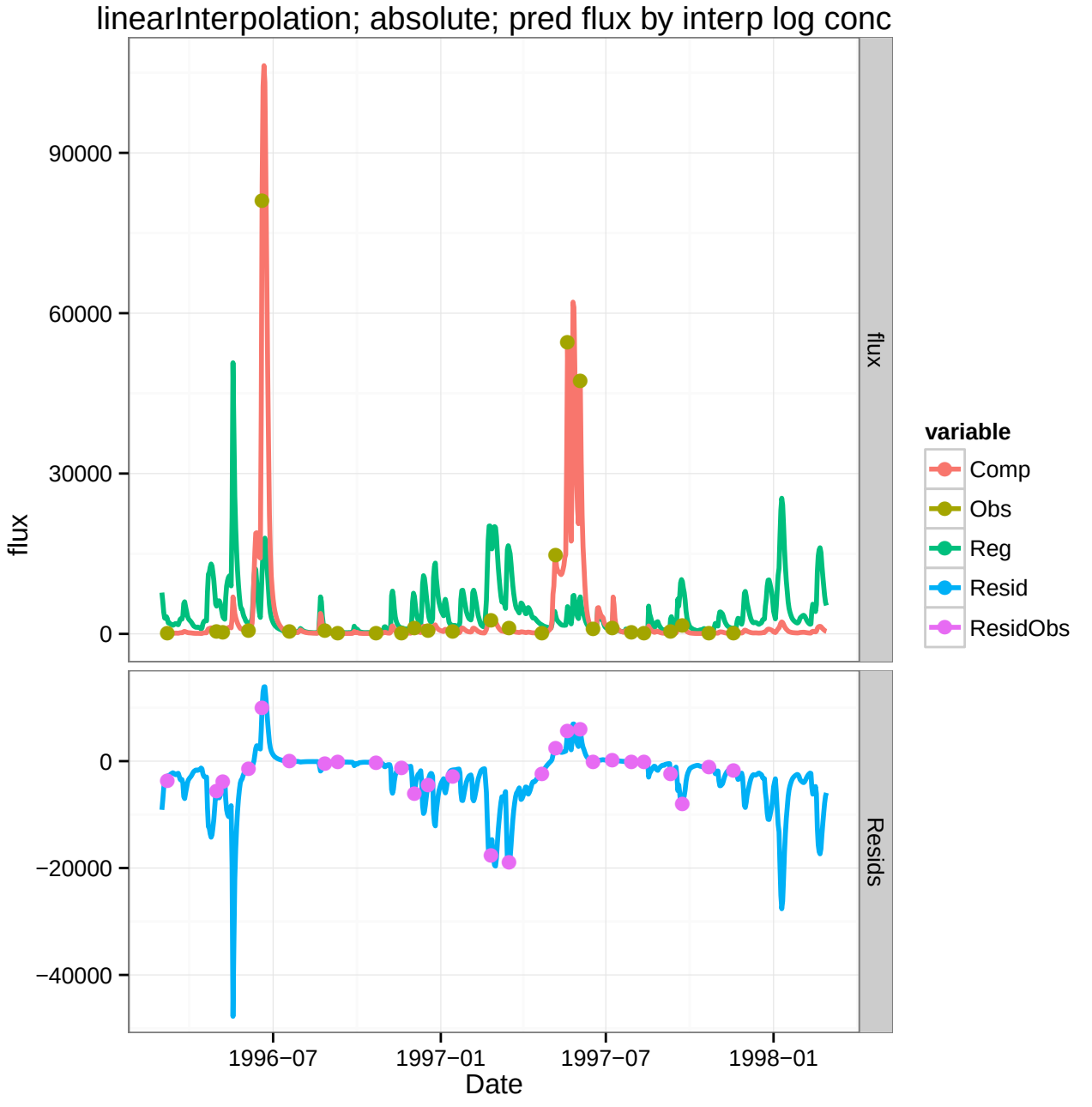

1e+05
1e+03
FLUX
1996−07
1997−01
1997−07
1998−01
DATES

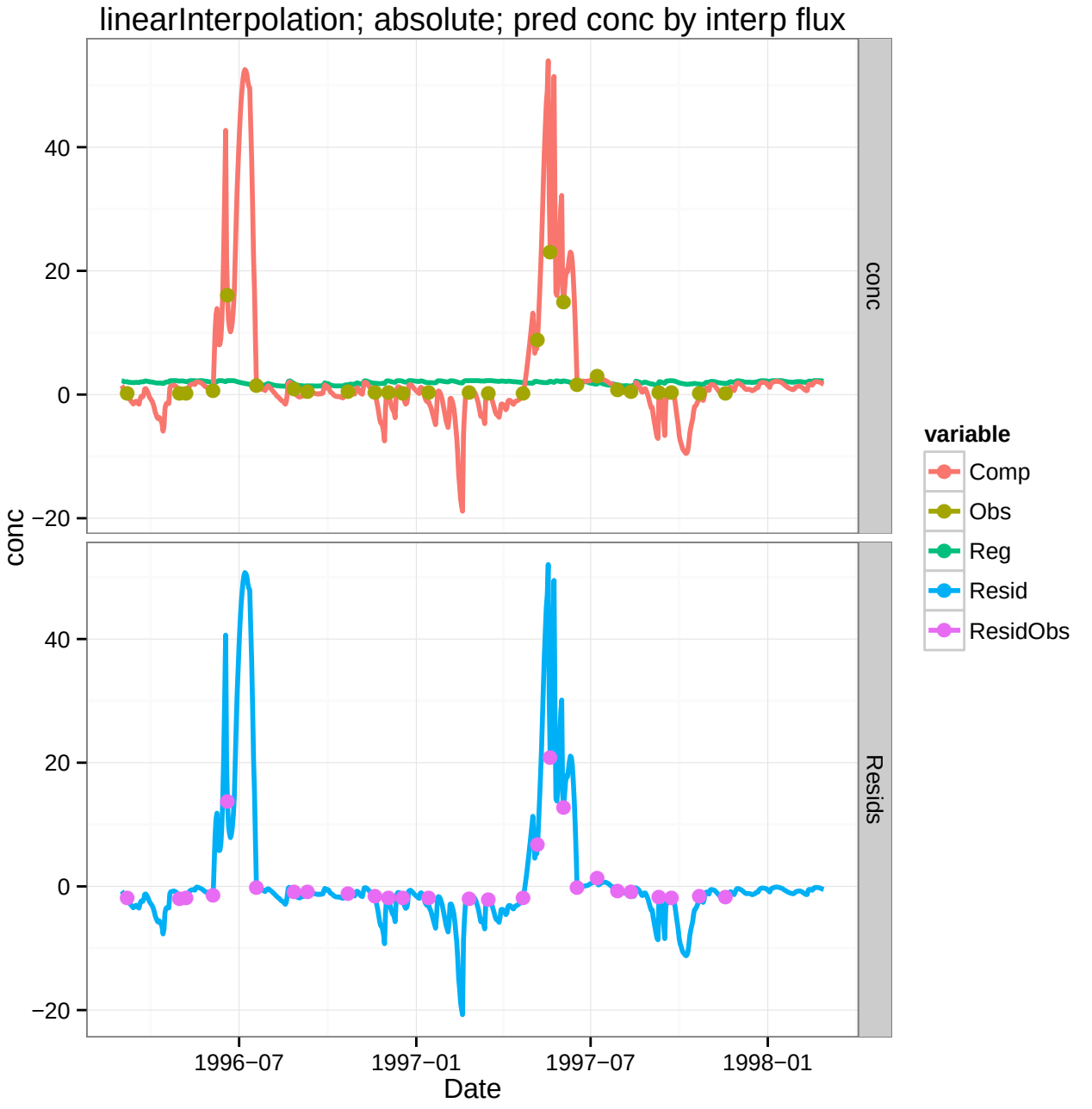

Atrazine
10.0
1.0
0.1
1996−07
1997−01
1997−07
1998−01
DATES

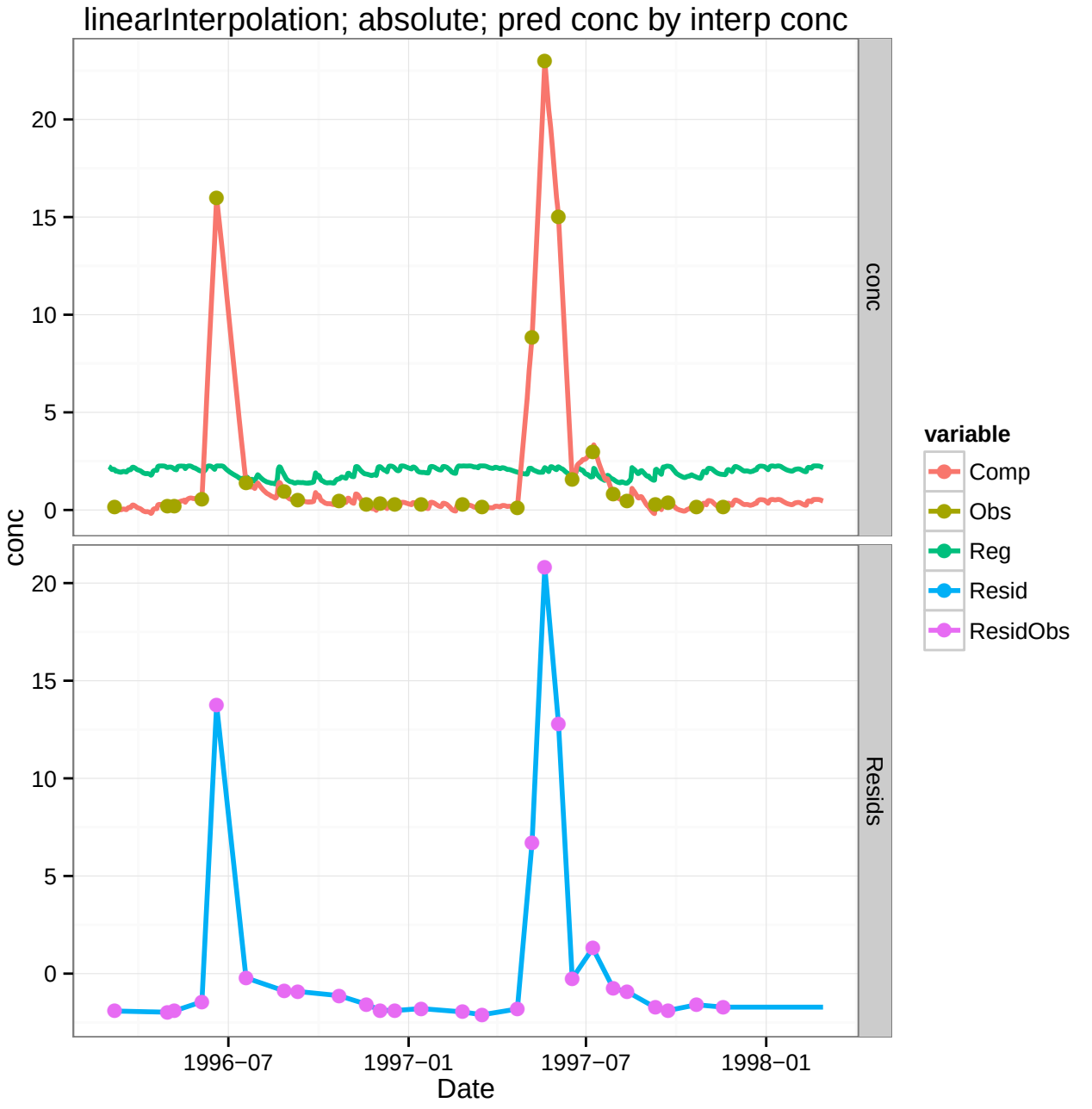

6e+06
4e+06
2e+06
0e+00
fit
Apr 22
Apr 29
May 06
May 13
May 20
May 27
Jun 03
Jun 10
date

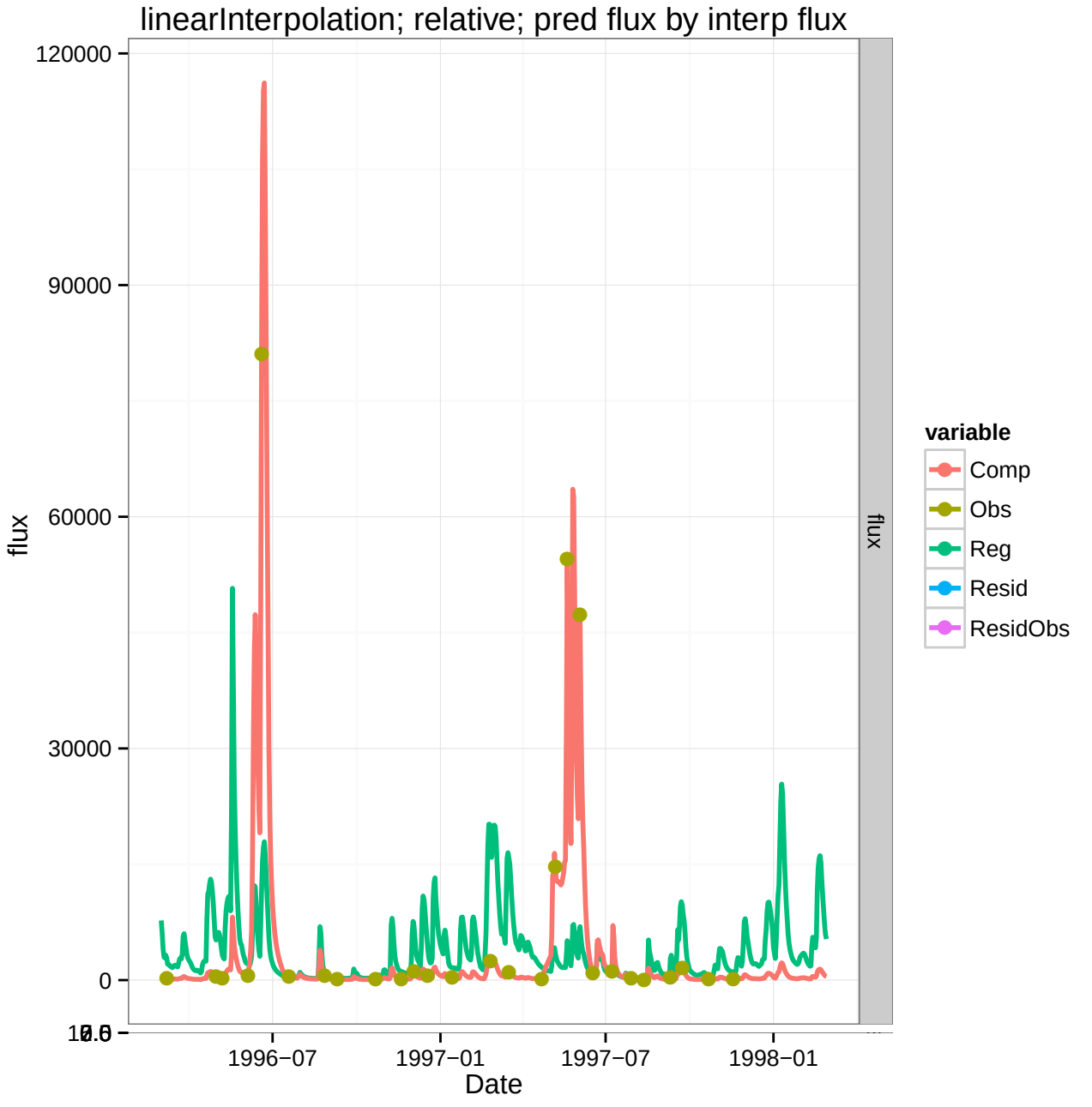

300
200
100
0
fit
Apr 22
Apr 29
May 06
May 13
May 20
May 27
Jun 03
Jun 10
date

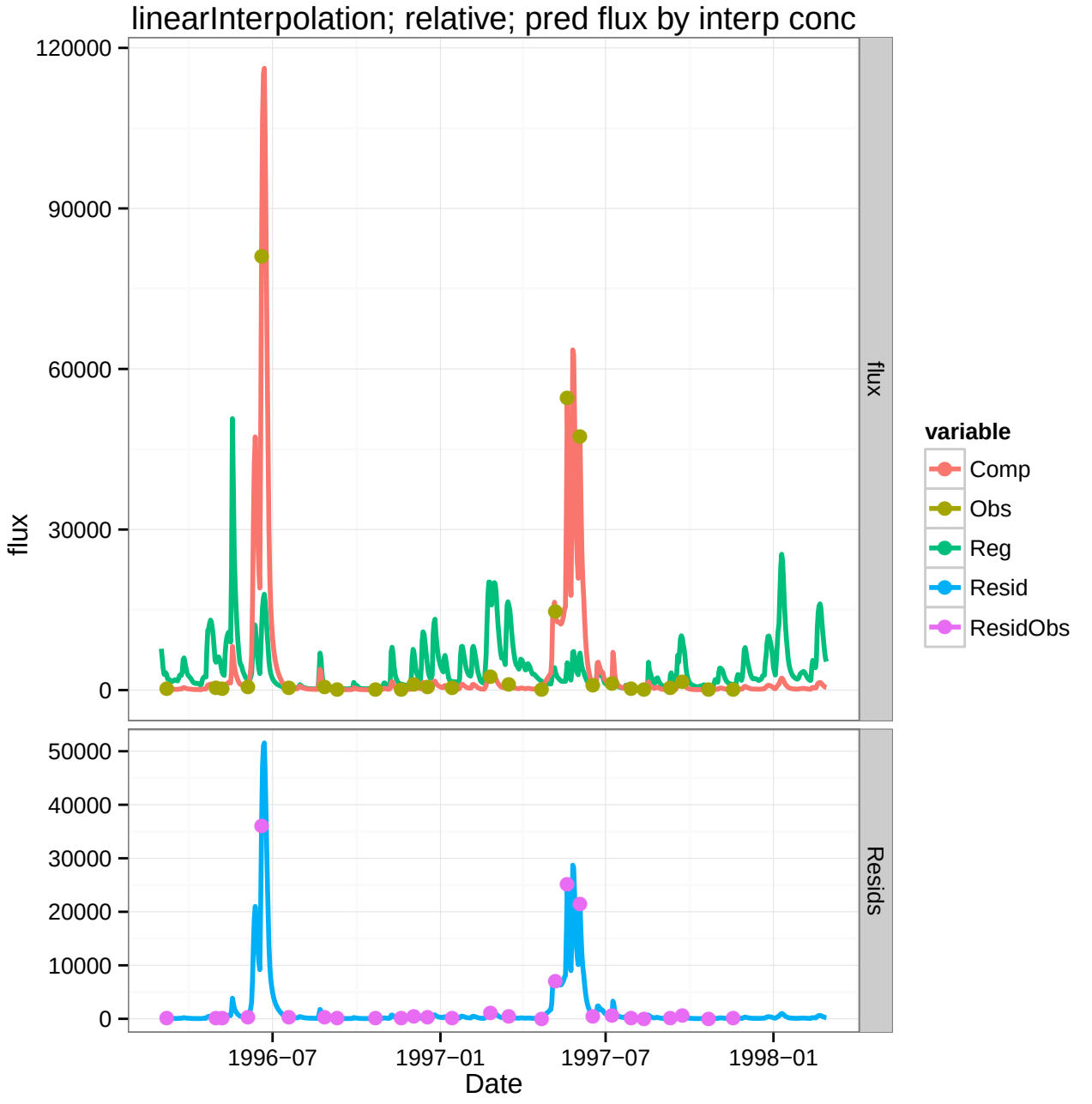

linearInterpolation; absolute; pred flux by interp log flux
flux
90000
60000
30000
0
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

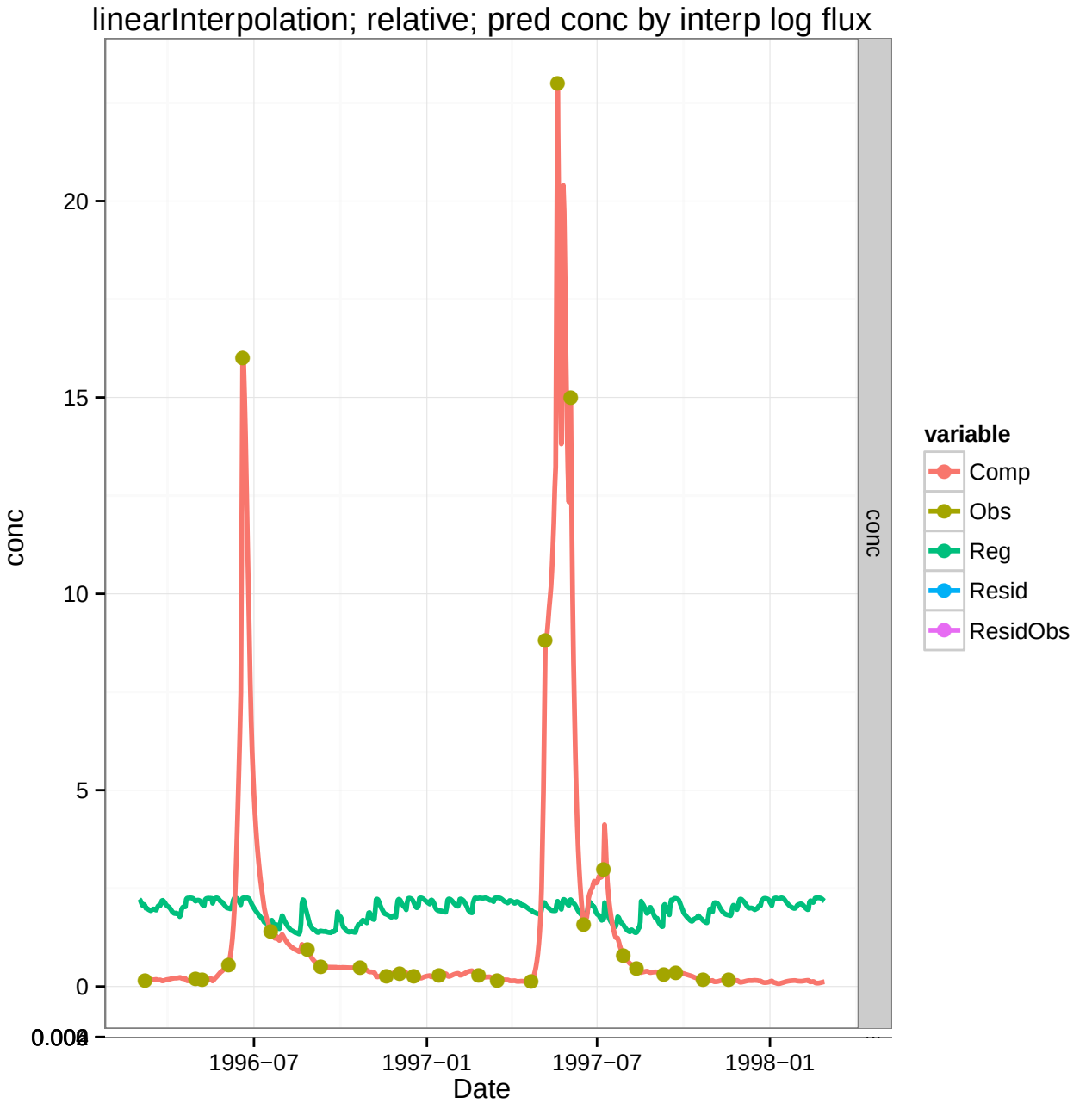

linearInterpolation; absolute; pred flux by interp log conc
flux
90000
60000
30000
0
flux
Resids
0
−20000
−40000
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

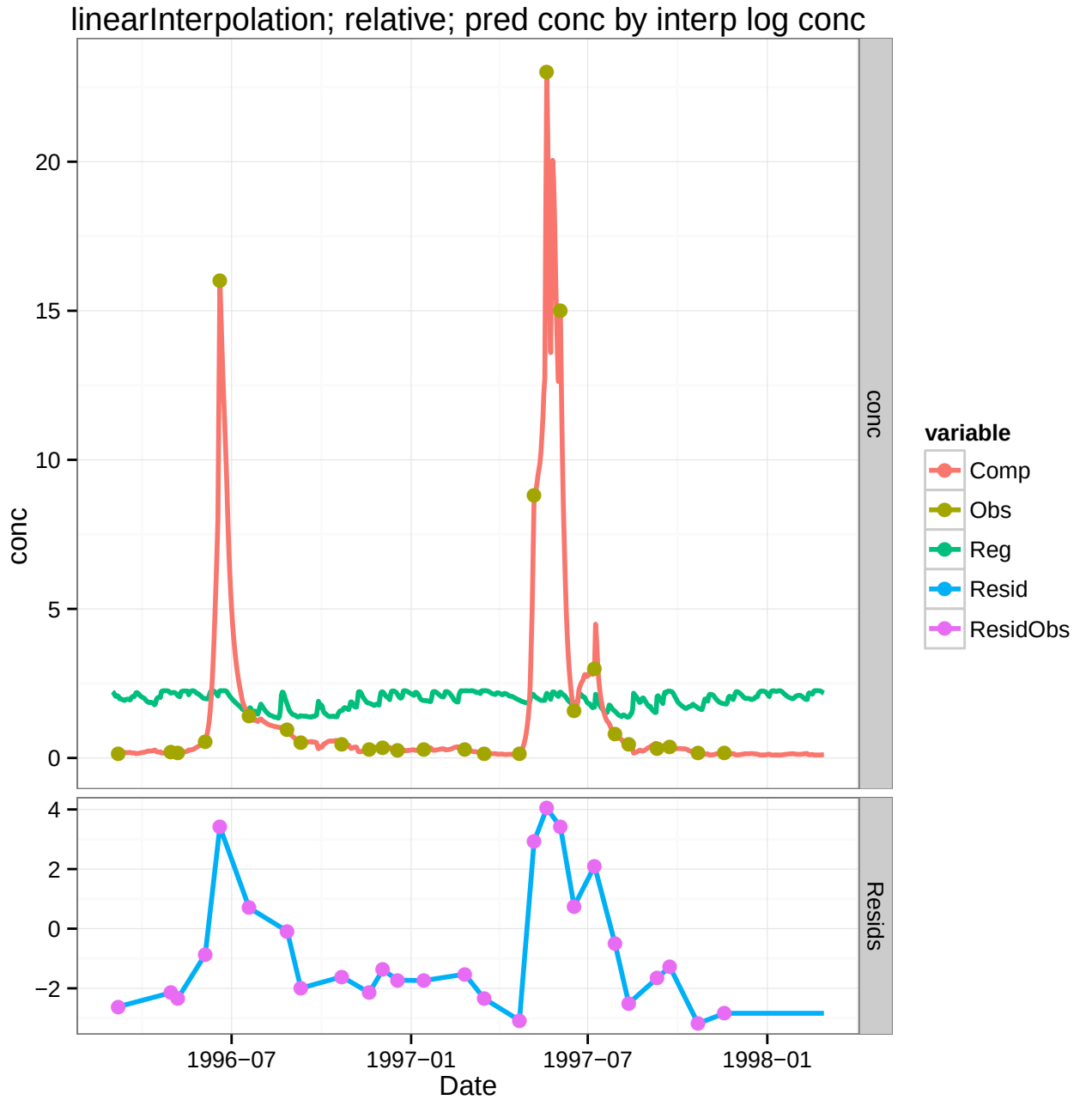

linearInterpolation; absolute; pred conc by interp flux
conc
Resids
40
20
0
−20
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

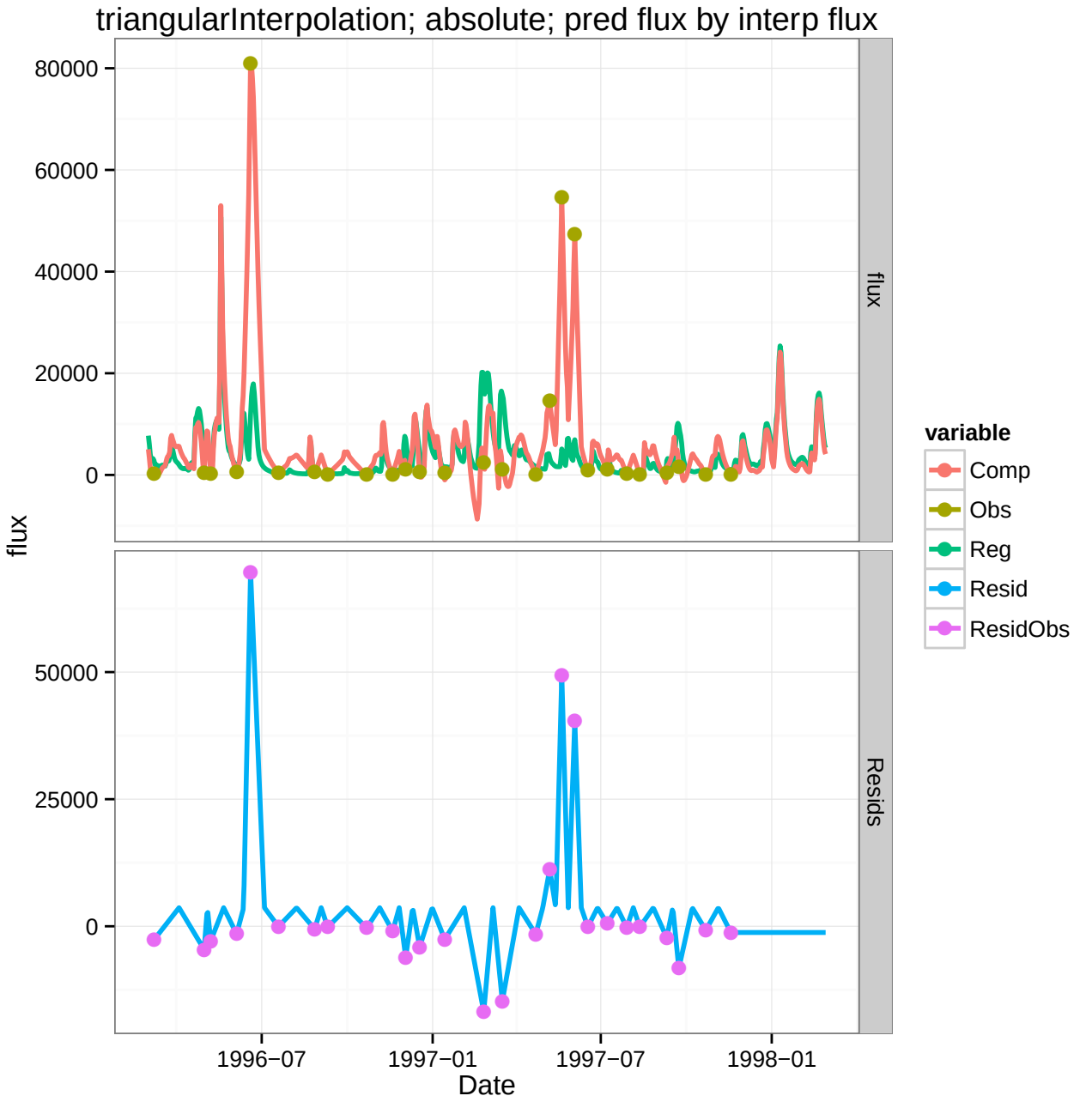

linearInterpolation; absolute; pred conc by interp conc
conc
20
15
10
5
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

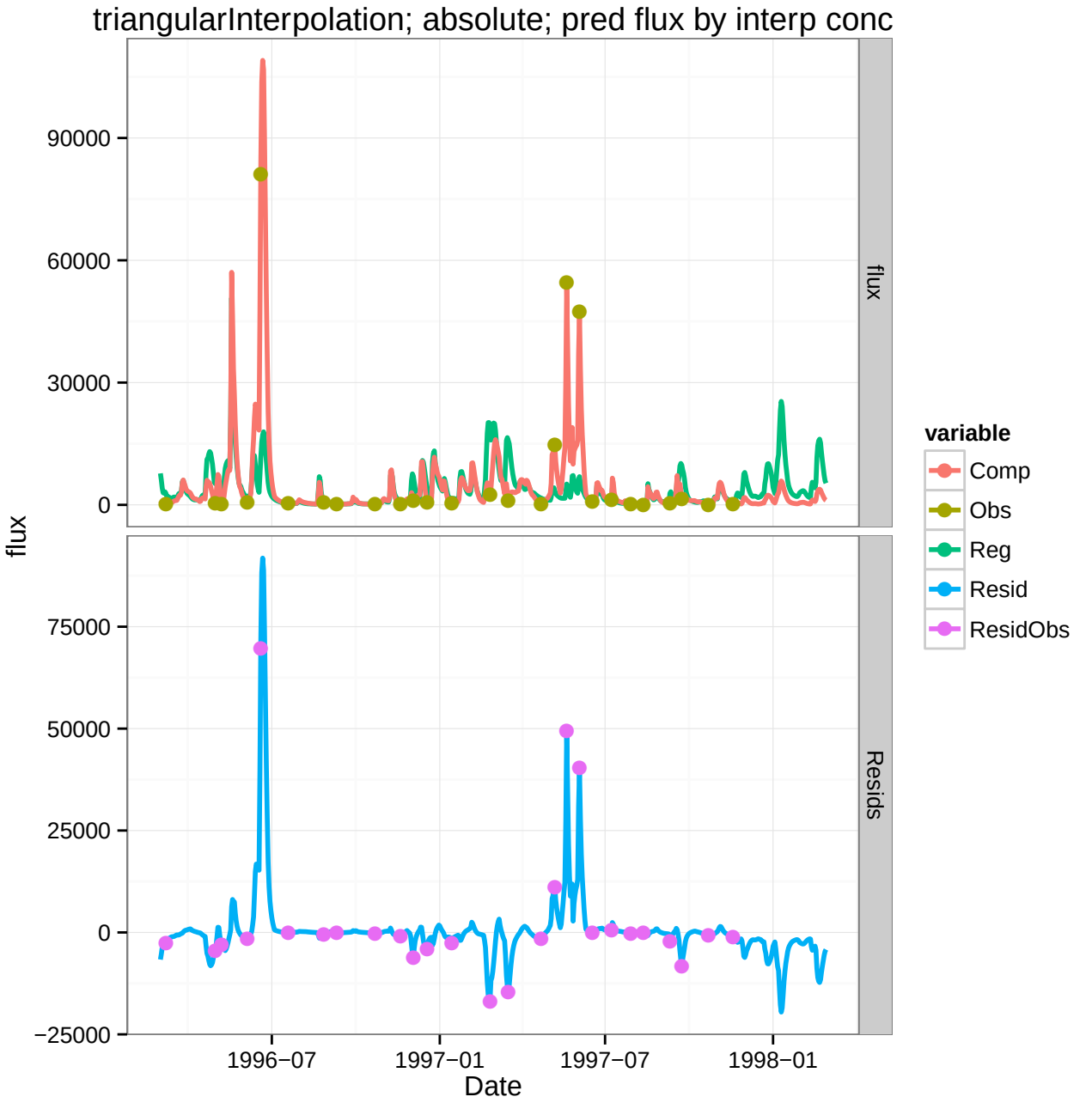

linearInterpolation; relative; pred flux by interp flux
120000
90000
60000
30000
0
flux
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

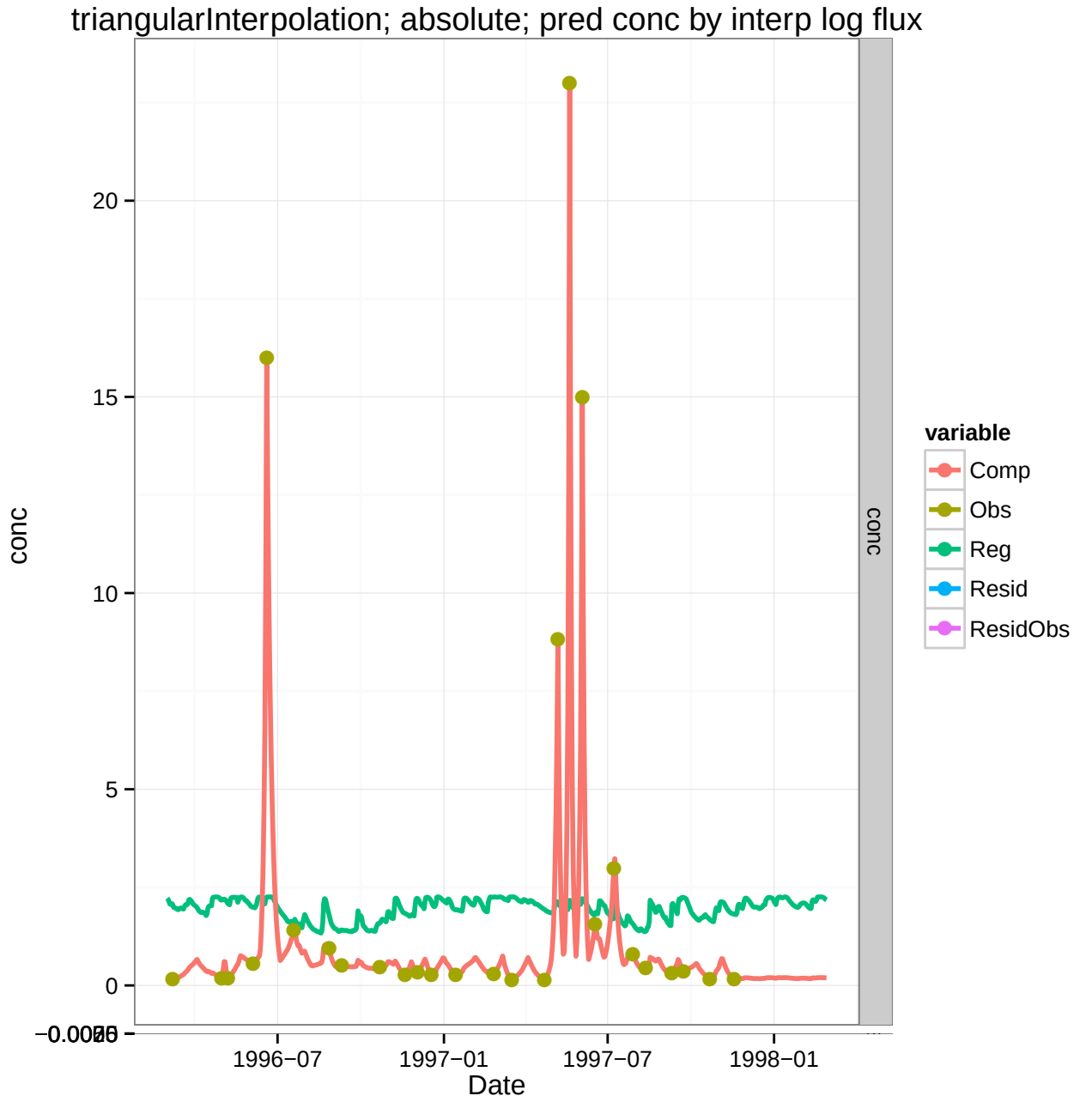

linearInterpolation; relative; pred flux by interp conc
120000
90000
60000
30000
0
flux
flux
50000
40000
30000
20000
10000
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


linearInterpolation; relative; pred conc by interp log flux
conc
20
15
10
5
0
0.002
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs


linearInterpolation; relative; pred conc by interp log conc
conc
20
15
10
5
0
conc
4
2
0
−2
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


triangularInterpolation; absolute; pred flux by interp flux
flux
80000
60000
40000
20000
0
flux
50000
25000
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


triangularInterpolation; absolute; pred flux by interp conc
flux
90000
60000
30000
0
flux
75000
50000
25000
0
−25000
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


triangularInterpolation; absolute; pred conc by interp log flux
conc
20
15
10
5
0
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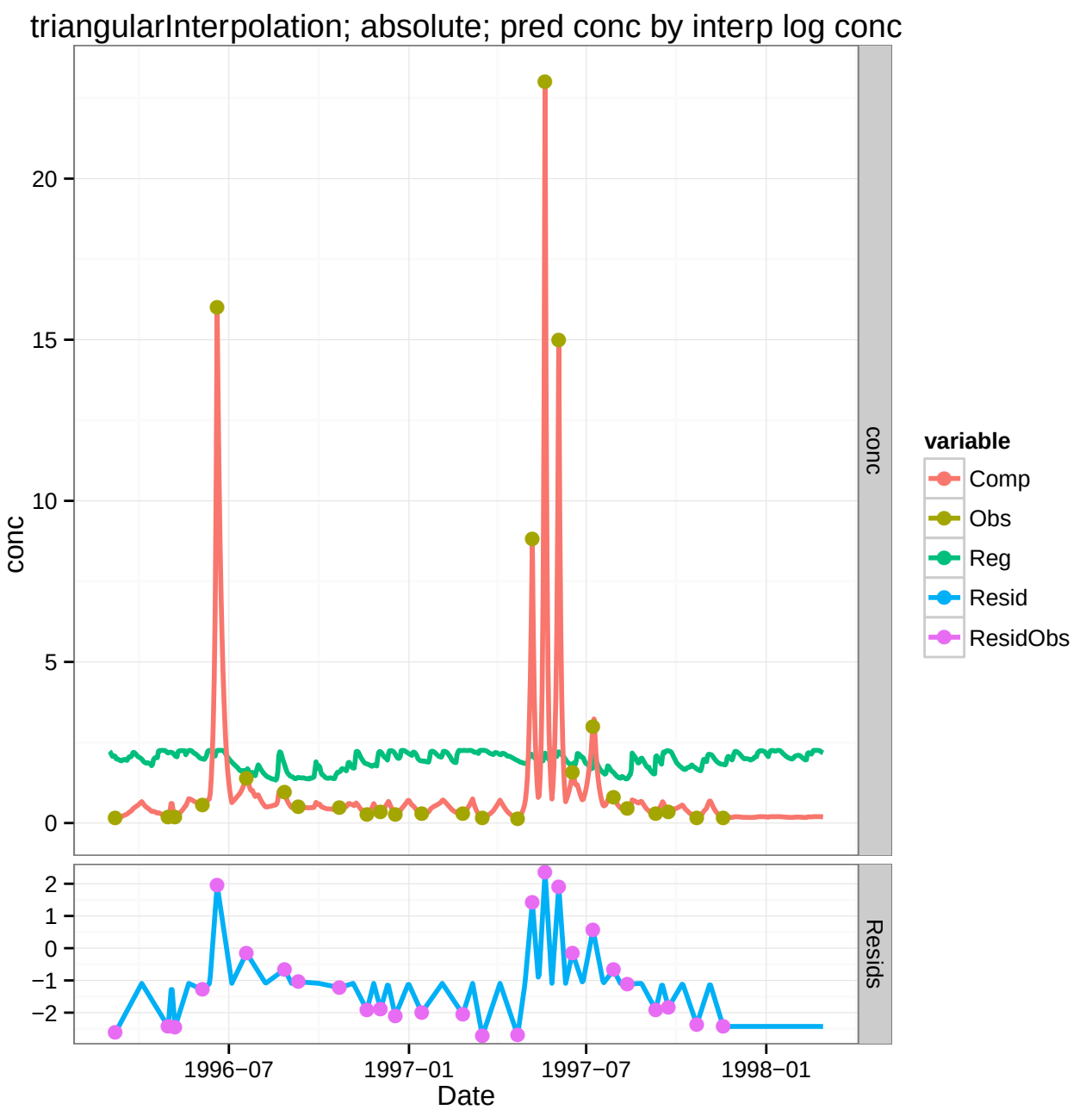
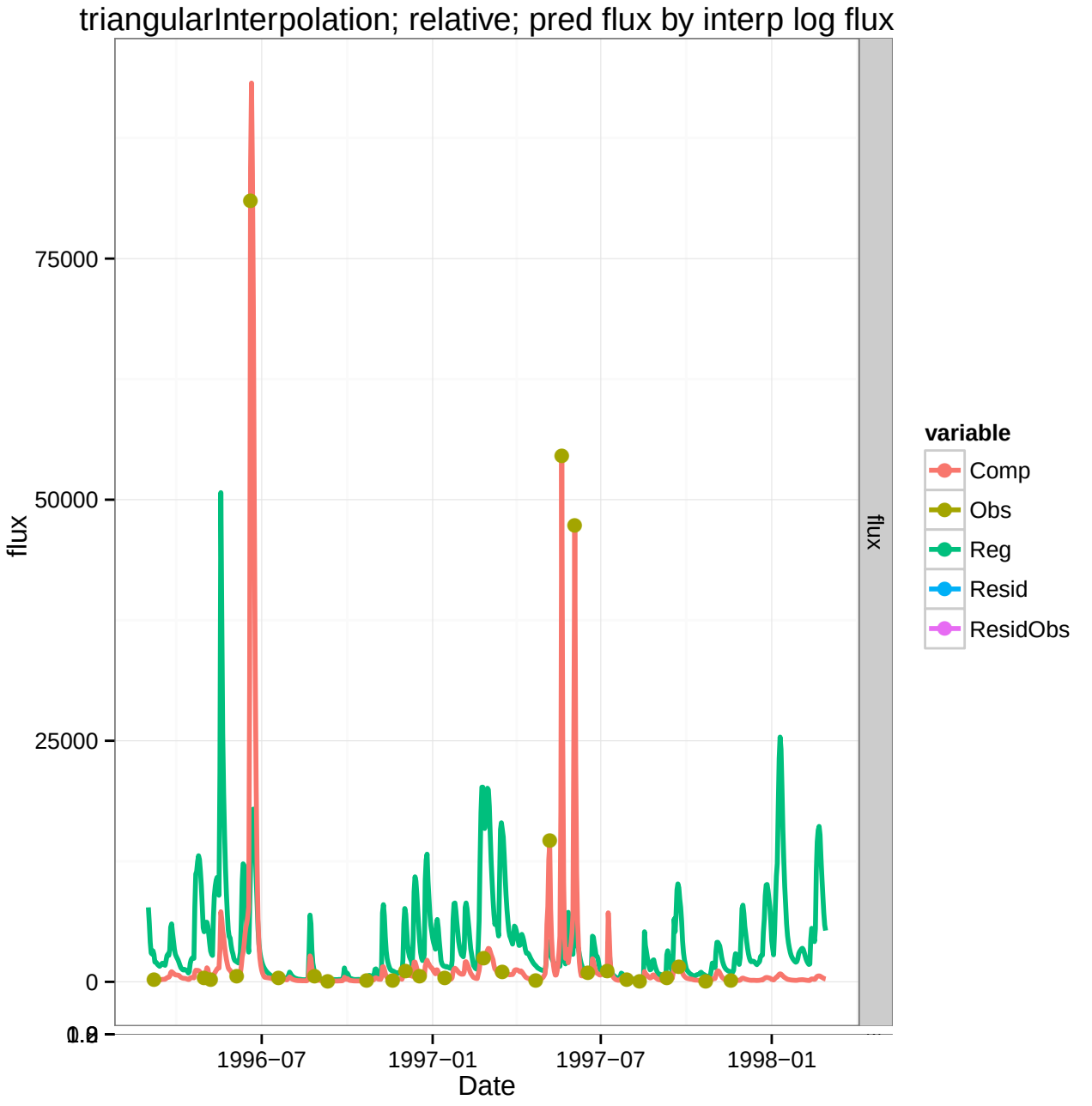
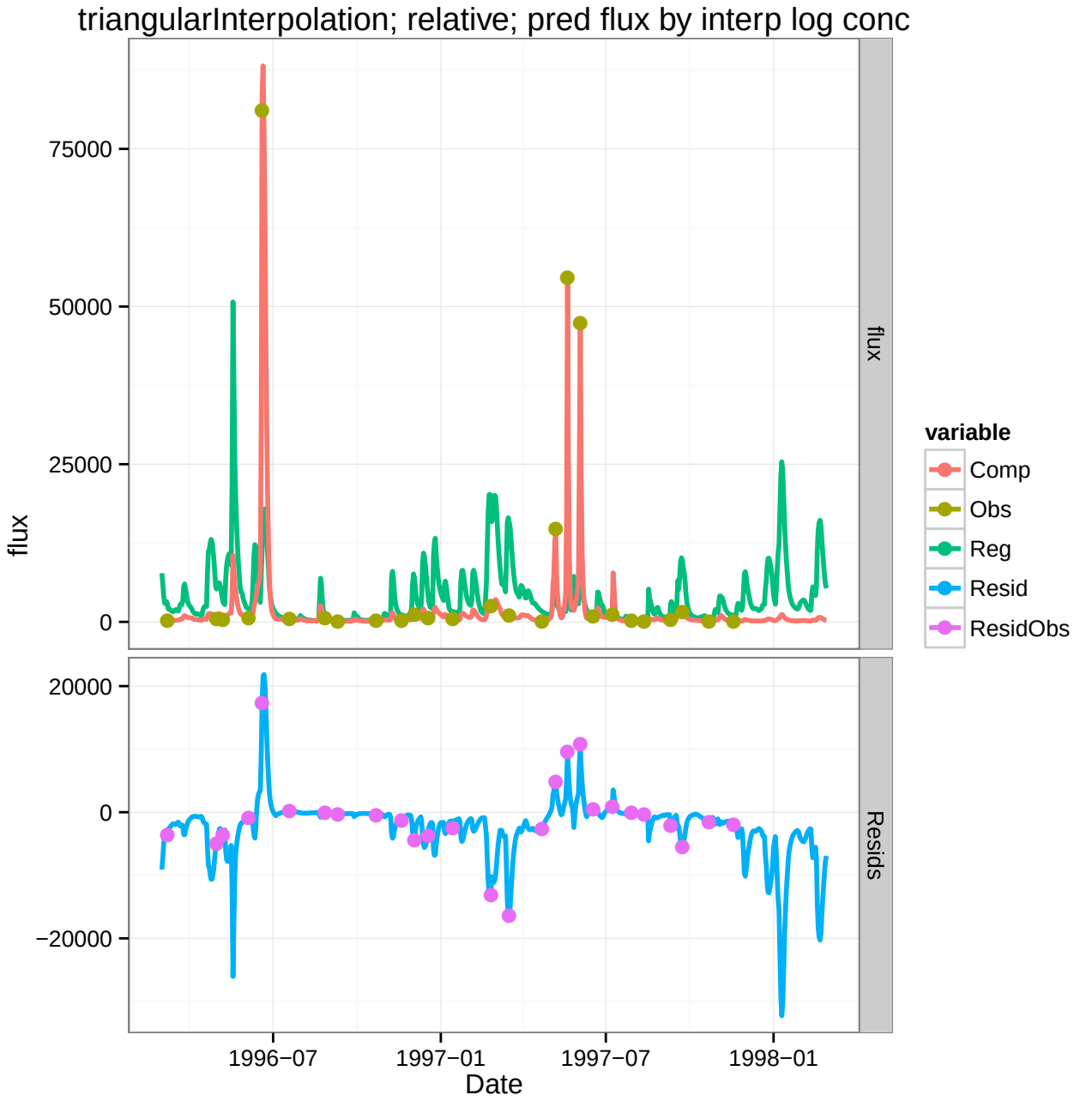
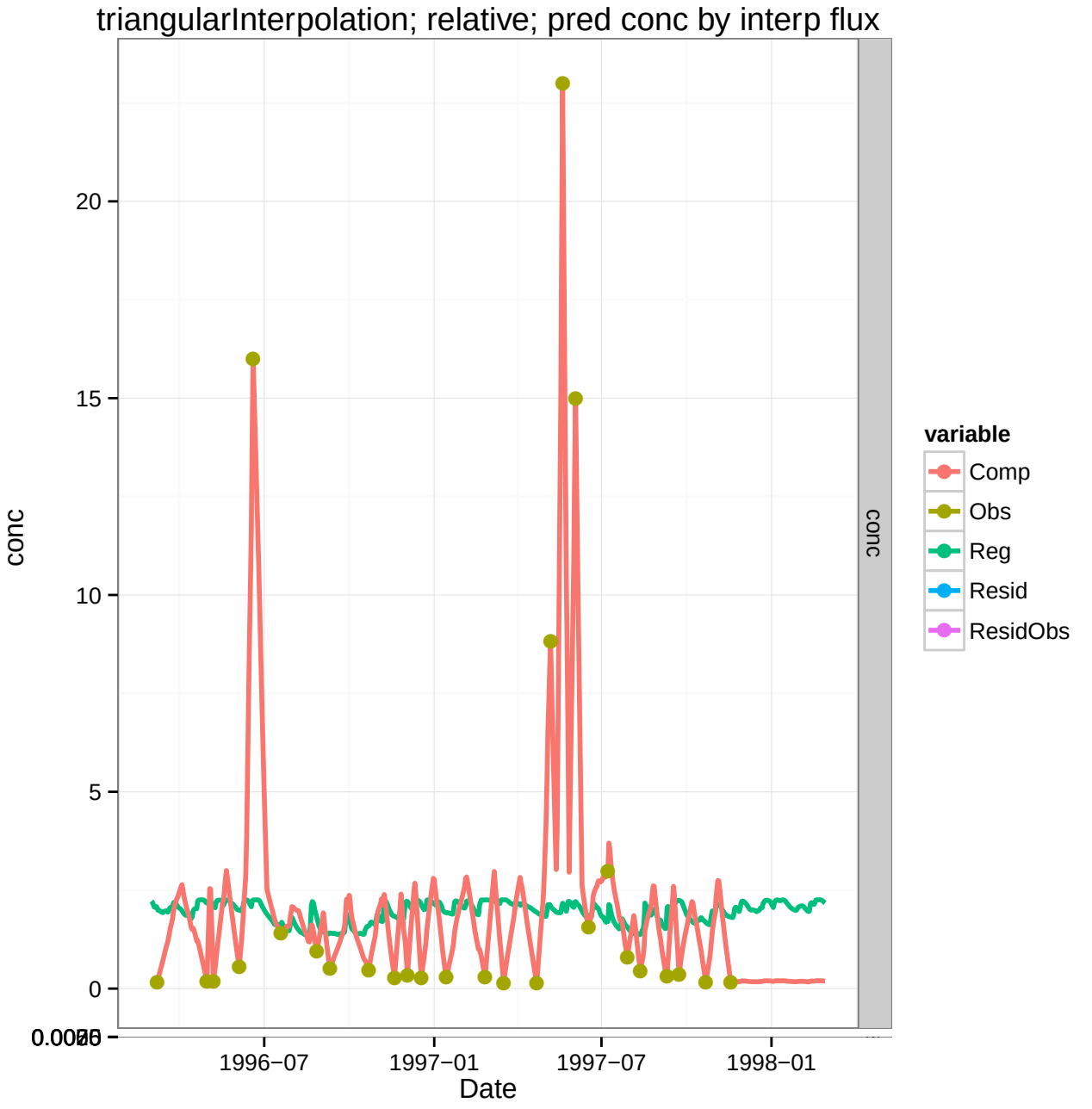
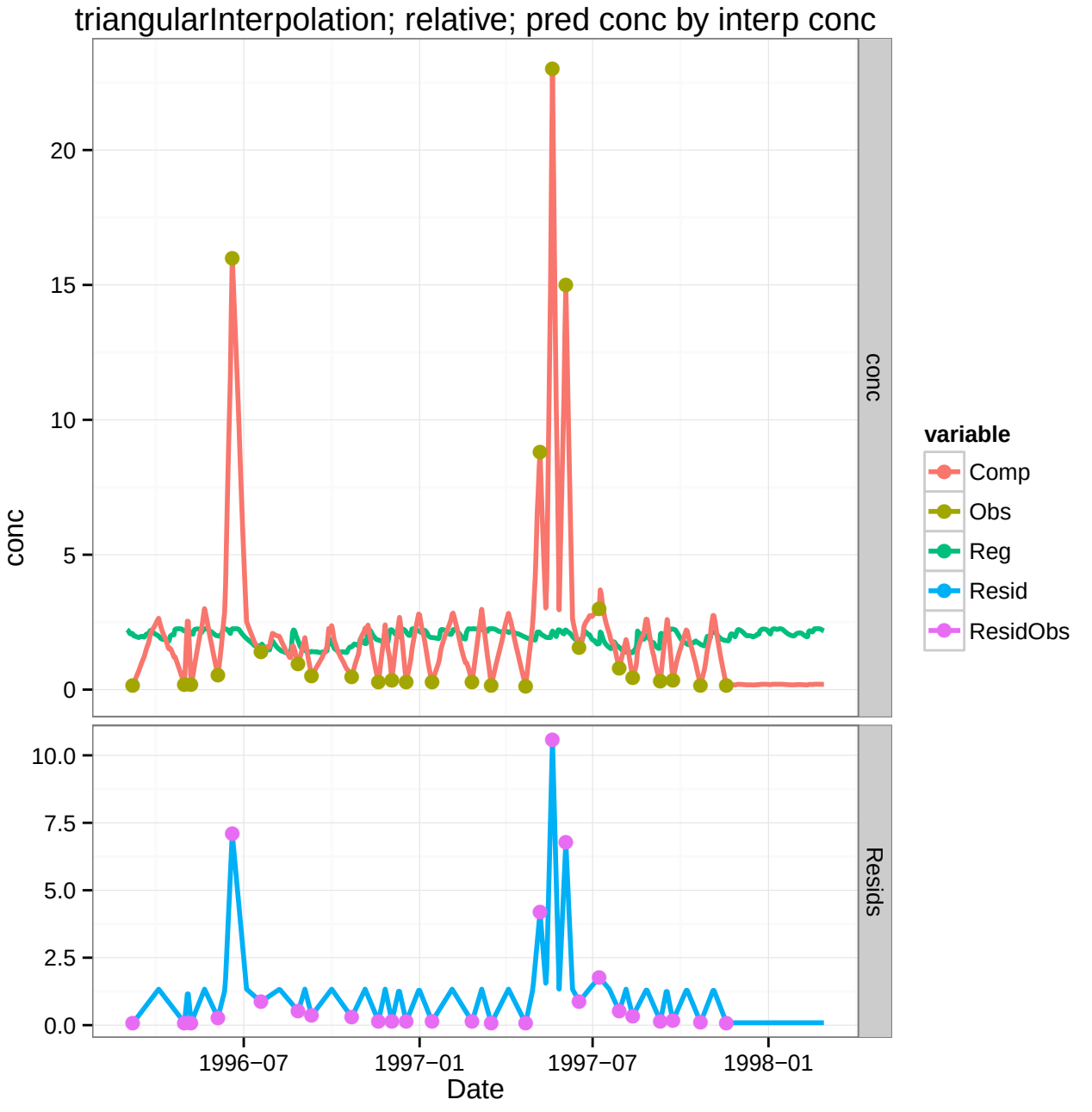
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs

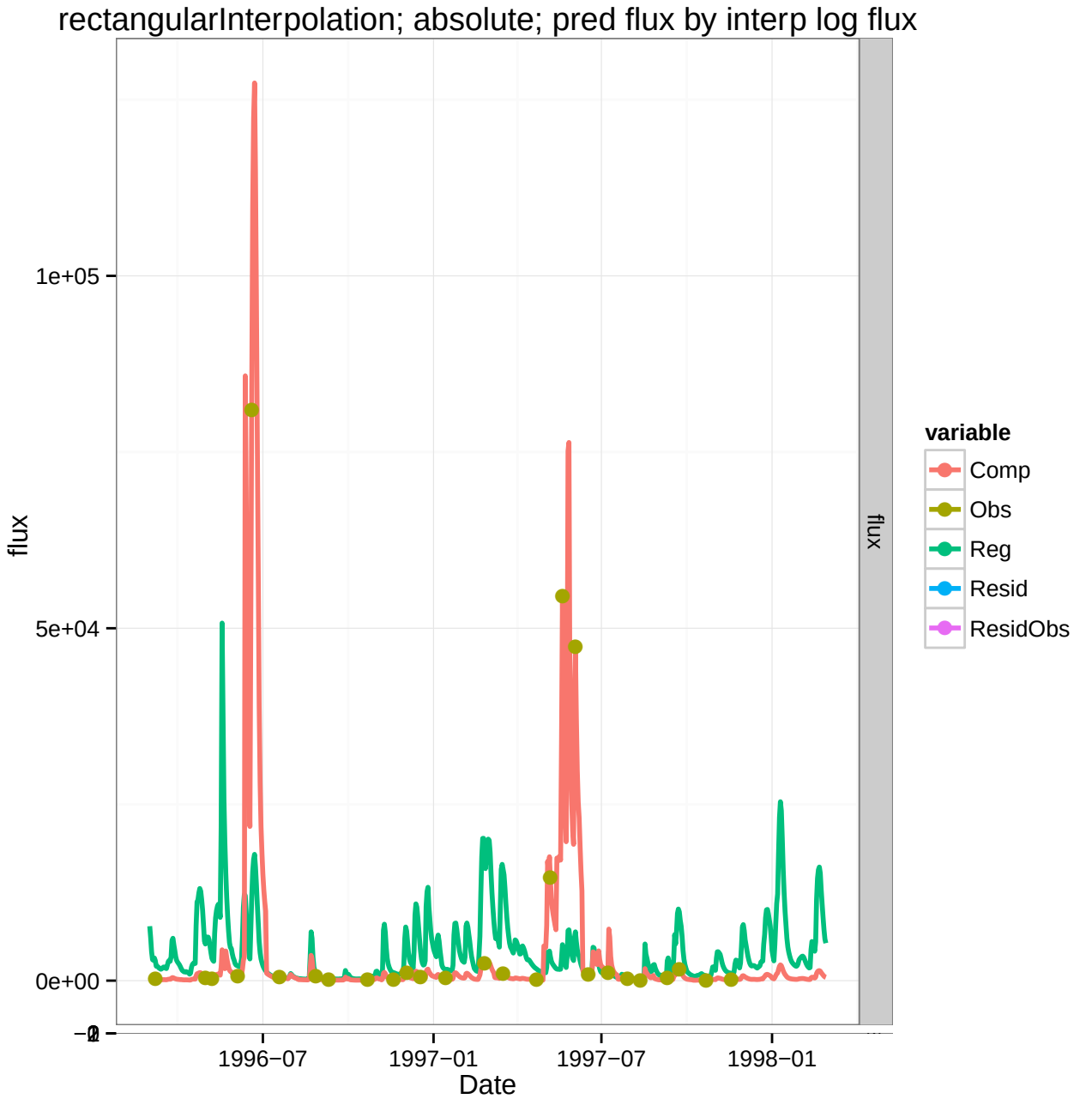

triangularInterpolation; absolute; pred conc by interp log conc
conc
20
15
10
5
0
Resids
2
1
0
−1
−2
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

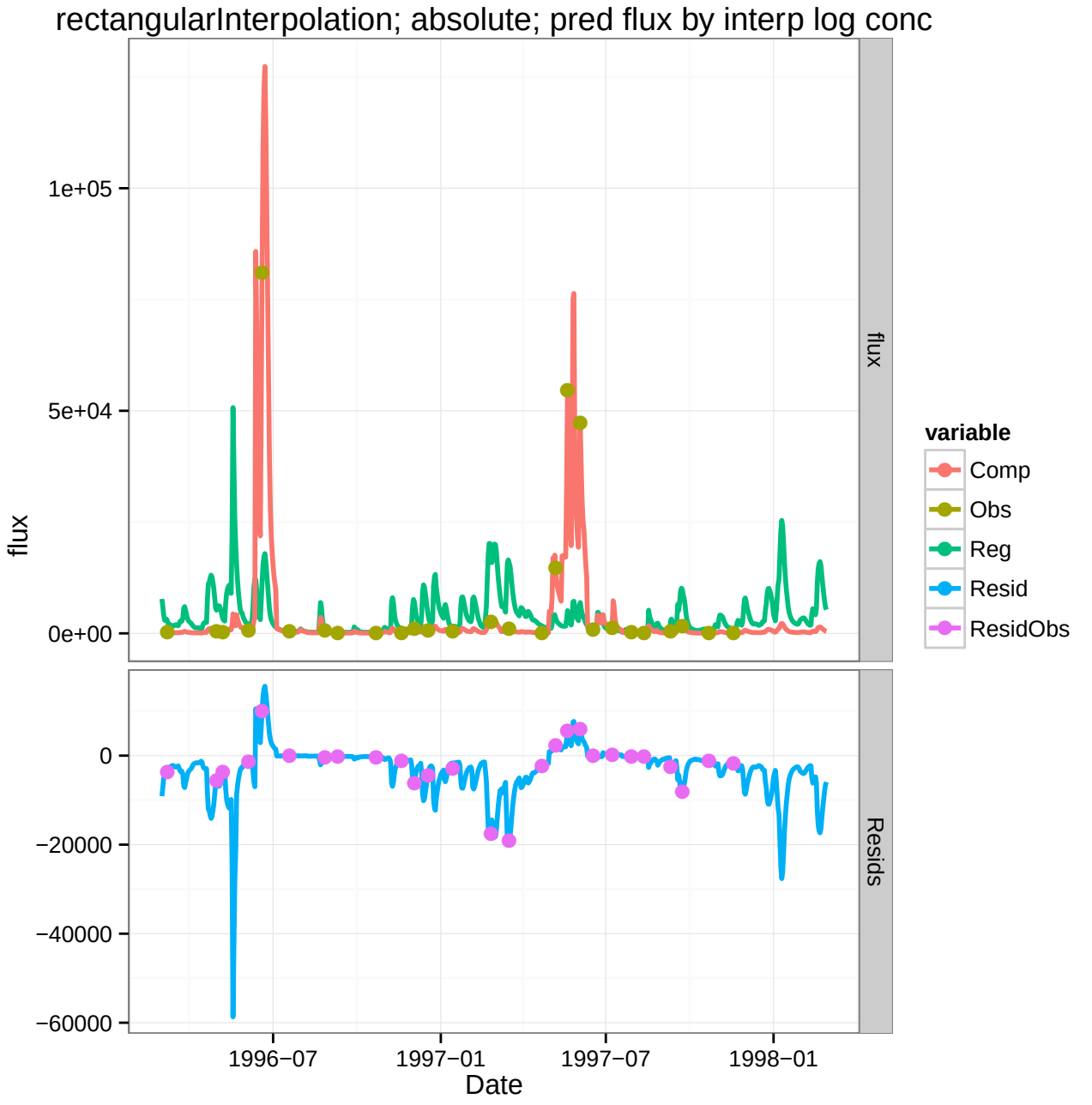

triangularInterpolation; relative; pred flux by interp log flux
flux
75000
50000
25000
0
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

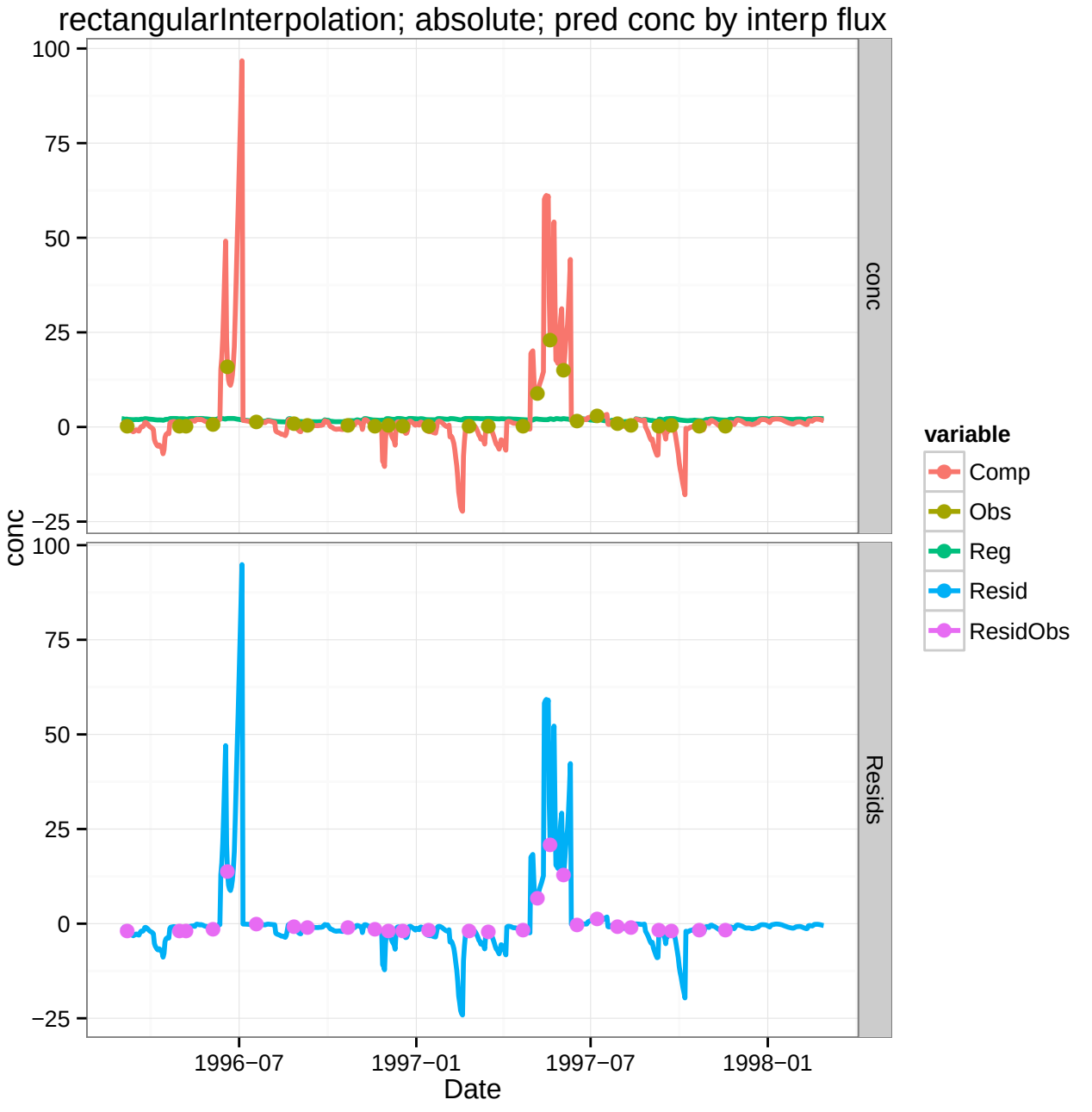

triangularInterpolation; relative; pred flux by interp log conc
flux
75000
50000
25000
0
20000
0
−20000
1996−07
1997−01
1997−07
1998−01
Date
flux
Resids
variable
Comp
Obs
Reg
Resid
ResidObs

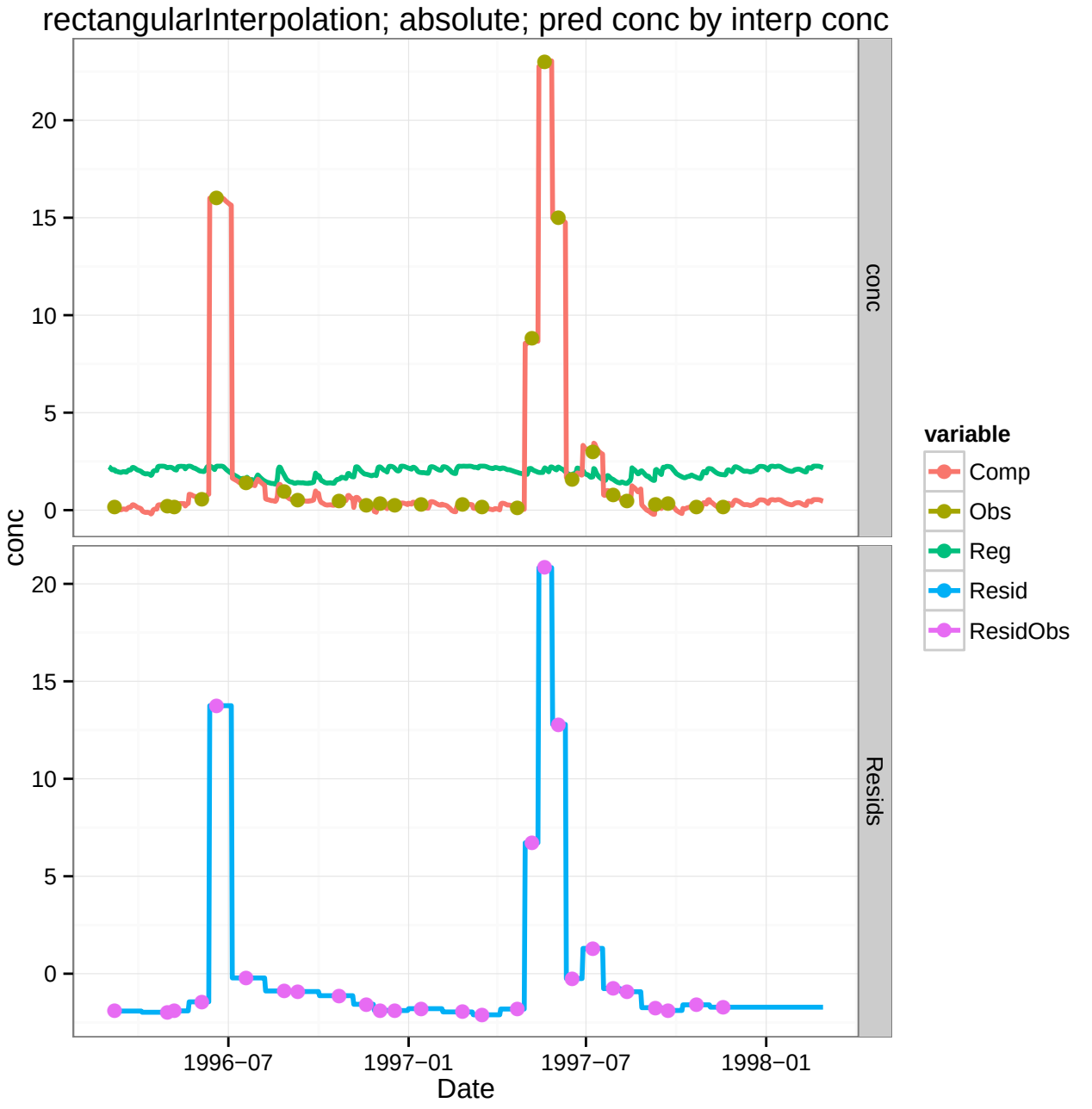

triangularInterpolation; relative; pred conc by interp flux
conc
20
15
10
5
0
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs

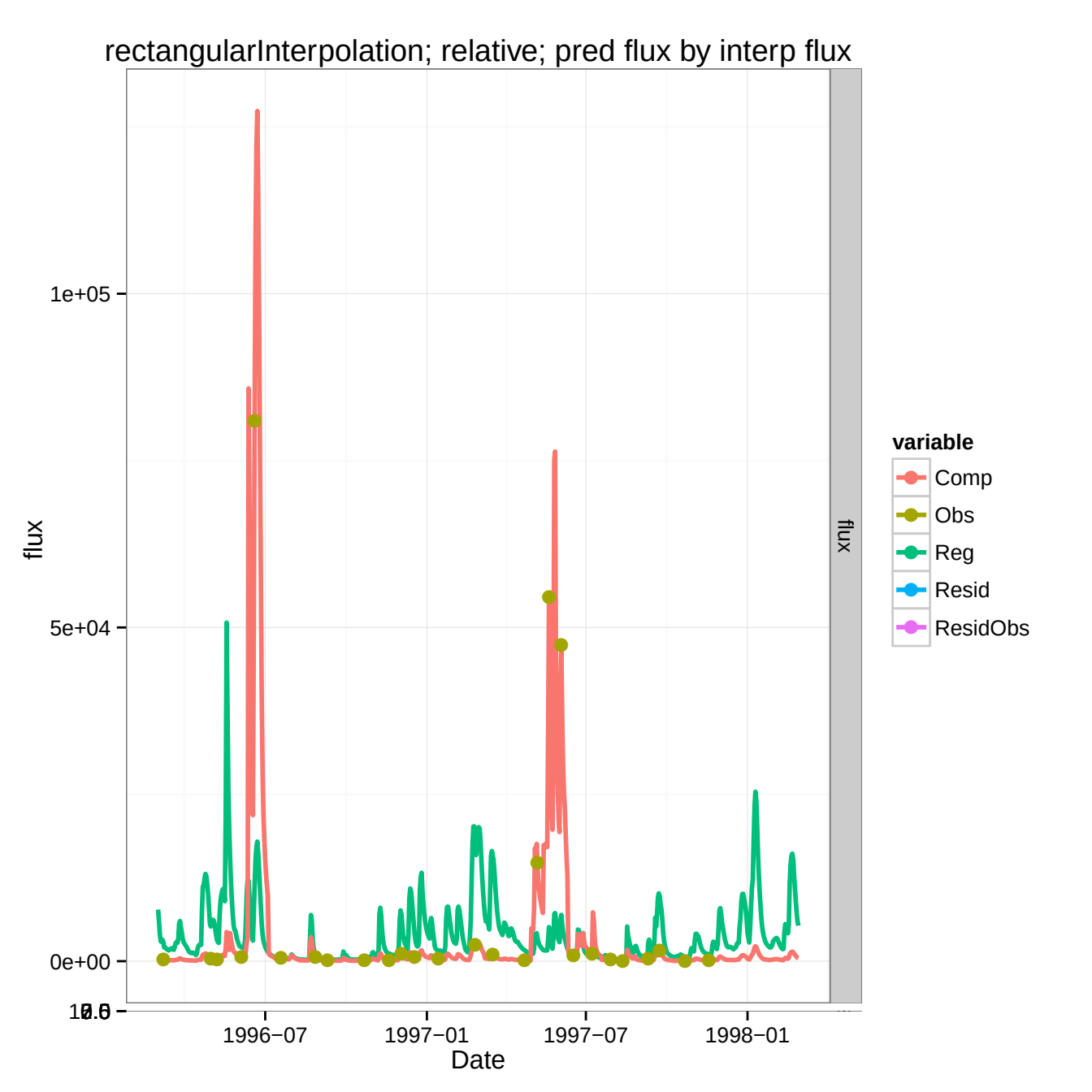

triangularInterpolation; relative; pred conc by interp conc
conc
20
15
10
5
0
conc
Resids
10.0
7.5
5.0
2.5
0.0
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

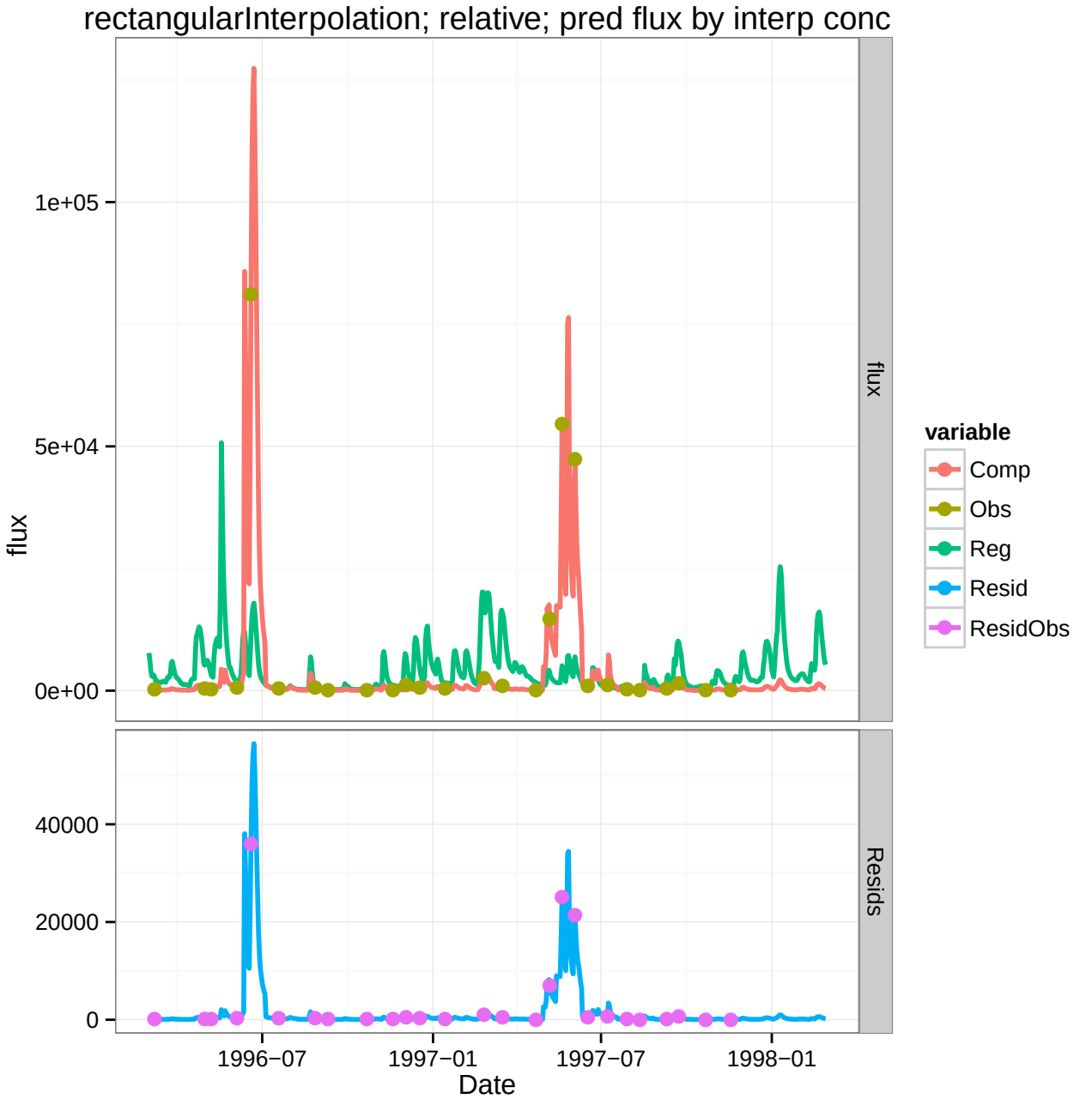

rectangularInterpolation; absolute; pred flux by interp log flux
flux
1e+05
5e+04
0e+00
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

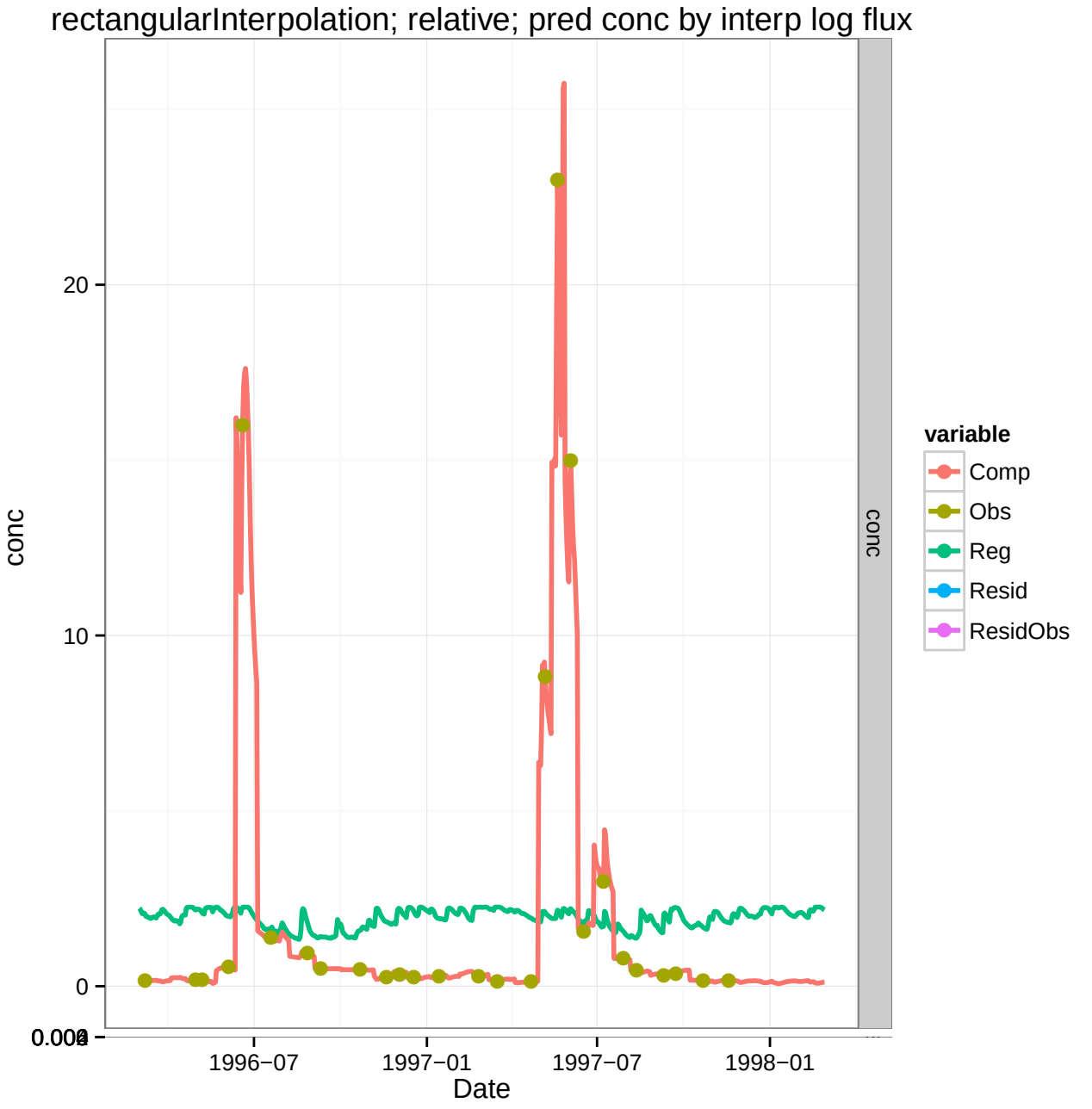

rectangularInterpolation; absolute; pred flux by interp log conc
flux
1e+05
5e+04
0e+00
flux
0
−20000
−40000
−60000
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

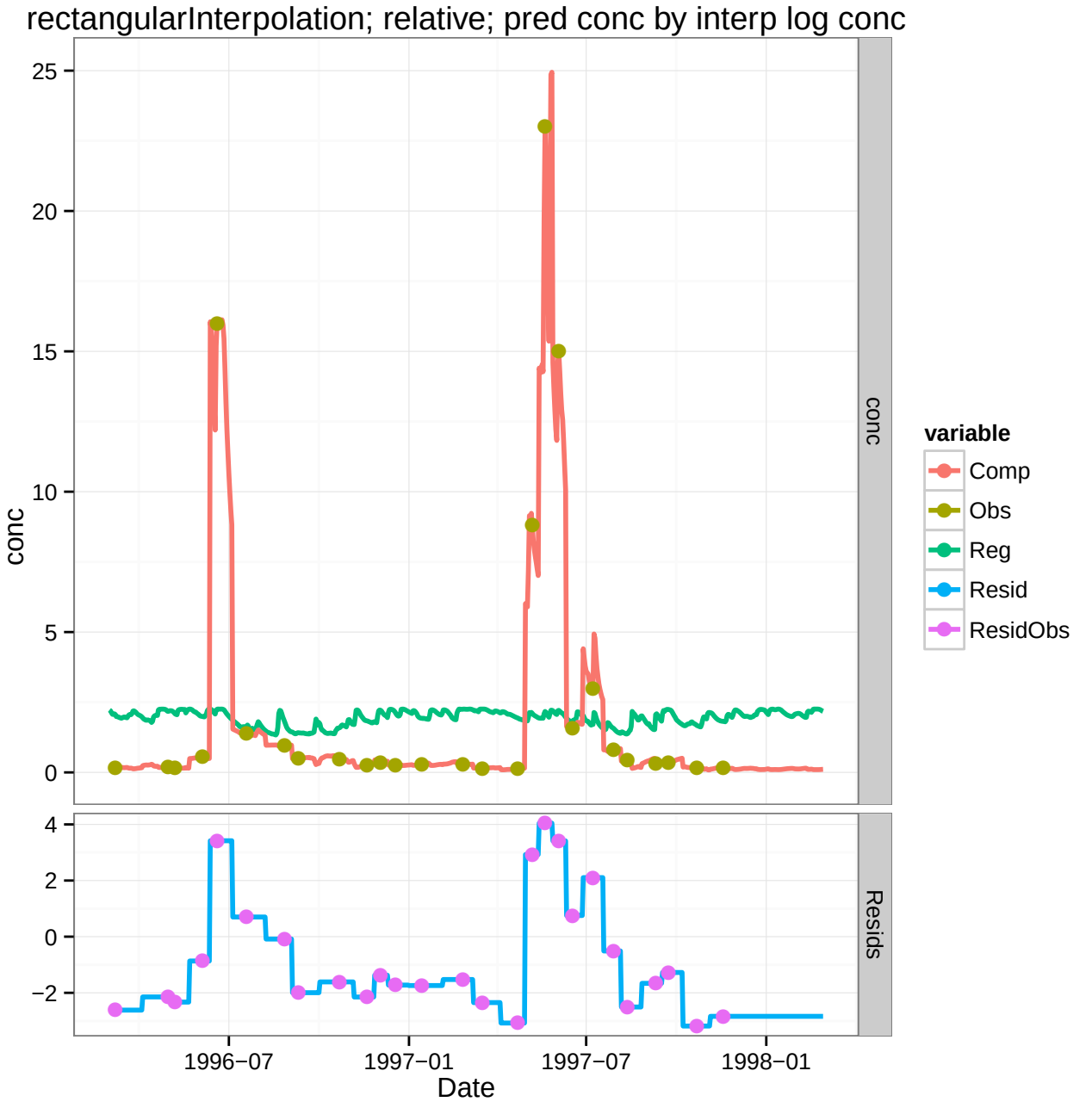

rectangularInterpolation; absolute; pred conc by interp flux
conc
100
75
50
25
0
−25
conc
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

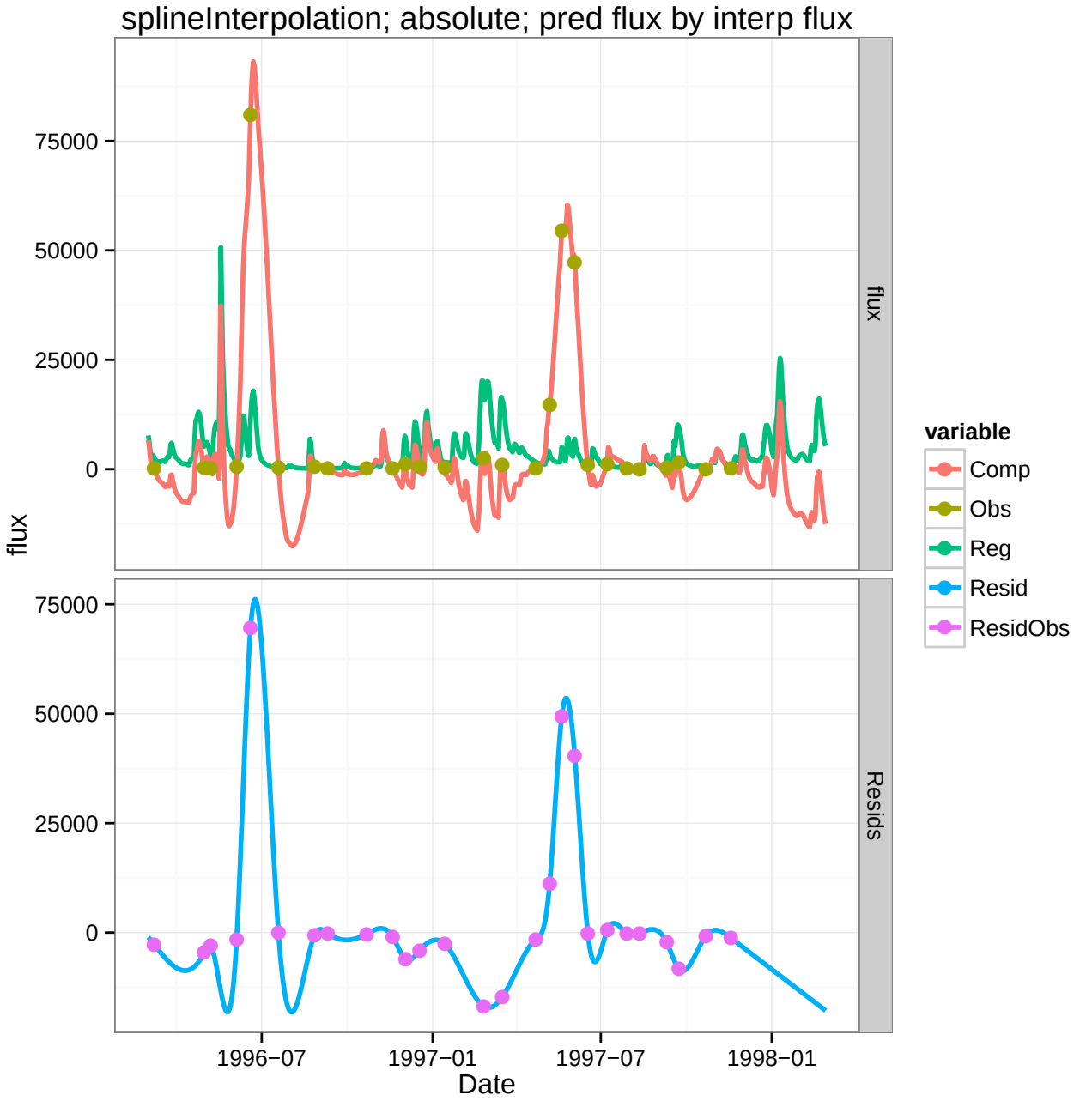

rectangularInterpolation; absolute; pred conc by interp conc
conc
20
15
10
5
0
conc
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

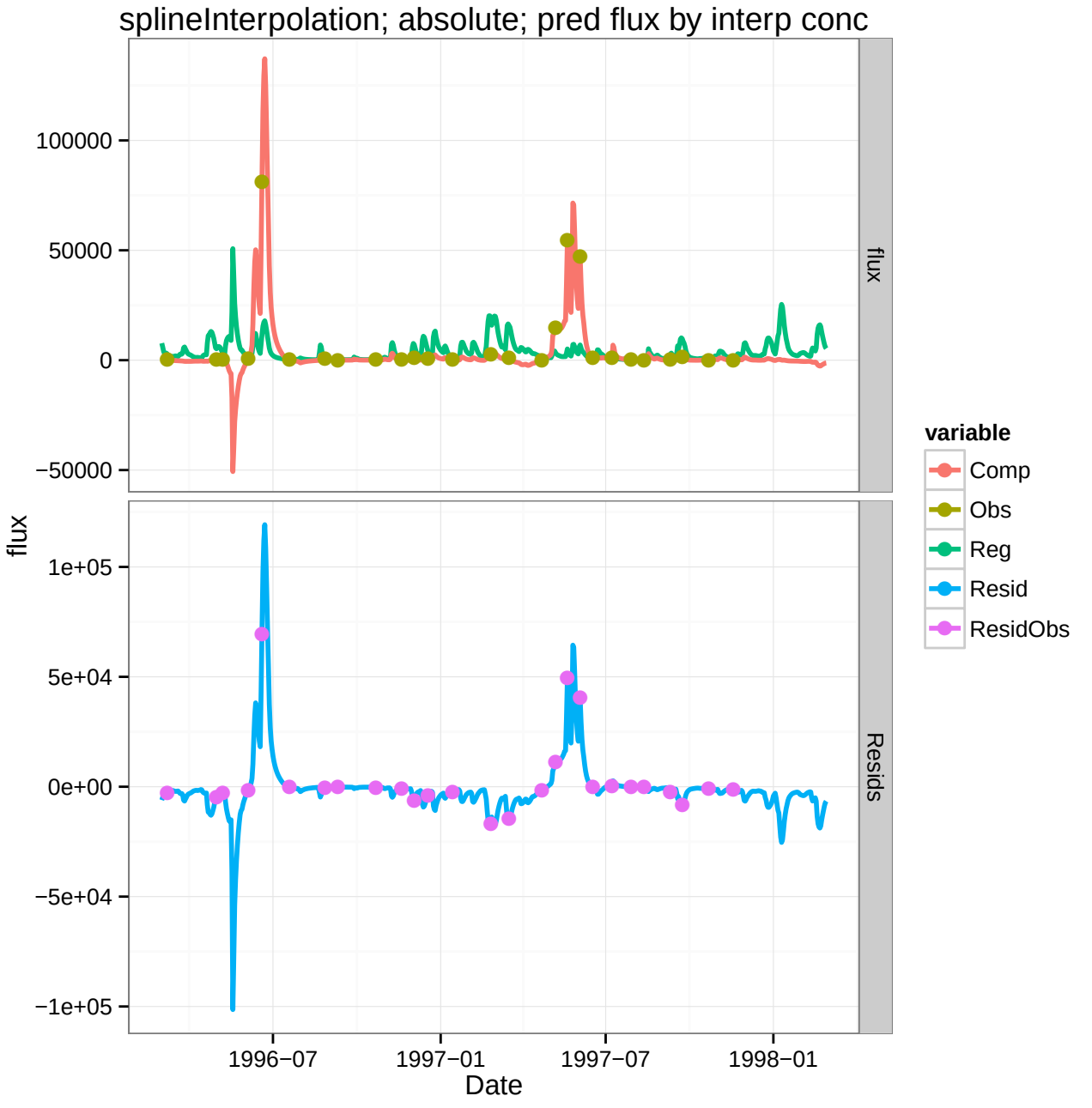

rectangularInterpolation; relative; pred flux by interp flux
flux
1e+05
5e+04
0e+00
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

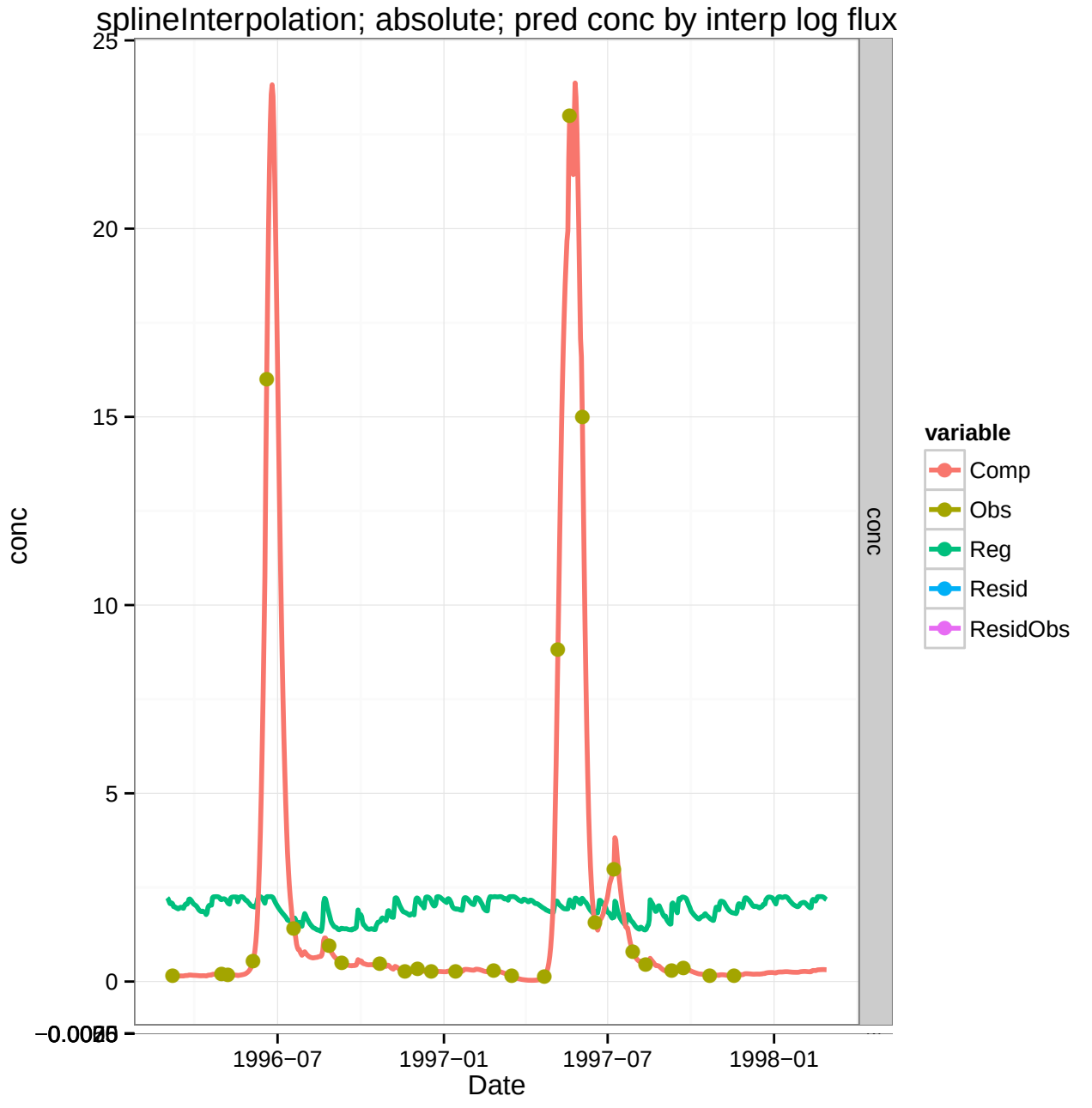

rectangularInterpolation; relative; pred flux by interp conc
flux
1e+05
5e+04
0e+00
flux
40000
20000
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

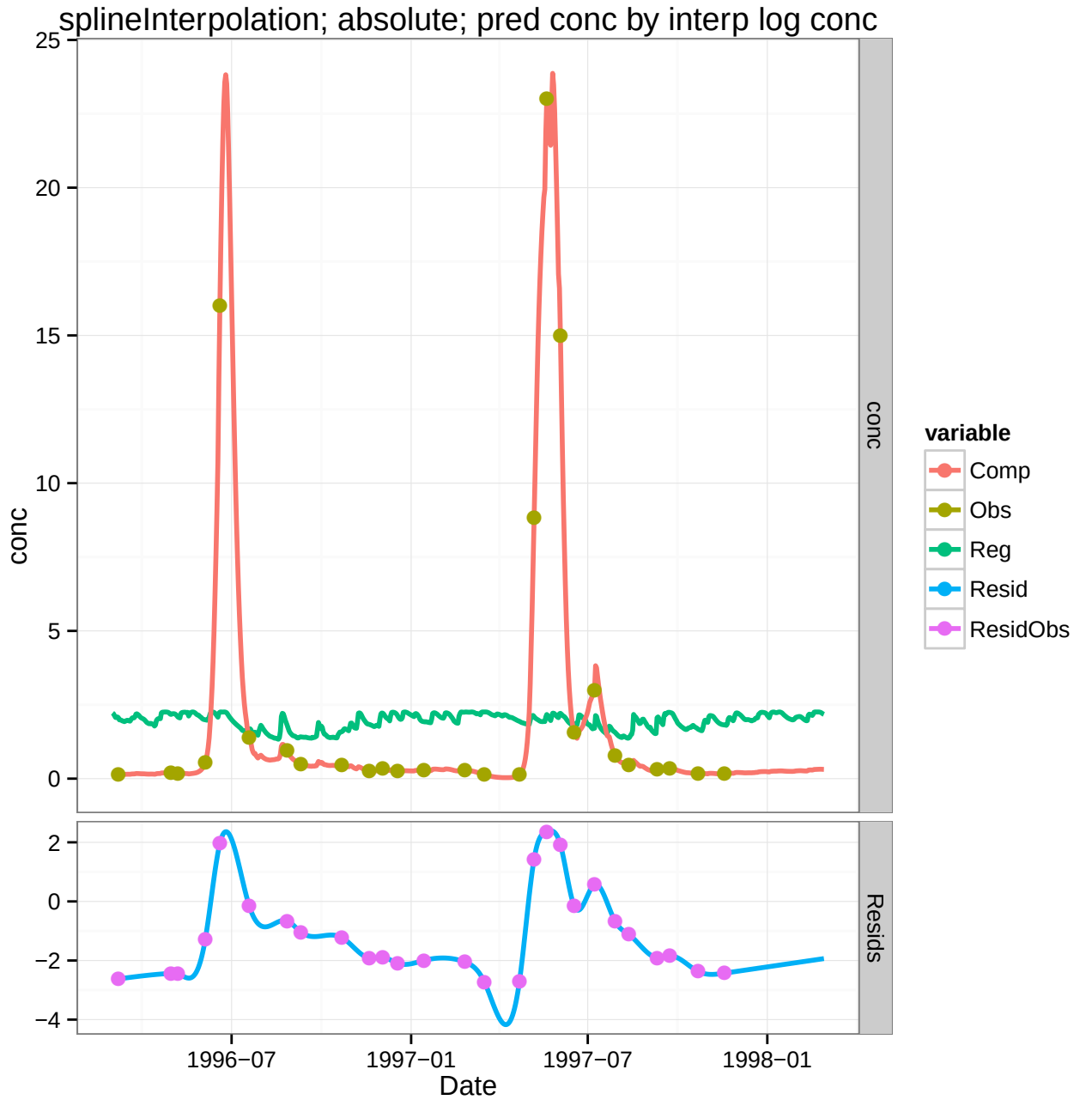

rectangularInterpolation; relative; pred conc by interp log flux
conc
20
10
0
0.002
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs

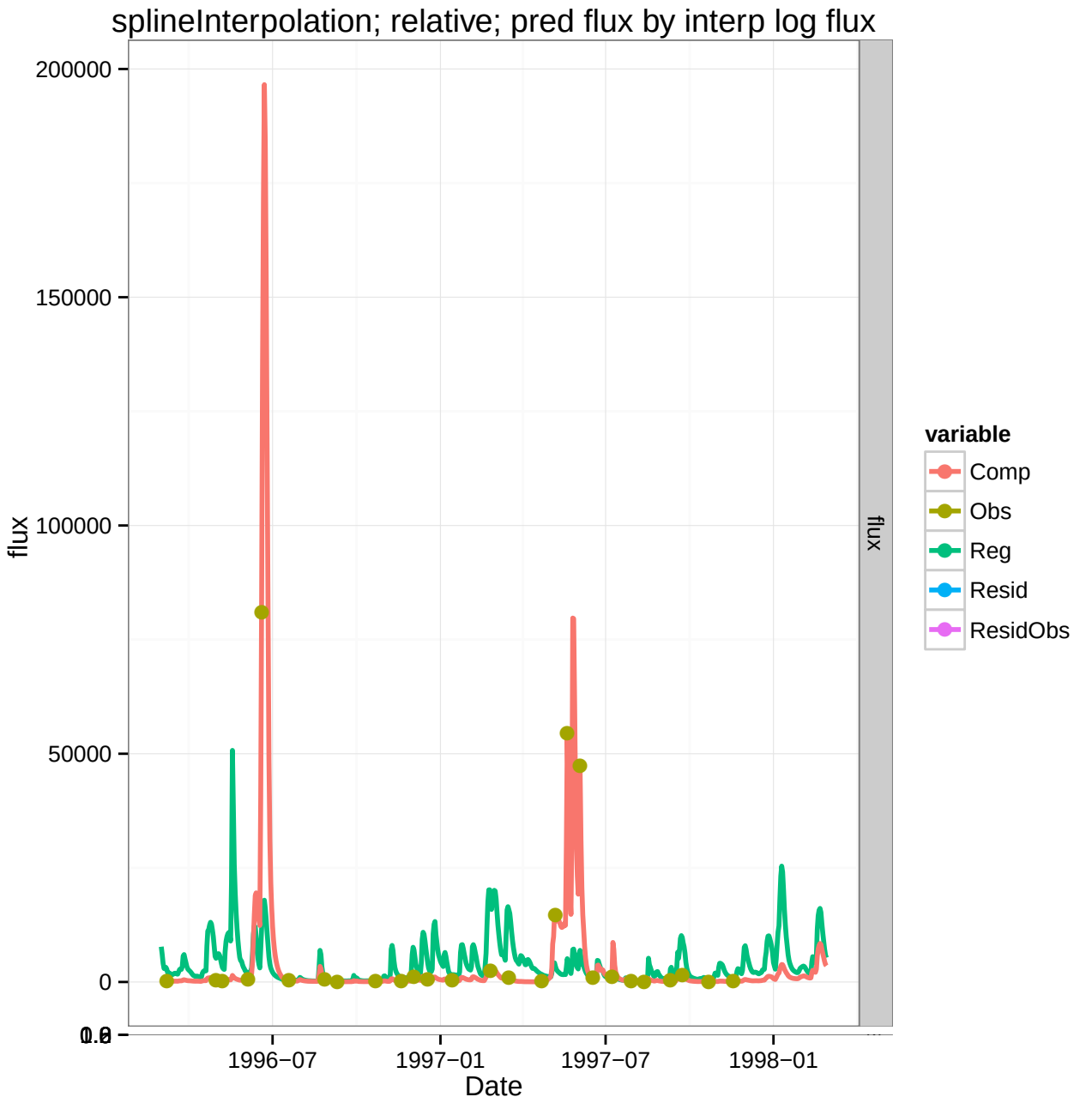

rectangularInterpolation; relative; pred conc by interp log conc
conc
25
20
15
10
5
0
conc
4
2
0
−2
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

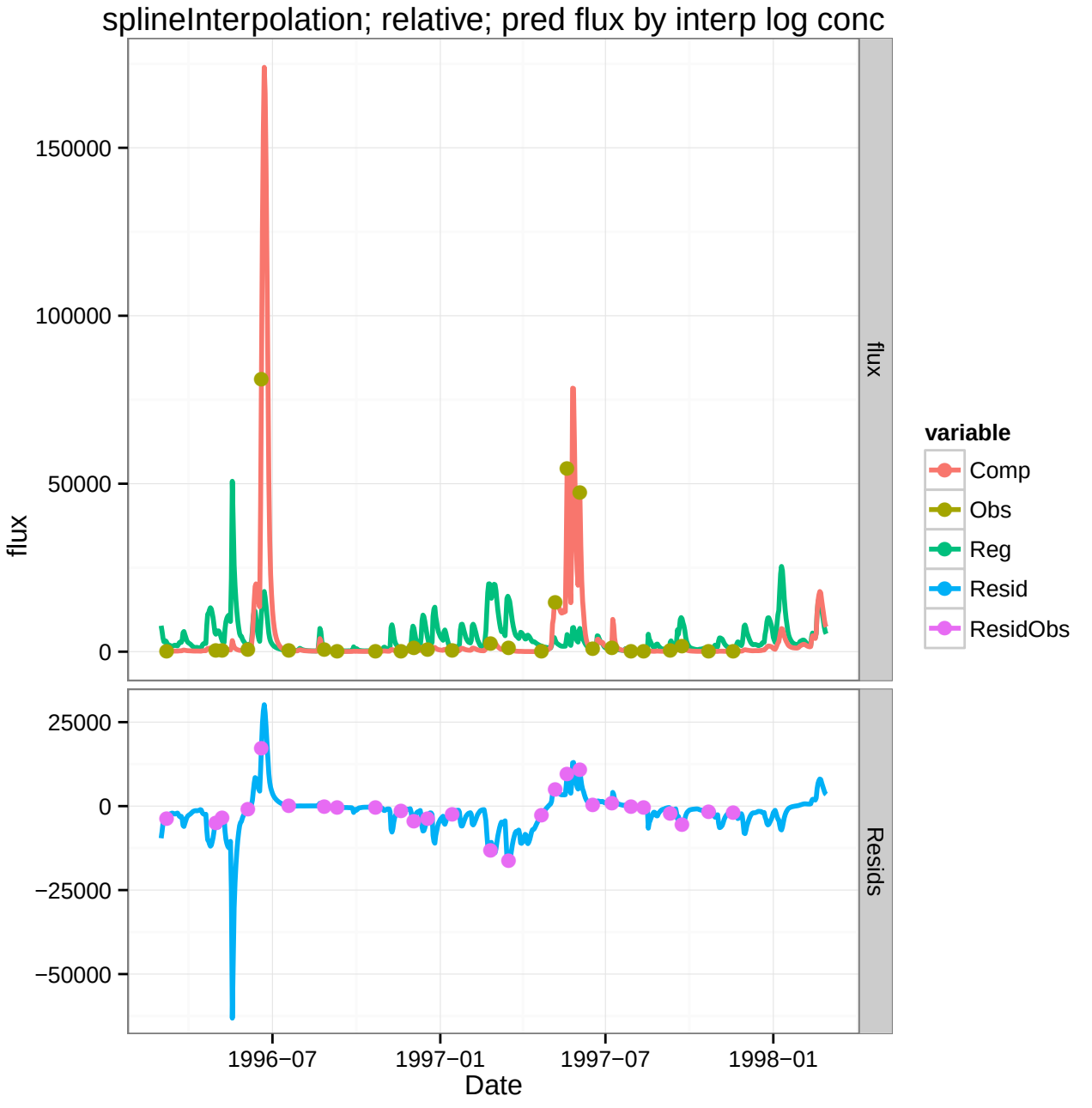

splineInterpolation; absolute; pred flux by interp flux
flux
75000
50000
25000
0
flux
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

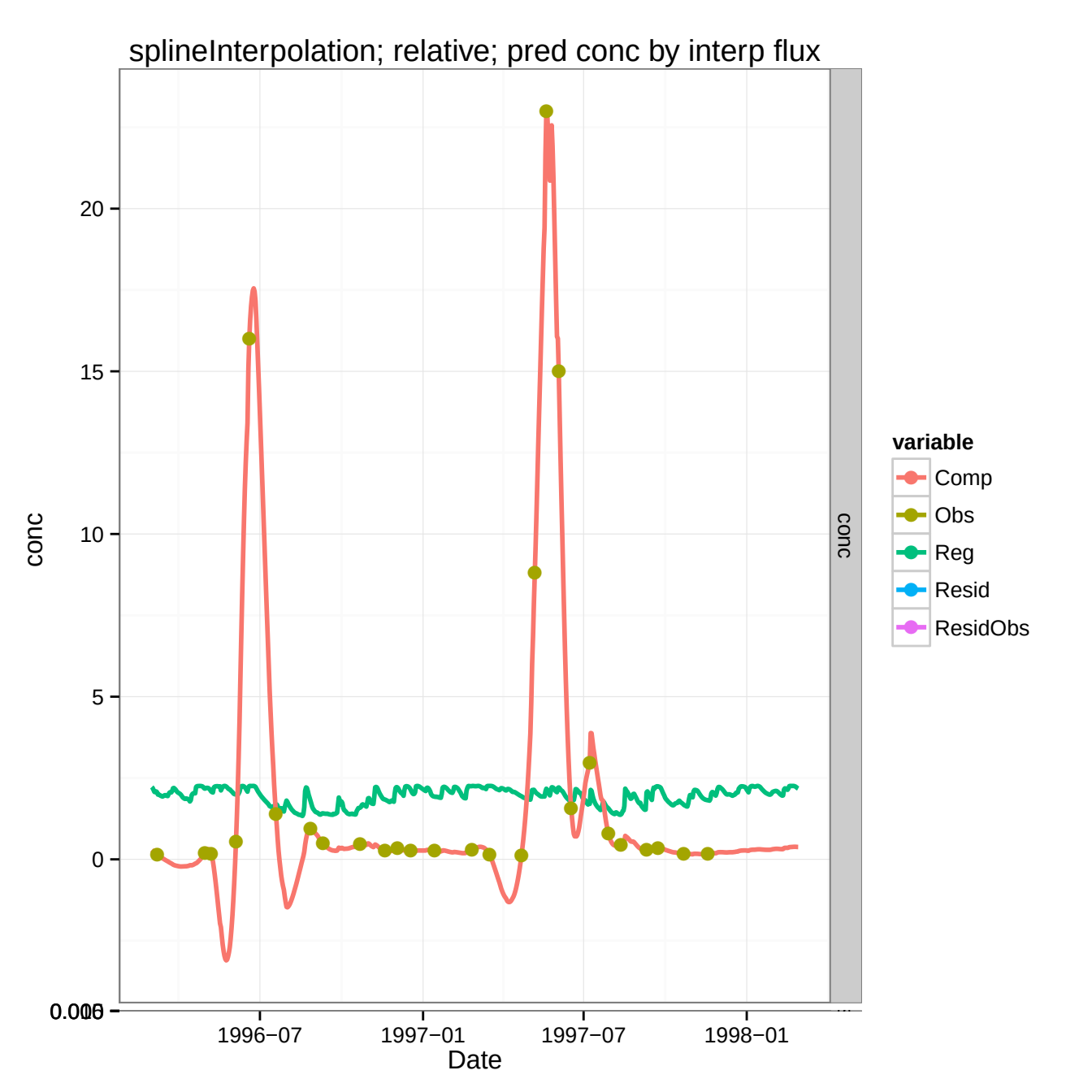

splineInterpolation; absolute; pred flux by interp conc
flux
100000
50000
0
−50000
flux
1e+05
5e+04
0e+00
−5e+04
−1e+05
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

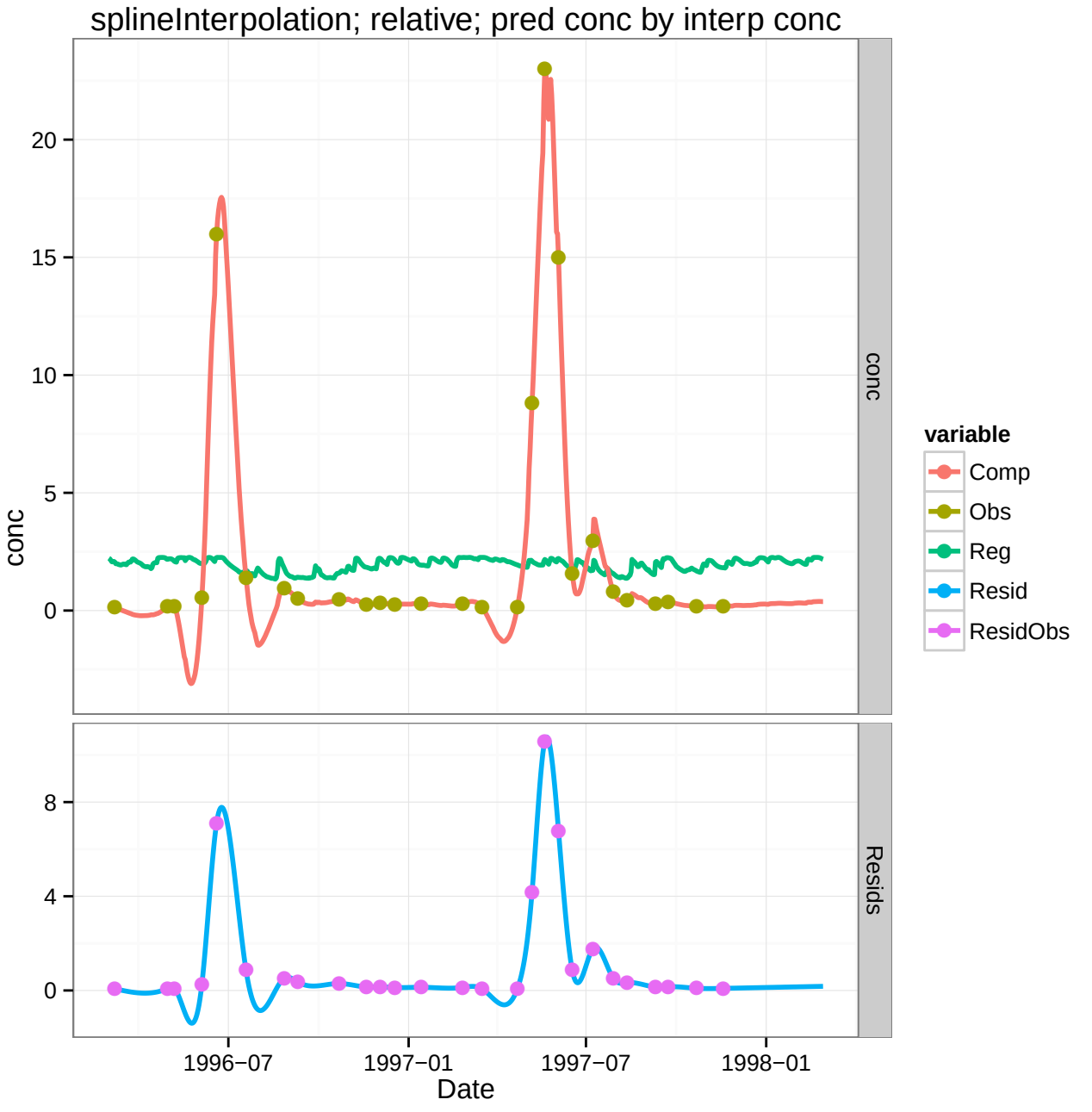

splineInterpolation; absolute; pred conc by interp log flux
conc
25
20
15
10
5
0
−0.0025
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs


splineInterpolation; absolute; pred conc by interp log conc
conc
25
20
15
10
5
0
conc
2
0
−2
−4
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


splineInterpolation; relative; pred flux by interp log flux
200000
150000
100000
50000
0
flux
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs


splineInterpolation; relative; pred flux by interp log conc
flux
150000
100000
50000
0
25000
0
−25000
−50000
1996−07
1997−01
1997−07
1998−01
Date
flux
Resids
variable
Comp
Obs
Reg
Resid
ResidObs


splineInterpolation; relative; pred conc by interp flux
conc
20
15
10
5
0
0.005
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs


splineInterpolation; relative; pred conc by interp conc
conc
20
15
10
5
0
conc
Resids
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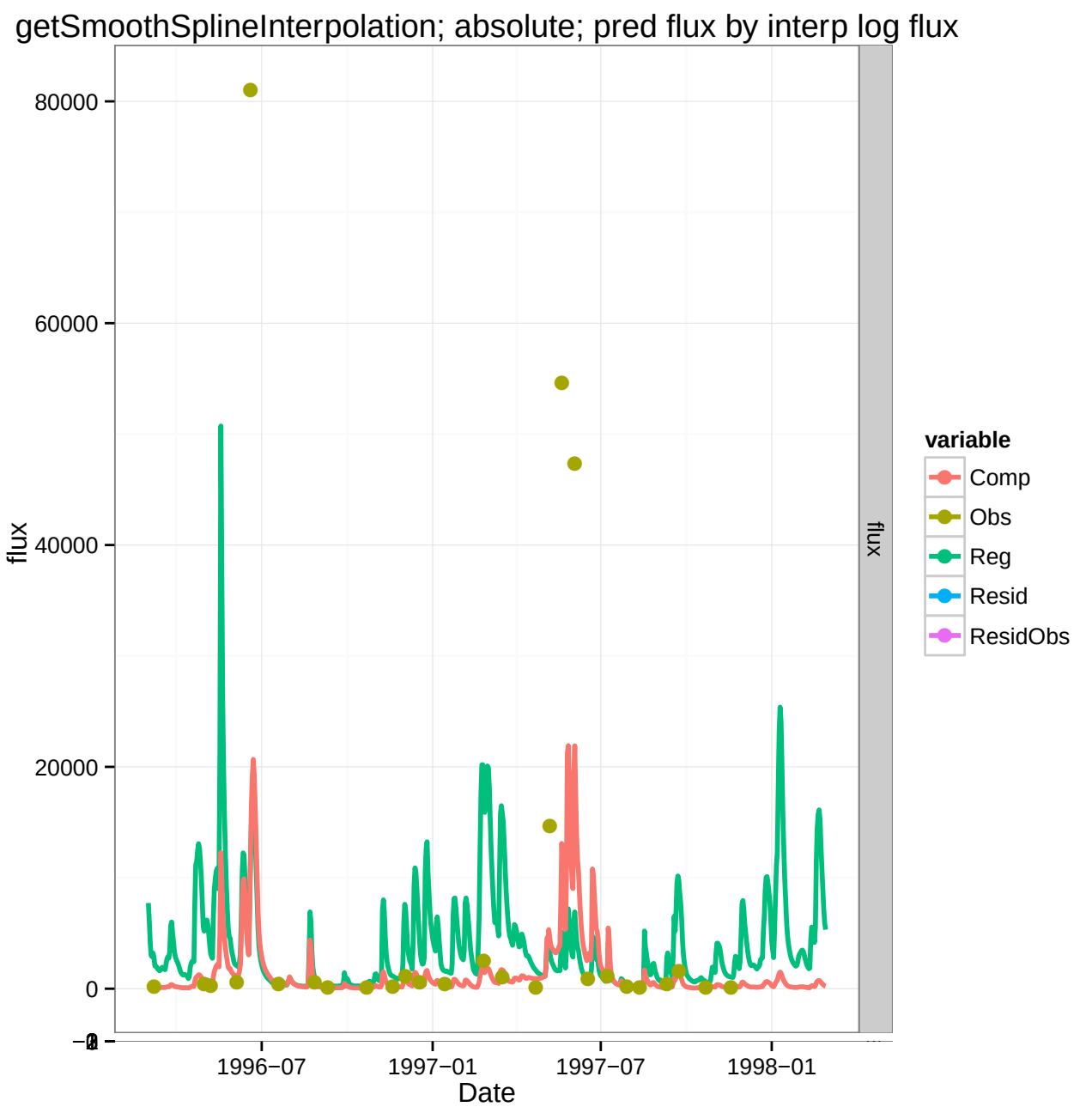
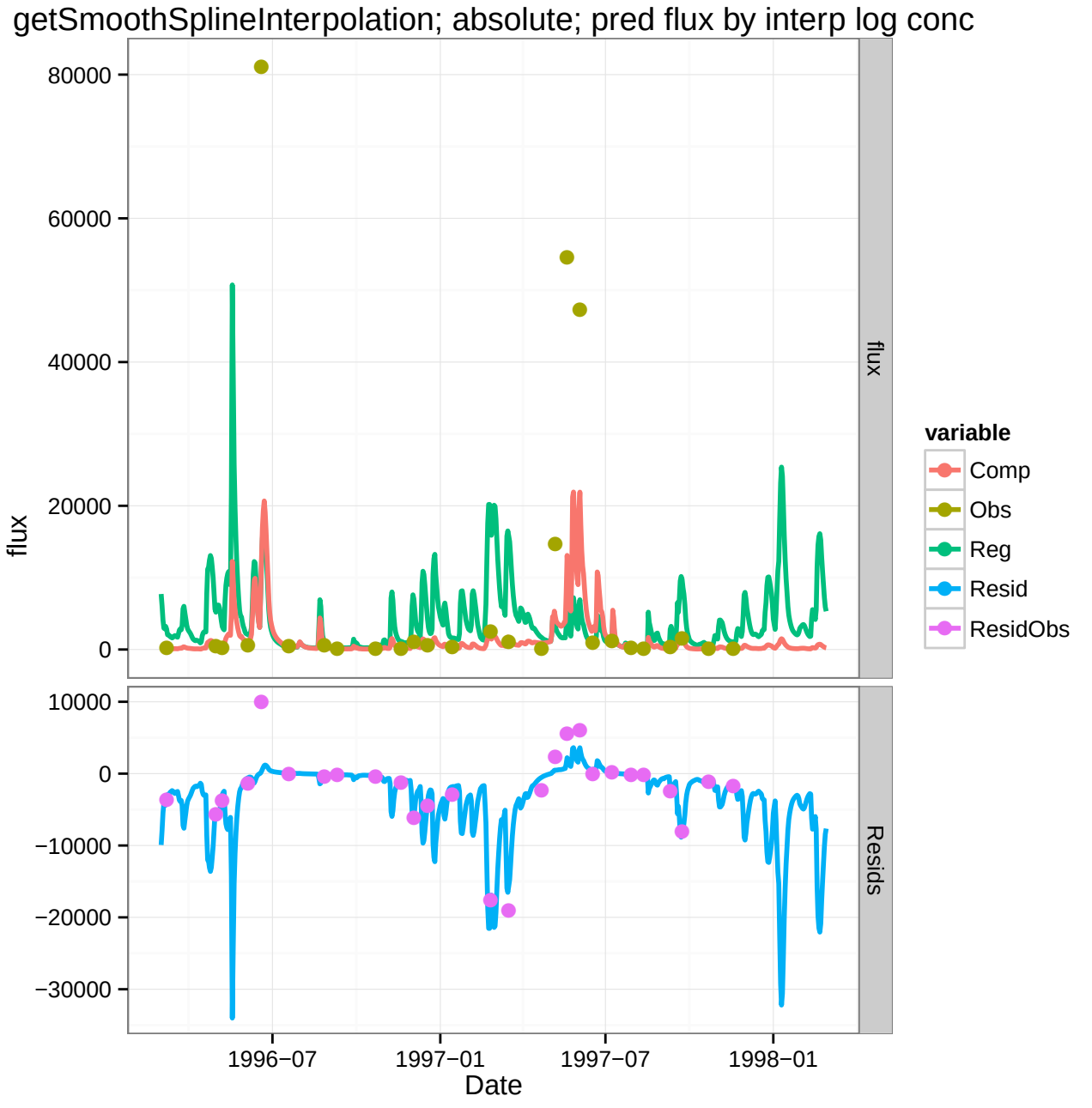
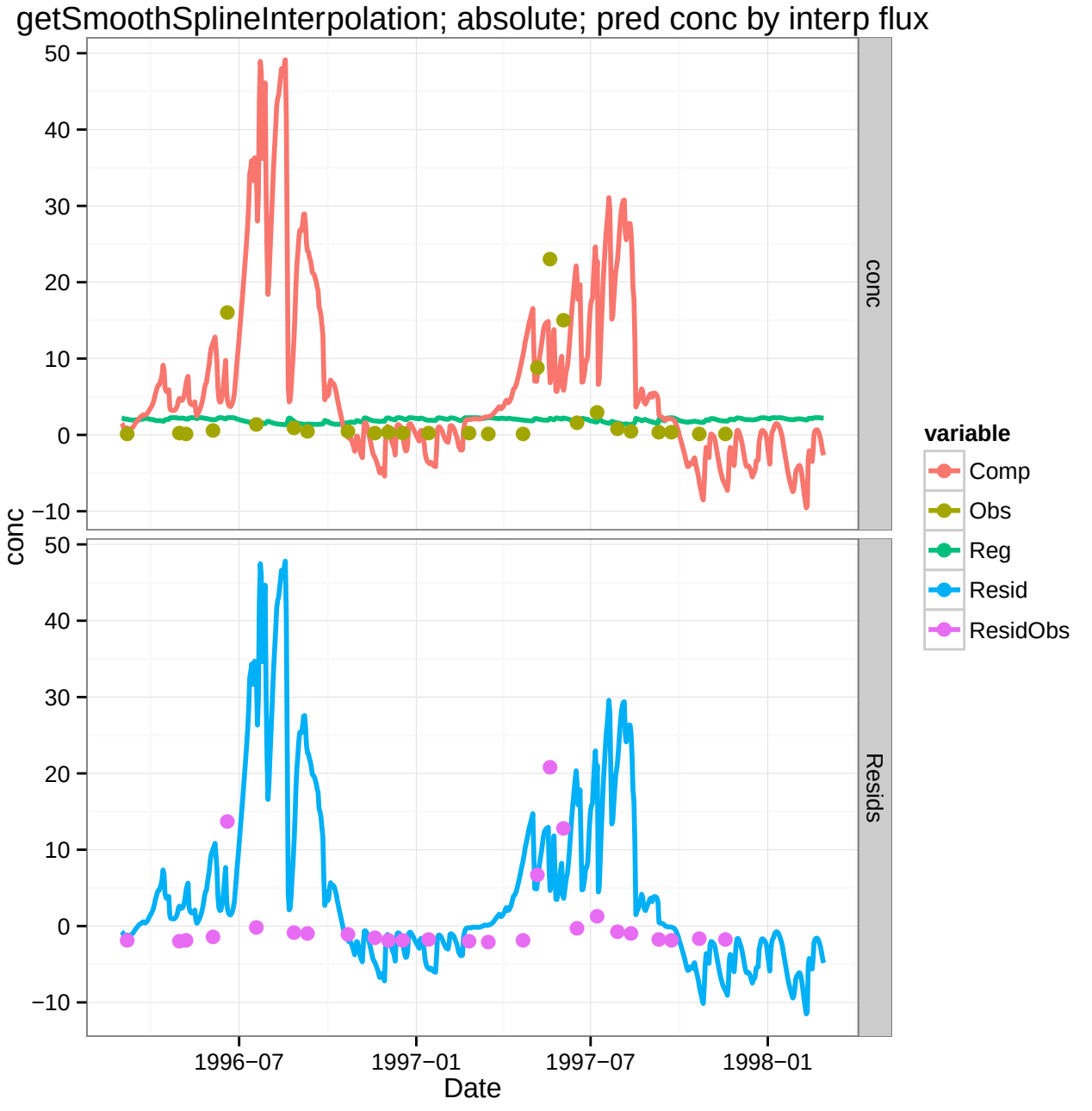
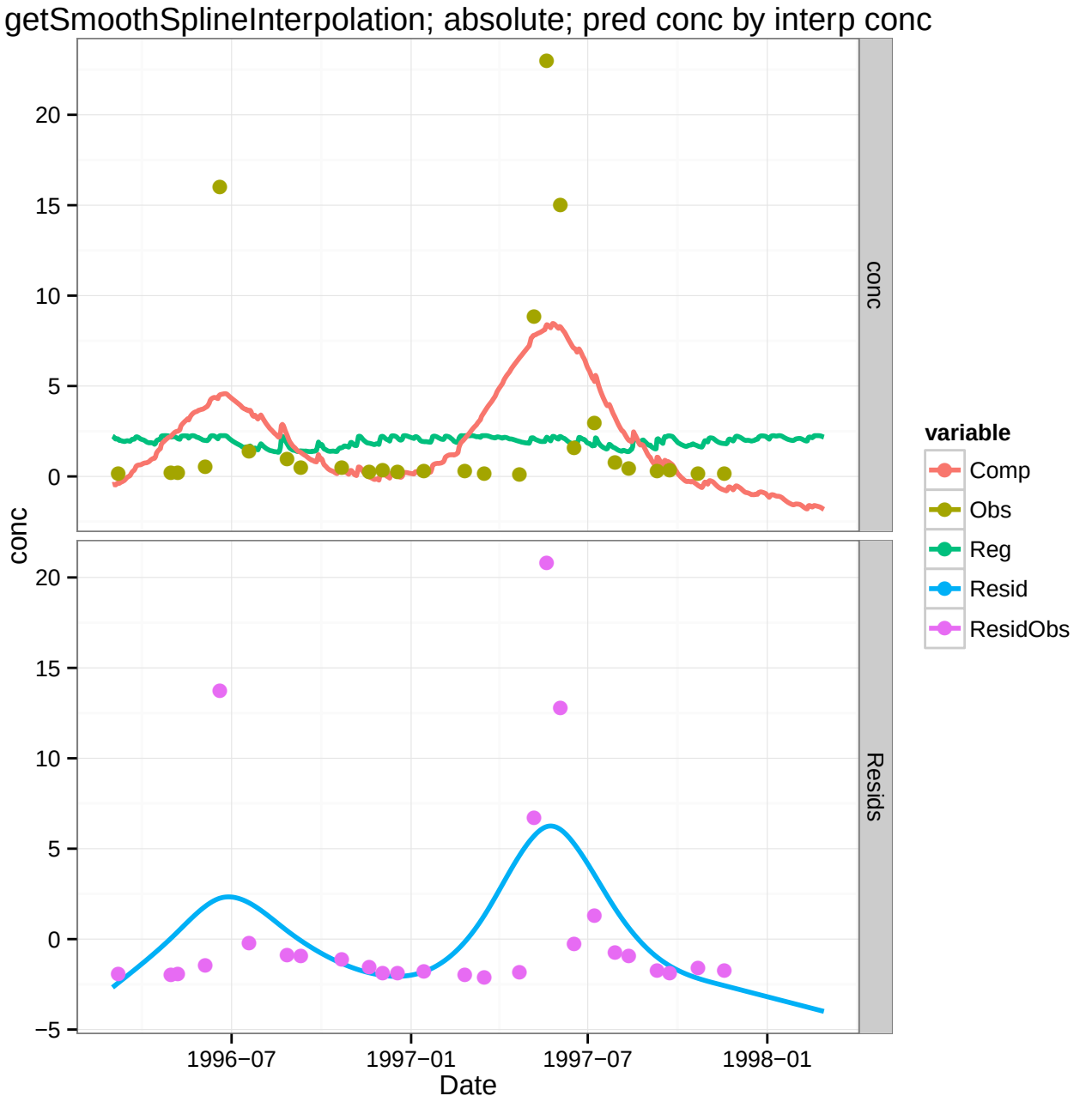
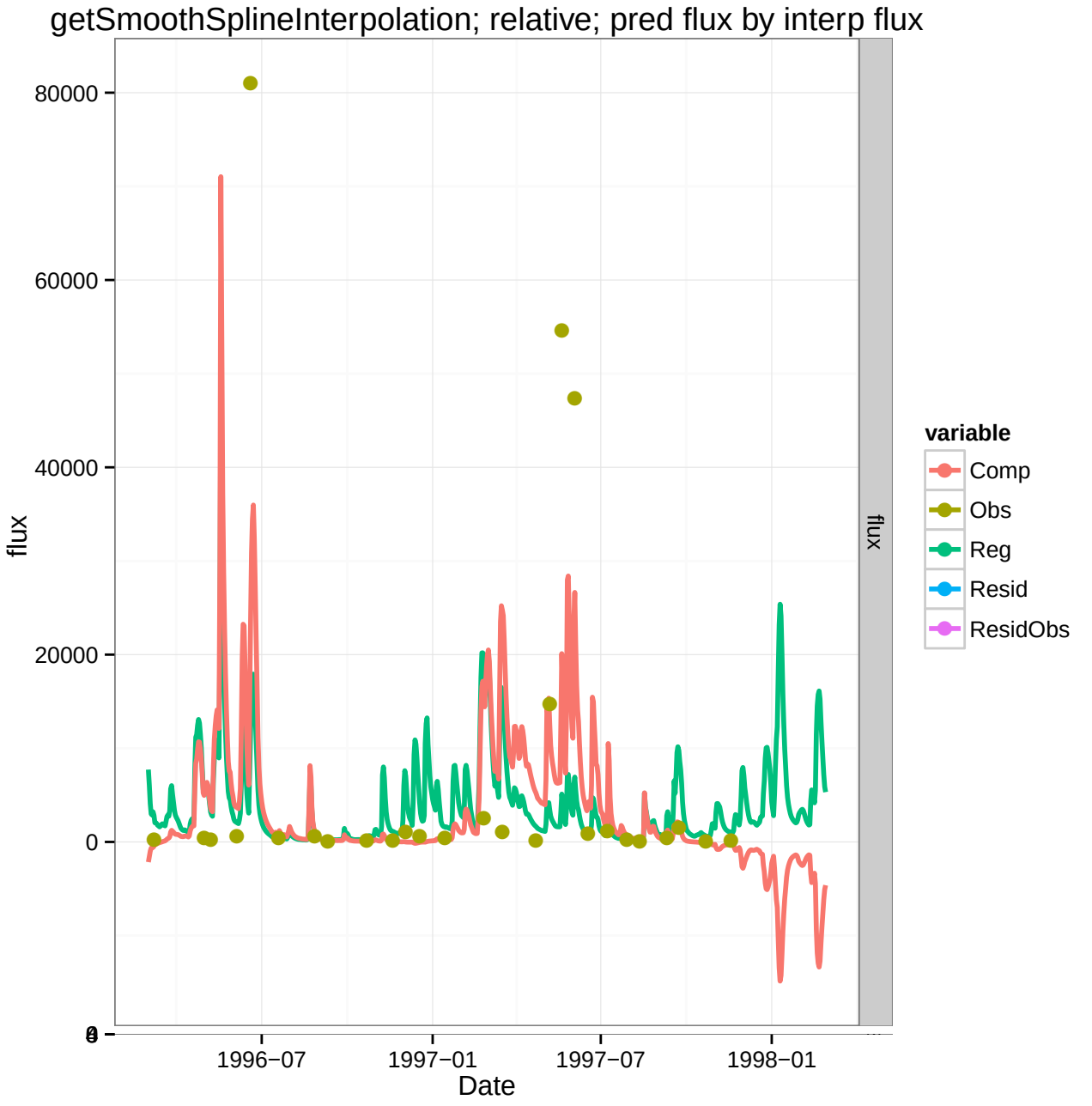
4
0
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

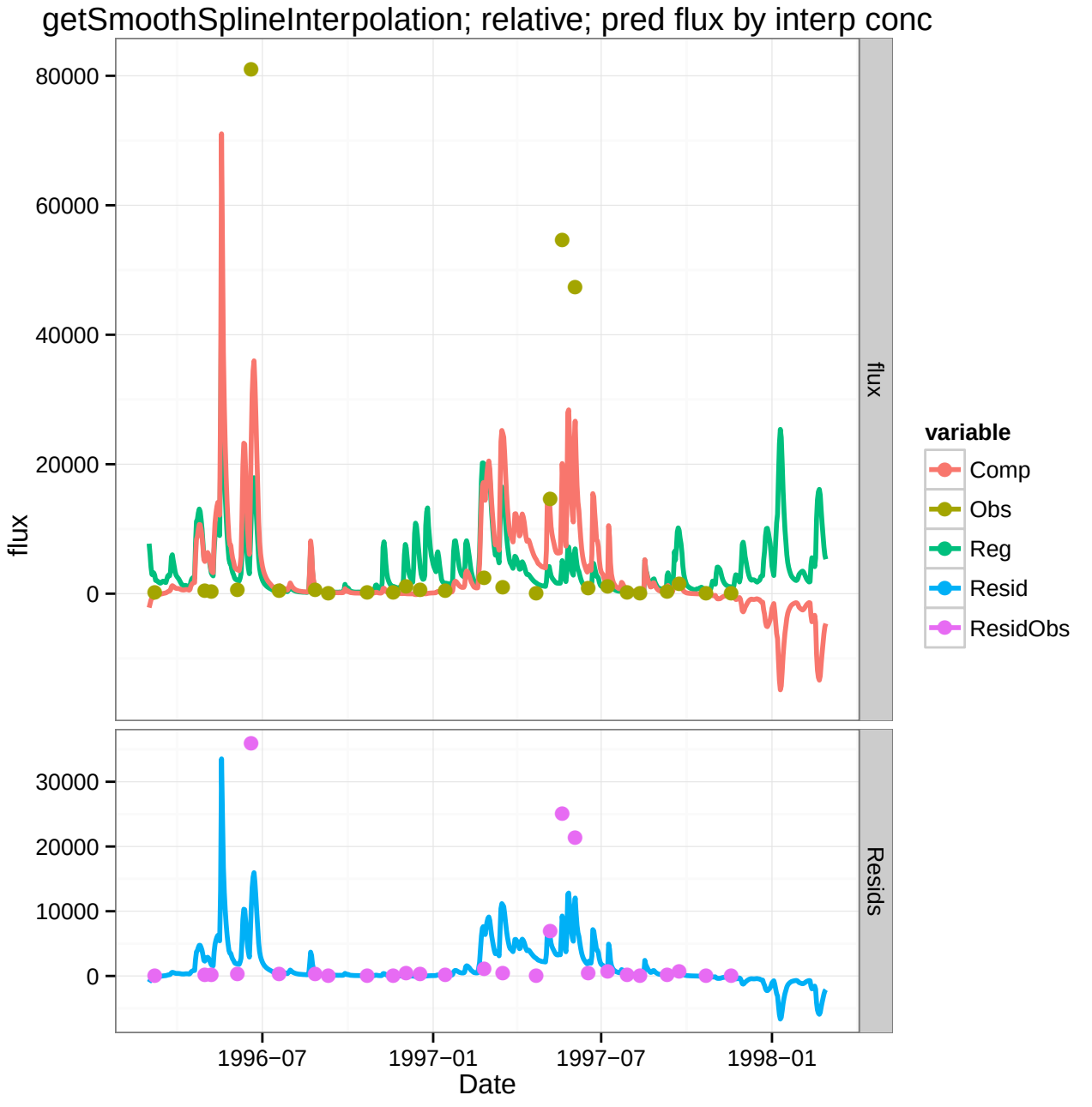

getSmoothSplineInterpolation; absolute; pred flux by interp log flux
80000
60000
40000
20000
0
flux
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

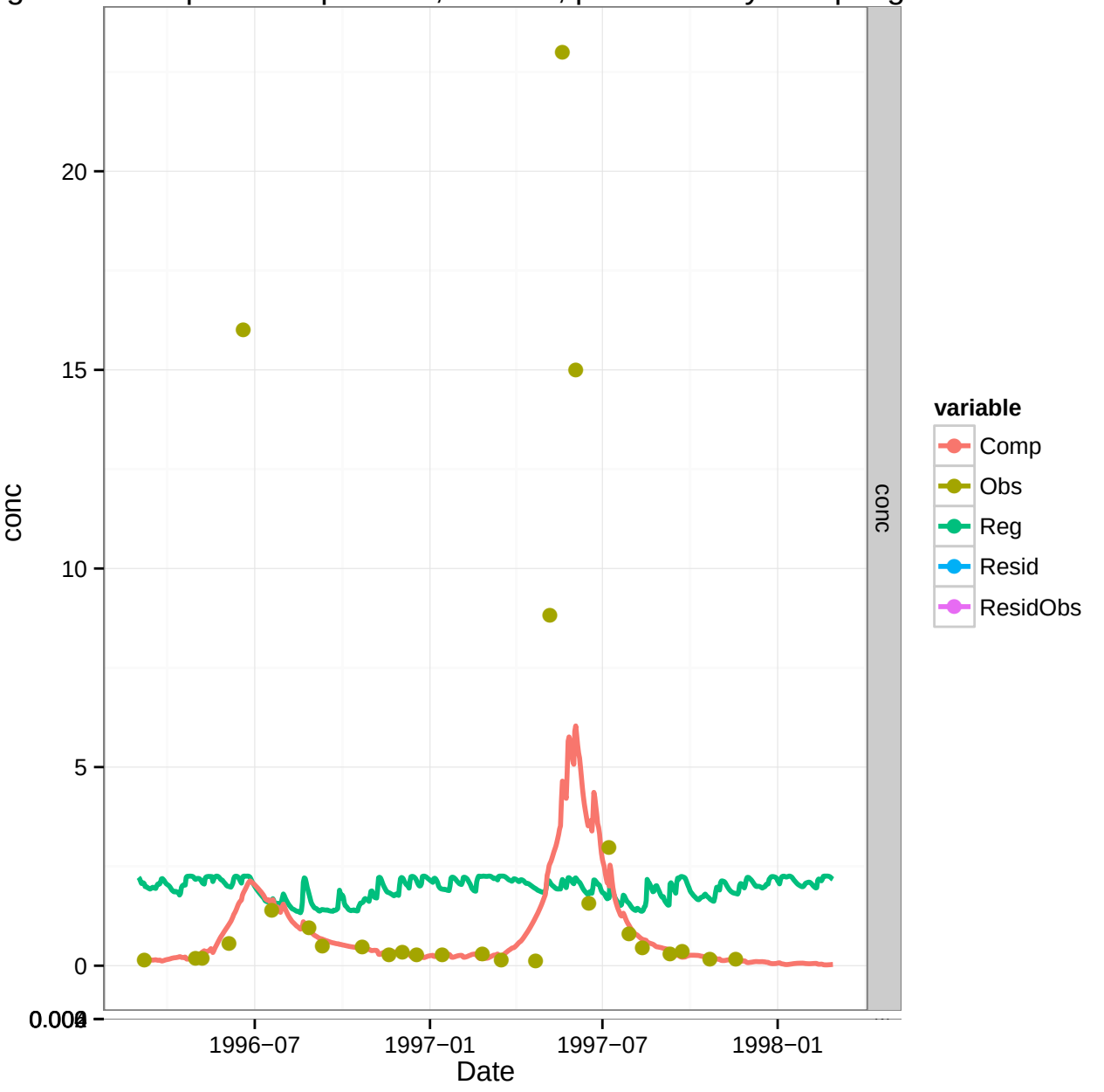

getSmoothSplineInterpolation; absolute; pred flux by interp log conc
flux
80000
60000
40000
20000
0
10000
0
−10000
−20000
−30000
1996−07
1997−01
1997−07
1998−01
Date
flux
Resids
variable
Comp
Obs
Reg
Resid
ResidObs

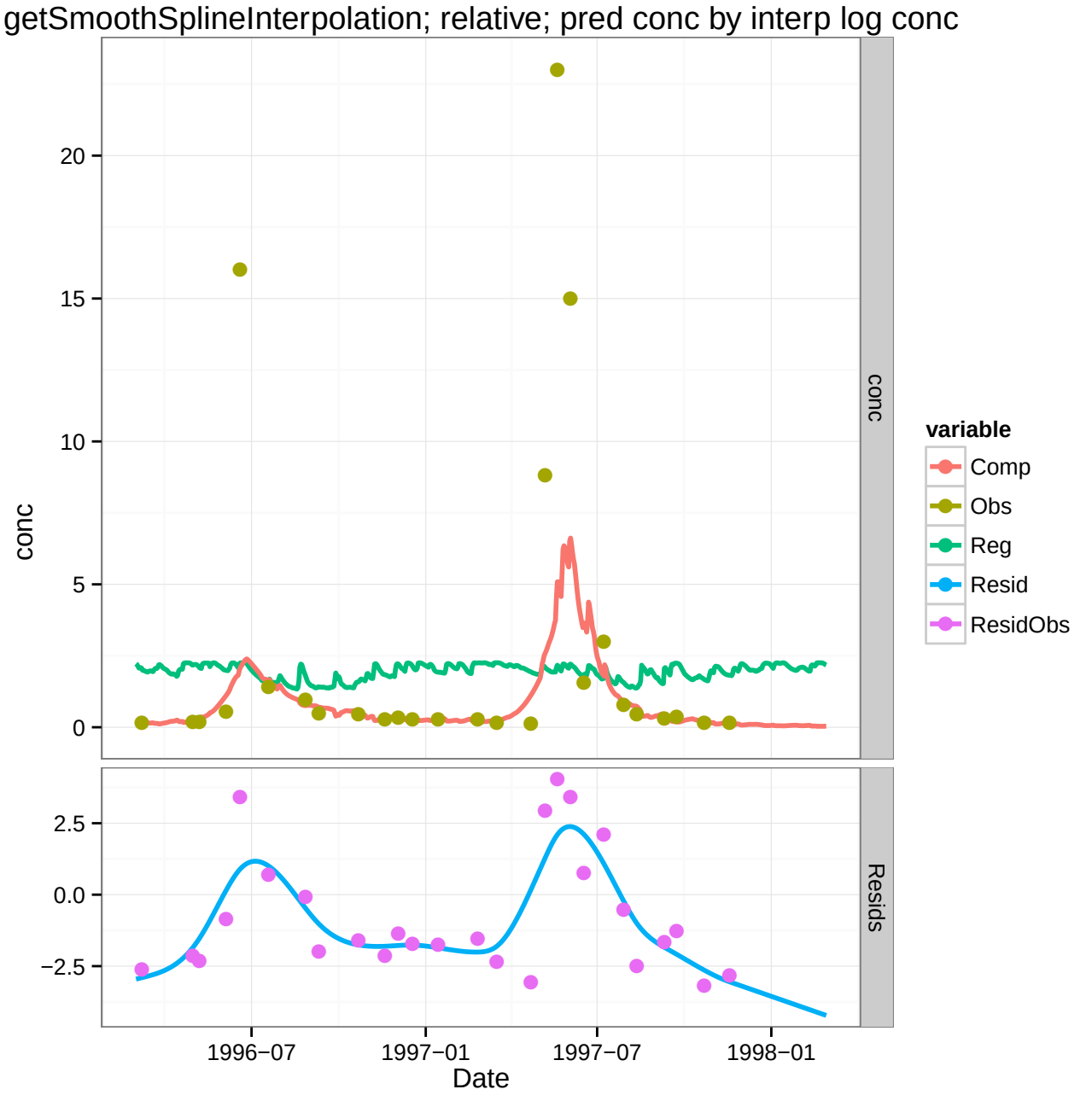

getSmoothSplineInterpolation; absolute; pred conc by interp flux
conc
Resids
50
40
30
20
10
0
−10
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

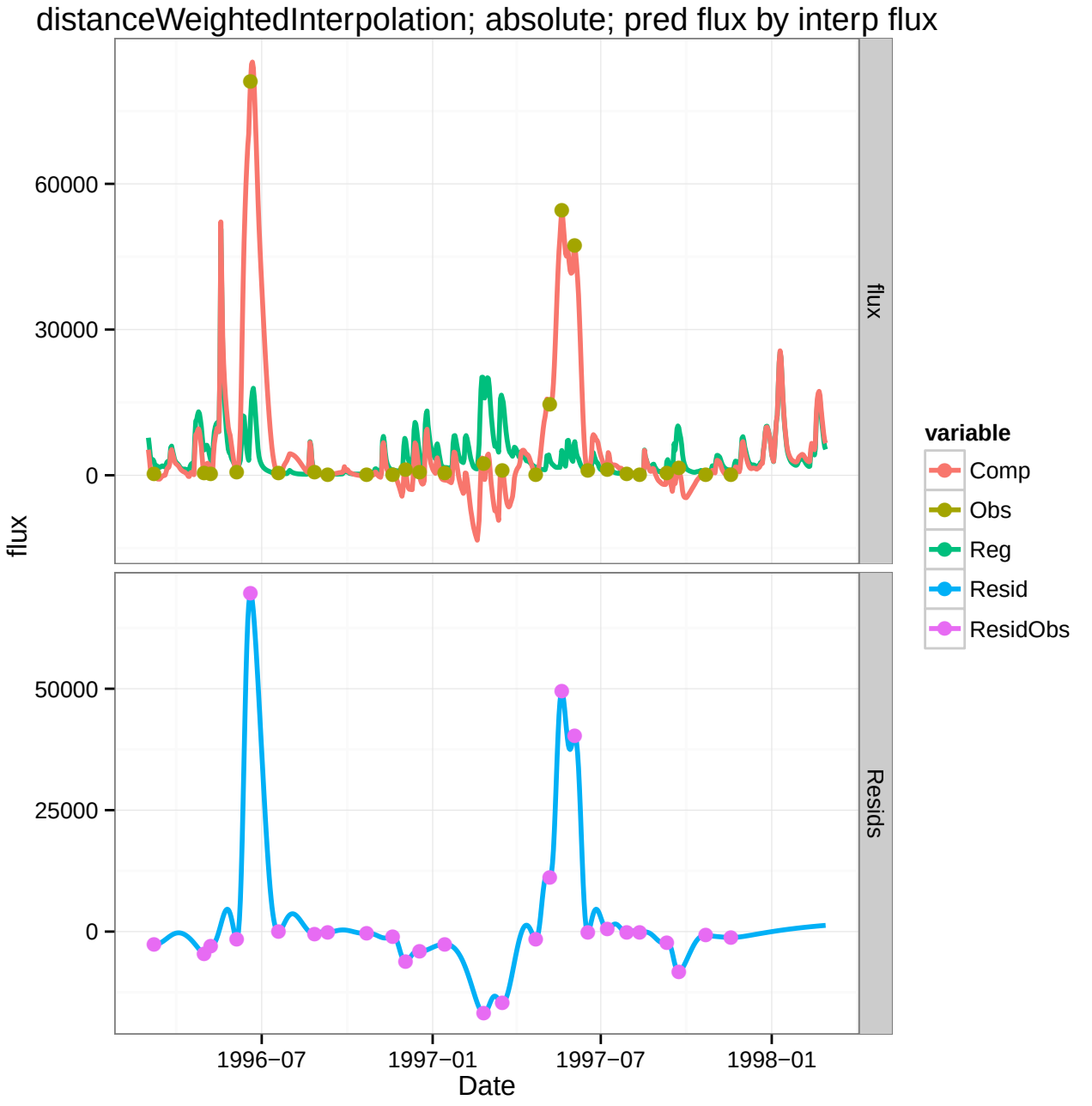

getSmoothSplineInterpolation; absolute; pred conc by interp conc
conc
Resids
20
15
10
5
0
−5
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

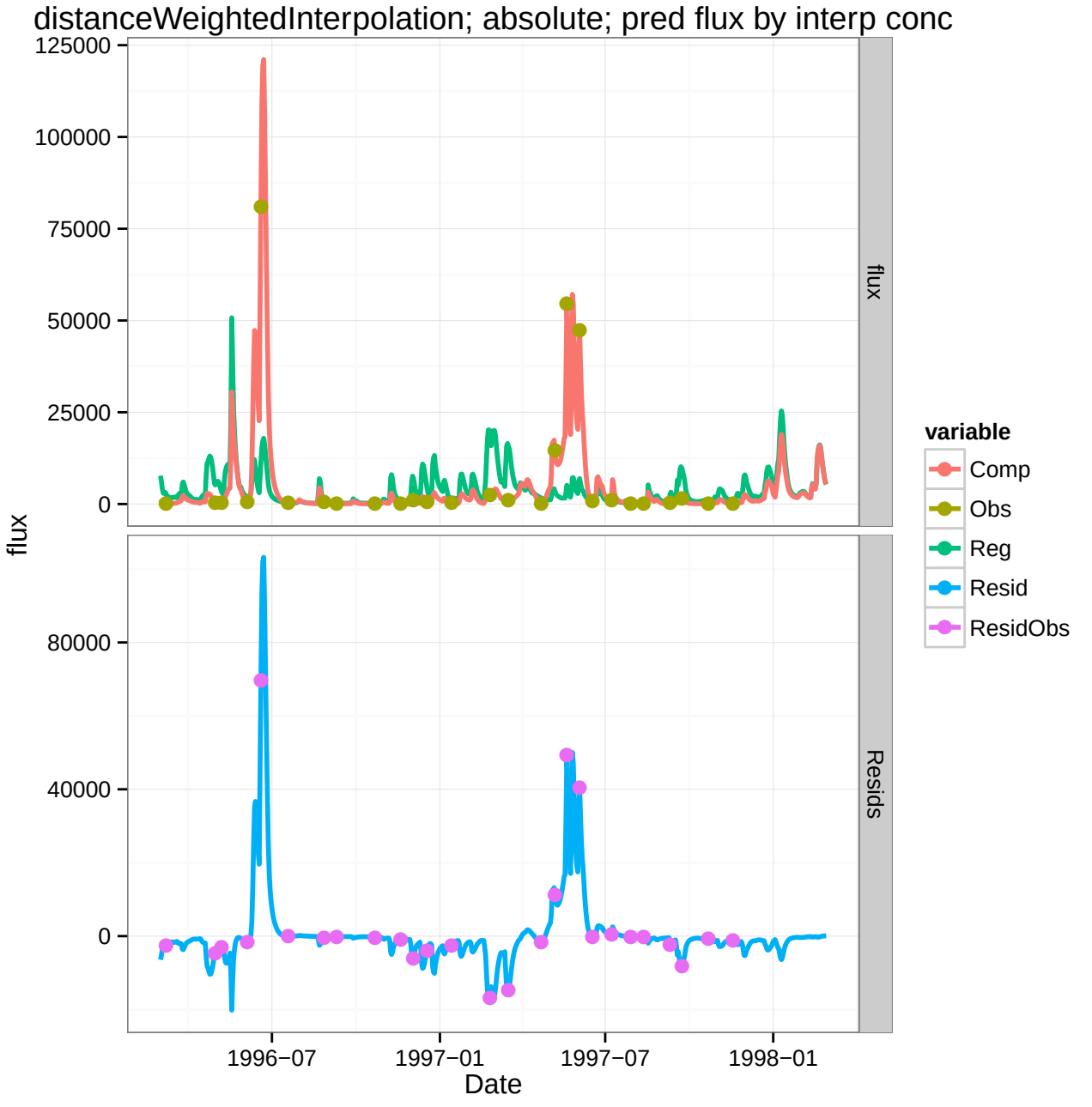

getSmoothSplineInterpolation; relative; pred flux by interp flux
80000
60000
40000
20000
0
flux
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs

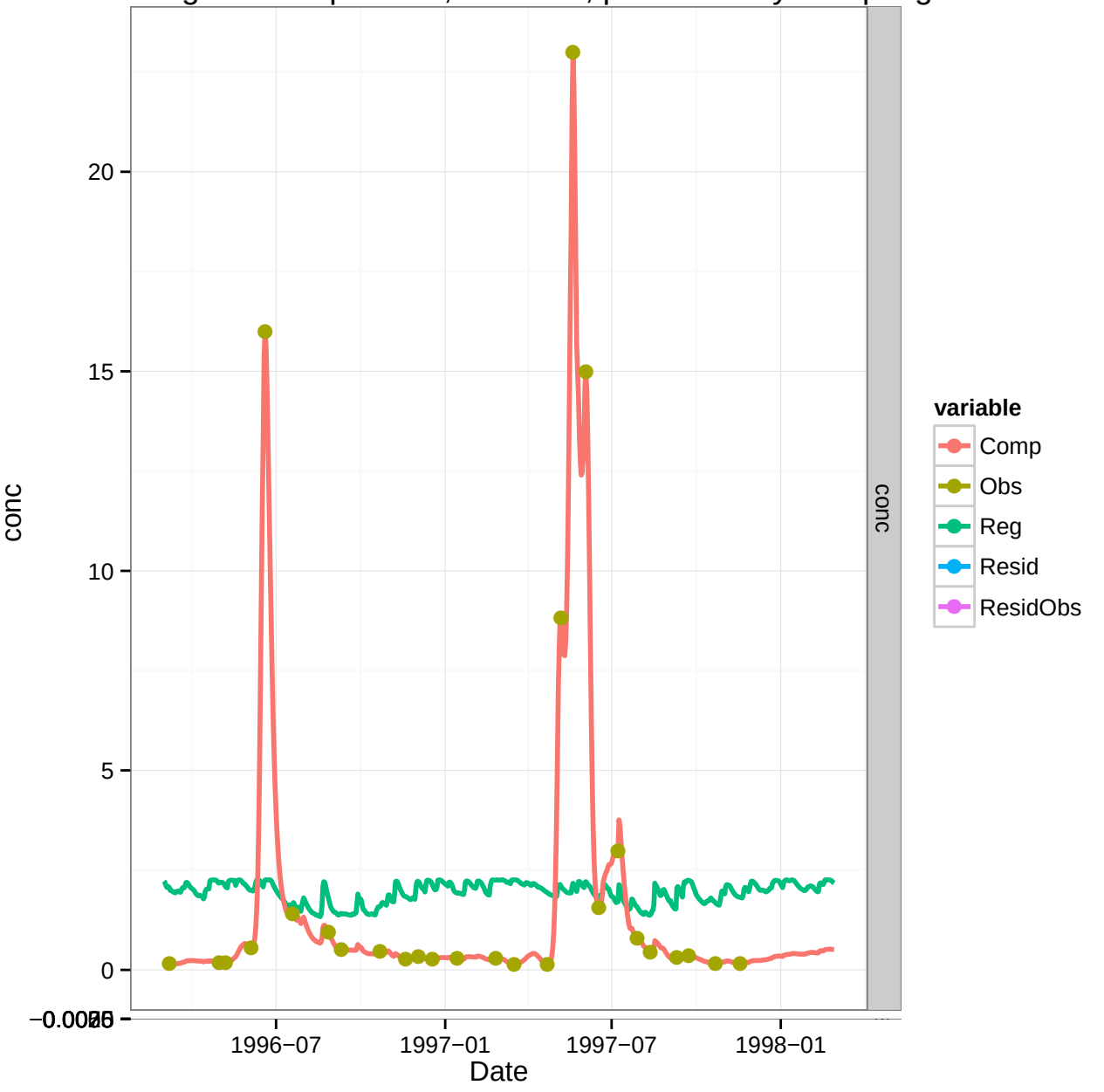

getSmoothSplineInterpolation; relative; pred flux by interp conc
flux
80000
60000
40000
20000
0
30000
20000
10000
0
1996−07
1997−01
1997−07
1998−01
Date
flux
Resids
variable
Comp
Obs
Reg
Resid
ResidObs

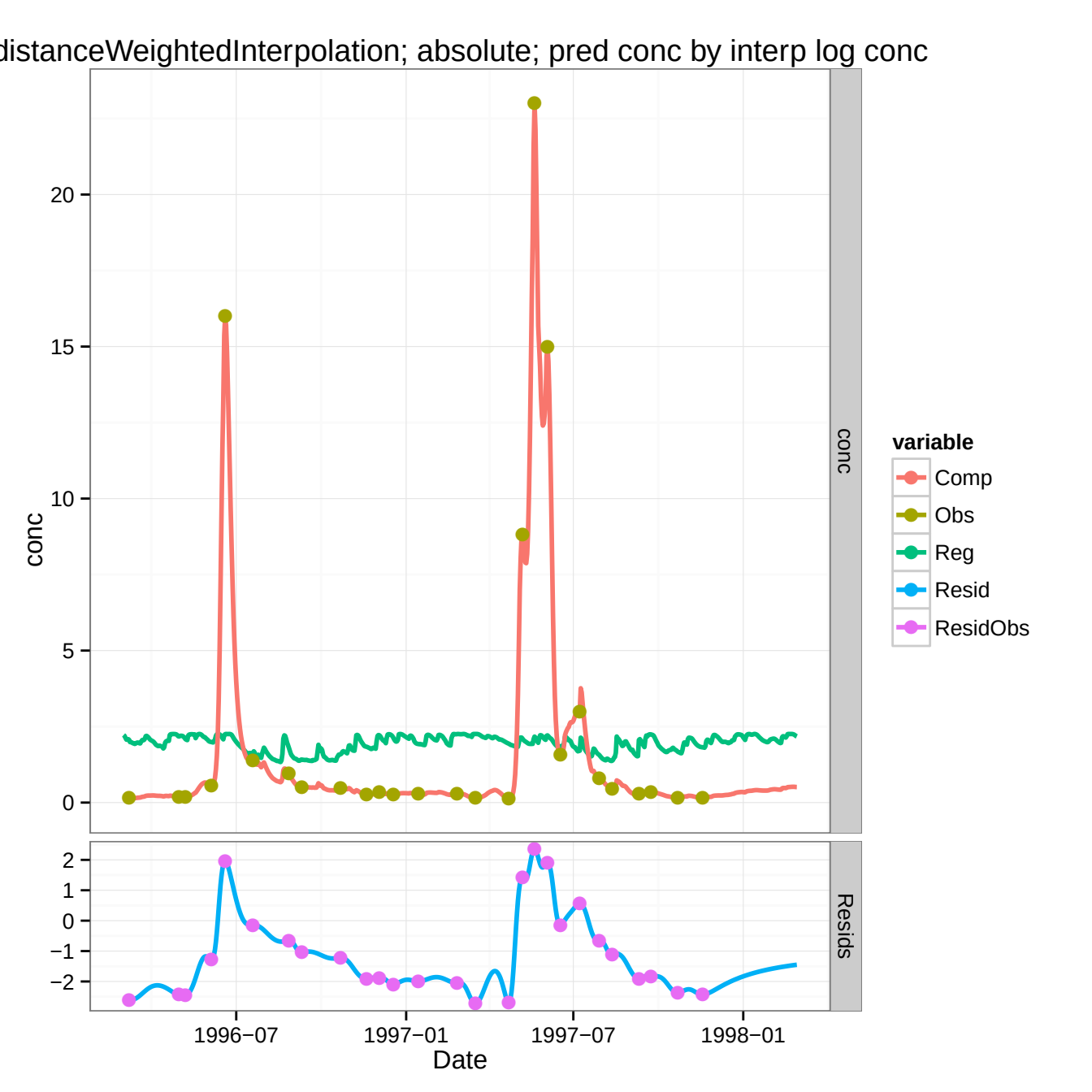

getSmoothSplineInterpolation; relative; pred conc by interp log flux
conc
20
15
10
5
0
0.00
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs

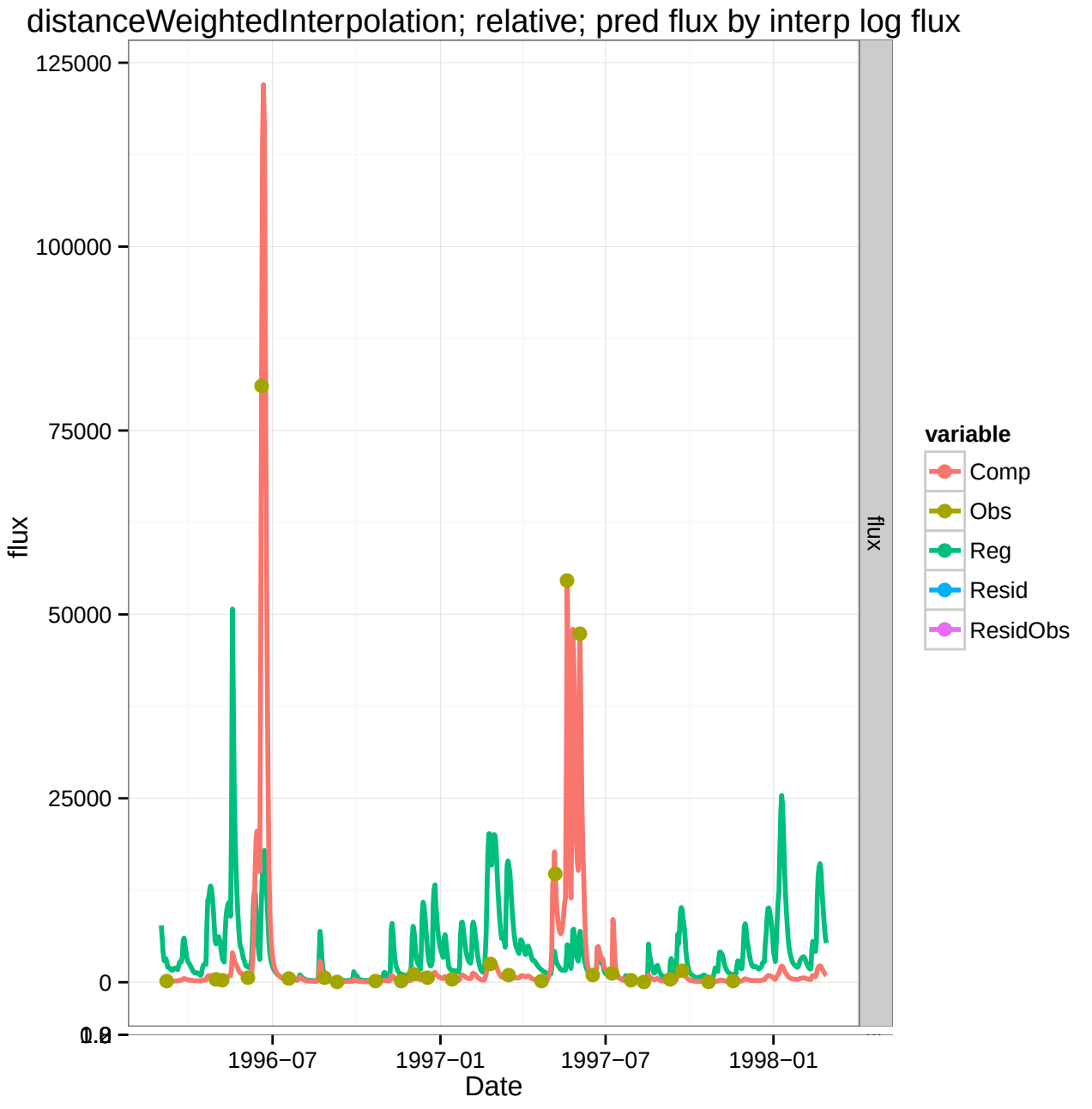

getSmoothSplineInterpolation; relative; pred conc by interp log conc
conc
20
15
10
5
0
conc
Resids
2.5
0.0
−2.5
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

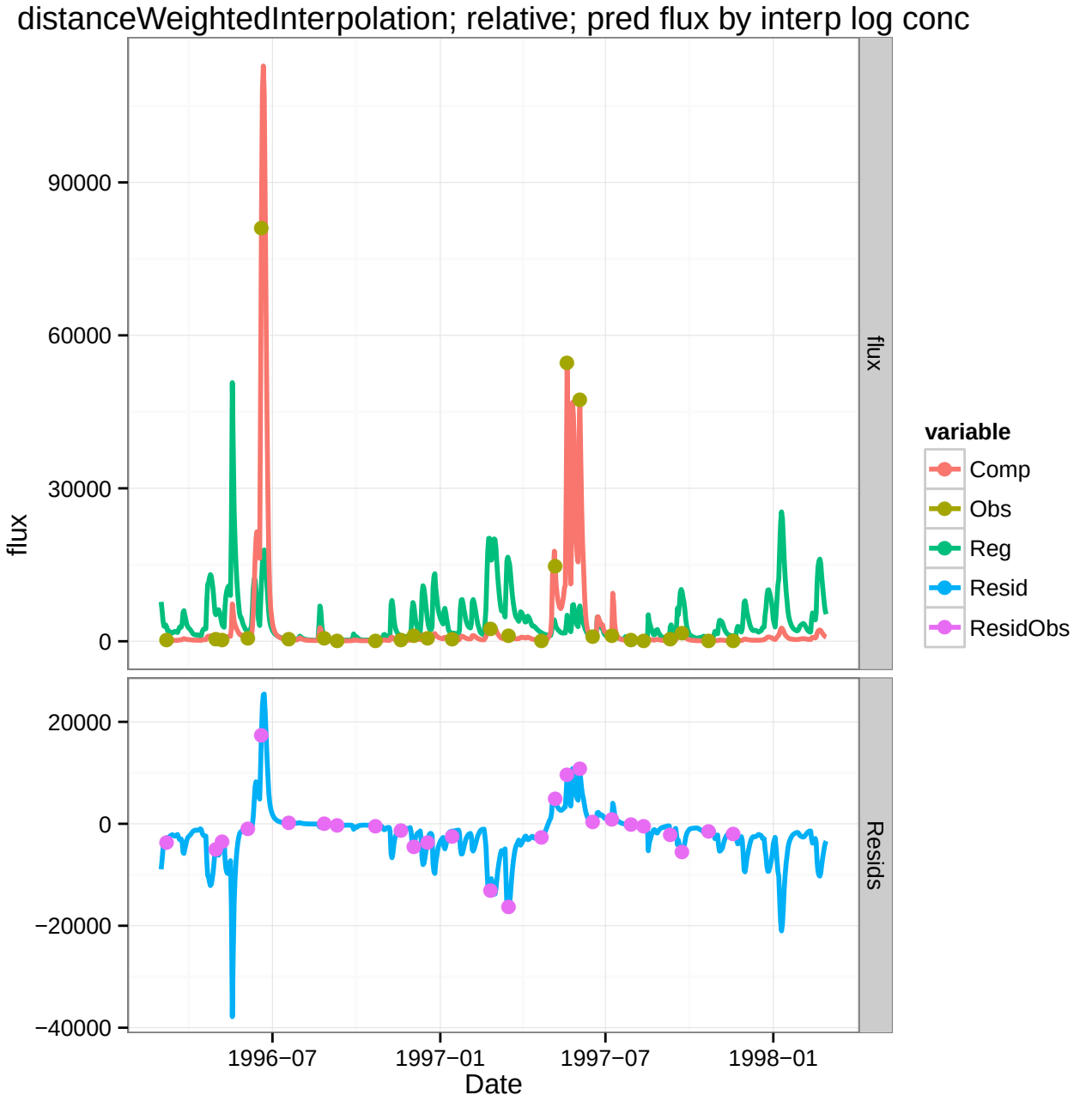

distanceWeightedInterpolation; absolute; pred flux by interp flux
flux
60000
30000
0
flux
50000
25000
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

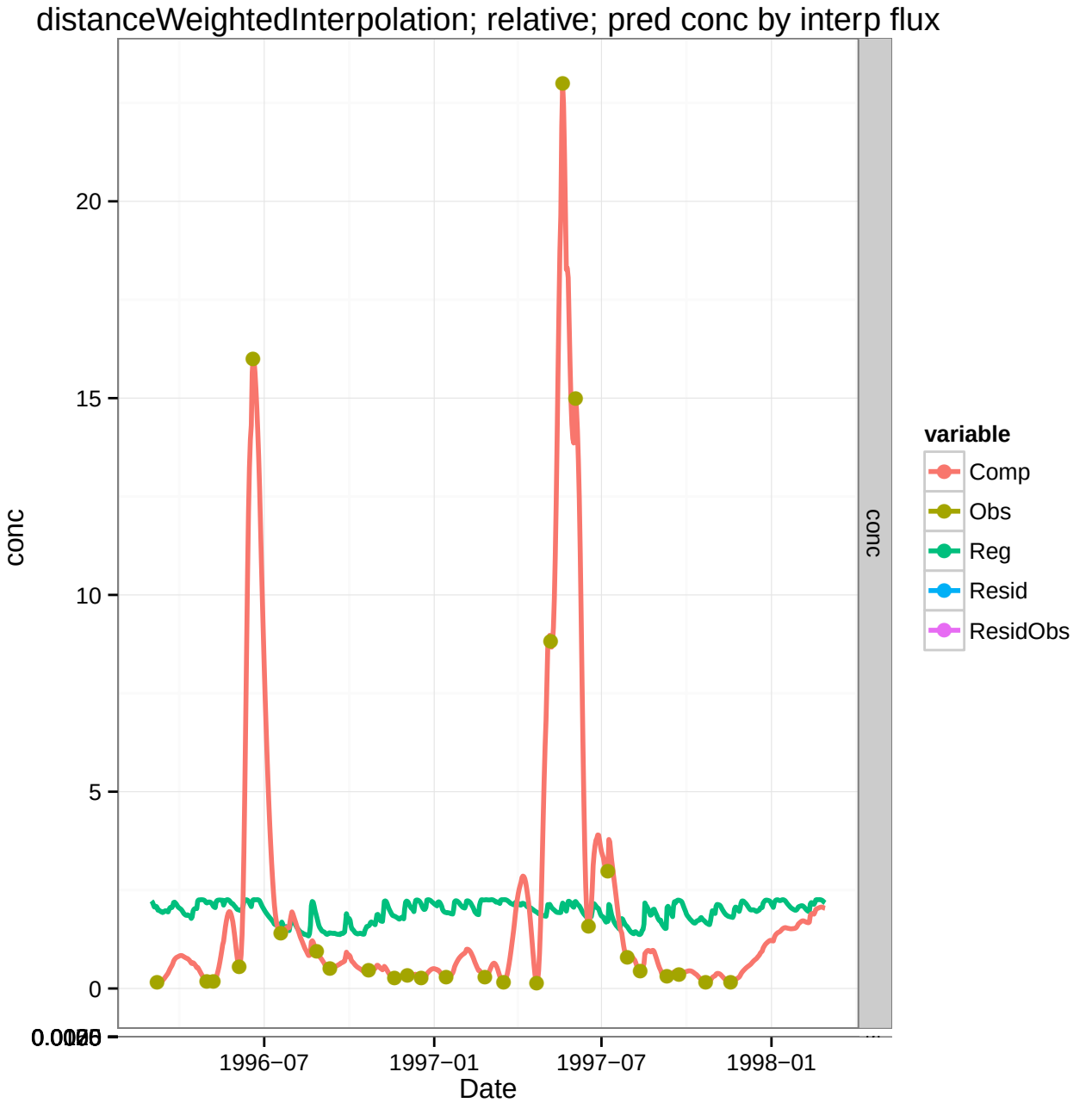

distanceWeightedInterpolation; absolute; pred flux by interp conc
flux
125000
100000
75000
50000
25000
0
flux
80000
40000
0
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs

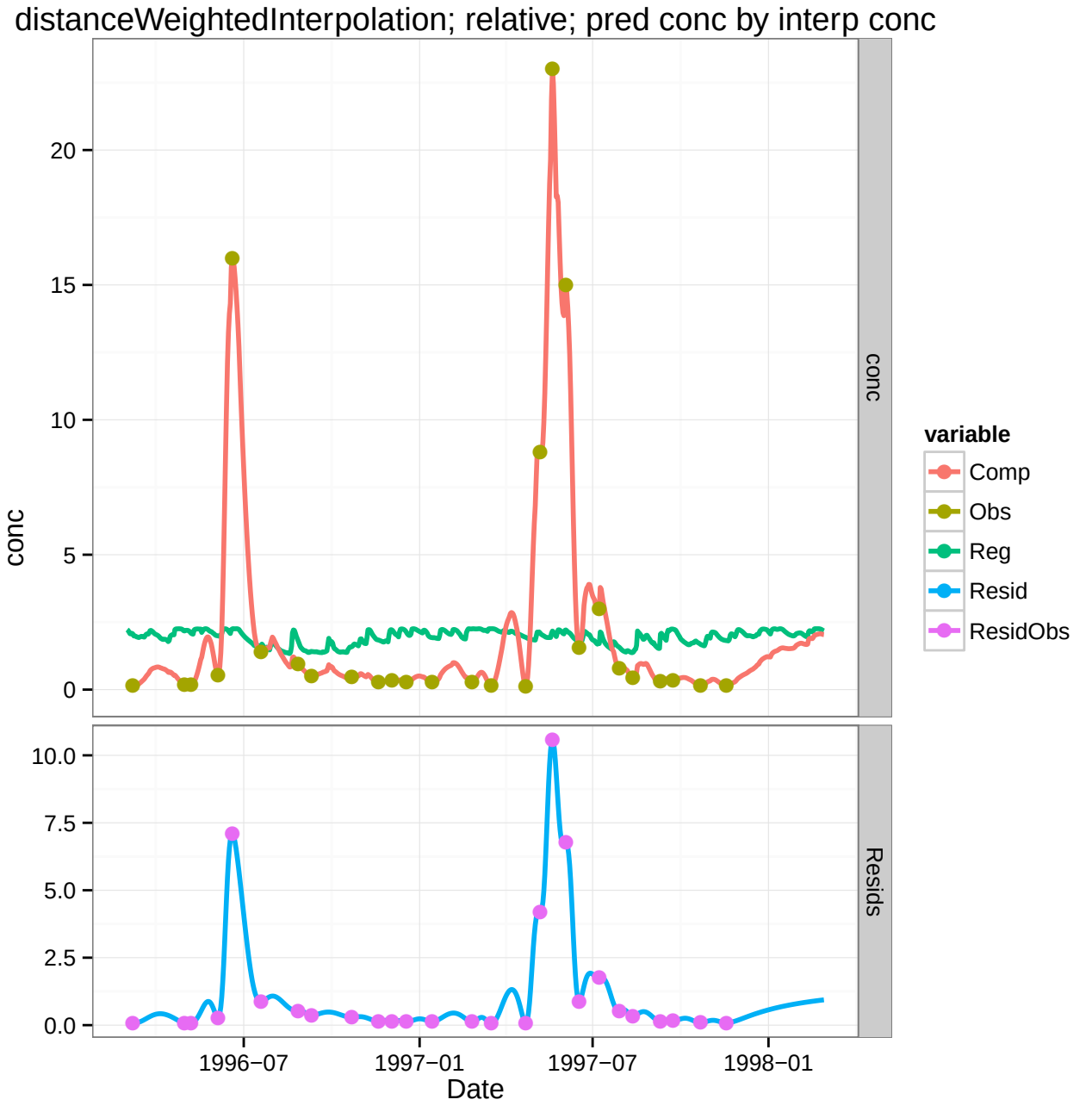

distanceWeightedInterpolation; absolute; pred conc by interp log flux
conc
20
15
10
5
0
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs

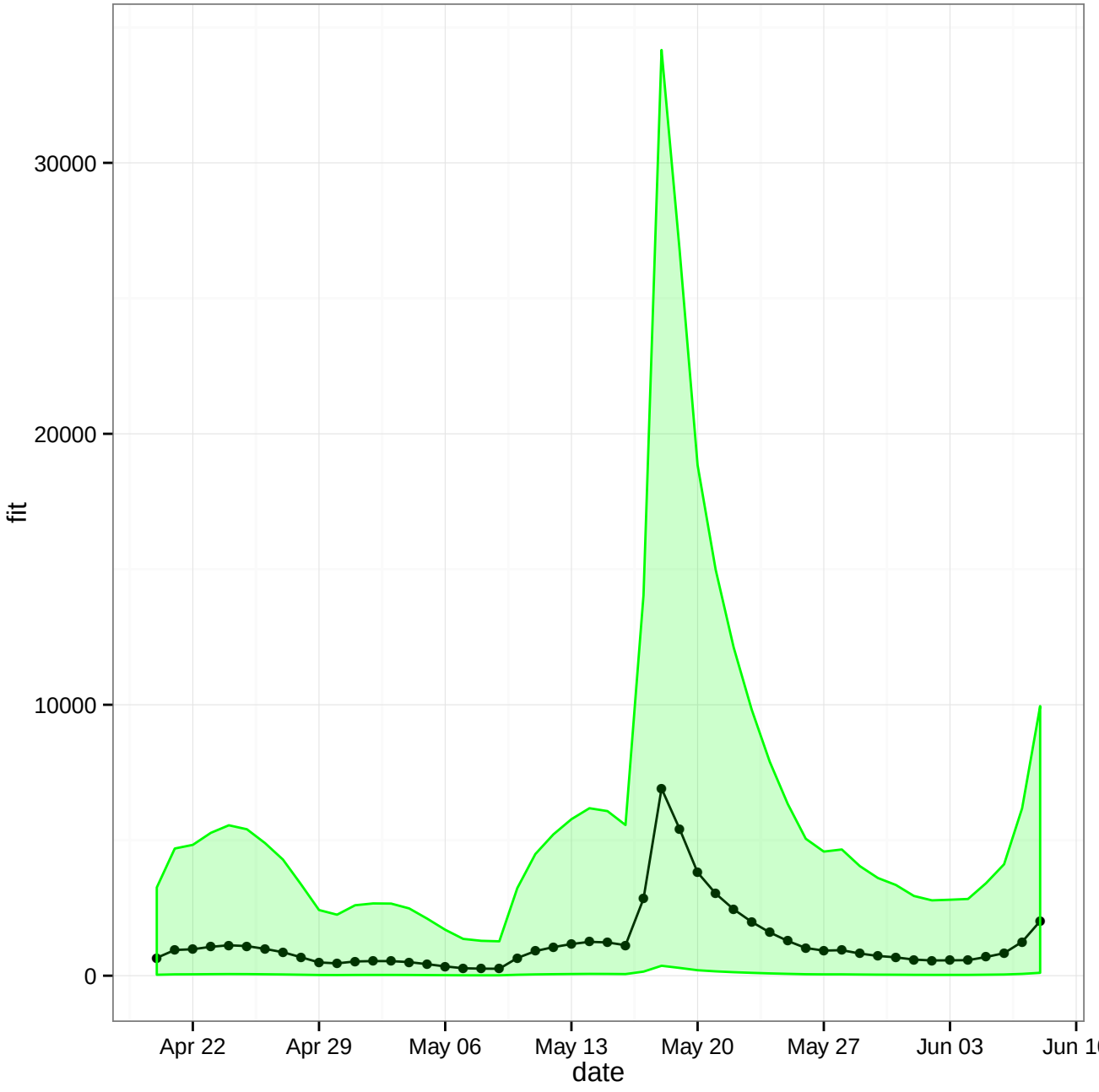

distanceWeightedInterpolation; absolute; pred conc by interp log conc
conc
20
15
10
5
0
conc
Resids
2
1
0
−1
−2
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


distanceWeightedInterpolation; relative; pred flux by interp log flux
125000
100000
75000
50000
25000
0
flux
1996−07
1997−01
1997−07
1998−01
Date
flux
variable
Comp
Obs
Reg
Resid
ResidObs


distanceWeightedInterpolation; relative; pred flux by interp log conc
flux
90000
60000
30000
0
flux
20000
0
−20000
−40000
Resids
1996−07
1997−01
1997−07
1998−01
Date
variable
Comp
Obs
Reg
Resid
ResidObs


distanceWeightedInterpolation; relative; pred conc by interp flux
conc
20
15
10
5
0
1996−07
1997−01
1997−07
1998−01
Date
conc
variable
Comp
Obs
Reg
Resid
ResidObs


distanceWeightedInterpolation; relative; pred conc by interp conc
conc
20
15
10
5
0
conc
variable
Comp
Obs
Reg
Resid
ResidObs
10.0
7.5
5.0
2.5
0.0
Resids
1996−07
1997−01
1997−07
1998−01
Date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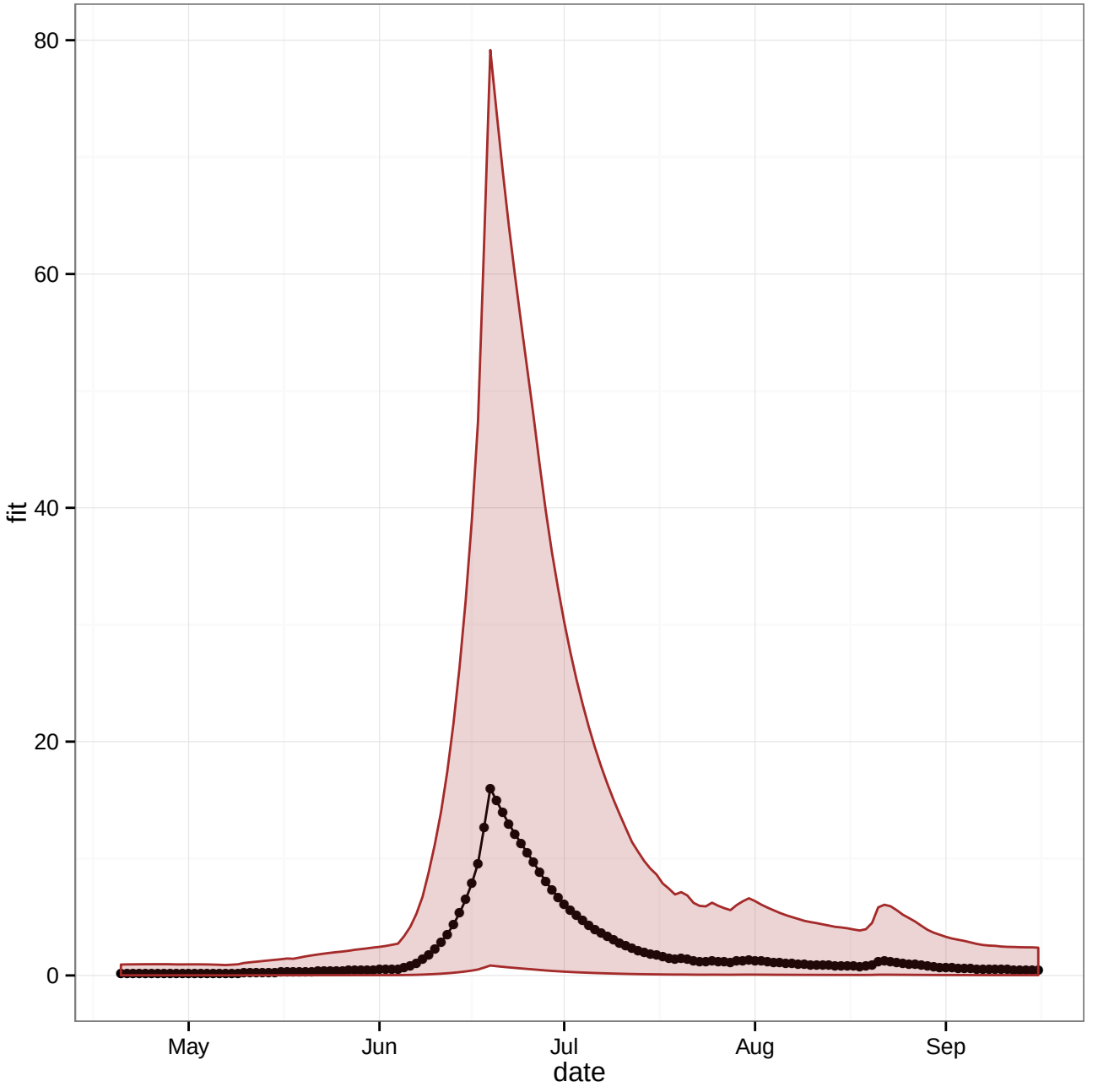
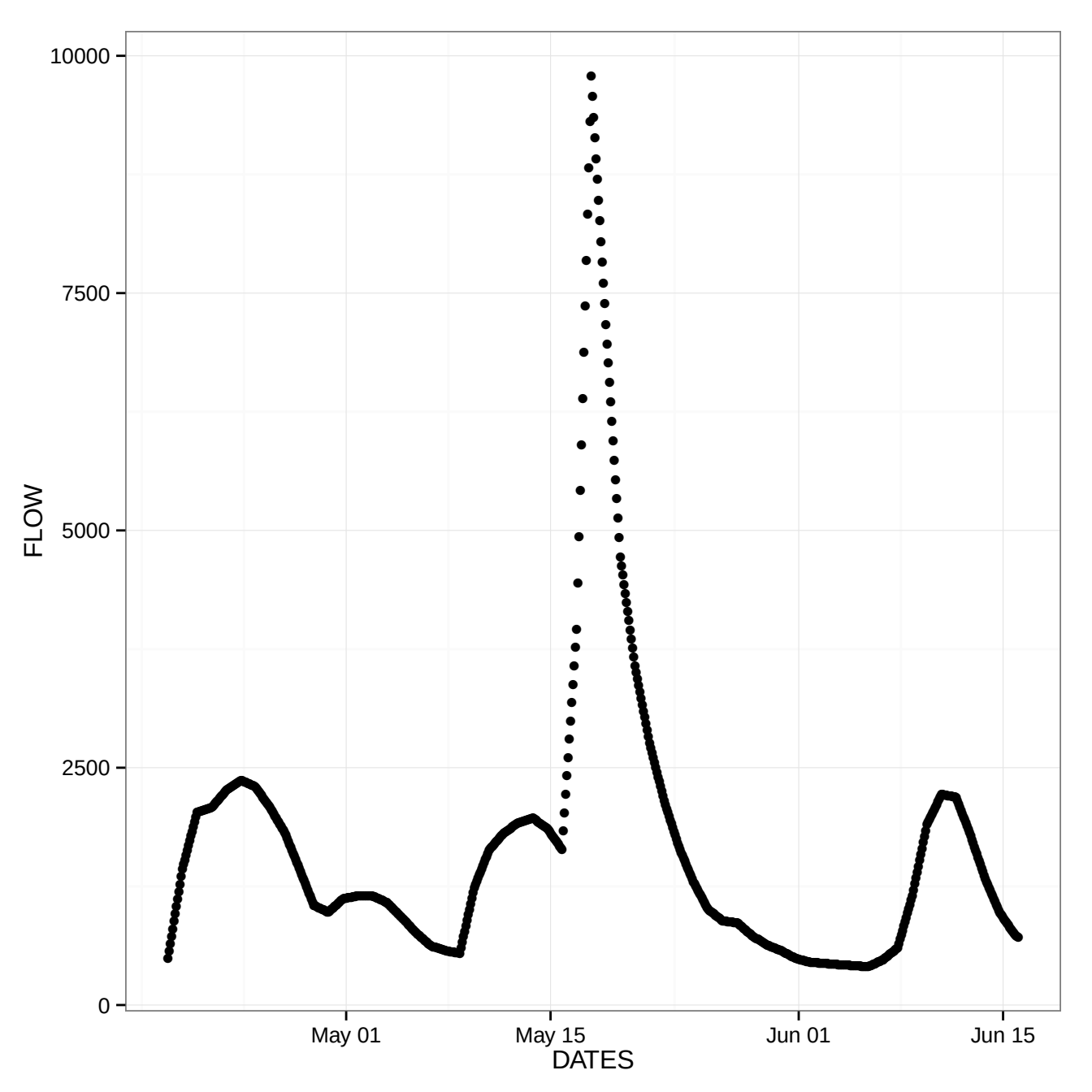
20000
10000
0
fit
Apr 22
Apr 29
May 06
May 13
May 20
May 27
Jun 03
Jun 10
date


80
60
40
20
0
fit
May
Jun
Jul
Aug
Sep
date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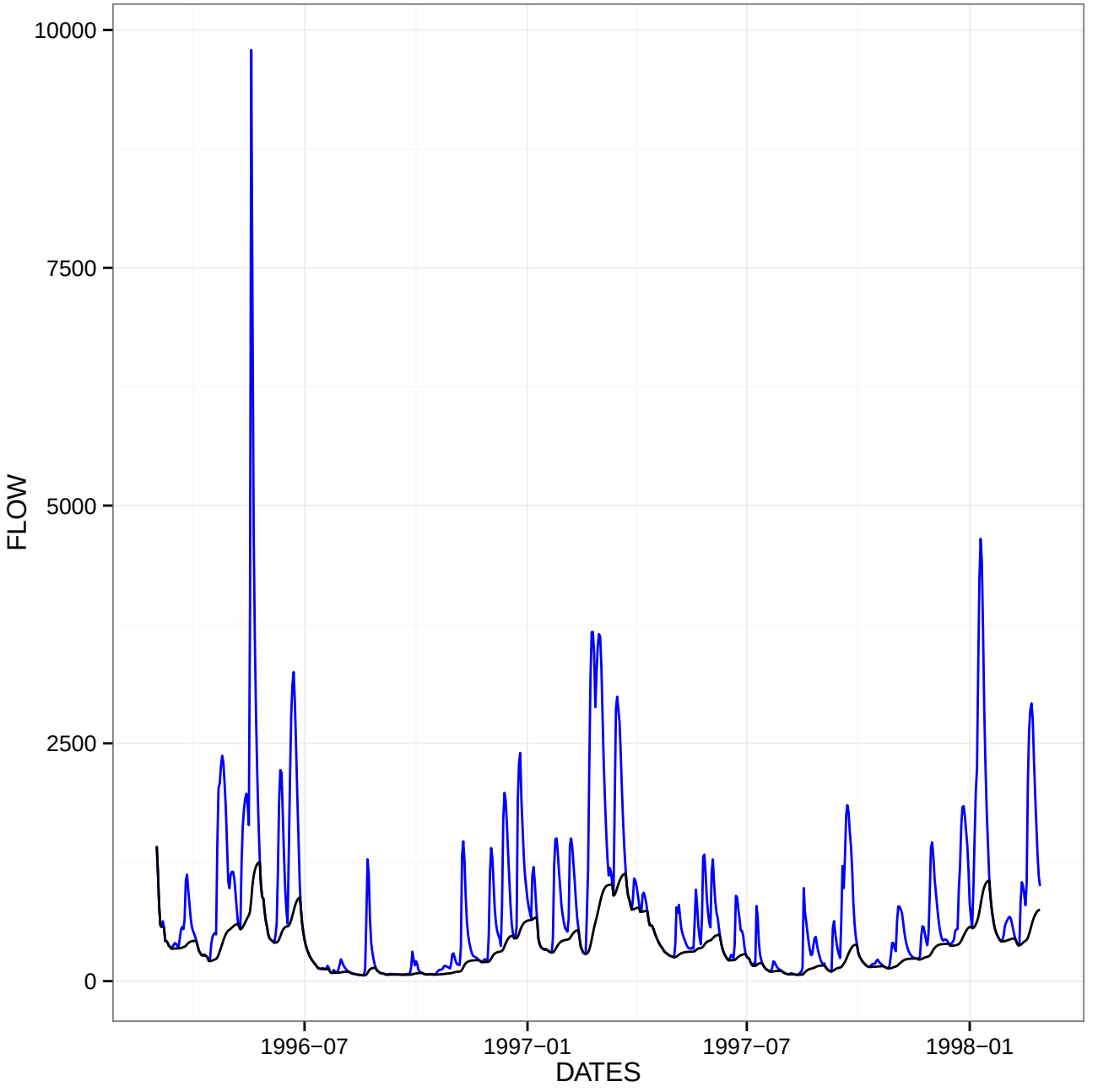
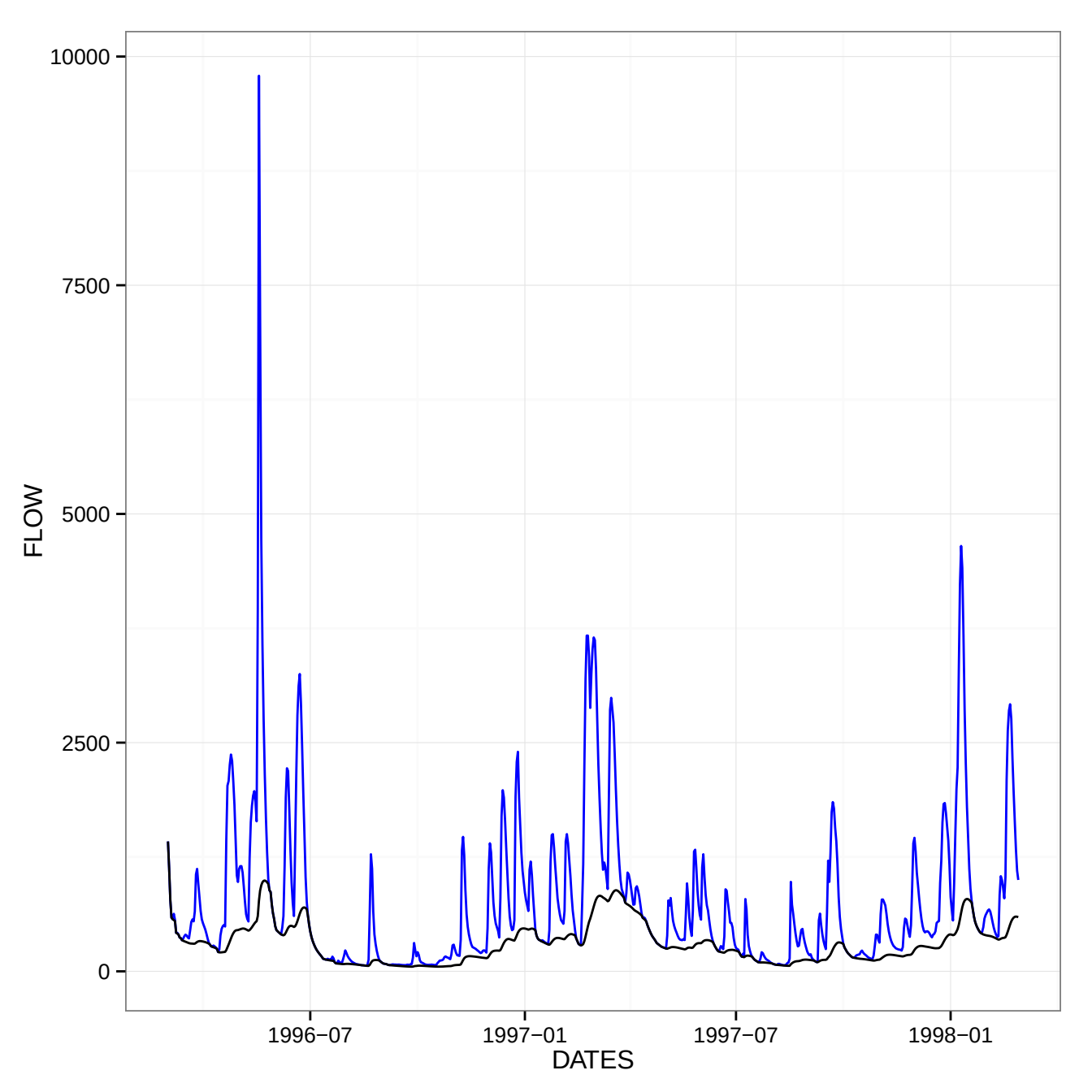
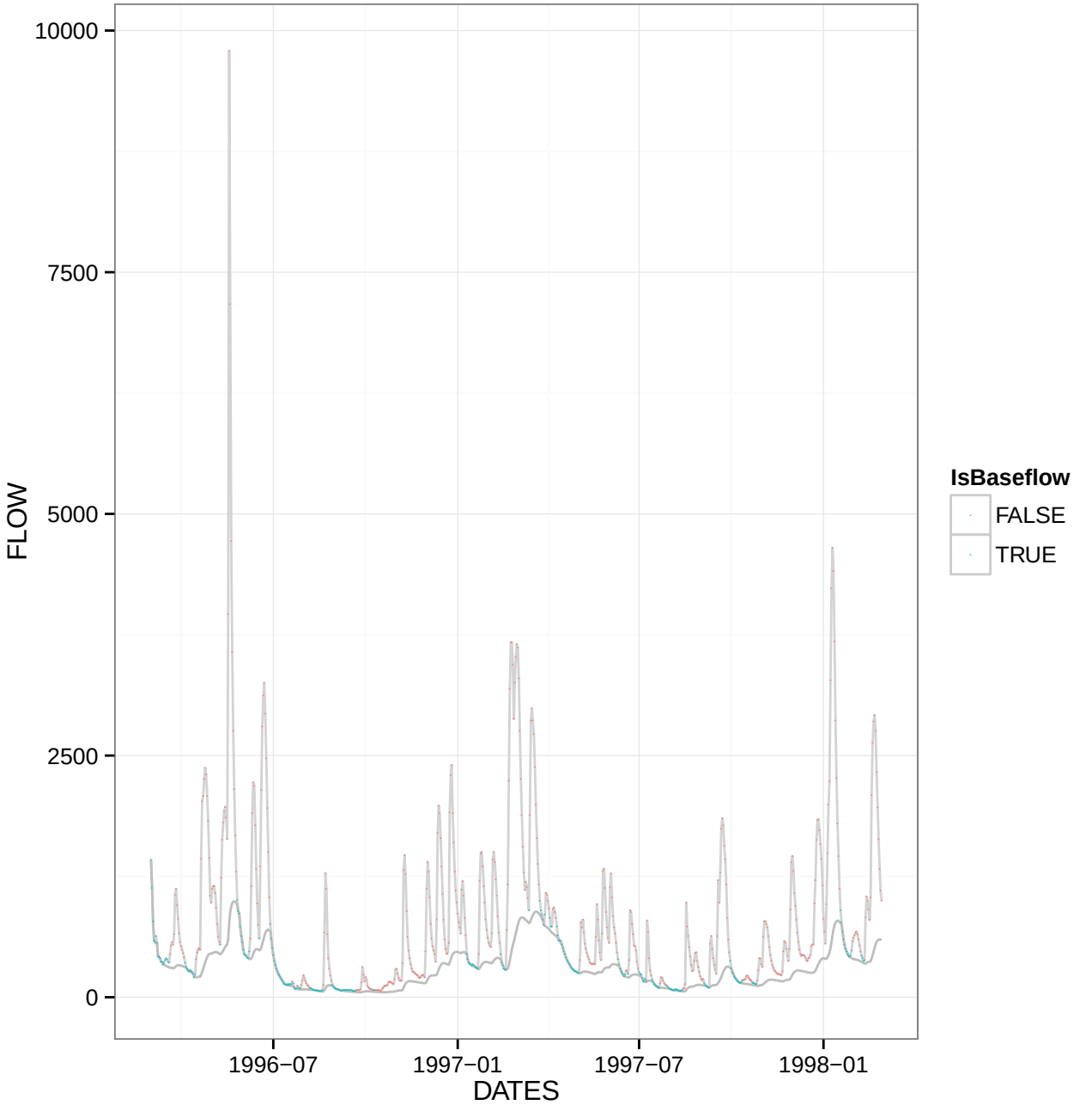
5000
2500
0
FLOW
May 01
May 15
Jun 01
Jun 15
DATES


10000
7500
5000
2500
0
FLOW
1996−07
1997−01
1997−07
1998−01
DATES


10000
7500
5000
2500
0
FLOW
1996−07
1997−01
1997−07
1998−01
DATES


10000
7500
5000
2500
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FLOW
1996−07
1997−01
1997−07
1998−01
DATES
IsBaseflow
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TRUE