Estimation Summary Report

04 January 2020 03::01::00 pm
AIC: 2047.71
Log-likelihood: -967.853
  Release: -153.691
  A1: -78.9806
  A2: -10.9982
  A3: -91.6591
  A4: -111.316
  A5: -84.3672
  A6: -69.5899
  A8: -72.7196
  A9: -64.2219
  A10: -32.2675
  A11: -99.6238
  A12: -8.97276
  A13: -15.5654
  A14: -7.46091
  A15: -9.8911
  A16: -1.49022
  A17: -310.29
  A18: -1.53366
  A19: 0
  B1: -39.7019
  B2: 0
  C1: -0.138595
  D1: 0
  E1: -9.52953
  E2: -5.57355
  F1: -0.924292
  B1aux: -7.79998
  C1aux: -1.52527
  D1aux: 3.1246
  A15aux: -3.00857
  A16aux: -2.66469
  A17aux: -8.40199
  A18aux: 342.23
  A19aux: -4.03406
  E1aux: -5.26692

Dimension of the Minimum Sufficient Statistic: 68
Number of parameters: 56

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

Category	Counts	Category	Counts	Category	Counts
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

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	0.780966	--na--
sA2	0.663088	--na--
sA3	0.707821	--na--
sA4	0.588979	--na--
sA5	0.477481	--na--
sA6	0.637606	--na--
sA8	0.677109	--na--
sA9	0.638964	--na--
sA10	0.630342	--na--
sA11	0.617792	--na--
sA12	0.61305	--na--
sA13	0.854313	--na--
sA14	0.761515	--na--
sA15	0.48366	--na--
sA16	0.341889	--na--
sA17	0.879113	--na--
phiB1B2	0.256941	--na--
phiB1C1	0.556619	--na--
phiB1D1	0.07678	--na--
phiB1E1	0.187387	--na--
psiA1	0.540772	--na--
psiA2	0.789639	--na--
sC1	0.0669865	--na--
sE1	0.811926	--na--
sE2	0.0295009	--na--
sF1	0.327789	--na--
pA1	0.781943	--na--

pA2	0.291224	--na--
pA3	0.758605	--na--
pA4	0.709829	--na--
pA5	0.598607	--na--
pA6	0.629332	--na--
pA8	0.586049	--na--
pA9	0.579507	--na--
pA10	0.49904	--na--
pA12	0.603825	--na--
pA17b	0.986544	--na--
pA18a	2	--na--
pA18b	2	--na--
pA19a	0.733727	--na--
pA19b	0.943205	--na--
pB1a	0.458352	--na--
pB1b	0.676177	--na--
pB2	0.886996	--na--
pC1a	0.636148	--na--
pC1b	0.636148	--na--
pD1a	0.875027	--na--
pE1a	0.637787	--na--
pE1b	0.928395	--na--
pE2	1.17384	--na--
pA16a	0.933481	--na--
pA16b	0.933481	--na--
sA19	0.828776	--na--
pF1	-0.430471	--na--

pA15b	0.869242	--na--
pD1b	-0.550879	--na--

Convenience Functions

Name	Estimate	s.e.
psiB	0.459228	--na--
psiF	0.210361	--na--
qA1	0.218057	--na--
qA2	0.708776	--na--
qA3	0.241395	--na--
qA4	0.290171	--na--
qA5	0.401393	--na--
qA6	0.370668	--na--
qA8	0.413951	--na--
qA9	0.420493	--na--
qA10	0.50096	--na--
qA11	0	--na--
qA12	0.396175	--na--
qA13	0	--na--
qA14	0	--na--
qA15a	0	--na--
qA15b	0.130758	--na--
qA15	0	--na--
pA15	1	--na--
qA16a	0.0665188	--na--
qA16b	0.0665188	--na--
qA16	0.00442475	--na--

pA16	0.995575	--na--
qA17a	0	--na--
qA17b	0.013456	--na--
qA17	0	--na--
pA17	1	--na--
qA18a	-1	--na--
qA18b	-1	--na--
qA18	0.999999	--na--
pA18	7.01815e-07	--na--
qA19a	0.266273	--na--
qA19b	0.0567948	--na--
qA19	0.0151229	--na--
pA19	0.984877	--na--
qE1a	0.362213	--na--
qE1b	0.0716052	--na--
qE1	0.0259363	--na--
pE1	0.974064	--na--
qE2	-0.173836	--na--
qD1a	0.124973	--na--
qD1b	1.55088	--na--
qD1	0.193819	--na--
pD1	0.806181	--na--
qB1a	0.541648	--na--
qB1b	0.323823	--na--
qB1	0.175398	--na--
pB1	0.824602	--na--
qB2	0.113004	--na--

qC1a	0.363852	--na--
qC1b	0.363852	--na--
qC1	0.132388	--na--
pC1	0.867612	--na--
qF1	1.43047	--na--
xA19	1	--na--
xA18	0.183757	--na--
xA17	0.183757	--na--
xA16	0.120887	--na--
xA15	0.658294	--na--
xA14	0.6142	--na--
xA13	0.238485	--na--
xA12	0.145687	--na--
xB2	1	--na--
xC1	0.933049	--na--
xD1	1	--na--
xE1	0.0510961	--na--
xE2	0.970499	--na--
xB1	0.0351952	--na--
xF1	0.672386	--na--
xA11	0.407823	--na--
xA10	0.382208	--na--
xA9	0.49035	--na--
xA8	0.492783	--na--
xA6	0.461013	--na--
xA5	0.47135	--na--
xA4	0.612857	--na--

xA3	0.515761	--na--
xA2	0.380304	--na--
xA1	0.515648	--na--
x0	0.306847	--na--
gamma_B1A16	0.00493621	--na--
gamma_B1A17	-1.03548e-06	--na--
gamma_A14A16	0.0477066	--na--
gamma_A11A16	0.000243749	--na--
gamma_A11A17	-5.11316e-08	--na--
pA14	1	--na--
pA11	1	--na--
pA17a	1	--na--
sB1	0	--na--
sD1	0	--na--
pA13	1	--na--
pA15a	1	--na--
sA18	1	--na--