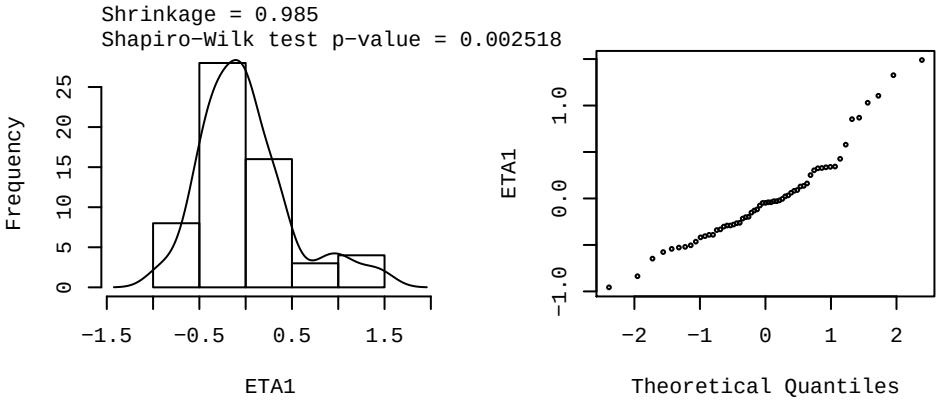
Normality and Population Shrinkage of Etas

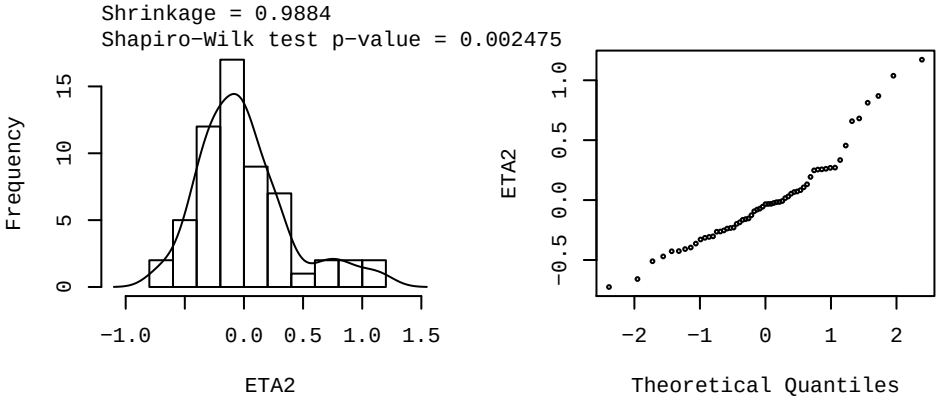
Eta 1

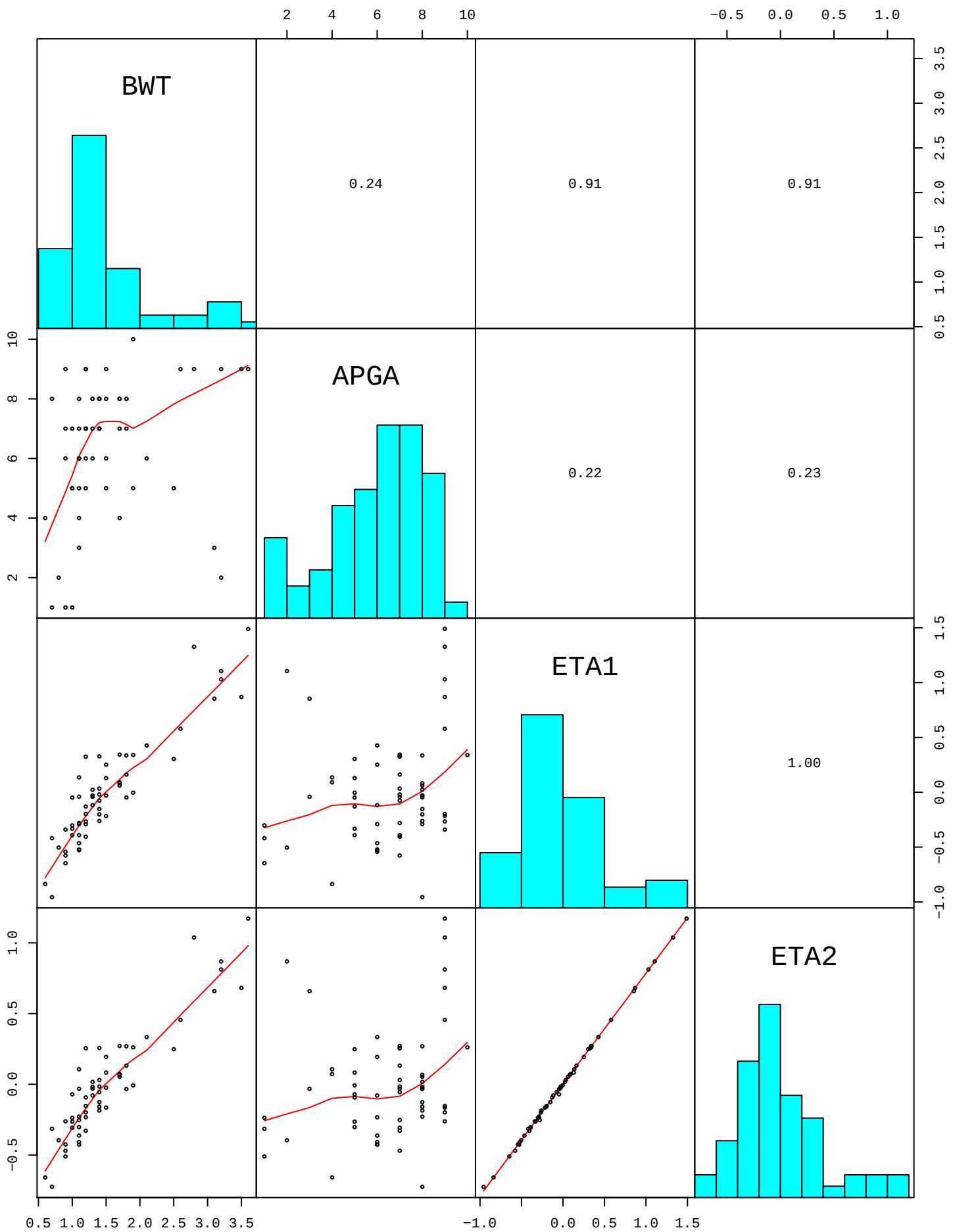
```
Minimum : −0.9563
1st Qu. : −0.3173
Median  : −0.0471
Mean    : −0.004655
3rd Qu. : 0.2066
Maximum : 1.489
Std Dev : 0.4962
t−test p= 0.9428
```

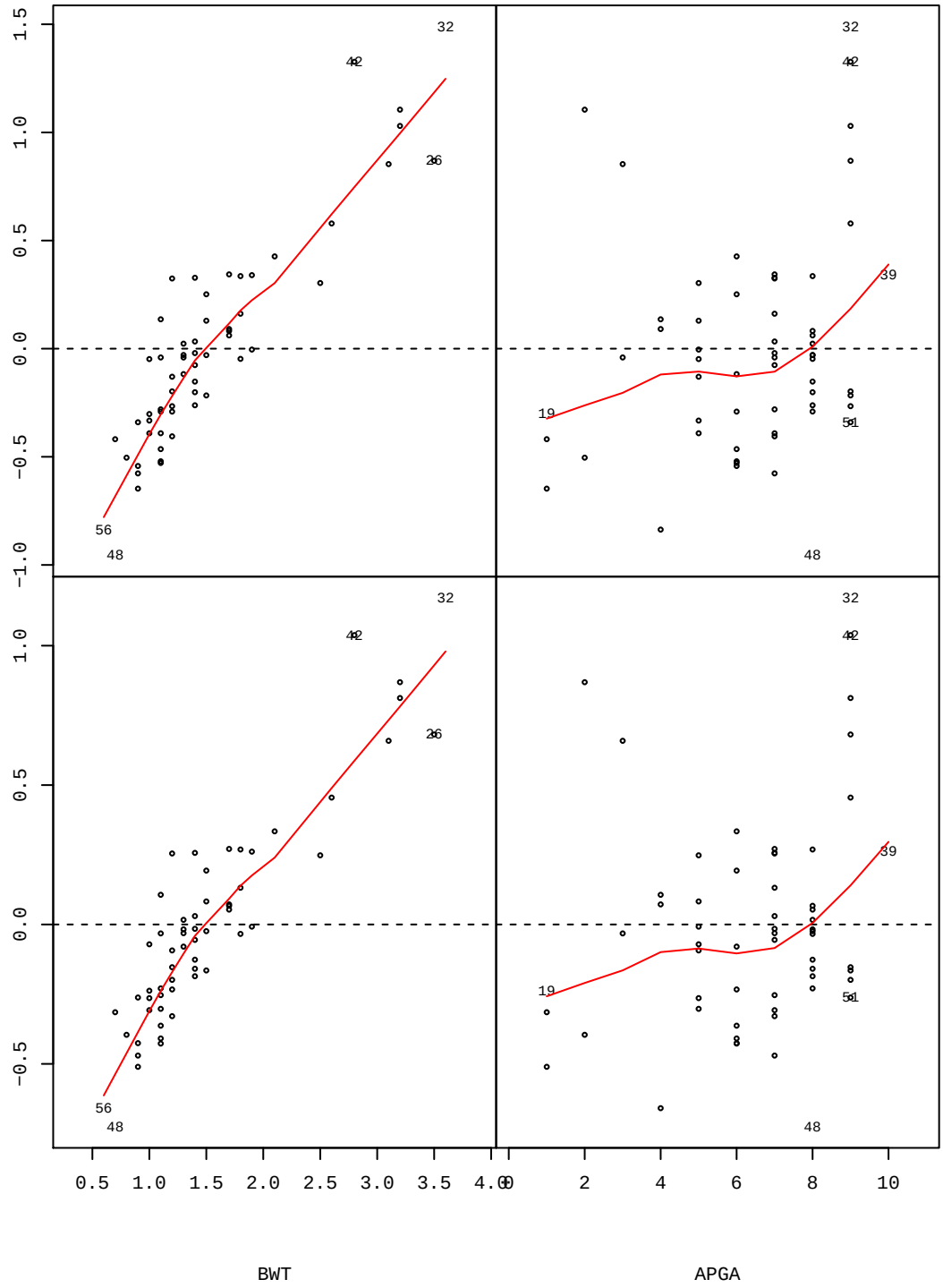


Eta 2

```
Minimum : −0.7253
1st Qu. : −0.2577
Median  : −0.03379
Mean    : −0.003903
3rd Qu. : 0.1625
Maximum : 1.172
Std Dev : 0.3892
t−test p= 0.9389
```




Covariate vs ETA of 2005
BWT
APGA
ETA1
ETA2
0.24
0.91
0.91
0.22
0.23
1.00


ETA1
ETA2
BWT
APGA
1.5
1.0
0.5
0.0
−0.5
−1.0
0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0
0 2 4 6 8 10
32
42
26
56
48
19
39
51

Estimation vs EBE

$`Correlation of Covariates and EBE`

	BWT	APGA	ETA1	ETA2
BWT	1.0000000	0.2445790	0.9118076	0.9131330
APGA	0.2445790	1.0000000	0.2244595	0.2273454
ETA1	0.9118076	0.2244595	1.0000000	0.9996951
ETA2	0.9131330	0.2273454	0.9996951	1.0000000

$`Covariance of EBE`

	ETA1	ETA2
ETA1	0.2462461	0.1930863
ETA2	0.1930863	0.1514951

$`Omega Matrix`

	Eta 1	Eta 2
Eta 1	0.2538128	0.1965735
Eta 2	0.1965735	0.1550651

$`Ratios of Cov(EBE)/OM`

	ETA1	ETA2
ETA1	0.9701879	0.9822603
ETA2	0.9822603	0.9769774

$`Correlation of EBE`

	ETA1	ETA2
ETA1	1.0000000	0.9996951
ETA2	0.9996951	1.0000000

$`Correlation from Omega Matrix`

	Eta 1	Eta 2
Eta 1	1.0000000	0.9908573
Eta 2	0.9908573	1.0000000

$`Ratios of Cor(EBE)/(Cor from OM)`

	ETA1	ETA2
ETA1	1.000000	1.008919
ETA2	1.008919	1.000000

Multiple Linear Regression : ETA 1

```
Residuals:
    Min      1Q  Median      3Q     Max
−0.4223 −0.1439 −0.0101  0.1131  0.5379

Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept) −0.9860667  0.0923394 −10.679 4.01e−15 ***
BWT          0.6419294  0.0398565  16.106  < 2e−16 ***
APGA         0.0003421  0.0125496   0.027    0.978
−−−
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2074 on 56 degrees of freedom
Multiple R−squared:  0.8314, Adjusted R−squared:  0.8254
F−statistic: 138.1 on 2 and 56 DF,  p−value: < 2.2e−16
```

Multiple Linear Regression − Influence : ETA 1

$`Model Estimates`

	Variable	Estimate	SE	T	p−value
1	Intercept	−0.9860666556	0.09233941	−10.67871890	4.010894e−15
2	BWT	0.6419293760	0.03985646	16.10603102	0.000000e+00
3	APGA	0.0003421342	0.01254961	0.02726254	9.783473e−01

$`Influence Diagnostics with DFBETAs`

	Yhat	Residual	R−Student	hat	Cook's D	COV−Ratio	DFFITS
1	−0.08497059	0.009107890	0.04395151	0.01915782	1.280511e−05	1.0760467	0.006142530
2	−0.02009338	−0.196139616	−0.96561198	0.04165458	1.352537e−02	1.0472527	−0.201313545
3	−0.02111979	0.272628786	1.33567393	0.01756933	1.048805e−02	0.9763008	0.178618765
4	−0.40627741	−0.136245588	−0.66395860	0.03054887	4.677224e−03	1.0630379	−0.117862489
5	−0.08497059	0.412894590	2.06850009	0.01915782	2.631639e−02	0.8595460	0.289087340
6	−0.21404073	0.084323733	0.40888309	0.02564910	1.489159e−03	1.0735103	0.066340319
7	−0.34242661	0.010001609	0.04854135	0.03031533	2.500005e−05	1.0884028	0.008582774
8	−0.21335647	−0.191924535	−0.93538527	0.02314463	6.925493e−03	1.0305818	−0.143979451
9	−0.08462846	−0.177132544	−0.86434731	0.02775522	7.141513e−03	1.0426096	−0.146040346
10	−0.08497059	0.064599890	0.31200688	0.01915782	6.441863e−04	1.0704659	0.043605141
11	−0.21335647	0.537939465	2.77760806	0.02314463	5.440722e−02	0.7288150	0.427544129
12	−0.14950566	0.031985662	0.15436530	0.01894049	1.560671e−04	1.0745245	0.021448536
13	−0.27789154	−0.242863463	−1.18942518	0.02326701	1.115098e−02	1.0014070	−0.183577505
14	−0.27754940	−0.003000597	−0.01453222	0.02624629	1.931902e−06	1.0839815	−0.002385840
15	−0.14916353	0.108427327	0.52496738	0.02078181	1.975158e−03	1.0619020	0.076477601
16	−0.21267220	−0.053189803	−0.26095740	0.04994043	1.213409e−03	1.1069117	−0.059830185
17	−0.27823367	−0.112830329	−0.54832494	0.02761280	2.881931e−03	1.0679081	−0.092400342
18	−0.34242661	0.294417209	1.45616370	0.03031533	2.166345e−02	0.9717612	0.257469655
19	−0.34379515	0.041614145	0.21193257	0.11867324	2.050977e−03	1.1947458	0.077768841
20	−0.21369860	−0.077238401	−0.37349175	0.02073433	9.998976e−04	1.0697325	−0.054347025
21	0.17180116	−0.010102161	−0.04877190	0.02005026	1.651737e−05	1.0770004	−0.006976343
22	−0.02043552	−0.009388182	−0.04547003	0.02630109	1.895341e−05	1.0839328	−0.007473084
23	1.00494081	−0.151482813	−0.80522615	0.18214410	4.843823e−02	1.2460329	−0.380003006
24	1.06879162	0.036418384	0.19898206	0.23436476	4.110454e−03	1.3756771	0.110090317
25	−0.53637396	0.117820958	0.60373800	0.12438605	1.745788e−02	1.1818362	0.227550615
26	1.26376537	−0.394821368	−2.13797611	0.15634811	2.654406e−01	0.9846852	−0.920380728
27	0.23530983	−0.239412210	−1.17787379	0.03259070	1.547269e−02	1.0125300	−0.216192413
28	1.07118656	−0.041296555	−0.21050882	0.12030373	2.055139e−03	1.1969994	−0.077847284
29	−0.34174234	−0.049451660	−0.24009873	0.03008678	6.062779e−04	1.0848714	−0.042287431
30	0.17214329	0.163496705	0.79643507	0.02637173	5.764614e−03	1.0474729	0.131075968
31	−0.08462846	−0.116712544	−0.56734181	0.02775522	3.100477e−03	1.0668362	−0.095858219
32	1.32795831	0.161511694	0.85275327	0.16984057	4.983407e−02	1.2223658	0.385712187
33	0.10795036	−0.025897057	−0.12539895	0.02560935	1.402275e−04	1.0823568	−0.020329494
34	0.10658182	−0.015817020	−0.07723479	0.04199795	8.874515e−05	1.1014588	−0.016171258
35	0.62046746	−0.316916455	−1.60460963	0.06735528	6.028770e−02	0.9866228	−0.431218214
36	−0.02146192	0.150747921	0.73287032	0.02419105	4.475358e−03	1.0506298	0.115391041
37	−0.21267220	0.015302197	0.07503235	0.04994043	1.004288e−04	1.1106873	0.017202805
38	−0.14882139	0.172009893	0.83998572	0.02994819	7.299407e−03	1.0473049	0.147590955
39	0.23702050	0.103011499	0.50933600	0.06135312	5.728008e−03	1.1087734	0.130218170
40	−0.27891794	0.238254339	1.18831769	0.05827958	2.891706e−02	1.0387842	0.295617251
41	0.10760822	0.235898777	1.15173330	0.01871889	8.385804e−03	1.0014576	0.159072573
42	0.81441481	0.512155195	2.72216023	0.08258829	1.995230e−01	0.7874699	0.816753057
43	−0.40798808	−0.239185917	−1.23521998	0.11983867	6.860308e−02	1.1047458	−0.455786710
44	−0.08497059	0.118209990	0.57212519	0.01915782	2.157030e−03	1.0571725	0.079958492
45	−0.47183889	−0.032167114	−0.16117404	0.08980383	8.694588e−04	1.1580459	−0.050626161
46	−0.27720727	−0.013450732	−0.06549322	0.03655064	5.522414e−05	1.0953313	−0.012756437
47	0.68602893	−0.107031930	−0.53125485	0.06816358	6.971075e−03	1.1154952	−0.143684288

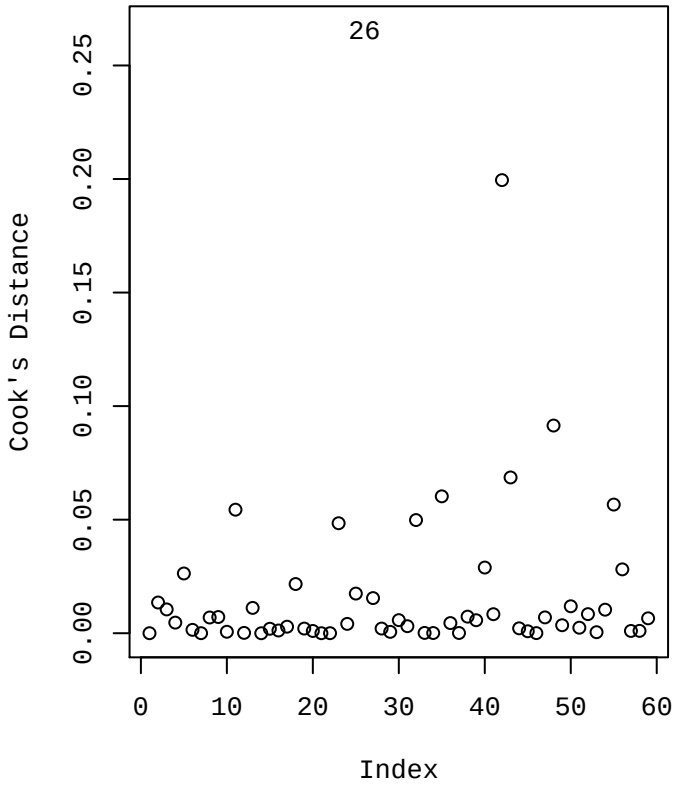
Multiple Linear Regression − Influence : ETA 1

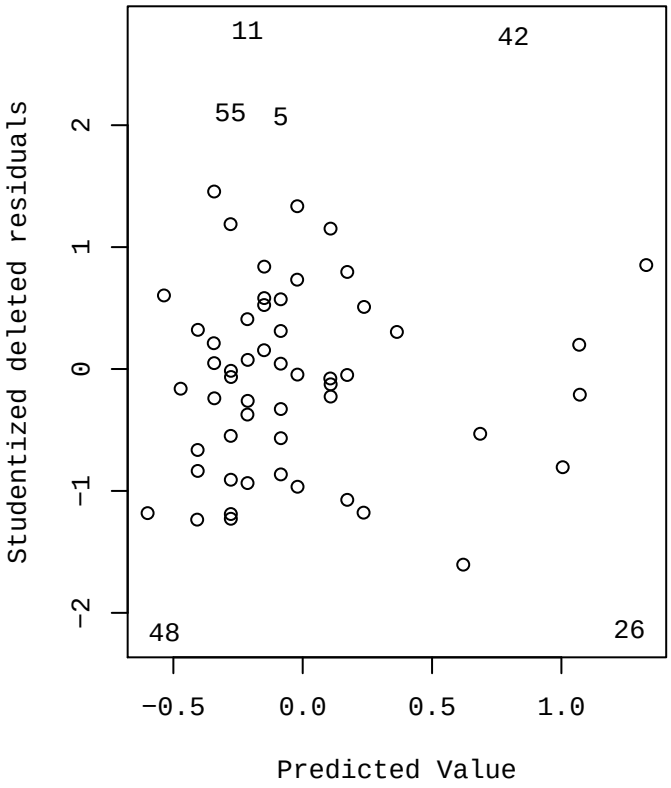
48	−0.53397902	−0.422297981	−2.16709095	0.05862157	9.144648e−02	0.8769159	−0.540783898
49	−0.14882139	0.119569993	0.58197699	0.02994819	3.527160e−03	1.0682733	0.102257143
50	−0.27789154	−0.250608463	−1.22838049	0.02326701	1.187354e−02	0.9964081	−0.189589921
51	−0.40525101	0.065000009	0.32153965	0.06487582	2.429803e−03	1.1224316	0.084691788
52	−0.40593528	−0.170739722	−0.83576497	0.03466612	8.406577e−03	1.0528244	−0.158379140
53	0.10795036	−0.046615957	−0.22579650	0.02560935	4.543614e−04	1.0802784	−0.036605799
54	0.17214329	−0.219242595	−1.07293758	0.02637173	1.036578e−02	1.0188116	−0.176582294
55	−0.27857581	0.414380805	2.09989100	0.03928365	5.665272e−02	0.8717667	0.424624546
56	−0.59954049	−0.237106507	−1.18184230	0.05733975	2.812111e−02	1.0385960	−0.291480730
57	0.36403784	0.062608161	0.30424558	0.03118792	1.009646e−03	1.0840406	0.054588070
58	−0.08462846	−0.067620544	−0.32806759	0.02775522	1.040761e−03	1.0793276	−0.055430384
59	−0.27789154	−0.186406463	−0.90814024	0.02326701	6.569174e−03	1.0334955	−0.140163603

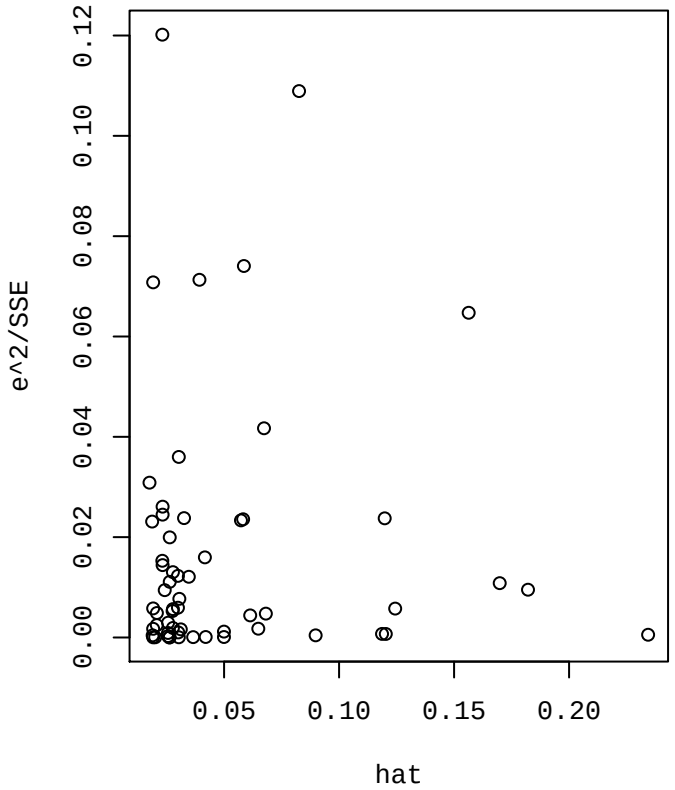
	Intercept	BWT	APGA
1	0.0010631619	−0.001448366	0.0018093755
2	0.0698085266	0.042433373	−0.1549674181
3	0.0788256267	0.001866883	−0.0329458647
4	−0.0740428447	0.076831585	−0.0025333412
5	0.0500358372	−0.068164773	0.0851550634
6	0.0527053907	−0.017179677	−0.0293542848
7	0.0071150868	−0.003939318	−0.0030297732
8	−0.0388578544	0.067267432	−0.0474838365
9	0.0167716481	0.041584212	−0.0887907619
10	0.0075472684	−0.010281787	0.0128445562
11	0.1153876295	−0.199749309	0.1410023127
12	0.0117816345	−0.005774981	−0.0023450038
13	−0.1115637495	0.090859700	0.0067937647
14	−0.0007305875	0.001329788	−0.0008081152
15	0.0172455498	−0.027510486	0.0241233842
16	0.0120798935	0.026954974	−0.0458379658
17	−0.0755057134	0.033749271	0.0367907893
18	0.2134413508	−0.118173317	−0.0908884046
19	0.0714943659	−0.004674784	−0.0685240442
20	−0.0317594856	0.021239753	0.0039047787
21	0.0005048655	−0.002179854	−0.0010823170
22	0.0012756627	0.001300283	−0.0044508396
23	−0.0453628007	−0.314587146	0.2503941641
24	0.0194399623	0.088082843	−0.0787824508
25	0.2208824017	−0.050563109	−0.1867430791
26	0.5628121774	−0.794632914	−0.1468543297
27	−0.0806912548	−0.111453666	0.1242707390
28	0.0485107129	−0.063679758	−0.0173254207
29	−0.0141791858	0.026699756	−0.0145239887
30	−0.0430505257	0.023764793	0.0665790540
31	0.0110086039	0.027295118	−0.0582806364
32	−0.2343032838	0.337501389	0.0546487277
33	0.0056893845	−0.001298642	−0.0110759715
34	−0.0100666116	−0.005478629	0.0122221436
35	−0.0267084360	−0.346248129	0.2192837341
36	0.0753651694	0.012009133	−0.0630371714
37	−0.0034732979	−0.007750288	0.0131796616
38	−0.0090246316	−0.056849885	0.0903948333
39	−0.0778410332	0.010020116	0.1045252233
40	0.2718060085	−0.038071738	−0.2292351005
41	−0.0019722280	0.029094870	0.0310067810
42	−0.5170694021	0.587860390	0.2728277008

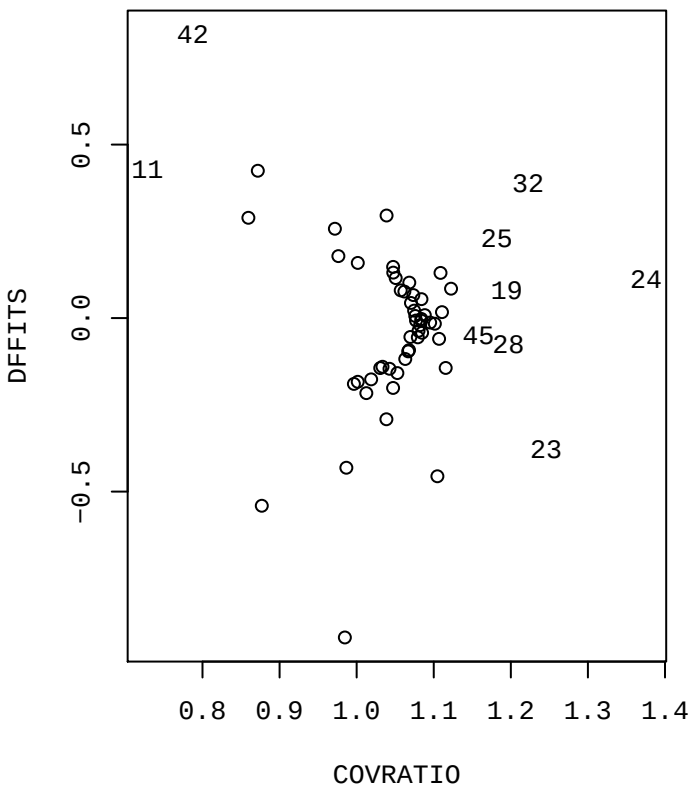
```
43 −0.4282293478  0.052570311  0.3934580323
44  0.0138393819 −0.018853653  0.0235529875
45 −0.0491117688  0.012492953  0.0394669542
46 −0.0004350564  0.007012621 −0.0076994653
47  0.0907148860 −0.092679520 −0.0580053206
48 −0.0909591868  0.406460862 −0.2997336394
49 −0.0062526395 −0.039387961  0.0626292942
50 −0.1152176158  0.093835480  0.0070162699
51 −0.0064729280 −0.052649428  0.0616178778
52 −0.0567473572  0.109509462 −0.0546753922
53  0.0102444488 −0.002338367 −0.0199436730
54  0.0579966008 −0.032015340 −0.0896936509
55  0.3832254259 −0.098319539 −0.2714041843
56 −0.2697830062  0.172842697  0.1255944777
57  0.0022221778  0.036074578 −0.0162754614
58  0.0063657676  0.015783507 −0.0337010024
59 −0.0851802461  0.069372458  0.0051871200

$n
[1] 59

$`Parameter Count`
[1] 3

$`Degree of Freedom`
[1] 56

$SSE
[1] 2.408057

$MSE
[1] 0.04300102
```

Influence Diagnostics on Eta 1









Multiple Linear Regression : ETA 2

```
Residuals:
     Min       1Q   Median       3Q      Max
−0.31150 −0.11293 −0.01026  0.09137  0.42215

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) −0.7772821  0.0719026 −10.810 2.52e−15 ***
BWT          0.5038668  0.0310353  16.235  < 2e−16 ***
APGA         0.0007423  0.0097721   0.076     0.94
−−−
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1615 on 56 degrees of freedom
Multiple R−squared:  0.8338, Adjusted R−squared:  0.8279
F−statistic: 140.5 on 2 and 56 DF,  p−value: < 2.2e−16
```

Multiple Linear Regression − Influence : ETA 2

$`Model Estimates`

	Variable	Estimate	SE	T	p−value
1	Intercept	−0.777282057	0.071902599	−10.81020806	2.518710e−15
2	BWT	0.503866776	0.031035317	16.23527063	0.000000e+00
3	APGA	0.000742306	0.009772096	0.07596181	9.397202e−01

$`Influence Diagnostics with DFBETAs`

	Yhat	Residual	R−Student	hat	Cook's D	COV−Ratio	DFFITS
1	−0.06667243	0.011444728	0.07092776	0.01915782	3.334602e−05	1.0758648	0.009912651
2	−0.01480114	−0.150032861	−0.94828185	0.04165458	1.305198e−02	1.0491180	−0.197700510
3	−0.01702806	0.210287057	1.32267023	0.01756933	1.029109e−02	0.9780860	0.176879788
4	−0.31934812	−0.106231878	−0.66484522	0.03054887	4.689624e−03	1.0629701	−0.118019878
5	−0.06667243	0.323488428	2.08221754	0.01915782	2.664100e−02	0.8570739	0.291004449
6	−0.16893040	0.075862696	0.47265176	0.02564910	1.987847e−03	1.0702353	0.076686636
7	−0.26970375	0.005616751	0.03500783	0.03031533	1.300339e−05	1.0884700	0.006189863
8	−0.16744578	−0.161355216	−1.01125050	0.02314463	8.073108e−03	1.0224531	−0.155657028
9	−0.06593012	−0.119618878	−0.74834568	0.02775522	5.371283e−03	1.0531767	−0.126440679
10	−0.06667243	0.051196128	0.31756002	0.01915782	6.672786e−04	1.0702622	0.044381231
11	−0.16744578	0.422146784	2.80234034	0.02314463	5.525883e−02	0.7240248	0.431351053
12	−0.11780141	0.038425612	0.23822512	0.01894049	3.714730e−04	1.0725980	0.033100574
13	−0.21857477	−0.190162233	−1.19620041	0.02326701	1.127515e−02	1.0005468	−0.184623203
14	−0.21783246	−0.035522539	−0.22103585	0.02624629	4.465424e−04	1.0811104	−0.036288758
15	−0.11705911	0.085897006	0.53413652	0.02078181	2.044398e−03	1.0613425	0.077813366
16	−0.16596117	−0.032610828	−0.20542034	0.04994043	7.522450e−04	1.1084751	−0.047097099
17	−0.21931707	−0.083170927	−0.51892306	0.02761280	2.582617e−03	1.0697281	−0.087445717
18	−0.26970375	0.198661151	1.25581912	0.03031533	1.626717e−02	1.0000275	0.222045992
19	−0.27267297	0.035133975	0.22980406	0.11867324	2.411118e−03	1.1942319	0.084326797
20	−0.16818809	−0.064815910	−0.40258798	0.02073433	1.161281e−03	1.0684193	−0.058580836
21	0.13487428	−0.003126282	−0.01938288	0.02005026	2.608878e−06	1.0771181	−0.002772530
22	−0.01554344	−0.008402855	−0.05226558	0.02630109	2.504167e−05	1.0838935	−0.008589945
23	0.78693187	−0.128142867	−0.87569568	0.18214410	5.716569e−02	1.2381097	−0.413259044
24	0.83657624	0.032414762	0.22747127	0.23436476	5.370555e−03	1.3747665	0.125852470
25	−0.42383301	0.109180008	0.71946786	0.12438605	2.472394e−02	1.1720835	0.271169536
26	0.99293241	−0.311500413	−2.16862229	0.15634811	2.725012e−01	0.9781693	−0.933573650
27	0.18377635	−0.191501987	−1.21079580	0.03259070	1.632694e−02	1.0083055	−0.222235072
28	0.84177238	−0.029579380	−0.19362487	0.12030373	1.738909e−03	1.1974447	−0.071603511
29	−0.26821914	−0.039138861	−0.24404350	0.03008678	6.263418e−04	1.0847585	−0.042982204
30	0.13561659	0.133383412	0.83489229	0.02637173	6.327628e−03	1.0439374	0.137405194
31	−0.06593012	−0.092878878	−0.57988680	0.02775522	3.238266e−03	1.0660040	−0.097977824
32	1.04331909	0.128350909	0.87052288	0.16984057	5.190407e−02	1.2203529	0.393749628
33	0.08522991	−0.018192610	−0.11312783	0.02560935	1.141320e−04	1.0825296	−0.018340119
34	0.08226069	−0.010264486	−0.06436664	0.04199795	6.163888e−05	1.1015683	−0.013476952
35	0.48609641	−0.237994413	−1.54498572	0.06735528	5.607351e−02	0.9963403	−0.415195055
36	−0.01777036	0.100440063	0.62626487	0.02419105	3.276605e−03	1.0588959	0.098605925
37	−0.16596117	0.012692172	0.07992382	0.04994043	1.139482e−04	1.1106414	0.018324281
38	−0.11631680	0.133040200	0.83426993	0.02994819	7.201643e−03	1.0478449	0.146586653
39	0.18748788	0.073743122	0.46808445	0.06135312	4.841281e−03	1.1112040	0.119671692
40	−0.22080169	0.188747585	1.20951495	0.05827958	2.993094e−02	1.0359814	0.300890482
41	0.08448760	0.186458396	1.16952597	0.01871889	8.640567e−03	0.9992579	0.161530022
42	0.64022567	0.397634330	2.71310918	0.08258829	1.983548e−01	0.7893351	0.814037390
43	−0.32305965	−0.187356347	−1.24277218	0.11983867	6.942155e−02	1.1036493	−0.458573414
44	−0.06667243	0.096833928	0.60206712	0.01915782	2.387196e−03	1.0551598	0.084143087
45	−0.37270402	−0.022995976	−0.14796577	0.08980383	7.328474e−04	1.1583038	−0.046477329
46	−0.21709016	−0.012149845	−0.07597480	0.03655064	7.431281e−05	1.0952428	−0.014797985
47	0.53945231	−0.084252315	−0.53707924	0.06816358	7.123965e−03	1.1151186	−0.145259563

48	−0.41863687	−0.306691134	−2.01002843	0.05862157	7.954566e−02	0.9064755	−0.501589936
49	−0.11631680	0.098899800	0.61843379	0.02994819	3.979758e−03	1.0657428	0.108662839
50	−0.21857477	−0.208522233	−1.31516006	0.02326701	1.355747e−02	0.9848226	−0.202983598
51	−0.31712120	0.055169204	0.35053966	0.06487582	2.886840e−03	1.1212414	0.092330232
52	−0.31860582	−0.151534184	−0.95439711	0.03466612	1.092085e−02	1.0408729	−0.180860168
53	0.08522991	−0.031773710	−0.19762688	0.02560935	3.481394e−04	1.0809809	−0.032038981
54	0.13561659	−0.169409188	−1.06453400	0.02637173	1.020731e−02	1.0197900	−0.175199247
55	−0.22005938	0.326570379	2.12735714	0.03928365	5.803101e−02	0.8666755	0.430178548
56	−0.47199277	−0.186853233	−1.19644540	0.05733975	2.880260e−02	1.0366795	−0.295082330
57	0.28529201	0.048833991	0.30476095	0.03118792	1.013064e−03	1.0840221	0.054680538
58	−0.06593012	−0.060344878	−0.37609783	0.02775522	1.366971e−03	1.0773428	−0.063545587
59	−0.21857477	−0.144425233	−0.90353525	0.02326701	6.503693e−03	1.0339590	−0.139452864

	Intercept	BWT	APGA
1	0.0017157022	−0.002337334	0.0029199217
2	0.0685556518	0.041671809	−0.1521861708
3	0.0780582051	0.001848707	−0.0326251141
4	−0.0741417187	0.076934183	−0.0025367241
5	0.0503676545	−0.068616814	0.0857197771
6	0.0609252284	−0.019858988	−0.0339323262
7	0.0051313729	−0.002841021	−0.0021850606
8	−0.0420094541	0.072723215	−0.0513350540
9	0.0145207721	0.036003311	−0.0768744019
10	0.0076815957	−0.010464784	0.0130731653
11	0.1164150601	−0.201527910	0.1422578207
12	0.0181820738	−0.008912273	−0.0036189404
13	−0.1121992412	0.091377256	0.0068324635
14	−0.0111122754	0.020226141	−0.0122914771
15	0.0175467623	−0.027990987	0.0245447256
16	0.0095090454	0.021218405	−0.0360827105
17	−0.0714570002	0.031939592	0.0348180200
18	0.1840752709	−0.101914579	−0.0783836292
19	0.0775232186	−0.005068991	−0.0743024208
20	−0.0342336534	0.022894399	0.0042089737
21	0.0002006431	−0.000866315	−0.0004301332
22	0.0014663120	0.001494612	−0.0051160229
23	−0.0493327351	−0.342118302	0.2723074585
24	0.0222232739	0.100694082	−0.0900621081
25	0.2632231005	−0.060255494	−0.2225396497
26	0.5708796402	−0.806023342	−0.1489593691
27	−0.0829466056	−0.114568838	0.1277441527
28	0.0446198915	−0.058572298	−0.0159358283
29	−0.0144121465	0.027138427	−0.0147626144
30	−0.0451292935	0.024912316	0.0697939368
31	0.0112520247	0.027898664	−0.0595693305
32	−0.2391856774	0.344534217	0.0557874937
33	0.0051326407	−0.001171561	−0.0099921147
34	−0.0083894056	−0.004565830	0.0101858028
35	−0.0257160069	−0.333382279	0.2111356132
36	0.0644023325	0.010262249	−0.0538676009
37	−0.0036997272	−0.008255540	0.0140388630
38	−0.0089632223	−0.056463043	0.0897797295
39	−0.0715366230	0.009208579	0.0960596384
40	0.2766544937	−0.038750863	−0.2333242044
41	−0.0020026961	0.029544345	0.0314857926
42	−0.5153501698	0.585905781	0.2719205611

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43 −0.4308475645  0.052891728  0.3958636553
44  0.0145636602 −0.019840351  0.0247856232
45 −0.0450870418  0.011469151  0.0362326233
46 −0.0005046831  0.008134925 −0.0089316927
47  0.0917094341 −0.093695607 −0.0586412590
48 −0.0843668105  0.377002123 −0.2780100842
49 −0.0066443237 −0.041855342  0.0665525824
50 −0.1233572231  0.100464535  0.0075119379
51 −0.0070567283 −0.057397937  0.0671752604
52 −0.0648023255  0.125053714 −0.0624362567
53  0.0089663853 −0.002046640 −0.0174555664
54  0.0575423536 −0.031764586 −0.0889911426
55  0.3882379360 −0.099605539 −0.2749540955
56 −0.2731165044  0.174978379  0.1271463507
57  0.0022259420  0.036135686 −0.0163030309
58  0.0072977383  0.018094268 −0.0386349474
59 −0.0847483155  0.069020686  0.0051608172

$n
[1] 59

$`Parameter Count`
[1] 3

$`Degree of Freedom`
[1] 56

$SSE
[1] 1.460097

$MSE
[1] 0.02607316
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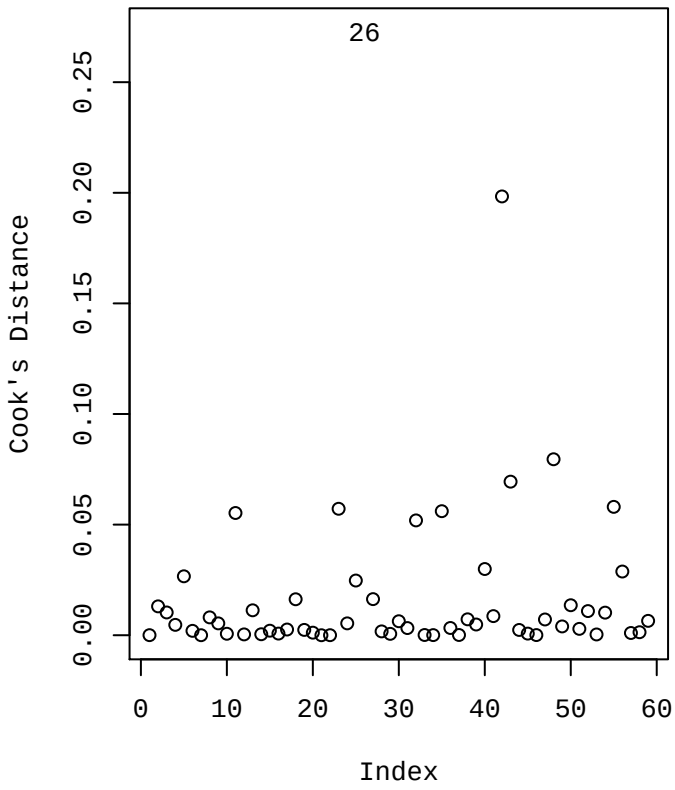
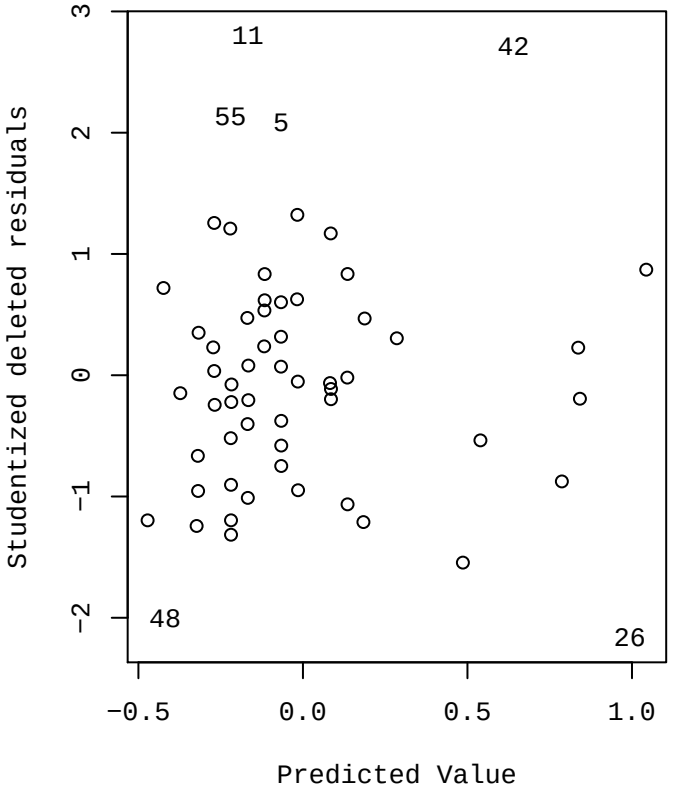
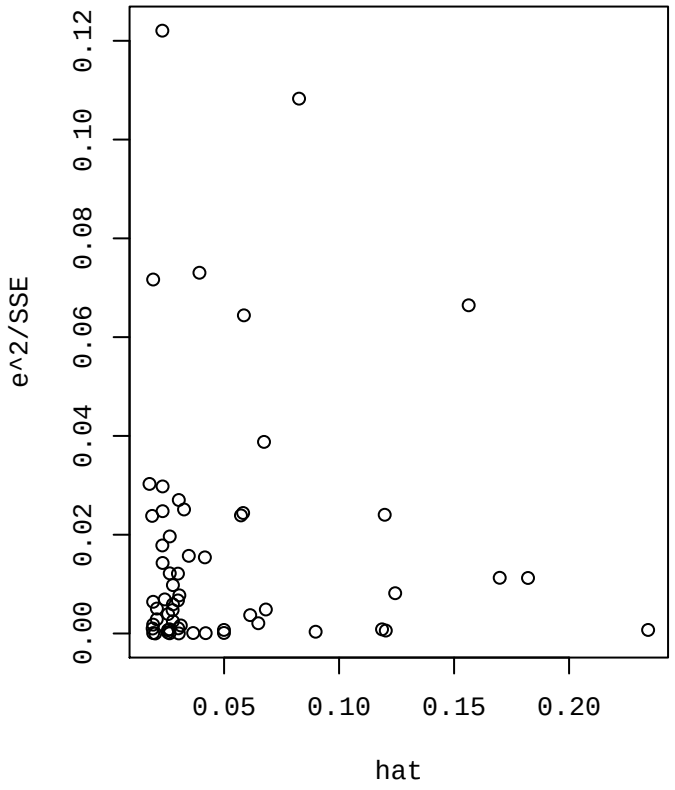
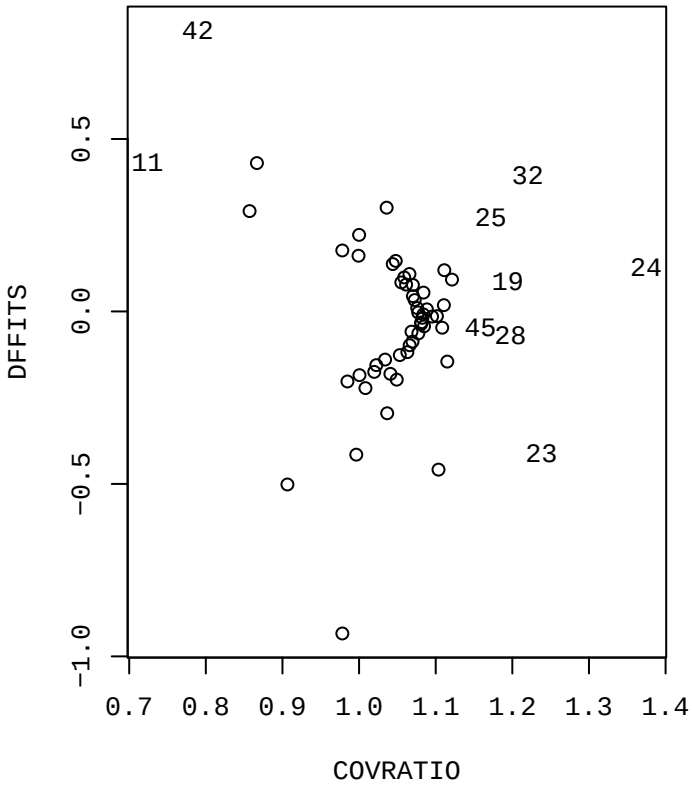
Influence Diagnostics on Eta 2









ETA 1

	ID	ETA1	seETA1	LL1	UL1	ZERO1	RSE1	SHR1
1	1	−0.07586270	0.01141610	−0.09869490	−0.05303050	FALSE	0.150483703	0.022660057
2	2	−0.21623300	0.00865062	−0.23353424	−0.19893176	FALSE	0.040006012	0.017170798
3	3	0.25150900	0.00862549	0.23425802	0.26875998	FALSE	0.034294956	0.017120917
4	4	−0.54252300	0.00812653	−0.55877606	−0.52626994	FALSE	0.014979144	0.016130520
5	5	0.32792400	0.01128900	0.30534600	0.35050200	FALSE	0.034425660	0.022407774
6	6	−0.12971700	0.00845630	−0.14662960	−0.11280440	FALSE	0.065190376	0.016785088
7	7	−0.33242500	0.00850109	−0.34942718	−0.31542282	FALSE	0.025572956	0.016873992
8	8	−0.40528100	0.00654967	−0.41838034	−0.39218166	FALSE	0.016160812	0.013000578
9	9	−0.26176100	0.00495151	−0.27166402	−0.25185798	FALSE	0.018916149	0.009828356
10	10	−0.02037070	0.00780198	−0.03597466	−0.00476674	FALSE	0.383000093	0.015486314
11	11	0.32458300	0.01914650	0.28629000	0.36287600	FALSE	0.058987994	0.038004291
12	12	−0.11752000	0.00690616	−0.13133232	−0.10370768	FALSE	0.058765827	0.013708182
13	13	−0.52075500	0.00833681	−0.53742862	−0.50408138	FALSE	0.016009083	0.016547910
14	14	−0.28055000	0.00585965	−0.29226930	−0.26883070	FALSE	0.020886295	0.011630943
15	15	−0.04073620	0.01050950	−0.06175520	−0.01971720	FALSE	0.257989209	0.020860528
16	16	−0.26586200	0.00729219	−0.28044638	−0.25127762	FALSE	0.027428478	0.014474421
17	17	−0.39106400	0.00682370	−0.40471140	−0.37741660	FALSE	0.017449062	0.013544506
18	18	−0.04800940	0.00621045	−0.06043030	−0.03558850	FALSE	0.129359042	0.012327253
19	19	−0.30218100	0.00762623	−0.31743346	−0.28692854	FALSE	0.025237292	0.015137464
20	20	−0.29093700	0.00736316	−0.30566332	−0.27621068	FALSE	0.025308434	0.014615291
21	21	0.16169900	0.00654022	0.14861856	0.17477944	FALSE	0.040446880	0.012981820
22	22	−0.02982370	0.01329410	−0.05641190	−0.00323550	FALSE	0.445756227	0.026387739
23	23	0.85345800	0.00697984	0.83949832	0.86741768	FALSE	0.008178305	0.013854431
24	24	1.10521000	0.00443319	1.09634362	1.11407638	FALSE	0.004011174	0.008799532
25	25	−0.41855300	0.00507113	−0.42869526	−0.40841074	FALSE	0.012115861	0.010065793
26	26	0.86894400	0.00801797	0.85290806	0.88497994	FALSE	0.009227257	0.015915037
27	27	−0.00410238	0.00993465	−0.02397168	0.01576692	TRUE	2.421679610	0.019719496
28	28	1.02989000	0.03138330	0.96712340	1.09265660	FALSE	0.030472478	0.062293373
29	29	−0.39119400	0.02261840	−0.43643080	−0.34595720	FALSE	0.057818883	0.044895738
30	30	0.33564000	0.01408150	0.30747700	0.36380300	FALSE	0.041954177	0.027950666
31	31	−0.20134100	0.02302920	−0.24739940	−0.15528260	FALSE	0.114379088	0.045711144
32	32	1.48947000	0.01067660	1.46811680	1.51082320	FALSE	0.007168053	0.021192208
33	33	0.08205330	0.01229720	0.05745890	0.10664770	FALSE	0.149868439	0.024408971
34	34	0.09076480	0.01137180	0.06802120	0.11350840	FALSE	0.125288658	0.022572125
35	35	0.30355100	0.00872063	0.28610974	0.32099226	FALSE	0.028728714	0.017309762
36	36	0.12928600	0.00747171	0.11434258	0.14422942	FALSE	0.057792104	0.014830754
37	37	−0.19737000	0.00982567	−0.21702134	−0.17771866	FALSE	0.049782996	0.019503179
38	38	0.02318850	0.00578108	0.01162634	0.03475066	FALSE	0.249308062	0.011474987
39	39	0.34003200	0.00553947	0.32895306	0.35111094	FALSE	0.016291026	0.010995411
40	40	−0.04066360	0.01804140	−0.07674640	−0.00458080	FALSE	0.443674441	0.035810755
41	41	0.34350700	0.01017720	0.32315260	0.36386140	FALSE	0.029627344	0.020200939
42	42	1.32657000	0.02038690	1.28579620	1.36734380	FALSE	0.015368130	0.040466387
43	43	−0.64717400	0.02730000	−0.70177400	−0.59257400	FALSE	0.042183400	0.054188345
44	44	0.03323940	0.00834141	0.01655658	0.04992222	FALSE	0.250949476	0.016557040
45	45	−0.50400600	0.01053780	−0.52508160	−0.48293040	FALSE	0.020908084	0.020916701
46	46	−0.29065800	0.02994040	−0.35053880	−0.23077720	FALSE	0.103009035	0.059429330
47	47	0.57899700	0.01957580	0.53984540	0.61814860	FALSE	0.033809847	0.038856417
48	48	−0.95627700	0.00456630	−0.96540960	−0.94714440	FALSE	0.004775081	0.009063745
49	49	−0.02925140	0.00721993	−0.04369126	−0.01481154	FALSE	0.246823400	0.014330991
50	50	−0.52850000	0.00501634	−0.53853268	−0.51846732	FALSE	0.009491656	0.009957039
51	51	−0.34025100	0.00780223	−0.35585546	−0.32464654	FALSE	0.022930807	0.015486811
52	52	−0.57667500	0.00675734	−0.59018968	−0.56316032	FALSE	0.011717761	0.013412786
53	53	0.06133440	0.01194600	0.03744240	0.08522640	FALSE	0.194768352	0.023711867
54	54	−0.04709930	0.00601026	−0.05911982	−0.03507878	FALSE	0.127608266	0.011929892

ETA 1

55	55	0.13580500	0.02279980	0.09020540	0.18140460	FALSE	0.167886308	0.045255803
56	56	−0.83664700	0.03327890	−0.90320480	−0.77008920	FALSE	0.039776513	0.066055989
57	57	0.42664600	0.01116940	0.40430720	0.44898480	FALSE	0.026179549	0.022170377
58	58	−0.15224900	0.00749753	−0.16724406	−0.13725394	FALSE	0.049245184	0.014882005
59	59	−0.46429800	0.00656870	−0.47743540	−0.45116060	FALSE	0.014147595	0.013038351

ETA 2

	ID	ETA2	seETA2	LL2	UL2	ZERO2	RSE2	SHR2
1	1	−0.05522770	0.00578321	−0.06679412	−0.04366128	FALSE	0.104715750	0.014686285
2	2	−0.16483400	0.00431514	−0.17346428	−0.15620372	FALSE	0.026178701	0.010958166
3	3	0.19325900	0.00445092	0.18435716	0.20216084	FALSE	0.023030855	0.011302975
4	4	−0.42558000	0.00378097	−0.43314194	−0.41801806	FALSE	0.008884276	0.009601657
5	5	0.25681600	0.00601152	0.24479296	0.26883904	FALSE	0.023407887	0.015266071
6	6	−0.09306770	0.00417974	−0.10142718	−0.08470822	FALSE	0.044910748	0.010614322
7	7	−0.26408700	0.00443952	−0.27296604	−0.25520796	FALSE	0.016810824	0.011274025
8	8	−0.32880100	0.00294533	−0.33469166	−0.32291034	FALSE	0.008957789	0.007479575
9	9	−0.18554900	0.00291978	−0.19138856	−0.17970944	FALSE	0.015735897	0.007414692
10	10	−0.01547630	0.00386956	−0.02321542	−0.00773718	FALSE	0.250031338	0.009826629
11	11	0.25470100	0.01056800	0.23356500	0.27583700	FALSE	0.041491788	0.026837112
12	12	−0.07937580	0.00444461	−0.08826502	−0.07048658	FALSE	0.055994522	0.011286951
13	13	−0.40873700	0.00442276	−0.41758252	−0.39989148	FALSE	0.010820552	0.011231463
14	14	−0.25335500	0.00342666	−0.26020832	−0.24650168	FALSE	0.013525133	0.008701898
15	15	−0.03116210	0.00565459	−0.04247128	−0.01985292	FALSE	0.181457283	0.014359658
16	16	−0.19857200	0.00342475	−0.20542150	−0.19172250	FALSE	0.017246893	0.008697048
17	17	−0.30248800	0.00333037	−0.30914874	−0.29582726	FALSE	0.011009924	0.008457373
18	18	−0.07104260	0.00380533	−0.07865326	−0.06343194	FALSE	0.053564059	0.009663519
19	19	−0.23753900	0.00386923	−0.24527746	−0.22980054	FALSE	0.016288820	0.009825791
20	20	−0.23300400	0.00334166	−0.23968732	−0.22632068	FALSE	0.014341642	0.008486043
21	21	0.13174800	0.00414340	0.12346120	0.14003480	FALSE	0.031449434	0.010522037
22	22	−0.02394630	0.00621527	−0.03637684	−0.01151576	FALSE	0.259550327	0.015783488
23	23	0.65878900	0.00370131	0.65138638	0.66619162	FALSE	0.005618354	0.009399363
24	24	0.86899100	0.00252054	0.86394992	0.87403208	FALSE	0.002900536	0.006400834
25	25	−0.31465300	0.00200550	−0.31866400	−0.31064200	FALSE	0.006373688	0.005092906
26	26	0.68143200	0.00413805	0.67315590	0.68970810	FALSE	0.006072580	0.010508451
27	27	−0.00772564	0.00457358	−0.01687280	0.00142152	TRUE	0.592000145	0.011614466
28	28	0.81219300	0.01673180	0.77872940	0.84565660	FALSE	0.020600769	0.042489893
29	29	−0.30735800	0.01234640	−0.33205080	−0.28266520	FALSE	0.040169444	0.031353304
30	30	0.26900000	0.00865518	0.25168964	0.28631036	FALSE	0.032175390	0.021979564
31	31	−0.15880900	0.01148670	−0.18178240	−0.13583560	FALSE	0.072330284	0.029170123
32	32	1.17167000	0.00524880	1.16117240	1.18216760	FALSE	0.004479760	0.013329167
33	33	0.06703730	0.00580560	0.05542610	0.07864850	FALSE	0.086602533	0.014743143
34	34	0.07199620	0.00546534	0.06106552	0.08292688	FALSE	0.075911506	0.013879063
35	35	0.24810200	0.00417250	0.23975700	0.25644700	FALSE	0.016817680	0.010595936
36	36	0.08266970	0.00468244	0.07330482	0.09203458	FALSE	0.056640341	0.011890913
37	37	−0.15326900	0.00521994	−0.16370888	−0.14282912	FALSE	0.034057376	0.013255878
38	38	0.01672340	0.00383901	0.00904538	0.02440142	FALSE	0.229559181	0.009749048
39	39	0.26123100	0.00336381	0.25450338	0.26795862	FALSE	0.012876764	0.008542292
40	40	−0.03205410	0.00841904	−0.04889218	−0.01521602	FALSE	0.262650956	0.021379894
41	41	0.27094600	0.00448303	0.26197994	0.27991206	FALSE	0.016545843	0.011384517
42	42	1.03786000	0.01150180	1.01485640	1.06086360	FALSE	0.011082227	0.029208469
43	43	−0.51041600	0.01416870	−0.53875340	−0.48207860	FALSE	0.027759122	0.035980979
44	44	0.03016150	0.00518237	0.01979676	0.04052624	FALSE	0.171820699	0.013160470
45	45	−0.39570000	0.00507164	−0.40584328	−0.38555672	FALSE	0.012816881	0.012879274
46	46	−0.22924000	0.01580800	−0.26085600	−0.19762400	FALSE	0.068958297	0.040143932
47	47	0.45520000	0.01028550	0.43462900	0.47577100	FALSE	0.022595562	0.026119712
48	48	−0.72532800	0.00179903	−0.72892606	−0.72172994	FALSE	0.002480299	0.004568582
49	49	−0.01741700	0.00349113	−0.02439926	−0.01043474	FALSE	0.200443819	0.008865618
50	50	−0.42709700	0.00183401	−0.43076502	−0.42342898	FALSE	0.004294130	0.004657412
51	51	−0.26195200	0.00378158	−0.26951516	−0.25438884	FALSE	0.014436156	0.009603207
52	52	−0.47014000	0.00354281	−0.47722562	−0.46305438	FALSE	0.007535649	0.008996857
53	53	0.05345620	0.00531019	0.04283582	0.06407658	FALSE	0.099337214	0.013485065
54	54	−0.03379260	0.00231778	−0.03842816	−0.02915704	FALSE	0.068588389	0.005885931

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55	55	0.10651100	0.01296620	0.08057860	0.13244340	FALSE	0.121735783	0.032927268
56	56	−0.65884600	0.01830530	−0.69545660	−0.62223540	FALSE	0.027783883	0.046485748
57	57	0.33412600	0.00574027	0.32264546	0.34560654	FALSE	0.017179956	0.014577240
58	58	−0.12627500	0.00349634	−0.13326768	−0.11928232	FALSE	0.027688299	0.008878848
59	59	−0.36300000	0.00291308	−0.36882616	−0.35717384	FALSE	0.008025014	0.007397677