

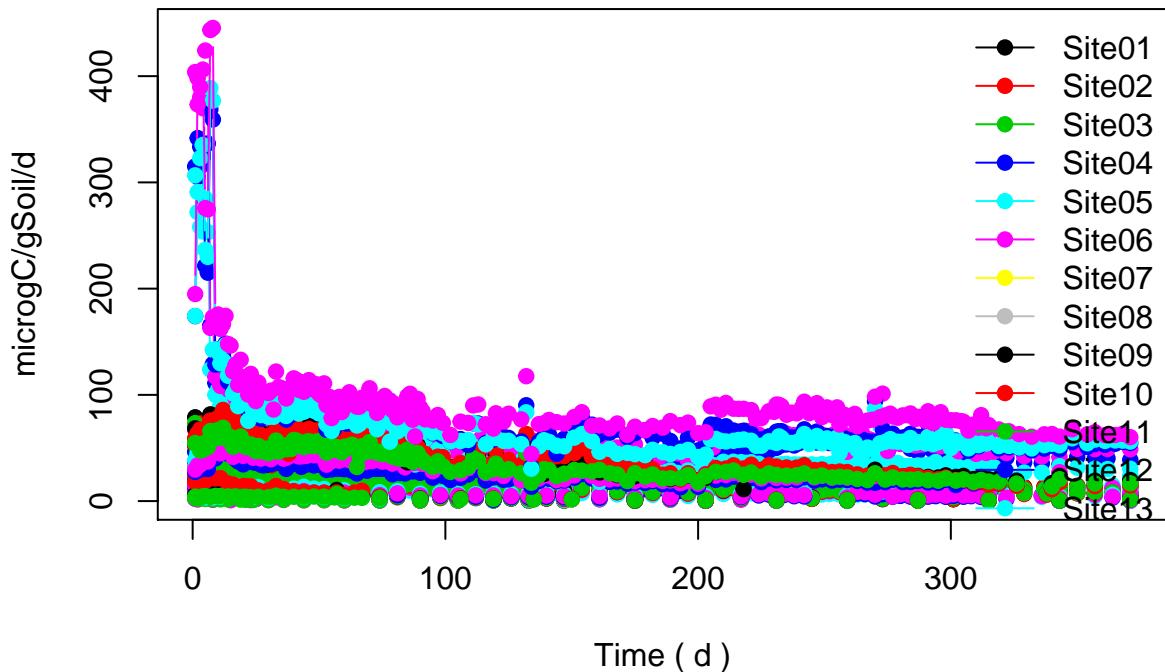
Fitting models to time series data Crow2019a

Mina Azizi-Rad

Dataset Crow2019a

A dataset with 37 variables of 6 different sites each two levels of vegetation (Native grassland and cultivated). and three levels of temperature (15, 25, 35)

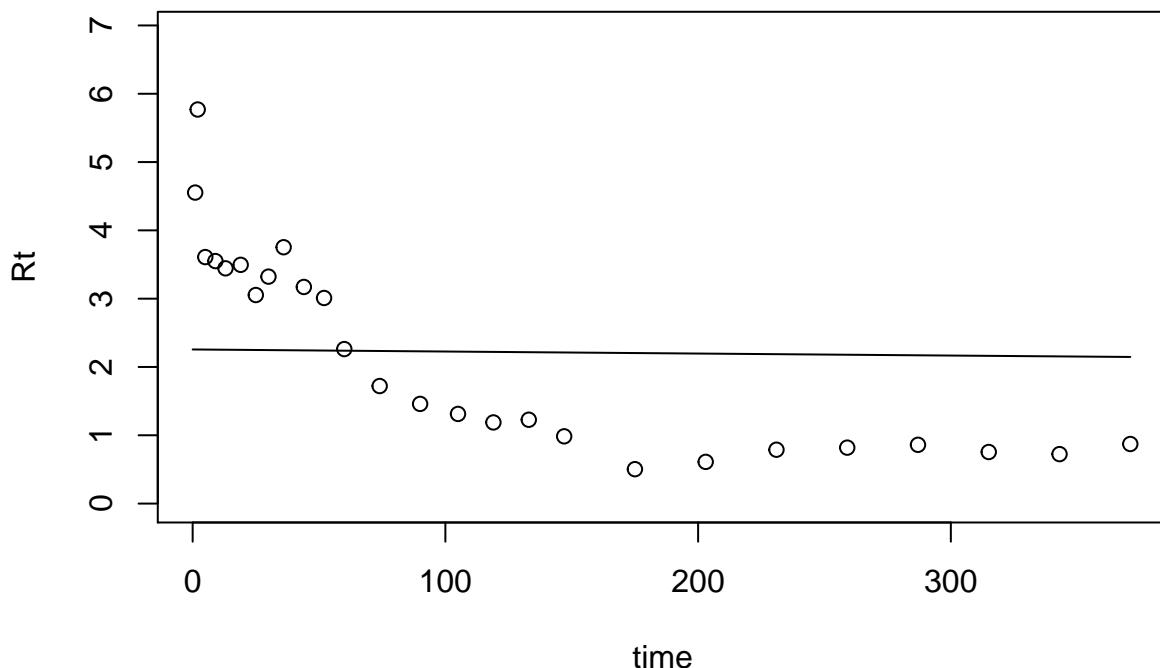
Crow2019a



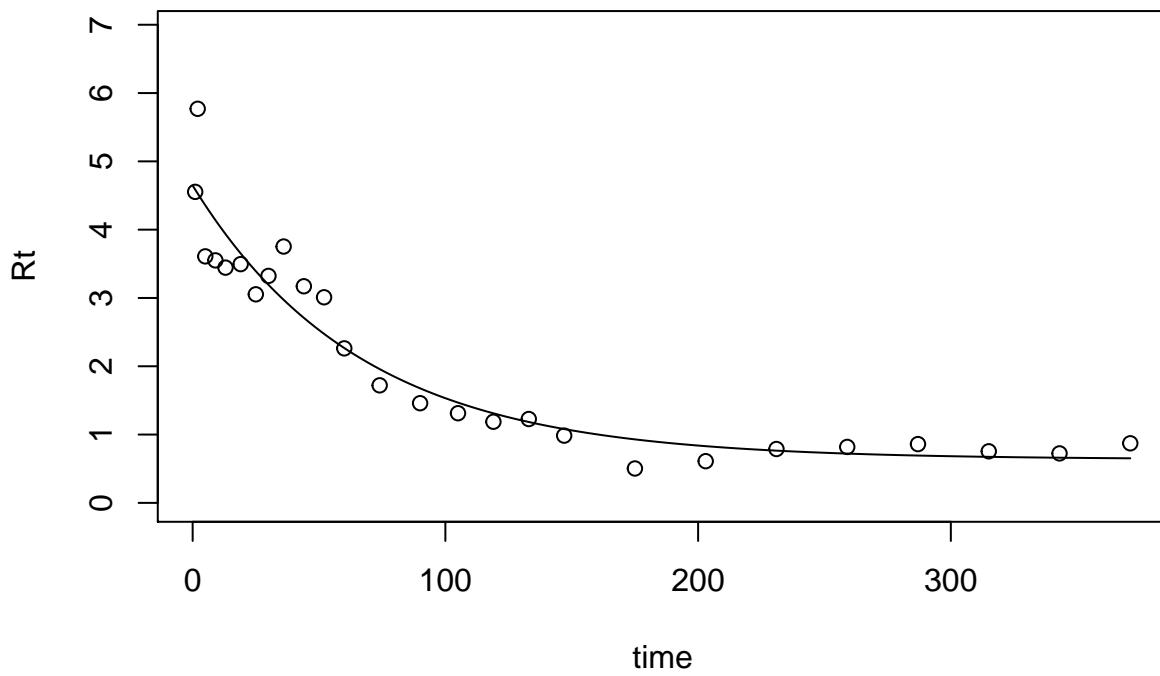
Variable Site01:

CO2 production rate

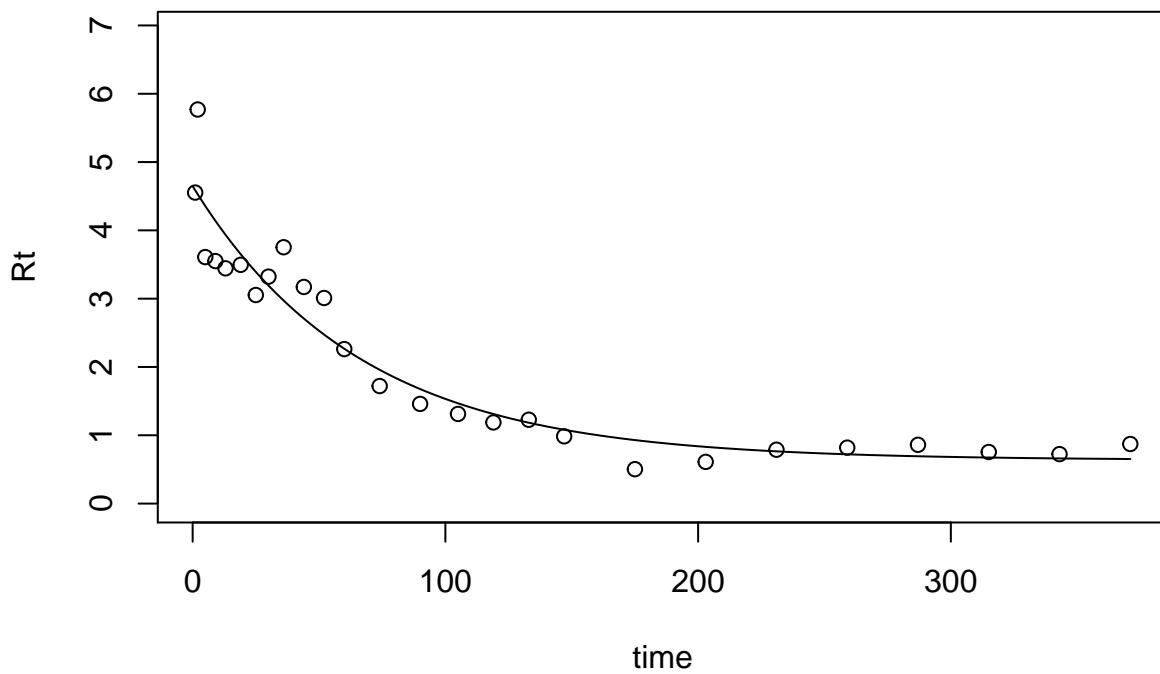
```
## [1] "Best fit parameter: 0.000134302811549901"
```



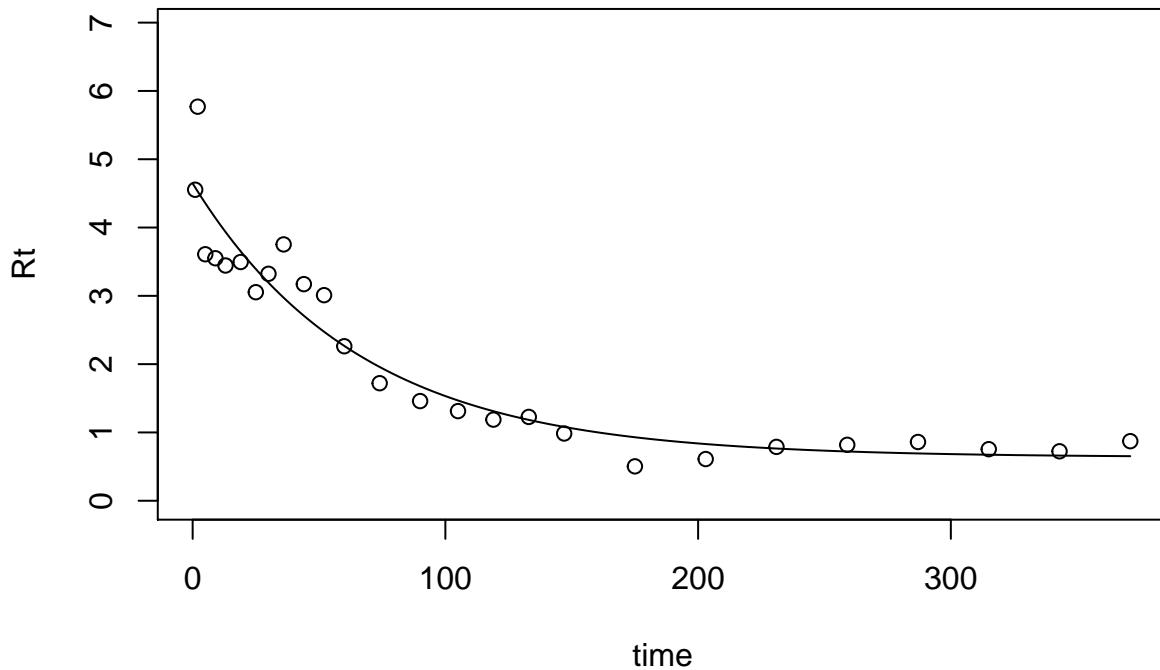
```
## [1] "AIC = 0.63437063827261"
## [1] "k1= 0.0150492366476274"
## [2] "k2= 3.91188163257795e-05"
## [3] "proportion of C0 in pool 1= 0.015822057617315"
```



```
## [1] "AIC = 9.53606523312129"
## [1] "k1= 0.0150489461088625"
## [2] "k2= 3.91180512668053e-05"
## [3] "a21= 0.0740288487303253"
## [4] "a12= 5.21902653100037e-05"
## [5] "Proportion of C0 in pool 1= 0.0170906911771803"
```



```
## [1] "AIC = 13.5360652144238"
## [1] "k1= 0.0150492175936028"
## [2] "k2= 3.91187561374027e-05"
## [3] "a21= 0.000203770234879164"
## [4] "Proportion of C0 in pool 1= 0.0158252785216162"
```

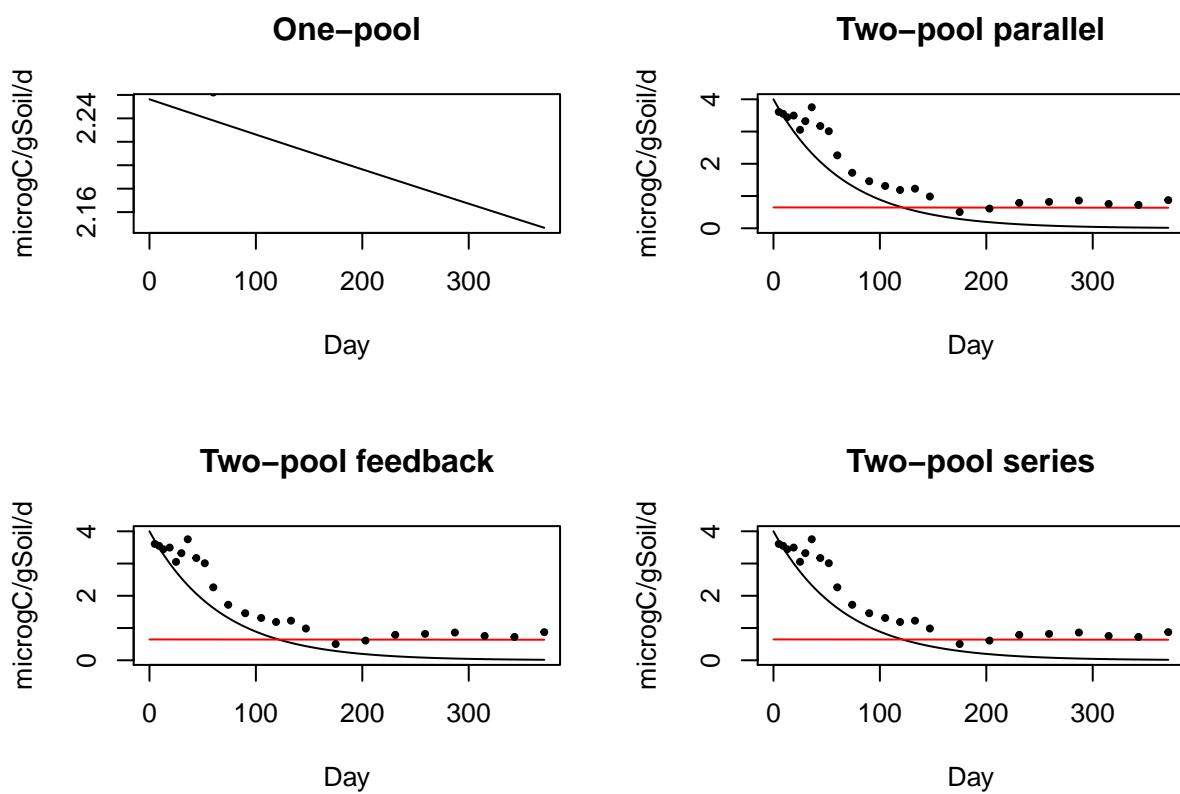


```
## [1] "AIC = 11.5360652329193"
## Warning: `fun` was deprecated in dplyr 0.8.0.
## Please use a list of either functions or lambdas:
##
## # Simple named list:
```

```

##  list(mean = mean, median = median)
##
##  # Auto named with `tibble::lst()`:
##  tibble::lst(mean, median)
##
##  # Using lambdas
##  list(~ mean(., trim = .2), ~ median(., na.rm = TRUE))

```

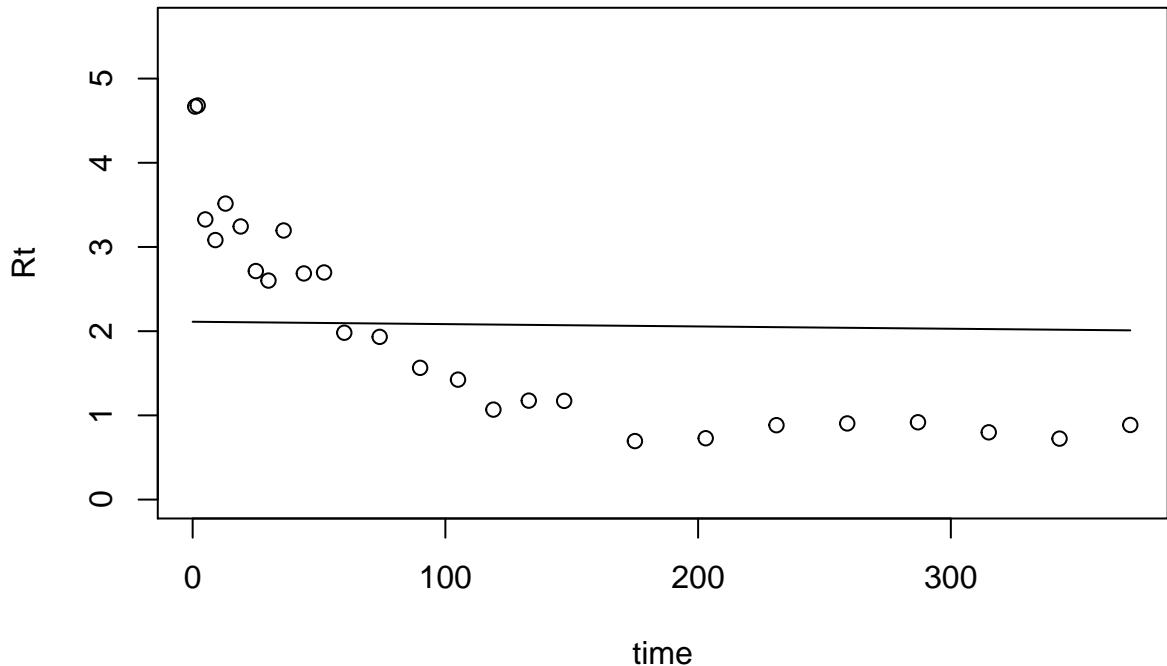


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	0.634	0.000134	NA	NA	NA	NA	0.645	0.987	NA	NA
Two-pool parallel	9.54	0.015	3.91e-05	0.0158	NA	NA	9.6	0.0112	25200	17300
Two-pool feedback	13.5	0.015	3.91e-05	0.0171	0.074	5.22e-05	13.7	0.00144	1960	51.6
Two-pool series	11.5	0.015	3.91e-05	0.0158	0.000204	NA	11.6	0.00403	71.7	46.1

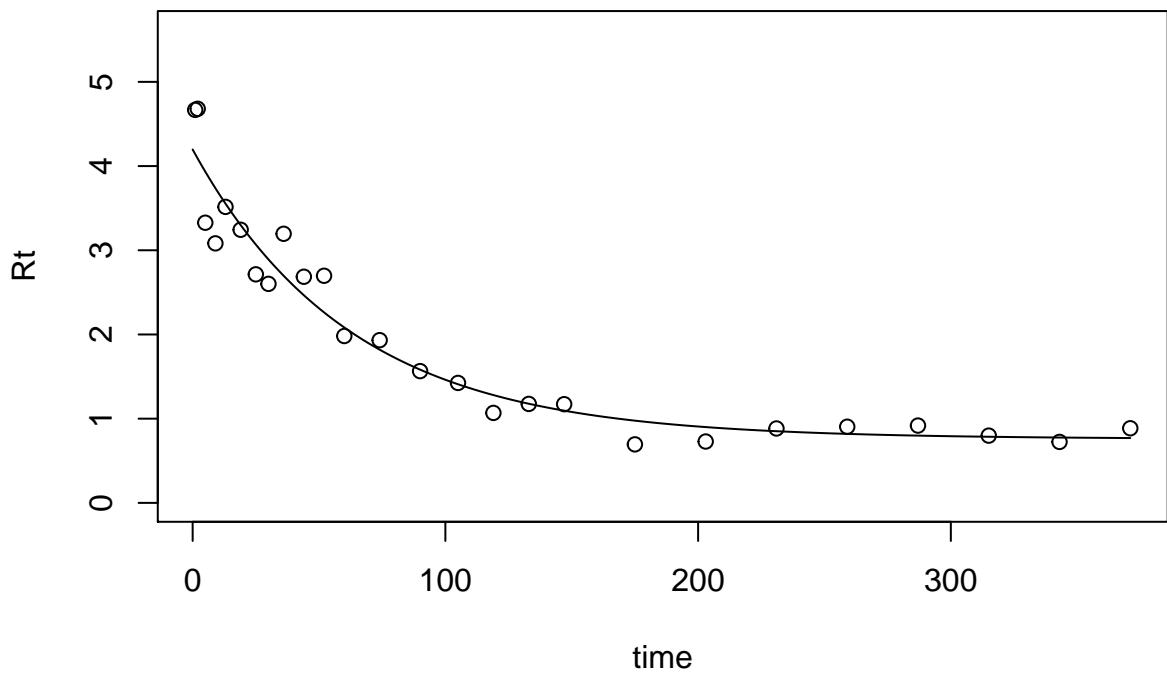
Variable Site02:

CO2 production rate

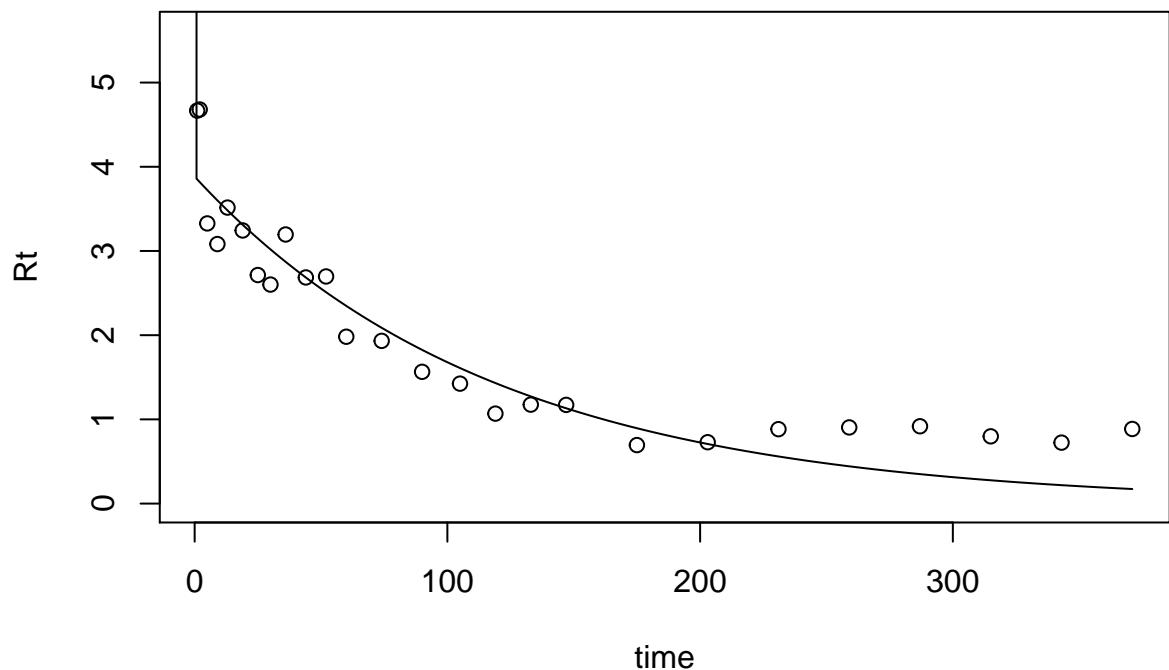
```
## [1] "Best fit parameter: 0.000133665785106416"
```



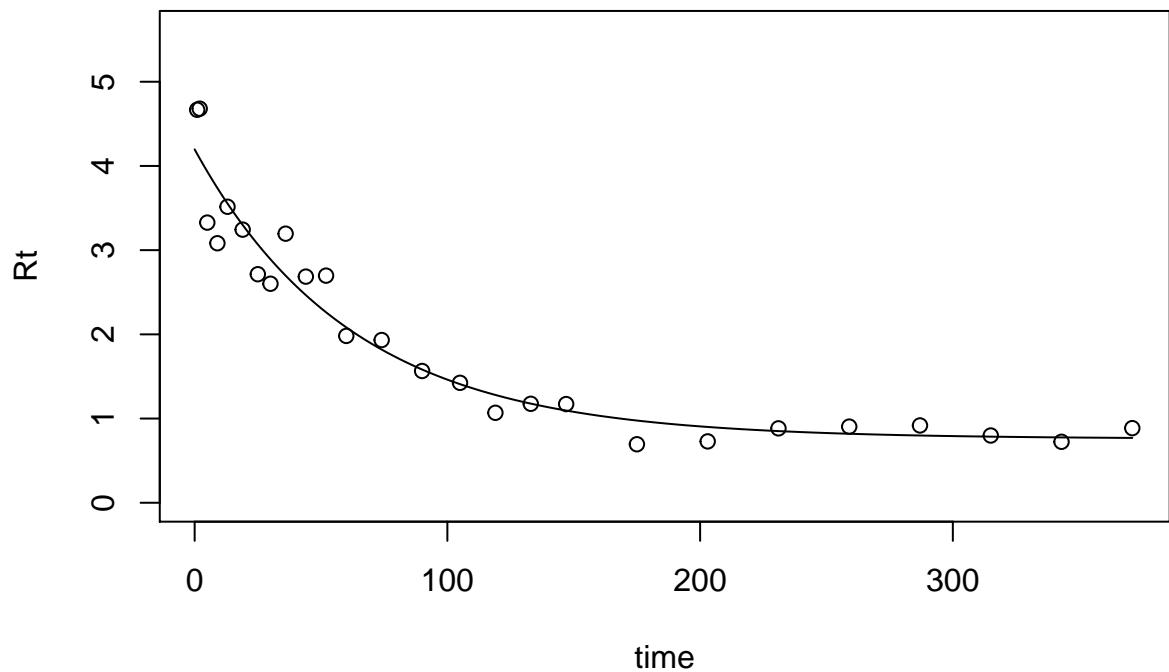
```
## [1] "AIC = 1.31123868954215"
## [1] "k1= 0.0159987246551327"
## [2] "k2= 4.97207191000826e-05"
## [3] "proportion of C0 in pool 1= 0.0135372893378183"
```



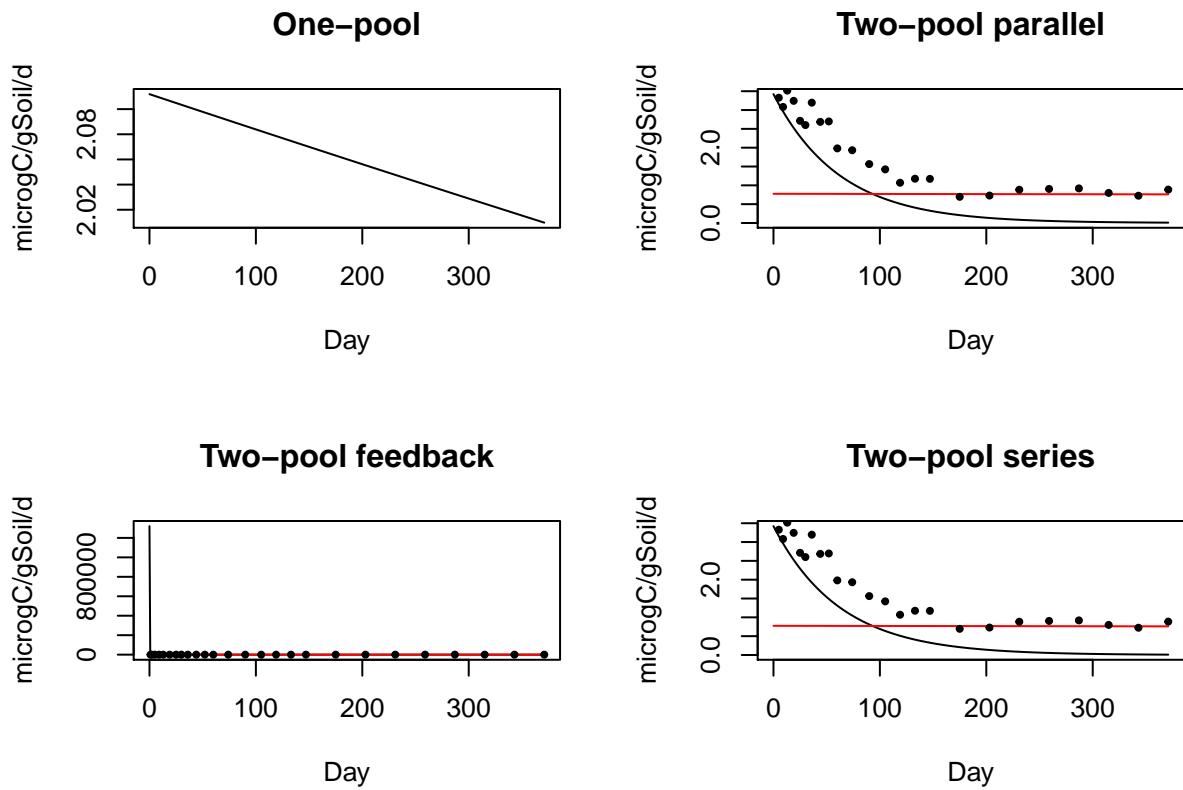
```
## [1] "AIC = 10.8120813486886"
## [1] "k1= 86.121852247379"
## [2] "k2= 0.00862973299806336"
## [3] "a21= 0.0282142788829967"
## [4] "a12= 0.999997200571049"
## [5] "Proportion of C0 in pool 1= 0.998883600500305"
```



```
## [1] "AIC = 13.522923497435"
## [1] "k1= 0.015998726051245"
## [2] "k2= 4.97207232103423e-05"
## [3] "a21= 0.0451343133006349"
## [4] "Proportion of C0 in pool 1= 0.0141792499391762"
```



```
## [1] "AIC = 12.8120813486829"
```

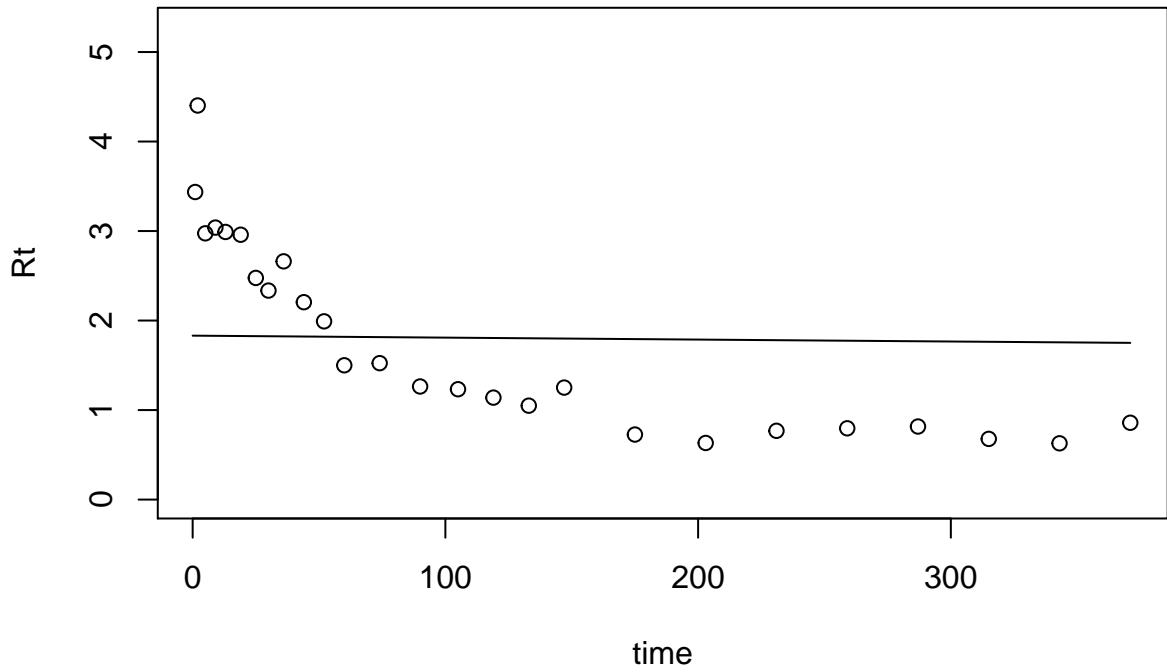


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	1.31	0.000134	NA	NA	NA	NA	1.32	0.99	NA	NA
Two-pool parallel	10.8	0.016	4.97e-05	0.0135	NA	NA	10.9	0.00833	19800	13700
Two-pool feedback	13.5	86.1	0.00863	0.999	0.0282	1	13.7	0.00204	3.38	0.00839
Two-pool series	12.8	0.016	4.97e-05	0.0142	0.0451	NA	12.9	0.003	970	46.3

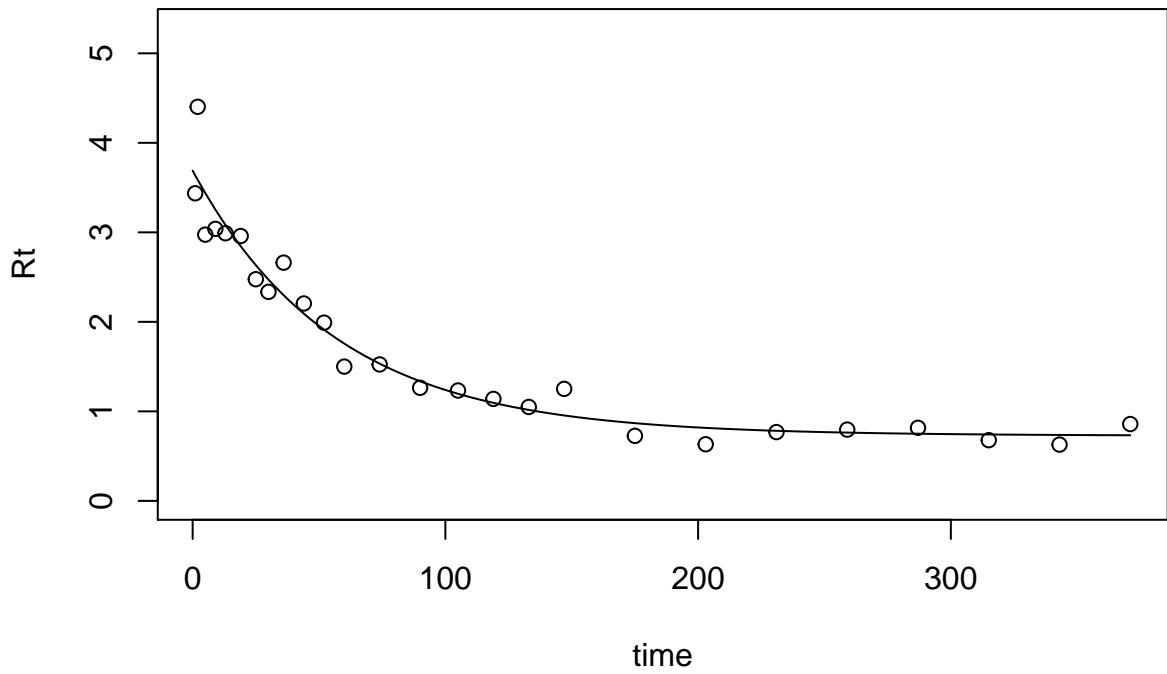
Variable Site03:

CO2 production rate

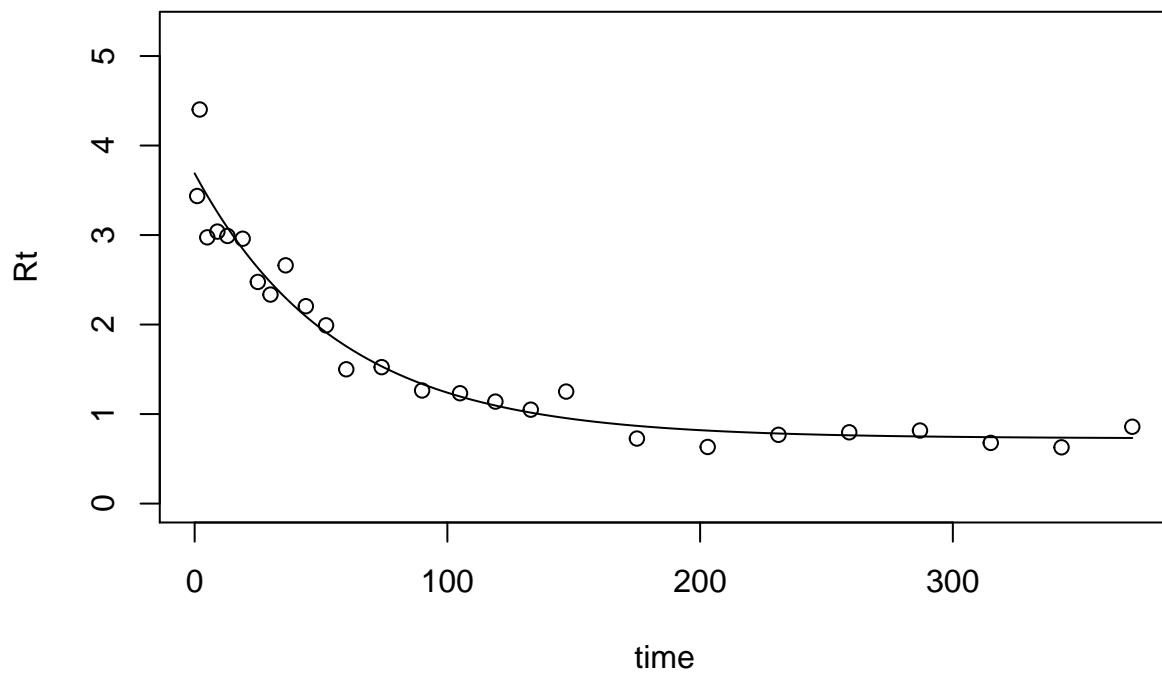
```
## [1] "Best fit parameter: 0.000121281961539556"
```



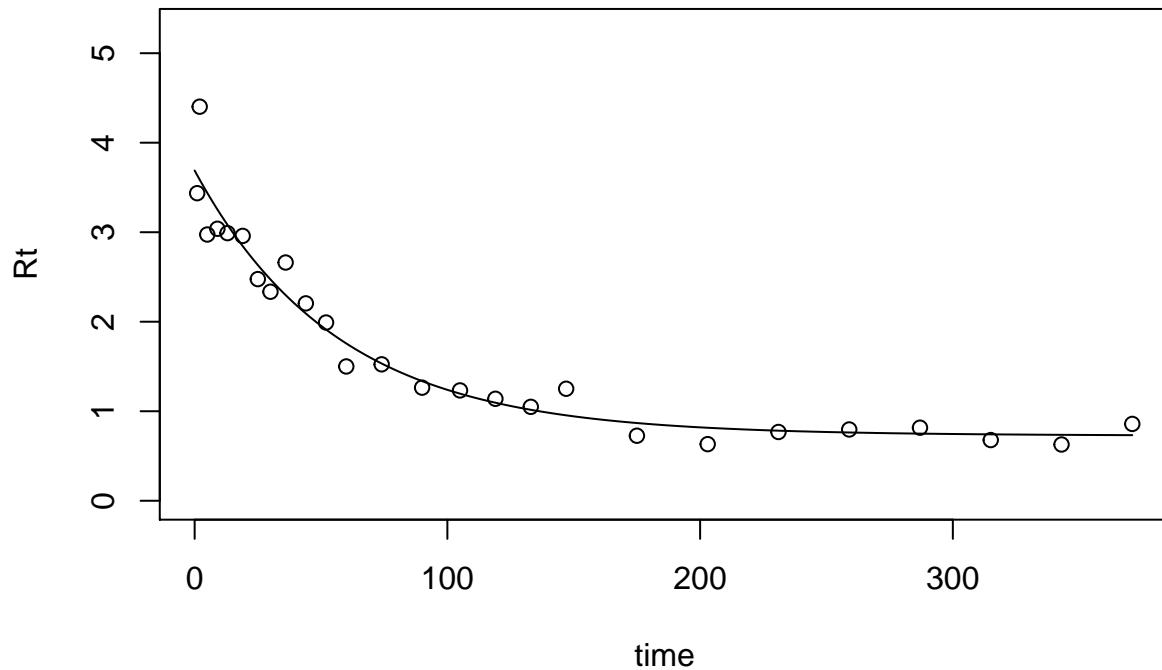
```
## [1] "AIC = 1.93288998190054"
## [1] "k1= 0.0177296212586343"
## [2] "k2= 4.97047047973896e-05"
## [3] "proportion of C0 in pool 1= 0.0110082371578302"
```



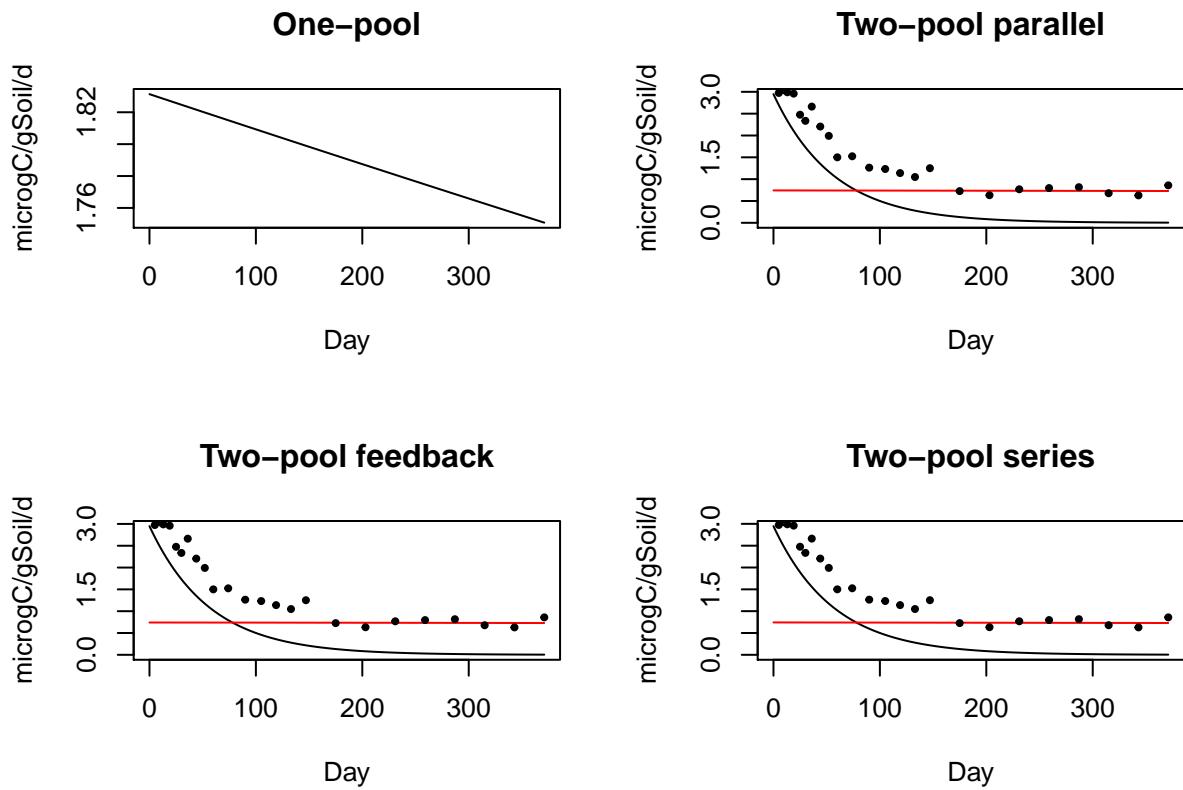
```
## [1] "AIC = 11.7865651761402"
## [1] "k1= 0.0177296289124539"
## [2] "k2= 4.9704769691771e-05"
## [3] "a21= 0.196930088867737"
## [4] "a12= 5.06377544851055e-06"
## [5] "Proportion of C0 in pool 1= 0.0137171476007902"
```



```
## [1] "AIC = 15.7865651760813"
## [1] "k1= 0.0177296193826135"
## [2] "k2= 4.9704700767329e-05"
## [3] "a21= 0.0490442505905533"
## [4] "Proportion of C0 in pool 1= 0.0115776471694631"
```



```
## [1] "AIC = 13.7865651761274"
```

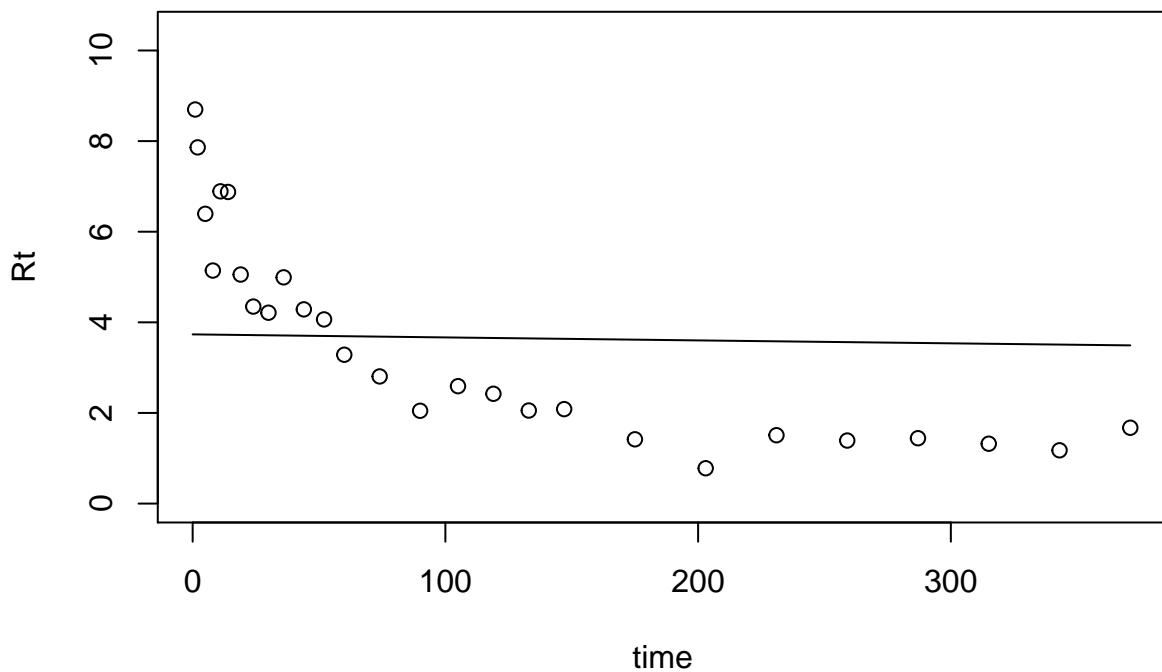


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	1.93	0.000121	NA	NA	NA	NA	1.94	0.992	NA	NA
Two-pool parallel	11.8	0.0177	4.97e-05	0.011	NA	NA	11.9	0.007	19900	13700
Two-pool feedback	15.8	0.0177	4.97e-05	0.0137	0.197	5.06e-06	16	0.000901	4020	54.9
Two-pool series	13.8	0.0177	4.97e-05	0.0116	0.049	NA	13.9	0.00252	1040	42.1

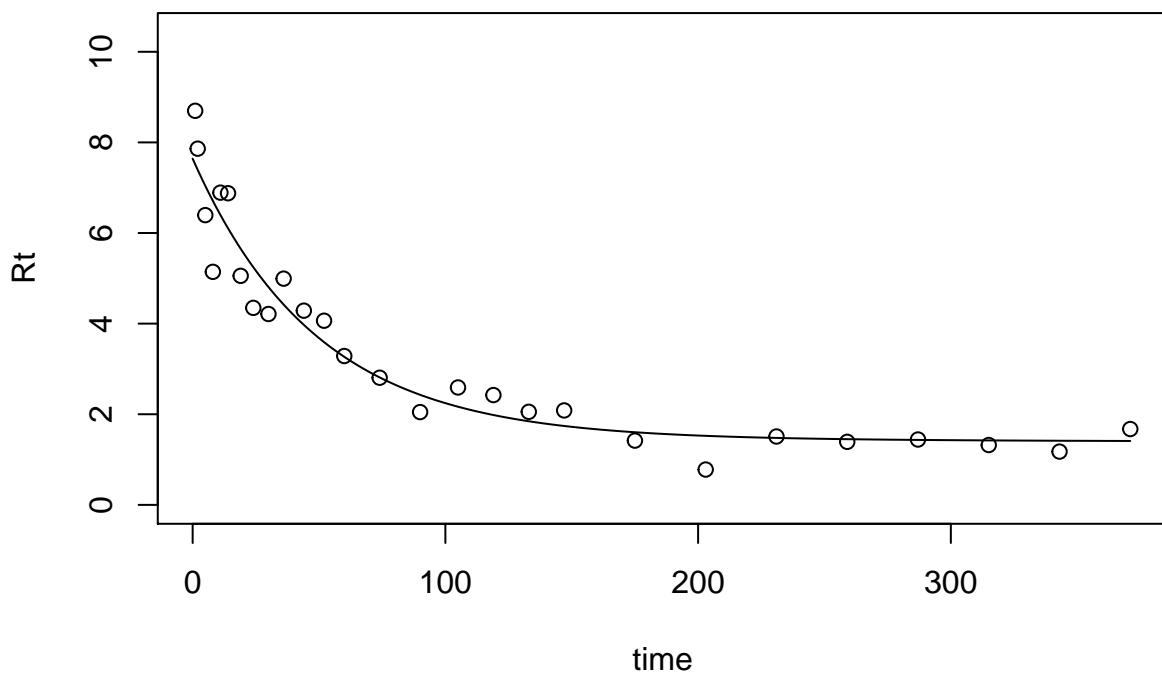
Variable Site04:

CO2 production rate

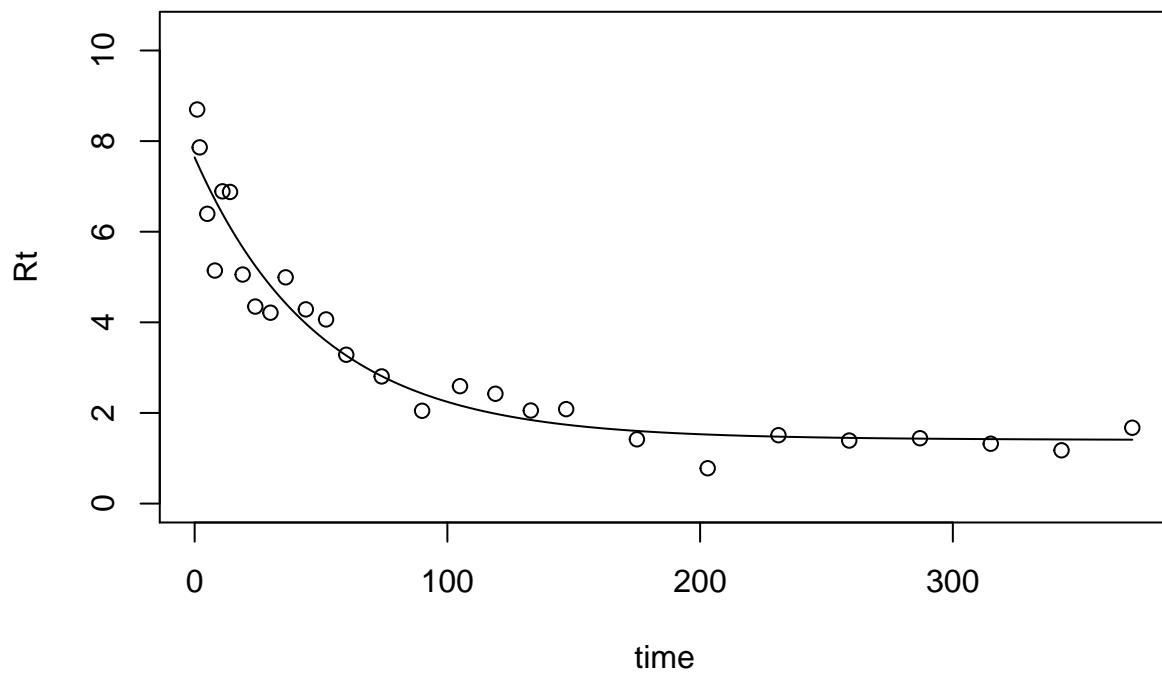
```
## [1] "Best fit parameter: 0.000181278499460136"
```



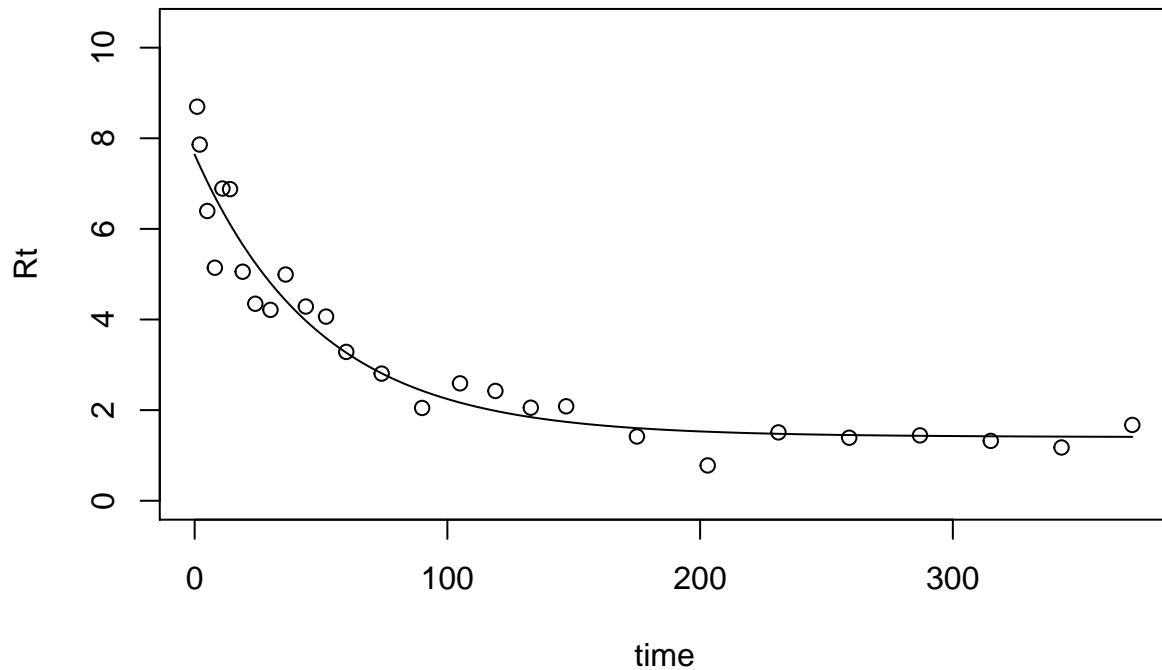
```
## [1] "AIC = -1.08572108590773"  
## [1] "k1= 0.0203348117431867"  
## [2] "k2= 7.11707622200827e-05"  
## [3] "proportion of C0 in pool 1= 0.0147923623267685"
```



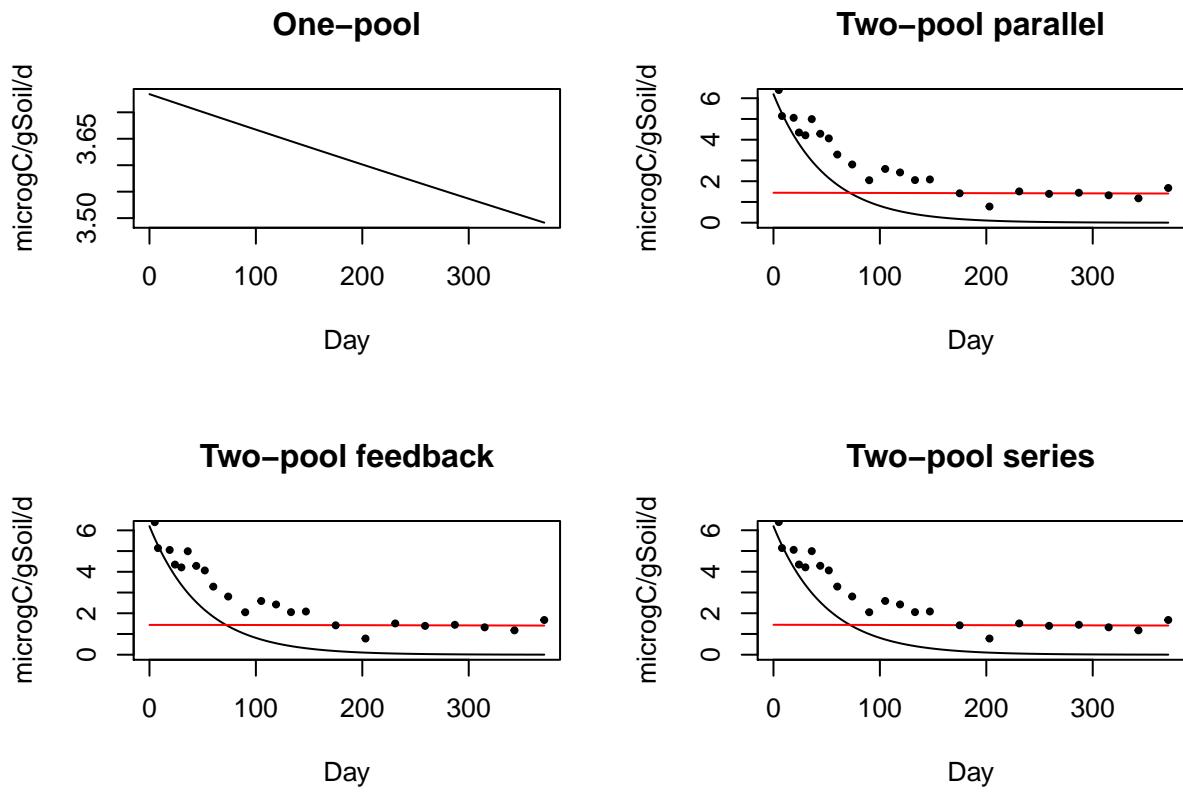
```
## [1] "AIC = 8.21822192799316"
## [1] "k1= 0.0203340672351936"
## [2] "k2= 7.11693789585825e-05"
## [3] "a21= 0.235652787632309"
## [4] "a12= 2.13316457588486e-05"
## [5] "Proportion of C0 in pool 1= 0.0193745725480423"
```



```
## [1] "AIC = 12.2182219208025"
## [1] "k1= 0.0203349717240707"
## [2] "k2= 7.11711361014426e-05"
## [3] "a21= 0.0654485050319059"
## [4] "Proportion of C0 in pool 1= 0.0158320735873843"
```



```
## [1] "AIC = 10.2182219281905"
```

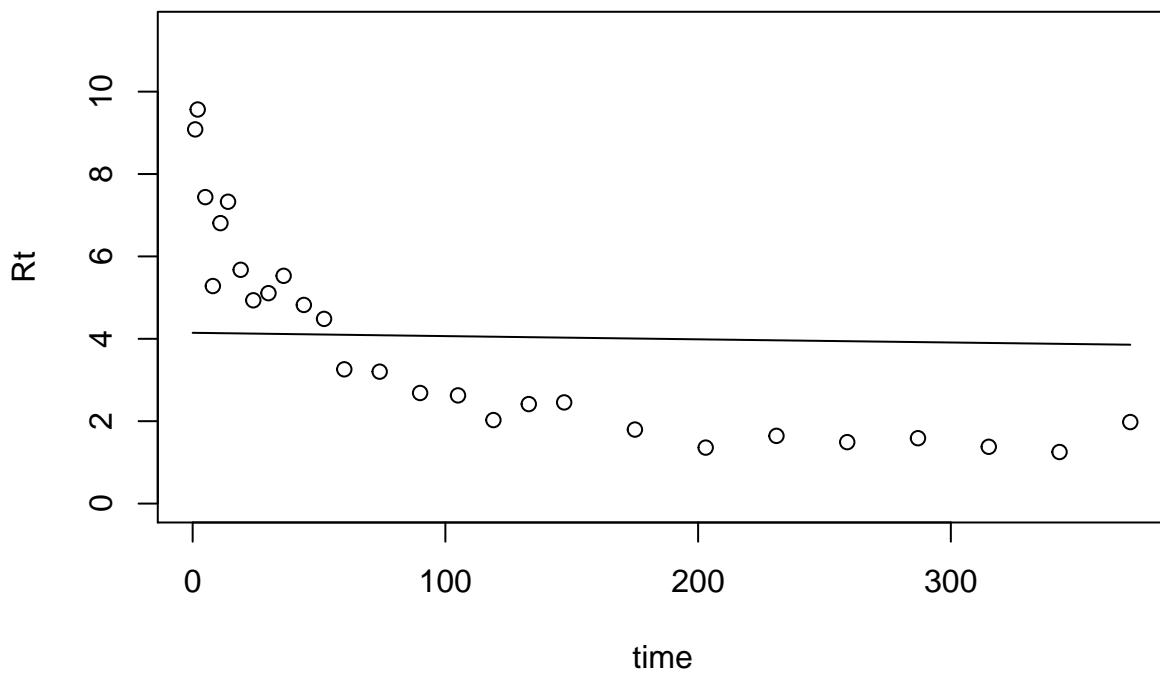


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.09	0.000181	NA	NA	NA	NA	-1.07	0.99	NA	NA
Two-pool parallel	8.22	0.0203	7.12e-05	0.0148	NA	NA	8.28	0.00919	13800	9530
Two-pool feedback	12.2	0.0203	7.12e-05	0.0194	0.236	2.13e-05	12.4	0.00118	3360	52.2
Two-pool series	10.2	0.0203	7.12e-05	0.0158	0.0654	NA	10.3	0.00331	969	37.7

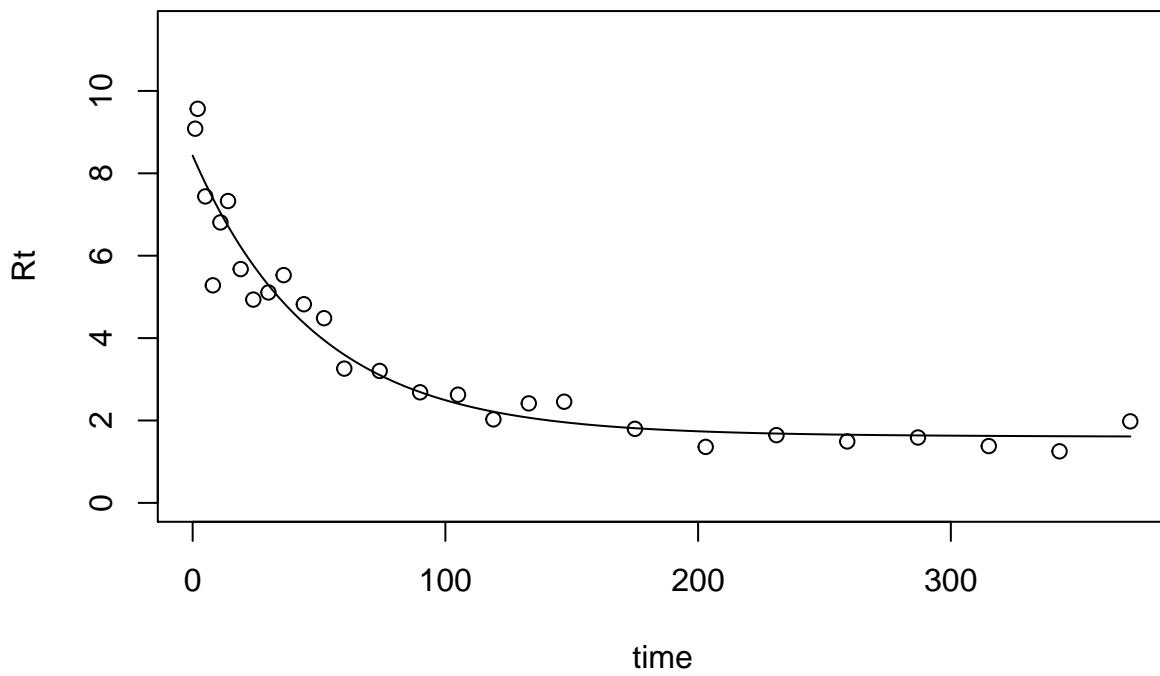
Variable Site05:

CO2 production rate

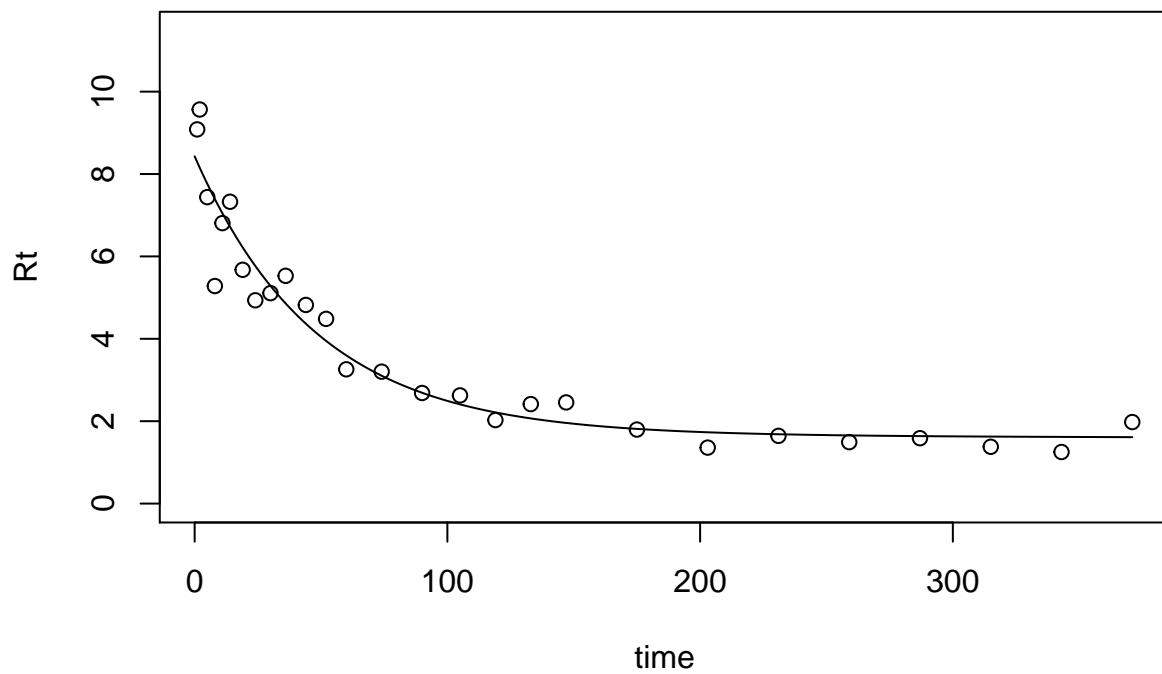
```
## [1] "Best fit parameter: 0.000194627536181577"
```



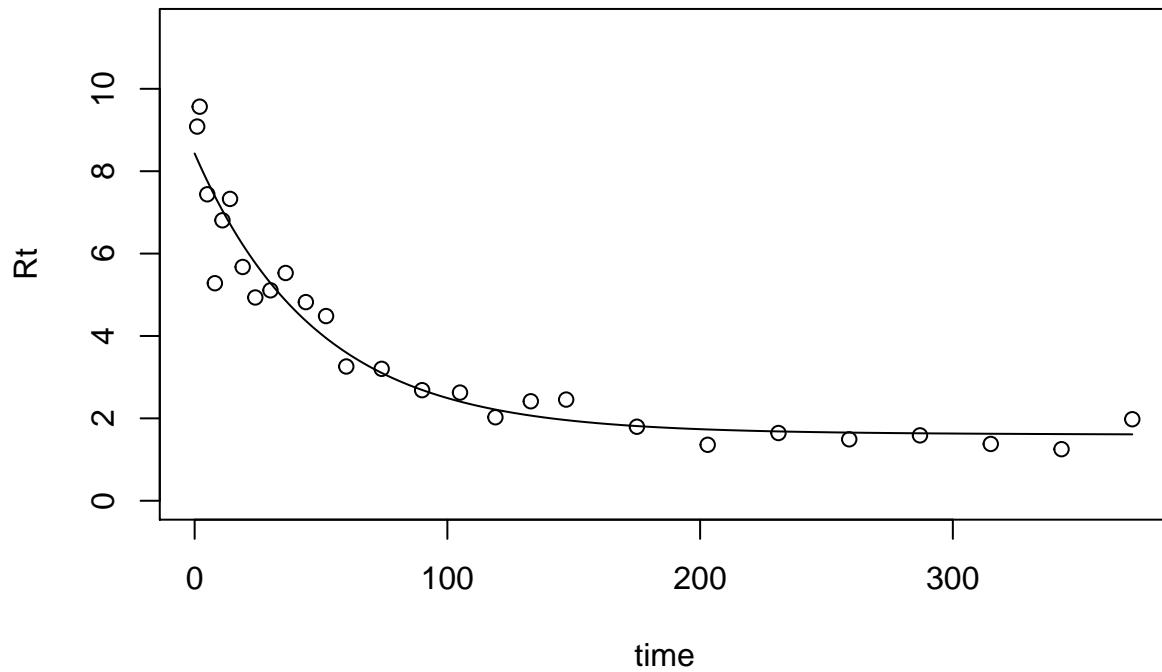
```
## [1] "AIC = -1.43011135568537"
## [1] "k1= 0.0207727237389409"
## [2] "k2= 7.90114286736543e-05"
## [3] "proportion of C0 in pool 1= 0.0153082820722723"
```



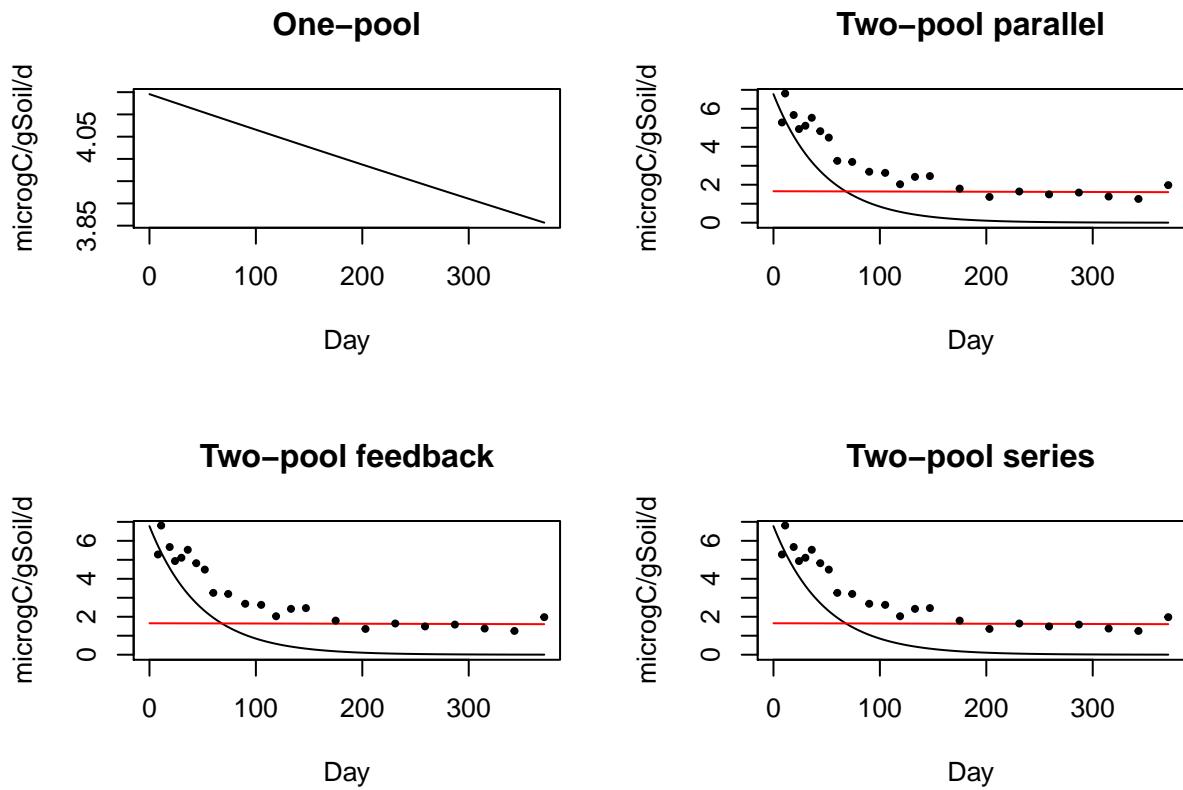
```
## [1] "AIC = 7.8612206014507"
## [1] "k1= 0.0207728863844398"
## [2] "k2= 7.90118834816118e-05"
## [3] "a21= 0.0534917411704579"
## [4] "a12= 1.537974005833e-05"
## [5] "Proportion of C0 in pool 1= 0.0161768552342665"
```



```
## [1] "AIC = 11.8612206017404"
## [1] "k1= 0.0207723429833235"
## [2] "k2= 7.90105161549334e-05"
## [3] "a21= 0.0383094071306057"
## [4] "Proportion of C0 in pool 1= 0.015920719663921"
```



```
## [1] "AIC = 9.86122059817101"
```

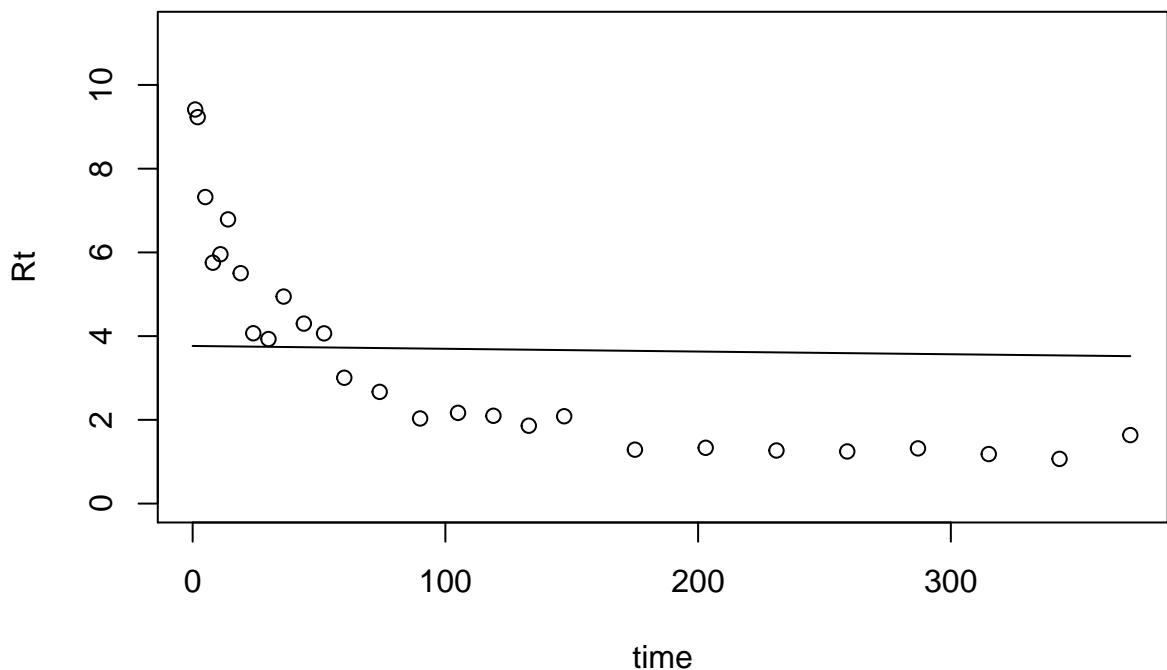


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.43	0.000195	NA	NA	NA	NA	-1.42	0.99	NA	NA
Two-pool parallel	7.86	0.0208	7.9e-05	0.0153	NA	NA	7.93	0.00925	12500	8580
Two-pool feedback	11.9	0.0208	7.9e-05	0.0162	0.0535	1.54e-05	12	0.00119	725	36.2
Two-pool series	9.86	0.0208	7.9e-05	0.0159	0.0383	NA	9.97	0.00333	533	35.3

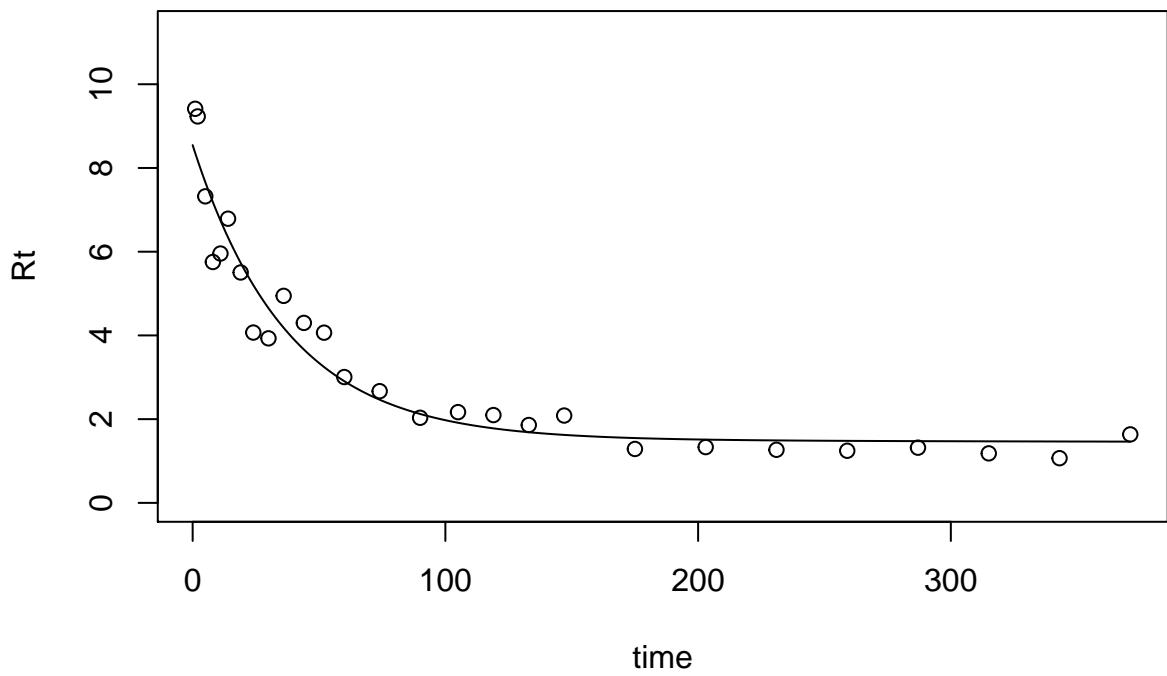
Variable Site06:

CO2 production rate

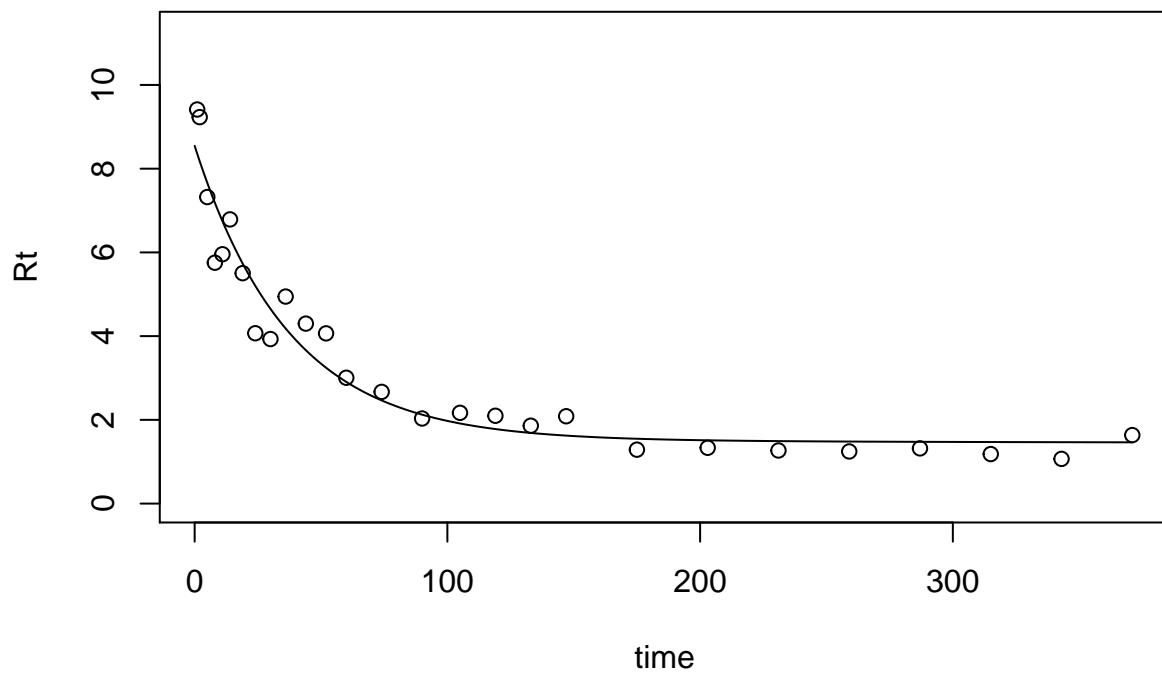
```
## [1] "Best fit parameter: 0.000180136342689585"
```



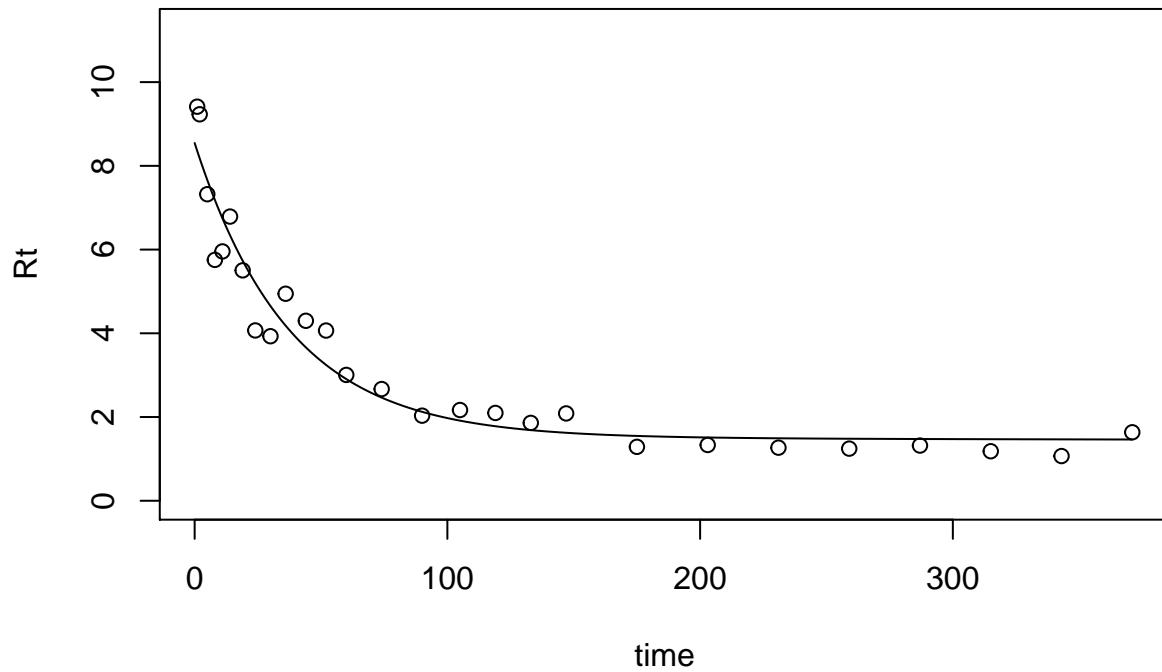
```
## [1] "AIC = -1.49375772738924"
## [1] "k1= 0.026797839604408"
## [2] "k2= 7.28116285178511e-05"
## [3] "proportion of C0 in pool 1= 0.0125749343116197"
```



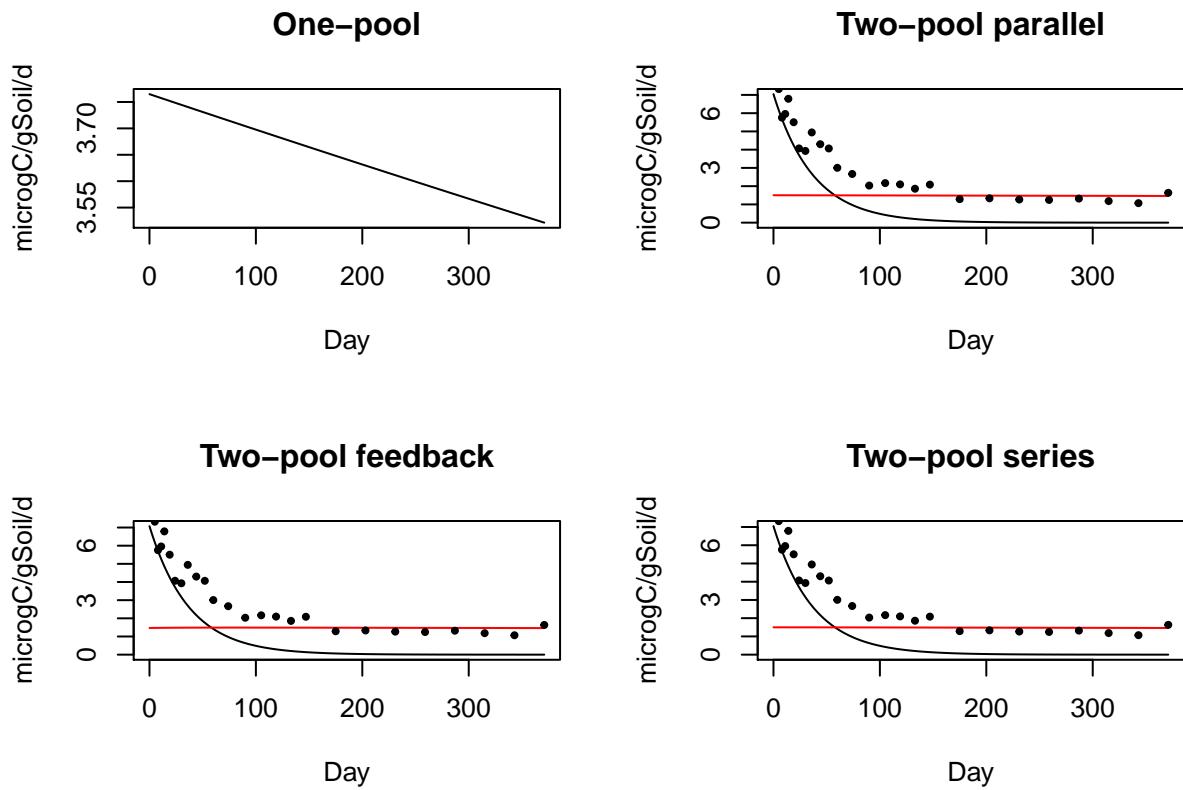
```
## [1] "AIC = 8.04795480951001"
## [1] "k1= 0.0267980654291413"
## [2] "k2= 7.28127819025441e-05"
## [3] "a21= 0.636444351240429"
## [4] "a12= 1.59837534952634e-05"
## [5] "Proportion of C0 in pool 1= 0.0347542914633518"
```



```
## [1] "AIC = 12.0479548025721"
## [1] "k1= 0.0267982856201999"
## [2] "k2= 7.28123568322437e-05"
## [3] "a21= 0.181663827586959"
## [4] "Proportion of C0 in pool 1= 0.0153755019837449"
```



```
## [1] "AIC = 10.0479548077444"
```

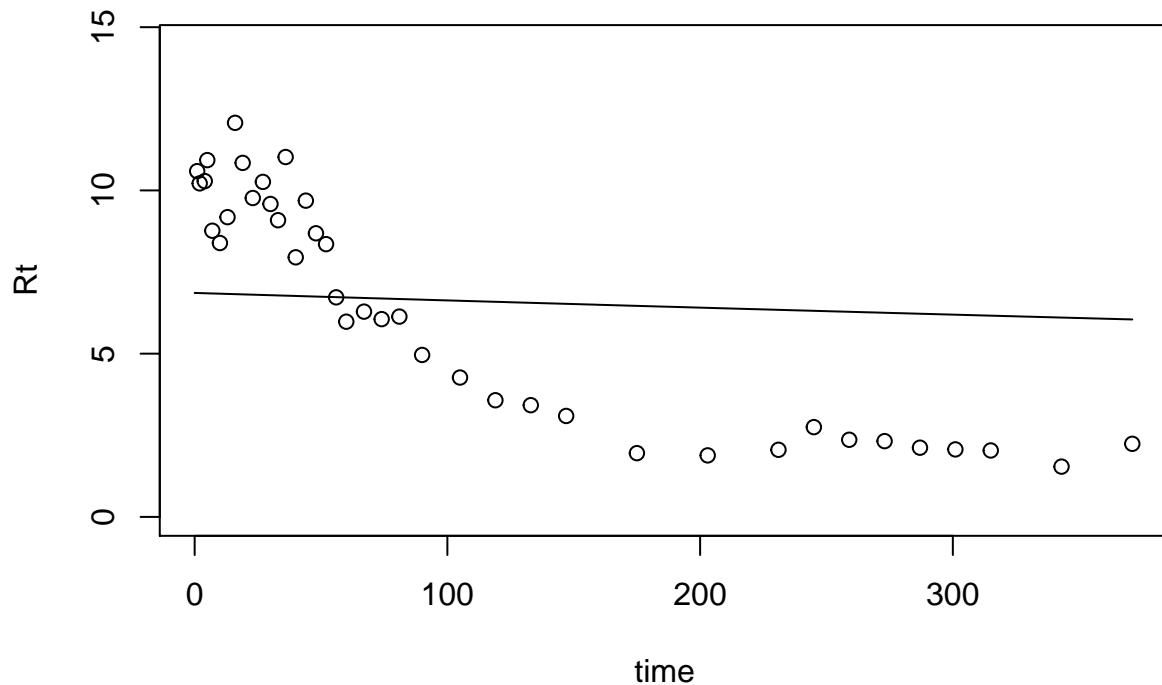


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.49	0.00018	NA	NA	NA	NA	-1.48	0.991	NA	NA
Two-pool parallel	8.05	0.0268	7.28e-05	0.0126	NA	NA	8.11	0.00817	13600	9350
Two-pool feedback	12	0.0268	7.28e-05	0.0348	0.636	1.6e-05	12.2	0.00105	8780	3350
Two-pool series	10	0.0268	7.28e-05	0.0154	0.182	NA	10.2	0.00294	2530	35.2

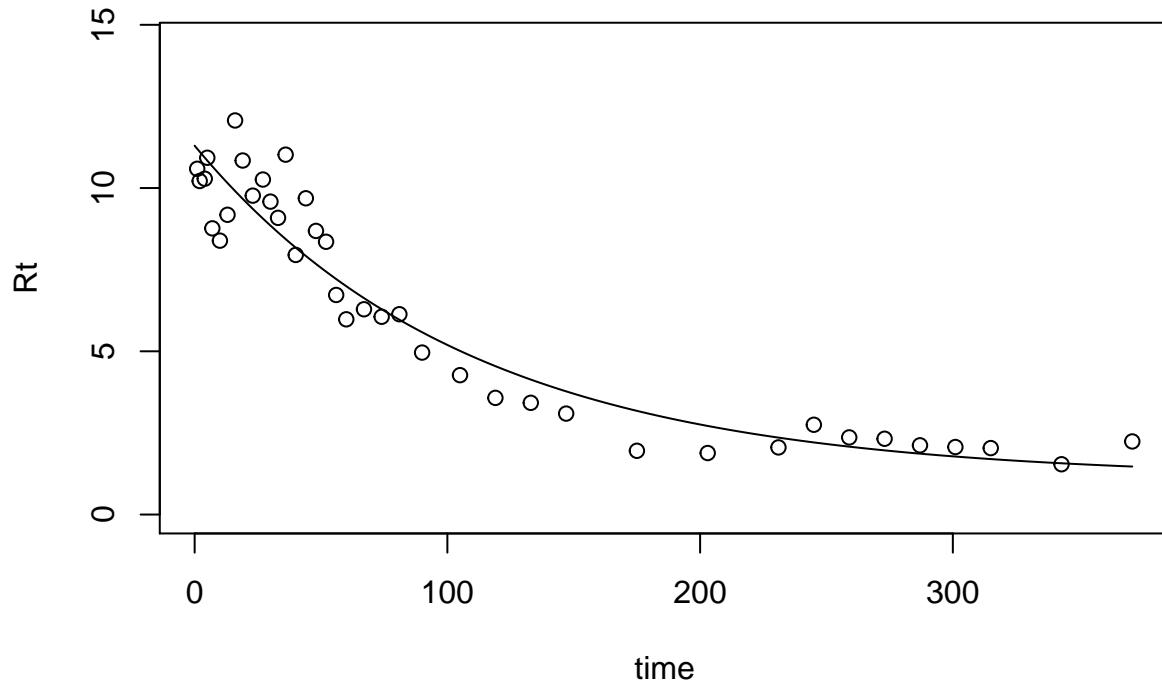
Variable Site07:

CO2 production rate

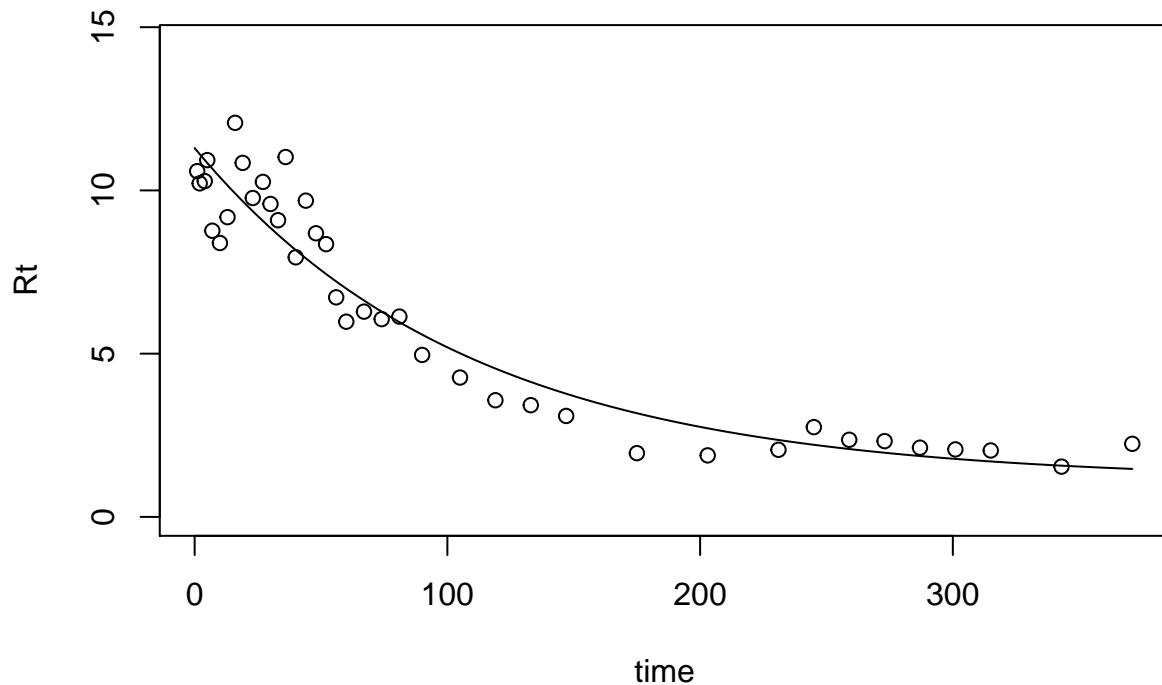
```
## [1] "Best fit parameter: 0.00033960550712394"
```



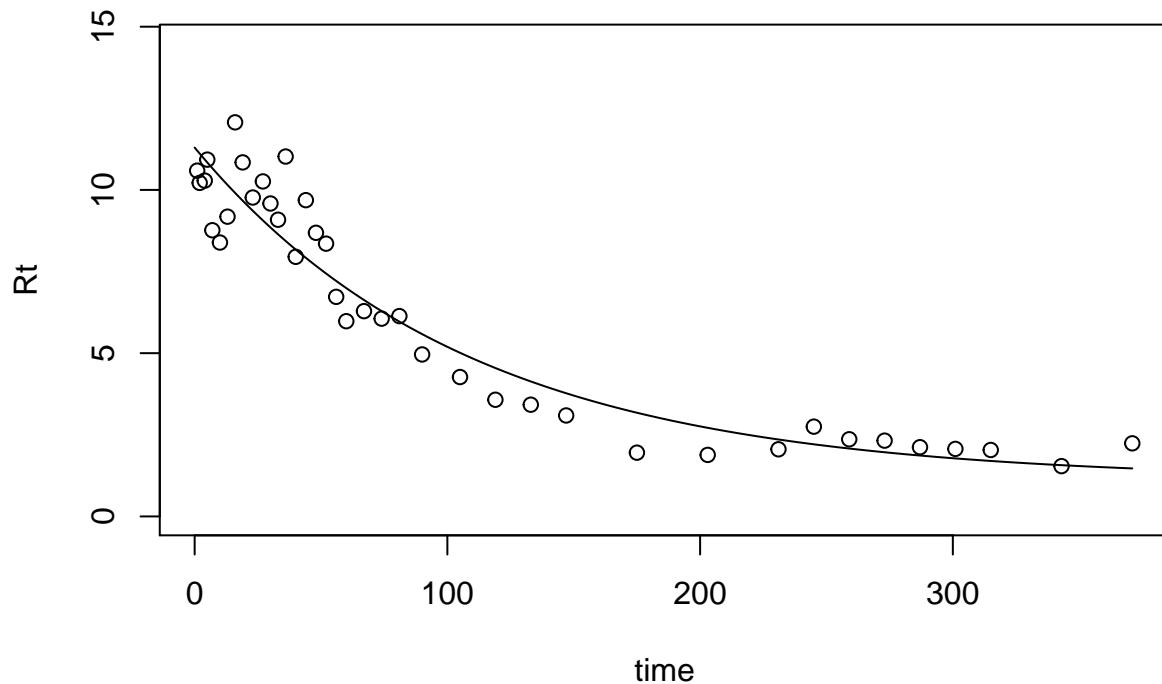
```
## [1] "AIC = -2.68914449779203"
## [1] "k1= 0.00920024064145791"
## [2] "k2= 6.08439001062591e-05"
## [3] "proportion of C0 in pool 1= 0.0545365215298995"
```



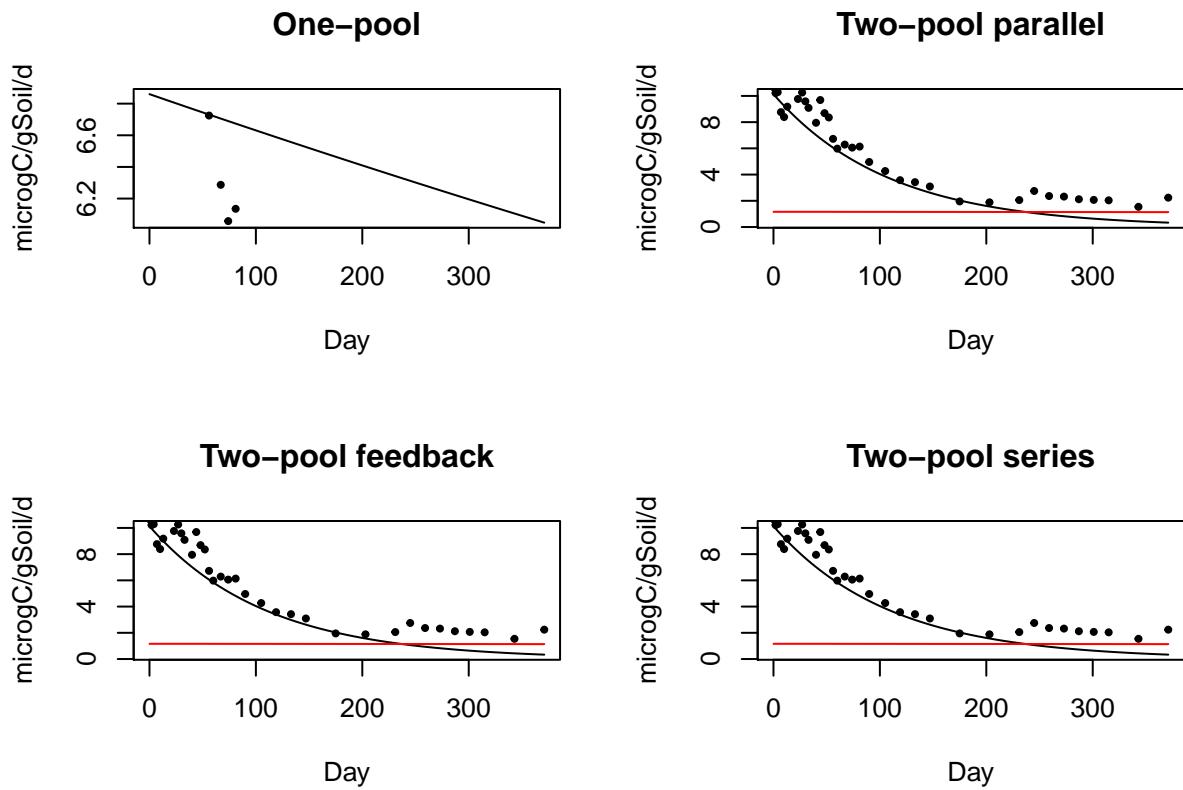
```
## [1] "AIC = 6.03815842120897"
## [1] "k1= 0.00920057522073081"
## [2] "k2= 6.08496678928275e-05"
## [3] "a21= 0.00258383964489522"
## [4] "a12= 4.30975978049641e-06"
## [5] "Proportion of C0 in pool 1= 0.0546763284605302"
```



```
## [1] "AIC = 10.0381584213272"
## [1] "k1= 0.00920053426464872"
## [2] "k2= 6.08489597922028e-05"
## [3] "a21= 0.00269887960002246"
## [4] "Proportion of C0 in pool 1= 0.0546827488381924"
```



```
## [1] "AIC = 8.03815841945513"
```

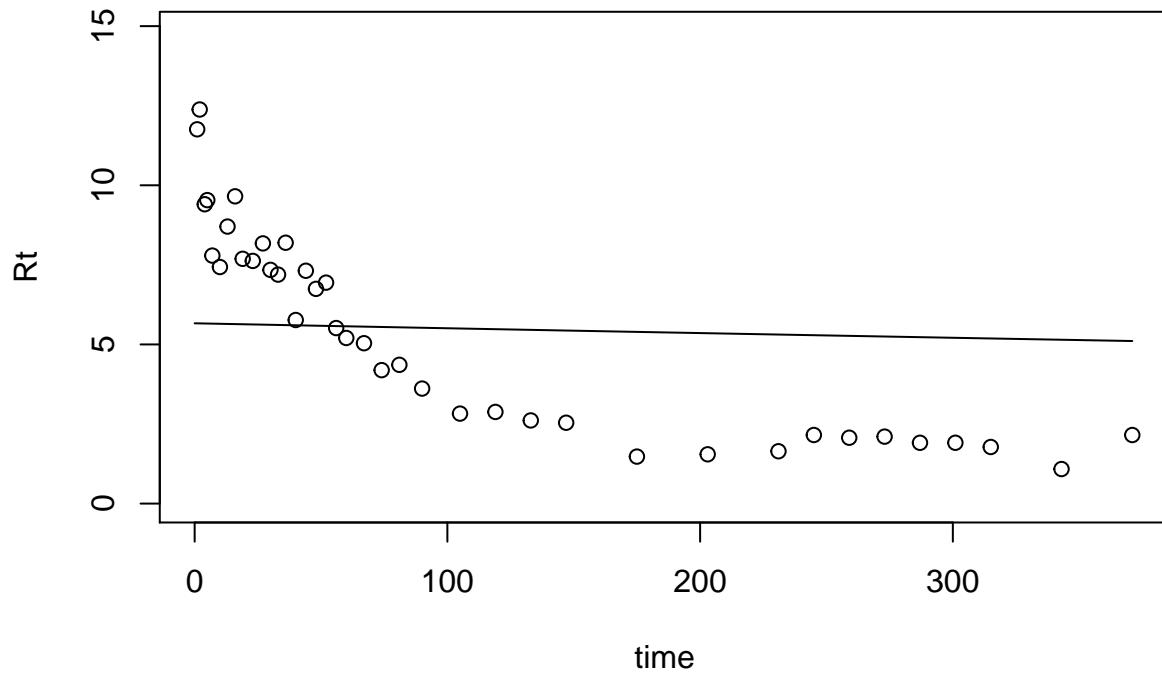


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.69	0.00034	NA	NA	NA	NA	-2.68	0.986	NA	NA
Two-pool parallel	6.04	0.0092	6.08e-05	0.0545	NA	NA	6.1	0.0122	15500	10500
Two-pool feedback	10	0.0092	6.08e-05	0.0547	0.00258	4.31e-06	10.2	0.00157	151	75.6
Two-pool series	8.04	0.0092	6.08e-05	0.0547	0.0027	NA	8.15	0.0044	153	75.6

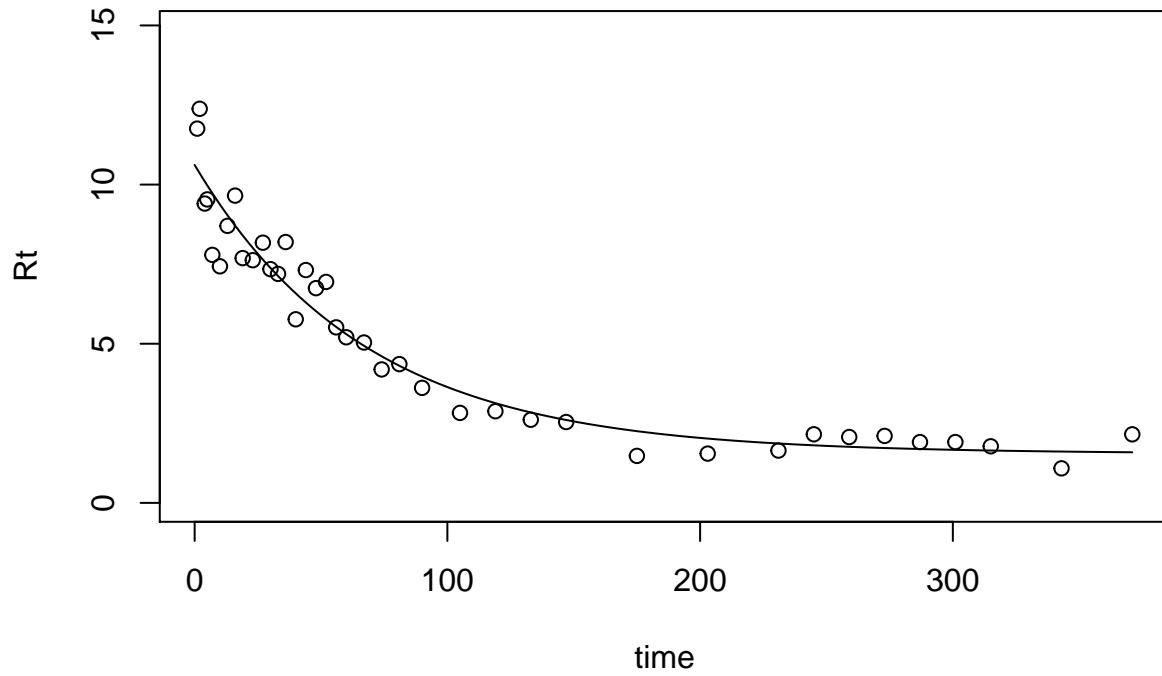
Variable Site08:

CO2 production rate

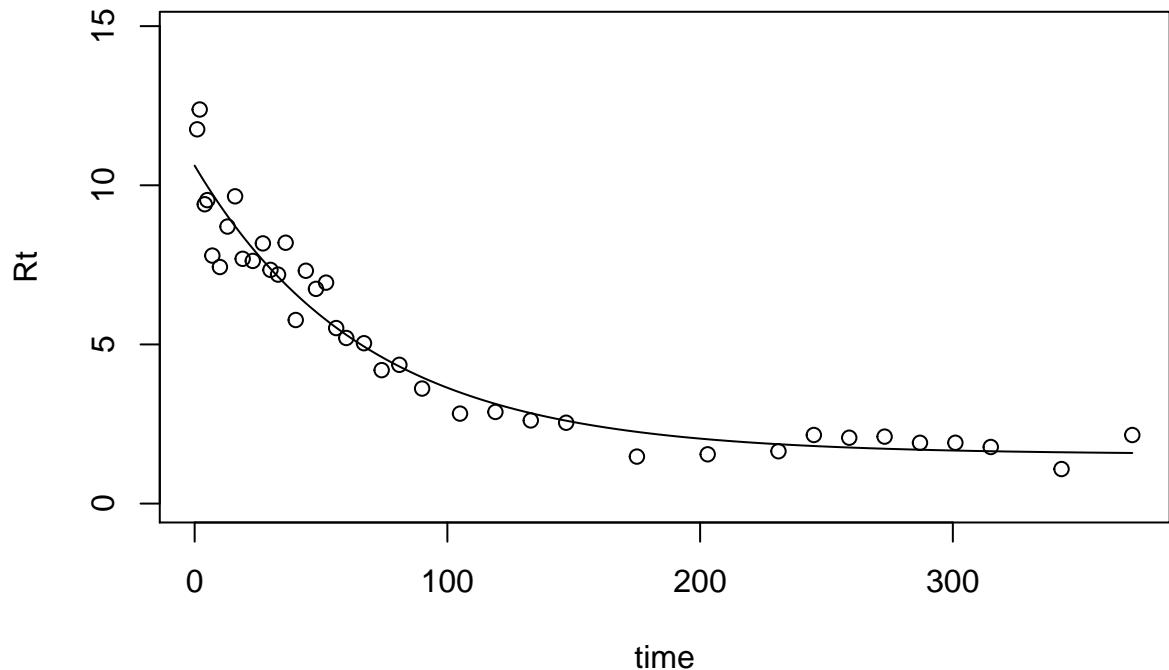
```
## [1] "Best fit parameter: 0.000279013239275527"
```



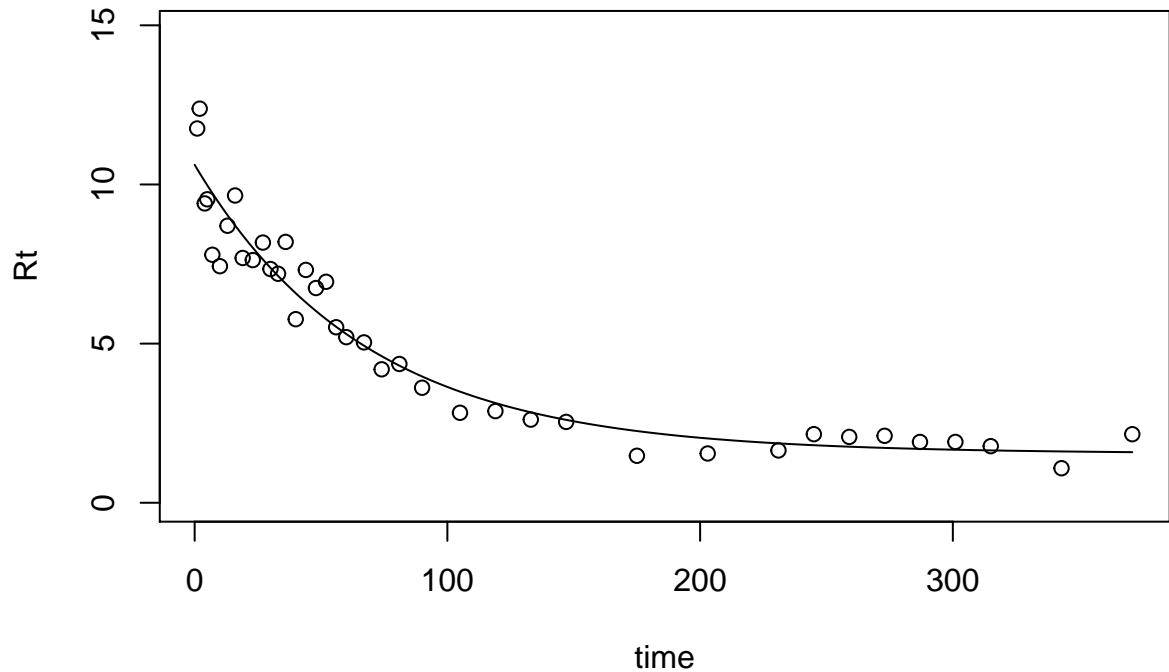
```
## [1] "AIC = -2.37340894230537"
## [1] "k1= 0.0148049181038127"
## [2] "k2= 8.1246749300503e-05"
## [3] "proportion of C0 in pool 1= 0.0300040565613327"
```



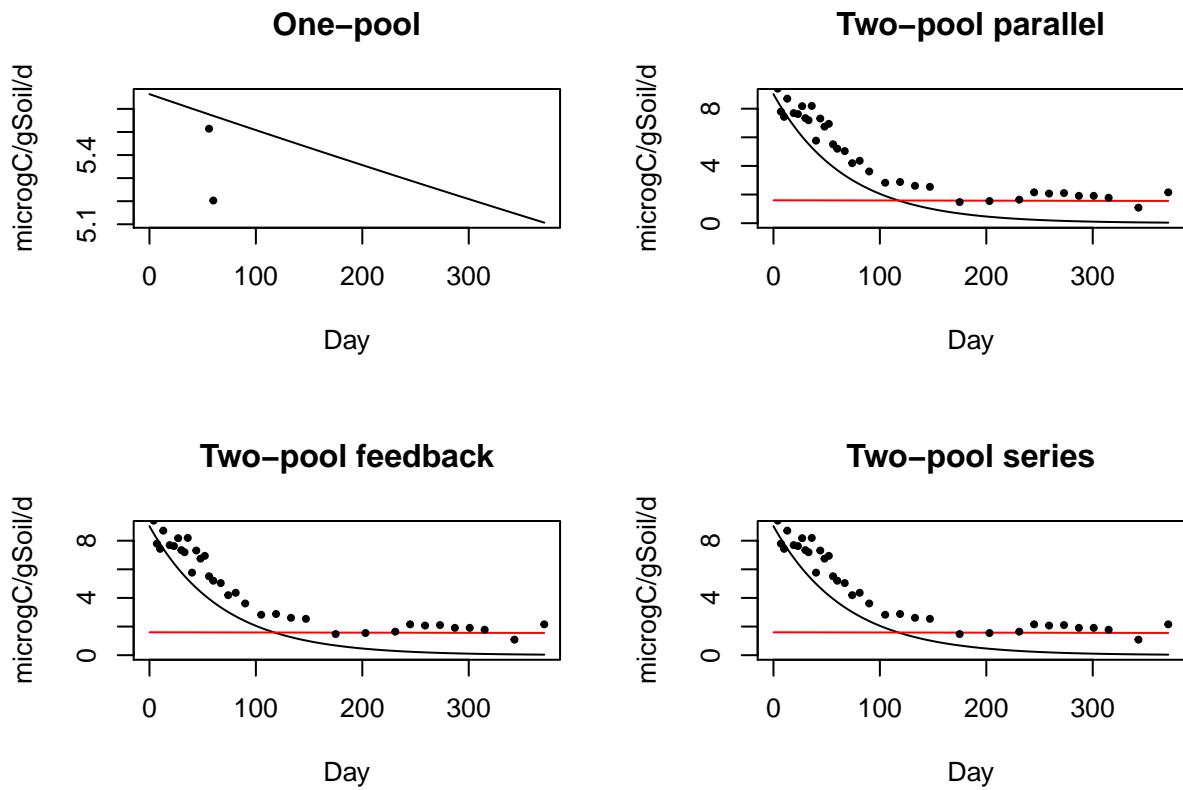
```
## [1] "AIC = 6.9685995685959"
## [1] "k1= 0.0148049062757236"
## [2] "k2= 8.12466752185984e-05"
## [3] "a21= 0.00249893587998451"
## [4] "a12= 4.52574456311083e-06"
## [5] "Proportion of C0 in pool 1= 0.0300796854077762"
```



```
## [1] "AIC = 10.9685995685988"
## [1] "k1= 0.0148048714638598"
## [2] "k2= 8.12464536403207e-05"
## [3] "a21= 0.00754717946874101"
## [4] "Proportion of C0 in pool 1= 0.0302335638421434"
```



```
## [1] "AIC = 8.96859956852585"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.37	0.000279	NA	NA	NA	NA	-2.36	0.99	NA	NA
Two-pool parallel	6.97	0.0148	8.12e-05	0.03	NA	NA	7.03	0.00902	11900	8160
Two-pool feedback	11	0.0148	8.12e-05	0.0301	0.0025	4.53e-06	11.1	0.00116	98.3	47
Two-pool series	8.97	0.0148	8.12e-05	0.0302	0.00755	NA	9.08	0.00325	160	47.3

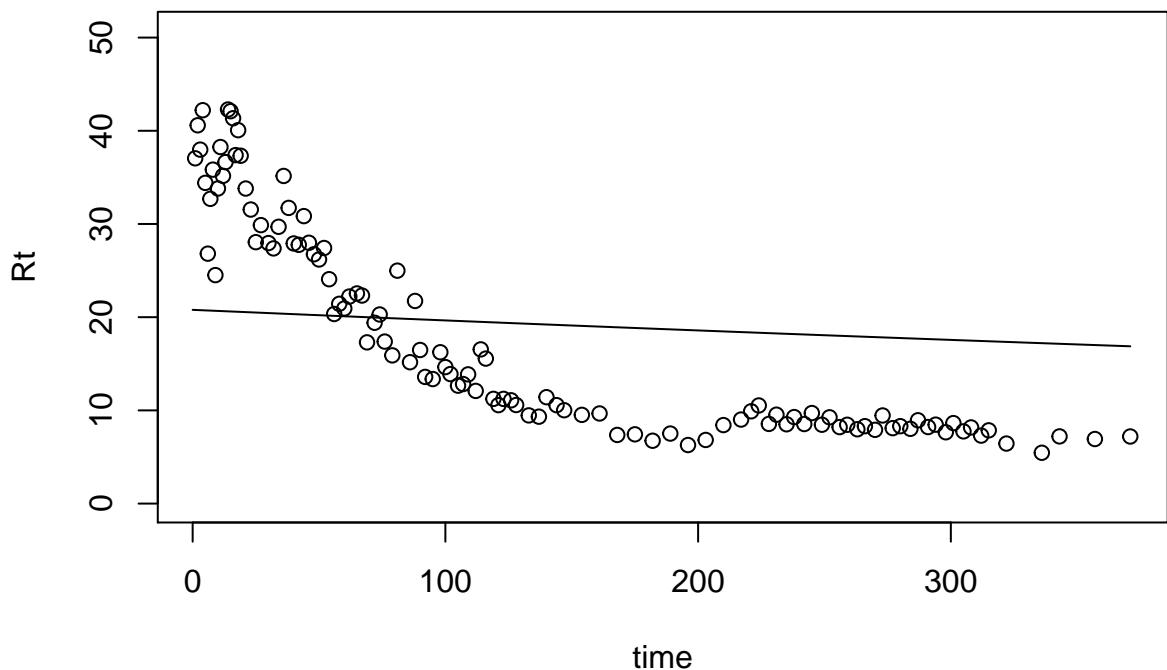
Variable Site09:

CO2 production rate

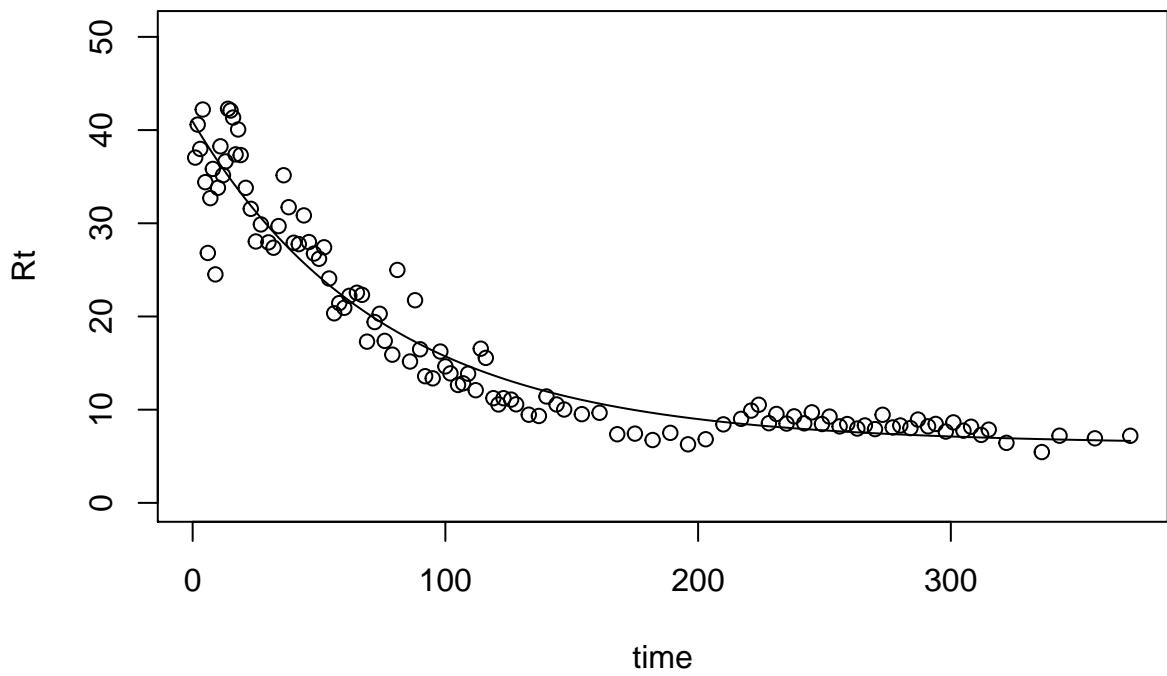
Variable Site10:

CO2 production rate

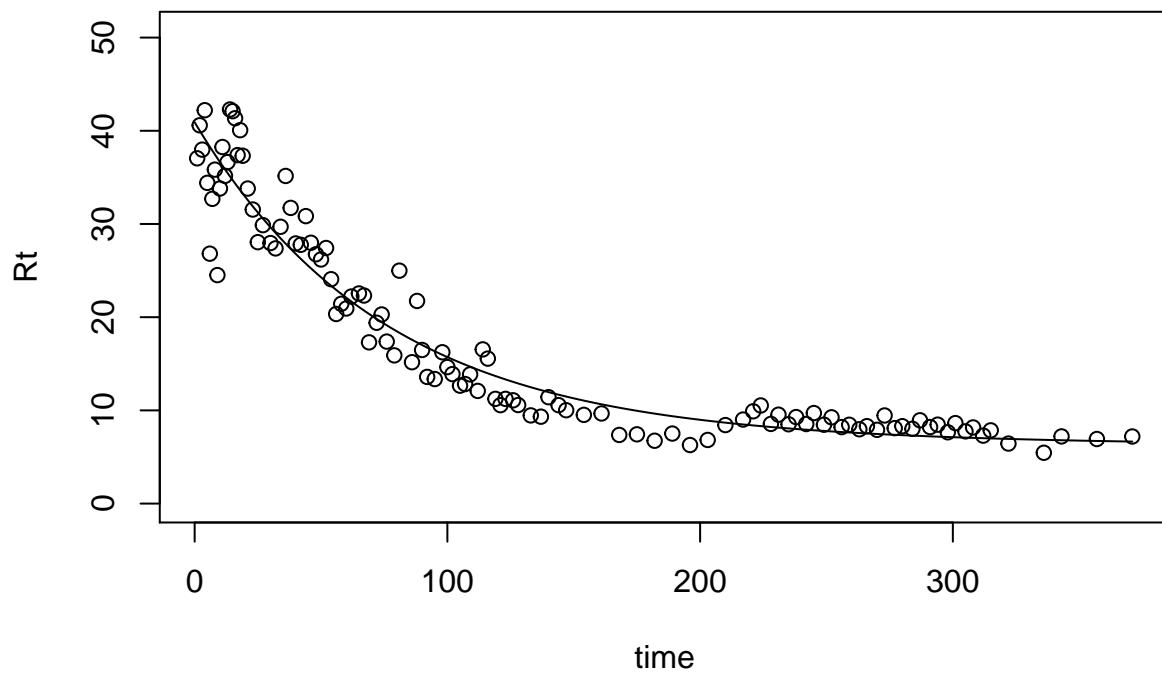
```
## [1] "Best fit parameter: 0.000561804202808262"
```



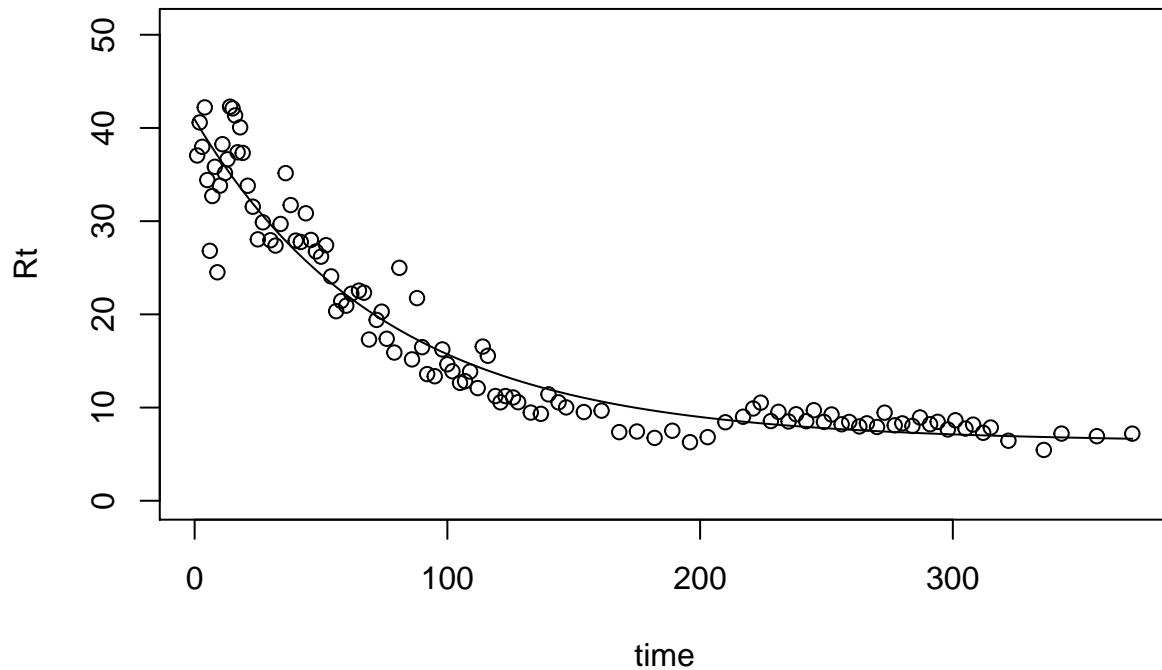
```
## [1] "AIC = -7.31345717487192"
## [1] "k1= 0.0133523356574467"
## [2] "k2= 0.000200461145834926"
## [3] "proportion of C0 in pool 1= 0.0688388293262408"
```



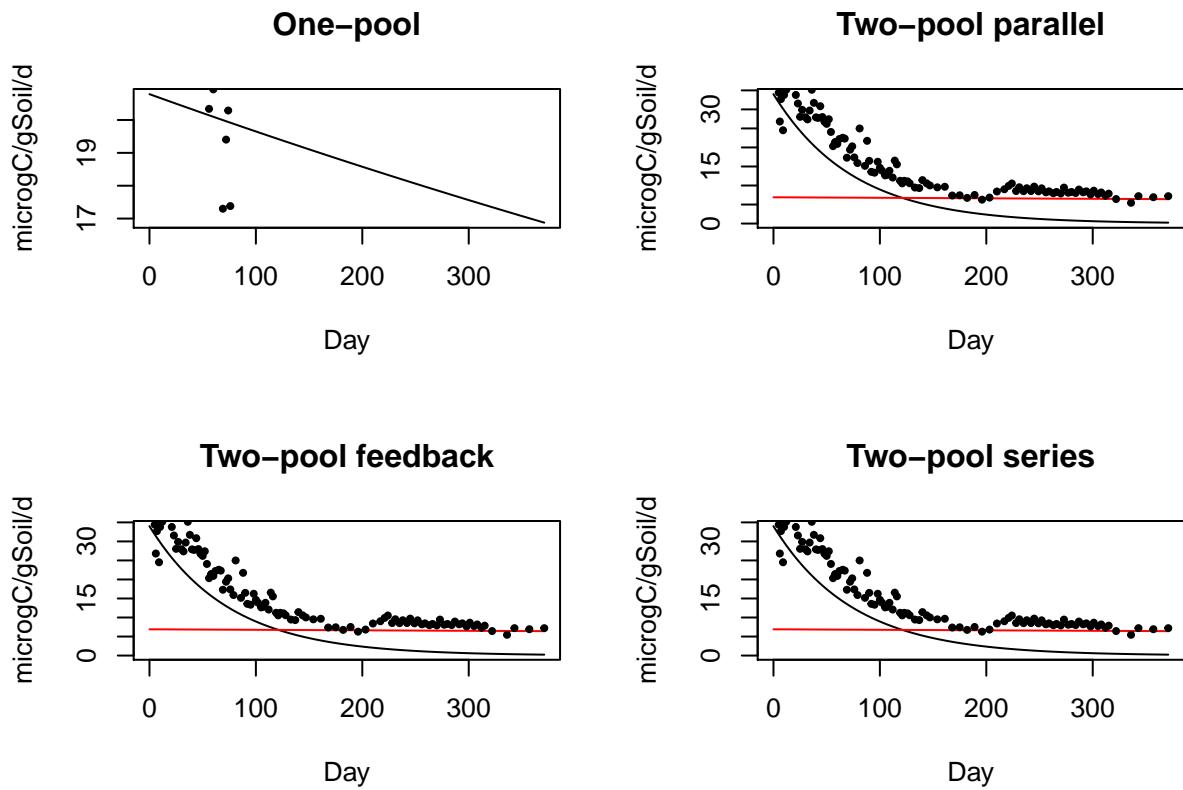
```
## [1] "AIC = 1.61139560805245"
## [1] "k1= 0.0133522031783789"
## [2] "k2= 0.000200459034740395"
## [3] "a21= 0.00991949951118393"
## [4] "a12= 6.71272961344505e-06"
## [5] "Proportion of C0 in pool 1= 0.0695397684034003"
```



```
## [1] "AIC = 5.61139560699989"
## [1] "k1= 0.0133524392336177"
## [2] "k2= 0.000200462806340194"
## [3] "a21= 0.00823062227362958"
## [4] "Proportion of C0 in pool 1= 0.0694182931694707"
```



```
## [1] "AIC = 3.6113956080992"
```

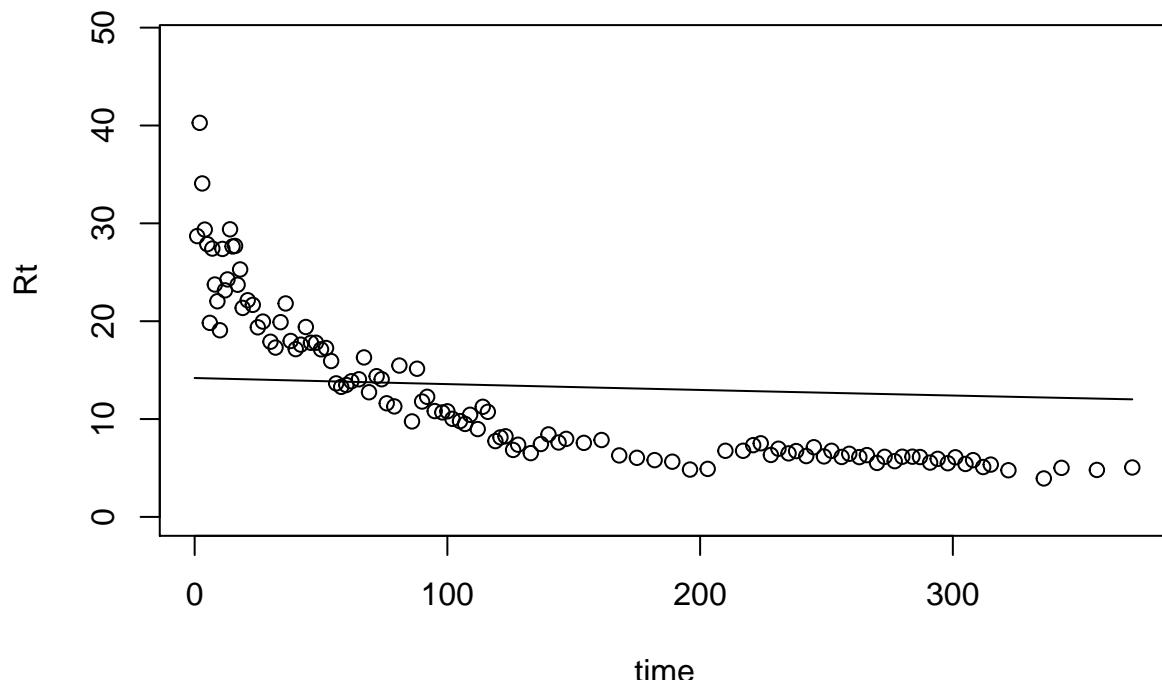


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-7.31	0.000562	NA	NA	NA	NA	-7.3	0.987	NA	NA
Two-pool parallel	1.61	0.0134	2e-04	0.0688	NA	NA	1.68	0.0111	4650	3100
Two-pool feedback	5.61	0.0134	2e-04	0.0695	0.00992	6.71e-06	5.78	0.00143	124	52.7
Two-pool series	3.61	0.0134	2e-04	0.0694	0.00823	NA	3.72	0.00399	116	52.5

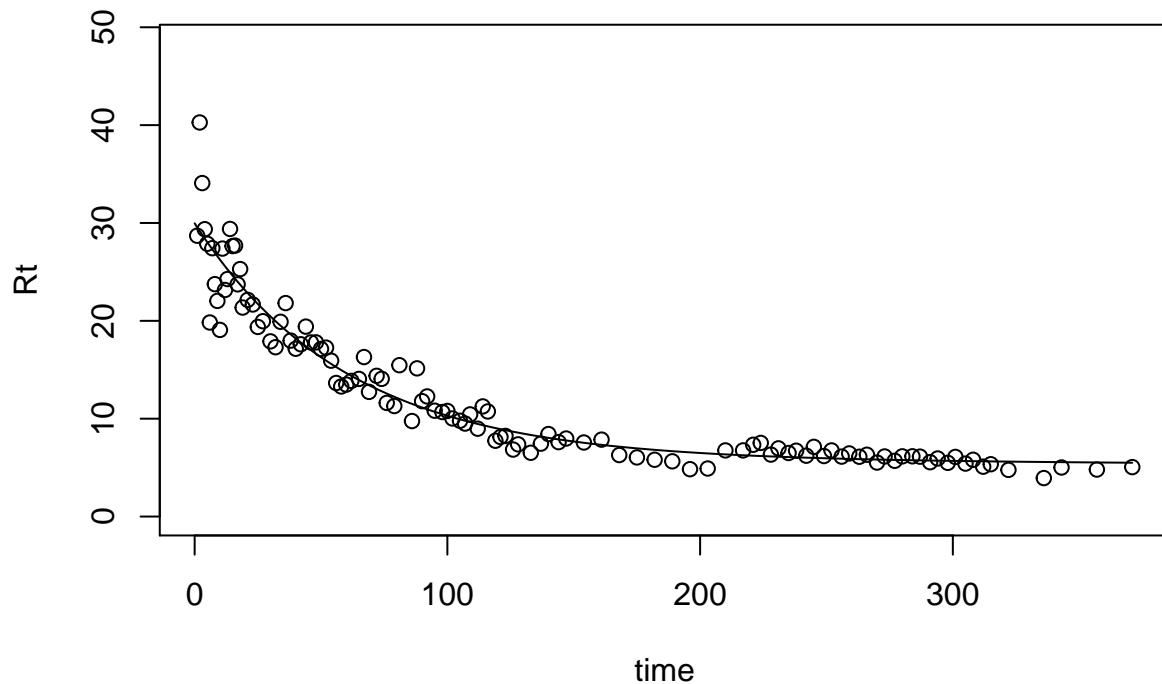
Variable Site11:

CO2 production rate

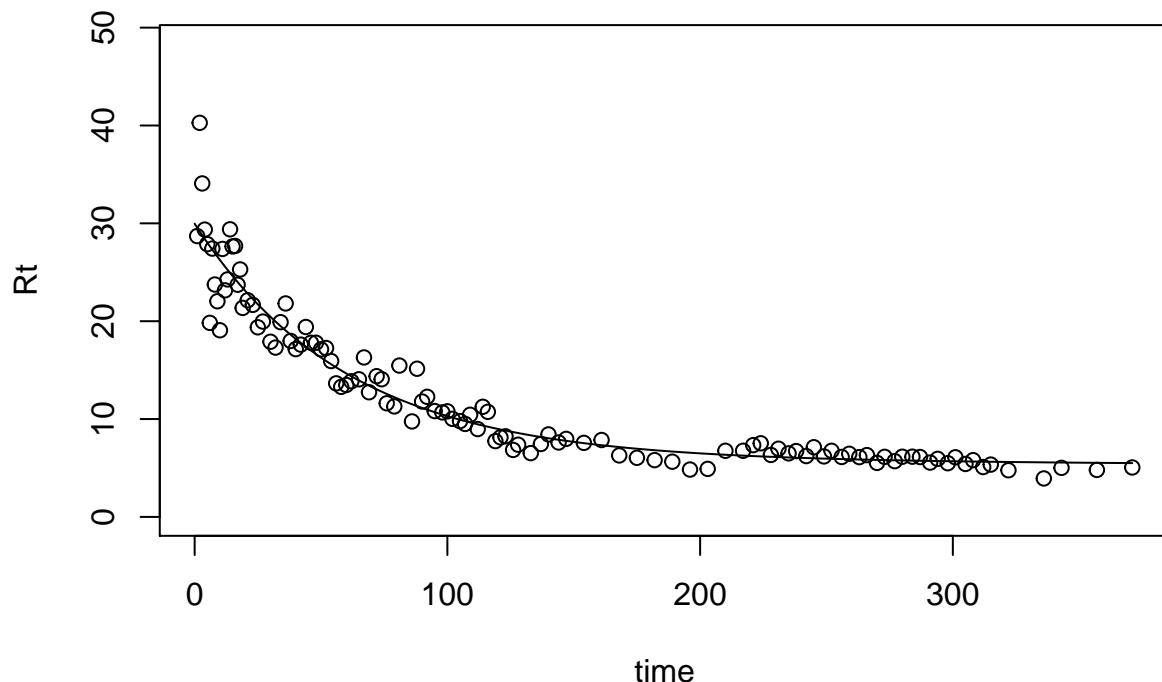
```
## [1] "Best fit parameter: 0.000449152249752465"
```



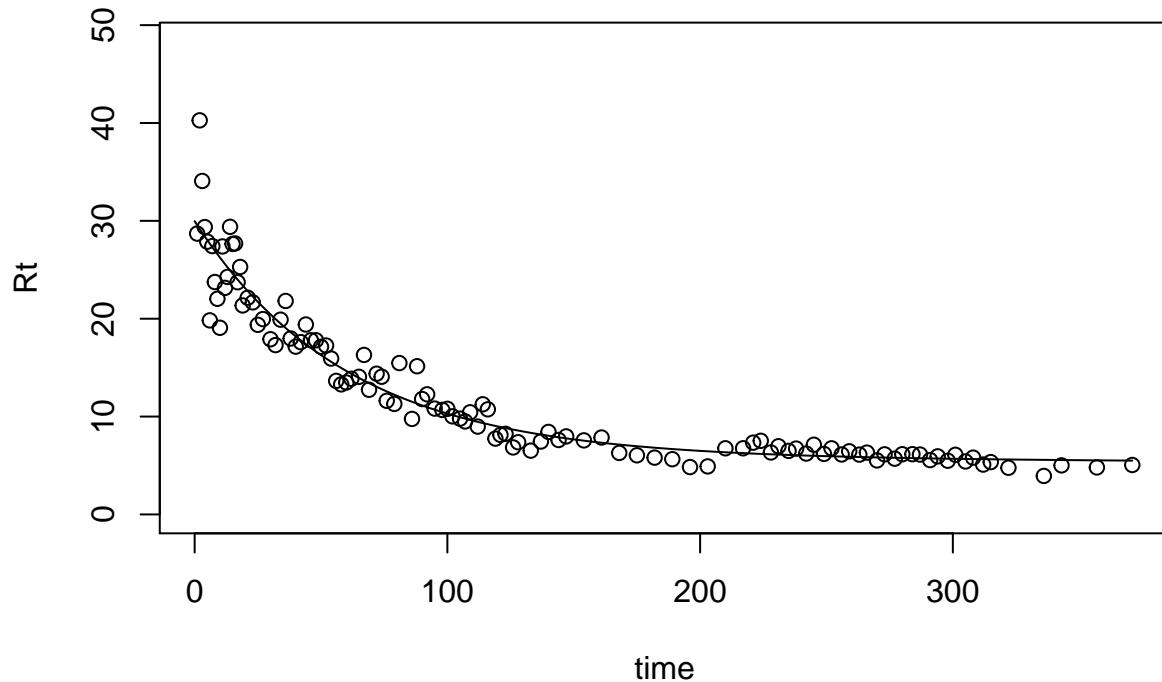
```
## [1] "AIC = -5.96041785305259"
## [1] "k1= 0.0166569464624123"
## [2] "k2= 0.00019418899927466"
## [3] "proportion of C0 in pool 1= 0.0458053272309299"
```



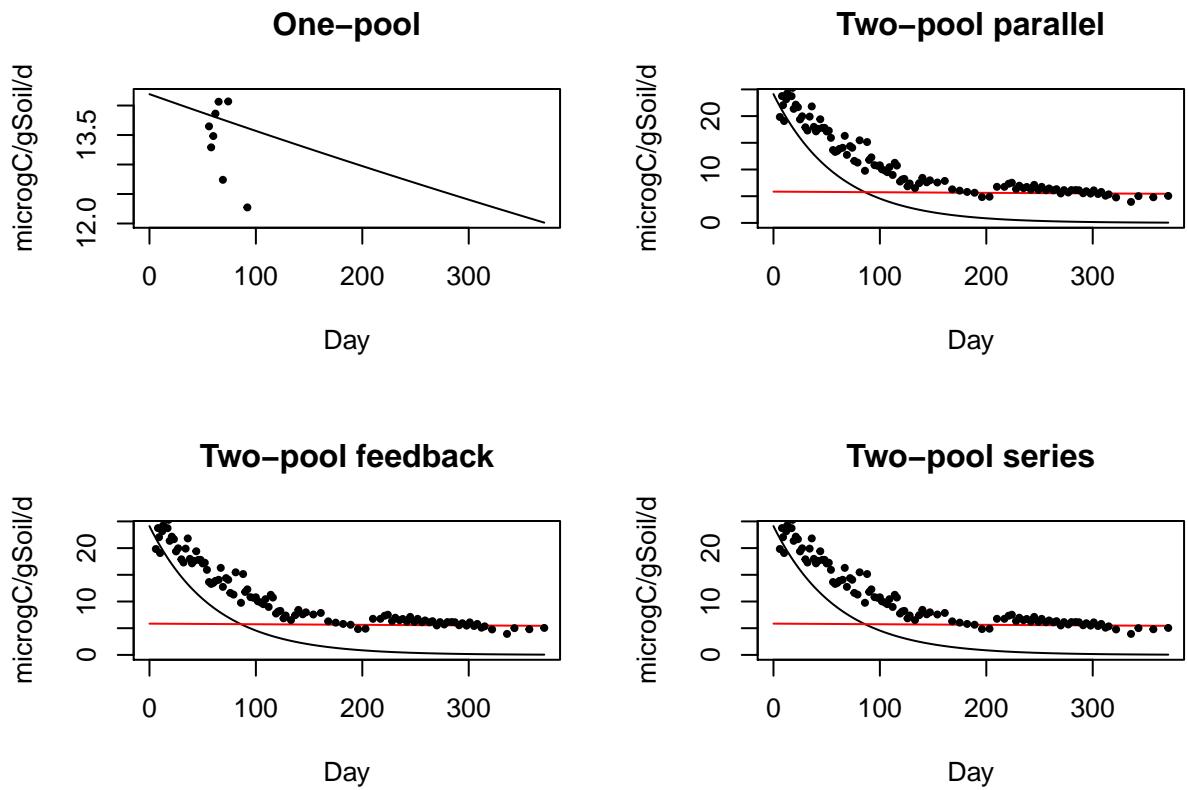
```
## [1] "AIC = 3.1200257660843"
## [1] "k1= 0.0166569547779255"
## [2] "k2= 0.000194189092781285"
## [3] "a21= 0.00725140951314401"
## [4] "a12= 1.62944122273911e-05"
## [5] "Proportion of C0 in pool 1= 0.0461440244910085"
```



```
## [1] "AIC = 7.12002576607724"  
## [1] "k1= 0.0166569048010734"  
## [2] "k2= 0.000194188649910172"  
## [3] "a21= 0.00289667058285176"  
## [4] "Proportion of C0 in pool 1= 0.0459400196899761"
```



```
## [1] "AIC = 5.12002576597362"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	- 5.96	0.000449	NA	NA	NA	NA	- 5.95	0.988	NA	NA
Two-pool parallel	3.12	0.0167	0.000194	0.0458	NA	NA	3.19	0.0103	4920	3330
Two-pool feedback	7.12	0.0167	0.000194	0.0461	0.00725	1.63e-05	7.28	0.00132	97.4	42.1
Two-pool series	5.12	0.0167	0.000194	0.0459	0.0029	NA	5.23	0.00369	75	41.8

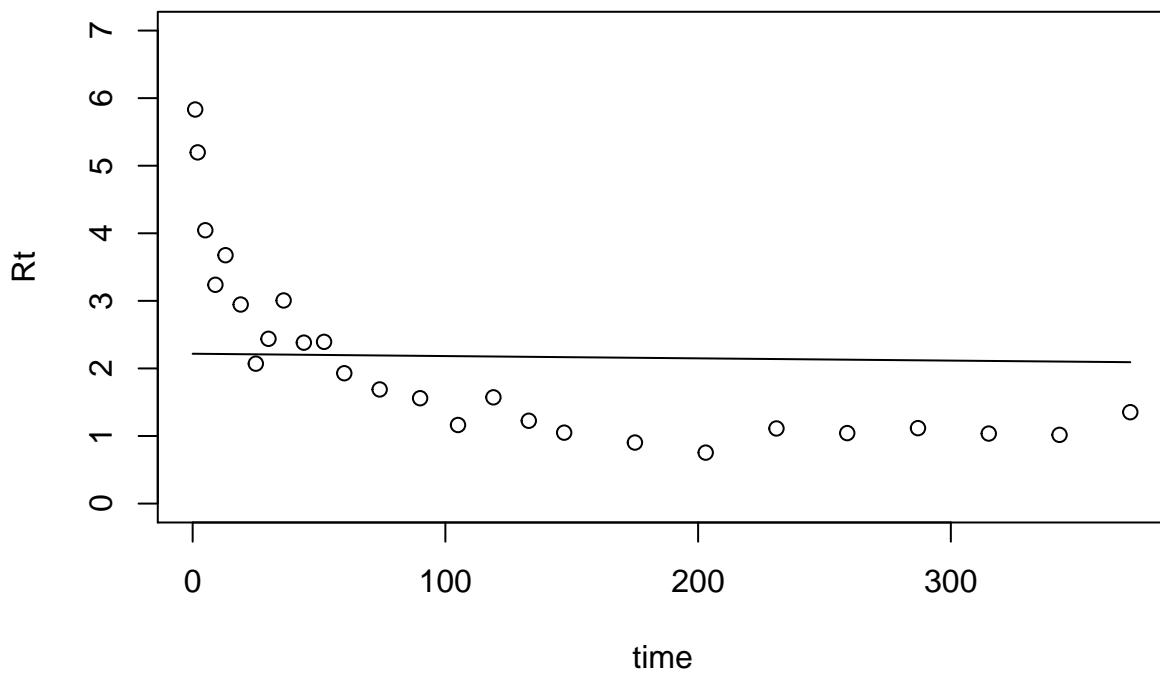
Variable Site12:

CO2 production rate

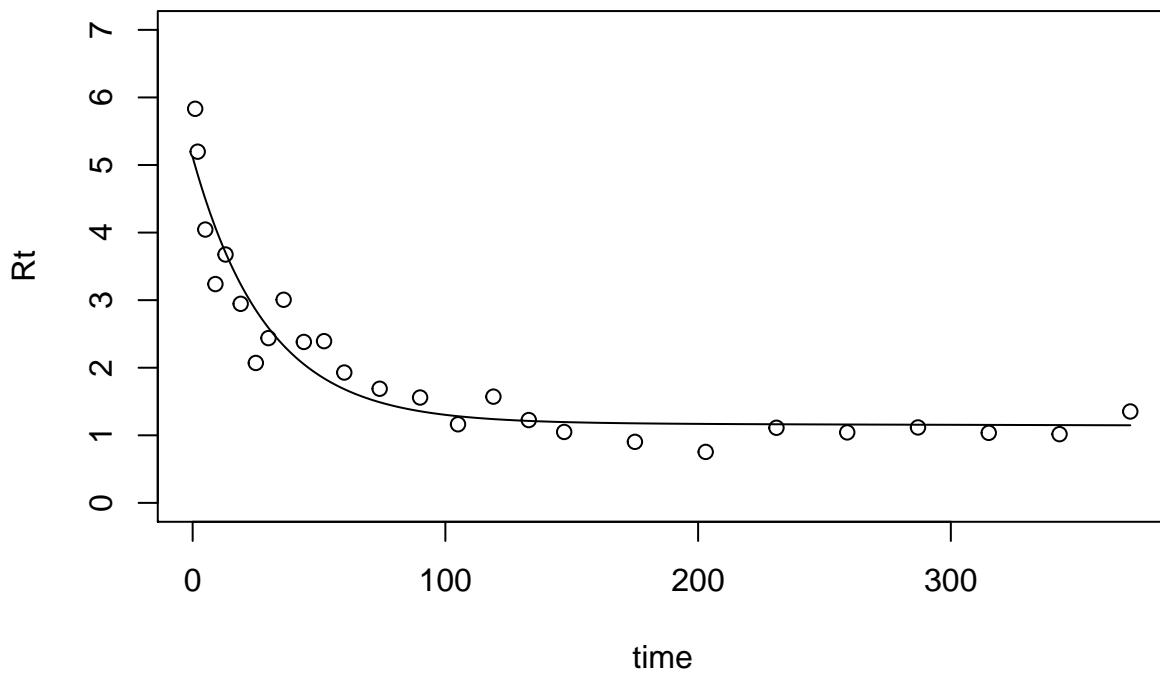
Variable Site13:

CO2 production rate

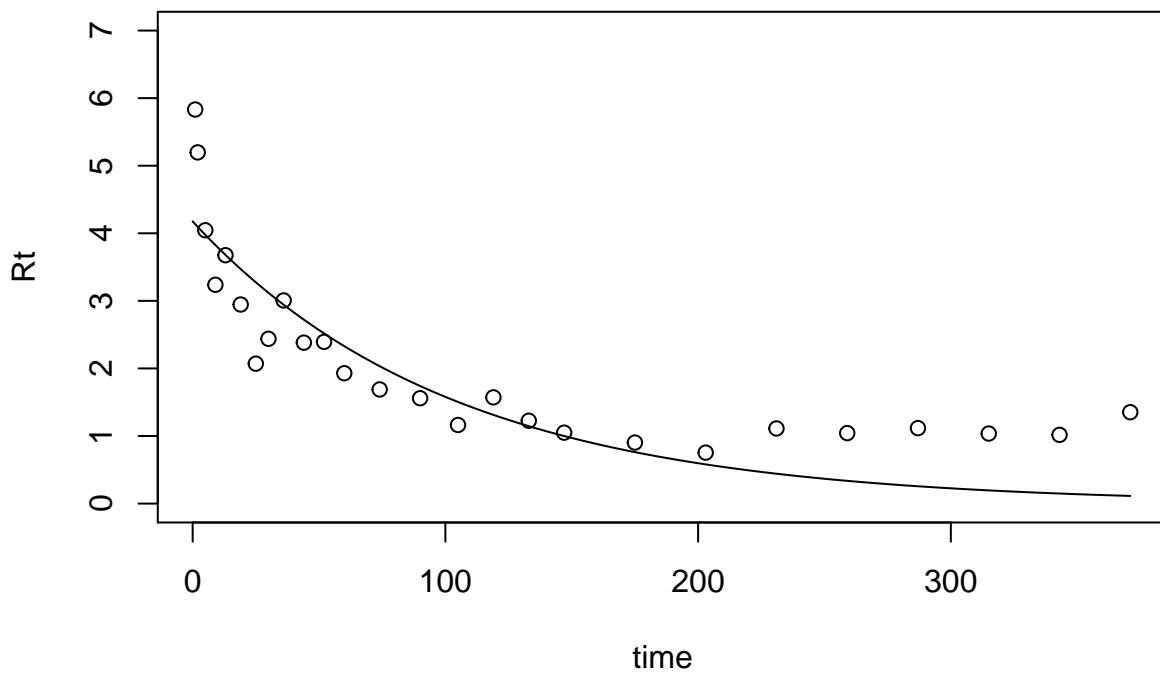
```
## [1] "Best fit parameter: 0.000156155121646436"
```



```
## [1] "AIC =  0.960706351667316"
## [1] "k1= 0.0342452480387773"
## [2] "k2= 8.41079969523627e-05"
## [3] "proportion of C0 in pool 1= 0.00809040206166006"
```



```
## [1] "AIC =  9.76624001472825"
## [1] "k1= 5.37679586267652e-20"
## [2] "k2= 0.00972501666487171"
## [3] "a21= 0.999709020000031"
## [4] "a12= 4.22581416748002e-07"
## [5] "Proportion of C0 in pool 1= 0.969760802209421"
```



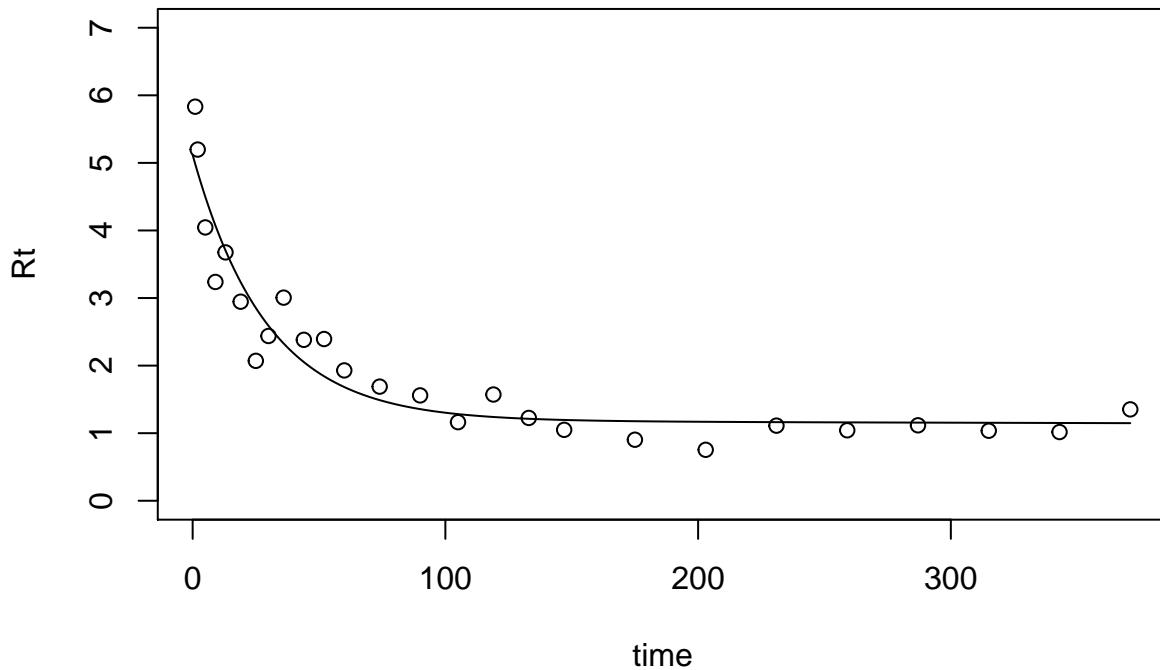
```
## [1] "AIC = 11.5449912239174"
```

```
## [1] "k1= 0.03424650096034"
```

```
## [2] "k2= 8.41090764044814e-05"
```

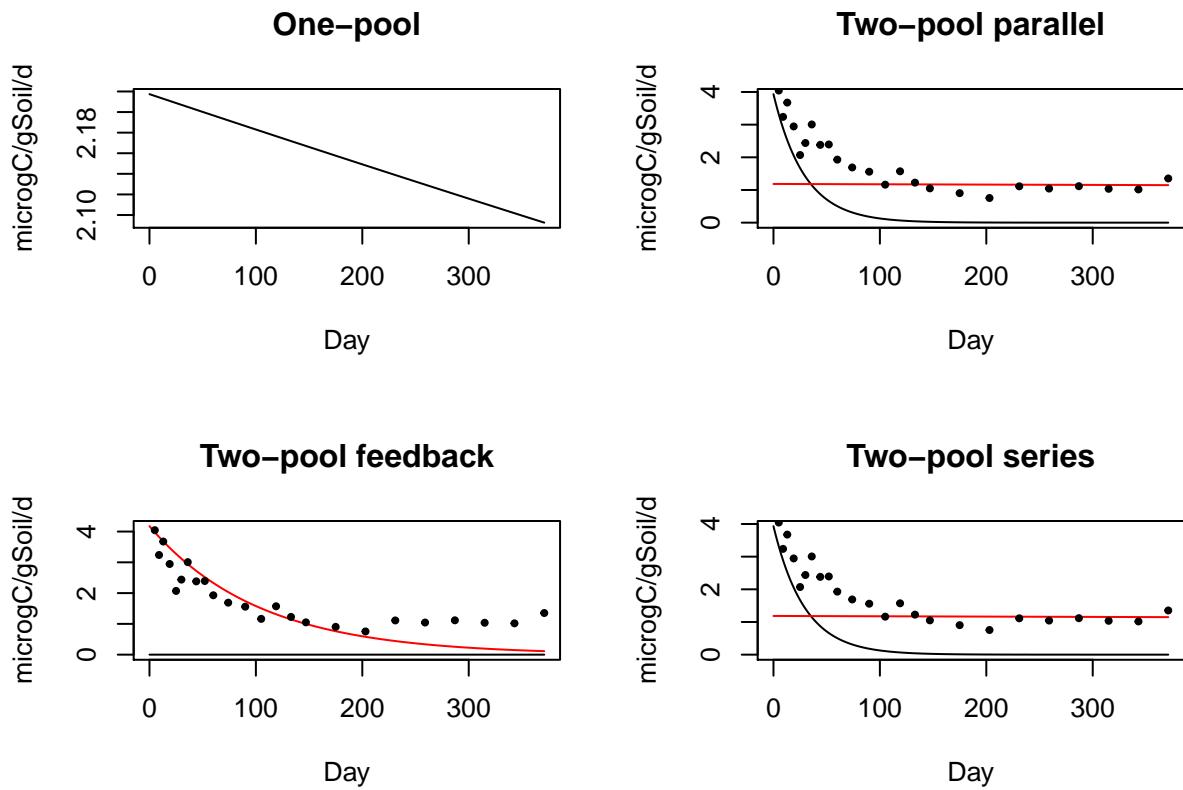
```
## [3] "a21= 6.27844862431948e-05"
```

```
## [4] "Proportion of C0 in pool 1= 0.00809062021226586"
```



```
## [1] "AIC = 11.7662400176435"
```

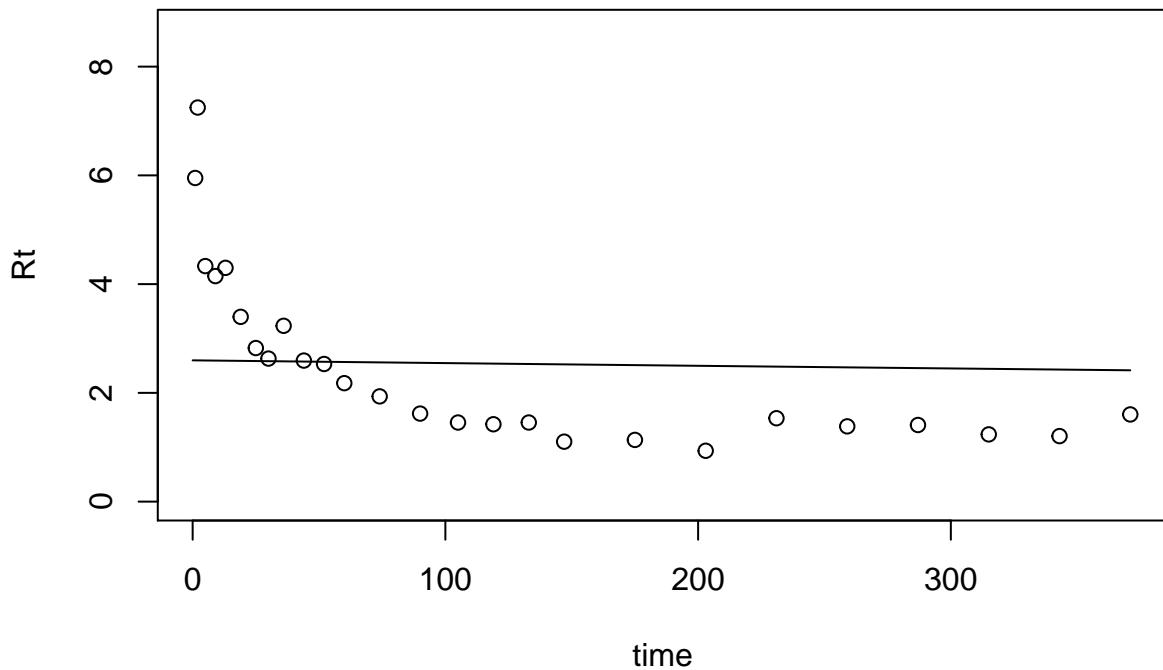
```
## Error in solve.default(A): system is computationally singular: reciprocal condition number = 5.52882
```



Variable Site14:

CO₂ production rate

```
## [1] "Best fit parameter: 0.000196818792485271"
```

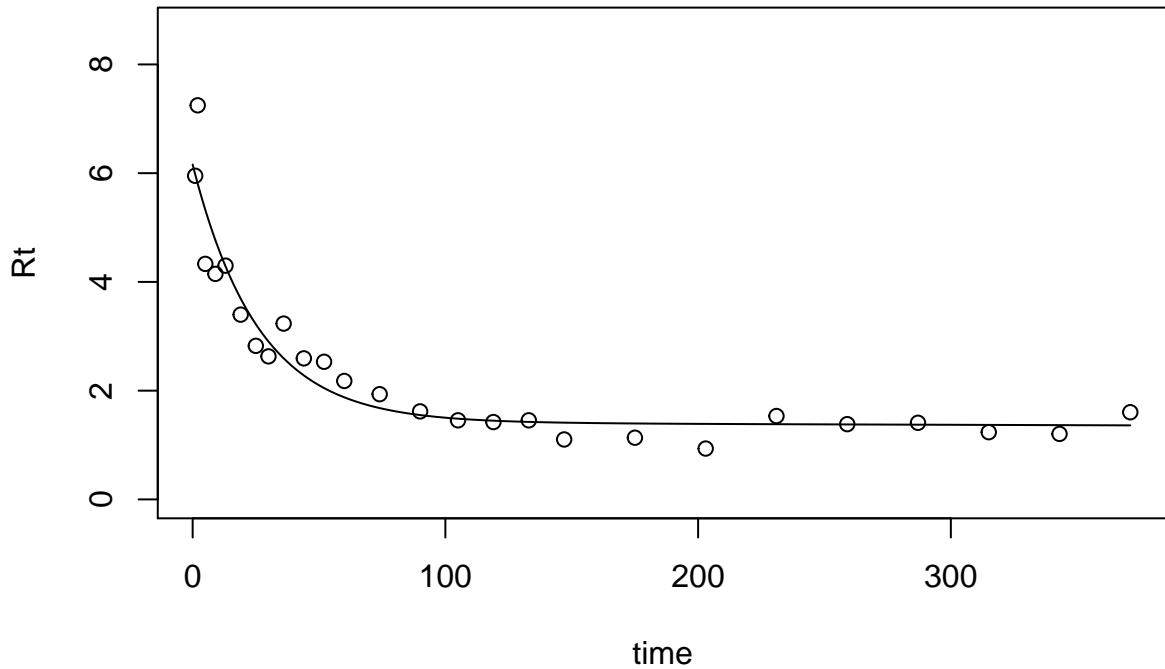


```
## [1] "AIC = 0.310622801216832"
```

```

## [1] "k1= 0.0385578094982407"
## [2] "k2= 0.000108404036051263"
## [3] "proportion of C0 in pool 1= 0.00931571582240387"

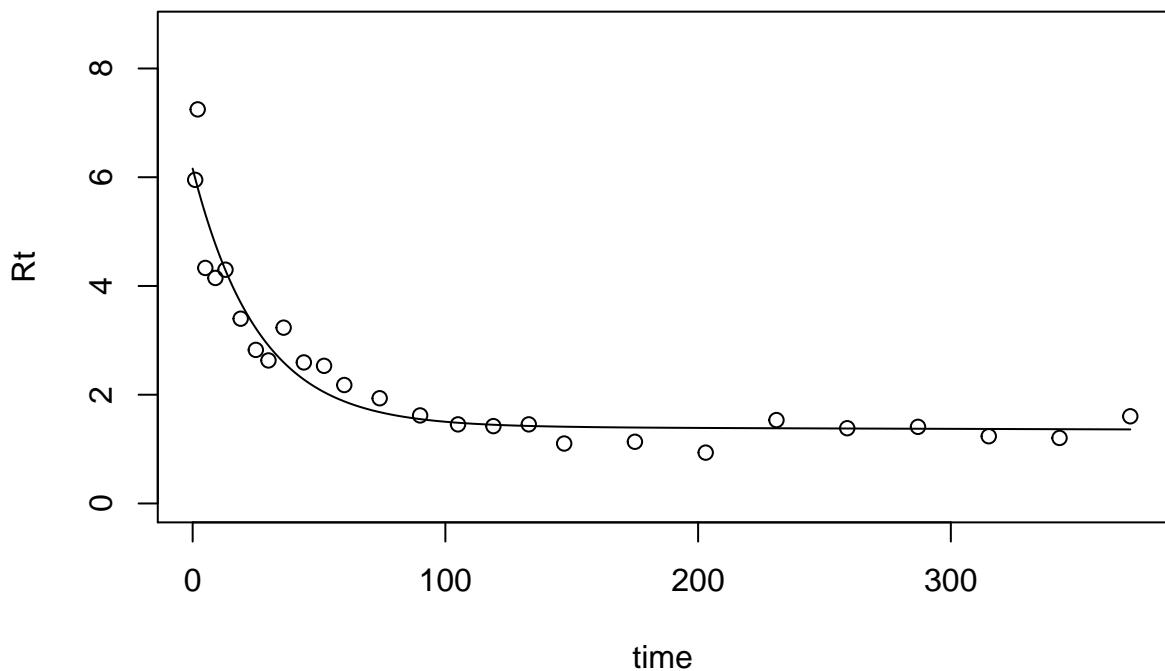
```



```

## [1] "AIC = 9.23047388056813"
## [1] "k1= 0.0385581338525114"
## [2] "k2= 0.000108405377550395"
## [3] "a21= 0.552900070332997"
## [4] "a12= 1.73582195085453e-05"
## [5] "Proportion of C0 in pool 1= 0.0209086724326332"

```



```

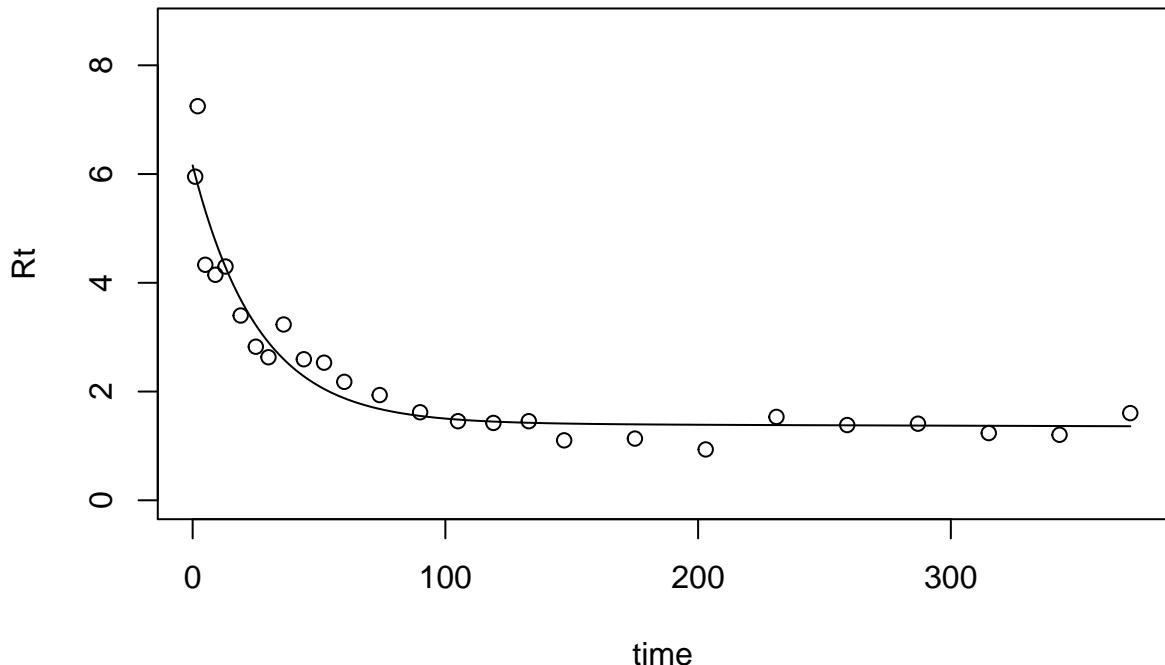
## [1] "AIC = 13.2304738851221"

```

```

## [1] "k1= 0.0385572431576873"
## [2] "k2= 0.00010840347978661"
## [3] "a21= 0.46820771831914"
## [4] "Proportion of C0 in pool 1= 0.017561353538473"

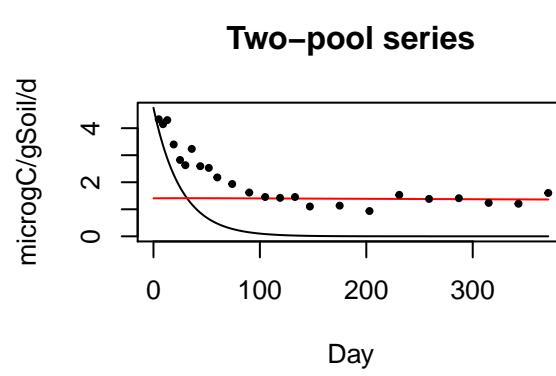
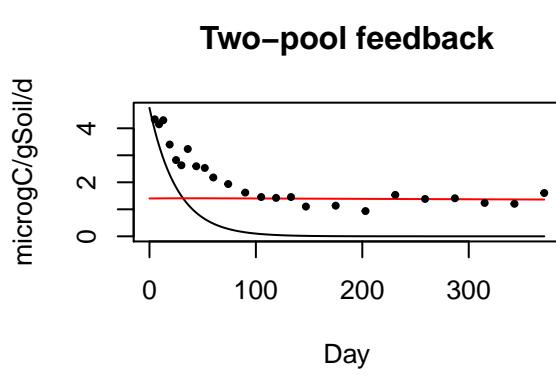
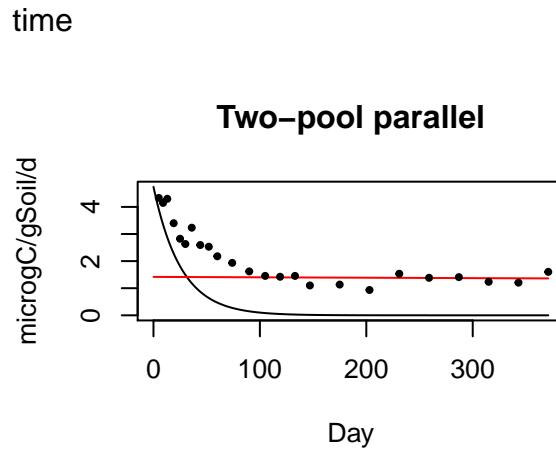
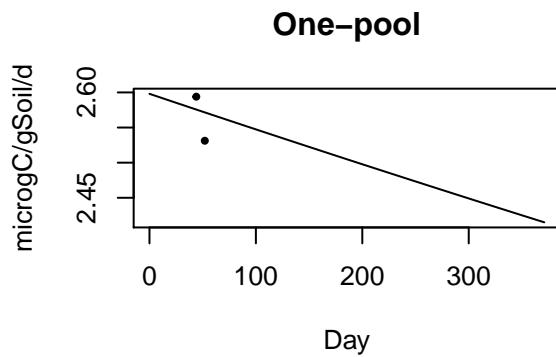
```



```

## [1] "AIC = 11.2304738828355"

```

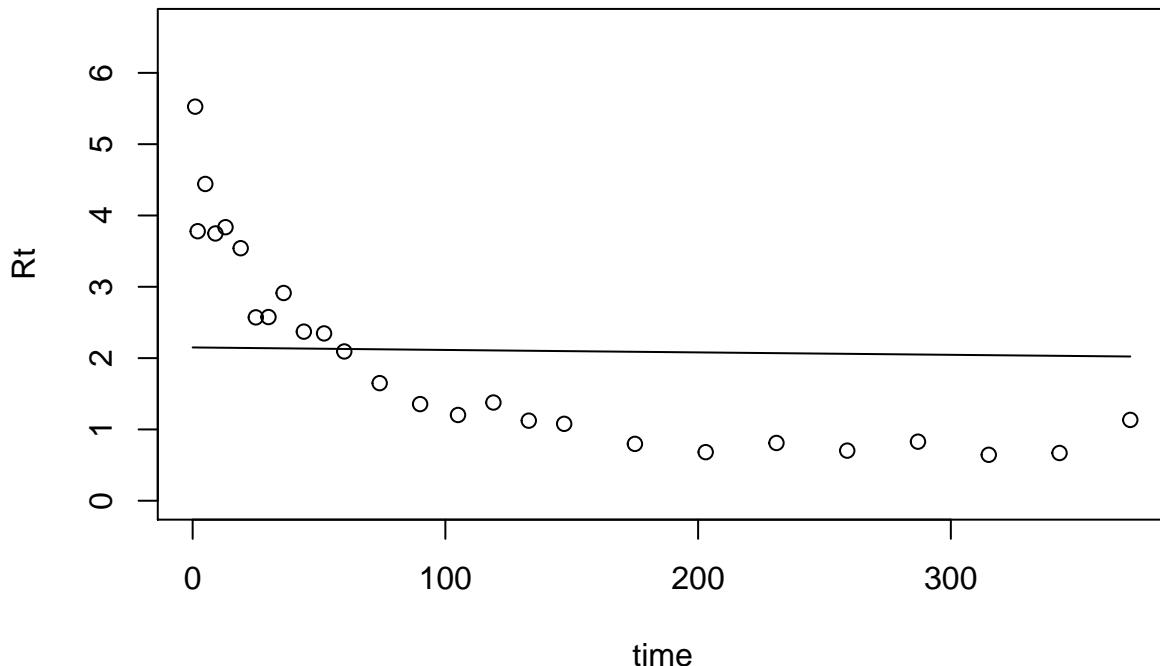


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	0.311	0.000197	NA	NA	NA	NA	0.321	0.987	NA	NA
Two-pool parallel	9.23	0.0386	0.000108	0.00932	NA	NA	9.3	0.0111	9140	6310
Two-pool feedback	13.2	0.0386	0.000108	0.0209	0.553	1.74e-05	13.4	0.00143	5130	954
Two-pool series	11.2	0.0386	0.000108	0.0176	0.468	NA	11.3	0.004	4350	71.2

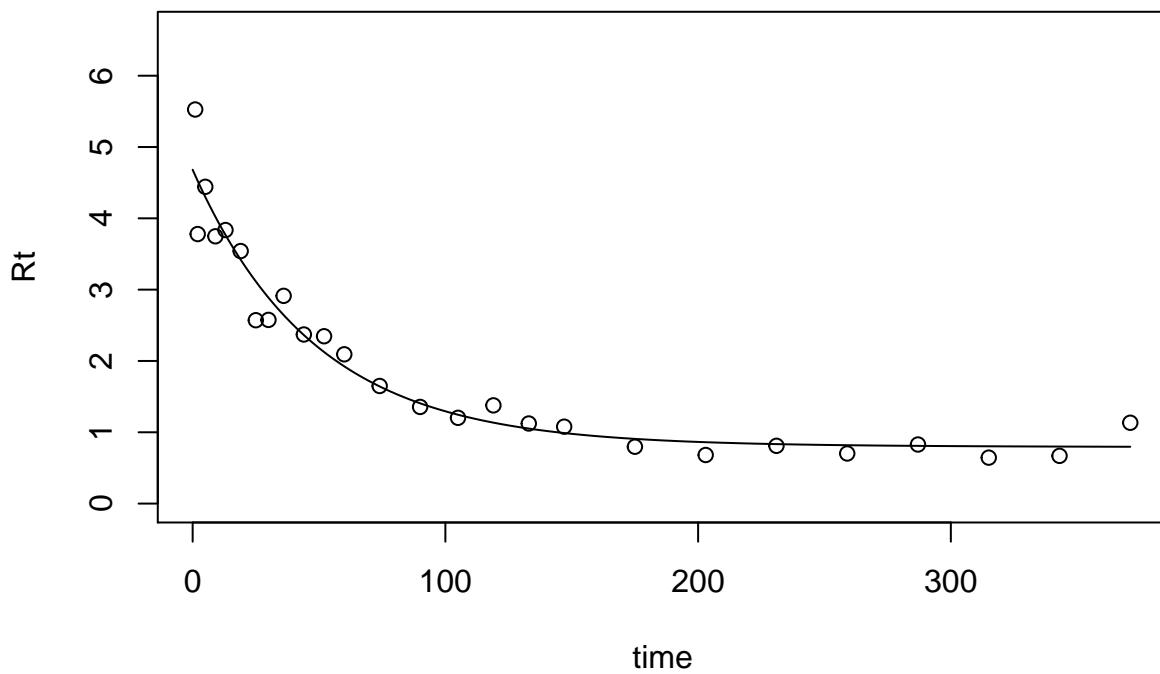
Variable Site15:

CO2 production rate

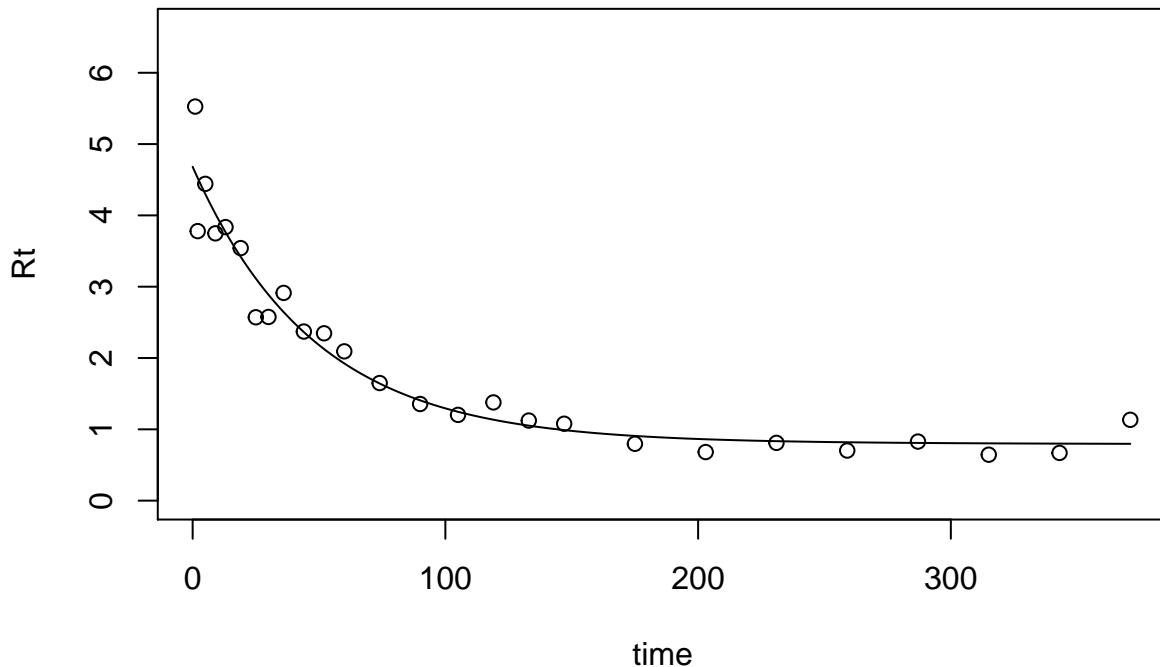
```
## [1] "Best fit parameter: 0.000164082217620137"
```



```
## [1] "AIC = 0.898119353636908"
## [1] "k1= 0.020753974708309"
## [2] "k2= 6.30099730669015e-05"
## [3] "proportion of C0 in pool 1= 0.0142270194207435"
```

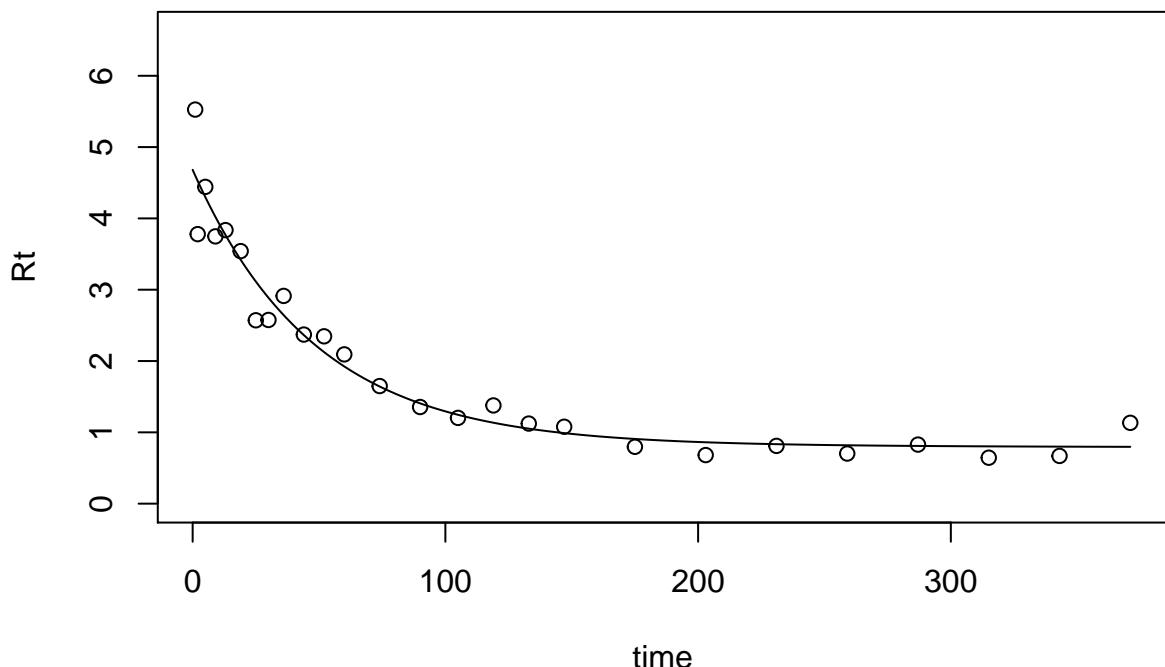


```
## [1] "AIC = 10.8023837717763"
## [1] "k1= 0.0207539840536792"
## [2] "k2= 6.30102676640702e-05"
## [3] "a21= 0.127187243184164"
## [4] "a12= 3.40949153107561e-05"
## [5] "Proportion of C0 in pool 1= 0.0163075171514729"
```

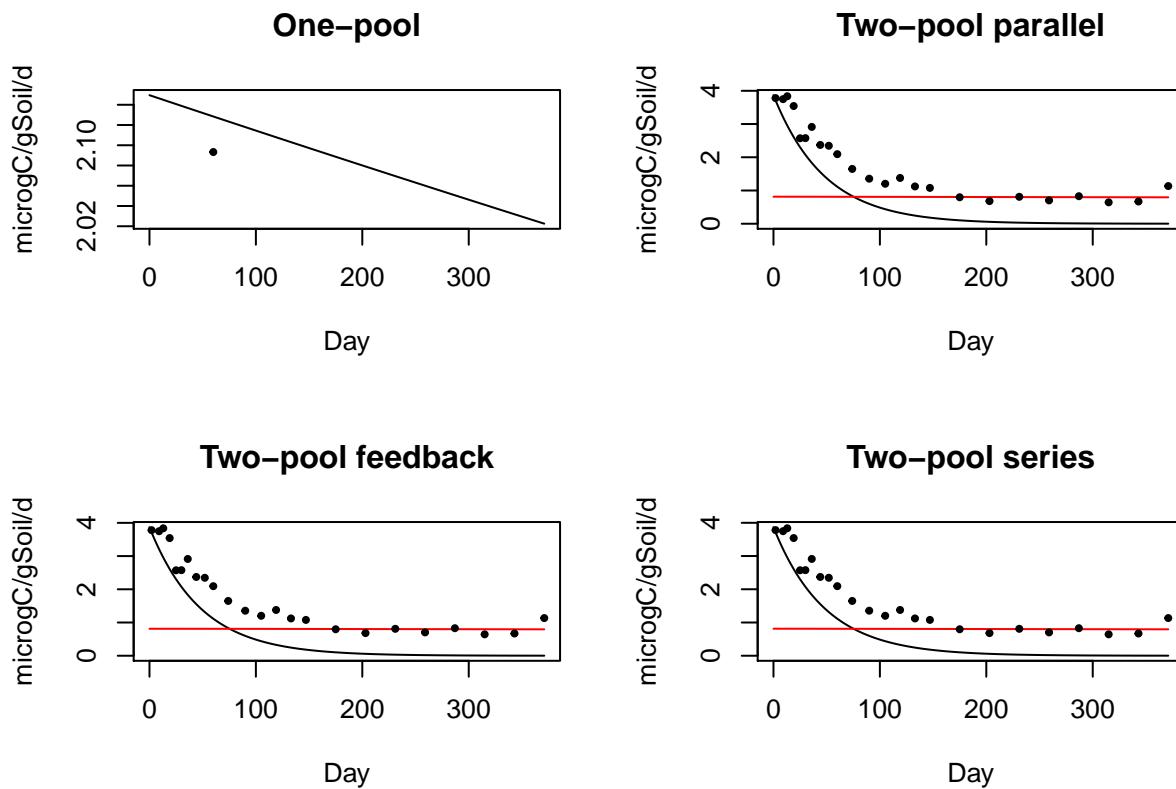


```
## [1] "AIC = 14.8023837717433"
## [1] "k1= 0.0207539553917189"
## [2] "k2= 6.30099298107117e-05"
## [3] "a21= 0.0318014040665985"
```

```
## [4] "Proportion of C0 in pool 1= 0.0146957453637727"
```



```
## [1] "AIC = 12.8023837706854"
```



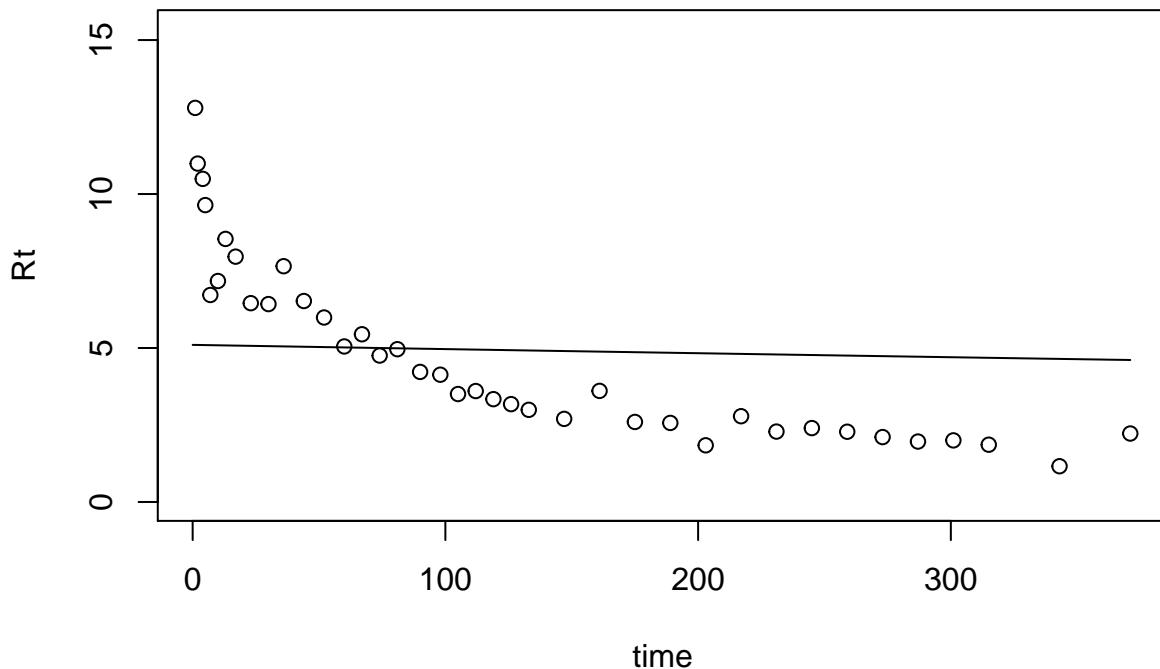
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	0.898	0.000164	NA	NA	NA	NA	0.909	0.992	NA	NA
Two-pool parallel	10.8	0.0208	6.3e-05	0.0142	NA	NA	10.9	0.00683	15600	10800

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	14.8	0.0208	6.3e-05	0.0163	0.127	3.41e-05	15	0.000879	2070	41
Two-pool series	12.8	0.0208	6.3e-05	0.0147	0.0318	NA	12.9	0.00246	553	35

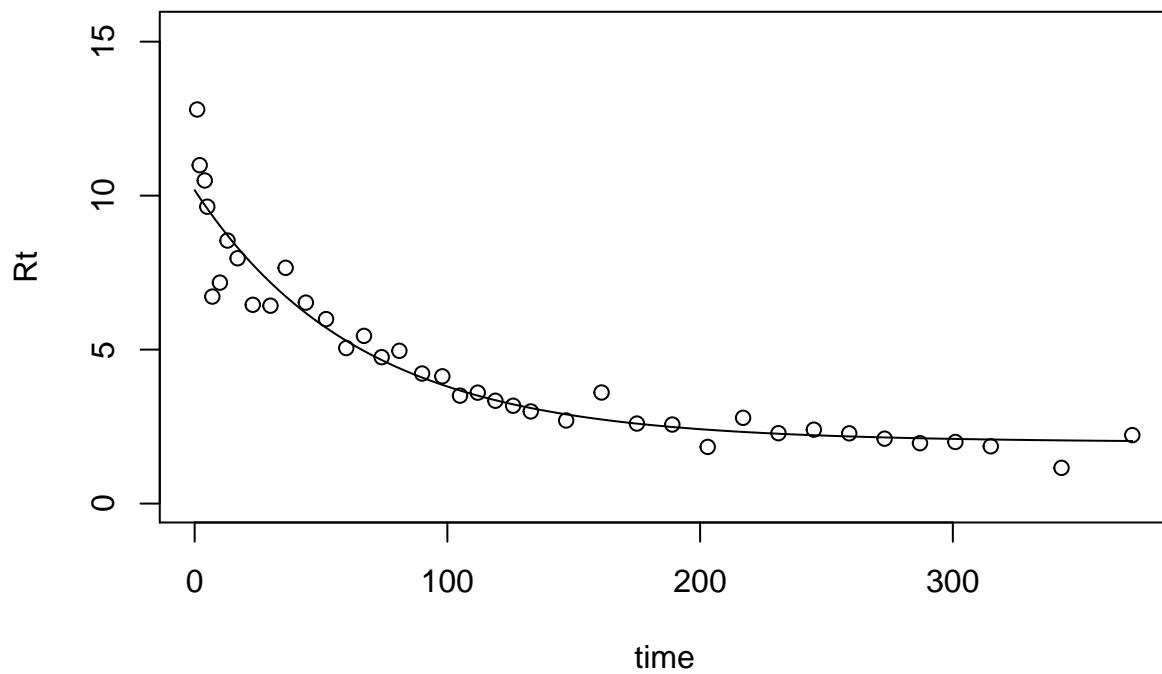
Variable Site16:

CO2 production rate

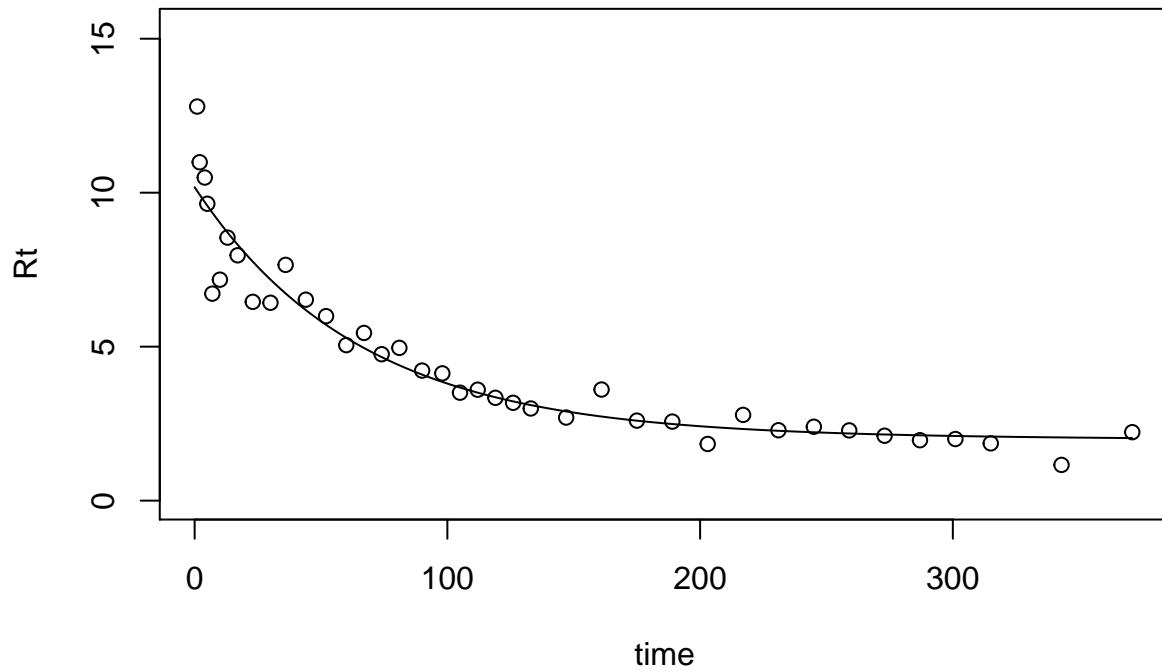
```
## [1] "Best fit parameter: 0.000272817145906261"
```



```
## [1] "AIC = -2.04653577010712"
## [1] "k1= 0.0154030063019568"
## [2] "k2= 0.000115118956184563"
## [3] "proportion of C0 in pool 1= 0.0280746663551604"
```

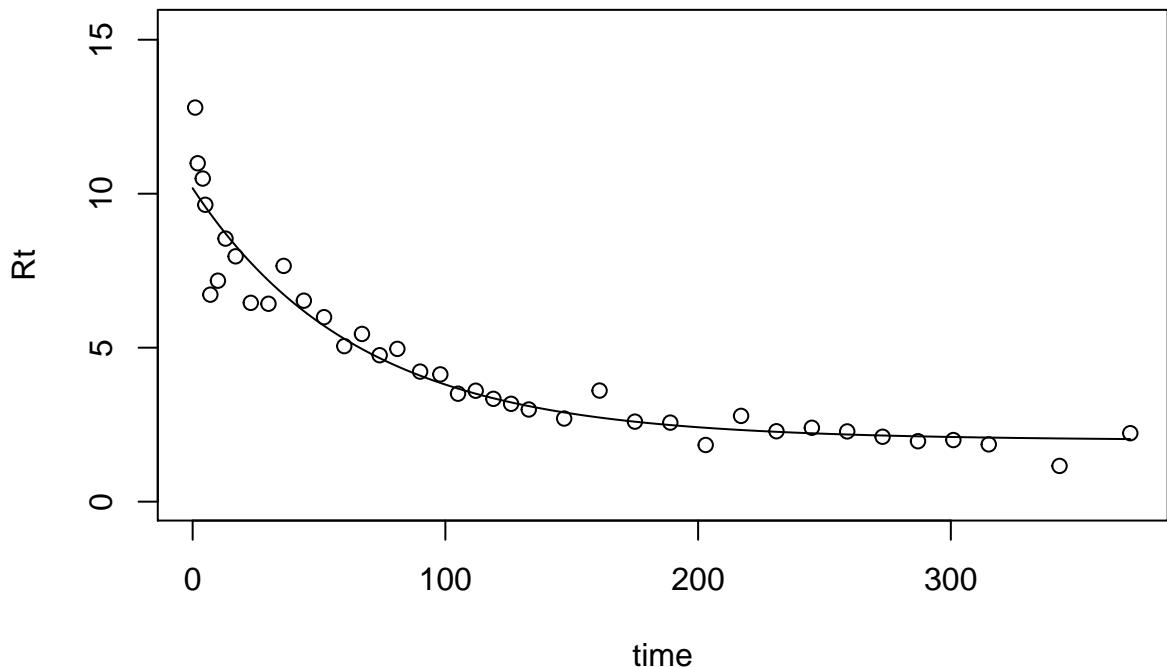


```
## [1] "AIC = 6.80050461715213"
## [1] "k1= 0.0154032263388181"
## [2] "k2= 0.000115120232599066"
## [3] "a21= 0.0127907714562838"
## [4] "a12= 6.28323544826781e-06"
## [5] "Proportion of C0 in pool 1= 0.0284408036690922"
```

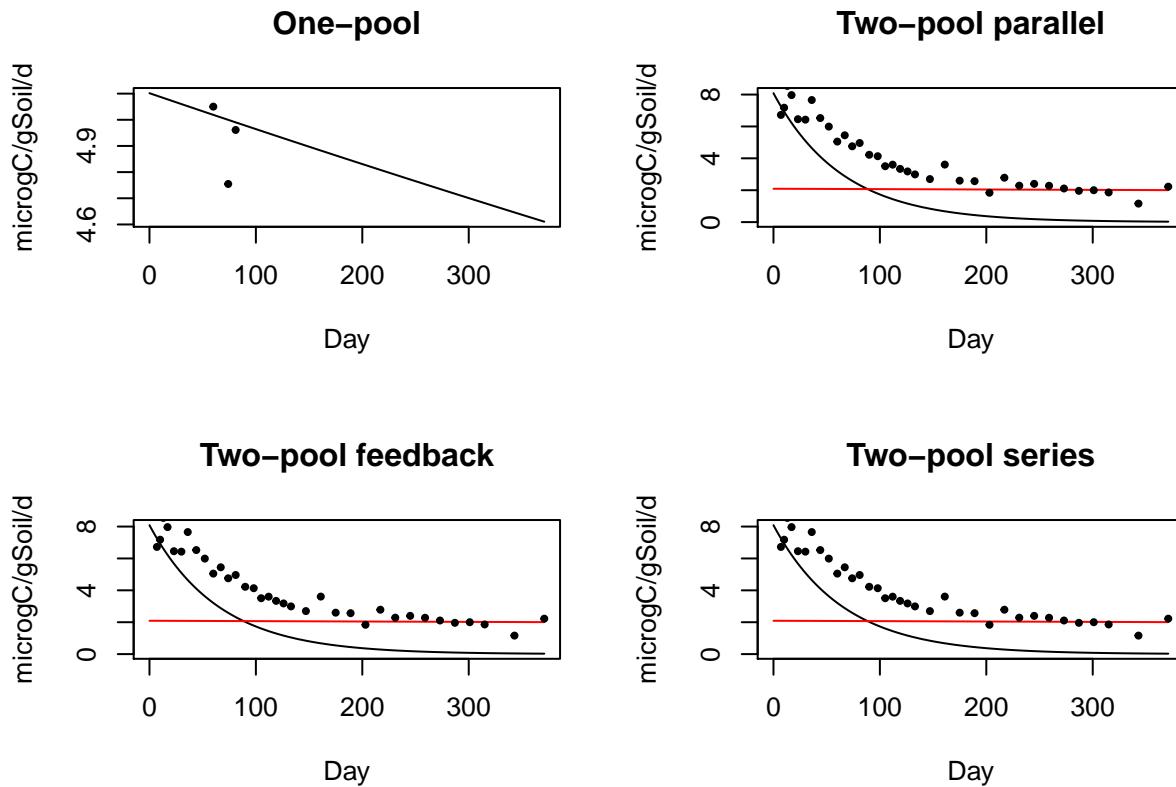


```
## [1] "AIC = 10.8005046176685"
## [1] "k1= 0.015402683151695"
## [2] "k2= 0.000115117094468906"
## [3] "a21= 0.0179950869445162"
```

```
## [4] "Proportion of C0 in pool 1= 0.0285935270002354"
```



```
## [1] "AIC = 8.8005046132161"
```



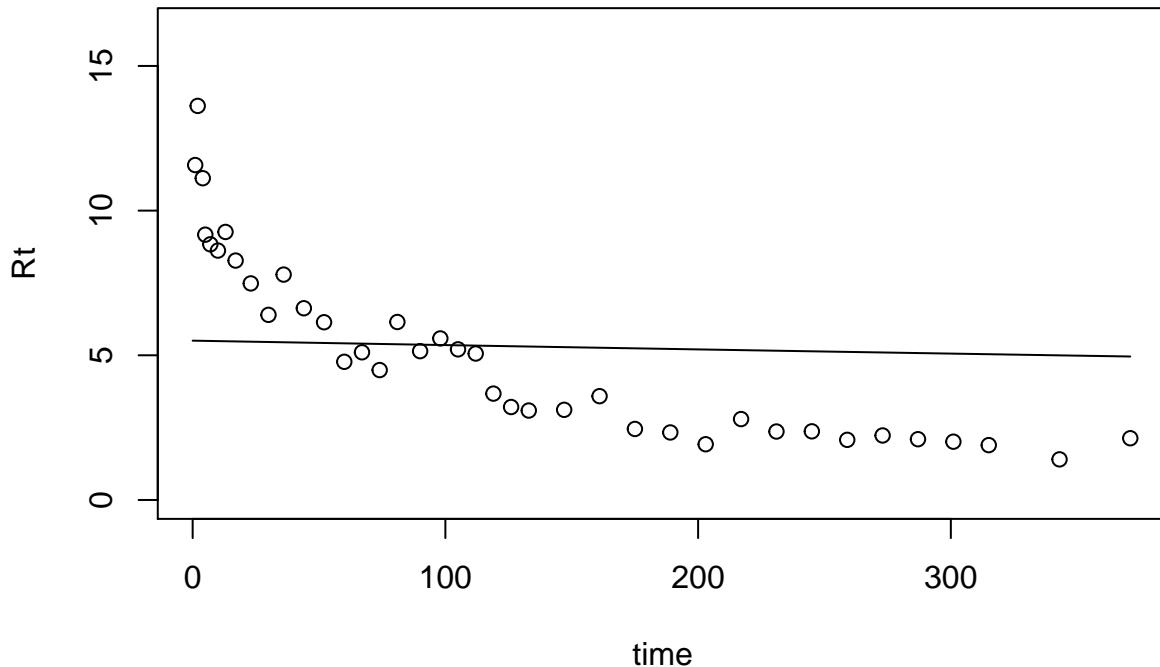
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.05	0.000273	NA	NA	NA	NA	-2.04	0.987	NA	NA
Two-pool parallel	6.8	0.0154	0.000115	0.0281	NA	NA	6.87	0.0115	8440	5770

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.8	0.0154	0.000115	0.0284	0.0128	6.28e-06	11	0.00148	176	45.8
Two-pool series	8.8	0.0154	0.000115	0.0286	0.018	NA	8.91	0.00415	221	46.2

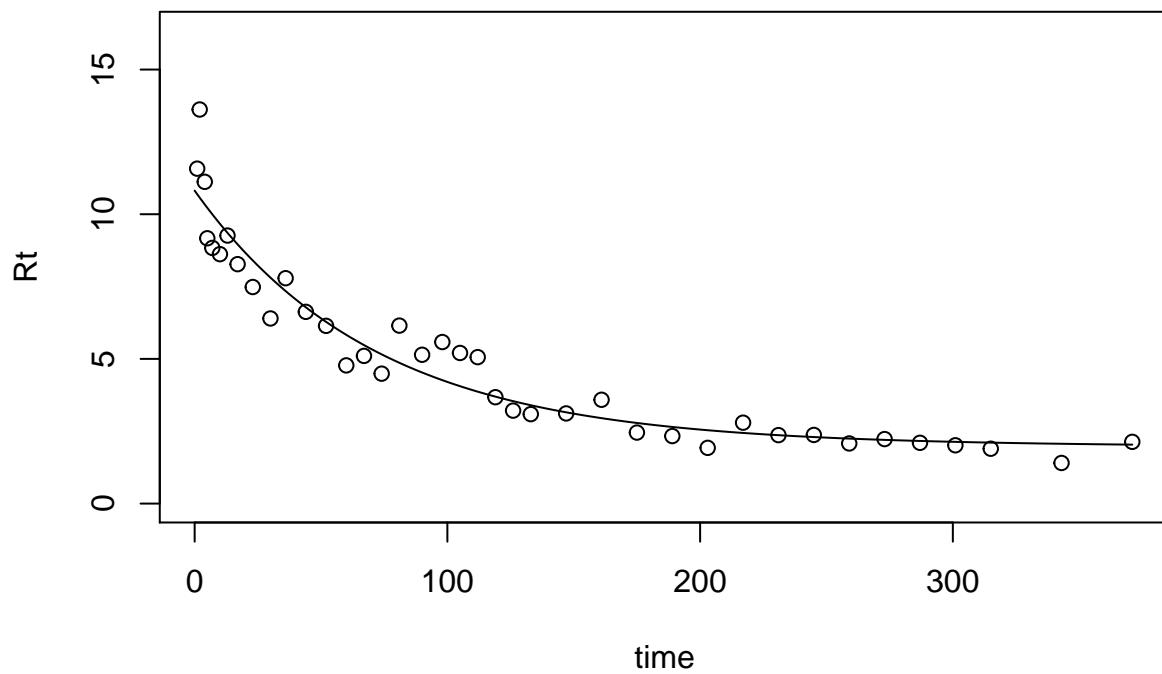
Variable Site17:

CO2 production rate

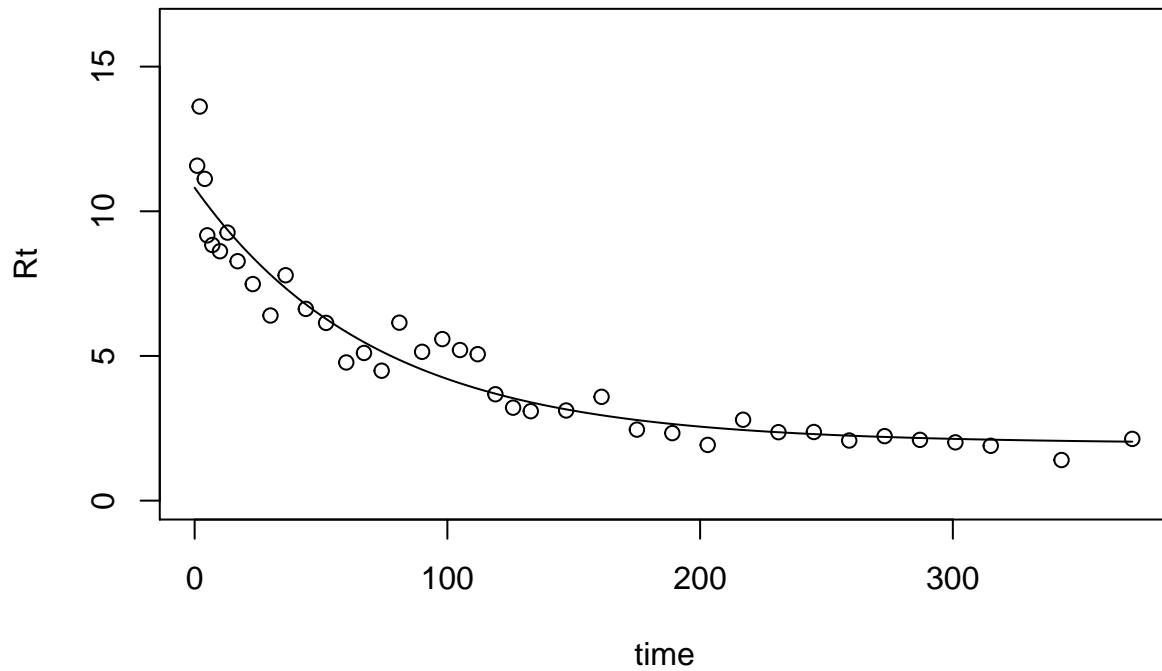
```
## [1] "Best fit parameter: 0.000282347814821592"
```



```
## [1] "AIC = -2.32518687545184"
## [1] "k1= 0.0140041587192428"
## [2] "k2= 0.000109725771225137"
## [3] "proportion of C0 in pool 1= 0.0320175033031613"
```

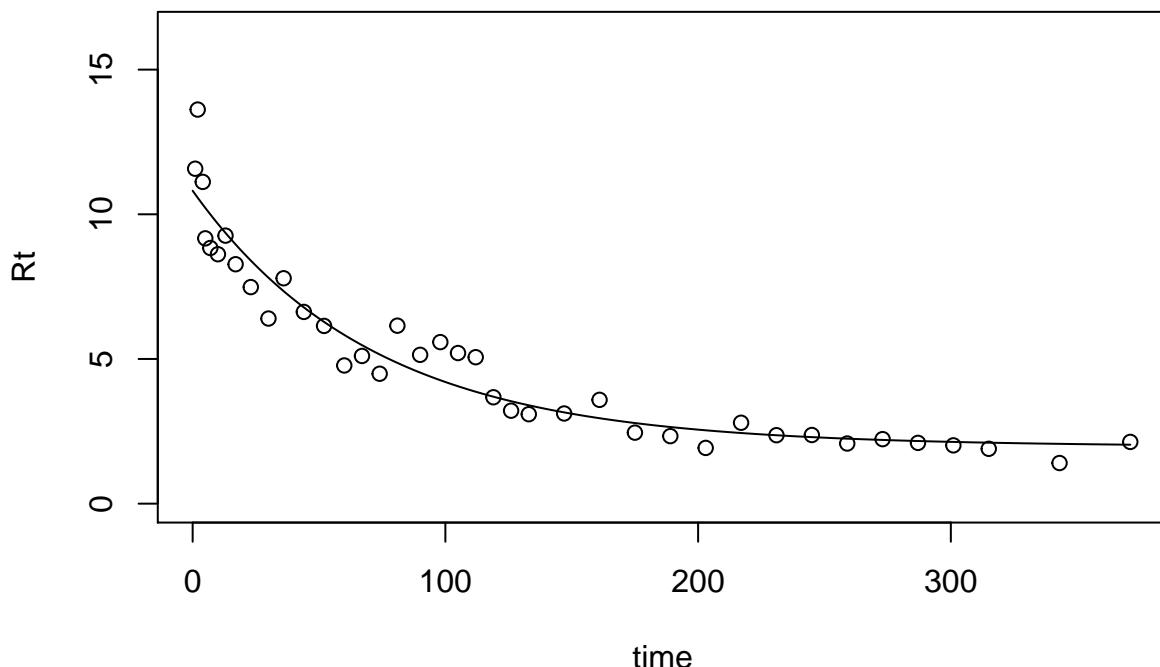


```
## [1] "AIC = 6.67366651822523"
## [1] "k1= 0.0140037559641186"
## [2] "k2= 0.00011026614091284"
## [3] "a21= 0.00485582671979756"
## [4] "a12= 0.999991119789801"
## [5] "Proportion of C0 in pool 1= 0.0397961400377154"
```

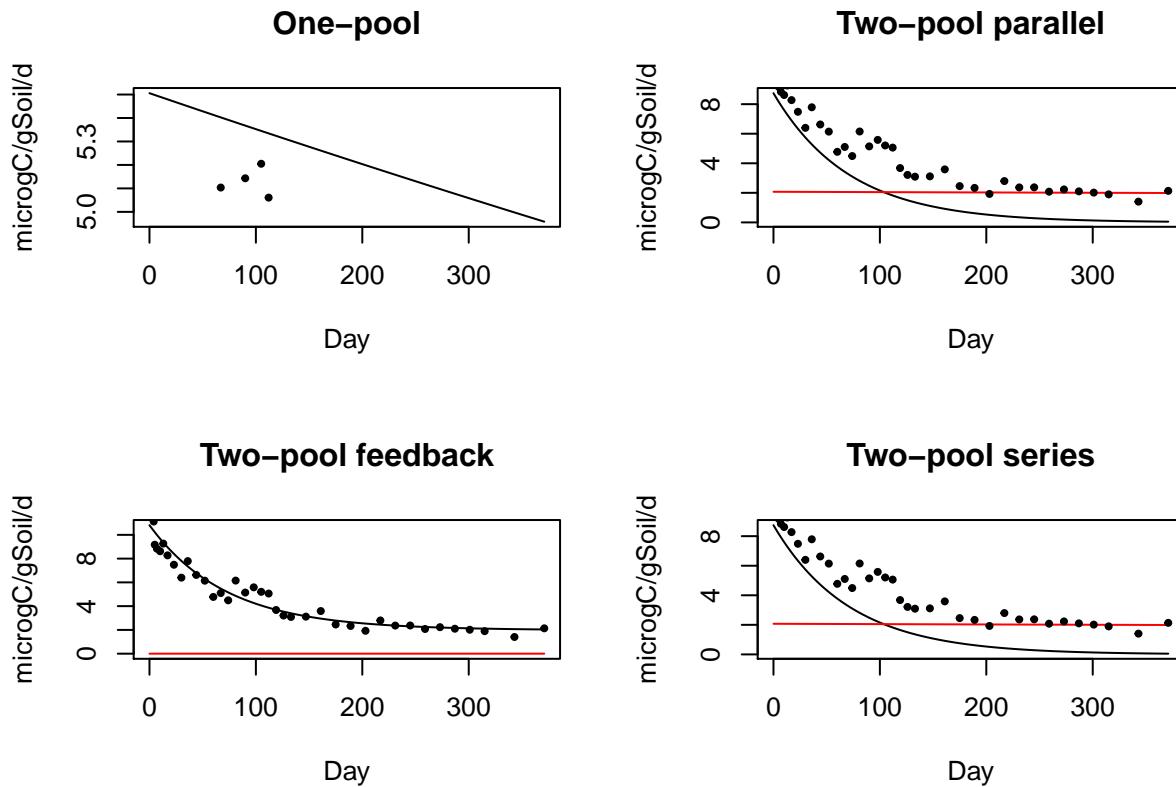


```
## [1] "AIC = 10.673666517725"
## [1] "k1= 0.0140042015424244"
## [2] "k2= 0.000109726079770309"
## [3] "a21= 0.00411371061113219"
```

```
## [4] "Proportion of C0 in pool 1= 0.0321505421371633"
```



```
## [1] "AIC = 8.67366651703251"
```



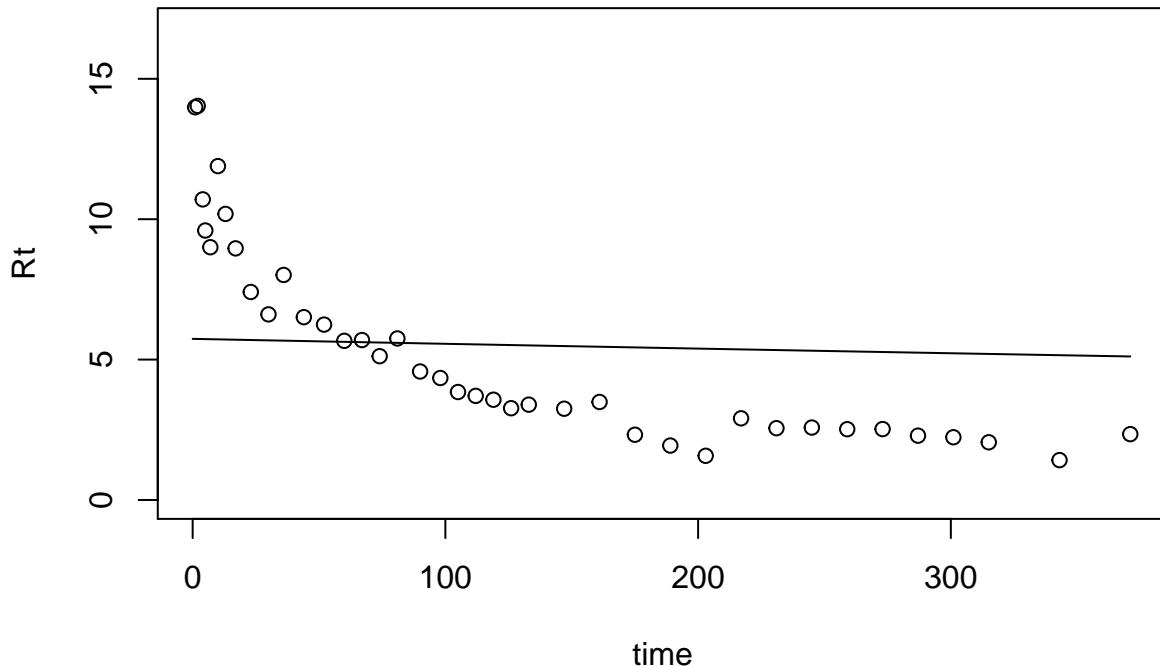
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.33	0.000282	NA	NA	NA	NA	-2.31	0.988	NA	NA
Two-pool parallel	6.67	0.014	0.00011	0.032	NA	NA	6.74	0.0107	8820	6020

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.7	0.014	0.00011	0.0398	0.00486	1	10.8	0.00138	116	49.8
Two-pool series	8.67	0.014	0.00011	0.0322	0.00411	NA	8.78	0.00385	109	49.8

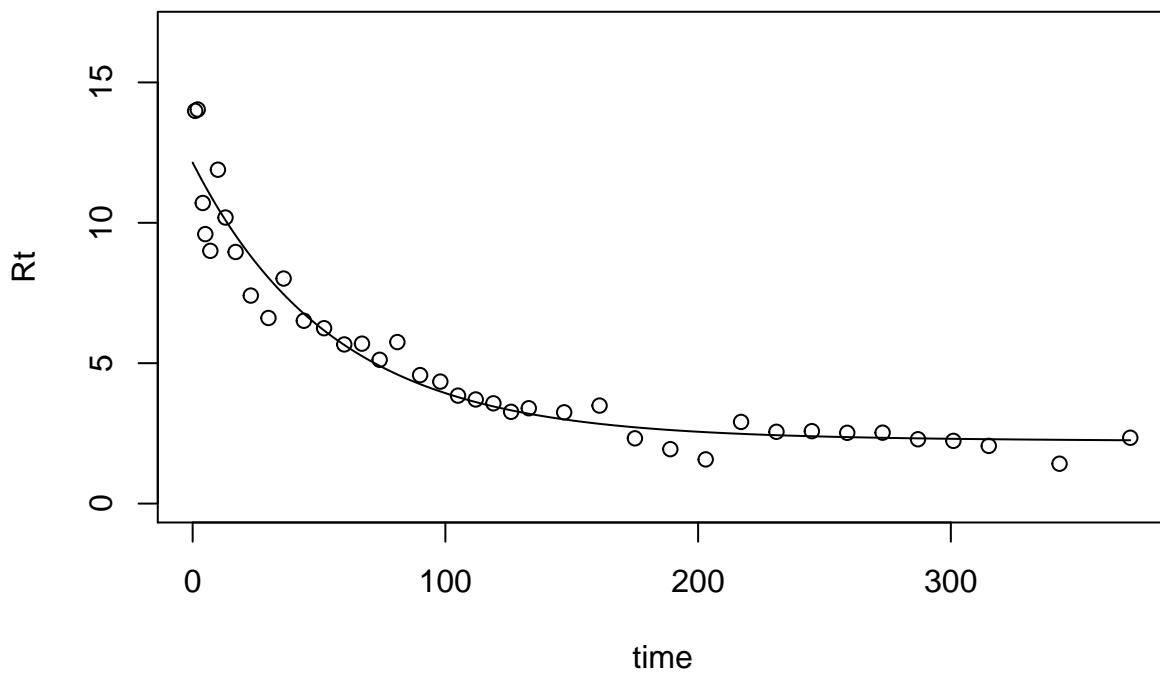
Variable Site18:

CO2 production rate

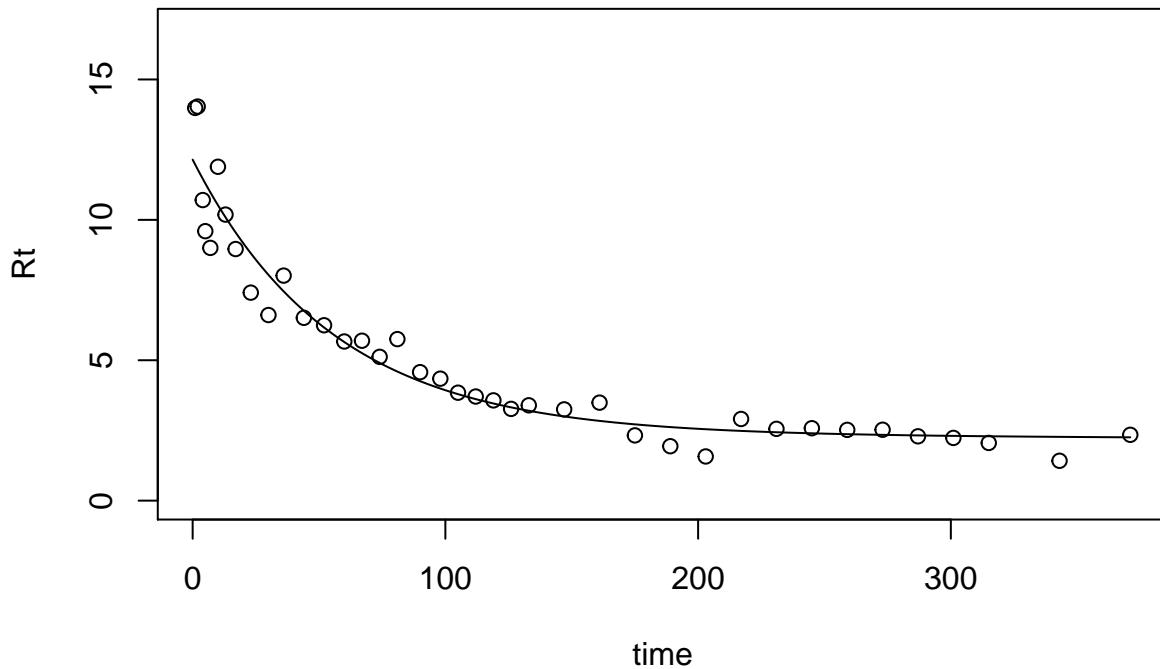
```
## [1] "Best fit parameter: 0.000311853305072993"
```



```
## [1] "AIC = -2.7514992632838"
## [1] "k1= 0.018061796957814"
## [2] "k2= 0.000131892874637747"
## [3] "proportion of C0 in pool 1= 0.0294580541425038"
```

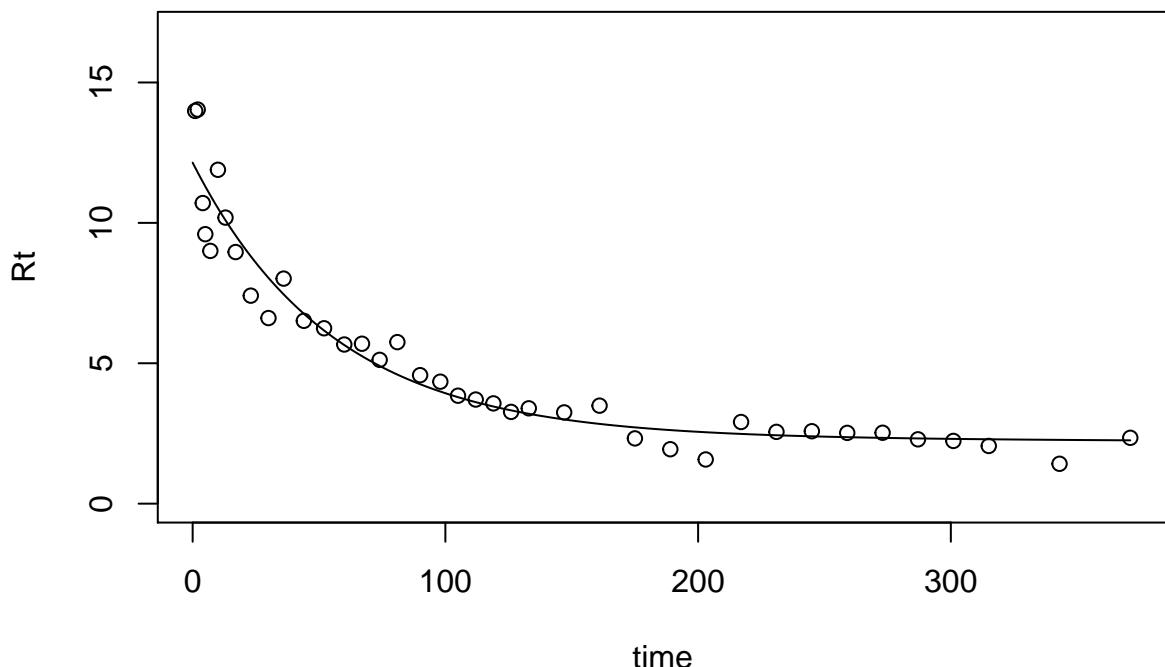


```
## [1] "AIC = 6.65714606502734"
## [1] "k1= 0.0180620002422103"
## [2] "k2= 0.000131893935260995"
## [3] "a21= 0.00146157932744173"
## [4] "a12= 2.48208430675412e-06"
## [5] "Proportion of C0 in pool 1= 0.0295011494908582"
```

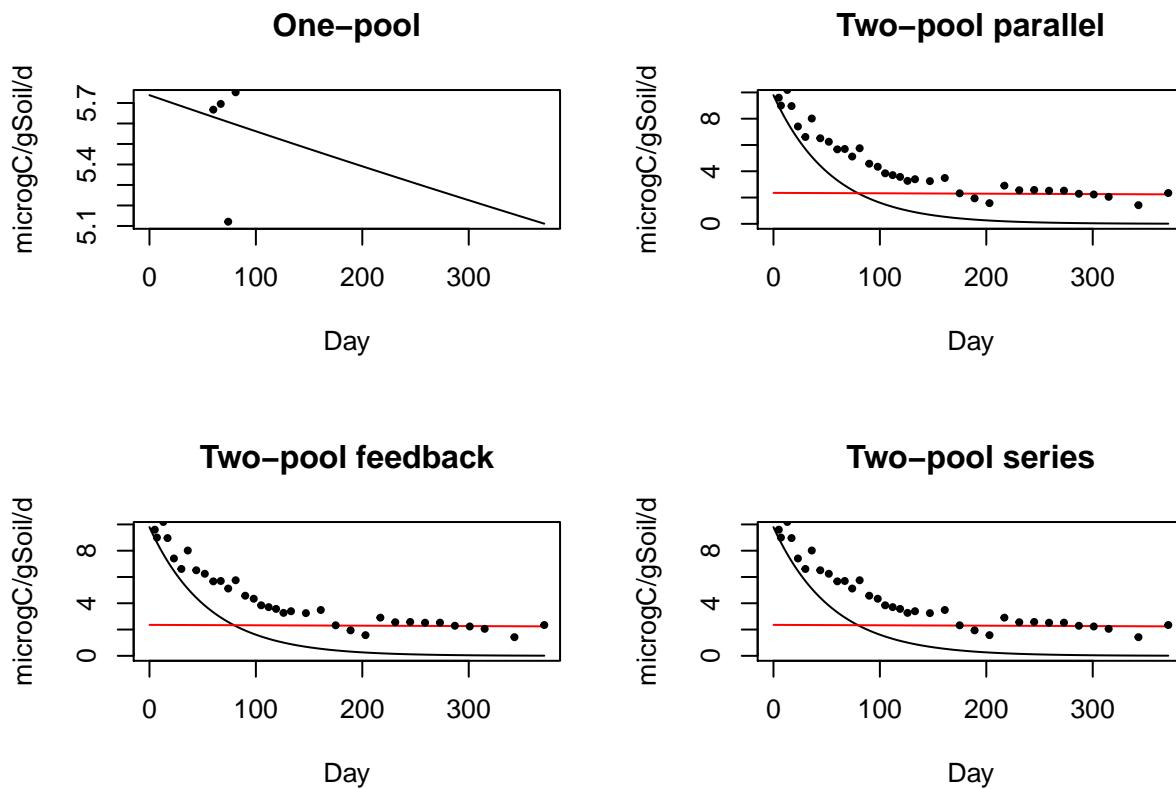


```
## [1] "AIC = 10.6571460654437"
## [1] "k1= 0.0180618688443837"
## [2] "k2= 0.000131893248626391"
## [3] "a21= 0.00124420197811598"
```

```
## [4] "Proportion of C0 in pool 1= 0.0294948546178883"
```



```
## [1] "AIC = 8.65714606512527"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	- 2.75	0.000312	NA	NA	NA	NA	- 2.74	0.99	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05	
Two-pool parallel	6.66	0.0181	0.000132	0.0295	NA	NA	6.72	0.00873	7360	5030
Two-pool feedback	10.7	0.0181	0.000132	0.0295	0.00146	2.48e-06	10.8	0.00112	66.4	38.5
Two-pool series	8.66	0.0181	0.000132	0.0295	0.00124	NA	8.77	0.00314	64.8	38.4

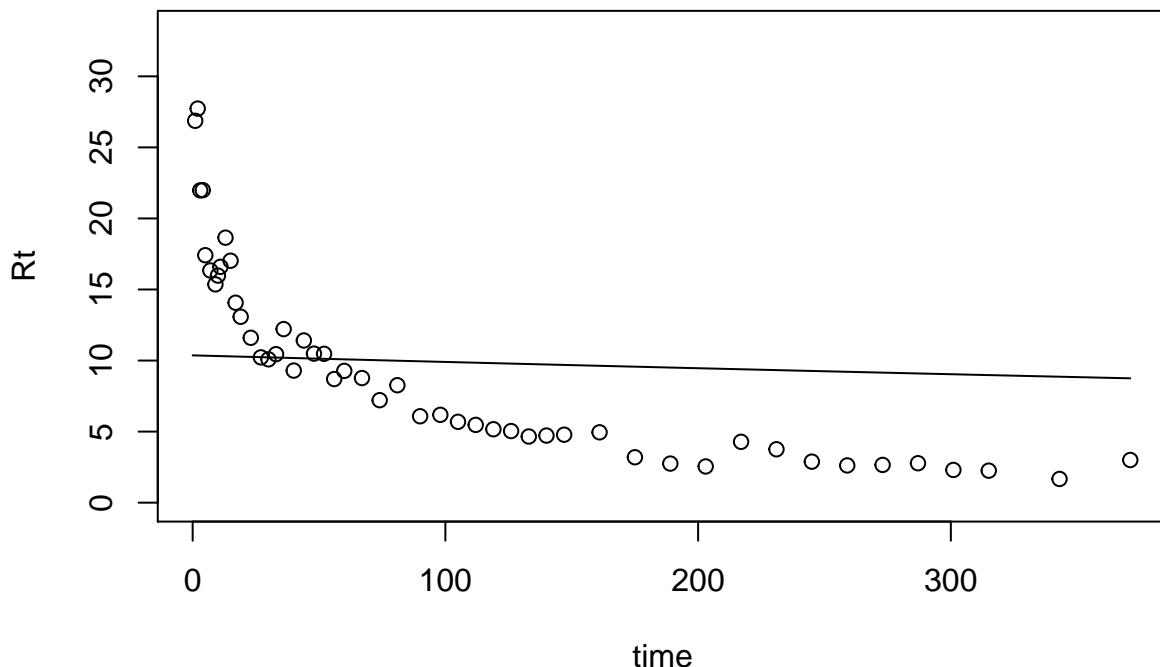
Variable Site19:

CO2 production rate

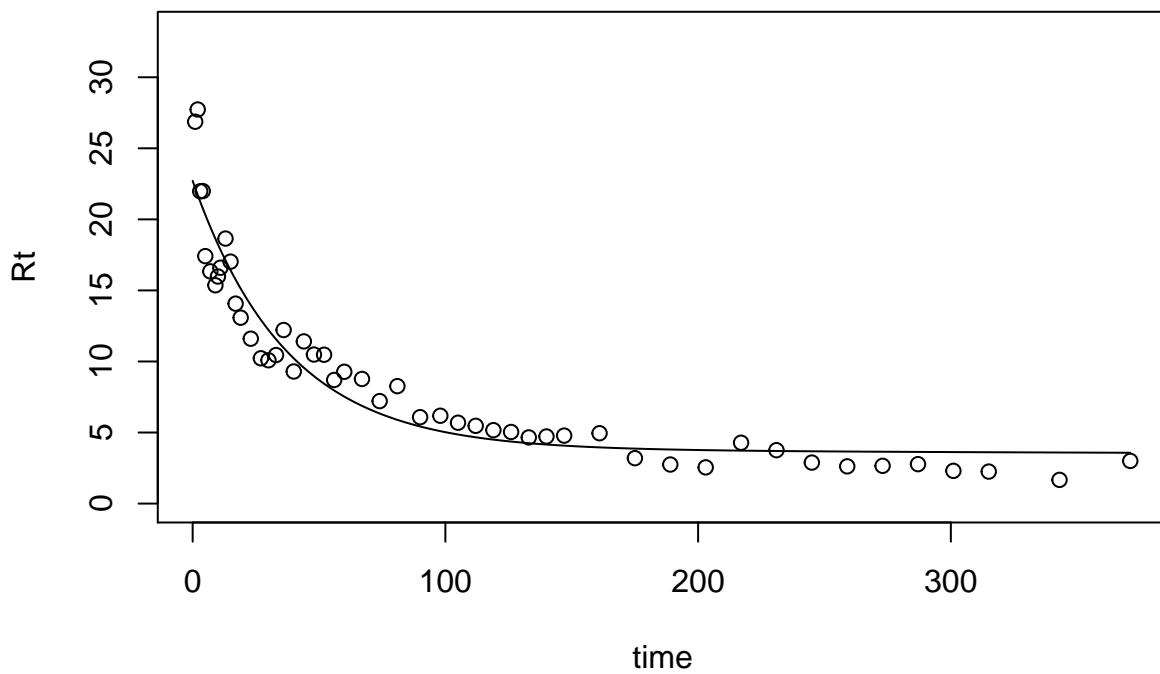
Variable Site20:

CO2 production rate

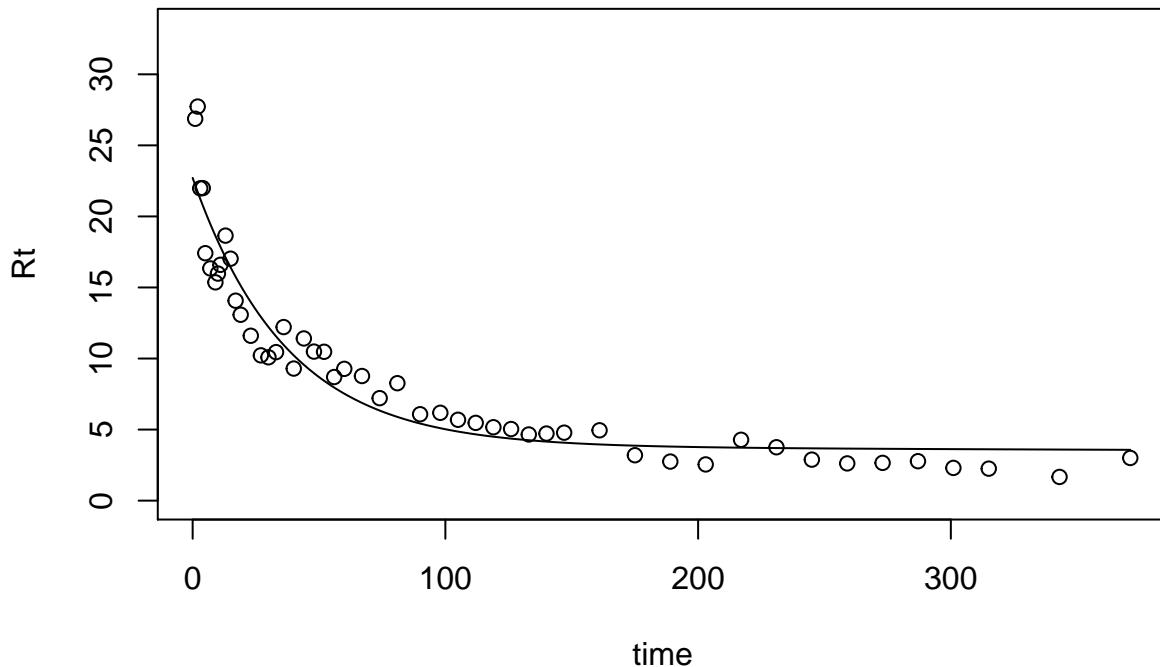
```
## [1] "Best fit parameter: 0.000456598464348221"
```



```
## [1] "AIC = -5.30497052622656"
## [1] "k1= 0.0269307072967726"
## [2] "k2= 0.000173270778516012"
## [3] "proportion of C0 in pool 1= 0.0309124592387499"
```

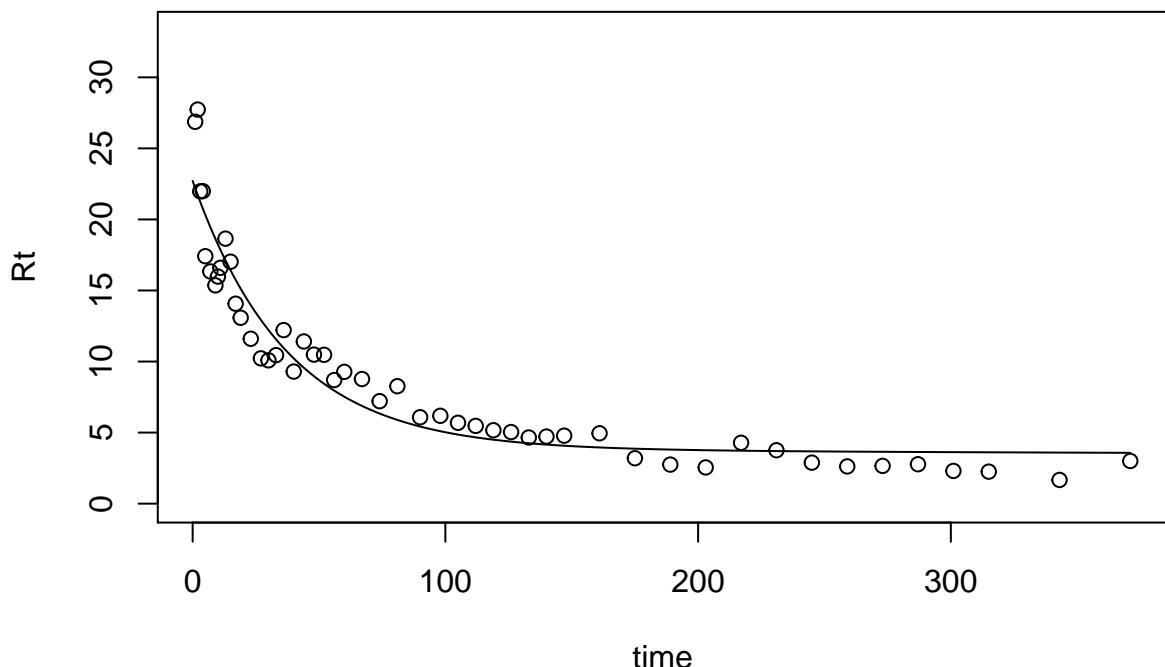


```
## [1] "AIC = 3.55073888585162"
## [1] "k1= 0.026931248584007"
## [2] "k2= 0.000173273519345782"
## [3] "a21= 0.00681847296701538"
## [4] "a12= 2.09259032157849e-05"
## [5] "Proportion of C0 in pool 1= 0.0311255770824847"
```

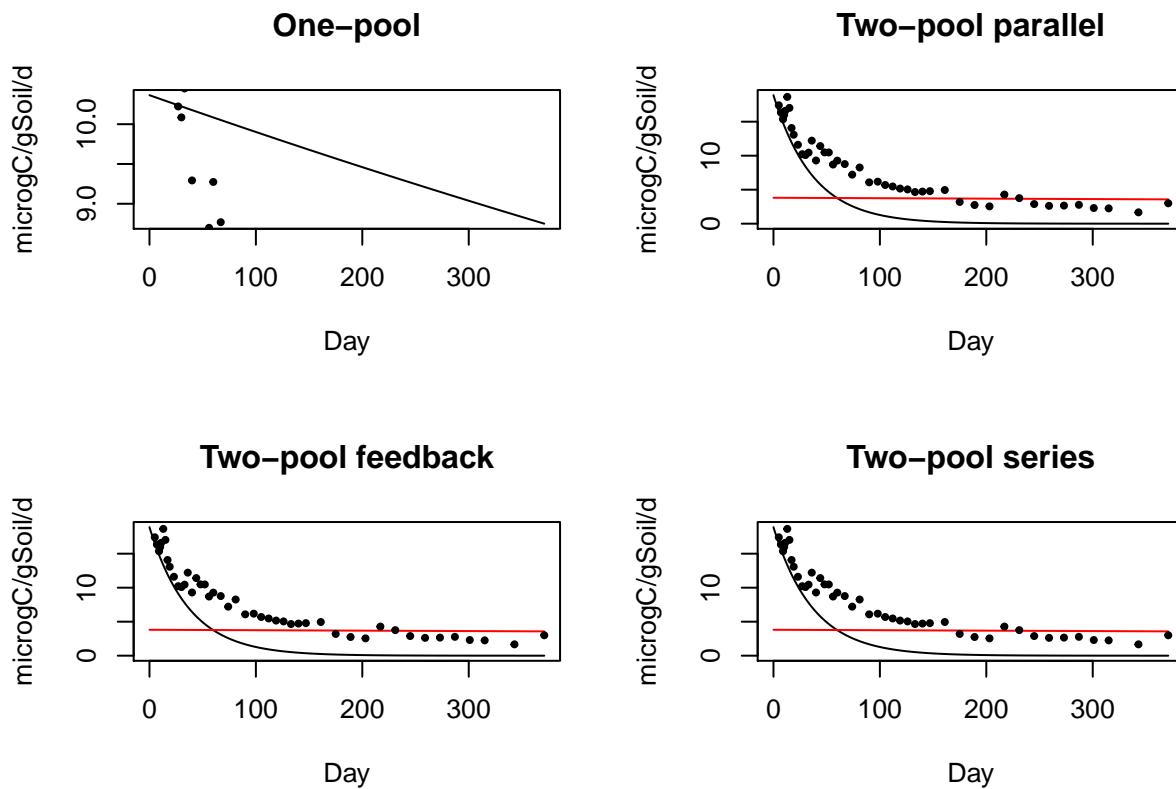


```
## [1] "AIC = 7.55073888943365"
## [1] "k1= 0.0269317786154463"
## [2] "k2= 0.000173276560609067"
## [3] "a21= 0.0114796211138467"
```

```
## [4] "Proportion of C0 in pool 1= 0.0312724723718774"
```



```
## [1] "AIC = 5.55073889082026"
```



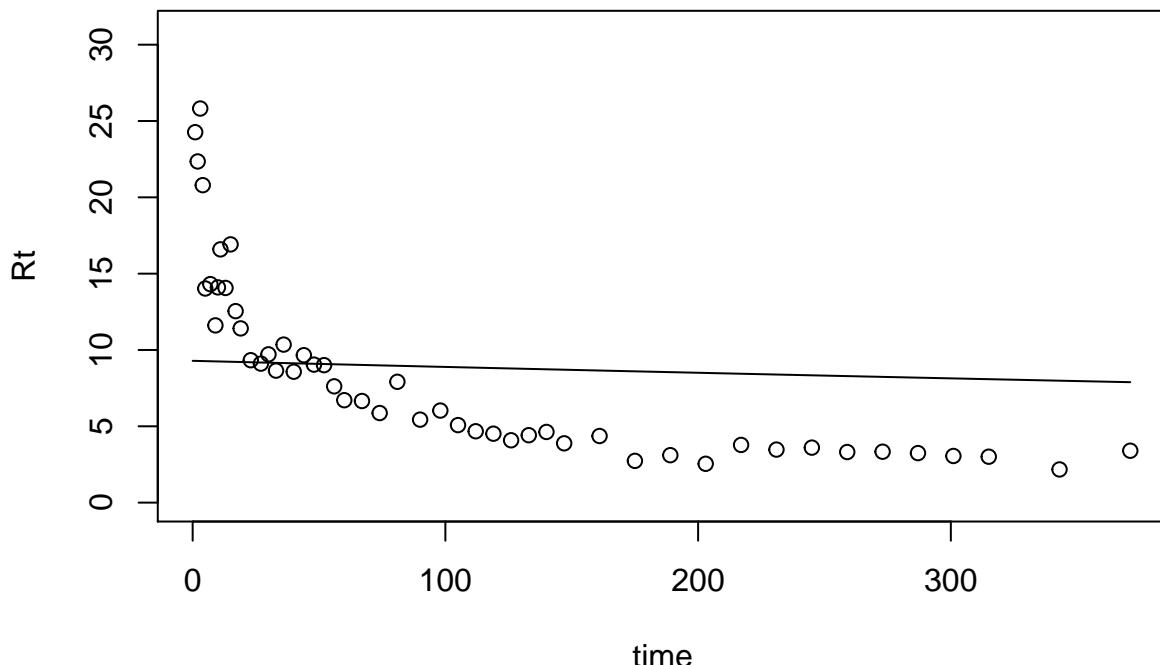
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.3	0.000457	NA	NA	NA	NA	-5.29	0.987	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool parallel	3.55	0.0269	0.000173	0.0309	NA	NA	3.62	0.0115	5590	3820
Two-pool feedback	7.55	0.0269	0.000173	0.0311	0.00682	2.09e-05	7.72	0.00148	76.5	26
Two-pool series	5.55	0.0269	0.000173	0.0313	0.0115	NA	5.66	0.00413	103	26.2

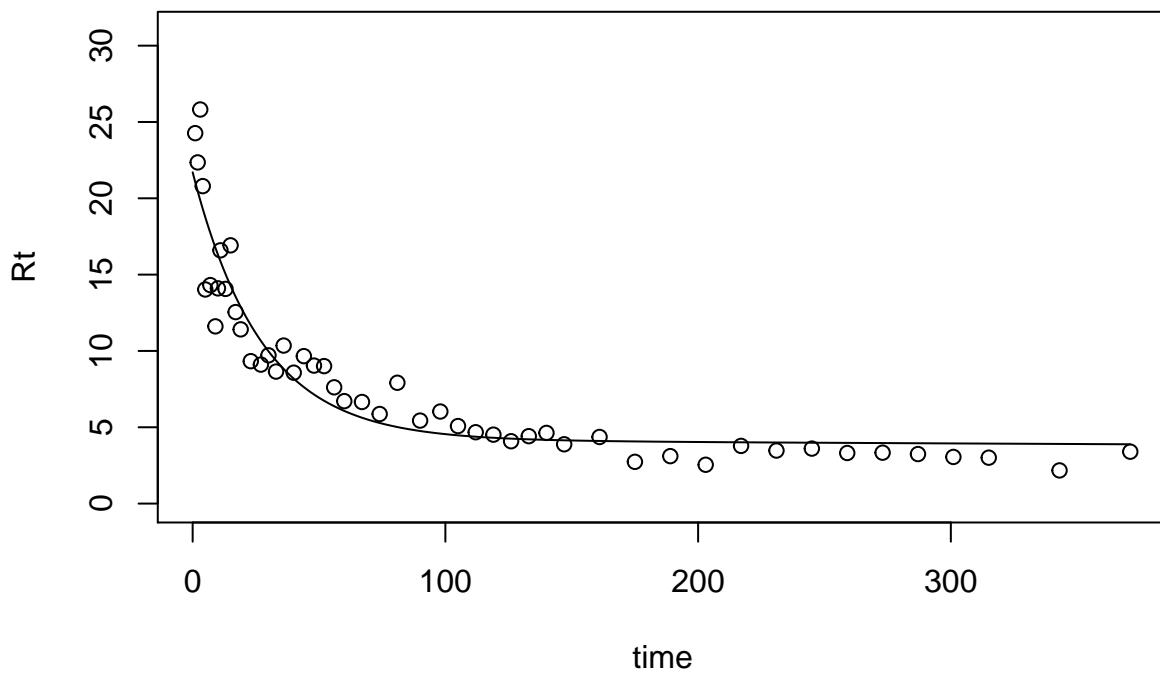
Variable Site21:

CO2 production rate

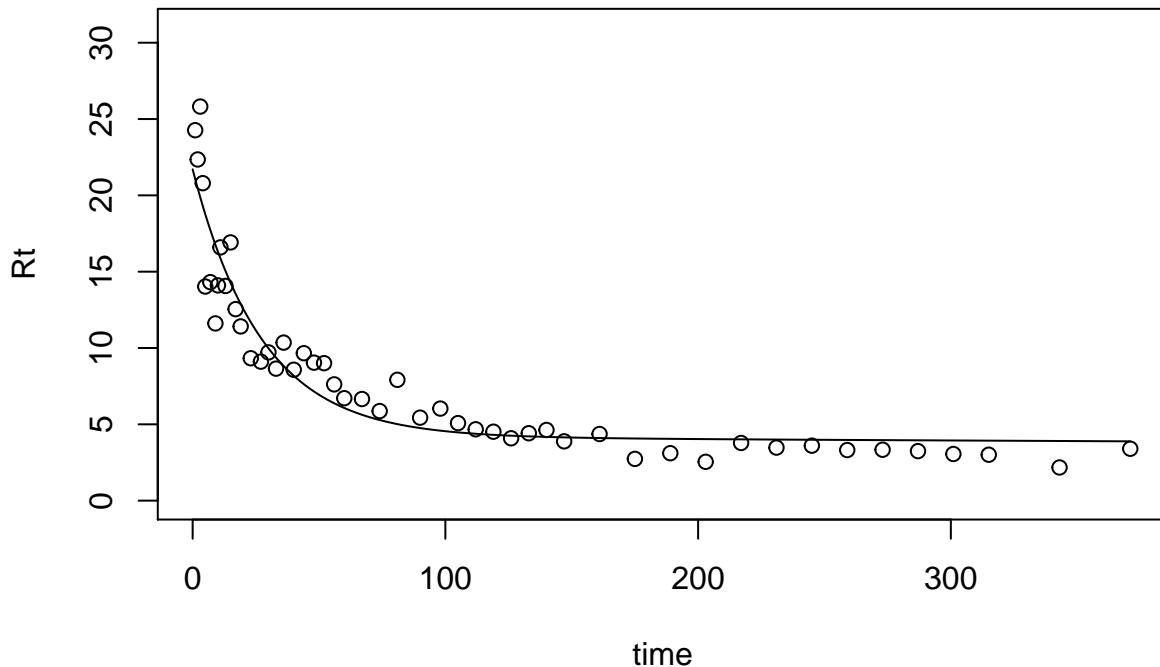
```
## [1] "Best fit parameter: 0.000440237152789389"
```



```
## [1] "AIC = -4.89951880992185"
## [1] "k1= 0.0367476743826393"
## [2] "k2= 0.00020312265691374"
## [3] "proportion of C0 in pool 1= 0.0225903348545992"
```

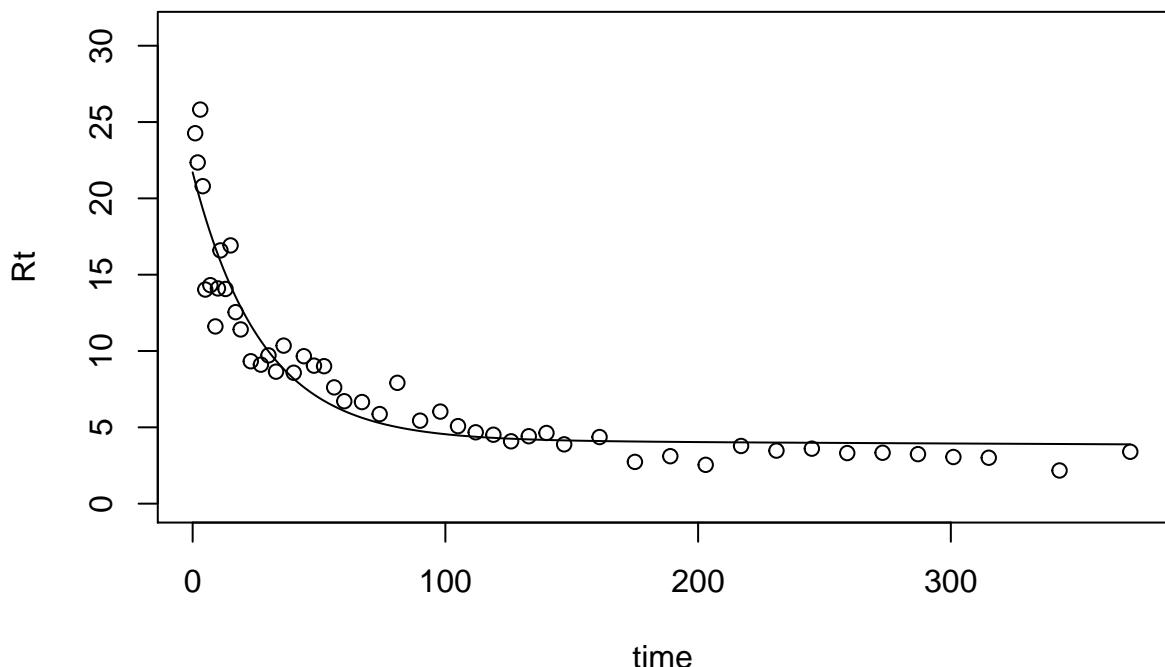


```
## [1] "AIC = 3.44617631432037"
## [1] "k1= 0.0367489184536859"
## [2] "k2= 0.000203126092729954"
## [3] "a21= 0.101370336748583"
## [4] "a12= 1.36861499129282e-05"
## [5] "Proportion of C0 in pool 1= 0.0251537906652759"
```

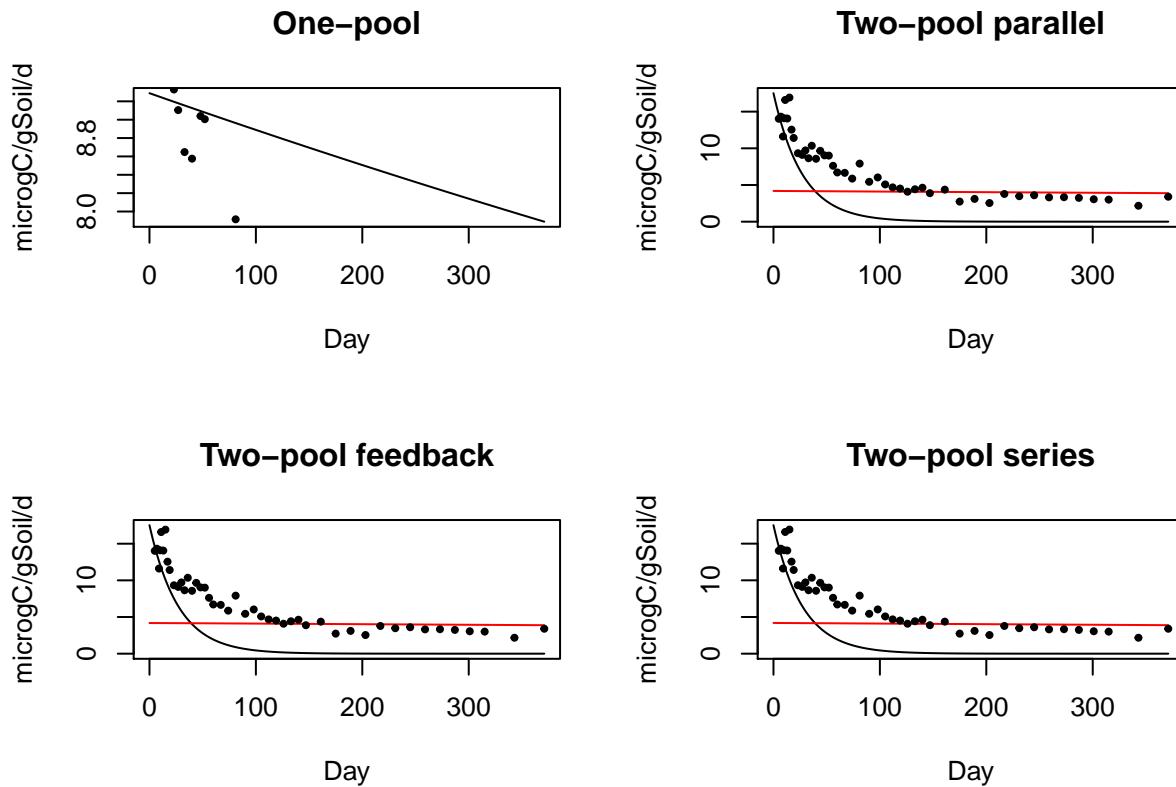


```
## [1] "AIC = 7.44617631735816"
## [1] "k1= 0.0367487686295873"
## [2] "k2= 0.000203125418781075"
## [3] "a21= 0.017262073156145"
```

```
## [4] "Proportion of C0 in pool 1= 0.0229887161473748"
```



```
## [1] "AIC = 5.44617631665434"
```



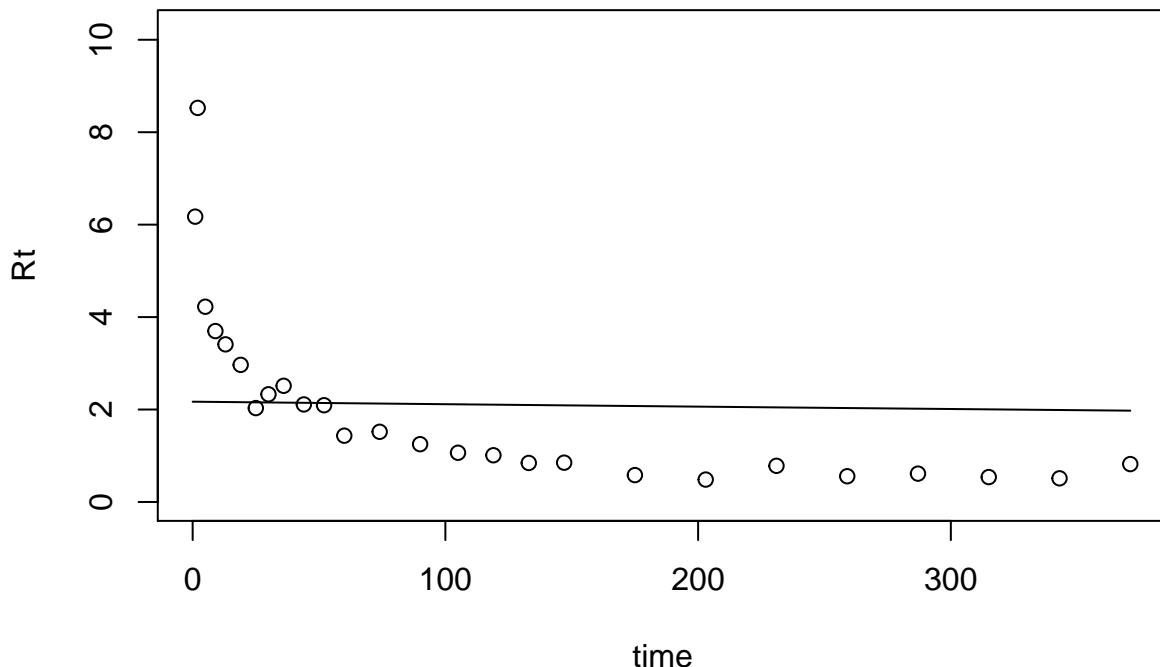
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-4.9	0.00044	NA	NA	NA	NA	-4.89	0.983	NA	NA
Two-pool parallel	3.45	0.0367	0.000203	0.0226	NA	NA	3.51	0.0147	4810	3300

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	7.45	0.0367	0.000203	0.0252	0.101	1.37e-05	7.61	0.0019	526	22.1
Two-pool series	5.45	0.0367	0.000203	0.023	0.0173	NA	5.56	0.00531	112	19.3

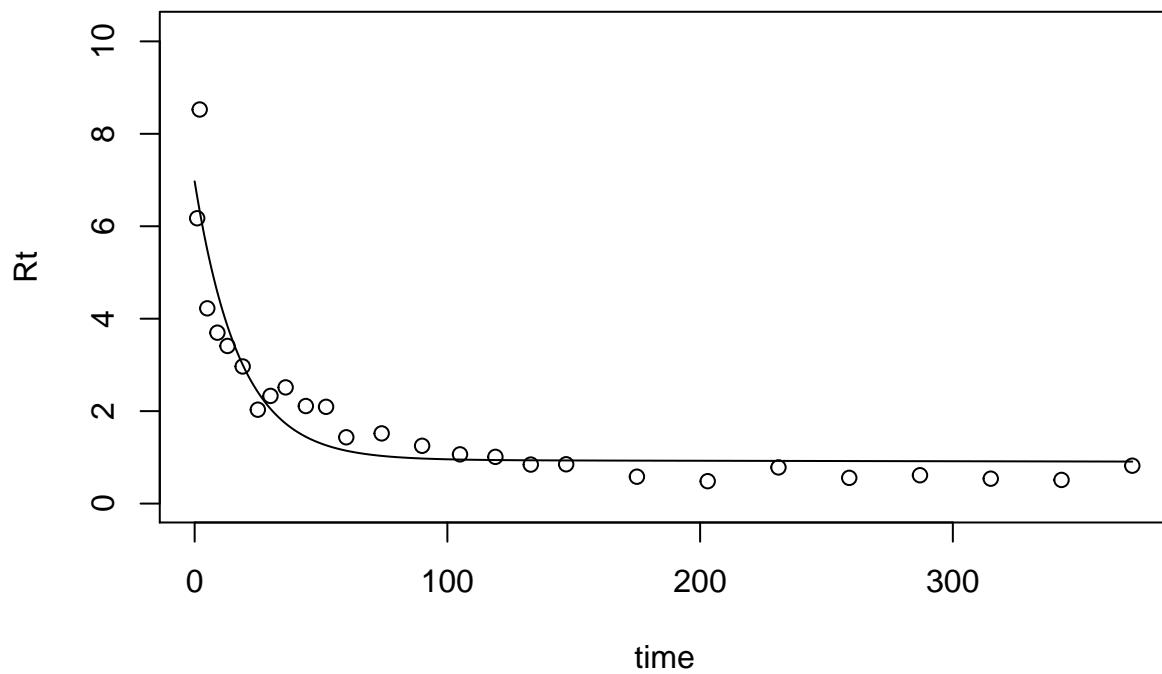
Variable Site22:

CO2 production rate

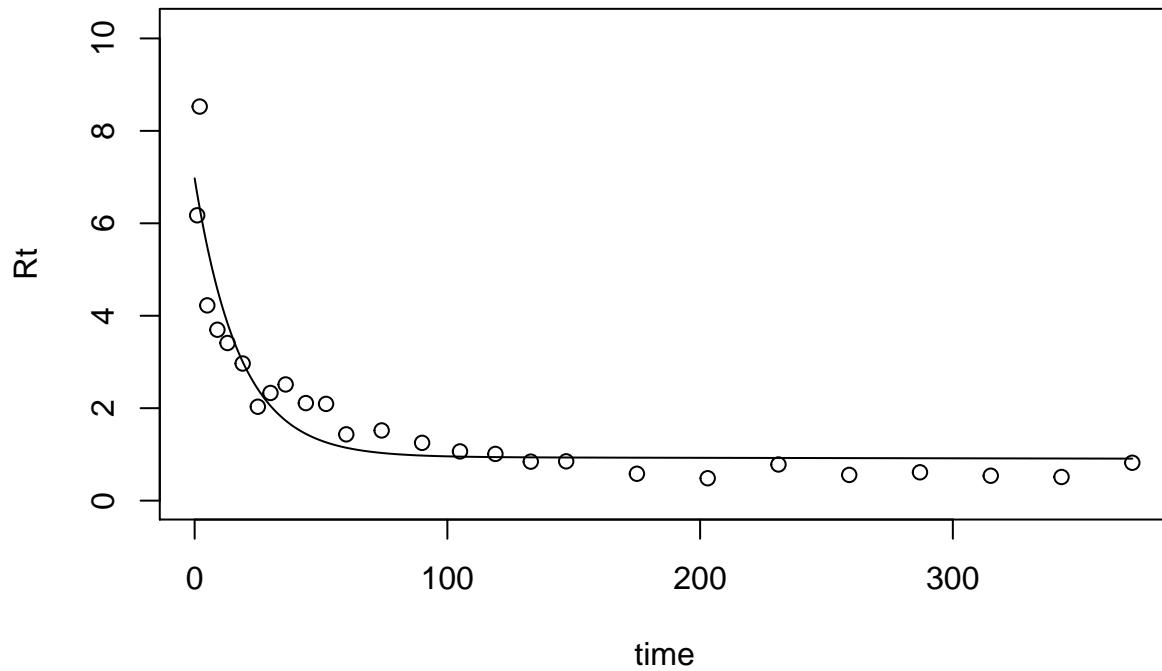
```
## [1] "Best fit parameter: 0.000252257664377127"
```



```
## [1] "AIC = -0.452026839676388"
## [1] "k1= 0.0564603334206298"
## [2] "k2= 0.000111512831717987"
## [3] "proportion of C0 in pool 1= 0.0124076076871162"
```

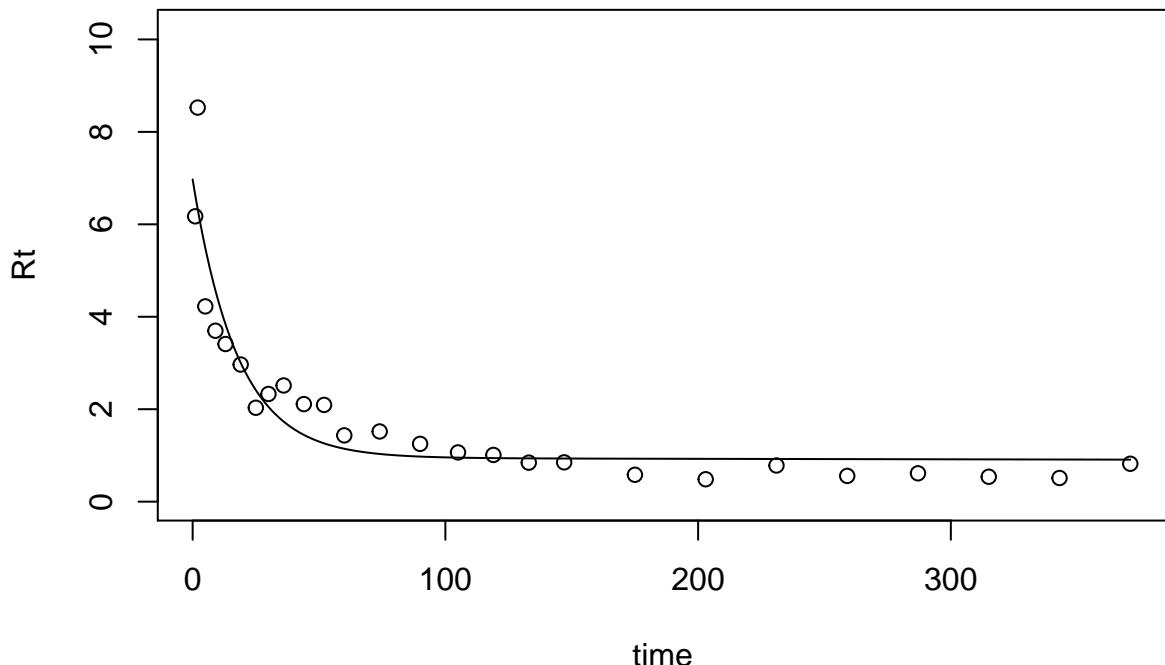


```
## [1] "AIC = 7.74579076581222"
## [1] "k1= 0.0564639476365037"
## [2] "k2= 0.000111516481647183"
## [3] "a21= 0.196391862107436"
## [4] "a12= 4.73273427231691e-06"
## [5] "Proportion of C0 in pool 1= 0.0154465521274782"
```

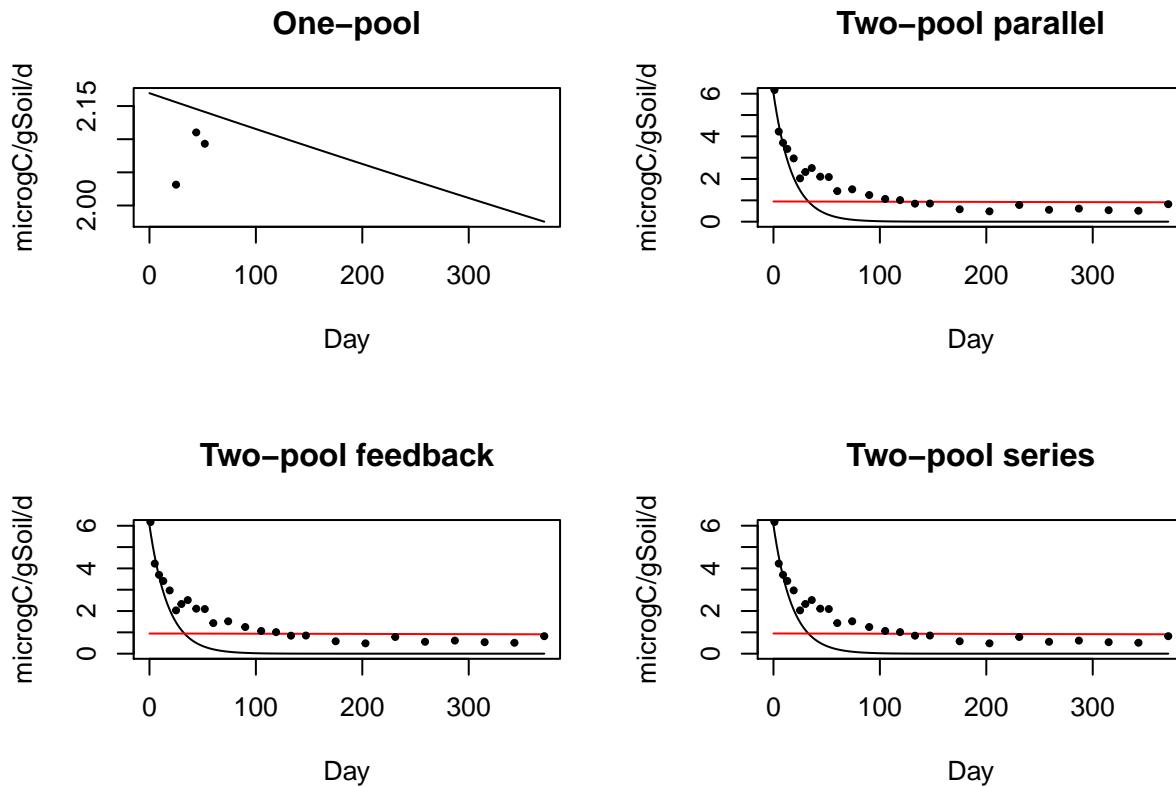


```
## [1] "AIC = 11.7457907736398"
## [1] "k1= 0.0564587365306285"
## [2] "k2= 0.000111511282009578"
## [3] "a21= 0.00241641905747281"
```

```
## [4] "Proportion of C0 in pool 1= 0.0124378976191859"
```



```
## [1] "AIC = 9.74579075861818"
```



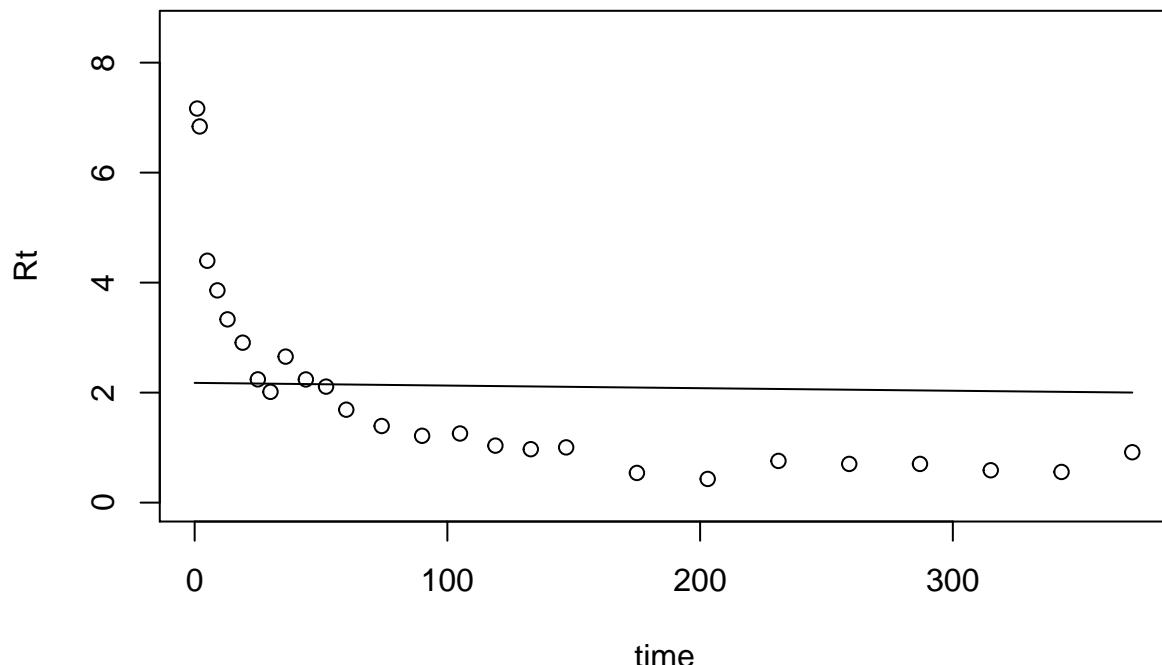
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrTq05	
One-pool	- 0.452	0.000252	NA	NA	NA	NA	- 0.441	0.982	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrTq05
Two-pool parallel	7.75	0.0565	0.000112	0.0124	NA	NA	7.81	0.0159	8860
Two-pool feedback	11.7	0.0565	0.000112	0.0154	0.196	4.73e-06	11.9	0.00204	1780
Two-pool series	9.75	0.0565	0.000112	0.0124	0.00242	NA	9.86	0.00571	39.4

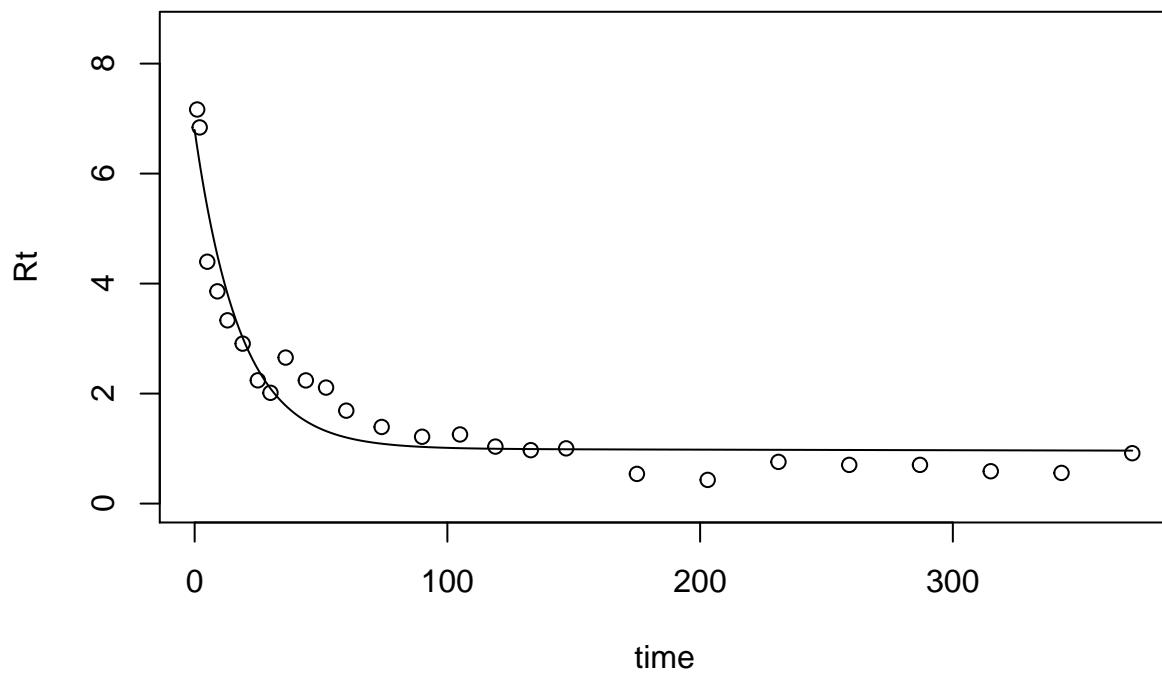
Variable Site23:

CO2 production rate

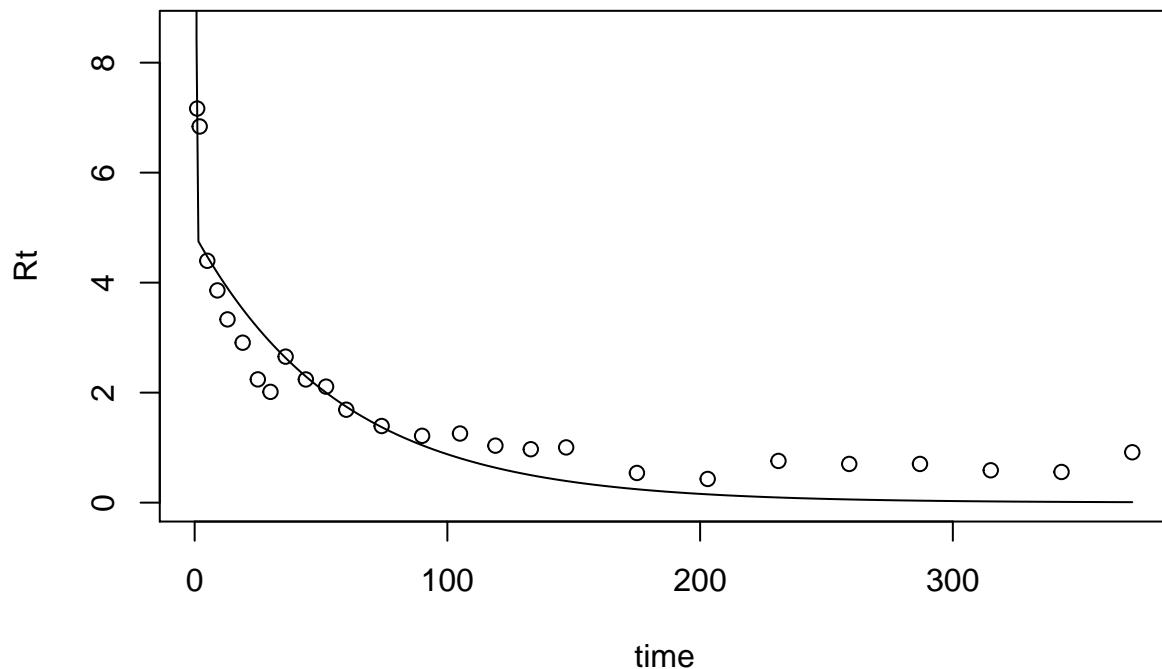
```
## [1] "Best fit parameter: 0.000226777584002239"
```



```
## [1] "AIC = -0.209344702714491"
## [1] "k1= 0.0555384824801928"
## [2] "k2= 0.000105448929830073"
## [3] "proportion of CO in pool 1= 0.0108619043597534"
```

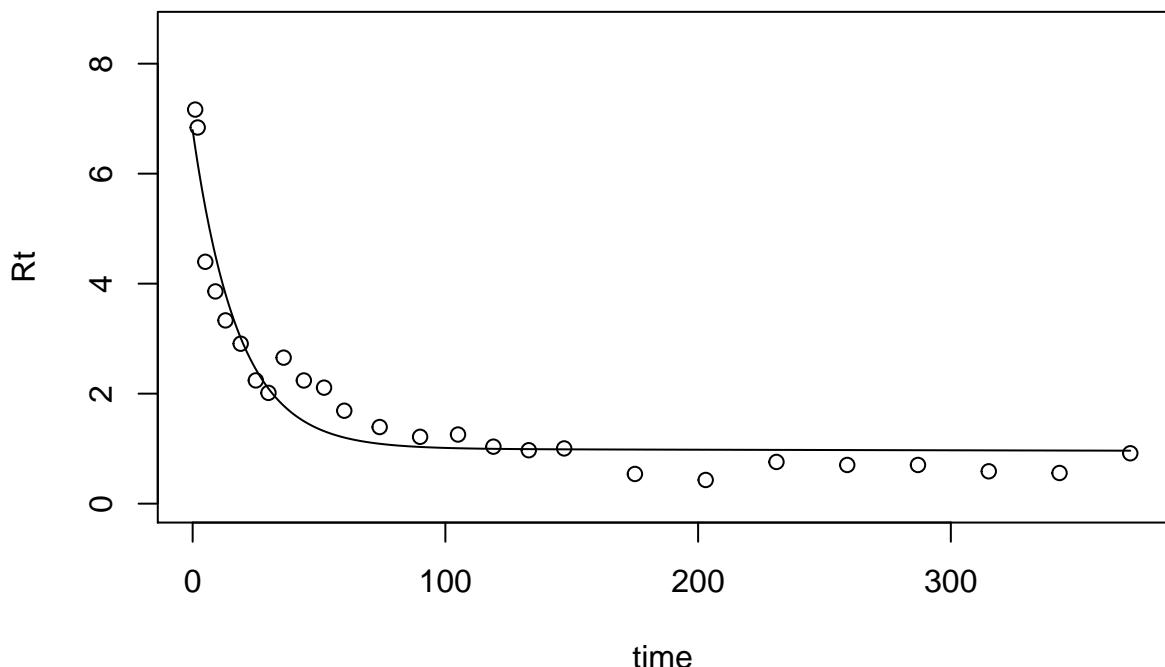


```
## [1] "AIC = 8.94289259752473"
## [1] "k1= 14.1209634432727"
## [2] "k2= 0.0176309596682989"
## [3] "a21= 0.028957009732072"
## [4] "a12= 0.999998119915936"
## [5] "Proportion of C0 in pool 1= 0.999356589063978"
```

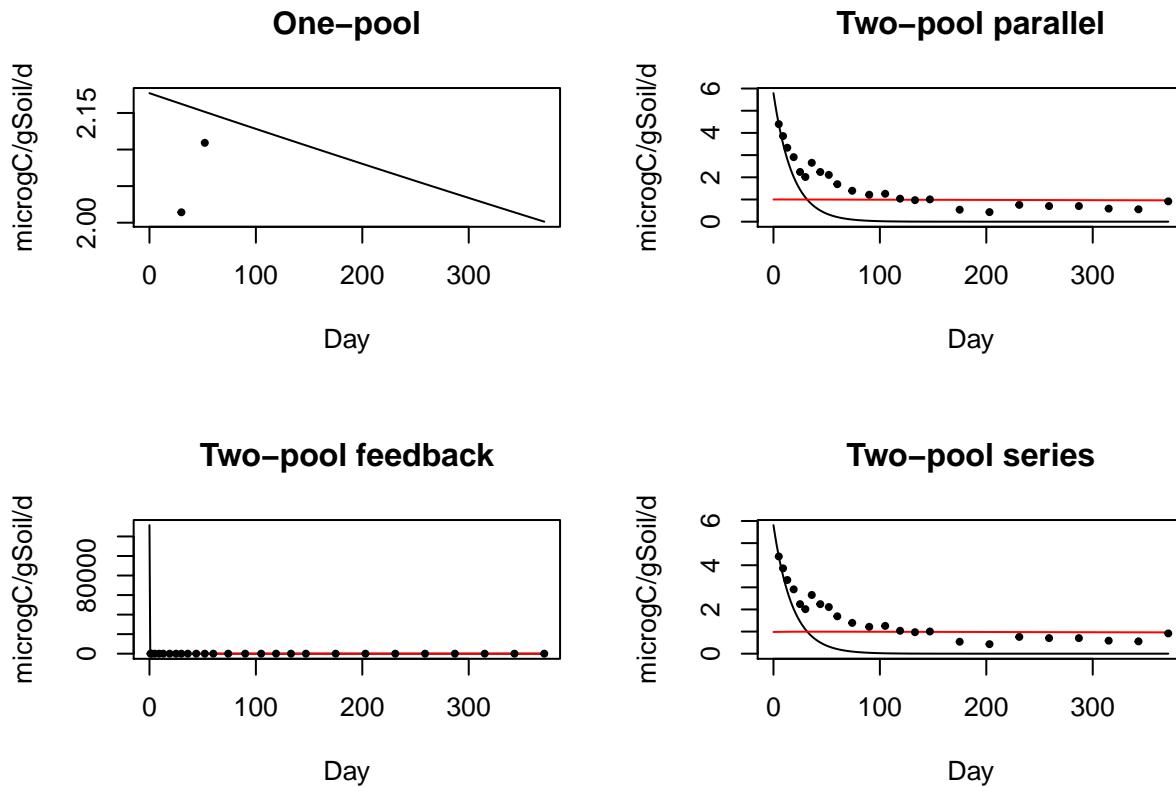


```
## [1] "AIC = 11.7300691105531"
## [1] "k1= 0.0555421295889596"
## [2] "k2= 0.000105452118408004"
## [3] "a21= 0.642153167013919"
```

```
## [4] "Proportion of C0 in pool 1= 0.0304558887029366"
```



```
## [1] "AIC = 10.9428925982555"
```



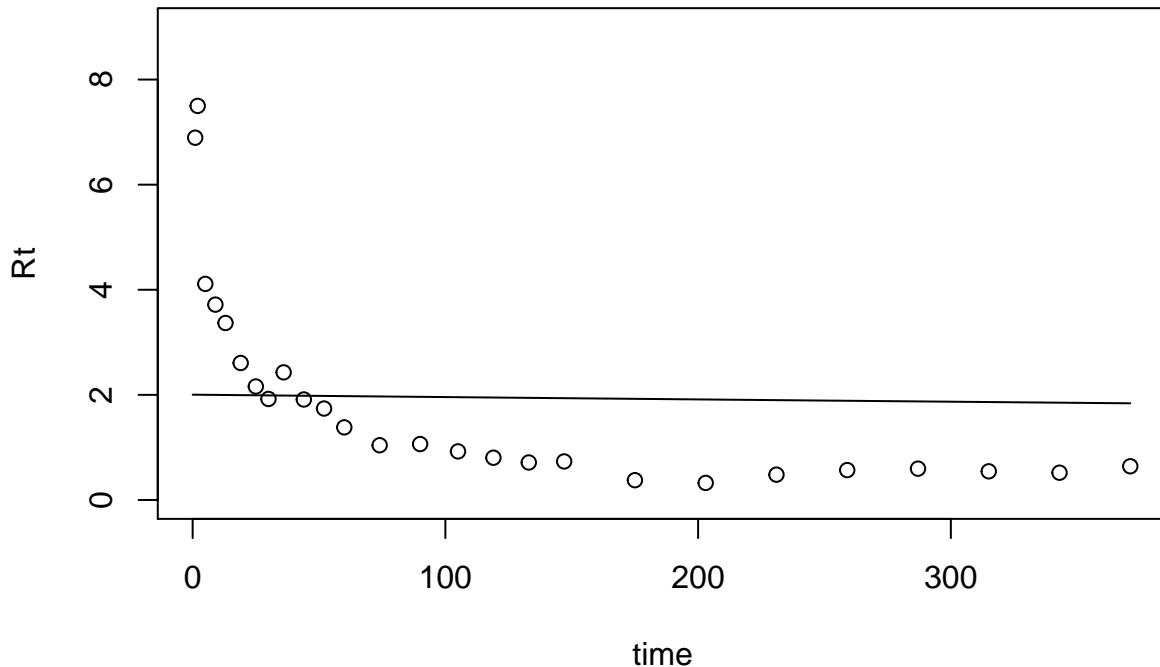
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-0.209	0.000227	NA	NA	NA	NA	-0.199	0.988	NA	NA
Two-pool parallel	8.94	0.0555	0.000105	0.0109	NA	NA	9.01	0.0099	9380	6470

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	11.7	14.1	0.0176	0.999	0.029	1	11.9	0.00234	1.76	0.0512
Two-pool series	10.9	0.0555	0.000105	0.0305	0.642	NA	11.1	0.00356	6110	2390

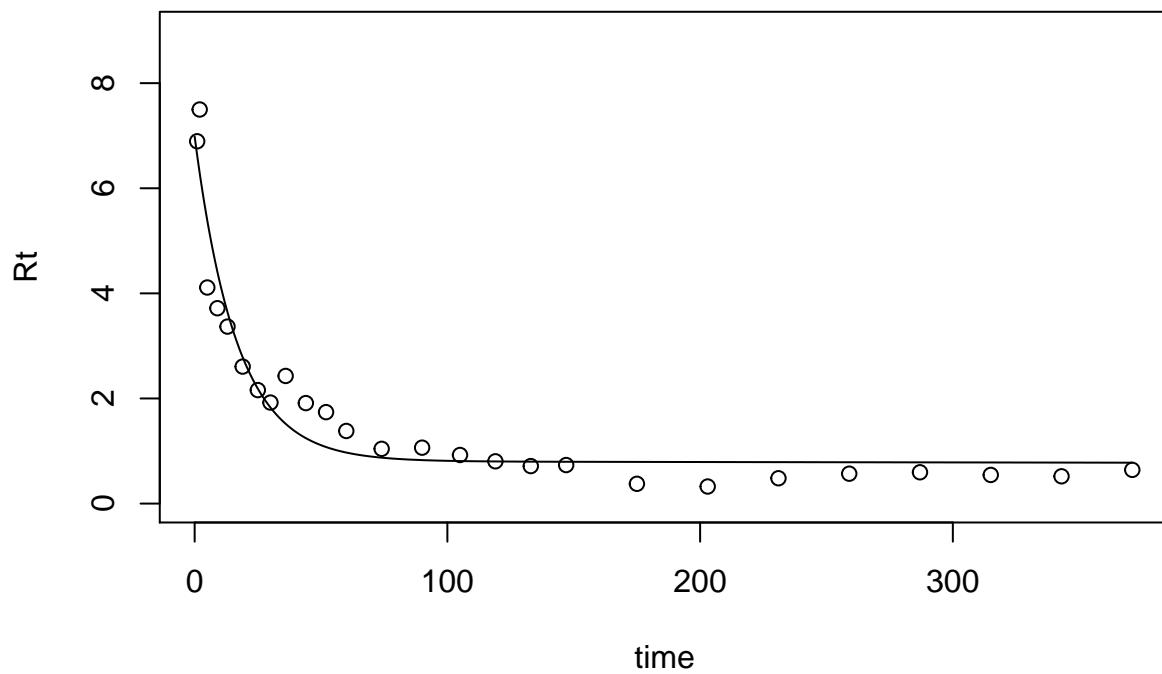
Variable Site24:

CO2 production rate

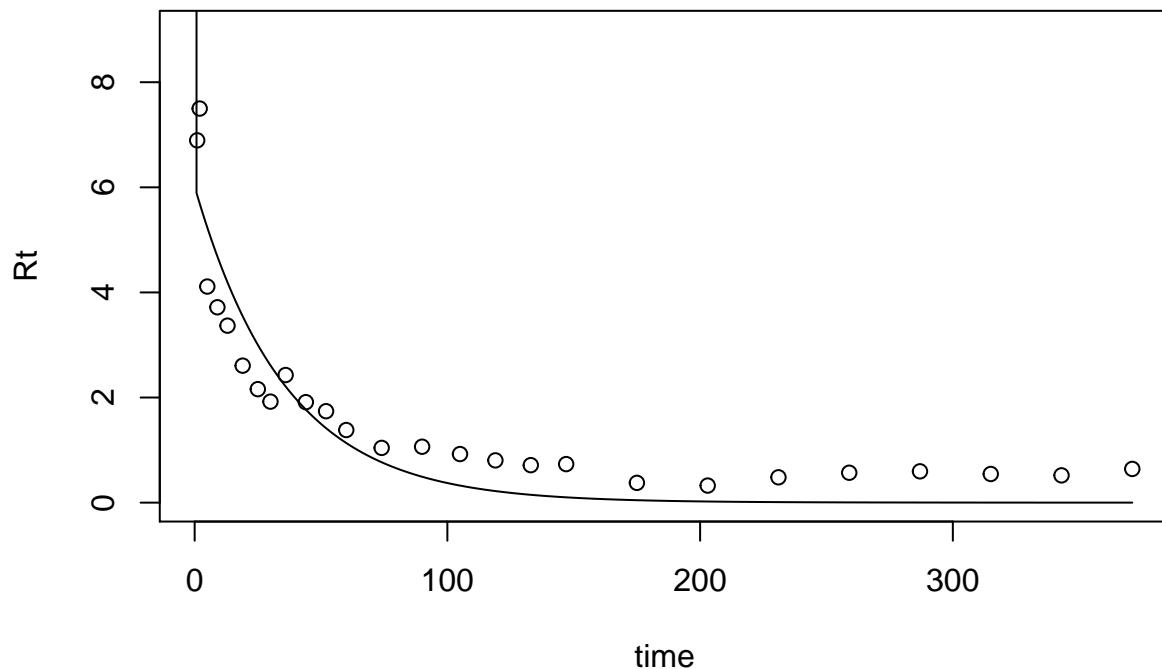
```
## [1] "Best fit parameter: 0.000230297179891895"
```



```
## [1] "AIC = -0.408473158444481"
## [1] "k1= 0.0599038876399336"
## [2] "k2= 9.37126909678408e-05"
## [3] "proportion of C0 in pool 1= 0.0118576195889253"
```

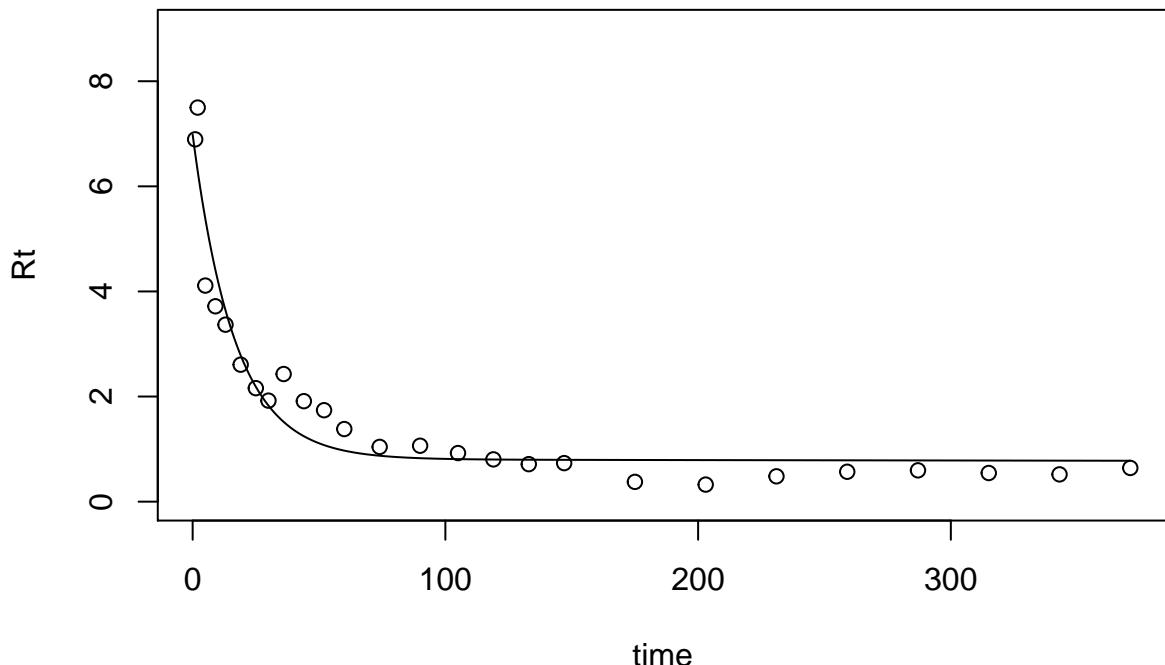


```
## [1] "AIC = 8.78547249536453"
## [1] "k1= 818.793100740234"
## [2] "k2= 0.027809006707401"
## [3] "a21= 0.0246330442233542"
## [4] "a12= 1.22862557389025e-06"
## [5] "Proportion of C0 in pool 1= 0.999759448176471"
```

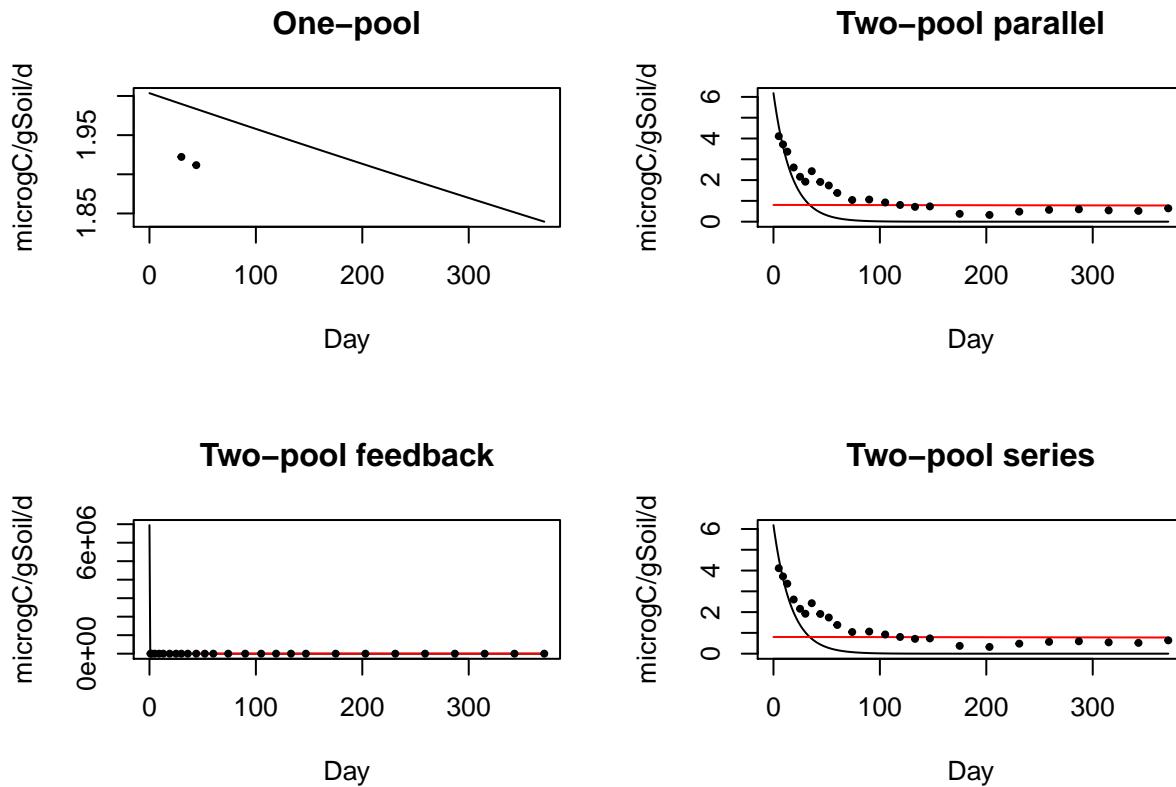


```
## [1] "AIC = 11.3217706844967"
## [1] "k1= 0.0599053965823033"
## [2] "k2= 9.3714041708307e-05"
## [3] "a21= 0.276977925410504"
```

```
## [4] "Proportion of C0 in pool 1= 0.0164094384077683"
```



```
## [1] "AIC = 10.7854724959619"
```



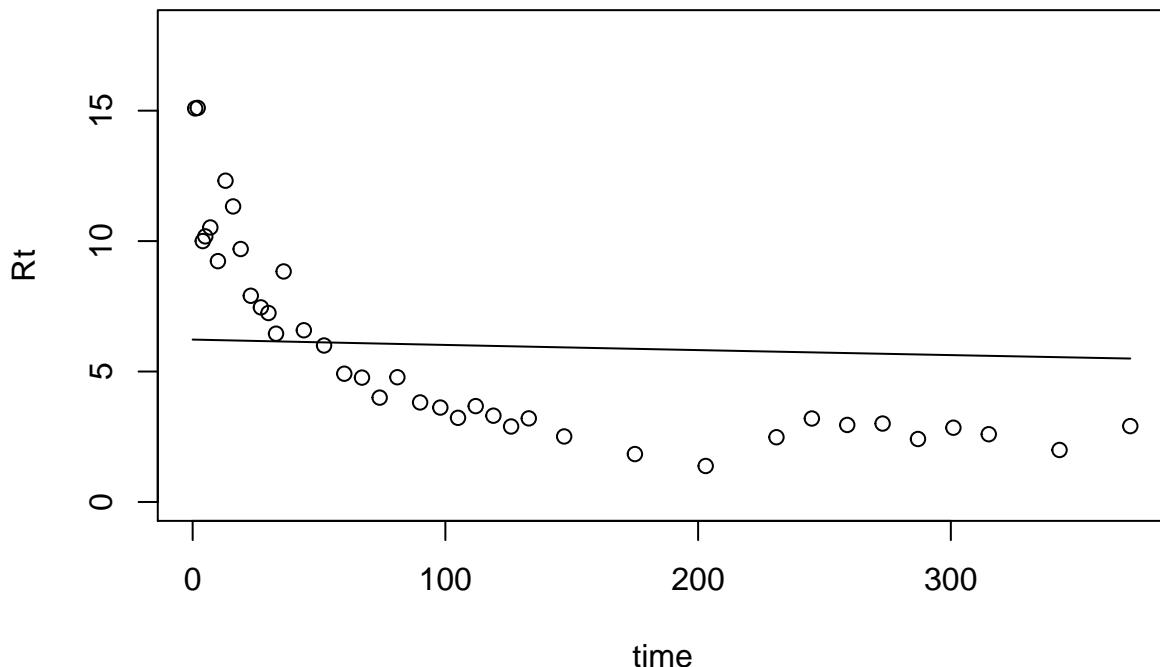
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-0.408	0.00023	NA	NA	NA	NA	-0.398	0.988	NA	NA
Two-pool parallel	8.79	0.0599	9.37e-05	0.0119	NA	NA	8.85	0.00969	10500	7270

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	11.3	819	0.0278	1	0.0246	1.23e-06	11.5	0.00259	0.887	0.000848
Two-pool series	10.8	0.0599	9.37e-05	0.0164	0.277	NA	10.9	0.00349	2970	19.6

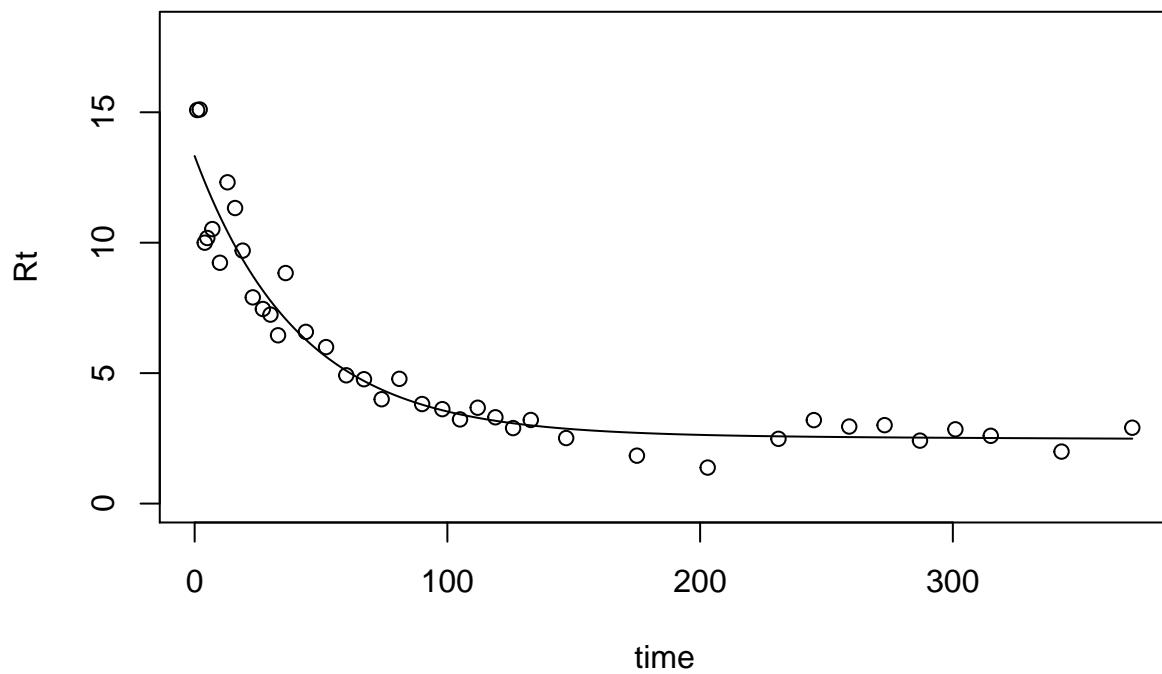
Variable Site25:

CO2 production rate

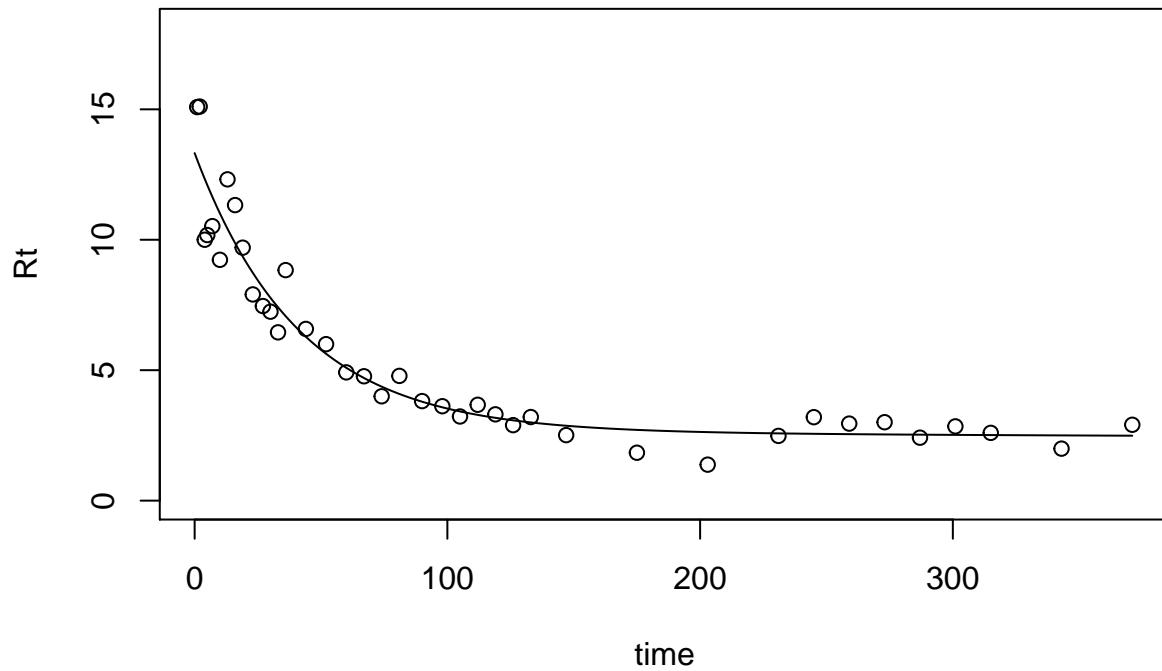
```
## [1] "Best fit parameter: 0.000334657917993986"
```



```
## [1] "AIC = -3.05401460107751"
## [1] "k1= 0.0242926467807851"
## [2] "k2= 0.000144546190308214"
## [3] "proportion of C0 in pool 1= 0.023674175781559"
```

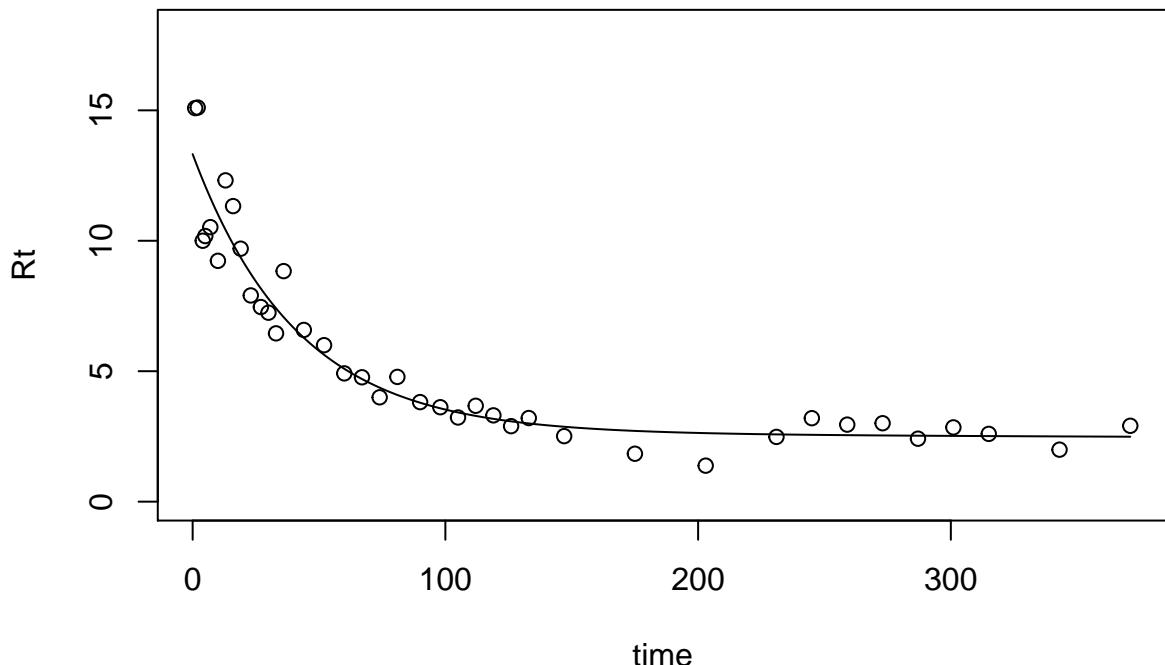


```
## [1] "AIC = 5.99115587180991"
## [1] "k1= 0.0242933417966362"
## [2] "k2= 0.000144548753355363"
## [3] "a21= 0.0328370027332048"
## [4] "a12= 3.47143108425652e-06"
## [5] "Proportion of C0 in pool 1= 0.0244822806156386"
```

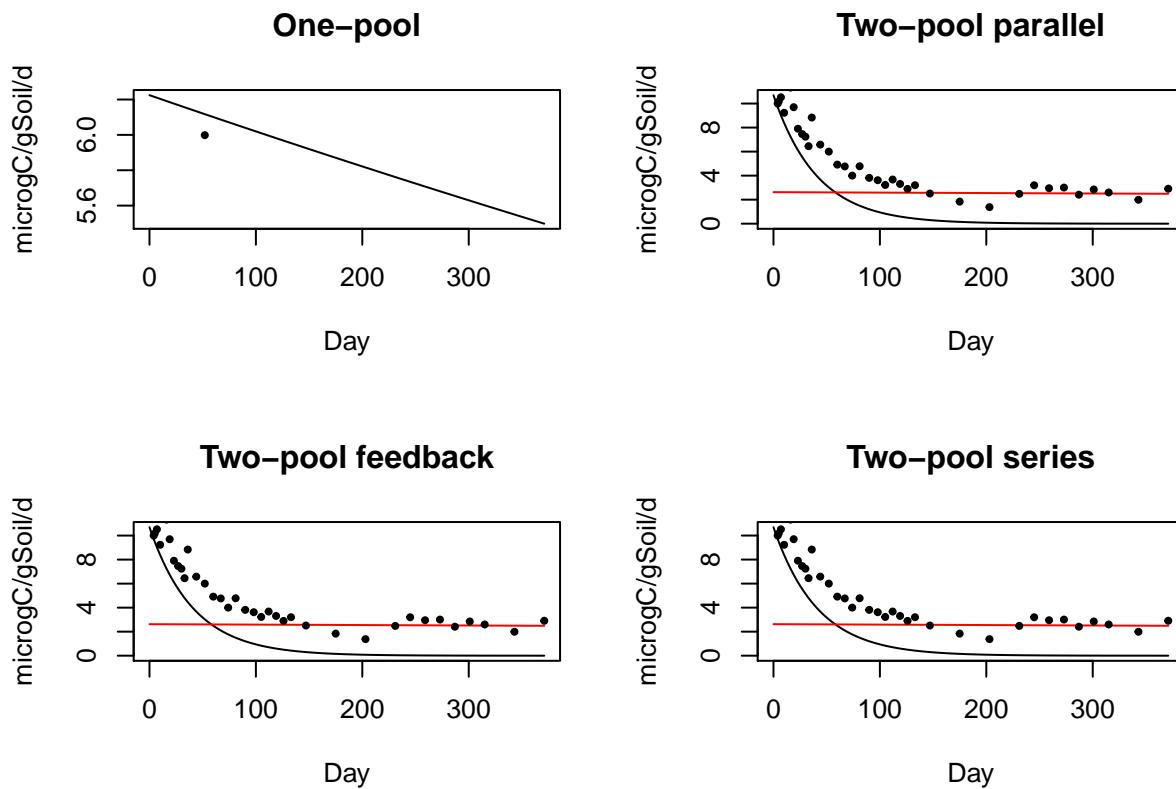


```
## [1] "AIC = 9.99115587451837"
## [1] "k1= 0.0242936227017786"
## [2] "k2= 0.000144550181867189"
## [3] "a21= 0.0107186421515926"
```

```
## [4] "Proportion of C0 in pool 1= 0.0239312606246744"
```



```
## [1] "AIC = 7.99115587427887"
```



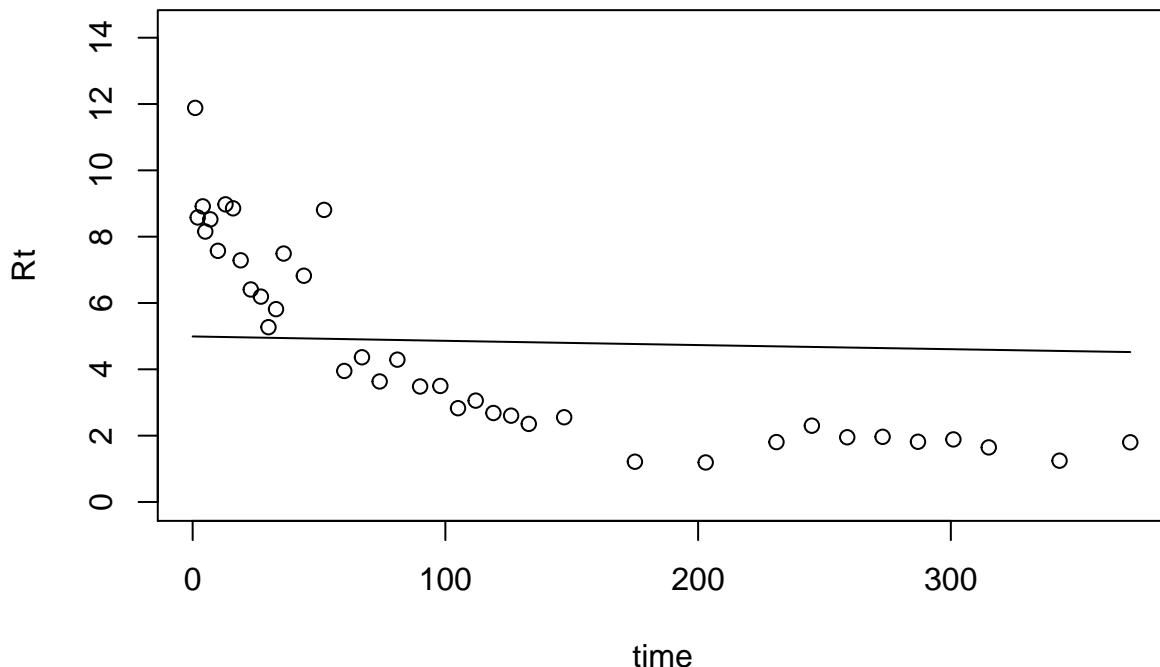
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-3.05	0.000335	NA	NA	NA	NA	-3.04	0.988	NA	NA
Two-pool parallel	5.99	0.0243	0.000145	0.0237	NA	NA	6.06	0.0104	6760	4630

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	9.99	0.0243	0.000145	0.0245	0.0328	3.47e-06	10.2	0.00135	268	30
Two-pool series	7.99	0.0243	0.000145	0.0239	0.0107	NA	8.1	0.00376	115	29

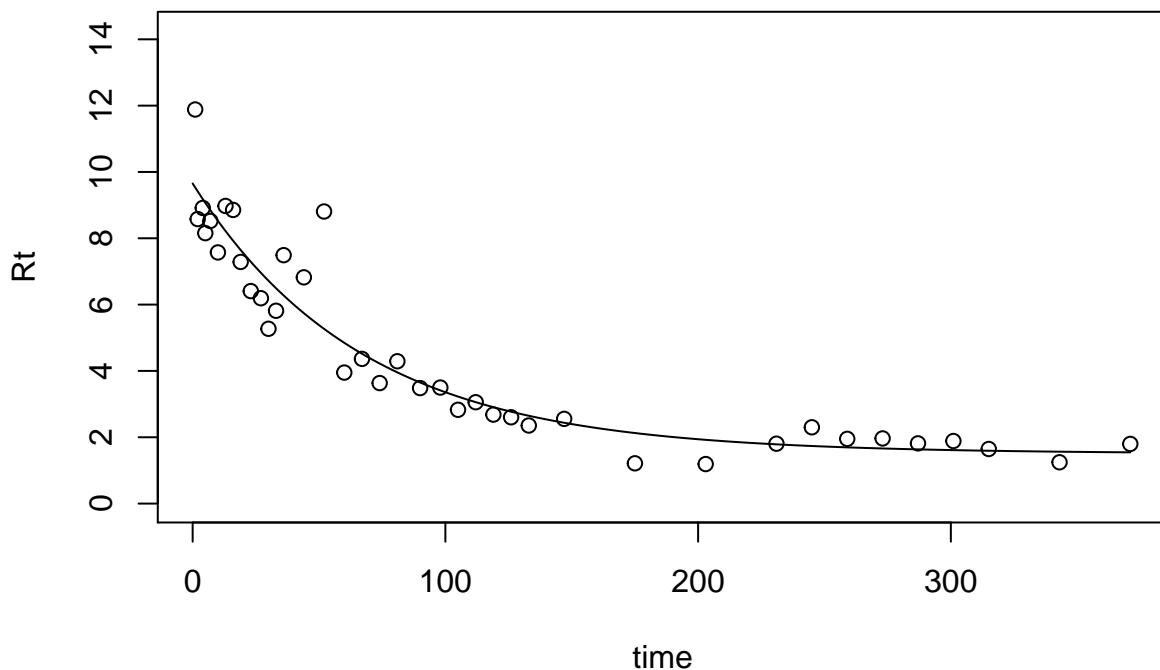
Variable Site26:

CO2 production rate

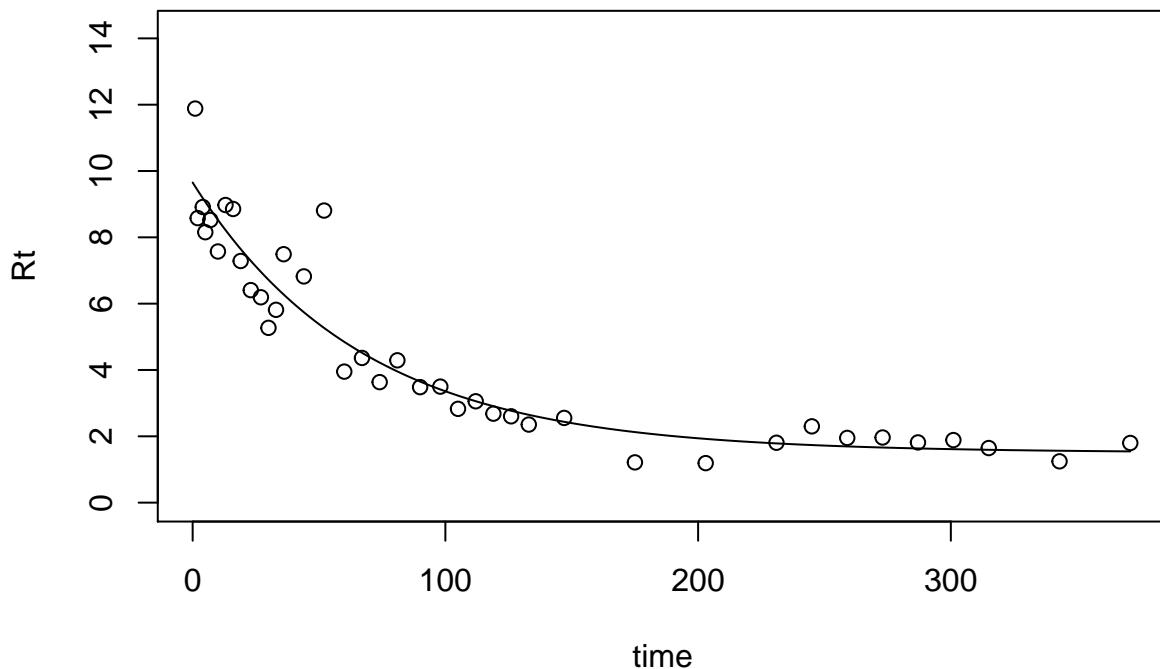
```
## [1] "Best fit parameter: 0.000266889511797217"
```



```
## [1] "AIC = -2.09425307532179"
## [1] "k1= 0.0149824886514182"
## [2] "k2= 8.60529551463372e-05"
## [3] "proportion of C0 in pool 1= 0.0288788564603088"
```

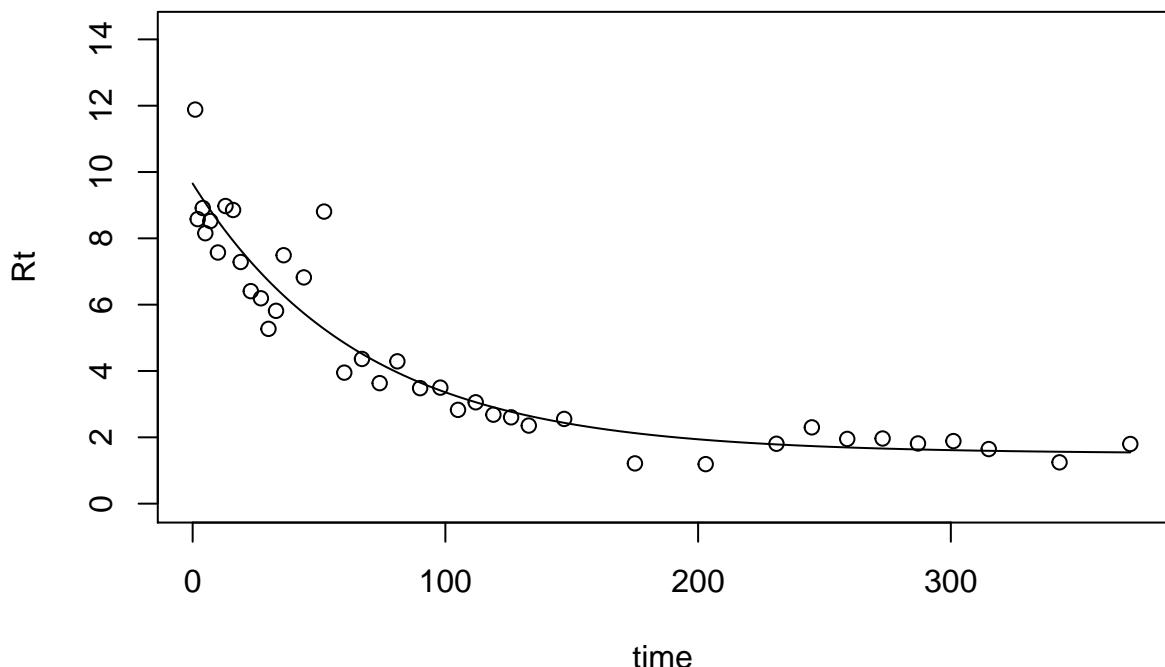


```
## [1] "AIC = 6.35921546651096"
## [1] "k1= 0.0149824657072447"
## [2] "k2= 8.60529430466194e-05"
## [3] "a21= 0.0126222159876566"
## [4] "a12= 0.00012723125538816"
## [5] "Proportion of C0 in pool 1= 0.0292508664946237"
```

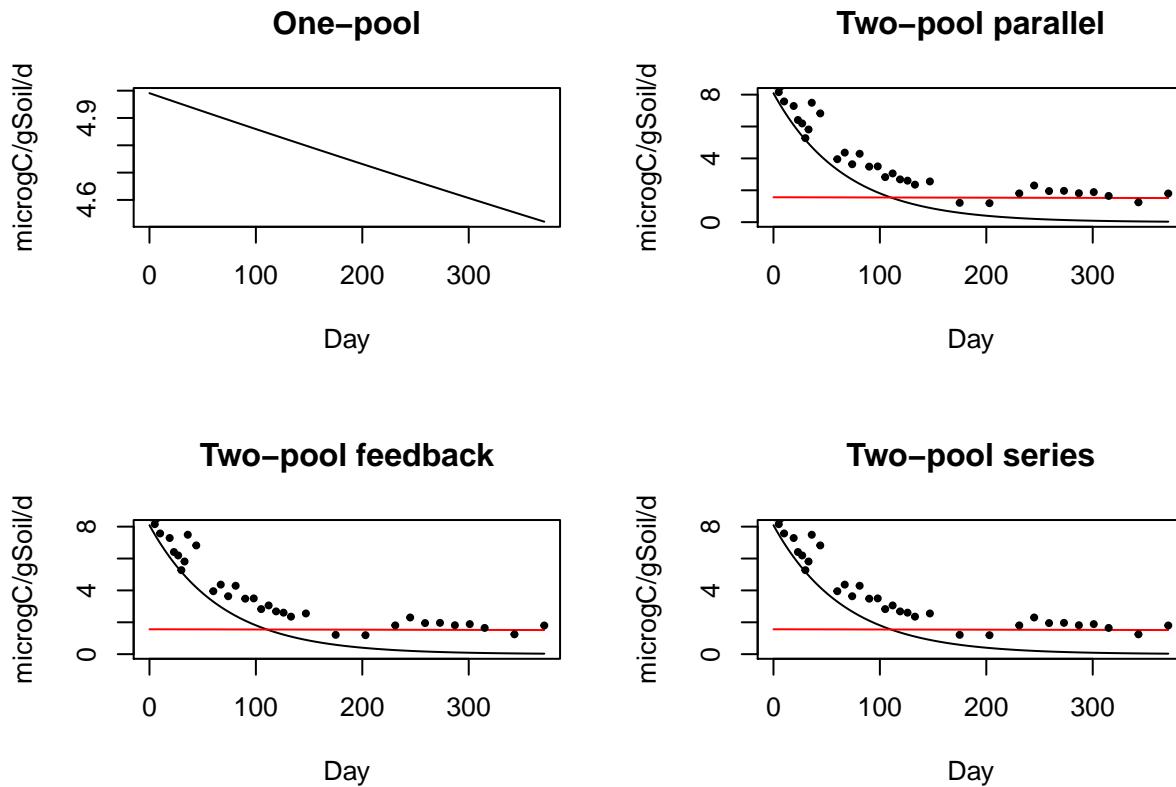


```
## [1] "AIC = 10.3592154661625"
## [1] "k1= 0.0149824708145515"
## [2] "k2= 8.60528445377228e-05"
## [3] "a21= 0.0258218083167392"
```

```
## [4] "Proportion of C0 in pool 1= 0.029648858000612"
```



```
## [1] "AIC = 8.35921546641925"
```



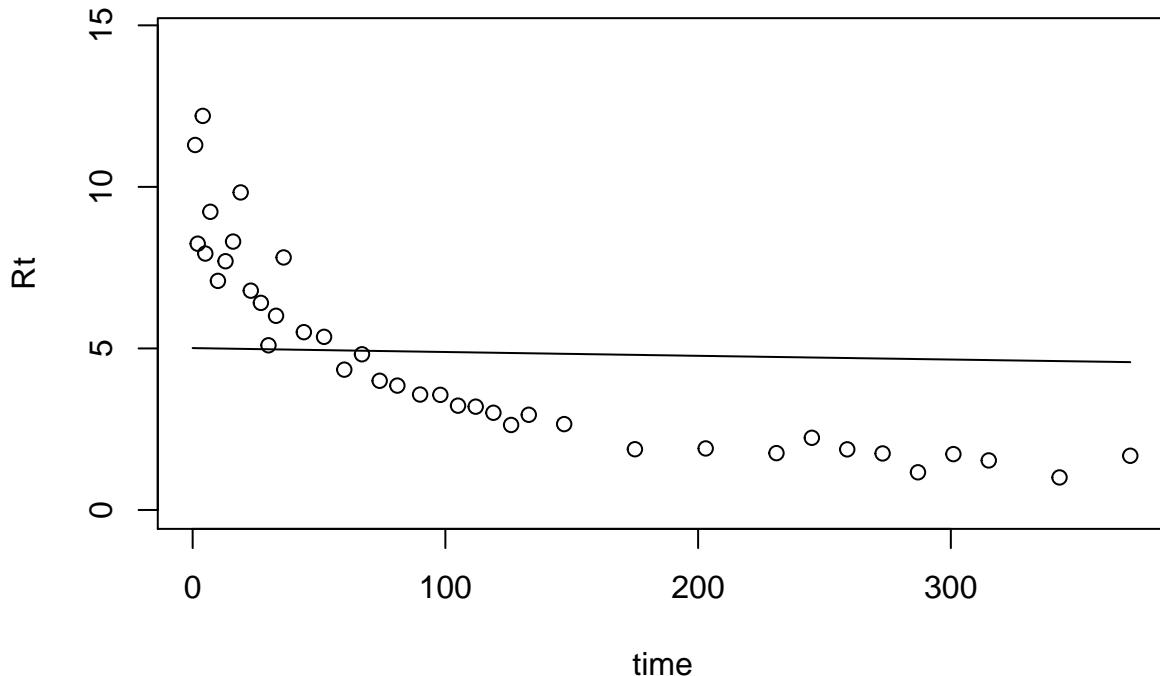
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.09	0.000267	NA	NA	NA	NA	-2.08	0.984	NA	NA
Two-pool parallel	6.36	0.015	8.61e-05	0.0289	NA	NA	6.42	0.014	11300	7710

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.4	0.015	8.61e-05	0.0293	0.0126	0.000127	10.5	0.0018	213	47.1
Two-pool series	8.36	0.015	8.61e-05	0.0296	0.0258	NA	8.47	0.00503	367	48.1

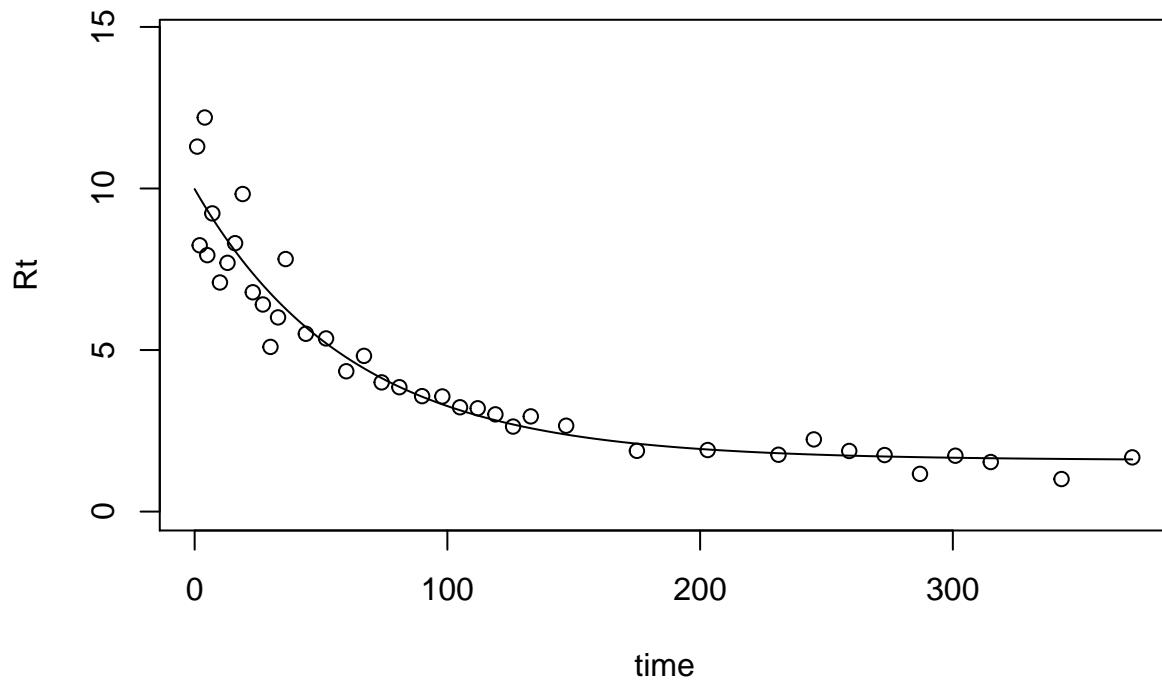
Variable Site27:

CO2 production rate

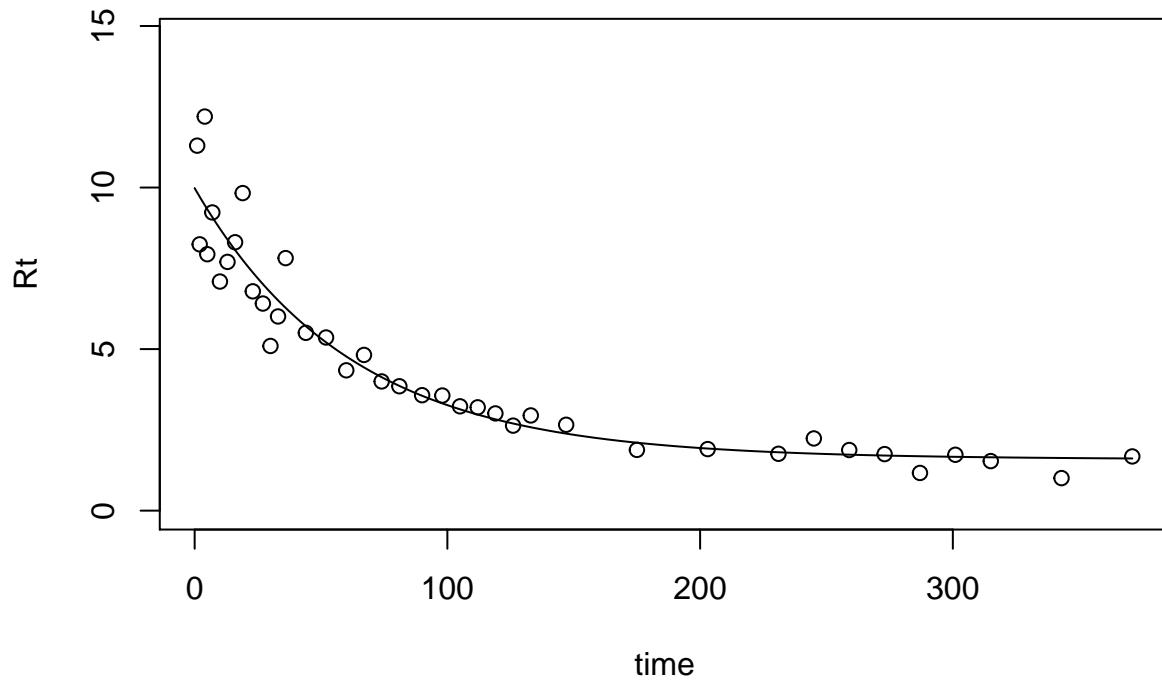
```
## [1] "Best fit parameter: 0.00024440085887254"
```



```
## [1] "AIC = -2.1953763824342"
## [1] "k1= 0.0162972832571775"
## [2] "k2= 8.22520329818669e-05"
## [3] "proportion of C0 in pool 1= 0.0249568682536521"
```

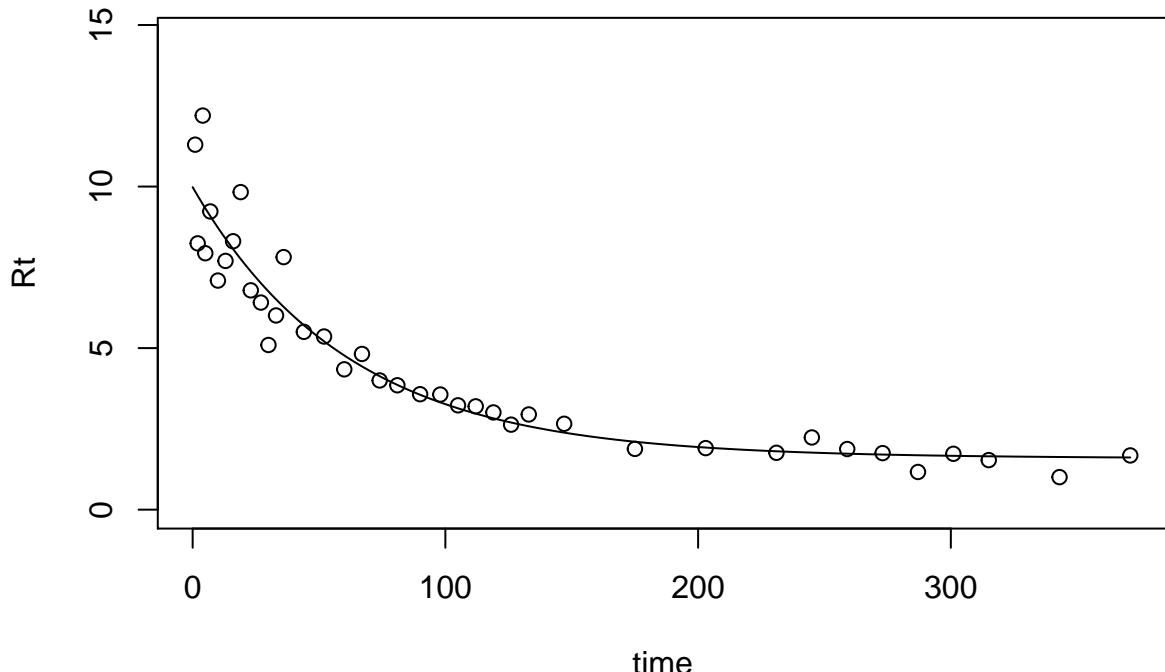


```
## [1] "AIC = 6.58836191589095"
## [1] "k1= 0.01629731929508"
## [2] "k2= 8.225230588223e-05"
## [3] "a21= 0.0288587999737768"
## [4] "a12= 3.89811981015287e-05"
## [5] "Proportion of C0 in pool 1= 0.0257023049763335"
```

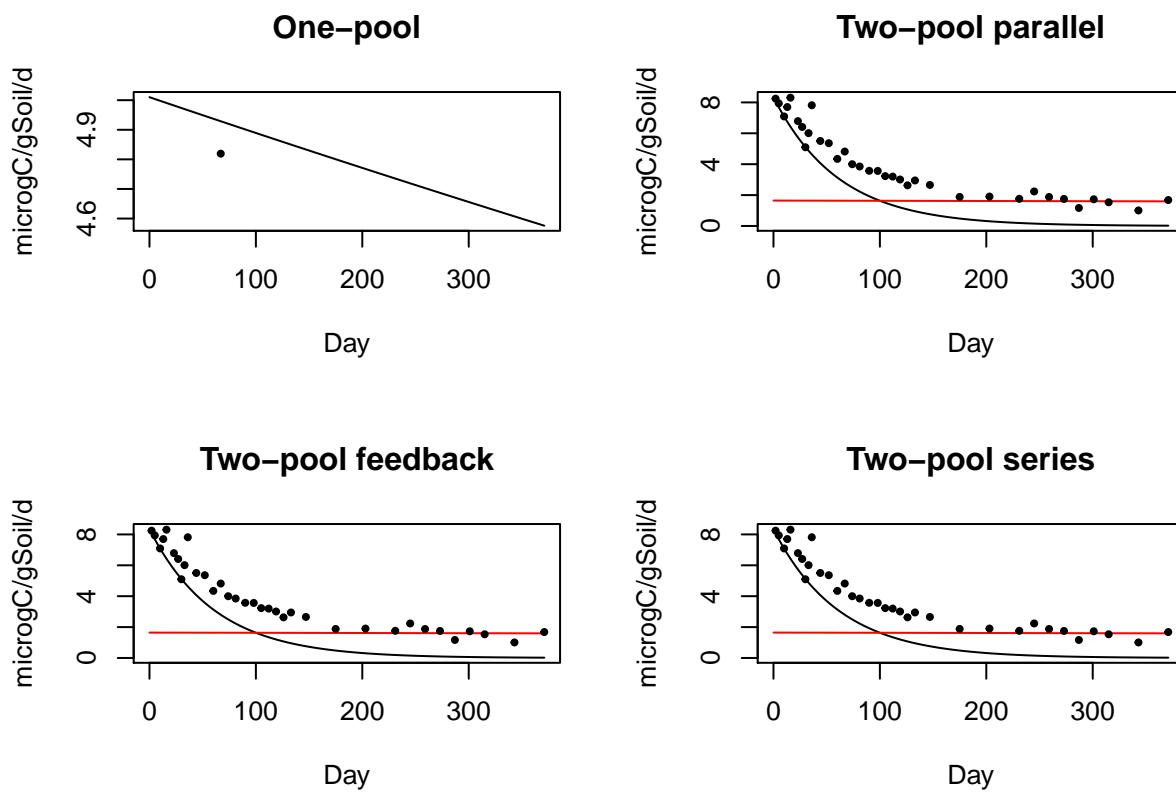


```
## [1] "AIC = 10.5883619130414"
## [1] "k1= 0.0162974927016412"
## [2] "k2= 8.22530854368877e-05"
## [3] "a21= 0.0103598134515853"
```

```
## [4] "Proportion of C0 in pool 1= 0.0252190837036731"
```



```
## [1] "AIC = 8.58836191541083"
```



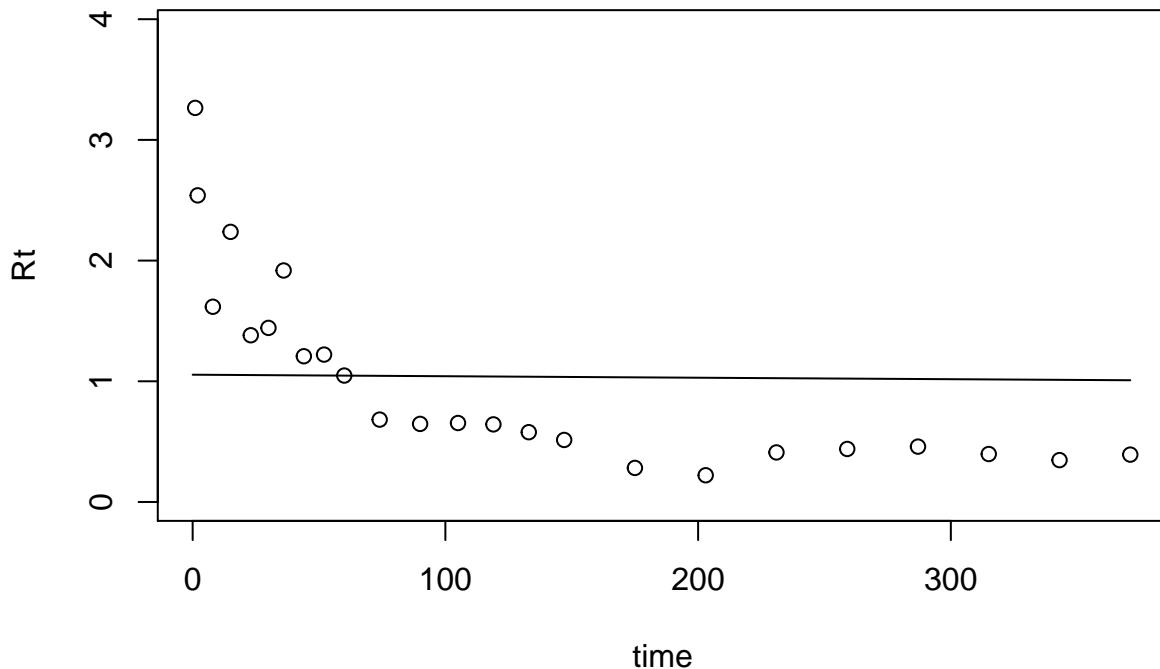
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.2	0.000244	NA	NA	NA	NA	-2.18	0.987	NA	NA
Two-pool parallel	6.59	0.0163	8.23e-05	0.025	NA	NA	6.65	0.0119	11900	8120

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.6	0.0163	8.23e-05	0.0257	0.0289	3.9e-05	10.8	0.00153	412	44.4
Two-pool series	8.59	0.0163	8.23e-05	0.0252	0.0104	NA	8.7	0.00428	187	43.2

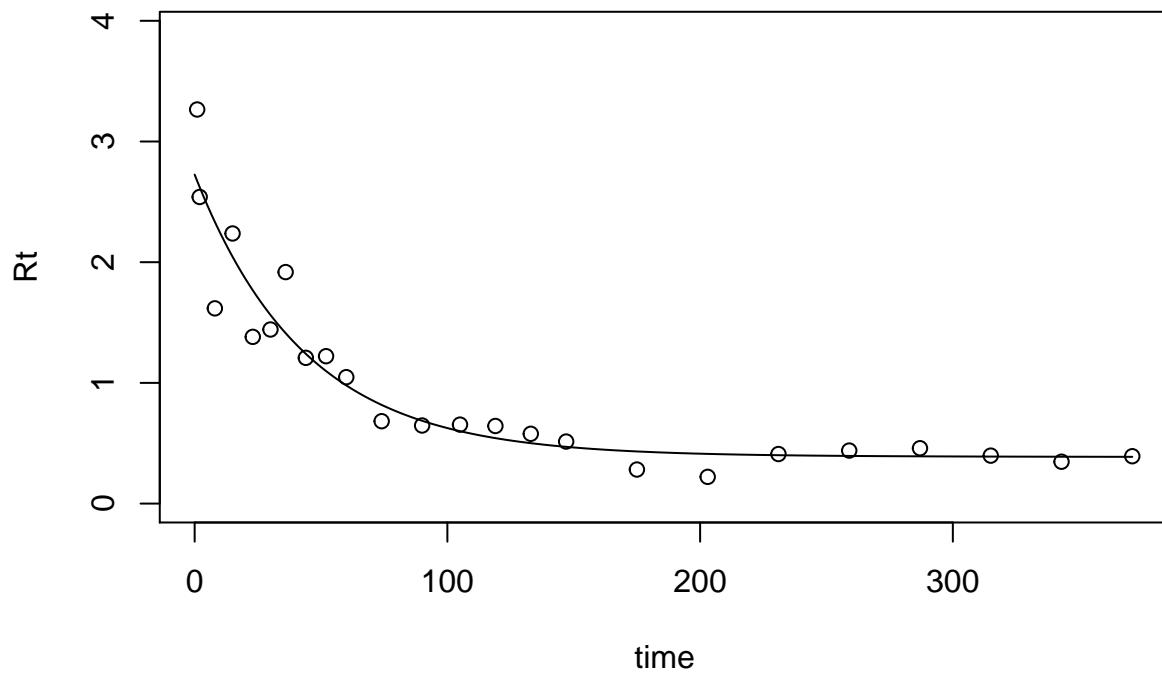
Variable Site28:

CO2 production rate

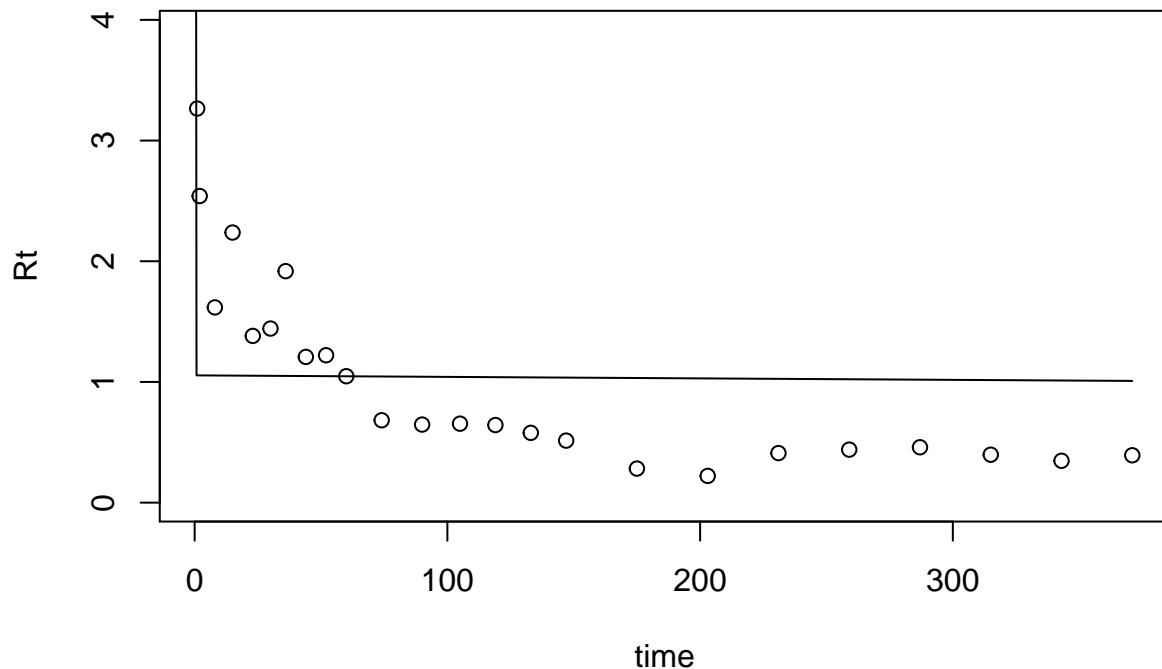
```
## [1] "Best fit parameter: 0.000119819769529993"
```



```
## [1] "AIC = 3.01862949757221"
## [1] "k1= 0.0229986907021708"
## [2] "k2= 4.52187038016449e-05"
## [3] "proportion of C0 in pool 1= 0.0115253806136047"
```

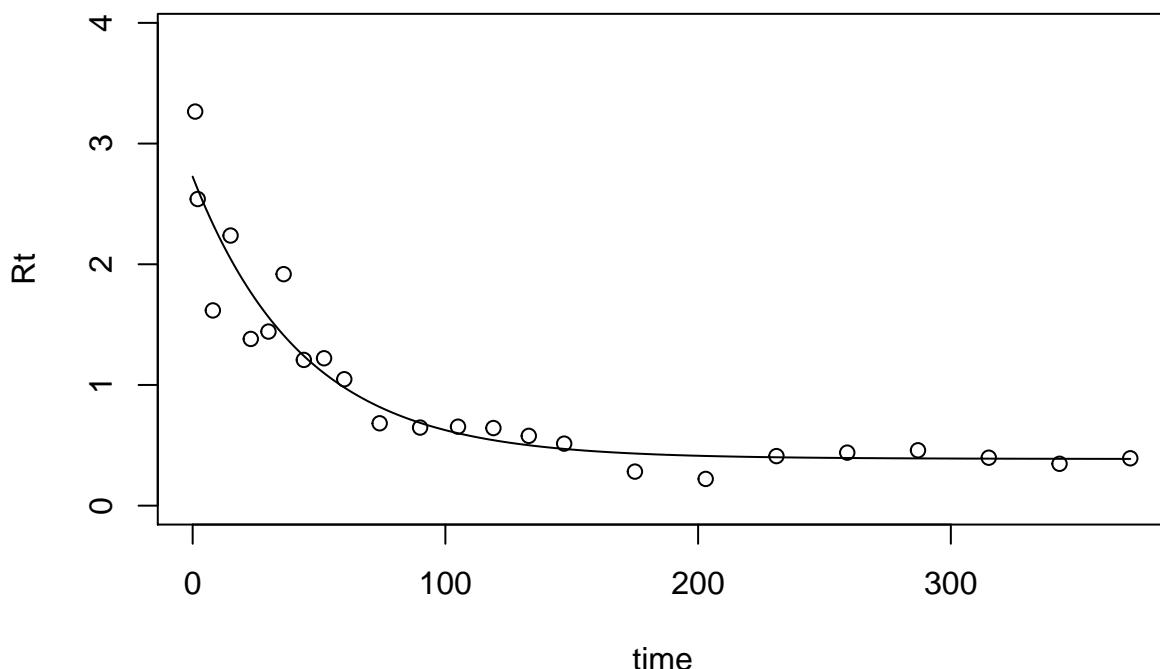


```
## [1] "AIC = 11.6047736426247"
## [1] "k1= 59.9234410597467"
## [2] "k2= 0.0166843795163432"
## [3] "a21= 0.992855317138496"
## [4] "a12= 0.999960650434301"
## [5] "Proportion of C0 in pool 1= 0.00442394741056346"
```

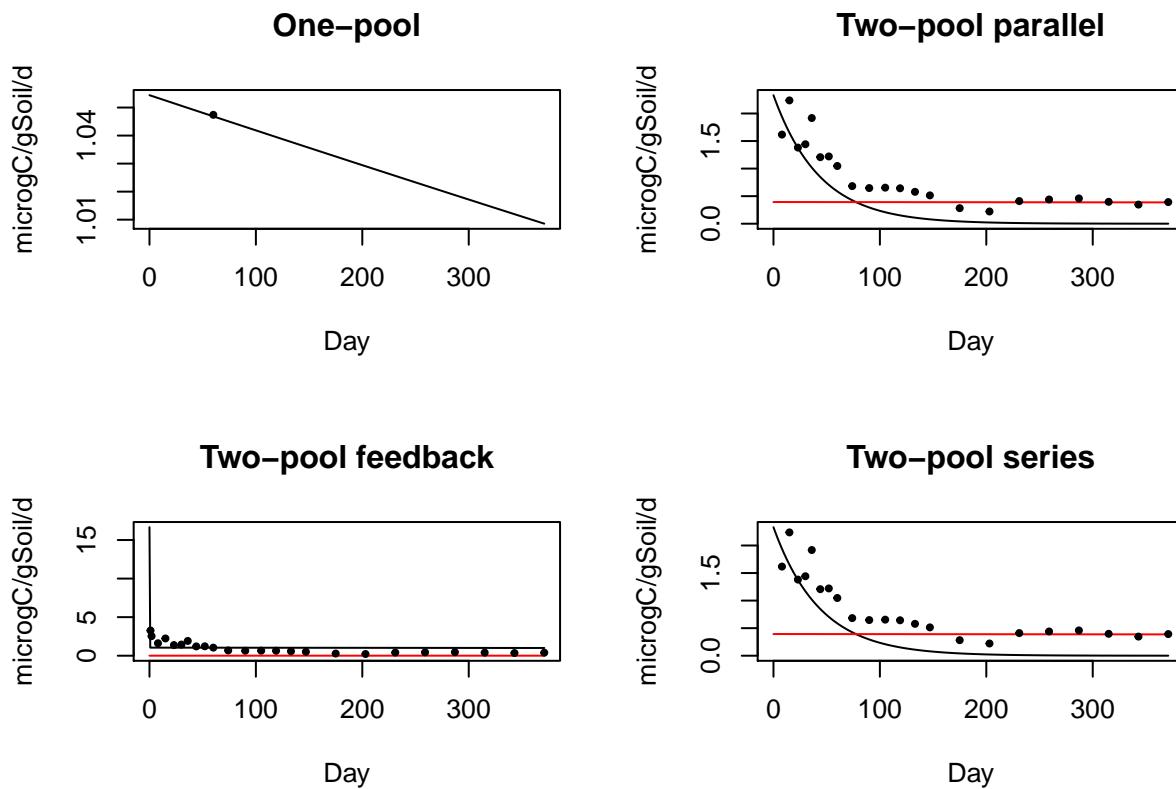


```
## [1] "AIC = 11.018631089673"
## [1] "k1= 0.0229979205059624"
## [2] "k2= 4.52172229662677e-05"
## [3] "a21= 0.00254581700284356"
```

```
## [4] "Proportion of C0 in pool 1= 0.0115551441893774"
```



```
## [1] "AIC = 13.6047736382591"
```



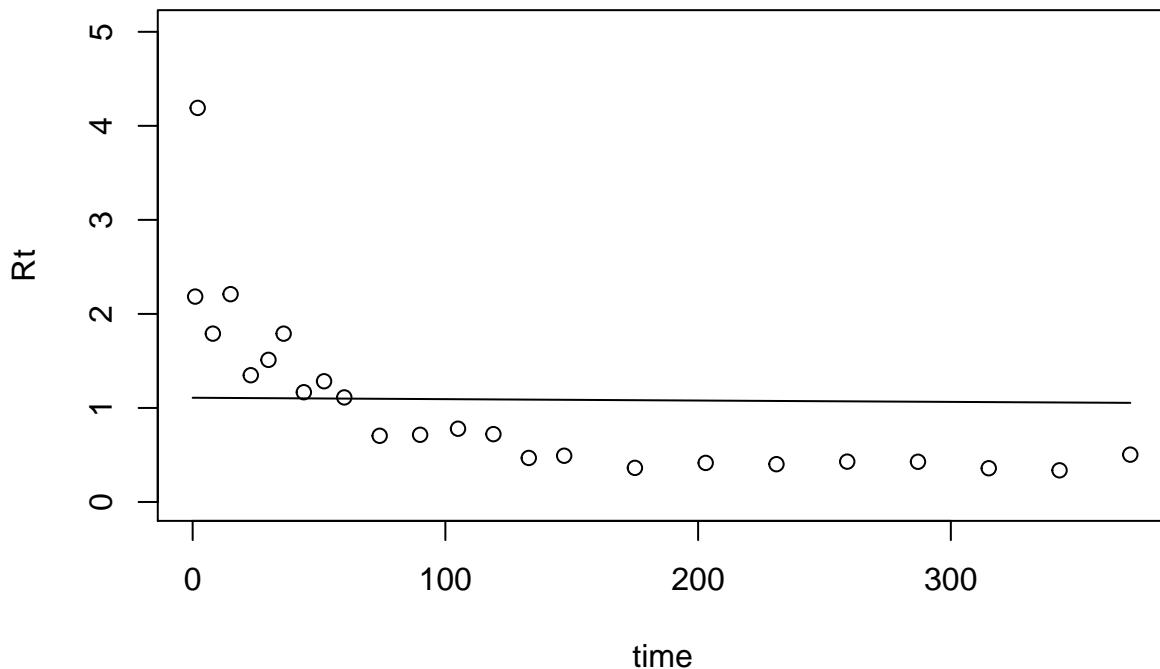
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	3.02	0.00012	NA	NA	NA	NA	3.03	0.971	NA	NA
Two-pool parallel	11.6	0.023	4.52e-05	0.0115	NA	NA	11.7	0.0129	21900	15100

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	11	59.9	0.0167	0.00442	0.993	1	11.2	0.0165	8290	5720
Two-pool series	13.6	0.023	4.52e-05	0.0116	0.00255	NA	13.7	0.00464	99.8	30.3

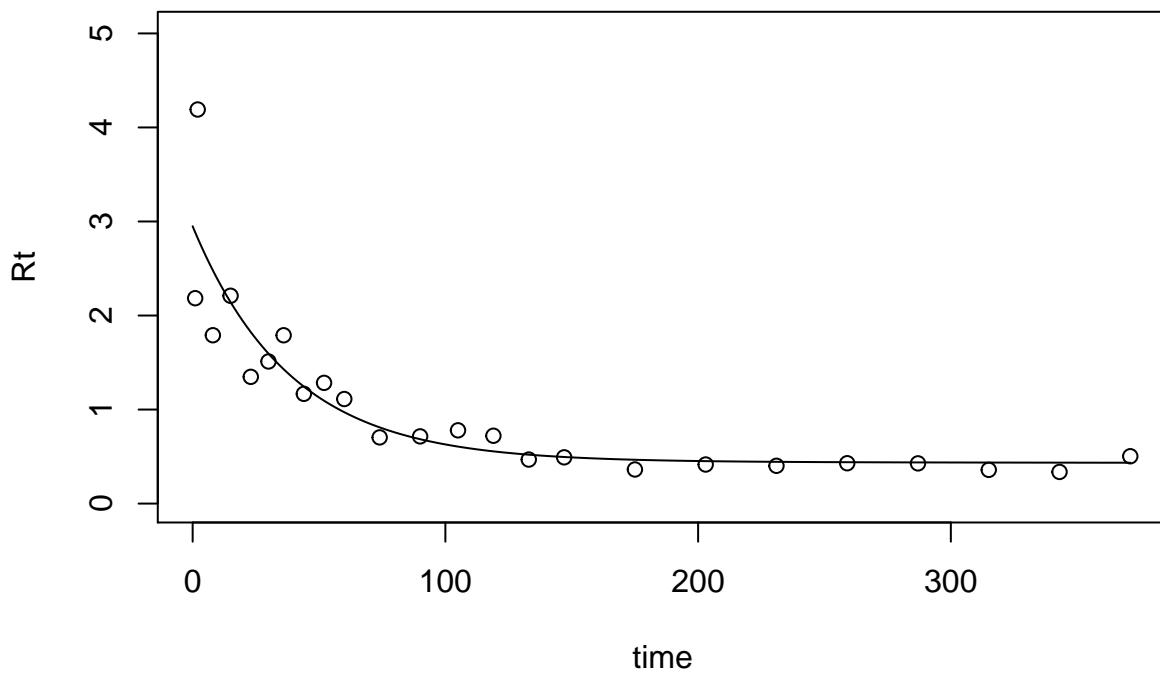
Variable Site29:

CO2 production rate

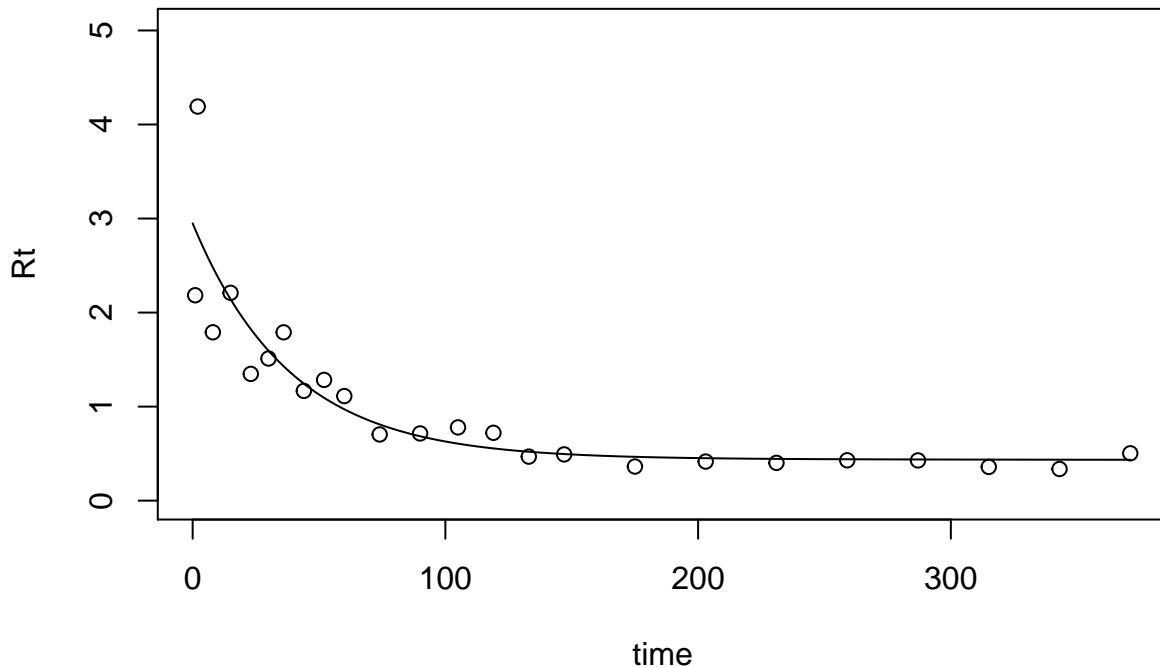
```
## [1] "Best fit parameter: 0.000135161028500652"
```



```
## [1] "AIC = 2.5861515009043"
## [1] "k1= 0.025888773067719"
## [2] "k2= 5.46899769018754e-05"
## [3] "proportion of C0 in pool 1= 0.0118039723912726"
```

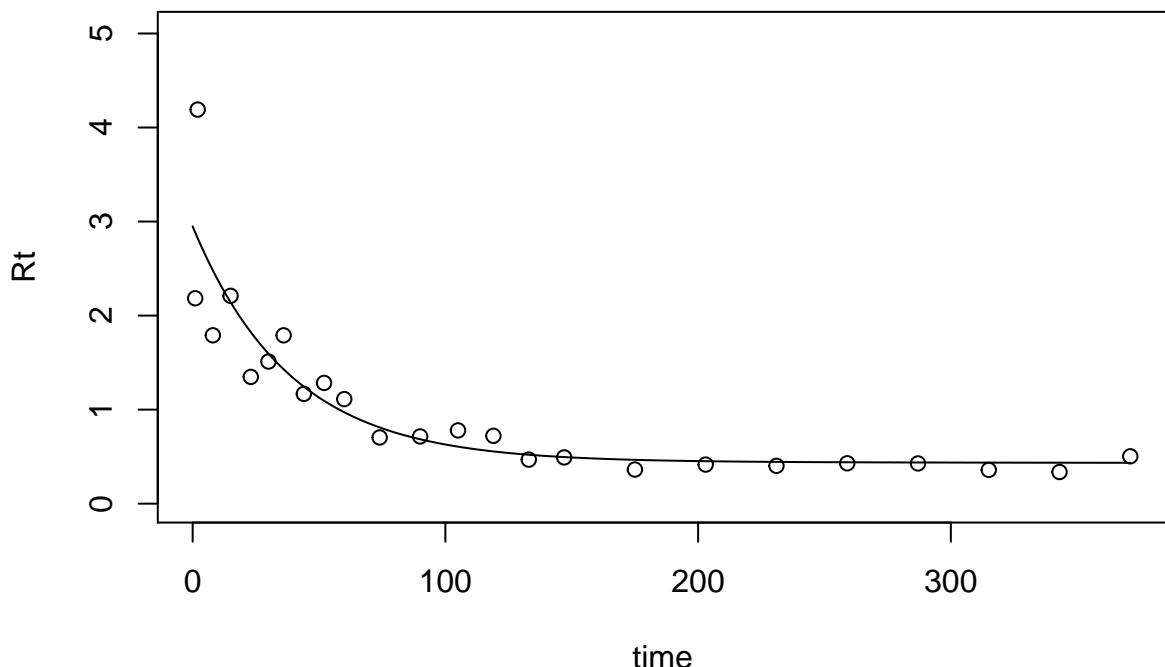


```
## [1] "AIC = 9.92236907388202"
## [1] "k1= 0.025888509008494"
## [2] "k2= 5.46897870496845e-05"
## [3] "a21= 0.172867421928001"
## [4] "a12= 5.12304462786939e-05"
## [5] "Proportion of C0 in pool 1= 0.0142773786638409"
```

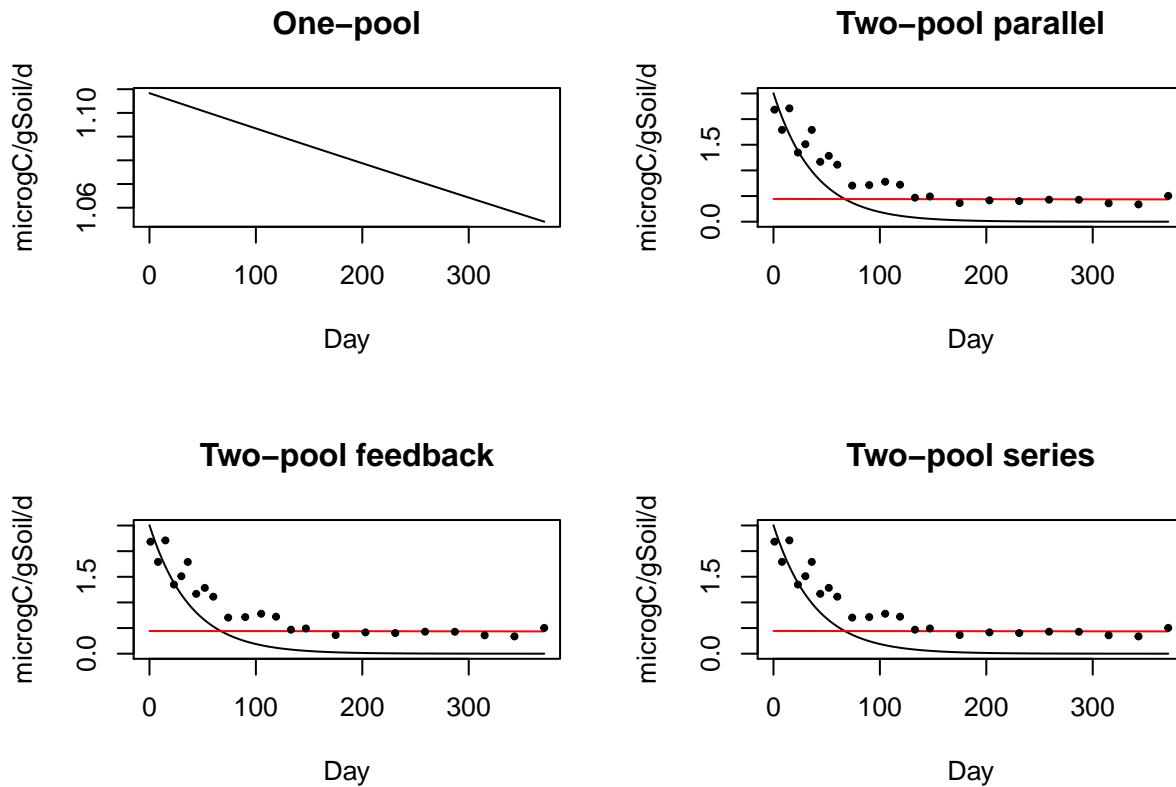


```
## [1] "AIC = 13.9223690731332"
## [1] "k1= 0.0258886951552165"
## [2] "k2= 5.46895854405962e-05"
## [3] "a21= 0.00583678247522262"
```

```
## [4] "Proportion of C0 in pool 1= 0.0118735013555769"
```



```
## [1] "AIC = 11.9223690739925"
```



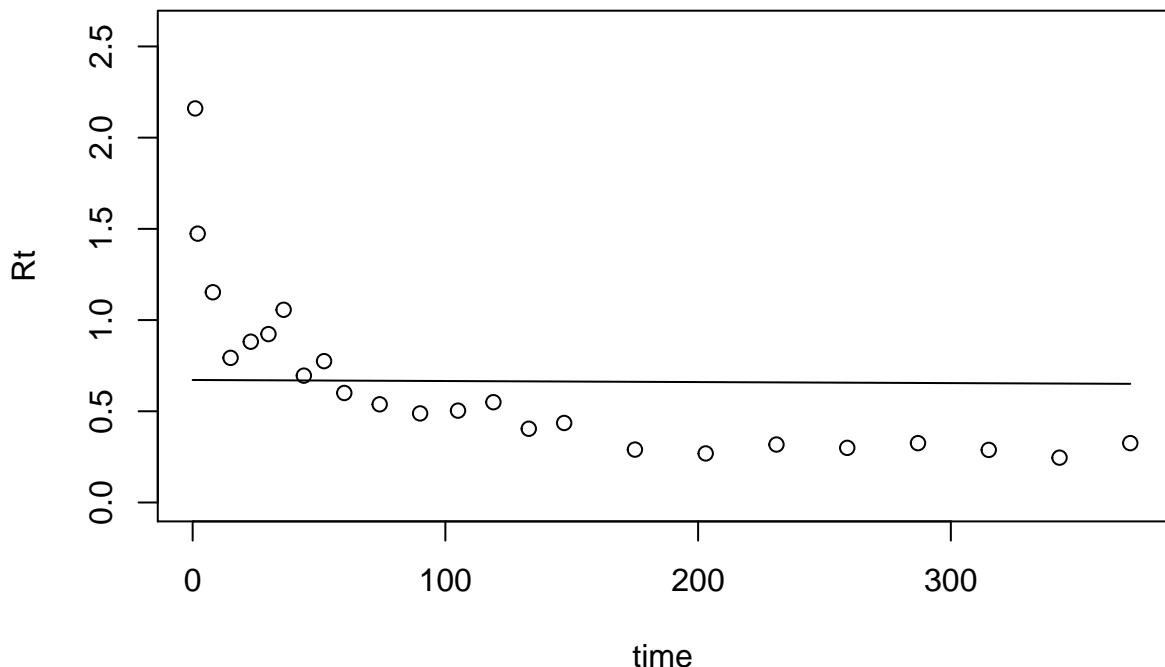
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	2.59	0.000135	NA	NA	NA	NA	2.6	0.973	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool parallel	9.92	0.0259	5.47e-05	0.0118	NA	NA	9.99	0.0242	18100	12500
Two-pool feedback	13.9	0.0259	5.47e-05	0.0143	0.173	5.12e-05	14.1	0.00311	3200	35.8
Two-pool series	11.9	0.0259	5.47e-05	0.0119	0.00584	NA	12	0.0087	145	27

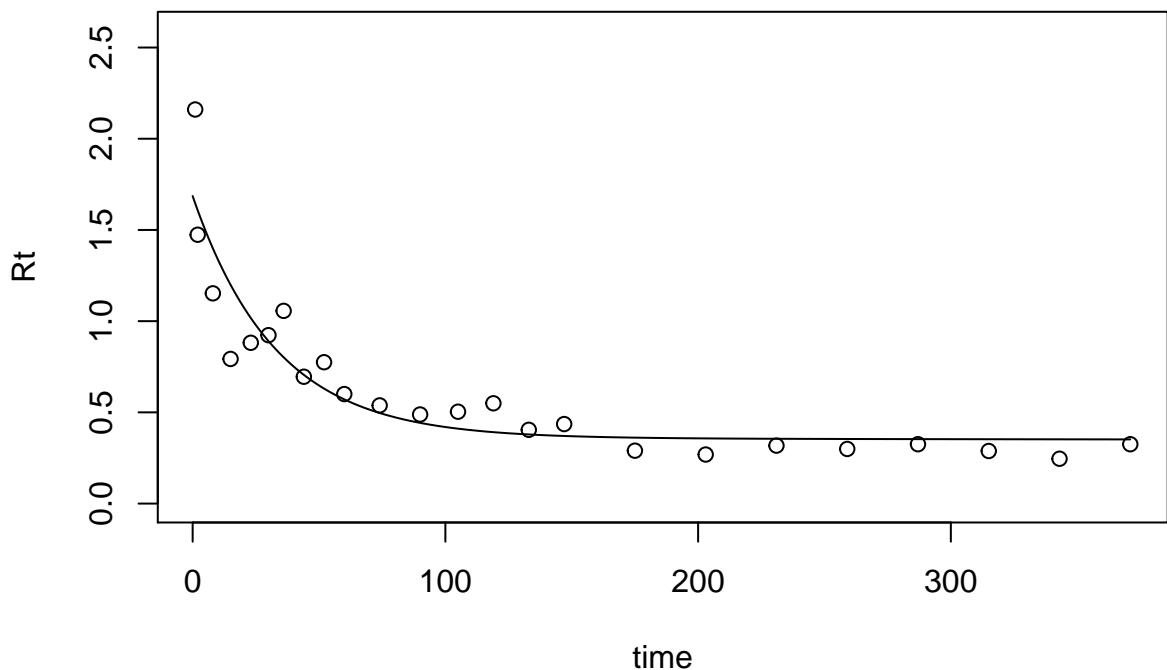
Variable Site30:

CO2 production rate

```
## [1] "Best fit parameter: 8.61026330656378e-05"
```



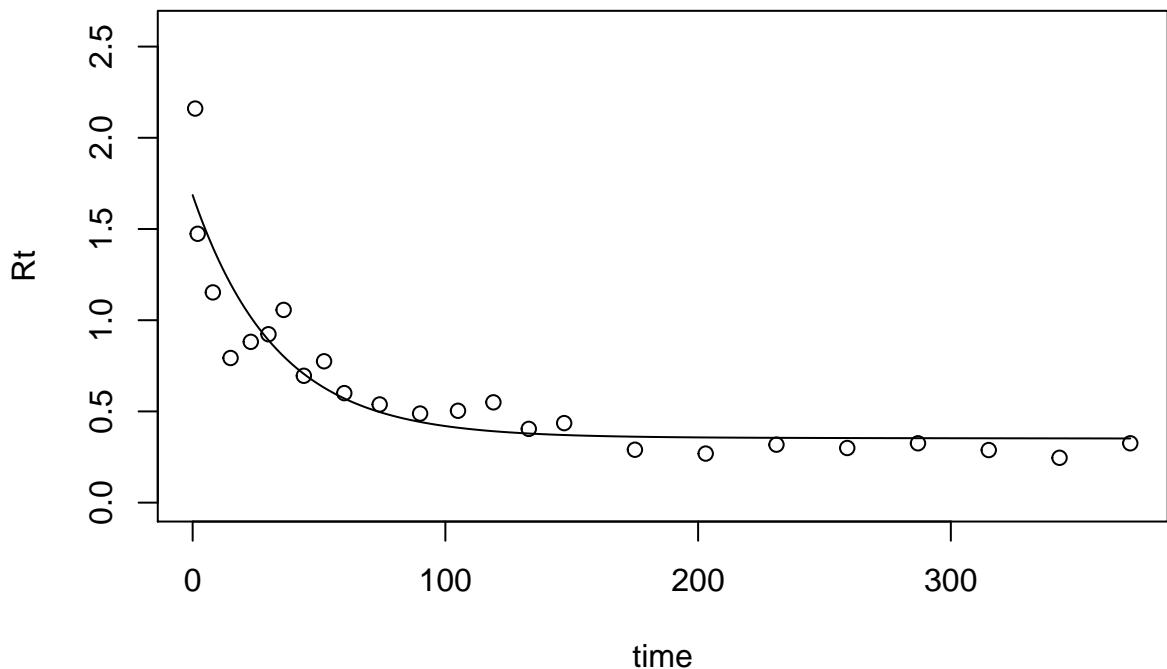
```
## [1] "AIC = 5.2882235116114"
## [1] "k1= 0.0303997836994646"
## [2] "k2= 4.61312835906368e-05"
## [3] "proportion of C0 in pool 1= 0.00560118153681022"
```



```

## [1] "AIC = 13.0946192977183"
## [1] "k1= 0.0304025786826478"
## [2] "k2= 4.61332976152052e-05"
## [3] "a21= 0.387782281892866"
## [4] "a12= 1.26834220313121e-05"
## [5] "Proportion of C0 in pool 1= 0.0091571047358977"

```

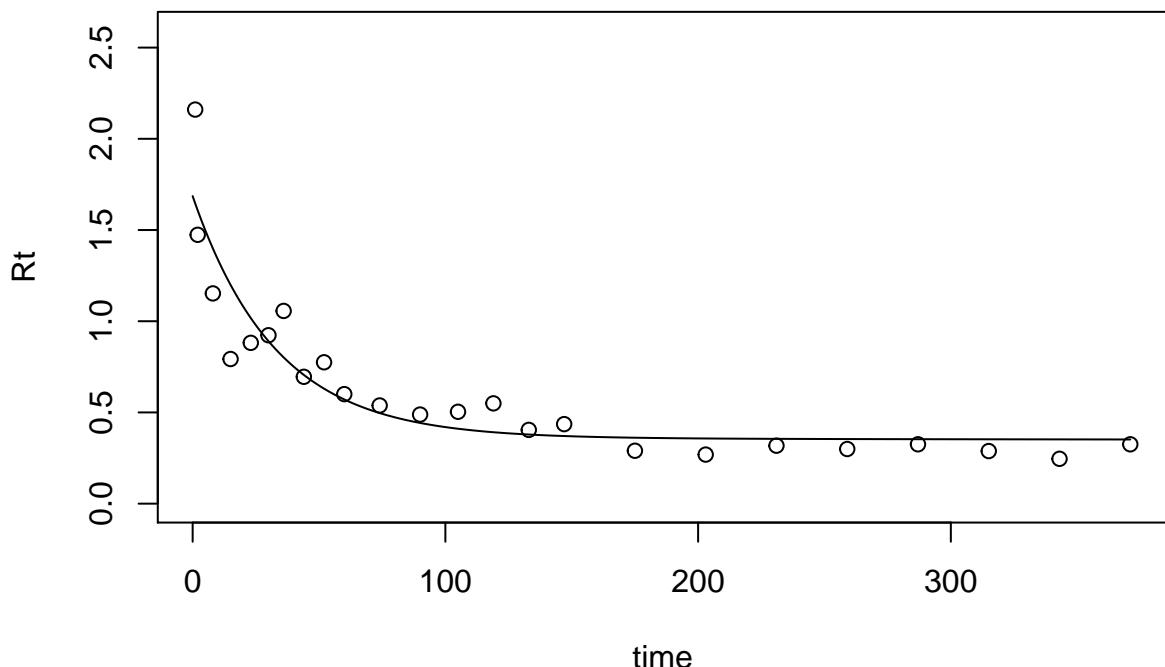


```

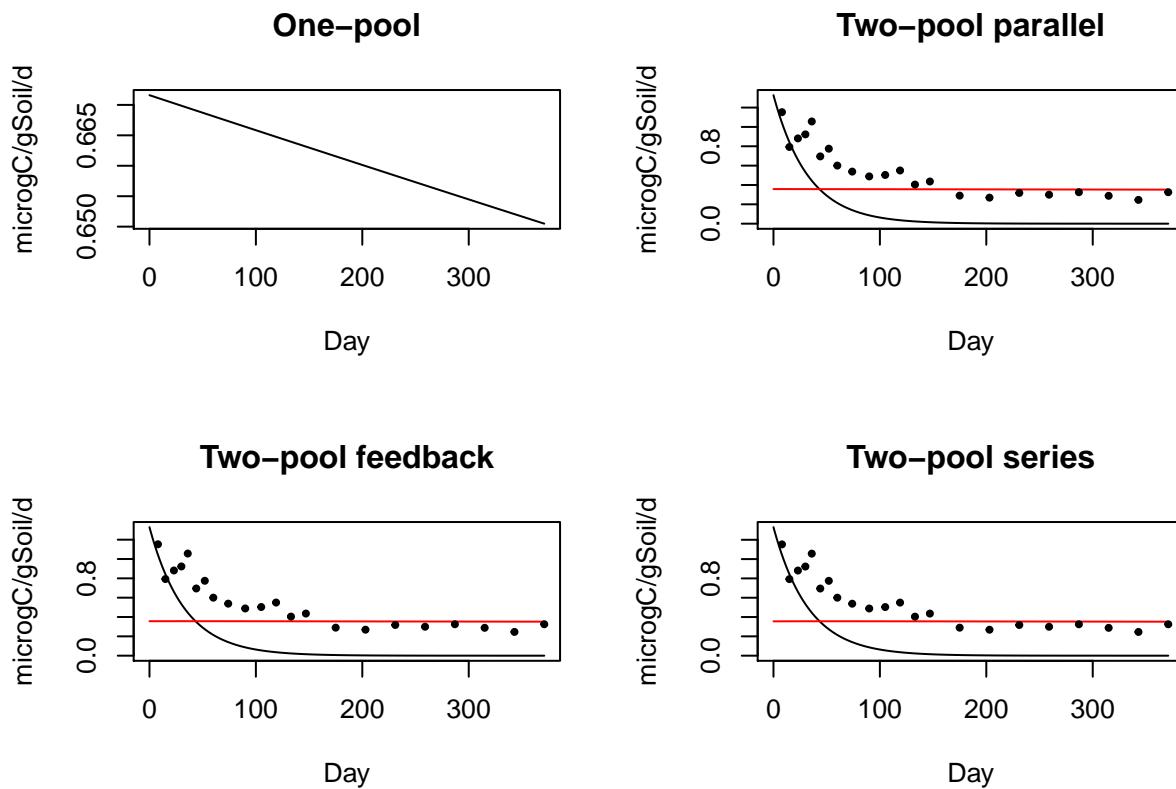
## [1] "AIC = 17.0946192861558"
## [1] "k1= 0.0304023548507462"
## [2] "k2= 4.61329107954388e-05"
## [3] "a21= 0.540038859436933"

```

```
## [4] "Proportion of C0 in pool 1= 0.0121984172785198"
```



```
## [1] "AIC = 15.0946192774615"
```



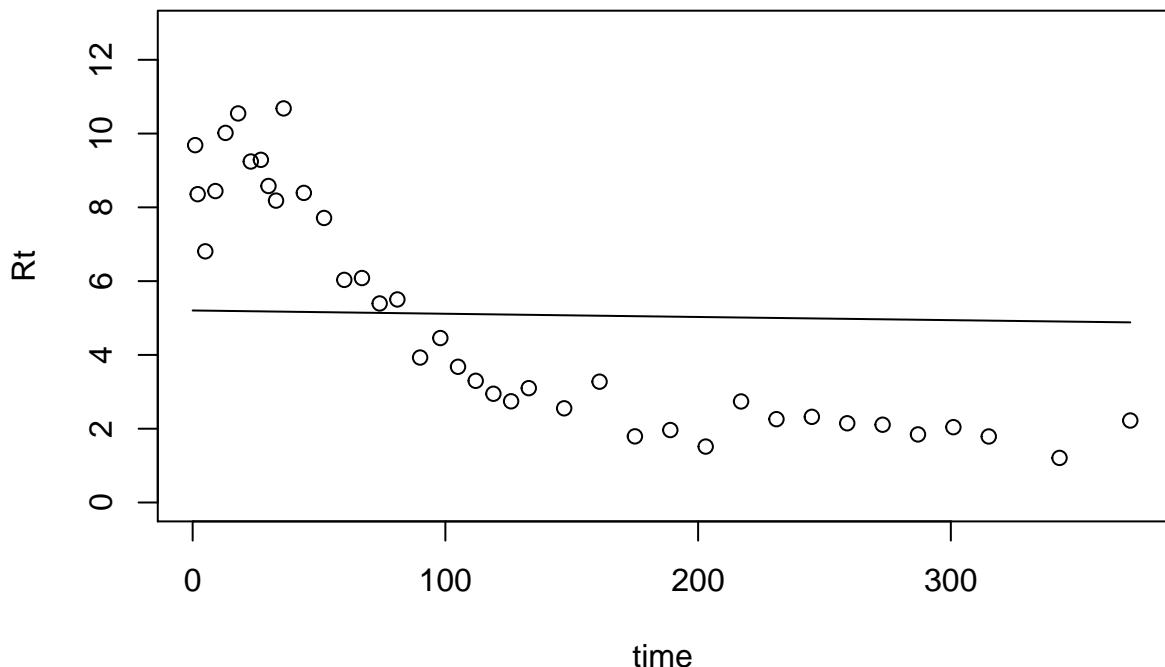
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	5.29	8.61e-05	NA	NA	NA	NA	5.3	0.978	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool parallel	13.1	0.0304	4.61e-05	0.0056	NA	NA	13.2	0.0192	21600	14900
Two-pool feedback	17.1	0.0304	4.61e-05	0.00916	0.388	1.27e-05	17.3	0.00247	8440	55.7
Two-pool series	15.1	0.0304	4.61e-05	0.0122	0.54	NA	15.2	0.00691	11700	1700

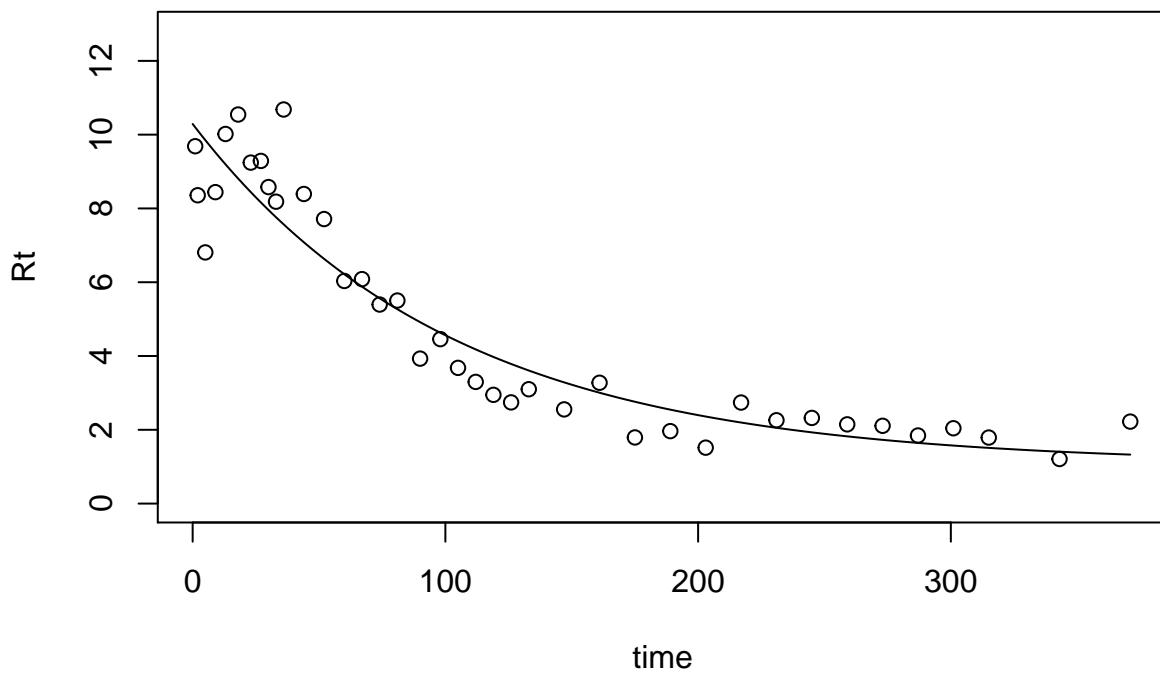
Variable Site31:

CO2 production rate

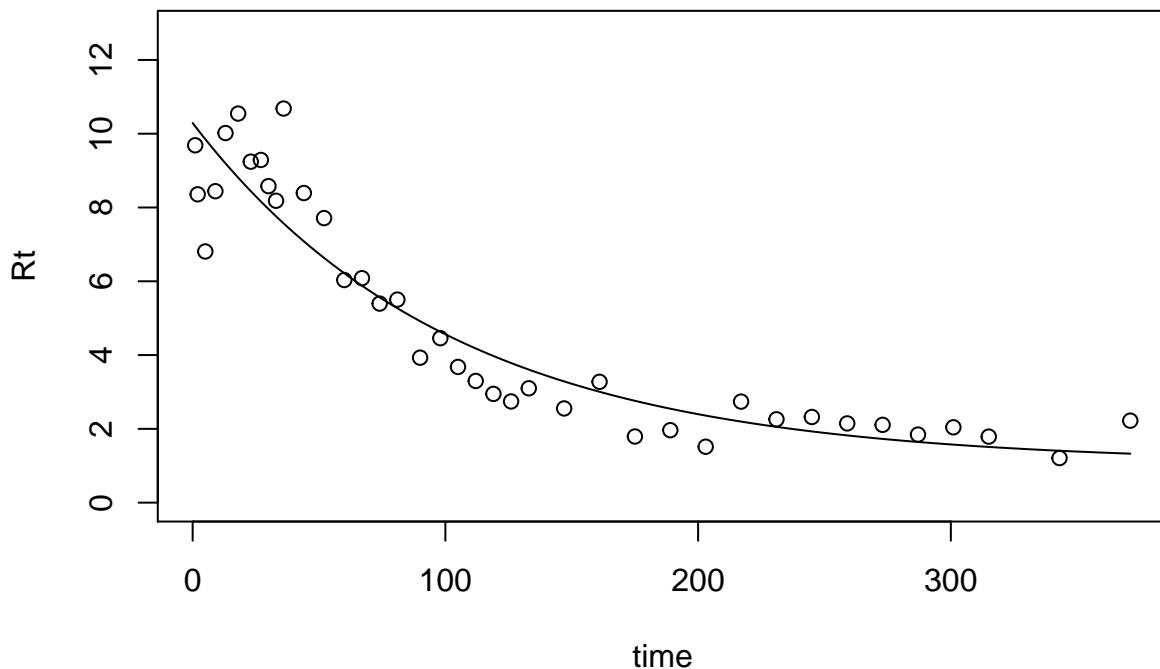
```
## [1] "Best fit parameter: 0.000172345056725763"
```



```
## [1] "AIC = -2.36658441955296"
## [1] "k1= 0.00973961529589929"
## [2] "k2= 3.74140618749131e-05"
## [3] "proportion of C0 in pool 1= 0.0312621652481834"
```

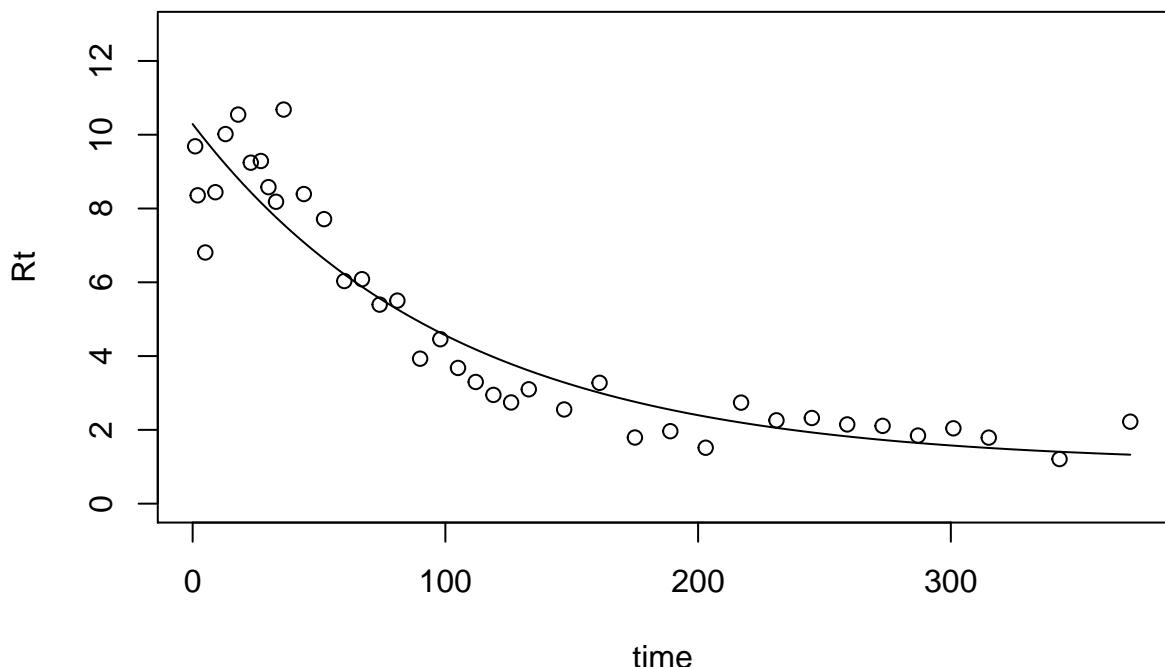


```
## [1] "AIC = 5.85807532657257"
## [1] "k1= 0.00973934575934265"
## [2] "k2= 3.7411563049253e-05"
## [3] "a21= 0.0106098153738284"
## [4] "a12= 9.15341441430906e-05"
## [5] "Proportion of C0 in pool 1= 0.0315999106773656"
```

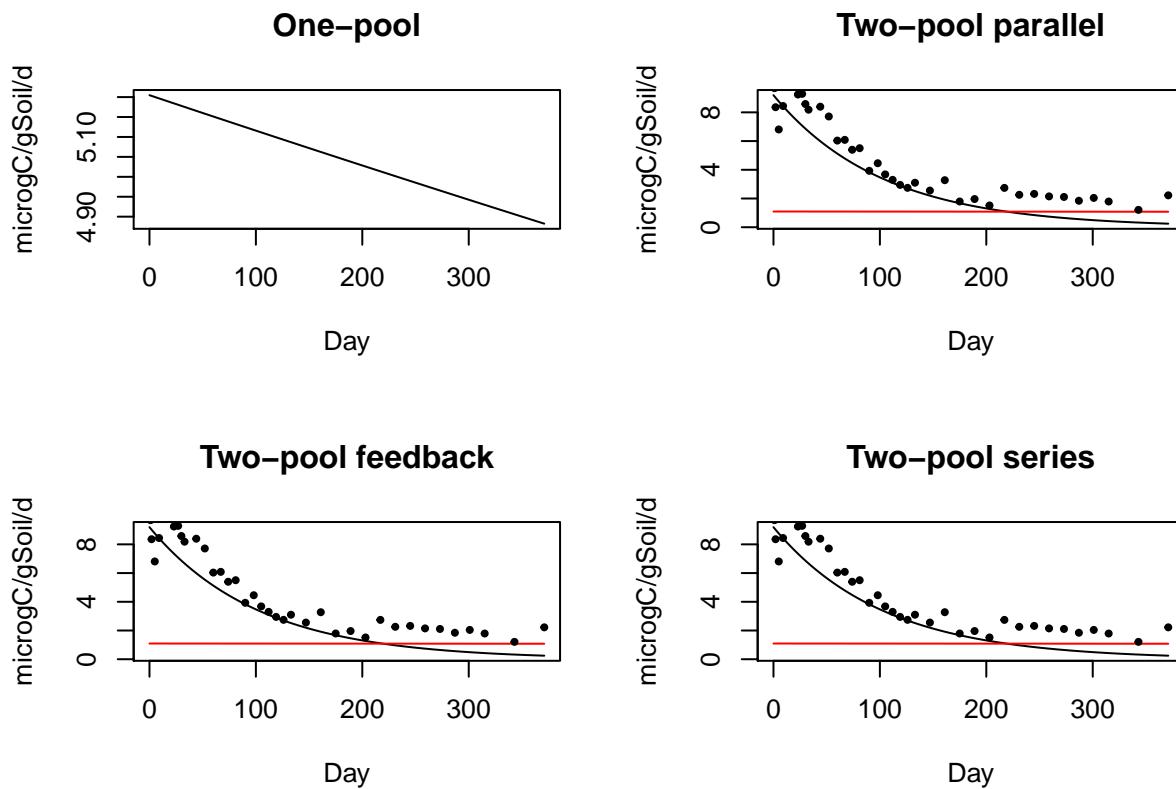


```
## [1] "AIC = 9.85807532545106"
## [1] "k1= 0.0097388390508465"
## [2] "k2= 3.7406774283464e-05"
## [3] "a21= 0.0104017496085949"
```

```
## [4] "Proportion of C0 in pool 1= 0.031594754729393"
```



```
## [1] "AIC = 7.8580753162532"
```



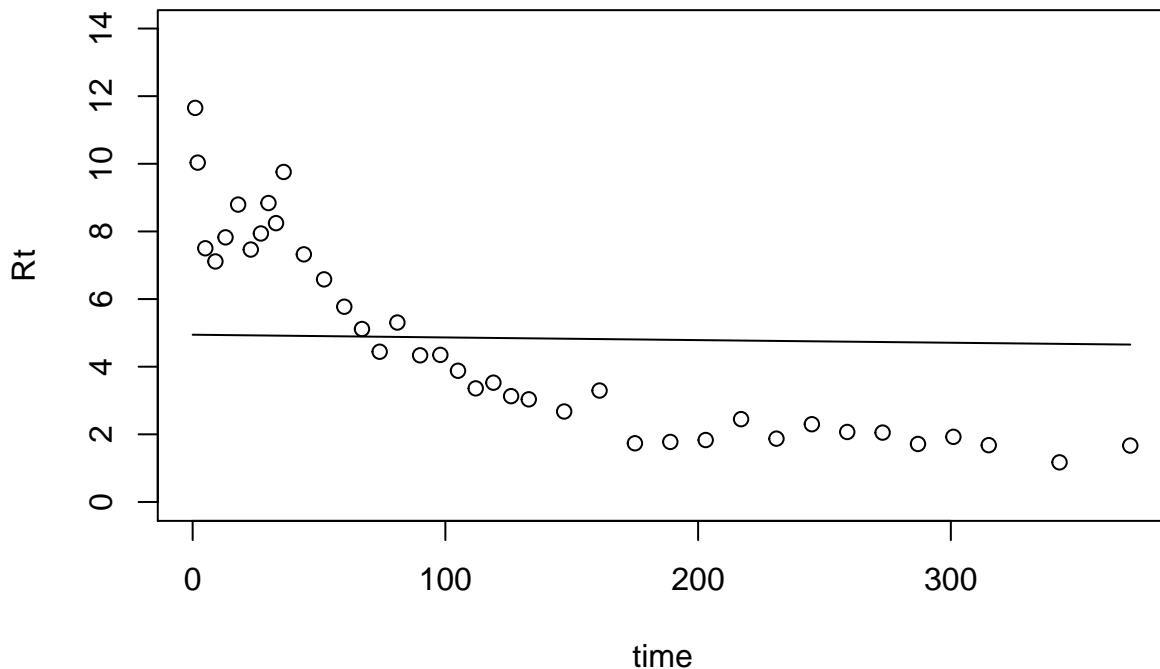
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.37	0.000172	NA	NA	NA	NA	-2.36	0.982	NA	NA
Two-pool parallel	5.86	0.00974	3.74e-05	0.0313	NA	NA	5.92	0.0156	25900	17700

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	9.86	0.00974	3.74e-05	0.0316	0.0106	9.15e-05	10	0.00202	386	72.3
Two-pool series	7.86	0.00974	3.74e-05	0.0316	0.0104	NA	7.97	0.00563	381	72.3

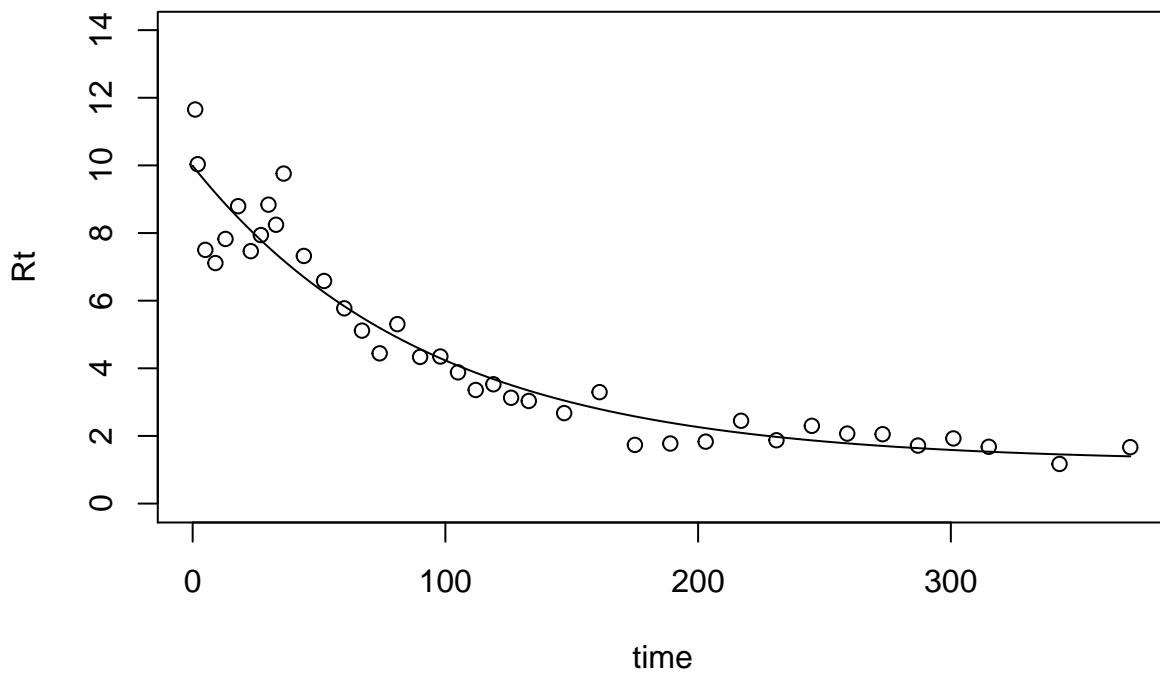
Variable Site32:

CO2 production rate

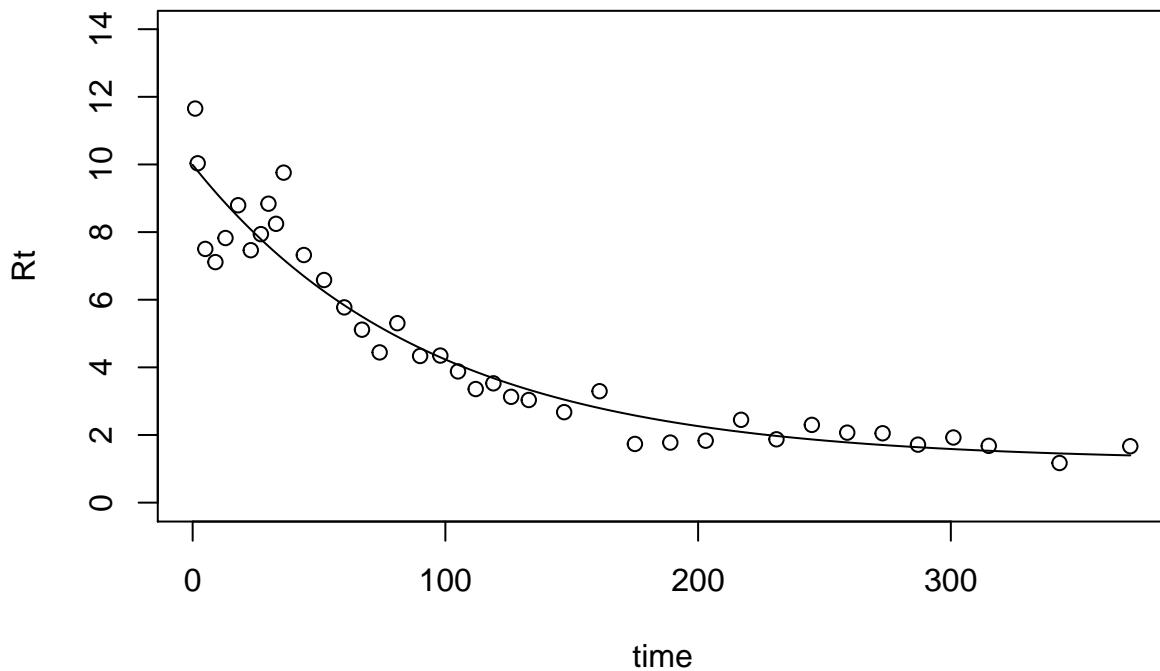
```
## [1] "Best fit parameter: 0.00016376583794582"
```



```
## [1] "AIC = -2.13140049770804"
## [1] "k1= 0.0107424772691706"
## [2] "k2= 4.26665552878324e-05"
## [3] "proportion of C0 in pool 1= 0.0269285190063374"
```

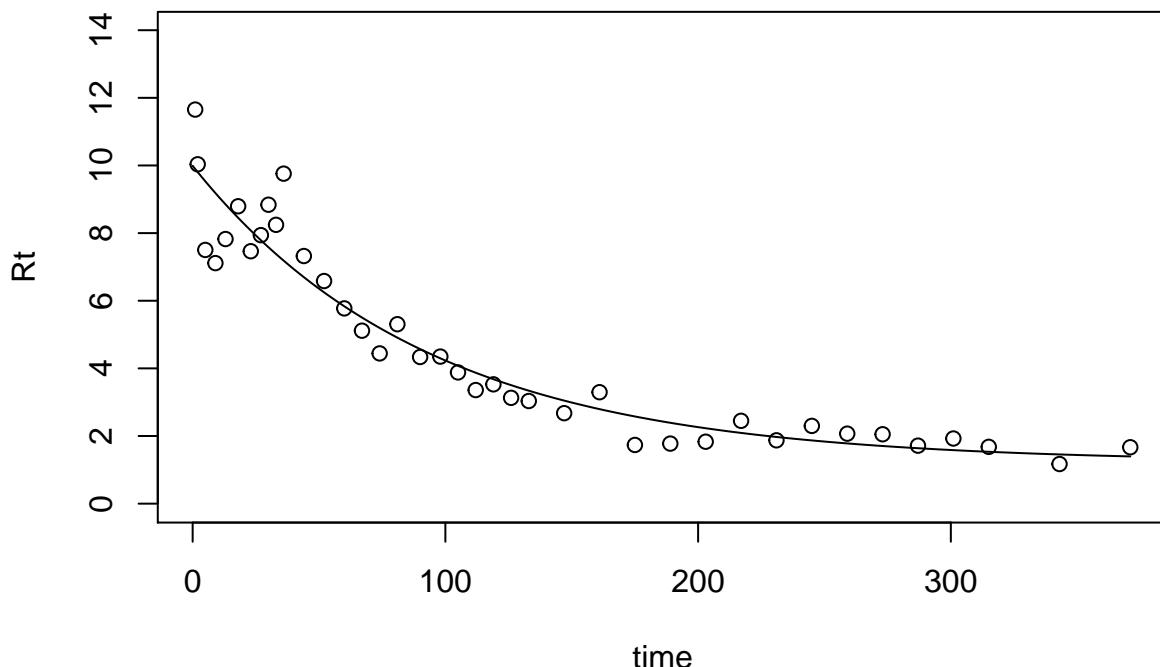


```
## [1] "AIC = 6.77089901962427"
## [1] "k1= 0.0107280317112587"
## [2] "k2= 5.7149364578858e-05"
## [3] "a21= 0.252411339012162"
## [4] "a12= 0.999987700396951"
## [5] "Proportion of C0 in pool 1= 0.0412455774401419"
```

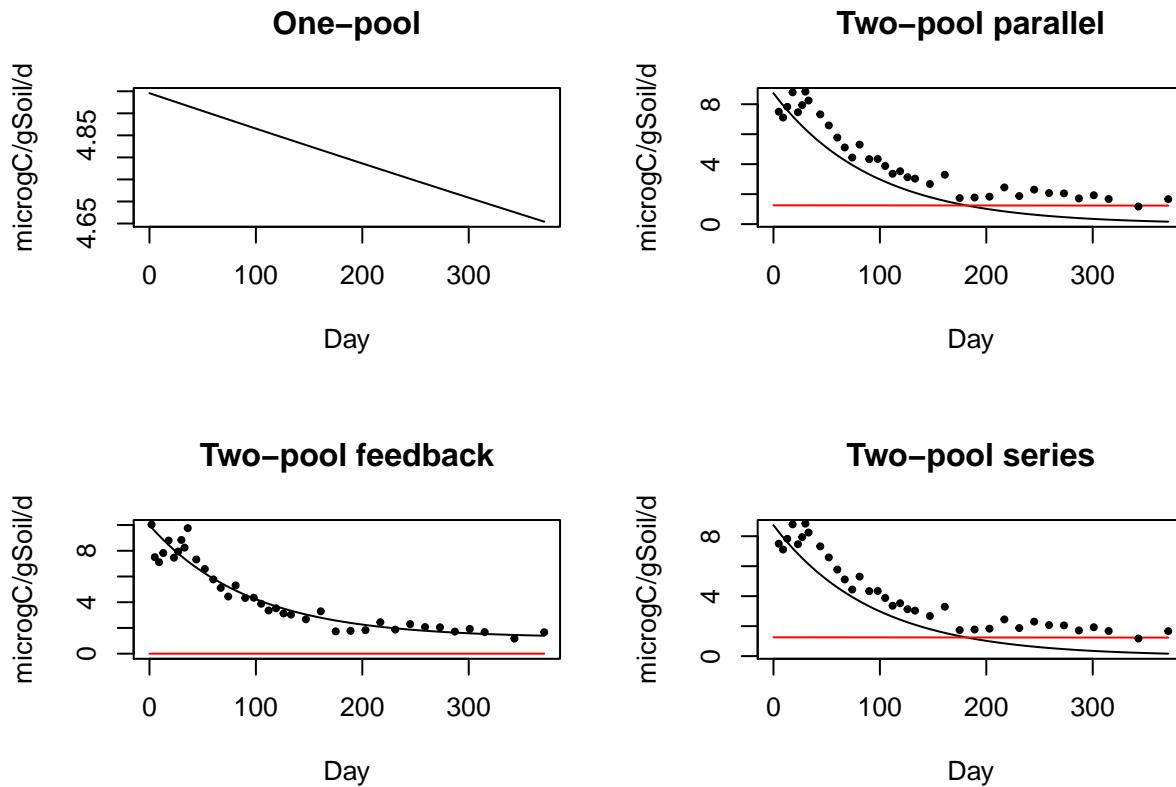


```
## [1] "AIC = 10.770899019579"
## [1] "k1= 0.0107427207350601"
## [2] "k2= 4.26683570046923e-05"
## [3] "a21= 0.00464171773739452"
```

```
## [4] "Proportion of C0 in pool 1= 0.0270538836947349"
```



```
## [1] "AIC = 8.77089901815097"
```



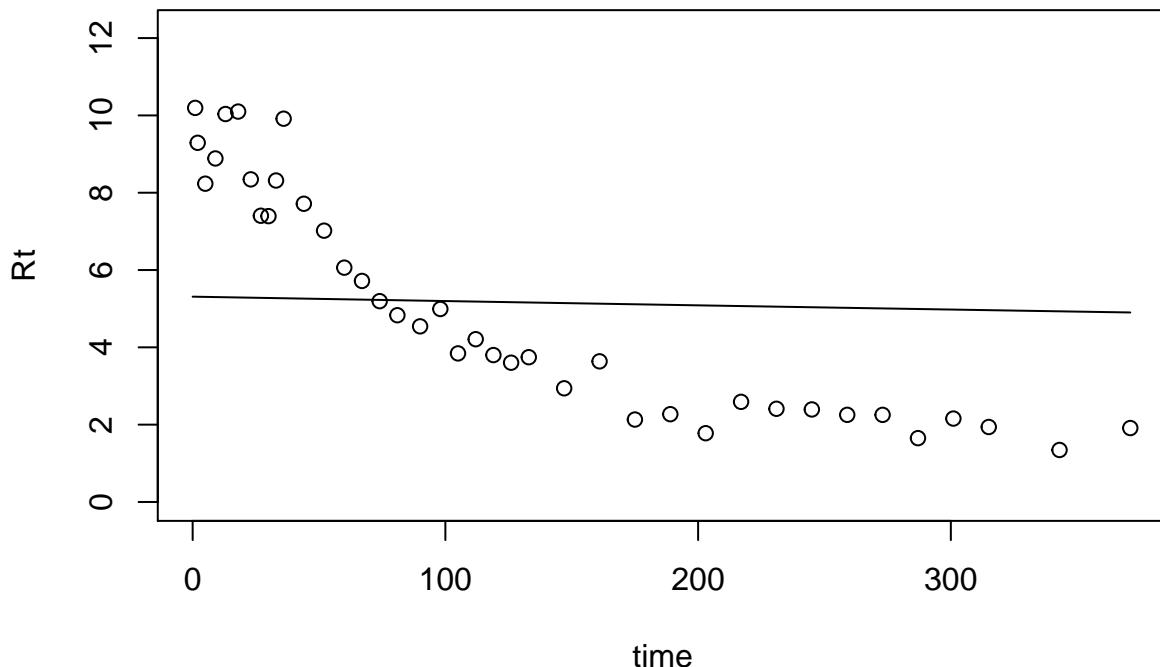
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.13	0.000164	NA	NA	NA	NA	-2.12	0.987	NA	NA
Two-pool parallel	6.77	0.0107	4.27e-05	0.0269	NA	NA	6.84	0.0112	22800	15600

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.8	0.0107	5.71e-05	0.0412	0.252	1	10.9	0.00144	6030	103
Two-pool series	8.77	0.0107	4.27e-05	0.0271	0.00464	NA	8.88	0.00403	202	65

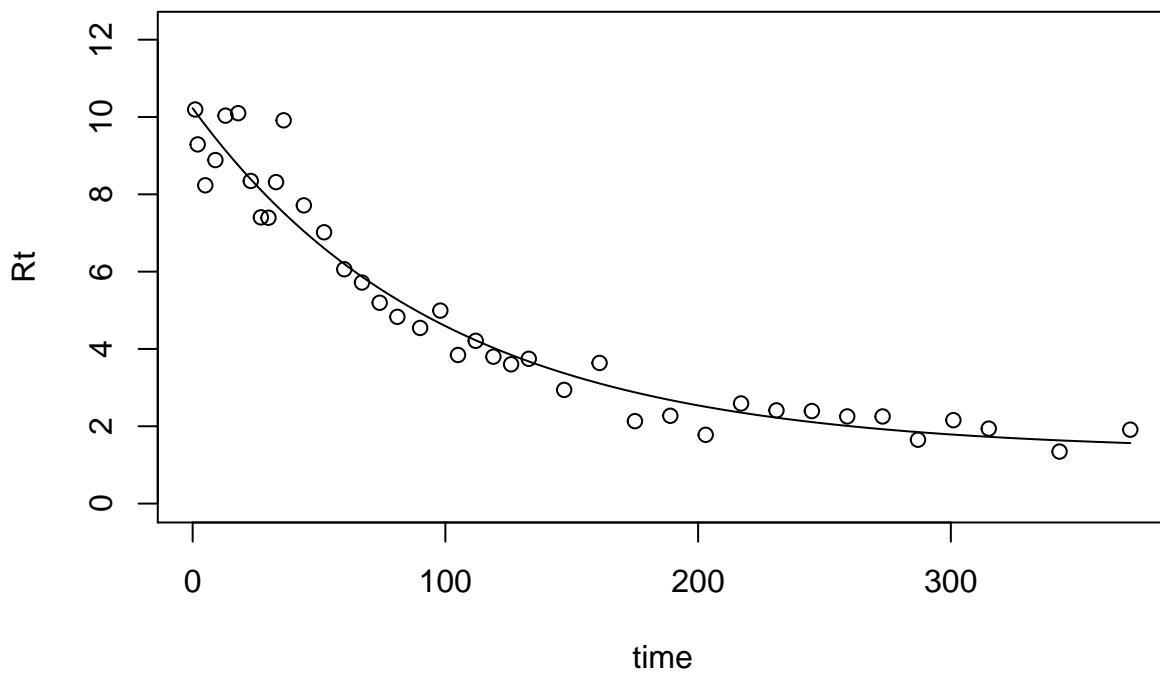
Variable Site33:

CO2 production rate

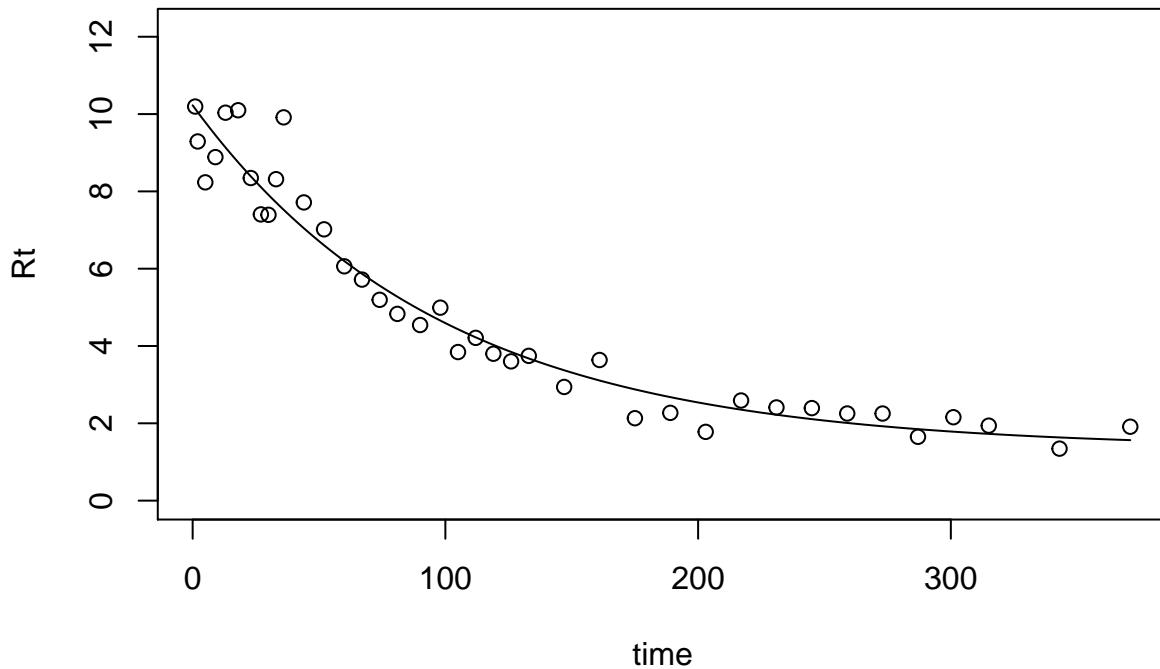
```
## [1] "Best fit parameter: 0.000215892280603663"
```



```
## [1] "AIC = -2.05373078215694"
## [1] "k1= 0.0101207652401172"
## [2] "k2= 5.84927114443833e-05"
## [3] "proportion of C0 in pool 1= 0.0355011732875775"
```

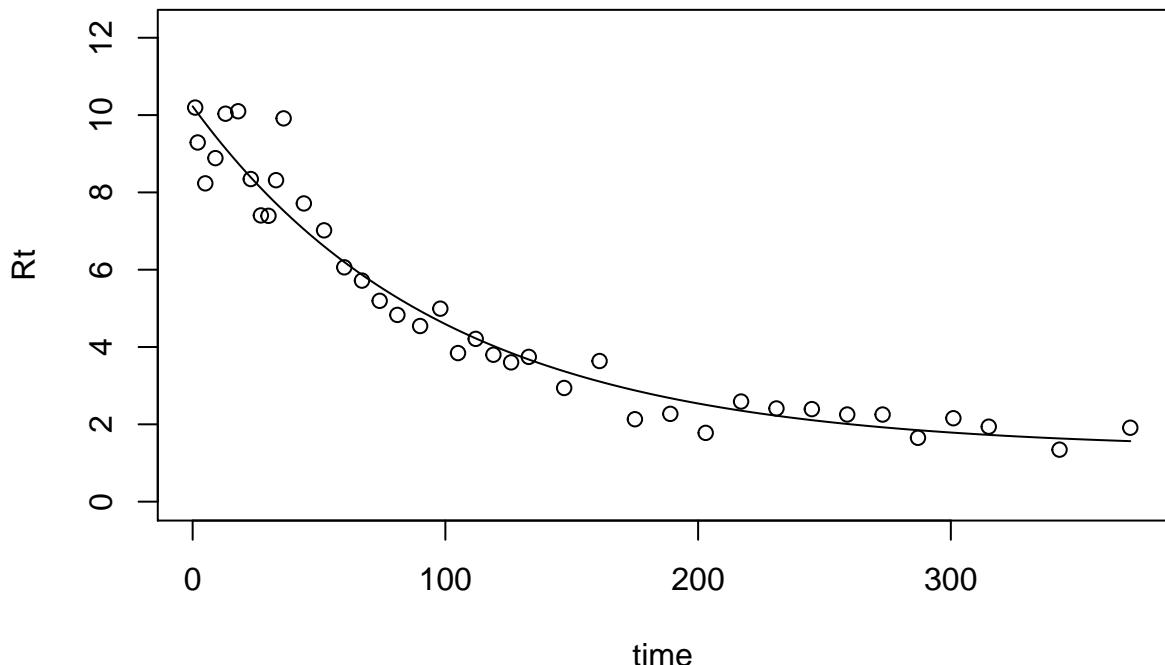


```
## [1] "AIC = 7.66187082524219"
## [1] "k1= 0.0101207216926007"
## [2] "k2= 5.84922680405734e-05"
## [3] "a21= 0.0138780721713751"
## [4] "a12= 1.36575743010514e-05"
## [5] "Proportion of C0 in pool 1= 0.0360039809269271"
```

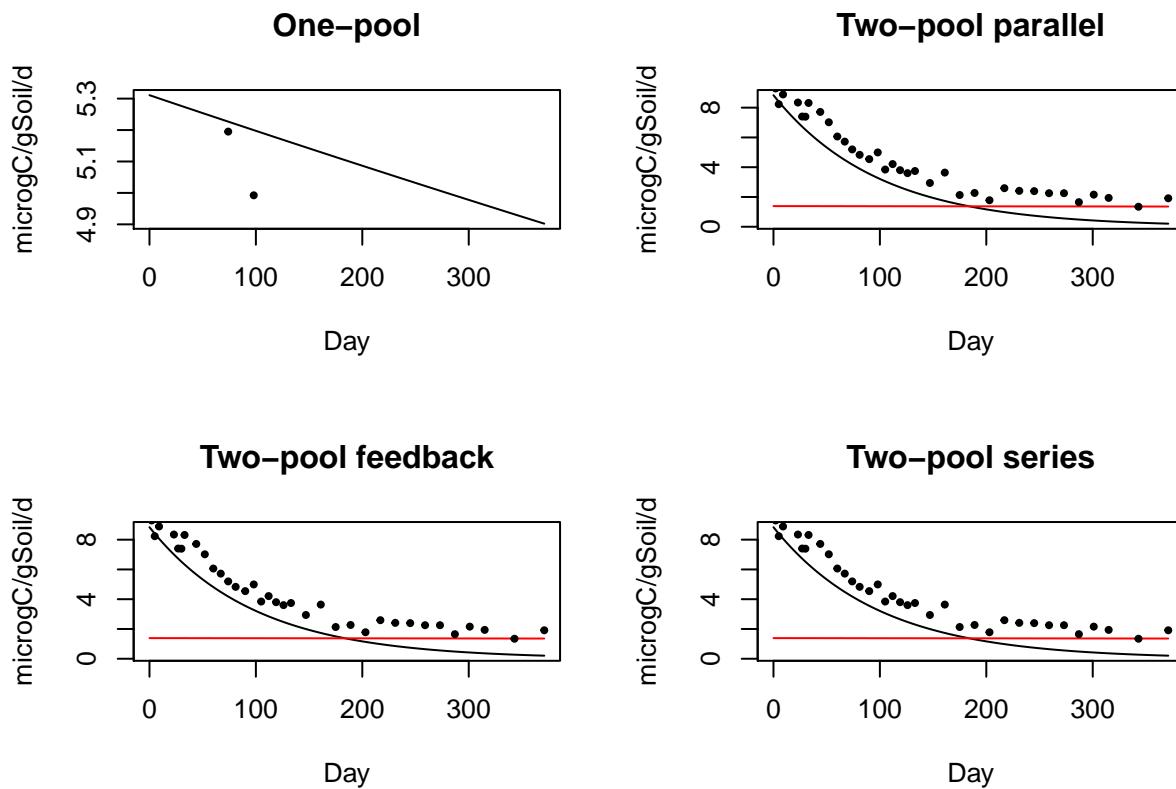


```
## [1] "AIC = 11.6618708253091"
## [1] "k1= 0.0101207201065461"
## [2] "k2= 5.84922405175735e-05"
## [3] "a21= 0.00462976842578994"
```

```
## [4] "Proportion of C0 in pool 1= 0.0356674350090733"
```



```
## [1] "AIC = 9.6618708253111"
```



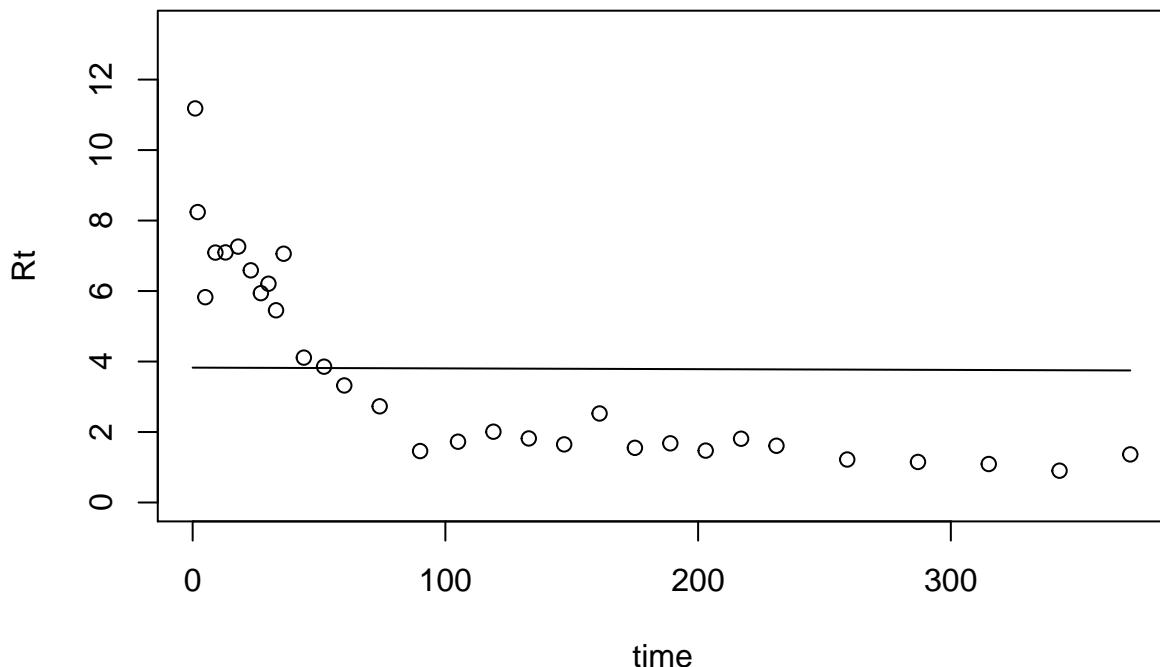
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrTq05	
One-pool	- 2.05	0.000216	NA	NA	NA	NA	- 2.04	0.992	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrTq05
Two-pool parallel	7.66	0.0101	5.85e-05	0.0355	NA	NA	7.73	0.00749	16500 11200
Two-pool feedback	11.7	0.0101	5.85e-05	0.036	0.0139	1.37e-05	11.8	0.000965	336 69.9
Two-pool series	9.66	0.0101	5.85e-05	0.0357	0.00463	NA	9.77	0.0027	178 68.9

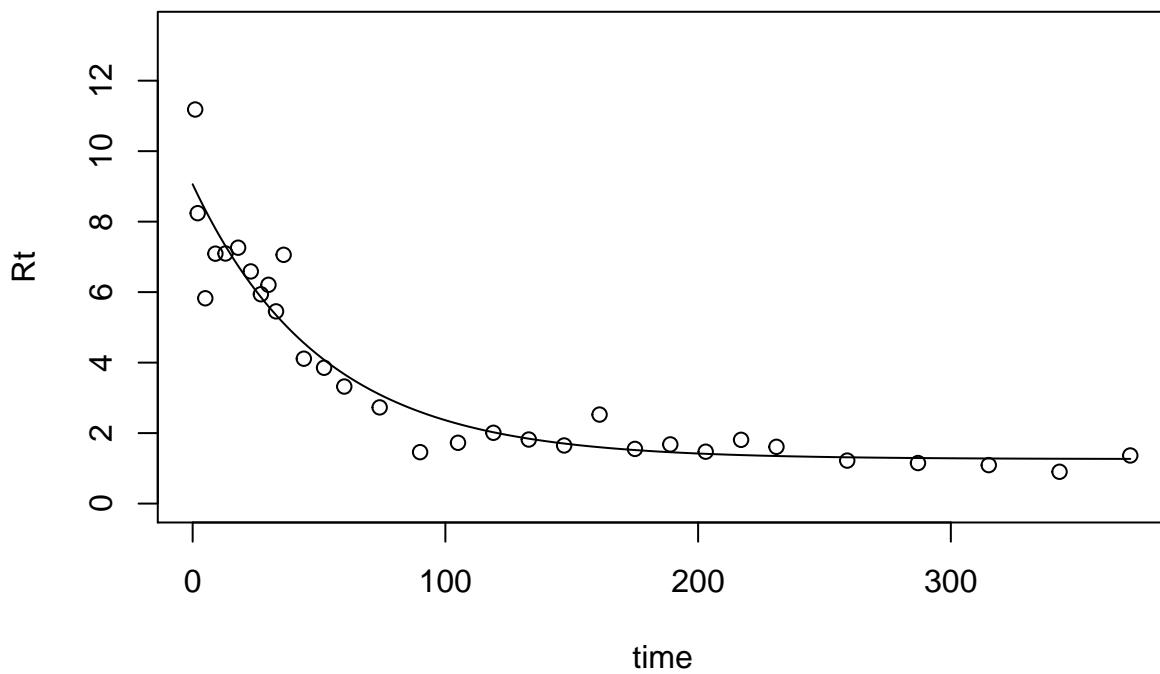
Variable Site34:

CO2 production rate

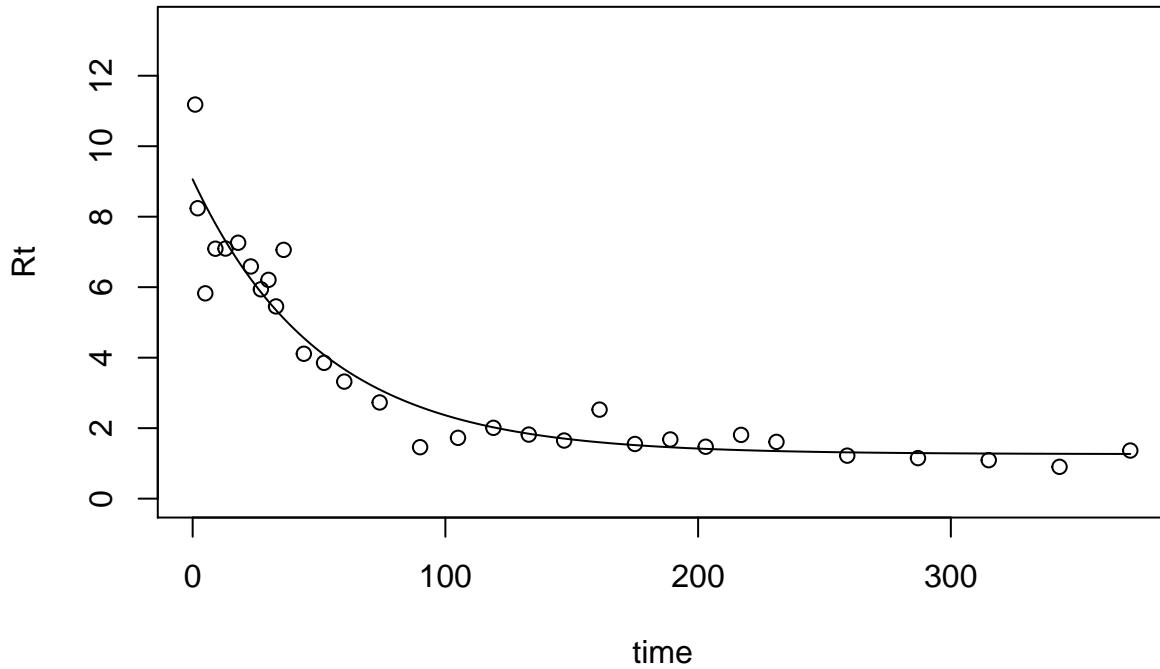
```
## [1] "Best fit parameter: 5.66895363187764e-05"
```



```
## [1] "AIC = -1.95621955127766"
## [1] "k1= 0.0196072215215642"
## [2] "k2= 1.89412115663702e-05"
## [3] "proportion of C0 in pool 1= 0.00588633162765251"
```

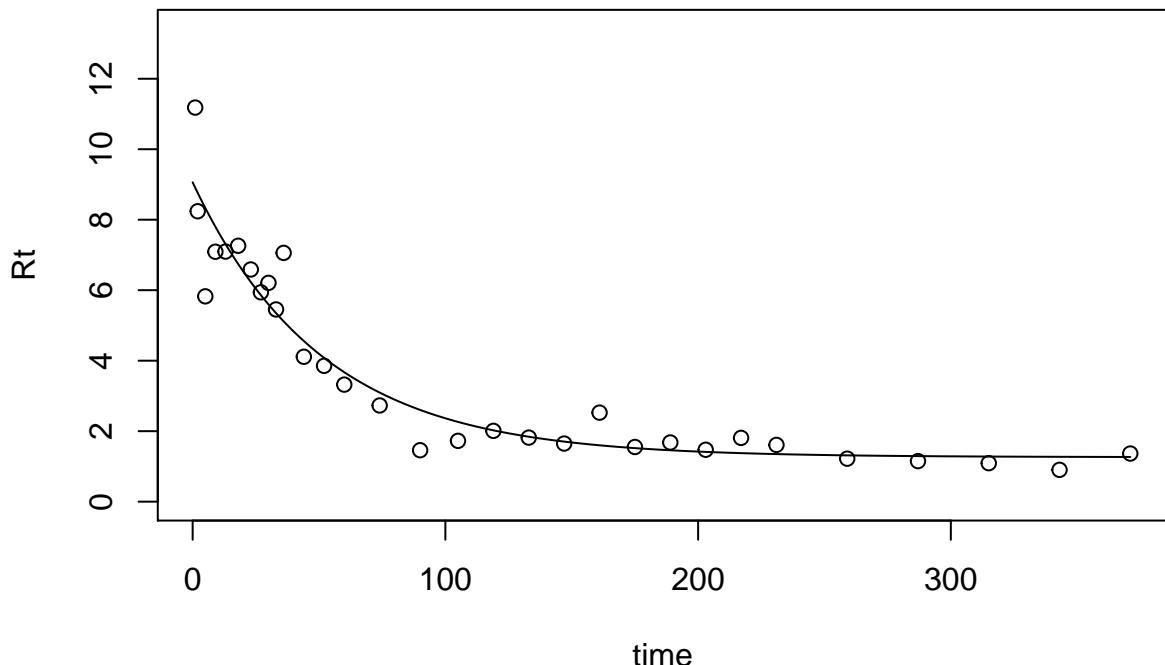


```
## [1] "AIC = 6.84478401864477"
## [1] "k1= 0.0196071851917656"
## [2] "k2= 1.89413525073537e-05"
## [3] "a21= 0.300543518370304"
## [4] "a12= 3.02119494556274e-05"
## [5] "Proportion of C0 in pool 1= 0.00841910905166821"
```

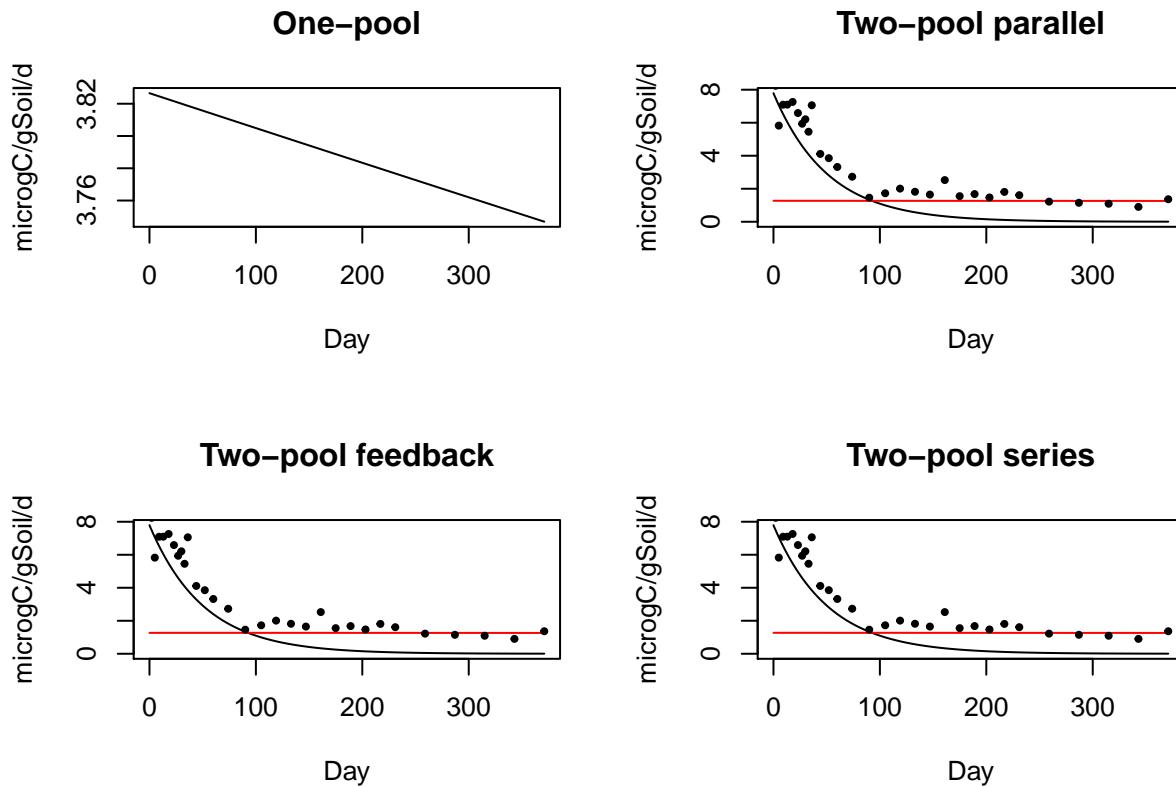


```
## [1] "AIC = 10.8447840185671"
## [1] "k1= 0.0196072097494388"
## [2] "k2= 1.89412014582085e-05"
## [3] "a21= 0.132404067755203"
```

```
## [4] "Proportion of C0 in pool 1= 0.00678564432327028"
```



```
## [1] "AIC = 8.84478401860259"
```



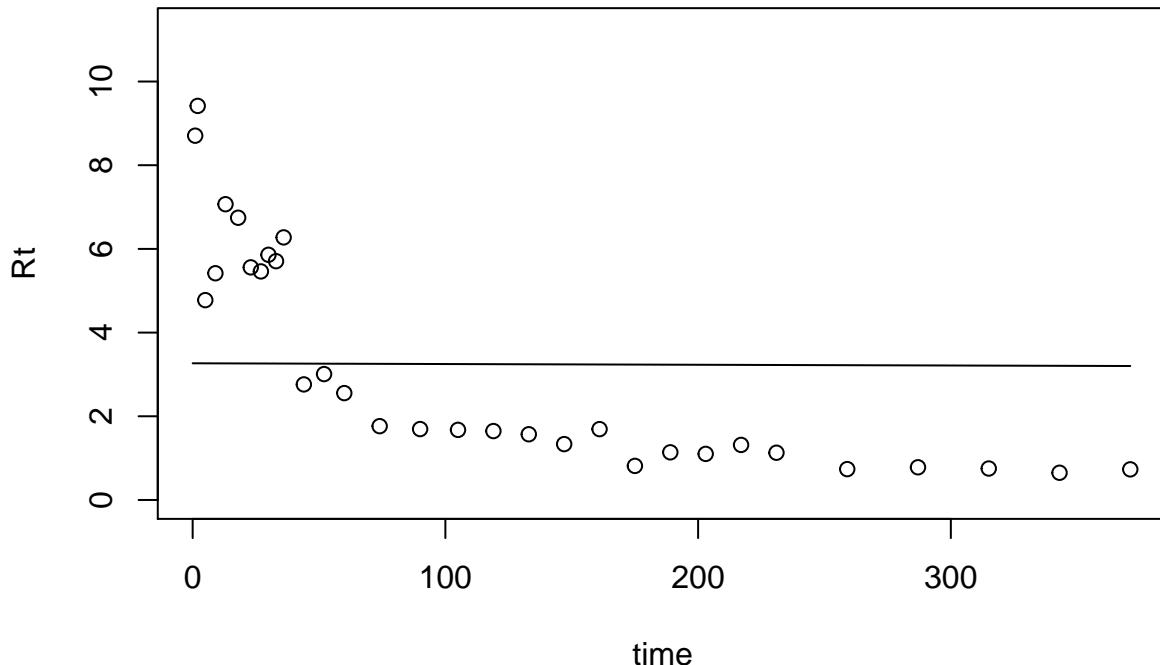
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.96	5.67e-05	NA	NA	NA	NA	-1.95	0.987	NA	NA
Two-pool parallel	6.84	0.0196	1.89e-05	0.00589	NA	NA	6.91	0.0118	52500	36300

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	10.8	0.0196	1.89e-05	0.00842	0.301	3.02e-05	11	0.00152	15900	64
Two-pool series	8.84	0.0196	1.89e-05	0.00679	0.132	NA	8.95	0.00424	7040	43.8

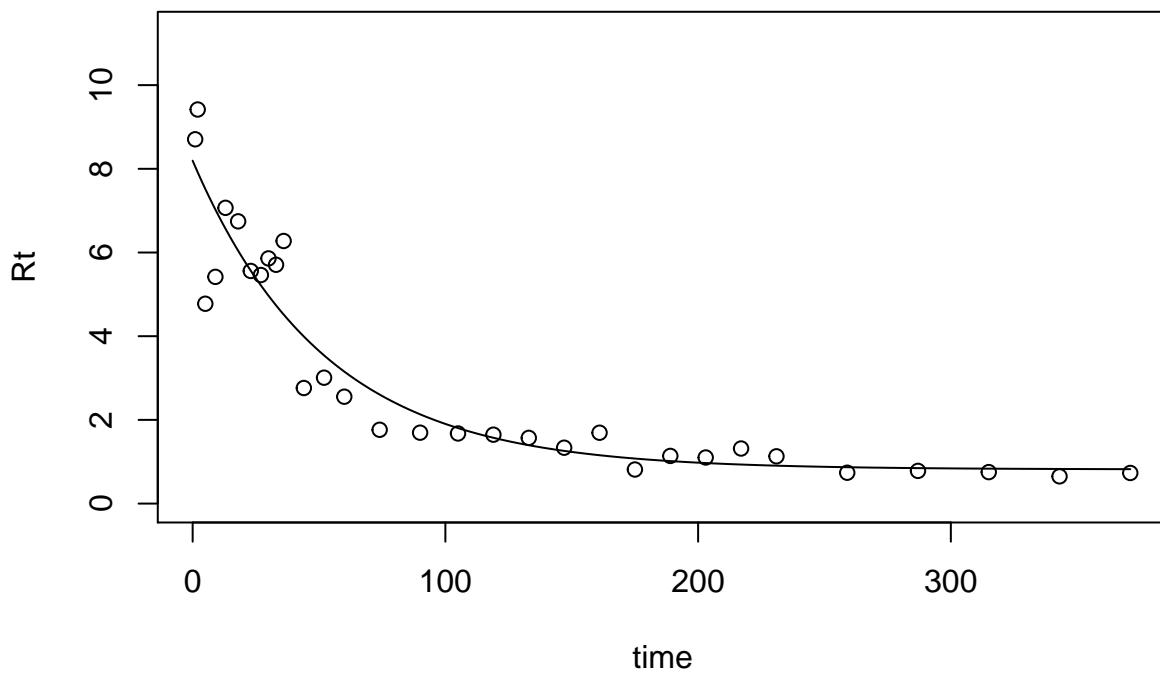
Variable Site35:

CO2 production rate

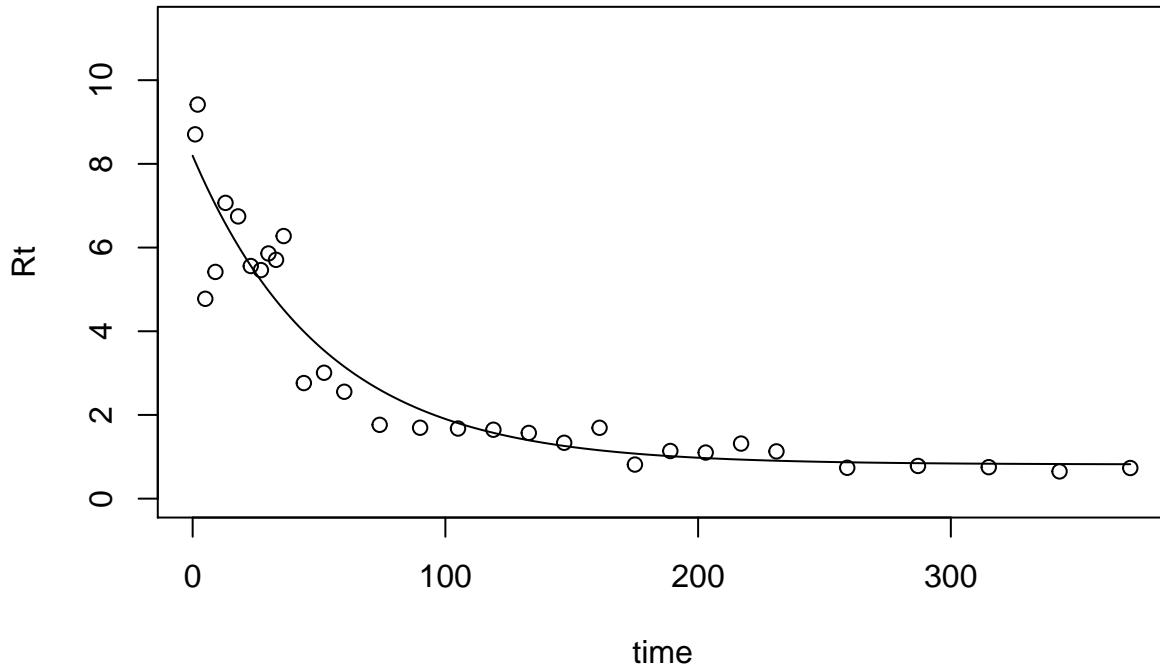
```
## [1] "Best fit parameter: 5.41661773569666e-05"
```



```
## [1] "AIC = -1.78557106100381"
## [1] "k1= 0.0191699143625036"
## [2] "k2= 1.36918406031233e-05"
## [3] "proportion of C0 in pool 1= 0.00637946668238421"
```

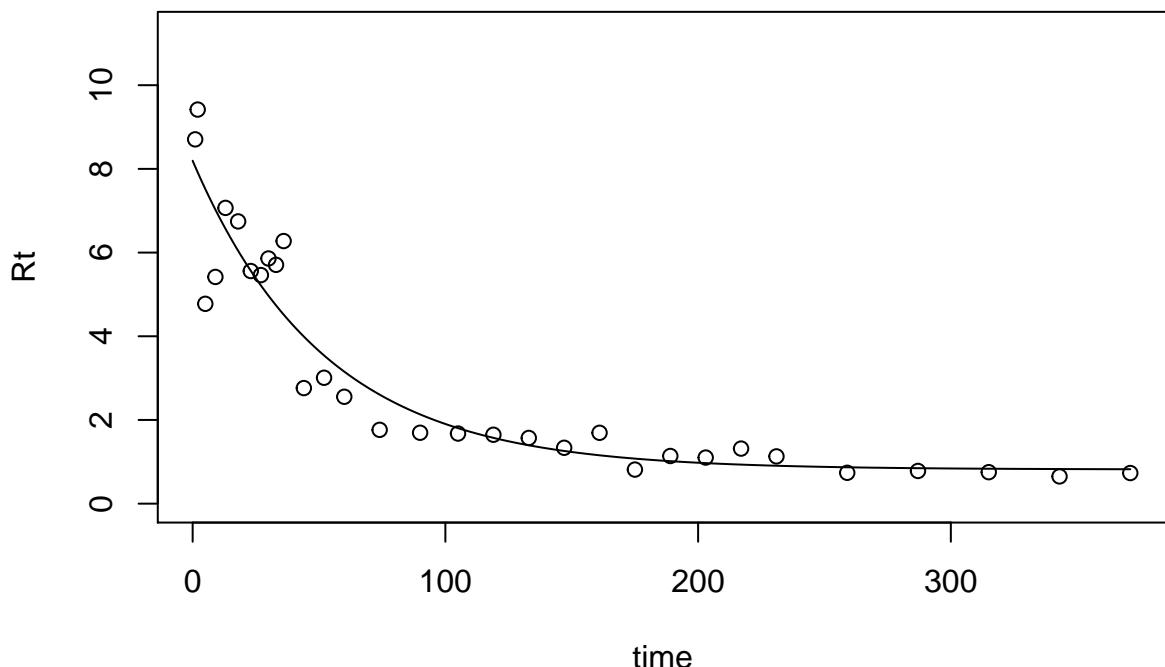


```
## [1] "AIC = 6.66880350383988"
## [1] "k1= 0.0191699055333086"
## [2] "k2= 1.36920603271592e-05"
## [3] "a21= 0.305387344353507"
## [4] "a12= 5.45176482764642e-05"
## [5] "Proportion of C0 in pool 1= 0.00918709829560388"
```

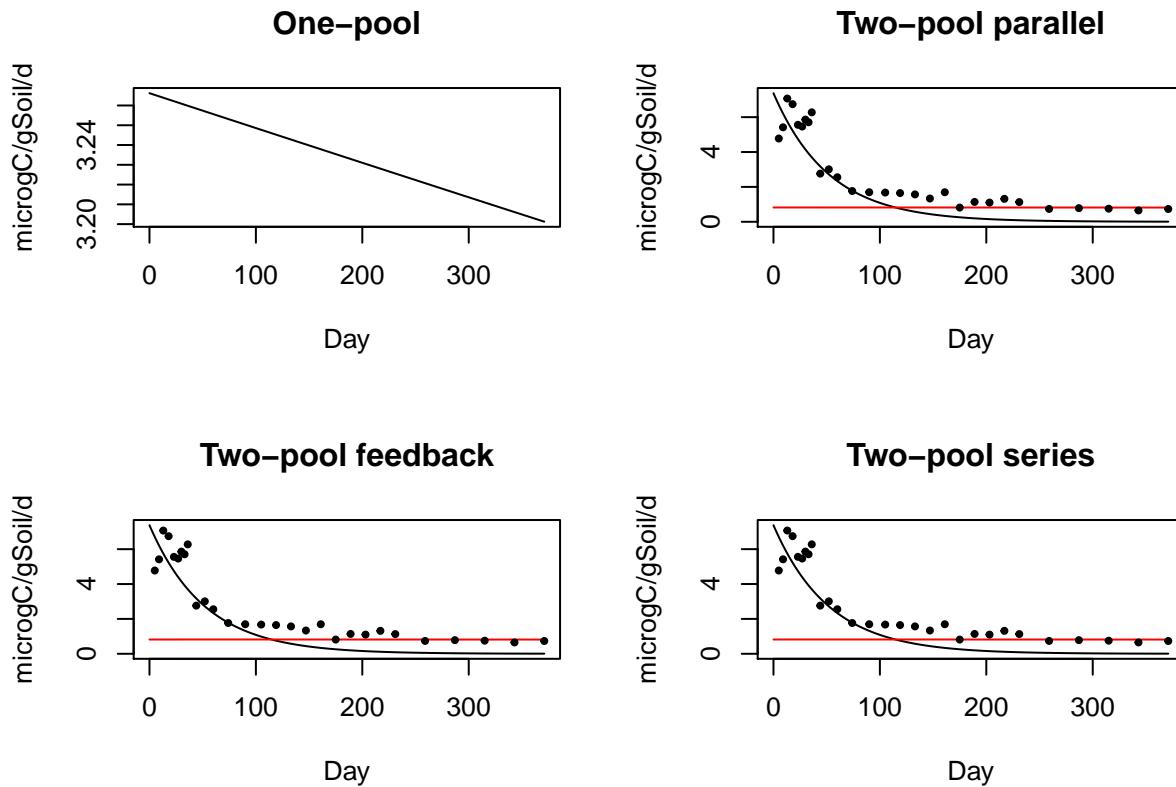


```
## [1] "AIC = 10.6688035032648"
## [1] "k1= 0.0191698668785708"
## [2] "k2= 1.3691794955736e-05"
## [3] "a21= 0.0881342485369224"
```

```
## [4] "Proportion of C0 in pool 1= 0.00699655390541565"
```



```
## [1] "AIC = 8.66880350381876"
```



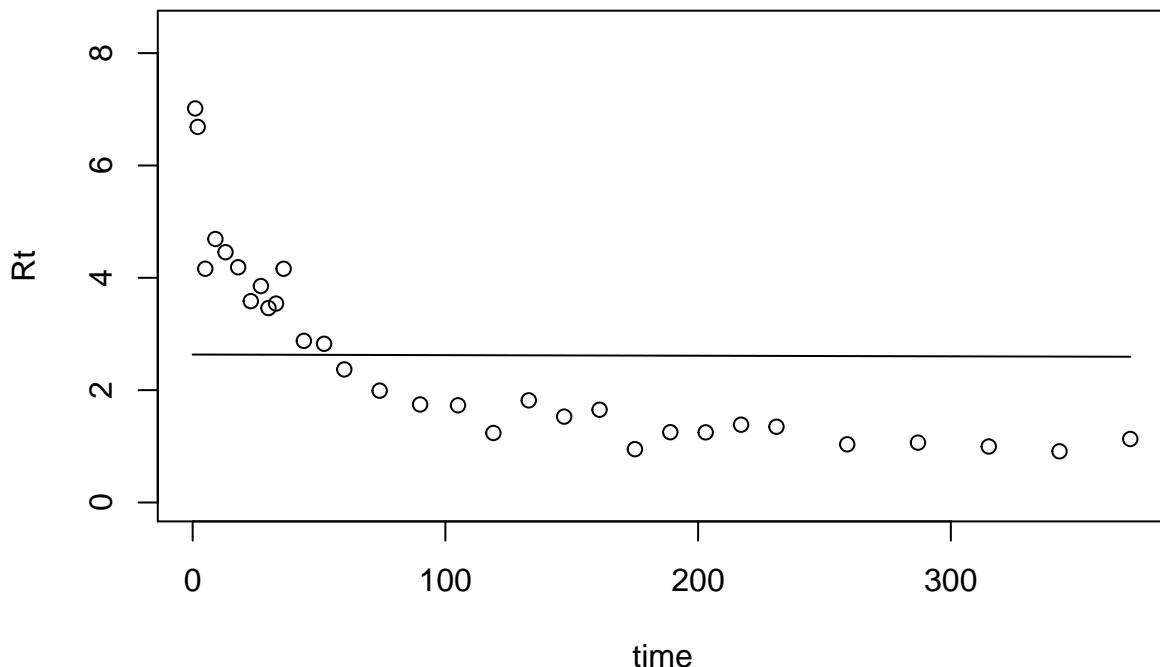
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	- 1.79	5.42e- 05	NA	NA	NA	NA	- 1.77	0.984	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
Two-pool parallel	6.67	0.0192	1.37e-05	0.00638	NA	NA	6.73	0.014	72600 50200
Two-pool feedback	10.7	0.0192	1.37e-05	0.00919	0.305	5.45e-05	10.8	0.0018	22400 66.3
Two-pool series	8.67	0.0192	1.37e-05	0.007	0.0881	NA	8.78	0.00503	6490 41.5

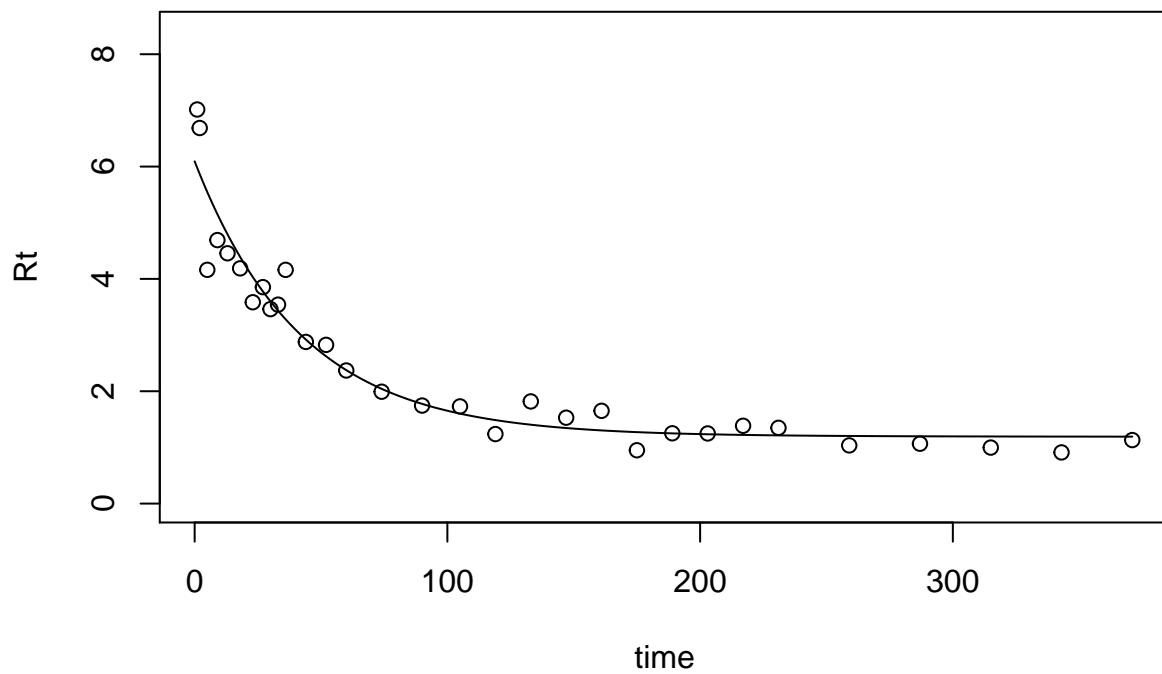
Variable Site36:

CO2 production rate

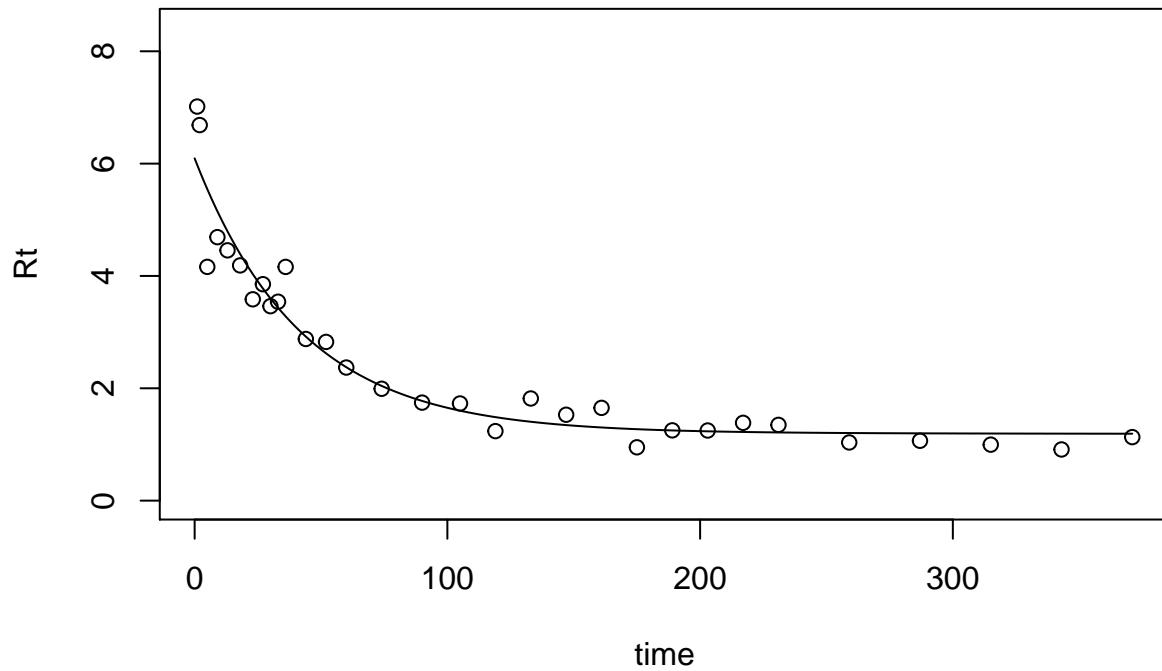
```
## [1] "Best fit parameter: 4.05231649895394e-05"
```



```
## [1] "AIC = 0.0302171434963536"
## [1] "k1= 0.0237354900091703"
## [2] "k2= 1.85027711855756e-05"
## [3] "proportion of C0 in pool 1= 0.00317262560676257"
```

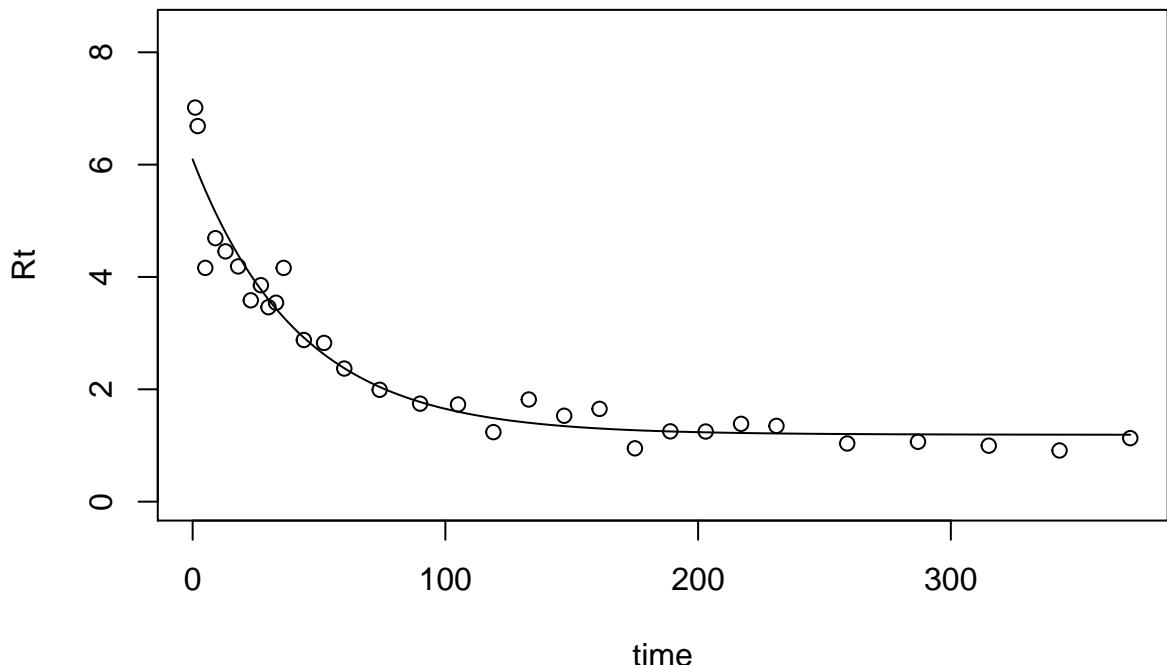


```
## [1] "AIC =  9.34735411611092"
## [1] "k1=  0.023718068448969"
## [2] "k2=  3.66328615512741e-05"
## [3] "a21=  0.49454762249087"
## [4] "a12=  0.999938289224567"
## [5] "Proportion of C0 in pool 1=  0.0078197543697448"
```

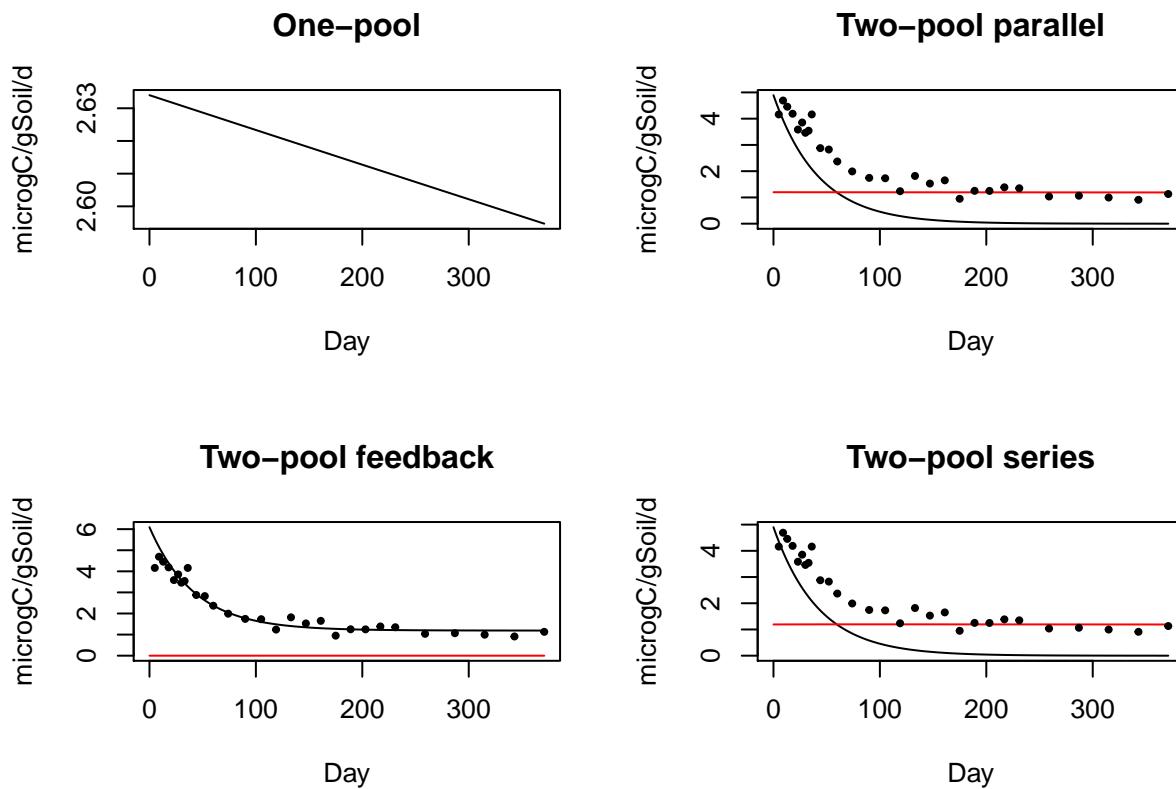


```
## [1] "AIC =  13.3473554917212"
## [1] "k1=  0.0237360104438163"
## [2] "k2=  1.8503089273599e-05"
## [3] "a21=  0.656849062100326"
```

```
## [4] "Proportion of C0 in pool 1= 0.00925919095959132"
```



```
## [1] "AIC = 11.3473541032735"
```



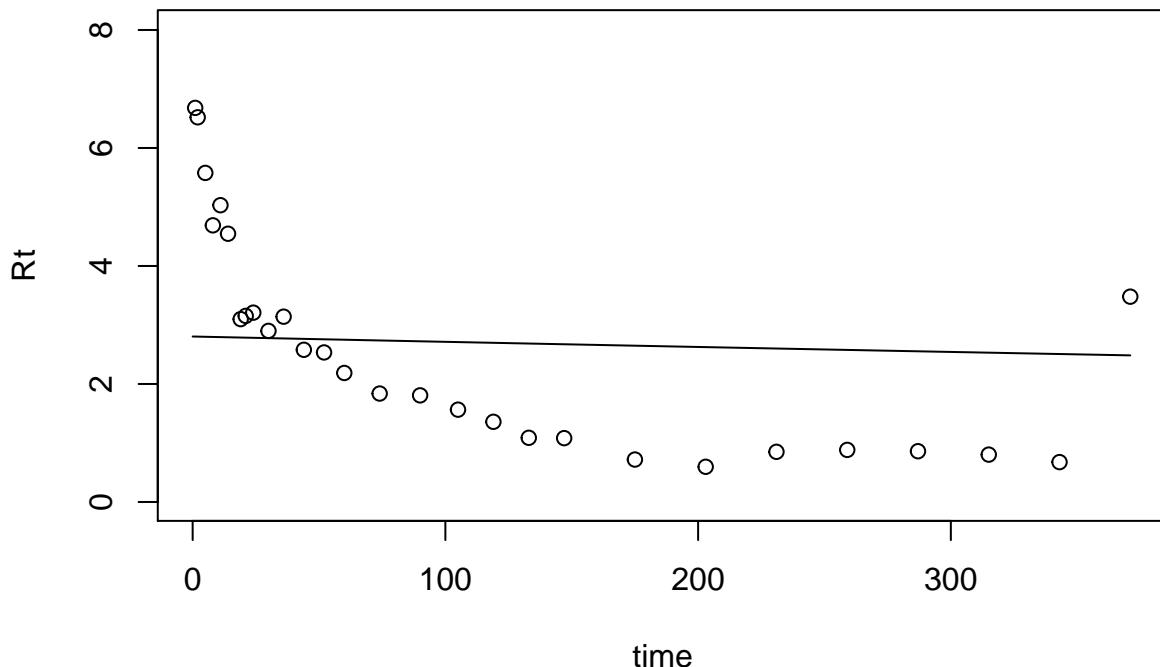
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	0.0302	4.05e-05	NA	NA	NA	NA	0.0411	0.99	NA	NA
Two-pool parallel	9.35	0.0237	1.85e-05	0.00317	NA	NA	9.41	0.00913	53900	37300

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	13.3	0.0237	3.66e-05	0.00782	0.495	1	13.5	0.00118	26800	184
Two-pool series	11.3	0.0237	1.85e-05	0.00926	0.657	NA	11.5	0.00329	35500	14800

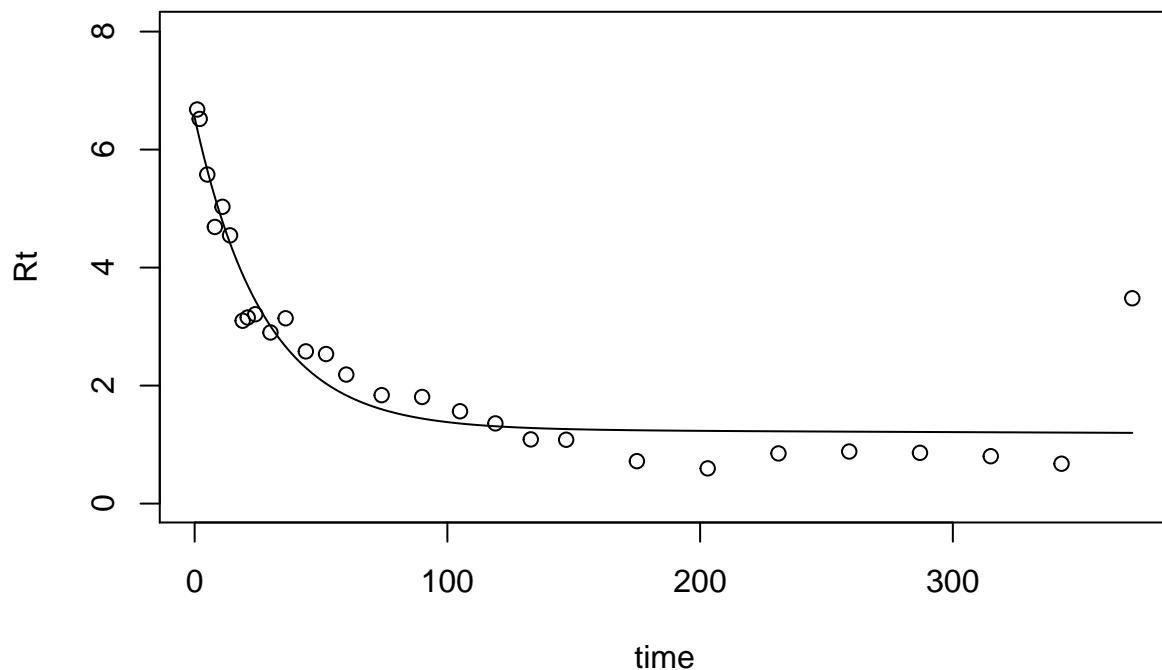
Variable Site37:

CO2 production rate

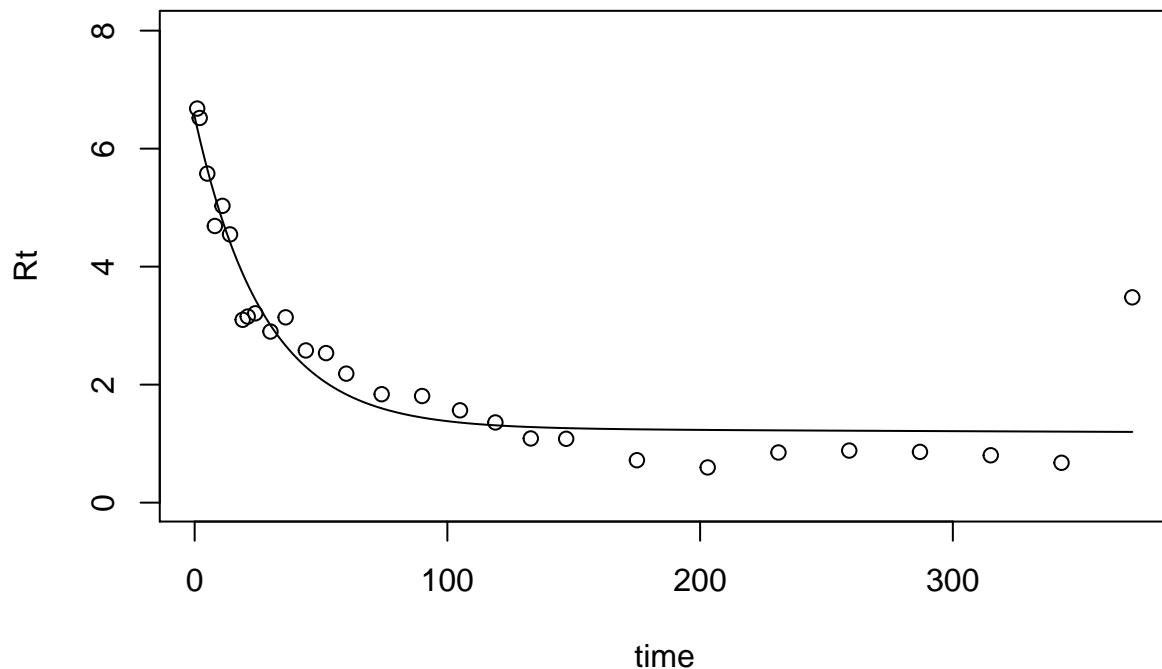
```
## [1] "Best fit parameter: 0.000326092548278382"
```



```
## [1] "AIC = -0.173166226839397"
## [1] "k1= 0.0368420638493111"
## [2] "k2= 0.000149822065646229"
## [3] "proportion of C0 in pool 1= 0.0166496557738594"
```

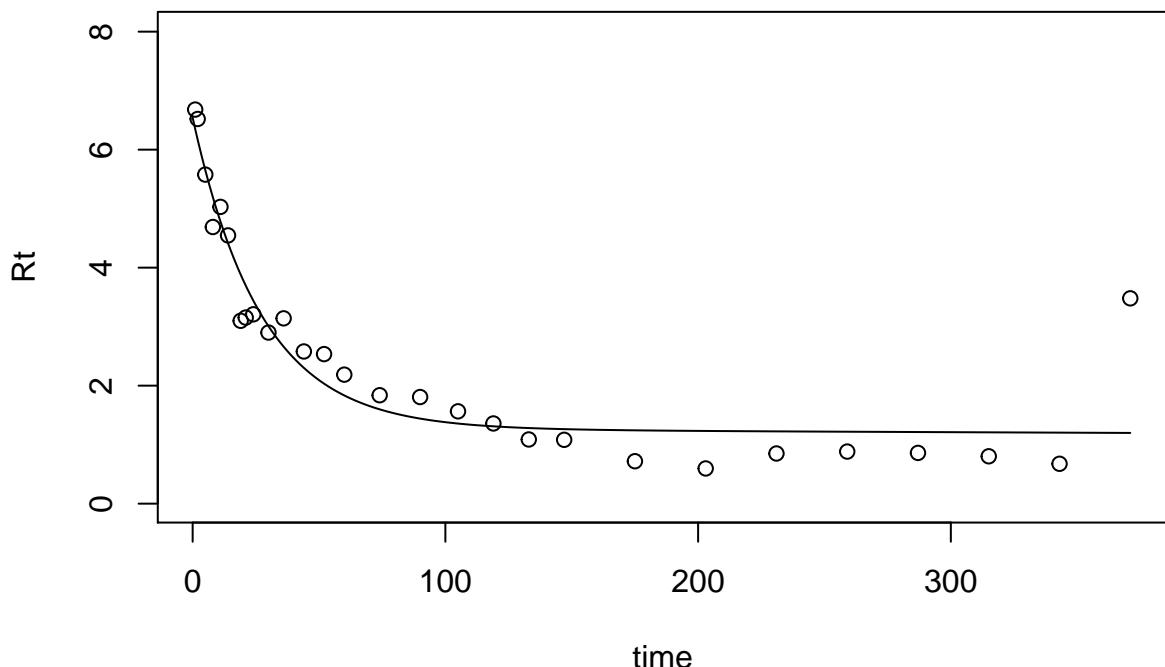


```
## [1] "AIC = 8.21700457808002"
## [1] "k1= 0.036842368625919"
## [2] "k2= 0.000149823666502926"
## [3] "a21= 0.252837020598843"
## [4] "a12= 2.75961230468136e-05"
## [5] "Proportion of C0 in pool 1= 0.0223146025319593"
```

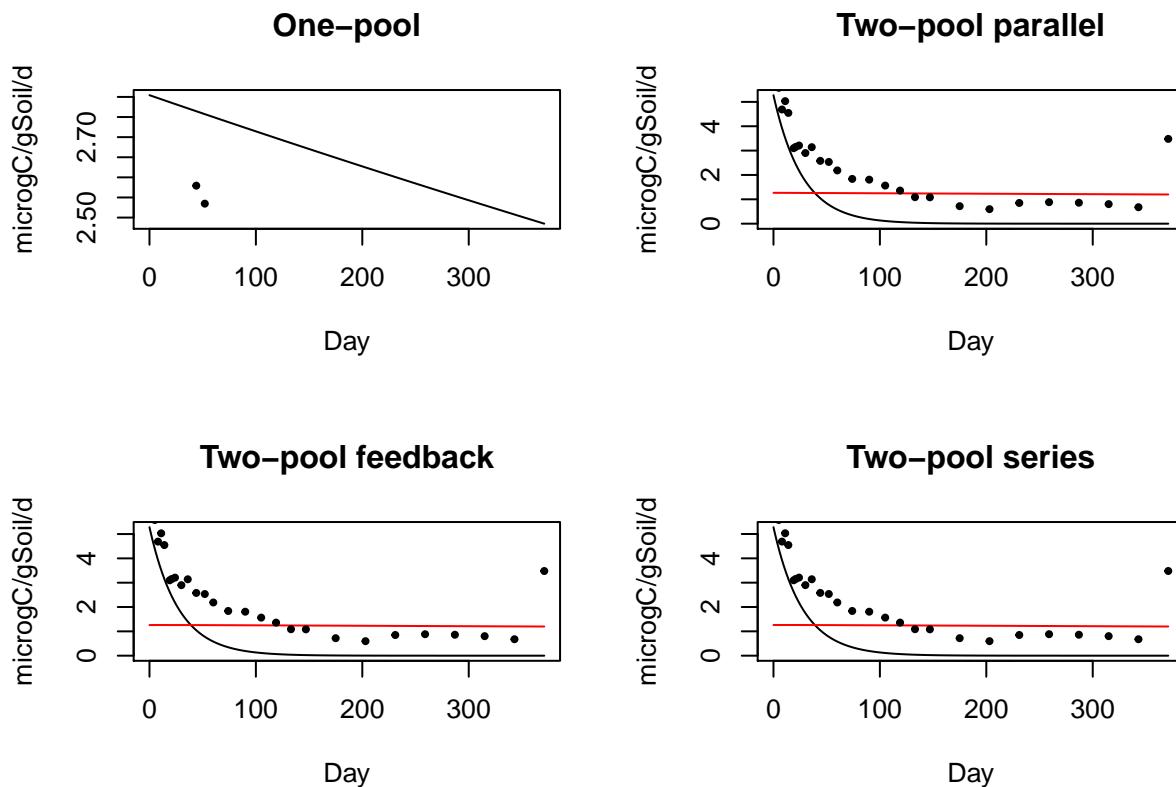


```
## [1] "AIC = 12.2170045782727"
## [1] "k1= 0.0368416324121571"
## [2] "k2= 0.000149821275945077"
## [3] "a21= 0.200361476652261"
```

```
## [4] "Proportion of C0 in pool 1= 0.0208429437115134"
```



```
## [1] "AIC = 10.2170045769521"
```



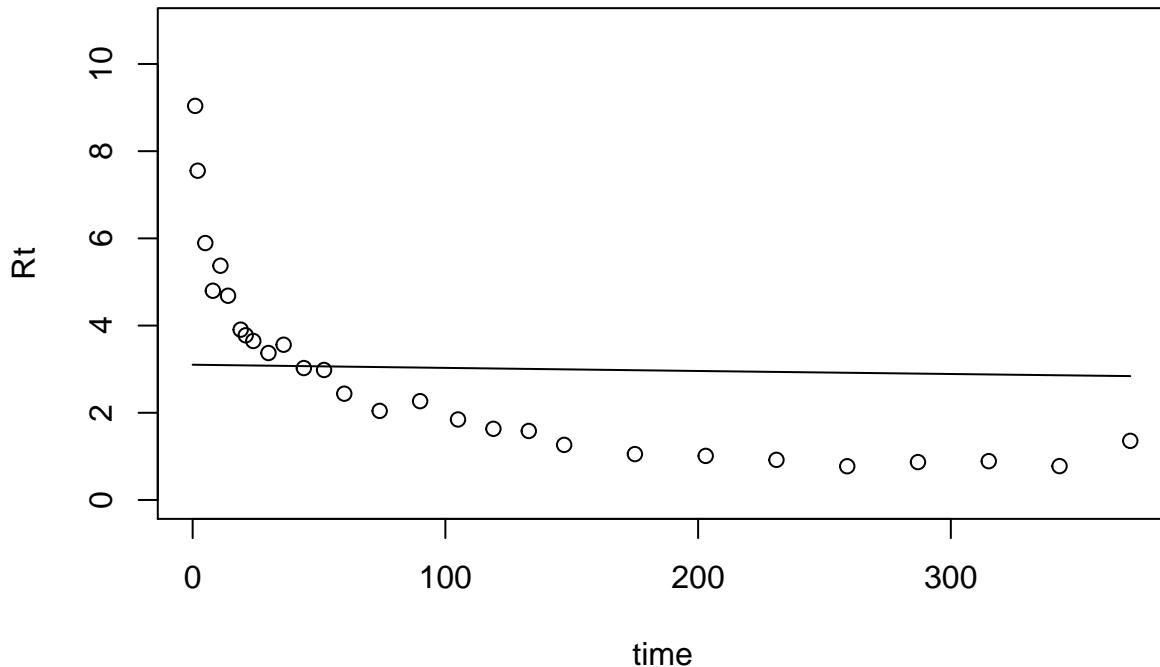
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-0.173	0.000326	NA	NA	NA	NA	-0.162	0.984	NA	NA
Two-pool parallel	8.22	0.0368	0.00015	0.0166	NA	NA	8.28	0.0144	6560	4510

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	12.2	0.0368	0.00015	0.0223	0.253	2.76e-05	12.4	0.00186	1710	30
Two-pool series	10.2	0.0368	0.00015	0.0208	0.2	NA	10.3	0.00519	1360	26.6

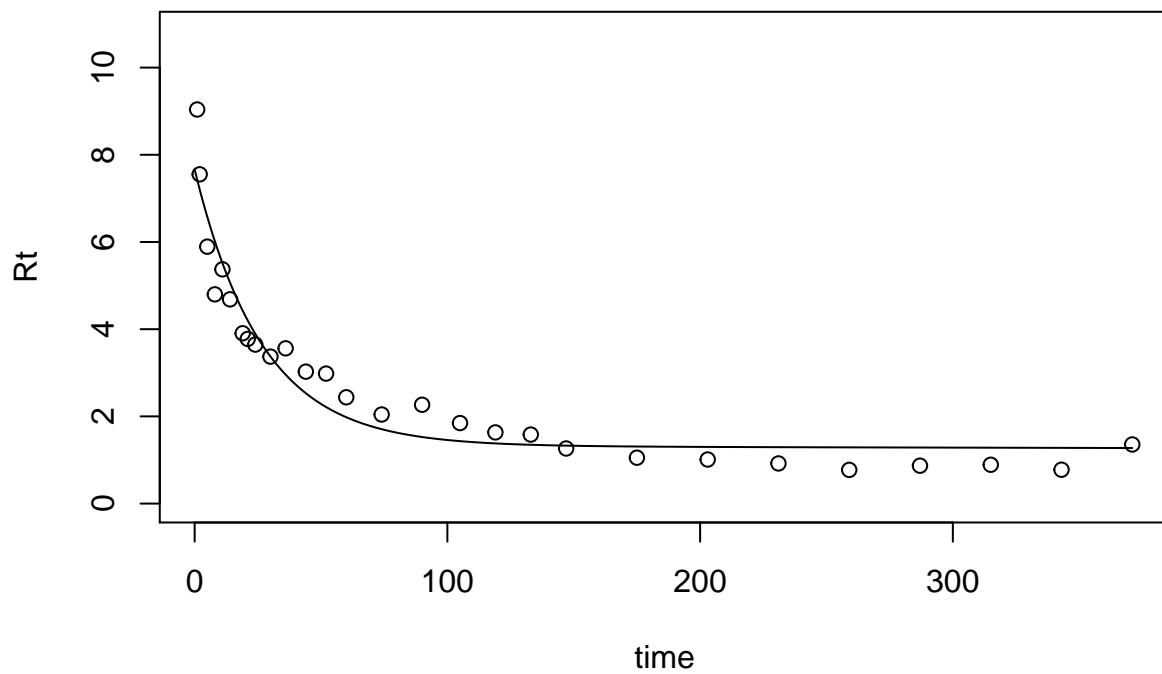
Variable Site38:

CO2 production rate

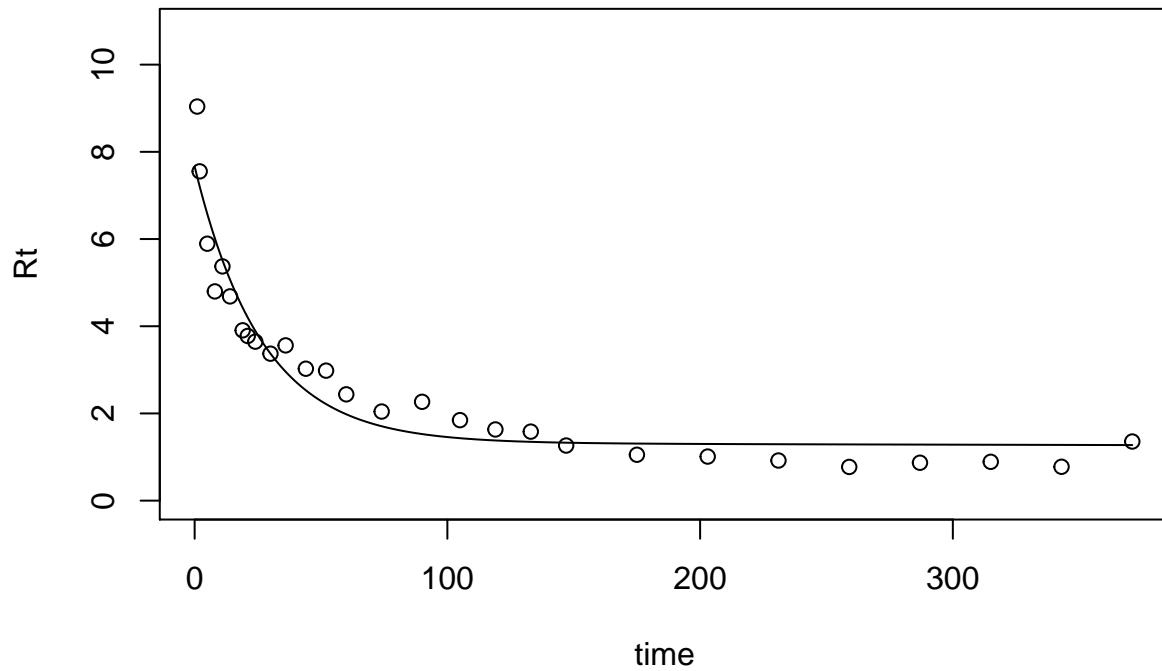
```
## [1] "Best fit parameter: 0.000236795771032054"
```



```
## [1] "AIC = -0.849401983873366"
## [1] "k1= 0.0375833427838168"
## [2] "k2= 0.000102348434365127"
## [3] "proportion of C0 in pool 1= 0.0128770240618121"
```

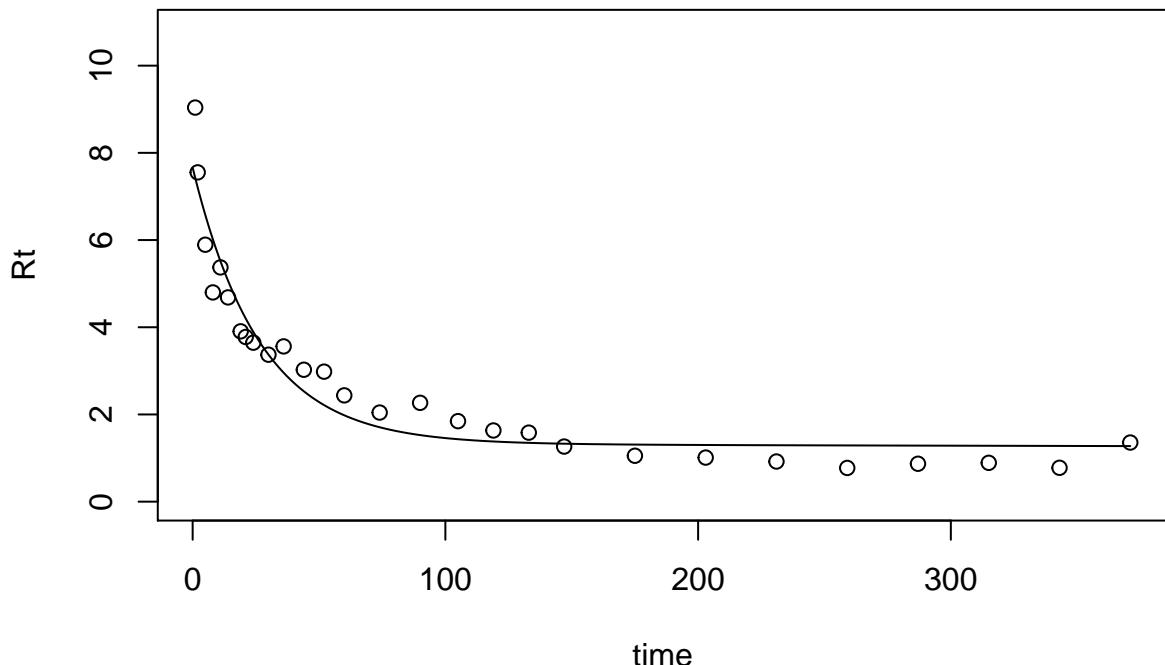


```
## [1] "AIC = 8.30644756506078"
## [1] "k1= 0.0375851721092729"
## [2] "k2= 0.000102351316757375"
## [3] "a21= 0.289997938900945"
## [4] "a12= 1.03474542180182e-05"
## [5] "Proportion of C0 in pool 1= 0.0181561441401899"
```

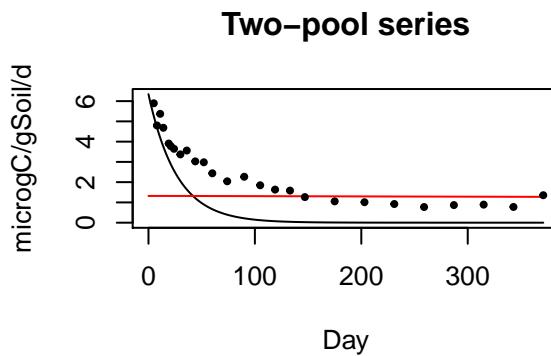
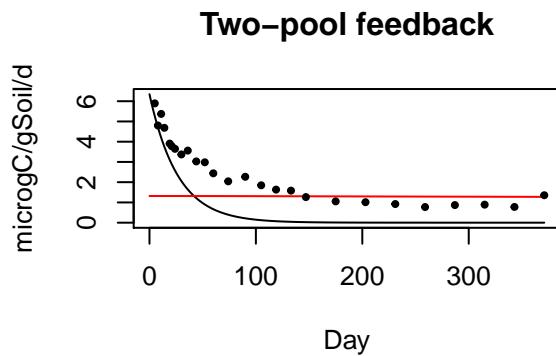
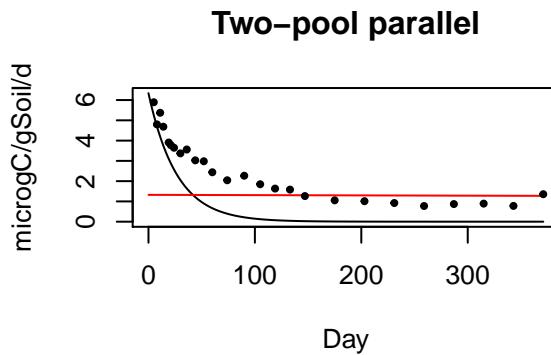
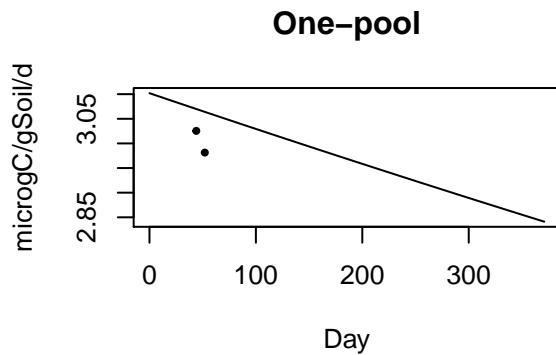


```
## [1] "AIC = 12.3064475698963"
## [1] "k1= 0.0375841537602384"
## [2] "k2= 0.000102349597243089"
## [3] "a21= 0.15728723220901"
```

```
## [4] "Proportion of C0 in pool 1= 0.0152878286221937"
```



```
## [1] "AIC = 10.3064475653832"
```



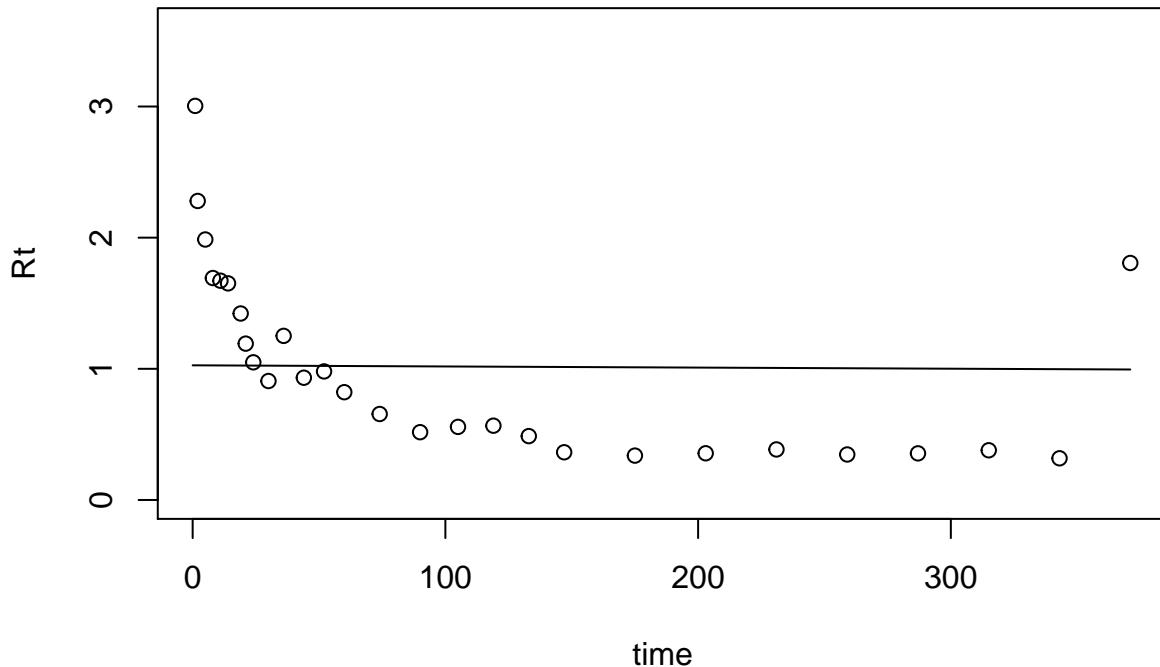
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-0.849	0.000237	NA	NA	NA	NA	-0.839	0.989	NA	NA
Two-pool parallel	8.31	0.0376	0.000102	0.0129	NA	NA	8.37	0.00989	9650	6650

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool feedback	12.3	0.0376	0.000102	0.0182	0.29	1.03e-05	12.5	0.00127	2860	32.4
Two-pool series	10.3	0.0376	0.000102	0.0153	0.157	NA	10.4	0.00356	1560	23.9

Variable Site39:

CO2 production rate

```
## [1] "Best fit parameter: 8.4844562231414e-05"
```

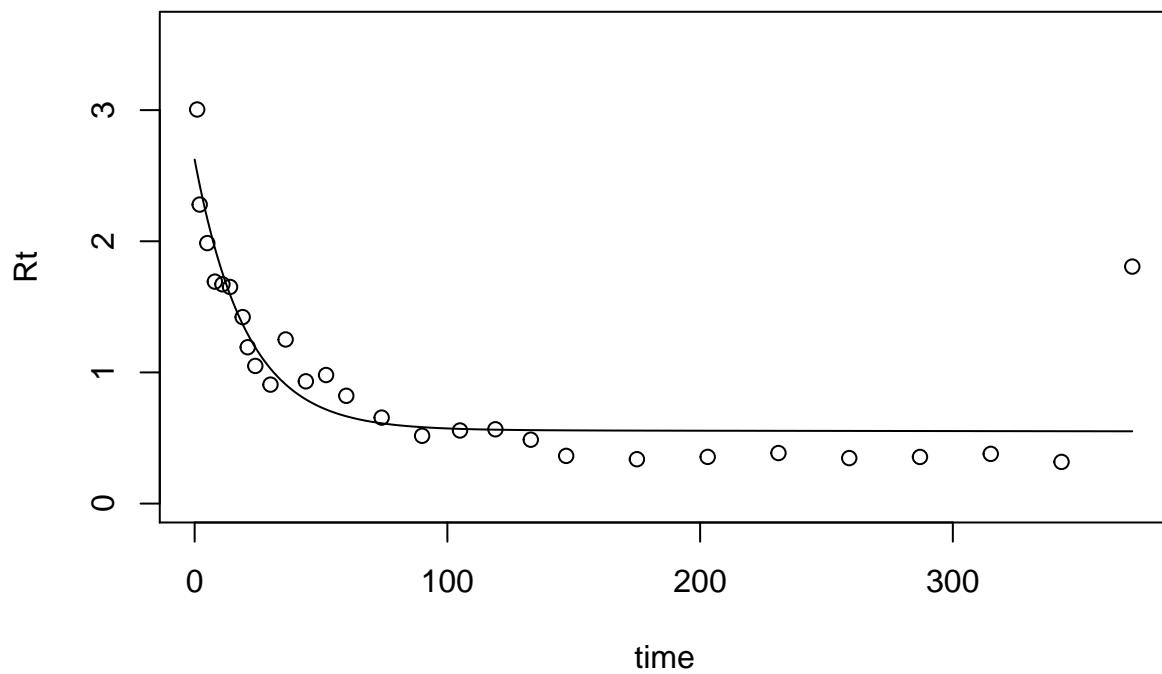


```
## [1] "AIC = 3.52173915517024"
```

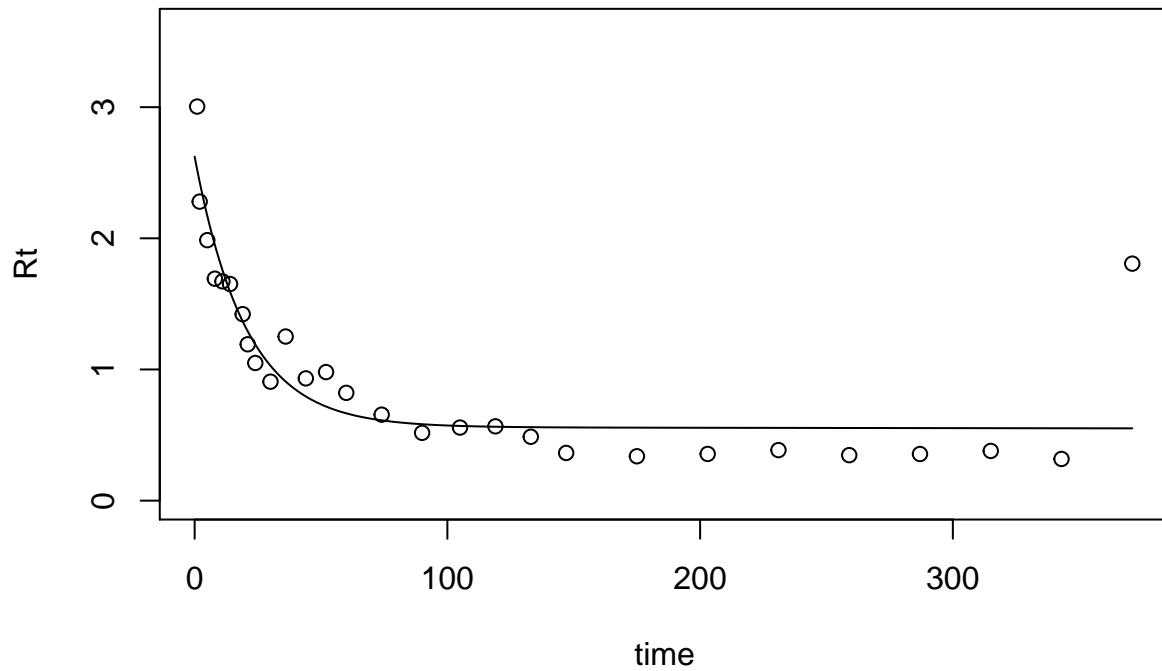
```
## [1] "k1= 0.049372764027026"
```

```
## [2] "k2= 4.64924826807207e-05"
```

```
## [3] "proportion of C0 in pool 1= 0.00345153819849653"
```

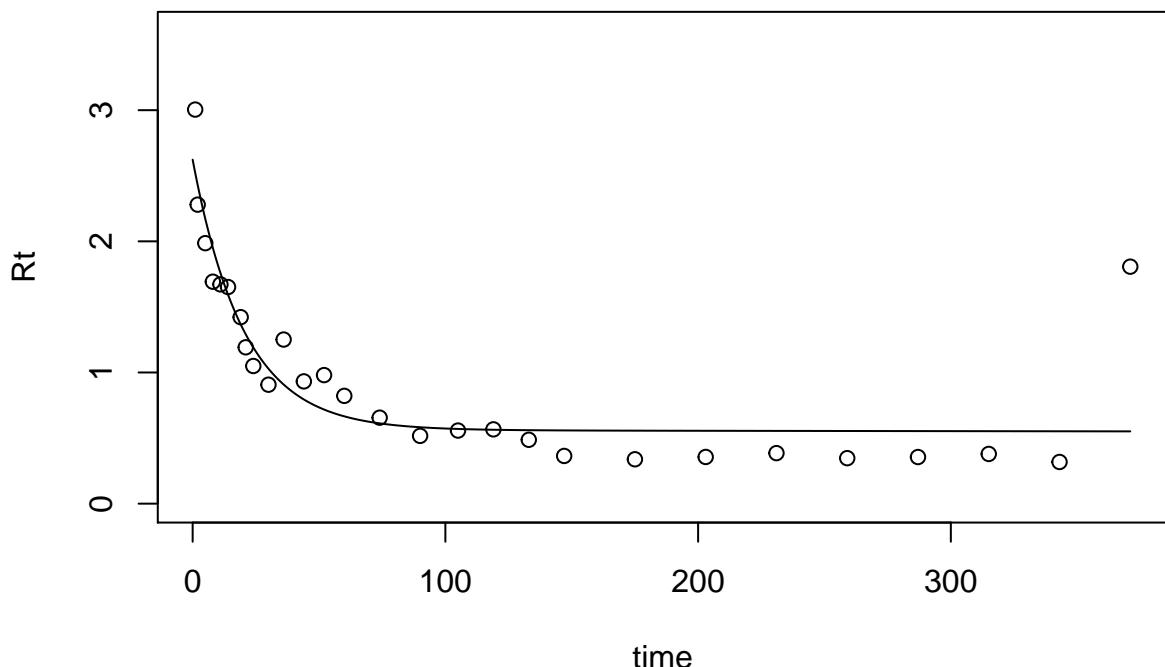


```
## [1] "AIC = 10.7901592297102"
## [1] "k1= 0.0493732909321692"
## [2] "k2= 4.64994578867839e-05"
## [3] "a21= 0.571805094001926"
## [4] "a12= 0.000258535720695008"
## [5] "Proportion of C0 in pool 1= 0.00807101679415023"
```



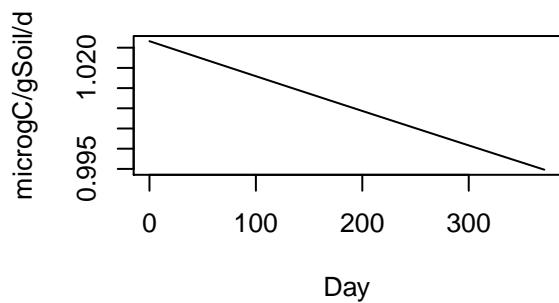
```
## [1] "AIC = 14.790159212191"
## [1] "k1= 0.0493732349168239"
## [2] "k2= 4.64925710656916e-05"
## [3] "a21= 0.361980185114022"
```

```
## [4] "Proportion of C0 in pool 1= 0.00541262072933707"
```

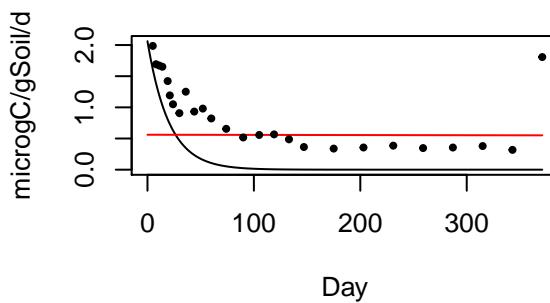


```
## [1] "AIC = 12.790159218578"
```

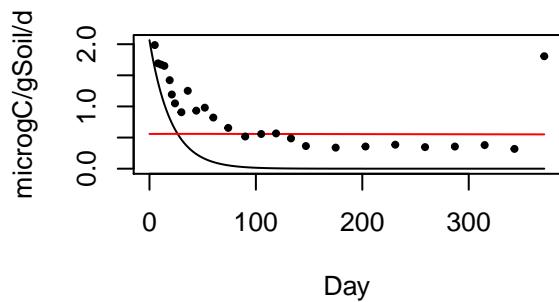
One-pool



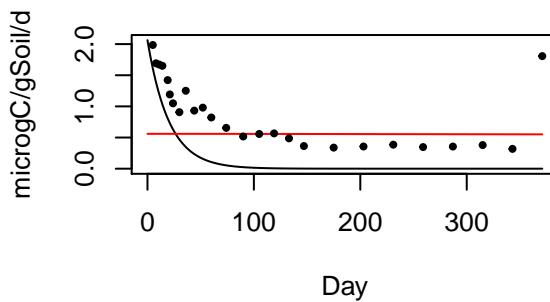
Two-pool parallel



Two-pool feedback



Two-pool series



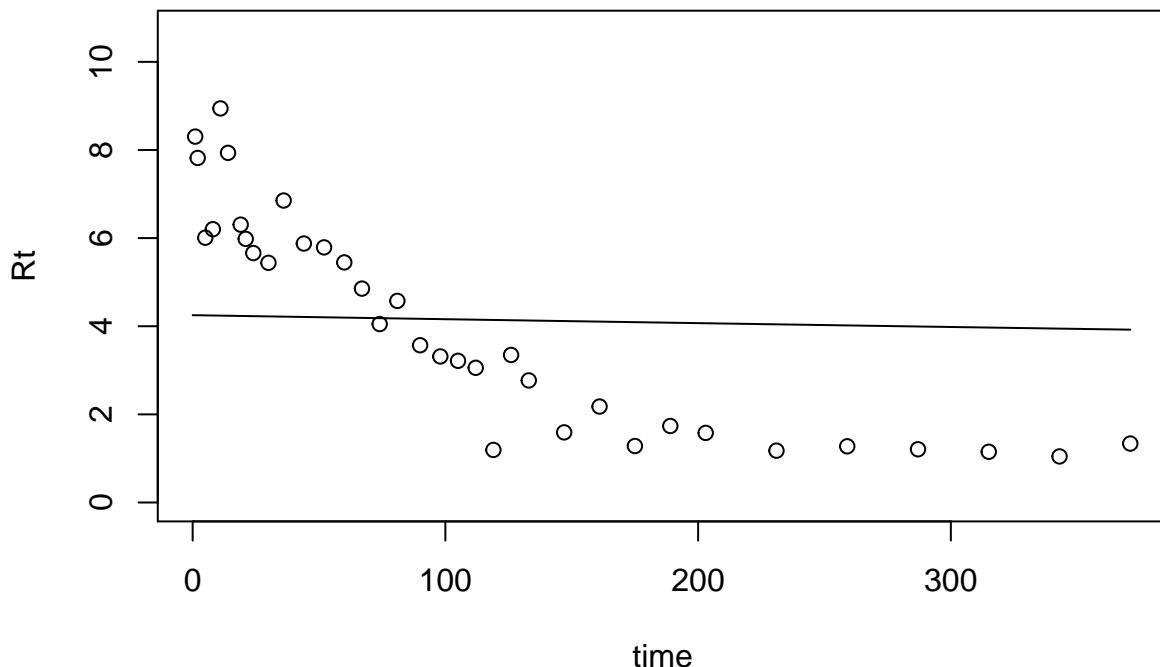
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	3.52	8.48e-05	NA	NA	NA	NA	3.53	0.972	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool parallel	10.8	0.0494	4.65e-05	0.00345	NA	NA	10.9	0.025	21400	14800
Two-pool feedback	14.8	0.0494	4.65e-05	0.00807	0.572	0.000259	15	0.00322	12300	2910
Two-pool series	12.8	0.0494	4.65e-05	0.00541	0.362	NA	12.9	0.00899	7810	31

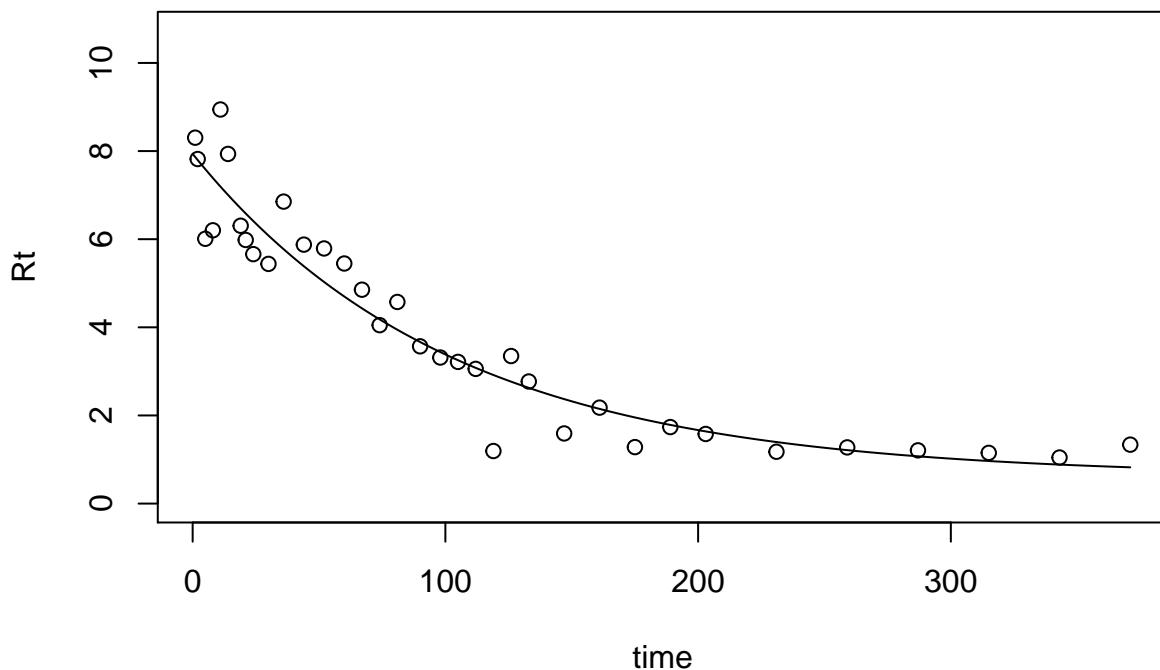
Variable Site40:

CO2 production rate

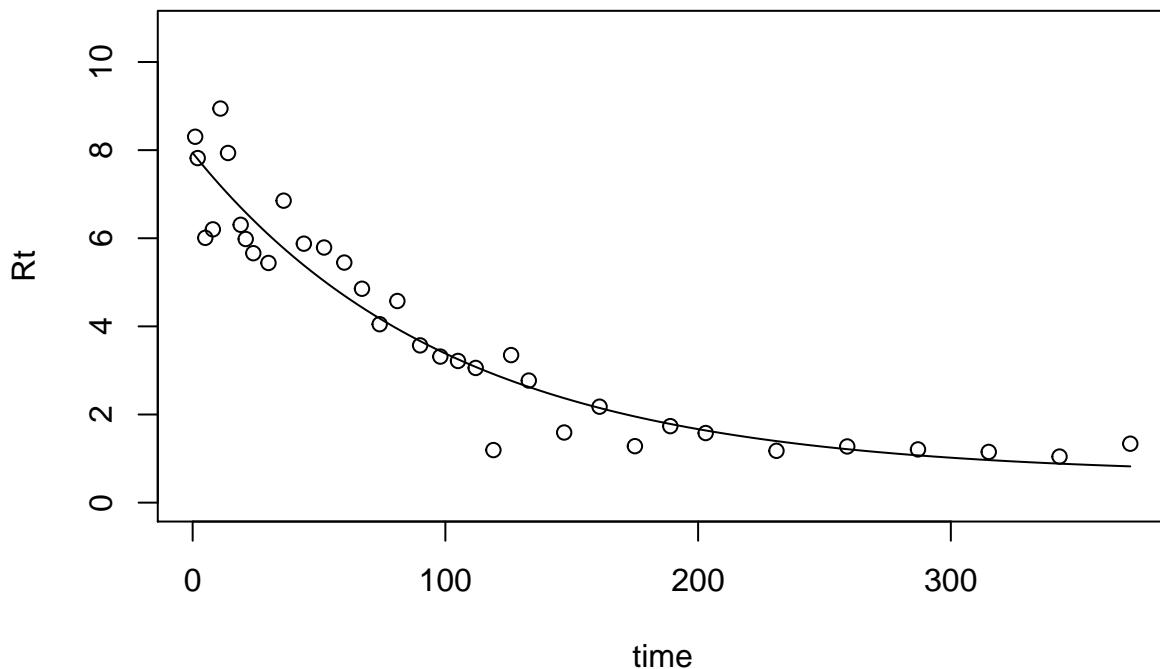
```
## [1] "Best fit parameter: 0.000216881858987754"
```



```
## [1] "AIC = -1.35992746761612"
## [1] "k1= 0.00976181995455681"
## [2] "k2= 3.37149242733811e-05"
## [3] "proportion of C0 in pool 1= 0.0381622082569006"
```

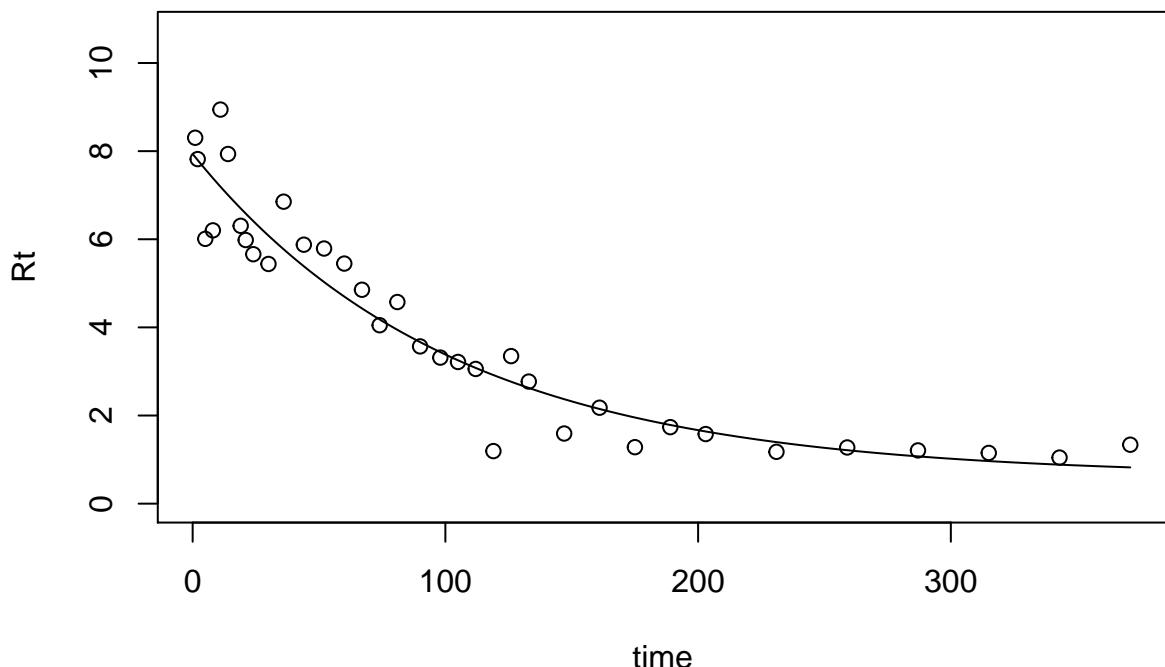


```
## [1] "AIC = 7.38755076496917"
## [1] "k1= 0.00976175819038732"
## [2] "k2= 3.37141402613797e-05"
## [3] "a21= 0.00553488958802439"
## [4] "a12= 2.27439072325586e-06"
## [5] "Proportion of C0 in pool 1= 0.0383755381818165"
```

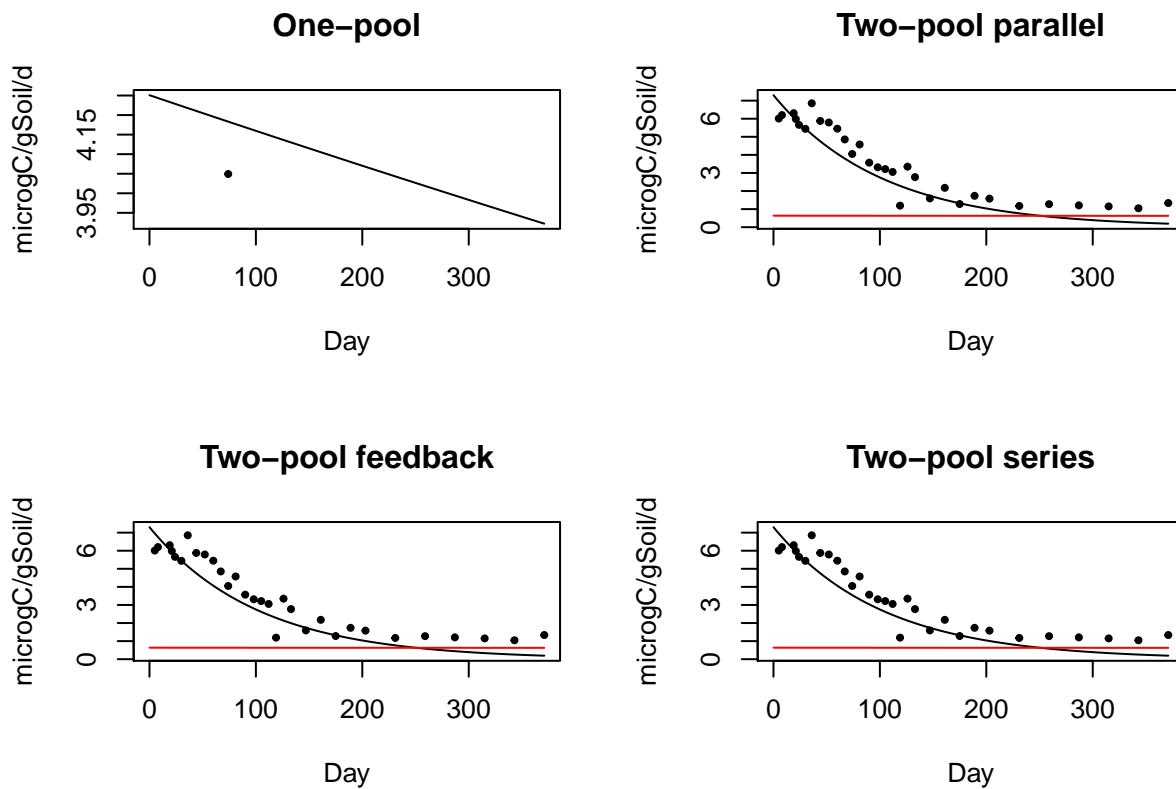


```
## [1] "AIC = 11.3875507646115"
## [1] "k1= 0.00976176134085394"
## [2] "k2= 3.37141796666738e-05"
## [3] "a21= 0.00156085134112049"
```

```
## [4] "Proportion of C0 in pool 1= 0.0382221621002272"
```



```
## [1] "AIC = 9.38755076357269"
```



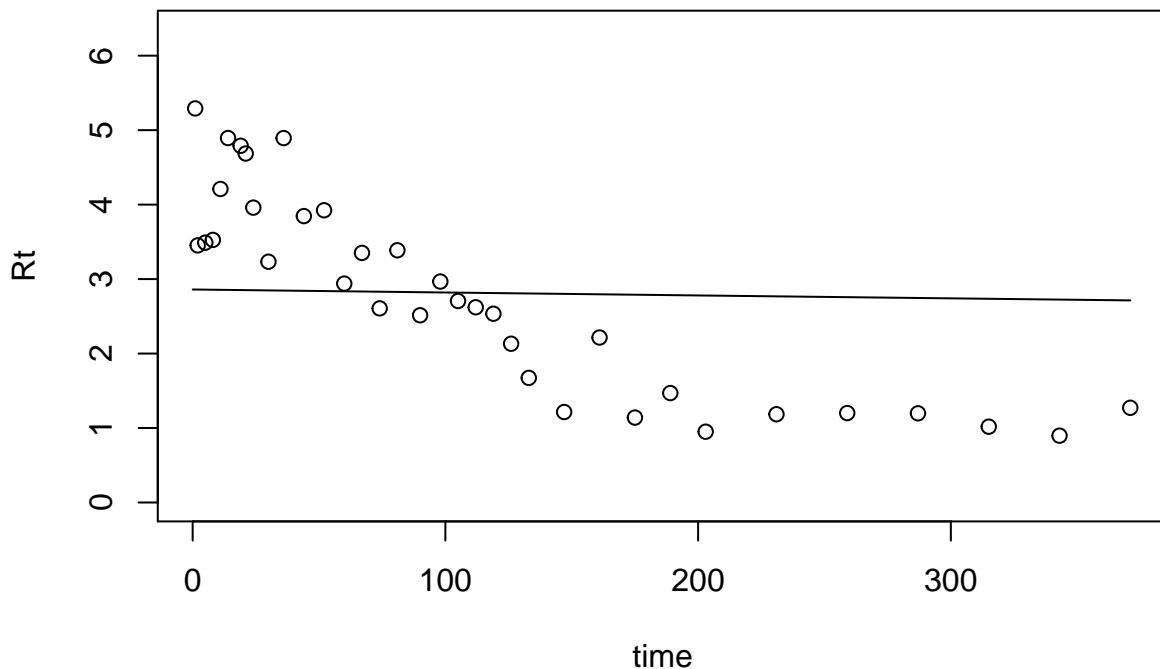
model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	- 1.36	0.000217	NA	NA	NA	NA	- 1.35	0.986	NA	NA

model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
Two-pool parallel	7.39	0.00976	3.37e-05	0.0382	NA	NA	7.45	0.0121	28500	19400
Two-pool feedback	11.4	0.00976	3.37e-05	0.0384	0.00553	2.27e-06	11.6	0.00156	267	71.6
Two-pool series	9.39	0.00976	3.37e-05	0.0382	0.00156	NA	9.5	0.00435	149	71.2

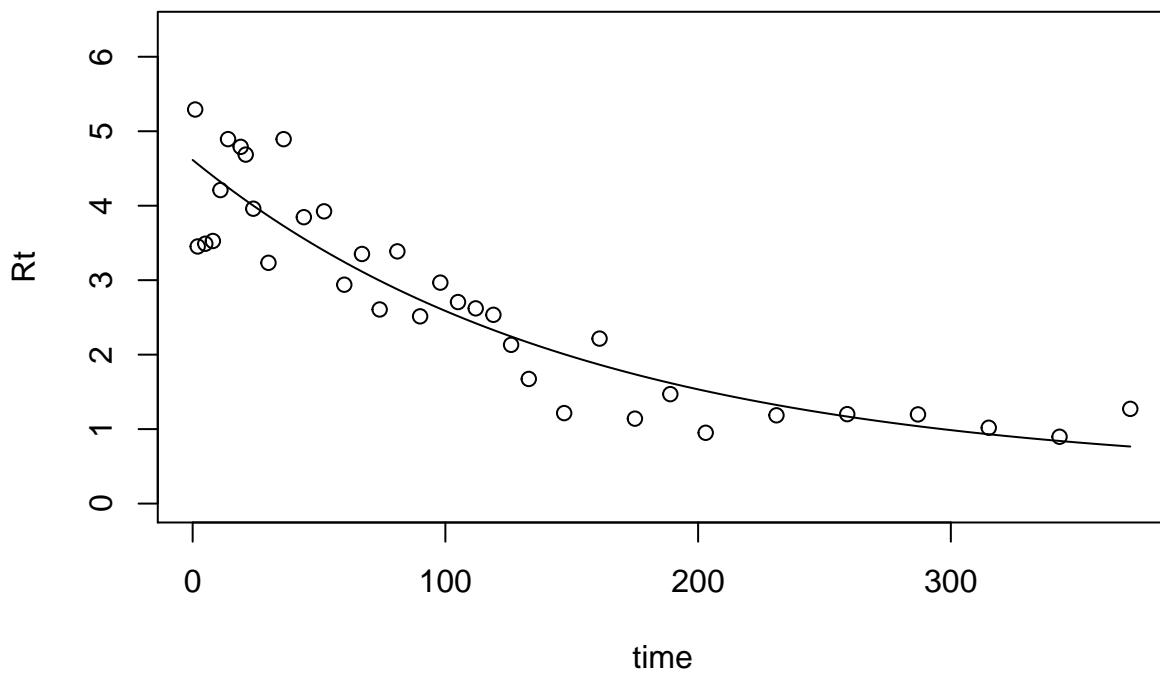
Variable Site41:

CO2 production rate

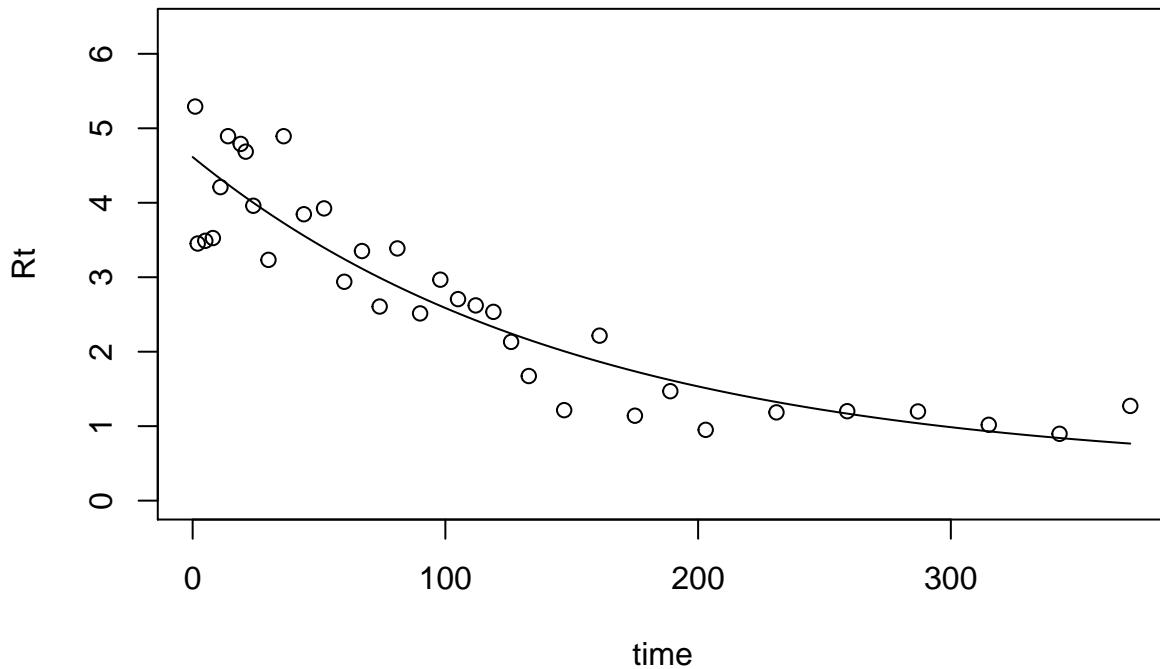
```
## [1] "Best fit parameter: 0.000141594582863778"
```



```
## [1] "AIC = 1.02609714280752"
## [1] "k1= 0.00655286028384018"
## [2] "k2= 2.03687284399967e-05"
## [3] "proportion of C0 in pool 1= 0.0318512570648856"
```

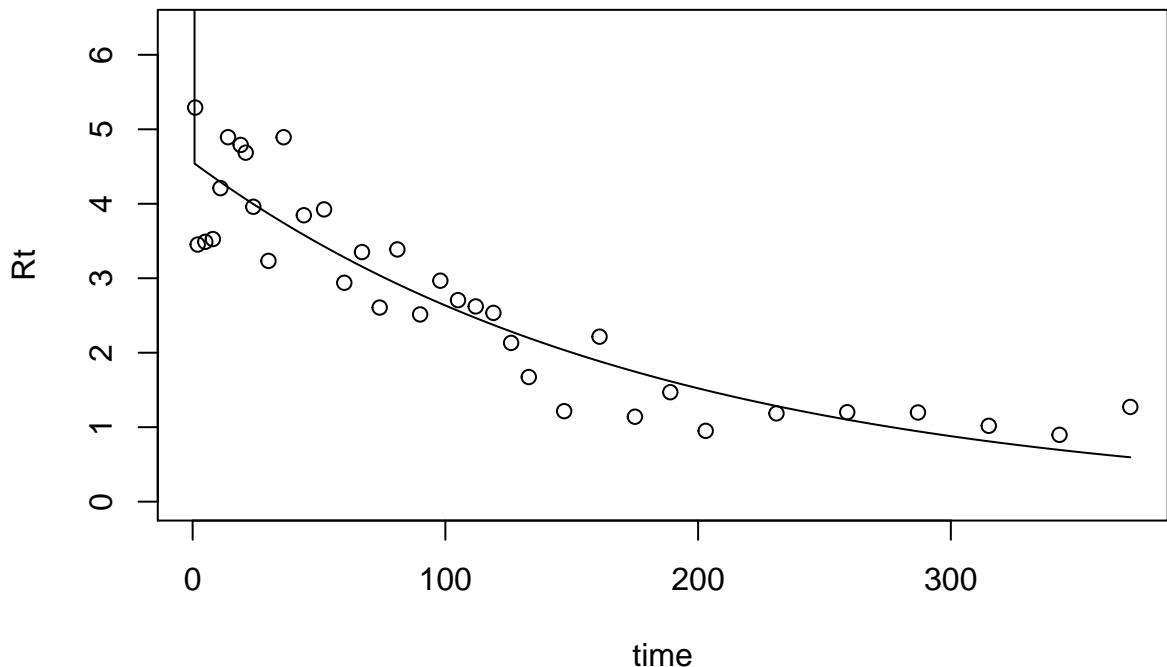


```
## [1] "AIC = 8.56876798562567"
## [1] "k1= 0.00655204730361691"
## [2] "k2= 2.13434762888932e-05"
## [3] "a21= 0.0454272077913072"
## [4] "a12= 0.999991482354522"
## [5] "Proportion of C0 in pool 1= 0.0365240786561939"
```



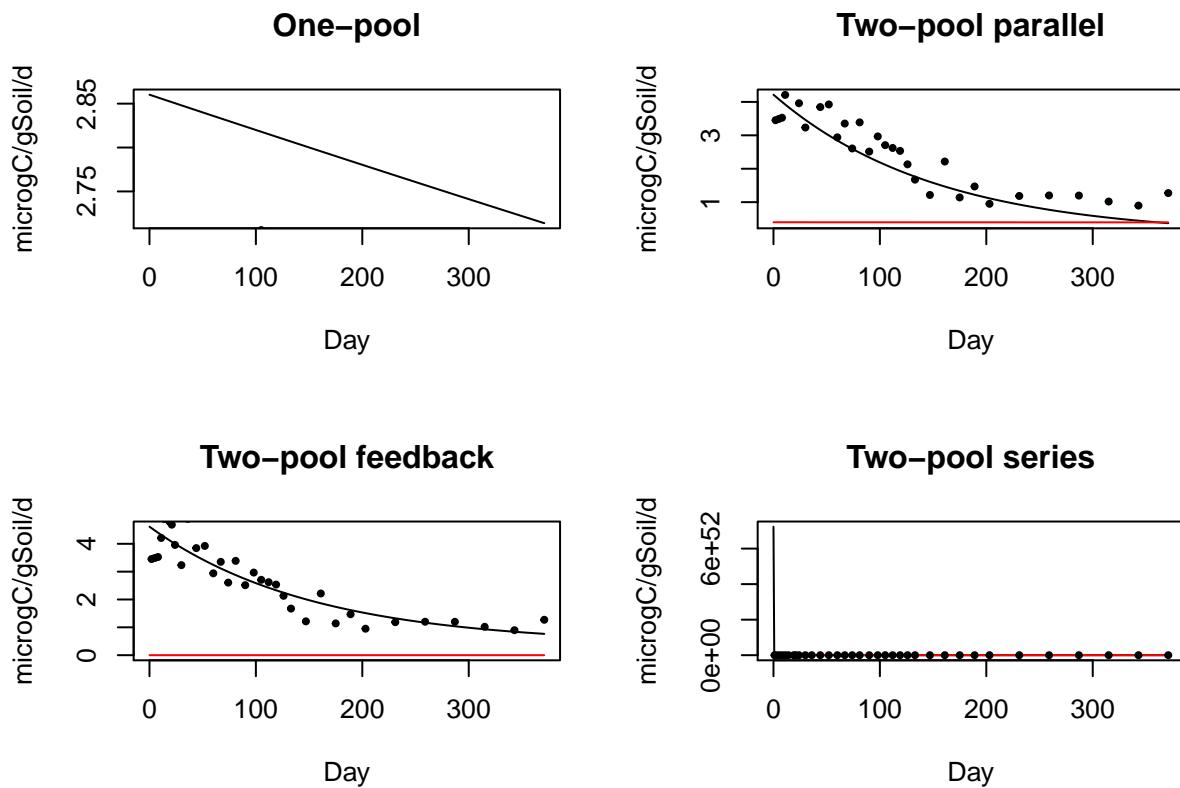
```
## [1] "AIC = 12.5687679848852"
## [1] "k1= 3.7350726465203e+48"
## [2] "k2= 0.00548569701412691"
## [3] "a21= 0.0411040543712268"
```

```
## [4] "Proportion of C0 in pool 1= 0.999958821801291"
```



```
## [1] "AIC = 10.5400915864056"
```

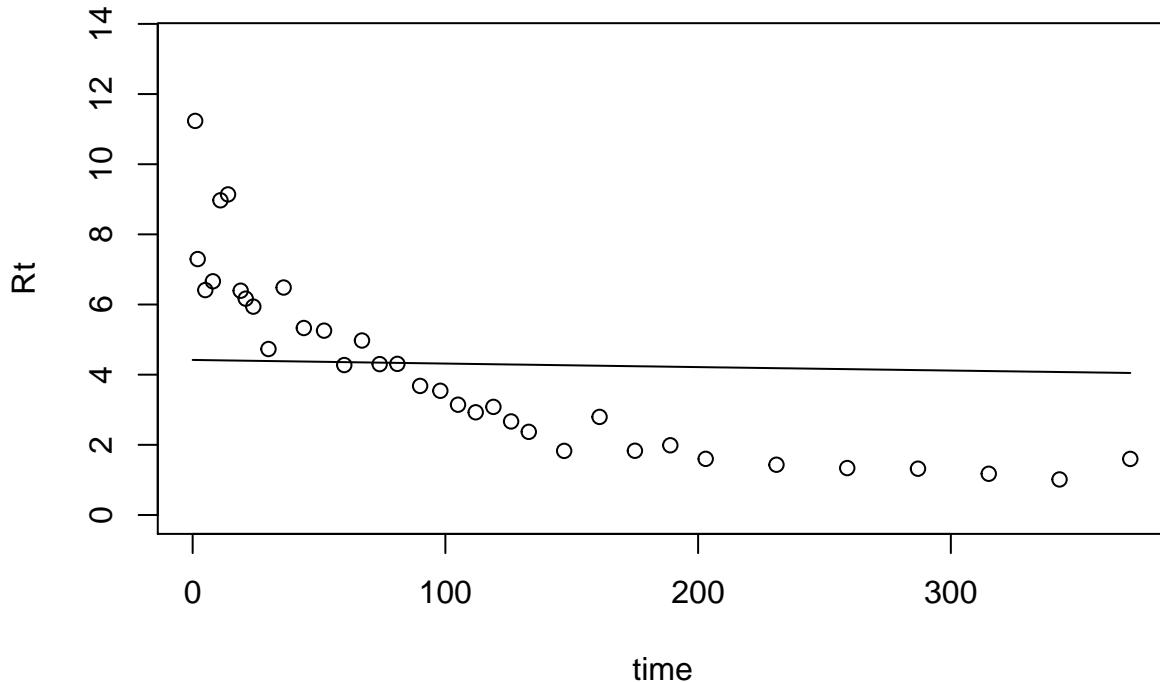
```
## Error in solve.default(A): system is computationally singular: reciprocal condition number = 1.41071
```



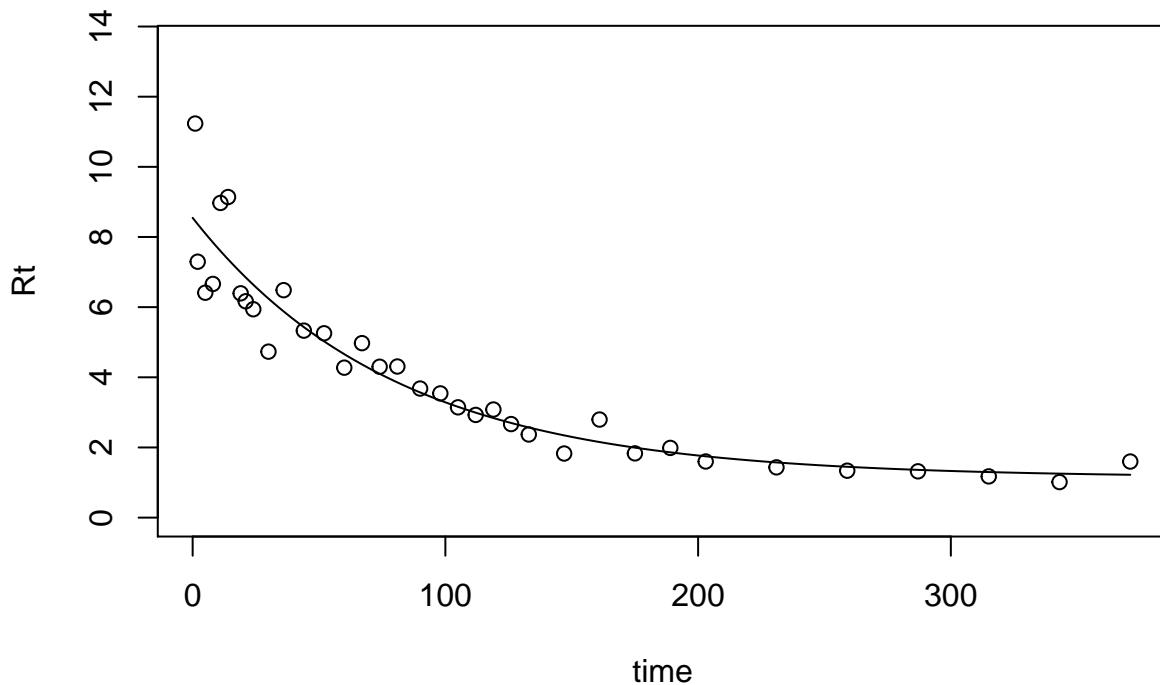
Variable Site42:

CO₂ production rate

```
## [1] "Best fit parameter: 0.000236369498500562"
```



```
## [1] "AIC = -1.56738492749861"
## [1] "k1= 0.0124707172792095"
## [2] "k2= 6.50033361548062e-05"
## [3] "proportion of C0 in pool 1= 0.0316016467489096"
```

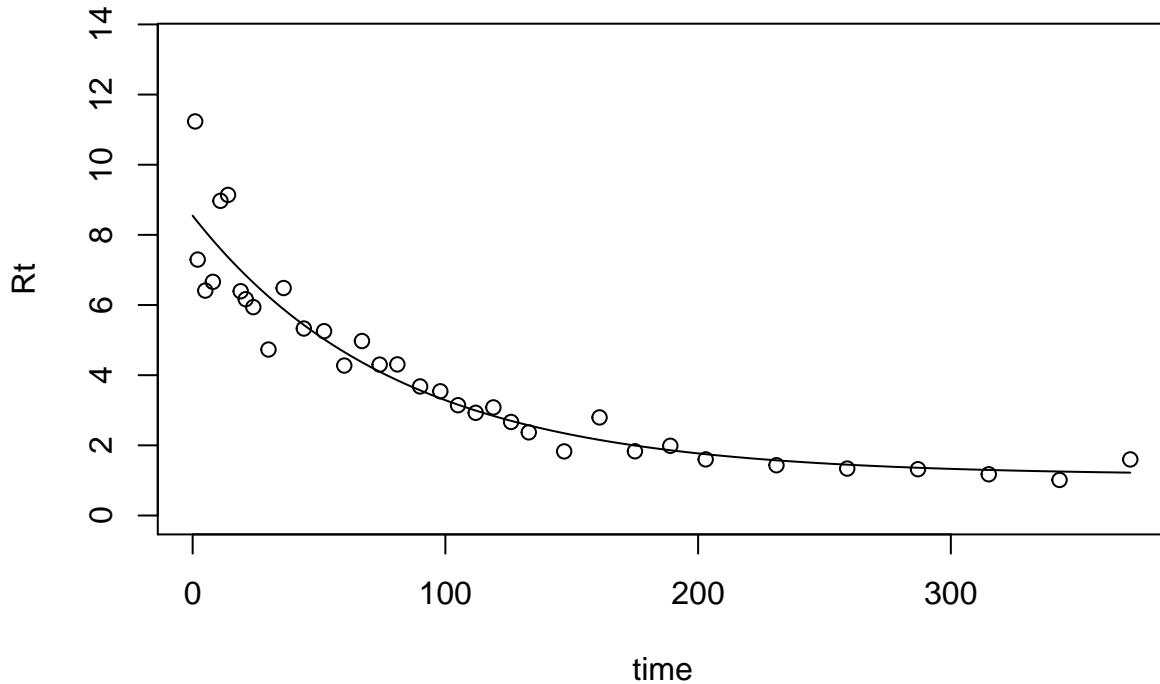


```
## [1] "AIC = 6.74753139875787"
```

```

## [1] "k1= 0.0124707561784301"
## [2] "k2= 6.50036715069628e-05"
## [3] "a21= 0.00518077563187008"
## [4] "a12= 2.17570249649857e-06"
## [5] "Proportion of C0 in pool 1= 0.0317669585067553"

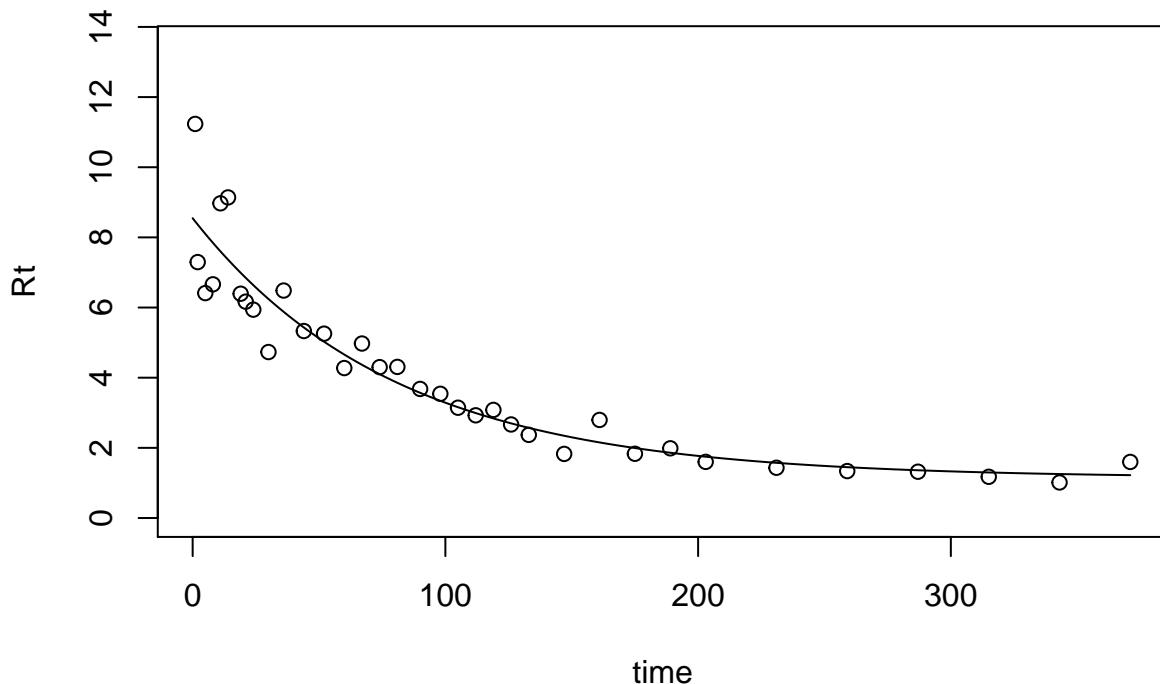
```



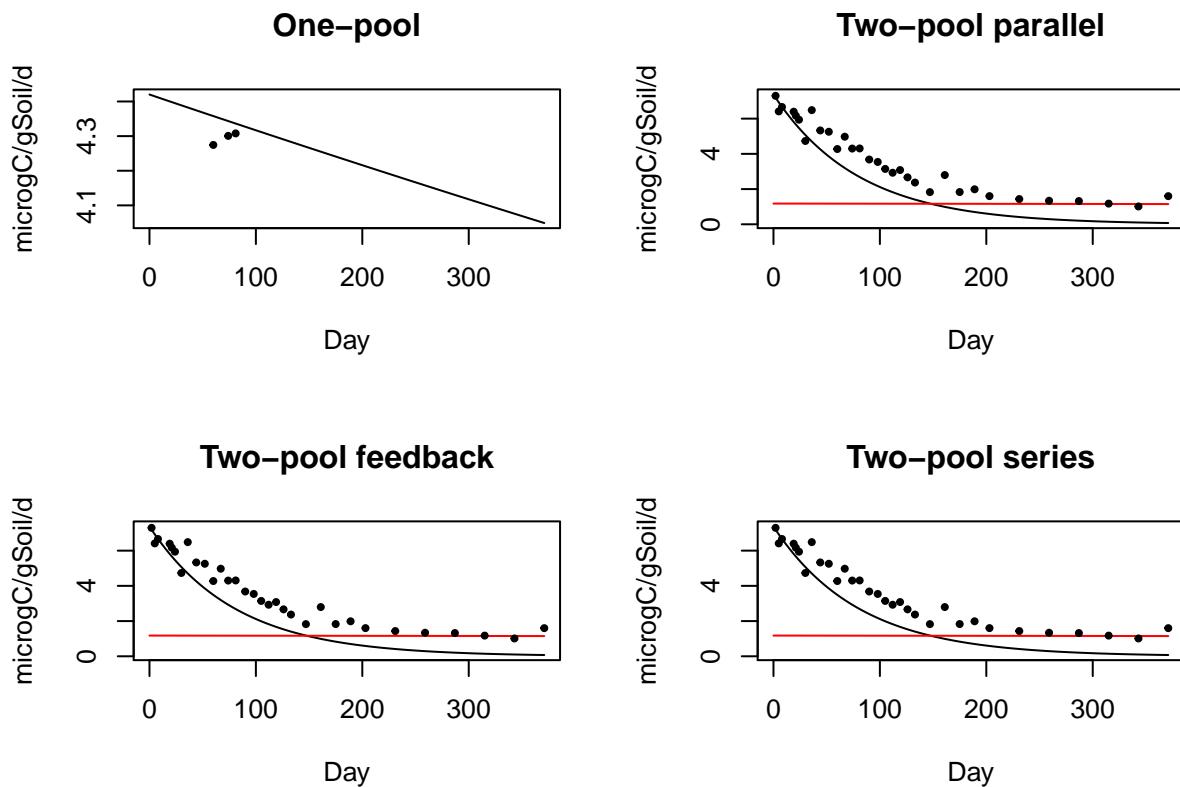
```

## [1] "AIC = 10.7475313987284"
## [1] "k1= 0.0124707758805643"
## [2] "k2= 6.50038403910522e-05"
## [3] "a21= 0.00191748446253026"
## [4] "Proportion of C0 in pool 1= 0.0316624708303131"

```



```
## [1] "AIC = 8.74753139867997"
```

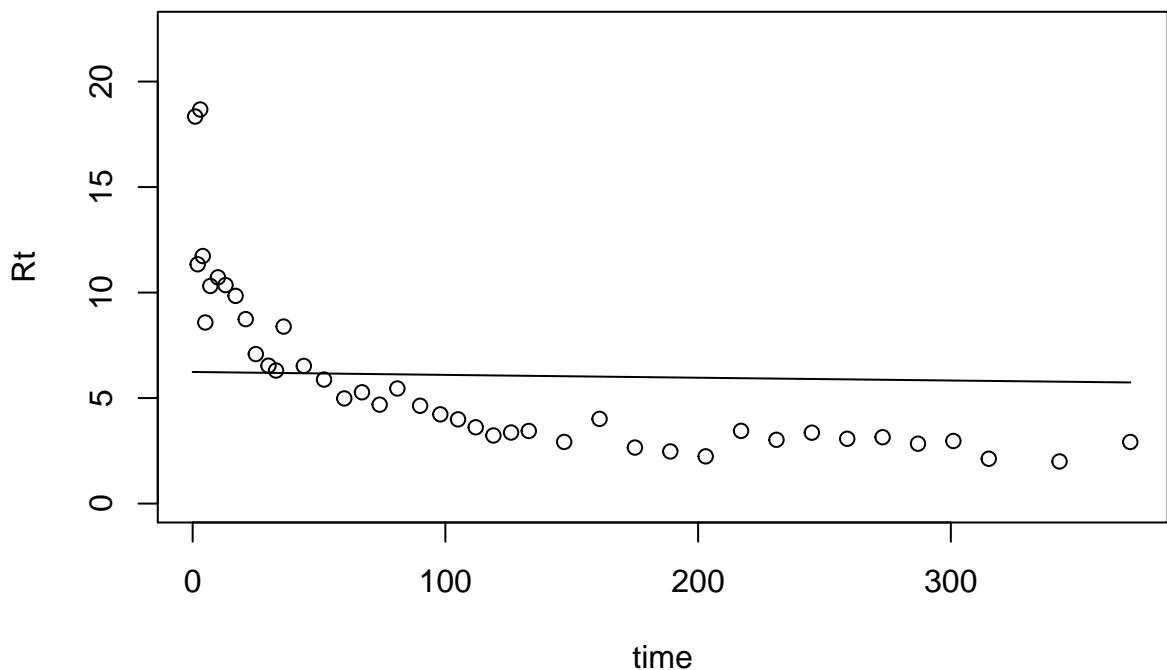


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.57	0.000236	NA	NA	NA	NA	-1.56	0.983	NA	NA
Two-pool parallel	6.75	0.0125	6.5e-05	0.0316	NA	NA	6.81	0.015	14900	10200
Two-pool feedback	10.7	0.0125	6.5e-05	0.0318	0.00518	2.18e-06	10.9	0.00193	160	56
Two-pool series	8.75	0.0125	6.5e-05	0.0317	0.00192	NA	8.86	0.00539	110	55.7

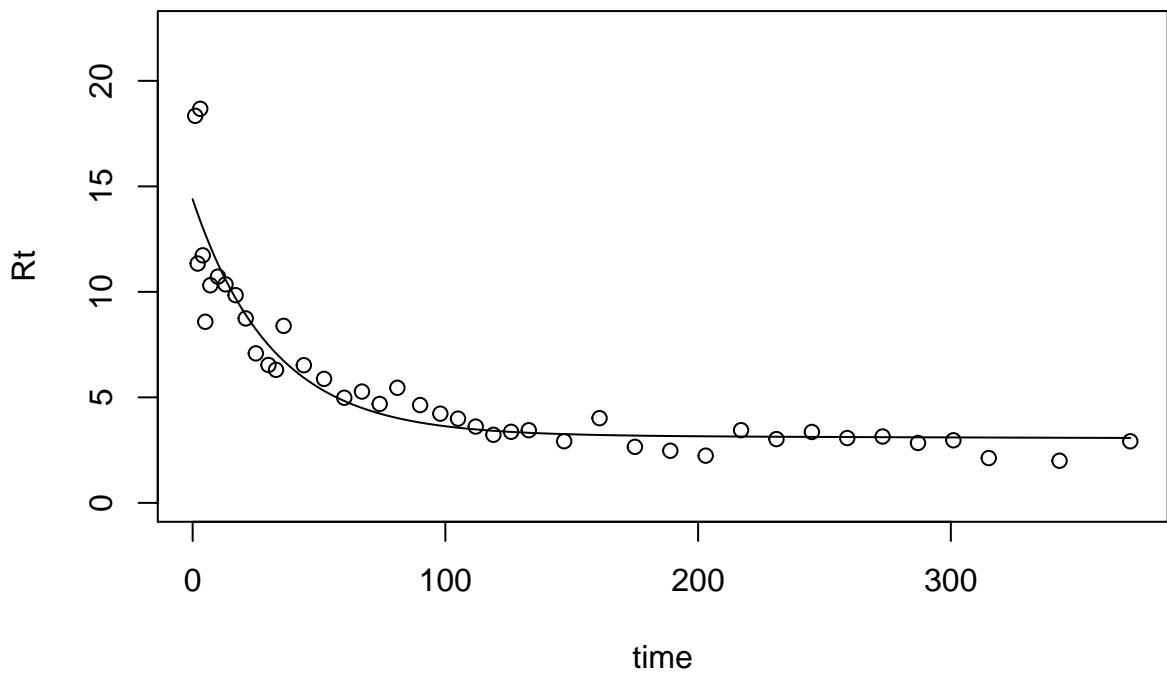
Variable Site43:

CO2 production rate

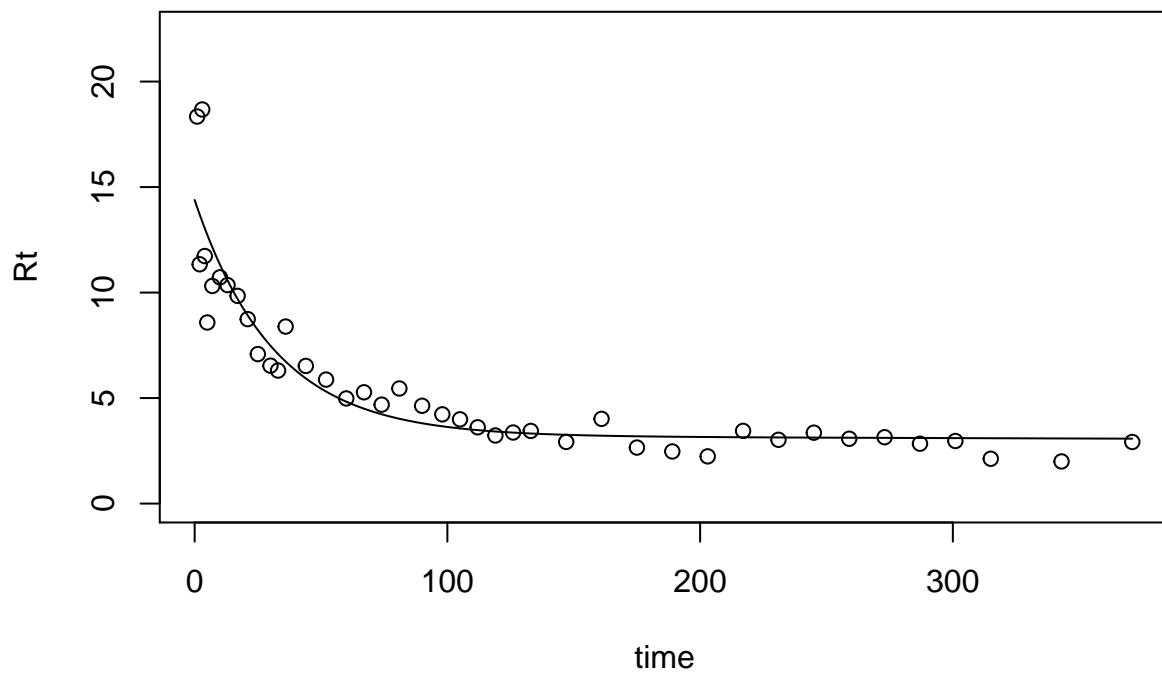
```
## [1] "Best fit parameter: 0.00022354673554541"
```



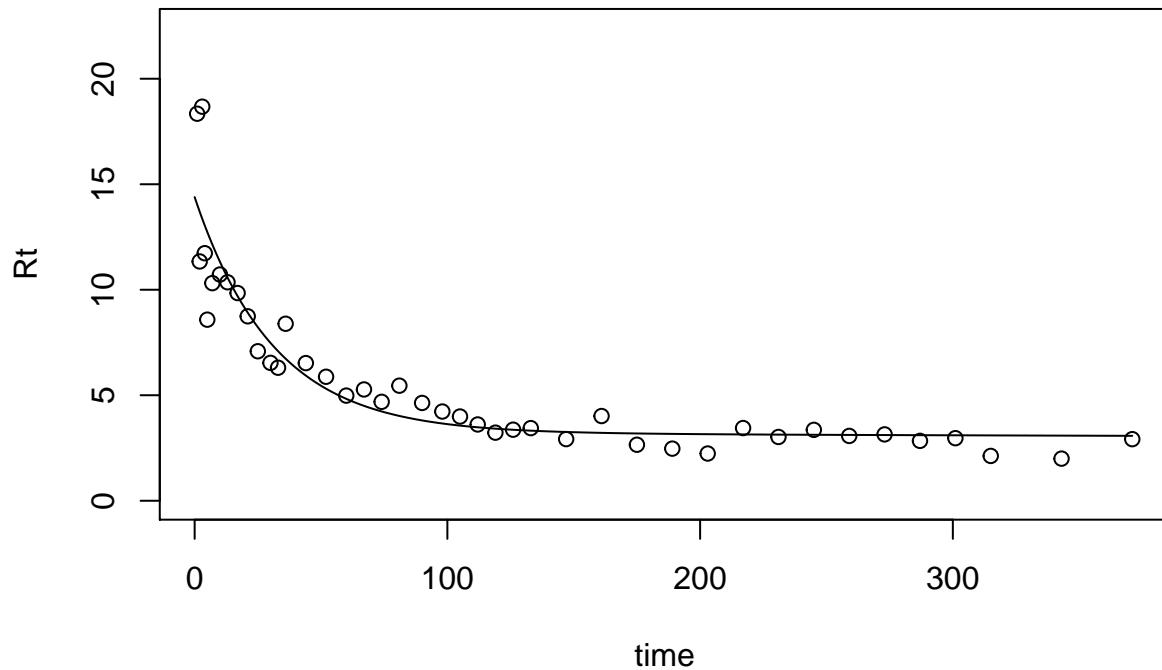
```
## [1] "AIC = -3.40517025136822"
## [1] "k1= 0.0319942615193887"
## [2] "k2= 0.000116599102273068"
## [3] "proportion of C0 in pool 1= 0.0125229640838148"
```



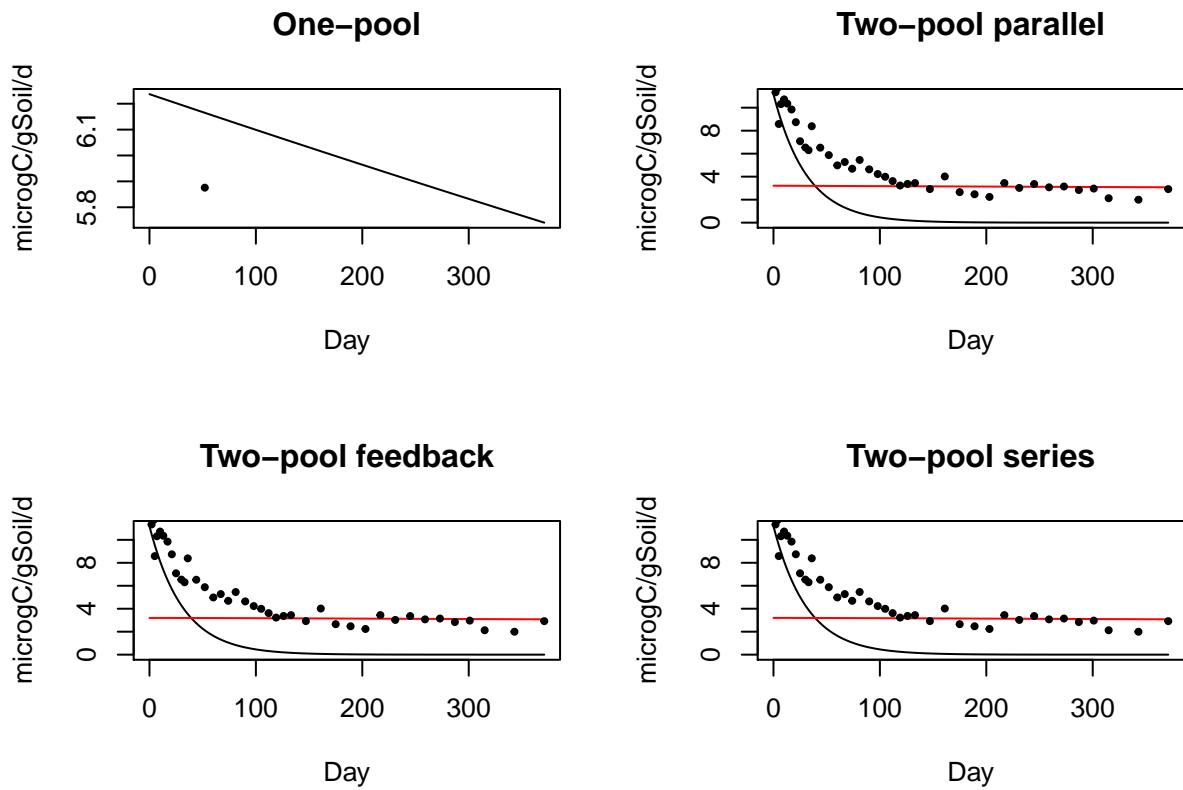
```
## [1] "AIC = 4.47036589621732"
## [1] "k1= 0.0319947102356783"
## [2] "k2= 0.000116601591511652"
## [3] "a21= 0.256961755390455"
## [4] "a12= 6.16478964444722e-05"
## [5] "Proportion of C0 in pool 1= 0.0168750833103351"
```



```
## [1] "AIC = 8.47036589567527"
## [1] "k1= 0.0319939118640764"
## [2] "k2= 0.000116598641697147"
## [3] "a21= 0.236896330814064"
## [4] "Proportion of C0 in pool 1= 0.0164290468093968"
```



```
## [1] "AIC = 6.47036588716515"
```

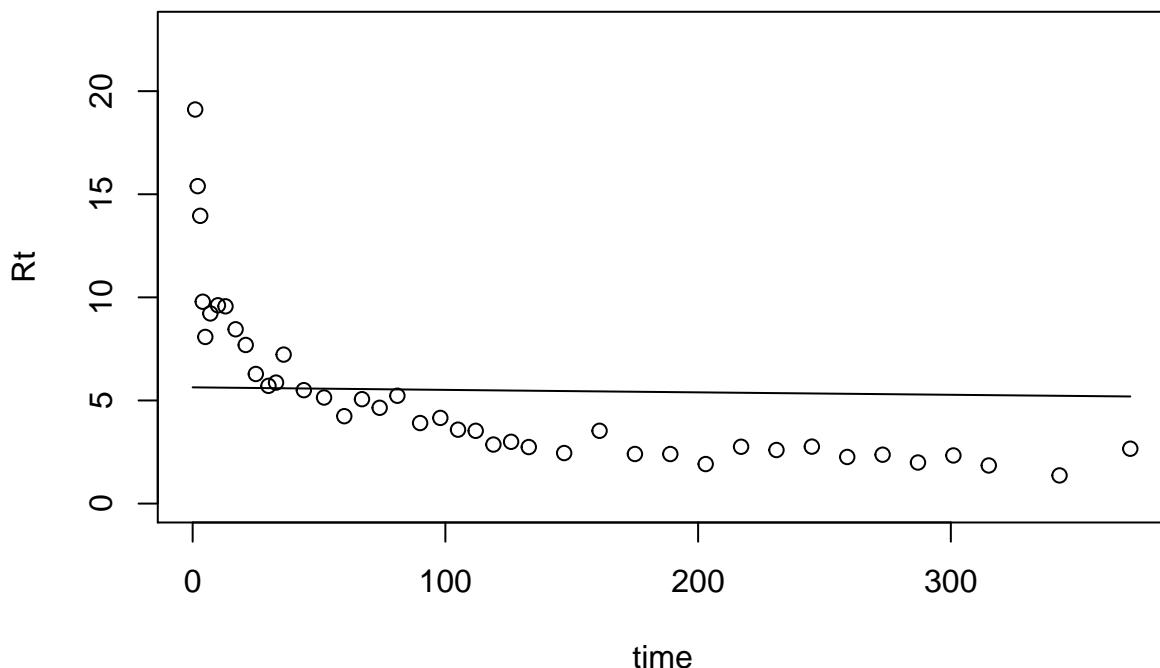


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-3.41	0.000224	NA	NA	NA	NA	-3.39	0.979	NA	NA
Two-pool parallel	4.47	0.032	0.000117	0.0125	NA	NA	4.54	0.0186	8470	5840
Two-pool feedback	8.47	0.032	0.000117	0.0169	0.257	6.16e-05	8.63	0.00239	2240	34.9
Two-pool series	6.47	0.032	0.000117	0.0164	0.237	NA	6.58	0.00668	2060	33.2

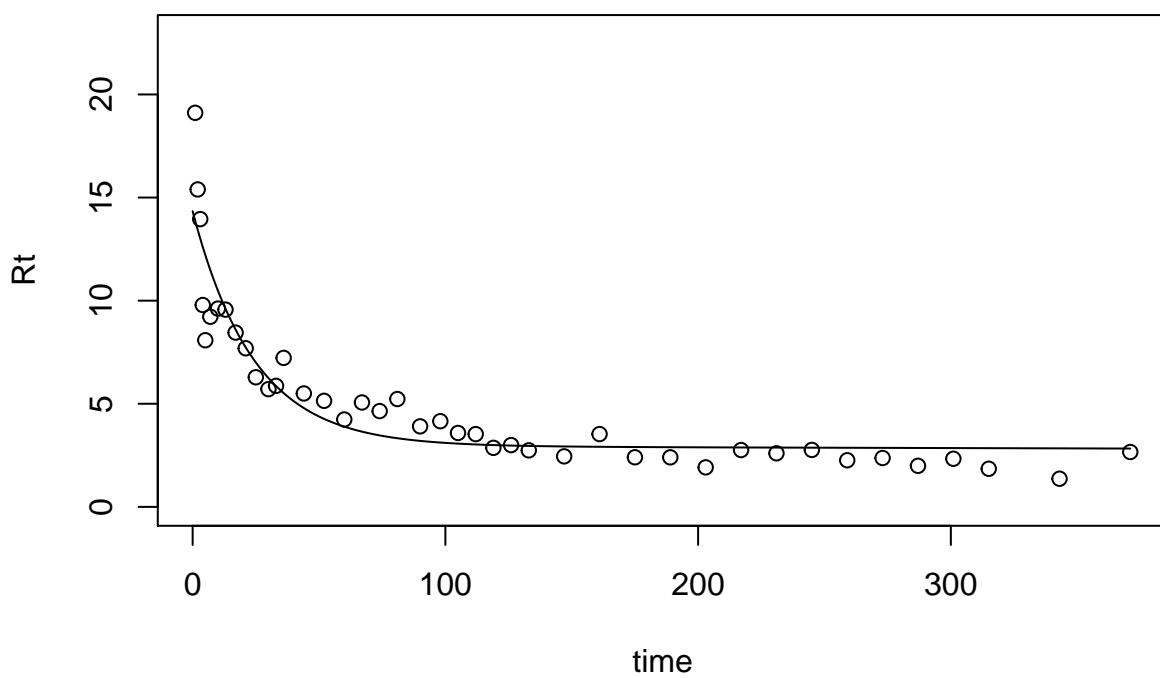
Variable Site44:

CO2 production rate

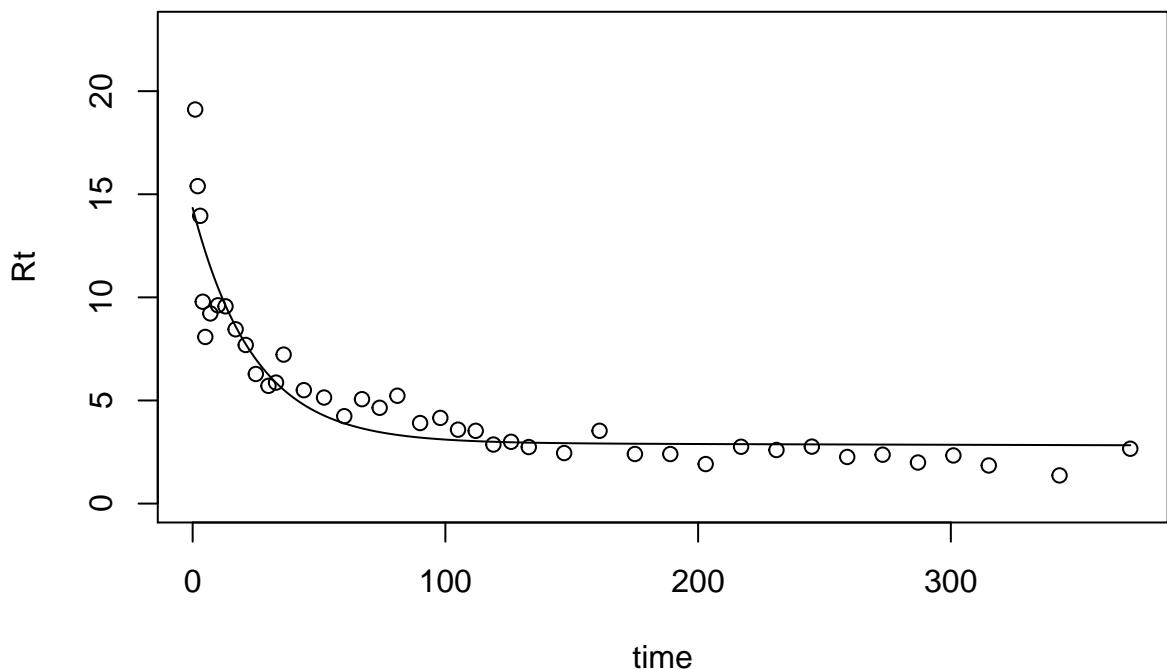
```
## [1] "Best fit parameter: 0.000220161006269604"
```



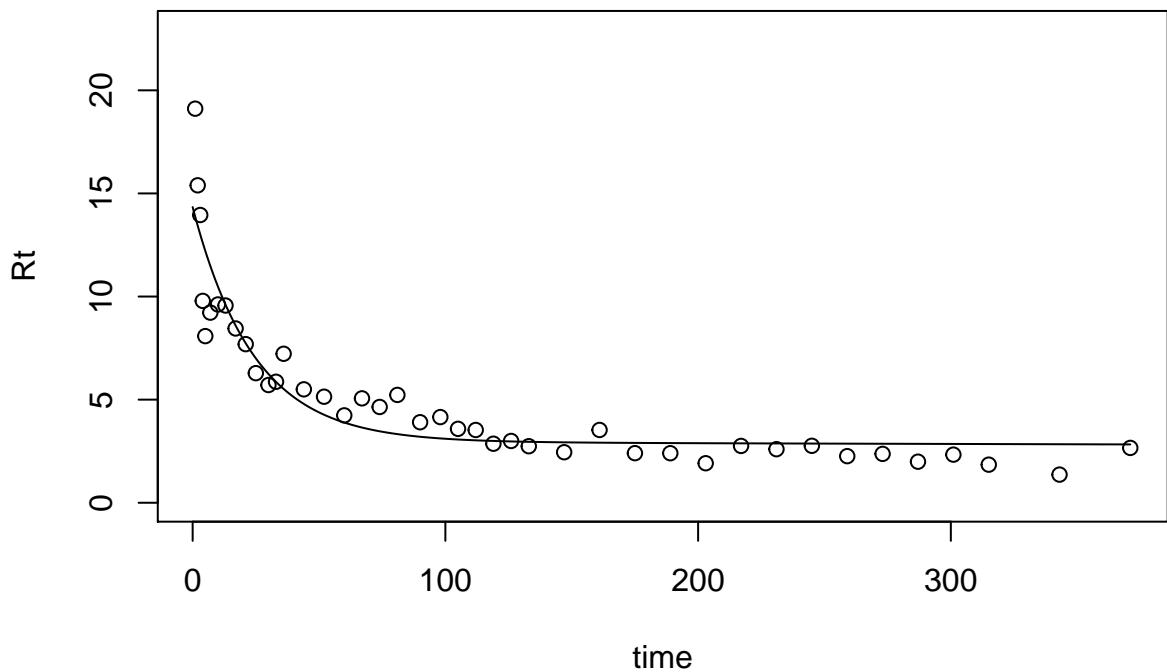
```
## [1] "AIC = -3.31715995843335"
## [1] "k1= 0.0412550710957312"
## [2] "k2= 0.000116622250847352"
## [3] "proportion of C0 in pool 1= 0.0107791410988077"
```



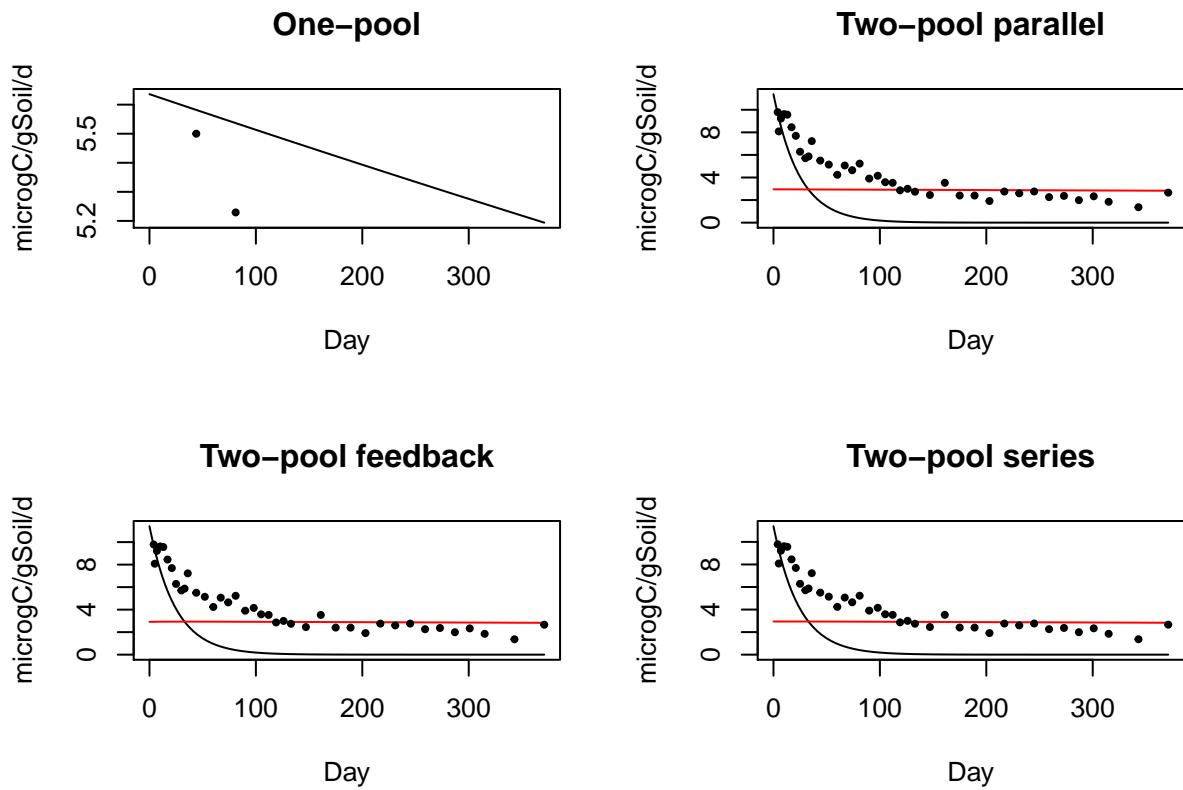
```
## [1] "AIC = 4.60808062411781"
## [1] "k1= 0.041258675978208"
## [2] "k2= 0.00011662566907404"
## [3] "a21= 0.528378252797104"
## [4] "a12= 2.18763614823203e-06"
## [5] "Proportion of C0 in pool 1= 0.0229266798703684"
```



```
## [1] "AIC = 8.60808063366379"
## [1] "k1= 0.041256198544016"
## [2] "k2= 0.000116623254780668"
## [3] "a21= 0.302188044059622"
## [4] "Proportion of C0 in pool 1= 0.015465506090532"
```



```
## [1] "AIC = 6.60808062568568"
```

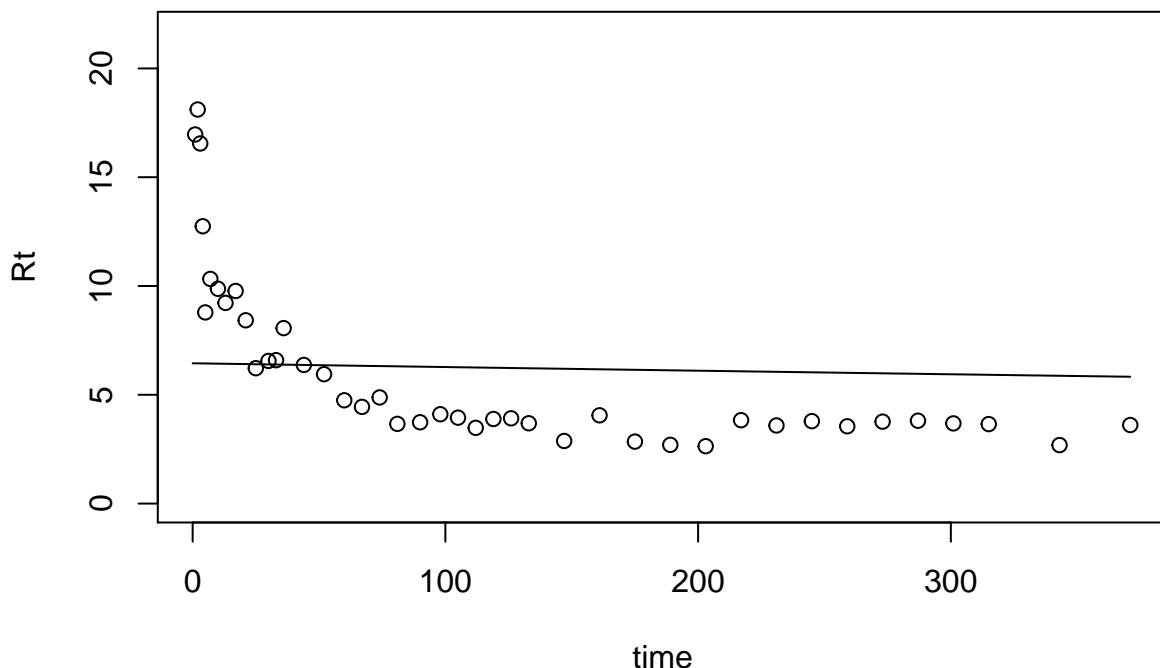


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-3.32	0.00022	NA	NA	NA	NA	-3.31	0.98	NA	NA
Two-pool parallel	4.61	0.0413	0.000117	0.0108	NA	NA	4.67	0.0181	8480	5850
Two-pool feedback	8.61	0.0413	0.000117	0.0229	0.528	2.19e-06	8.77	0.00233	4550	498
Two-pool series	6.61	0.0413	0.000117	0.0155	0.302	NA	6.72	0.00652	2620	30.5

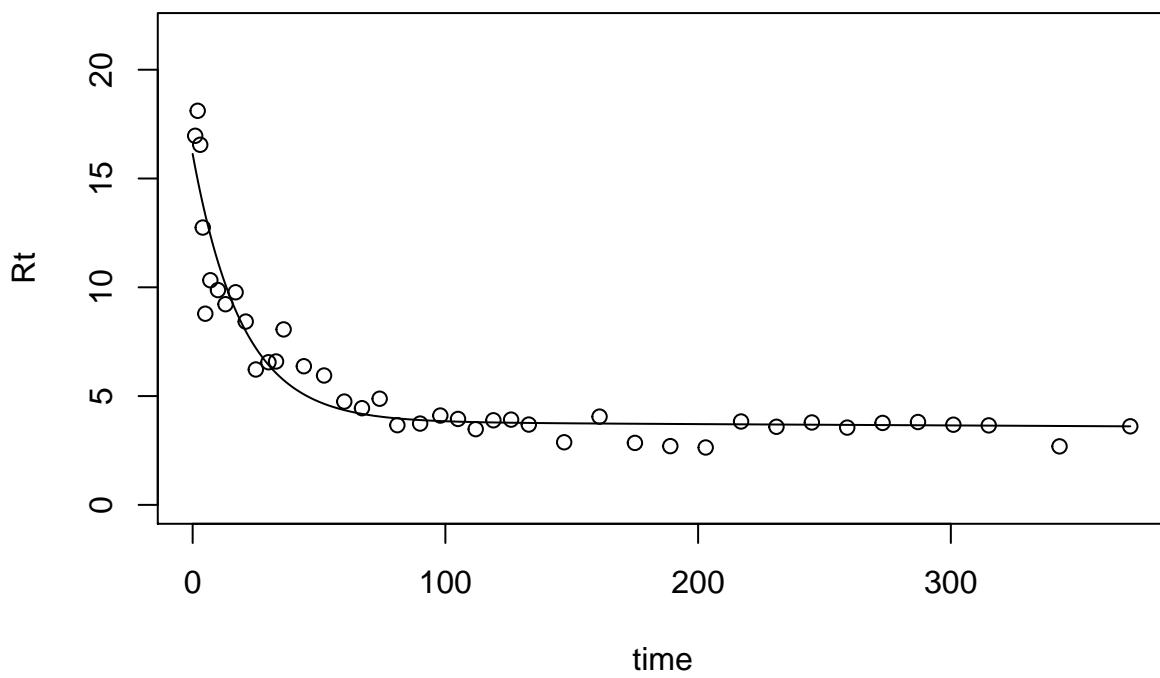
Variable Site45:

CO2 production rate

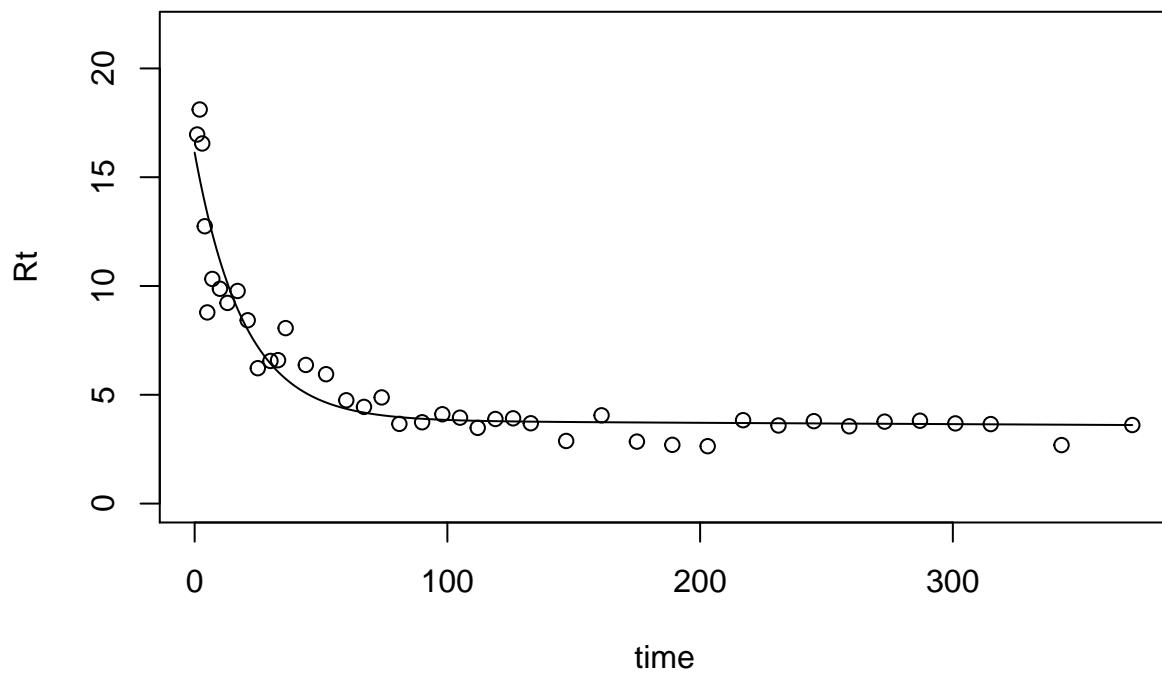
```
## [1] "Best fit parameter: 0.000272066313840672"
```



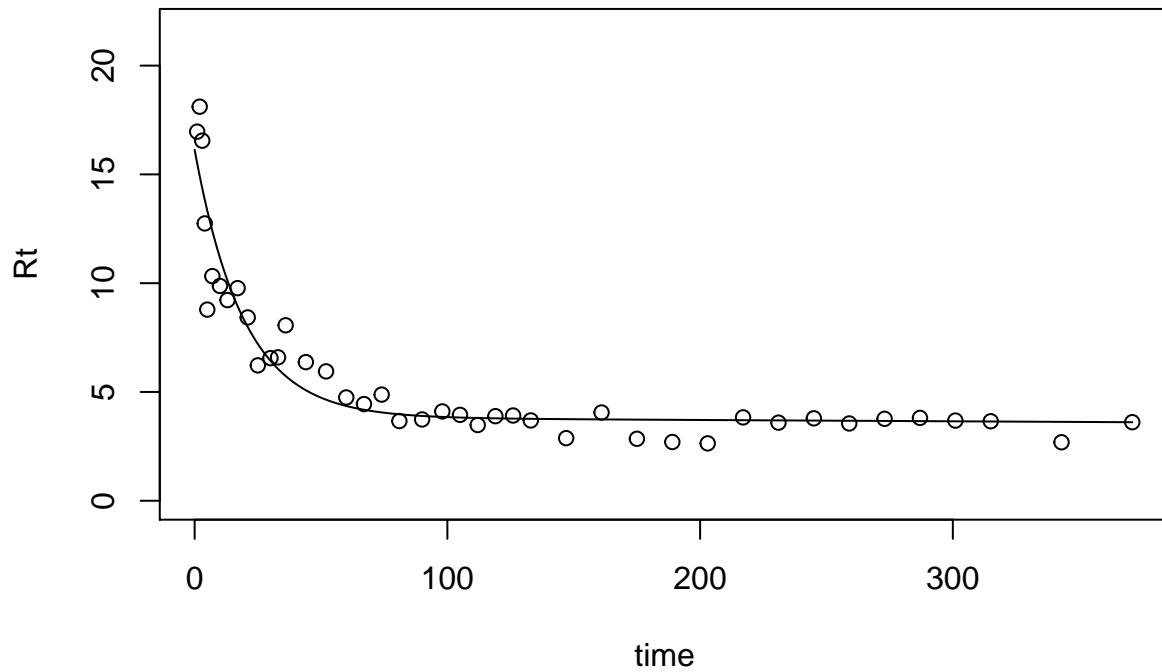
```
## [1] "AIC = -3.35589136875069"
## [1] "k1= 0.051552210862195"
## [2] "k2= 0.000163467103849253"
## [3] "proportion of C0 in pool 1= 0.0100635367153713"
```



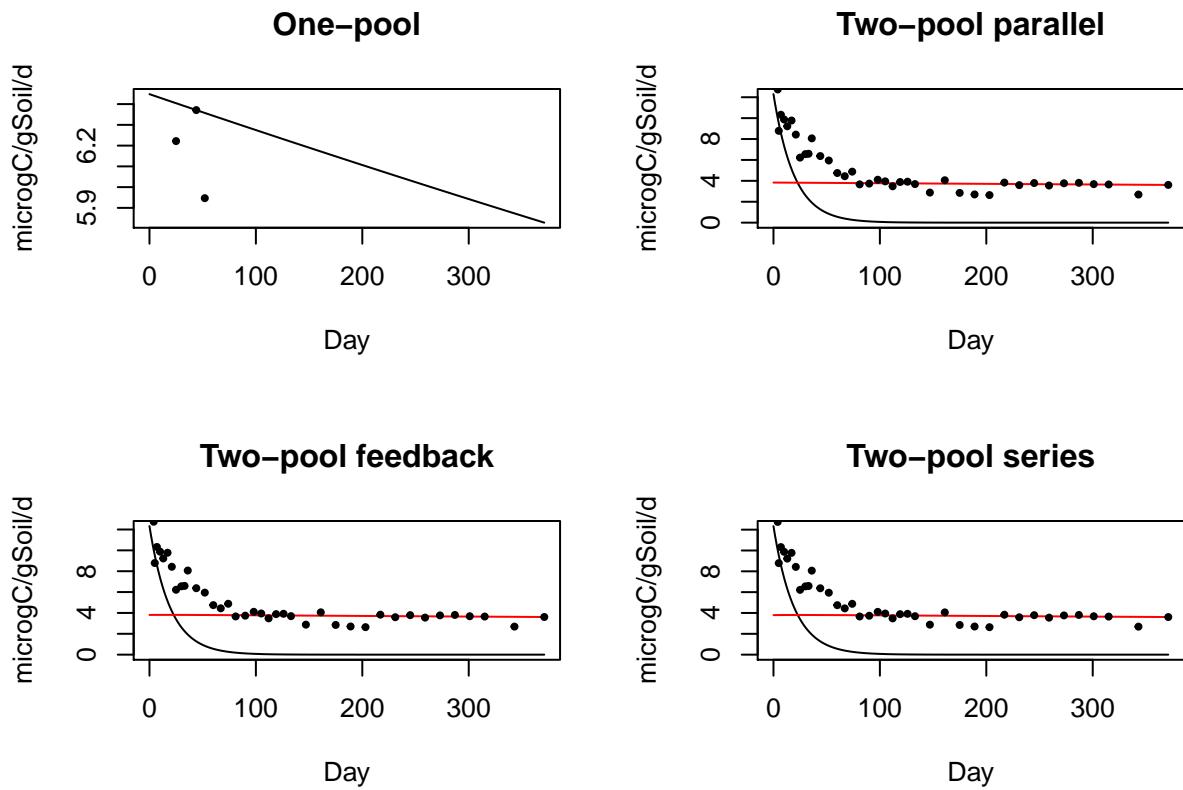
```
## [1] "AIC = 5.19871552209523"
## [1] "k1= 0.0515529844686395"
## [2] "k2= 0.000163474664717355"
## [3] "a21= 0.402748329262653"
## [4] "a12= 0.000106802800857841"
## [5] "Proportion of C0 in pool 1= 0.0168860823716381"
```



```
## [1] "AIC = 9.19871552360073"
## [1] "k1= 0.0515537777699057"
## [2] "k2= 0.000163468243825532"
## [3] "a21= 0.514639854237983"
## [4] "Proportion of C0 in pool 1= 0.0208039225194691"
```



```
## [1] "AIC = 7.19871552392136"
```

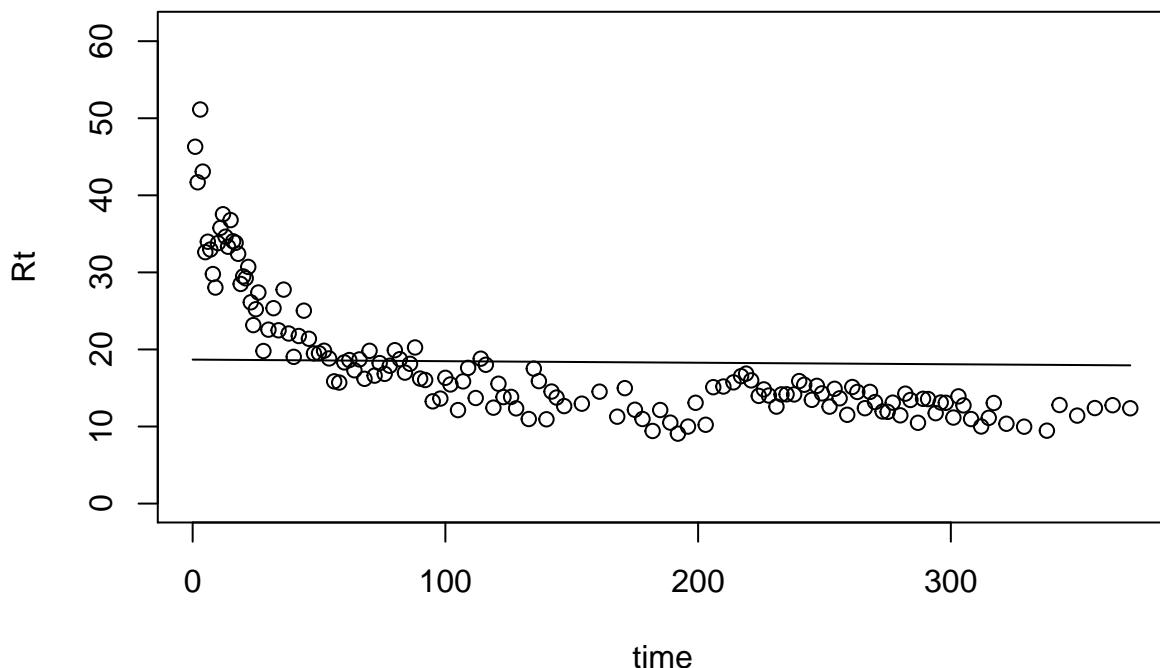


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-3.36	0.000272	NA	NA	NA	NA	-3.35	0.985	NA	NA
Two-pool parallel	5.2	0.0516	0.000163	0.0101	NA	NA	5.26	0.0133	6060	4180
Two-pool feedback	9.2	0.0516	0.000163	0.0169	0.403	0.000107	9.36	0.00171	2480	35
Two-pool series	7.2	0.0516	0.000163	0.0208	0.515	NA	7.31	0.00479	3170	196

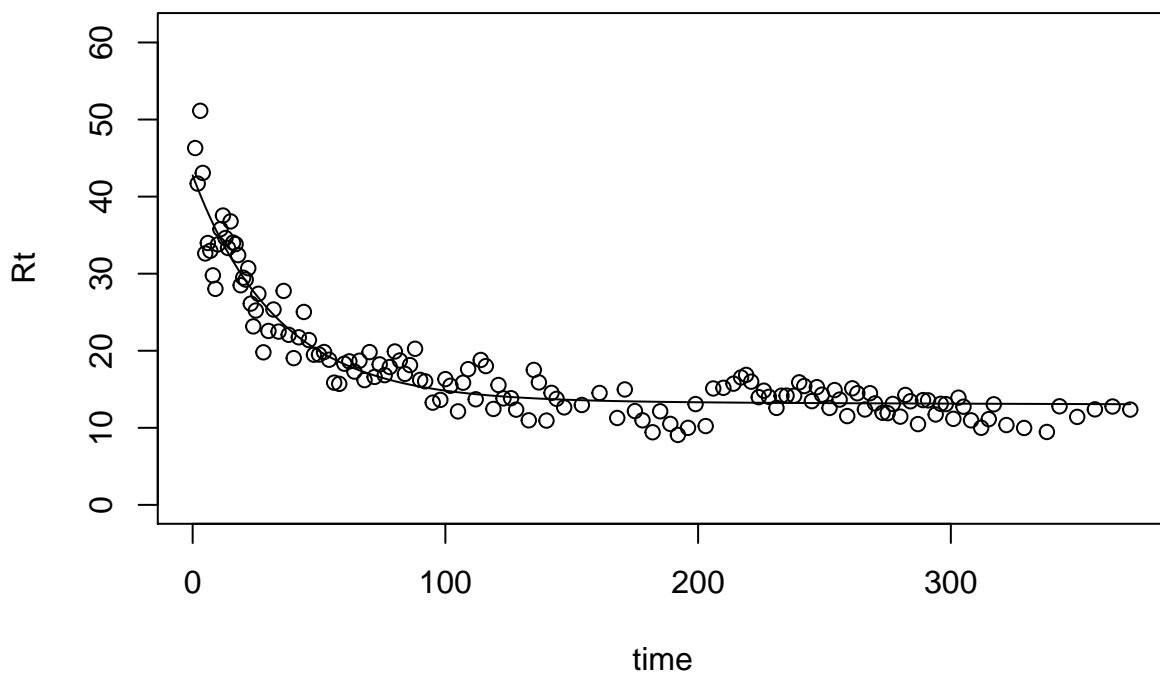
Variable Site46:

CO2 production rate

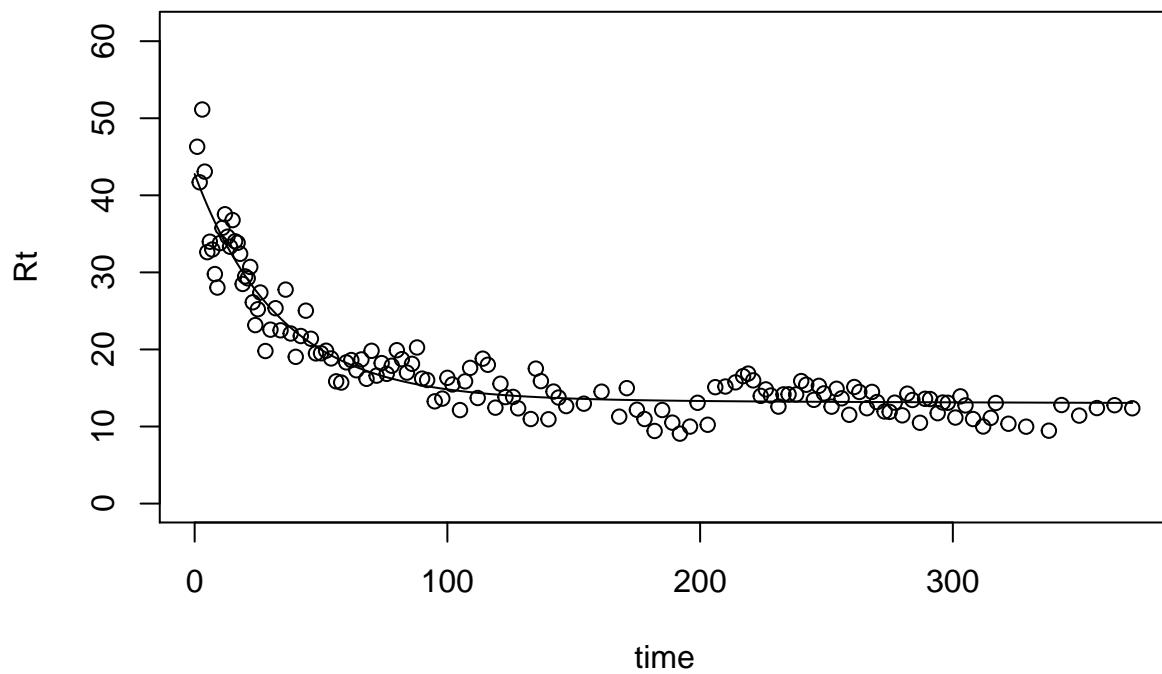
```
## [1] "Best fit parameter: 0.000109564948479471"
```



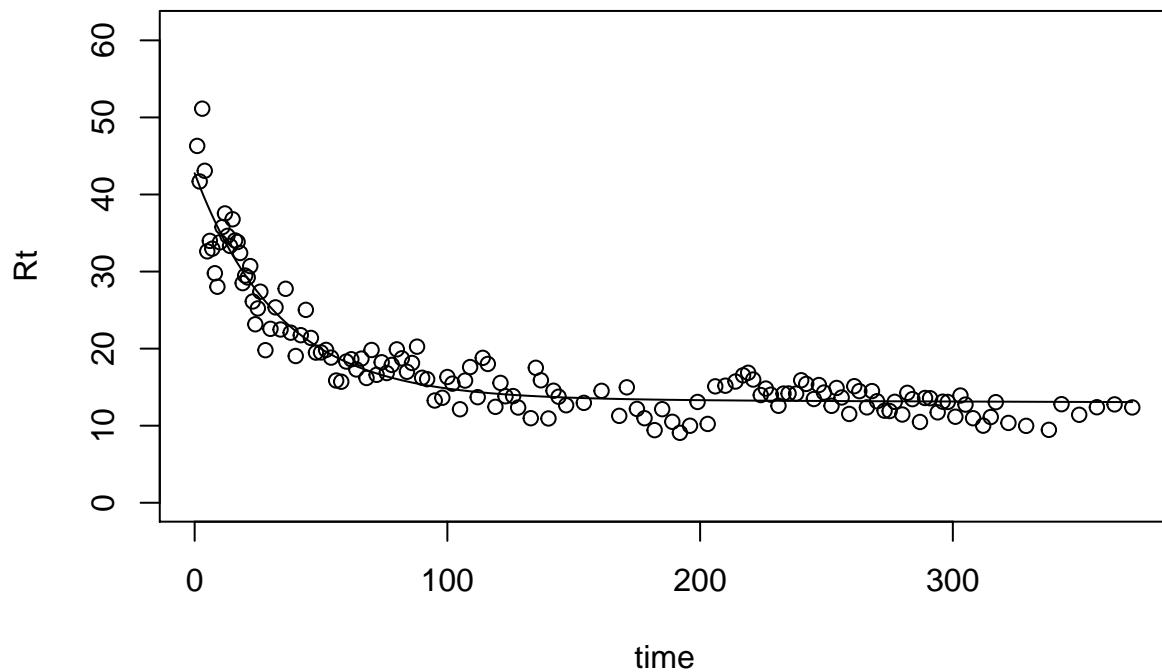
```
## [1] "AIC = -6.33959652843242"
## [1] "k1= 0.0298861499635095"
## [2] "k2= 7.93457671106644e-05"
## [3] "proportion of C0 in pool 1= 0.00575251012871547"
```



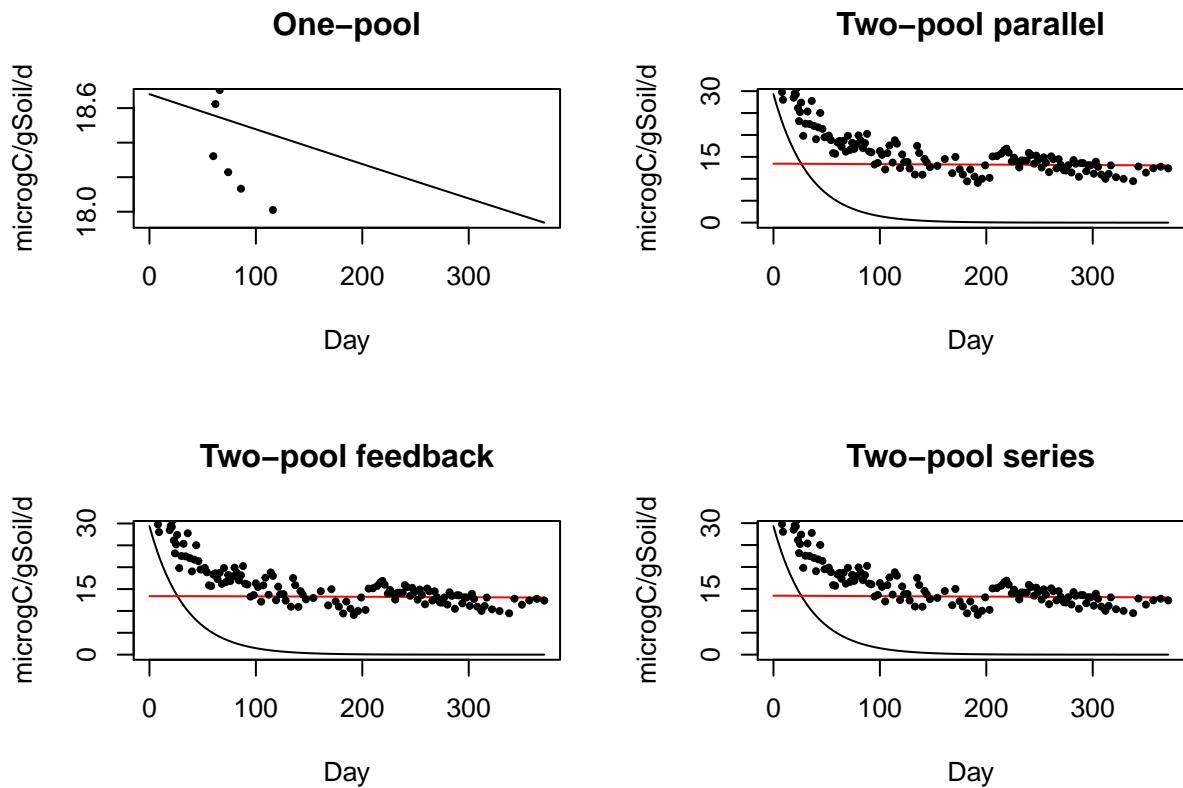
```
## [1] "AIC = 2.28342636180652"
## [1] "k1= 0.0298860684790678"
## [2] "k2= 7.93600745048138e-05"
## [3] "a21= 0.494564935562281"
## [4] "a12= 0.000364275437540529"
## [5] "Proportion of C0 in pool 1= 0.0114120081461545"
```



```
## [1] "AIC = 6.28342636160935"  
## [1] "k1= 0.0298862391159844"  
## [2] "k2= 7.93458320620759e-05"  
## [3] "a21= 0.00316471675804519"  
## [4] "Proportion of C0 in pool 1= 0.00577080110483236"
```



```
## [1] "AIC = 4.28342636181109"
```

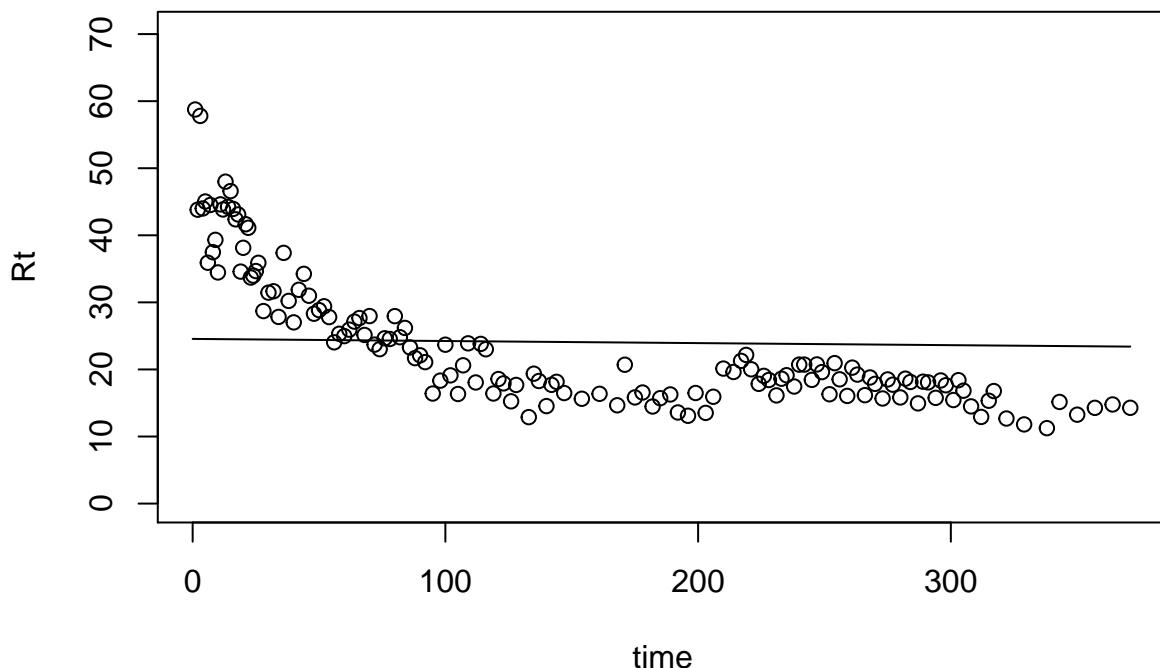


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-6.34	0.00011	NA	NA	NA	NA	-6.33	0.985	NA	NA
Two-pool parallel	2.28	0.0299	7.93e-05	0.00575	NA	NA	2.35	0.0129	12500	8660
Two-pool feedback	6.28	0.0299	7.94e-05	0.0114	0.495	0.000364	6.45	0.00166	6270	133
Two-pool series	4.28	0.0299	7.93e-05	0.00577	0.00316	NA	4.39	0.00463	73.3	23.3

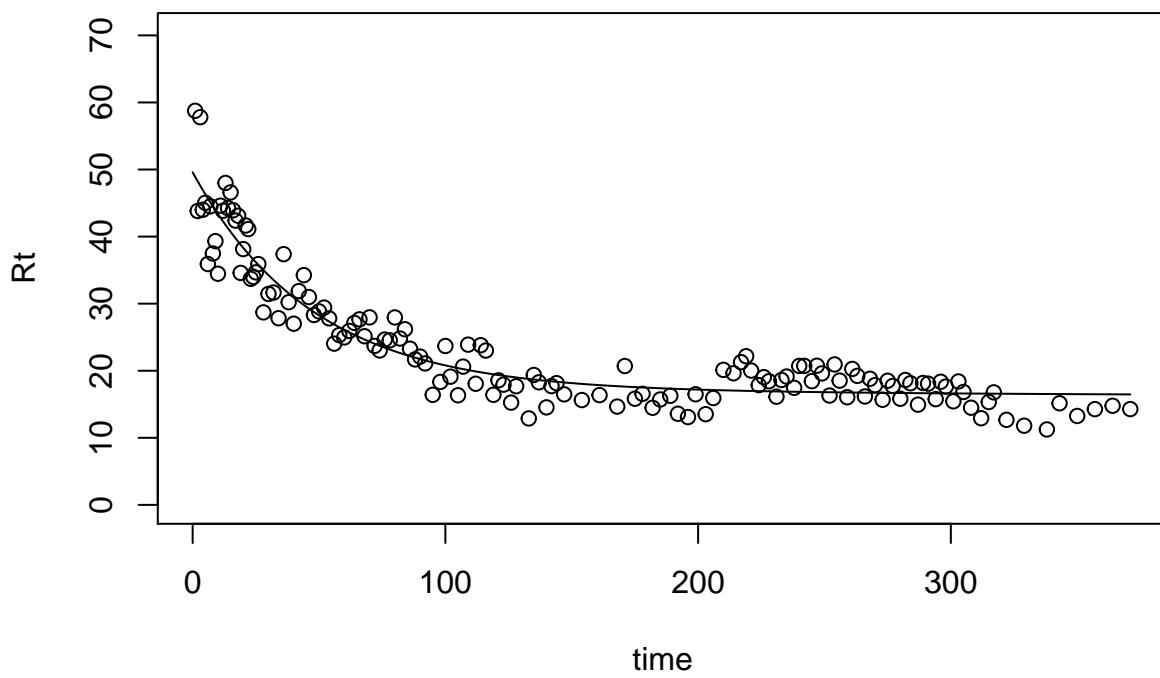
Variable Site47:

CO2 production rate

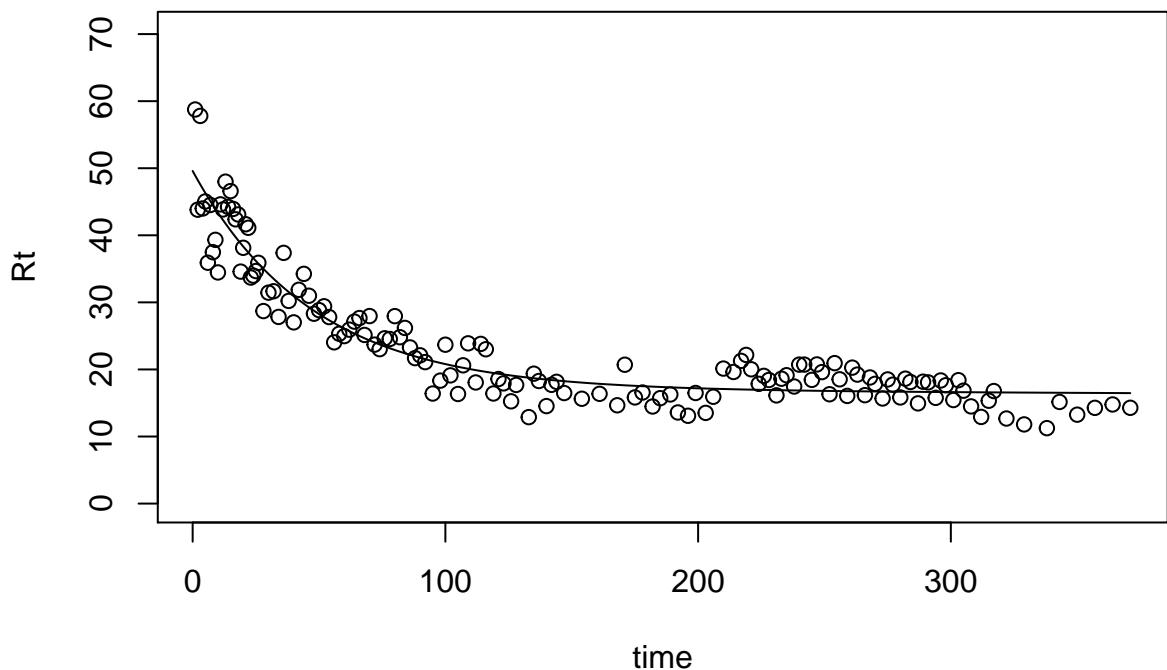
```
## [1] "Best fit parameter: 0.000129013602391634"
```



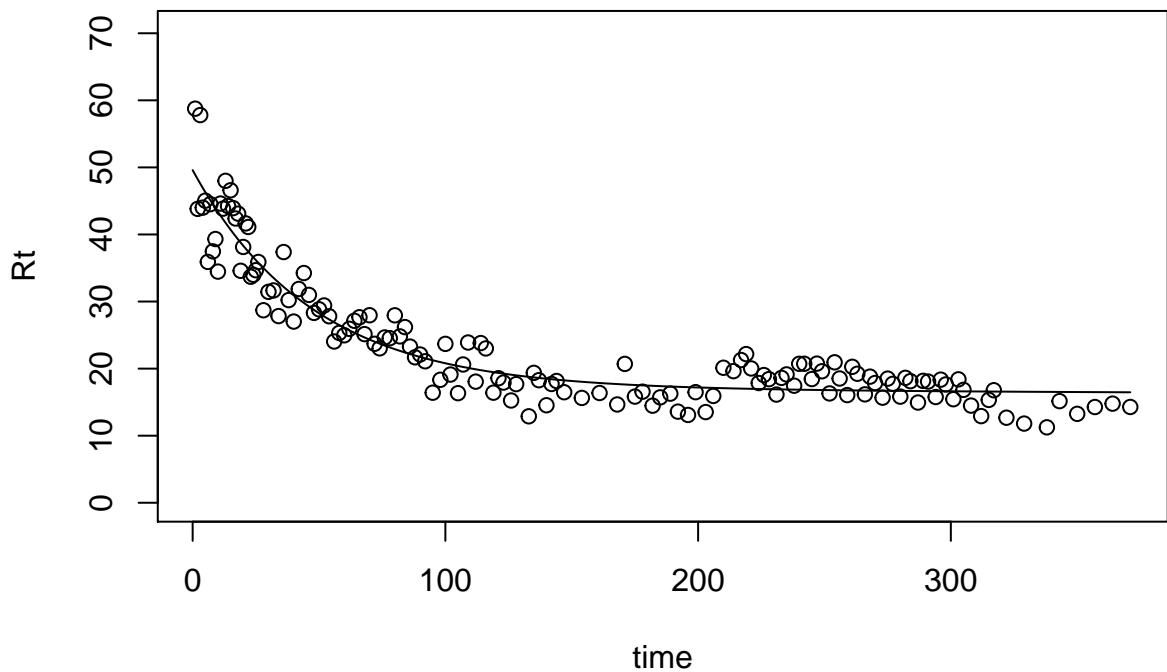
```
## [1] "AIC = -7.10374514673623"
## [1] "k1= 0.0211406234161167"
## [2] "k2= 9.01484957144409e-05"
## [3] "proportion of C0 in pool 1= 0.00809798998246436"
```



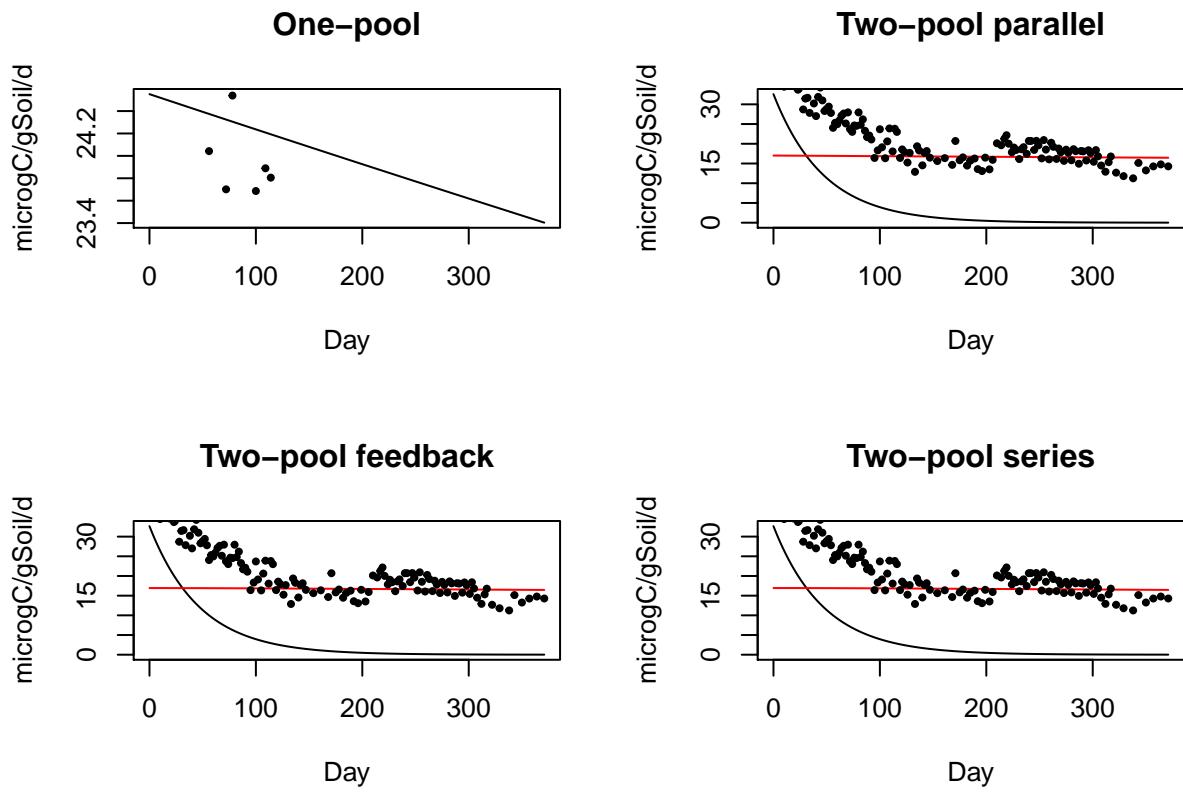
```
## [1] "AIC = 1.36541783591387"
## [1] "k1= 0.0211405700578496"
## [2] "k2= 9.01519181760106e-05"
## [3] "a21= 0.380910174659208"
## [4] "a12= 0.000102245166354653"
## [5] "Proportion of C0 in pool 1= 0.0131154908567644"
```



```
## [1] "AIC = 5.3654178358724"
## [1] "k1= 0.0211406244028384"
## [2] "k2= 9.01484970402832e-05"
## [3] "a21= 0.363489677173376"
## [4] "Proportion of C0 in pool 1= 0.012753662518305"
```



```
## [1] "AIC = 3.36541783590518"
```

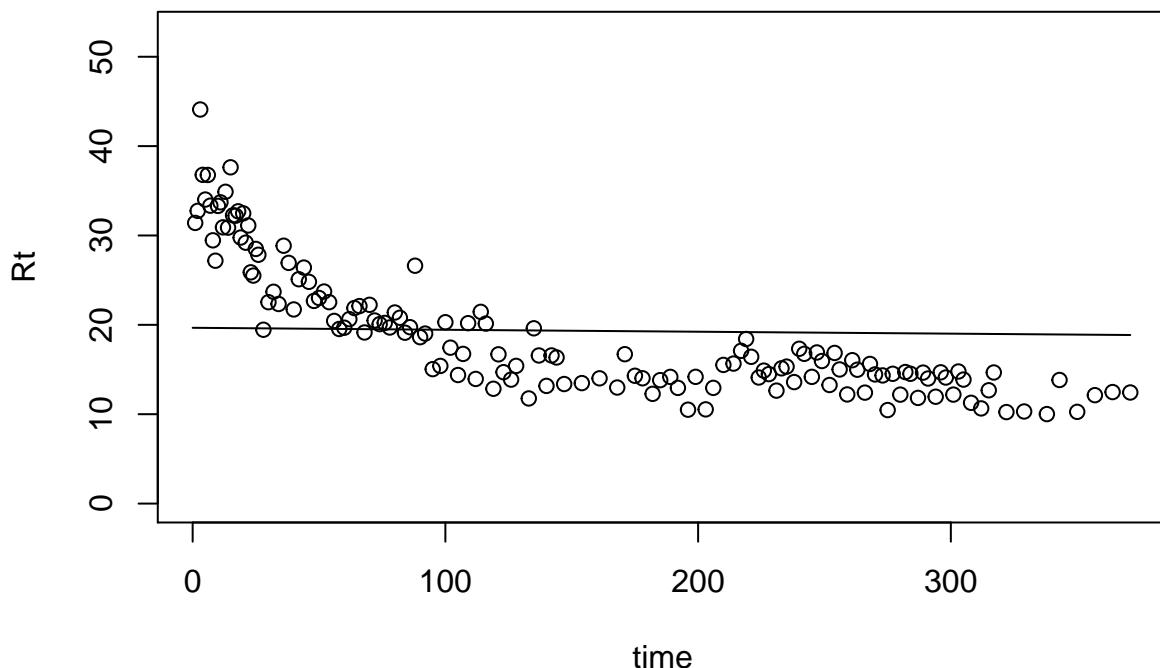


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-7.1	0.000129	NA	NA	NA	NA	-7.09	0.984	NA
Two-pool parallel	1.37	0.0211	9.01e-05	0.0081	NA	NA	1.43	0.0139	11000
Two-pool feedback	5.37	0.0211	9.02e-05	0.0131	0.381	0.000102	5.53	0.00179	4270
Two-pool series	3.37	0.0211	9.01e-05	0.0128	0.363	NA	3.47	0.00499	4080

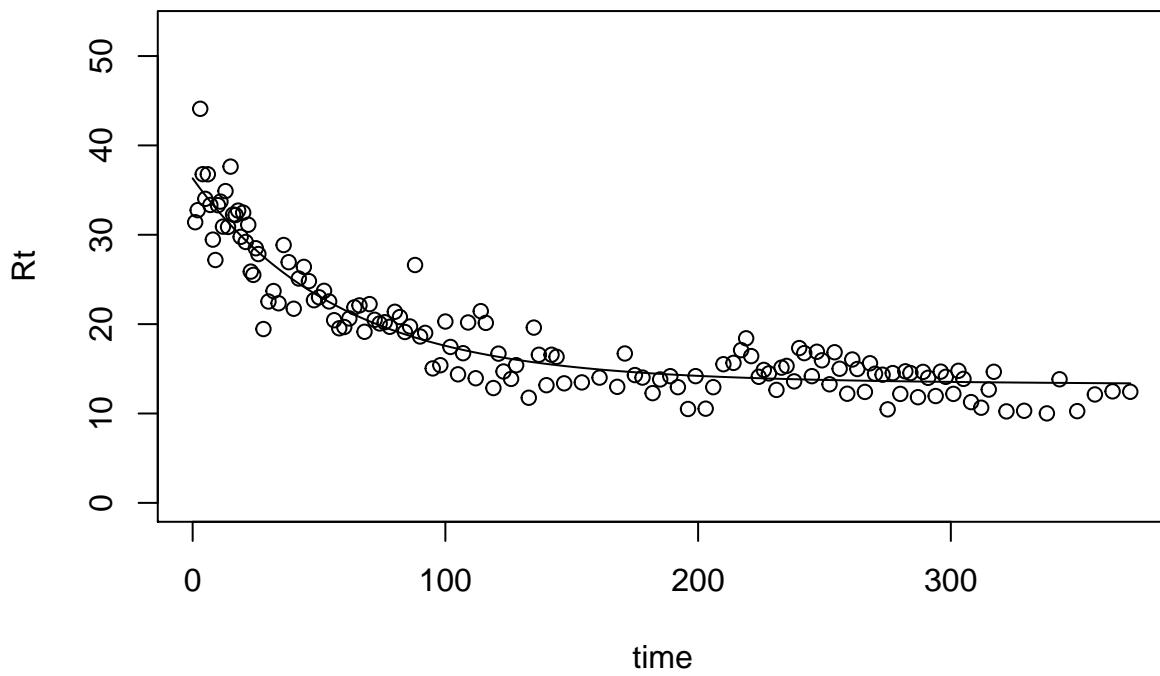
Variable Site48:

CO2 production rate

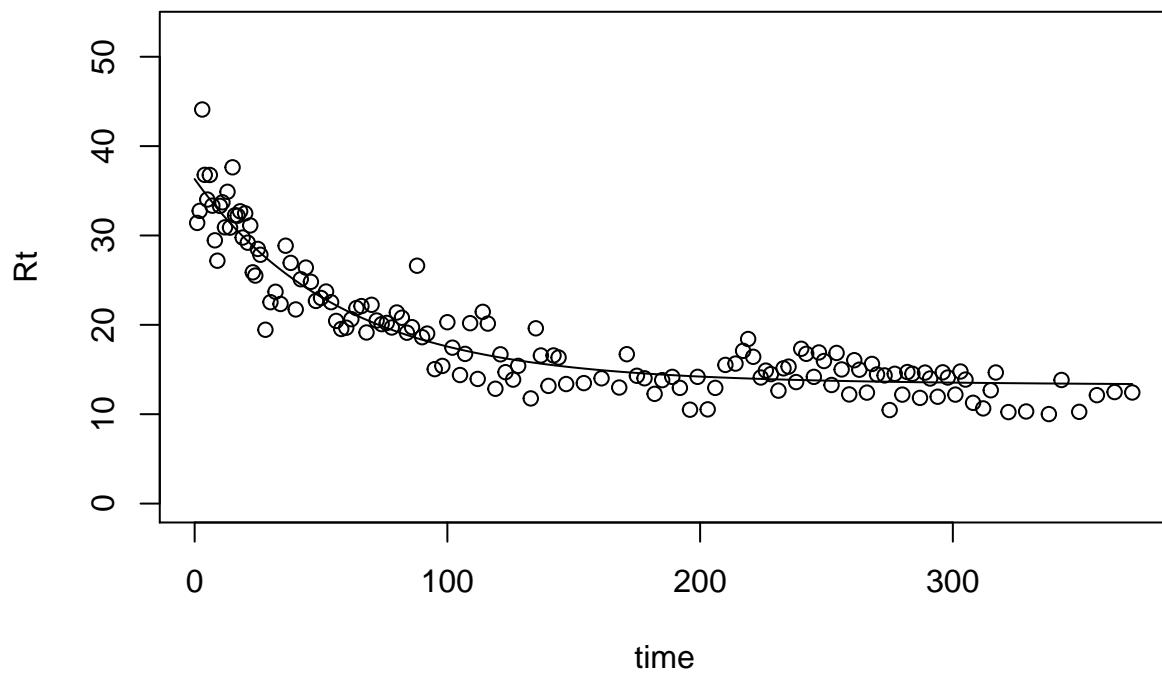
```
## [1] "Best fit parameter: 0.000112845911327687"
```



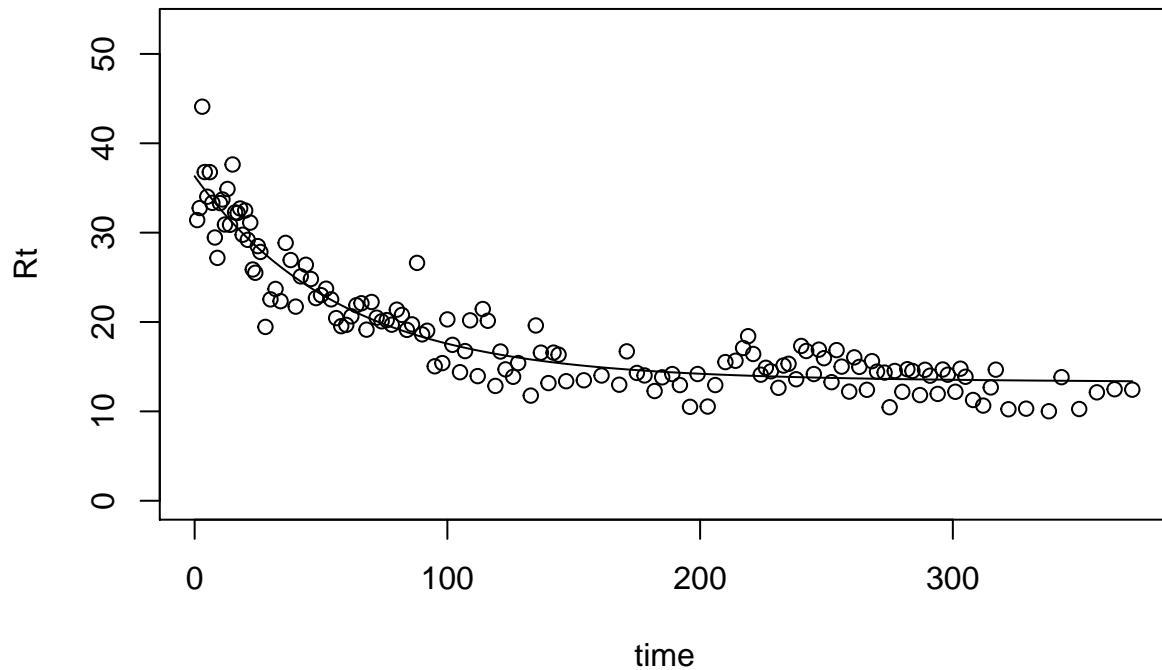
```
## [1] "AIC = -5.80952563477667"
## [1] "k1= 0.0174464678019873"
## [2] "k2= 7.94133700697551e-05"
## [3] "proportion of C0 in pool 1= 0.00742382803214231"
```



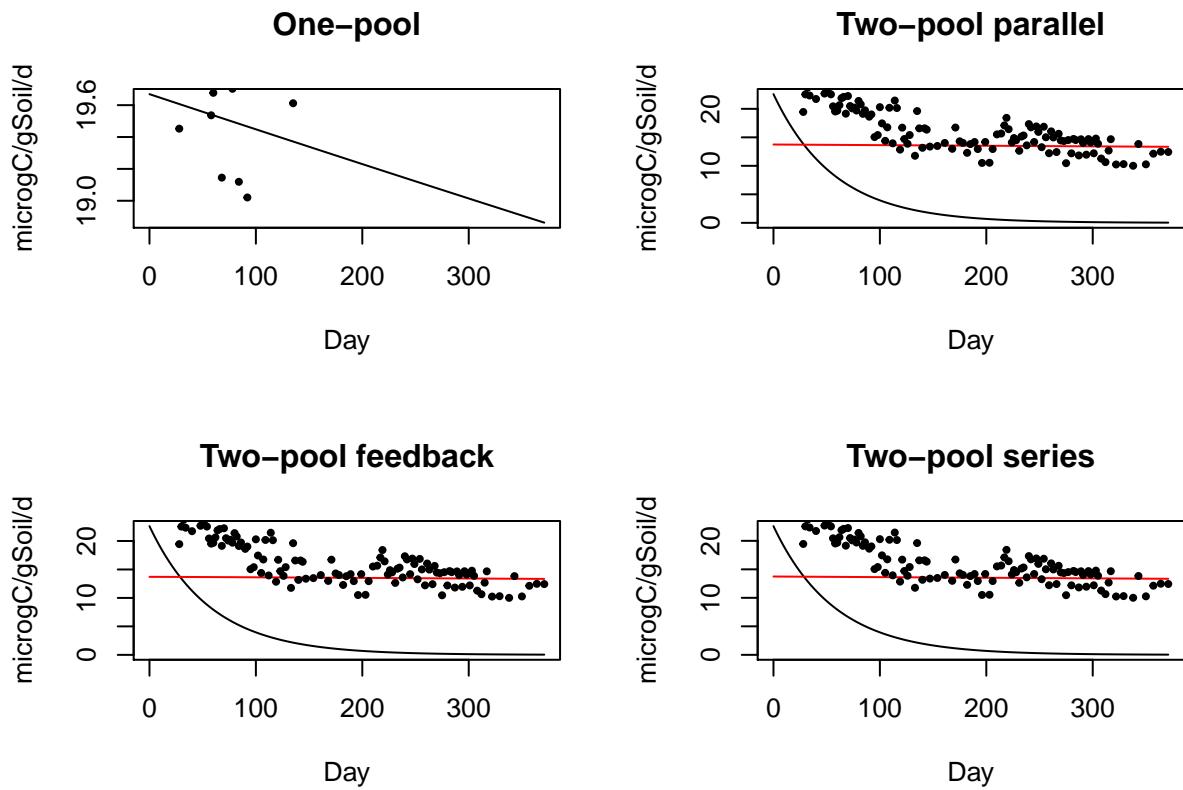
```
## [1] "AIC = 2.39913500632347"
## [1] "k1= 0.0174466396793777"
## [2] "k2= 7.94170324964457e-05"
## [3] "a21= 0.239791037737894"
## [4] "a12= 0.000182519629701061"
## [5] "Proportion of C0 in pool 1= 0.00978035357910589"
```



```
## [1] "AIC = 6.39913500628631"
## [1] "k1= 0.0174465624821478"
## [2] "k2= 7.94134689505419e-05"
## [3] "a21= 0.00243528948372101"
## [4] "Proportion of C0 in pool 1= 0.00744197114963313"
```



```
## [1] "AIC = 4.39913500599283"
```

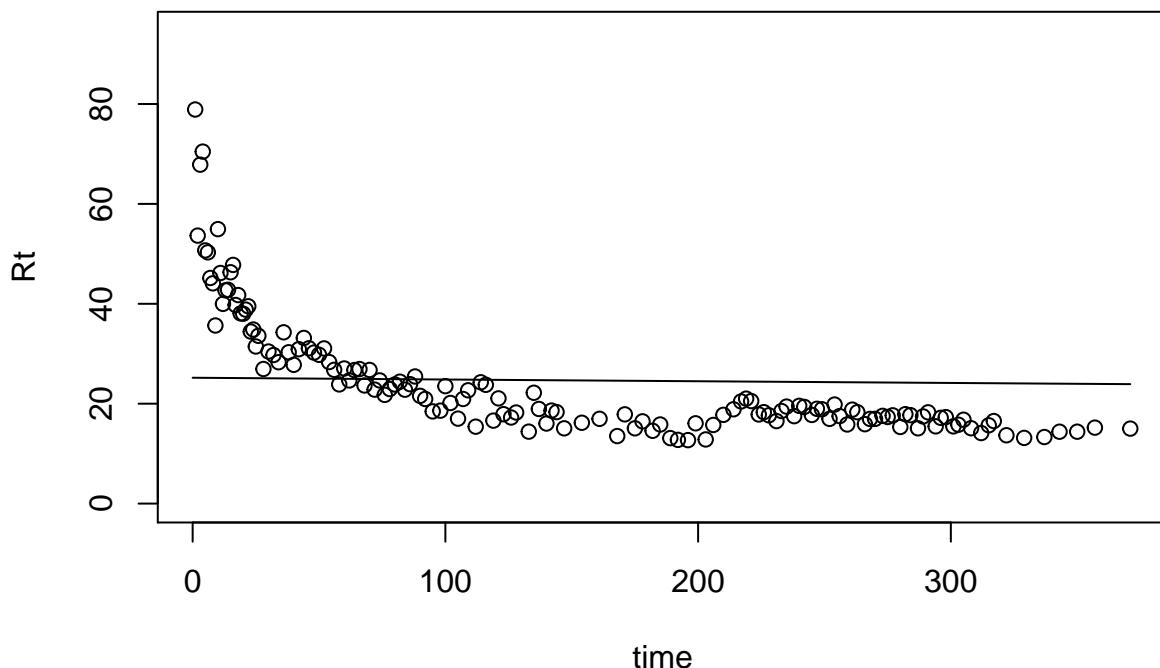


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.81	0.000113	NA	NA	NA	NA	-5.8	0.982	NA	NA
Two-pool parallel	2.4	0.0174	7.94e-05	0.00742	NA	NA	2.46	0.0158	12500	8630
Two-pool feedback	6.4	0.0174	7.94e-05	0.00978	0.24	0.000183	6.56	0.00203	3080	61.4
Two-pool series	4.4	0.0174	7.94e-05	0.00744	0.00244	NA	4.51	0.00568	88	39.9

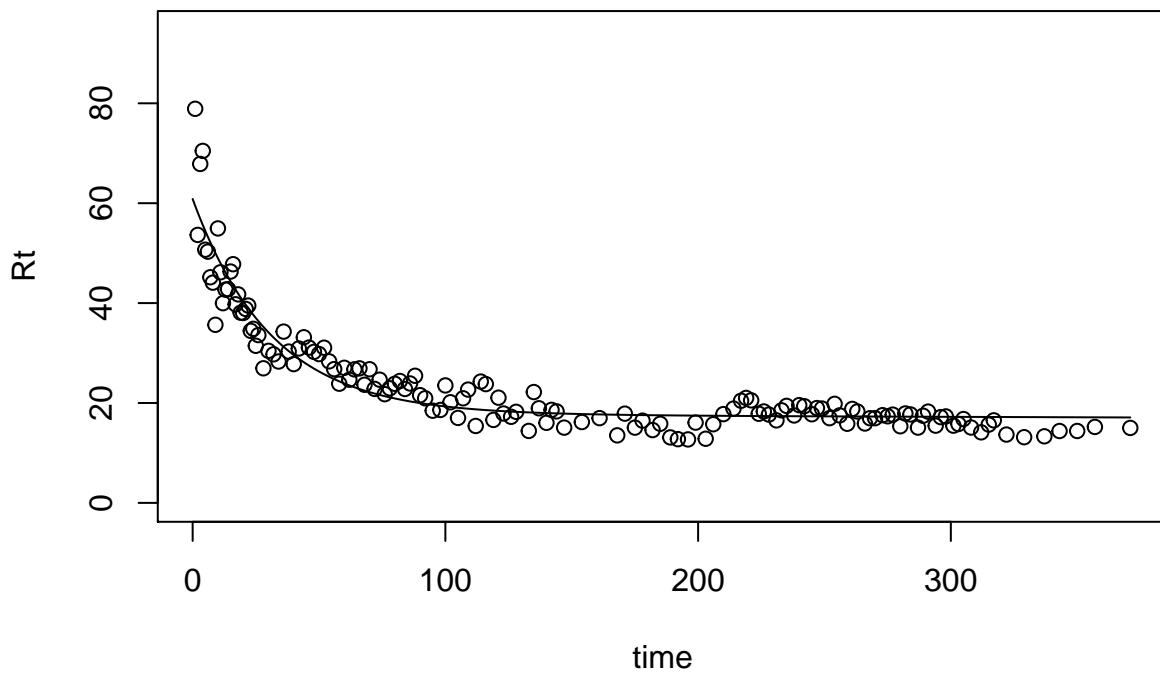
Variable Site49:

CO2 production rate

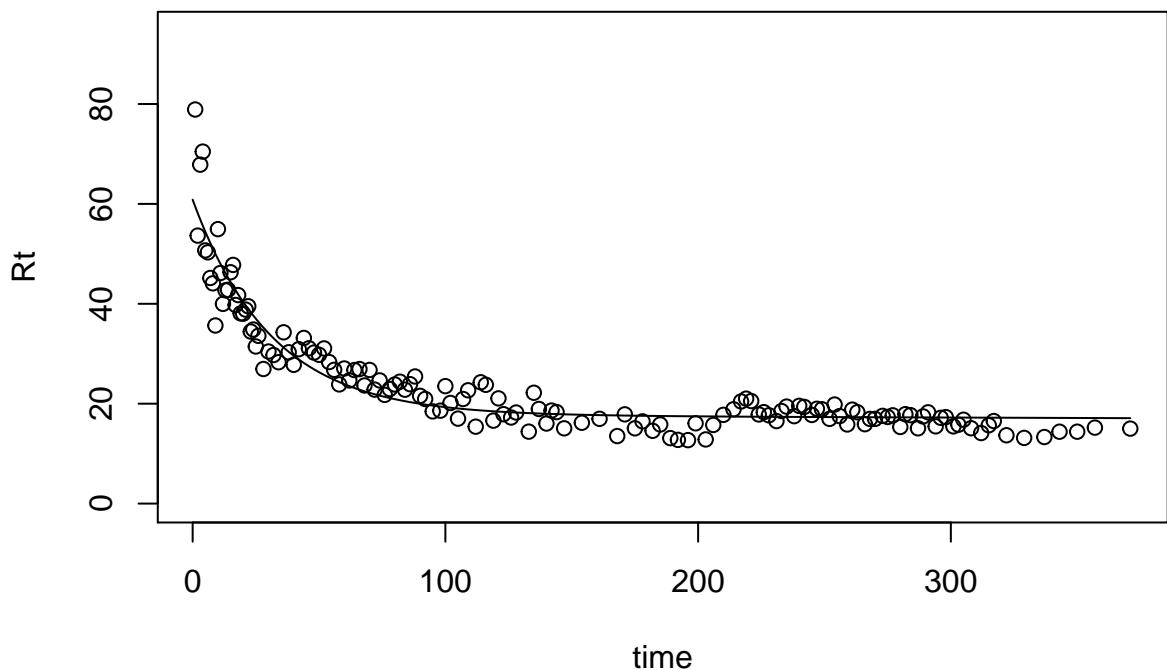
```
## [1] "Best fit parameter: 0.000140576784957729"
```



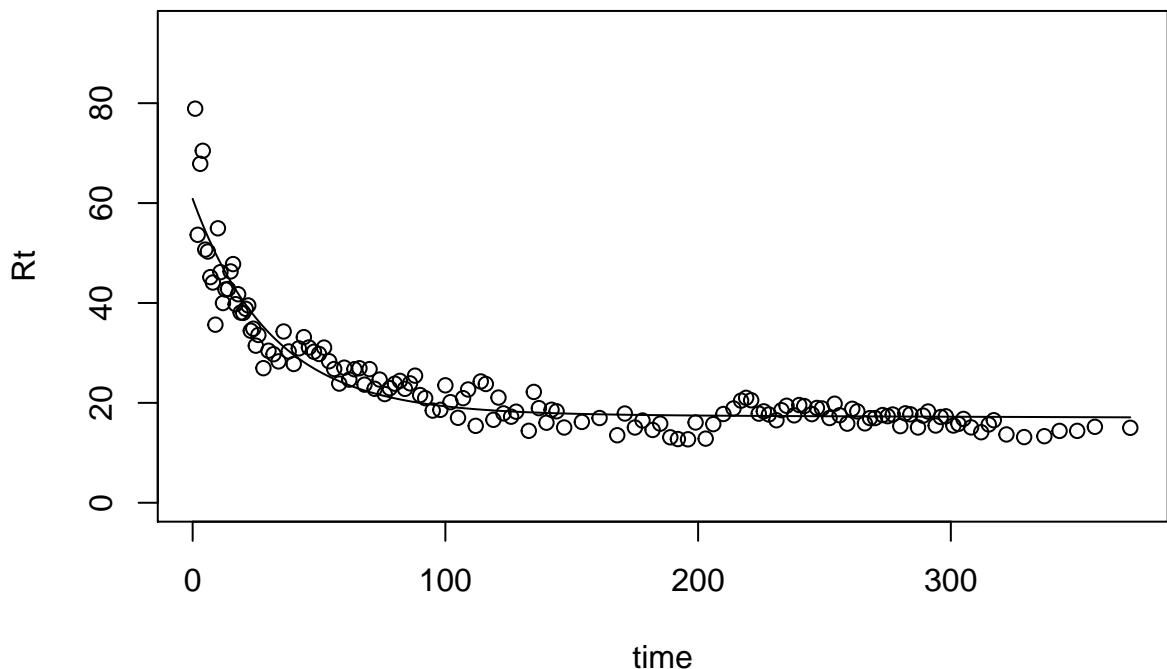
```
## [1] "AIC = -7.8148299796769"
## [1] "k1= 0.0321239104015434"
## [2] "k2= 9.97770738082023e-05"
## [3] "proportion of C0 in pool 1= 0.007487787472231"
```



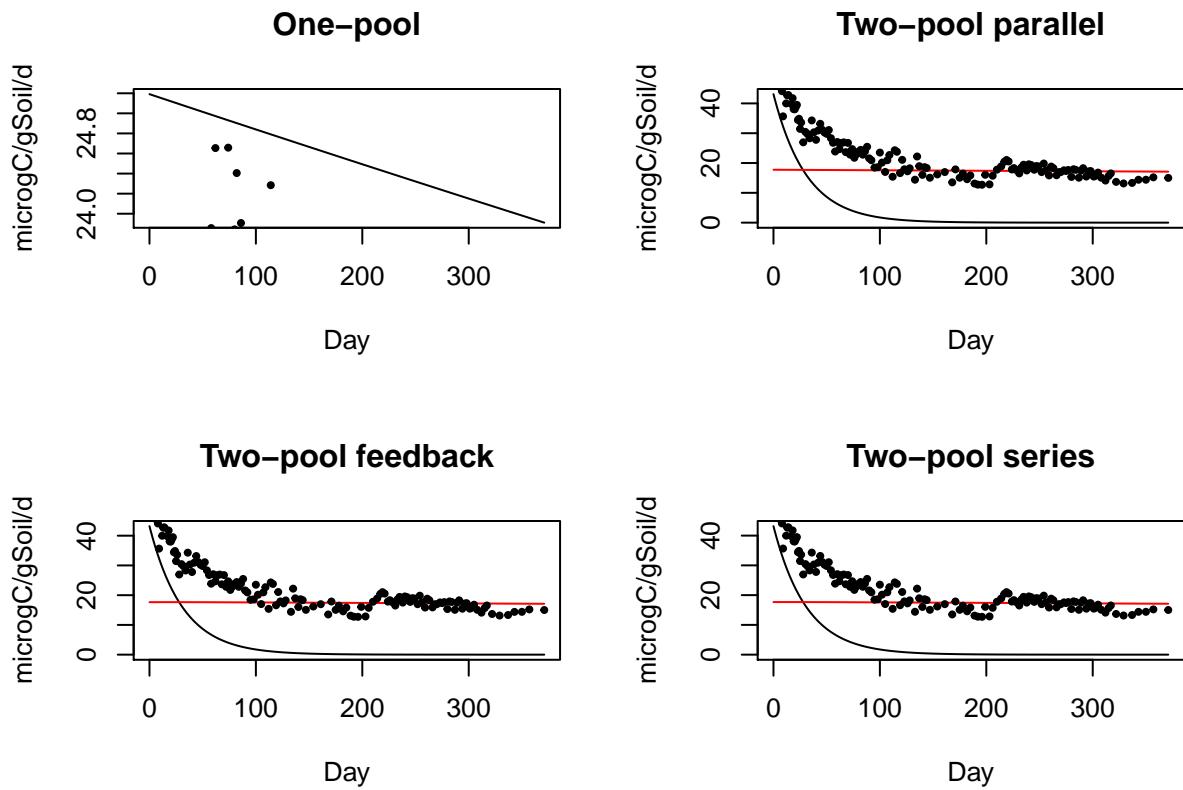
```
## [1] "AIC = 0.654861625530085"
## [1] "k1= 0.0321247406821459"
## [2] "k2= 9.97918008243596e-05"
## [3] "a21= 0.429009500906974"
## [4] "a12= 0.00033000617870188"
## [5] "Proportion of C0 in pool 1= 0.0131452040488909"
```



```
## [1] "AIC = 4.65486162705527"  
## [1] "k1= 0.0321235138253313"  
## [2] "k2= 9.97769105249902e-05"  
## [3] "a21= 0.37010644763394"  
## [4] "Proportion of C0 in pool 1= 0.011909216642831"
```



```
## [1] "AIC = 2.65486162316836"
```

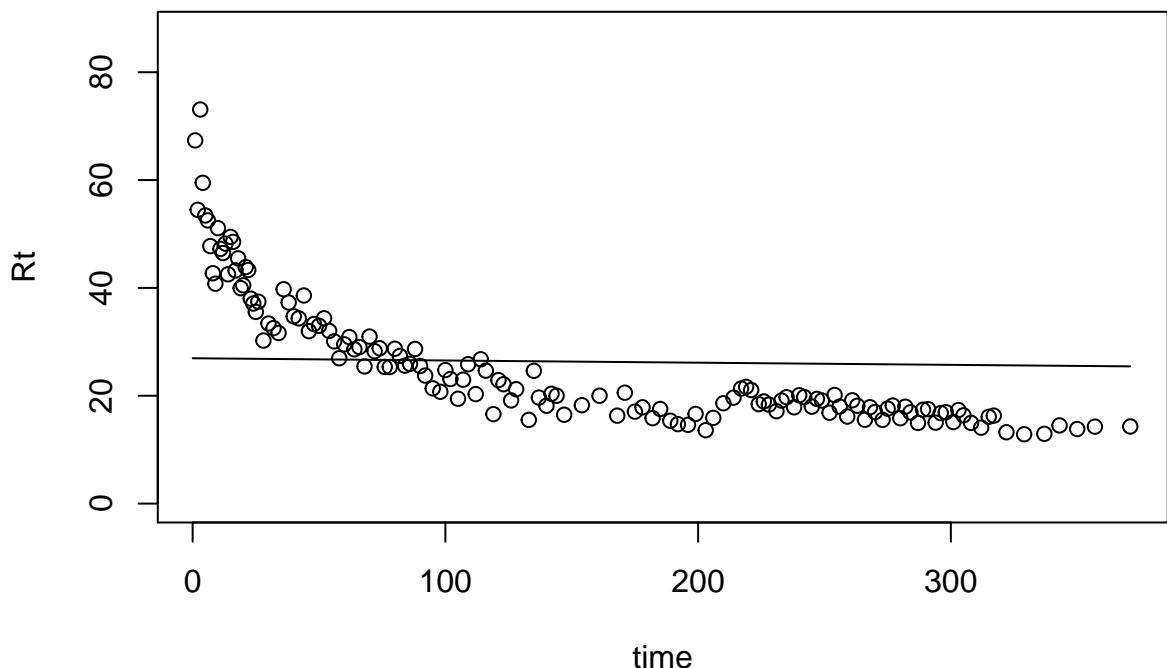


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-7.81	0.000141	NA	NA	NA	NA	-7.8	0.984	NA	NA
Two-pool parallel	0.655	0.0321	9.98e-05	0.00749	NA	NA	0.72	0.0139	9950	6870
Two-pool feedback	4.65	0.0321	9.98e-05	0.0131	0.429	0.00033	4.82	0.00179	4330	64.2
Two-pool series	2.65	0.0321	9.98e-05	0.0119	0.37	NA	2.76	0.00499	3740	48.9

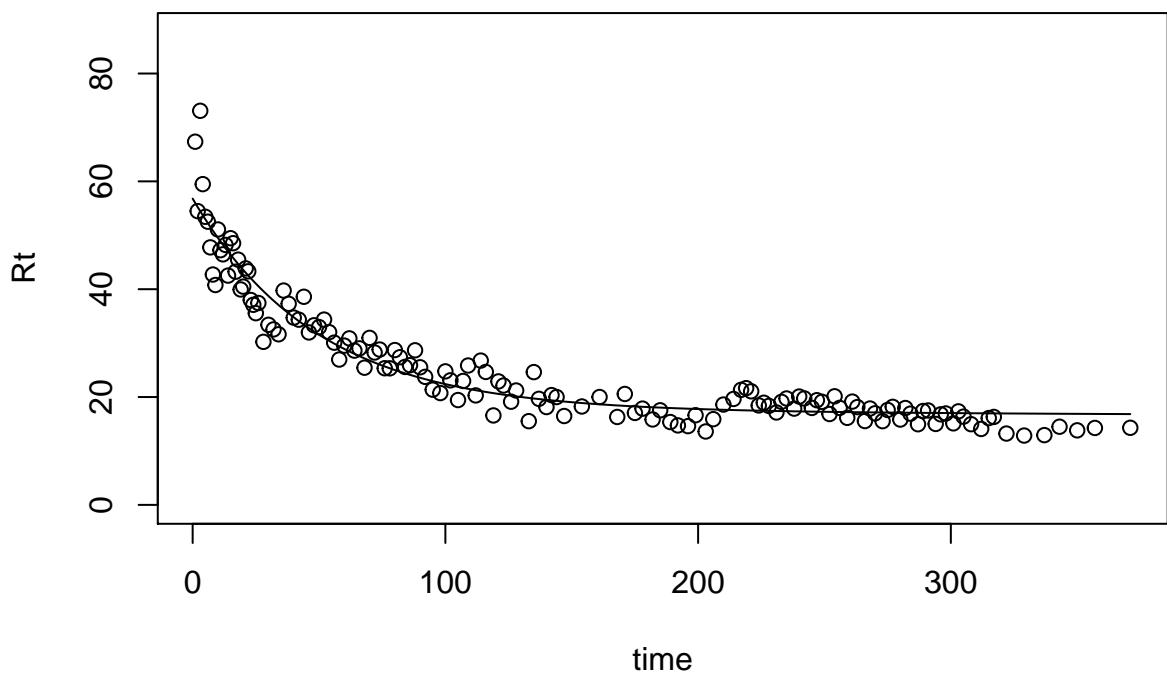
Variable Site50:

CO2 production rate

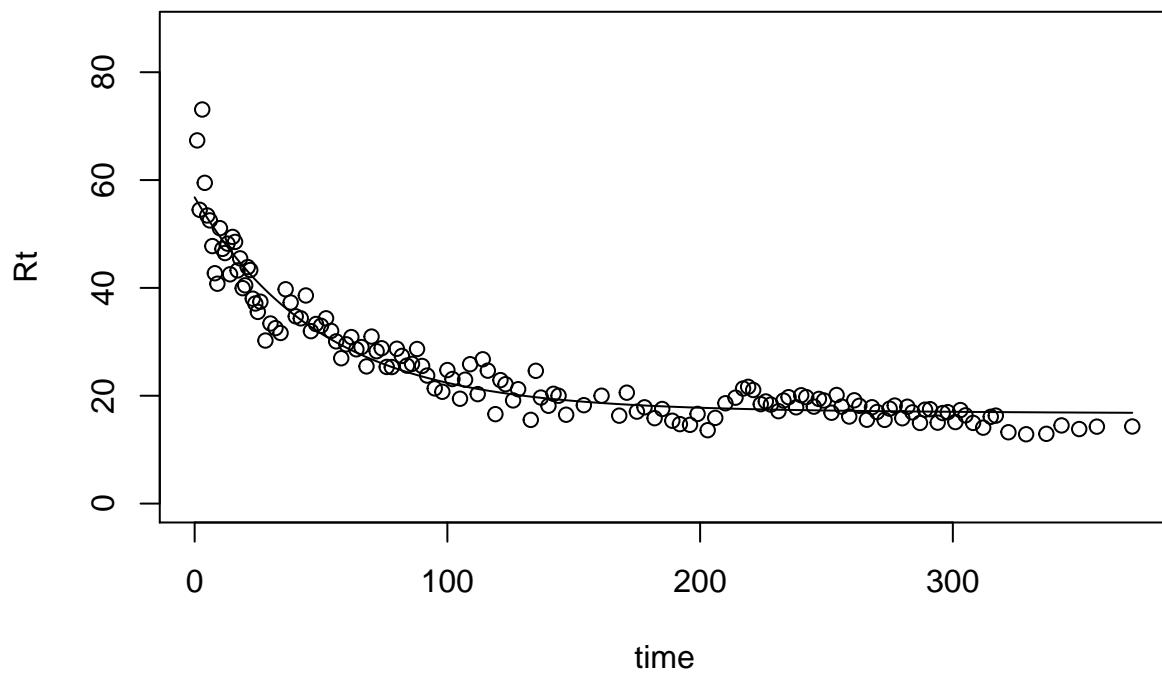
```
## [1] "Best fit parameter: 0.000154901734895766"
```



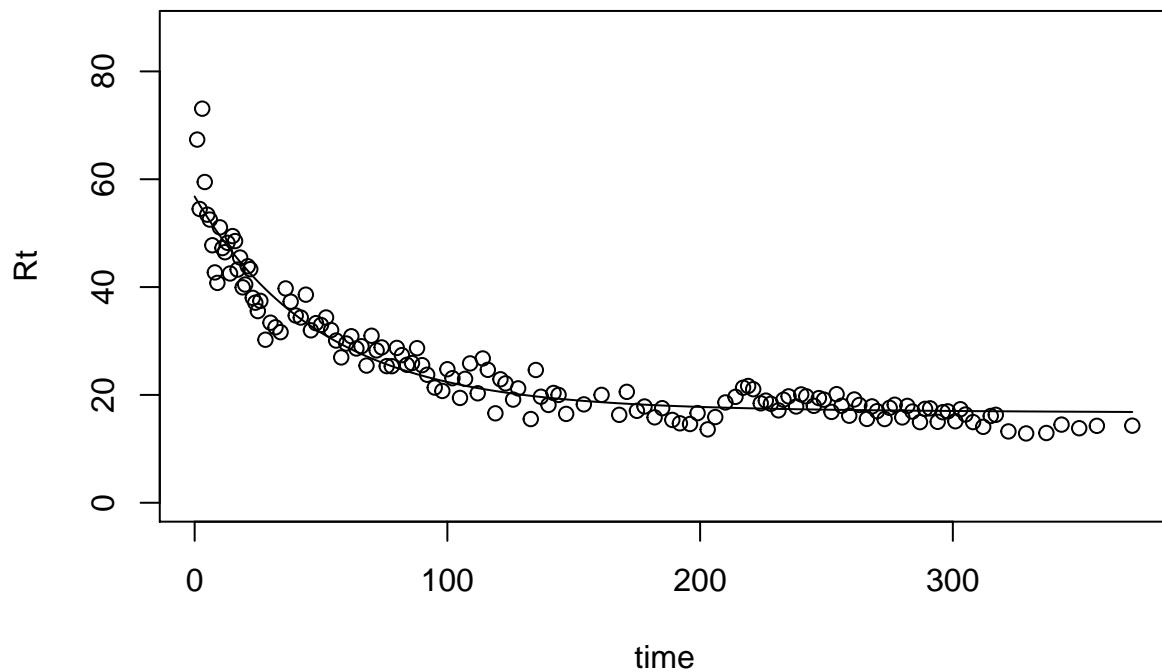
```
## [1] "AIC = -7.82216238443417"
## [1] "k1= 0.0204029522645191"
## [2] "k2= 0.000101468834703593"
## [3] "proportion of C0 in pool 1= 0.0110816268026063"
```



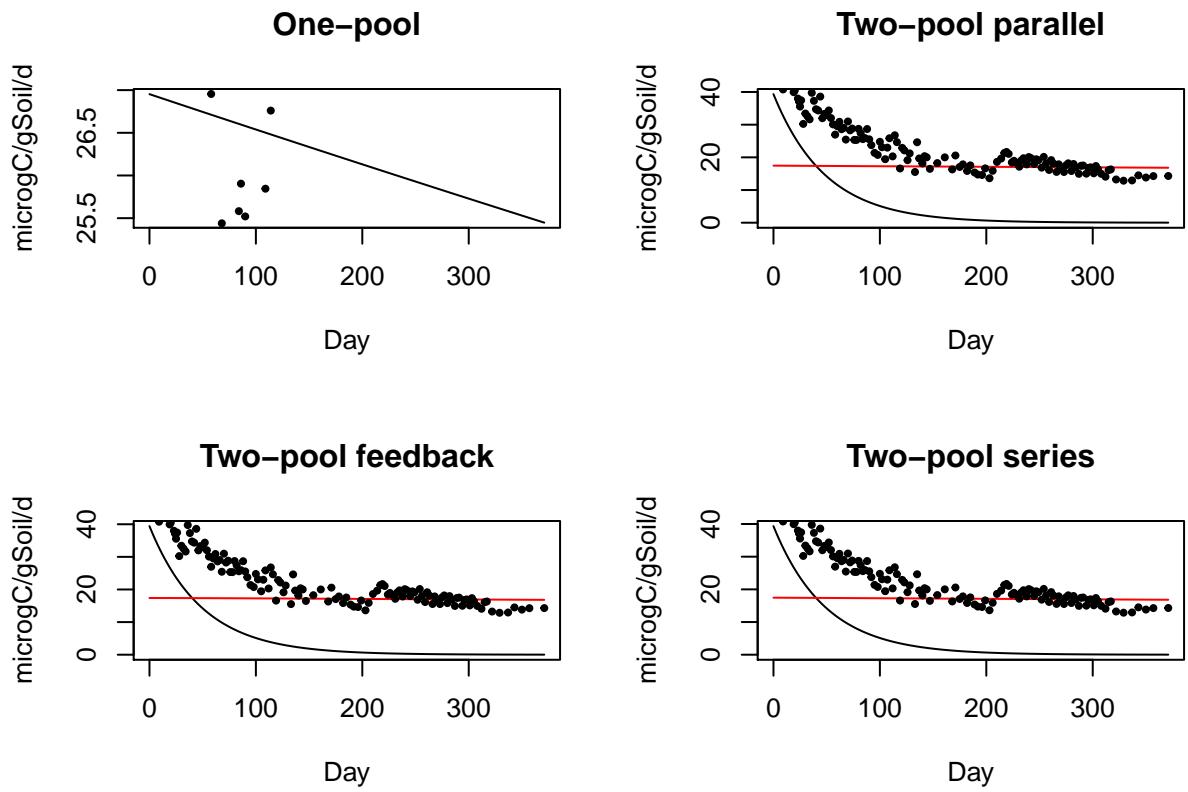
```
## [1] "AIC = 1.21110967567892"
## [1] "k1= 0.0204032195910812"
## [2] "k2= 0.000101471017739039"
## [3] "a21= 0.277547375182807"
## [4] "a12= 6.5575834639231e-05"
## [5] "Proportion of C0 in pool 1= 0.0153685333883657"
```



```
## [1] "AIC = 5.21110967604622"  
## [1] "k1= 0.0204030824792363"  
## [2] "k2= 0.000101469008187391"  
## [3] "a21= 0.0316069244141782"  
## [4] "Proportion of C0 in pool 1= 0.0114451127269987"
```



```
## [1] "AIC = 3.21110967606106"
```

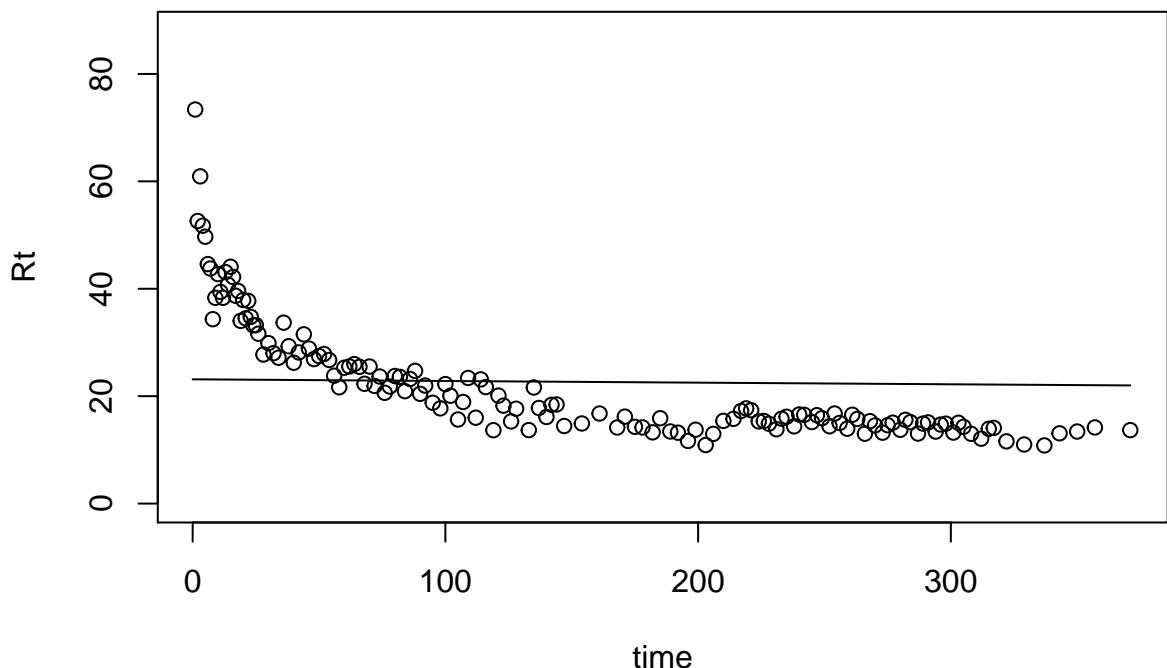


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-7.82	0.000155	NA	NA	NA	NA	-7.81	0.988	NA
Two-pool parallel	1.21	0.0204	0.000101	0.0111	NA	NA	1.28	0.0105	9750
Two-pool feedback	5.21	0.0204	0.000101	0.0154	0.278	6.56e-05	5.38	0.00135	2780
Two-pool series	3.21	0.0204	0.000101	0.0114	0.0316	NA	3.32	0.00378	361

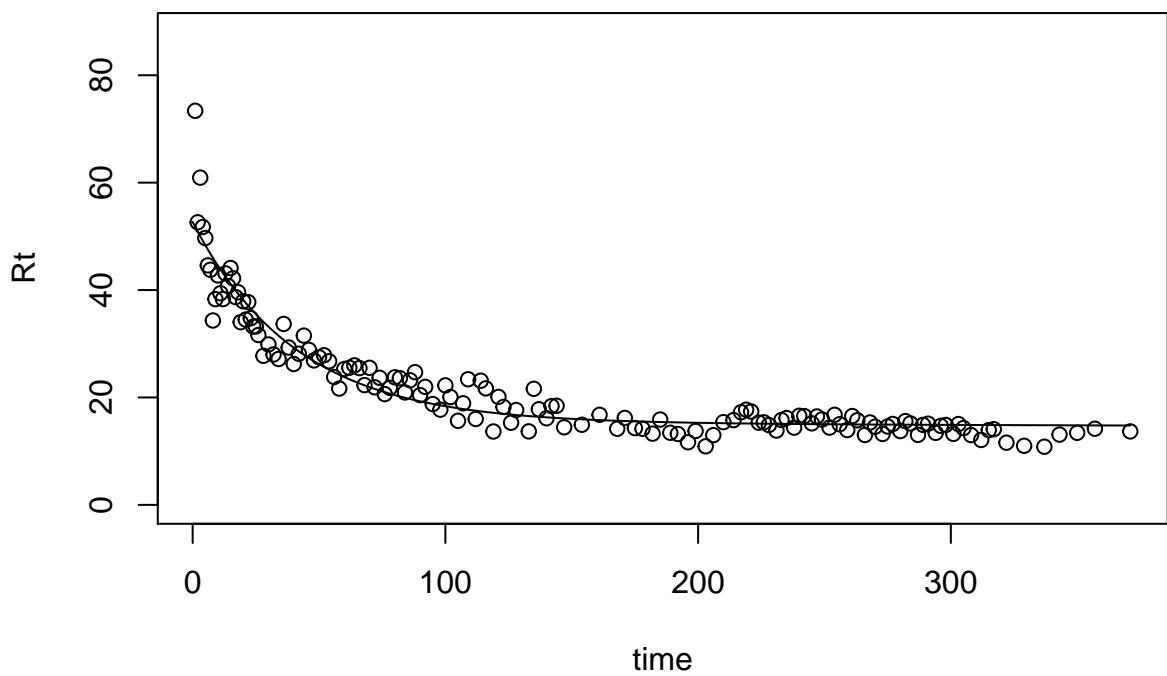
Variable Site51:

CO2 production rate

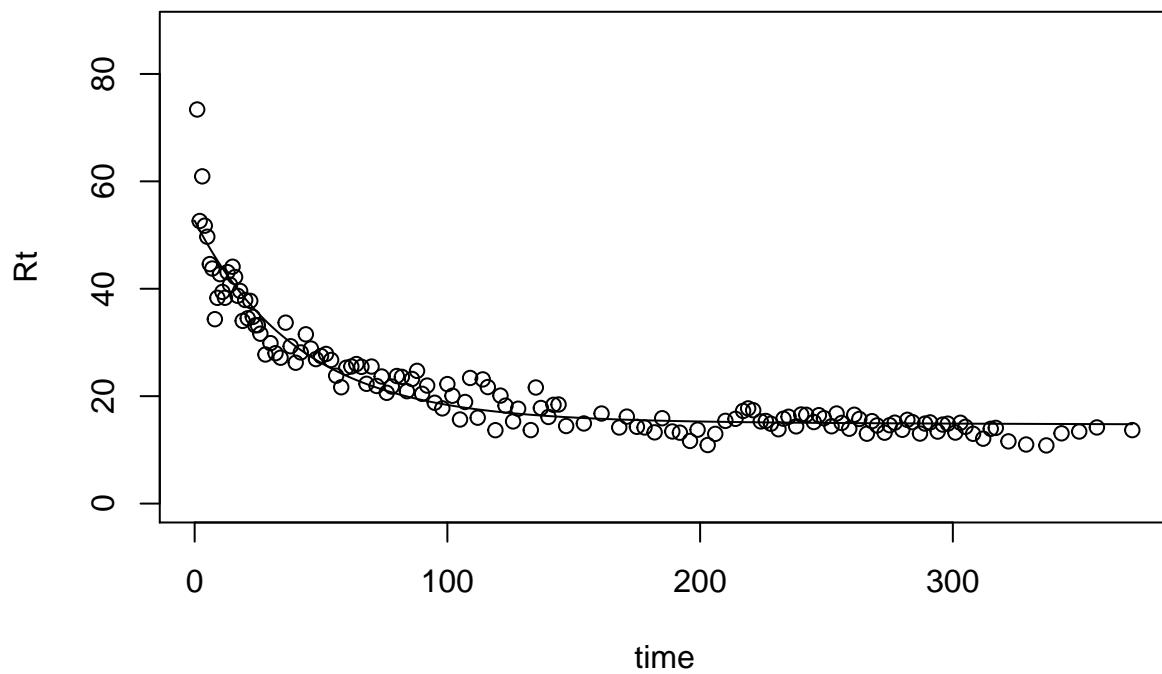
```
## [1] "Best fit parameter: 0.000136190530587585"
```



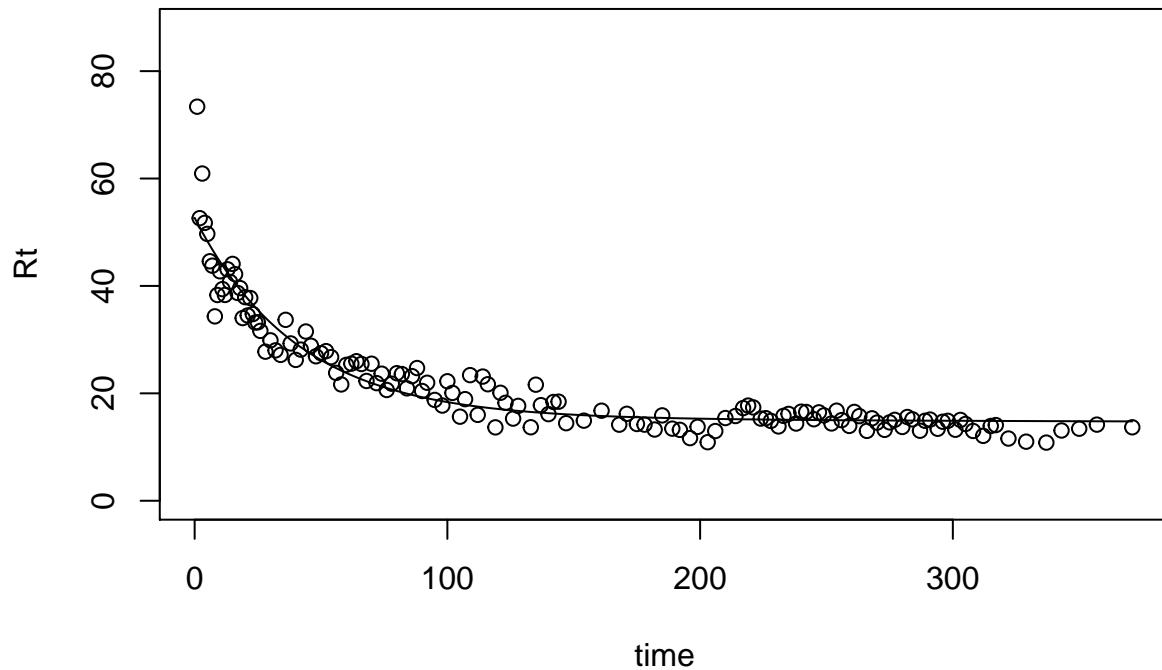
```
## [1] "AIC = -7.49774611614712"
## [1] "k1= 0.0244819550790018"
## [2] "k2= 9.07374971068819e-05"
## [3] "proportion of C0 in pool 1= 0.00899132634595751"
```



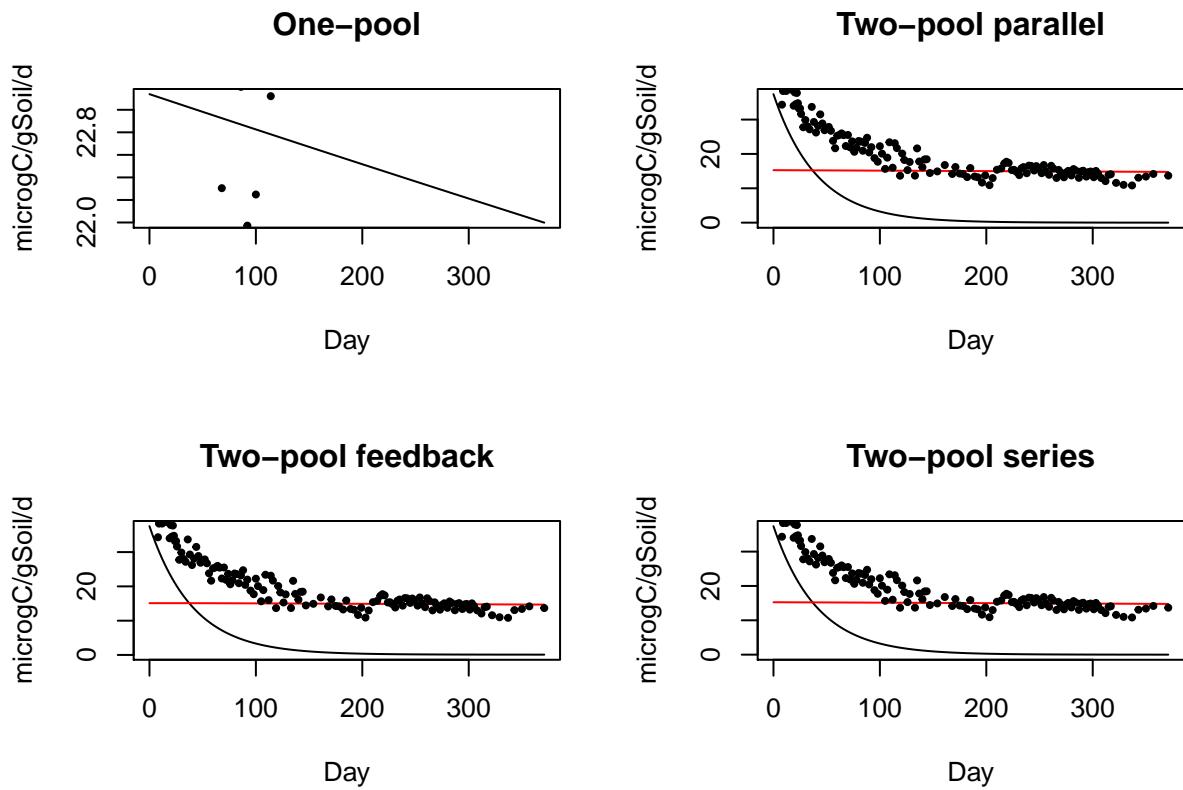
```
## [1] "AIC = 1.30326300477917"
## [1] "k1= 0.0244814153599868"
## [2] "k2= 9.10551144861713e-05"
## [3] "a21= 0.376848482871667"
## [4] "a12= 0.00920189488676831"
## [5] "Proportion of C0 in pool 1= 0.0144953613949337"
```



```
## [1] "AIC = 5.30326300555114"
## [1] "k1= 0.0244825890682464"
## [2] "k2= 9.07380850058955e-05"
## [3] "a21= 0.107854568813838"
## [4] "Proportion of C0 in pool 1= 0.0100826476378287"
```



```
## [1] "AIC = 3.30326300634082"
```

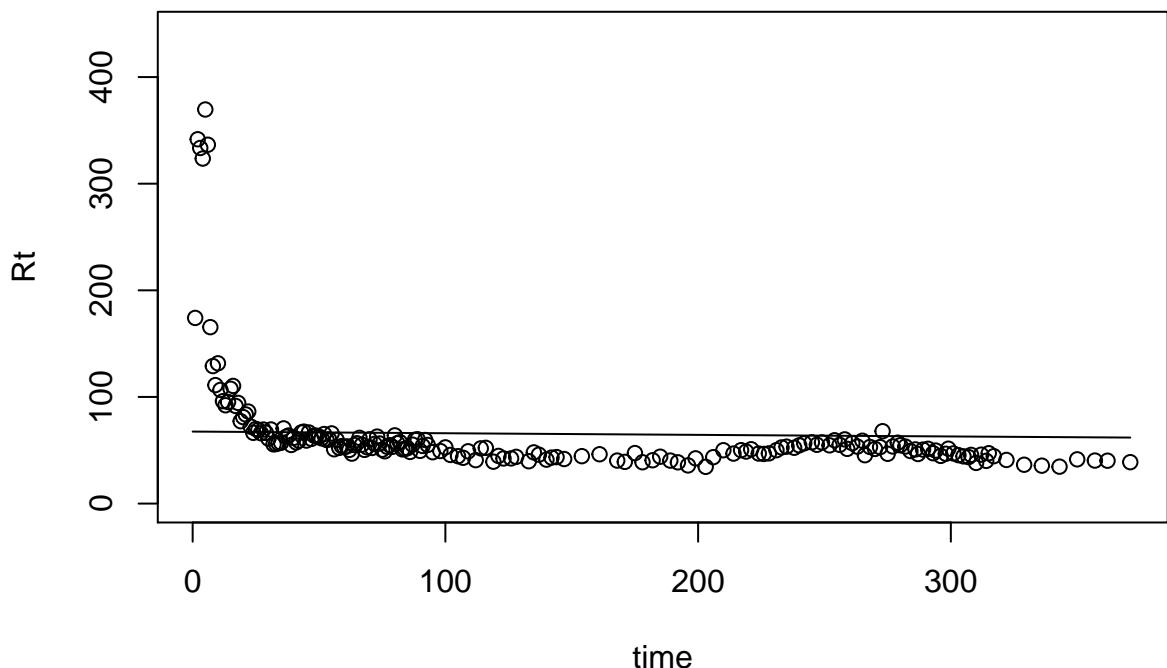


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-7.5	0.000136	NA	NA	NA	NA	-7.49	0.987	NA	NA
Two-pool parallel	1.3	0.0245	9.07e-05	0.00899	NA	NA	1.37	0.0118	10900	7540
Two-pool feedback	5.3	0.0245	9.11e-05	0.0145	0.377	0.0092	5.47	0.00152	4190	65.9
Two-pool series	3.3	0.0245	9.07e-05	0.0101	0.108	NA	3.41	0.00424	1230	33.6

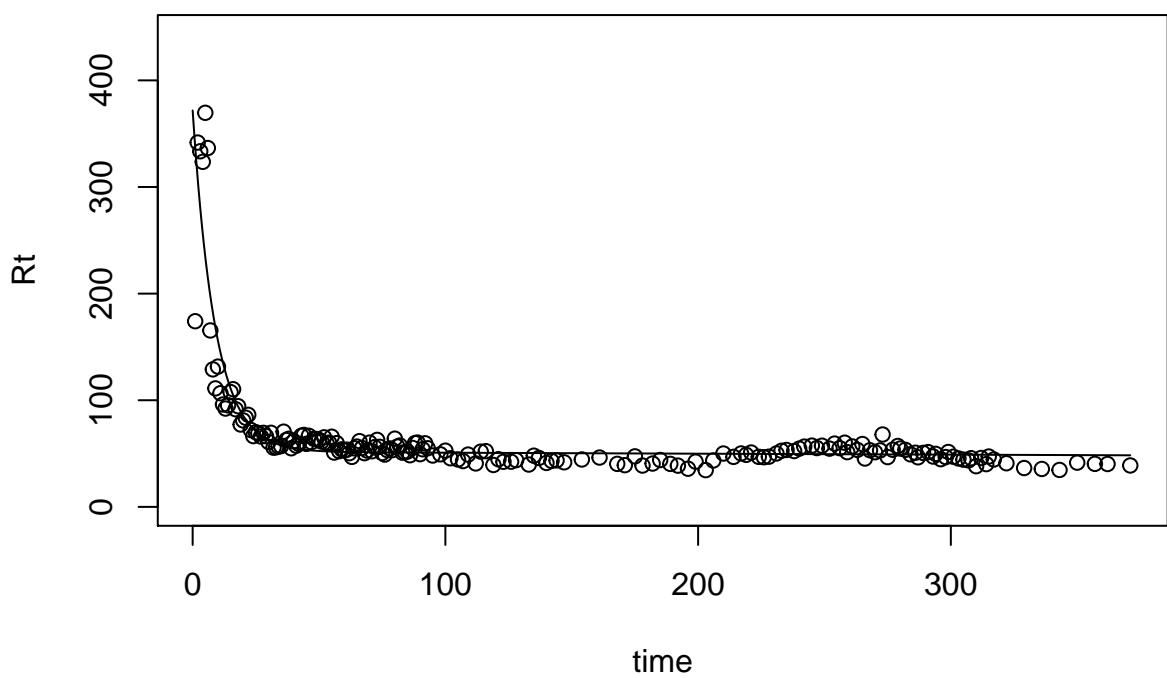
Variable Site52:

CO2 production rate

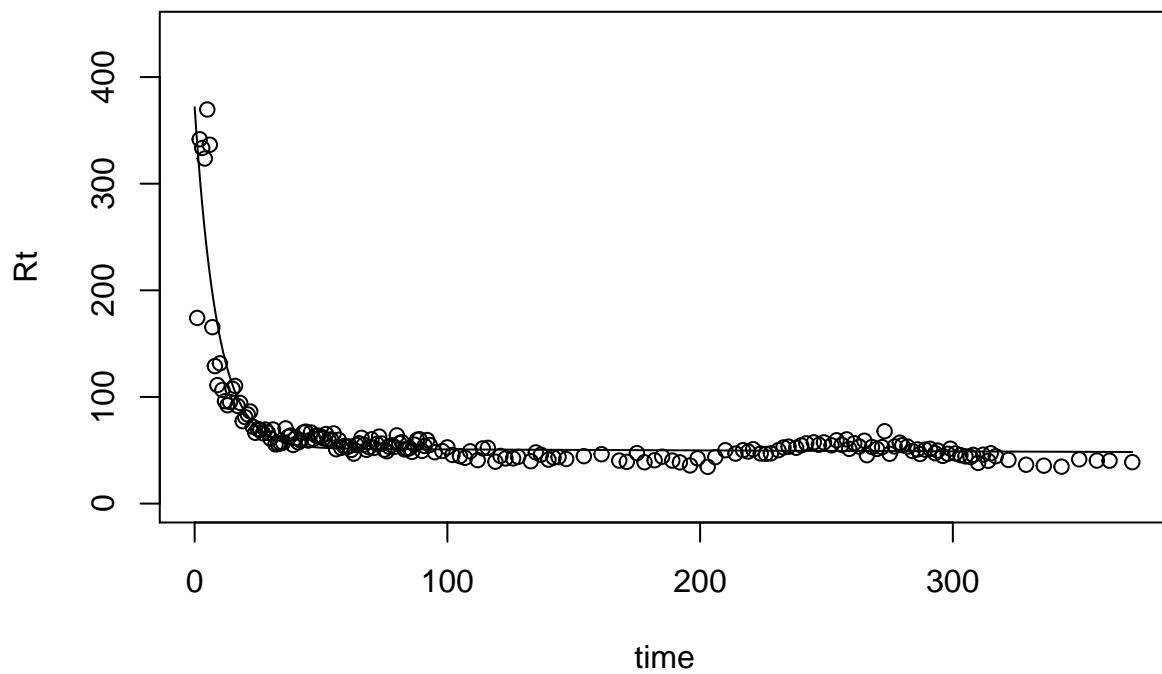
```
## [1] "Best fit parameter: 0.000234144398577956"
```



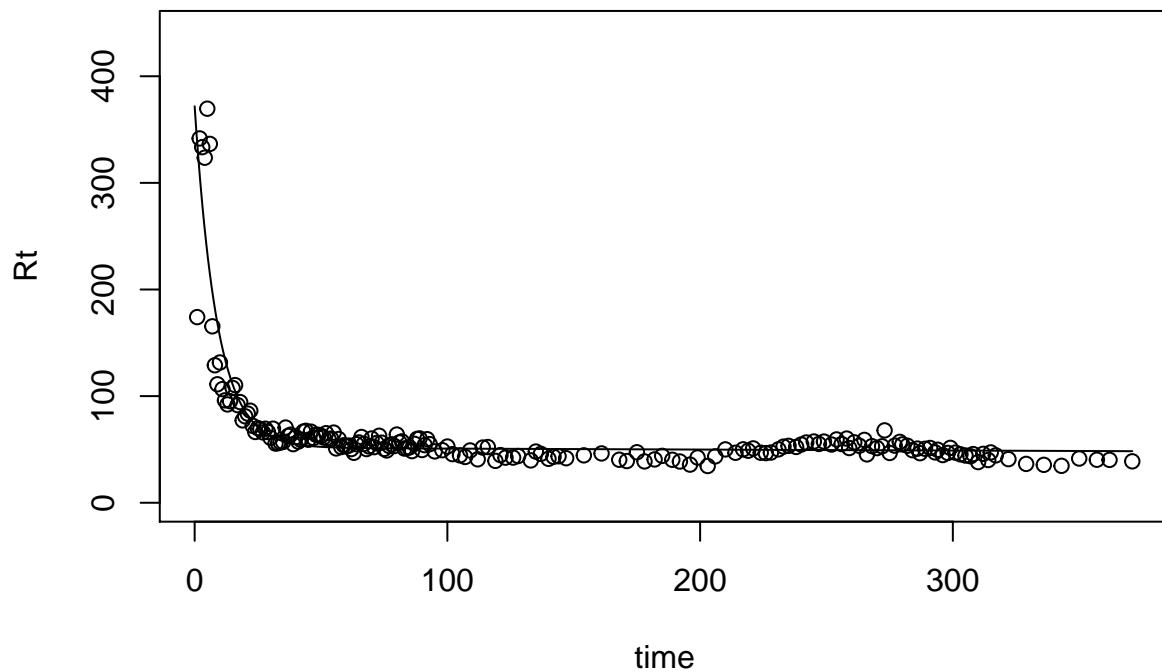
```
## [1] "AIC = -13.5411447153282"
## [1] "k1= 0.112132544132362"
## [2] "k2= 0.000181128834823848"
## [3] "proportion of C0 in pool 1= 0.00989779324105711"
```



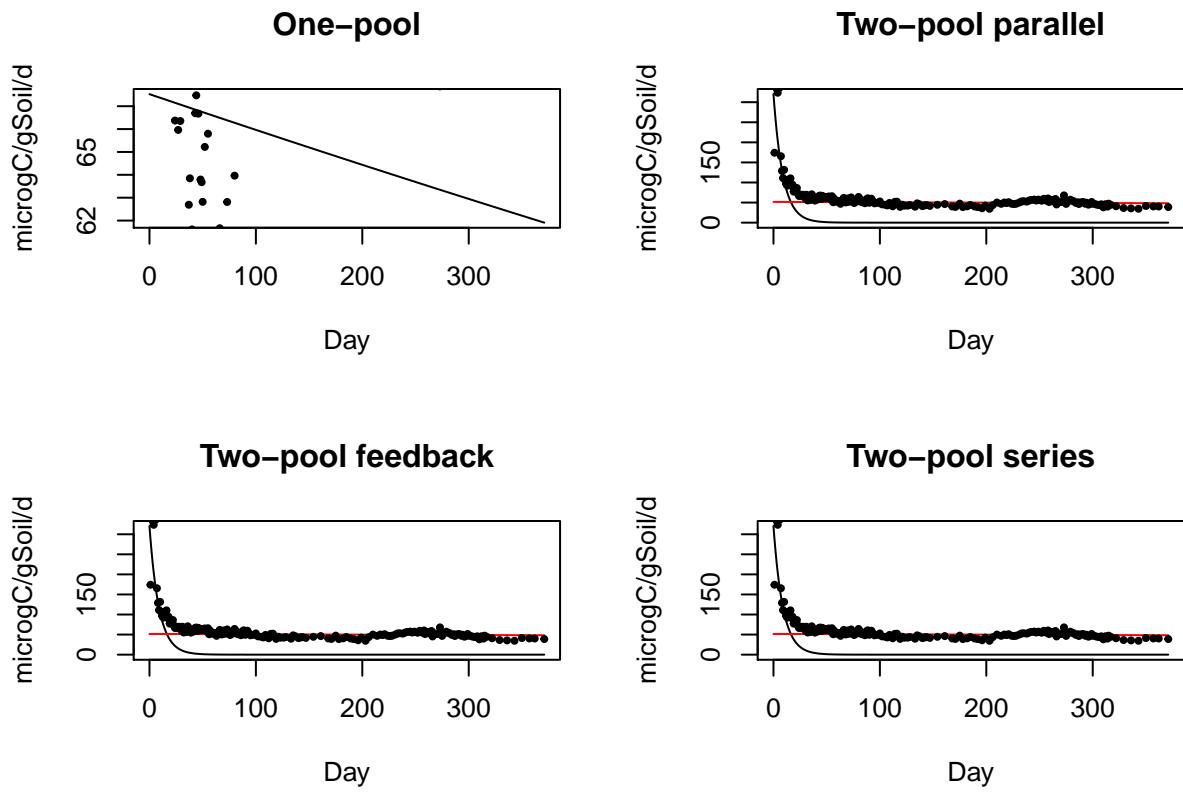
```
## [1] "AIC = -6.28109293357519"
## [1] "k1= 0.112136914222219"
## [2] "k2= 0.000181130038389191"
## [3] "a21= 0.225510861624791"
## [4] "a12= 2.16347013720641e-06"
## [5] "Proportion of C0 in pool 1= 0.0127853489048246"
```



```
## [1] "AIC = -2.28109293773081"  
## [1] "k1= 0.112134369119008"  
## [2] "k2= 0.00018112931278268"  
## [3] "a21= 0.226298739105186"  
## [4] "Proportion of C0 in pool 1= 0.0127985835001618"
```



```
## [1] "AIC = -4.28109293496563"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-13.5	0.000234	NA	NA	NA	NA	-13.5	0.972	NA
Two-pool parallel	-6.28	0.112	0.000181	0.0099	NA	NA	-6.22	0.0251	5470
Two-pool feedback	-2.28	0.112	0.000181	0.0128	0.226	2.16e-06	-2.12	0.00323	1250
Two-pool series	-4.28	0.112	0.000181	0.0128	0.226	NA	-4.17	0.00902	1260

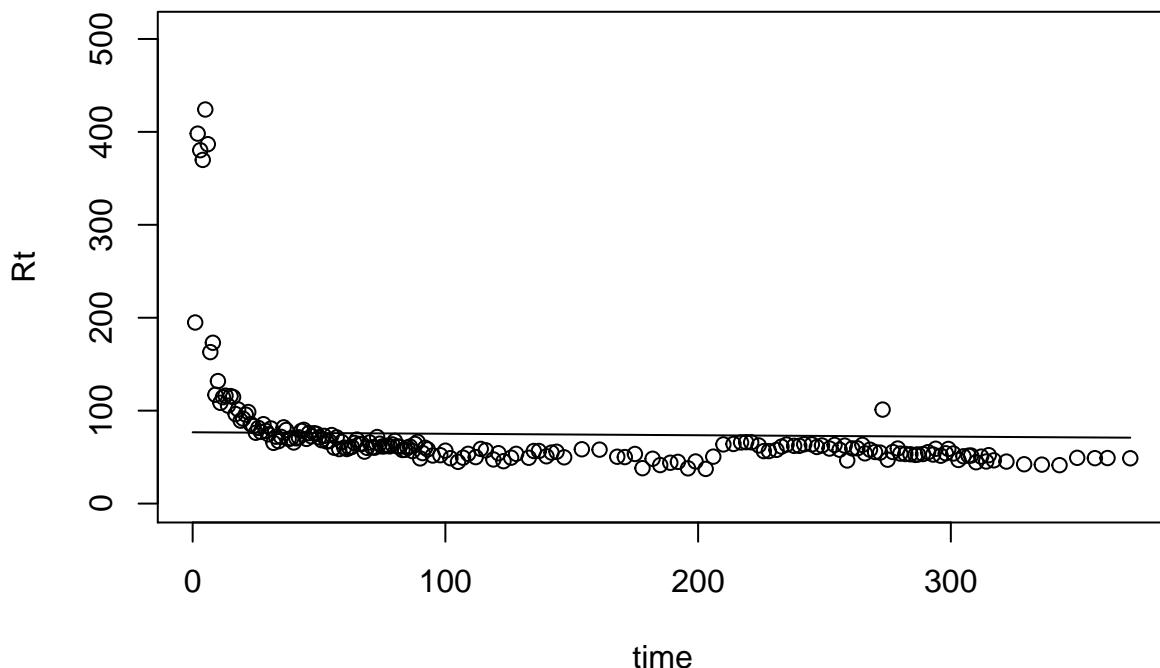
Variable Site53:

CO2 production rate

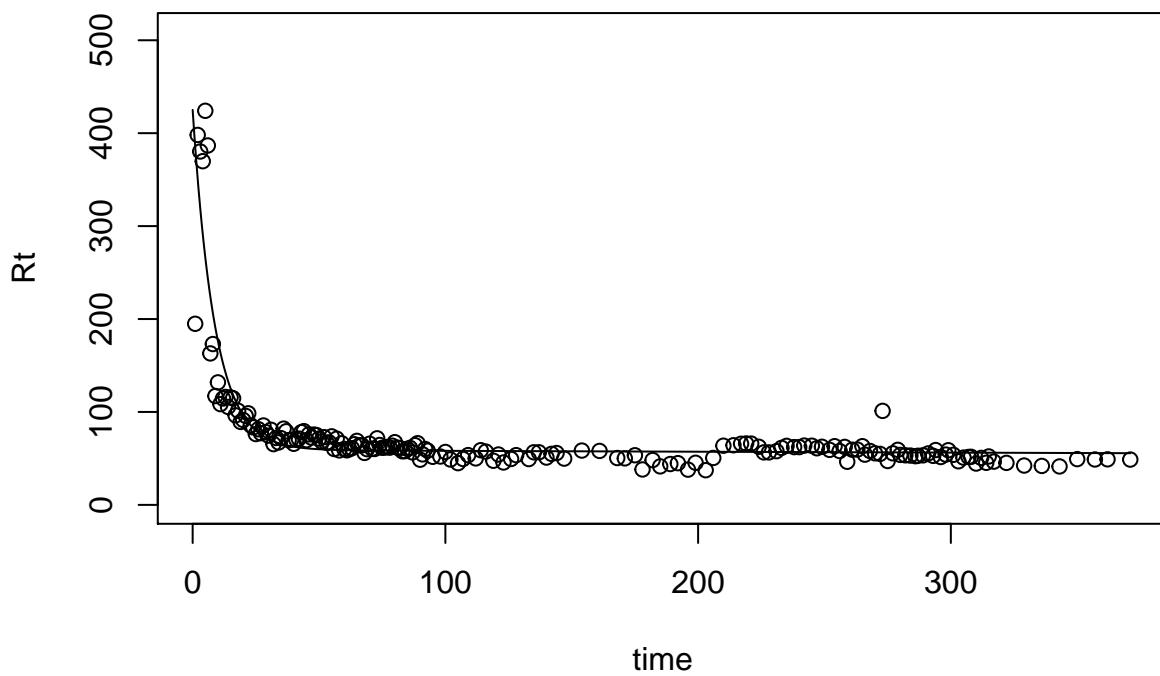
Variable Site54:

CO2 production rate

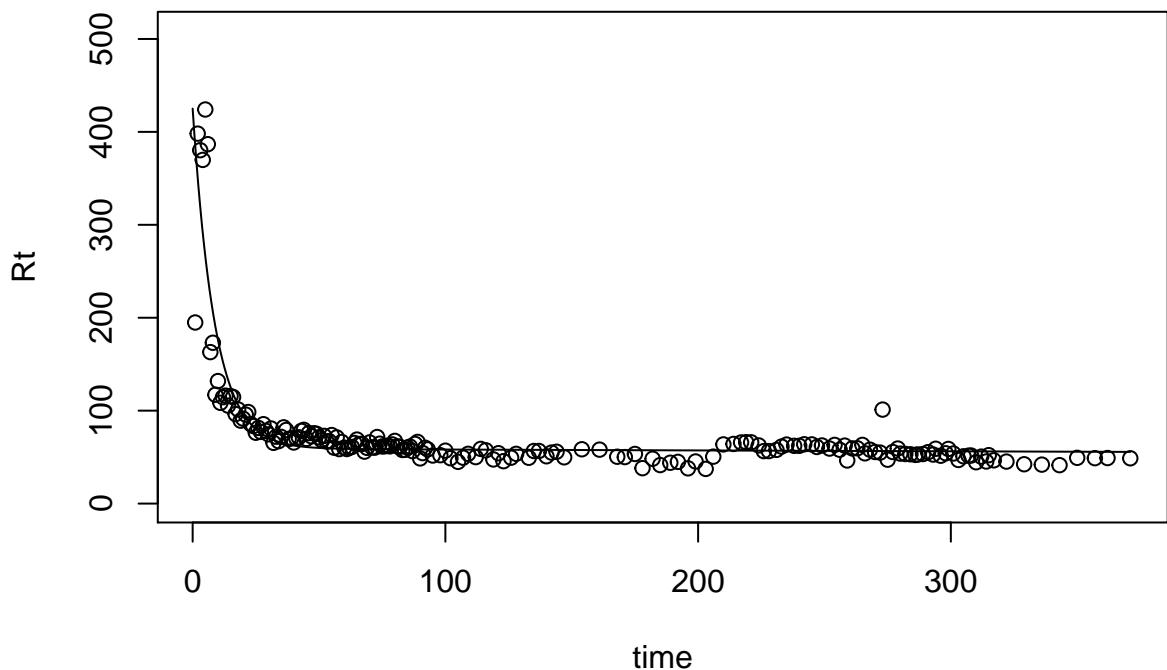
```
## [1] "Best fit parameter: 0.000212316131846763"
```



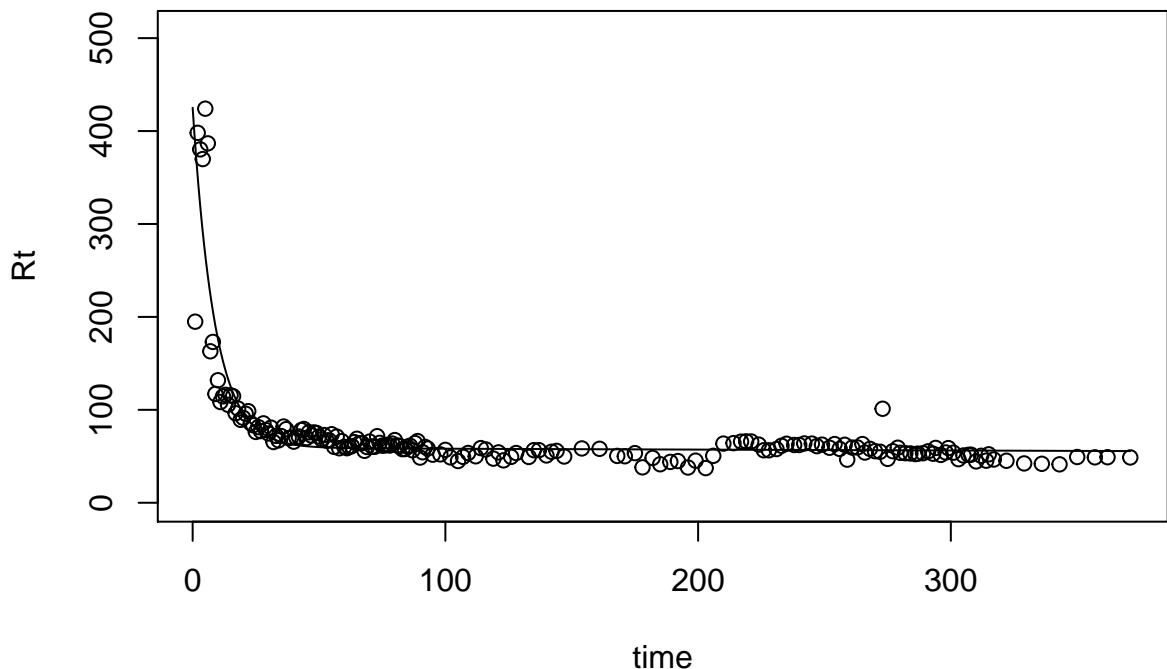
```
## [1] "AIC = -14.0828698717563"
## [1] "k1= 0.113813877751784"
## [2] "k2= 0.000165056095814153"
## [3] "proportion of C0 in pool 1= 0.00889663603134211"
```



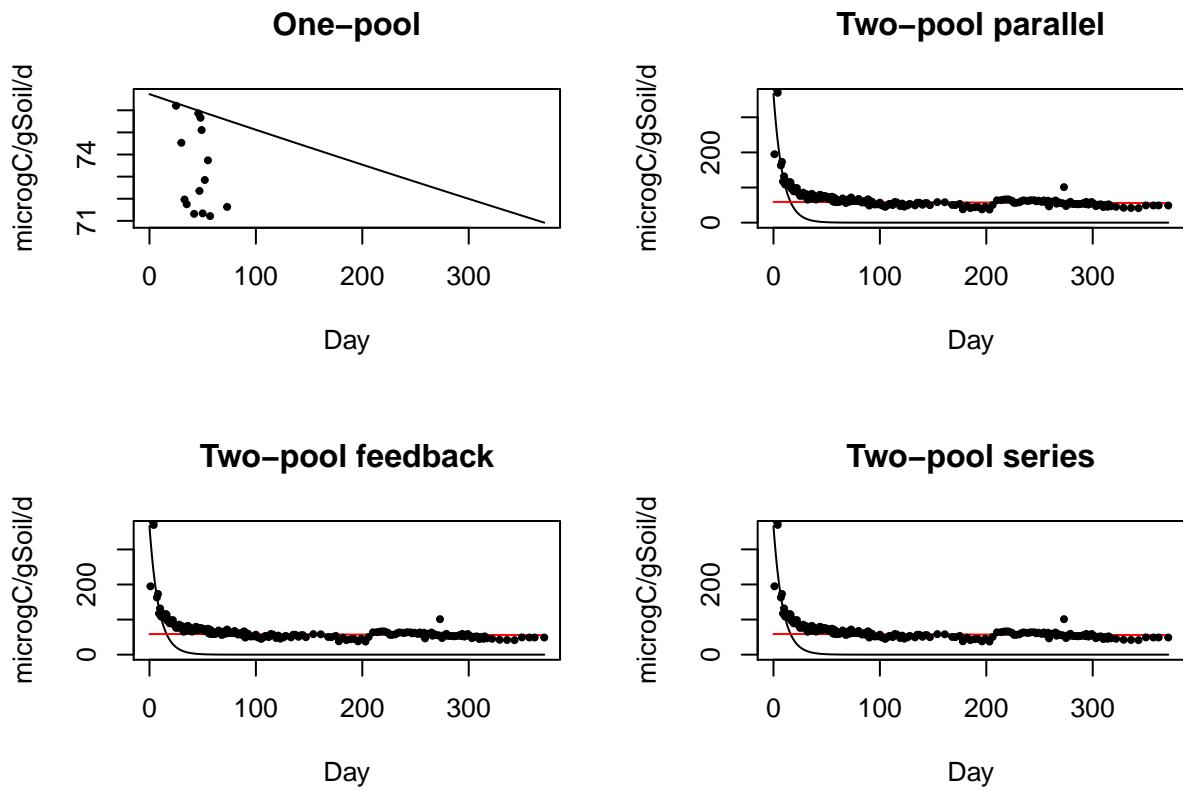
```
## [1] "AIC = -6.95654930089792"
## [1] "k1= 0.113814531751924"
## [2] "k2= 0.000165058325482108"
## [3] "a21= 0.47530170782798"
## [4] "a12= 2.65633941738952e-05"
## [5] "Proportion of C0 in pool 1= 0.0169780457139748"
```



```
## [1] "AIC = -2.95654930115903"
## [1] "k1= 0.113814457090928"
## [2] "k2= 0.000165056227286656"
## [3] "a21= 0.342201340532911"
## [4] "Proportion of C0 in pool 1= 0.0135350029382482"
```



```
## [1] "AIC = -4.95654930118355"
```

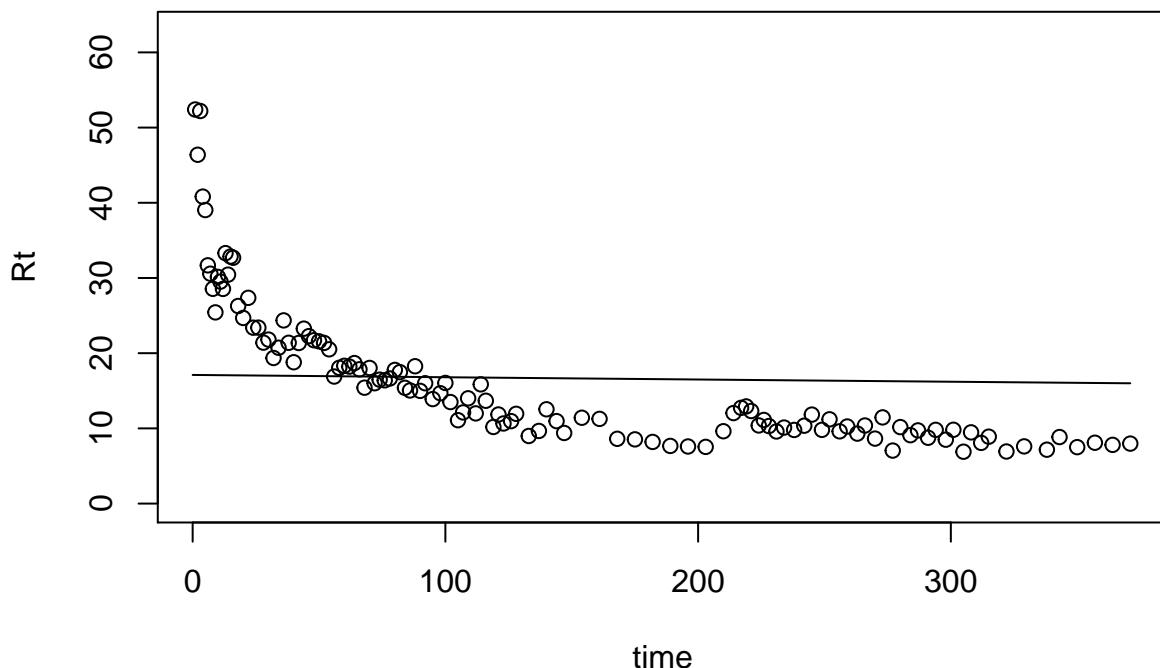


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-14.1	0.000212	NA	NA	NA	NA	-14.1	0.97	NA
Two-pool parallel	-6.96	0.114	0.000165	0.0089	NA	NA	-6.89	0.0268	6000
Two-pool feedback	-2.96	0.114	0.000165	0.017	0.475	2.66e-05	-2.79	0.00345	2890
Two-pool series	-4.96	0.114	0.000165	0.0135	0.342	NA	-4.85	0.00963	2080

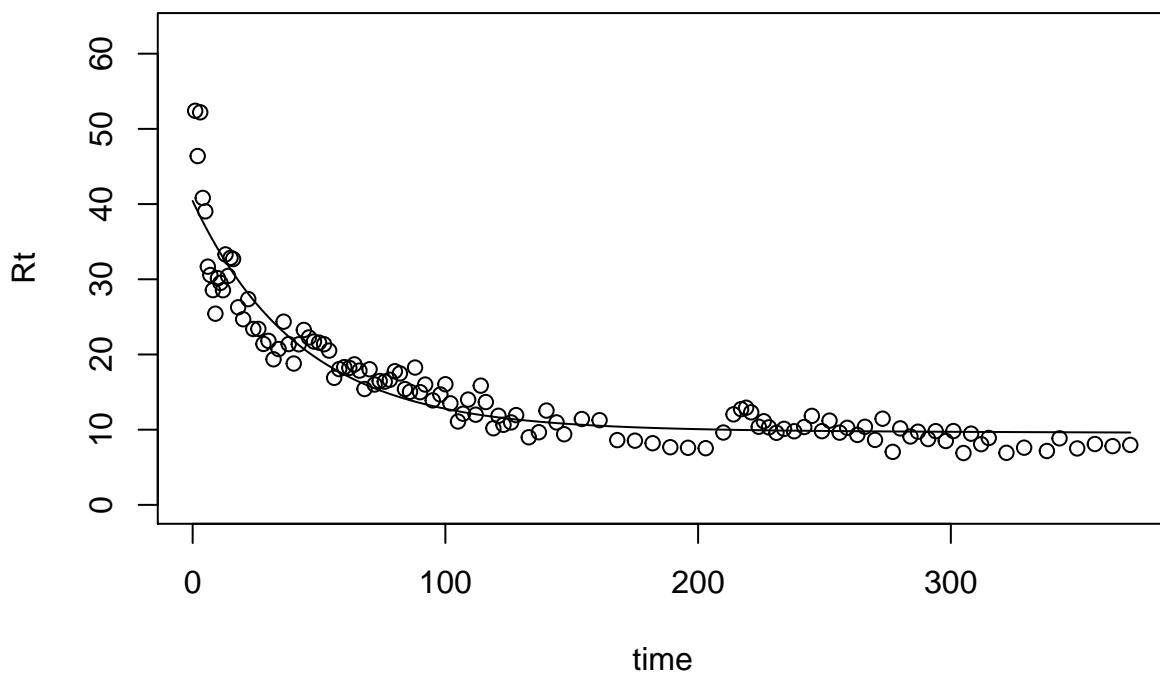
Variable Site55:

CO2 production rate

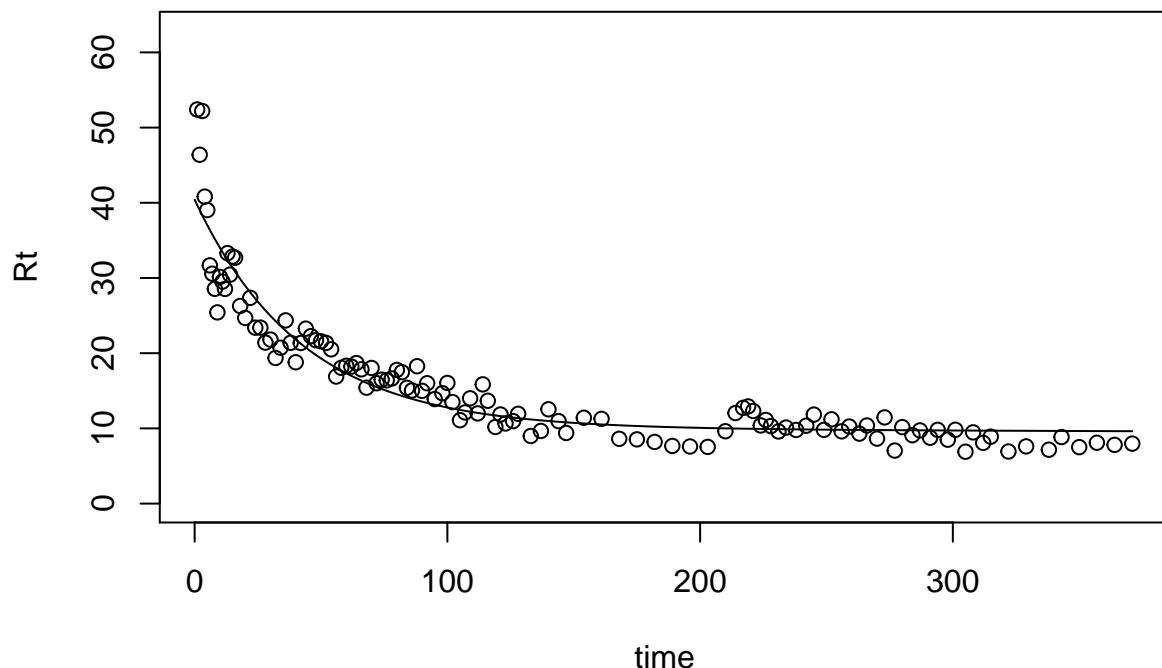
```
## [1] "Best fit parameter: 0.000181027963615673"
```



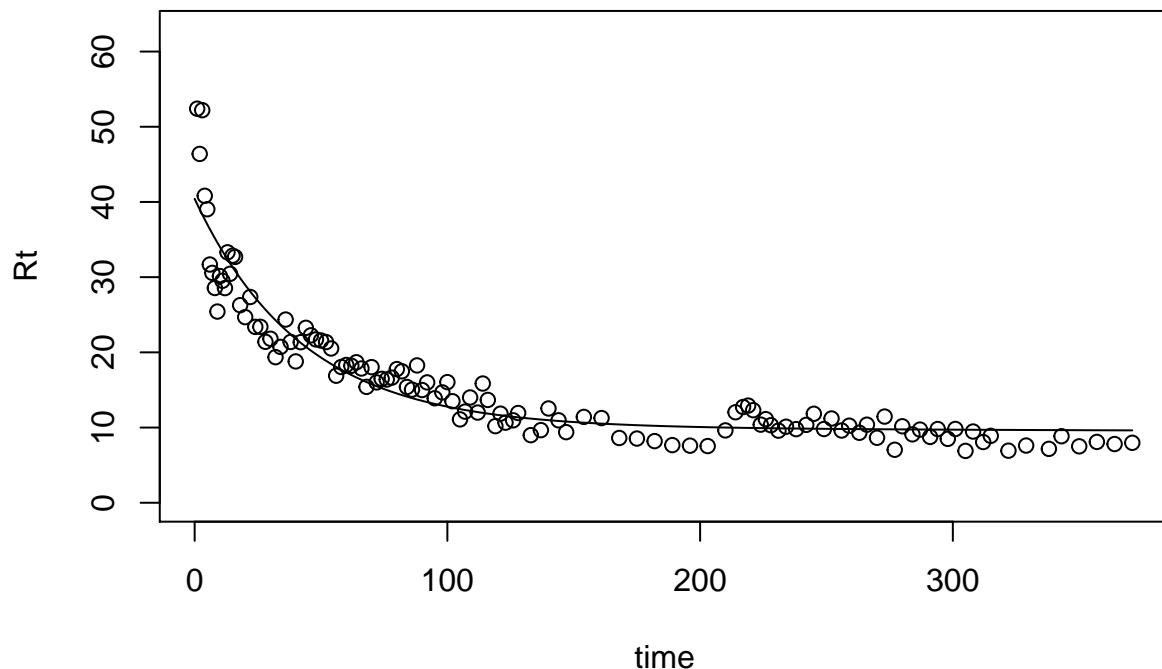
```
## [1] "AIC = -6.78584373926243"
## [1] "k1= 0.0235882644247993"
## [2] "k2= 0.000107394416843395"
## [3] "proportion of C0 in pool 1= 0.0136416131217101"
```



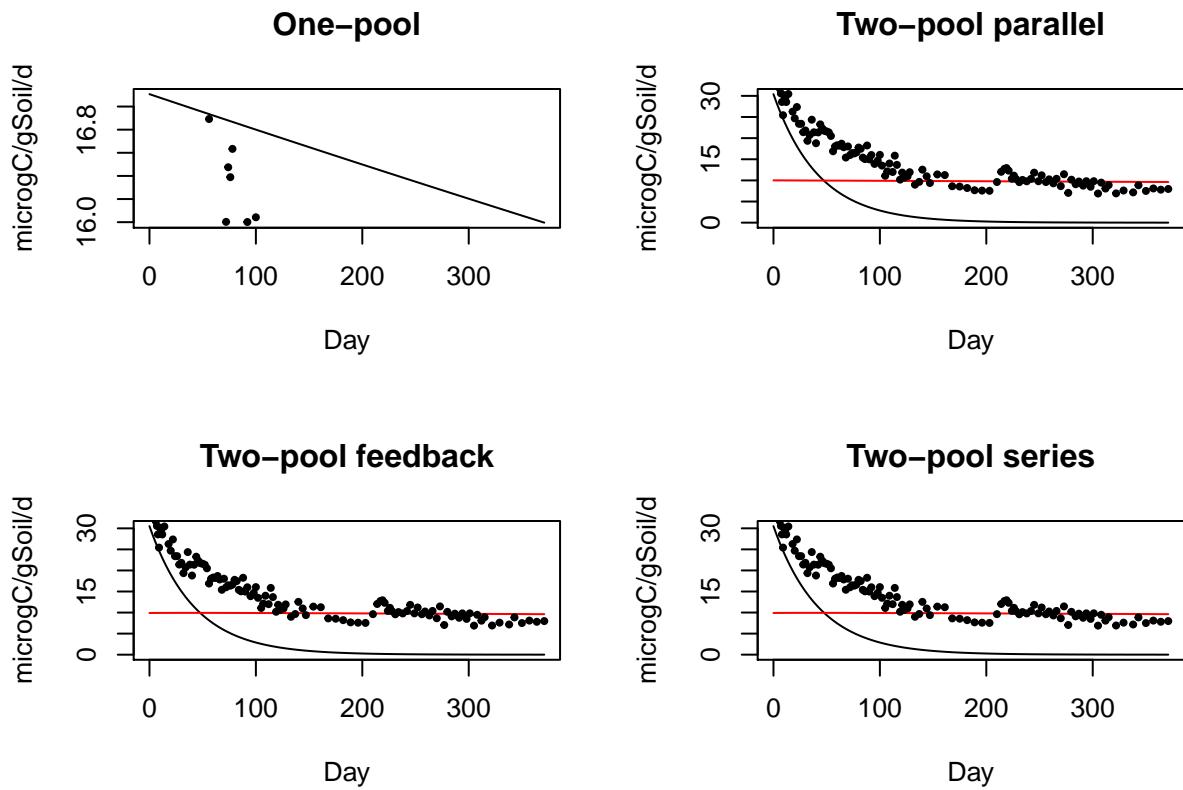
```
## [1] "AIC = 1.67525541995539"
## [1] "k1= 0.0235890906712915"
## [2] "k2= 0.000107396216070539"
## [3] "a21= 0.450258590491011"
## [4] "a12= 8.56715424135679e-06"
## [5] "Proportion of C0 in pool 1= 0.0249072362144051"
```



```
## [1] "AIC = 5.67525542177148"
## [1] "k1= 0.0235891259298354"
## [2] "k2= 0.000107395811076731"
## [3] "a21= 0.438795759408189"
## [4] "Proportion of C0 in pool 1= 0.024394269595327"
```



```
## [1] "AIC = 3.67525542177824"
```

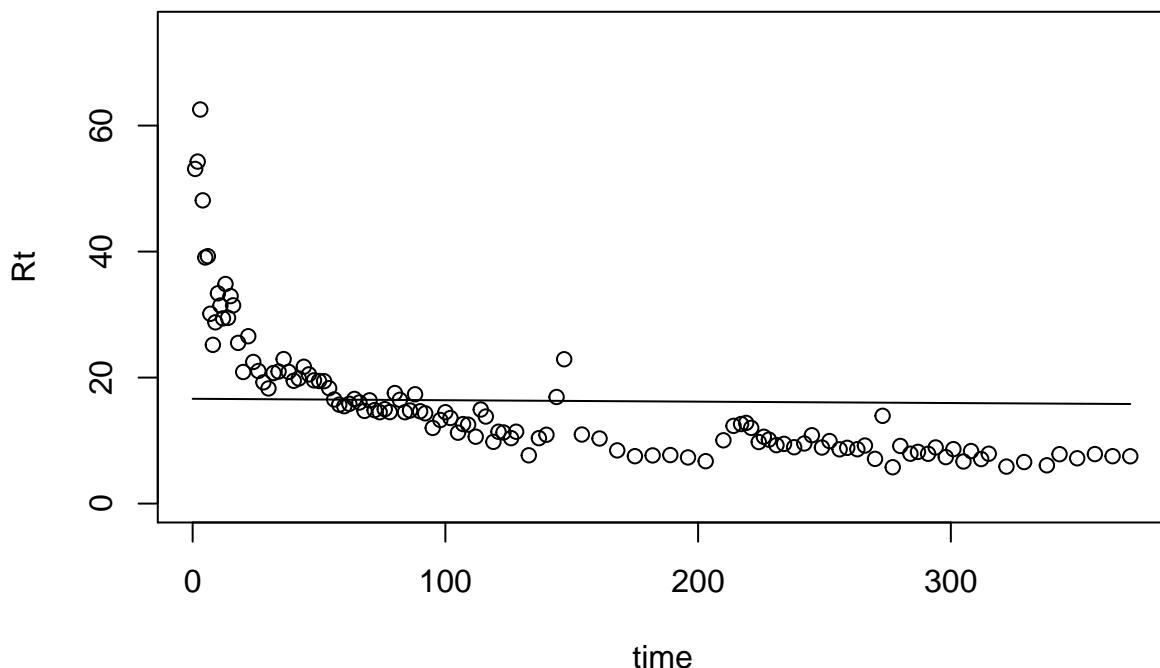


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-6.79	0.000181	NA	NA	NA	NA	-6.78	0.984	NA	NA
Two-pool parallel	1.68	0.0236	0.000107	0.0136	NA	NA	1.74	0.0139	9190	6330
Two-pool feedback	5.68	0.0236	0.000107	0.0249	0.45	8.57e-06	5.84	0.00179	4230	99.4
Two-pool series	3.68	0.0236	0.000107	0.0244	0.439	NA	3.78	0.00501	4130	92.2

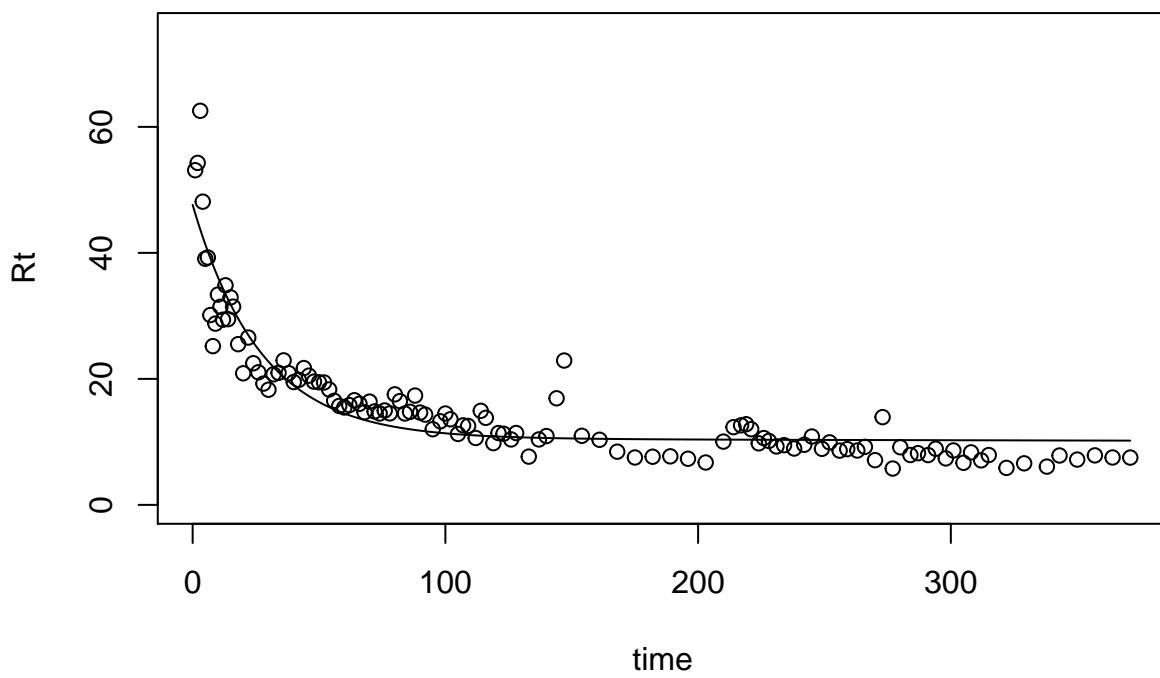
Variable Site56:

CO2 production rate

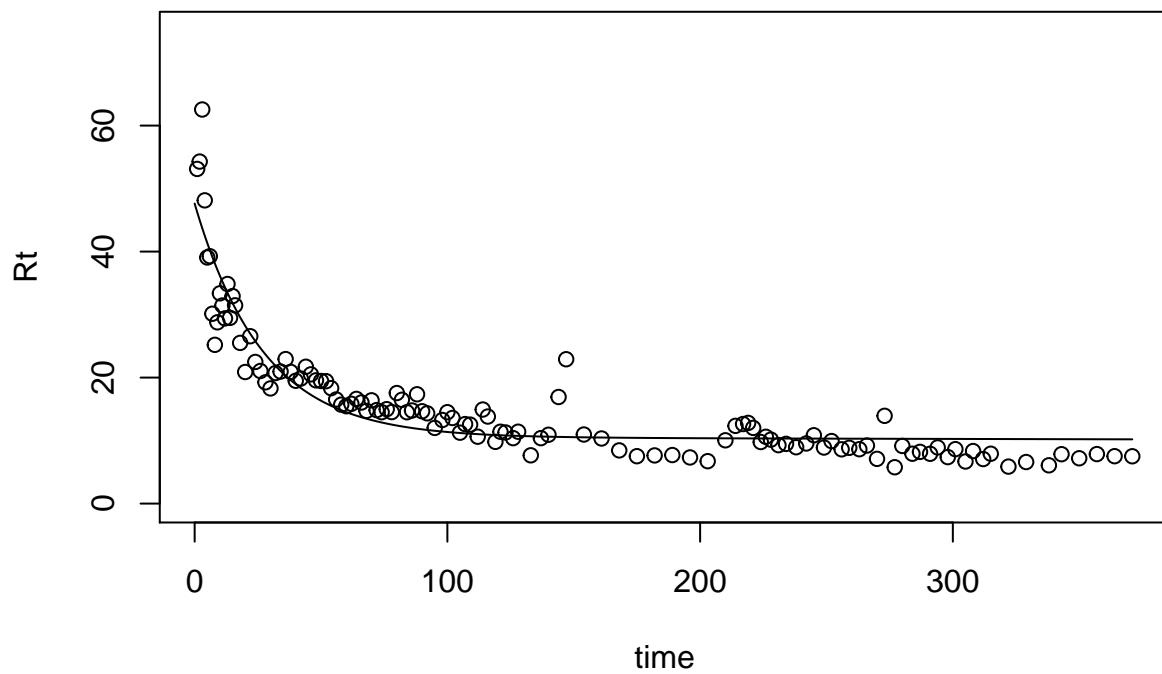
```
## [1] "Best fit parameter: 0.000137678007583551"
```



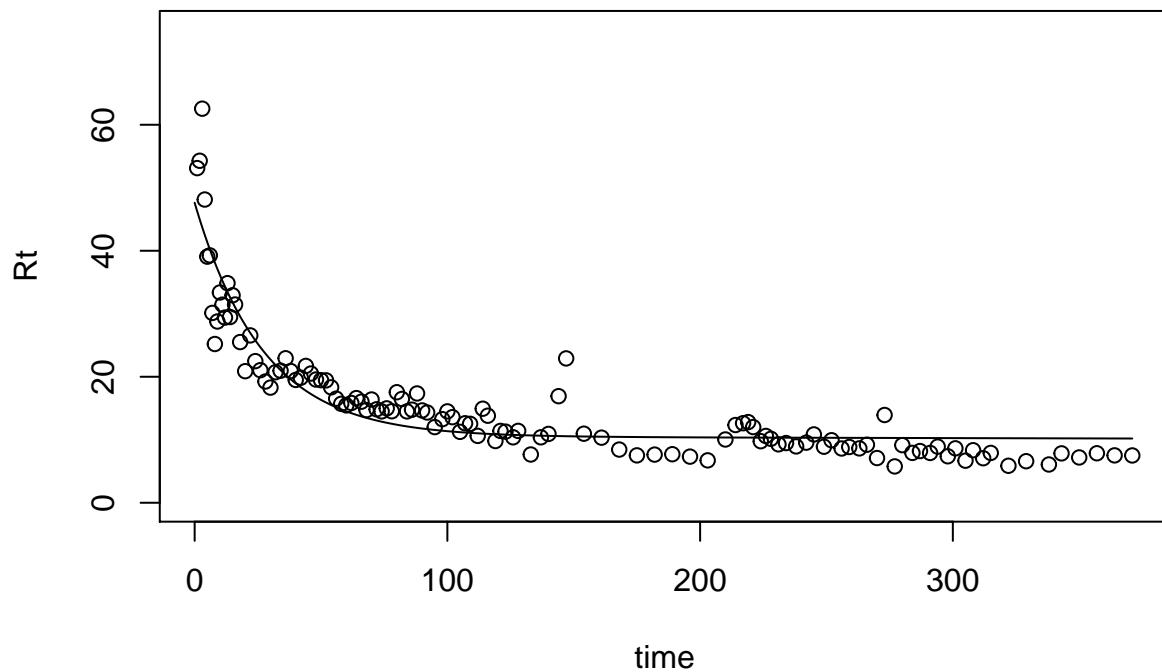
```
## [1] "AIC = -7.26200012174547"
## [1] "k1= 0.0369742337148002"
## [2] "k2= 8.79376554541232e-05"
## [3] "proportion of C0 in pool 1= 0.00830226895765596"
```



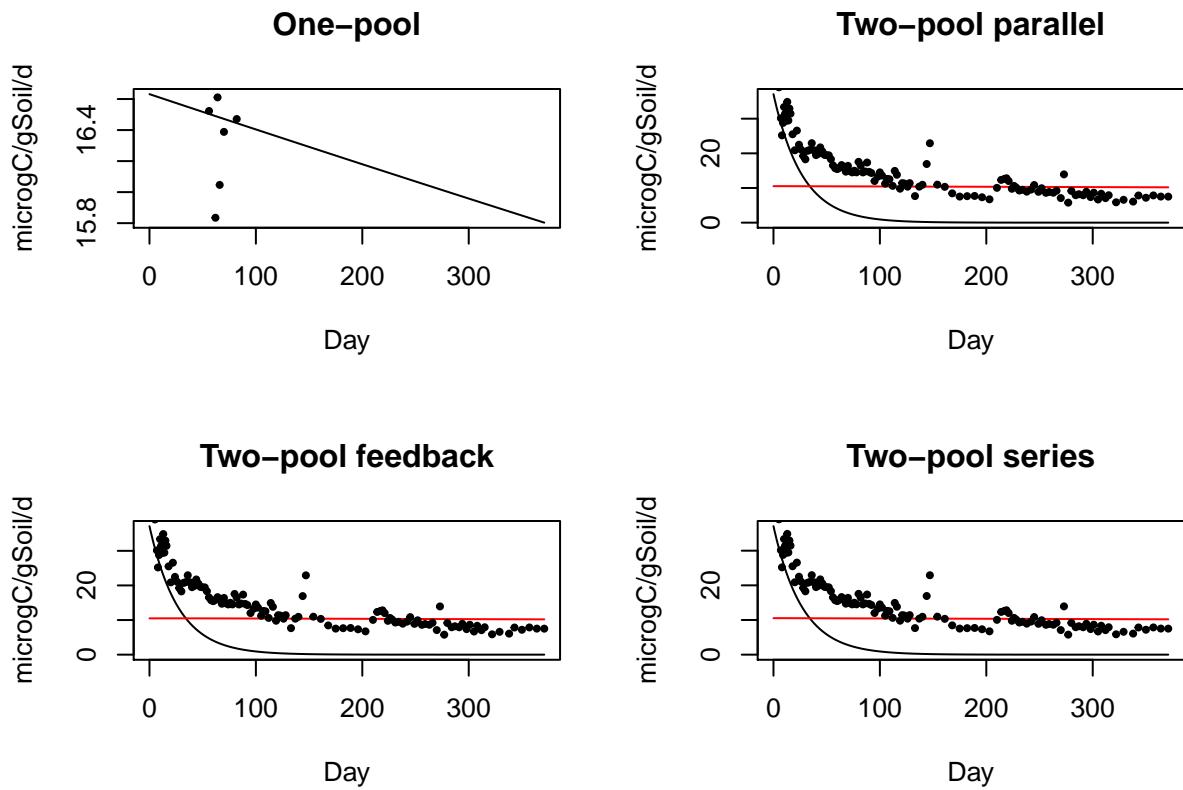
```
## [1] "AIC = 0.647562639915278"
## [1] "k1= 0.0369759690963204"
## [2] "k2= 8.79397606070862e-05"
## [3] "a21= 0.359545783905543"
## [4] "a12= 3.11115425366548e-05"
## [5] "Proportion of C0 in pool 1= 0.0129800796049041"
```



```
## [1] "AIC = 4.64756264492684"
## [1] "k1= 0.0369759999015929"
## [2] "k2= 8.79387959165824e-05"
## [3] "a21= 0.00435099739149836"
## [4] "Proportion of C0 in pool 1= 0.00833810928759449"
```



```
## [1] "AIC = 2.64756263132384"
```

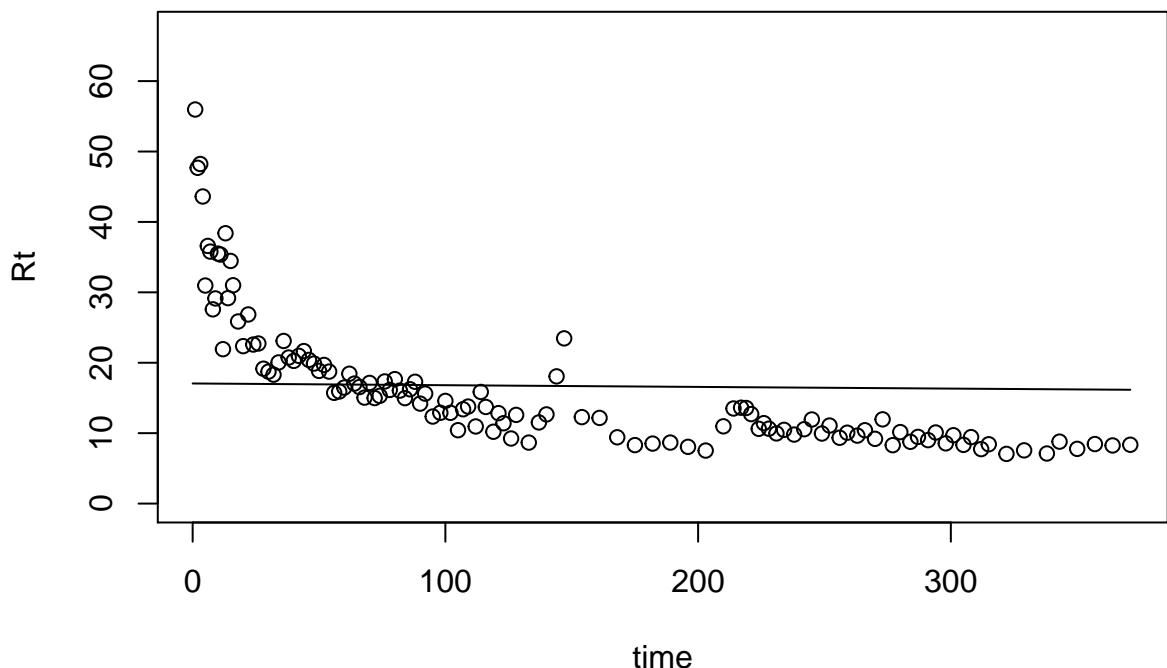


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-7.26	0.000138	NA	NA	NA	NA	-7.25	0.979	NA	NA
Two-pool parallel	0.648	0.037	8.79e-05	0.0083	NA	NA	0.713	0.0183	11300	7790
Two-pool feedback	4.65	0.037	8.79e-05	0.013	0.36	3.11e-05	4.81	0.00235	4120	40.9
Two-pool series	2.65	0.037	8.79e-05	0.00834	0.00435	NA	2.76	0.00657	76.5	18.9

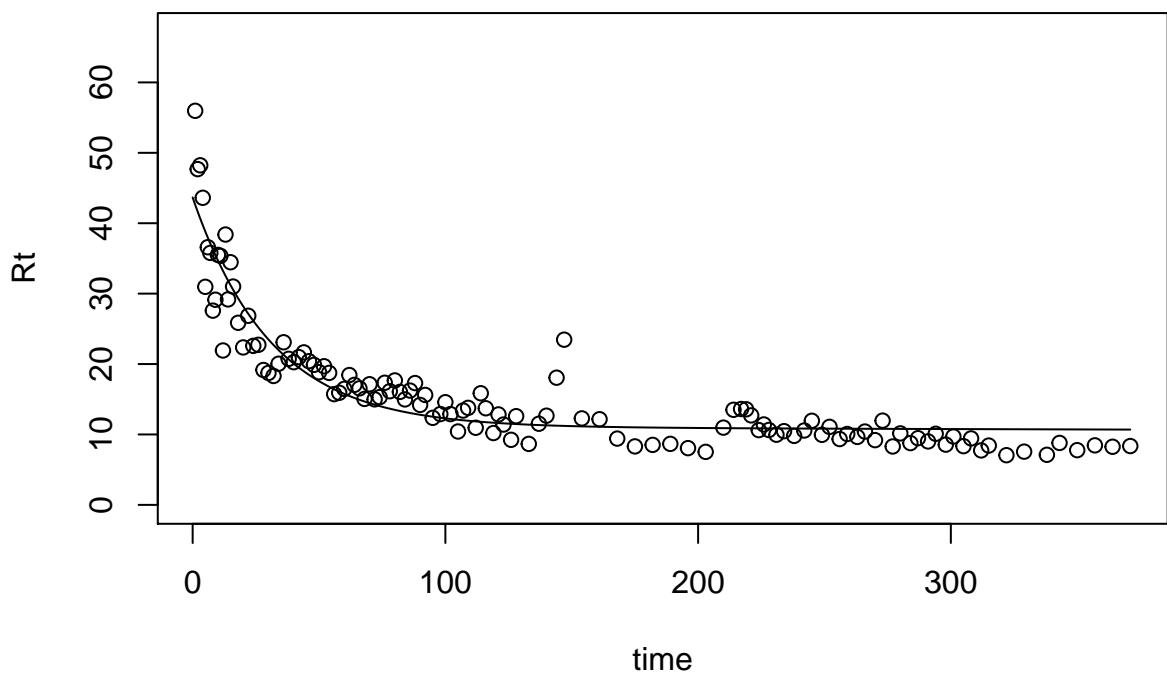
Variable Site57:

CO2 production rate

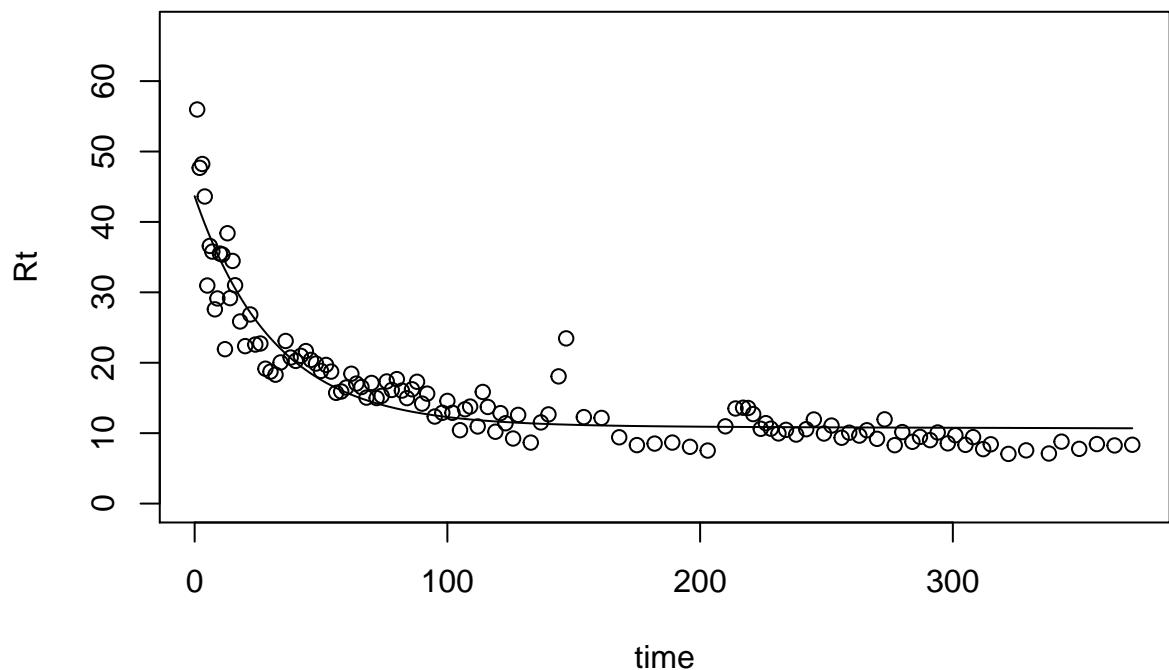
```
## [1] "Best fit parameter: 0.000145293457218117"
```



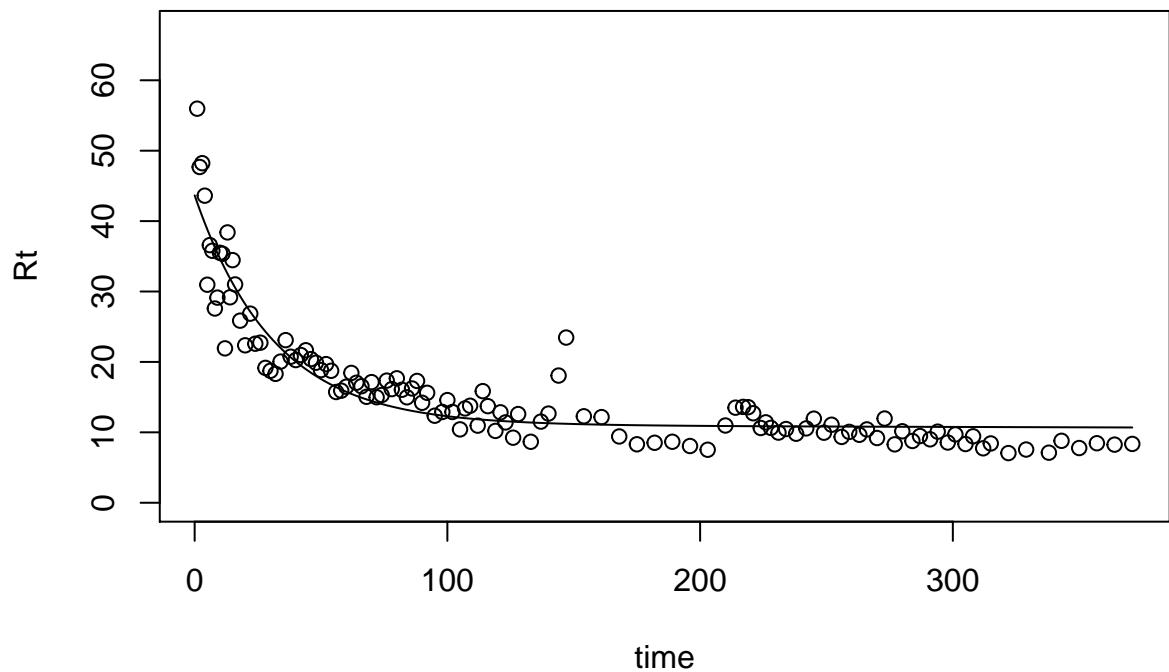
```
## [1] "AIC = -6.86757297026052"
## [1] "k1= 0.0320958621419554"
## [2] "k2= 9.51723440803048e-05"
## [3] "proportion of C0 in pool 1= 0.00864735930108335"
```



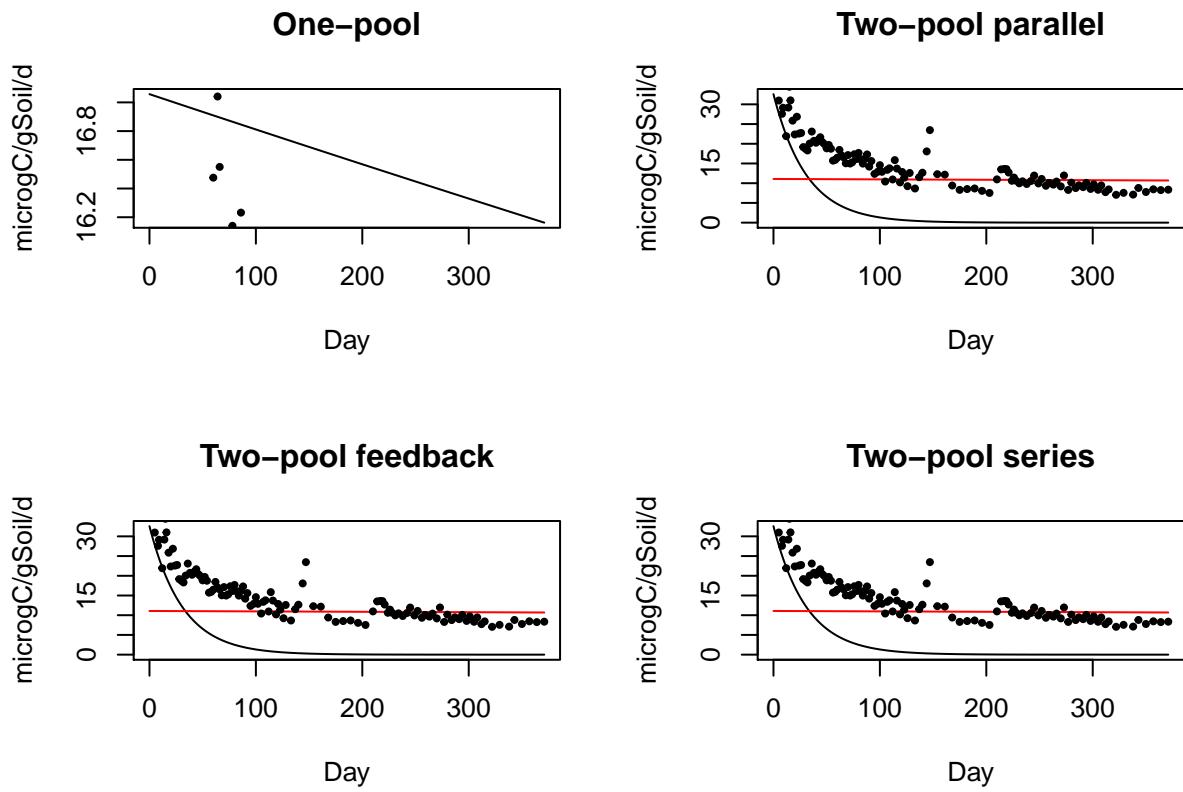
```
## [1] "AIC = 1.17380627098187"
## [1] "k1= 0.0320972905153704"
## [2] "k2= 9.51734640861342e-05"
## [3] "a21= 0.0545427765272962"
## [4] "a12= 1.92778065893906e-06"
## [5] "Proportion of C0 in pool 1= 0.00914746527596377"
```



```
## [1] "AIC = 5.17380627528514"
## [1] "k1= 0.0320958012631765"
## [2] "k2= 9.51722618126887e-05"
## [3] "a21= 0.00228987983208939"
## [4] "Proportion of C0 in pool 1= 0.00866723450955353"
```



```
## [1] "AIC = 3.17380627017258"
```

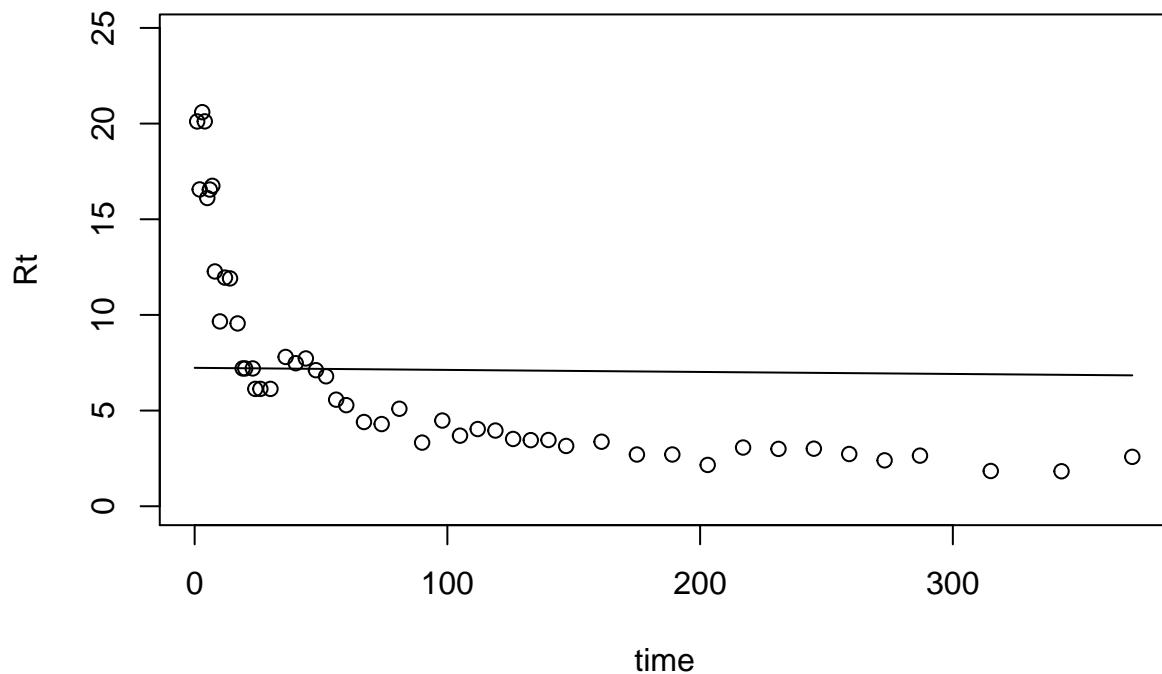


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	- 6.87	0.000145	NA	NA	NA	NA	- 6.86	0.981	NA
Two-pool parallel	1.17	0.0321	9.52e- 05	0.00865	NA	NA	1.24	0.0171	10400
Two-pool feedback	5.17	0.0321	9.52e- 05	0.00915	0.0545	1.93e- 06	5.34	0.00221	604
Two-pool series	3.17	0.0321	9.52e- 05	0.00867	0.00229	NA	3.28	0.00616	55.2
									21.7

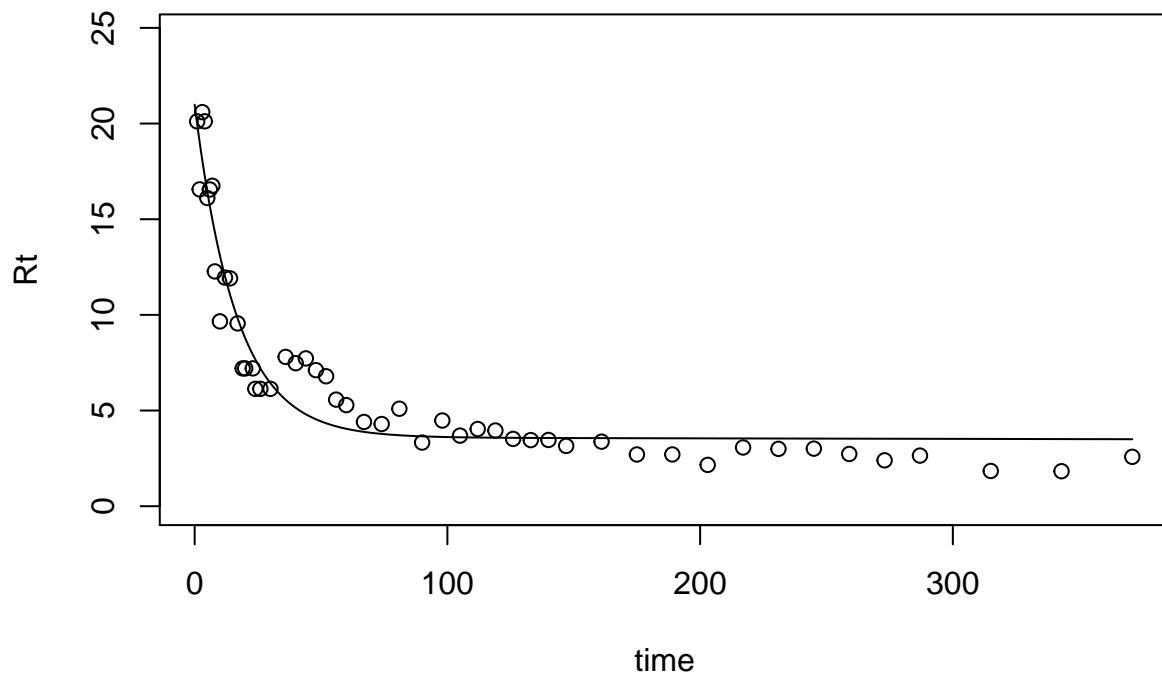
Variable Site58:

CO2 production rate

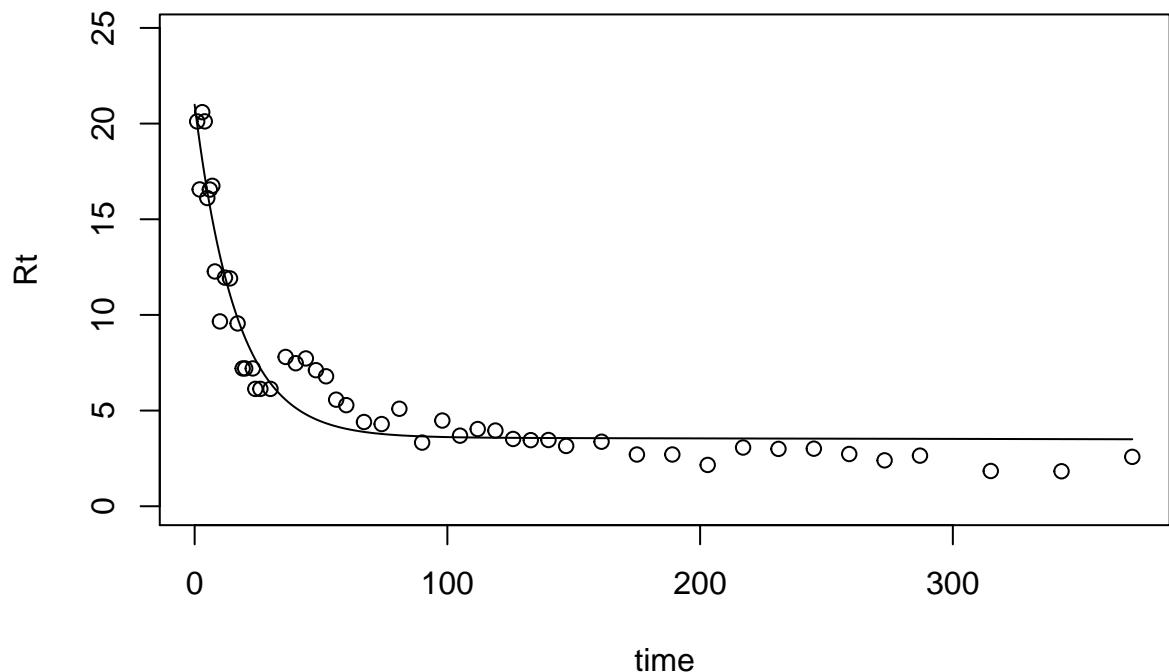
```
## [1] "Best fit parameter: 0.000150388442779251"
```



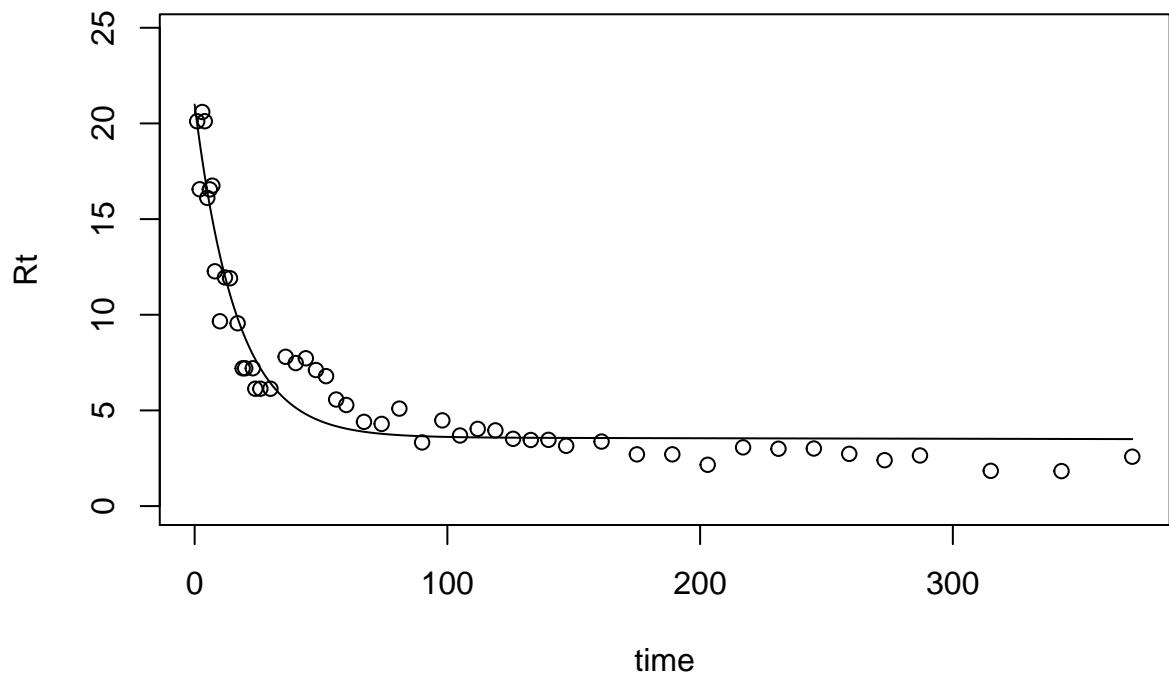
```
## [1] "AIC = -4.5482044014304"
## [1] "k1= 0.0604332373634958"
## [2] "k2= 7.52975503240346e-05"
## [3] "proportion of C0 in pool 1= 0.00598154164386366"
```



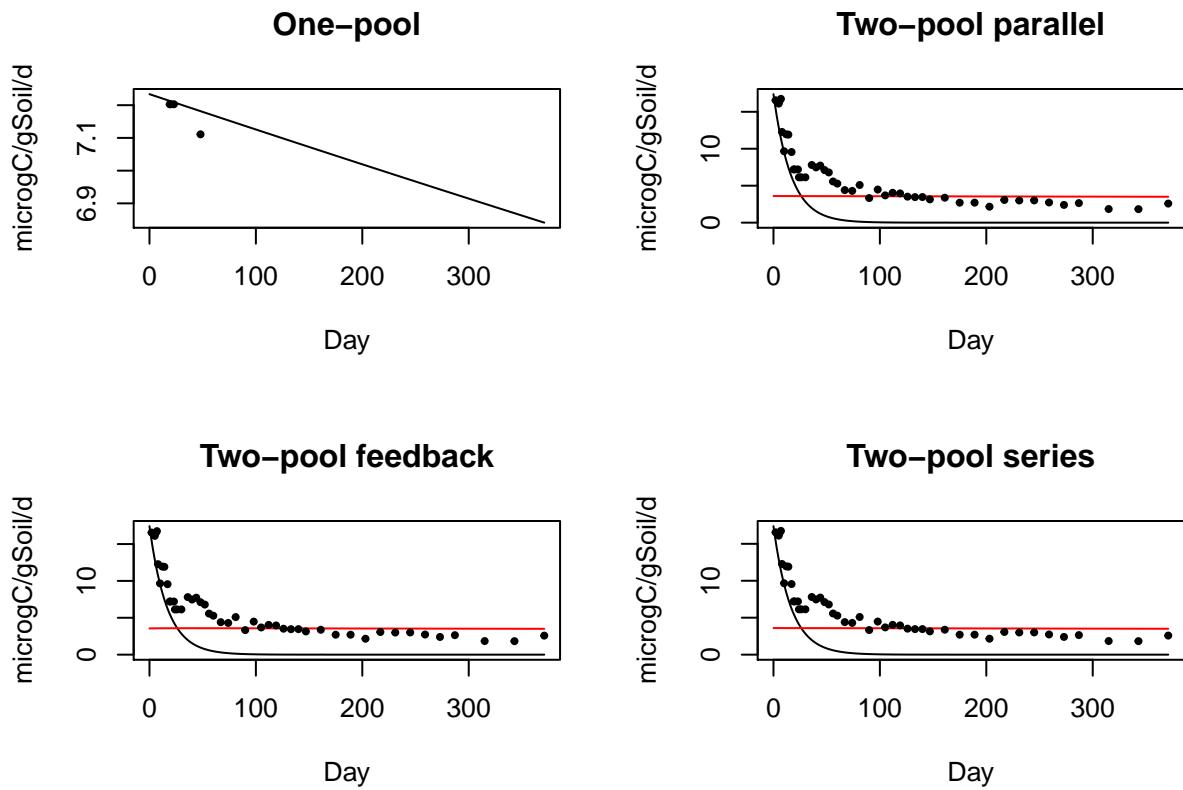
```
## [1] "AIC = 4.54001925292631"
## [1] "k1= 0.0604341633104924"
## [2] "k2= 7.52995614126891e-05"
## [3] "a21= 0.656453628489412"
## [4] "a12= 3.20282983685694e-05"
## [5] "Proportion of C0 in pool 1= 0.0174526193444763"
```



```
## [1] "AIC = 8.54001925381765"
## [1] "k1= 0.0604333901153168"
## [2] "k2= 7.52976222419126e-05"
## [3] "a21= 0.156976214523947"
## [4] "Proportion of C0 in pool 1= 0.00709692196580508"
```



```
## [1] "AIC = 6.54001925103856"
```

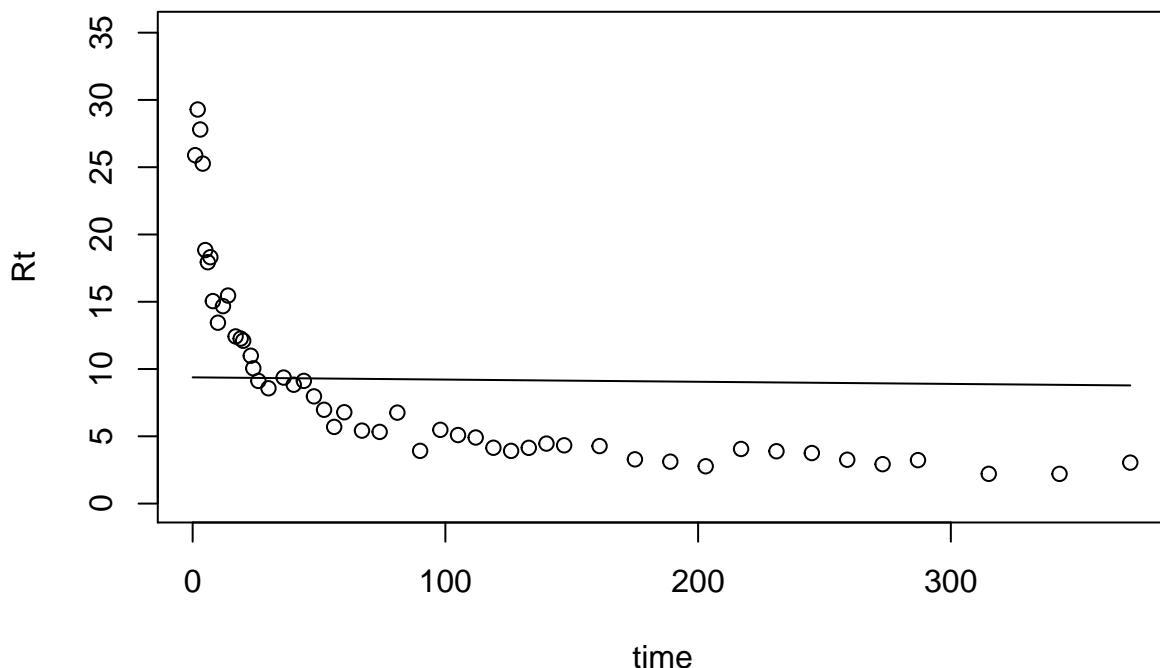


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-4.55	0.00015	NA	NA	NA	NA	-4.54	0.988	NA	NA
Two-pool parallel	4.54	0.0604	7.53e-05	0.00598	NA	NA	4.61	0.0102	13200	9130
Two-pool feedback	8.54	0.0604	7.53e-05	0.0175	0.656	3.2e-05	8.7	0.00132	8730	3630
Two-pool series	6.54	0.0604	7.53e-05	0.0071	0.157	NA	6.65	0.00368	2100	14.9

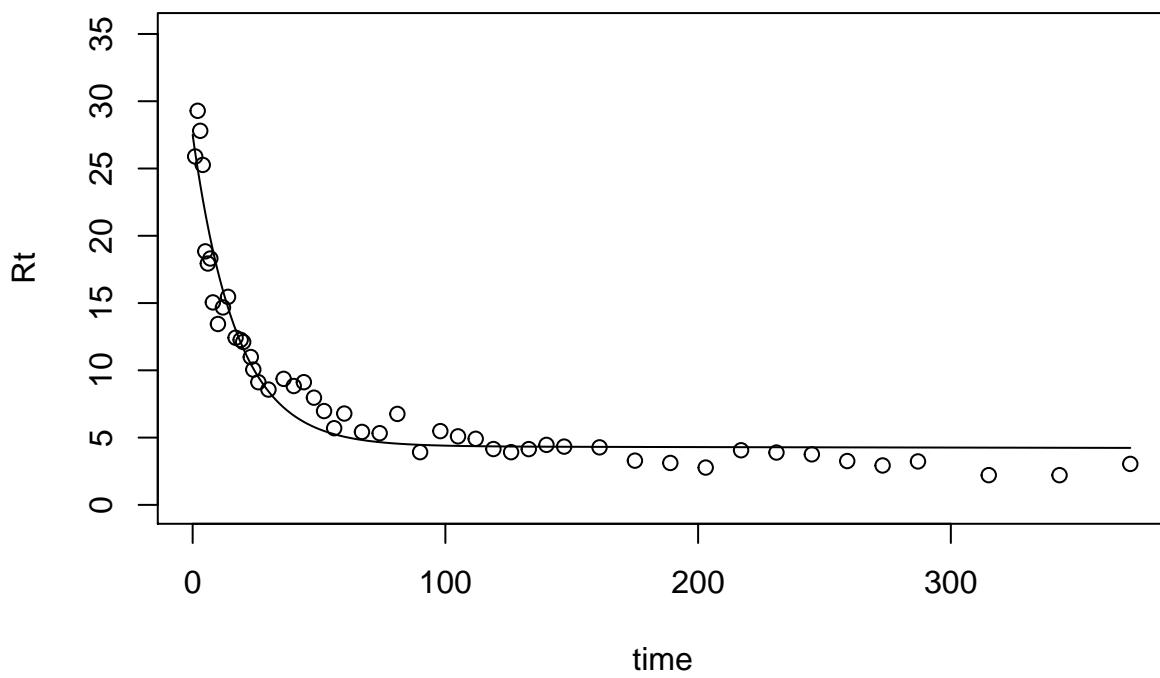
Variable Site59:

CO2 production rate

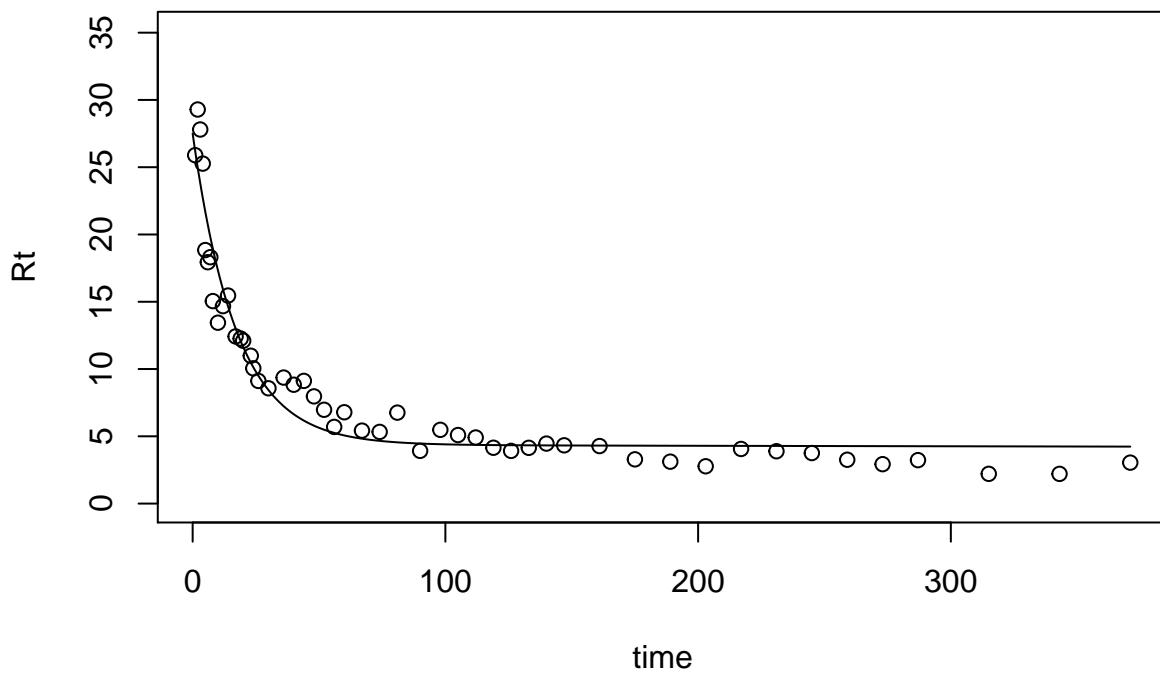
```
## [1] "Best fit parameter: 0.000178012921349447"
```



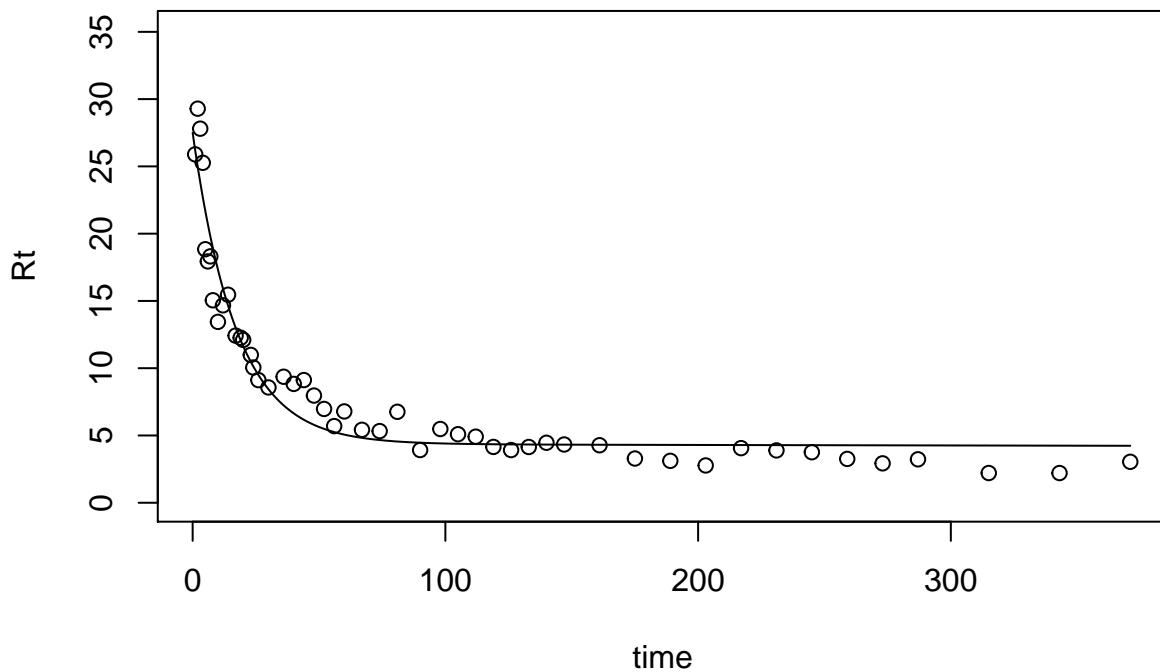
```
## [1] "AIC = -5.69514411882214"
## [1] "k1= 0.0578249749671867"
## [2] "k2= 8.34980149889974e-05"
## [3] "proportion of C0 in pool 1= 0.00759138724256381"
```



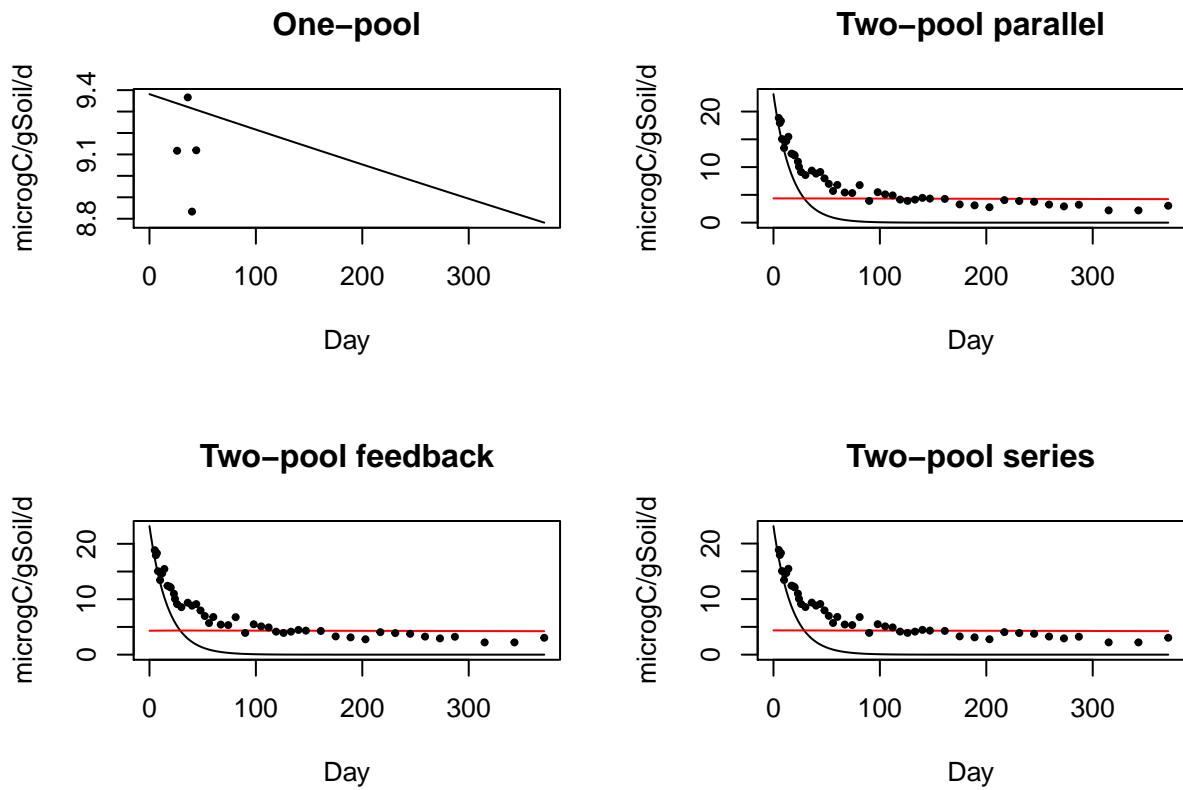
```
## [1] "AIC = 3.8318728766988"
## [1] "k1= 0.0578261877690873"
## [2] "k2= 8.35005817836587e-05"
## [3] "a21= 0.618981684251195"
## [4] "a12= 3.54508134762788e-05"
## [5] "Proportion of C0 in pool 1= 0.0199706006908226"
```



```
## [1] "AIC = 7.83187287899887"
## [1] "k1= 0.0578252661830243"
## [2] "k2= 8.34981805147082e-05"
## [3] "a21= 0.000609886607051247"
## [4] "Proportion of C0 in pool 1= 0.00759595836242805"
```



```
## [1] "AIC = 5.83187287596385"
```

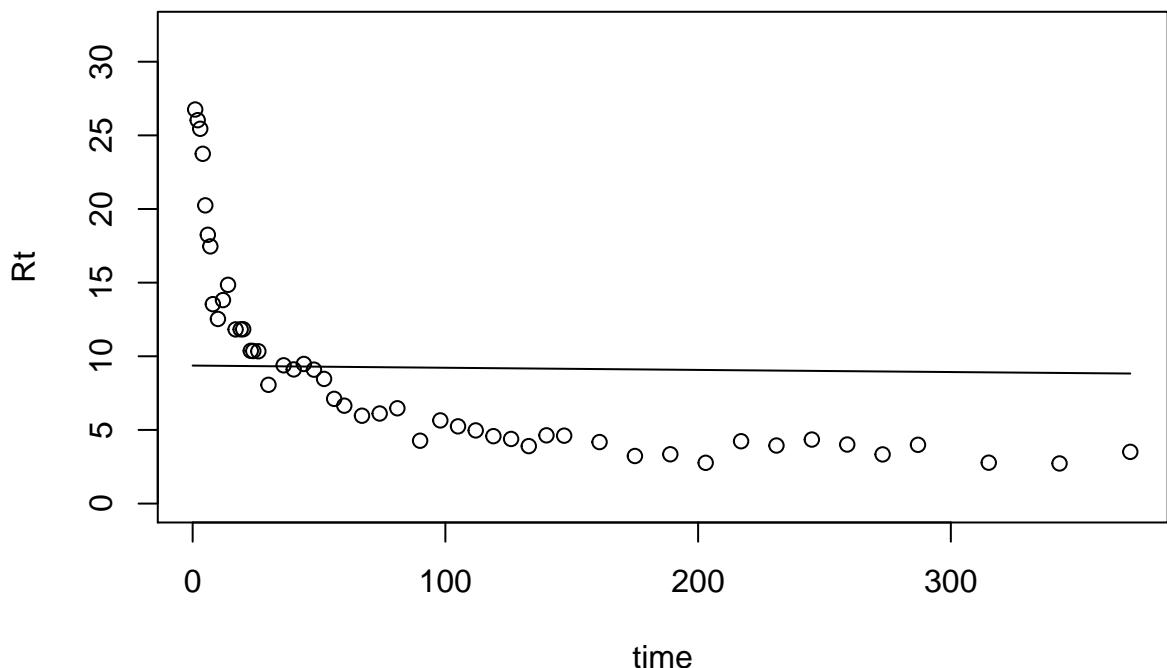


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.7	0.000178	NA	NA	NA	NA	-5.68	0.991	NA	NA
Two-pool parallel	3.83	0.0578	8.35e-05	0.00759	NA	NA	3.9	0.00823	11900	8210
Two-pool feedback	7.83	0.0578	8.35e-05	0.02	0.619	3.55e-05	8	0.00106	7430	2570
Two-pool series	5.83	0.0578	8.35e-05	0.0076	0.00061	NA	5.94	0.00296	24.6	12

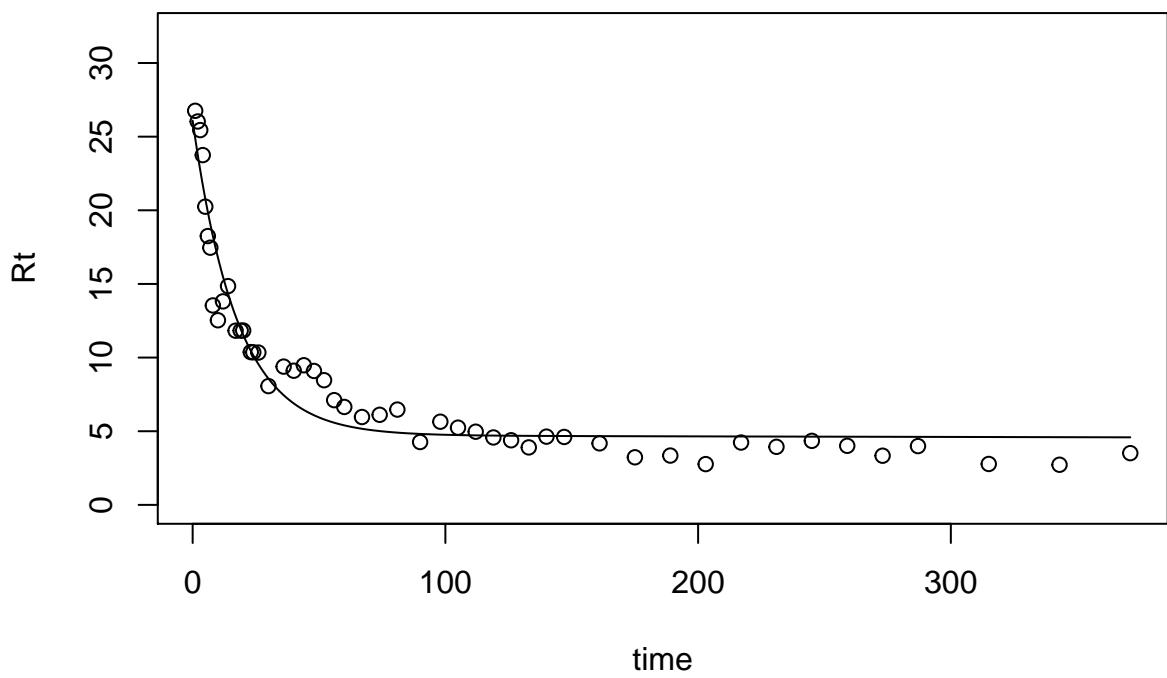
Variable Site60:

CO2 production rate

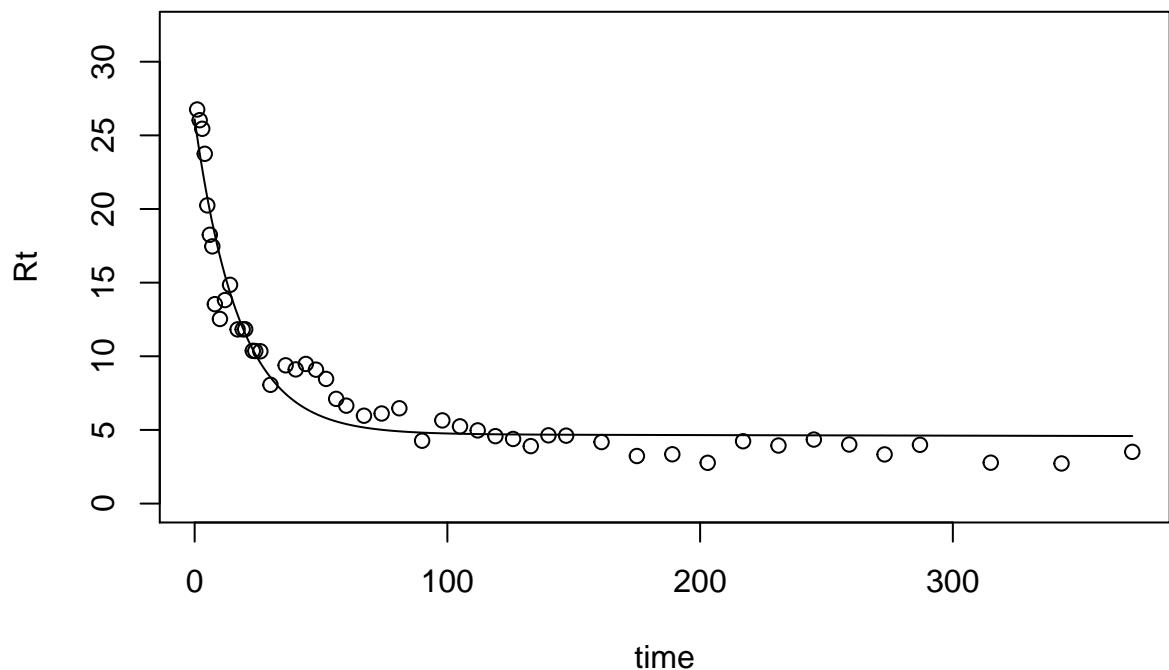
```
## [1] "Best fit parameter: 0.000160170062215443"
```



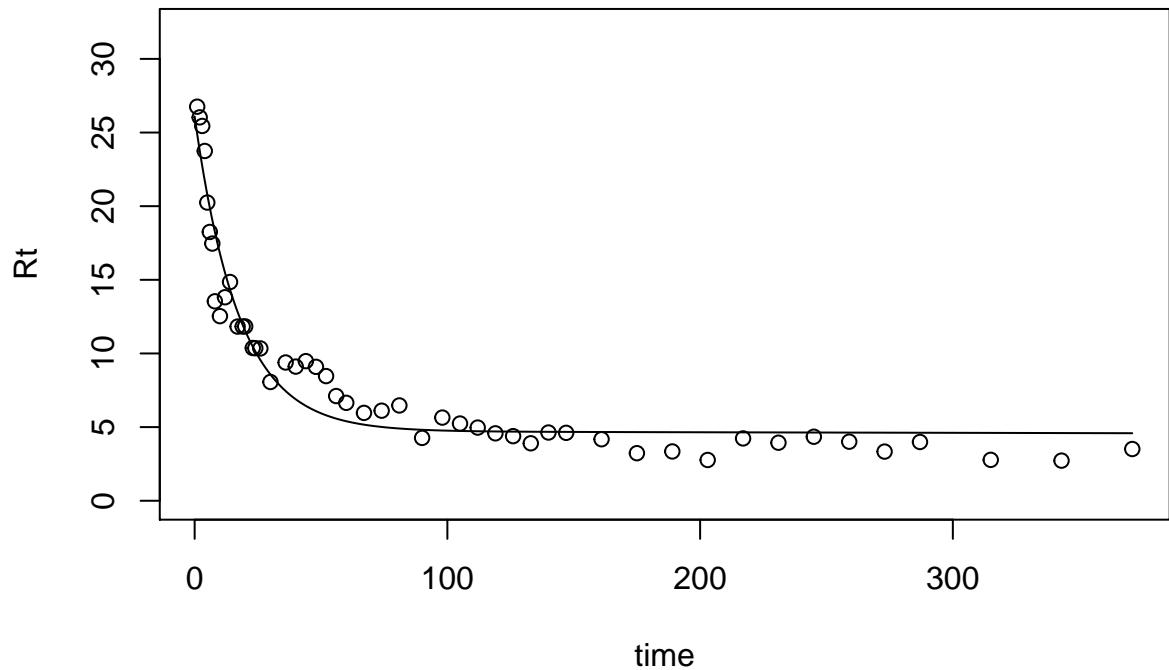
```
## [1] "AIC = -5.40019375936889"
## [1] "k1= 0.0570869968746053"
## [2] "k2= 8.13079256546111e-05"
## [3] "proportion of C0 in pool 1= 0.006397147299052"
```



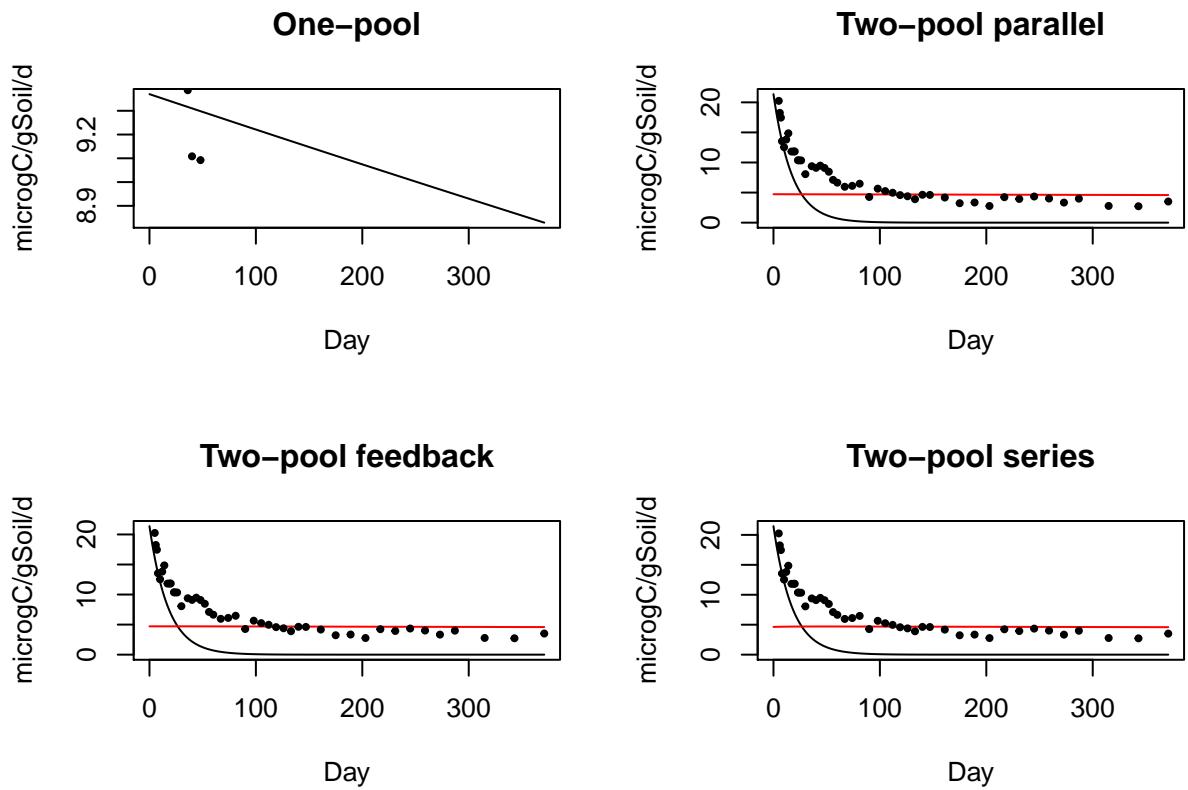
```
## [1] "AIC = 4.02882680838945"
## [1] "k1= 0.0570872913667486"
## [2] "k2= 8.13081799576184e-05"
## [3] "a21= 0.387408946391346"
## [4] "a12= 3.17226511248325e-06"
## [5] "Proportion of C0 in pool 1= 0.0104521536217092"
```



```
## [1] "AIC = 8.02882680965637"
## [1] "k1= 0.0570885026913656"
## [2] "k2= 8.13087095183629e-05"
## [3] "a21= 0.759200769121991"
## [4] "Proportion of C0 in pool 1= 0.0266859140996454"
```



```
## [1] "AIC = 6.02882681219716"
```

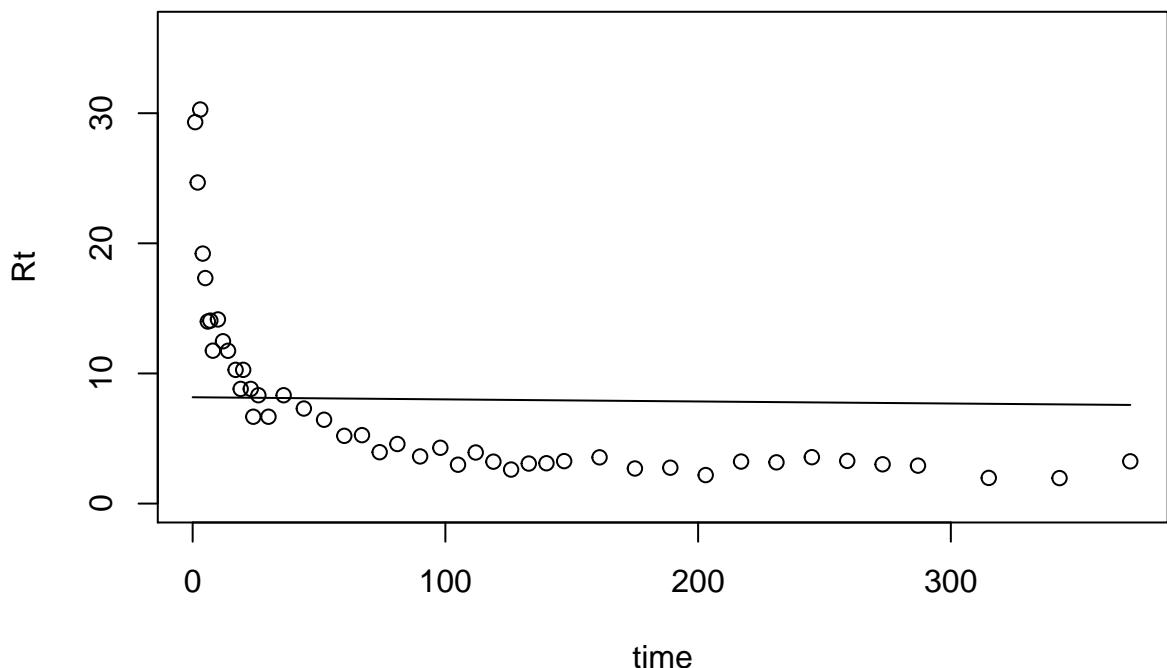


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.4	0.00016	NA	NA	NA	NA	-5.39	0.99	NA	NA
Two-pool parallel	4.03	0.0571	8.13e-05	0.0064	NA	NA	4.09	0.00864	12200	8450
Two-pool feedback	8.03	0.0571	8.13e-05	0.0105	0.387	3.17e-06	8.19	0.00111	4780	29.6
Two-pool series	6.03	0.0571	8.13e-05	0.0267	0.759	NA	6.14	0.00311	9350	5150

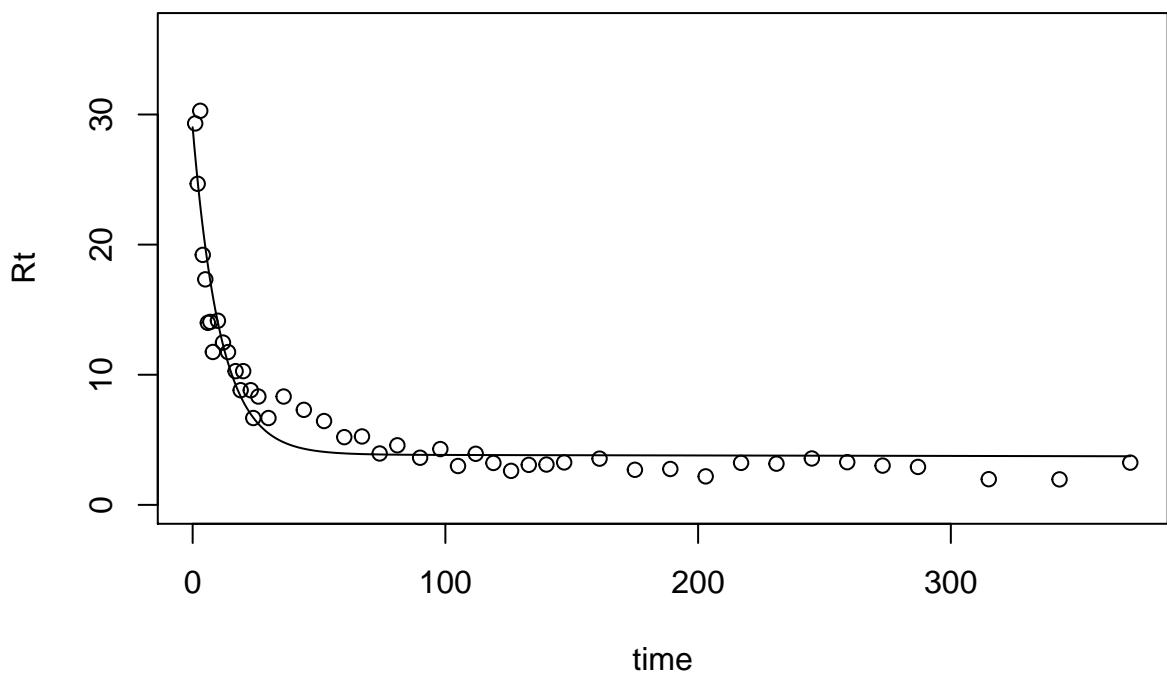
Variable Site61:

CO2 production rate

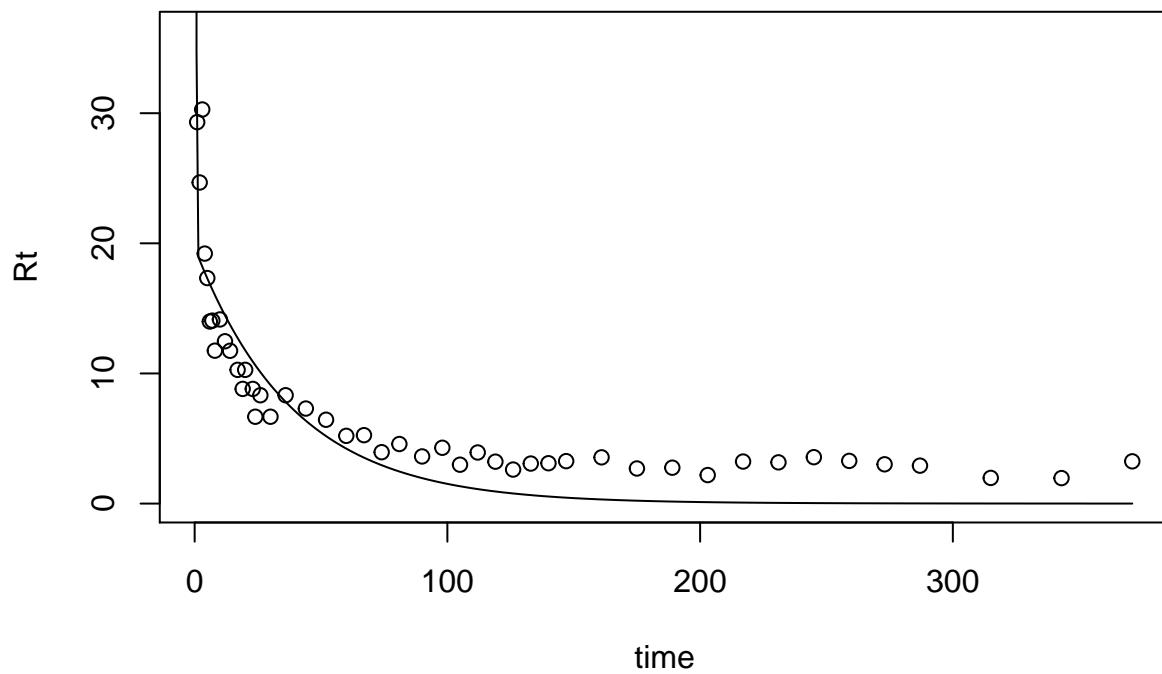
```
## [1] "Best fit parameter: 0.000202243499080877"
```



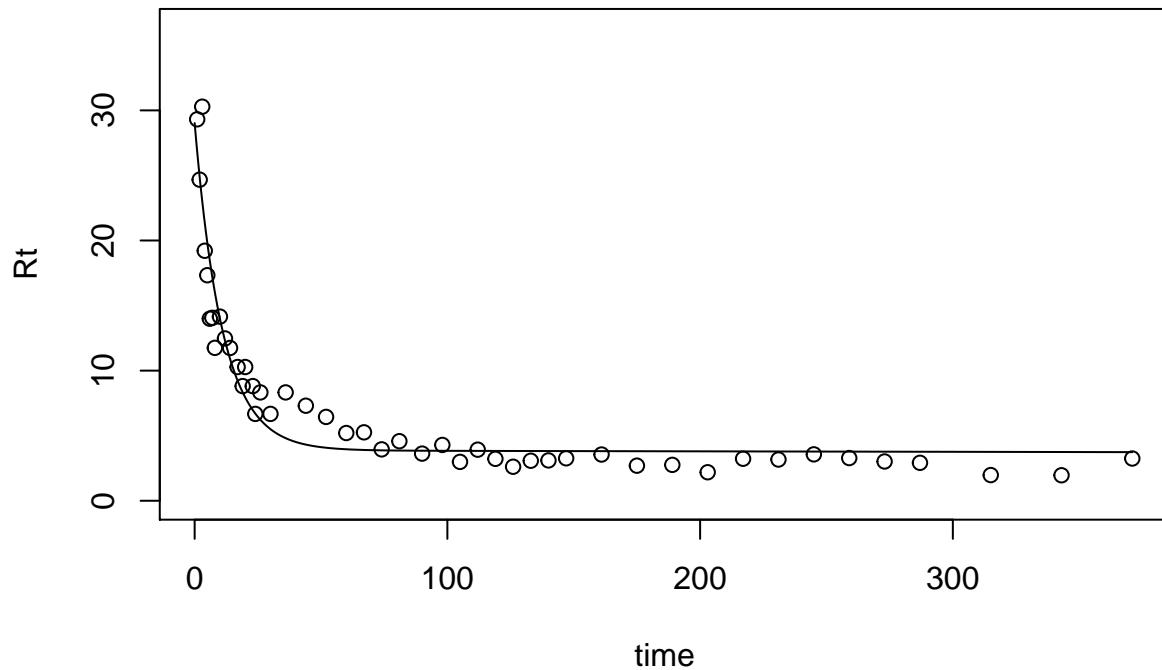
```
## [1] "AIC = -5.6317645619647"
## [1] "k1= 0.0909522469955234"
## [2] "k2= 9.6493249360729e-05"
## [3] "proportion of C0 in pool 1= 0.00684519771884329"
```



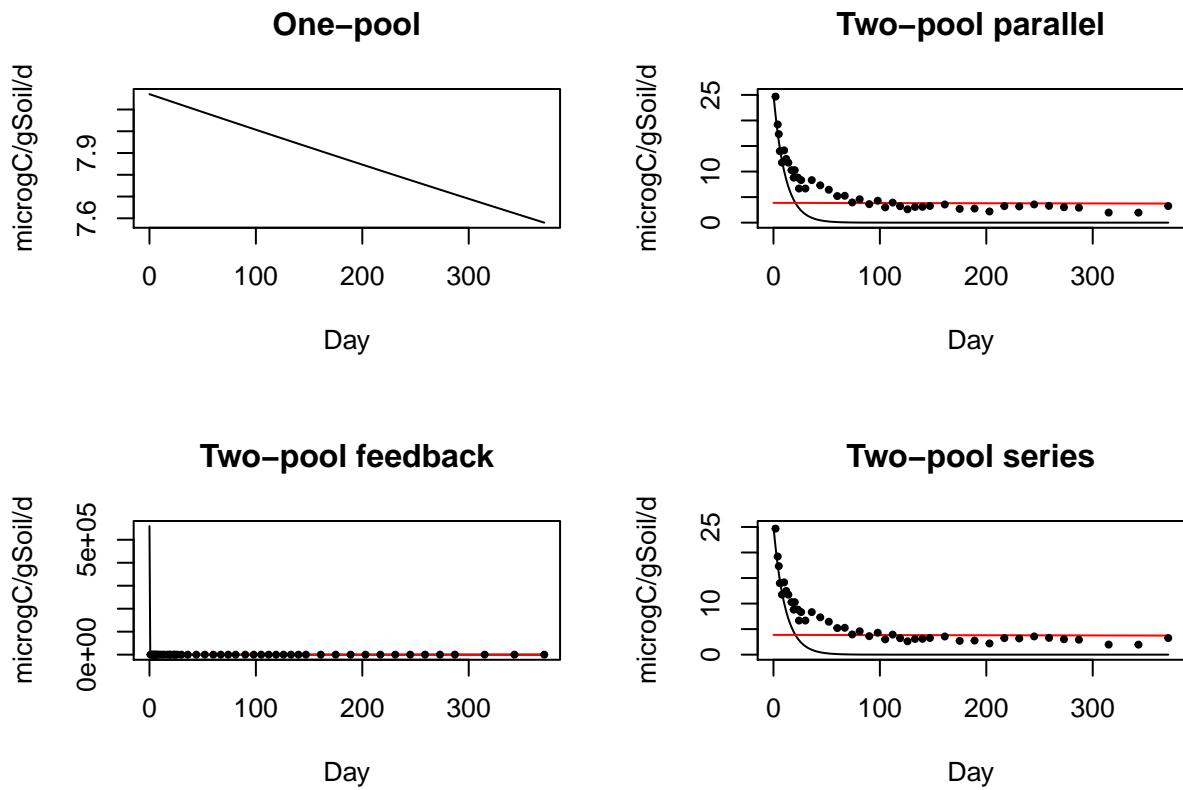
```
## [1] "AIC = 3.27851612155335"
## [1] "k1= 14.1115867540242"
## [2] "k2= 0.0261365705788296"
## [3] "a21= 0.0186404121366899"
## [4] "a12= 0.999996713641577"
## [5] "Proportion of C0 in pool 1= 0.999711414699087"
```



```
## [1] "AIC = 5.52303511677796"
## [1] "k1= 0.090950029310018"
## [2] "k2= 9.64923141590805e-05"
## [3] "a21= 0.229764174766514"
## [4] "Proportion of C0 in pool 1= 0.00888996369936729"
```



```
## [1] "AIC = 5.27851611114127"
```

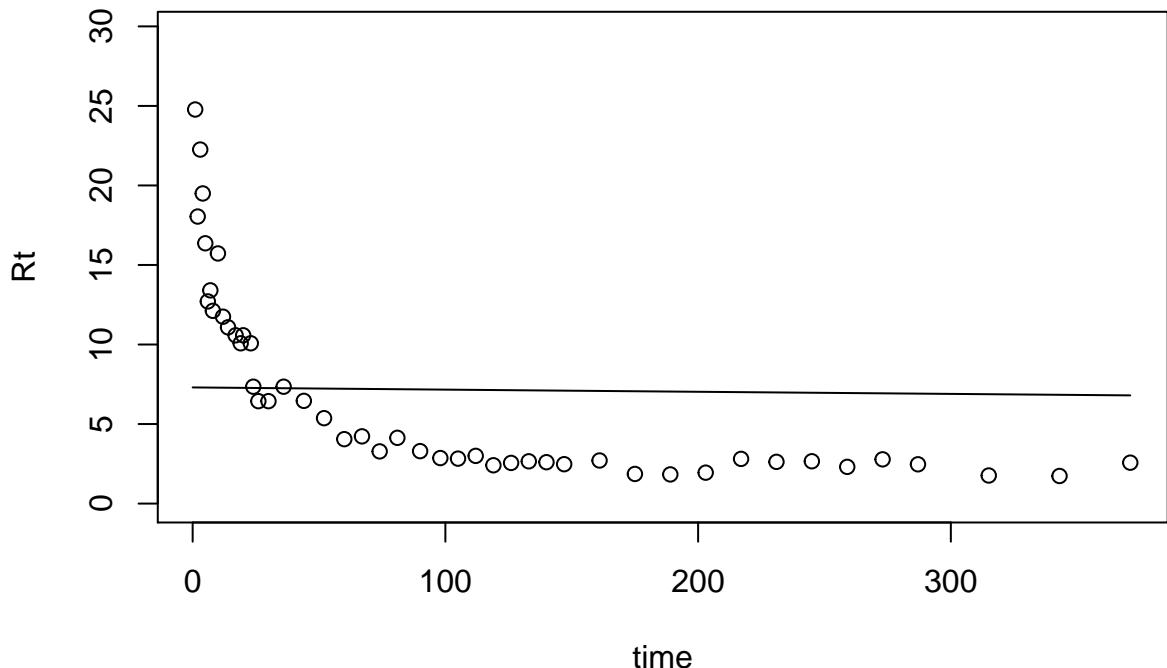


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.63	0.000202	NA	NA	NA	NA	-5.62	0.985	NA	NA
Two-pool parallel	3.28	0.091	9.65e-05	0.00685	NA	NA	3.34	0.0111	10300	7110
Two-pool feedback	5.52	14.1	0.0261	1	0.0186	1	5.69	0.00345	0.799	0.0505
Two-pool series	5.28	0.091	9.65e-05	0.00889	0.23	NA	5.39	0.00401	2390	11.5

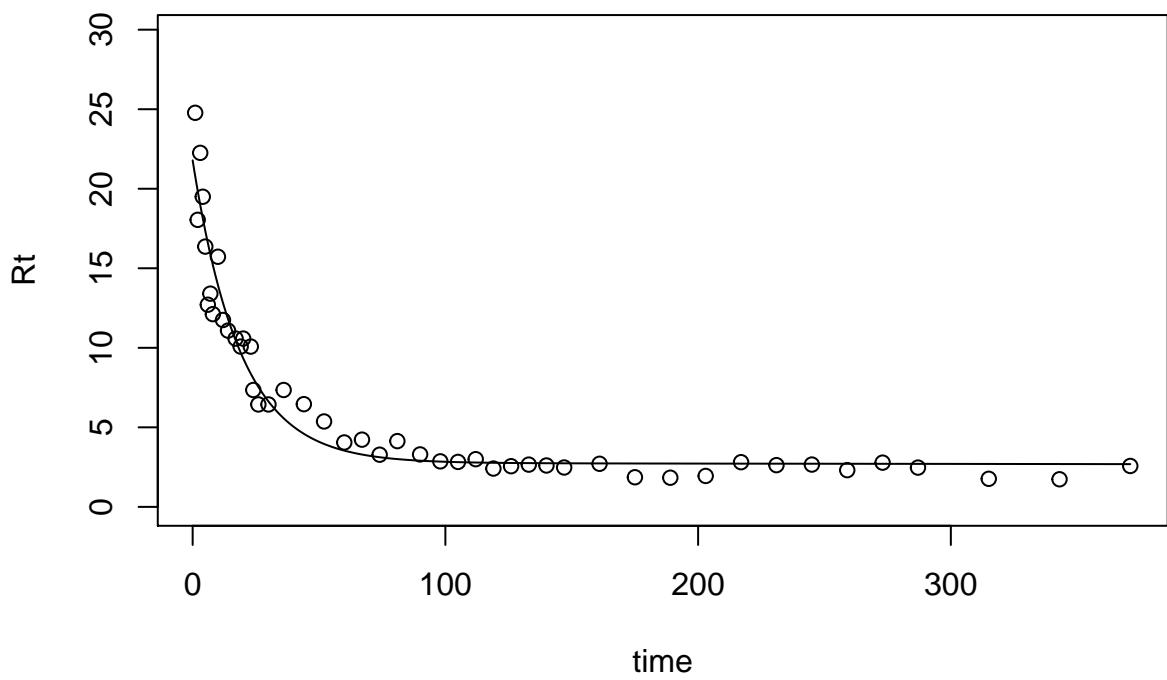
Variable Site62:

CO2 production rate

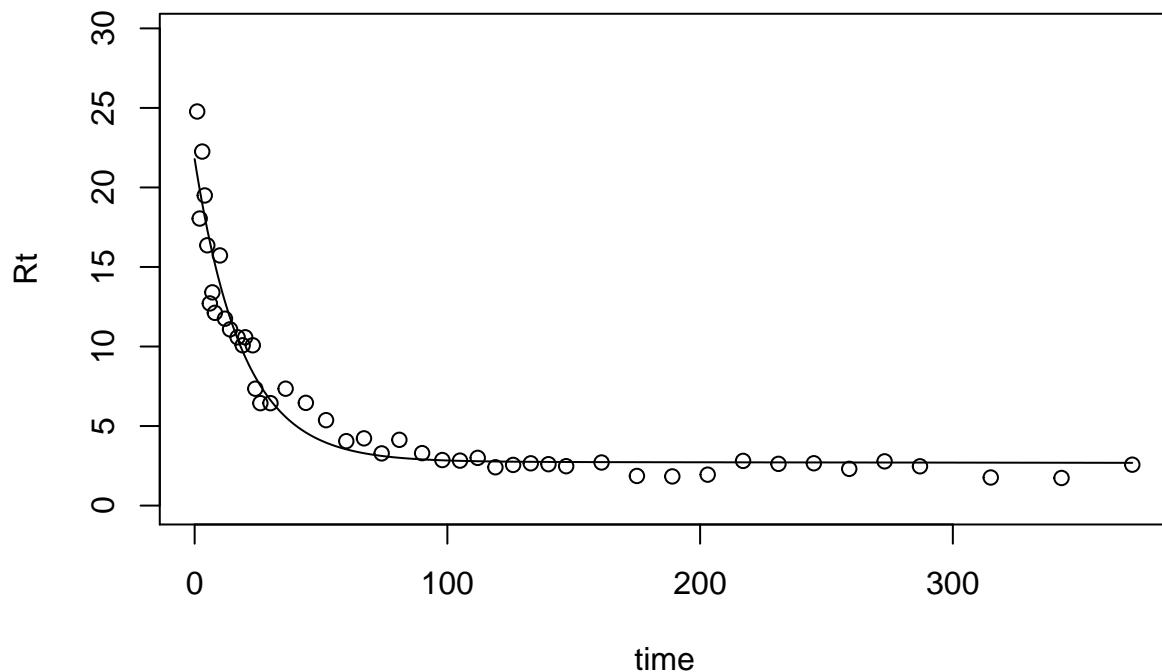
```
## [1] "Best fit parameter: 0.000191153624789265"
```



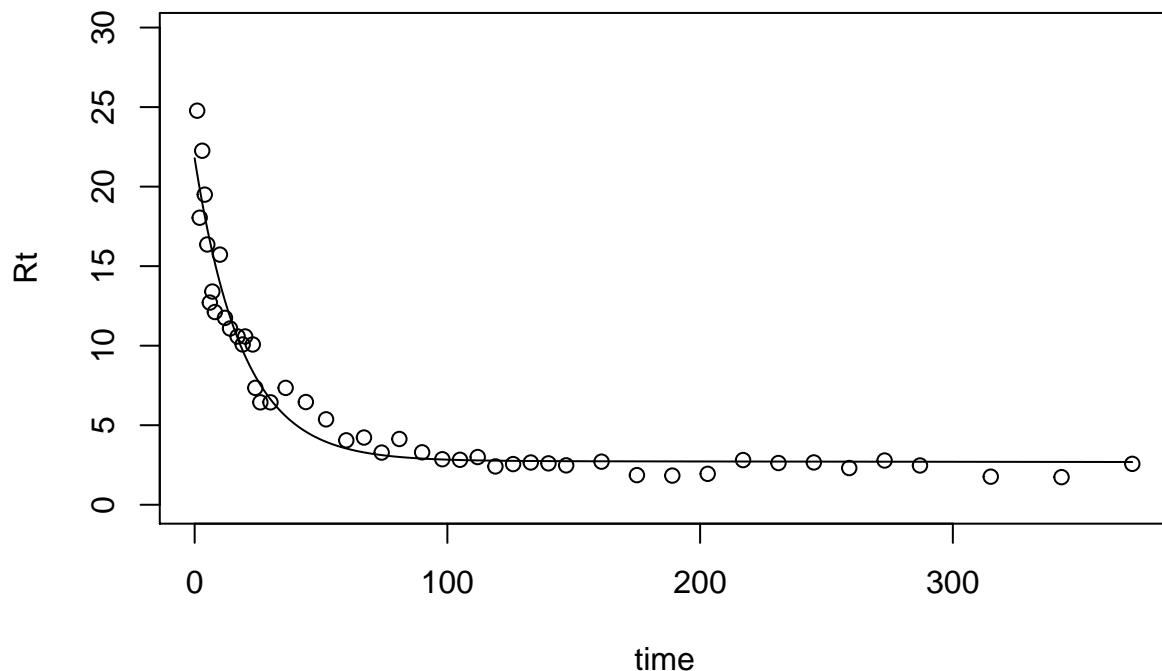
```
## [1] "AIC = -5.07409154674753"
## [1] "k1= 0.0530583742858257"
## [2] "k2= 7.29634265518252e-05"
## [3] "proportion of C0 in pool 1= 0.009386368534061"
```



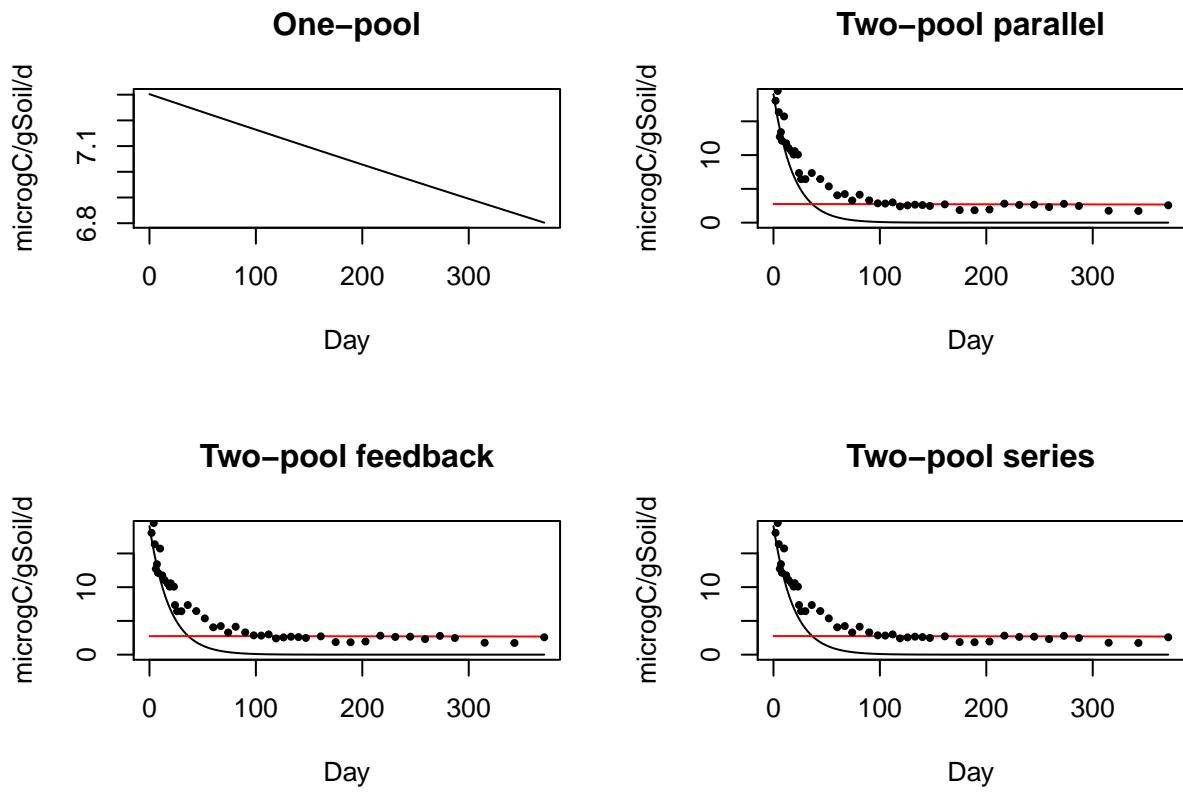
```
## [1] "AIC = 4.69279924347675"
## [1] "k1= 0.0530590009464366"
## [2] "k2= 7.29640677485067e-05"
## [3] "a21= 0.459243342237777"
## [4] "a12= 4.72258670319858e-06"
## [5] "Proportion of C0 in pool 1= 0.0173780111444604"
```



```
## [1] "AIC = 8.69279924187247"
## [1] "k1= 0.0530583736484342"
## [2] "k2= 7.29634099924981e-05"
## [3] "a21= 0.195341472168334"
## [4] "Proportion of C0 in pool 1= 0.0116688873362389"
```



```
## [1] "AIC = 6.69279924174427"
```

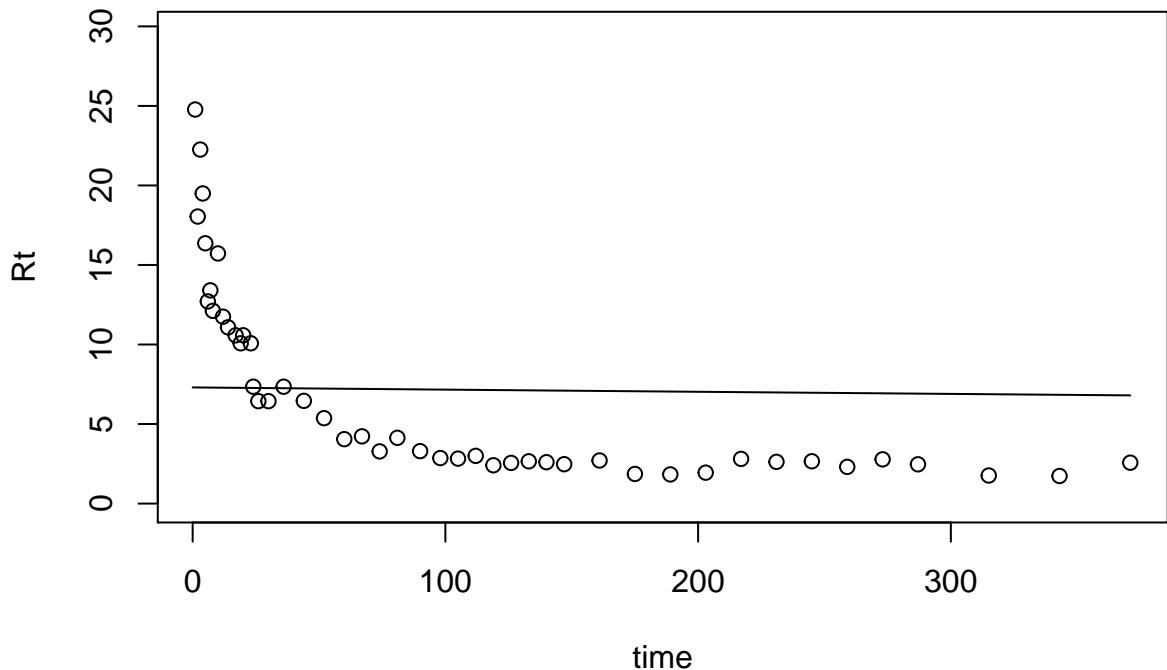


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-5.07	0.000191	NA	NA	NA	NA	-5.06	0.992	NA
Two-pool parallel	4.69	0.0531	7.3e-05	0.00939	NA	NA	4.76	0.00731	13600
Two-pool feedback	8.69	0.0531	7.3e-05	0.0174	0.459	4.72e-06	8.86	0.000941	6310
Two-pool series	6.69	0.0531	7.3e-05	0.0117	0.195	NA	6.8	0.00263	2700
									48.3
									18.3

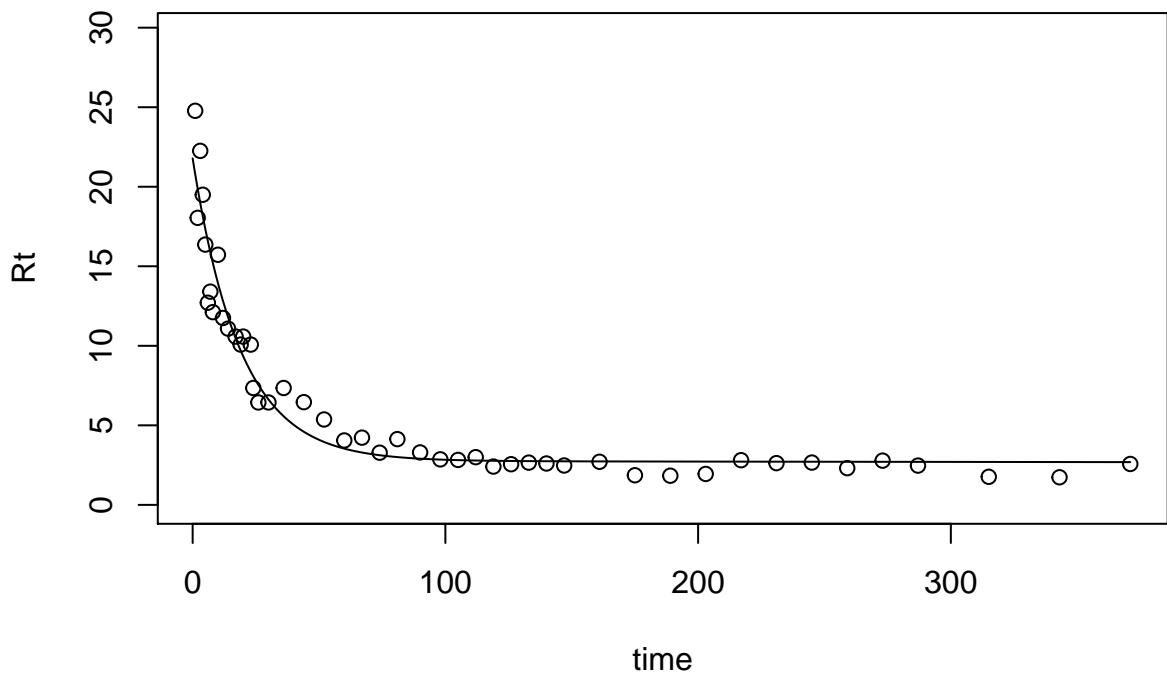
Variable Site62:

CO2 production rate

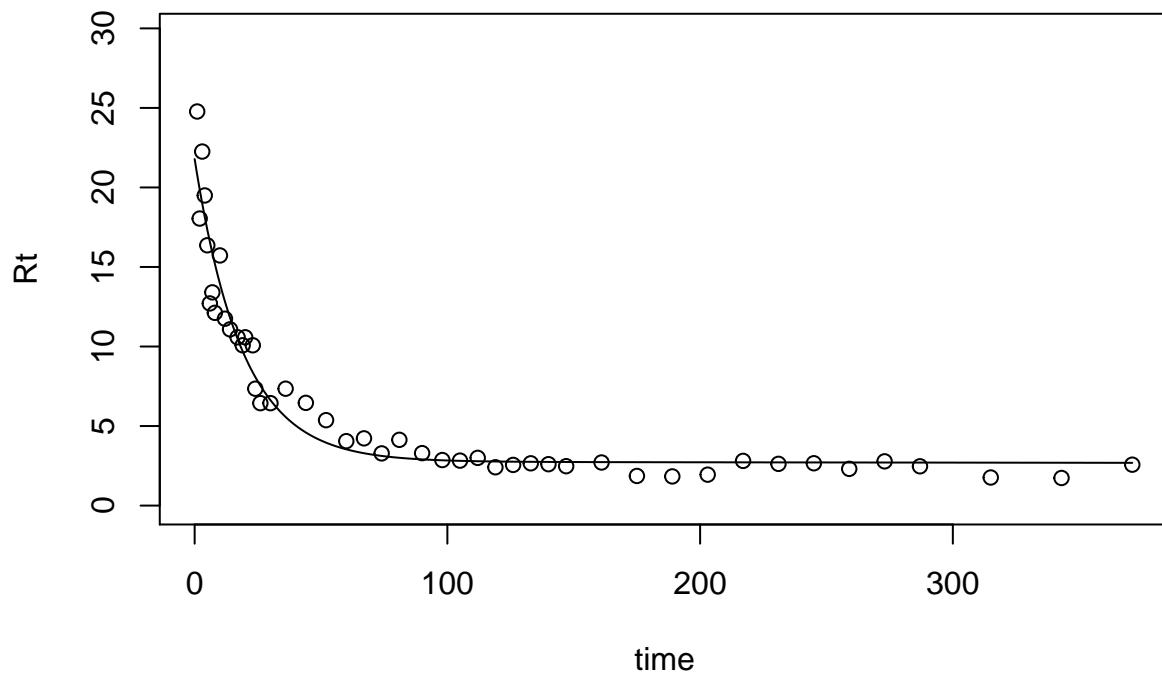
```
## [1] "Best fit parameter: 0.000191153624789265"
```



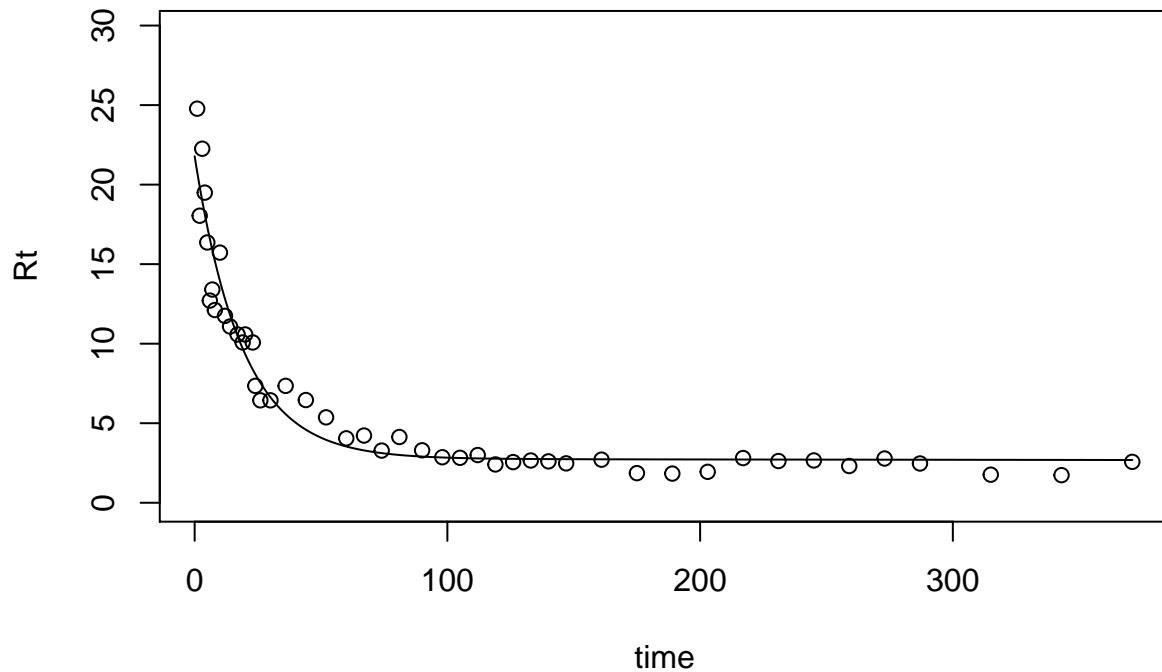
```
## [1] "AIC = -5.07409154674753"
## [1] "k1= 0.0530583742858257"
## [2] "k2= 7.29634265518252e-05"
## [3] "proportion of C0 in pool 1= 0.009386368534061"
```



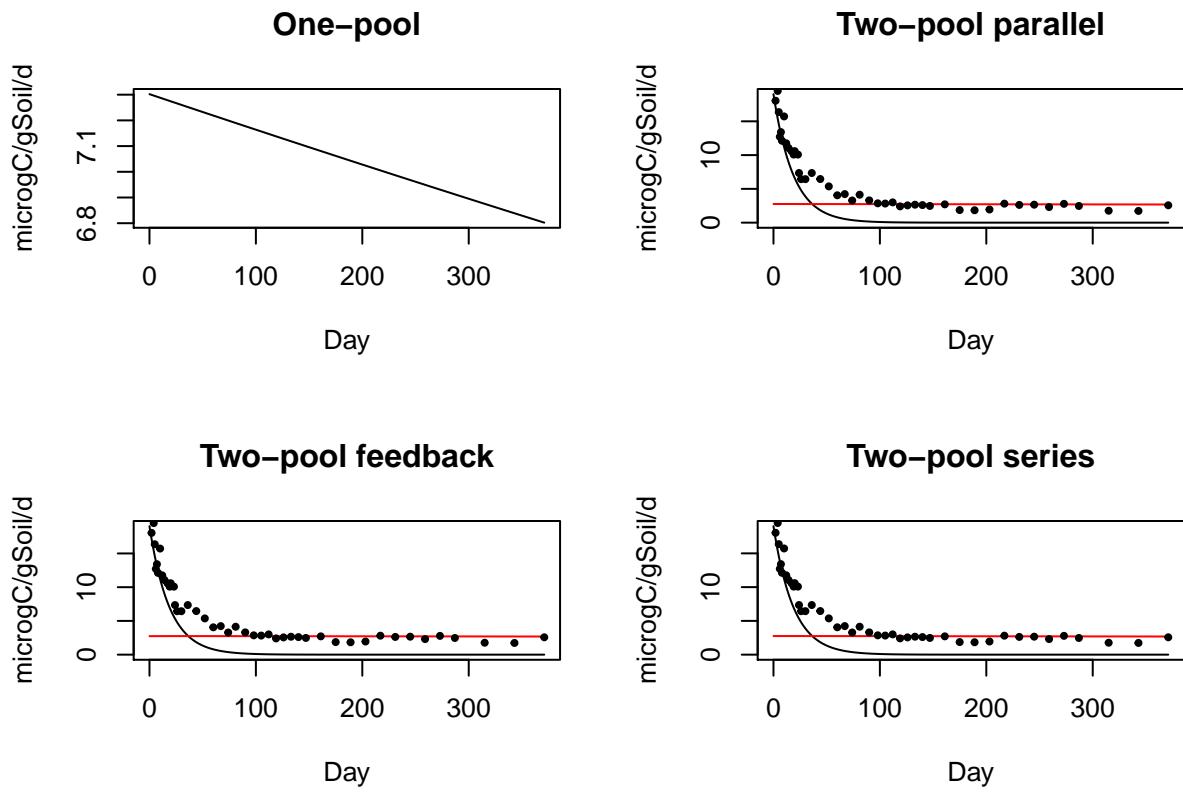
```
## [1] "AIC = 4.69279924347675"
## [1] "k1= 0.0530590009464366"
## [2] "k2= 7.29640677485067e-05"
## [3] "a21= 0.459243342237777"
## [4] "a12= 4.72258670319858e-06"
## [5] "Proportion of C0 in pool 1= 0.0173780111444604"
```



```
## [1] "AIC = 8.69279924187247"
## [1] "k1= 0.0530583736484342"
## [2] "k2= 7.29634099924981e-05"
## [3] "a21= 0.195341472168334"
## [4] "Proportion of C0 in pool 1= 0.0116688873362389"
```



```
## [1] "AIC = 6.69279924174427"
```

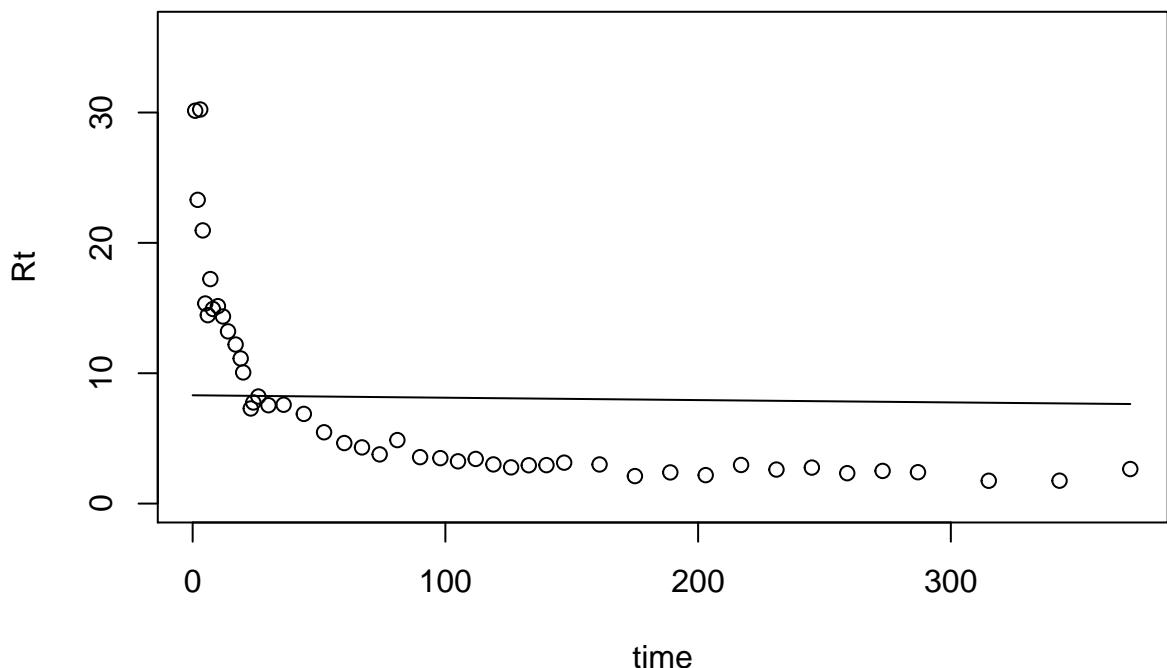


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-5.07	0.000191	NA	NA	NA	NA	-5.06	0.992	NA
Two-pool parallel	4.69	0.0531	7.3e-05	0.00939	NA	NA	4.76	0.00731	13600
Two-pool feedback	8.69	0.0531	7.3e-05	0.0174	0.459	4.72e-06	8.86	0.000941	6310
Two-pool series	6.69	0.0531	7.3e-05	0.0117	0.195	NA	6.8	0.00263	2700
									48.3
									18.3

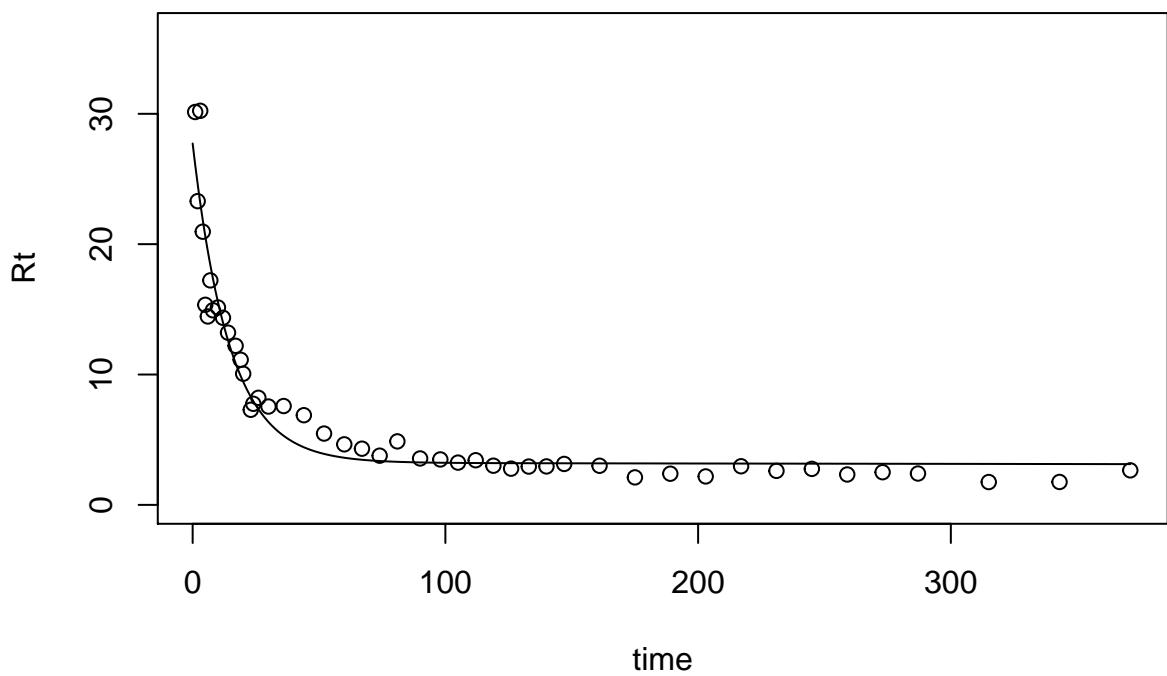
Variable Site63:

CO2 production rate

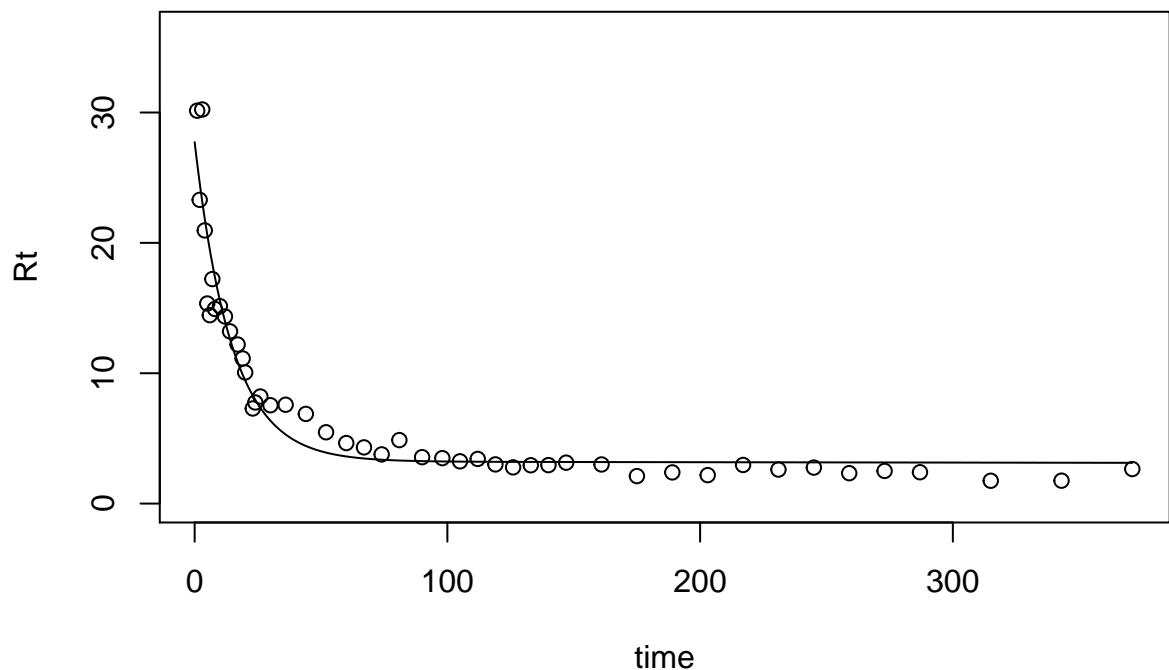
```
## [1] "Best fit parameter: 0.000226993473882663"
```



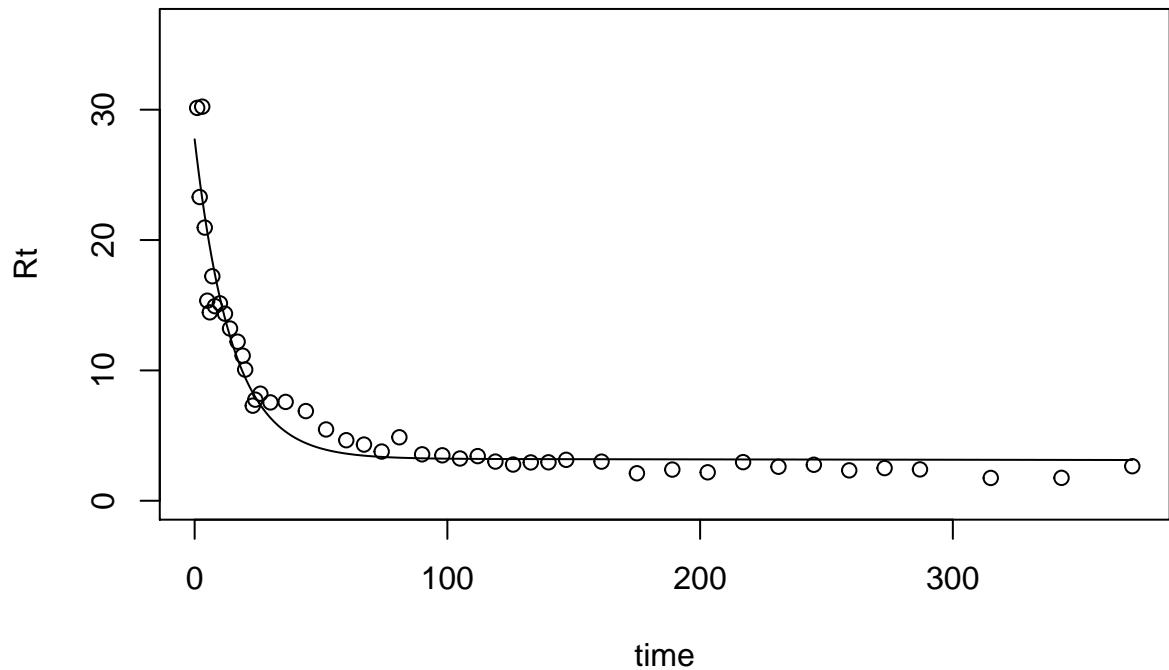
```
## [1] "AIC = -5.83375399238325"
## [1] "k1= 0.0685256204277715"
## [2] "k2= 8.9149022680705e-05"
## [3] "proportion of C0 in pool 1= 0.00976678878038623"
```



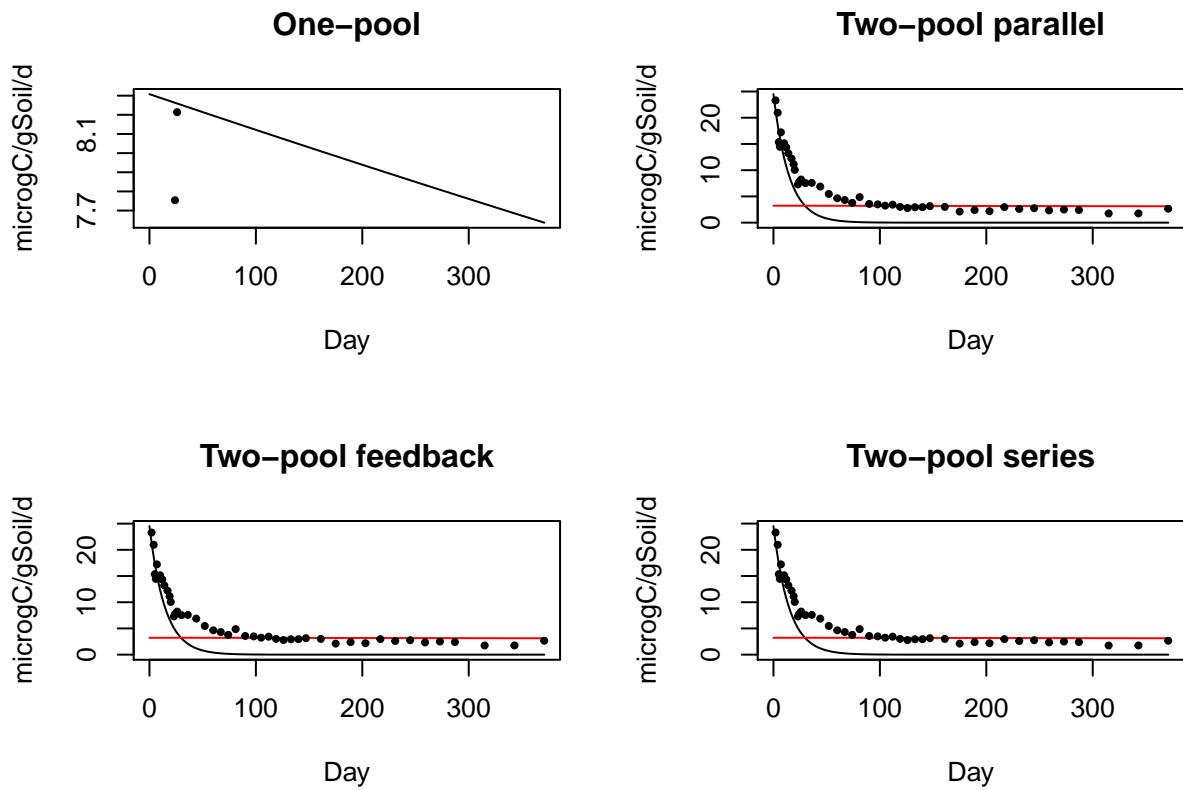
```
## [1] "AIC = 3.49912943464775"
## [1] "k1= 0.0685252199686277"
## [2] "k2= 8.91496337363323e-05"
## [3] "a21= 0.437369621949496"
## [4] "a12= 2.30459743747469e-05"
## [5] "Proportion of C0 in pool 1= 0.0173767951063625"
```



```
## [1] "AIC = 7.49912943949971"
## [1] "k1= 0.068525782071632"
## [2] "k2= 8.91491092624803e-05"
## [3] "a21= 0.348972153913317"
## [4] "Proportion of C0 in pool 1= 0.0150125103172274"
```



```
## [1] "AIC = 5.49912943884039"
```

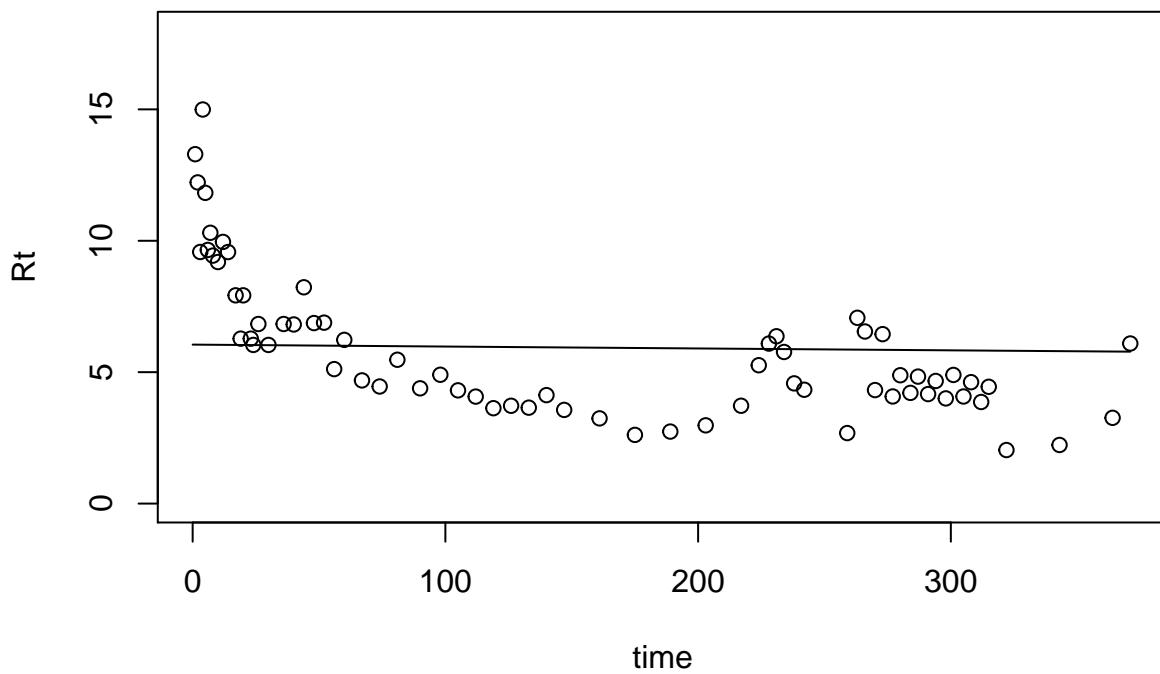


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-5.83	0.000227	NA	NA	NA	NA	-5.82	0.99	NA	NA
Two-pool parallel	3.5	0.0685	8.91e-05	0.00977	NA	NA	3.56	0.00906	11100	7670
Two-pool feedback	7.5	0.0685	8.91e-05	0.0174	0.437	2.3e-05	7.66	0.00117	4920	31.9
Two-pool series	5.5	0.0685	8.91e-05	0.015	0.349	NA	5.61	0.00326	3930	21.3

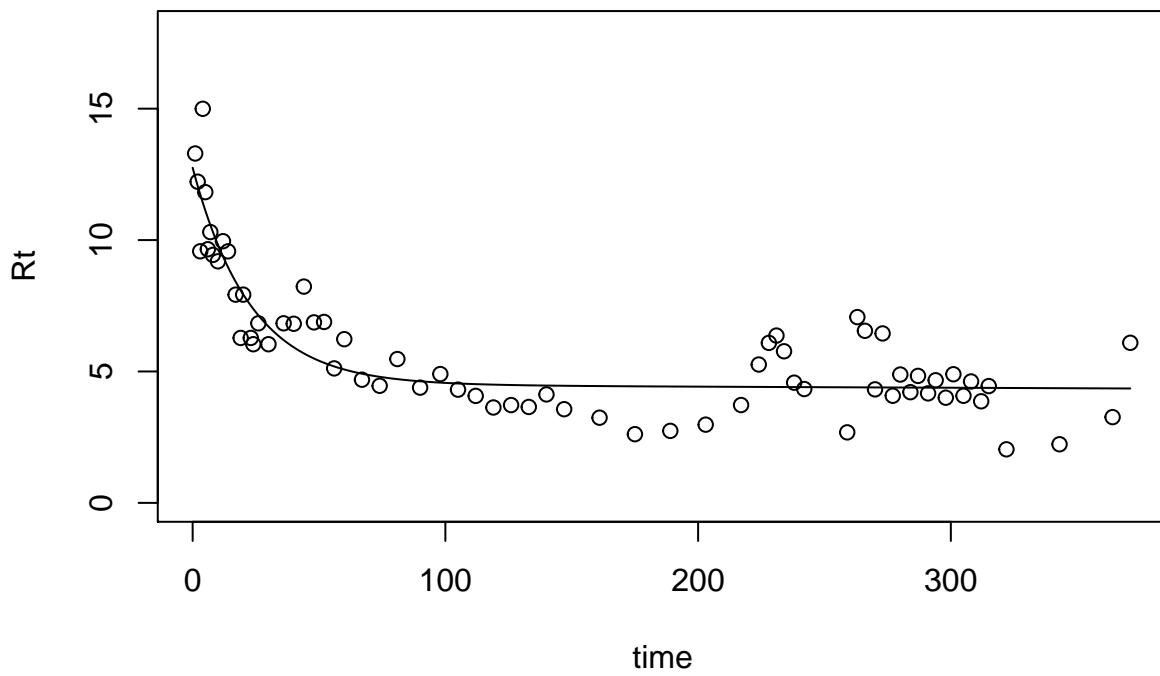
Variable Site64:

CO2 production rate

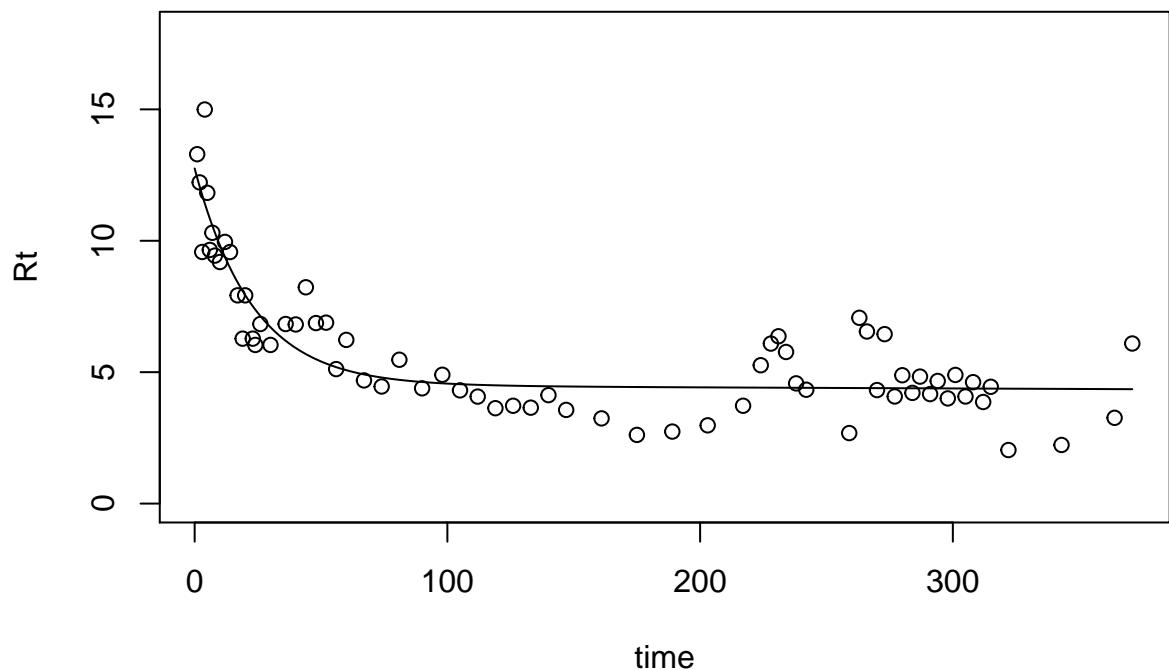
```
## [1] "Best fit parameter: 0.000122197300886401"
```



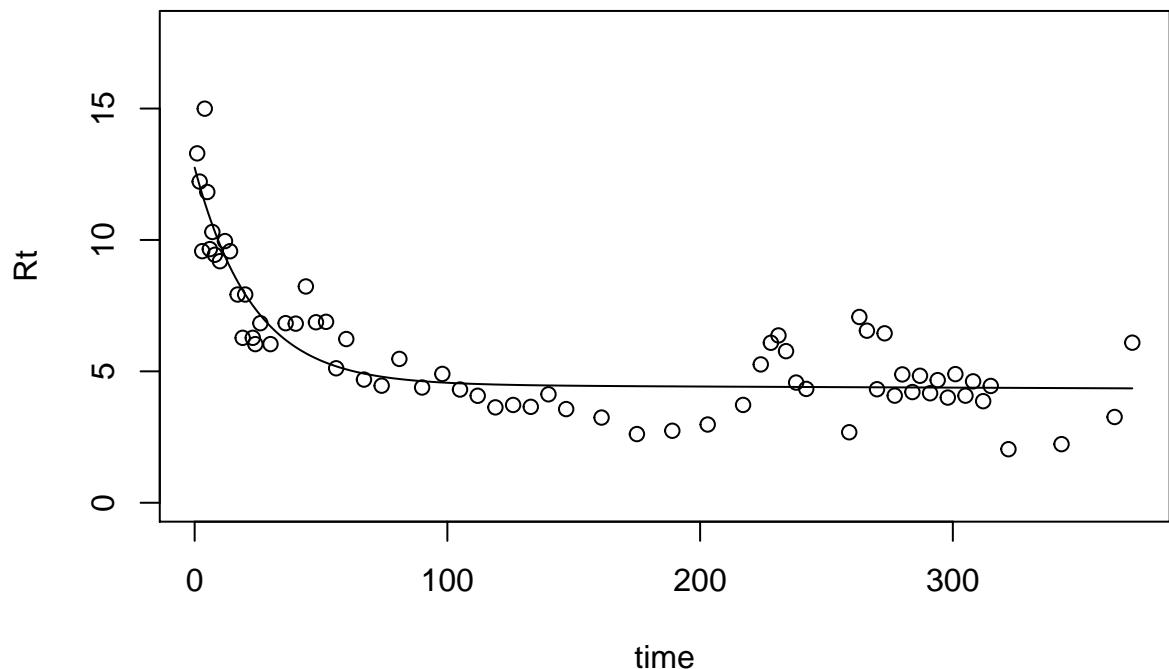
```
## [1] "AIC = -1.85151301498267"
## [1] "k1= 0.0437468030045223"
## [2] "k2= 9.1310694395831e-05"
## [3] "proportion of C0 in pool 1= 0.00380923210660744"
```



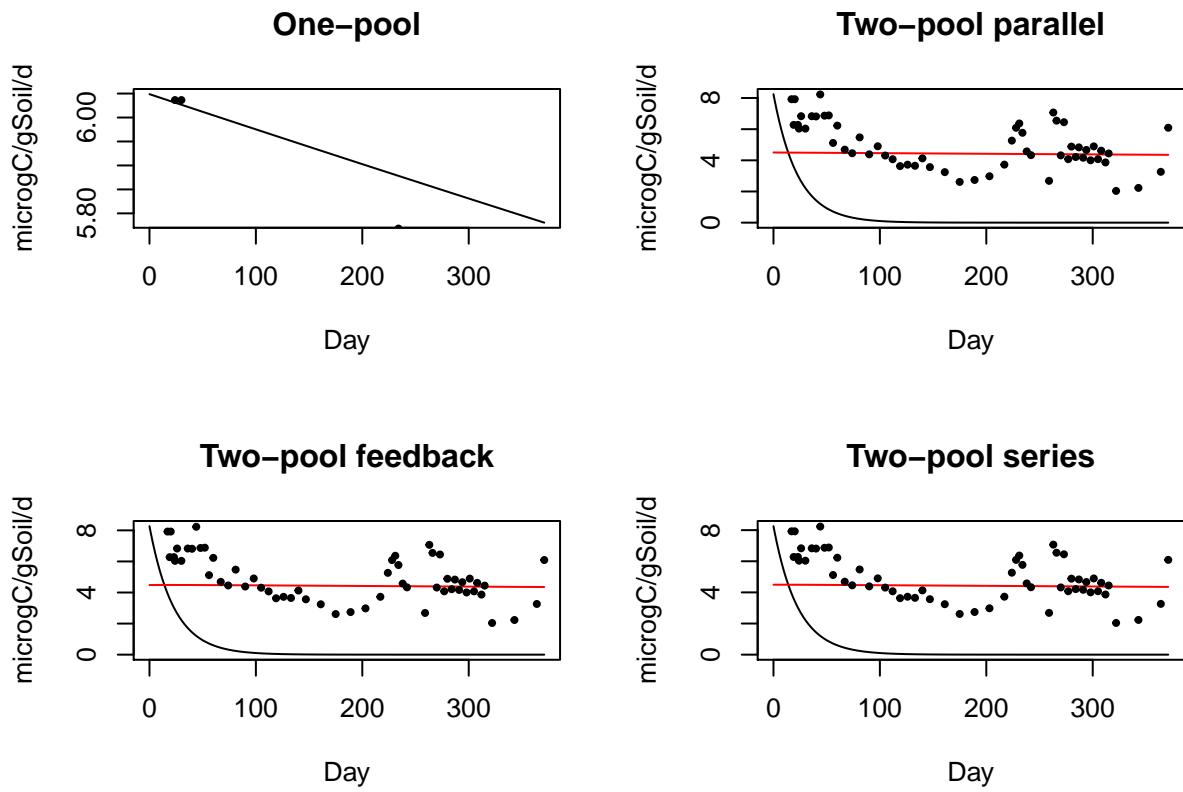
```
## [1] "AIC = 5.23709134537931"
## [1] "k1= 0.04374709097348"
## [2] "k2= 9.13171541526843e-05"
## [3] "a21= 0.568645909199163"
## [4] "a12= 0.000134867191127486"
## [5] "Proportion of C0 in pool 1= 0.00885552423122904"
```



```
## [1] "AIC =  9.23709134441552"
## [1] "k1=  0.0437477678870395"
## [2] "k2=  9.1310917173734e-05"
## [3] "a21=  0.312089300258231"
## [4] "Proportion of C0 in pool 1=  0.00554255727953373"
```



```
## [1] "AIC =  7.23709134561459"
```

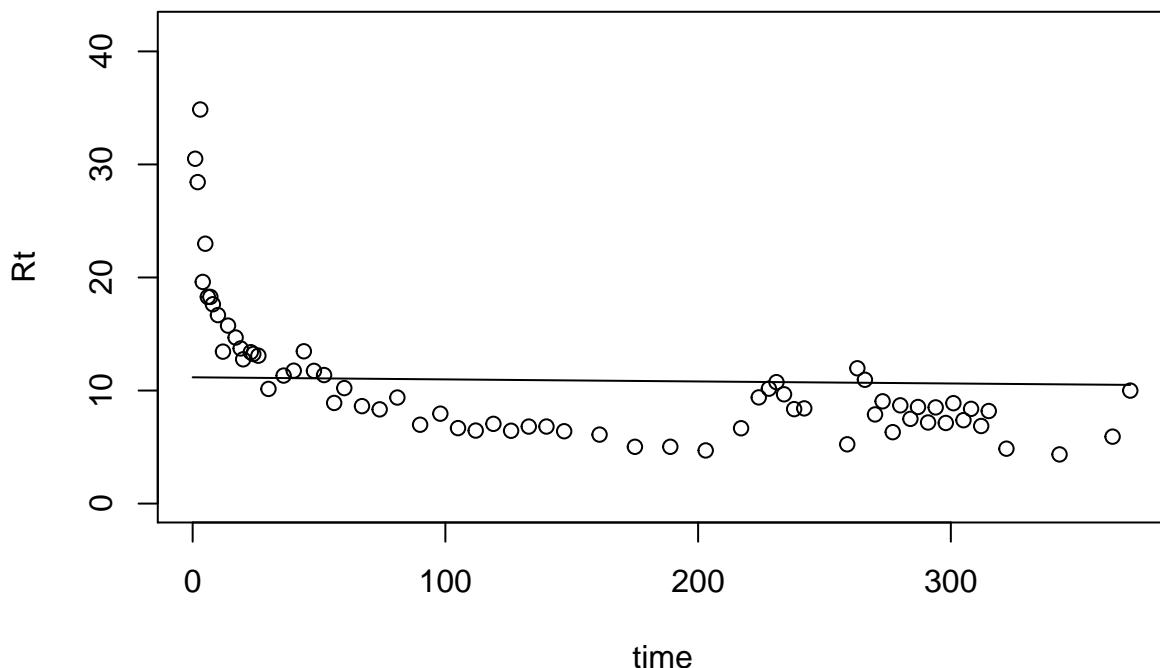


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-1.85	0.000122	NA	NA	NA	NA	-1.84	0.969	NA	NA
Two-pool parallel	5.24	0.0437	9.13e-05	0.00381	NA	NA	5.3	0.0272	10900	7550
Two-pool feedback	9.24	0.0437	9.13e-05	0.00886	0.569	0.000135	9.4	0.00351	6250	1430
Two-pool series	7.24	0.0437	9.13e-05	0.00554	0.312	NA	7.35	0.00981	3440	29.6

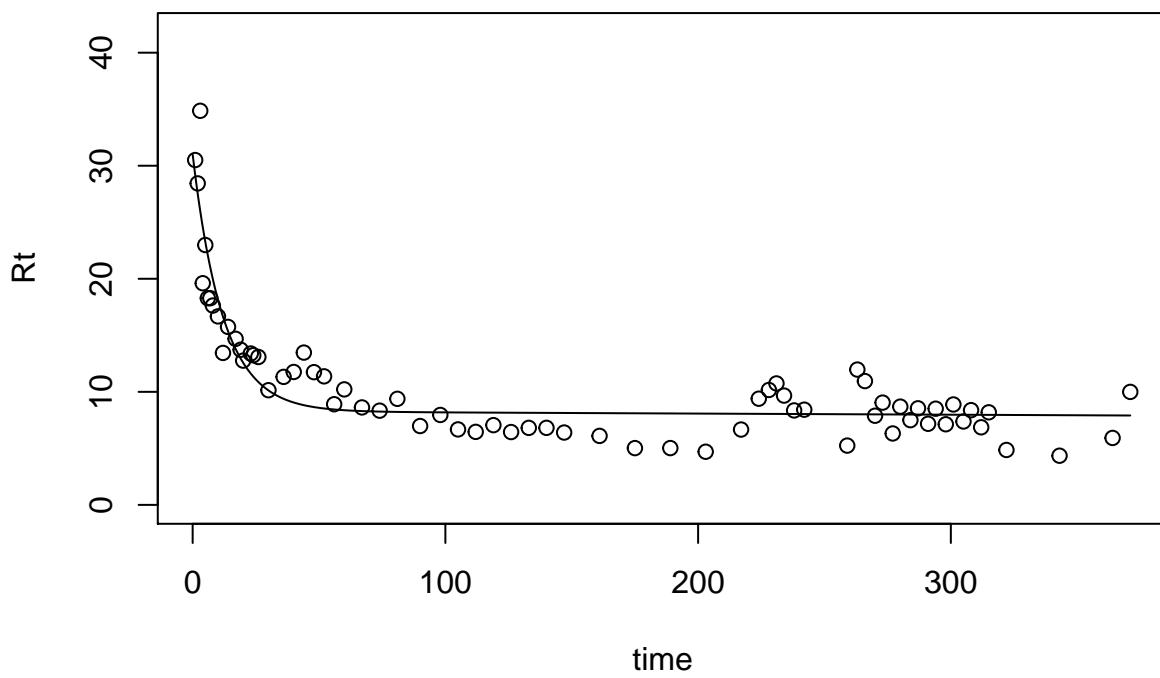
Variable Site65:

CO2 production rate

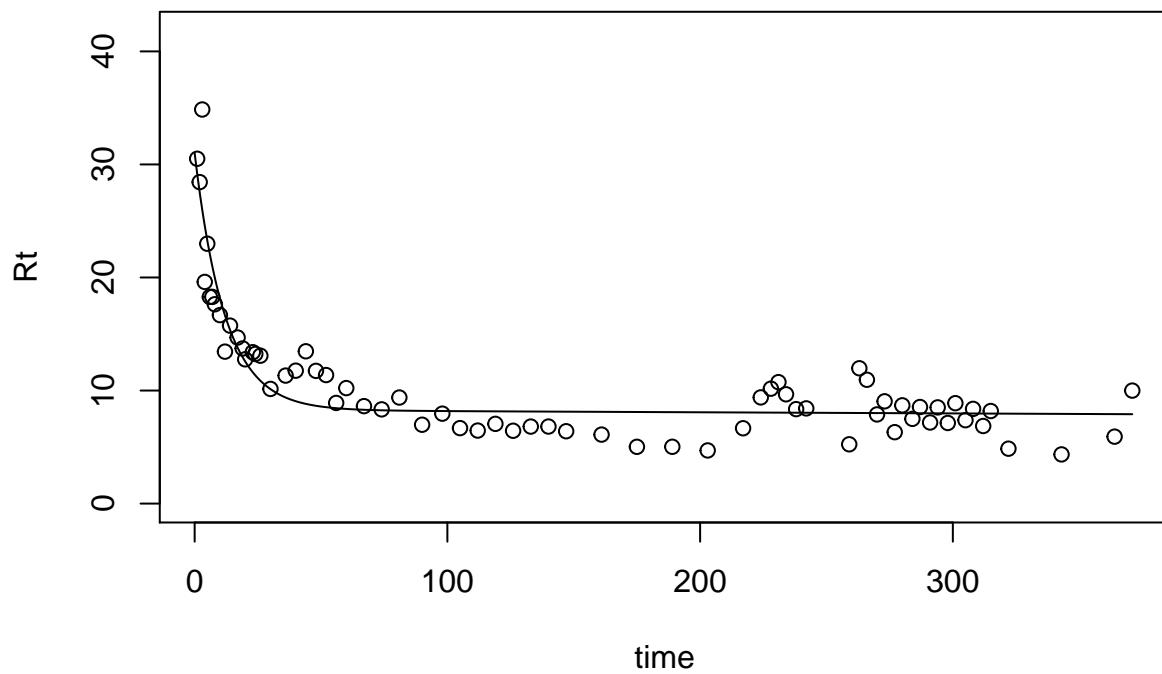
```
## [1] "Best fit parameter: 0.000166963171729436"
```



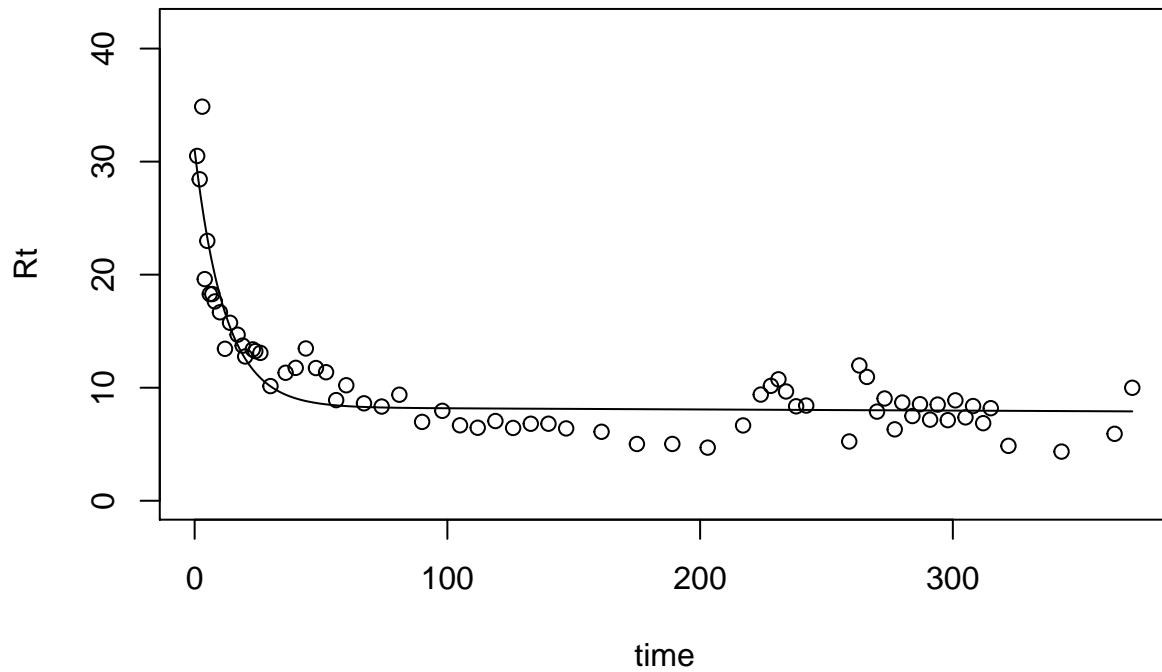
```
## [1] "AIC = -4.97862497717017"
## [1] "k1= 0.0831324262571504"
## [2] "k2= 0.000124260254133219"
## [3] "proportion of C0 in pool 1= 0.00408706062075265"
```



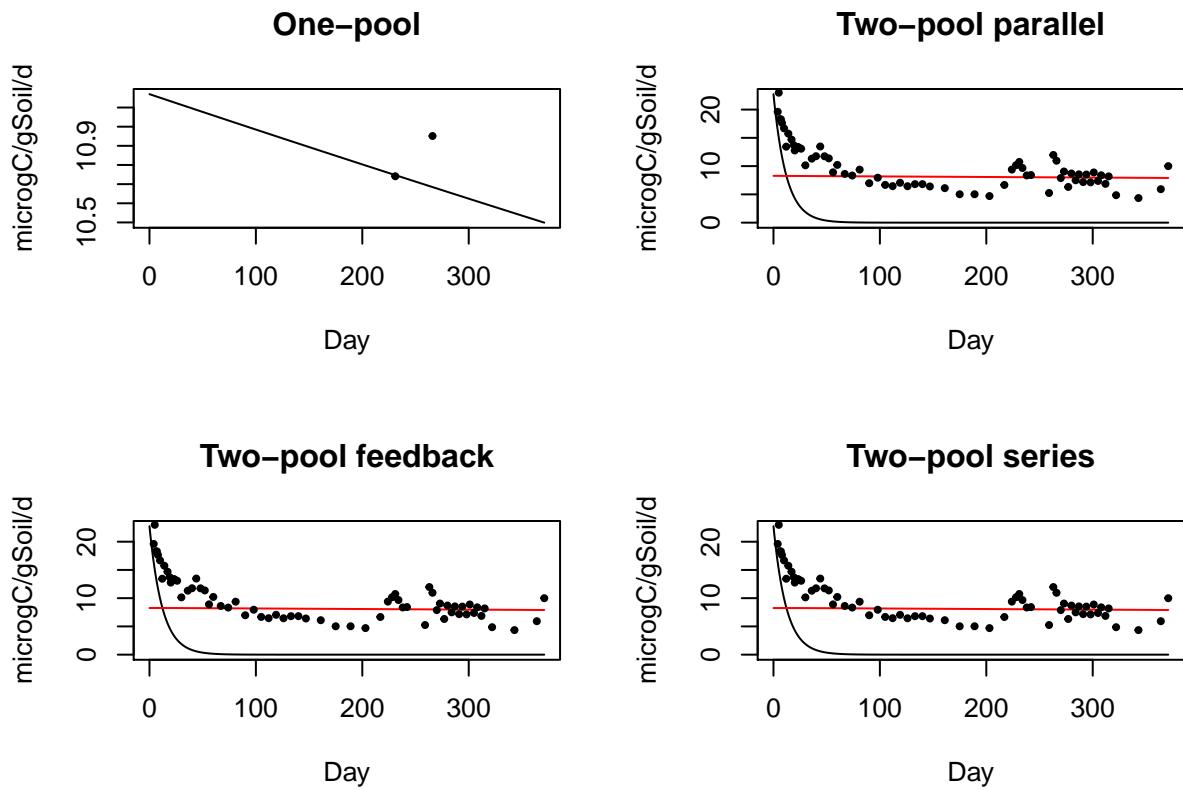
```
## [1] "AIC = 2.71651340568277"
## [1] "k1= 0.0831352585719432"
## [2] "k2= 0.000124261200479381"
## [3] "a21= 0.381310024579324"
## [4] "a12= 9.61231579771349e-06"
## [5] "Proportion of C0 in pool 1= 0.00661191845823439"
```



```
## [1] "AIC = 6.71651340949495"
## [1] "k1= 0.0831350982787383"
## [2] "k2= 0.000124260718548299"
## [3] "a21= 0.441787980268188"
## [4] "Proportion of C0 in pool 1= 0.00733022447727416"
```



```
## [1] "AIC = 4.71651341017205"
```

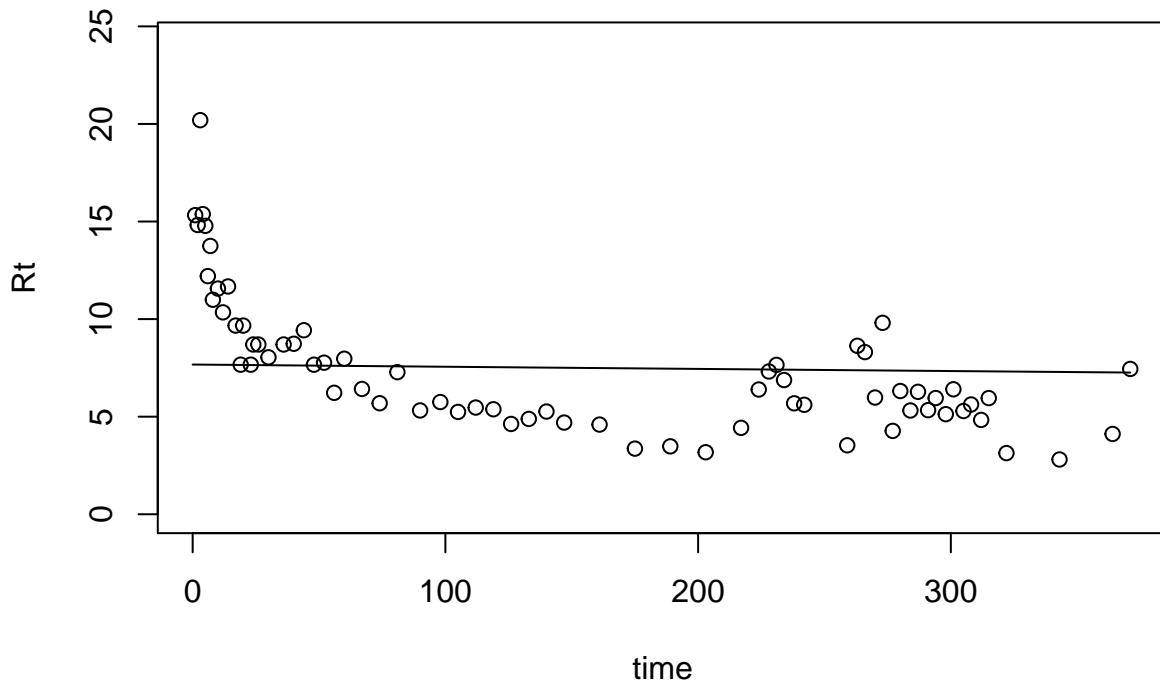


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-4.98	0.000167	NA	NA	NA	NA	-4.97	0.977	NA
Two-pool parallel	2.72	0.0831	0.000124	0.00409	NA	NA	2.78	0.0203	8010
Two-pool feedback	6.72	0.0831	0.000124	0.00661	0.381	9.61e-06	6.88	0.00261	3080
Two-pool series	4.72	0.0831	0.000124	0.00733	0.442	NA	4.83	0.0073	27

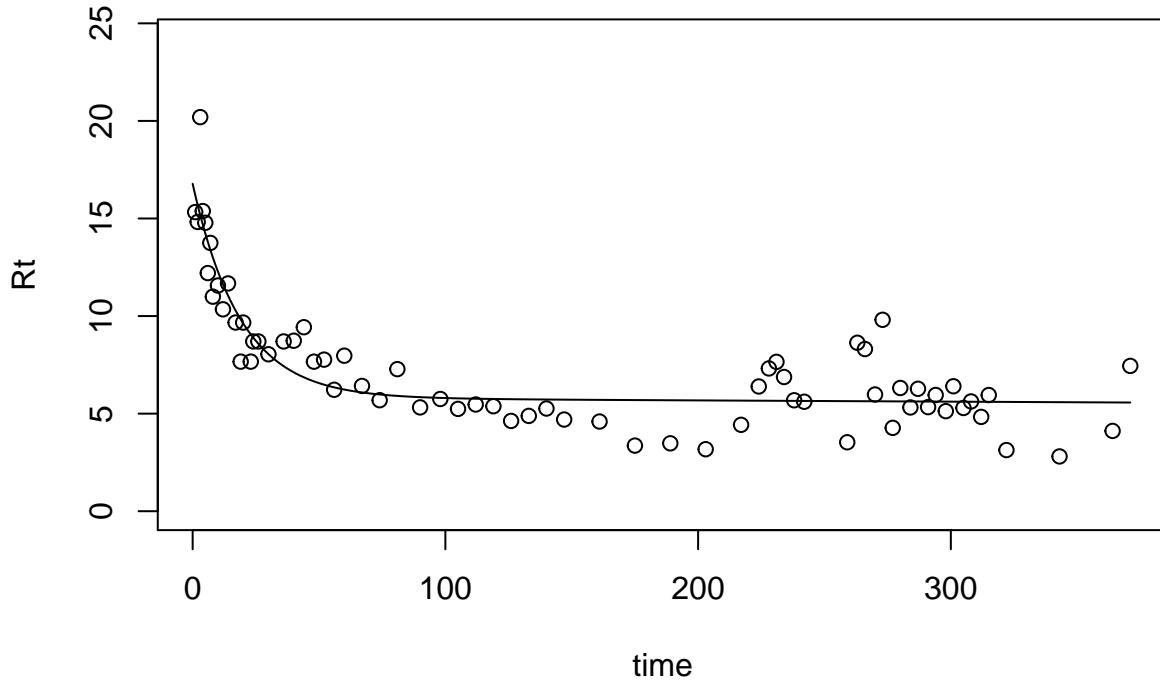
Variable Site66:

CO2 production rate

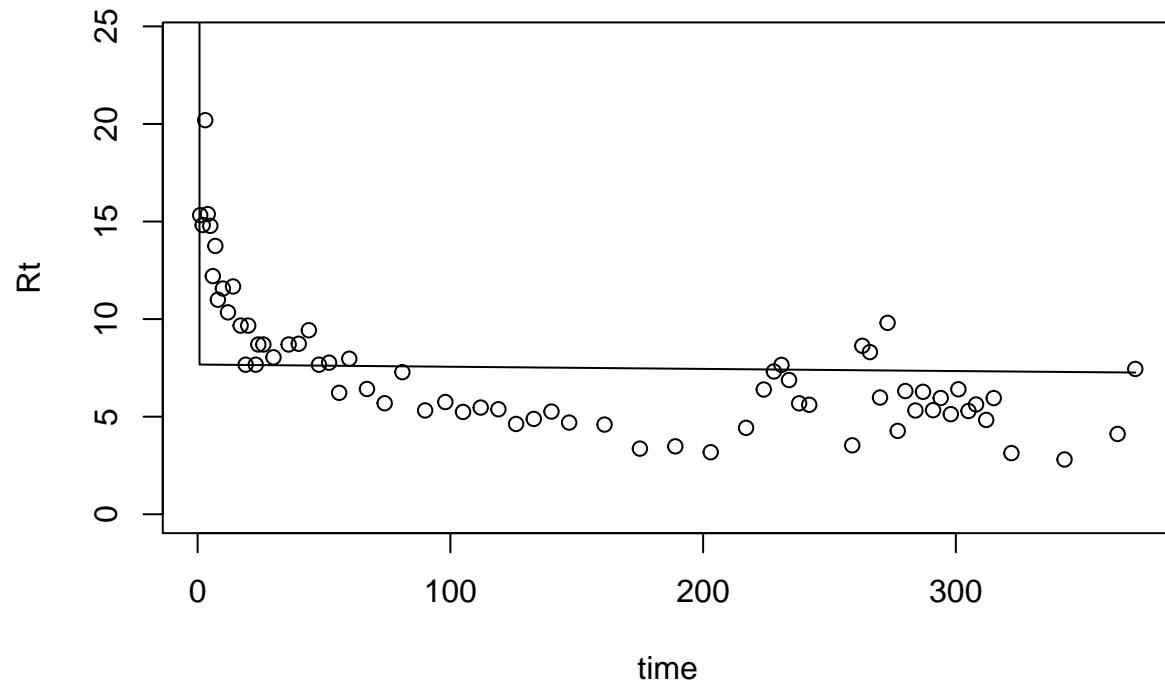
```
## [1] "Best fit parameter: 0.000148091689932478"
```



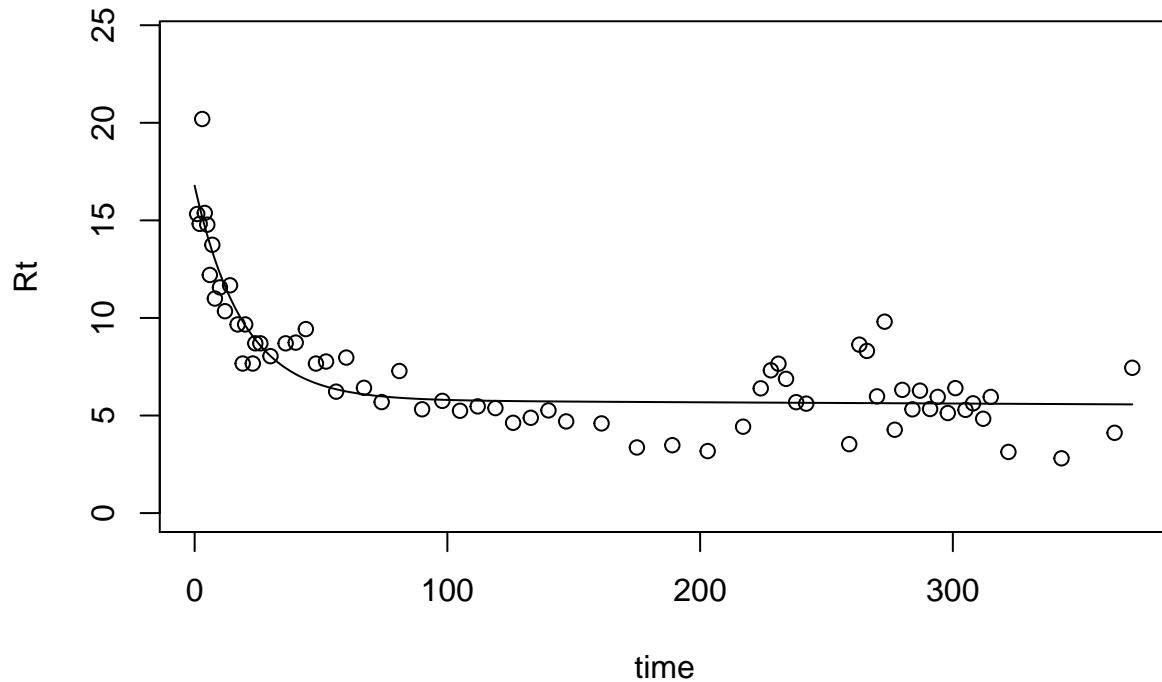
```
## [1] "AIC = -2.77202739648496"
## [1] "k1= 0.0526320195247329"
## [2] "k2= 0.000112554427985552"
## [3] "proportion of C0 in pool 1= 0.00402377539559651"
```



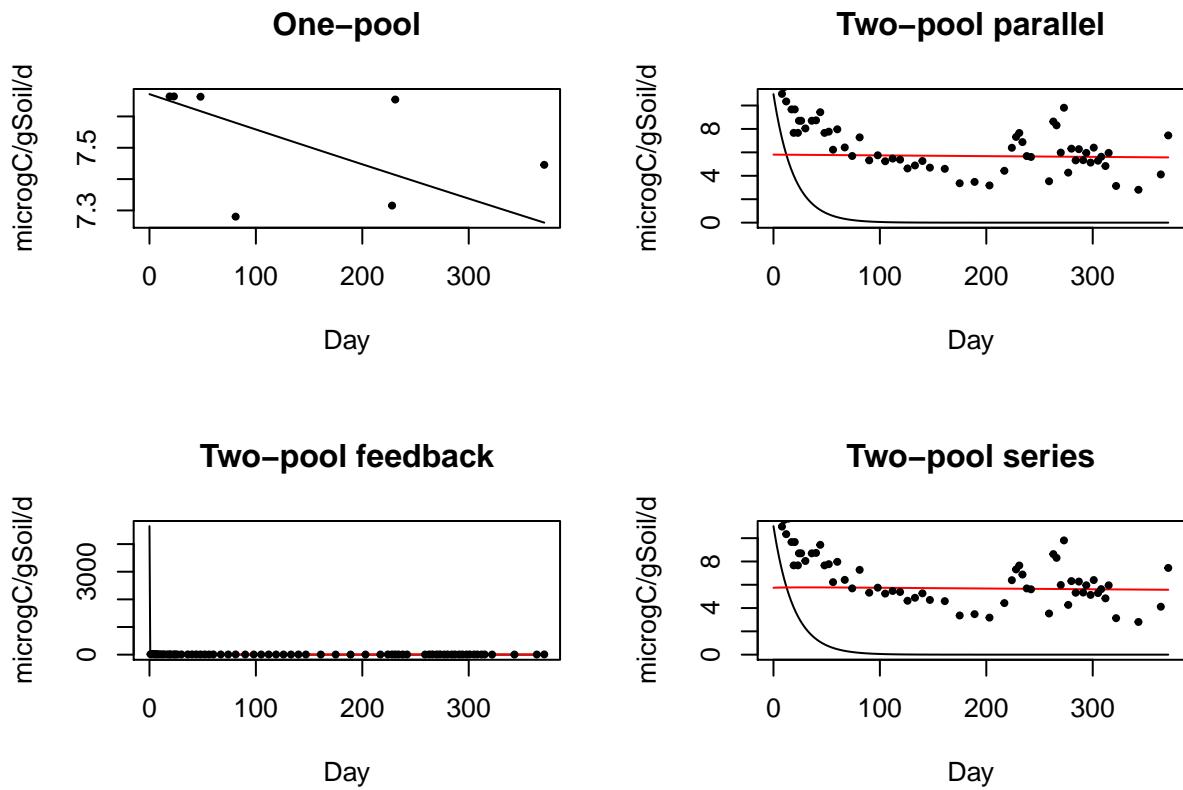
```
## [1] "AIC = 4.35767242075541"
## [1] "k1= 1117605.33132527"
## [2] "k2= 0.000148091890030701"
## [3] "a21= 0.999718159892231"
## [4] "a12= 3.0505038445261e-07"
## [5] "Proportion of C0 in pool 1= 0.000284928981119259"
```



```
## [1] "AIC = 5.22797261182058"
## [1] "k1= 0.0526307577478241"
## [2] "k2= 0.000112554147297785"
## [3] "a21= 0.725758349807202"
## [4] "Proportion of C0 in pool 1= 0.0147563822333575"
```



```
## [1] "AIC = 6.35767241946147"
```

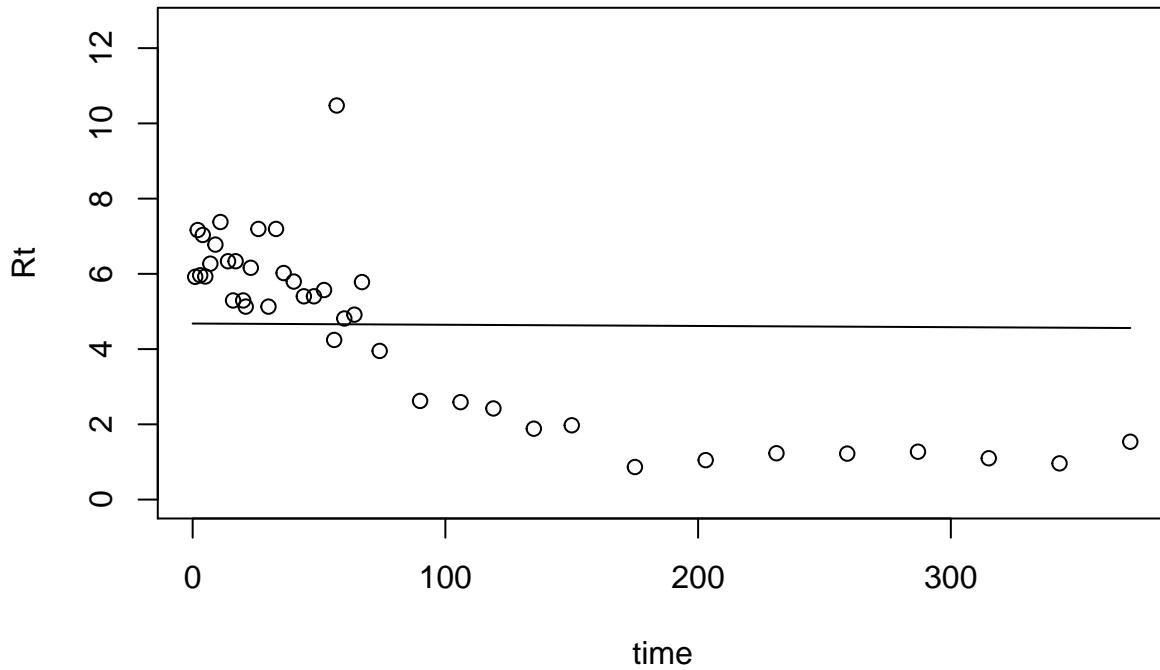


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-2.77	0.000148	NA	NA	NA	NA	-2.76	0.957	NA	NA
Two-pool parallel	4.36	0.0526	0.000113	0.00402	NA	NA	4.42	0.0264	8850	6120
Two-pool feedback	5.23	1120000	0.000148	0.000285	1	3.05e-07	5.39	0.0162	6750	4680
Two-pool series	6.36	0.0526	0.000113	0.0148	0.726	NA	6.47	0.00949	6470	3330

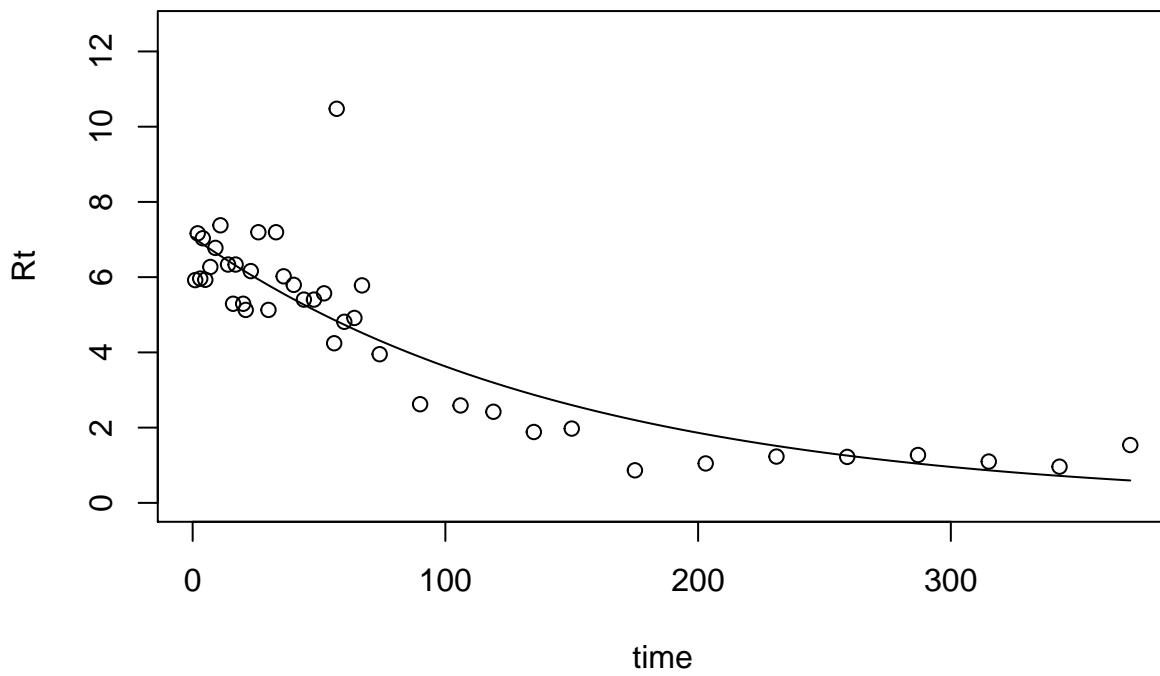
Variable Site67:

CO2 production rate

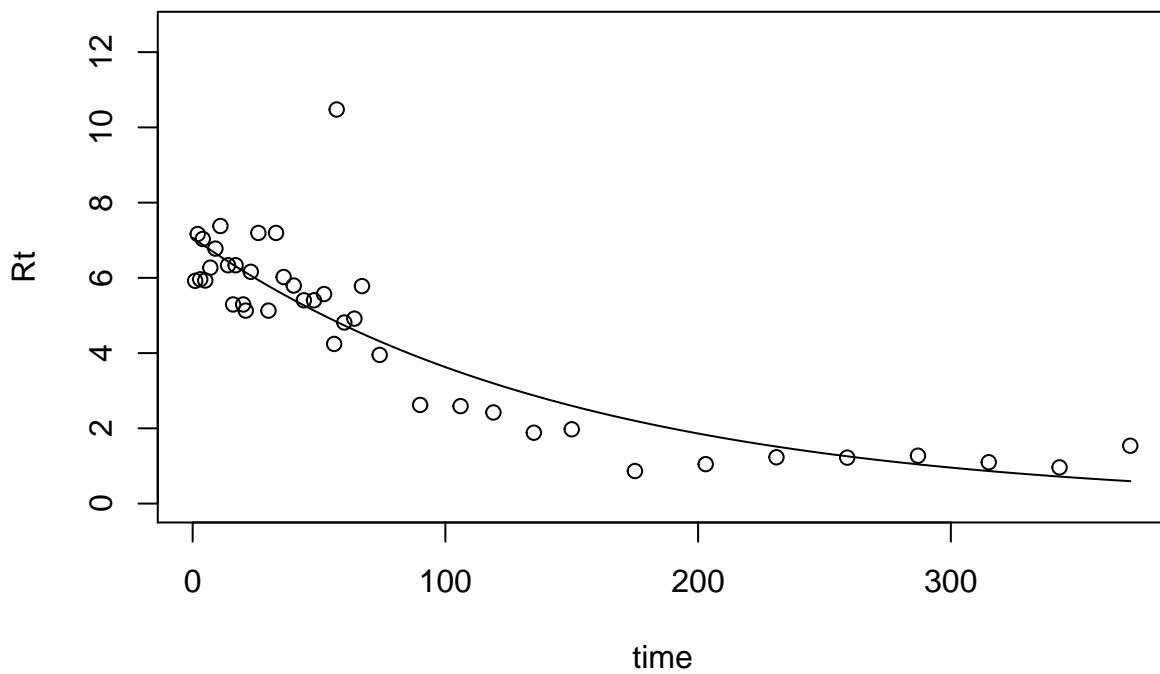
```
## [1] "Best fit parameter: 6.93257896420021e-05"
```



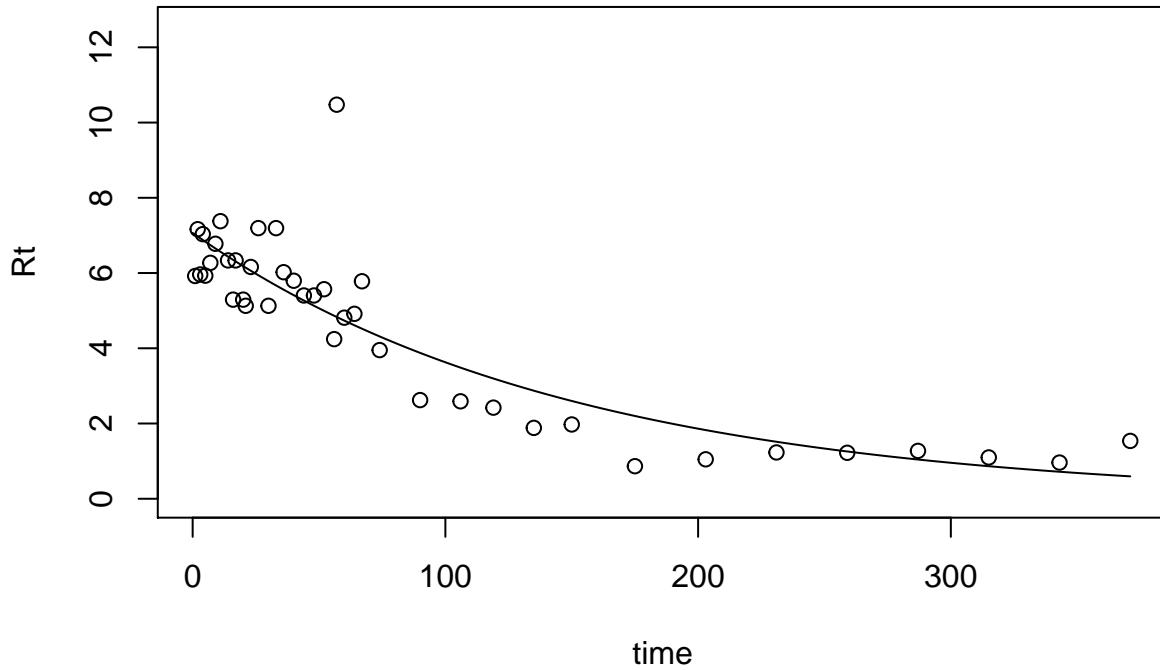
```
## [1] "AIC = -1.32353685401467"
## [1] "k1= 0.00666650194815083"
## [2] "k2= 3.65326762214709e-19"
## [3] "proportion of C0 in pool 1= 0.0157014323100678"
```



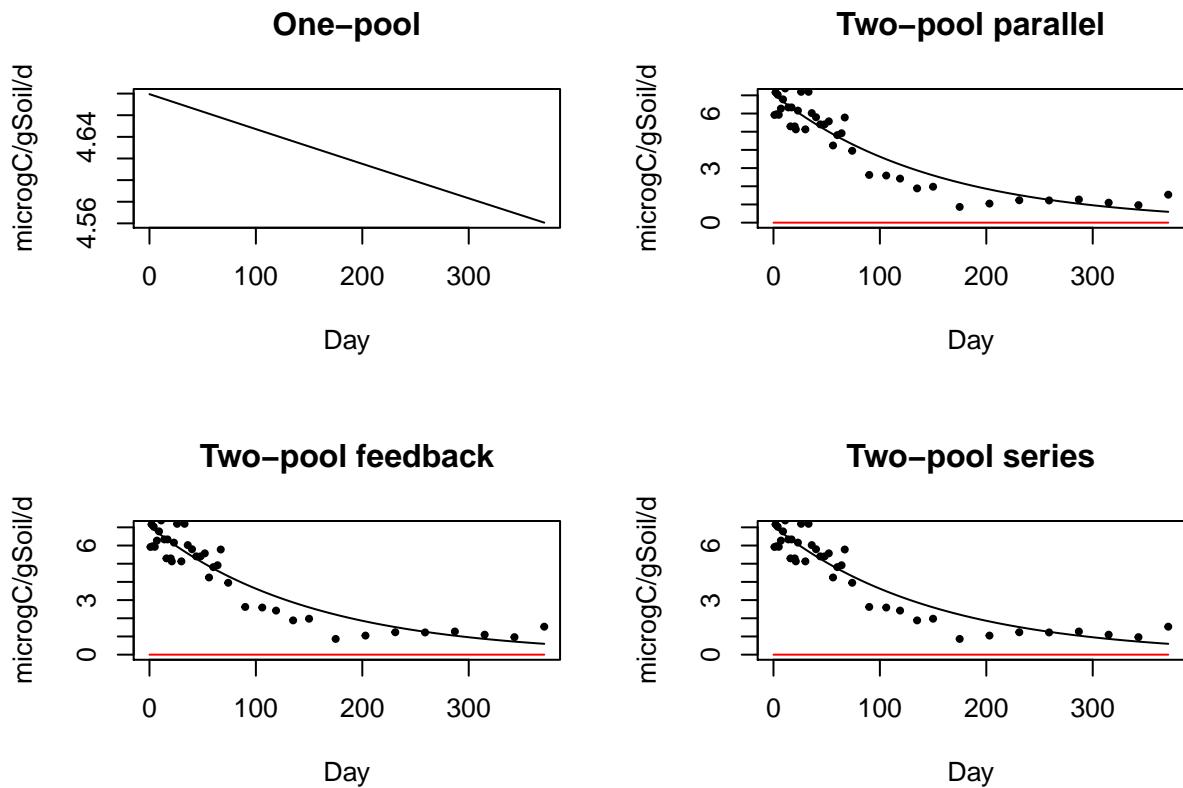
```
## [1] "AIC = 5.45298177954449"
## [1] "k1= 0.00666651392459081"
## [2] "k2= 1.43892250094798e-10"
## [3] "a21= 0.0264017887216506"
## [4] "a12= 0.000133598758742248"
## [5] "Proportion of C0 in pool 1= 0.0161271495123398"
```



```
## [1] "AIC = 9.4529816673791"
## [1] "k1= 0.00666651600742618"
## [2] "k2= 1.32843738650578e-10"
## [3] "a21= 0.98243215897851"
## [4] "Proportion of C0 in pool 1= 0.893756912582178"
```



```
## [1] "AIC = 7.45298167598494"
## Error in solve.default(A): system is computationally singular: reciprocal condition number = 5.48004
```



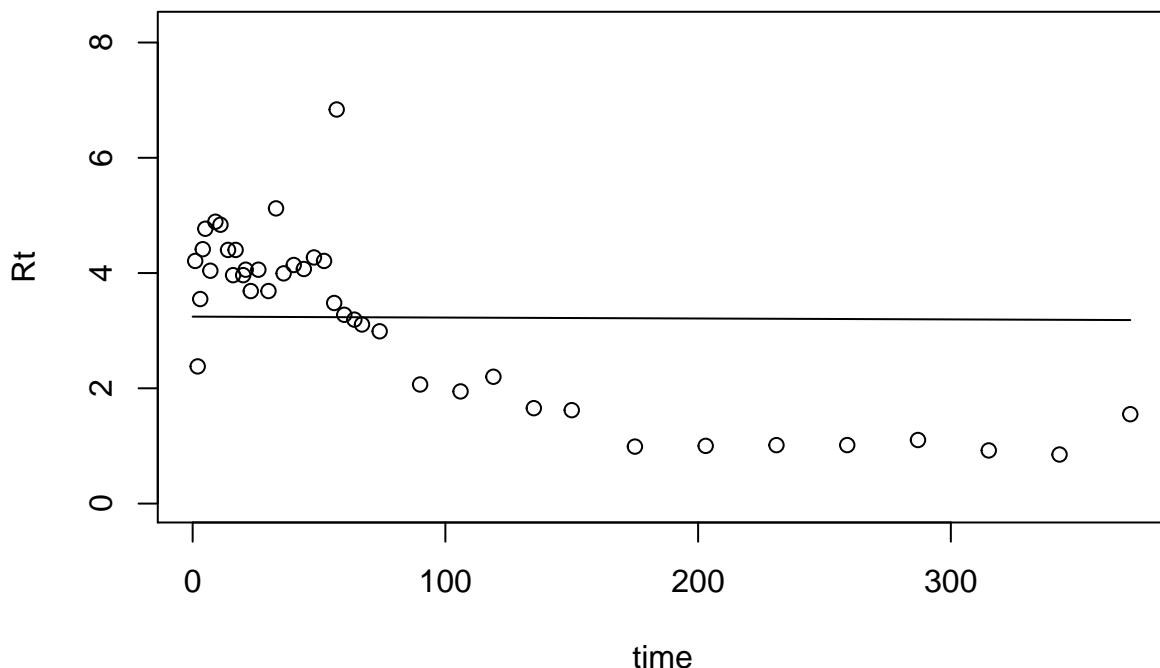
Variable Site68:

CO₂ production rate

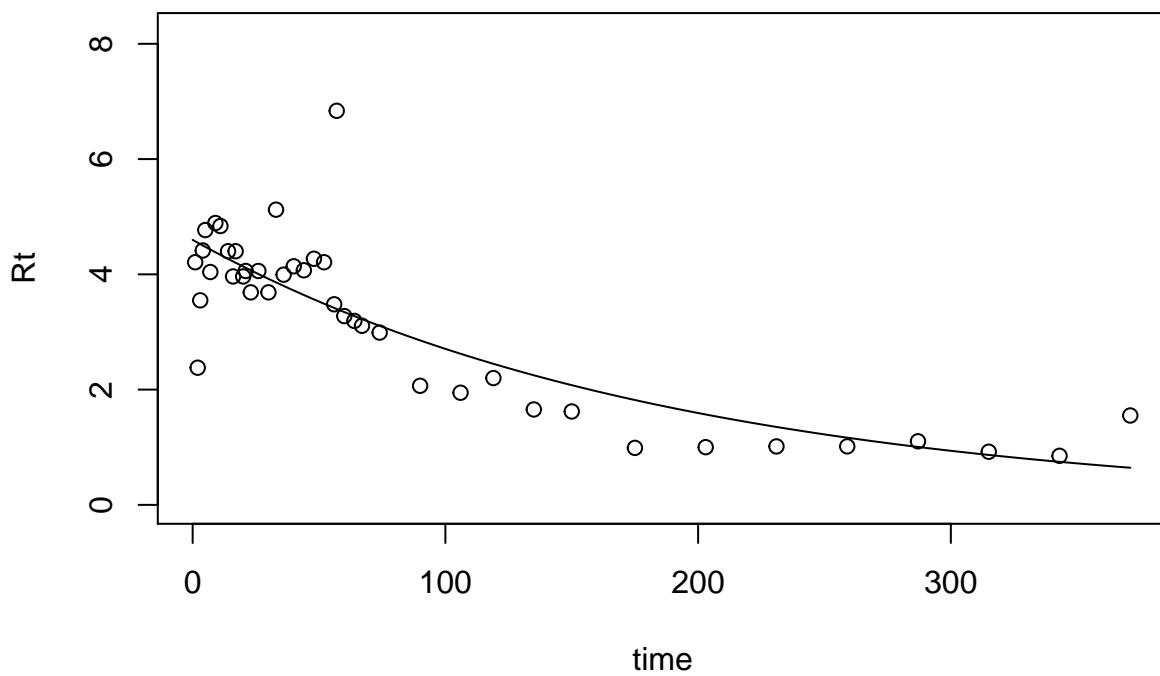
Variable Site69:

CO₂ production rate

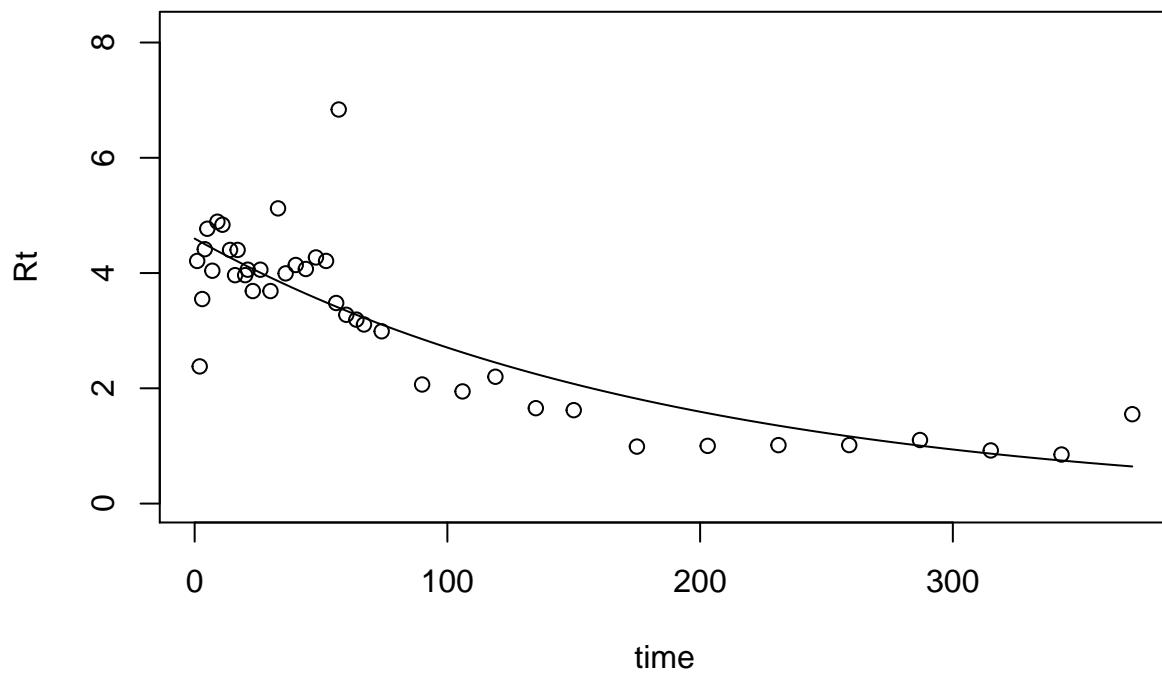
```
## [1] "Best fit parameter: 4.99040081051768e-05"
```



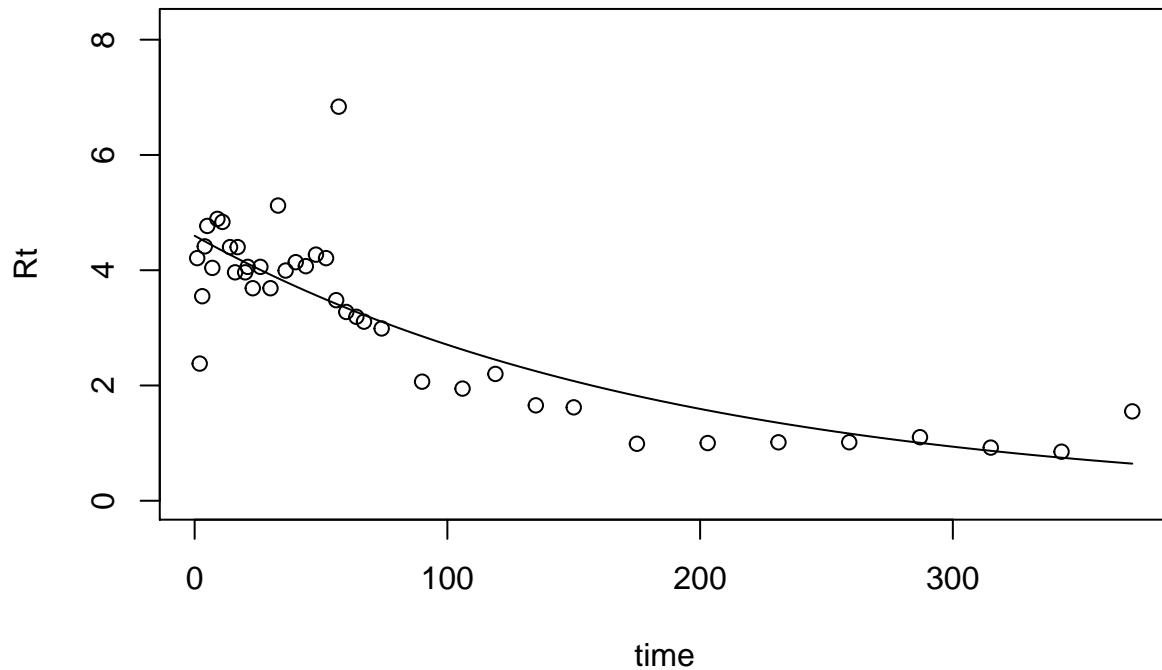
```
## [1] "AIC =  0.570755267219318"
## [1] "k1= 0.00529770538984298"
## [2] "k2= 1.68601506818775e-18"
## [3] "proportion of C0 in pool 1= 0.0133517037273589"
```



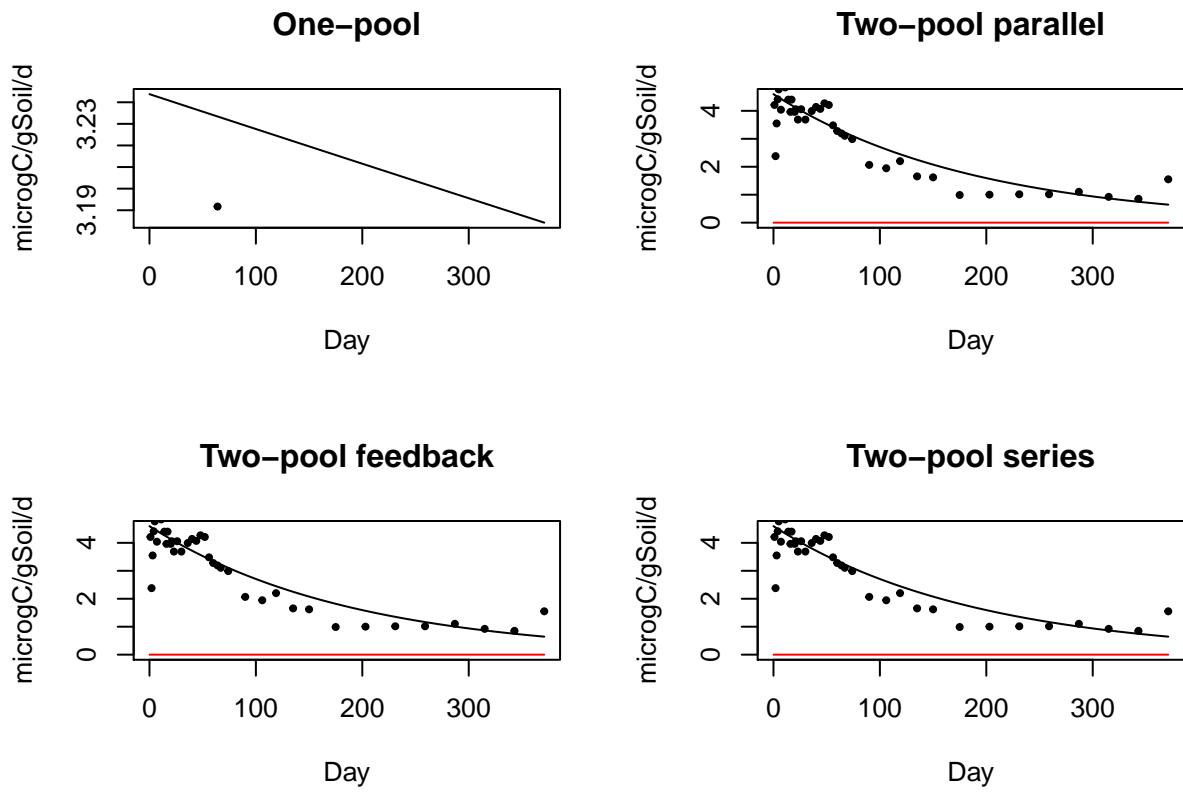
```
## [1] "AIC =  6.95208263850479"
## [1] "k1= 0.0052977116701871"
## [2] "k2= 3.14650021679164e-12"
## [3] "a21= 0.00758241257204545"
## [4] "a12= 6.28745551462528e-05"
## [5] "Proportion of C0 in pool 1= 0.0134536378577574"
```



```
## [1] "AIC = 10.9520826360921"
## [1] "k1= 0.00529774511649425"
## [2] "k2= 2.57256121531693e-10"
## [3] "a21= 0.0359363253775836"
## [4] "Proportion of C0 in pool 1= 0.013849249019649"
```



```
## [1] "AIC = 8.95208251104242"
```

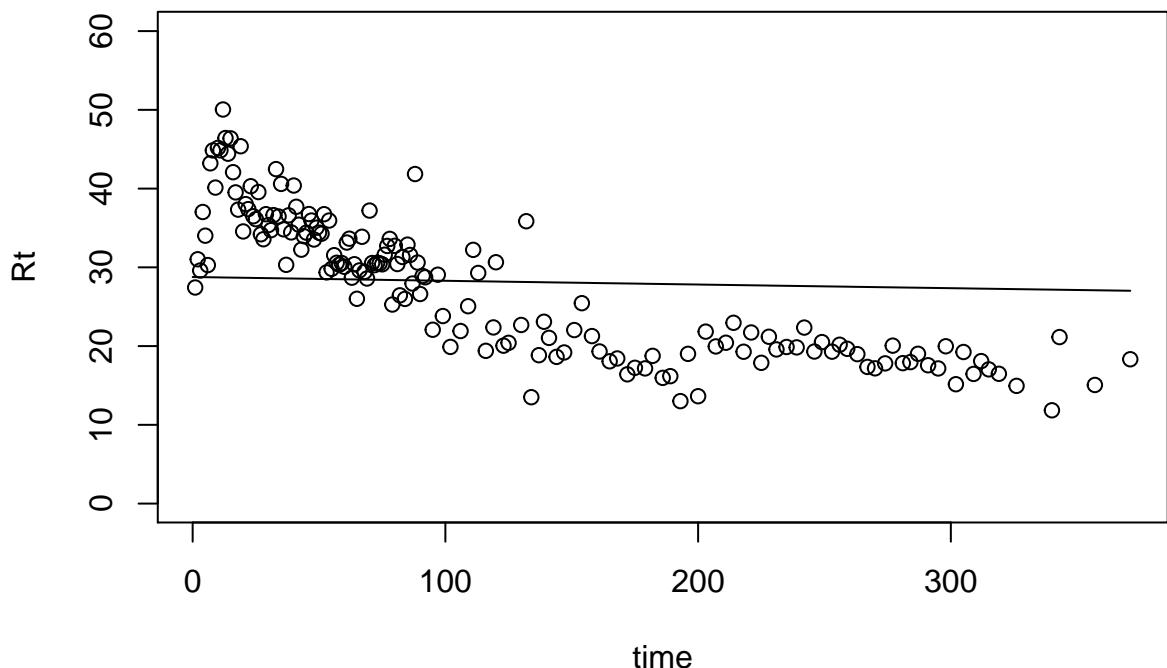


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	0.571	4.99e-05	NA	NA	NA	NA	0.582	0.957	NA	NA
Two-pool parallel	6.95	0.0053	1.69e-18	0.0134	NA	NA	7.02	0.0383	5.85e+17	3.71e+17
Two-pool feedback	11	0.0053	3.15e-12	0.0135	0.00758	6.29e-05	11.1	0.00493	2.41e+09	132
Two-pool series	8.95	0.0053	2.57e-10	0.0138	0.0359	NA	9.06	0.0138	1.4e+08	138

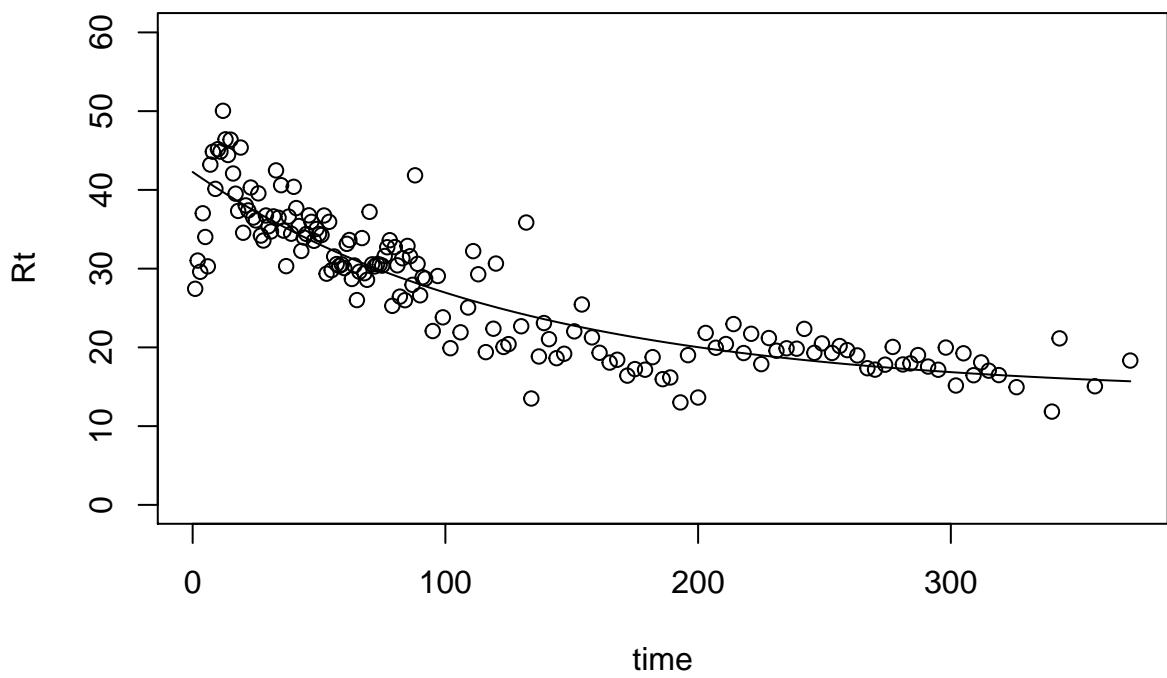
Variable Site70:

CO2 production rate

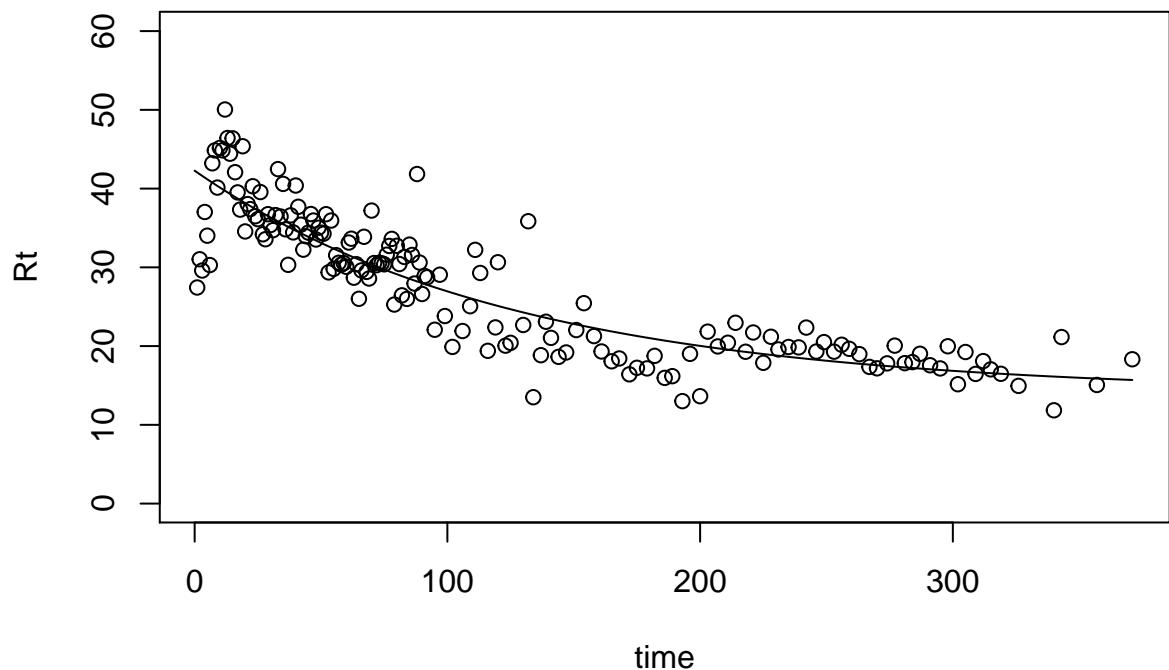
```
## [1] "Best fit parameter: 0.000168752481522496"
```



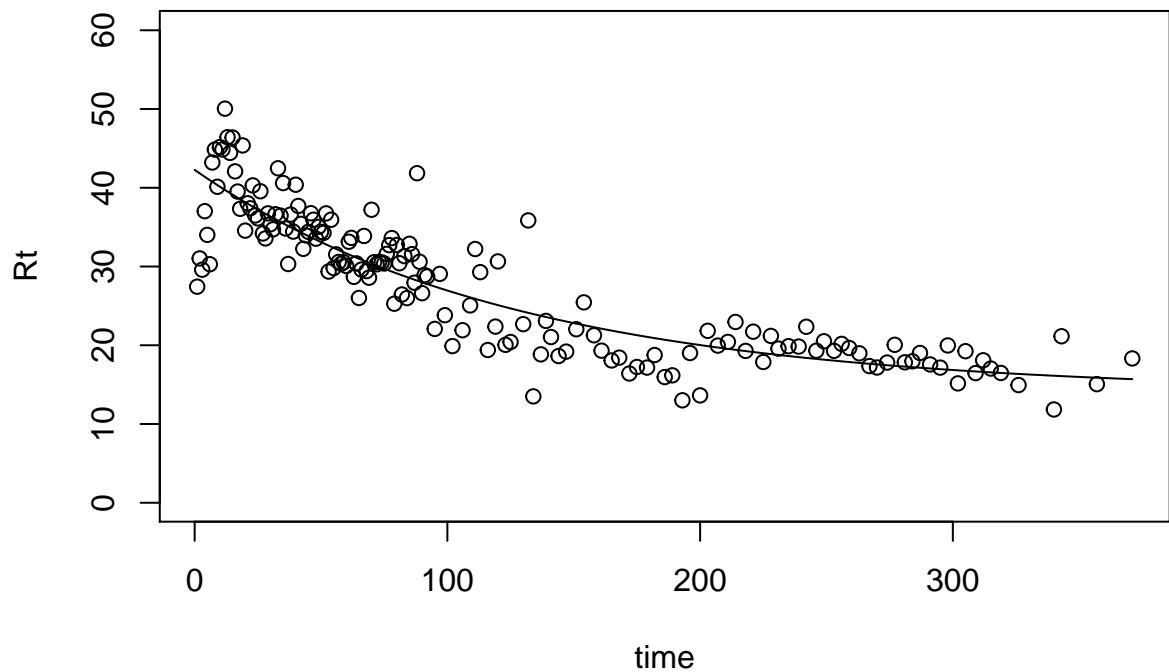
```
## [1] "AIC = -6.49323269942647"
## [1] "k1= 0.00804416722335576"
## [2] "k2= 8.84781885633224e-05"
## [3] "proportion of C0 in pool 1= 0.0200423566770878"
```



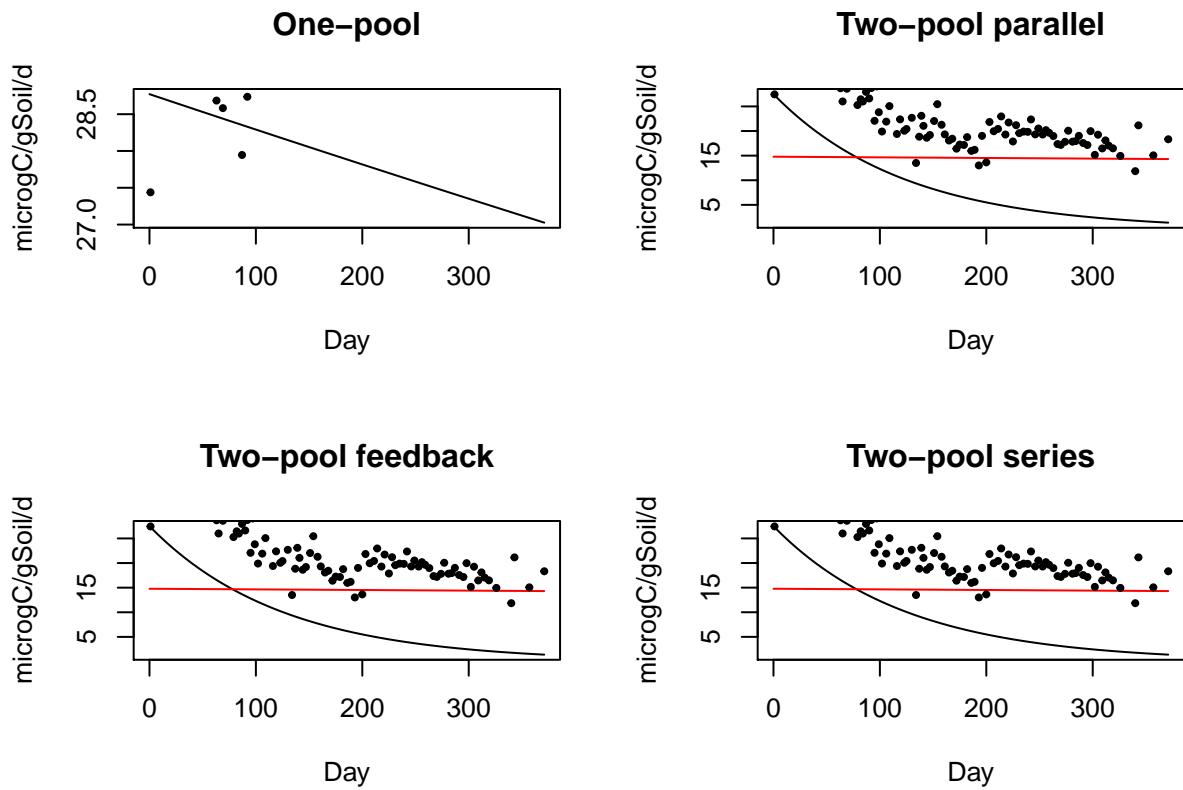
```
## [1] "AIC = 0.432393657072427"
## [1] "k1= 0.00804427365274878"
## [2] "k2= 8.84790243496103e-05"
## [3] "a21= 0.0191516933553496"
## [4] "a12= 4.25986521866983e-05"
## [5] "Proportion of C0 in pool 1= 0.0204382627715881"
```



```
## [1] "AIC = 4.43239365707466"
## [1] "k1= 0.00804434207070625"
## [2] "k2= 8.84794441342589e-05"
## [3] "a21= 0.0150546901069041"
## [4] "Proportion of C0 in pool 1= 0.0203515964934526"
```



```
## [1] "AIC = 2.43239365688803"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-6.49	0.000169	NA	NA	NA	NA	-6.48	0.967	NA	NA
Two-pool parallel	0.432	0.00804	8.85e-05	0.02	NA	NA	0.498	0.0295	11100	7610
Two-pool feedback	4.43	0.00804	8.85e-05	0.0204	0.0192	4.26e-05	4.6	0.0038	341	88.6
Two-pool series	2.43	0.00804	8.85e-05	0.0204	0.0151	NA	2.54	0.0106	294	88.1

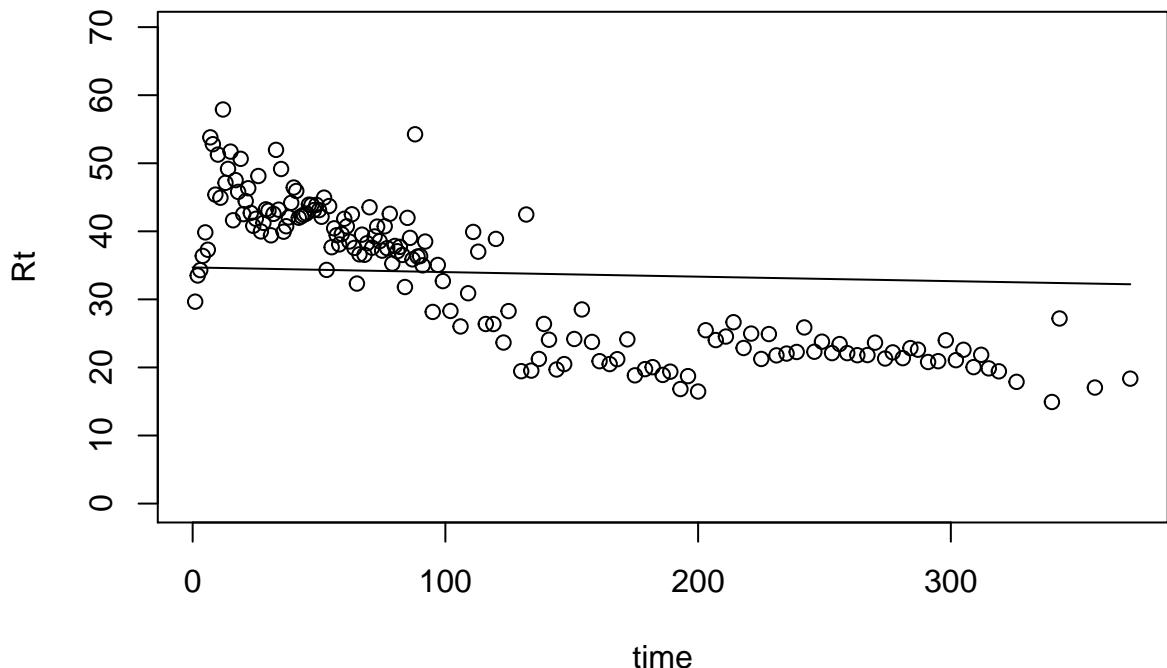
Variable Site71:

CO2 production rate

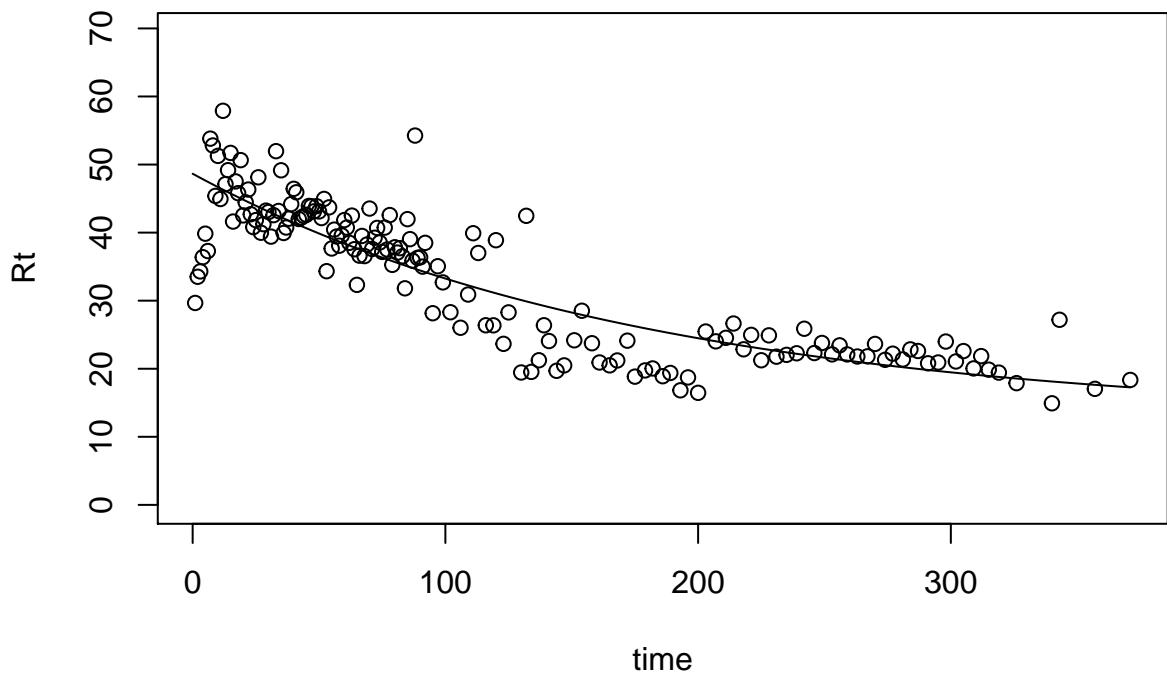
Variable Site72:

CO2 production rate

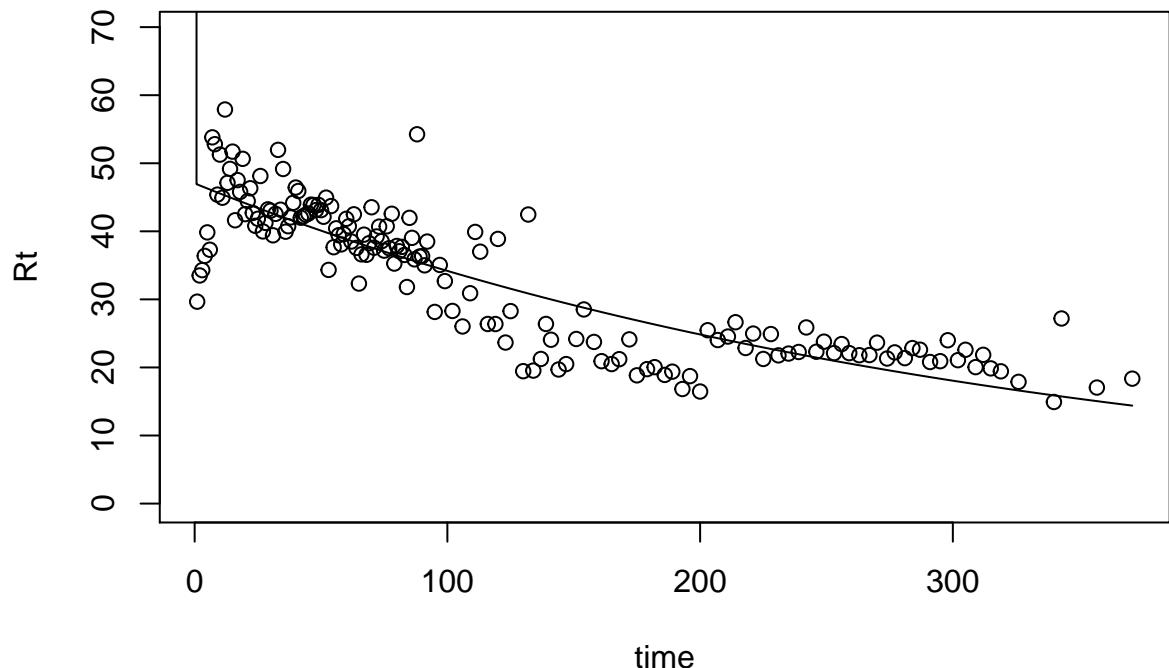
```
## [1] "Best fit parameter: 0.000199030609250252"
```



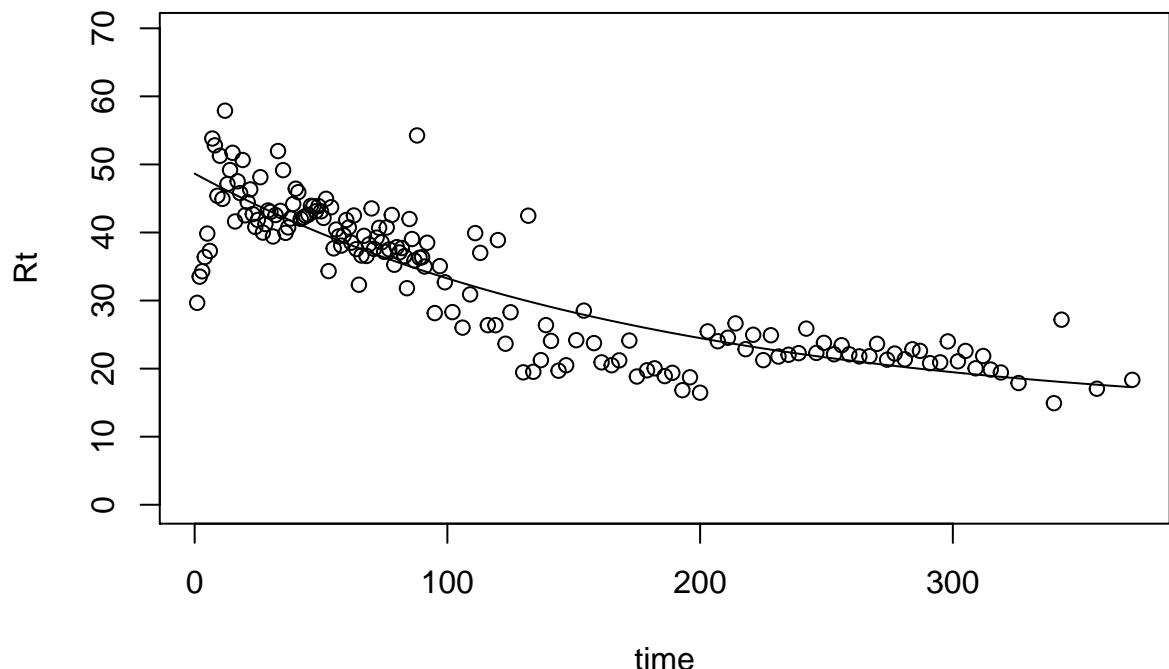
```
## [1] "AIC = -7.14746607289872"
## [1] "k1= 0.00568106641441122"
## [2] "k2= 7.9537722266347e-05"
## [3] "proportion of C0 in pool 1= 0.0356298893361925"
```



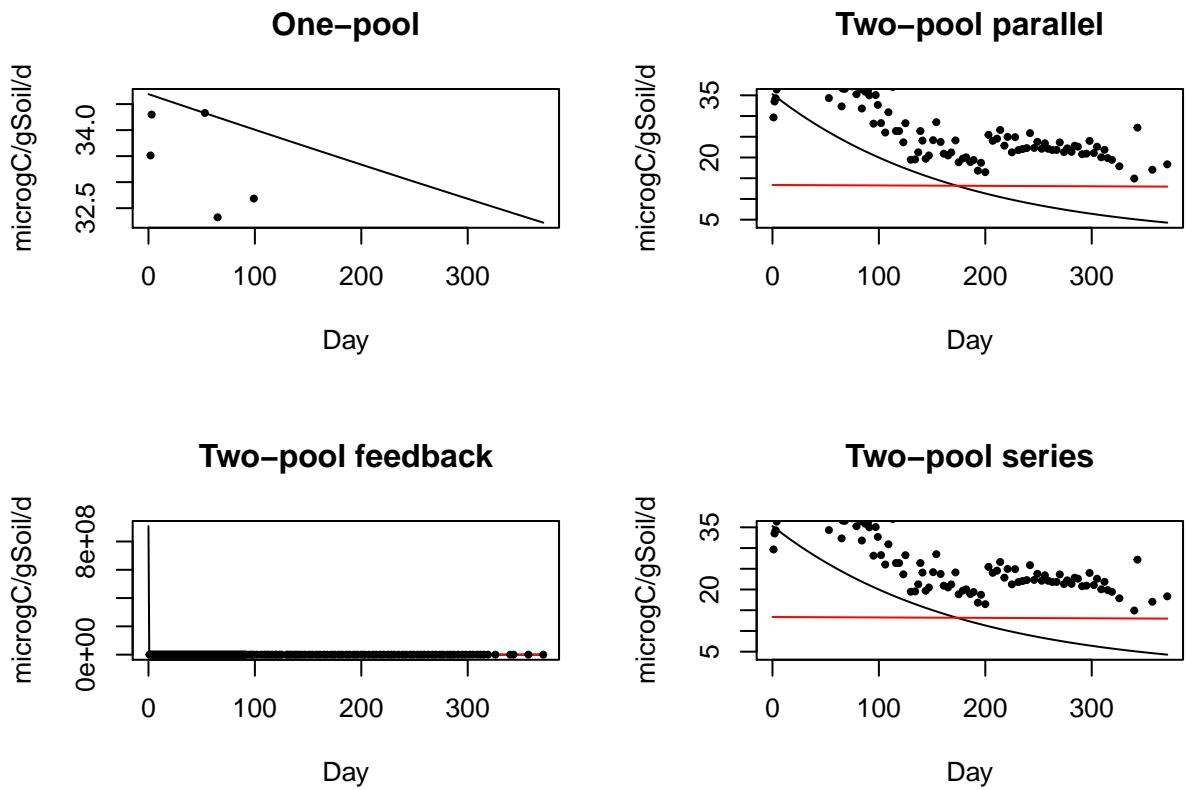
```
## [1] "AIC = -0.471927730009836"
## [1] "k1= 5694.26697929835"
## [2] "k2= 0.00319194649841303"
## [3] "a21= 0.000867783340367356"
## [4] "a12= 1.47523118620985e-06"
## [5] "Proportion of C0 in pool 1= 0.916245006444948"
```



```
## [1] "AIC = 3.44724332349194"
## [1] "k1= 0.00568120435686495"
## [2] "k2= 7.95400453792003e-05"
## [3] "a21= 0.00791258887529861"
## [4] "Proportion of C0 in pool 1= 0.0359168360579887"
```



```
## [1] "AIC = 1.52807226921735"
```

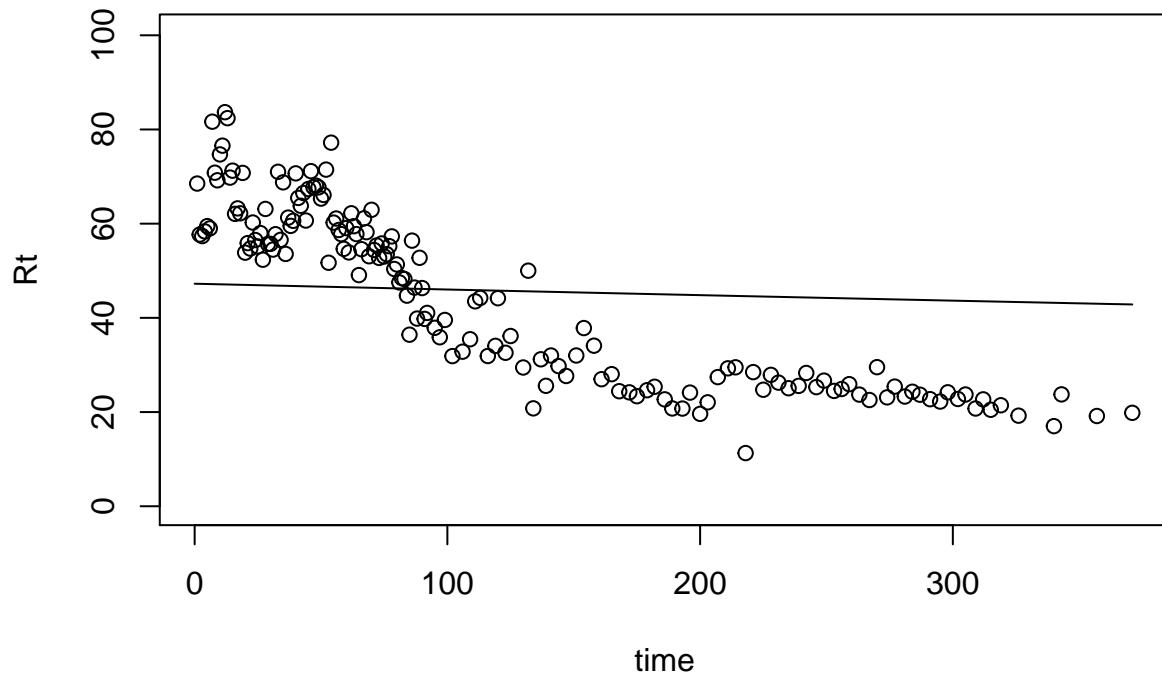


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrTq05
One-pool	-7.15	0.000199	NA	NA	NA	NA	-7.14	0.962	NA
Two-pool parallel	-	0.00568	7.95e-05	0.0356	NA	NA	-	0.0333	12100
Two-pool feedback	0.472						0.407		
Two-pool series	3.45	5690	0.00319	0.916	0.000868	1.48e-06	3.61	0.00446	0.272
	1.53	0.00568	7.95e-05	0.0359	0.00791	NA	1.64	0.012	275
									123

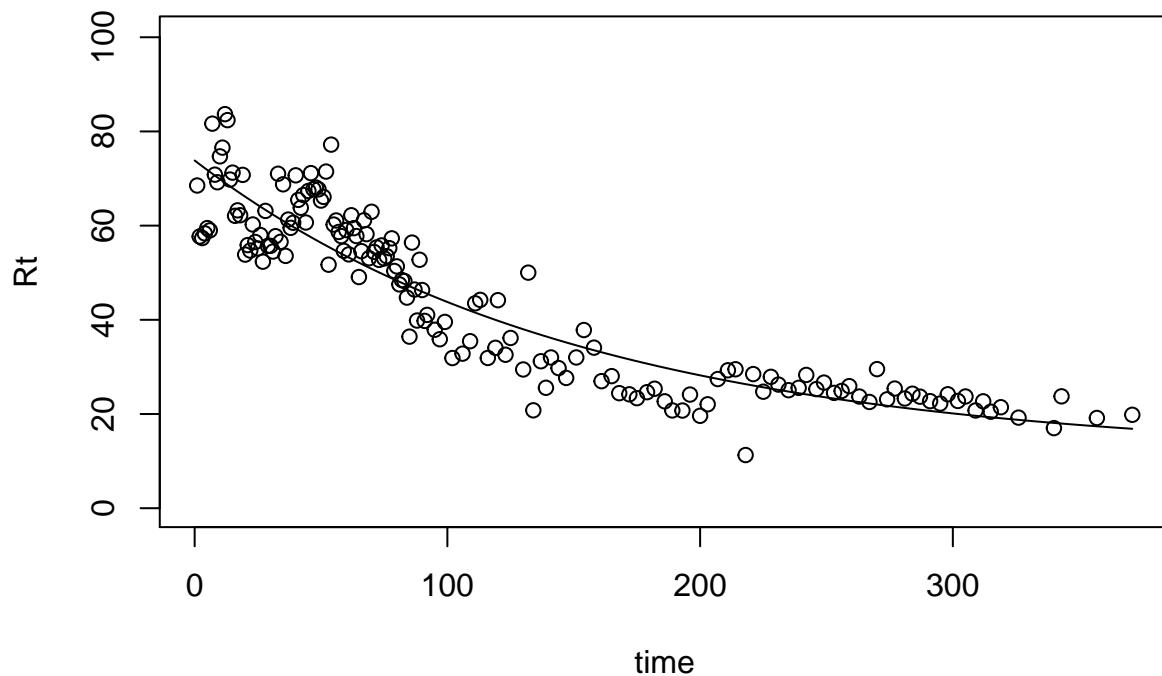
Variable Site73:

CO2 production rate

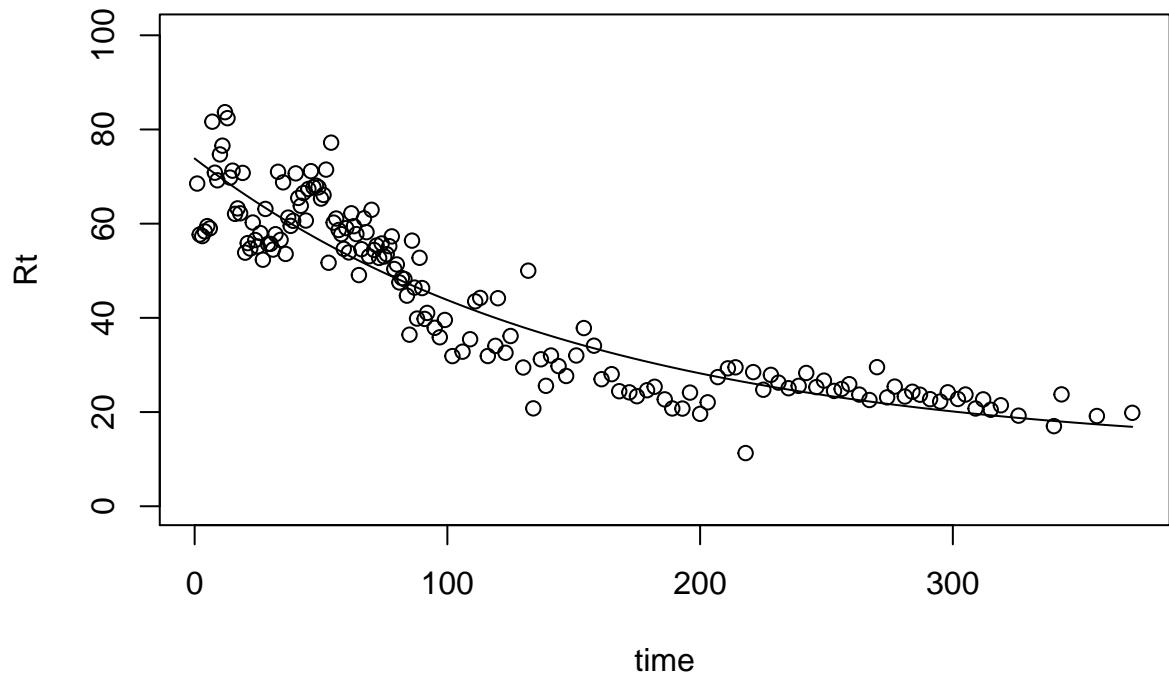
```
## [1] "Best fit parameter: 0.000263663899808708"
```



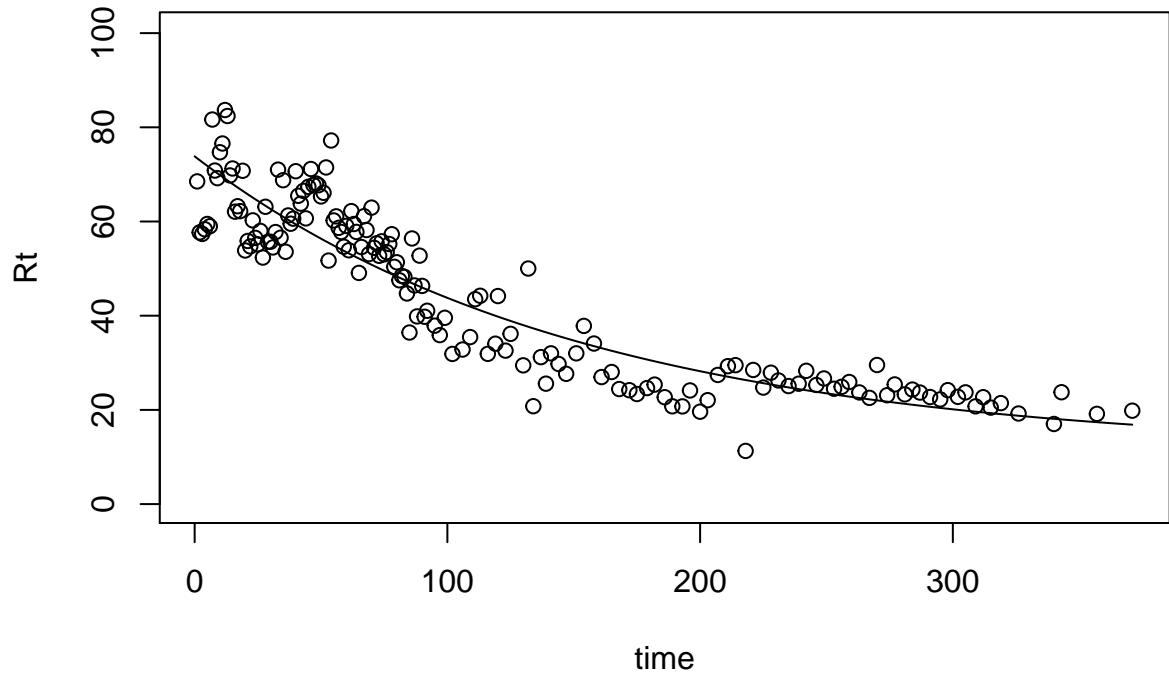
```
## [1] "AIC = -9.3377613344794"
## [1] "k1= 0.00659812133104911"
## [2] "k2= 6.9492159674646e-05"
## [3] "proportion of C0 in pool 1= 0.0524630397885043"
```



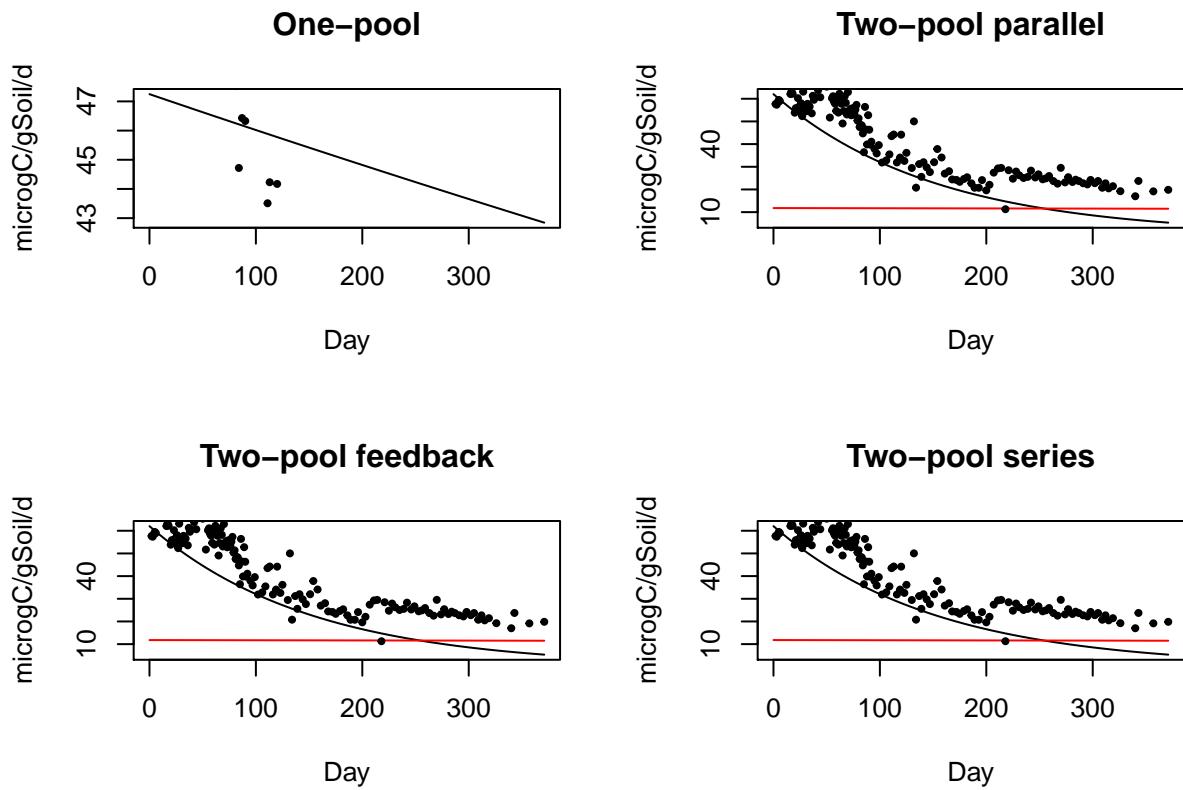
```
## [1] "AIC = -1.81346924581126"
## [1] "k1= 0.00659835171810946"
## [2] "k2= 6.94974034268352e-05"
## [3] "a21= 0.00921311329880914"
## [4] "a12= 4.80553230206571e-05"
## [5] "Proportion of C0 in pool 1= 0.0529541301162312"
```



```
## [1] "AIC = 2.18653075416332"
## [1] "k1= 0.00659848188504513"
## [2] "k2= 6.95003225667261e-05"
## [3] "a21= 0.000724957643727597"
## [4] "Proportion of C0 in pool 1= 0.0524973312273407"
```



```
## [1] "AIC = 0.186530749069753"
```

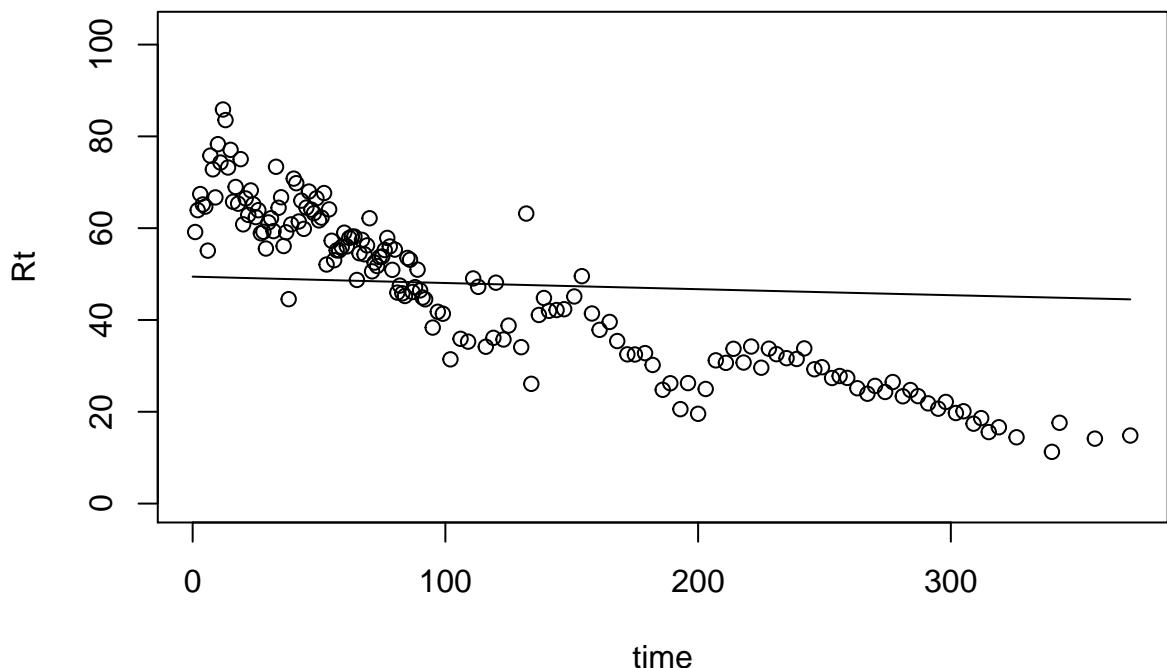


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-9.34	0.000264	NA	NA	NA	NA	-9.33	0.975	NA	NA
Two-pool parallel	-1.81	0.0066	6.95e-05	0.0525	NA	NA	-1.75	0.022	13600	9200
Two-pool feedback	2.19	0.0066	6.95e-05	0.053	0.00921	4.81e-05	2.35	0.00284	284	106
Two-pool series	0.187	0.0066	6.95e-05	0.0525	0.000725	NA	0.296	0.00793	162	105

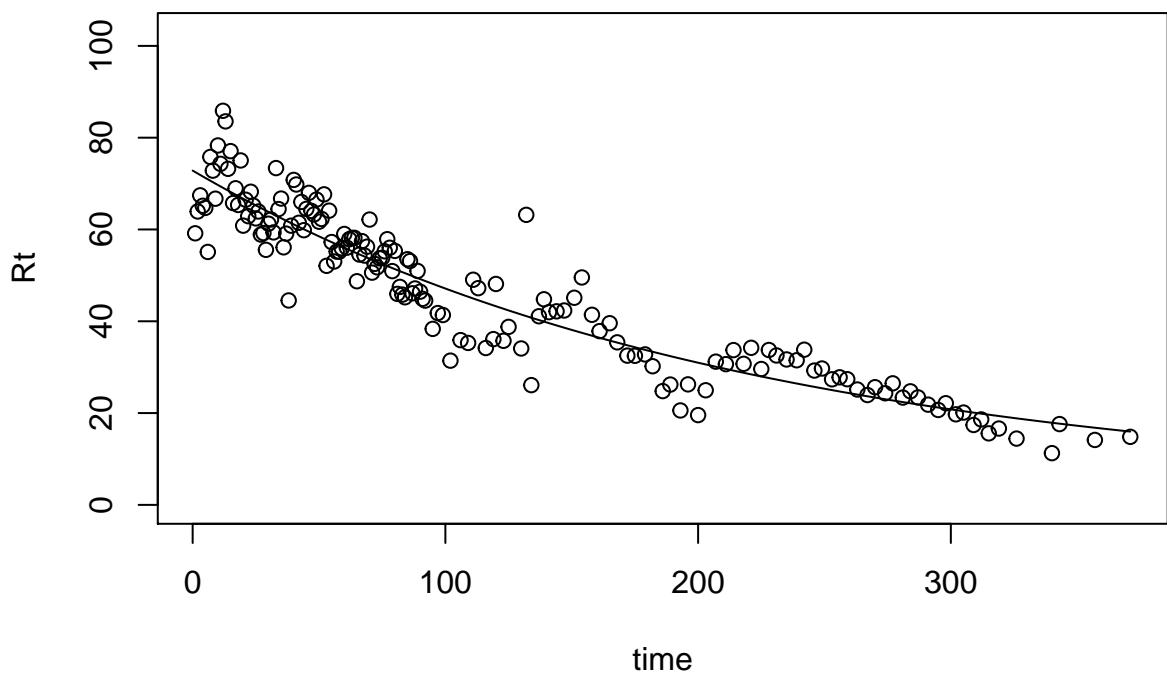
Variable Site74:

CO2 production rate

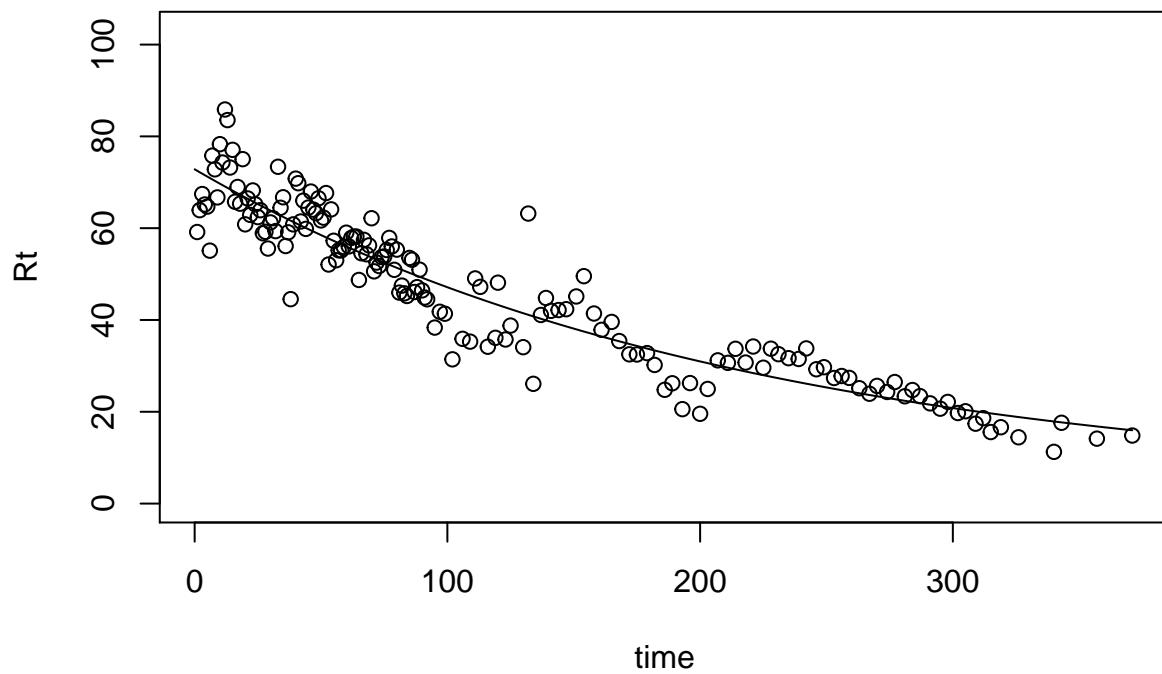
```
## [1] "Best fit parameter: 0.000284133767108801"
```



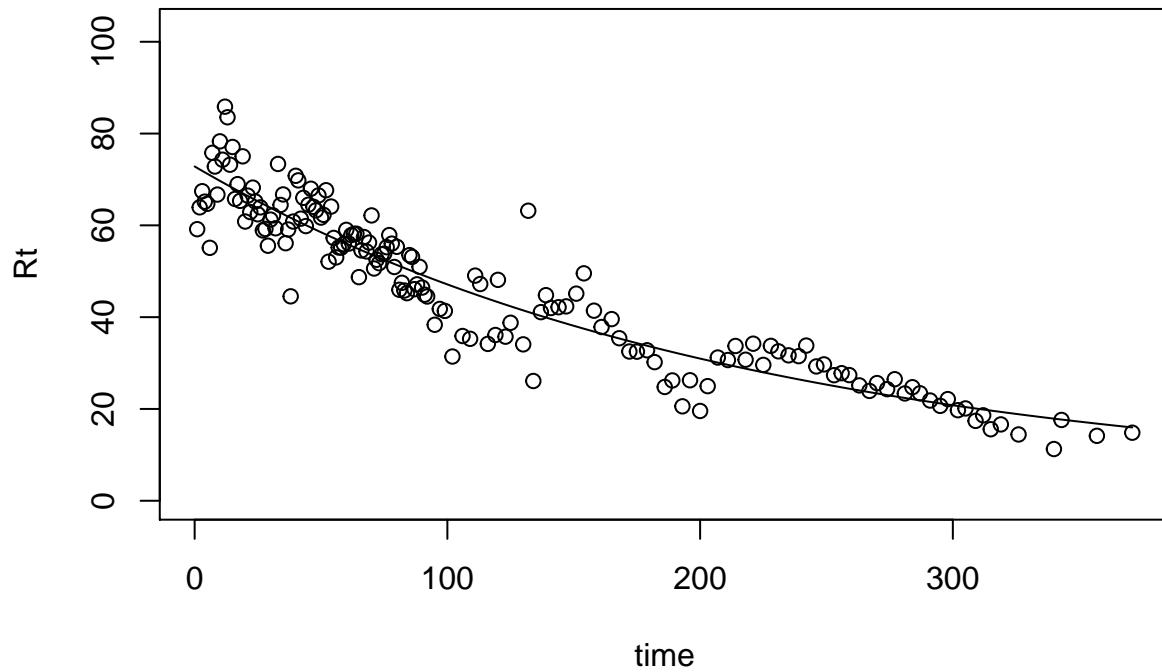
```
## [1] "AIC = -9.13756866598792"
## [1] "k1= 0.00464003932397663"
## [2] "k2= 2.28229651488392e-05"
## [3] "proportion of C0 in pool 1= 0.0857096491908595"
```



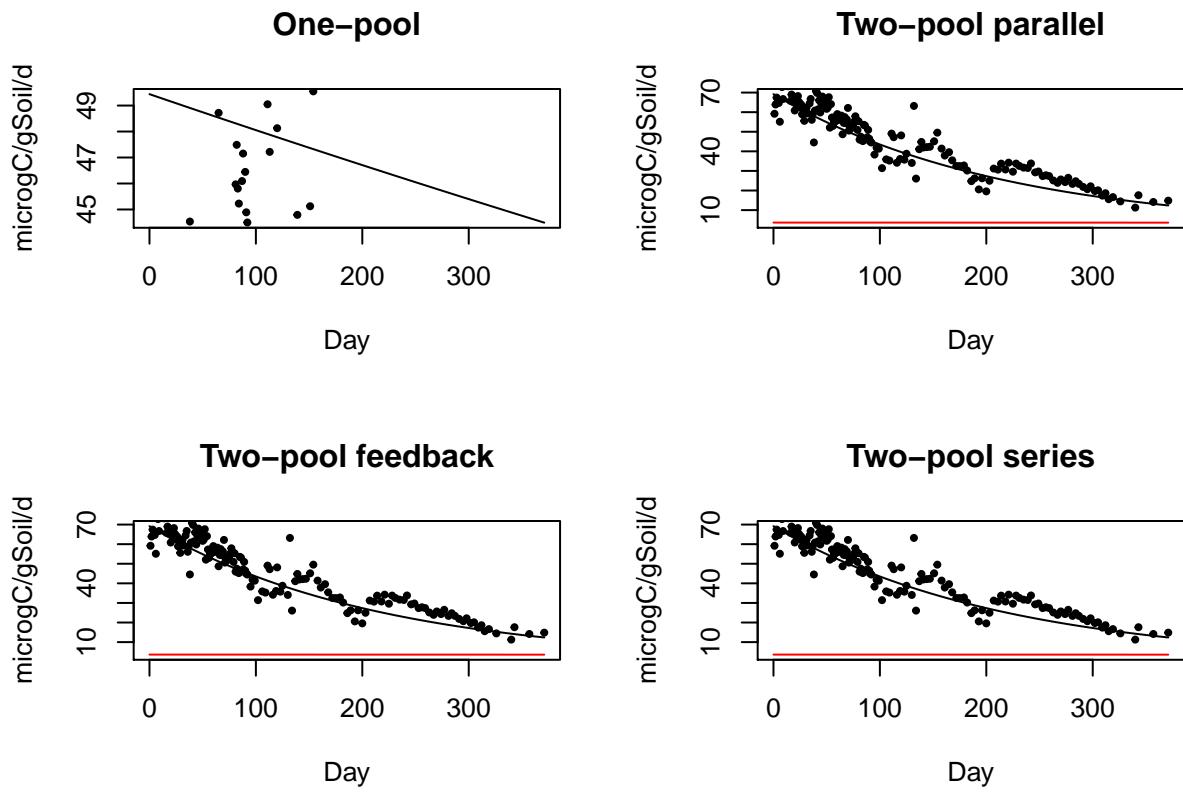
```
## [1] "AIC = -1.13636680607606"
## [1] "k1= 0.00464003842742238"
## [2] "k2= 2.28229248714953e-05"
## [3] "a21= 0.00762371668815576"
## [4] "a12= 3.6062444762619e-05"
## [5] "Proportion of C0 in pool 1= 0.0863715573819341"
```



```
## [1] "AIC = 2.86363319392349"
## [1] "k1= 0.00464003949295017"
## [2] "k2= 2.28229736473869e-05"
## [3] "a21= 0.00185602348679031"
## [4] "Proportion of C0 in pool 1= 0.0858697669219571"
```



```
## [1] "AIC = 0.863633193895632"
```

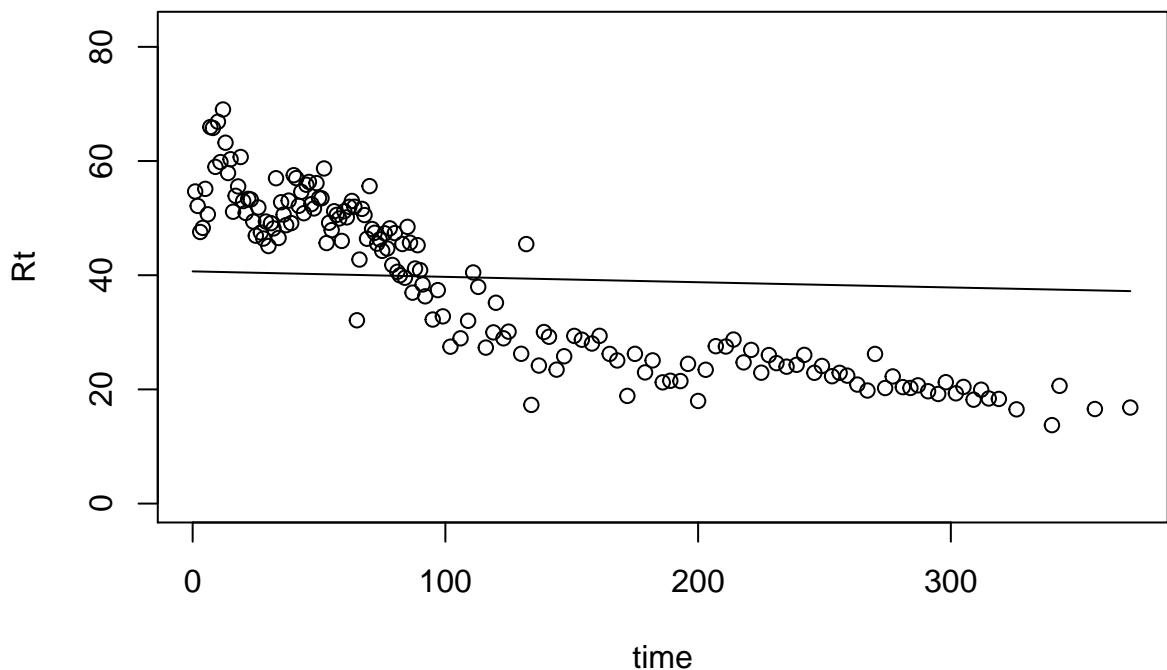


model	AIC	k1	k2	C0	Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	- 9.14	0.000284	NA	NA	NA	NA	NA	- 9.13	0.98	NA	NA
Two-pool parallel	- 1.14	0.00464	2.28e- 05	0.0857	NA	NA	NA	- 1.07	0.0175	40100	26400
Two-pool feedback	2.86	0.00464	2.28e- 05	0.0864	0.00762	3.61e- 05	3.03	0.00225	550	151	
Two-pool series	0.864	0.00464	2.28e- 05	0.0859	0.00186	NA	NA	0.973	0.00628	297	150

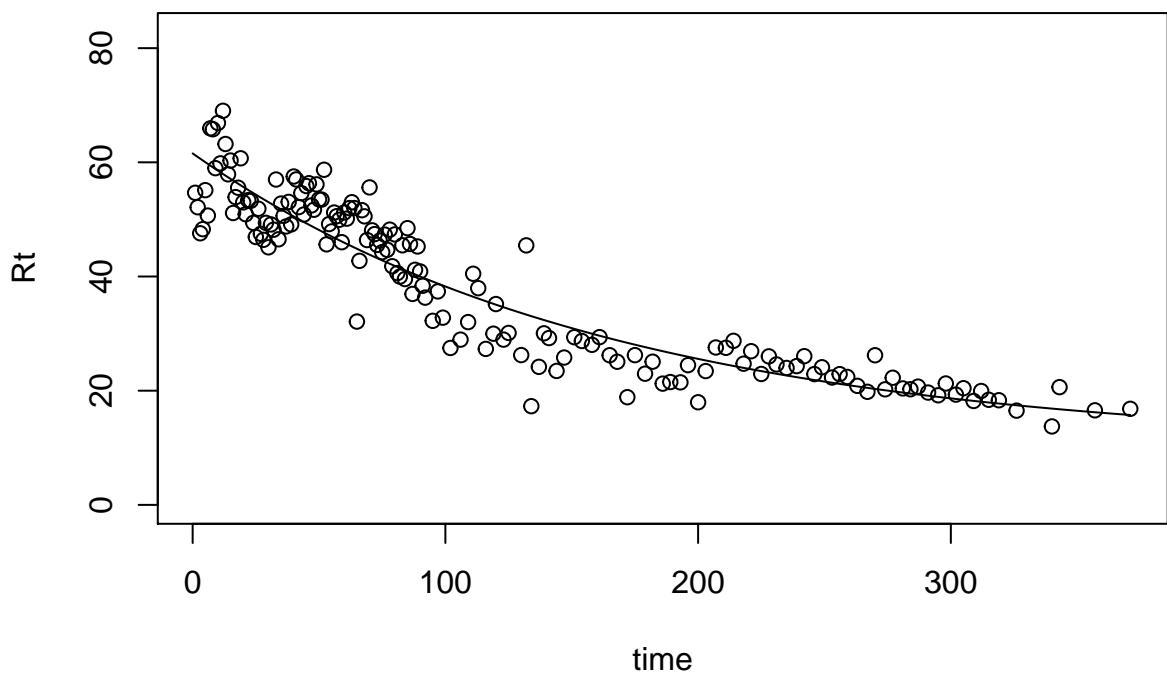
Variable Site75:

CO2 production rate

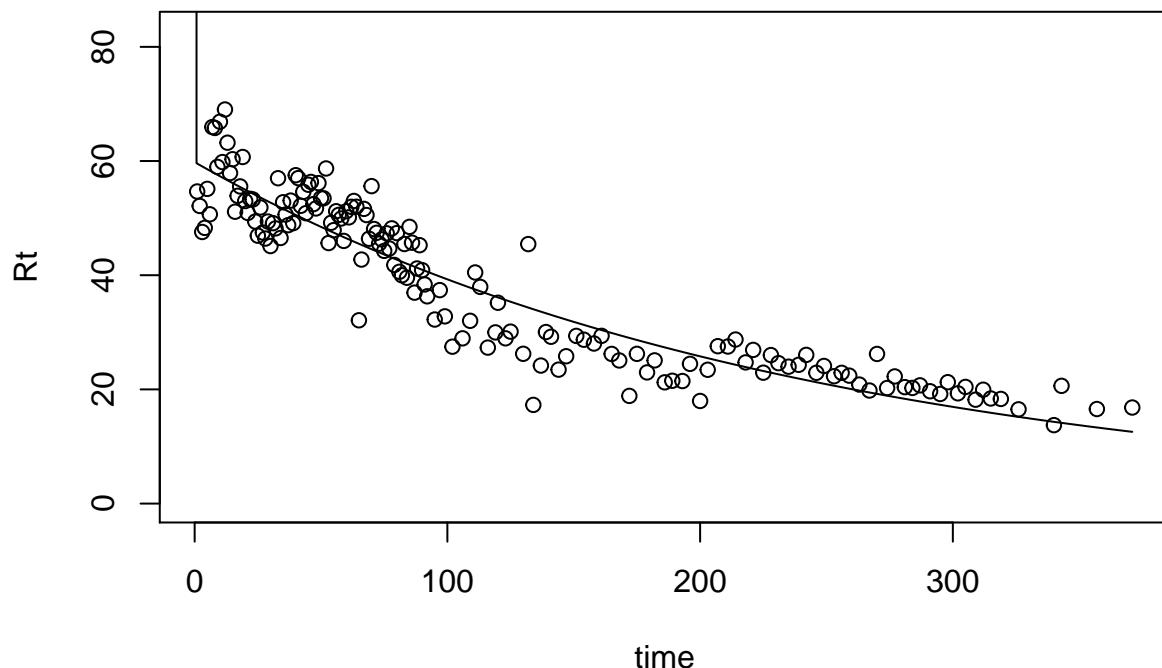
```
## [1] "Best fit parameter: 0.000239393082546149"
```



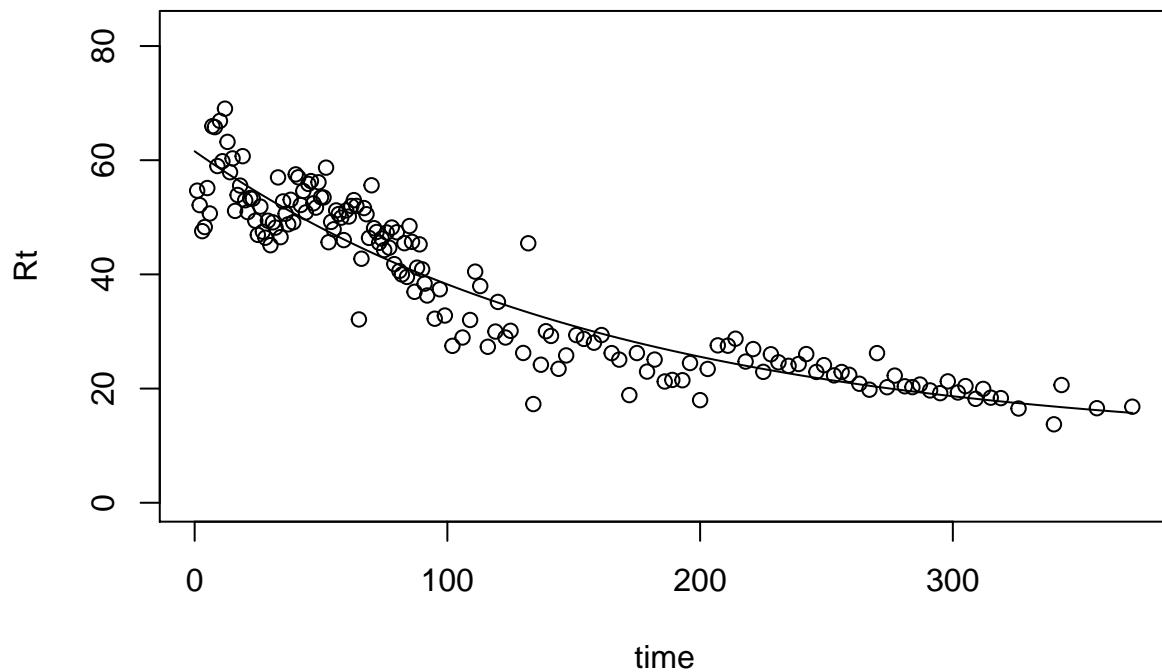
```
## [1] "AIC = -8.39147530915433"
## [1] "k1= 0.00610980480055231"
## [2] "k2= 6.64473029132312e-05"
## [3] "proportion of C0 in pool 1= 0.0489614233572432"
```



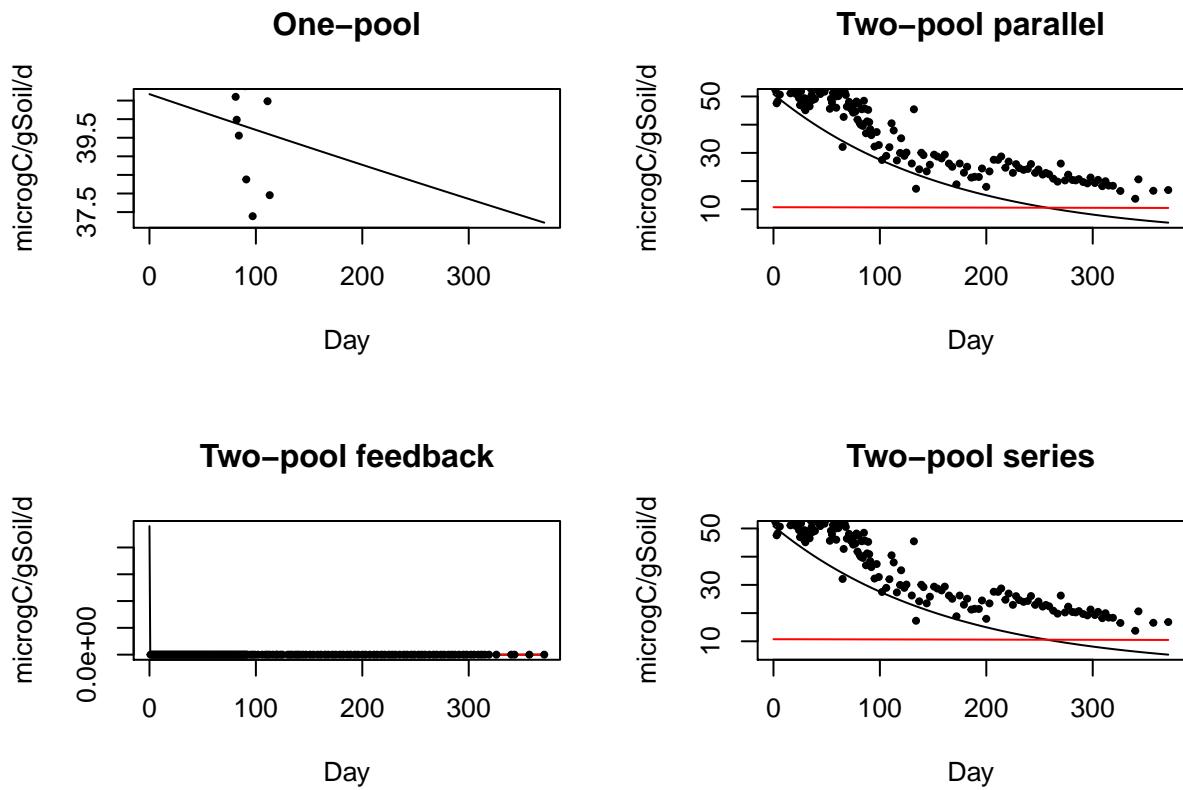
```
## [1] "AIC = -0.504182999292202"
## [1] "k1= 1540.48745523501"
## [2] "k2= 0.00420716571866288"
## [3] "a21= 0.000527526925972077"
## [4] "a12= 0.999993835608837"
## [5] "Proportion of C0 in pool 1= 0.916771489168731"
```



```
## [1] "AIC = 3.40803687504739"
## [1] "k1= 0.00610980662411944"
## [2] "k2= 6.6447341952045e-05"
## [3] "a21= 0.00108376806651717"
## [4] "Proportion of C0 in pool 1= 0.04901509162954"
```



```
## [1] "AIC = 1.49581700069815"
```

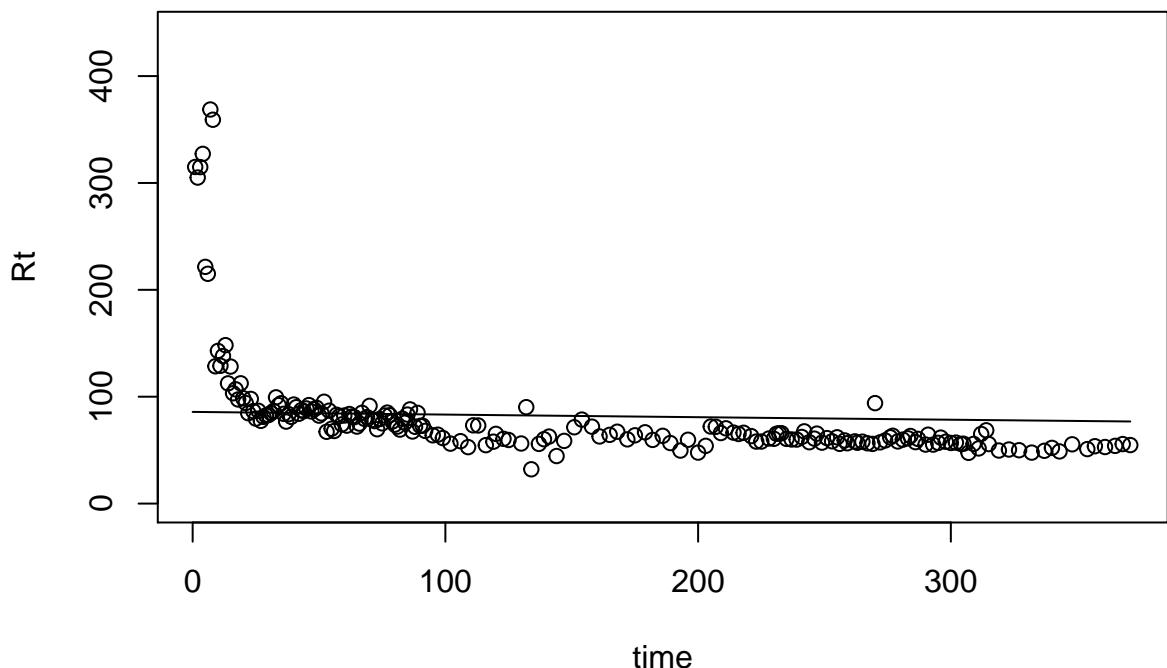


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-8.39	0.000239	NA	NA	NA	NA	-8.38	0.979	NA	NA
Two-pool parallel	-0.504	0.00611	6.64e-05	0.049	NA	NA	-0.439	0.0185	14300	9680
Two-pool feedback	3.41	1540	0.00421	0.917	0.000528	1	3.57	0.00248	0.126	0.000465
Two-pool series	1.5	0.00611	6.64e-05	0.049	0.00108	NA	1.61	0.00664	180	114

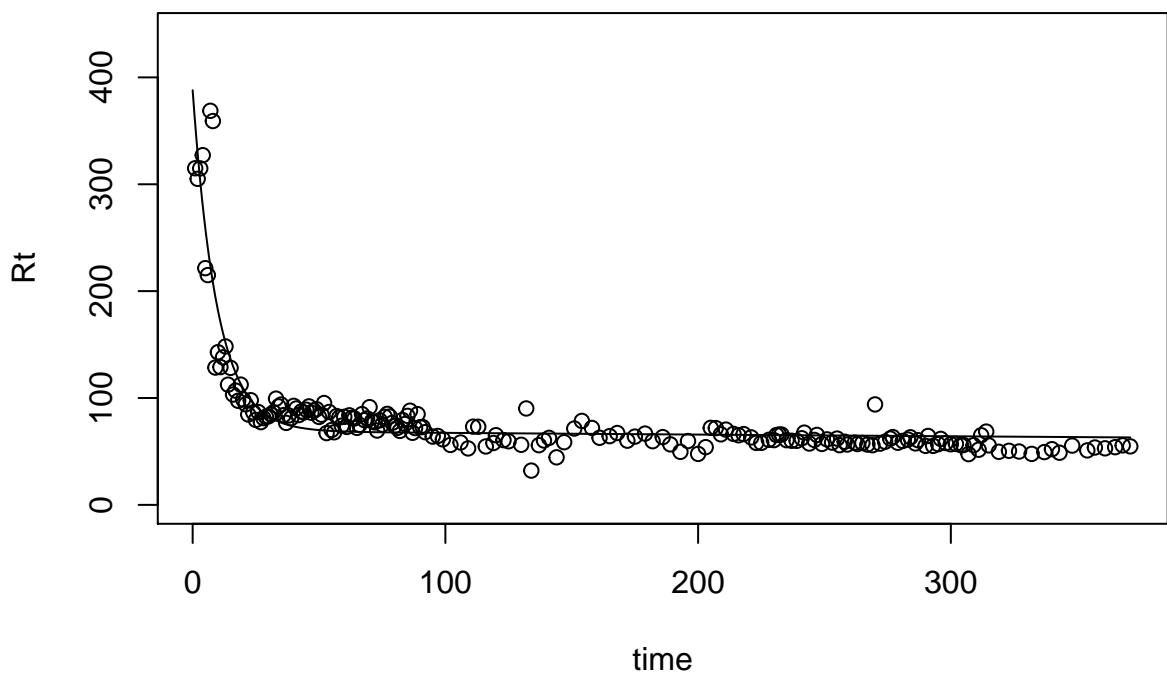
Variable Site76:

CO2 production rate

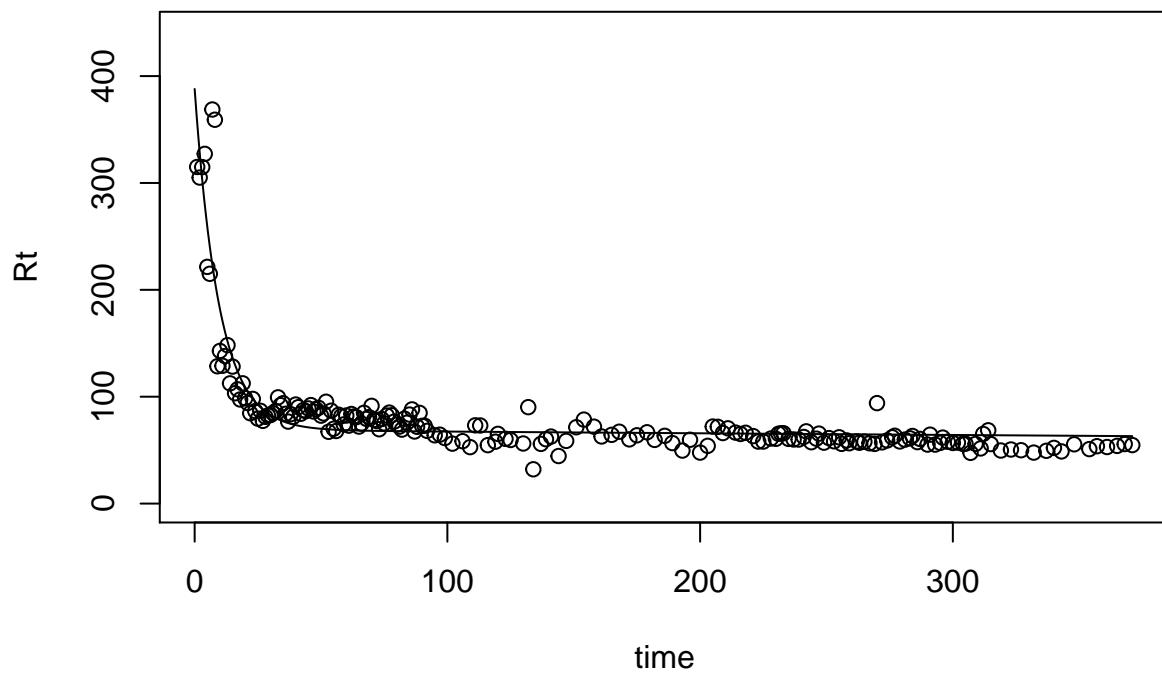
```
## [1] "Best fit parameter: 0.000297446205096518"
```



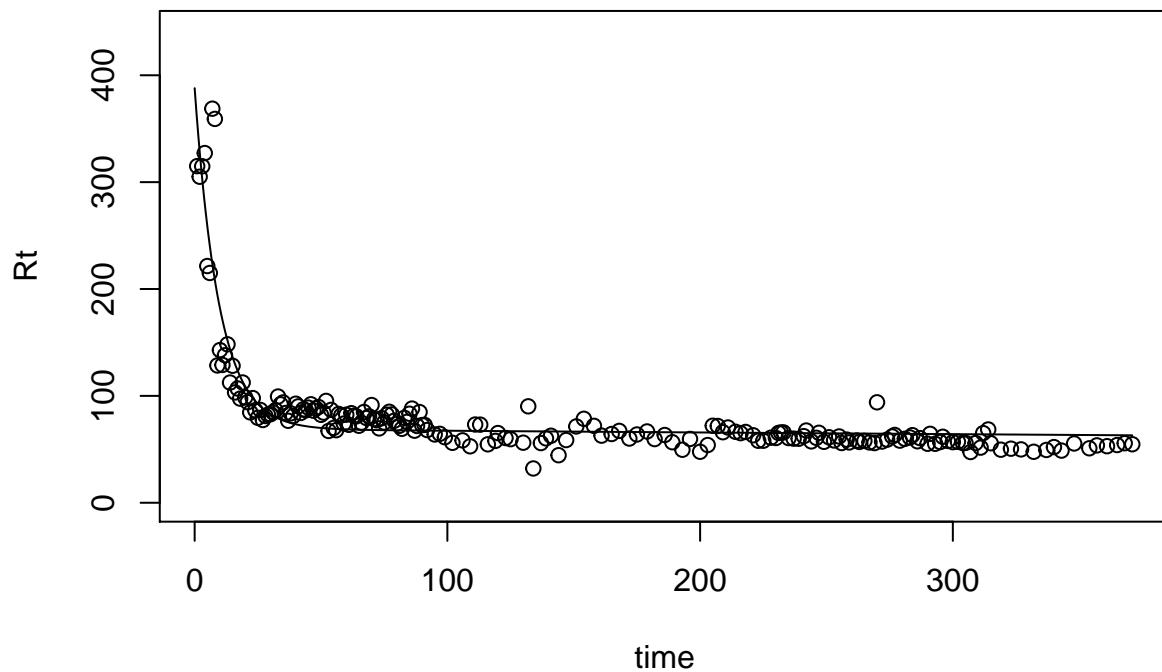
```
## [1] "AIC = -13.5025762999765"
## [1] "k1= 0.103540741159054"
## [2] "k2= 0.000241922875116518"
## [3] "proportion of C0 in pool 1= 0.0106805788364825"
```



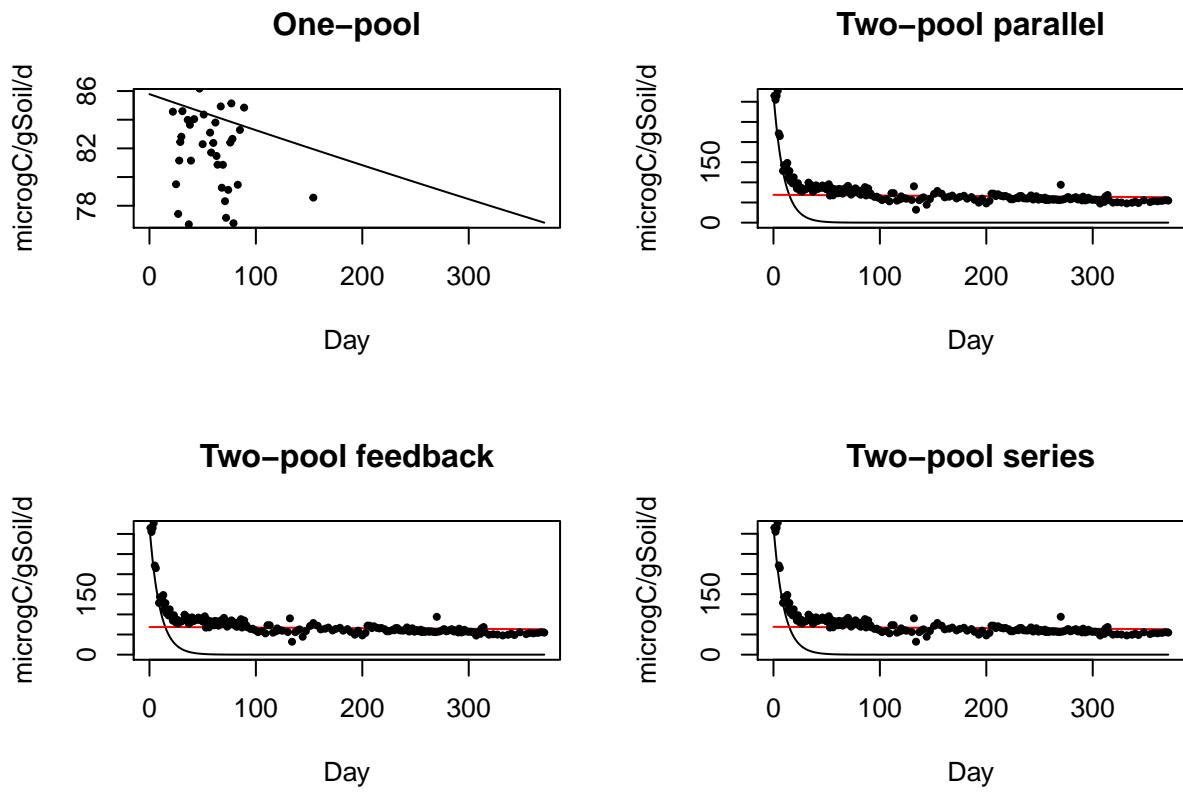
```
## [1] "AIC = -5.98965723699895"
## [1] "k1= 0.103540865208684"
## [2] "k2= 0.000241923682544172"
## [3] "a21= 0.393008866470666"
## [4] "a12= 8.10238329201907e-06"
## [5] "Proportion of C0 in pool 1= 0.017622418837703"
```



```
## [1] "AIC = -1.98965723928749"
## [1] "k1= 0.103540838440878"
## [2] "k2= 0.000241922907241979"
## [3] "a21= 0.00131144210936901"
## [4] "Proportion of C0 in pool 1= 0.0106946142288496"
```



```
## [1] "AIC = -3.98965723702497"
```

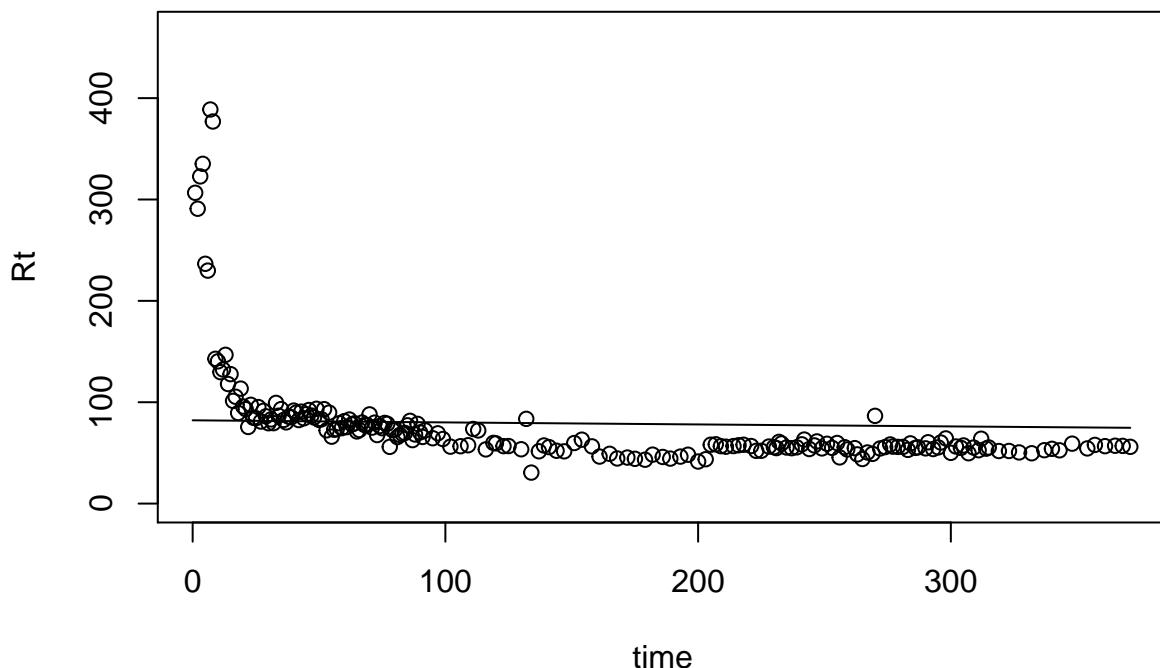


model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT q05
One-pool	-13.5	0.000297	NA	NA	NA	NA	-13.5	0.975	NA
Two-pool parallel	-5.99	0.104	0.000242	0.0107	NA	NA	-5.92	0.0222	4090
Two-pool feedback	-1.99	0.104	0.000242	0.0176	0.393	8.1e-06	-1.83	0.00286	1630
Two-pool series	-3.99	0.104	0.000242	0.0107	0.00131	NA	-3.88	0.00798	15.1
									6.71

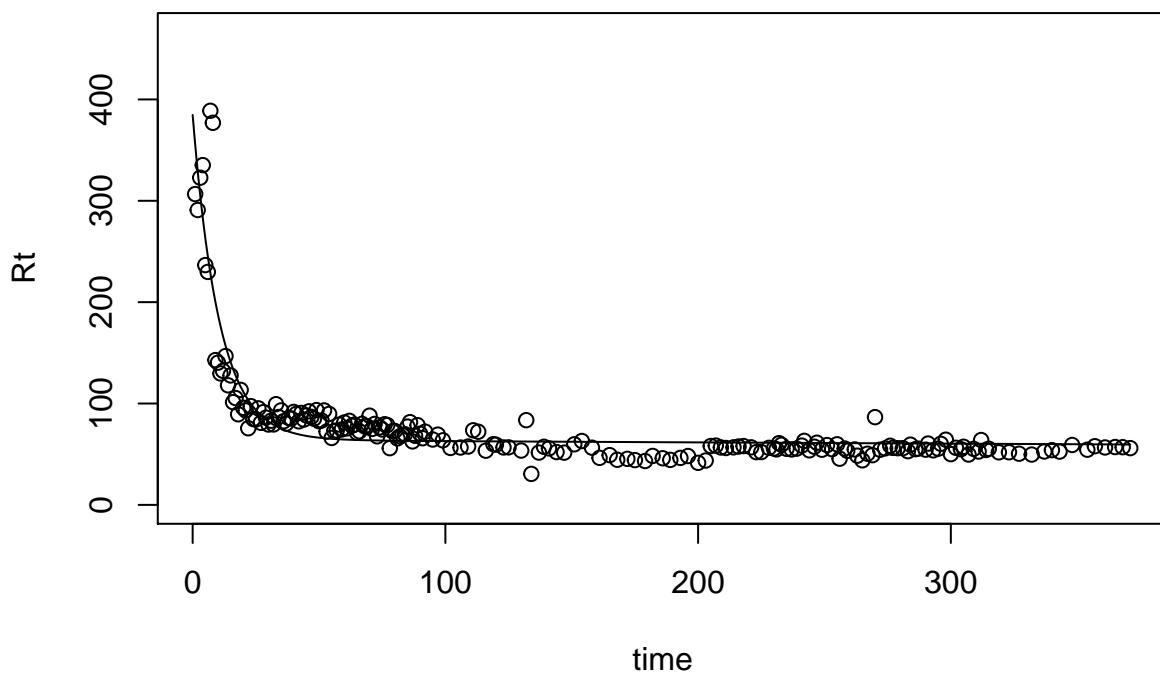
Variable Site77:

CO2 production rate

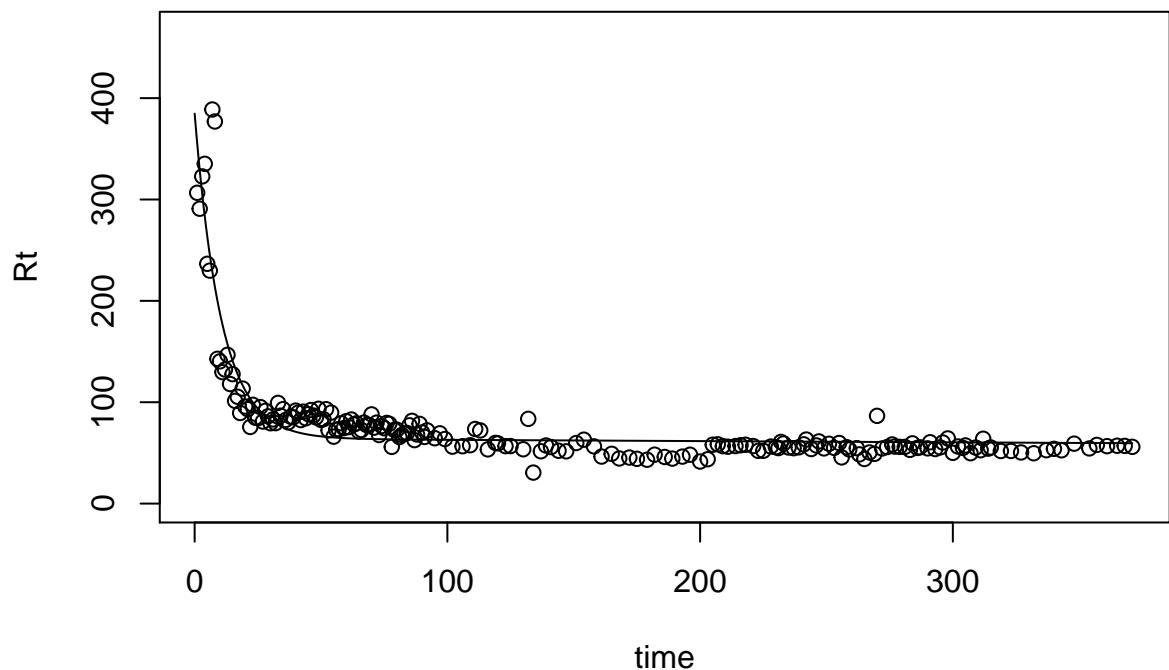
```
## [1] "Best fit parameter: 0.000253705214158045"
```



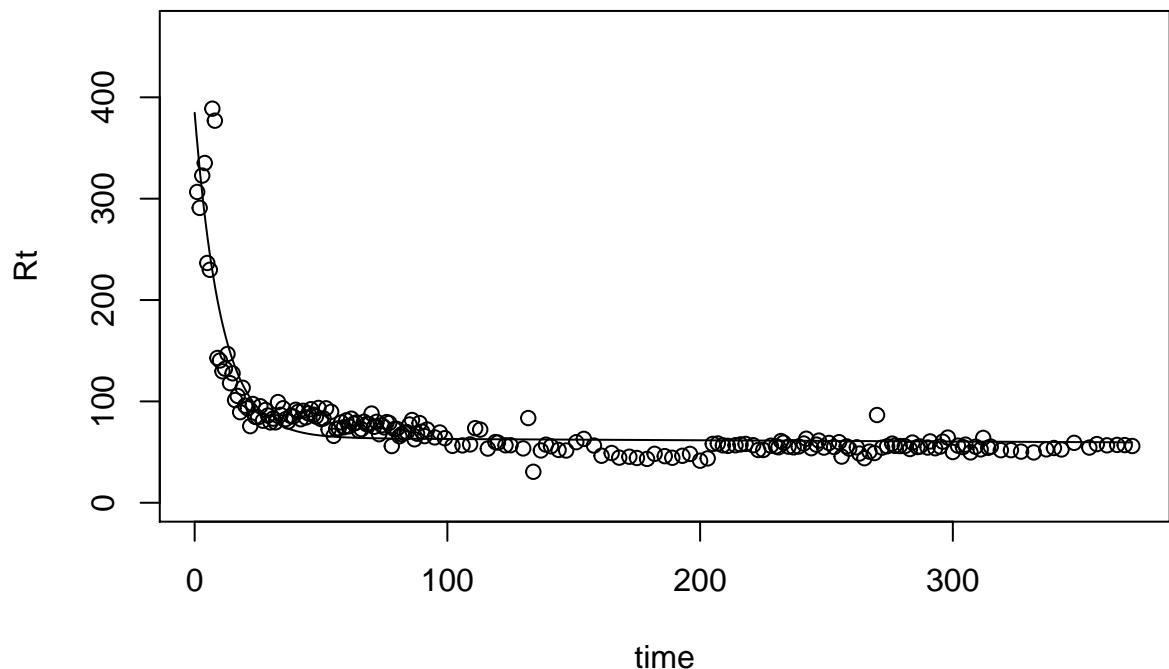
```
## [1] "AIC = -13.7199488199099"
## [1] "k1= 0.0950712191971867"
## [2] "k2= 0.000200247067742093"
## [3] "proportion of C0 in pool 1= 0.0104134305241269"
```



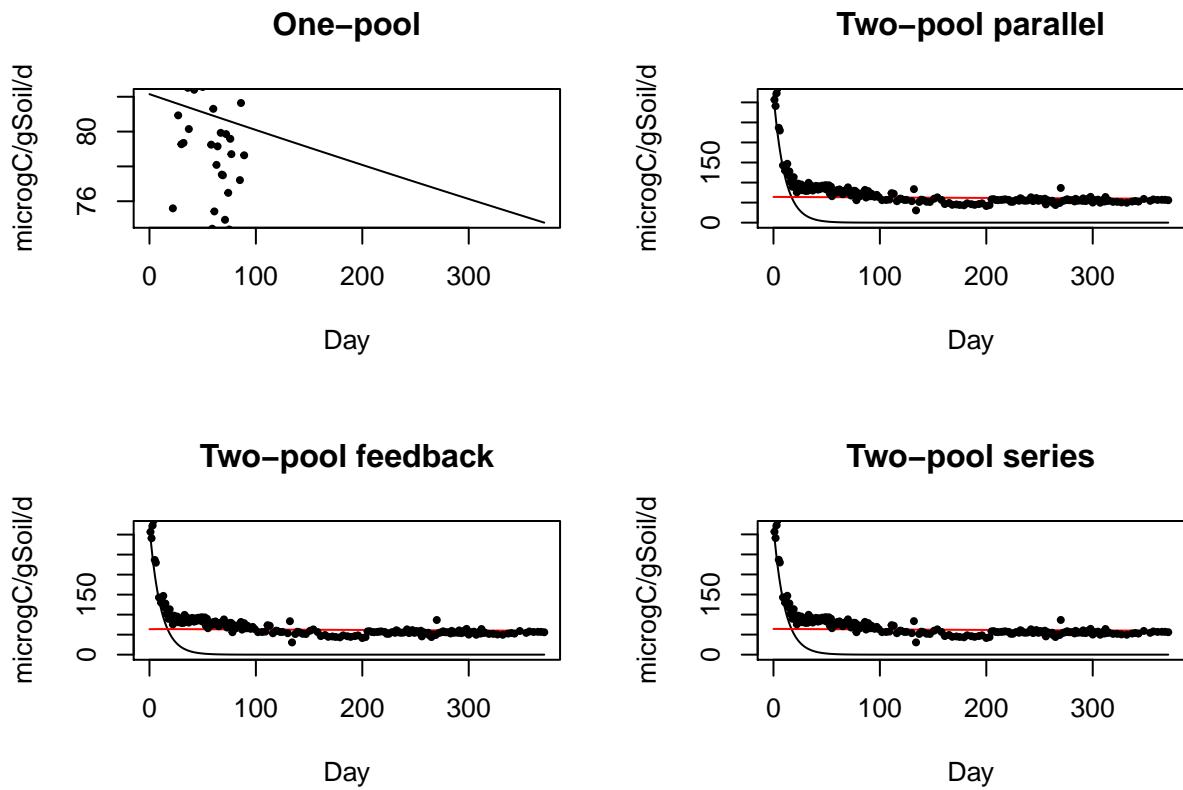
```
## [1] "AIC = -6.32237392277772"
## [1] "k1= 0.0950712871215661"
## [2] "k2= 0.000200275307842507"
## [3] "a21= 0.437195314034128"
## [4] "a12= 0.000326102467487377"
## [5] "Proportion of C0 in pool 1= 0.018533792612125"
```



```
## [1] "AIC = -2.32237392297141"
## [1] "k1= 0.0950703419450928"
## [2] "k2= 0.000200246788813682"
## [3] "a21= 0.000109936950002221"
## [4] "Proportion of C0 in pool 1= 0.0104146114908493"
```



```
## [1] "AIC = -4.32237392303088"
```



model	AIC	k1	k2	C0Inp1	a21	a12	AICc	wi	MeanTrT	q05
One-pool	-13.7	0.000254	NA	NA	NA	NA	-13.7	0.974	NA	NA
Two-pool parallel	-6.32	0.0951	2e-04	0.0104	NA	NA	-6.26	0.0234	4940	3410
Two-pool feedback	-2.32	0.0951	2e-04	0.0185	0.437	0.000326	-2.16	0.00302	2190	22.9
Two-pool series	-4.32	0.0951	2e-04	0.0104	0.00011	NA	-4.21	0.00844	11.1	7.29