

## **Estimation Summary Report**

25 September 2019 09:45:58 am

AIC: 192.077

Log-likelihood: -73.0387

Release\_d: -10.1894

A7\_d: -19.0572

A8\_d: -8.69332

A9\_d: -5.90816

A10\_d: -3.54678

A11\_d: -7.24185

A12\_d: -2.11708

A13\_d: -1.61551

A14\_d: -2.58979

B1\_d: -1.77062

A15\_d: -3.63355

A16\_d: -1.69064

A17\_d: 0

B1aux\_d: -4.00794

A17aux\_d: -0.97692

Dimension of the Minimum Sufficient Statistic: 24

Number of parameters: 23

## **Categories and Corresponding Counts by Likelihood**

"Release\_d"

Total observed counts: 355

Category	Counts	Category	Counts	Category	Counts
RA7_d	190	RA8_d	137	RA9_d	14
RA10_d	3	RA11_d	2	RA12_d	0
RA13_d	0	RA14_d	0	RA15_d	0
RA16_d	0	RA17_d	0	RB1_d	0
Rx_d	9				

"A7\_d"

Total observed counts: 190

Category	Counts	Category	Counts	Category	Counts
A7A8_d	147	A7A9_d	12	A7A10_d	4
A7A11_d	3	A7A12_d	0	A7A13_d	0
A7A14_d	0	A7A15_d	0	A7A16_d	0
A7A17_d	1	A7B1_d	0	A7x_d	23

"A8\_d"

Total observed counts: 283

Category	Counts	Category	Counts	Category	Counts
A8A9_d	178	A8A10_d	38	A8A11_d	32
A8A12_d	0	A8A13_d	0	A8A14_d	0
A8A15_d	0	A8A16_d	0	A8A17_d	0
A8B1_d	0	A8x_d	35		

"A9\_d"

Total observed counts: 204

Category	Counts	Category	Counts	Category	Counts
A9A10_d	119	A9A11_d	69	A9A12_d	0
A9A13_d	0	A9A14_d	0	A9A15_d	0
A9A16_d	0	A9A17_d	0	A9B1_d	0
A9x_d	16				

"A10\_d"

Total observed counts: 164

Category	Counts	Category	Counts	Category	Counts
A10A11_d	157	A10A12_d	0	A10A13_d	0
A10A14_d	0	A10A15_d	0	A10A16_d	0
A10A17_d	0	A10B1_d	1	A10x_d	6

"A11\_d"

Total observed counts: 263

Category	Counts	Category	Counts	Category	Counts
A11A12_d	123	A11A13_d	6	A11A14_d	0
A11A15_d	0	A11A16_d	0	A11A17_d	0
A11B1_d	120	A11x_d	14		

"A12\_d"

Total observed counts: 123

Category	Counts	Category	Counts	Category	Counts
A12A13_d	111	A12A14_d	0	A12A15_d	0

A12A16_d	0	A12A17_d	0	A12 x_d	12
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"A13\_d"

Total observed counts: 117

Category	Counts	Category	Counts	Category	Counts
A13A14_d	113	A13A15_d	0	A13A16_d	0
A13A17_d	0	A13 x_d	4		

"A14\_d"

Total observed counts: 113

Category	Counts	Category	Counts	Category	Counts
A14A15_d	53	A14A16_d	0	A14A17_d	0
A14 x_d	60				

"B1\_d"

Total observed counts: 121

Category	Counts	Category	Counts	Category	Counts
B1A17_d	5	B1 x_d	116		

"A15\_d"

Total observed counts: 53

Category	Counts	Category	Counts	Category	Counts
A15A16_d	20	A15A17_d	3	A15 x_d	30

"A16\_d"

Total observed counts: 20

Category	Counts	Category	Counts	Category	Counts
A16A17_d	13	A16 x_d	7		

"A17\_d"

Total observed counts: 22

Category	Counts	Category	Counts	Category	Counts
A17 x_d	22				

"B1aux\_d"

Total observed counts: 121

Category	Counts	Category	Counts	Category	Counts
B1ab_d	44	B1a0_d	2	B10b_d	75

"A17aux\_d"

Total observed counts: 22

Category	Counts	Category	Counts	Category	Counts
A17ab_d	21	A17a0_d	0	A170b_d	1

## Parameter Estimates

Parameter	Estimate	s.e.
sA7_d	1.03517	0.0165105
sA8_d	0.893925	0.0243231
sA9_d	0.897894	0.0209185
sA10_d	0.935386	0.0199782
sA11_d	0.963823	0.0146696
sA12_d	0.96666	0.0176466
sA13_d	0.902439	0.0267544
sA14_d	0.965812	0.0167993
sA15_d	0.469027	0.0469456
sA16_d	0.464441	0.0760396
sA17_d	0.65	0.106653
sB1_d	0.047384	0.0189274
psiA1_d	0.505899	0.0320438
pA7_d	0.517028	0.0278046
pA8_d	0.864525	0.020171
pA9_d	0.693727	0.0280004
pA10_d	0.596226	0.0301406
pA11_d	0.992032	0.00561182

pA12_d	0.948718	0.0203919
pA16_d	0.8125	0.0975778
pA17a_d	0.954545	0.0444095
pB1a_d	0.363278	0.0439246
pB1b_d	0.939784	0.0336744

### Convenience Functions

Name	Estimate	s.e.
psiB_d	0.494101	0.0320438
qA7_d	0.482972	0.0278046
qA8_d	0.135475	0.020171
qA9_d	0.306273	0.0280004
qA10_d	0.403774	0.0301406
qA11_d	0.00796813	0.00561182
qA12_d	0.0512821	0.0203919
qA13_d	0	0
qA14_d	0	0
qA15_d	0	0
qA16_d	0.1875	0.0975778
qA17a_d	0.0454545	0.0444095
qA17b_d	0	0
qA17_d	0	0
pA17_d	1	0
qB1a_d	0.636722	0.0439246
qB1b_d	0.0602164	0.0336744
qB1_d	0.0383411	0.02207
pB1_d	0.961659	0.02207

xA17_d	1	0
xA16_d	0.35	0.106653
xA15_d	0.566038	0.0680786
xA14_d	0.530973	0.0469456
xA13_d	0.034188	0.0167993
xA12_d	0.097561	0.0267544
xB1_d	0.952616	0.0189274
xA11_d	0.0532319	0.013843
xA10_d	0.0365854	0.0146601
xA9_d	0.0784314	0.0188232
xA8_d	0.123675	0.0195695
xA7_d	0.121053	0.0236642
x0_d	0.0253521	0.00834289
gamma_A11A17_d	0.000867732	0.00061004
pA17b_d	1	0
pA13_d	1	0
pA14_d	1	0
pA15_d	1	0