TFD longitudinal analyses

Amy Nematollahi and Julia Fisher

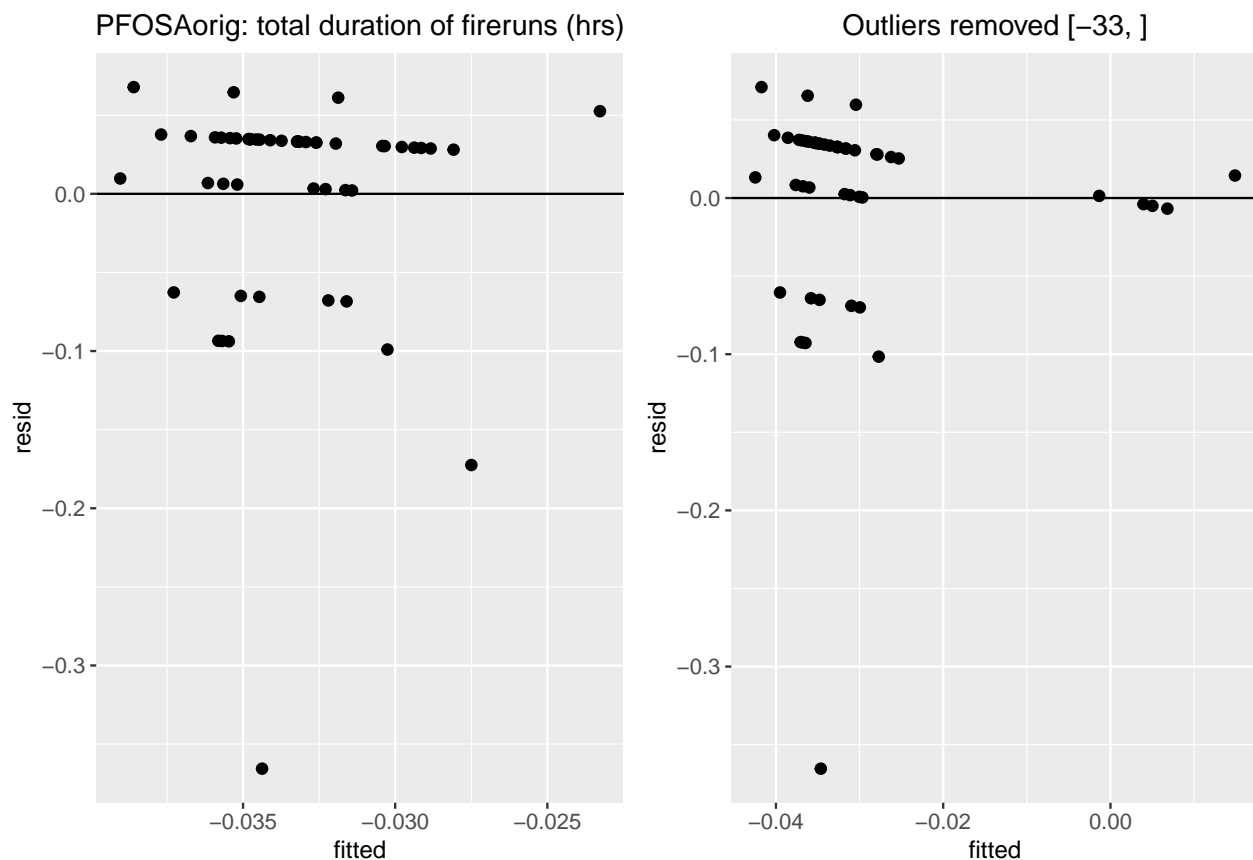*7/27/2020*

| | PFOSAorig: total duration of fireruns (hrs) | Outliers removed [−33,] |

Table 1: PFOSA: total duration of fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFOSAorig	
	(1)	(2)
Constant	−0.041	−0.046
	t = −1.222	t = −1.454
	p = 0.228	p = 0.153
total.duration.hrs	0.0003	0.0005
	t = 0.230	t = 0.411
	p = 0.819	p = 0.683
EthnicityHispanic	0.003	0.035
	t = 0.079	t = 1.026
	p = 0.938	p = 0.310
Observations	52	51
R^2	0.002	0.033
Adjusted R^2	−0.039	−0.007
Note:	*p<0.1; **p<0.05; ***p<0.01	

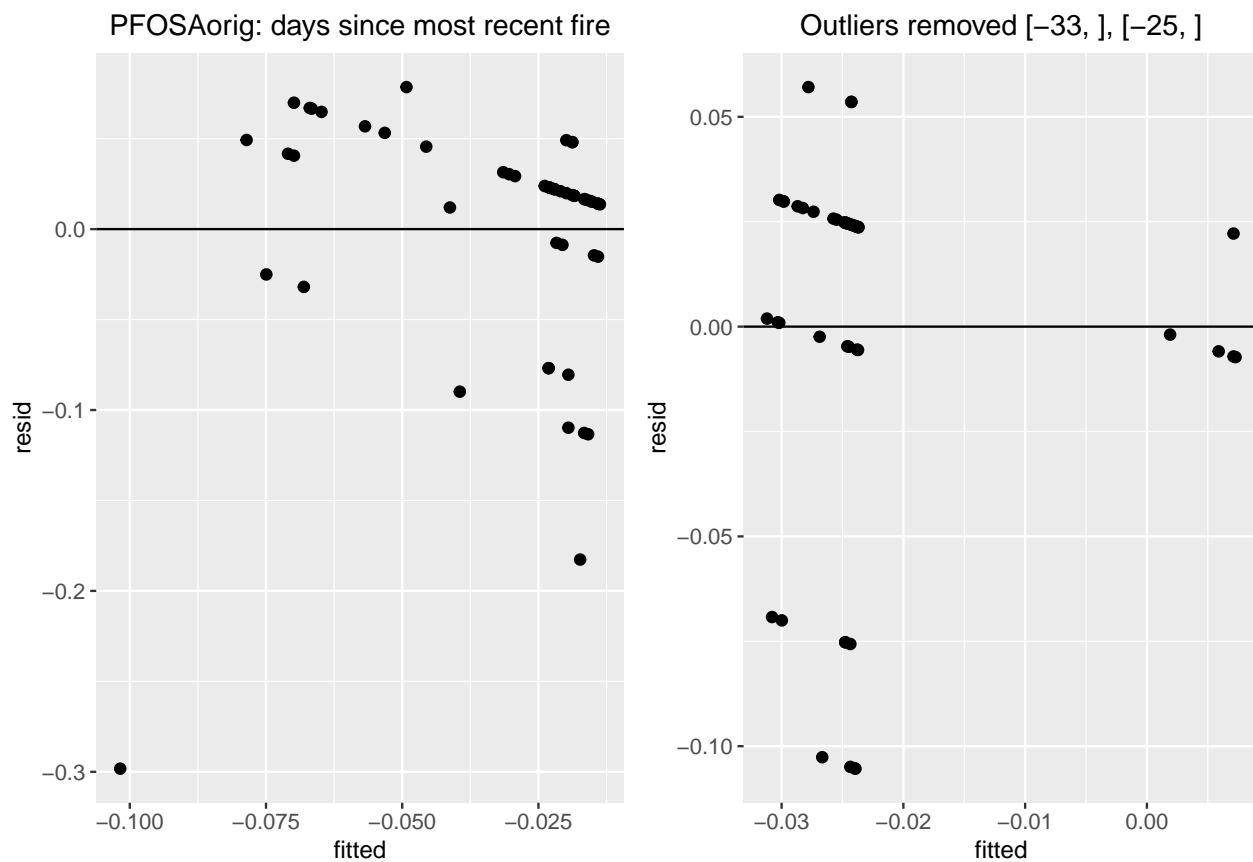**PFOSAorig: days since most recent fire**

Outliers removed [−33,], [−25,]

Table 2: PFOSA: days since most recent fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFOSAorig	
	(1)	(2)
Constant	−0.013	−0.024
	t = −0.965	t = −2.607
	p = 0.340	p = 0.013**
days.since.MRF	−0.0004	−0.00004
	t = −2.262	t = −0.367
	p = 0.029**	p = 0.716
EthnicityHispanic	0.002	0.032
	t = 0.059	t = 1.484
	p = 0.954	p = 0.145
Observations	52	50
R²	0.095	0.047
Adjusted R²	0.058	0.007
Note:	*p<0.1; **p<0.05; ***p<0.01	

3

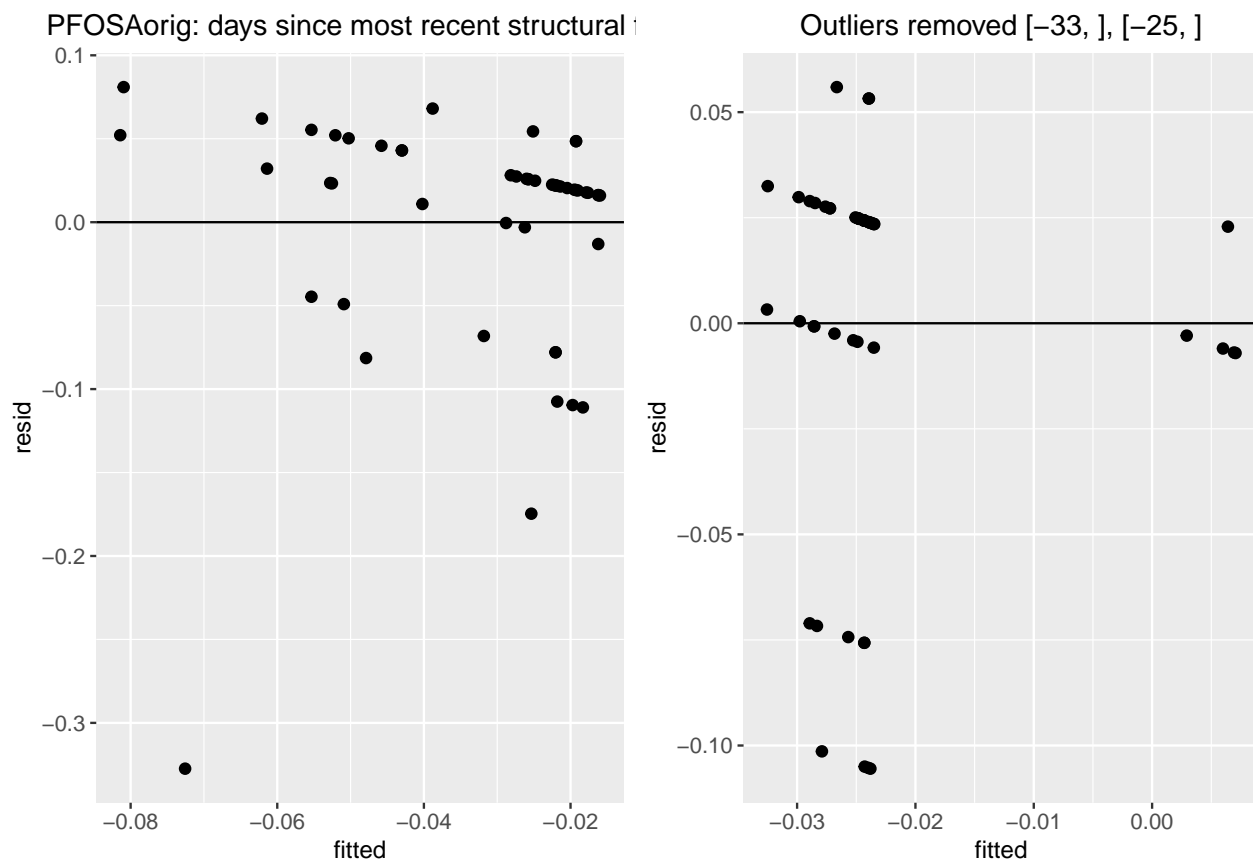PFOSAorig: days since most recent structural f... | Outliers removed [−33,], [−25,]

Table 3: PFOSA: days since most recent structural fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFOSAorig	
	(1)	(2)
Constant	−0.016	−0.023
	t = −1.058	t = −2.481
	p = 0.296	p = 0.017**
days.since.struc.MRF	−0.0002	−0.00003
	t = −1.746	t = −0.364
	p = 0.088*	p = 0.718
EthnicityHispanic	−0.0003	0.031
	t = −0.009	t = 1.451
	p = 0.993	p = 0.154
Observations	52	50
R²	0.059	0.047
Adjusted R²	0.021	0.007
Note:	*p<0.1; **p<0.05; ***p<0.01	

4
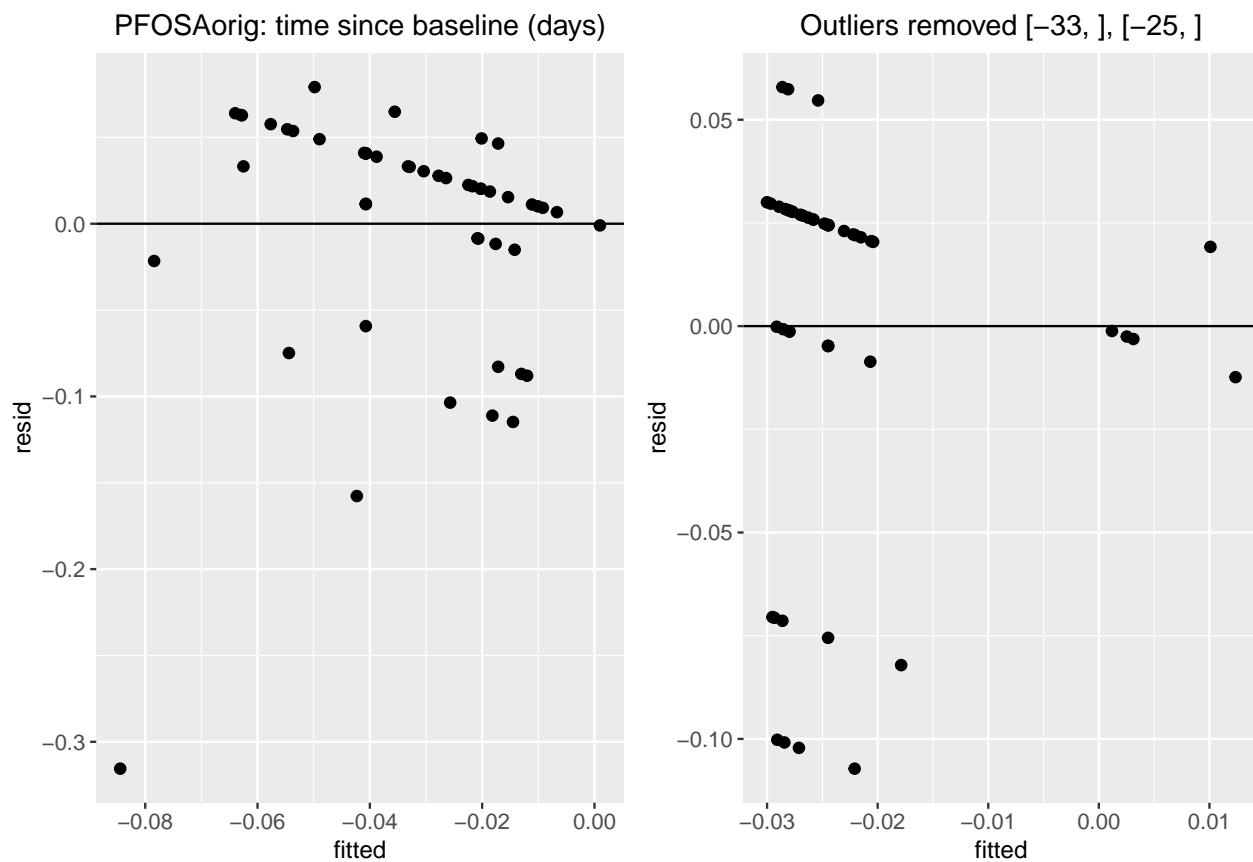
Table 4: PFOSA: time since baseline (days) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFOSAorig	
	(1)	(2)
Constant	0.082	−0.046
	t = 1.339	t = −1.107
	p = 0.187	p = 0.274
time.since.baseline	−0.0001	0.00003
	t = −1.925	t = 0.491
	p = 0.061*	p = 0.626
EthnicityHispanic	0.016	0.030
	t = 0.497	t = 1.402
	p = 0.622	p = 0.168
Observations	52	50
R^2	0.071	0.050
Adjusted R^2	0.033	0.009
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 5: nPFOA: Total number of fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	−0.321	−0.394
	t = −2.854	t = −4.812
	p = 0.007***	p = 0.00002***
days.since.struc.MRF	−0.002	−0.002
	t = −2.442	t = −2.059
	p = 0.019**	p = 0.046**
EthnicityHispanic	−0.365	0.020
	t = −1.541	t = 0.095
	p = 0.130	p = 0.925
Observations	52	50
R^2	0.135	0.086
Adjusted R^2	0.099	0.047
Note:	*p<0.1; **p<0.05; ***p<0.01	

nPFOAorig: total number of structural fireruns

Outliers removed [−40,]

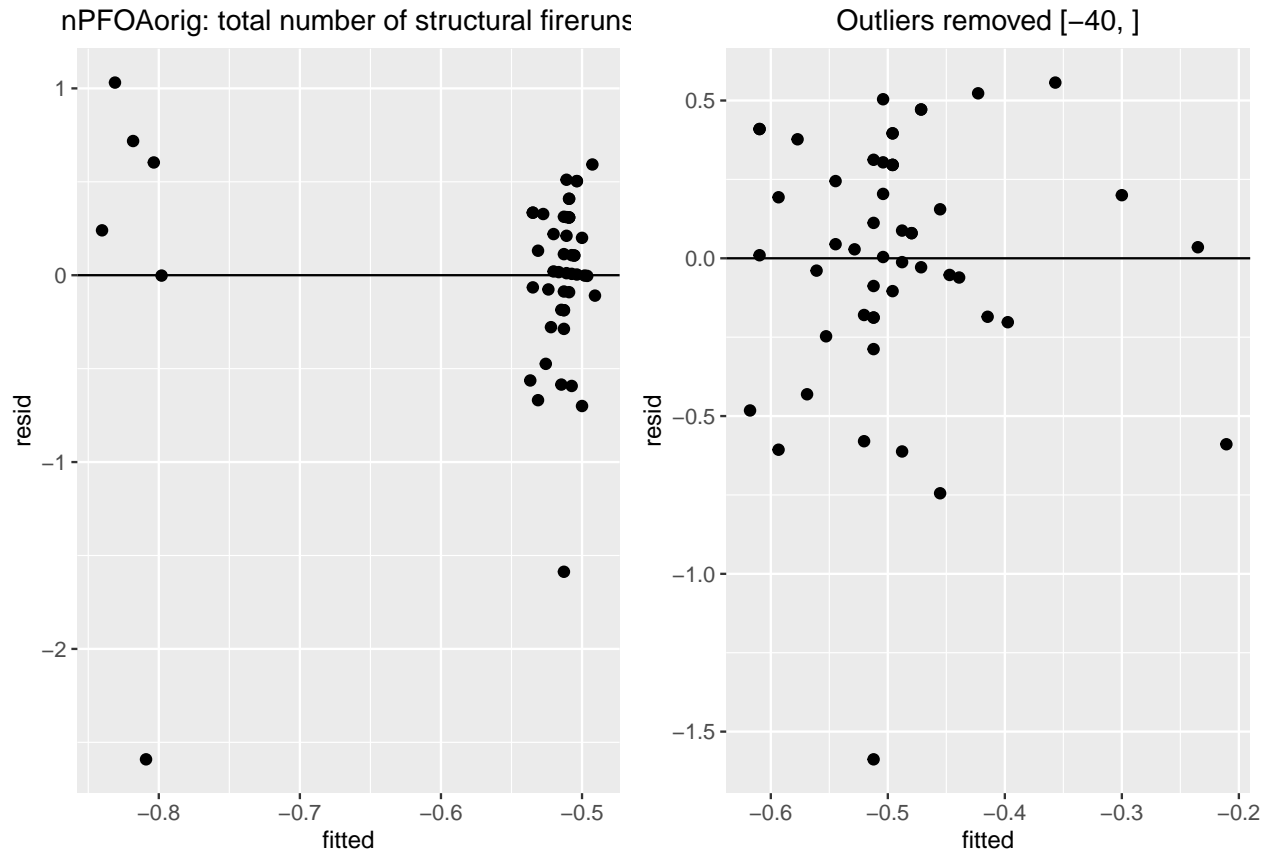Table 6: nPFOA: Total number of structural fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	−0.483	−0.382
	t = −2.199	t = −2.431
	p = 0.033**	p = 0.019**
str.num.fireruns	−0.002	−0.008
	t = −0.146	t = −0.901
	p = 0.885	p = 0.373
EthnicityHispanic	−0.291	0.277
	t = −1.098	t = 1.349
	p = 0.278	p = 0.184
Observations	52	51
R^2	0.030	0.041
Adjusted R^2	−0.010	0.001
Note:	*p<0.1; **p<0.05; ***p<0.01	

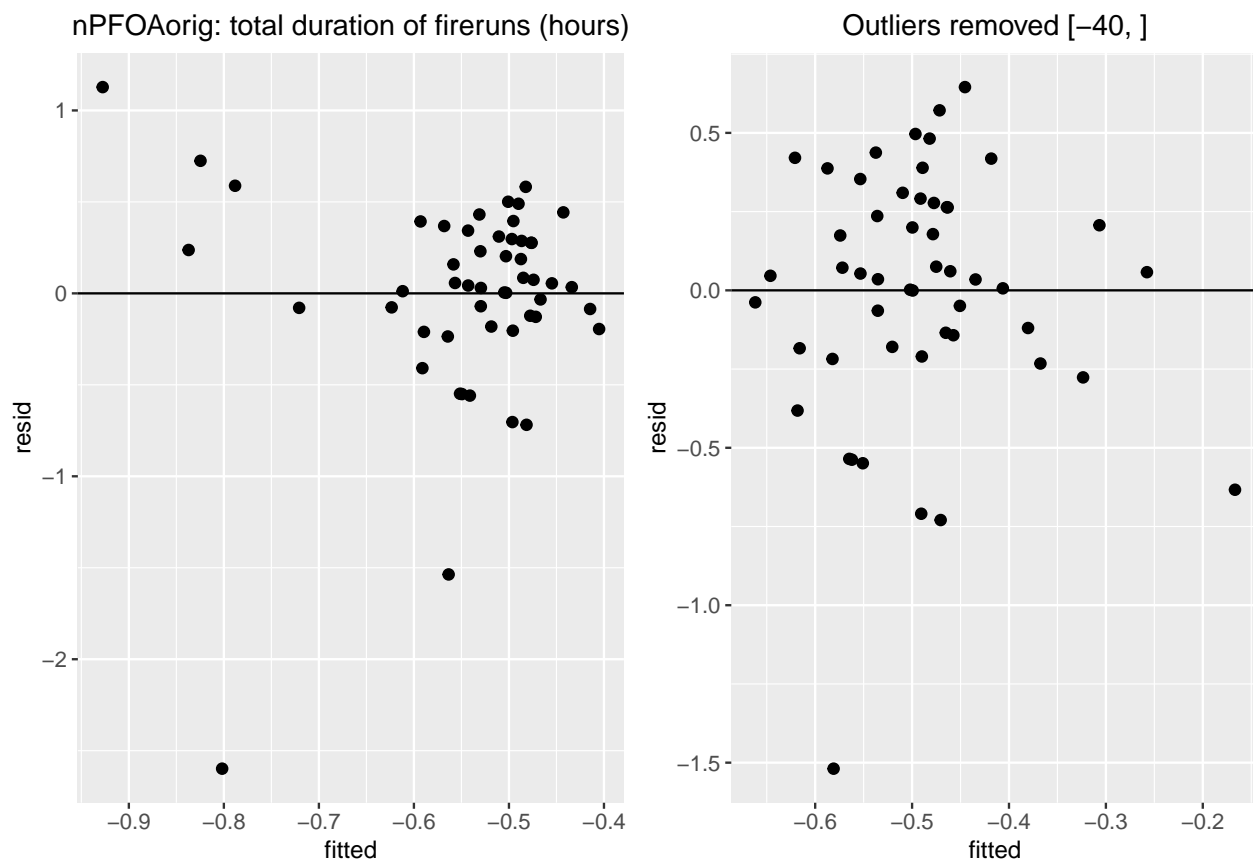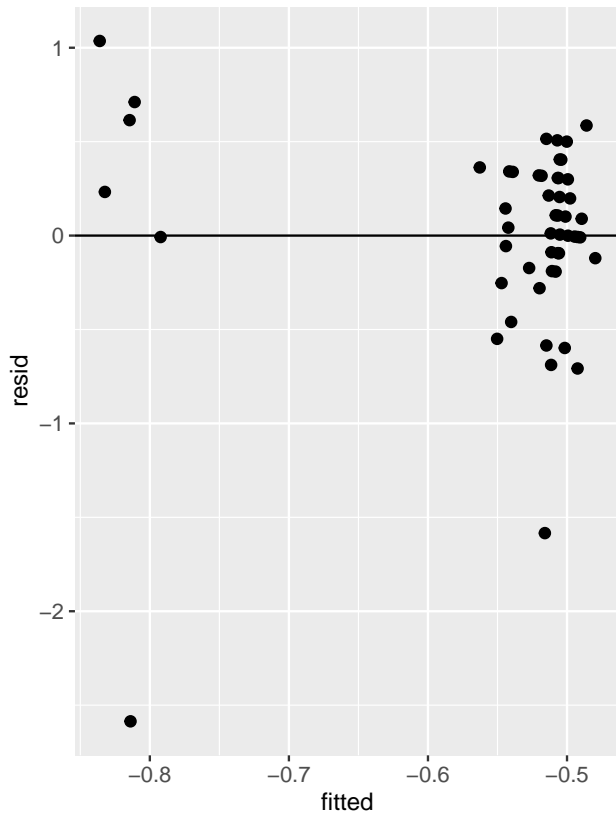nPFOAorig: total duration of fireruns (hours)   Outliers removed [−40,]

Table 7: nPFOA: total duration of fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	−0.355	−0.300
	t = −1.357	t = −1.613
	p = 0.182	p = 0.114
total.duration.hrs	−0.006	−0.008
	t = −0.638	t = −1.210
	p = 0.527	p = 0.233
EthnicityHispanic	−0.243	0.298
	t = −0.915	t = 1.463
	p = 0.365	p = 0.151
Observations	52	51
R^2	0.037	0.053
Adjusted R^2	−0.002	0.014
Note:	*p<0.1; **p<0.05; ***p<0.01	

nPFOAorig: total duration of structural fireruns (h[...]
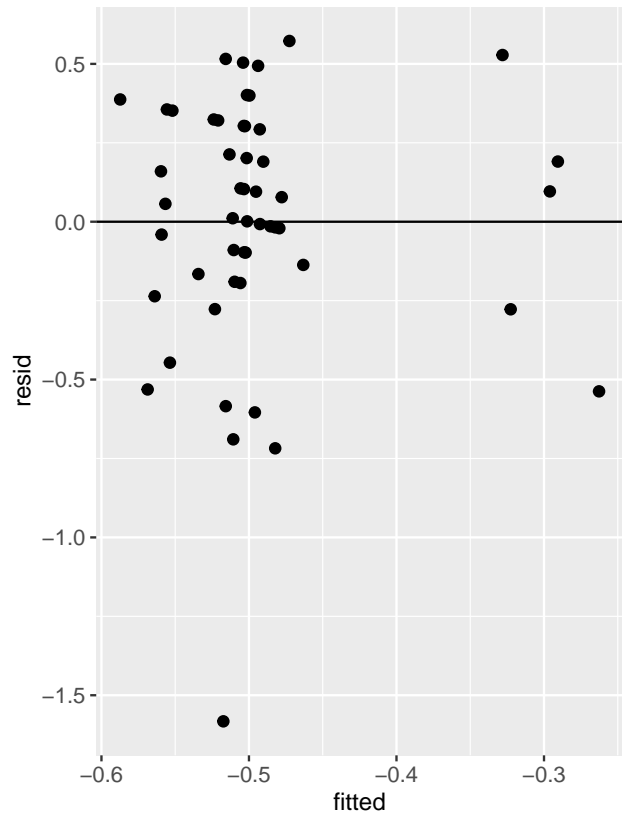

Outliers removed [−40,]

Table 8: nPFOA: total duration of structural fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

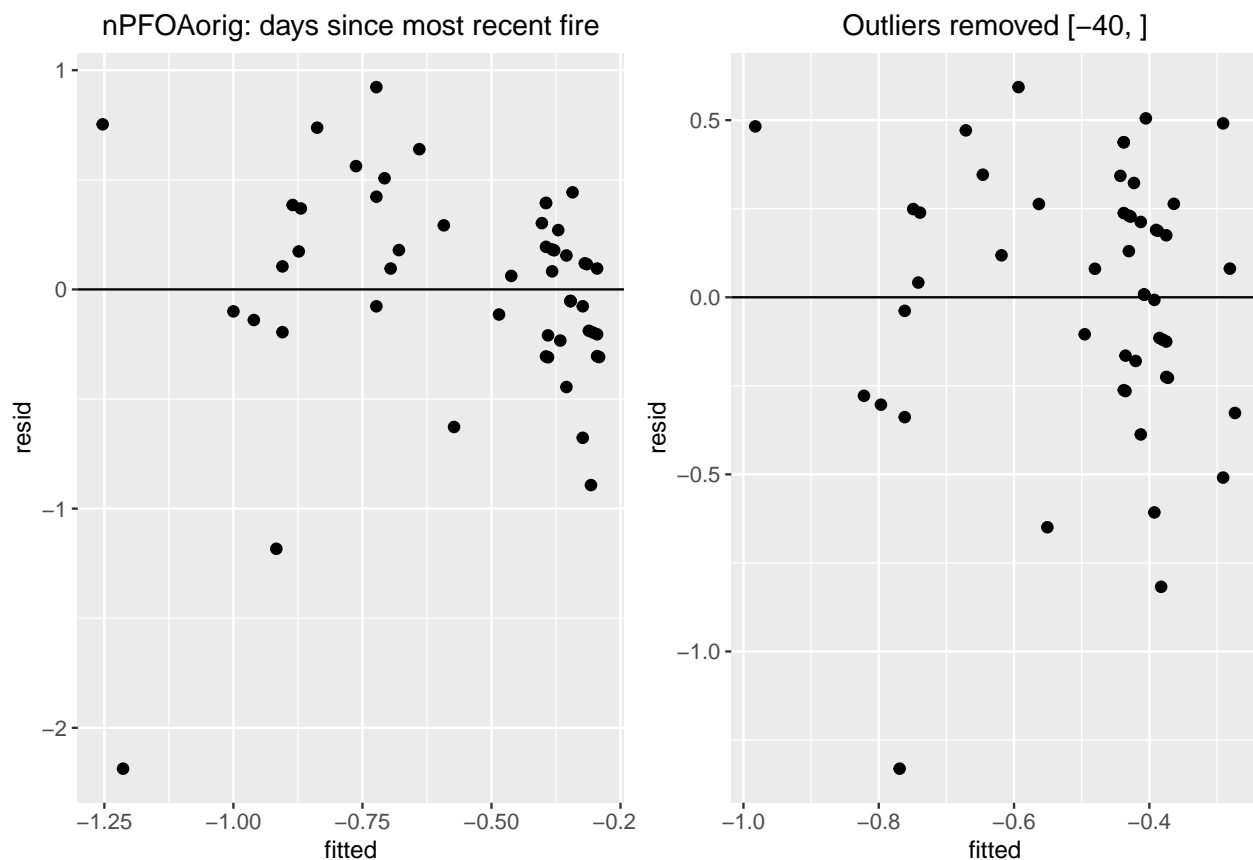|	*Dependent variable:*	
	nPFOAorig	
	(1)	(2)
Constant	−0.472	−0.452
	t = −2.384	t = −3.182
	p = 0.022**	p = 0.003***
str.duration.hrs	−0.003	−0.005
	t = −0.229	t = −0.478
	p = 0.820	p = 0.635
EthnicityHispanic	−0.279	0.251
	t = −1.024	t = 1.198
	p = 0.311	p = 0.237
Observations	52	51
R^2	0.030	0.029
Adjusted R^2	−0.009	−0.011
Note:	*p<0.1; **p<0.05; ***p<0.01	

9

Table 9: nPFOA: days since most recent fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	−0.288	−0.370
	t = −2.830	t = −4.860
	p = 0.007***	p = 0.00002***
days.since.MRF	−0.004	−0.003
	t = −3.365	t = −2.798
	p = 0.002***	p = 0.008***
EthnicityHispanic	−0.344	0.137
	t = −1.530	t = 0.751
	p = 0.133	p = 0.457
Observations	52	51
R^2	0.212	0.161
Adjusted R^2	0.179	0.126
Note:	*p<0.1; **p<0.05; ***p<0.01	

nPFOAorig: days since most recent structural fi   Outliers removed [−40,]
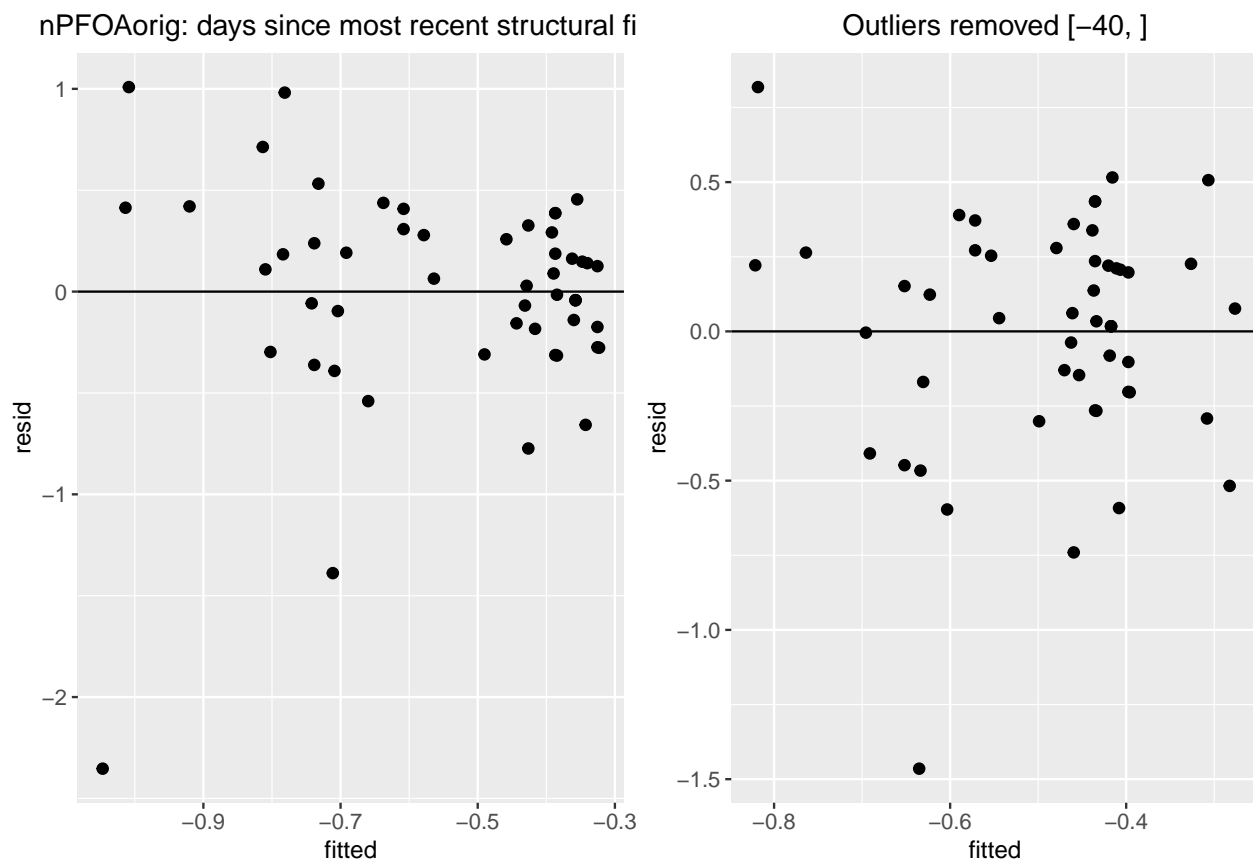
Table 10: nPFOA: days since most recent structural fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	−0.321	−0.394
	t = −2.854	t = −4.768
	p = 0.007***	p = 0.00002***
days.since.struc.MRF	−0.002	−0.002
	t = −2.442	t = −2.023
	p = 0.019**	p = 0.049**
EthnicityHispanic	−0.365	0.147
	t = −1.541	t = 0.776
	p = 0.130	p = 0.442
Observations	52	51
R^2	0.135	0.101
Adjusted R^2	0.099	0.064
Note:	*p<0.1; **p<0.05; ***p<0.01	

11

nPFOAorig: time since baseline (days)

Outliers removed [−40,], [−4,]
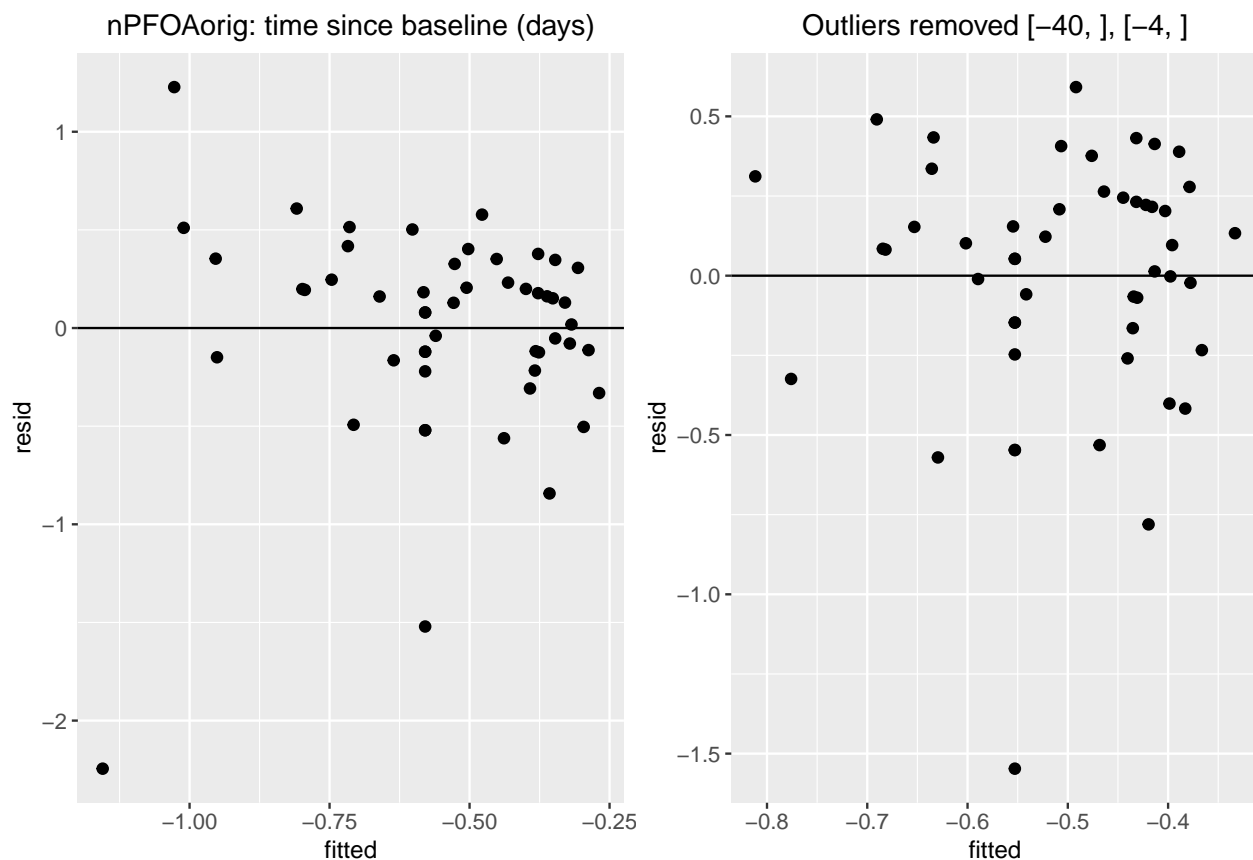
Table 11: nPFOA: time since baseline (days) - Change Score Models - 1) original and 2) outliers removed

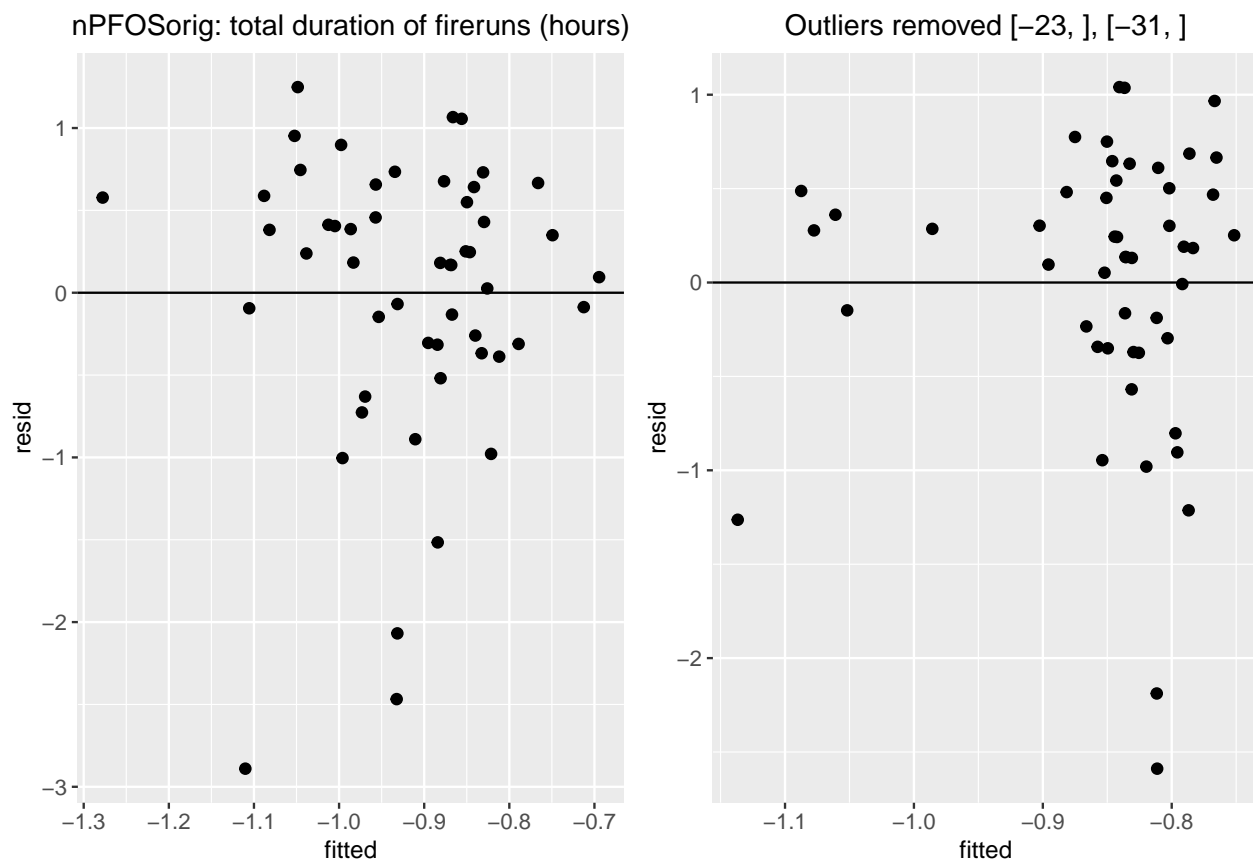|	Dependent variable:	
	nPFOAorig	
	(1)	(2)
Constant	0.628	0.172
	t = 1.359	t = 0.479
	p = 0.181	p = 0.634
time.since.baseline	−0.001	−0.001
	t = −2.506	t = −1.932
	p = 0.016**	p = 0.060*
EthnicityHispanic	−0.204	0.065
	t = −0.857	t = 0.318
	p = 0.396	p = 0.753
Observations	52	50
R^2	0.140	0.077
Adjusted R^2	0.105	0.038
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 12: nPFOS: total duration of fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

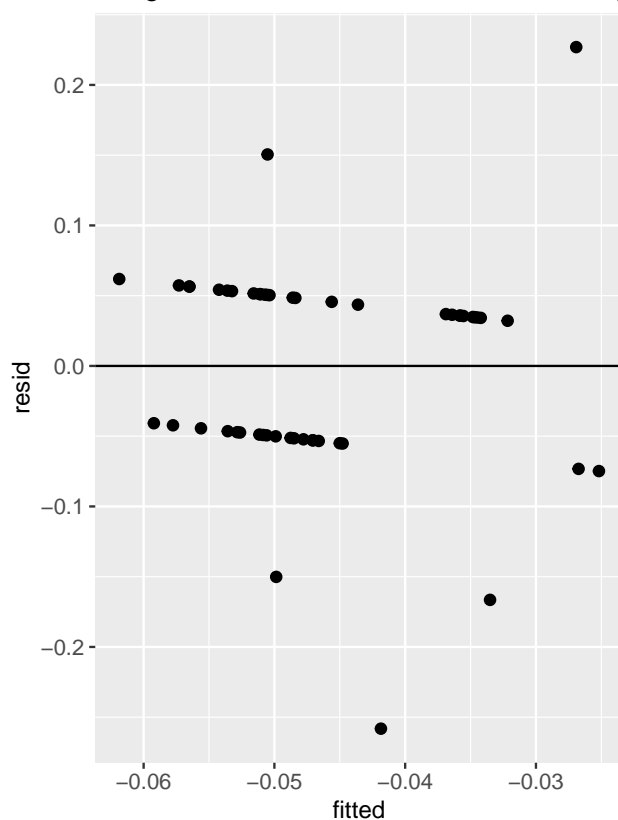|	Dependent variable:	
	nPFOSorig	
	(1)	(2)
Constant	−0.599	−0.939
	t = −1.508	t = −2.581
	p = 0.139	p = 0.014**
total.duration.hrs	−0.012	0.004
	t = −0.800	t = 0.331
	p = 0.428	p = 0.743
EthnicityHispanic	−0.052	−0.287
	t = −0.128	t = −0.797
	p = 0.899	p = 0.430
Observations	52	50
R^2	0.017	0.013
Adjusted R^2	−0.023	−0.029
Note:	*p<0.1; **p<0.05; ***p<0.01	

13

Table 13: PFDEA: total duration of fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFDEAorig	
	(1)	(2)
Constant	−0.009	−0.037
	t = −0.264	t = −1.107
	p = 0.794	p = 0.274
total.duration.hrs	−0.001	−0.0002
	t = −1.133	t = −0.160
	p = 0.263	p = 0.874
EthnicityHispanic	0.029	0.011
	t = 0.802	t = 0.327
	p = 0.427	p = 0.746
Observations	52	51
R^2	0.029	0.002
Adjusted R^2	−0.011	−0.039
Note:	*p<0.1; **p<0.05; ***p<0.01	

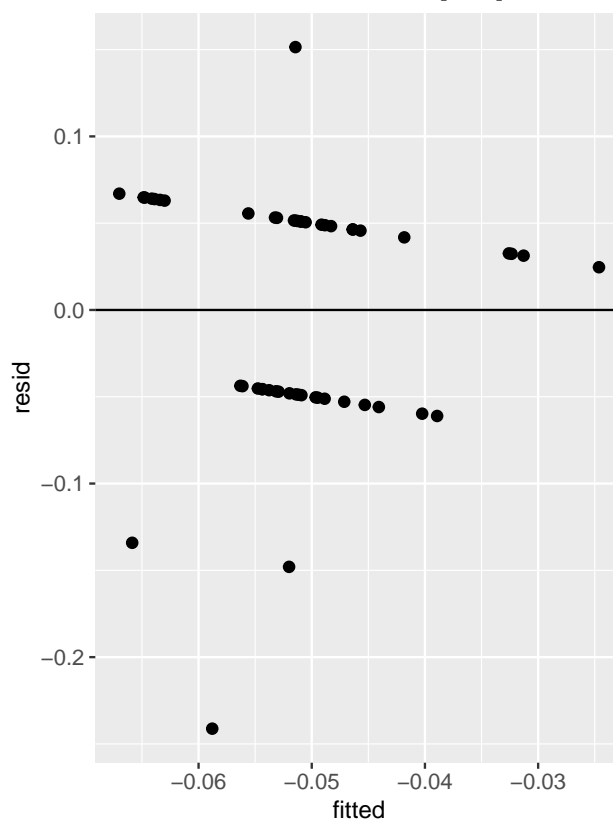PFDEAorig: total duration of structural fireruns (h

Outliers removed [−3,]

Table 14: PFDEA: total duration of structural fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFDEAorig	
	(1)	(2)
Constant	−0.065	−0.039
	t = −2.393	t = −1.523
	p = 0.021**	p = 0.135
str.duration.hrs	0.001	−0.001
	t = 0.702	t = −0.610
	p = 0.486	p = 0.545
EthnicityHispanic	0.004	0.029
	t = 0.107	t = 0.849
	p = 0.916	p = 0.401
Observations	52	51
R^2	0.014	0.016
Adjusted R^2	−0.027	−0.025
Note:	*p<0.1; **p<0.05; ***p<0.01	

PFHXSorig: total number of fireruns

Outliers removed [−31,], [−4,], [−40,]

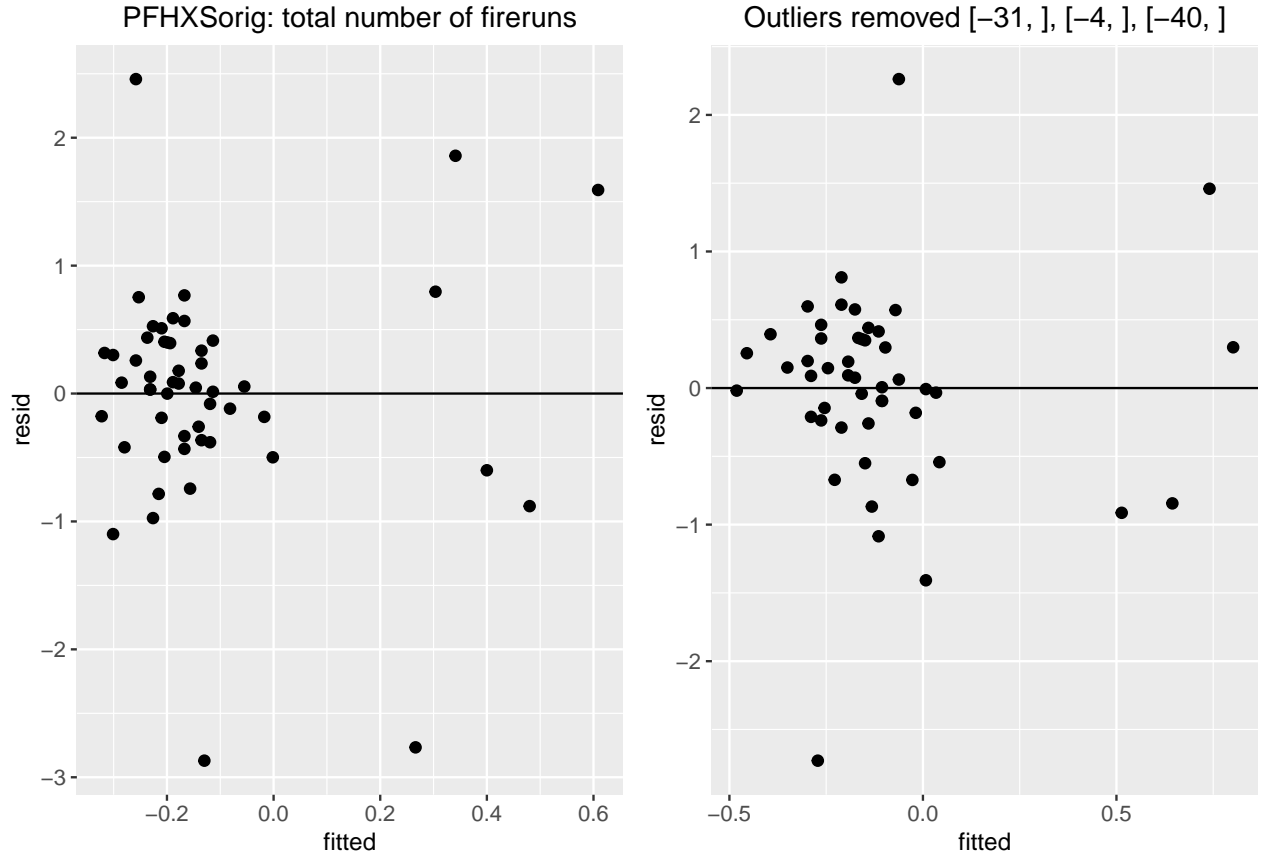Table 15: PFHXS: total number of fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.440	0.235
	t = −1.056	t = 0.601
	p = 0.297	p = 0.551
total.num.fireruns	0.005	−0.009
	t = 0.639	t = −1.103
	p = 0.526	p = 0.276
EthnicityHispanic	0.514	0.942
	t = 1.285	t = 2.367
	p = 0.205	p = 0.023**
Observations	52	49
R²	0.053	0.115
Adjusted R²	0.015	0.077
Note:	*p<0.1; **p<0.05; ***p<0.01	

16

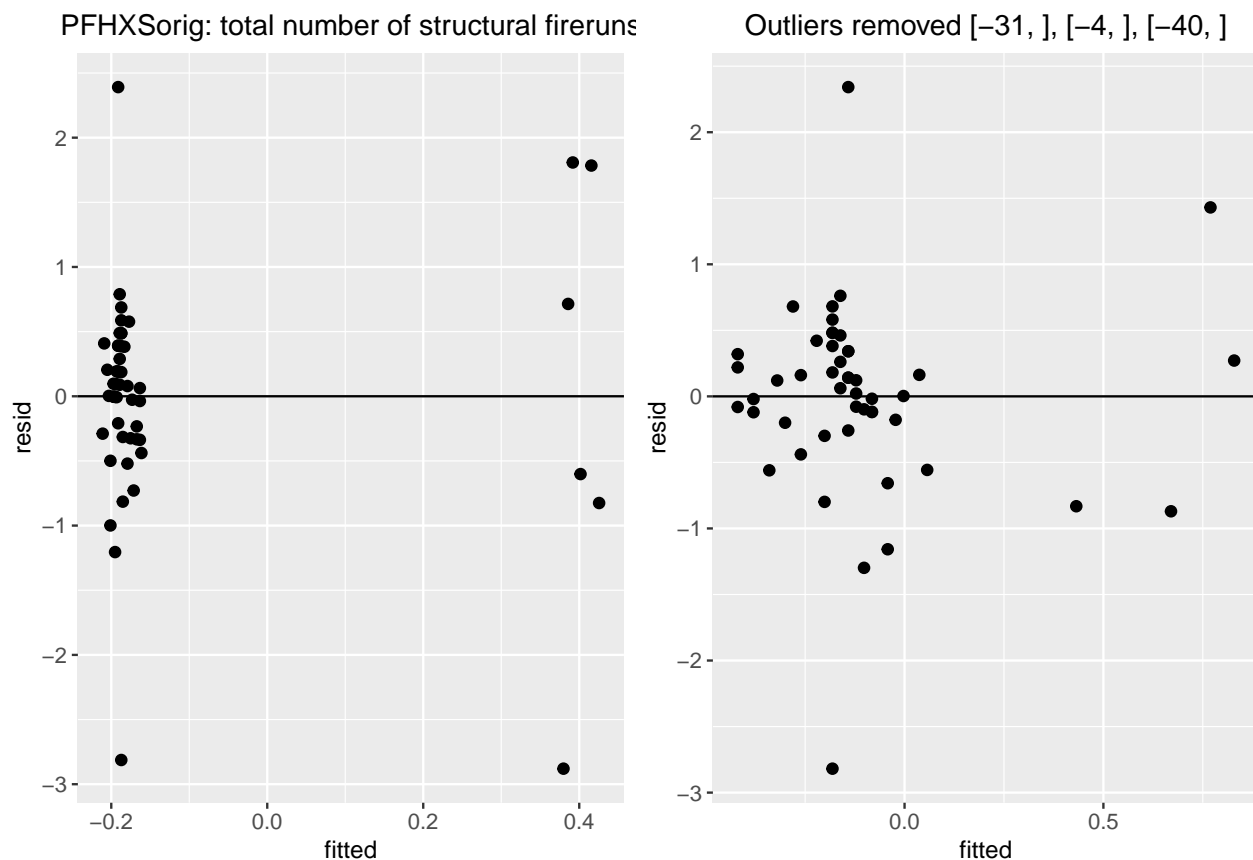PFHXSorig: total number of structural fireruns   Outliers removed [−31,], [−4,], [−40,]

Table 16: PFHXS: total number of structural fireruns - Change Score Models - 1) original and 2) outliers removed

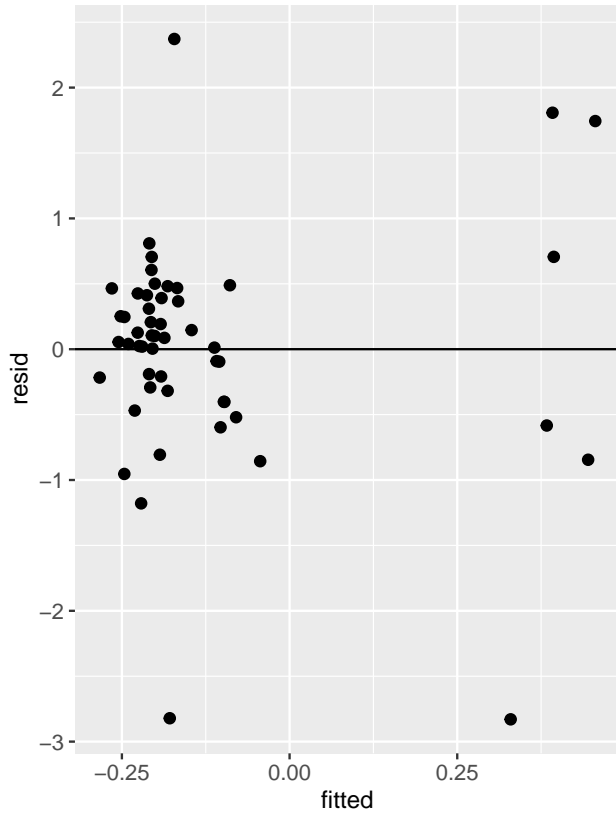|	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.219	0.136
	t = −0.646	t = 0.448
	p = 0.522	p = 0.656
str.num.fireruns	0.002	−0.020
	t = 0.102	t = −1.110
	p = 0.919	p = 0.273
EthnicityHispanic	0.573	1.010
	t = 1.403	t = 2.436
	p = 0.167	p = 0.019**
Observations	52	49
R^2	0.046	0.116
Adjusted R^2	0.007	0.077
Note:	*p<0.1; **p<0.05; ***p<0.01	

PFHXSorig: total duration of fireruns (hours) — Outliers removed [−23,]

Table 17: PFHXS: total duration of fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.442	−0.440
	t = −1.095	t = −1.048
	p = 0.279	p = 0.301
total.duration.hrs	0.010	0.010
	t = 0.667	t = 0.625
	p = 0.508	p = 0.535
EthnicityHispanic	0.490	0.491
	t = 1.196	t = 1.170
	p = 0.238	p = 0.248
Observations	52	51
R^2	0.054	0.054
Adjusted R^2	0.015	0.014
Note:	*p<0.1; **p<0.05; ***p<0.01	

PFHXSorig: total duration of structural fireruns (ho   Outliers removed [−31,]
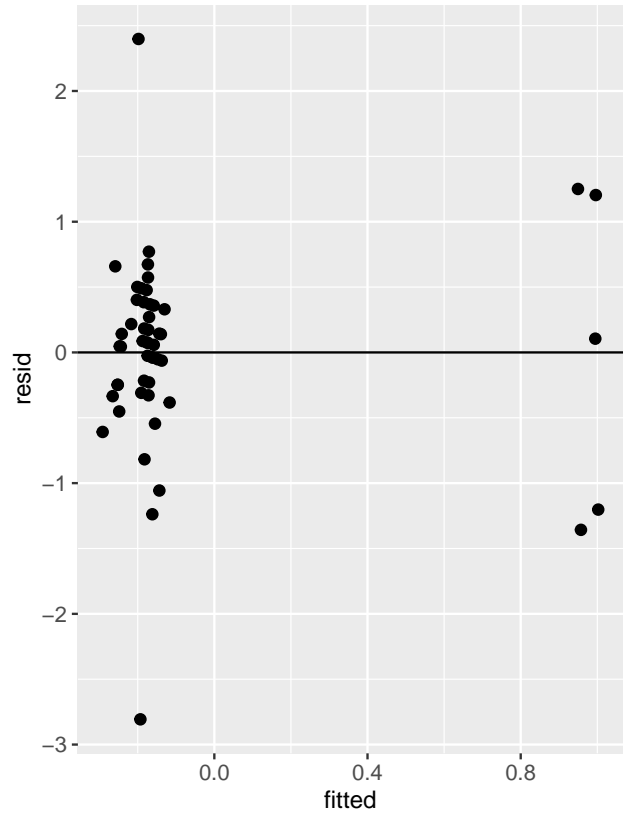

Table 18: PFHXS: total duration of structural fireruns (hours) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.305	−0.101
	t = −1.001	t = −0.373
	p = 0.322	p = 0.711
str.duration.hrs	0.009	−0.007
	t = 0.429	t = −0.354
	p = 0.670	p = 0.726
EthnicityHispanic	0.515	1.230
	t = 1.230	t = 3.052
	p = 0.225	p = 0.004***
Observations	52	51
R^2	0.049	0.180
Adjusted R^2	0.010	0.146
Note:	*p<0.1; **p<0.05; ***p<0.01	

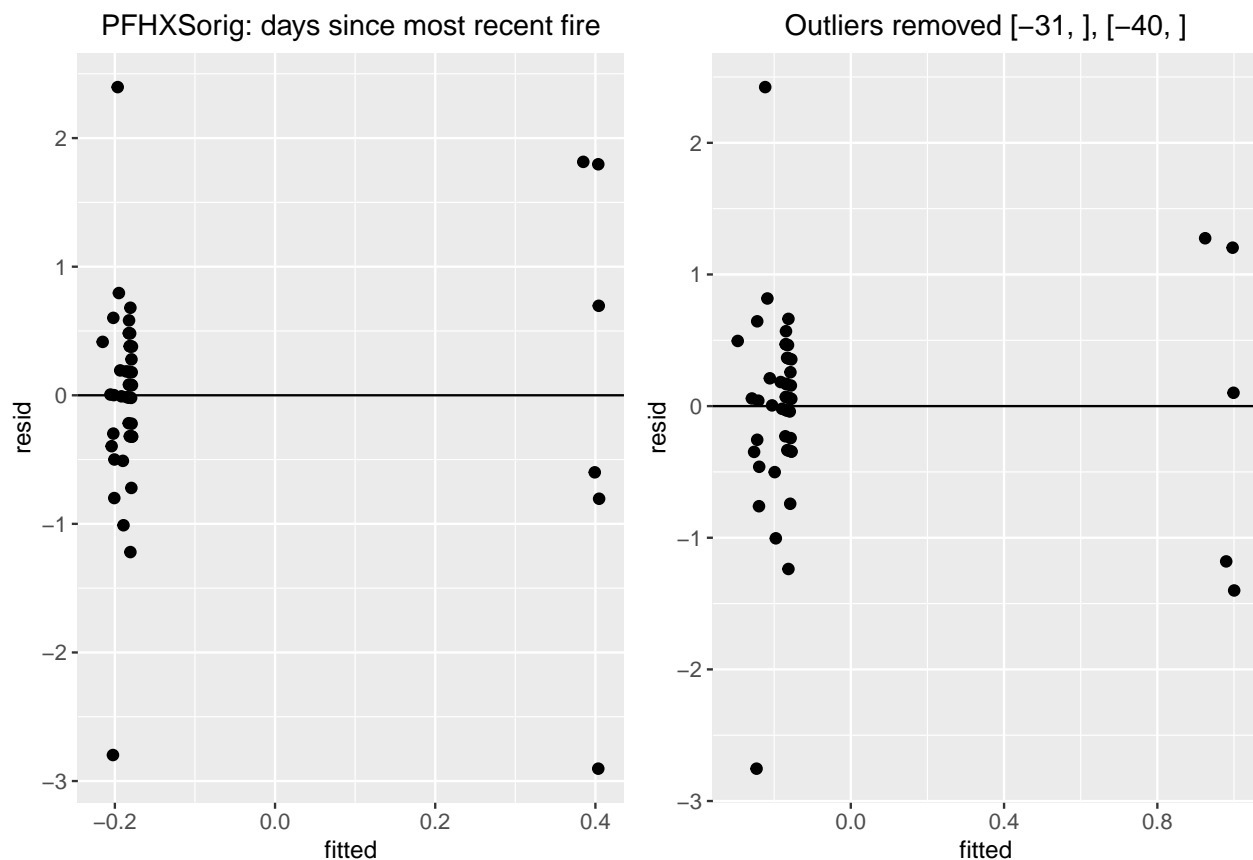PFHXSorig: days since most recent fire | Outliers removed [−31,], [−40,]

Table 19: PFHXS: days since most recent fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.178	−0.154
	t = −1.026	t = −1.022
	p = 0.310	p = 0.313
days.since.MRF	−0.0002	−0.001
	t = −0.075	t = −0.331
	p = 0.941	p = 0.743
EthnicityHispanic	0.585	1.164
	t = 1.520	t = 3.216
	p = 0.135	p = 0.003***
Observations	52	51
R²	0.045	0.180
Adjusted R²	0.007	0.146
Note:	*p<0.1; **p<0.05; ***p<0.01	

PFHXSorig: days since most recent structural fi
Outliers removed [−31,], [−40,]
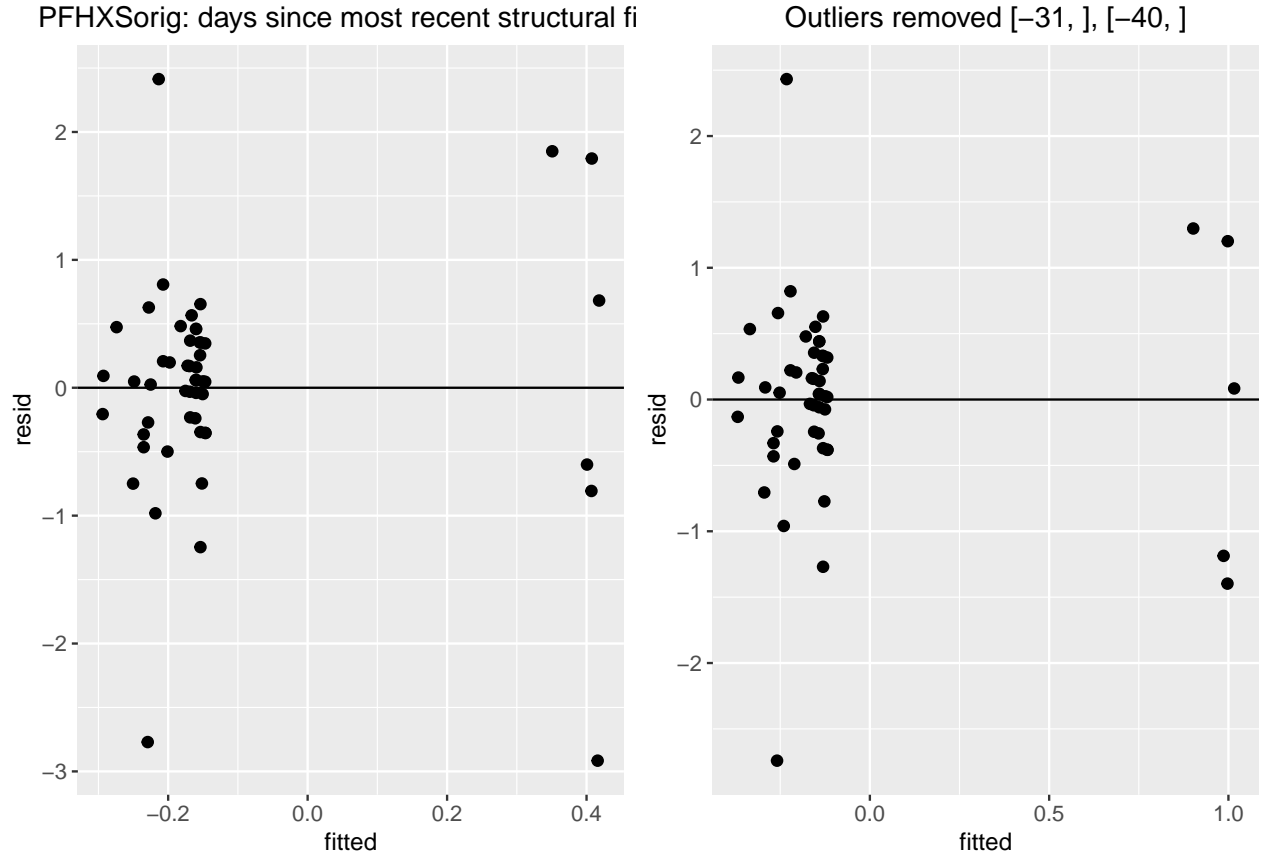
Table 20: PFHXS: days since most recent structural fire - Change Score Models - 1) original and 2) outliers removed

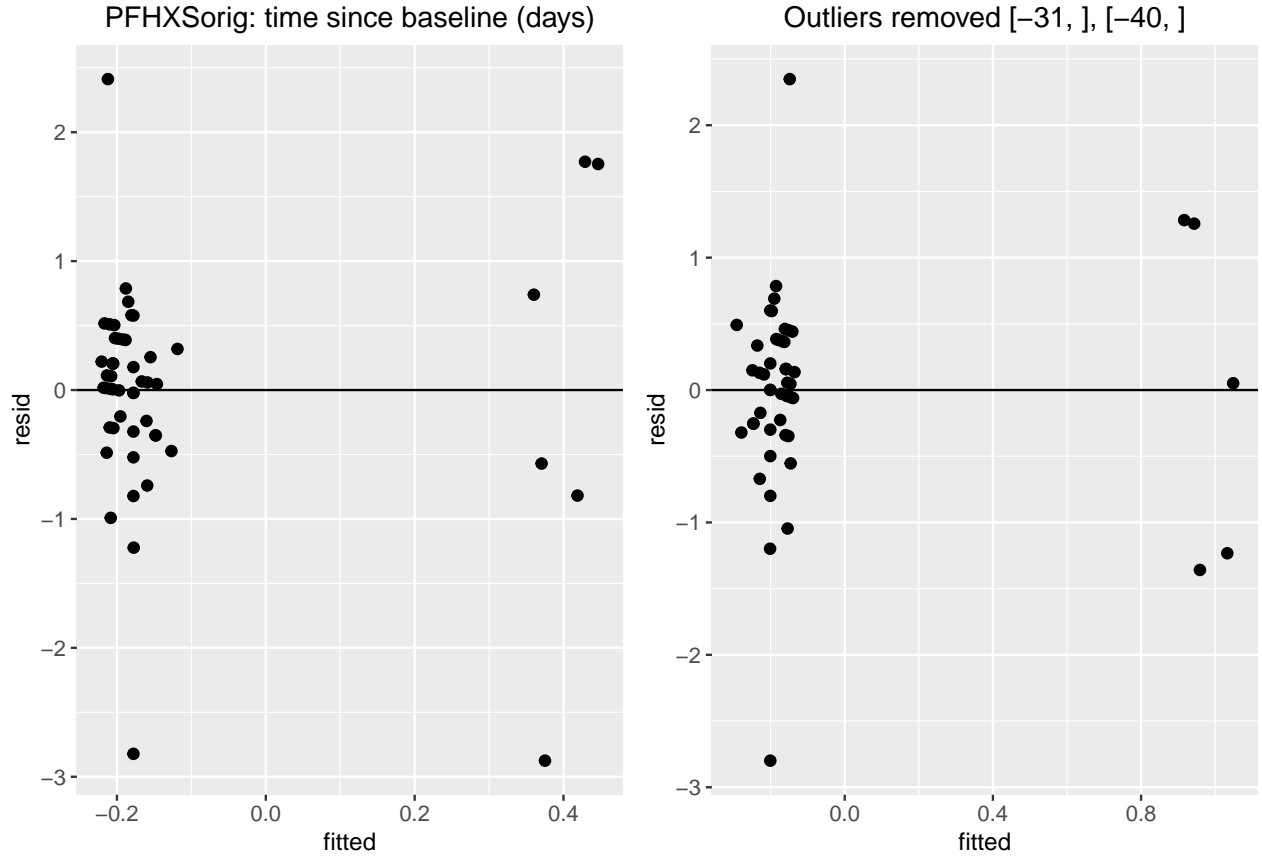|	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.146	−0.117
	t = −0.796	t = −0.738
	p = 0.430	p = 0.464
days.since.struc.MRF	−0.001	−0.001
	t = −0.320	t = −0.627
	p = 0.751	p = 0.534
EthnicityHispanic	0.574	1.150
	t = 1.485	t = 3.180
	p = 0.144	p = 0.003***
Observations	52	51
R²	0.047	0.185
Adjusted R²	0.008	0.151
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 21: PFHXS: time since baseline (days) - Change Score Models - 1) original and 2) outliers removed

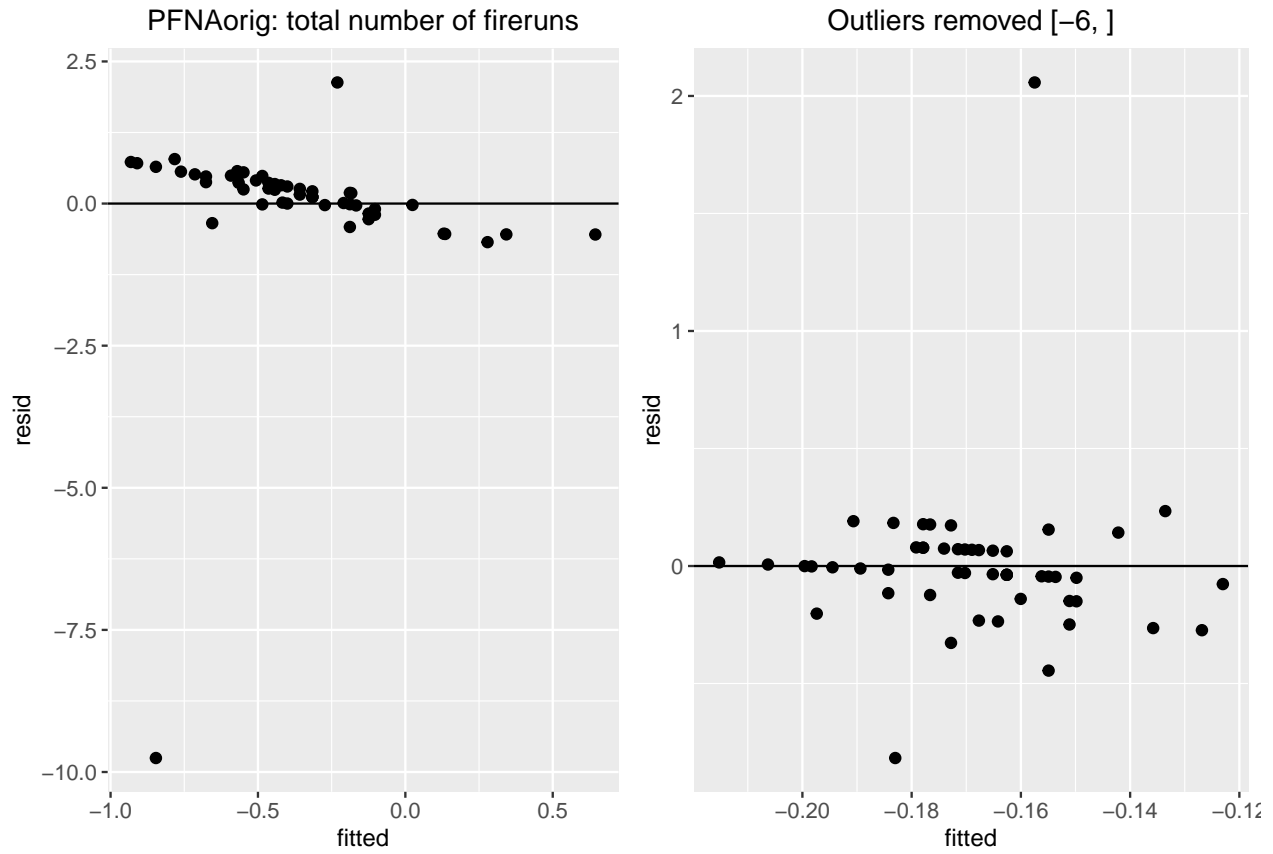|	Dependent variable:	
	PFHXSorig	
	(1)	(2)
Constant	−0.344	0.053
	t = −0.454	t = 0.080
	p = 0.652	p = 0.937
time.since.baseline	0.0002	−0.0003
	t = 0.210	t = −0.367
	p = 0.835	p = 0.716
EthnicityHispanic	0.573	1.195
	t = 1.470	t = 3.233
	p = 0.148	p = 0.003***
Observations	52	51
R^2	0.046	0.180
Adjusted R^2	0.007	0.146
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 22: PFNA: total number of fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFNAorig	
	(1)	(2)
Constant	−1.398	−0.228
	t = −1.998	t = −1.325
	p = 0.052*	p = 0.192
total.num.fireruns	0.021	0.001
	t = 1.512	t = 0.373
	p = 0.138	p = 0.711
EthnicityHispanic	−0.080	−0.034
	t = −0.119	t = −0.209
	p = 0.906	p = 0.836
Observations	52	51
R^2	0.047	0.003
Adjusted R^2	0.008	−0.038
Note:	*p<0.1; **p<0.05; ***p<0.01	

PFNAorig: total number of structural fireruns   Outliers removed [−6,]
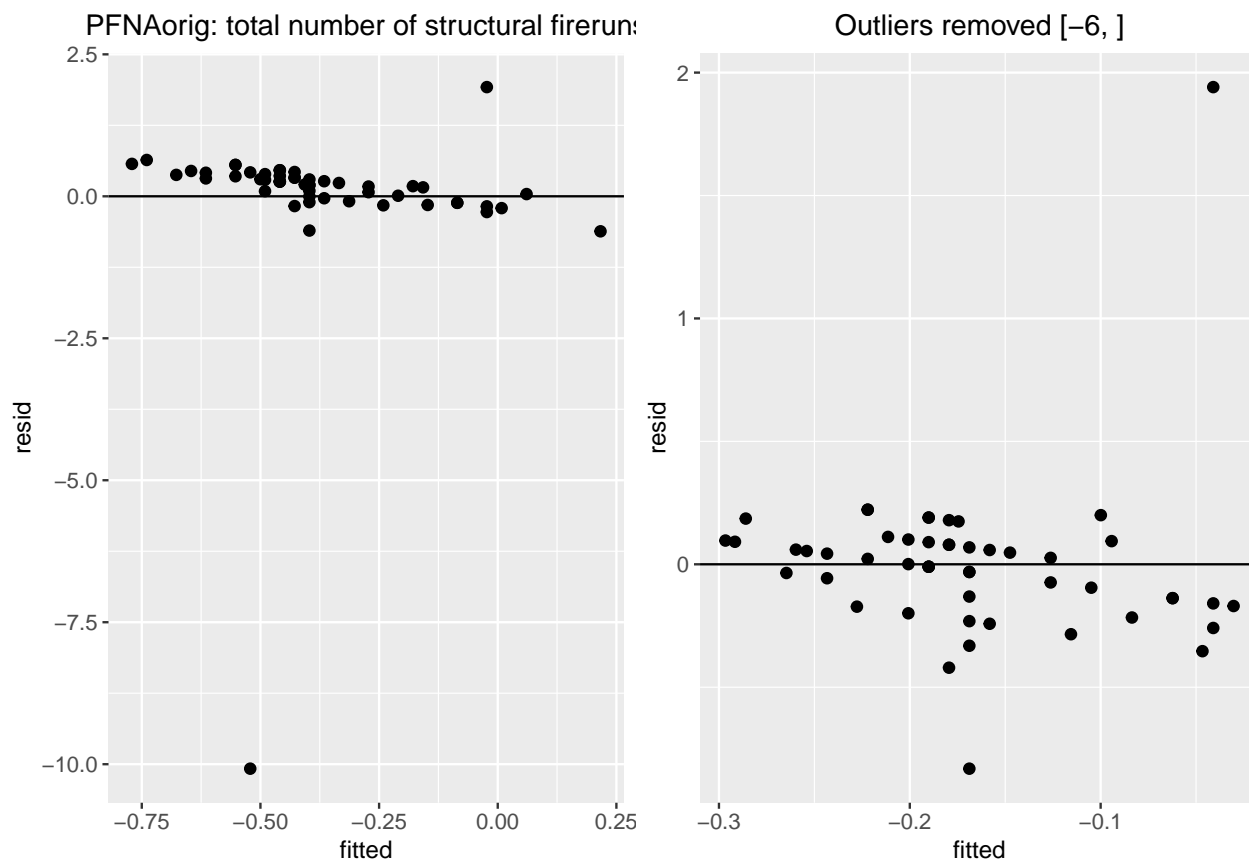
Table 23: PFNA: total number of structural fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFNAorig	
	(1)	(2)
Constant	−0.895	−0.339
	t = −1.558	t = −2.531
	p = 0.126	p = 0.015**
str.num.fireruns	0.031	0.011
	t = 0.947	t = 1.395
	p = 0.349	p = 0.170
EthnicityHispanic	−0.010	−0.091
	t = −0.014	t = −0.568
	p = 0.989	p = 0.573
Observations	52	51
R^2	0.020	0.039
Adjusted R^2	−0.020	−0.001
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 24: PFNA: total fireruns duration (hours) - Change Score Models - 1) original and 2) outliers removed

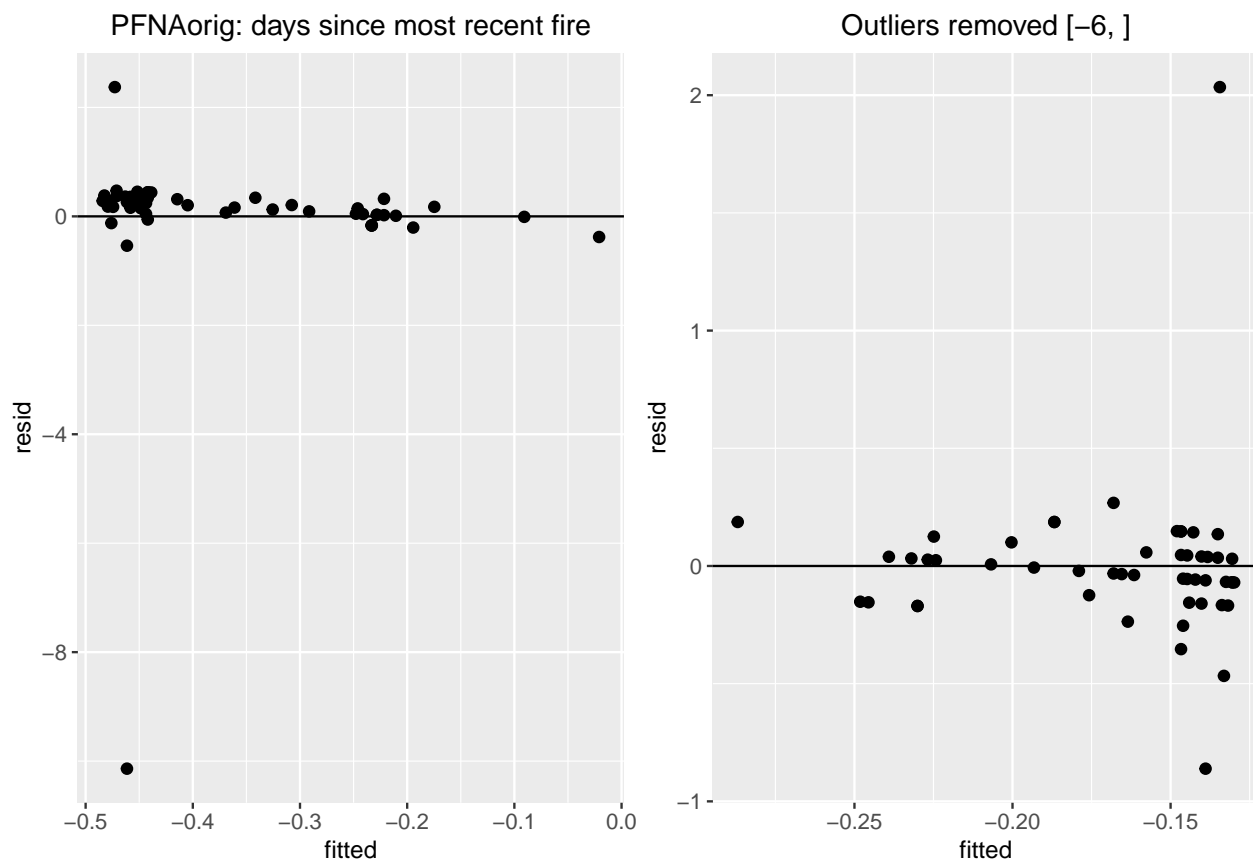|	*Dependent variable:*	
	PFNAorig	
	(1)	(2)
Constant	−1.406	−0.202
	t = −2.080	t = −1.211
	p = 0.043**	p = 0.233
total.duration.hrs	0.039	0.001
	t = 1.583	t = 0.225
	p = 0.120	p = 0.824
EthnicityHispanic	−0.176	−0.030
	t = −0.257	t = −0.181
	p = 0.799	p = 0.858
Observations	52	51
R^2	0.051	0.001
Adjusted R^2	0.012	−0.040
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 25: PFNA: days since most recent fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	PFNAorig	
	(1)	(2)
Constant	−0.486	−0.129
	t = −1.638	t = −1.846
	p = 0.108	p = 0.072*
days.since.MRF	0.002	−0.001
	t = 0.471	t = −0.806
	p = 0.640	p = 0.425
EthnicityHispanic	0.227	−0.024
	t = 0.345	t = −0.156
	p = 0.732	p = 0.877
Observations	52	51
R^2	0.007	0.014
Adjusted R^2	−0.034	−0.028
Note:	*p<0.1; **p<0.05; ***p<0.01	

26

PFNAorig: days since most recent structural fir   Outliers removed [−6,]
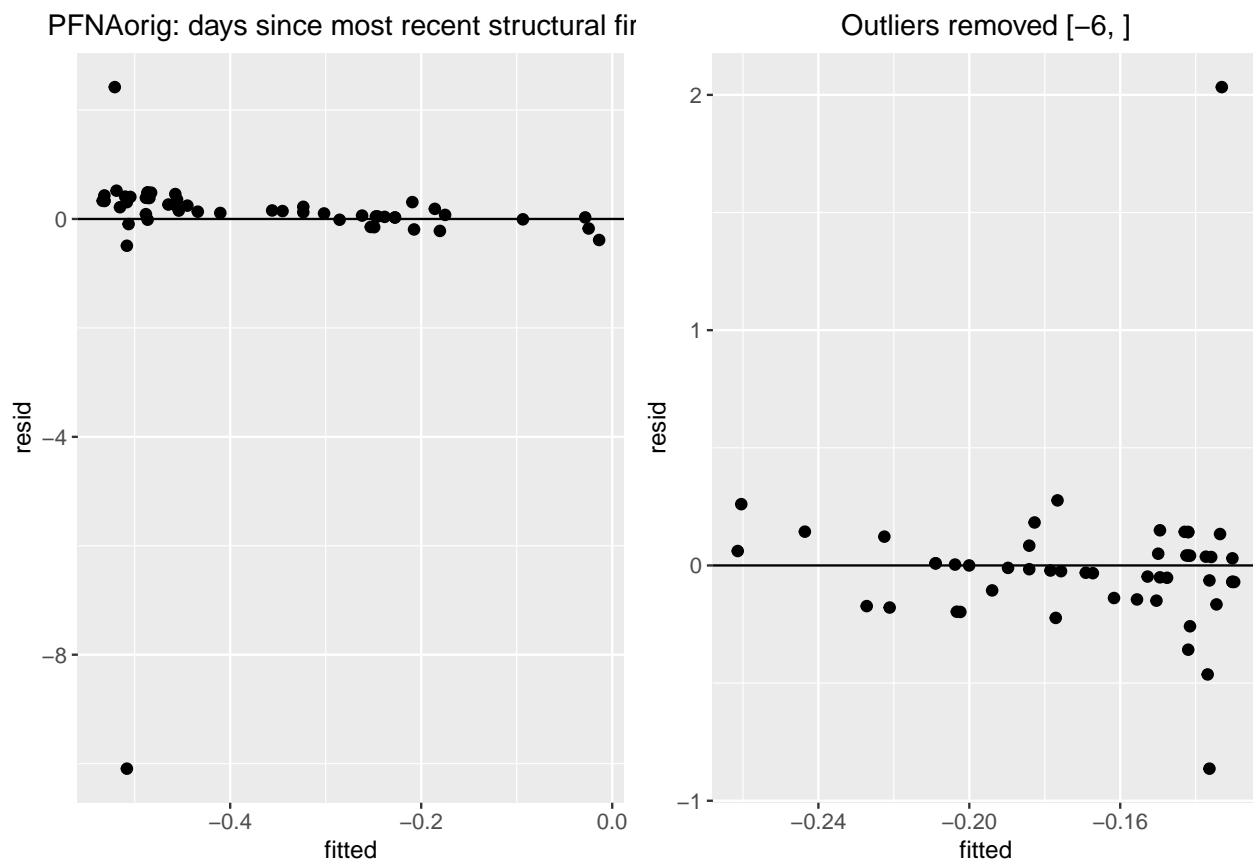
Table 26: PFNA: days since most recent structural fire - Change Score Models - 1) original and 2) outliers removed

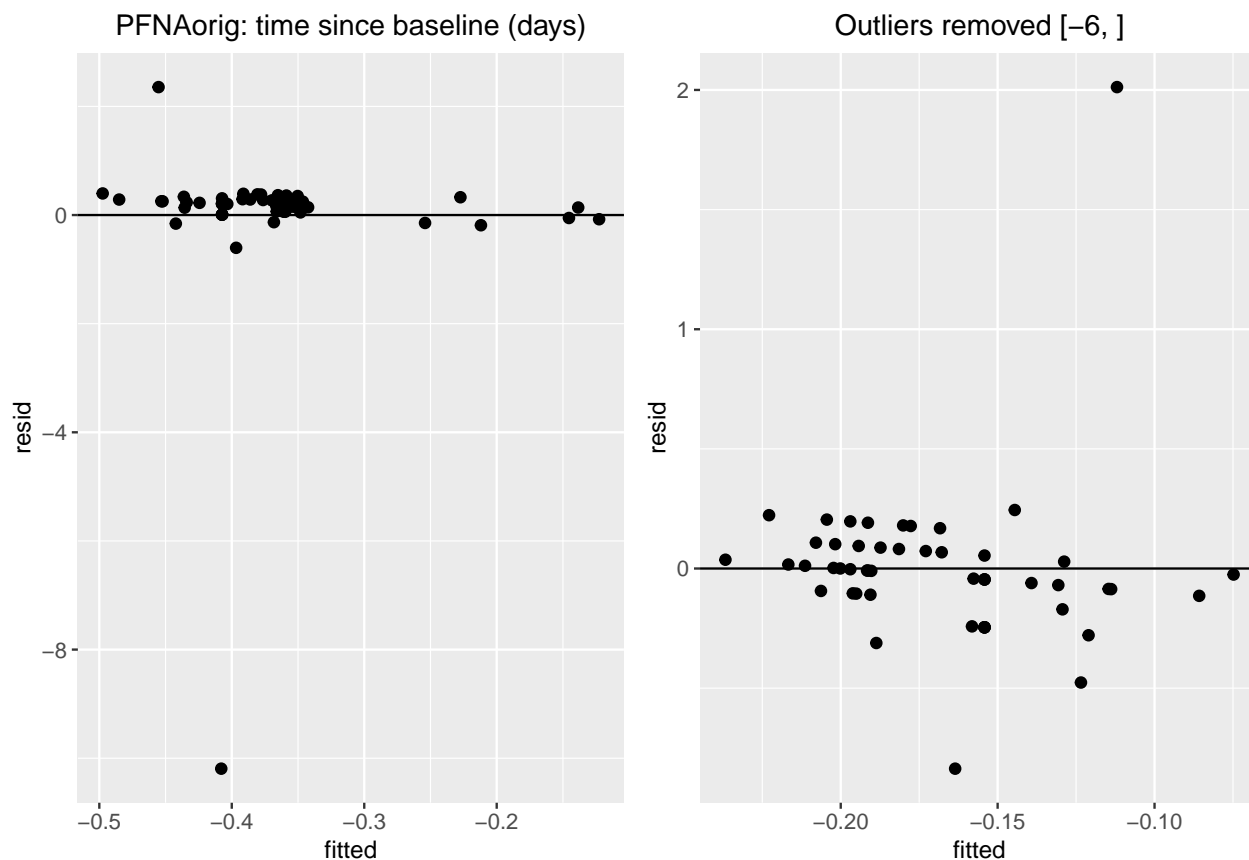|	Dependent variable:	
	PFNAorig	
	(1)	(2)
Constant	−0.535	−0.129
	t = −1.714	t = −1.744
	p = 0.093*	p = 0.088*
days.since.struc.MRF	0.002	−0.0005
	t = 0.647	t = −0.712
	p = 0.521	p = 0.480
EthnicityHispanic	0.255	−0.029
	t = 0.388	t = −0.189
	p = 0.700	p = 0.852
Observations	52	51
R^2	0.011	0.011
Adjusted R^2	−0.030	−0.031
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 27: PFNA: time since baseline (days) - Change Score Models - 1) original and 2) outliers removed

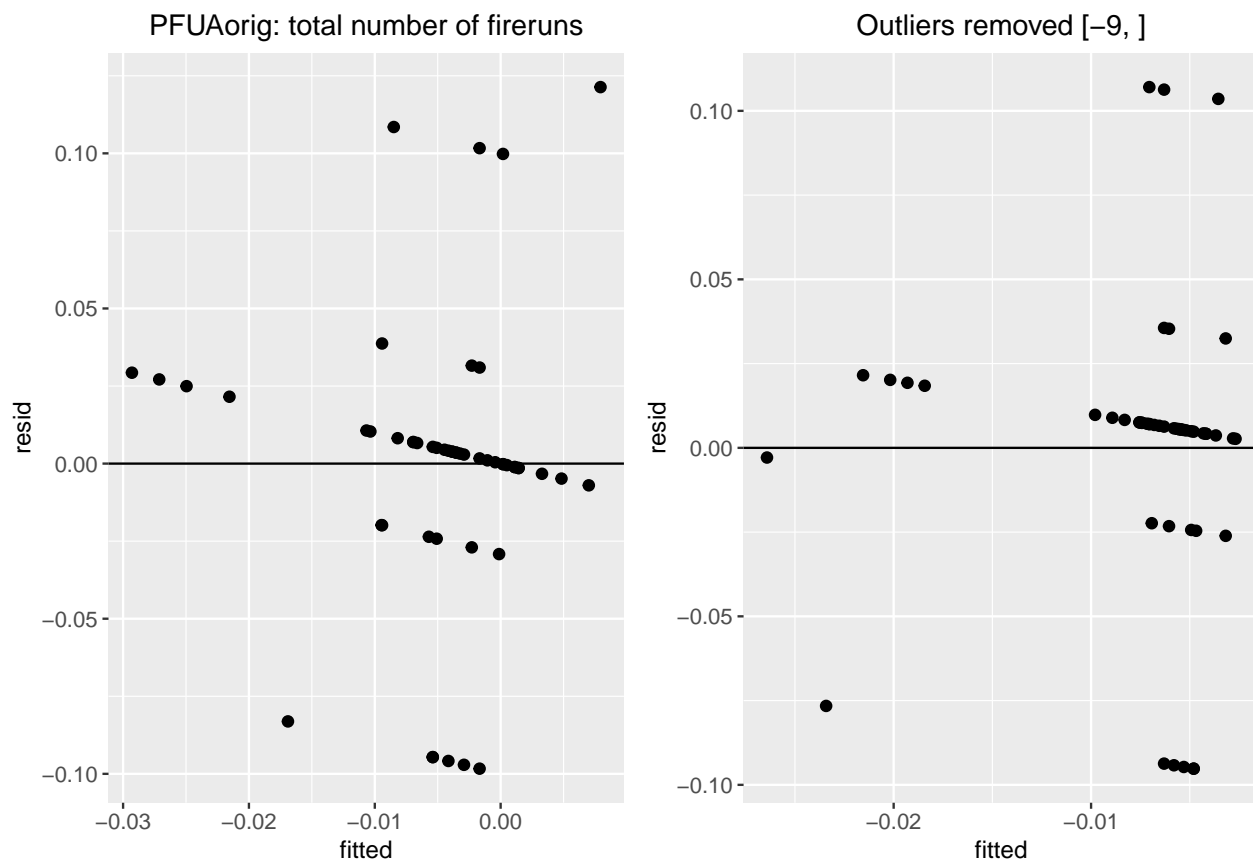|	*Dependent variable:*	
	PFNAorig	
	(1)	(2)
Constant	−0.155	−0.377
	t = −0.120	t = −1.251
	p = 0.906	p = 0.217
time.since.baseline	−0.0003	0.0003
	t = −0.187	t = 0.708
	p = 0.853	p = 0.483
EthnicityHispanic	0.231	−0.035
	t = 0.346	t = −0.227
	p = 0.731	p = 0.822
Observations	52	51
R^2	0.003	0.011
Adjusted R^2	−0.038	−0.031
Note:	*p<0.1; **p<0.05; ***p<0.01	

28

Table 28: PFUA: total number of fireruns - Change Score Models - 1) original and 2) outliers removed

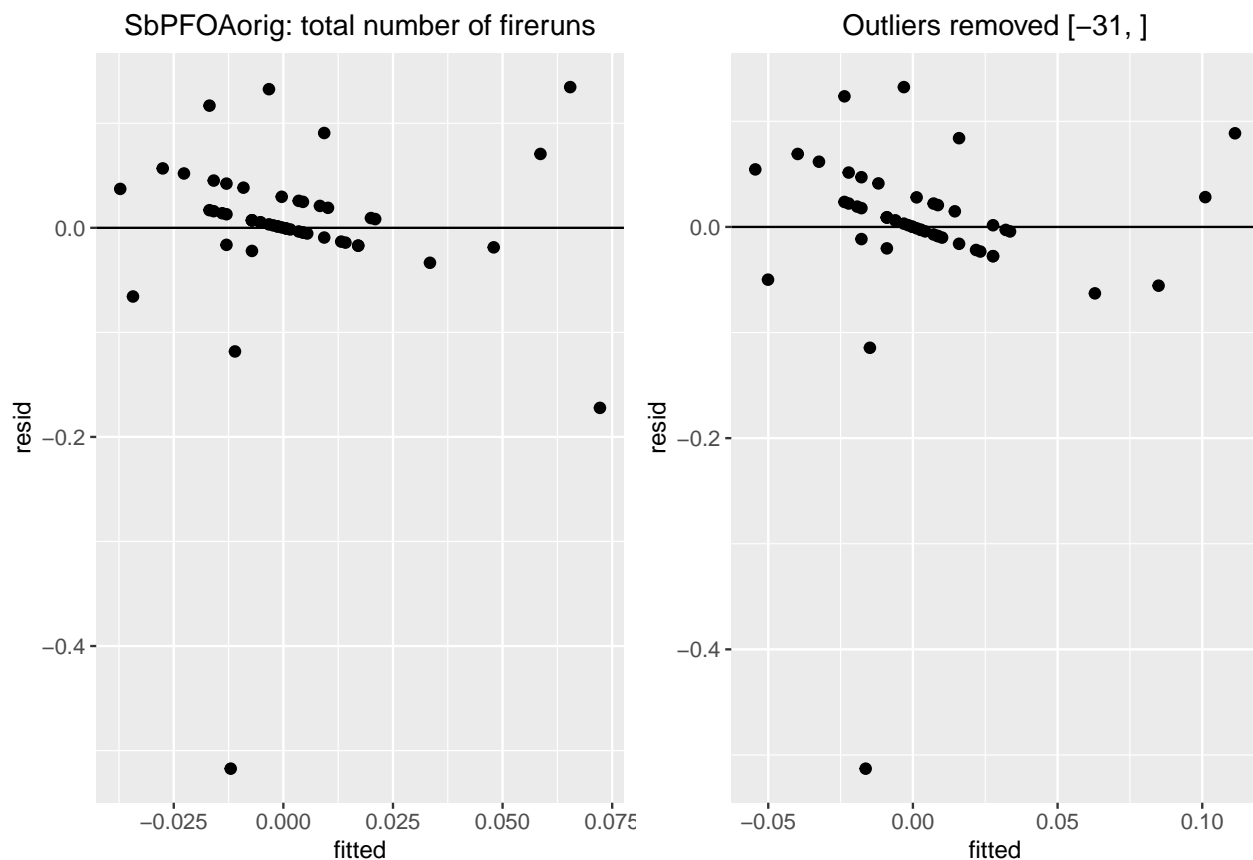|	*Dependent variable:*	
	PFUAorig	
	(1)	(2)
Constant	−0.017	0.0001
	t = −0.780	t = 0.003
	p = 0.440	p = 0.998
total.num.fireruns	0.0003	−0.0001
	t = 0.689	t = −0.282
	p = 0.494	p = 0.780
EthnicityHispanic	−0.023	−0.014
	t = −1.069	t = −0.693
	p = 0.291	p = 0.492
Observations	52	51
R^2	0.026	0.016
Adjusted R^2	−0.014	−0.025
Note:	*p<0.1; **p<0.05; ***p<0.01	

SbPFOAorig: total number of fireruns | Outliers removed [−31,]

Table 29: SbPFOA: total number of fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	SbPFOAorig	
	(1)	(2)
Constant	0.042	0.066
	t = 0.993	t = 1.559
	p = 0.326	p = 0.126
total.num.fireruns	−0.001	−0.001
	t = −1.134	t = −1.725
	p = 0.263	p = 0.091*
EthnicityHispanic	0.065	0.109
	t = 1.587	t = 2.481
	p = 0.119	p = 0.017**
Observations	52	51
R^2	0.058	0.126
Adjusted R^2	0.020	0.090
Note:	*p<0.1; **p<0.05; ***p<0.01	

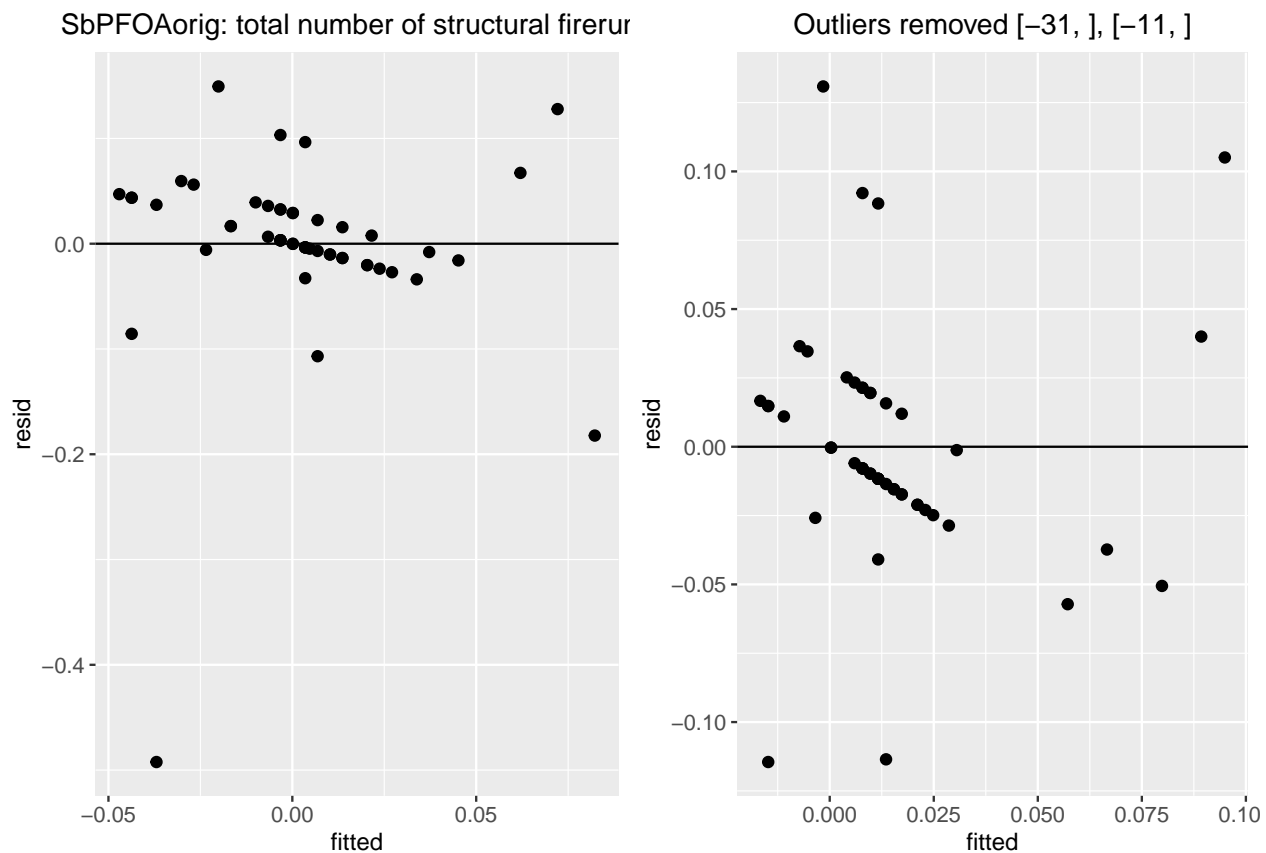| | SbPFOAorig: total number of structural firerun | Outliers removed [−31,], [−11,] |

Table 30: SbPFOA: total number of structural fireruns - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	SbPFOAorig	
	(1)	(2)
Constant	0.051	0.038
	t = 1.495	t = 2.148
	p = 0.142	p = 0.037**
str.num.fireruns	−0.003	−0.002
	t = −1.735	t = −1.825
	p = 0.090*	p = 0.075*
EthnicityHispanic	0.075	0.087
	t = 1.845	t = 3.767
	p = 0.072*	p = 0.0005***
Observations	52	50
R²	0.089	0.233
Adjusted R²	0.052	0.200
Note:	*p<0.1; **p<0.05; ***p<0.01	

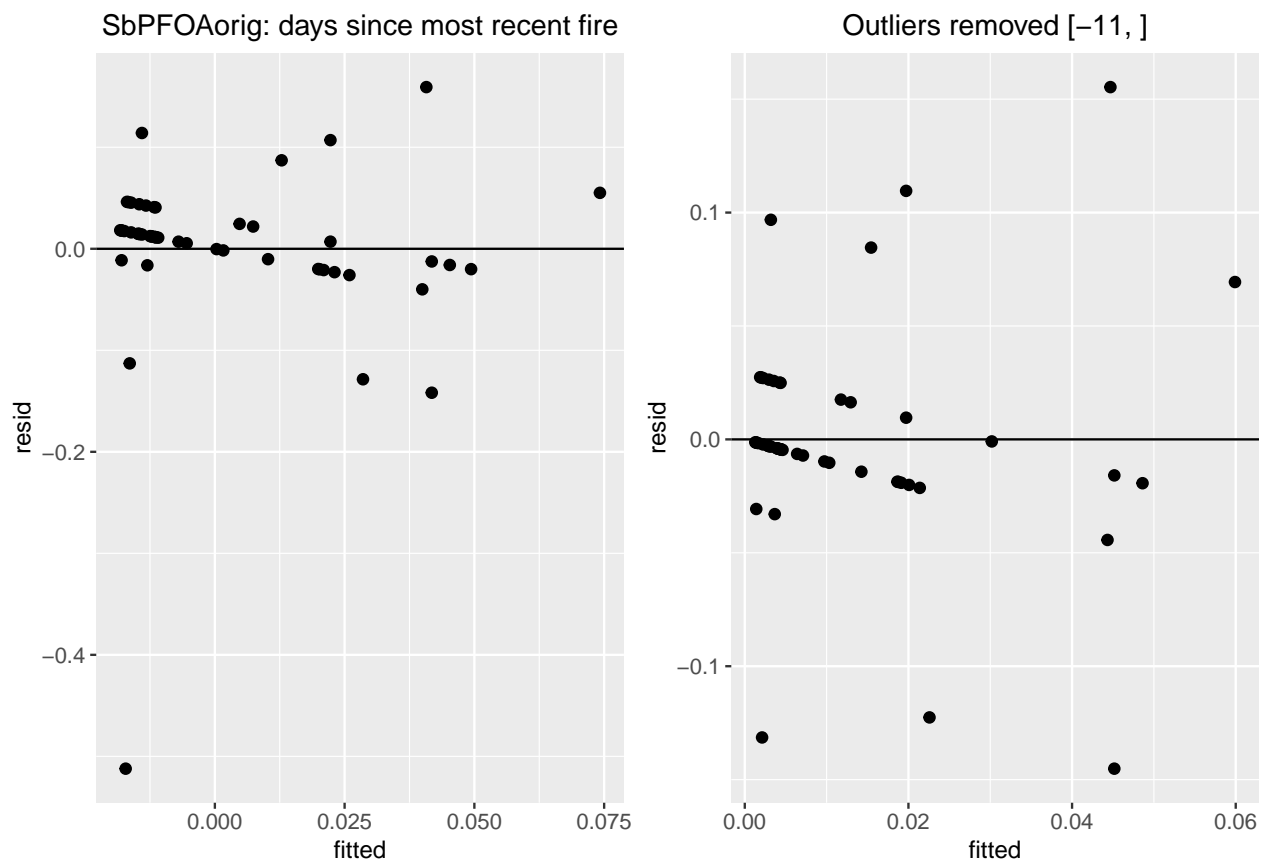SbPFOAorig: days since most recent fire   Outliers removed [−11,]

Table 31: SbPFOA: days since most recent fire - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	SbPFOAorig	
	(1)	(2)
Constant	−0.018	0.001
	t = −1.049	t = 0.115
	p = 0.300	p = 0.909
days.since.MRF	0.0003	0.0001
	t = 1.281	t = 1.025
	p = 0.207	p = 0.311
EthnicityHispanic	0.054	0.041
	t = 1.390	t = 1.868
	p = 0.171	p = 0.068*
Observations	52	51
R^2	0.065	0.083
Adjusted R^2	0.027	0.044
Note:	*p<0.1; **p<0.05; ***p<0.01	

SbPFOAorig: days since most recent structural

Outliers removed [−11,]

Table 32: SbPFOA: days since most recent structural fire - Change Score Models - 1) original and 2) outliers removed

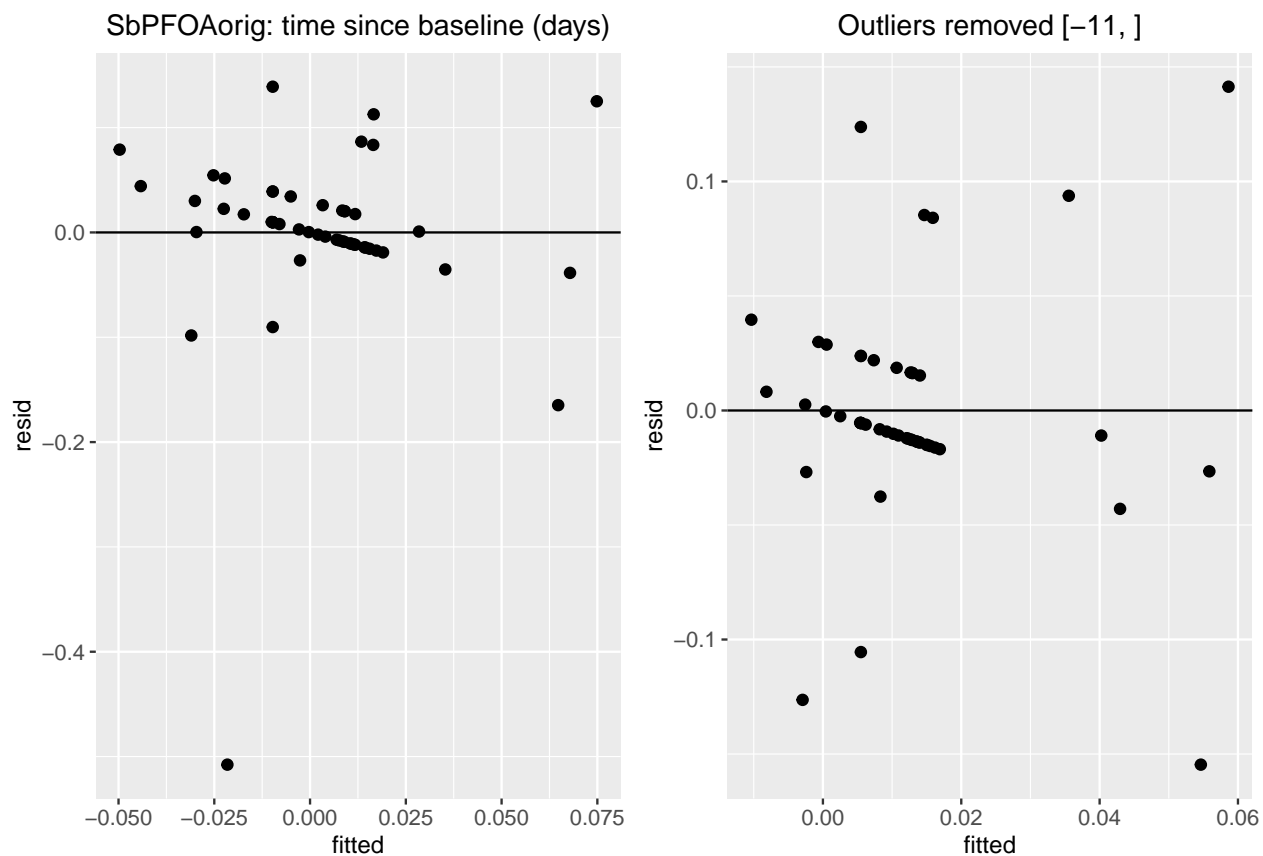|	Dependent variable:	
	SbPFOAorig	
	(1)	(2)
Constant	−0.017	−0.0005
	t = −0.916	t = −0.043
	p = 0.365	p = 0.966
days.since.struc.MRF	0.0002	0.0001
	t = 1.031	t = 1.148
	p = 0.308	p = 0.257
EthnicityHispanic	0.056	0.043
	t = 1.417	t = 1.929
	p = 0.163	p = 0.060*
Observations	52	51
R^2	0.054	0.088
Adjusted R^2	0.015	0.050
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 33: SbPFOA: time since baseline (days) - Change Score Models - 1) original and 2) outliers removed

	Dependent variable:	
	SbPFOAorig	
	(1)	(2)
Constant	0.102	0.050
	t = 1.335	t = 1.140
	p = 0.189	p = 0.260
time.since.baseline	−0.0001	−0.0001
	t = −1.403	t = −0.970
	p = 0.167	p = 0.337
EthnicityHispanic	0.061	0.044
	t = 1.542	t = 1.949
	p = 0.130	p = 0.058*
Observations	52	51
R^2	0.071	0.081
Adjusted R^2	0.033	0.042
Note:	*p<0.1; **p<0.05; ***p<0.01	