Sample Size for 2016 Chinook Tagging Study: Supplemental Release

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Summary of Recommendations

Assume

- Barrier is installed at head of Old River
- Approximately 25% of fish reaching the Turner Cut Junction enter Turner Cut
- The survival probability from Turner Cut to Chipps Island is 0.05 for fish entering Turner Cut
- A primary release at Durham Ferry is paired with a supplemental release in the San Joaquin River downstream of the Old River flow split
- Total sample size = 648

Recommend

- To estimate route selection probability at the head of Old River: Release scenario II
- To estimate route selection probability at Turner Cut: Release scenario I
- To estimate survival from through the Old River route to Chipps Island: Release scenario II
- To estimate survival from the lower San Joaquin River or Turner Cut to Chipps Island: Release scenario I
- To estimate survival from Mossdale to the Turner Cut junction: Release scenario II

Where

- Release scenario I = release 324 fish at Durham Ferry, 324 fish in supplemental release
- Release scenario II = release 500 fish at Durham Ferry, 148 fish in supplemental release
- “Low” or “Low Mixed” survival was assumed

Introduction

This analysis updates previous sample size analyses for Chinook salmon acoustic tagging studies in the South Delta. It uses data simulation to select between two scenarios using a primary release at Durham Ferry paired with a supplemental release in the San Joaquin River downstream of the Old River flow split. Scenario I uses equal release sizes at the two release locations: 324 fish released both at Durham Ferry and in the supplemental release. Scenario II uses 500 fish released at Durham Ferry and 148 fish released in the supplemental release. Both scenarios use a total release size of 648. Data were simulated under the "Low" and "Low Mixed" survival scenarios from a previous sample size analysis (Buchanan 2014). Primary focus is on estimating survival from various points to Chipps Island

Methods

Analysis methods were based on the methods described in Buchanan (2014). Detection data were simulated 10,000 times from a simplified survival model using 48 parameter sets and two candidate release scenarios, as described above. For each simulated data set, parameter estimates were computed using Method of Moments. For each parameter set and release size combination, the mean, maximum, and standard deviation of the sampling distribution of parameter estimates was computed, as well as the number of simulations in which each parameter was estimable. The preferred release scenario of the two scenarios considered was identified based on several criteria on the estimability of parameters and validity of estimates.

Parameters estimated in the survival model were (Figure 1):

- Overall survival from Durham Ferry to Chipps Island (s_R)
- Survival from Durham Ferry to the head of Old River (s_{R0})
- Survival from the head of Old River to Chipps Island in both the San Joaquin River route and the Old River route (s_A, s_B)
- Survival from the head of Old River to Turner Cut in the San Joaquin River (s_{A1})
- Survival from the Turner Cut junction to Chipps Island in both the San Joaquin River route and the Turner Cut route (s_{A2}, s_F)
- Route selection at the head of Old River and at Turner Cut (ψ_{A1}, ψ_{A2})
- Detection probabilities at the dual arrays at the 5 detection sites

The supplemental release located downstream of the Old River flow split contributed to estimation of parameters s_{A2}, s_F, ψ_{A2}, and detection probabilities at 3 detection sites, when combined with data from the primary release at Durham Ferry. The survival model is described in more detail in Buchanan (2014).

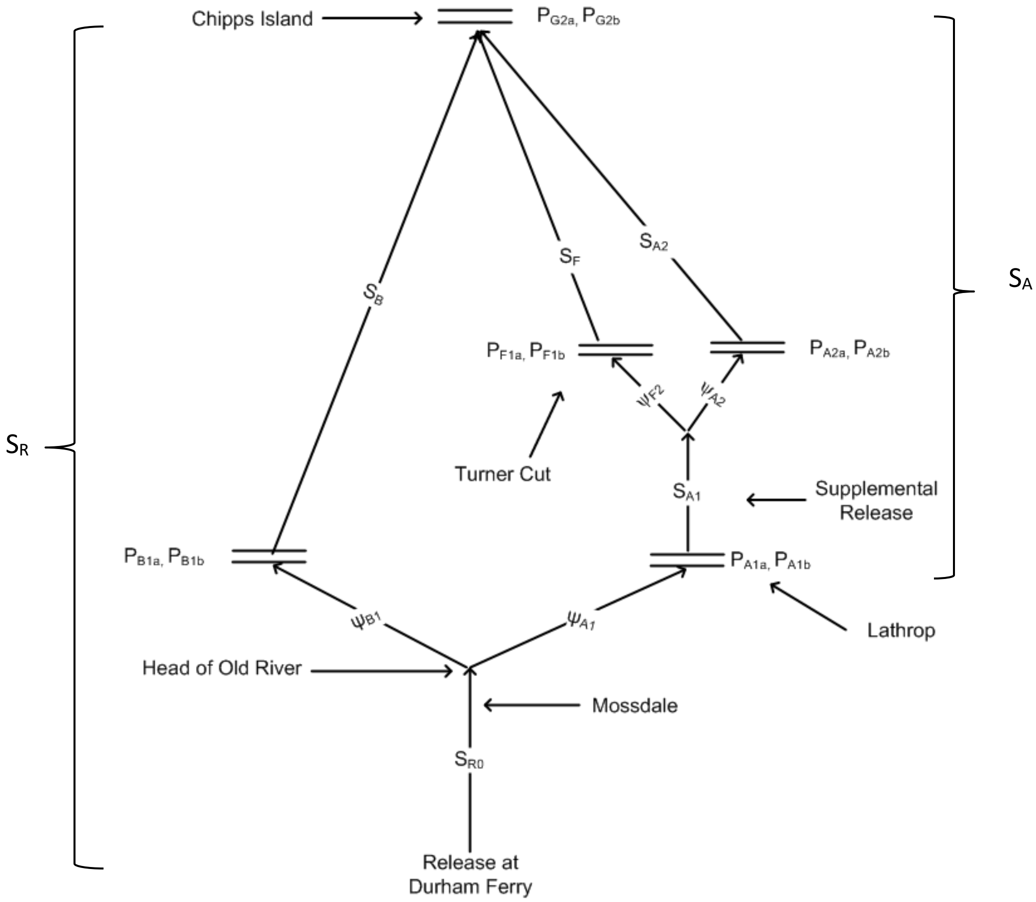

Figure 1. Schematic of model used in data simulations, with parameters: survival from Durham Ferry to Chipps Island (S_R), survival from head of Old River/Mossdale in the San Joaquin River route (S_A) and Old River route (S_B), probability of survival from head of Old River/Mossdale to Turner Cut (S_{A1}), survival from Turner Cut to Chipps Island in the San Joaquin River route (S_{A2}) and Turner Cut route (S_F), and the probabilities of remaining in the San Joaquin River at the head of Old River (ψ_{A1}) and at Turner Cut (ψ_{A2}). Other parameters are survival from Durham Ferry to the head of Old River/Mossdale (S_{R0}), and detection probabilities on the upstream and downstream arrays at Lathrop (P_{A1a}, P_{A1b}), Old River (P_{B1a}, P_{B1b}), Turner Cut in the San Joaquin (P_{A2a}, P_{A2b}) and in Turner Cut (P_{F1a}, P_{F1b}), and at Chipps Island (P_{G2a}, P_{G2b}).

The total release size was assumed to be 648. Two candidate release scenarios were considered (Table 1), to determine the preferred distribution of the total release size over the two release locations (primary release at Durham Ferry, supplemental release downstream).

Table 1. Release scenarios considered, for a total release size of 648.

Scenario	Durham Ferry Release Size (R1)	Supplemental Release Size (R2)
I	324	324
II	500	148

Parameters Sets

Parameter values were selected from a subset of the parameters considered in a previous analysis (Buchanan 2014, Tables 2 and 3). The "Low" and "Low Mixed" parameter scenarios were considered for this analysis (scenarios 2 and 3 from Buchanan 2014), based on survival estimates from recent years combined with the possible expectation of higher water than in recent years. These two parameter scenarios both assume that survival from the Durham Ferry release site to Mossdale is s_{R0}=0.4, survival from Mossdale to the Turner Cut junction (sites A2 and F1) is s_{A1}=0.3, and 98% of the fish reaching the Old River junction remain in the San Joaquin, as expected if a barrier is installed in Old River (Table 2). Survival from site A2 to Chipps Island (site G2) was modeled as either 0.07 or 0.15, survival from Turner Cut to Chipps Island was assumed to be 0.05, and survival from the head of Old River to Chipps Island via the Old River route was assumed to be either 0.07 or 0.2 (Table 2). The probability of entering Turner Cut upon reaching the Turner Cut junction was assumed to be 0.25. Detection probabilities for each line of the dual arrays were assumed to be either 0.9 or 0.85 at the upriver sites (A1, B1), 0.85 at sites A2 and F1, and either 0.5 or 0.9 at site G2 (Chipps Island). Results for alternative values of the route selection parameters (ψ_{A1} and ψ_{A2}) and S_F are provided in Appendix A.

Table 2. Parameter sets used in data simulations to estimate survival to Turner Cut and Chipps Island and route selection at Old River and Turner Cut. Values of S_R and S_A were computed from values of other parameters. For each scenario, s_F=0.05, ψ_{A2}=0.75, p_{G2a}=p_{G2b}=0.5 or 0.9 (equivalent to p_{G2}=0.75 or 0.99), and p_{A2a} = p_{A2b} = p_{F1a} = p_{F1b} = 0.85.

Scenario	S_{R0}	S_{A1}	S_{A2}	S_B	ψ_{A1}	S_R	S_A	p_{A1a}, p_{A1b}, p_{B1a}, p_{B1b}
2: Low	0.4	0.3	0.07	0.07	0.98	0.008	0.020	0.9
3: Low Mixed	0.4	0.3	0.15	0.2	0.98	0.016	0.038	0.85

Criteria

Four criteria were used to assess the candidate release scenarios (Table 3). These criteria are the same as those used in previous analyses (e.g., Buchanan 2014), except that the maximum standard error considered for criterion C3 was reduced from 0.10 to 0.05.

Table 3. Criteria used for identification of minimum sample size necessary to estimate a model parameter, assuming 10,000 simulations. The standard error in Criterion C3 is calculated as the standard deviation of the observed parameter estimates over all simulations.

Criterion	Definition
C1	Parameter is estimable in at least 95% of simulations (9500 or more)
C2	Probability estimate is not greater than 1.1 in 95% of simulations (9500 or more)
C3	Standard error on parameter estimate is not greater than 0.05
C4	Difference between average of parameter estimates and true parameter value is not greater than 0.05

Results

Results for the four criteria from simulations using the “Low” and “Low Mixed” survival scenarios, and assuming that the probability of remaining in the San Joaquin River at the head of Old River is 0.98, are shown in Table 4. Simulation results indicate that many parameters can be estimated with confidence using either release scenario I (equal split of 324 at both release locations) or release scenario II (500 released at Durham Ferry, 148 released downstream). Release scenario I favors estimation of downstream parameters such as S_{A2}, S_F, and ψ_{A2}, whereas release scenario II favors estimation of upstream parameters such as S_{R0}, as well as S_B. Giving priority to estimation of downstream parameters such as S_{A2}, S_F, and ψ_{A2}, release scenario I is recommended. This recommendation is based on the assumption that a physical barrier will block the majority of access to Old River.

Table 5 presents results for the same survival scenarios but assuming that the probability of remaining in the San Joaquin River at the head of Old River is 0.4 (e.g., if the barrier is either absent or ineffective). Under this assumption, all parameters are expected to be estimable (Criterion C1) using either release scenario (I or II). The only criterion that is sometimes unmet is C3, which requires a standard error < 0.5. Release scenario I is recommended to meet this criterion for downstream San Joaquin River and Turner Cut parameters (S_{A2}, S_F, ψ_{A2}), whereas release scenario II is recommended to meet this criterion for upstream San Joaquin River and Old River parameters (S_{A1}, S_B, ψ_{A1}).

Simulation results for all parameter sets are presented in Appendix A.

Summary

Using a primary release at Durham Ferry and a supplemental release in the San Joaquin River downstream of the Old River flow split, and a total release size of 648, the following recommendations are made:

- To estimate route selection probability at the head of Old River: Release scenario II
- To estimate route selection probability at Turner Cut: Release scenario I
- To estimate survival from through the Old River route to Chipps Island: Release scenario II
- To estimate survival from the lower San Joaquin River or Turner Cut to Chipps Island: Release scenario I
- To estimate survival from Mossdale to the Turner Cut junction: Release scenario II

Where

- Release scenario I = release 324 fish at Durham Ferry, 324 fish in supplemental release
- Release scenario II = release 500 fish at Durham Ferry, 148 fish in supplemental release
- “Low” or “Low Mixed” survival was assumed

Table 4. Release scenario selected for estimation of each parameter based on the four criteria defined in Table 3, assuming that a 98% probability of remaining in the San Joaquin River at the head of Old River. Release scenarios are: I = (R1 = R2 = 324), and II = (R1 = 500, R2 = 148), where R1 = release size at Durham Ferry, and R2 = size of supplemental release. Release scenarios identified in [brackets] indicate the preferred release scenario in the case when neither release scenario satisfied the criterion. Parameter set numbers refer to Table 6.

Survival Scenario	Parameter	Value	Criterion C1	Criterion C2	Criterion C3	Criterion C4
Low survival, low detection probability at Chipps Island – Parameter Set 6	S_{R0}	0.4	II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	I or II	I or II
	S_{A2}	0.07	[I]	I or II	I or II	I or II
	S_{B}	0.07	[I]	I or II	[II]	I or II
	S_{F}	0.05	[I]	I or II	[I]	I or II
	ψ_{A1}	0.98	II	I or II	[II]	I or II
	ψ_{A2}	0.75	I or II	I or II	I or II	I or II
	P_{G1a}	0.5	I or II	I or II	[I]	I or II
	P_{G2b}	0.5	I or II	I or II	[I]	I or II
	S_{A}	0.020	[I]	I or II	I or II	I or II
	S_{R}	0.008	[II]	I or II	I or II	I or II
Low survival, high detection probability at Chipps Island – Parameter Set 18	S_{R0}	0.4	II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	I or II	I or II
	S_{A2}	0.07	I or II	I or II	I or II	I or II
	S_{B}	0.07	II	I or II	[II]	I or II
	S_{F}	0.05	I or II	I or II	I or II	I or II
	ψ_{A1}	0.98	II	I or II	[II]	I or II
	ψ_{A2}	0.75	I or II	I or II	I or II	I or II
	P_{G1a}	0.9	I or II	I or II	[I]	I or II
	P_{G2b}	0.9	I or II	I or II	[I]	I or II
	S_{A}	0.020	I or II	I or II	I or II	I or II
	S_{R}	0.008	II	I or II	I or II	I or II
Low Mixed survival, low detection probability at Chipps Island – Parameter Set 30	S_{R0}	0.4	II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	I or II	I or II
	S_{A2}	0.15	I or II	I or II	[I]	I or II
	S_{B}	0.2	II	I or II	[II]	I or II
	S_{F}	0.05	I or II	I or II	[I]	I or II
	ψ_{A1}	0.98	II	I or II	[II]	II
	ψ_{A2}	0.75	I or II	I or II	I or II	I or II
	P_{G1a}	0.5	I or II	I or II	[I]	I or II
	P_{G2b}	0.5	I or II	I or II	[I]	I or II
	S_{A}	0.038	I or II	I or II	I or II	I or II
	S_{R}	0.016	[II]	I or II	I or II	I or II
Low Mixed survival, high detection probability at Chipps Island – Parameter Set 42	S_{R0}	0.4	[II]	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	I or II	I or II
	S_{A2}	0.15	I or II	I or II	I or II	I or II
	S_{B}	0.2	II	I or II	[II]	I or II
	S_{F}	0.05	I or II	I or II	I or II	I or II
	ψ_{A1}	0.98	II	I or II	[II]	I or II
	ψ_{A2}	0.75	I or II	I or II	I or II	I or II
	P_{G1a}	0.9	I or II	I or II	[I]	I or II
	P_{G2b}	0.9	I or II	I or II	[I]	I or II
	S_{A}	0.038	I or II	I or II	I or II	I or II
	S_{R}	0.016	[II]	I or II	I or II	I or II

Table 5. Release scenario selected for estimation of each parameter based on the four criteria defined in Table 3, assuming that a 40% probability of remaining in the San Joaquin River at the head of Old River. Release scenarios are: I = (R1 = R2 = 324), and II = (R1 = 500, R2 = 148), where R1 = release size at Durham Ferry, and R2 = size of supplemental release. Release scenarios identified in [brackets] indicate the preferred release scenario in the case when neither release scenario satisfied the criterion. Parameter set numbers refer to Table 6.

Survival Scenario	Parameter	Value	Criterion C1	Criterion C2	Criterion C3	Criterion C4
Low survival, low detection probability at Chipps Island – Parameter Set 2	S_{R0}	0.4	I or II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	[II]	I or II
	S_{A2}	0.07	I or II	I or II	I	I or II
	S_B	0.07	I or II	I or II	I or II	I or II
	S_F	0.05	I or II	I or II	[I]	I or II
	ψ_{A1}	0.4	I or II	I or II	I or II	I or II
	ψ_{A2}	0.75	I or II	I or II	I	I or II
	P_{G1a}	0.5	I or II	I or II	[II]	I or II
	P_{G2b}	0.5	I or II	I or II	[II]	I or II
	S_A	0.020	I or II	I or II	I or II	I or II
	S_R	0.008	I or II	I or II	I or II	I or II
Low survival, high detection probability at Chipps Island – Parameter Set 14	S_{R0}	0.4	I or II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	[II]	I or II
	S_{A2}	0.07	I or II	I or II	I or II	I or II
	S_B	0.07	I or II	I or II	I or II	I or II
	S_F	0.05	I or II	I or II	I	I or II
	ψ_{A1}	0.4	I or II	I or II	I or II	I or II
	ψ_{A2}	0.75	I or II	I or II	I	I or II
	P_{G1a}	0.9	I or II	I or II	[I]	I or II
	P_{G2b}	0.9	I or II	I or II	[I or II]	I or II
	S_A	0.020	I or II	I or II	I or II	I or II
	S_R	0.008	I or II	I or II	I or II	I or II
Low Mixed survival, low detection probability at Chipps Island – Parameter Set 26	S_{R0}	0.4	I or II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	[II]	I or II
	S_{A2}	0.15	I or II	I or II	[I]	I or II
	S_B	0.2	I or II	I or II	[II]	I or II
	S_F	0.05	I or II	I or II	[I]	I or II
	ψ_{A1}	0.4	I or II	I or II	I or II	I or II
	ψ_{A2}	0.75	I or II	I or II	I	I or II
	P_{G1a}	0.5	I or II	I or II	[II]	I or II
	P_{G2b}	0.5	I or II	I or II	[II]	I or II
	S_A	0.038	I or II	I or II	I or II	I or II
	S_R	0.016	I or II	I or II	I or II	I or II
Low Mixed survival, high detection probability at Chipps Island – Parameter Set 38	S_{R0}	0.4	I or II	I or II	I or II	I or II
	S_{A1}	0.3	I or II	I or II	[II]	I or II
	S_{A2}	0.15	I or II	I or II	I	I or II
	S_B	0.2	I or II	I or II	I or II	I or II
	S_F	0.05	I or II	I or II	I	I or II
	ψ_{A1}	0.4	I or II	I or II	I or II	I or II
	ψ_{A2}	0.75	I or II	I or II	I	I or II
	P_{G1a}	0.9	I or II	I or II	[II]	I or II
	P_{G2b}	0.9	I or II	I or II	[II]	I or II
	S_A	0.038	I or II	I or II	I or II	I or II
	S_R	0.016	I or II	I or II	I or II	I or II

References

Buchanan, R. A. 2014. Sample Size for 2015 Chinook Tagging Study, prepared for Pat Brandes, 11 December 2014.

Appendix A

Table 6. Simulation results for survival parameter sets (s_{R0}=0.4, s_{A1}=0.3, s_{A2} = 0.07 or 0.15, s_B = 0.07 or 0.2, $p_{A1a} = p_{A1b} = p_{B1a} = p_{B1b}$ = 0.90 or 0.85, and $p_{A2a} = p_{A2b} = p_{F1a} = p_{F1b}$ = 0.85). Parameter sets 6 and 18 correspond to the "Low" survival scenario; parameter sets 30 and 42 correspond to the "Low Mixed" survival scenario (see Table 2). C1 = % of simulations in which parameter was successfully estimated. C2 = % of simulations in which parameter was estimated ≤1.1. C3 = standard error of estimate (standard deviation of sampling distribution). C4 = absolute difference between average estimate and true value. Mean = average estimate. Max = maximum estimate. Statistics are calculated over all 10,000 simulations. Highlighted results are summarized in Table 4 and Table 5.

	Parameter		R1 = R2 = 324							R1 = 500, R2 = 148					
Set	**Name**	**Value**	**C1**	**C2**	**C3**	**C4**	**Mean**	**Max**		**C1**	**C2**	**C3**	**C4**	**Mean**	**Max**
1	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.534		100	0	0.023	0.007	0.407	0.489
	S_{A1}	0.3	100	0	0.065	0.005	0.295	0.538		100	0	0.052	0.006	0.294	0.494
	S_{A2}	0.07	95	0	0.046	0.006	0.076	0.486		95	0	0.053	0.006	0.076	0.525
	S_B	0.07	95	0	0.046	0.006	0.076	0.503		95	0	0.040	0.006	0.076	0.378
	S_F	0.01	95	0	0.026	0.001	0.011	0.344		95	0	0.034	0.001	0.011	0.400
	ψ_{A1}	0.4	100	0	0.044	0.005	0.405	0.596		100	0	0.035	0.006	0.406	0.538
	ψ_{A2}	0.75	100	0	0.042	0.007	0.757	0.911		100	0	0.055	0.014	0.764	0.970
	P_{G1a}	0.5	99.7	0	0.231	0.001	0.501	1.000		99.7	0	0.228	0.002	0.498	1.000
	P_{G2b}	0.5	99.7	0	0.230	0.000	0.500	1.000		99.7	0	0.227	0.003	0.497	1.000
	S_A	0.016	95	0	0.011	0.002	0.018	0.126		95	0	0.013	0.002	0.018	0.115
	S_R	0.019	95	0	0.012	0.005	0.021	0.125		95	0	0.011	0.005	0.021	0.100
2	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.523		100	0	0.023	0.008	0.408	0.510
	S_{A1}	0.3	100	0	0.065	0.005	0.295	0.603		100	0	0.052	0.004	0.296	0.535
	S_{A2}	0.07	96	0	0.046	0.006	0.076	0.535		96	0	0.053	0.005	0.075	0.552
	S_B	0.07	96	0	0.047	0.006	0.076	0.467		96	0	0.040	0.006	0.076	0.473
	S_F	0.05	96	0	0.058	0.004	0.054	0.597		96	0	0.076	0.005	0.055	0.700
	ψ_{A1}	0.4	100	0	0.044	0.006	0.406	0.578		100	0	0.035	0.005	0.405	0.554
	ψ_{A2}	0.75	100	0	0.042	0.008	0.758	0.907		100	0	0.054	0.016	0.766	0.946
	P_{G1a}	0.5	99.8	0	0.221	0.000	0.500	1.000		99.8	0	0.217	0.001	0.499	1.000
	P_{G2b}	0.5	99.8	0	0.222	0.000	0.500	1.000		99.8	0	0.219	0.001	0.499	1.000
	S_A	0.020	96	0	0.013	0.001	0.021	0.155		96	0	0.014	0.001	0.021	0.166
	S_R	0.020	96	0	0.012	0.002	0.022	0.141		96	0	0.011	0.002	0.022	0.121
3	S_{R0}	0.4	100	0	0.029	0.009	0.409	0.530		100	0	0.023	0.009	0.409	0.492
	S_{A1}	0.3	100	0	0.053	0.005	0.295	0.532		100	0	0.042	0.005	0.295	0.461
	S_{A2}	0.07	93	0	0.045	0.006	0.076	0.538		92	0	0.051	0.006	0.076	0.463
	S_B	0.07	93	0	0.053	0.006	0.076	0.495		92	0	0.046	0.006	0.076	0.551

	S_F	0.01	93	0	0.024	0.001	0.011	0.250		92	0	0.030	0.001	0.011	0.286
	ψ_{A1}	0.6	100	0	0.044	0.004	0.604	0.746		100	0	0.035	0.005	0.605	0.738
	ψ_{A2}	0.75	100	0	0.041	0.009	0.759	0.599		100	0	0.050	0.017	0.767	0.979
	P_{G1a}	0.5	99	0	0.251	0.001	0.501	1.000		99	0	0.253	0.000	0.500	1.000
	P_{G2b}	0.5	99	0	0.248	0.001	0.499	1.000		99	0	0.254	0.000	0.500	1.000
	S_A	0.016	93	0	0.011	0.003	0.018	0.118		92	0	0.012	0.003	0.018	0.122
	S_R	0.015	93	0	0.010	0.000	0.017	0.094		92	0	0.009	0.000	0.017	0.086
4	S_{R0}	0.4	100	0	0.028	0.009	0.409	0.521		100	0	0.023	0.009	0.409	0.496
	S_{A1}	0.3	100	0	0.053	0.005	0.295	0.511		100	0	0.043	0.005	0.295	0.456
	S_{A2}	0.07	95	0	0.044	0.006	0.076	0.671		94	0	0.051	0.005	0.075	0.479
	S_B	0.07	95	0	0.053	0.006	0.076	0.677		94	0	0.045	0.006	0.076	0.524
	S_F	0.05	95	0	0.056	0.006	0.055	0.583		94	0	0.067	0.004	0.054	0.750
	ψ_{A1}	0.6	100	0	0.043	0.006	0.606	0.770		100	0	0.035	0.005	0.605	0.723
	ψ_{A2}	0.75	100	0	0.040	0.010	0.760	0.885		100	0	0.050	0.017	0.767	0.938
	P_{G1a}	0.5	99.7	0	0.231	0.004	0.504	1.000		99.6	0	0.241	0.006	0.506	1.000
	P_{G2b}	0.5	99.6	0	0.234	0.005	0.505	1.000		99.6	0	0.240	0.002	0.502	1.000
	S_A	0.020	95	0	0.012	0.005	0.021	0.166		94	0	0.013	0.005	0.021	0.135
	S_R	0.016	95	0	0.010	0.002	0.017	0.111		94	0	0.009	0.002	0.017	0.101
5	S_{R0}	0.4	88	0	0.029	0.013	0.413	0.524		96	0	0.023	0.012	0.412	0.511
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.461		100	0	0.033	0.005	0.295	0.423
	S_{A2}	0.07	85	0	0.042	0.006	0.076	0.524		77	0	0.046	0.005	0.075	0.479
	S_B	0.07	79	1.3	0.231	0.006	0.076	2.500		76	0.4	0.177	0.005	0.075	1.800
	S_F	0.01	85	0	0.022	0.001	0.011	0.200		77	0	0.024	0.001	0.011	0.242
	ψ_{A1}	0.98	91	0	0.171	0.033	0.947	0.994		97	0	0.105	0.012	0.968	0.996
	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.904		100	0	0.044	0.021	0.771	0.922
	P_{G1a}	0.5	98	0	0.295	0.002	0.498	1.000		95	0	0.331	0.001	0.501	1.000
	P_{G2b}	0.5	98	0	0.294	0.000	0.500	1.000		95	0	0.327	0.001	0.499	1.000
	S_A	0.016	85	0	0.010	0.011	0.018	0.138		77	0	0.011	0.011	0.018	0.112
	S_R	0.007	75	0	0.005	0.009	0.008	0.065		74	0	0.005	0.009	0.008	0.042
6	S_{R0}	0.4	88	0	0.029	0.014	0.414	0.519		96	0	0.023	0.013	0.413	0.495
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.465		100	0	0.033	0.005	0.295	0.413
	S_{A2}	0.07	90	0	0.042	0.006	0.076	0.412		82	0	0.046	0.005	0.075	0.463
	S_B	0.07	83	1	0.239	0.011	0.081	2.667		81	1	0.193	0.005	0.075	3.000
	S_F	0.05	90	0	0.053	0.004	0.054	0.477		82	0	0.059	0.003	0.053	0.635
	ψ_{A1}	0.98	91	0	0.157	0.028	0.952	0.994		97	0	0.110	0.013	0.967	0.996
	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.894		100	0	0.044	0.021	0.771	0.934

	P_{G1a}	0.5	99	0	0.267	0.004	0.496	1.000		97	0	0.308	0.001	0.499	1.000
	P_{G2b}	0.5	99	0	0.268	0.002	0.498	1.000		97	0	0.307	0.005	0.495	1.000
	S_A	0.020	90	0	0.011	0.013	0.021	0.123		82	0	0.012	0.013	0.021	0.136
	S_R	0.008	78	0	0.005	0.010	0.009	0.055		79	0	0.005	0.010	0.009	0.054
7	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.530		100	0	0.023	0.007	0.407	0.495
	S_{A1}	0.3	98	0	0.065	0.004	0.296	0.563		92	0	0.053	0.004	0.296	0.529
	S_{A2}	0.07	96	0	0.043	0.006	0.076	0.560		96	0	0.048	0.006	0.076	0.490
	S_B	0.07	96	0	0.048	0.007	0.077	0.465		96	0	0.040	0.007	0.077	0.489
	S_F	0.01	96	0.02	0.067	0.002	0.012	1.667		92	0.2	0.094	0.003	0.0123	1.800
	ψ_{A1}	0.4	100	0	0.043	0.005	0.405	0.584		100	0	0.035	0.005	0.405	0.538
	ψ_{A2}	0.95	98	0	0.043	0.004	0.954	1.008		92	0	0.082	0.005	0.955	1.033
	P_{G1a}	0.5	99.8	0	0.219	0.002	0.498	1.000		99.9	0	0.218	0.000	0.500	1.000
	P_{G2b}	0.5	99.9	0	0.220	0.003	0.497	1.000		99.8	0	0.218	0.001	0.499	1.000
	S_A	0.020	94	0	0.013	0.002	0.022	0.178		88	0	0.015	0.002	0.022	0.146
	S_R	0.020	94	0	0.012	0.002	0.022	0.135		88	0	0.011	0.002	0.022	0.150
8	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.516		100	0	0.023	0.007	0.407	0.498
	S_{A1}	0.3	98	0	0.066	0.004	0.296	0.609		92	0	0.052	0.003	0.297	0.487
	S_{A2}	0.07	97	0	0.041	0.005	0.075	0.596		96	0	0.050	0.006	0.076	0.552
	S_B	0.07	97	0	0.046	0.006	0.076	0.560		96	0	0.040	0.006	0.076	0.490
	S_F	0.05	96	0.2	0.133	0.002	0.052	1.731		93	0.4	0.178	0.006	0.056	2.909
	ψ_{A1}	0.4	100	0	0.044	0.006	0.406	0.566		100	0	0.035	0.006	0.406	0.541
	ψ_{A2}	0.95	98	0	0.038	0.005	0.955	1.008		92	0	0.075	0.007	0.957	1.033
	P_{G1a}	0.5	99.9	0	0.213	0.002	0.502	1.000		99.8	0	0.215	0.003	0.503	1.000
	P_{G2b}	0.5	99.9	0	0.214	0.002	0.502	1.000		99.9	0	0.214	0.002	0.498	1.000
	S_A	0.021	95	0	0.013	0.002	0.022	0.281		88	0	0.015	0.002	0.022	0.188
	S_R	0.020	95	0	0.012	0.001	0.022	0.163		88	0	0.011	0.001	0.022	0.115
9	S_{R0}	0.4	100	0	0.028	0.010	0.410	0.515		100	0	0.023	0.009	0.409	0.494
	S_{A1}	0.3	99	0	0.053	0.004	0.296	0.504		95	0	0.043	0.003	0.297	0.470
	S_{A2}	0.07	95	0	0.041	0.006	0.076	0.467		94	0	0.046	0.006	0.076	0.492
	S_B	0.07	95	0	0.053	0.006	0.076	0.556		94	0	0.046	0.006	0.076	0.473
	S_F	0.01	95	0.01	0.060	0.001	0.011	1.375		92	0.04	0.067	0.000	0.010	1.312
	ψ_{A1}	0.6	100	0	0.044	0.005	0.605	0.761		100	0	0.035	0.005	0.605	0.731
	ψ_{A2}	0.95	99	0	0.051	0.006	0.956	1.014		95	0	0.079	0.010	0.960	1.033
	P_{G1a}	0.5	99.6	0	0.230	0.000	0.500	1.000		99.5	0	0.239	0.000	0.500	1.000
	P_{G2b}	0.5	99.7	0	0.229	0.001	0.499	1.000		99.5	0	0.239	0.001	0.501	1.000
	S_A	0.020	94	0	0.012	0.006	0.022	0.140		89	0	0.014	0.006	0.022	0.137

	S_R	0.016	94	0	0.010	0.002	0.018	0.123		89	0	0.009	0.002	0.018	0.100
10	S_{R0}	0.4	100	0	0.029	0.009	0.409	0.521		100	0	0.023	0.009	0.409	0.487
	S_{A1}	0.3	99	0	0.053	0.004	0.296	0.516		94	0	0.043	0.004	0.296	0.465
	S_{A2}	0.07	95	0	0.041	0.006	0.076	0.505		94	0	0.047	0.006	0.076	0.529
	S_B	0.07	95	0	0.054	0.006	0.076	0.656		94	0	0.046	0.006	0.076	0.535
	S_F	0.05	94	0.1	0.132	0.005	0.055	2.143		92	0.4	0.166	0.006	0.056	2.800
	ψ_{A1}	0.6	100	0	0.043	0.005	0.605	0.755		100	0	0.035	0.005	0.605	0.735
	ψ_{A2}	0.95	99	0	0.051	0.005	0.955	1.012		95	0	0.070	0.012	0.962	1.043
	P_{G1a}	0.5	99.8	0	0.230	0.000	0.500	1.000		99.6	0	0.239	0.002	0.502	1.000
	P_{G2b}	0.5	99.8	0	0.230	0.000	0.500	1.000		99.6	0	0.237	0.001	0.501	1.000
	S_A	0.021	93	0	0.013	0.006	0.022	0.159		89	0	0.014	0.006	0.022	0.142
	S_R	0.016	93	0	0.010	0.003	0.018	0.109		89	0	0.009	0.003	0.018	0.094
11	S_{R0}	0.4	88	0	0.029	0.014	0.414	0.513		96	0	0.023	0.013	0.413	0.493
	S_{A1}	0.3	99	0	0.041	0.004	0.296	0.466		98	0	0.034	0.004	0.296	0.440
	S_{A2}	0.07	90	0	0.039	0.005	0.075	0.401		84	0	0.042	0.005	0.075	0.460
	S_B	0.07	83	1.3	0.237	0.008	0.078	3.000		82	4.1	0.180	0.004	0.074	2.000
	S_F	0.01	90	0	0.051	0.000	0.010	0.781		83	0.01	0.057	0.000	0.010	1.429
	ψ_{A1}	0.98	90	0	0.162	0.030	0.950	0.994		97	0	0.116	0.015	0.965	0.996
	ψ_{A2}	0.95	99	0	0.040	0.010	0.960	1.018		98	0	0.060	0.019	0.969	1.034
	P_{G1a}	0.5	99	0	0.265	0.000	0.500	1.000		97	0	0.302	0.000	0.500	1.000
	P_{G2b}	0.5	99	0	0.267	0.001	0.501	1.000		97	0	0.302	0.001	0.499	1.000
	S_A	0.020	89	0	0.012	0.013	0.021	0.123		82	0	0.012	0.013	0.022	0.135
	S_R	0.008	78	0	0.005	0.011	0.009	0.052		78	0	0.005	0.011	0.009	0.058
12	S_{R0}	0.4	89	0	0.029	0.013	0.413	0.544		96	0	0.023	0.013	0.413	0.501
	S_{A1}	0.3	99	0	0.042	0.005	0.295	0.455		98	0	0.034	0.003	0.297	0.423
	S_{A2}	0.07	91	0	0.039	0.005	0.075	0.494		84	0	0.042	0.005	0.075	0.409
	S_B	0.07	84	1.2	0.221	0.002	0.072	2.286		84	0.5	0.184	0.005	0.075	2.000
	S_F	0.05	91	0.07	0.123	0.004	0.054	1.604		84	0.2	0.141	0.004	0.054	1.600
	ψ_{A1}	0.98	91	0	0.151	0.026	0.954	0.994		98	0	0.109	0.013	0.967	0.996
	ψ_{A2}	0.95	99	0	0.038	0.010	0.960	1.021		98	0	0.061	0.019	0.969	1.037
	P_{G1a}	0.5	99	0	0.264	0.000	0.500	1.000		98	0	0.296	0.004	0.504	1.000
	P_{G2b}	0.5	99	0	0.261	0.001	0.499	1.000		98	0	0.297	0.006	0.506	1.000
	S_A	0.021	90	0	0.012	0.013	0.022	0.171		83	0	0.012	0.013	0.022	0.119
	S_R	0.009	80	0	0.005	0.011	0.010	0.058		80	0	0.005	0.011	0.010	0.046
13	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.537		100	0	0.023	0.007	0.407	0.492
	S_{A1}	0.3	100	0	0.065	0.004	0.296	0.569		100	0	0.052	0.005	0.295	0.526

	S_{A2}	0.07	100	0	0.029	0.000	0.070	0.190		100	0	0.037	0.001	0.071	0.244
	S_{B}	0.07	100	0	0.029	0.000	0.070	0.196		100	0	0.024	0.000	0.070	0.165
	S_{F}	0.01	100	0	0.019	0.000	0.010	0.150		100	0	0.025	0.000	0.010	0.222
	ψ_{A1}	0.4	100	0	0.044	0.005	0.405	0.576		100	0	0.035	0.006	0.406	0.543
	ψ_{A2}	0.75	100	0	0.041	0.008	0.758	0.907		100	0	0.054	0.014	0.764	0.938
	P_{G1a}	0.9	100	0	0.096	0.002	0.902	1.000		100	0	0.095	0.001	0.901	1.000
	P_{G2b}	0.9	100	0	0.099	0.002	0.898	1.000		100	0	0.095	0.000	0.900	1.000
	S_{A}	0.016	100	0	0.008	0.003	0.016	0.062		100	0	0.009	0.003	0.017	0.061
	S_{R}	0.019	100	0	0.007	0.003	0.020	0.053		100	0	0.006	0.003	0.020	0.046
14	S_{R0}	0.4	100	0	0.028	0.008	0.408	0.510		100	0	0.023	0.007	0.407	0.492
	S_{A1}	0.3	100	0	0.065	0.005	0.295	0.563		100	0	0.052	0.004	0.296	0.525
	S_{A2}	0.07	100	0	0.028	0.000	0.070	0.206		100	0	0.036	0.000	0.070	0.224
	S_{B}	0.07	100	0	0.030	0.000	0.070	0.209		100	0	0.024	0.000	0.070	0.184
	S_{F}	0.05	100	0	0.042	0.001	0.049	0.304		100	0	0.056	0.001	0.051	0.377
	ψ_{A1}	0.4	100	0	0.044	0.005	0.405	0.594		100	0	0.035	0.005	0.405	0.532
	ψ_{A2}	0.75	100	0	0.042	0.007	0.757	0.903		100	0	0.055	0.014	0.764	0.968
	P_{G1a}	0.9	100	0	0.093	0.001	0.899	1.000		100	0	0.094	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.093	0.001	0.899	1.000		100	0	0.093	0.000	0.900	1.000
	S_{A}	0.020	100	0	0.008	0.001	0.019	0.058		100	0	0.010	0.001	0.019	0.068
	S_{R}	0.020	100	0	0.007	0.001	0.020	0.053		100	0	0.006	0.001	0.020	0.047
15	S_{R0}	0.4	100	0	0.029	0.010	0.410	0.509		100	0	0.023	0.009	0.409	0.495
	S_{A1}	0.3	100	0	0.053	0.005	0.295	0.530		100	0	0.042	0.005	0.295	0.506
	S_{A2}	0.07	100	0	0.028	0.000	0.070	0.182		100	0	0.034	0.000	0.070	0.240
	S_{B}	0.07	100	0	0.036	0.001	0.071	0.275		100	0	0.029	0.000	0.070	0.217
	S_{F}	0.01	100	0	0.018	0.000	0.010	0.158		100	0	0.024	0.000	0.010	0.312
	ψ_{A1}	0.6	100	0	0.043	0.005	0.605	0.764		100	0	0.035	0.005	0.605	0.746
	ψ_{A2}	0.75	100	0	0.040	0.009	0.759	0.890		100	0	0.051	0.016	0.766	0.935
	P_{G1a}	0.9	100	0	0.104	0.000	0.900	1.000		100	0	0.106	0.001	0.599	1.000
	P_{G2b}	0.9	100	0	0.105	0.001	0.901	1.000		100	0	0.105	0.002	0.902	1.000
	S_{A}	0.016	100	0	0.007	0.001	0.016	0.051		100	0	0.008	0.001	0.017	0.057
	S_{R}	0.015	100	0	0.006	0.001	0.015	0.044		100	0	0.005	0.001	0.015	0.042
16	S_{R0}	0.4	100	0	0.029	0.009	0.409	0.533		100	0	0.023	0.009	0.409	0.491
	S_{A1}	0.3	100	0	0.053	0.005	0.295	0.513		100	0	0.042	0.005	0.295	0.466
	S_{A2}	0.07	100	0	0.027	0.000	0.070	0.215		100	0	0.033	0.000	0.070	0.238
	S_{B}	0.07	100	0	0.037	0.000	0.070	0.229		100	0	0.029	0.0000	0.070	0.190
	S_{F}	0.05	100	0	0.041	0.000	0.050	0.286		100	0	0.051	.000	0.050	0.300

	ψ_{A1}	0.6	100	0	0.043	0.005	0.605	0.770		100	0	0.035	0.005	0.605	0.733
	ψ_{A2}	0.75	100	0	0.040	0.010	0.760	0.908		100	0	0.050	0.017	0.767	0.930
	P_{G1a}	0.9	100	0	0.099	0.000	0.900	1.000		100	0	0.102	0.001	0.899	1.000
	P_{G2b}	0.9	100	0	0.098	0.001	0.901	1.000		100	0	0.103	0.002	0.898	1.000
	S_A	0.020	100	0	0.008	0.003	0.019	0.054		100	0	0.009	0.004	0.019	0.068
	S_R	0.016	100	0	0.006	0.003	0.016	0.046		100	0	0.005	0.003	0.016	0.043
17	S_{R0}	0.4	88	0	0.029	0.013	0.413	0.535		96	0	0.023	0.013	0.413	0.511
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.46*9		100	0	0.033	0.005	0.295	0.408
	S_{A2}	0.07	99.8	0	0.026	0.000	0.070	0.203		99	0	0.030	0.001	0.071	0.190
	S_B	0.07	92	0.03	0.167	0.005	0.065	1.333		97	0.02	0.149	0.000	0.070	1.125
	S_F	0.01	99.8	0	0.018	0.000	0.010	0.154		99	0	0.021	0.000	0.010	0.192
	ψ_{A1}	0.98	90	0	0.162	0.030	0.950	0.994		97	0	0.108	0.013	0.967	0.996
	ψ_{A2}	0.75	100	0	0.038	0.011	0.761	0.891		100	0	0.044	0.021	0.771	0.913
	P_{G1a}	0.9	100	0	0.129	0.000	0.900	1.000		99.5	0	0.145	0.001	0.901	1.000
	P_{G2b}	0.9	99.9	0	0..127	0.000	0.900	1.000		99.6	0	0.145	0.001	0.901	1.000
	S_A	0.016	99.8	0	0.006	0.009	0.016	0.045		99	0	0.007	0.010	0.017	0.052
	S_R	0.007	87	0	0.003	0.009	0.007	0.023		95	0	0.003	0.009	0.007	0.022
18	S_{R0}	0.4	88	0	0.029	0.013	0.413	0.522		96	0	0.023	0.012	0.412	0.508
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.458		100	0	0.033	0.004	0.296	0.444
	S_{A2}	0.07	99.9	0	0.026	0.001	0.071	0.207		99.6	0	0.030	0.000	0.070	0.214
	S_B	0.07	92	0	0.178	0.001	0.069	1.089		98	0.01	0.149	0.000	0.070	1.111
	S_F	0.05	99.9	0	0.039	0.000	0.050	0.245		99.6	0	0.045	0.001	0.051	0.295
	ψ_{A1}	0.98	90	0	0.159	0.029	0.951	0.994		97	0	0.097	0.010	0.970	0.996
	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.892		100	0	0.044	0.021	0.771	0.916
	P_{G1a}	0.9	99.9	0	0.115	0.001	0.899	1.000		99.8	0	0.133	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.115	0.001	0.899	1.000		99.8	0	0.132	0.002	0.902	1.000
	S_A	0.020	99.9	0	0.007	0.011	0.019	0.051		99.6	0	0.008	0.011	0.019	0.058
	S_R	0.008	88	0	0.003	0.011	0.008	0.026		96	0	0.003	0.011	0.008	0.025
19	S_{R0}	0.4	100	0	0.029	0.008	0.408	0.514		100	0	0.023	0.008	0.408	0.497
	S_{A1}	0.3	99	0	0.066	0.004	0.296	0.569		92	0	0.053	0.004	0.296	0.493
	S_{A2}	0.07	100	0	0.025	0.000	0.070	0.178		100	0	0.033	0.000	0.070	0.251
	S_B	0.07	100	0	0.029	0.000	0.070	0.202		100	0	0.024	0.000	0.070	0.171
	S_F	0.01	99.6	0	0.046	0.001	0.009	1.048		96	0	0.067	0.001	0.011	1.071
	ψ_{A1}	0.4	100	0	0.044	0.005	0.405	0.560		100	0	0.036	0.006	0.406	0.542
	ψ_{A2}	0.95	99	0	0.034	0.005	0.955	1.012		92	0	0.089	0.004	0.954	1.030
	P_{G1a}	0.9	100	0	0.092	0.001	0.901	1.000		100	0	0.091	0.001	0.901	1.000

	P_{G2b}	0.9	100	0	0.092	0.001	0.899	1.000		100	0	0.092	0.000	0.900	1.000
	S_A	0.020	99	0	0.009	0.000	0.020	0.064		91	0	0.010	0.000	0.020	0.082
	S_R	0.020	99	0	0.007	0.000	0.020	0.060		91	0	0.006	0.000	0.020	0.046
20	S_{R0}	0.4	100	0	0.028	0.007	0.407	0.520		100	0	0.022	0.007	0.407	0.496
	S_{A1}	0.3	98	0	0.065	0.003	0.297	0.612		92	0	0.052	0.003	0.297	0.491
	S_{A2}	0.07	100	0	0.025	0.000	0.070	0.189		100	0	0.032	0.000	0.070	0.239
	S_B	0.07	100	0	0.029	0.000	0.070	0.194		100	0	0.024	0.000	0.070	0.171
	S_F	0.05	99.6	0	0.104	0.001	0.051	1.024		97	0.01	0.134	0.000	0.050	1.250
	ψ_{A1}	0.4	100	0	0.044	0.006	0.406	0.578		100	0	0.035	0.006	0.406	0.537
	ψ_{A2}	0.95	99	0	0.044	0.004	0.954	1.010		92	0	0.083	0.005	0.955	1.035
	P_{G1a}	0.9	100	0	0.092	0.000	0.900	1.000		100	0	0.092	0.001	0.899	1.000
	P_{G2b}	0.9	100	0	0.090	0.000	0.900	1.000		100	0	0.091	0.001	0.901	1.000
	S_A	0.021	98	0	0.009	0.001	0.021	0.070		92	0	0.010	0.000	0.020	0.085
	S_R	0.020	98	0	0.007	0.000	0.020	0.052		92	0	0.006	0.000	0.020	0.051
21	S_{R0}	0.4	100	0	0.029	0.009	0.409	0.516		100	0	0.023	0.009	0.409	0.499
	S_{A1}	0.3	99	0	0.054	0.004	0.296	0.515		95	0	0.043	0.003	0.297	0.486
	S_{A2}	0.07	100	0	0.024	0.000	0.070	0.188		100	0	0.030	0.000	0.070	0.208
	S_B	0.07	100	0	0.036	0.000	0.070	0.225		100	0	0.029	0.001	0.071	0.190
	S_F	0.01	99.7	0	0.049	0.001	0.011	1.013		98	0	0.057	0.000	0.010	1.018
	ψ_{A1}	0.6	100	0	0.043	0.005	0.605	0.803		100	0	0.035	0.004	0.605	0.758
	ψ_{A2}	0.95	99	0	0.038	0.007	0.957	1.016		95	0	0.071	0.012	0.962	1.039
	P_{G1a}	0.9	100	0	0.099	0.002	0.898	1.000		100	0	0.101	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.099	0.000	0.900	1.000		100	0	0.100	0.000	0.900	1.000
	S_A	0.020	99	0	0.008	0.000	0.020	0.076		95	0	0.009	0.000	0.020	0.073
	S_R	0.016	99	0	0.006	0.000	0.016	0.045		95	0	0.005	0.000	0.016	0.037
22	S_{R0}	0.4	100	0	0.029	0.009	0.409	0.526		100	0	0.023	0.009	0.409	0.498
	S_{A1}	0.3	99	0	0.053	0.004	0.296	0.498		95	0	0.042	0.003	0.297	0.462
	S_{A2}	0.07	100	0	0.024	0.000	0.070	0.188		100	0	0.030	0.000	0.070	0.195
	S_B	0.07	100	0	0.036	0.000	0.070	0.263		100	0	0.029	0.000	0.070	0.197
	S_F	0.05	99.7	0	0.100	0.001	0.049	1.046		98	0	0.127	0.000	0.050	1.091
	ψ_{A1}	0.6	100	0	0.044	0.005	0.605	0.767		100	0	0.035	0.005	0.605	0.736
	ψ_{A2}	0.95	99	0	0.041	0.006	0.956	1.012		95	0	0.075	0.011	0.961	1.032
	P_{G1a}	0.9	100	0	0.096	0.000	0.900	1.000		100	0	0.100	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.096	0.001	0.901	1.000		100	0	0.100	0.001	0.901	1.000
	S_A	0.021	99	0	0.008	0.000	0.020	0.059		95	0	0.009	0.000	0.021	0.068
	S_R	0.016	99	0	0.006	0.000	0.016	0.051		95	0	0.005	0.000	0.016	0.037

23	S_{R0}	0.4	88	0	0.029	0.014	0.414	0.552		96	0	0.023	0.013	0.413	0.509
	S_{A1}	0.3	99	0	0.042	0.005	0.4295	0.468		98	0	0.034	0.003	0.297	0.426
	S_{A2}	0.07	100	0	0.023	0.000	0.070	0.179		99.7	0	0.026	0.000	0.070	0.184
	S_{B}	0.07	93	0.04	0.179	0.001	0.069	1.250		98	0.02	0.150	0.001	0.071	1.125
	S_{F}	0.01	99.7	0	0.045	0.001	0.011	1.037		99	0	0.051	0.000	0.010	1.000
	ψ_{A1}	0.98	91	0	0.165	0.031	0.949	0.994		97	0	0.109	0.013	0.967	0.996
	ψ_{A2}	0.95	99	0	0.043	0.010	0.960	1.017		98	0	0.068	0.018	0.968	1.038
	P_{G1a}	0.9	99.9	0	0.113	0.000	0.900	1.000		99.8	0	0.130	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.112	0.000	0.900	1.000		99.9	0	0.132	0.002	0.898	1.000
	S_{A}	0.020	99	0	0.007	0.000	0.020	0.052		97	0	0.008	0.000	0.020	0.056
	S_{R}	0.008	87	0	0.003	0.000	0.009	0.031		93	0	0.003	0.000	0.009	0.023
24	S_{R0}	0.4	88	0	0.029	0.013	0.413	0.515		96	0	0.023	0.013	0.413	0.503
	S_{A1}	0.3	99	0	0.041	0.003	0.297	0.477		97	0	0.034	0.004	0.296	0.432
	S_{A2}	0.07	100	0	0.023	0.000	0.070	0.162		99.7	0	0.026	0.000	0.070	0.192
	S_{B}	0.07	93	0.08	0.187	0.004	0.074	1.200		98	0.01	0.151	0.002	0.072	1.111
	S_{F}	0.05	99.8	0	0.093	0.000	0.050	1.029		99	0	0.110	0.000	0.050	1.059
	ψ_{A1}	0.98	91	0	0.168	0.032	0.948	0.994		97	0	0.104	0.012	0.968	0.996
	ψ_{A2}	0.95	99.5	0	0.037	0.010	0.960	1.018		98	0	0.065	0.018	0.968	1.038
	P_{G1a}	0.9	100	0	0.109	0.000	0.900	1.000		99.8	0	0.129	0.001	0.899	1.000
	P_{G2b}	0.9	100	0	0.110	0.001	0.899	1.000		99.8	0	0.127	0.002	0.902	1.000
	S_{A}	0.021	99	0	0.007	0.000	0.021	0.056		97	0	0.008	0.000	0.021	0.063
	S_{R}	0.009	87	0	0.003	0.000	0.009	0.028		93	0	0.003	0.000	0.009	0.029
25	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.540		100	0	0.023	0.013	0.413	0.508
	S_{A1}	0.3	100	0	0.064	0.005	0.295	0.564		100	0	0.052	0.005	0.295	0.521
	S_{A2}	0.15	99.9	0	0.064	0.008	0.158	1.063		100	0	0.073	0.008	0.158	0.932
	S_{B}	0.2	99.9	0.01	0.078	0.011	0.211	1.286		100	0	0.064	0.009	0.209	1.065
	S_{F}	0.01	99.9	0	0.024	0.000	0.010	0.257		100	0	0.031	0.001	0.011	0.321
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.583		100	0	0.035	0.000	0.400	0.547
	ψ_{A2}	0.75	100	0	0.041	0.008	0.758	0.915		100	0	0.055	0.014	0.764	0.963
	P_{G1a}	0.5	100	0	0.138	0.000	0.500	1.000		100	0	0.129	0.001	0.499	1.000
	P_{G2b}	0.5	100	0	0.138	0.001	0.499	1.000		100	0	0.129	0.002	0.498	1.000
	S_{A}	0.034	99.9	0	0.017	0.002	0.036	0.265		100	0	0.018	0.002	0.036	0.239
	S_{R}	0.054	99.9	0	0.021	0.005	0.058	0.335		100	0	0.017	0.004	0.058	0.296
26	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.521		100	0	0.023	0.013	0.413	0.502
	S_{A1}	0.3	100	0	0.064	0.006	0.294	0.552		100	0	0.053	0.006	0.294	0.491

	S_{A2}	0.15	100	0	0.060	0.007	0.157	0.751		100	0.01	0.073	0.006	0.156	1.195
	S_{B}	0.2	100	0.02	0.075	0.009	0.209	1.243		100	0	0.065	0.010	0.210	0.990
	S_{F}	0.05	100	0	0.054	0.003	0.053	0.533		100	0	0.071	0.003	0.053	0.808
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.570		100	0	0.035	0.001	0.399	0.556
	ψ_{A2}	0.75	100	0	0.041	0.007	0.757	0.907		100	0	0.054	0.015	0.765	0.963
	P_{G1a}	0.5	100	0	0.134	0.002	0.502	1.000		100	0	0.130	0.003	0.497	1.000
	P_{G2b}	0.5	100	0	0.135	0.002	0.502	1.000		100	0	0.129	0.001	0.499	1.000
	S_{A}	0.038	100	0	0.017	0.001	0.039	0.205		100	0	0.019	0.001	0.039	0.210
	S_{R}	0.054	100	0	0.020	0.004	0.058	0.381		100	0	0.018	0.004	0.058	0.271
27	S_{R0}	0.4	100	0	0.029	0.012	0.412	0.527		100	0	0.023	0.013	0.413	0.504
	S_{A1}	0.3	100	0	0.053	0.005	0.295	0.511		100	0	0.042	0.004	0.296	0.451
	S_{A2}	0.15	99.7	0	0.065	0.009	0.159	0.909		99.8	0	0.070	0.008	0.158	0.847
	S_{B}	0.2	99.7	0	0.091	0.014	0.214	1.043		99.8	0	0.079	0.011	0.211	1.028
	S_{F}	0.01	99.7	0	0.024	0.001	0.011	0.245		99.8	0	0.029	0.000	0.010	0.407
	ψ_{A1}	0.6	100	0	0.044	0.000	0.600	0.759		100	0	0.035	0.001	0.599	0.730
	ψ_{A2}	0.75	100	0	0.041	0.009	0.759	0.923		100	0	0.050	0.017	0.767	0.951
	P_{G1a}	0.5	100	0	0.150	0.003	0.497	1.000		100	0	0.147	0.003	0.503	1.000
	P_{G2b}	0.5	100	0	0.150	0.000	0.500	1.000		100	0	0.147	0.001	0.501	1.000
	S_{A}	0.034	99.7	0	0.016	0.002	0.036	0.215		99.8	0	0.017	0.002	0.037	0.215
	S_{R}	0.040	99.7	0	0.017	0.004	0.044	0.224		99.8	0	0.015	0.004	0.044	0.233
28	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.529		100	0	0.023	0.013	0.413	0.493
	S_{A1}	0.3	100	0	0.052	0.005	0.295	0.488		100	0	0.043	0.005	0.295	0.455
	S_{A2}	0.15	99.9	0	0.064	0.008	0.158	0.804		99.7	0	0.073	0.008	0.158	1.067
	S_{B}	0.2	99.9	0.03	0.092	0.011	0.211	1.250		99.7	0.01	0.079	0.012	0.212	1.106
	S_{F}	0.05	99.9	0	0.053	0.002	0.052	0.515		99.7	0	0.065	0.003	0.053	0.891
	ψ_{A1}	0.6	100	0	0.044	0.000	0.600	0.769		100	0	0.035	0.000	0.600	0.733
	ψ_{A2}	0.75	100	0	0.040	0.010	0.760	0.896		100	0	0.050	0.017	0.767	0.942
	P_{G1a}	0.5	100	0	0.147	0.001	0.501	1.000		100	0	0.147	0.002	0.498	1.000
	P_{G2b}	0.5	100	0	0.149	0.003	0.503	1.000		100	0	0.147	0.001	0.499	1.000
	S_{A}	0.038	99.9	0	0.017	0.002	0.039	0.188		99.7	0	0.018	0.002	0.039	0.290
	S_{R}	0.041	99.9	0	0.017	0.004	0.045	0.269		99.7	0	0.016	0.004	0.045	0.248
29	S_{R0}	0.4	95	0	0.029	0.013	0.413	0.545		94	0	0.024	0.013	0.413	0.508
	S_{A1}	0.3	100	0	0.042	0.005	0.295	0.449		100	0	0.033	0.005	0.295	0.436
	S_{A2}	0.15	98	0	0.070	0.013	0.163	0.794		96	0	0.079	0.014	0.164	1.014
	S_{B}	0.2	91	4.4	0.384	0.017	0.217	4.267		94	2.6	0.318	0.018	0.218	3.273
	S_{F}	0.01	98	0	0.024	0.001	0.011	0.312		96	0	0.027	0.001	0.011	0.328

	ψ_{A1}	0.98	90	0	0.218	0.055	0.925	0.994		97	0	0.150	0.025	0.955	0.996
	ψ_{A2}	0.75	100	0	0.038	0.011	0.761	0.892		100	0	0.045	0.020	0.770	0.932
	P_{G1a}	0.5	100	0	0.190	0.001	0.501	1.000		99.8	0	0.221	0.000	0.500	1.000
	P_{G2b}	0.5	100	0	0.190	0.000	0.500	1.000		99.8	0	0.220	0.002	0.498	1.000
	S_A	0.034	98	0	0.017	0.003	0.037	0.205		96	0	0.019	0.004	0.038	0.231
	S_R	0.015	83	0	0.008	0.002	0.017	0.107		90	0	0.009	0.002	0.017	0.101
30	S_{R0}	0.4	85	0	0.029	0.014	0.414	0.518		96	0	0.024	0.013	0.413	0.497
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.469		100	0	0.034	0.004	0.296	0.429
	S_{A2}	0.15	99	0	0.072	0.012	0.162	0.953		97	0	0.077	0.013	0.163	0.860
	S_B	0.2	91	4.6	0.390	0.024	0.224	4.267		95	2.2	0.313	0.017	0.217	3.273
	S_F	0.05	99	0	0.054	0.004	0.054	0.735		97	0	0.061	0.004	0.054	0.625
	ψ_{A1}	0.98	90	0	0.208	0.050	0.930	0.994		97	0	0.141	0.022	0.958	0.996
	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.886		100	0	0.045	0.021	0.771	0.934
	P_{G1a}	0.5	100	0	0.183	0.001	0.499	1.000		99.9	0	0.210	0.003	0.503	1.000
	P_{G2b}	0.5	100	0	0.183	0.003	0.497	1.000		100	0	0.208	0.000	0.500	1.000
	S_A	0.038	99	0	0.019	0.003	0.040	0.261		97	0	0.019	0.003	0.041	0.222
	S_R	0.016	84	0	0.009	0.002	0.018	0.092		92	0	0.008	0.002	0.018	0.085
31	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.525		100	0	0.023	0.013	0.413	0.501
	S_{A1}	0.3	98	0	0.065	0.004	0.296	0.554		92	0	0.052	0.004	0.296	0.506
	S_{A2}	0.15	100	0	0.055	0.007	0.157	0.770		100	0.01	0.064	0.006	0.156	1.212
	S_B	0.2	100	0.01	0.072	0.009	0.209	1.189		100	0.01	0.062	0.007	0.207	1.345
	S_F	0.01	99.6	0.04	0.063	0.001	0.011	1.560		97	0.10	0.080	0.001	0.011	2.333
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.585		100	0	0.036	0.000	0.400	0.549
	ψ_{A2}	0.95	99	0	0.049	0.003	0.953	1.017		92	0	0.079	0.005	0.955	1.032
	P_{G1a}	0.5	100	0	0.129	0.002	0.498	1.000		100	0	0.125	0.001	0.501	1.000
	P_{G2b}	0.5	100	0	0.132	0.000	0.500	1.000		100	0	0.126	0.002	0.502	1.000
	S_A	0.043	98	0	0.019	0.002	0.044	0.284		92	0	0.020	0.002	0.044	0.305
	S_R	0.055	98	0	0.019	0.004	0.059	0.289		92	0	0.017	0.004	0.059	0.390
32	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.520		100	0	0.023	0.013	0.413	0.507
	S_{A1}	0.3	99	0	0.065	0.005	0.295	0.556		91	0	0.052	0.004	0.296	0.500
	S_{A2}	0.15	100	0	0.057	0.007	0.157	0.755		100	0	0.063	0.005	0.155	0.799
	S_B	0.2	100	0.03	0.076	0.009	0.209	1.414		100	0	0.062	0.007	0.207	1.024
	S_F	0.05	99.6	0.2	0.149	0.004	0.054	5.400		96	0.6	0.175	0.006	0.056	1.965
	ψ_{A1}	0.4	100	0	0.044	0.001	0.401	0.568		100	0	0.035	0.000	0.400	0.522
	ψ_{A2}	0.95	99	0	0.039	0.004	0.954	1.011		92	0	0.085	0.005	0.955	1.030
	P_{G1a}	0.5	100	0	0.131	0.000	0.500	1.000		100	0	0.125	0.002	0.502	0.917

	P_{G2b}	0.5	100	0	0.130	0.000	0.500	1.000		100	0	0.125	0.002	0.498	1.000
	S_A	0.044	99	0	0.019	0.001	0.045	0.323		91	0	0.020	0.001	0.045	0.216
	S_R	0.055	99	0	0.021	0.004	0.059	0.372		91	0	0.017	0.004	0.059	0.256
33	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.523		100	0	0.024	0.013	0.413	0.506
	S_{A1}	0.3	99	0	0.053	0.004	0.296	0.508		95	0	0.043	0.003	0.297	0.478
	S_{A2}	0.15	99.9	0	0.057	0.008	0.158	0.984		99.8	0.01	0.066	0.007	0.157	1.186
	S_B	0.2	99.9	0	0.086	0.010	0.210	0.868		99.8	0	0.077	0.009	0.209	1.027
	S_F	0.01	99.6	0.01	0.055	0.000	0.010	1.250		98	0.03	0.066	0.000	0.010	1.500
	ψ_{A1}	0.6	100	0	0.043	0.000	0.600	0.770		100	0	0.035	0.001	0.599	0.735
	ψ_{A2}	0.95	99	0	0.039	0.007	0.957	1.013		95	0	0.079	0.010	0.960	1.040
	P_{G1a}	0.5	100	0	0.139	0.000	0.500	1.000		100	0	0.142	0.000	0.500	1.000
	P_{G2b}	0.5	100	0	0.140	0.001	0.501	1.000		100	0	0.141	0.000	0.500	1.000
	S_A	0.043	99	0	0.018	0.002	0.045	0.277		95	0	0.020	0.002	0.045	0.253
	S_R	0.042	99	0	0.017	0.003	0.046	0.181		95	0	0.015	0.004	0.046	0.207
34	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.529		100	0	0.024	0.013	0.413	0.504
	S_{A1}	0.3	99	0	0.053	0.005	0.295	0.518		94	0	0.043	0.003	0.297	0.478
	S_{A2}	0.15	99.9	0	0.056	0.007	0.157	0.922		100	0	0.064	0.009	0.159	0.913
	S_B	0.2	99.9	0.03	0.087	0.009	0.209	1.445		100	0.01	0.076	0.011	0.211	1.141
	S_F	0.05	99.8	0.1	0.128	0.004	0.054	1.670		98	0.5	0.166	0.005	0.055	3.000
	ψ_{A1}	0.6	100	0	0.045	0.001	0.601	0.763		100	0	0.035	0.000	0.600	0.736
	ψ_{A2}	0.95	99	0	0.047	0.006	0.956	1.013		95	0	0.079	0.010	0.960	1.035
	P_{G1a}	0.5	100	0	0.138	0.000	0.500	1.000		100	0	0.141	0.001	0.501	1.000
	P_{G2b}	0.5	100	0	0.138	0.001	0.501	1.000		100	0	0.139	0.001	0.499	1.000
	S_A	0.044	99	0	0.018	0.002	0.045	0.302		94	0	0.020	0.003	0.046	0.277
	S_R	0.042	99	0	0.017	0.003	0.046	0.317		94	0	0.015	0.004	0.046	0.214
35	S_{R0}	0.4	85	0	0.029	0.013	0.413	0.521		95	0	0.023	0.013	0.413	0.506
	S_{A1}	0.3	99	0	0.042	0.004	0.296	0.475		98	0	0.034	0.004	0.296	0.414
	S_{A2}	0.15	99	0.01	0.064	0.011	0.161	1.130		98	0	0.070	0.013	0.163	0.990
	S_B	0.2	92	3.9	0.366	0.005	0.205	4.529		96	2.3	0.318	0.019	0.219	3.765
	S_F	0.01	99	0.01	0.056	0.001	0.011	2.032		97	0.03	0.063	0.000	0.010	1.296
	ψ_{A1}	0.98	90	0	0.211	0.051	0.929	0.994		97	0	0.146	0.024	0.956	0.996
	ψ_{A2}	0.95	99	0	0.048	0.009	0.959	1.018		98	0	0.063	0.018	0.968	1.037
	P_{G1a}	0.5	100	0	0.169	0.004	0.504	1.000		99.9	0	0.194	0.002	0.498	1.000
	P_{G2b}	0.5	100	0	0.167	0.002	0.502	1.000		100	0	0.194	0.002	0.498	1.000
	S_A	0.043	99	0	0.020	0.003	0.046	0.355		95	0	0.021	0.004	0.047	0.287
	S_R	0.018	84	0	0.009	0.002	0.021	0.141		90	0	0.009	0.003	0.021	0.115

36	S_{R0}	0.4	85	0	0.029	0.013	0.413	0.521		95	0	0.023	0.013	0.413	0.502
	S_{A1}	0.3	99	0	0.042	0.004	0.296	0.476		98	0	0.034	0.003	0.297	0.440
	S_{A2}	0.15	99	0	0.062	0.011	0.161	0.916		98	0	0.070	0.012	0.162	0.833
	S_{B}	0.2	92	3.9	0.364	0.009	0.209	3.500		96	2.5	0.325	0.023	0.223	3.462
	S_{F}	0.05	99	0.04	0.123	0.004	0.054	2.000		97	0.2	0.143	0.004	0.054	2.000
	ψ_{A1}	0.98	90	0	0.205	0.048	0.932	0.994		97	0	0.147	0.024	0.956	0.996
	ψ_{A2}	0.95	99	0	0.046	0.009	0.959	1.027		98	0	0.067	0.018	0.968	1.034
	P_{G1a}	0.5	100	0	0.167	0.000	0.500	1.000		100	0	0.194	0.002	0.502	1.000
	P_{G2b}	0.5	100	0	0.167	0.001	0.499	1.000		100	0	0.194	0.000	0.500	1.000
	S_{A}	0.044	99	0	0.019	0.003	0.046	0.221		96	0	0.021	0.004	0.047	0.226
	S_{R}	0.019	84	0	0.009	0.002	0.021	0.116		91	0	0.009	0.002	0.021	0.120
37	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.522		100	0	0.023	0.013	0.413	0.506
	S_{A1}	0.3	100	0	0.064	0.005	0.295	0.560		100	0	0.052	0.005	0.295	0.482
	S_{A2}	0.15	100	0	0.040	0.000	0.150	0.318		100	0	0.051	0.001	0.151	0.376
	S_{B}	0.2	100	0	0.046	0.000	0.200	0.403		100	0	0.037	0.000	0.200	0.365
	S_{F}	0.01	100	0	0.019	0.000	0.010	0.151		100	0	0.026	0.001	0.011	0.251
	ψ_{A1}	0.4	100	0	0.043	0.001	0.401	0.571		100	0	0.036	0.000	0.400	0.533
	ψ_{A2}	0.75	100	0	0.041	0.007	0.757	0.895		100	0	0.055	0.014	0.764	0.945
	P_{G1a}	0.9	100	0	0.060	0.001	0.901	1.000		100	0	0.057	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.061	0.001	0.899	1.000		100	0	0.056	0.000	0.900	1.000
	S_{A}	0.034	100	0	0.012	0.000	0.034	0.108		100	0	0.013	0.000	0.035	0.108
	S_{R}	0.054	100	0	0.013	0.002	0.055	0.105		100	0	0.010	0.002	0.055	0.110
38	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.541		100	0	0.023	0.013	0.413	0.501
	S_{A1}	0.3	100	0	0.064	0.006	0.294	0.584		100	0	0.052	0.004	0.296	0.493
	S_{A2}	0.15	100	0	0.040	0.000	0.150	0.343		100	0	0.051	0.001	0.149	0.352
	S_{B}	0.2	100	0	0.046	0.000	0.200	0.409		100	0	0.037	0.000	0.200	0.348
	S_{F}	0.05	100	0	0.042	0.000	0.050	0.306		100	0	0.055	0.000	0.050	0.303
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.571		100	0	0.035	0.000	0.400	0.544
	ψ_{A2}	0.75	100	0	0.042	0.007	0.757	0.892		100	0	0.054	0.015	0.765	0.958
	P_{G1a}	0.9	100	0	0.060	0.001	0.899	1.000		100	0	0.056	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.060	0.000	0.900	1.000		100	0	0.056	0.000	0.900	1.000
	S_{A}	0.038	100	0	0.013	0.001	0.037	0.113		100	0	0.014	0.000	0.037	0.102
	S_{R}	0.054	100	0	0.012	0.002	0.056	0.107		100	0	0.010	0.002	0.056	0.100
39	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.521		100	0	0.024	0.013	0.413	0.508
	S_{A1}	0.3	100	0	0.053	0.006	0.294	0.501		100	0	0.043	0.004	0.296	0.473
	S_{A2}	0.15	100	0	0.038	0.001	0.151	0.354		100	0	0.047	0.000	0.150	0.357

	S_B	0.2	100	0	0.057	0.001	0.201	0.434		100	0	0.046	0.000	0.200	0.374
	S_F	0.01	100	0	0.019	0.000	0.010	0.138		100	0	0.023	0.000	0.010	0.182
	ψ_{A1}	0.6	100	0	0.044	0.001	0.599	0.778		100	0	0.036	0.000	0.600	0.729
	ψ_{A2}	0.75	100	0	0.041	0.010	0.760	0.894		100	0	0.050	0.017	0.767	0.948
	P_{G1a}	0.9	100	0	0.066	0.001	0.899	1.000		100	0	0.065	0.001	0.599	1.000
	P_{G2b}	0.9	100	0	0.066	0.000	0.900	1.000		100	0	0.065	0.000	0.900	1.000
	S_A	0.034	100	0	0.011	0.000	0.034	0.084		100	0	0.012	0.000	0.035	0.100
	S_R	0.040	100	0	0.011	0.001	0.042	0.086		100	0	0.009	0.001	0.042	0.081
40	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.528		100	0	0.023	0.013	0.413	0.514
	S_{A1}	0.3	100	0	0.053	0.004	0.296	0.503		100	0	0.042	0.004	0.296	0.457
	S_{A2}	0.15	100	0	0.038	0.000	0.150	0.329		100	0	0.047	0.001	0.149	0.356
	S_B	0.2	100	0	0.057	0.000	0.200	0.475		100	0	0.046	0.000	0.200	0.420
	S_F	0.05	100	0	0.041	0.000	0.050	0.267		100	0	0.050	0.000	0.050	0.336
	ψ_{A1}	0.6	100	0	0.044	0.001	0.599	0.762		100	0	0.035	0.000	0.600	0.729
	ψ_{A2}	0.75	100	0	0.040	0.010	0.760	0.895		100	0	0.050	0.017	0.767	0.929
	P_{G1a}	0.9	100	0	0.064	0.000	0.900	1.000		100	0	0.063	0.001	0.901	1.000
	P_{G2b}	0.9	100	0	0.064	0.001	0.901	1.000		100	0	0.064	0.001	0.901	1.000
	S_A	0.038	100	0	0.011	0.000	0.037	0.088		100	0	0.012	0.000	0.037	0.101
	S_R	0.041	100	0	0.011	0.001	0.042	0.103		100	0	0.009	0.001	0.042	0.081
41	S_{R0}	0.4	84	0	0.029	0.014	0.414	0.520		95	0	0.023	0.013	0.413	0.501
	S_{A1}	0.3	100	0	0.041	0.004	0.296	0.449		100	0	0.033	0.005	0.295	0.438
	S_{A2}	0.15	100	0	0.036	0.000	0.150	0.302		100	0	0.042	0.001	0.151	0.333
	S_B	0.2	92	0.02	0.290	0.005	0.205	1.333		98	0.03	0.235	0.001	0.201	1.200
	S_F	0.01	100	0	0.018	0.000	0.010	0.127		100	0	0.020	0.000	0.010	0.175
	ψ_{A1}	0.98	89	0	0.216	0.053	0.927	0.994		97	0	0.147	0.024	0.956	0.996
	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.908		100	0	0.044	0.021	0.771	0.931
	P_{G1a}	0.9	100	0	0.082	0.001	0.899	1.000		100	0	0.094	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.082	0.000	0.900	1.000		100	0	0.094	0.002	0.898	1.000
	S_A	0.035	100	0	0.010	0.000	0.035	0.085		100	0	0.011	0.000	0.035	0.088
	S_R	0.015	84	0	0.005	0.001	0.016	0.043		95	0	0.005	0.001	0.016	0.037
42	S_{R0}	0.4	85	0	0.029	0.013	0.413	0.535		94	0	0.023	0.013	0.413	0.517
	S_{A1}	0.3	100	0	0.041	0.005	0.295	0.456		100	0	0.034	0.005	0.295	0.429
	S_{A2}	0.15	100	0	0.036	0.000	0.150	0.306		100	0	0.042	0.000	0.150	0.343
	S_B	0.2	92	0.01	0.283	0.000	0.200	1.800		98	0.01	0.234	0.001	0.201	1.111
	S_F	0.05	100	0	0.039	0.000	0.050	0.311		100	0	0.044	0.000	0.050	0.404
	ψ_{A1}	0.98	89	0	0.207	0.049	0.931	0.994		96	0	0.147	0.024	0.956	0.996

	ψ_{A2}	0.75	100	0	0.038	0.012	0.762	0.892		100	0	0.044	0.021	0.771	0.920
	P_{G1a}	0.9	100	0	0.079	0.001	0.899	1.000		100	0	0.088	0.001	0.901	1.000
	P_{G2b}	0.9	100	0	0.079	0.000	0.900	1.000		100	0	0.089	0.001	0.901	1.000
	S_A	0.038	100	0	0.010	0.000	0.037	0.082		100	0	0.011	0.000	0.038	0.087
	S_R	0.016	85	0	0.005	0.001	0.017	0.043		94	0	0.005	0.001	0.017	0.039
43	S_{R0}	0.4	100	0	0.029	0.014	0.414	0.525		100	0	0.023	0.013	0.413	0.525
	S_{A1}	0.3	98	0	0.065	0.004	0.296	0.536		92	0	0.052	0.004	0.296	0.498
	S_{A2}	0.15	100	0	0.035	0.000	0.150	0.304		100	0	0.045	0.000	0.150	0.333
	S_B	0.2	100	0	0.046	0.001	0.199	0.412		100	0	0.037	0.000	0.200	0.346
	S_F	0.01	99.5	0	0.046	0.001	0.009	1.012		97	0	0.058	0.001	0.009	1.014
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.584		100	0	0.035	0.000	0.400	0.543
	ψ_{A2}	0.95	98	0	0.044	0.004	0.954	1.009		93	0	0.082	0.005	0.955	1.039
	P_{G1a}	0.9	100	0	0.057	0.001	0.899	1.000		100	0	0.056	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.057	0.000	0.900	1.000		100	0	0.056	0.000	0.900	1.000
	S_A	0.043	98	0	0.014	0.000	0.043	0.129		92	0	0.015	0.000	0.043	0.120
	S_R	0.055	98	0	0.013	0.002	0.057	0.117		92	0	0.010	0.002	0.056	0.096
44	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.526		100	0	0.023	0.013	0.413	0.508
	S_{A1}	0.3	98	0	0.065	0.004	0.296	0.584		92	0	0.053	0.003	0.297	0.492
	S_{A2}	0.15	100	0	0.035	0.000	0.150	0.287		100	0	0.045	0.001	0.151	0.324
	S_B	0.2	100	0	0.046	0.000	0.200	0.429		100	0	0.037	0.000	0.200	0.347
	S_F	0.05	99.6	0	0.106	0.000	0.050	1.026		97	0	0.140	0.002	0.052	1.073
	ψ_{A1}	0.4	100	0	0.044	0.000	0.400	0.573		100	0	0.035	0.000	0.400	0.547
	ψ_{A2}	0.95	98	0	0.039	0.005	0.955	1.015		92	0	0.081	0.005	0.955	1.034
	P_{G1a}	0.9	100	0	0.057	0.000	0.900	1.000		100	0	0.056	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.057	0.001	0.901	1.000		100	0	0.055	0.001	0.899	1.000
	S_A	0.044	98	0	0.014	0.000	0.043	0.118		92	0	0.015	0.000	0.044	0.144
	S_R	0.055	98	0	0.013	0.002	0.057	0.113		92	0	0.010	0.002	0.057	0.103
45	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.517		100	0	0.023	0.013	0.413	0.494
	S_{A1}	0.3	99	0	0.053	0.003	0.297	0.512		94	0	0.043	0.003	0.297	0.464
	S_{A2}	0.15	100	0	0.034	0.000	0.150	0.303		100	0	0.042	0.000	0.150	0.331
	S_B	0.2	100	0	0.056	0.000	0.200	0.439		100	0	0.045	0.000	0.200	0.382
	S_F	0.01	99.7	0	0.045	0.001	0.009	1.008		98	0	0.053	0.001	0.009	1.033
	ψ_{A1}	0.6	100	0	0.044	0.000	0.600	0.777		100	0	0.035	0.000	0.600	0.730
	ψ_{A2}	0.95	99	0	0.048	0.006	0.956	1.011		95	0	0.079	0.010	0.960	1.044
	P_{G1a}	0.9	100	0	0.061	0.001	0.899	1.000		100	0	0.062	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.062	0.000	0.900	1.000		100	0	0.062	0.001	0.899	1.000

	S_A	0.043	99	0	0.013	0.000	0.043	0.096		94	0	0.014	0.000	0.043	0.108
	S_R	0.042	99	0	0.011	0.001	0.044	0.092		94	0	0.009	0.001	0.044	0.083
46	S_{R0}	0.4	100	0	0.029	0.013	0.413	0.517		100	0	0.023	0.012	0.412	0.509
	S_{A1}	0.3	99	0	0.053	0.002	0.298	0.520		95	0	0.043	0.003	0.297	0.475
	S_{A2}	0.15	100	0	0.035	0.001	0.151	0.317		100	0	0.041	0.001	0.151	0.326
	S_B	0.2	100	0	0.057	0.001	0.199	0.447		100	0	0.045	0.000	0.200	0.371
	S_F	0.05	99.8	0	0.099	0.001	0.049	1.064		98	0	0.125	0.001	0.049	1.051
	ψ_{A1}	0.6	100	0	0.044	0.002	0.598	0.763		100	0	0.036	0.000	0.600	0.728
	ψ_{A2}	0.95	99	0	0.039	0.007	0.957	1.013		95	0	0.074	0.011	0.961	1.035
	P_{G1a}	0.9	100	0	0.061	0.002	0.898	1.000		100	0	0.061	0.001	0.901	1.000
	P_{G2b}	0.9	100	0	0.061	0.001	0.899	1.000		100	0	0.061	0.000	0.900	1.000
	S_A	0.044	99	0	0.013	0.000	0.044	0.103		95	0	0.014	0.000	0.044	0.112
	S_R	0.042	99	0	0.011	0.001	0.044	0.090		95	0	0.009	0.001	0.044	0.080
47	S_{R0}	0.4	85	0	0.029	0.014	0.414	0.527		95	0	0.023	0.013	0.413	0.513
	S_{A1}	0.3	99	0	0.041	0.004	0.296	0.443		98	0	0.034	0.003	0.297	0.453
	S_{A2}	0.15	100	0	0.032	0.000	0.150	0.309		100	0	0.037	0.000	0.150	0.292
	S_B	0.2	93	0.01	0.284	0.007	0.207	1.122		98	0	0.233	0.001	0.201	1.083
	S_F	0.01	99.9	0	0.043	0.000	0.010	0.513		99	0	0.050	0.000	0.010	1.048
	ψ_{A1}	0.98	90	0	0.210	0.051	0.929	0.994		97	0	0.136	0.021	0.959	0.996
	ψ_{A2}	0.95	99	0	0.037	0.010	0.960	1.021		98	0	0.058	0.019	0.969	1.041
	P_{G1a}	0.9	100	0	0.074	0.000	0.900	1.000		100	0	0.084	0.001	0.899	1.000
	P_{G2b}	0.9	100	0	0.073	0.000	0.900	1.000		100	0	0.084	0.000	0.900	1.000
	S_A	0.043	99	0	0.011	0.000	0.043	0.088		98	0	0.012	0.000	0.043	0.098
	S_R	0.018	85	0	0.005	0.001	0.019	0.042		93	0	0.005	0.001	0.019	0.043
48	S_{R0}	0.4	85	0	0.029	0.014	0.414	0.532		95	0	0.023	0.014	0.414	0.502
	S_{A1}	0.3	99	0	0.041	0.004	0.296	0.465		97	0	0.034	0.004	0.296	0.429
	S_{A2}	0.15	100	0	0.032	0.000	0.150	0.283		100	0	0.037	10.000	0.150	0.332
	S_B	0.2	92	0	0.282	0.000	0.200	1.096		98	0	0.233	0.002	0.202	1.100
	S_F	0.05	99.9	0	0.093	0.001	0.051	1.011		99	0	0.107	0.001	0.049	1.032
	ψ_{A1}	0.98	89	0	0.211	0.051	0.929	0.994		97	0	0.145	0.024	0.956	0.996
	ψ_{A2}	0.95	99.5	0	0.047	0.009	0.959	1.021		98	0	0.061	0.019	0.969	1.034
	P_{G1a}	0.9	100	0	0.073	0.001	0.901	1.000		100	0	0.084	0.000	0.900	1.000
	P_{G2b}	0.9	100	0	0.072	0.000	0.900	1.000		100	0	0.084	0.001	0.899	1.000
	S_A	0.044	99	0	0.011	0.000	0.043	0.097		97	0	0.012	0.000	0.044	0.100
	S_R	0.019	84	0	0.005	0.001	0.019	0.050		92	0	0.005	0.001	0.019	0.043