

Estimation Summary Report

04 January 2020 01::47::40 pm

AIC: 2185.72

Log-likelihood: -1033.86

Release: -186.054

A1: -124.844

A2: -11.0043

A3: -108.214

A4: -74.4352

A5: -108.12

A6: -101.011

A8: -83.8258

A9: -65.7427

A10: -32.1318

A11: -99.6491

A12: -1.94859

A13: -11.9878

A14: -11.0503

A15: -6.1402

A16: -1.42016

A17: -328.235

A18: -3.53275

A19: 0

B1: -17.3878

B2: 0

C1: -0.275295

D1: 0

E1: -1.7756

E2: -1.70871

F1: -0.996857

B1aux: -8.32973

C1aux: -1.5211

D1aux: 2.61499

A15aux: 21.608

A16aux: -5.69366

A17aux: -2.79093

A18aux: 349.435

A19aux: -4.26578

E1aux: -3.42626

Dimension of the Minimum Sufficient Statistic: 70

Number of parameters: 59

Categories and Corresponding Counts by Likelihood

"Release"

Total observed counts: 347

Category	Counts	Category	Counts	Category	Counts
RA1	343	RA2	0	RA3	0
RA4	0	RA5	0	RA6	0
RA8	0	RA9	0	RA10	0

RA11	0	RA12	0	RA13	0
RA14	0	RA15	0	RA16	0
RA17	0	RA18	0	RA19	0
RB1	0	RB2	0	RC1	0
RD1	0	RE1	0	RE2	0
RF1	0	Rx	4		

"A1"

Total observed counts: 343

Category	Counts	Category	Counts	Category	Counts
A1 A2	37	A1 A3	177	A1 A4	26
A1 A5	1	A1 A6	0	A1 A8	0
A1 A9	0	A1 A10	0	A1 A11	0
A1 A12	0	A1 A13	0	A1 A14	0
A1 A15	0	A1 A16	0	A1 A17	0
A1 A18	0	A1 A19	0	A1 B1	0
A1 B2	0	A1 C1	0	A1 D1	0
A1 E1	0	A1 E2	0	A1 F1	0
A1 x	102				

"A2"

Total observed counts: 37

Category	Counts	Category	Counts	Category	Counts
A2A3	28	A2A4	5	A2A5	0
A2A6	0	A2A8	0	A2A9	0
A2A10	0	A2A11	0	A2A12	0
A2A13	0	A2A14	0	A2A15	0
A2A16	0	A2A17	0	A2A18	0
A2A19	0	A2 B1	0	A2 B2	0

A2 C1	0	A2 D1	0	A2 E1	0
A2 E2	0	A2 F1	0	A2 x	4

"A3"

Total observed counts: 205

Category	Counts	Category	Counts	Category	Counts
A3 A4	176	A3 A5	0	A3 A6	0
A3 A8	0	A3 A9	0	A3 A10	0
A3 A11	0	A3 A12	0	A3 A13	0
A3 A14	0	A3 A15	0	A3 A16	0
A3 A17	0	A3 A18	0	A3 A19	0
A3 B1	0	A3 B2	0	A3 C1	0
A3 D1	0	A3 E1	0	A3 E2	0
A3 F1	0	A3 x	29		

"A4"

Total observed counts: 207

Category	Counts	Category	Counts	Category	Counts
A4 A5	158	A4 A6	0	A4 A8	0
A4 A9	0	A4 A10	0	A4 A11	0
A4 A12	0	A4 A13	0	A4 A14	0
A4 A15	0	A4 A16	0	A4 A17	0
A4 A18	0	A4 A19	0	A4 B1	0
A4 B2	0	A4 C1	0	A4 D1	0
A4 E1	0	A4 E2	0	A4 F1	0
A4 x	49				

"A5"

Total observed counts: 159

Category	Counts	Category	Counts	Category	Counts
A5 A6	140	A5 A8	2	A5 A9	0

A5A10	0	A5A11	0	A5A12	0
A5A13	0	A5A14	0	A5A15	0
A5A16	0	A5A17	0	A5A18	0
A5A19	0	A5 B1	0	A5 B2	0
A5 C1	0	A5 D1	0	A5 E1	0
A5 E2	0	A5 F1	0	A5 x	17

"A6"

Total observed counts: 140

Category	Counts	Category	Counts	Category	Counts
A6A8	98	A6A9	21	A6A10	7
A6A11	7	A6A12	0	A6A13	0
A6A14	0	A6A15	0	A6A16	0
A6A17	0	A6A18	0	A6A19	0
A6 B1	0	A6 B2	0	A6 C1	0
A6 D1	0	A6 E1	0	A6 E2	0
A6 F1	0	A6 x	7		

"A8"

Total observed counts: 100

Category	Counts	Category	Counts	Category	Counts
A8A9	73	A8A10	14	A8A11	13
A8A12	0	A8A13	0	A8A14	0
A8A15	0	A8A16	0	A8A17	0
A8A18	0	A8A19	0	A8 B1	0
A8 B2	0	A8 C1	0	A8 D1	0
A8 E1	0	A8 E2	0	A8 F1	0
A8 x	0				

"A9"

Total observed counts: 94

Category	Counts	Category	Counts	Category	Counts
A9 A10	46	A9 A11	47	A9 A12	0
A9 A13	0	A9 A14	0	A9 A15	0
A9 A16	0	A9 A17	0	A9 A18	0
A9 A19	0	A9 B1	0	A9 B2	0
A9 C1	0	A9 D1	0	A9 E1	0
A9 E2	0	A9 F1	0	A9 x	1

"A10"

Total observed counts: 67

Category	Counts	Category	Counts	Category	Counts
A10 A11	67	A10 A12	0	A10 A13	0
A10 A14	0	A10 A15	0	A10 A16	0
A10 A17	0	A10 A18	0	A10 A19	0
A10 B1	0	A10 B2	0	A10 C1	0
A10 D1	0	A10 E1	0	A10 E2	0
A10 F1	0	A10 x	0		

"A11"

Total observed counts: 134

Category	Counts	Category	Counts	Category	Counts
A11 A12	73	A11 A13	6	A11 A14	0
A11 A15	0	A11 A16	0	A11 A17	0
A11 A18	0	A11 A19	0	A11 B1	47
A11 B2	0	A11 C1	1	A11 D1	0
A11 E1	6	A11 E2	0	A11 F1	0
A11 x	1				

"A12"

Total observed counts: 73

Category	Counts	Category	Counts	Category	Counts
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A12A13	72	A12A14	0	A12A15	0
A12A16	0	A12A17	0	A12A18	0
A12A19	0	A12 F1	0	A12 x	1

"A13"

Total observed counts: 78

Category	Counts	Category	Counts	Category	Counts
A13A14	76	A13A15	0	A13A16	0
A13A17	0	A13A18	0	A13A19	0
A13 F1	0	A13 x	2		

"A14"

Total observed counts: 76

Category	Counts	Category	Counts	Category	Counts
A14A15	43	A14A16	4	A14A17	0
A14A18	0	A14A19	0	A14 F1	0
A14 x	29				

"A15"

Total observed counts: 43

Category	Counts	Category	Counts	Category	Counts
A15A16	19	A15A17	2	A15A18	0
A15A19	0	A15 x	22		

"A16"

Total observed counts: 20

Category	Counts	Category	Counts	Category	Counts
A16A17	17	A16A18	0	A16A19	0
A16 x	3				

"A17"

Total observed counts: 23

Category	Counts	Category	Counts	Category	Counts

A17 A18	22	A17 A19	0	A17 x	1
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"A18"

Total observed counts: 22

Category	Counts	Category	Counts	Category	Counts
A18 A19	18	A18 x	4		

"A19"

Total observed counts: 18

Category	Counts	Category	Counts	Category	Counts
A19 x	18				

"B1"

Total observed counts: 47

Category	Counts	Category	Counts	Category	Counts
B1 B2	11	B1 C1	1	B1 D1	6
B1 E1	23	B1 E2	2	B1 A16	0
B1 A17	0	B1 A18	0	B1 A19	0
B1 x	4				

"B2"

Total observed counts: 11

Category	Counts	Category	Counts	Category	Counts
B2 A16	0	B2 A17	0	B2 A18	0
B2 A19	0	B2 x	11		

"C1"

Total observed counts: 2

Category	Counts	Category	Counts	Category	Counts
C1 A16	0	C1 A17	0	C1 A18	0
C1 A19	0	C1 x	2		

"D1"

Total observed counts: 6

Category	Counts	Category	Counts	Category	Counts
D1 A17	0	D1 A18	0	D1 A19	0
D1 x	6				

"E1"

Total observed counts: 29

Category	Counts	Category	Counts	Category	Counts
E1 E2	21	E1 A17	0	E1 A18	0
E1 A19	0	E1 x	8		

"E2"

Total observed counts: 23

Category	Counts	Category	Counts	Category	Counts
E2 A17	4	E2 A18	0	E2 A19	0
E2 x	19				

"F1"

Total observed counts: 4

Category	Counts	Category	Counts	Category	Counts
F1 A16	1	F1 A17	0	F1 A18	0
F1 A19	0	F1 x	3		

"B1aux"

Total observed counts: 47

Category	Counts	Category	Counts	Category	Counts
B1ab	18	B1a0	2	B10b	27

"C1aux"

Total observed counts: 2

Category	Counts	Category	Counts	Category	Counts
C1ab	2	C1a0	0	C10b	0

"D1aux"

Total observed counts: 6

Category	Counts	Category	Counts	Category	Counts
D1ab	0	D1a0	6	D10b	0

"A15aux"

Total observed counts: 43

Category	Counts	Category	Counts	Category	Counts
A15ab	41	A15a0	2	A150b	0

"A16aux"

Total observed counts: 20

Category	Counts	Category	Counts	Category	Counts
A16ab	20	A16a0	0	A160b	0

"A17aux"

Total observed counts: 23

Category	Counts	Category	Counts	Category	Counts
A17ab	19	A17a0	4	A170b	0

"A18aux"

Total observed counts: 22

Category	Counts	Category	Counts	Category	Counts
A18ab	22	A18a0	0	A180b	0

"A19aux"

Total observed counts: 18

Category	Counts	Category	Counts	Category	Counts
A19ab	10	A19a0	2	A190b	6

"E1aux"

Total observed counts: 29

Category	Counts	Category	Counts	Category	Counts
E1ab	15	E1a0	4	E10b	10

Parameter Estimates

Parameter	Estimate	s.e.
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sA1	0.763465	--na--
sA2	0.877234	--na--
sA3	0.766777	--na--
sA4	0.635406	--na--
sA5	0.550508	--na--
sA6	0.542539	--na--
sA8	0.5749	--na--
sA9	0.615543	--na--
sA10	0.61938	--na--
sA11	0.619044	--na--
sA12	0.617096	--na--
sA13	0.945065	--na--
sA14	0.802153	--na--
sA15	0.500305	--na--
sA16	0.387524	--na--
sA17	0.857684	--na--
sA18	0.589556	--na--
sA19	0.953606	--na--
phiB1B2	0.364097	--na--
phiB1C1	0.0567852	--na--
phiB1D1	0.198984	--na--
phiB1E1	0.251298	--na--
psiA1	0.493596	--na--
psiA2	0.623847	--na--
sE1	0.727921	--na--
sE2	0.131071	--na--
sF1	0.363778	--na--

pA1	0.728187	--na--
pA2	0.502086	--na--
pA3	0.666881	--na--
pA4	0.60105	--na--
pA6	0.612566	--na--
pA8	0.500191	--na--
pA9	0.491159	--na--
pA10	0.499702	--na--
pA12	0.616863	--na--
pA13	1.01072	--na--
pA15a	1.77472	--na--
pA15b	0.946301	--na--
pA16a	0.858612	--na--
pA16b	0.858612	--na--
pA17b	0.926124	--na--
pA18a	2	--na--
pA18b	2	--na--
pA19a	0.690272	--na--
pA19b	0.958354	--na--
pB1a	0.459526	--na--
pB1b	0.659704	--na--
pB2	0.881588	--na--
pC1a	0.637053	--na--
pC1b	0.637053	--na--
pD1a	0.851163	--na--
pD1b	-0.429989	--na--
pE1a	0.598933	--na--

pE1b	0.814349	--na--
pE2	1.05167	--na--
pF1	-0.254278	--na--
pA5	0.677135	--na--
sC1	0.128961	--na--

Convenience Functions

Name	Estimate	s.e.
psiB	0.506404	--na--
psiF	0.376153	--na--
qA1	0.271813	--na--
qA2	0.497914	--na--
qA3	0.333119	--na--
qA4	0.39895	--na--
qA5	0.322865	--na--
qA6	0.387434	--na--
qA8	0.499809	--na--
qA9	0.508841	--na--
qA10	0.500298	--na--
qA11	0	--na--
qA12	0.383137	--na--
qA13	-0.0107213	--na--
qA14	0	--na--
qA15a	-0.774719	--na--
qA15b	0.0536989	--na--
qA15	-0.0416016	--na--
pA15	1.0416	--na--

qA16a	0.141388	--na--
qA16b	0.141388	--na--
qA16	0.0199905	--na--
pA16	0.980009	--na--
qA17a	0	--na--
qA17b	0.0738758	--na--
qA17	0	--na--
pA17	1	--na--
qA18a	-1	--na--
qA18b	-1	--na--
qA18	0.999999	--na--
pA18	5.05815e-07	--na--
qA19a	0.309728	--na--
qA19b	0.0416462	--na--
qA19	0.012899	--na--
pA19	0.987101	--na--
qE1a	0.401067	--na--
qE1b	0.185651	--na--
qE1	0.0744586	--na--
pE1	0.925541	--na--
qE2	-0.0516693	--na--
qD1a	0.148837	--na--
qD1b	1.42999	--na--
qD1	0.212835	--na--
pD1	0.787165	--na--
qB1a	0.540474	--na--
qB1b	0.340296	--na--

qB1	0.183921	--na--
pB1	0.816079	--na--
qB2	0.118412	--na--
qC1a	0.362947	--na--
qC1b	0.362947	--na--
qC1	0.131731	--na--
pC1	0.868269	--na--
qF1	1.25428	--na--
xA19	1	--na--
xA18	0.0586941	--na--
xA17	0.445048	--na--
xA16	0.142316	--na--
xA15	0.613579	--na--
xA14	0.642149	--na--
xA13	0.197847	--na--
xA12	0.0529301	--na--
xB2	1	--na--
xC1	0.871406	--na--
xD1	1	--na--
xE1	0.239398	--na--
xE2	0.868929	--na--
xB1	0.225298	--na--
xF1	0.637257	--na--
xA11	0.40203	--na--
xA10	0.380956	--na--
xA9	0.498669	--na--
xA8	0.540647	--na--

xA6	0.58045	--na--
xA5	0.57947	--na--
xA4	0.552487	--na--
xA3	0.504647	--na--
xA2	0.362124	--na--
xA1	0.280937	--na--
x0	0.294835	--na--
gamma_B1A16	0.000964673	--na--
gamma_B1A17	-7.57022e-05	--na--
gamma_A14A16	0.0808358	--na--
gamma_A11A16	5.5445e-05	--na--
gamma_A11A17	-4.35102e-06	--na--
pA14	1	--na--
pA11	1	--na--
pA17a	1	--na--
sB1	0	--na--
sD1	0	--na--