Supplemental material for "Bayesian structured antedependence model proposals for longitudinal data"

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Table A1: *Correlation matrix and variances for the Small Mice Data.*

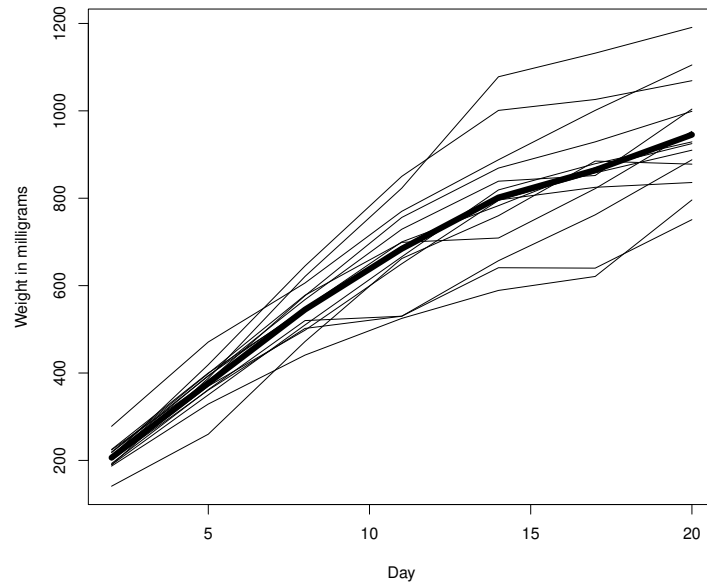| Days	2	5	8	11	14	17	20
2	1	0.92	0.57	0.36	0.23	0.23	0.38
5		1	0.77	0.54	0.45	0.41	0.55
8			1	0.86	0.80	0.76	0.81
11				1	0.93	0.92	0.87
14					1	0.96	0.89
17						1	0.92
20							1
Variances	886.37	2272.84	3400.59	10513.45	17884.07	18835.03	14560.68

Figure A1: *Profile plot for the Small Mice Data. The thicker line indicates the overall mean profile.*

Table A2: *Pooled correlation matrix and pooled variances for the Speech Recognition Data.*

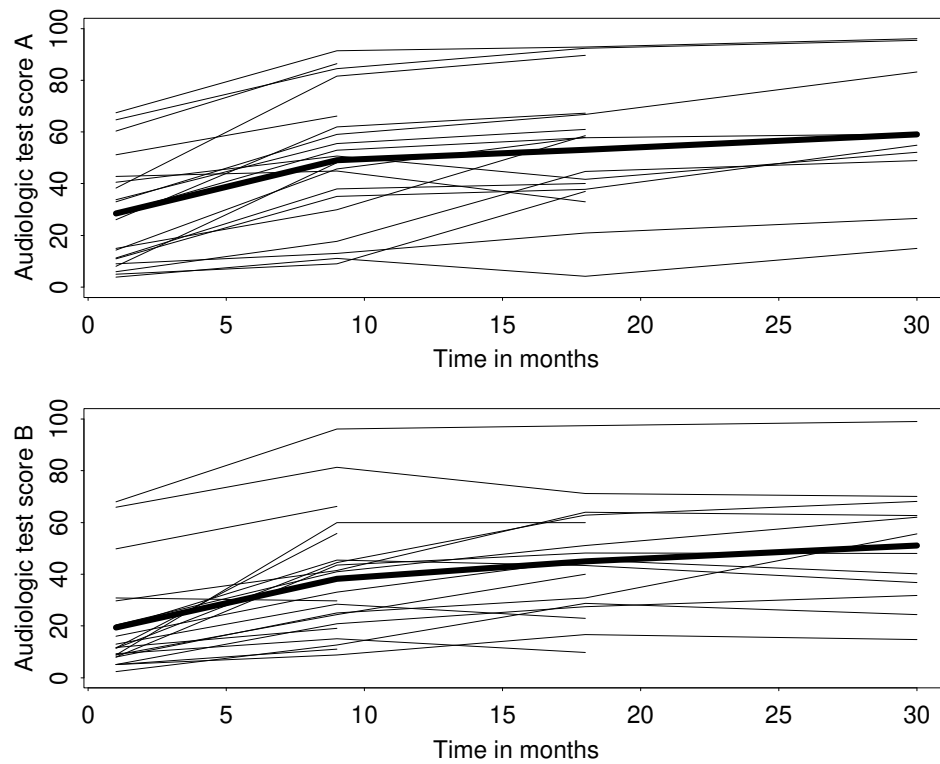| Months	1	9	18	30
1	1	0.85	0.70	0.64
9		1	0.90	0.87
18			1	0.95
30				1
Variances	395.40	599.80	577.10	606.00

Figure A2: *Profile plots for the Speech Recognition Data. The thicker line indicates the overall mean profile for each implant type. Top figure, cochlear implant type A; bottom figure, cochlear implant type B.*

Table A3: *Correlation matrix and variances for the 100-Km Race Data.*

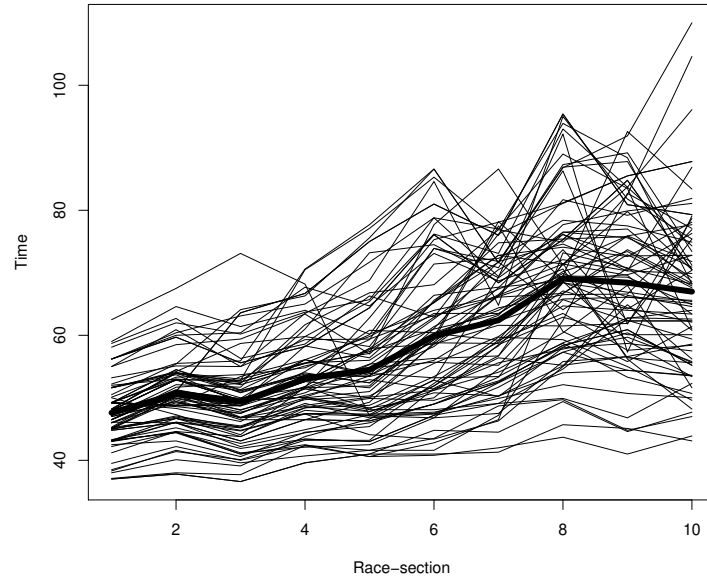| Section	1	2	3	4	5	6	7	8	9	10
1	1	.95	.84	.78	.60	.60	.52	.45	.51	.38
2		1	.89	.82	.63	.62	.54	.48	.51	.40
3			1	.92	.75	.72	.60	.61	.56	.44
4				1	.88	.84	.69	.69	.65	.49
5					1	.94	.95	.78	.73	.52
6						1	.84	.84	.77	.64
7							1	.78	.69	.72
8								1	.75	.65
9									1	.77
10										1
Variances	26.9	34.8	49.0	58.9	91.4	149.9	107.9	152.2	145	167.2

Figure A3: *Profile plot for the 100-Km Race Data. The thicker line indicates the overall mean profile.*

Residuals Race 100 km REML Methodology

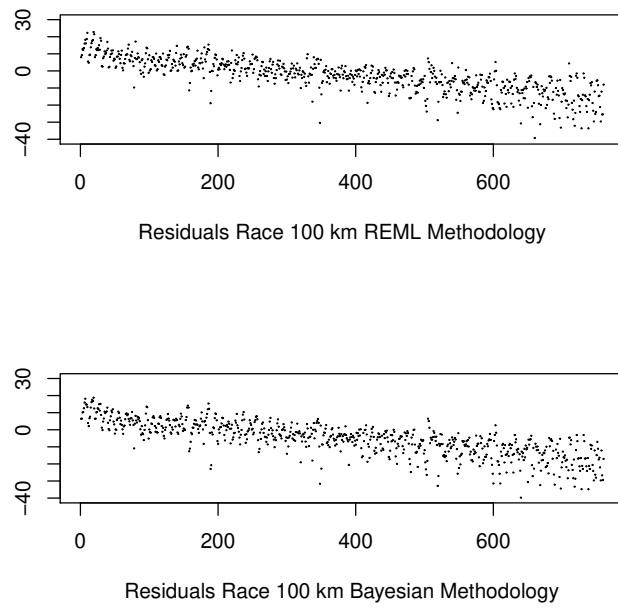Residuals Race 100 km Bayesian Methodology

Figure A4: *Residuals obtained under the Bayesian proposal (bottom panel) for the Type 3 - SAD variance-covariance structure, and classic REML methods (top panel) methods, for the 100-Km Race Data.*
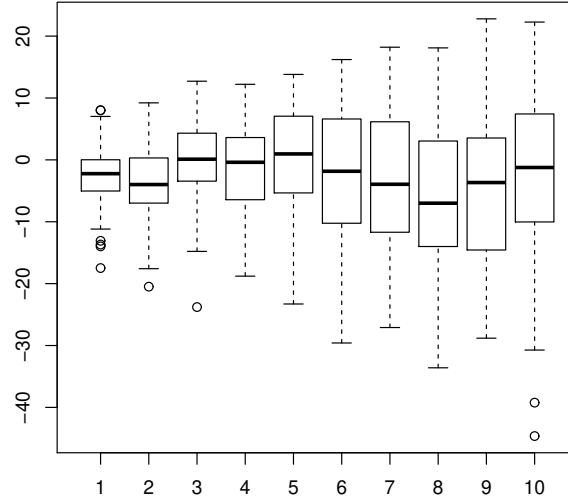
Figure A5: *Residual Box-plots for the different sections of the race in the 100-Km Race Data under REML estimation methods.*
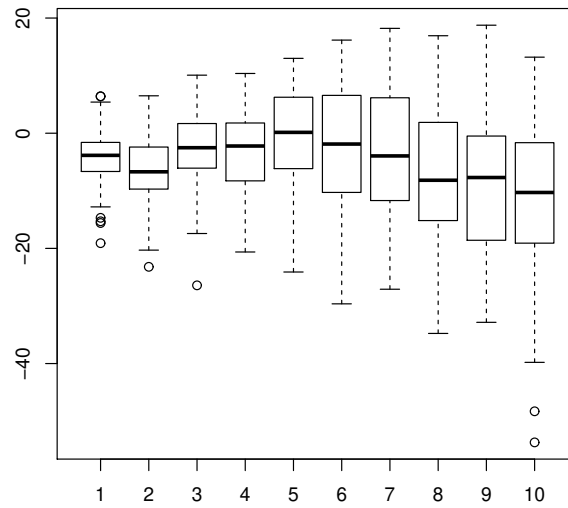

Figure A6: *Residual Box-plots for the different sections of the race in the 100-Km Race Data under the proposed Bayesian estimation methods for the Type 3 - SAD variance-covariance model.*