Estimation Summary Report

04 January 2020 02::31::03 pm

AIC: 496.885

Log-likelihood: -191.443 Release: -1.28003

A1: -27.7073

A2: -9.25765

A3: -22.3651

A4: -5.49782

A5: -4.163

A6: -15.3576

A8: -32.8458

A9: -17.1395

A10: 6.73563

A10. 6.73363 A11: -33.7931

A12: -5.70648

A13: -3.27872

A13: -3.27672 A14: 31.9851

A 14. 31.3031

A15: -6.85523

A16: -1.97971

A17: -338.239

A18: -1.91685

A19: 0

B1: -18.3154

B2: 0

C1: -1.08359

D1: 0

E1: 2.37483

E2: -12.4278

F1: -0.876155 B1aux: -10.9111

Diaux. - 10.911

C1aux: -1.5674 D1aux: 12.6421

A15aux: -7.13916

A16aux: -5.26194

A17aux: -1.63199

A18aux: 368.502

A19aux: -8.0611

E1aux: -19.0239

Dimension of the Mnimum Sufficient Statistic: 69

Number of parameters: 57

Categories and Corresponding Counts by Likelihood

"Release"

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
RM	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"

Category	Counts	Category	Counts	Category	Counts
A2 A3	28	A2 A4	5	A2 A5	0
A2 A6	0	A2 A8	0	A2 A9	0
A2 A10	0	A2 A11	0	A2 A12	0
A2 A13	0	A2 A14	0	A2A15	0
A2 A16	0	A2 A17	0	A2A18	0
A2 A19	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	A3A6	0
A3 A8	0	A3 A9	0	A3A10	0
A3 A11	0	A3 A12	0	A3A13	0
A3 A14	0	A3 A15	0	A3A16	0
A3A17	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"

Category	Counts	Category	Counts	Category	Counts
A5 A6	140	A5 A8	2	A5A9	0

A5 A10	0	A5 A11	0	A5 A12	0
A5 A13	0	A5 A14	0	A5 A15	0
A5 A16	0	A5 A17	0	A5 A18	0
A5 A19	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
A6 A8	98	A6 A9	21	A6A10	7
A6 A11	7	A6 A12	0	A6 A13	0
A6 A14	0	A6 A15	0	A6A16	0
A6 A17	0	A6 A18	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
A8 A9	73	A8 A10	14	A8 A11	13
A8 A12	0	A8 A13	0	A8 A14	0
A8 A15	0	A8 A16	0	A8 A17	0
A8 A18	0	A8 A19	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"

Category	Counts	Category	Counts	Category	Counts
A9 A10	46	A9 A11	47	A9A12	0
A9 A13	0	A9 A14	0	A9A15	0
A9 A16	0	A9 A17	0	A9A18	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
A10A17	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

Counts Category Counts	Category Counts	Car	egory Counts
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5

A12A13	72	A12 A14	0	A12A15	0
A12A16	0	A12 A17	0	A12A18	0
A12A19	0	A12 F1	0	A12 x	1

"A13"

Total observed counts: 78

Category	Counts	Category	Counts	Category	Counts
A13A14	76	A13 A15	0	A13 A16	0
A13A17	0	A13 A18	0	A13 A19	0
A13 F1	0	A13 x	2		

"A14"

Total observed counts: 76

Category	Counts	Category	Counts	Category	Counts
A14 A15	43	A14 A16	4	A14 A17	0
A14 A18	0	A14 A19	0	A14 F1	0
A14 x	29				

"A15"

Total observed counts: 43

Category	Counts	Category	Counts	Category	Counts
A15A16	19	A15 A17	2	A15A18	0
A15A19	0	A15 x	22		

"A16"

Total observed counts: 20

Category	Counts	Category	Counts	Category	Counts
A16A17	17	A16 A18	0	A16 A19	0
A16 x	3				

"A17"

	Category	Counts	Category	Counts	Category	Counts
ı						

A17A18	22	A17 A19	0	A17 x	1

"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"

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
E2A17	4	E2 A18	0	E2A19	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

Catego	ory	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"

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	0.992641	na
sA2	0.977854	na
sA3	0.690009	na
sA4	0.805881	na
sA5	0.593024	na
sA6	0.902579	na
sA8	0.898084	na
sA9	0.9284	na
sA10	0.843963	na
sA11	1.10576	na
sA12	0.974079	na
sA13	0.898455	na
sA14	0.995852	na
sA15	0.818359	na
sA16	0.376415	na
sA17	0.752936	na
phiB1B2	0.131587	na
phiB1C1	0.0839942	na
phiB1D1	0.155436	na
phiB1E1	0.412654	na
psiA1	0.35509	na
psiA2	2.88751	na
sC1	0.420074	na
sE1	0.388189	na
sE2	0.646799	na
sF1	0.248171	na
pA1	1.00393	na

pA2	0.231525	na
рА3	0.782862	na
pA4	0.87578	na
pA5	1.07263	na
pA6	0.983794	na
pA8	0.739997	na
рА9	0.446324	na
pA10	0.669962	na
pA12	0.820328	na
pA15a	0.882067	na
pA15b	0.893672	na
pA17b	0.790118	na
pA18a	2	na
pA18b	2	na
pA19a	0.397774	na
pA19b	0.980473	na
pB1a	0.567344	na
pB1b	0.694584	na
pB2	1.86291	na
pC1a	0.627046	na
pC1b	0.627046	na
pD1a	0.949574	na
pD1b	-5.02792	na
pE1a	0.541143	na
pE1b	0.997875	na
pE2	1.81504	na
pA16a	0.869205	na

pA16b	0.869205	na
sA18	0.927034	na
sA19	0.892951	na

Convenience Functions

Name	Estimate	s.e.
psiB	0.64491	na
psiF	-1.88751	na
qA1	-0.00392926	na
qA2	0.768475	na
qA3	0.217138	na
qA4	0.12422	na
qA5	-0.0726272	na
qA6	0.0162058	na
qA8	0.260003	na
qA9	0.553676	na
qA10	0.330038	na
qA11	0	na
qA12	0.179672	na
qA13	0	na
qA14	0	na
qA15a	0.117933	na
qA15b	0.106328	na
qA15	0.0125396	na
pA15	0.98746	na
qA16a	0.130795	na
qA16b	0.130795	na

qA16	0.0171073	na
pA16	0.982893	na
qA17a	0	na
qA17b	0.209882	na
qA17	0	na
pA17	1	na
qA18a	-1	na
qA18b	-1	na
qA18	1	na
pA18	2.12613e-07	na
qA19a	0.602226	na
qA19b	0.0195267	na
qA19	0.0117595	na
pA19	0.988241	na
qE1a	0.458857	na
qE1b	0.00212453	na
qE1	0.000974858	na
pE1	0.999025	na
qE2	-0.815039	na
qD1a	0.0504263	na
qD1b	6.02792	na
qD1	0.303966	na
pD1	0.696034	na
qB1a	0.432656	na
qB1b	0.305416	na
qB1	0.13214	na
рВ1	0.86786	na

qB2	-0.862913	na
qC1a	0.372954	na
qC1b	0.372954	na
qC1	0.139095	na
pC1	0.860905	na
qF1	0	na
xA19	1	na
xA18	0.117549	na
xA17	0.181938	na
xA16	0.247064	na
xA15	0.625176	na
xA14	0.200166	na
xA13	0.00414818	na
xA12	0.101545	na
xB2	1	na
xC1	0.581702	na
xD1	1	na
xE1	0.500062	na
xE2	0.353201	na
xB1	0.157024	na
xF1	0.752878	na
xA11	0.0452663	na
xA10	-0.105759	na
xA9	0.126579	na
xA8	0.136666	na
xA6	0.133828	na
xA5	0.099378	na

xA4	0.402696	na
xA3	0.234432	na
xA2	0.345116	na
xA1	0.281485	na
x0	0.00626124	na
gamma_B1A16	0.00490779	na
gamma_B1A17	-1.91064e-05	na
gamma_A14A16	0.0111537	na
gamma_A11A16	0.000407393	na
garma_A11A17	-1.58601e-06	na
pA14	1	na
pA11	1	na
pA17a	1	na
sB1	0	na
sD1	0	na
pA13	1	na
pF1	1	na