Estimation Summary Report

04 January 2020 02::26::28 pm
AIC: 2012.58
Log-likelihood: -949.292
  Release: -173.957
  A1: -105.285
  A2: -11.3265
  A3: -170.768
  A4: -66.0397
  A5: -99.5859
  A6: -65.246
  A8: -61.1157
  A9: -44.2983
  A10: -22.2597
  A11: -79.0065
  A12: -19.5758
  A13: -20.2297
  A14: -4.23874
  A15: -4.31084
  A16: -9.10778
  A17: -321.238
  A18: -1.65895
  A19: 0
  B1: -17.0093
  B2: 0
  C1: -0.129973
  D1: 0
  E1: -1.82947
  E2: -1.55163
  F1: -0.908936
  B1aux: -9.46674
  C1aux: -1.42733
  D1aux: 3.25254
  A15aux: 10.1725
  A16aux: 7.74063
  A17aux: -1.71578
  A18aux: 350.099
  A19aux: -3.53854
  E1aux: -3.73099

Dimension of the Minimum Sufficient Statistic: 69
Number of parameters: 57

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
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	A2 A15	0
A2 A16	0	A2 A17	0	A2 A18	0
A2 A19	0	A2 B1	0	A2 B2	0

Category	Counts	Category	Counts	Category	Counts
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

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	A6 A10	7
A6 A11	7	A6 A12	0	A6 A13	0
A6 A14	0	A6 A15	0	A6 A16	0
A6 A17	0	A6 A18	0	A6 A19	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"
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

Category	Counts	Category	Counts	Category	Counts
A12 A13	72	A12 A14	0	A12 A15	0
A12 A16	0	A12 A17	0	A12 A18	0
A12 A19	0	A12 F1	0	A12 x	1

"A13"
Total observed counts: 78

Category	Counts	Category	Counts	Category	Counts
A13 A14	76	A13 A15	0	A13 A16	0
A13 A17	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
A15 A16	19	A15 A17	2	A15 A18	0
A15 A19	0	A15 x	22		

"A16"
Total observed counts: 20

Category	Counts	Category	Counts	Category	Counts
A16 A17	17	A16 A18	0	A16 A19	0
A16 x	3				

"A17"
Total observed counts: 23

Category	Counts	Category	Counts	Category	Counts

| A17 A18 | 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"
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.

sA1	0.787068	--na--
sA2	0.876354	--na--
sA3	0.758384	--na--
sA4	0.470155	--na--
sA5	0.522506	--na--
sA6	0.501104	--na--
sA8	0.712081	--na--
sA9	0.727399	--na--
sA10	0.726212	--na--
sA11	0.71732	--na--
sA12	0.714391	--na--
sA13	0.731078	--na--
sA14	0.712682	--na--
sA15	0.652615	--na--
sA16	0.438783	--na--
sA17	0.995277	--na--
phiB1B2	0.298819	--na--
phiB1C1	0.0193448	--na--
phiB1D1	0.219384	--na--
phiB1E1	0.287223	--na--
psiA1	0.496995	--na--
psiA2	0.461484	--na--
sC1	0.0629308	--na--
sE1	0.704774	--na--
sE2	0.161173	--na--
sF1	0.279554	--na--
pA1	0.732308	--na--

pA2	0.459478	--na--
pA3	0.763176	--na--
pA4	0.546476	--na--
pA5	0.753444	--na--
pA6	0.708989	--na--
pA8	0.502306	--na--
pA9	0.489104	--na--
pA10	0.498933	--na--
pA12	0.656139	--na--
pA15a	1.72151	--na--
pA15b	0.773752	--na--
pA17b	0.869737	--na--
pA18a	2	--na--
pA18b	2	--na--
pA19a	0.530752	--na--
pA19b	0.695035	--na--
pB1a	0.456716	--na--
pB1b	0.622932	--na--
pB2	0.843268	--na--
pC1a	0.65758	--na--
pC1b	0.65758	--na--
pD1a	0.82632	--na--
pD1b	-0.528559	--na--
pE1a	0.558555	--na--
pE1b	0.706728	--na--
pE2	1.00117	--na--
pF1	-0.457139	--na--

pA16a	1.19114	--na--
pA16b	1.19114	--na--
sA18	0.854677	--na--

Convenience Functions

Name	Estimate	s.e.
psiB	0.503005	--na--
psiF	0.538516	--na--
qA1	0.267692	--na--
qA2	0.540522	--na--
qA3	0.236824	--na--
qA4	0.453524	--na--
qA5	0.246556	--na--
qA6	0.291011	--na--
qA8	0.497694	--na--
qA9	0.510896	--na--
qA10	0.501067	--na--
qA11	0	--na--
qA12	0.343861	--na--
qA13	0	--na--
qA14	0	--na--
qA15a	-0.721508	--na--
qA15b	0.226248	--na--
qA15	-0.16324	--na--
pA15	1.16324	--na--
qA16a	-0.191136	--na--
qA16b	-0.191136	--na--

qA16	0.0365329	--na--
pA16	0.963467	--na--
qA17a	0	--na--
qA17b	0.130263	--na--
qA17	0	--na--
pA17	1	--na--
qA18a	-1	--na--
qA18b	-1	--na--
qA18	1	--na--
pA18	4.90768e-07	--na--
qA19a	0.469248	--na--
qA19b	0.304965	--na--
qA19	0.143104	--na--
pA19	0.856896	--na--
qE1a	0.441445	--na--
qE1b	0.293272	--na--
qE1	0.129463	--na--
pE1	0.870537	--na--
qE2	-0.00116828	--na--
qD1a	0.17368	--na--
qD1b	1.52856	--na--
qD1	0.26548	--na--
pD1	0.73452	--na--
qB1a	0.543284	--na--
qB1b	0.377068	--na--
qB1	0.204855	--na--
pB1	0.795145	--na--

qB2	0.156732	--na--
qC1a	0.34242	--na--
qC1b	0.34242	--na--
qC1	0.117252	--na--
pC1	0.882748	--na--
qF1	1.45714	--na--
xA19	1	--na--
xA18	0.143104	--na--
xA17	0.267631	--na--
xA16	0.00472276	--na--
xA15	0.561292	--na--
xA14	0.688756	--na--
xA13	0.287318	--na--
xA12	0.268922	--na--
xB2	1	--na--
xC1	0.93708	--na--
xD1	1	--na--
xE1	0.294536	--na--
xE2	0.838827	--na--
xB1	0.293383	--na--
xF1	0.720494	--na--
xA11	0.340038	--na--
xA10	0.28268	--na--
xA9	0.37665	--na--
xA8	0.412573	--na--
xA6	0.434134	--na--
xA5	0.562205	--na--

xA4	0.549921	--na--
xA3	0.647103	--na--
xA2	0.357838	--na--
xA1	0.293149	--na--
x0	0.274696	--na--
gamma_B1A16	0.00014274	--na--
gamma_B1A17	2.55399e-07	--na--
gamma_A14A16	0.121589	--na--
gamma_A11A16	1.05075e-05	--na--
gamma_A11A17	1.88007e-08	--na--
pA14	1	--na--
pA11	1	--na--
pA17a	1	--na--
sB1	0	--na--
sD1	0	--na--
pA13	1	--na--
sA19	1	--na--