Rebuilding analysis for yelloweye rockfish based on the 2009 stock assessment

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Table of contents

Summary

Based on the 2009 stock assessment, this rebuilding analysis compares the results of applying a suite of potential future management actions to the U.S. yelloweye rockfish stock. The base case model for the 2009 assessment estimated that the yelloweye rockfish resource is at 20.3% of the unexploited equilibrium spawning output at the beginning of 2009. This represents an increase from the 2007 updated assessment, which estimated depletion in 2007 to be 16.4%. Uncertainty about the base case results is included through the integration over eight alternate (and less likely) states of nature along two axes of uncertainty: steepness (h), and the magnitude of historical catch prior to 2000. In the yelloweye assessment, steepness is the primary parameter governing productivity and the rebuilding trajectory, while the magnitude of catch determines the absolute scale of the population estimate. The 2009-2010 OYs were set at 17 mt by the Pacific Council. In the context of the 2009 assessment, the 17 mt OYs represented an SPR rate of 75.2%, or somewhat less fishing mortality than the existing rebuilding SPR target of 71.9%. These levels of harvest are estimated to be far below that which would result in overfishing.

Assuming the 2010 OY of 17 mt is removed, various management options for 2011 and subsequent years are considered ranging from zero fishing mortality to the largest removal that could occur without overfishing (ABC catches). In the absence of any future fishing mortality (beginning in 2011 and assuming a 2010 OY of 17 mt) the yelloweye rockfish stock is projected to have a 50% probability of recovery to the rebuilding target ($SB_{40\%}$) by 2047, slightly sooner than the estimate of 2049 from the 2007 rebuilding analysis. In contrast, the stock is not projected to reach this level within the next 500 years if the full ABC catches are removed. The current rebuilding harvest rate (SPR = 71.9%) would produce an OY of 20.4 mt in 2011 (20.7 mt in 2012) and has a 50% probability of rebuilding by 2087 (this is consistent with the preliminary forecasts reported in the 2009 updated stock assessment for the base case). A range of additional management approaches to recovery based on historical and recalculated reference points are presented.

Introduction

The yelloweye rockfish (*Sebastes ruberrimus*) stock was determined to be "overfished" in 2002, based on the 2001 stock assessment (Wallace 2001) which included only the California and Oregon portions of the stock. The next assessment included the entire U.S. coastal population (Methot et al. 2002) and estimated that the stock was at 24% of unexploited spawning biomass in 2002. An updated rebuilding analysis was conducted (Methot and Piner 2002) and the estimated rebuilding parameters were adopted by the Pacific Fishery Management Council (PFMC 2004). Subsequent rebuilding analyses were conducted on the basis of the 2005 (Wallace et al. 2005), 2006 (Wallace et al. 2006) and 2007 (Wallace 2008) stock assessments.

The 2002 rebuilding analysis estimated that the mean generation time for yelloweye rockfish was 44 years, and that if no fishing occurred beginning in 2003 there would be a 50% chance of rebuilding by 2027. The estimated value for steepness (h) from the 2002 assessment was 0.437, and the degree of recruitment variability (σ_r) was assumed to be 0.4. Management alternatives with OYs for 2003 between 22 and 27 mt were presented.

The 2005 rebuilding analysis (Tsou and Wallace 2005) was based on the updated stock assessment and estimates of steepness, and recruitment variability that were unchanged from 2002. Mean generation time was again estimated to be 44 years, but the year in which a 50% chance of rebuilding was projected to be achieved was increased to 2036. The maximum allowable rebuilding time (T_{MAX}) was estimated to be 2071, and the probability of achieving this target under the target F of 0.0153 was 80%.

A full stock assessment and subsequent rebuilding analysis (Tsou and Wallace 2006) was conducted in 2006. The 2006 assessment included area-specific models and revised the assumed values for natural mortality (from 0.045 to 0.036), steepness (from 0.437 to 0.45) and the degree of recruitment variability (from 0.4 to 0.5). The 2006 assessment estimated the 2006 depletion level to be 17.7%, somewhat lower than previous analyses. As a result of these changes, the rebuilding plan estimated that the mean generation time was 50 years and that in the absence of fishing beginning in 2007 the coastwide yelloweye stock would not rebuild to target levels with a 50% probability until 2046. The selected target SPR rate was 71.9%, with further reductions in the 2007 and 2008 OY levels to 14.0 and 14.3 mt respectively if this rate were to be maintained. The results of this rebuilding analysis were included in Amendment 16-4 of the 2006 Pacific Coast Groundfish Fishery Management Plan (PFMC 2006) re-evaluating and revising the yelloweye rockfish rebuilding plan so that the rebuilding periods are as short as possible, taking into account the status and biology of the species, the socioeconomic needs of West Coast fishing communities, and the interaction of the depleted species within the marine ecosystem. The council ultimately adopted a 'ramp-down' from then *status quo* catch levels to those consistent with the SPR target of 71.9%, which led to OYs in 2007 and 2008 of 23 and 20 mt.

The 2007 updated yelloweye assessment included several key changes: (1) correction of a technical error in the definition of age and length classes, (2) deletion of incorrectly classified trawl-caught fish from hook-and-line age compositions, and (3) revision of the fixed natural mortality rate from 0.036 to 0.043. The combination of these corrections led to an overall downward revision in the estimate of current spawning

biomass and the level of relative depletion, compared to the 2006 assessment. The 2007 rebuilding plan was consistent with previous analyses in predicting an extremely long period need to achieve target stock levels, and did not require a revision of the target reference points or strategy from the previous analysis. The median year to rebuild with no fishing mortality beginning in 2009 was estimated to be 2049, and it was estimated that recovery would not be achieved at an SPR rate consistent with ABC harvest levels (50.0%). The median year to rebuild under the SPR target (71.9%) was estimated to be 2082. An SPR of 71.2% (slightly more fishing mortality) was estimated to be possible and still achieve a 50% probability of recovery by the target year in Amendment 16-4, 2084. Management alternatives were presented that included the 'ramp-down' from *status quo* OY levels to those consistent with the SPR target of 71.9% by 2011, as well as immediate (2009) implementation of this level. The 'ramp-down' alternative provided in the 2007 rebuilding analysis consisted of 2009 and 2010 harvest of 17 and 14 mt respectively. Subsequent analysis indicated no change in the estimated year for rebuilding with a 50% probability for the option ultimately accepted by the council of 17 mt harvest in both years.

2009 Assessment summary

In the 2009 assessment (Stewart et al. 2009), all major structural and parameter assumptions from previous stock assessments were revisited. Revised inputs included: weight-length relationships, the maturity schedule, and addition of a fecundity relationship. Instead of fixed parameter values, natural mortality and steepness were estimated, as well as all growth parameters. Structural changes included use of a two-sex model, with explicit treatment of areas (California, Oregon and Washington) linked via a common stock-recruitment relationship and the removal of stochastic recruitment variability over the limited period for which it had been estimated in previous assessments (1968-1992). Because a fecundity relationship was used for yelloweye specifying that spawning output per unit weight increases with fish weight, all reference to spawning output was in terms of eggs produced, instead of spawning biomass.

In the 2009 assessment, the estimated relative depletion level in 2007 was 19.2% (slightly above the estimate of 16.4% from the 2007 assessment) and 20.3% in 2009, corresponding to 201.5 million eggs. Although the base case assessment model captured some uncertainty via asymptotic intervals, uncertainty from two sources is reported through alternate states of nature bracketing the base case results and included explicitly in the decision table. The magnitude of the estimated catch time-series was found to have a large influence on the perception of current stock size and the estimate of steepness of the stock-recruit relationship was closely linked to the projected recovery rates. Alternate values of each were selected to bracket the best estimates with marginal probabilities one-half as likely. For historical catch these values, 75% and 150% of the estimated catch series prior to 2000, were subjective, but reflect both the lack of a comprehensive catch reconstruction in Washington and the change in likelihood of the fit to data sources over a reasonable range of catch levels. For steepness the 12.5^{th} and 87.5^{th} percentiles were calculated from the likelihood profile as a proxy for the probability distribution about this point estimate. These two axes of uncertainty were both assigned a marginal probability such that the base case model was twice as likely as either the low or higher alternative

(Table 1). All nine combinations from these two axes are used to provide a more realistic degree of uncertainty in this rebuilding analysis.

Management performance under rebuilding

Following the 2002 declaration that the yelloweye rockfish stock was overfished the catch of yelloweye was reduced to 28% of the 2001 level and maintained between 12.3 and 19.6 mt since then (Table 2). These catch levels represent a 95% reduction from average catches observed in the 1980s and 1990s. Managers have constrained catches by eliminating all retention of yelloweye rockfish in both commercial and recreational fisheries, instituting broad spatial closures (some specifically for moving fixed-gear fleets away from known areas of yelloweye abundance), and creating new gear restrictions intended to reduce trawling in rocky shelf habitats and the coincident catch of rockfish in shelf flatfish trawls. Since 2002, the total 6-year catch (88.5 mt) has been only 63% of the sum of the OYs for 2002-2008 and only 29% of the sum of the ABCs for that period. The total 2008 catch (16.7 mt) is estimated to be just 4% of the peak annual catch that occurred in the early 1980s.

Rebuilding calculations

This rebuilding analysis was conducted using software developed by A. Punt (version 3.12a, September 2009). Because the rebuilding software does not have the capability for modeling area-based dynamics consistent with those in Stock Synthesis, there may be some differences in the rebuilding trajectory estimated here and that from the stock assessment. The steps followed were:

1. Define how virgin biomass (SB_0) will be calculated.
2. Define how future recruitment will be generated.
3. Define the fishery selectivity and allocation to be applied during rebuilding.
4. Decide how to include uncertainty in input parameters from the stock assessment in the rebuilding analysis.
5. Recalculate rebuilding reference points from the most current assessment results
   a) Calculate the projected year in which the stock would rebuild with a 50% probability if all future fishing mortality was eliminated ($T_{F=0}$).
   b) Calculate the projected year for a 50% probability of rebuilding from the year in which the stock was first declared overfished (T_{MIN}).
   c) Calculate the mean generation time.
   d) Calculate the maximum allowable rebuilding time (T_{MAX}).
6. Identification and analysis of alternative harvest strategies for rebuilding.

1. Definition of SB_0

The equilibrium spawning output level (SB_0) used in this rebuilding analysis is calculated via the stock-recruitment, growth, maturity and fecundity relationships in order to be consistent with assessment model results. This level is estimated to be 994 million eggs in the base case assessment model, which dictates that the rebuilding target ($SB_{40\%}$) is 398 million eggs. This result is highly uncertain, based on the range of values among the nine states of nature (Table 3), and this uncertainty is included in rebuilding projections.

2. Generation of future recruitment

The estimated parameters of the stock recruitment relationship (unexploited equilibrium recruitment [natural log of R_0], and steepness [h]) for each of the nine states of nature, are used to generate future recruitments in the rebuilding analysis. Because the degree of recruitment variability (σ_r) was not a component or result of the 2009 stock assessment, a value of 0.5 is used to be consistent with the last two rebuilding analyses, however sensitivity to this assumption is evaluated via analyses conducted with alternate values. The values for equilibrium recruitment and steepness for each combination of the two states of nature are provided in Table 4.

3. Fishery selectivity and allocation

In order to project the effect of fishing on the yelloweye rockfish rebuilding trajectory, it is necessary to specify the fishery selectivity and relative allocation among fleets. This rebuilding analysis projects forward using selectivity and allocation averaged over recent years (2005-2007), not including the terminal year with catch, 2008, since these catches are projected based on the GMT scorecard and may not well reflect the final fleet-specific values in that year. This choice also provides some consistency between assessment model results and short term-forecasts from the rebuilding analysis, although the two still may differ. The resulting selectivity and weight at age are included in the basic input data files (Appendices A and B).

4. Inclusion of uncertainty

Uncertainty is included in this rebuilding analysis via 1,600 random simulations of stochastic future recruitment strengths and integration over the nine combinations of the two states of nature. Because these states of nature represent discrete levels, it is expected that there will be some degree of 'stair-stepping' in reported probabilities.

5. Recalculate reference points

The median year of recovery in the absence of fishing ($T_{F=0}$) was calculated by setting fishing mortality to zero in 2011, and is equal to 2047. The value for T_{MIN}, the median year for rebuilding to the target level in the absence of fishing since the year of declaration (2000) is 2044 (revised downward slightly from 2046 in the 2007 analysis). That T_{MIN} is only three years shorter than $T_{F=0 \text{ in } 2011}$, indicates that harvest rates during this eight-year period have been low enough to have had little effect on the stock trajectory.

The estimated generation time has increased by one year to 45 years compared to the 2007 analysis. In conjunction with T_{MIN}, the mean generation time dictates the revised estimate of T_{MAX}, 2089 (increased slightly from 2090 in the 2007 analysis). Applying the same harvest rate (SPR$_{TARGET}$ = 71.9%) retained in 2007 (from Amendment 16-4) leads to a revised T_{TARGET} of 2087, three years longer than the current target. This harvest rate generates a P_{MAX} (probability of recovery by T_{MAX}) of 52.3%, slightly lower than the 2007 estimate of 68.9%.

All reference points from Amendment 16-4, the 2007 rebuilding analysis, and those recalculated here are summarized in Table 5.

6. Alternate rebuilding strategies

Assuming that a constant rate of harvest will be applied throughout a rebuilding period, the basis for rebuilding alternatives can be divided into two approaches: 1) strategies based on selection of a harvest rate, and 2) strategies based selection of a T_{TARGET} (year for 50% probability of recovery). The result of each of these strategies is contingent on the actual OY removed in 2010, which is assumed to be 17 mt. This rebuilding analysis therefore presents 14 alternate strategies:

1) Eliminate all harvest beginning in 2011 (F=0).
2) Apply the harvest rate that would currently generate a 14 mt 2010 OY (SPR=78.9%)
3) Apply the harvest rate that would currently generate the 17 mt 2010 OY (SPR=75.2%)
4) Apply the harvest rate that is estimated to generate a 50% probability of recovery by the T_{TARGET} from 2007 and Amendment 16-4 (2084, SPR=72.8%)
5) Apply the current rebuilding harvest rate target (SPR_{TARGET}=71.9%).
6) Apply the harvest rate that estimated to generate a 50% probability of recovery by the T_{MAX} from 2007 (2090, SPR=71.0%)
7) Apply the harvest rate that estimated to generate a 50% probability of recovery by the T_{MAX} from Amendment 16-4 (2096, SPR=69.9%)
8) Apply a 40:10 harvest policy.
9) Apply the ABC harvest rate ($SPR_{50\%}$).

Apply the harvest rate that achieves a 50% probability of recovery for years distributed between $T_{F=0}$ (2047) and the current T_{MAX} of 2089 (in increasing SPR order for easier interpretation and with 2092 included to provide additional comparability to previous analyses):
10) 2056
11) 2065
12) 2074
13) 2083
14) 2092

Results

Summary results from alternatives 1-9, are presented in Table 6. Detailed results are presented in Tables 8-10 and Figures 1-3. In the absence of any future fishing mortality, the yelloweye rockfish stock is projected to have a 50% probability of recovery to the rebuilding target (*$SB_{40\%}$*) by 2047 (alternative 1). In contrast, the stock is not projected to reach this level during the 500 years over which this projection was performed if the ABC catches are removed (alternative 9). The SPR proxy target used to generate ABC catches is 50%, which represents substantially more fishing mortality than that estimated to produce MSY for the base case assessment model (60.4%) occurring at an estimated 39.1% relative depletion. Even the most optimistic state of nature predicts MSY harvest to be achieved with less fishing mortality (51.2%) than the MSY proxy These two scenarios (alternatives 1 and 9) bound the range of fishing mortality between none and the overfishing level. All other scenarios lie within this range.

Fishing at the current SPR target (alternative 5) results in an increase from the 17 mt OY in 2010 to 20.4 mt in 2011. This harvest rate target results in a reduced probability of median recovery by the recalculated T_{MAX} (2089) of 52.3%, even though the estimated $T_{F=0}$ has been reduced from 2049 to 2047. The current rebuilding harvest rate (SPR = 71.9%, alternative 4) results in a median year to rebuild (recalculated T_{TARGET}) of 2087, and a probability of recovery in the T_{TARGET} from amendment 16-4 (2084) of 46.4%. If the SPR target is reduced to 72.8% (alternative 3), the 2011 OY is reduced to 19.6 mt (2012 to 19.9 mt), and the probability of rebuilding by the amendment 16-4 T_{TARGET} is estimated to be 50.0% (alternative 3). The harvest rate calculated from the 2009 assessment that is consistent with the 2010 OY (17 mt) is SPR = 75.2% (alternate 3), and if continued, results in a 50% probability of recovery achieved by 2077.

Figures 4-6 and Table 7 show the results of alternate management actions 10-14, fishing at SPR rates that result in a 50% probability of recovery by an arbitrary range of years between $T_{F=0 \text{ in } 2011}$ (2047) and slightly above the recalculated T_{MAX} (2089). Except for alternative 14, these runs correspond to harvest rates lower than that of the SPR = 71.9% value used to design the current approach (post 'ramp-down' target). Detailed results of these management alternatives are presented in tables 11-13.

Sensitivity analyses for the degree of recruitment variability (σ_r) used in rebuilding simulations were performed to evaluate the use of 0.5. The choice of 0.5 was intended to both provide consistency with previous analyses, as well as reflect a 'reasonable' level for west coast rockfish. Future assessments may be able to better inform this quantity. The year in which there is a 50% probability of recovery for the SPR target strategy (71.9%) is largely insensitive to the choice of σ_r between 0.01 and 1.0 (Figure 7). However, as the degree of recruitment variability increases, the 'smoothness' of the trajectory improves, indicating that year-to-year variability in recruitment strength is reducing the contrast between the nine states of nature (dominated by the steepness axis in this plot). It may therefore be useful to consider, when comparing the full suite of management alternatives, that probabilities differing substantially from the median may be more heavily influenced by the choice of σ_r. Inclusion of parameter uncertainty for all estimated quantities would generally cause the same type of smoothing behavior for any rebuilding analysis, although this is not currently possible for maximum likelihood based estimates.

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Tables

Table 1. Relative probabilities for combinations of the two alternate states of nature used to represent uncertainty in this rebuilding analysis.

		Historical catch		
		Low	Best estimate	High
Steepness	Low	6.25%	12.5%	6.25%
	Estimated value	12.5%	25%	12.5%
	High	6.25%	12.5%	6.25%

Table 2. Yelloweye rockfish management performance under rebuilding.

Year	ABC (mt)	OY (mt)	Commercial Catch (mt)[1]	Recreational Catch (mt)	Total Catch (mt)
2002	27^2	13.5^2	6.4	9.3	15.8
2003	52	22	3.0	9.4	12.4
2004	53	22	4.3	8.0	12.3
2005	54	26	4.7	10.4	15.1
2006	55	27	3.7	8.7	12.4
2007	47	23	6.0	13.6	19.6
2008	47	20	7.7	9.0	16.7

[1]Includes research catches.
[2]Includes the Columbia, Vancouver and Eureka INPFC areas only.

Table 3. Unexploited spawning output (SB_0, millions eggs) for the nine states of nature included in this rebuilding analysis.

		Historical catch		
		Low	Best estimate	High
Steepness	Low	743	988	1,477
	Estimated value	748	994	1,487
	High	755	1,003	1,499

Table 4. Stock recruitment parameters R_0 (1000s) and steepness (h) for the nine states of nature included in this rebuilding analysis.

		Historical catch		
		Low	Best estimate	High
Steepness	Low = 0.344	178	234	346
	MLE = 0.417	173	227	336
	High = 0.508	170	223	330

Table 5. Summary of rebuilding reference points for yelloweye rockfish from Amendment 16-4, the 2007 rebuilding analysis, and recalculated values based on the 2009 assessment results.

Parameter	Amendment 16-4	Source 2007 Rebuilding analysis	2009 Rebuilding analysis
SB_0 ([1]Spawning biomass or [2]Millions eggs)	$3,322^1$	$3,062^1$	994^2
Rebuilding target ($SB_{40\%}$)	$1,329^1$	$1,225^1$	398^2
SB_{2009} (Millions eggs)	NA	NA	202^2
T_{MIN}	2046	2046	2044
Mean generation time	50	44	45
T_{MAX}	2096	2090	2089
$T_{F=0}$ (begin in 2007)	2048	NA	NA
$T_{F=0}$ (begin in 2009)	NA	2049	NA
$T_{F=0}$ (begin in 2011)	NA	NA	2047
P_{MAX}	80.0%	68.9%	52.3%
T_{TARGET}	2084	2084^3	2087^4
SPR_{TARGET}	71.9%	71.9%	71.9%

[3]T_{TARGET} not updated in the 2007 analysis.
[4]Recalculated T_{TARGET} shown for comparison.

Table 6. Results of rebuilding alternatives based on selection of an SPR target or year for 50% probability of recovery.

Run	1	2	3	4	5	6	7	8	9
Basis	F=0 2011+	SPR from 2010 OY of 14 mt	SPR from 2010 OY of 17 mt	SPR that achieves 50% prob. recovery by 2007 T_{TARGET}	SPR = 71.9%	SPR that achieves 50% prob. recovery by 2007 T_{MAX}	SPR that achieves 50% prob. recovery by Amendment 16-4 T_{MAX}	40:10 Harvest policy	ABC harvest rate SPR = 50%
2011 OY (mt)	0.0	14.3	17.3	19.6	20.4	21.1	22.1	33.7	47.8
2011 ABC (mt)	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
2012 OY (mt)	0.0	14.6	17.7	19.9	20.7	21.4	22.5	34.4	48.0
2012 ABC (mt)	49.1	48.8	48.7	48.6	48.6	48.6	48.6	48.3	48.0
50% prob. recovery by:	2047	2069	2077	2084	2087	2090	2096	NA	NA
SPR_{TARGET}	100%	78.9%	75.2%	72.8%	71.9%	71.2%	69.9%	>=50%	50.0%
Probability of recovery by reference points based on the 2007 rebuilding analysis:									
2046 (T_{MIN})	48.2%	20.3%	15.2%	11.5%	10.0%	8.9%	7.3%	0.0%	0.0%
2049 ($T_{F=0}$ from 2009)	60.2%	23.1%	19.2%	15.3%	14.1%	13.1%	10.9%	0.0%	0.0%
2084 (T_{TARGET})	96.9%	70.0%	59.4%	50.0%	46.4%	43.0%	38.6%	0.4%	0.0%
2090 (T_{MAX})	98.9%	72.9%	65.3%	56.5%	52.9%	50.0%	44.6%	0.7%	0.1%
Probability of recovery by recalculated 2009 reference points:									
2044 (T_{MIN})	39.3%	17.8%	12.6%	8.6%	7.3%	6.5%	5.2%	0.0%	0.0%
2047 ($T_{F=0}$ from 2011)	52.1%	21.5%	16.5%	13.1%	11.4%	10.2%	8.4%	0.0%	0.0%
2087 (T_{TARGET})	97.8%	71.9%	62.6%	53.8%	50.0%	46.6%	41.4%	0.6%	0.1%
2089 (T_{MAX})	98.6%	72.6%	64.5%	55.6%	52.3%	48.8%	43.4%	0.6%	0.1%

Table 7. Results of rebuilding alternatives based on a year for 50% probability of recovery.

Basis	Run 10 SPR that achieves 50% prob. recovery by 2056	11 SPR that achieves 50% prob. recovery by 2065	12 SPR that achieves 50% prob. recovery by 2074	13 SPR that achieves 50% prob. recovery by 2083	14 SPR that achieves 50% prob. recovery by 2092
2011 OY (mt)	7.8	12.8	16.7	19.4	21.4
2011 ABC (mt)	47.8	47.8	47.8	47.8	47.8
2012 OY (mt)	8.0	13.1	17.0	19.7	21.7
2012 ABC (mt)	48.9	48.8	48.7	48.6	48.6
50% prob. recovery by:	2056	2065	2074	2083	2092
SPR_{TARGET}	87.4%	80.7%	76.0%	73.0%	70.9%
Probability of recovery by reference points based on the 2007 rebuilding analysis:					
2046 (T_{MIN})	26.9%	22.4%	16.5%	12.0%	8.4%
2049 ($T_{F=0}$ from 2009)	31.3%	24.6%	20.1%	15.6%	12.2%
2084 (T_{TARGET})	80.1%	72.9%	62.1%	51.1%	41.6%
2090 (T_{MAX})	83.2%	74.8%	67.7%	57.3%	48.5%
Probability of recovery by recalculated 2009 reference points:					
2044 (T_{MIN})	24.9%	20.3%	13.7%	9.0%	6.1%
2047 ($T_{F=0}$ from 2011)	28.2%	23.1%	18.4%	13.6%	9.8%
2087 (T_{TARGET})	81.8%	73.9%	64.9%	54.6%	44.9%
2089 (T_{MAX})	82.9%	74.6%	66.9%	56.2%	47.5%

Table 8. Probability of recovery for rebuilding alternatives based on selection of an SPR target or year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	1	2	3	4	5	6	7	8	9
Basis	F=0 2011+	SPR from 2010 OY of 14 mt	SPR from 2010 OY of 17 mt	SPR that achieves 50% prob. recovery by 2007 T_{TARGET}	SPR = 71.9%	SPR that achieves 50% prob. recovery by 2007 T_{MAX}	SPR that achieves 50% prob. recovery by Amendment 16-4 T_{MAX}	40:10 Harvest policy	ABC harvest rate SPR = 50%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2021	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2022	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2026	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2027	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2028	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2029	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2030	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2031	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2032	14.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2033	18.8%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
2034	21.8%	1.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
2035	23.1%	1.6%	0.8%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
2036	24.3%	2.7%	1.3%	0.6%	0.4%	0.1%	0.1%	0.0%	0.0%
2037	24.7%	5.0%	1.8%	1.0%	0.7%	0.5%	0.4%	0.0%	0.0%
2038	25.2%	6.6%	2.5%	1.6%	1.1%	0.8%	0.7%	0.0%	0.0%
2069	84.4%	51.2%	38.2%	31.4%	29.6%	27.9%	26.0%	0.0%	0.0%
2077	92.2%	63.2%	50.6%	40.6%	37.2%	34.5%	31.3%	0.2%	0.0%
2084	96.9%	70.0%	59.4%	50.0%	46.4%	43.0%	38.6%	0.4%	0.0%
2087	97.8%	71.9%	62.6%	53.8%	50.0%	46.6%	41.4%	0.6%	0.1%
2090	98.9%	72.9%	65.3%	56.5%	52.9%	50.0%	44.6%	0.7%	0.1%
2096	99.5%	74.7%	69.6%	61.3%	58.4%	55.9%	50.0%	0.8%	0.1%
2123	100.0%	84.0%	77.1%	73.1%	71.3%	69.9%	67.1%	1.7%	0.6%

Table 9. Median catches (mt) for rebuilding alternatives based on selection of an SPR target or year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	1	2	3	4	5	6	7	8	9
Basis	F=0 2011+	SPR from 2010 OY of 14 mt	SPR from 2010 OY of 17 mt	SPR that achieves 50% prob. recovery by 2007 T_{TARGET}	SPR = 71.9%	SPR that achieves 50% prob. recovery by 2007 T_{MAX}	SPR that achieves 50% prob. recovery by Amendment 16-4 T_{MAX}	40:10 Harvest policy	ABC harvest rate SPR = 50%
2009	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
2010	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
2011	0.0	14.3	17.3	19.6	20.4	21.1	22.1	33.7	47.8
2012	0.0	14.6	17.7	19.9	20.7	21.4	22.5	34.4	48.0
2013	0.0	14.8	18.0	20.2	21.0	21.8	22.8	35.1	48.1
2014	0.0	15.1	18.2	20.5	21.3	22.1	23.1	35.6	48.2
2015	0.0	15.3	18.5	20.8	21.6	22.3	23.4	36.1	48.2
2016	0.0	15.6	18.7	21.0	21.9	22.6	23.7	36.5	48.2
2017	0.0	15.8	19.0	21.3	22.1	22.8	23.9	36.9	48.1
2018	0.0	16.0	19.2	21.5	22.4	23.1	24.1	37.3	48.1
2019	0.0	16.2	19.4	21.8	22.6	23.3	24.4	37.6	48.0
2020	0.0	16.4	19.7	22.0	22.8	23.5	24.6	38.0	48.0
2021	0.0	16.6	19.9	22.2	23.0	23.8	24.8	38.3	47.9
2022	0.0	16.8	20.1	22.4	23.3	24.0	25.0	38.6	47.9
2023	0.0	17.0	20.3	22.6	23.5	24.2	25.2	38.9	47.8
2024	0.0	17.2	20.5	22.8	23.7	24.4	25.5	39.2	47.8
2025	0.0	17.4	20.7	23.0	23.9	24.6	25.7	39.5	47.7
2026	0.0	17.6	20.9	23.3	24.1	24.8	25.9	39.7	47.8
2027	0.0	17.8	21.1	23.5	24.3	25.1	26.1	39.9	47.8
2028	0.0	18.0	21.4	23.8	24.6	25.3	26.4	40.2	47.9
2029	0.0	18.2	21.6	24.0	24.8	25.6	26.6	40.4	48.0
2030	0.0	18.4	21.8	24.2	25.1	25.8	26.8	40.7	48.0
2031	0.0	18.6	22.1	24.5	25.3	26.1	27.1	41.0	48.1
2032	0.0	18.8	22.3	24.7	25.6	26.3	27.4	41.2	48.2
2033	0.0	19.0	22.5	25.0	25.8	26.6	27.6	41.5	48.3
2034	0.0	19.3	22.8	25.2	26.1	26.8	27.9	41.7	48.4
2035	0.0	19.5	23.0	25.5	26.3	27.1	28.2	42.0	48.4
2036	0.0	19.7	23.3	25.7	26.6	27.3	28.4	42.2	48.5
2037	0.0	19.9	23.5	26.0	26.8	27.6	28.6	42.5	48.6
2038	0.0	20.1	23.7	26.2	27.1	27.8	28.9	42.6	48.7
2069	0.0	26.4	30.4	33.0	33.9	34.6	35.7	48.4	49.4
2077	0.0	27.9	32.0	34.6	35.5	36.2	37.3	49.4	49.5
2084	0.0	29.1	33.2	35.8	36.7	37.5	38.5	50.4	49.6
2087	0.0	29.6	33.7	36.4	37.2	38.0	39.0	50.5	49.6
2090	0.0	30.0	34.1	36.8	37.7	38.5	39.5	50.7	49.6
2096	0.0	30.8	35.0	37.7	38.6	39.3	40.3	51.2	49.4
2123	0.0	34.5	38.8	41.4	42.2	42.9	43.8	52.8	49.7

Table 10. Median spawning output (millions eggs) for rebuilding alternatives based on selection of an SPR target or year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	1	2	3	4	5	6	7	8	9
Basis	F=0 2011+	SPR from 2010 OY of 14 mt	SPR from 2010 OY of 17 mt	SPR that achieves 50% prob. recovery by 2007 T_{TARGET}	SPR = 71.9%	SPR that achieves 50% prob. recovery by 2007 T_{MAX}	SPR that achieves 50% prob. recovery by Amendment 16-4 T_{MAX}	40:10 Harvest policy	ABC harvest rate SPR = 50%
2009	202	202	202	202	202	202	202	202	202
2010	206	206	206	206	206	206	206	206	206
2011	211	211	211	211	211	211	211	211	211
2012	217	216	215	215	215	215	215	214	212
2013	223	220	220	219	219	219	219	216	213
2014	229	224	223	223	222	222	222	218	214
2015	235	229	227	226	226	226	225	220	214
2016	240	232	231	229	229	229	228	221	214
2017	246	236	234	233	232	232	231	223	214
2018	251	240	237	236	235	234	234	224	214
2019	256	243	240	238	238	237	236	225	214
2020	262	247	243	241	240	240	239	226	214
2021	267	250	246	244	243	242	241	227	214
2022	272	253	249	246	245	245	243	228	214
2023	277	256	252	249	248	247	246	229	214
2024	282	259	255	252	251	249	248	230	214
2025	287	263	258	254	253	252	250	231	214
2026	292	266	260	257	255	254	252	232	214
2027	297	269	263	259	258	256	255	232	213
2028	301	272	266	262	260	259	257	233	213
2029	306	275	269	264	262	261	259	234	214
2030	312	278	272	267	265	264	262	235	214
2031	317	282	275	270	268	267	264	236	214
2032	323	285	278	273	271	269	267	237	215
2033	327	289	281	276	274	272	269	238	215
2034	333	292	284	278	276	275	272	238	216
2035	339	296	287	281	279	277	275	239	216
2036	344	299	290	284	282	280	277	240	216
2037	349	302	293	287	285	283	280	241	216
2038	355	306	297	290	287	285	282	242	217
2069	524	403	381	366	361	356	350	264	220
2077	569	427	402	385	379	373	365	268	220
2084	605	447	419	399	393	387	379	271	221
2087	619	455	426	406	399	393	384	272	222
2090	633	462	432	412	405	399	390	273	221
2096	659	475	444	422	414	408	399	274	221
2123	770	532	492	464	454	446	434	280	222

Table 11. Probability of recovery for rebuilding alternatives based on selection of a year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	10	11	12	13	14
Basis	SPR that achieves 50% prob. recovery by 2056	SPR that achieves 50% prob. recovery by 2065	SPR that achieves 50% prob. recovery by 2074	SPR that achieves 50% prob. recovery by 2083	SPR that achieves 50% prob. recovery by 2092
2009	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%
2011	0.0%	0.0%	0.0%	0.0%	0.0%
2012	0.0%	0.0%	0.0%	0.0%	0.0%
2013	0.0%	0.0%	0.0%	0.0%	0.0%
2014	0.0%	0.0%	0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%	0.0%	0.0%
2017	0.0%	0.0%	0.0%	0.0%	0.0%
2018	0.0%	0.0%	0.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%	0.0%	0.0%
2021	0.0%	0.0%	0.0%	0.0%	0.0%
2022	0.0%	0.0%	0.0%	0.0%	0.0%
2023	0.0%	0.0%	0.0%	0.0%	0.0%
2024	0.0%	0.0%	0.0%	0.0%	0.0%
2025	0.0%	0.0%	0.0%	0.0%	0.0%
2026	0.0%	0.0%	0.0%	0.0%	0.0%
2027	0.0%	0.0%	0.0%	0.0%	0.0%
2028	0.0%	0.0%	0.0%	0.0%	0.0%
2029	0.0%	0.0%	0.0%	0.0%	0.0%
2030	0.1%	0.0%	0.0%	0.0%	0.0%
2031	0.8%	0.1%	0.0%	0.0%	0.0%
2032	1.8%	0.3%	0.1%	0.0%	0.0%
2033	3.9%	0.9%	0.1%	0.1%	0.0%
2034	6.6%	1.5%	0.4%	0.1%	0.1%
2035	9.6%	2.7%	1.0%	0.1%	0.1%
2036	12.5%	4.9%	1.4%	0.6%	0.1%
2037	15.6%	6.4%	2.2%	1.0%	0.5%
2038	18.0%	8.6%	3.3%	1.6%	0.8%
2056	50.0%	31.8%	25.8%	22.0%	19.3%
2065	69.1%	49.9%	34.9%	28.3%	24.8%
2074	74.9%	64.9%	50.0%	37.2%	30.8%
2083	79.5%	72.4%	60.9%	50.0%	40.6%
2092	84.7%	75.6%	68.9%	58.6%	50.0%

Table 12. Median spawning output (millions eggs) for rebuilding alternatives based on selection of a year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	10	11	12	13	14
Basis	SPR that achieves 50% prob. recovery by 2056	SPR that achieves 50% prob. recovery by 2065	SPR that achieves 50% prob. recovery by 2074	SPR that achieves 50% prob. recovery by 2083	SPR that achieves 50% prob. recovery by 2092
2009	202	202	202	202	202
2010	206	206	206	206	206
2011	211	211	211	211	211
2012	216	216	215	215	215
2013	222	221	220	219	219
2014	227	225	224	223	222
2015	231	229	227	226	225
2016	236	233	231	230	228
2017	240	237	235	233	231
2018	245	241	238	236	234
2019	249	245	241	239	237
2020	253	248	244	241	239
2021	257	252	247	244	242
2022	261	255	250	247	244
2023	265	258	253	249	247
2024	269	262	256	252	249
2025	273	265	259	255	251
2026	277	268	262	257	254
2027	281	271	264	259	256
2028	285	275	267	262	258
2029	289	278	270	265	261
2030	293	282	273	267	263
2031	297	285	276	270	266
2032	301	289	279	273	268
2033	306	292	283	276	271
2034	310	296	286	279	274
2035	314	300	289	282	277
2036	318	303	292	284	279
2037	323	307	295	287	282
2038	327	310	298	290	284
2056	401	372	351	337	327
2065	437	401	375	358	345
2074	474	431	400	380	365
2083	508	457	422	399	383
2092	536	480	442	417	399

Table 13. Median catches (mt) for rebuilding alternatives based on selection of a year for 50% probability of recovery. Note that after 30 years the table is compressed.

Run	10	11	12	13	14
Basis	SPR that achieves 50% prob. recovery by 2056	SPR that achieves 50% prob. recovery by 2065	SPR that achieves 50% prob. recovery by 2074	SPR that achieves 50% prob. recovery by 2083	SPR that achieves 50% prob. recovery by 2092
2009	17.0	17.0	17.0	17.0	17.0
2010	17.0	17.0	17.0	17.0	17.0
2011	7.8	12.8	16.7	19.4	21.4
2012	8.0	13.1	17.0	19.7	21.7
2013	8.2	13.3	17.3	20.0	22.1
2014	8.3	13.6	17.6	20.3	22.4
2015	8.5	13.8	17.8	20.6	22.6
2016	8.7	14.0	18.1	20.8	22.9
2017	8.8	14.2	18.3	21.1	23.2
2018	8.9	14.4	18.5	21.3	23.4
2019	9.1	14.6	18.7	21.6	23.6
2020	9.2	14.8	19.0	21.8	23.8
2021	9.4	15.0	19.2	22.0	24.1
2022	9.5	15.2	19.4	22.2	24.3
2023	9.6	15.3	19.6	22.4	24.5
2024	9.8	15.5	19.8	22.6	24.7
2025	9.9	15.7	20.0	22.8	24.9
2026	10.0	15.9	20.2	23.1	25.1
2027	10.2	16.1	20.4	23.3	25.4
2028	10.3	16.3	20.7	23.5	25.6
2029	10.4	16.5	20.9	23.8	25.9
2030	10.6	16.7	21.1	24.0	26.1
2031	10.7	16.9	21.3	24.3	26.4
2032	10.9	17.1	21.6	24.5	26.6
2033	11.0	17.3	21.8	24.7	26.9
2034	11.2	17.5	22.0	25.0	27.1
2035	11.3	17.7	22.3	25.3	27.4
2036	11.5	17.9	22.5	25.5	27.7
2037	11.6	18.1	22.7	25.7	27.9
2038	11.8	18.3	23.0	26.0	28.1
2056	14.4	21.8	26.9	29.9	32.1
2065	15.6	23.5	28.7	31.9	34.0
2074	16.9	25.2	30.5	33.8	35.9
2083	18.1	26.7	32.2	35.5	37.6
2092	19.0	27.9	33.5	36.9	39.1
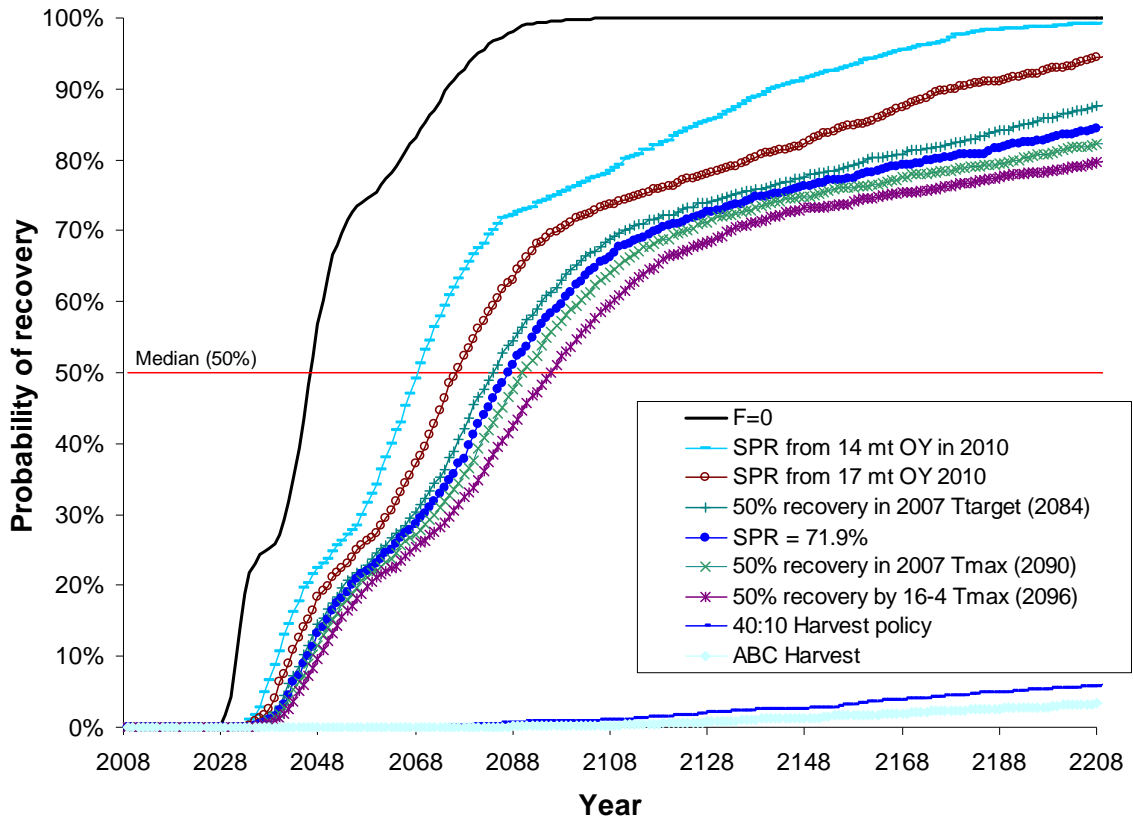
Figure 1. Probability of recovery for rebuilding alternatives 1-9.
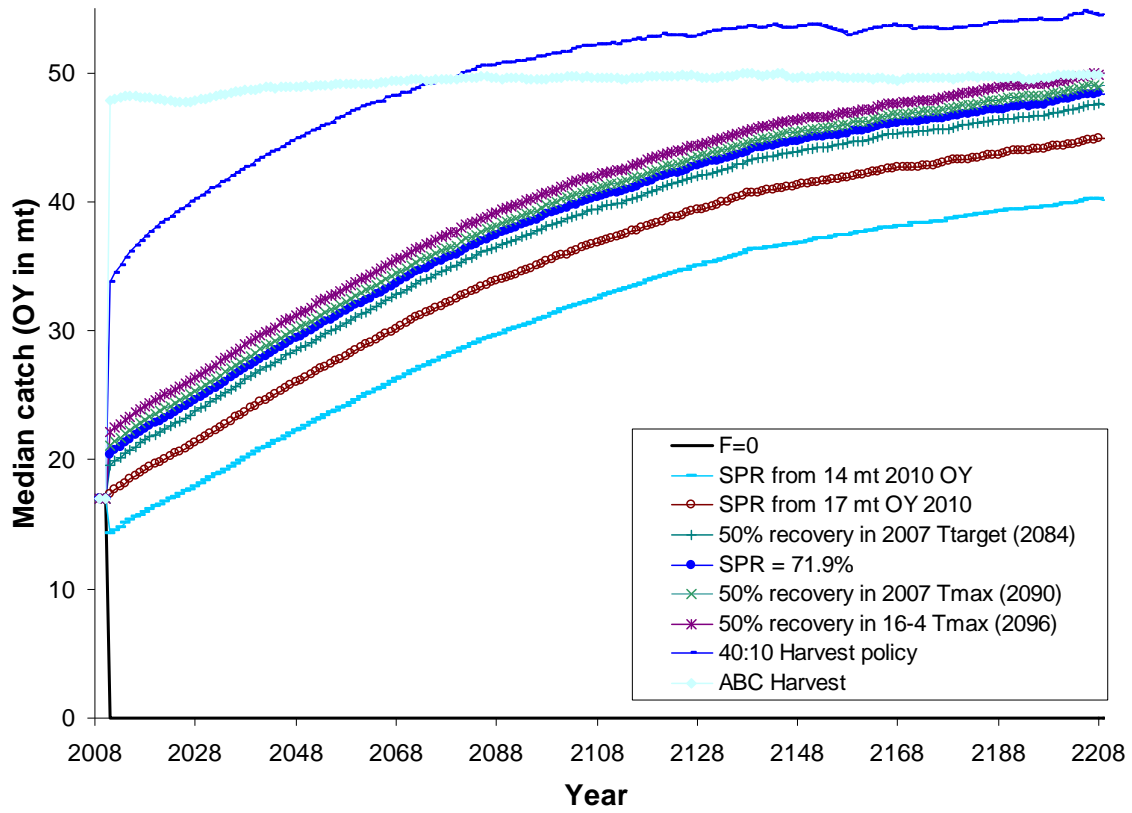
Figure 2. Projected median catch (mt) for rebuilding alternatives 1-9.
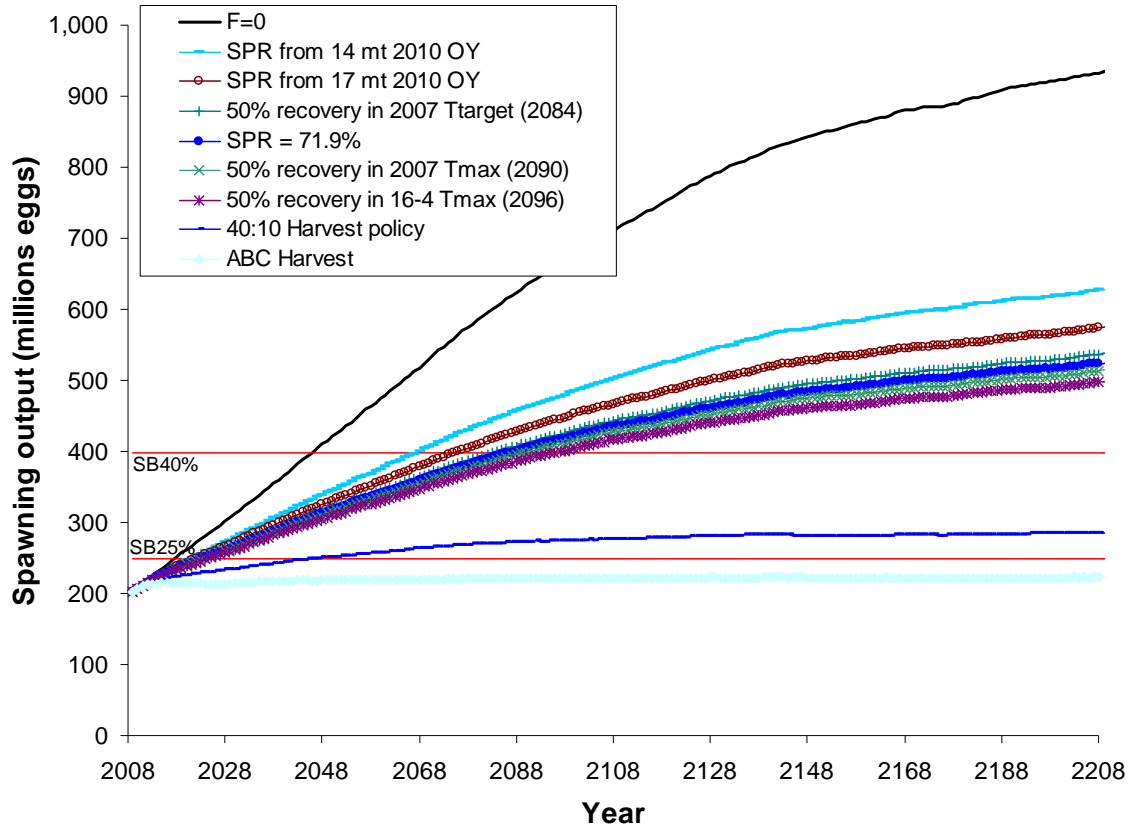
Figure 3. Projected median spawning biomass (mt) for rebuilding alternatives 1-9.
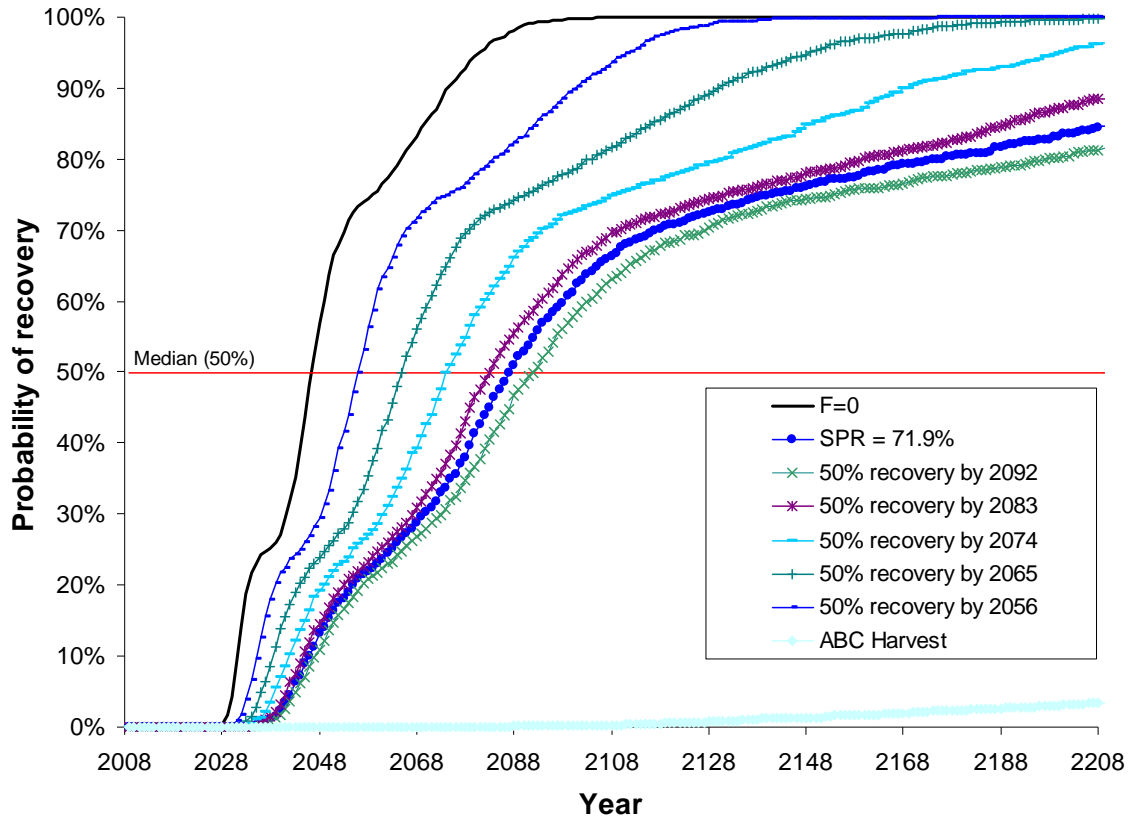
Figure 4. Probability of recovery for rebuilding alternatives 10-14 (1, 3, 9 are also included for comparison).
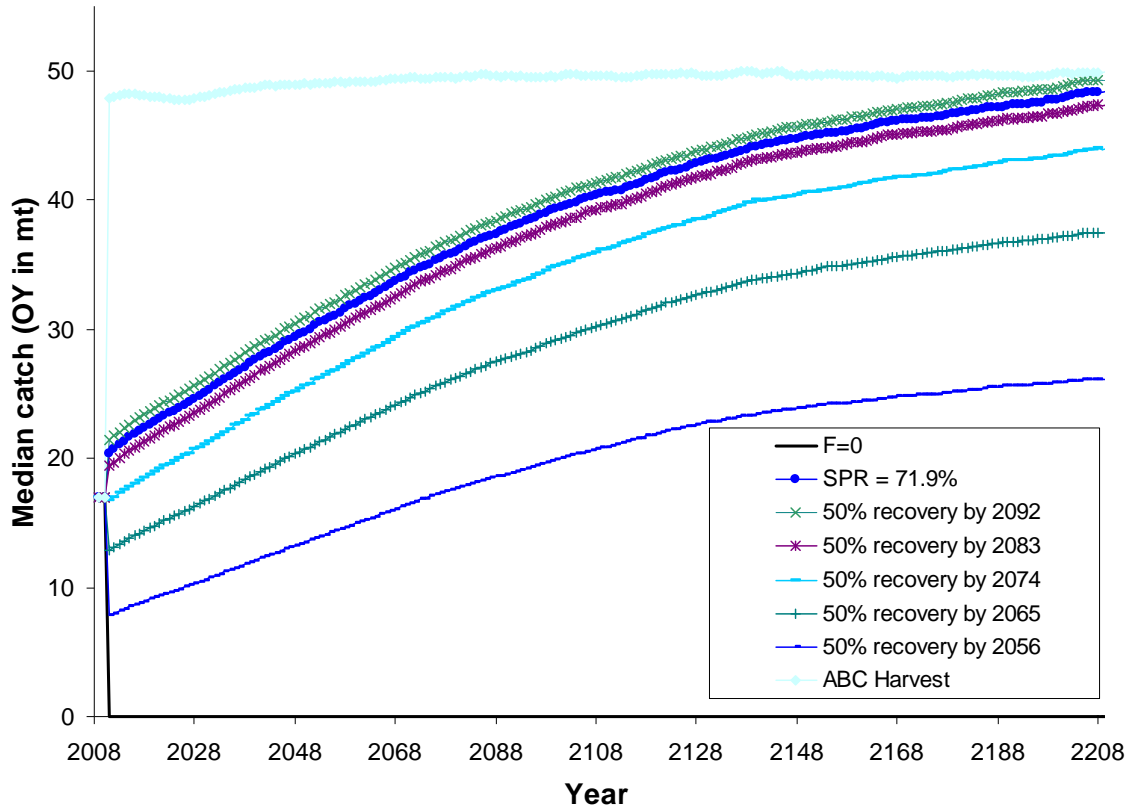
Figure 5. Projected median catch (mt) for rebuilding alternatives 10-14 (1, 3, 9 are also included for comparison).
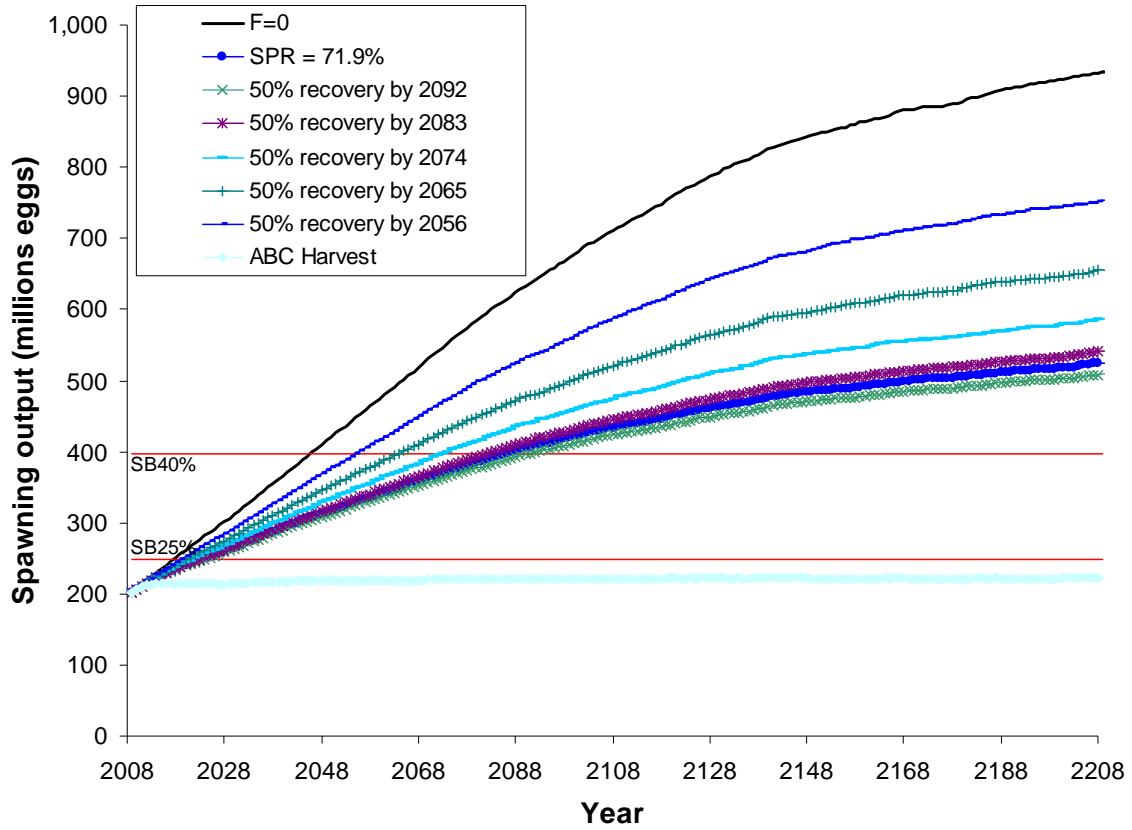
Figure 6. Projected median spawning biomass (mt) for rebuilding alternatives 10-15 10-14 (1, 3, 9 are also included for comparison).
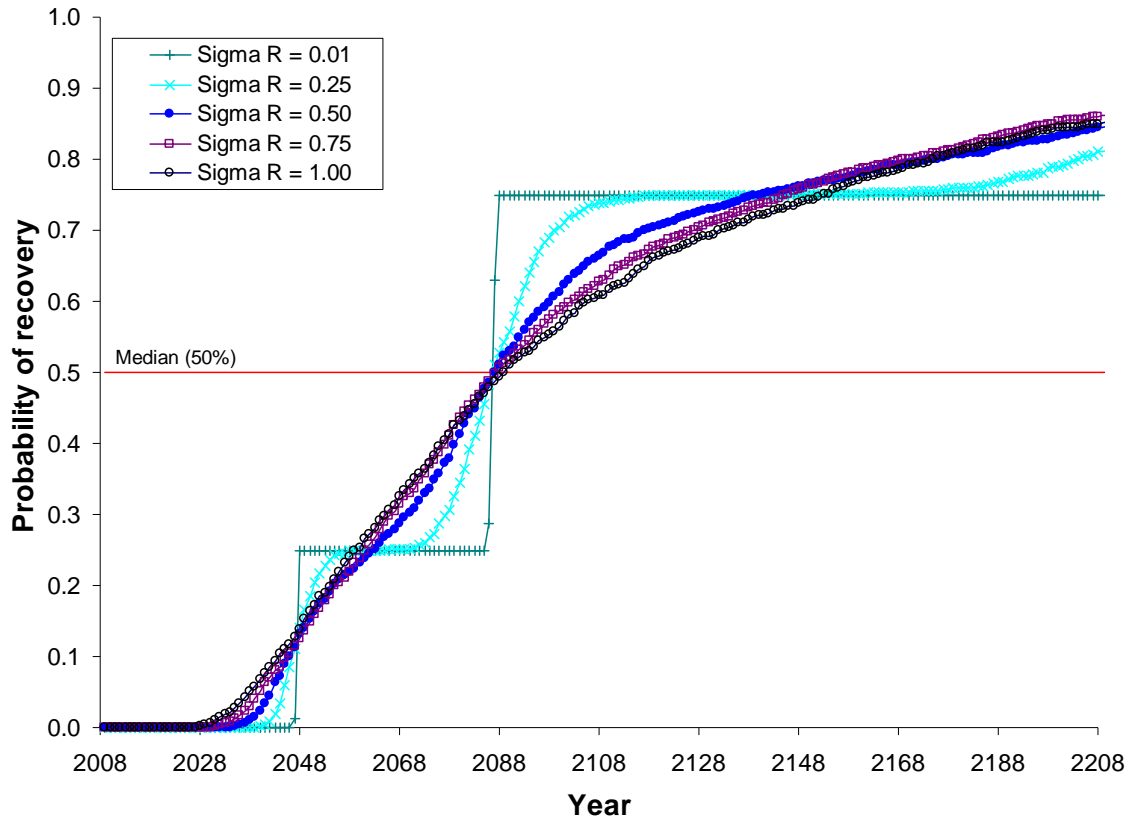
Figure 7. Sensitivity analyses for the degree of recruitment variability (σ_r) used in rebuilding simulations.

Appendix A. Basic input file for rebuilding analyses.

Title
Yelloweye_rebuilding_2009
Number of sexes
2
Age range to consider (minimum age; maximum age)
0 100
Number of fleets
6
First year of projection (Yinit)
2009
First Year of rebuilding period (Ydecl)
2002
Number of simulations
1600
Maximum number of years
500
Conduct projections with multiple starting values (0=No;else yes)
1
Number of parameter vectors (should be 16)
16
Is the maximum age a plus-group (1=Yes;2=No)
1
Generate future recruitments using historical recruitments (1) historical recruits/spawner (2) or a stock-recruitment (3)
3
Constant fishing mortality (1) or constant Catch (2) projections
1
Fishing mortality based on SPR (1) or actual rate (2)
1
Pre-specify the year of recovery (or -1) to ignore
-1
Fecundity-at-age
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 #runnumber: 307 yelloweye_data.SS yelloweye_control.SS 6101.65 9.94349e+008 2.01509e+008
 0 0 22.9416 87.4734 301.324 929.793 2536.63 6068.06 12748.2 23761.8 39884 61265.3 87455.9 117606 150713 185826 222162 259143 296381 333641 370795 407782 444577 481171 517560 553733 589674 625359 660757 695832 730544 764852 798713 832087 864933 897215 928897 959950 990344 1.02006e+006 1.04907e+006 1.07736e+006 1.10492e+006 1.13174e+006 1.15781e+006 1.18312e+006 1.20768e+006 1.23149e+006 1.25454e+006 1.27686e+006 1.29843e+006 1.31928e+006 1.3394e+006 1.35883e+006 1.37756e+006 1.39561e+006 1.41299e+006 1.42973e+006 1.44583e+006 1.46132e+006 1.4762e+006 1.4905e+006 1.50424e+006 1.51743e+006 1.53008e+006 1.54222e+006 1.55386e+006 1.56502e+006 1.57572e+006 1.58596e+006 1.59578e+006 1.60541e+006 1.61464e+006 1.62347e+006 1.63192e+006 1.64e+006 1.64774e+006 1.65514e+006 1.66221e+006 1.66897e+006 1.67543e+006 1.68161e+006 1.68751e+006 1.69315e+006 1.69853e+006 1.70368e+006 1.70859e+006 1.71328e+006 1.71776e+006 1.72203e+006 1.72611e+006 1.73001e+006 1.73372e+006 1.73727e+006 1.74065e+006 1.74388e+006 1.74696e+006 1.7499e+006 1.7527e+006 1.75537e+006 1.75792e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
Age specific selectivity and weight adjusted for discard and discard mortality
 #wt and selex for gender,fleet: 1 1
 0.0432416 0.154883 0.214573 0.283047 0.358848 0.440515 0.526818 0.616856 0.710024 0.805932 0.904313 1.00495 1.10763 1.21212 1.31815 1.42543 1.53365 1.64246 1.75155 1.86056 1.96919 2.07713 2.1841 2.28984 2.39412 2.49674 2.5975 2.69627 2.7929 2.88729 2.97936 3.06902 3.15622 3.24094 3.32314 3.40282 3.47998 3.55462 3.62677 3.69645 3.7637 3.82855 3.89105 3.95124 4.00918 4.06491 4.1185 4.17 4.21947 4.26697 4.31256 4.35629 4.39823 4.43844 4.47697 4.51389 4.54925 4.5831 4.61551 4.64653 4.6762 4.70459 4.73173 4.75769 4.7825 4.80622 4.82889 4.85054 4.87123 4.89099 4.90999 4.92825 4.94568 4.96233 4.97821 4.99338 5.00786 5.02167 5.03485 5.04743 5.05942 5.07087 5.08179 5.0922 5.10214 5.11161 5.12064 5.12926 5.13747 5.1453 5.15277 5.15989 5.16667 5.17314 5.17931 5.18519 5.19079 5.19613 5.20122 5.20607 5.21069
 0 0 0.049638 0.0768352 0.11409 0.162086 0.220137 0.286167 0.357113 0.429572 0.500408 0.567155 0.628175 0.682611 0.730243 0.771299 0.806289 0.835861 0.86071 0.881515 0.898898 0.913414 0.925541 0.935686 0.944192 0.95134 0.957367 0.962466 0.966793 0.97048 0.973634 0.976341 0.978675 0.980693 0.982446 0.983974 0.985311 0.986484 0.987518 0.988431 0.989241 0.989961 0.990604 0.991179 0.991695 0.992159 0.992578 0.992956 0.993299 0.99361 0.993894 0.994153 0.994389 0.994606 0.994804 0.994987 0.995155 0.99531 0.995453 0.995585 0.995707 0.995821 0.995926 0.996024 0.996115 0.9962 0.99628 0.996354 0.996423 0.996487 0.996548 0.996602 0.996651 0.996697 0.996741 0.996782 0.99682 0.996856 0.99689 0.996922 0.996952 0.996981 0.997008 0.997033 0.997057 0.99708 0.997101 0.997122 0.997141 0.997159 0.997176 0.997192 0.997208 0.997222 0.997236 0.997249 0.997262 0.997273 0.997284 0.997295 0.997305 0.997315
 #wt and selex for gender,fleet: 1 2
 0.0442767 0.16069 0.223657 0.296324 0.376948 0.463551 0.554333 0.647948 0.743554 0.840718 0.939268 1.03916 1.14038 1.24289 1.34663 1.45144 1.55714 1.66348 1.77021 1.87703 1.98364 2.08976 2.1951 2.29939 2.4024 2.5039 2.6037 2.70162 2.79753 2.89129 2.9828 3.07199 3.15879 3.24315 3.32505 3.40447 3.4814 3.55584 3.62782 3.69735 3.76446 3.8292 3.8916 3.9517 4.00956 4.06523 4.11876 4.17021 4.21963 4.26709 4.31264 4.35634 4.39825 4.43843 4.47694 4.51384 4.54918 4.58302 4.61541 4.64641

4.67607 4.70445 4.73158 4.75753 4.78234 4.80605 4.8287 4.85035 4.87104 4.89079 4.90978 4.92804 4.94547 4.96211 4.978
4.99316 5.00763 5.02144 5.03462 5.04719 5.05919 5.07063 5.08155 5.09196 5.10189 5.11137 5.1204 5.12901 5.13722 5.14505
5.15252 5.15963 5.16642 5.17289 5.17905 5.18493 5.19053 5.19587 5.20096 5.20581 5.21043
 0 0.0194188 0.0330265 0.0539454 0.0842592 0.125418 0.177638 0.23962 0.308742 0.381633 0.454845 0.525399 0.59109 0.650551
0.703163 0.748885 0.788067 0.821289 0.84924 0.87263 0.892134 0.90837 0.921876 0.933119 0.94249 0.950318 0.956873 0.962379
0.96702 0.970945 0.974278 0.977118 0.979548 0.981636 0.983435 0.984993 0.986347 0.987527 0.98856 0.989467 0.990267
0.990974 0.991602 0.99216 0.992659 0.993105 0.993505 0.993865 0.99419 0.994484 0.994751 0.994993 0.995214 0.995415
0.995599 0.995768 0.995922 0.996065 0.996196 0.996316 0.996428 0.996531 0.996627 0.996715 0.996797 0.996874 0.996945
0.997011 0.997073 0.997131 0.997183 0.997229 0.997272 0.997313 0.997351 0.997386 0.99742 0.997452 0.997482 0.99751
0.997536 0.997561 0.997584 0.997606 0.997627 0.997647 0.997666 0.997683 0.9977 0.997716 0.997731 0.997745 0.997758
0.997771 0.997783 0.997794 0.997805 0.997815 0.997825 0.997834 0.997843
 #wt and selex for gender,fleet: 1 3
 0.0481289 0.178676 0.247414 0.32306 0.401917 0.481774 0.562105 0.643406 0.726523 0.812263 0.901218 0.993703 1.08977
1.18923 1.29174 1.39682 1.50393 1.61252 1.72203 1.83194 1.94177 2.05111 2.15957 2.26682 2.3726 2.47666 2.5788 2.67885
2.77668 2.87217 2.96525 3.05584 3.1439 3.2294 3.31231 3.39264 3.47038 3.54556 3.6182 3.68833 3.75599 3.82121 3.88405
3.94456 4.00279 4.05879 4.11262 4.16435 4.21402 4.26171 4.30748 4.35137 4.39347 4.43382 4.47248 4.50952 4.54499 4.57895
4.61146 4.64256 4.67232 4.70079 4.72801 4.75404 4.77892 4.80269 4.82542 4.84713 4.86787 4.88768 4.90671 4.925 4.94246
4.95914 4.97505 4.99024 5.00474 5.01858 5.03178 5.04438 5.05639 5.06786 5.07879 5.08922 5.09917 5.10866 5.1177 5.12633
5.13456 5.1424 5.14988 5.157 5.1638 5.17028 5.17645 5.18234 5.18795 5.1933 5.1984 5.20326 5.20789
 0 0.0148964 0.0331114 0.0674245 0.1238 0.203934 0.303239 0.412381 0.52093 0.620547 0.706362 0.776763 0.832419 0.875227
0.907509 0.931524 0.949235 0.962236 0.971765 0.978754 0.983896 0.987694 0.990516 0.992626 0.994215 0.99542 0.996341
0.99705 0.997601 0.998032 0.998372 0.998642 0.998859 0.999033 0.999175 0.999291 0.999387 0.999466 0.999532 0.999587
0.999634 0.999674 0.999708 0.999737 0.999762 0.999783 0.999802 0.999819 0.999833 0.999846 0.999857 0.999867 0.999875
0.999883 0.99989 0.999897 0.999902 0.999907 0.999912 0.999916 0.99992 0.999923 0.999927 0.999929 0.999932 0.999934
0.999937 0.999939 0.999941 0.999942 0.999944 0.999945 0.999947 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952
0.999953 0.999954 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958 0.999959 0.999959 0.999959
0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999962 0.999962
 #wt and selex for gender,fleet: 1 4
 0.0441368 0.160428 0.223824 0.29765 0.380509 0.470576 0.56589 0.664688 0.765614 0.867773 0.970655 1.07402 1.17778 1.28193
1.38644 1.4913 1.59644 1.70174 1.80705 1.9122 2.01698 2.12117 2.22457 2.32694 2.42809 2.52781 2.62592 2.72227 2.81671
2.90911 2.99938 3.08742 3.17318 3.25658 3.33761 3.41623 3.49243 3.56621 3.63759 3.70657 3.77318 3.83746 3.89944 3.95916
4.01667 4.07202 4.12525 4.17643 4.2256 4.27283 4.31817 4.36167 4.4034 4.44342 4.48177 4.51853 4.55373 4.58745 4.61972
4.65062 4.68018 4.70846 4.73551 4.76137 4.7861 4.80974 4.83233 4.85392 4.87454 4.89424 4.91319 4.93141 4.9488 4.96541
4.98127 4.9964 5.01085 5.02463 5.03778 5.05034 5.06231 5.07373 5.08463 5.09502 5.10494 5.11439 5.12341 5.132 5.1402 5.14802
5.15547 5.16258 5.16935 5.17581 5.18196 5.18783 5.19342 5.19875 5.20383 5.20868 5.21329
 0 0.0110167 0.0187059 0.0307103 0.0486106 0.0739681 0.107951 0.150956 0.202384 0.26068 0.323611 0.38866 0.453411
0.515827 0.574386 0.62811 0.676502 0.719451 0.757125 0.789872 0.81814 0.842419 0.8632 0.88095 0.896095 0.909015 0.920045
0.929472 0.937543 0.944468 0.950424 0.95556 0.960002 0.963854 0.967206 0.97013 0.97269 0.974938 0.976917 0.978666
0.980215 0.981592 0.982819 0.983916 0.984898 0.98578 0.986575 0.987292 0.987941 0.98853 0.989065 0.989552 0.989997
0.990404 0.990776 0.991118 0.991432 0.991721 0.991988 0.992234 0.992462 0.992673 0.992868 0.99305 0.993219 0.993376
0.993522 0.993658 0.993786 0.993905 0.994011 0.994107 0.994197 0.994281 0.99436 0.994434 0.994504 0.994569 0.994631
0.994689 0.994744 0.994796 0.994845 0.994891 0.994934 0.994975 0.995014 0.995051 0.995086 0.995118 0.995149 0.995179
0.995207 0.995233 0.995258 0.995282 0.995304 0.995325 0.995346 0.995365 0.995383
 #wt and selex for gender,fleet: 1 5
 0.0442583 0.161339 0.225582 0.300974 0.386531 0.480789 0.581916 0.687927 0.796944 0.907419 1.01823 1.12865 1.23831
1.34704 1.45482 1.56167 1.66766 1.77283 1.87718 1.9807 2.08334 2.18501 2.28563 2.38508 2.48322 2.57994 2.6751 2.76858
2.86027 2.95006 3.03786 3.12359 3.20717 3.28856 3.36772 3.44461 3.51921 3.59151 3.66153 3.72925 3.79471 3.85792 3.91892
3.97774 4.03441 4.08899 4.14151 4.19203 4.2406 4.28727 4.33208 4.37511 4.41639 4.45599 4.49396 4.53036 4.56523 4.59864
4.63062 4.66125 4.69056 4.7186 4.74543 4.77109 4.79563 4.81909 4.84151 4.86294 4.88341 4.90297 4.9218 4.93993 4.95724
4.97376 4.98954 5.0046 5.01897 5.03269 5.04578 5.05827 5.07019 5.08156 5.09241 5.10276 5.11262 5.12203 5.13101 5.13957
5.14773 5.15551 5.16293 5.17001 5.17675 5.18318 5.18931 5.19515 5.20072 5.20603 5.21109 5.21591 5.2205
 0 0.00414071 0.00714514 0.0119744 0.0194675 0.0306543 0.0466662 0.0685674 0.0971359 0.13266 0.174823 0.222716 0.274967
0.329946 0.385974 0.441507 0.495247 0.546207 0.593711 0.637366 0.677016 0.712685 0.744528 0.772786 0.797747 0.819721
0.839019 0.855942 0.870771 0.883763 0.89515 0.905139 0.91391 0.921625 0.928421 0.934419 0.939723 0.944424 0.948598
0.952314 0.955629 0.958593 0.96125 0.963635 0.965783 0.96772 0.969471 0.971058 0.972498 0.973808 0.975001 0.976091
0.977088 0.978001 0.978839 0.979609 0.980319 0.980973 0.981576 0.982135 0.982652 0.983131 0.983575 0.983989 0.984373
0.984731 0.985065 0.985376 0.985667 0.985939 0.986184 0.986403 0.986608 0.986802 0.986983 0.987153 0.987314 0.987465
0.987607 0.98774 0.987867 0.987985 0.988098 0.988204 0.988304 0.988398 0.988488 0.988572 0.988652 0.988727 0.988799
0.988867 0.988931 0.988991 0.989049 0.989103 0.989155 0.989204 0.98925 0.989294 0.989336
 #wt and selex for gender,fleet: 1 6
 0.0453961 0.167046 0.234116 0.313112 0.403113 0.502636 0.609667 0.721838 0.836765 0.952407 1.06728 1.1805 1.29167 1.40073
1.50782 1.61316 1.71699 1.81953 1.92095 2.02135 2.1208 2.21929 2.31681 2.41327 2.5086 2.60268 2.6954 2.78664 2.87628
2.96422 3.05034 3.13457 3.21681 3.297 3.37508 3.45102 3.52478 3.59634 3.66569 3.73282 3.79776 3.86051 3.9211 3.97956
4.03592 4.09021 4.14248 4.19278 4.24115 4.28764 4.3323 4.37518 4.41634 4.45583 4.4937 4.53 4.56479 4.59813 4.63005 4.66061
4.68987 4.71787 4.74465 4.77028 4.79478 4.8182 4.84059 4.862 4.88245 4.90198 4.9208 4.9389 4.9562 4.97271 4.98847 5.00352
5.01788 5.03159 5.04467 5.05715 5.06906 5.08042 5.09126 5.1016 5.11146 5.12087 5.12984 5.13839 5.14655 5.15433 5.16174
5.16881 5.17555 5.18198 5.1881 5.19394 5.19951 5.20481 5.20987 5.21469 5.21928
 0 0.00135421 0.00255624 0.00467462 0.00827589 0.0141649 0.0233922 0.0371844 0.0567779 0.0831749 0.116896 0.157819
0.205152 0.257555 0.313344 0.370729 0.42802 0.483768 0.536844 0.586453 0.632113 0.673607 0.710924 0.744202 0.773681
0.79966 0.822464 0.842426 0.859866 0.875088 0.888368 0.899956 0.910074 0.918917 0.926657 0.933442 0.939401 0.944645

0.94927 0.953357 0.956978 0.960193 0.963054 0.965607 0.96789 0.969935 0.971773 0.973428 0.974921 0.976271 0.977494
0.978605 0.979616 0.980537 0.981378 0.982148 0.982853 0.983501 0.984097 0.984645 0.985151 0.985618 0.98605 0.98645
0.986821 0.987165 0.987485 0.987783 0.988061 0.988319 0.98855 0.988755 0.988947 0.989127 0.989296 0.989454 0.989603
0.989742 0.989874 0.989997 0.990113 0.990223 0.990326 0.990423 0.990515 0.990602 0.990684 0.990761 0.990834 0.990903
0.990968 0.99103 0.991088 0.991143 0.991195 0.991245 0.991292 0.991336 0.991379 0.991418 0.991456
 #wt and selex for gender,fleet: 2 1
 0.0517415 0.176504 0.243766 0.32021 0.404062 0.49366 0.587715 0.685362 0.786084 0.889583 0.995666 1.10416 1.21488 1.32757
1.44194 1.55767 1.67438 1.79169 1.90922 2.02659 2.14344 2.25943 2.37427 2.48766 2.59938 2.70919 2.81692 2.92241 3.02553
3.12617 3.22425 3.3197 3.41248 3.50255 3.5899 3.67453 3.75644 3.83565 3.91218 3.98608 4.05737 4.12611 4.19234 4.25611
4.31749 4.37654 4.4333 4.48785 4.54025 4.59056 4.63884 4.68517 4.7296 4.77219 4.81302 4.85214 4.88962 4.9255 4.95986
4.99274 5.02421 5.05432 5.08312 5.11067 5.13701 5.16219 5.18625 5.20926 5.23124 5.25224 5.27242 5.29182 5.31035 5.32805
5.34494 5.36108 5.37648 5.39118 5.40521 5.4186 5.43139 5.44358 5.45522 5.46633 5.47692 5.48703 5.49667 5.50587 5.51464
5.52301 5.53099 5.5386 5.54586 5.55278 5.55938 5.56567 5.57167 5.57739 5.58285 5.58805 5.59301
 0 0.0503239 0.079383 0.119697 0.172005 0.235365 0.307169 0.3837 0.460961 0.535411 0.604415 0.666367 0.720584 0.767088
0.806364 0.839155 0.866308 0.888668 0.90702 0.92206 0.934385 0.944498 0.952812 0.959667 0.965337 0.970046 0.973971
0.977258 0.980022 0.982357 0.984339 0.986027 0.987473 0.988715 0.989788 0.990718 0.991528 0.992235 0.992856 0.993402
0.993884 0.994312 0.994692 0.995031 0.995334 0.995607 0.995851 0.996072 0.996272 0.996453 0.996617 0.996767 0.996903
0.997028 0.997142 0.997247 0.997344 0.997432 0.997514 0.99759 0.99766 0.997724 0.997784 0.99784 0.997892 0.99794 0.997985
0.998027 0.998066 0.998103 0.998136 0.998166 0.998193 0.998219 0.998244 0.998267 0.998288 0.998309 0.998328 0.998346
0.998363 0.998379 0.998394 0.998408 0.998422 0.998435 0.998447 0.998458 0.998469 0.998479 0.998489 0.998498 0.998507
0.998515 0.998523 0.99853 0.998537 0.998544 0.99855 0.998556 0.998562
 #wt and selex for gender,fleet: 2 2
 0.0529548 0.182993 0.253877 0.334873 0.423808 0.518389 0.616695 0.717427 0.819891 0.92383 1.02923 1.13615 1.24465 1.35474
1.46631 1.57921 1.69318 1.80793 1.92311 2.03838 2.15339 2.26778 2.38124 2.49347 2.60419 2.71317 2.8202 2.92511 3.02774
3.12798 3.22572 3.32089 3.41343 3.50331 3.5905 3.67499 3.75679 3.8359 3.91236 3.98619 4.05743 4.12612 4.19231 4.25605
4.31741 4.37642 4.43317 4.4877 4.54009 4.59038 4.63866 4.68498 4.7294 4.77199 4.81282 4.85193 4.8894 4.92529 4.95964
4.99252 5.02399 5.0541 5.0829 5.11045 5.13678 5.16196 5.18603 5.20903 5.23101 5.25201 5.2722 5.2916 5.31013 5.32782 5.34472
5.36085 5.37625 5.39095 5.40499 5.41838 5.43116 5.44336 5.455 5.4661 5.4767 5.4868 5.49645 5.50564 5.51442 5.52278 5.53076
5.53837 5.54563 5.55255 5.55915 5.56545 5.57145 5.57717 5.58262 5.58782 5.59278
 0 0.0197584 0.0344038 0.0573349 0.0909872 0.136966 0.195301 0.264149 0.34013 0.419119 0.497096 0.570782 0.637939
0.697363 0.748717 0.792279 0.828706 0.858844 0.883589 0.903804 0.92027 0.933665 0.944565 0.953445 0.960697 0.966636
0.971518 0.975546 0.978884 0.981663 0.983986 0.985937 0.987584 0.98898 0.990169 0.991187 0.992062 0.992816 0.993471
0.99404 0.994537 0.994974 0.995357 0.995697 0.995997 0.996264 0.996503 0.996716 0.996907 0.997079 0.997234 0.997375
0.997502 0.997617 0.997722 0.997818 0.997906 0.997986 0.99806 0.998128 0.99819 0.998248 0.998301 0.99835 0.998396
0.998438 0.998477 0.998514 0.998548 0.998579 0.998608 0.998633 0.998656 0.998678 0.998699 0.998718 0.998736 0.998753
0.99877 0.998785 0.998799 0.998812 0.998825 0.998837 0.998848 0.998859 0.998869 0.998878 0.998887 0.998895 0.998903
0.998911 0.998918 0.998925 0.998931 0.998937 0.998943 0.998949 0.998954 0.998959 0.998963
 #wt and selex for gender,fleet: 2 3
 0.057462 0.20294 0.279764 0.363096 0.448822 0.534881 0.621161 0.708565 0.798234 0.891143 0.987944 1.08892 1.19402 1.30292
1.41512 1.52997 1.64681 1.76498 1.88383 2.0028 2.12138 2.23914 2.3557 2.47072 2.58396 2.69517 2.80416 2.9108 3.01495
3.11651 3.21542 3.3116 3.40504 3.49569 3.58357 3.66866 3.75099 3.83058 3.90745 3.98165 4.05321 4.1222 4.18865 4.25263
4.31419 4.3734 4.43032 4.485 4.53753 4.58795 4.63635 4.68277 4.72729 4.76997 4.81087 4.85006 4.8876 4.92355 4.95796 4.9909
5.02242 5.05257 5.08142 5.109 5.13537 5.16059 5.18469 5.20772 5.22973 5.25075 5.27096 5.29038 5.30892 5.32663 5.34354
5.35968 5.3751 5.38981 5.40385 5.41726 5.43005 5.44226 5.4539 5.46502 5.47562 5.48573 5.49538 5.50458 5.51336 5.52174
5.52972 5.53734 5.5446 5.55153 5.55813 5.56443 5.57043 5.57616 5.58162 5.58682 5.59178
 0 0.0153383 0.0352453 0.0735162 0.136826 0.226319 0.335533 0.452886 0.566403 0.667334 0.751332 0.817762 0.868309
0.905687 0.932771 0.952127 0.965844 0.975525 0.982351 0.987176 0.990599 0.993042 0.994799 0.996071 0.997001 0.997687
0.998197 0.99858 0.998871 0.999093 0.999265 0.999398 0.999503 0.999587 0.999653 0.999706 0.99975 0.999785 0.999814
0.999838 0.999859 0.999875 0.99989 0.999902 0.999912 0.999921 0.999928 0.999935 0.99994 0.999945 0.99995 0.999954
0.999957 0.99996 0.999963 0.999965 0.999967 0.999969 0.999971 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978
0.999979 0.99998 0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985
0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987
0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988
 #wt and selex for gender,fleet: 2 4
 0.0527909 0.182715 0.254126 0.33651 0.428054 0.526553 0.629798 0.735946 0.843714 0.95236 1.06156 1.17123 1.28141 1.39219
1.50359 1.6156 1.72814 1.84106 1.95418 2.06724 2.18 2.29219 2.40352 2.51374 2.62259 2.72986 2.83533 2.93882 3.04018 3.13928
3.236 3.33026 3.42199 3.51115 3.59769 3.68161 3.76289 3.84155 3.91759 3.99106 4.06196 4.13036 4.19629 4.25979 4.32093
4.37975 4.43632 4.49069 4.54292 4.59309 4.64124 4.68745 4.73177 4.77427 4.815 4.85404 4.89144 4.92725 4.96154 4.99437
5.02578 5.05584 5.0846 5.1121 5.13839 5.16354 5.18757 5.21054 5.23249 5.25346 5.27362 5.29301 5.31152 5.3292 5.34608 5.3622
5.37758 5.39227 5.40629 5.41968 5.43245 5.44464 5.45626 5.46736 5.47795 5.48805 5.49768 5.50687 5.51564 5.524 5.53197
5.53958 5.54683 5.55374 5.56034 5.56663 5.57262 5.57834 5.58379 5.58899 5.59394
 0 0.0112081 0.0194904 0.0326853 0.0526774 0.0813067 0.119879 0.168685 0.226757 0.291977 0.361489 0.432231 0.501405
0.566791 0.626865 0.680783 0.728262 0.769437 0.804722 0.834683 0.859953 0.881166 0.89892 0.913755 0.926147 0.936503
0.945171 0.95244 0.958551 0.963705 0.968064 0.971765 0.974918 0.977613 0.979928 0.981921 0.983646 0.985142 0.986446
0.987587 0.988587 0.989468 0.990247 0.990937 0.99155 0.992097 0.992586 0.993025 0.993419 0.993775 0.994096 0.994387
0.994652 0.994892 0.995112 0.995312 0.995495 0.995664 0.995818 0.995961 0.996092 0.996213 0.996325 0.996429 0.996525
0.996614 0.996697 0.996774 0.996846 0.996913 0.996973 0.997026 0.997076 0.997123 0.997167 0.997208 0.997247 0.997283
0.997317 0.997349 0.99738 0.997408 0.997435 0.997461 0.997485 0.997507 0.997529 0.997549 0.997568 0.997586 0.997603
0.997619 0.997635 0.997649 0.997663 0.997676 0.997688 0.9977 0.997711 0.997721 0.997731
 #wt and selex for gender,fleet: 2 5

0.0529334 0.183739 0.256122 0.340315 0.434963 0.538212 0.647881 0.761743 0.877834 0.994665 1.11127 1.22712 1.34203
1.45602 1.56916 1.68161 1.79344 1.90474 2.0155 2.1257 2.23523 2.34399 2.45182 2.55855 2.66402 2.76804 2.87045 2.97108
3.06979 3.16645 3.26094 3.35317 3.44306 3.53055 3.61559 3.69815 3.7782 3.85576 3.9308 4.00337 4.07346 4.14112 4.20638
4.26928 4.32987 4.3882 4.44432 4.49828 4.55014 4.59996 4.6478 4.69372 4.73778 4.78003 4.82055 4.85938 4.89659 4.93223
4.96636 4.99904 5.03031 5.06024 5.08888 5.11627 5.14246 5.16751 5.19145 5.21433 5.23621 5.25711 5.27721 5.29654 5.31501
5.33265 5.34949 5.36557 5.38093 5.39558 5.40957 5.42293 5.43567 5.44783 5.45944 5.47051 5.48107 5.49115 5.50077 5.50994
5.51869 5.52703 5.53499 5.54258 5.54982 5.55672 5.5633 5.56958 5.57556 5.58127 5.58671 5.5919 5.59684
 0 0.00421519 0.00745709 0.0127869 0.0212203 0.0340135 0.0525402 0.0780597 0.111424 0.152822 0.201654 0.256592 0.315784
0.377147 0.438638 0.498472 0.555246 0.607981 0.656096 0.699352 0.737771 0.771566 0.801065 0.826663 0.84878 0.867832
0.884213 0.898283 0.910366 0.920749 0.92968 0.937374 0.944014 0.949759 0.954739 0.959069 0.962844 0.966143 0.969036
0.971579 0.973821 0.975803 0.977561 0.979124 0.980518 0.981764 0.982881 0.983884 0.984788 0.985605 0.986344 0.987014
0.987623 0.988178 0.988685 0.989148 0.989572 0.989962 0.99032 0.990649 0.990953 0.991234 0.991494 0.991734 0.991957
0.992164 0.992356 0.992535 0.992702 0.992858 0.992997 0.993121 0.993237 0.993346 0.993448 0.993544 0.993634 0.993718
0.993798 0.993873 0.993943 0.99401 0.994073 0.994132 0.994187 0.99424 0.99429 0.994337 0.994381 0.994423 0.994463 0.9945
0.994536 0.994569 0.994601 0.994631 0.99466 0.994687 0.994713 0.994737 0.99476
 #wt and selex for gender,fleet: 2 6
 0.0542657 0.190101 0.265582 0.35368 0.453079 0.561858 0.677564 0.797489 0.919099 1.04041 1.16015 1.27771 1.39298 1.50614
1.61751 1.72743 1.83623 1.94415 2.05138 2.158 2.26403 2.36942 2.4741 2.57792 2.68072 2.78235 2.88262 2.98137 3.07843
3.17365 3.2669 3.35805 3.44702 3.53373 3.61809 3.70008 3.77966 3.8568 3.9315 4.00377 4.07362 4.14107 4.20616 4.26892
4.32938 4.38761 4.44364 4.49753 4.54933 4.5991 4.6469 4.69279 4.73682 4.77905 4.81955 4.85837 4.89557 4.9312 4.96532 4.998
5.02927 5.0592 5.08783 5.11522 5.14142 5.16646 5.19041 5.2133 5.23517 5.25608 5.27618 5.29552 5.31399 5.33162 5.34847
5.36455 5.37991 5.39456 5.40855 5.42191 5.43465 5.44682 5.45842 5.4695 5.48006 5.49014 5.49976 5.50893 5.51768 5.52602
5.53398 5.54157 5.54881 5.55572 5.5623 5.56858 5.57456 5.58027 5.58571 5.5909 5.59584
 0 0.00138366 0.00268882 0.00505141 0.00916502 0.01603 0.0269587 0.0434713 0.0670552 0.0988287 0.139223 0.187802
0.243288 0.30377 0.367015 0.430785 0.493091 0.552344 0.607418 0.657633 0.702688 0.742585 0.777539 0.807905 0.83411
0.856612 0.875867 0.892304 0.906318 0.91826 0.92844 0.937126 0.944548 0.950902 0.956353 0.961042 0.965085 0.968582
0.971615 0.974253 0.976556 0.978571 0.980341 0.9819 0.983277 0.984496 0.98558 0.986546 0.987409 0.988182 0.988877
0.989502 0.990067 0.990578 0.991041 0.991462 0.991845 0.992195 0.992515 0.992808 0.993076 0.993323 0.993551 0.993761
0.993954 0.994133 0.994299 0.994453 0.994596 0.994728 0.994846 0.99495 0.995047 0.995137 0.995222 0.995302 0.995376
0.995446 0.995512 0.995573 0.995631 0.995686 0.995737 0.995785 0.995831 0.995874 0.995914 0.995952 0.995988 0.996022
0.996055 0.996085 0.996114 0.996141 0.996167 0.996191 0.996214 0.996236 0.996257 0.996277 0.996295
M and current age-structure in year Yinit: 2009
 # gender = 1
 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
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0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
 47.7673 44.7179 41.8291 38.9521 36.2649 33.6738 31.2166 28.9499 27.379 25.6742 25.4653 24.5931 25.1068 25.0833 25.2368
24.8665 24.982 24.9908 24.5022 23.0915 21.9866 20.4171 18.6803 16.8792 15.2472 13.603 12.2359 10.9913 9.76854 8.5892
7.58271 6.68731 5.85839 5.14179 4.51584 3.97982 3.51685 3.12104 2.77601 2.47944 2.22426 2.00252 1.81133 1.64629 1.50253
1.37639 1.26625 1.1689 1.08231 1.00567 0.9373 0.876008 0.820068 0.768847 0.721873 0.678459 0.638294 0.601356 0.567255
0.535404 0.50573 0.47833 0.452589 0.429558 0.408128 0.387192 0.367072 0.34796 0.329953 0.312936 0.296845 0.281643 0.26727
0.253697 0.240864 0.228717 0.217231 0.206414 0.196175 0.186509 0.177362 0.168707 0.160519 0.152761 0.145404 0.138418
0.131788 0.125496 0.119522 0.113848 0.108456 0.103339 0.0984703 0.0938337 0.0894144 0.0852097 0.0812082 0.0773995
0.0737739 0.070322 1.44585
 # gender = 2
 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
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0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
 47.7673 44.7467 41.8828 39.0267 36.3565 33.7784 31.3304 29.0697 27.5044 25.8019 25.6008 24.7305 25.2508 25.2258 25.3702
24.9769 25.0572 25.0133 24.4542 22.9622 21.7671 20.1107 18.2969 16.4349 14.7565 13.088 11.7078 10.4651 9.2615 8.11519
7.14509 6.28933 5.50312 4.82734 4.23992 3.73899 3.30788 2.94053 2.61112 2.34723 2.112 1.90781 1.73188 1.58004 1.44769
1.3314 1.2297 1.13962 1.05925 0.987895 0.924039 0.866576 0.813883 0.765401 0.720724 0.679225 0.640648 0.605023 0.572003
0.541037 0.512087 0.485278 0.460011 0.437374 0.416255 0.395538 0.375557 0.356518 0.338531 0.321485 0.305325 0.290024
0.275529 0.261819 0.248839 0.236539 0.224896 0.213924 0.203527 0.193702 0.184397 0.175581 0.167232 0.15931 0.151789
0.144638 0.137842 0.131383 0.125244 0.119406 0.113851 0.108573 0.103546 0.0987533 0.09418 0.0898242 0.0856748 0.0817215
0.0779545 0.0743648 1.55232
Age-structure at Ydeclare= 2002

40.5015 38.3845 36.0833 35.8931 34.7755 35.6246 35.7182 36.0647 35.6588 35.943 36.0676 35.4654 33.5139 31.9906 29.7766
27.3031 24.7211 22.3738 19.9972 18.0179 16.2108 14.4287 12.7041 11.2294 9.91479 8.69492 7.6386 6.71448 5.92208 5.23681
4.6503 4.13841 3.69796 3.31862 2.98866 2.70393 2.45794 2.24351 2.05525 1.89078 1.74537 1.61598 1.50142 1.39922 1.30759
1.22396 1.1474 1.07719 1.01231 0.952293 0.897111 0.846176 0.79861 0.754302 0.713395 0.67497 0.640594 0.608611 0.577372
0.547355 0.518846 0.49199 0.466614 0.44262 0.419957 0.398531 0.378298 0.35917 0.341064 0.323942 0.307818 0.292554
0.278142 0.264505 0.2516 0.239391 0.227822 0.21685 0.206431 0.196543 0.187158 0.178248 0.169786 0.161742 0.15411 0.146848
0.139932 0.13334 0.127068 0.121099 0.115419 0.110011 0.104863 0.0999605 0.0952925 0.0908469 0.0866126 0.0825791
0.0787365 0.0750753 1.54676
  40.5015 38.4092 36.1294 35.961 34.8603 35.7264 35.827 36.168 35.7367 35.9747 36.0267 35.3259 33.2614 31.6099 29.2727
26.6901 24.022 21.6092 19.1992 17.2024 15.3993 13.6469 11.9726 10.5531 9.29853 8.14347 7.14918 6.28374 5.54488 4.90834
4.3654 3.89285 3.48727 3.13864 2.83575 2.57459 2.34902 2.1523 1.97936 1.82806 1.694 1.57436 1.46815 1.37308 1.28754 1.20911
1.13695 1.07048 1.00874 0.951369 0.898395 0.849306 0.80328 0.760257 0.720422 0.682884 0.649255 0.617886 0.58712 0.557452
0.529186 0.502485 0.477187 0.453205 0.430502 0.408996 0.388655 0.369398 0.351149 0.333874 0.317593 0.302164 0.287583
0.273771 0.260686 0.248292 0.236532 0.225366 0.214747 0.204657 0.195067 0.185951 0.177282 0.169033 0.161196 0.15373
0.146613 0.139822 0.133353 0.127192 0.121322 0.115728 0.110398 0.105318 0.100477 0.0958623 0.091463 0.0872689 0.0832698
0.0794563 1.66126
Year for Tmin Age-structure (set to Ydecl by SS)
2002
recruitment and biomass
Number of historical assessment years
95
Historical data
year recruitment spawner in B0 in R project in R/S project
1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
#years (with first value representing R0)
227.032 227.032 227.011 226.977 226.937 226.917 226.896 226.875 226.857 226.838 226.814 226.77 226.717 226.655 226.597
226.53 226.449 226.375 226.273 226.202 226.114 226 225.88 225.772 225.663 225.563 225.454 225.333 225.219 224.994 224.504
223.573 222.755 222.467 222.098 221.84 221.56 221.208 220.908 220.673 220.379 219.995 219.572 219.062 218.45 217.921
217.467 217.115 216.694 216.223 215.816 215.288 214.689 214.107 213.476 212.551 211.512 210.331 208.672 207.038 205.193
203.378 201.148 198.805 194.831 190.546 186.993 181.584 174.849 168.59 164.52 159.549 155.753 151.308 146.048 138.708
134.173 125.8 116.512 108.115 102.827 96.173 90.8777 84.3338 82.8355 79.3655 80.4882 81.0031 83.1743 85.4811 87.7372
89.8344 91.9719 93.7687 95.5347 #recruits; first value is R0 (virgin)
9.94349e+008 9.94349e+008 9.94088e+008 9.9366e+008 9.93161e+008 9.92915e+008 9.92646e+008 9.9239e+008 9.92167e+008
9.91929e+008 9.91624e+008 9.91078e+008 9.90421e+008 9.89647e+008 9.88918e+008 9.88086e+008 9.87083e+008 9.86168e+008
9.8491e+008 9.84034e+008 9.82944e+008 9.8154e+008 9.80063e+008 9.7873e+008 9.77401e+008 9.76173e+008 9.74843e+008
9.73376e+008 9.71986e+008 9.69249e+008 9.63347e+008 9.5224e+008 9.42609e+008 9.39257e+008 9.3498e+008 9.32e+008
9.28777e+008 9.24749e+008 9.21345e+008 9.18677e+008 9.15361e+008 9.11053e+008 9.06327e+008 9.00678e+008 8.93957e+008
8.88199e+008 8.83296e+008 8.79515e+008 8.75015e+008 8.70026e+008 8.65736e+008 8.60212e+008 8.54001e+008 8.48016e+008
8.41585e+008 8.32268e+008 8.21953e+008 8.10404e+008 7.94523e+008 7.7924e+008 7.62399e+008 7.46255e+008 7.26948e+008
7.07291e+008 6.75307e+008 6.42613e+008 6.16822e+008 5.79649e+008 5.36587e+008 4.99446e+008 4.7665e+008 4.50129e+008
4.30796e+008 4.09104e+008 3.84657e+008 3.52586e+008 3.33862e+008 3.01298e+008 2.6791e+008 2.39944e+008 2.2331e+008
2.03367e+008 1.8823e+008 1.70361e+008 1.66392e+008 1.57372e+008 1.60265e+008 1.616e+008 1.67286e+008 1.73429e+008
1.79543e+008 1.85321e+008 1.91307e+008 1.96416e+008 2.01509e+008 #spbio; first value is S0 (virgin)
1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 # in Bzero
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 # in R project
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 # in R/S project
Number of years with pre-specified catches
2
catches for years with pre-specified catches go next
2009 17
2010 17
Number of future recruitments to override
7
Process for overiding (-1 for average otherwise index in data list)
2003 1 2003
2004 1 2004
2005 1 2005
2006 1 2006
2007 1 2007
2008 1 2008
2009 1 2009
Which probability to product detailed results for (1=0.5; 2=0.6; etc.)
1
Steepness sigma-R Auto-correlation

0.417 0.5 0
Target SPR rate (FMSY Proxy); manually change to SPR_MSY if not using SPR_target
0.5
Discount rate (for cumulative catch)
0.1
Truncate the series when 0.4B0 is reached (1=Yes)
0
Set F to FMSY once 0.4B0 is reached (1=Yes)
0
Maximum possible F for projection (-1 to set to FMSY)
-1
Defintion of recovery (1=now only;2=now or before)
2
Projection type
11
Definition of the 40-10 rule
10 40
Calculate coefficients of variation (1=Yes)
0
Number of replicates to use
10
Random number seed
-99004
File with multiple parameter vectors
yelloweyeblend.dat
User-specific projection (1=Yes); Output replaced (1->9)
0 5
Catches and Fs (Year; 1/2/3 (F or C or SPR); value); Final row is -1
2011 1 3
-1 -1 -1
Fixed catch project (1=Yes); Output replaced (1->9); Approach (-1=Read in else 1-9)
0 2 -1
Split of Fs
2009 0.006 0.003 0.004 0.002 0.013 0.005
-1 1 1 1 1 1 1
Yrs to define T_target for projection type 4 (a.k.a. 5 pre-specified inputs)
0.5 0.719 0.75 0.8 0.9
Year for probability of recovery
2020 2030 2040 2050 2060 2070 2080 2090
Time varying weight-at-age (1=Yes;0=No)
0
File with time series of weight-at-age data
none
Use bisection (0) or linear interpolation (1)
1
Target Depletion
0.4
CV of implementation error
0

Appendix B. Parameter vector input file for rebuilding analyses.

low catch high h vector 1
 0 0 19.2144 74.8403 263.119 828.67 2307.06 5624.82 12016 22710.4 38545 59722.7 85819.4 115983 149191 184467 221002
258200 295660 333141 370511 407708 444706 481497 518076 554433 590550 626402 661959 697183 732033 766468 800444
833920 866856 899214 930960 962062 992493 1.02223e+006 1.05125e+006 1.07954e+006 1.10709e+006 1.13388e+006
1.15991e+006 1.18518e+006 1.20968e+006 1.23343e+006 1.25641e+006 1.27864e+006 1.30012e+006 1.32087e+006 1.3409e+006
1.36021e+006 1.37883e+006 1.39676e+006 1.41402e+006 1.43064e+006 1.44661e+006 1.46197e+006 1.47672e+006 1.49089e+006
1.50449e+006 1.51754e+006 1.53006e+006 1.54206e+006 1.55357e+006 1.56459e+006 1.57515e+006 1.58526e+006 1.59494e+006
1.60444e+006 1.61353e+006 1.62223e+006 1.63055e+006 1.63851e+006 1.64612e+006 1.65339e+006 1.66034e+006 1.66698e+006
1.67333e+006 1.67939e+006 1.68518e+006 1.69071e+006 1.69598e+006 1.70102e+006 1.70583e+006 1.71042e+006 1.7148e+006
1.71898e+006 1.72297e+006 1.72678e+006 1.73041e+006 1.73387e+006 1.73717e+006 1.74032e+006 1.74332e+006 1.74619e+006
1.74891e+006 1.75152e+006 1.754e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0418351 0.148506 0.207741 0.276116 0.352123 0.434199 0.521007 0.611563 0.705217 0.801563 0.900337 1.00134 1.10437
1.20921 1.31561 1.42329 1.53192 1.64117 1.75071 1.8602 1.96931 2.07773 2.18517 2.29138 2.3961 2.49914 2.6003 2.69943 2.7964
2.89109 2.98342 3.07331 3.16071 3.24559 3.32792 3.40769 3.48491 3.55958 3.63173 3.70138 3.76858 3.83335 3.89574 3.95581
4.01361 4.06918 4.12259 4.1739 4.22316 4.27044 4.31579 4.35929 4.40098 4.44093 4.47921 4.51586 4.55094 4.58453 4.61666
4.6474 4.67679 4.7049 4.73177 4.75745 4.78199 4.80543 4.82783 4.84922 4.86964 4.88914 4.90788 4.92588 4.94306 4.95945
4.9751 4.99003 5.00427 5.01785 5.03081 5.04316 5.05495 5.06618 5.0769 5.08711 5.09685 5.10613 5.11498 5.12342 5.13146
5.13912 5.14642 5.15338 5.16001 5.16633 5.17235 5.17809 5.18356 5.18877 5.19373 5.19845 5.20296 #bodywt for gender,fleet: 1 /
1
 0 0.0427391 0.0674651 0.102116 0.147744 0.204051 0.269228 0.340288 0.413713 0.486135 0.55482 0.617886 0.674298 0.723721
0.766328 0.802611 0.833234 0.858916 0.880368 0.898246 0.913133 0.925534 0.935878 0.944525 0.95177 0.957861 0.962999
0.967348 0.971044 0.974196 0.976896 0.979217 0.98122 0.982956 0.984466 0.985784 0.986939 0.987955 0.988851 0.989644
0.990349 0.990976 0.991537 0.992039 0.992491 0.992897 0.993264 0.993597 0.993898 0.994172 0.994422 0.99465 0.994859
0.995051 0.995226 0.995388 0.995537 0.995674 0.995801 0.995919 0.996028 0.996129 0.996223 0.99631 0.996391 0.996467
0.996537 0.996603 0.996665 0.996723 0.996775 0.996822 0.996865 0.996907 0.996945 0.996982 0.997016 0.997049 0.997079
0.997108 0.997135 0.99716 0.997184 0.997207 0.997229 0.997249 0.997268 0.997286 0.997303 0.997319 0.997335 0.997349
0.997363 0.997376 0.997389 0.9974 0.997411 0.997422 0.997432 0.997441 0.99745 #selex for gender,fleet: 1 / 1
 0.0428089 0.153832 0.216171 0.288586 0.369327 0.45633 0.547673 0.641893 0.738076 0.835756 0.934758 1.03505 1.13665
1.23953 1.34364 1.44884 1.55496 1.66175 1.76894 1.87623 1.98334 2.08995 2.19578 2.30056 2.40403 2.50598 2.60619 2.7045
2.80076 2.89484 2.98664 3.07608 3.16309 3.24763 3.32967 3.40919 3.48619 3.56068 3.63267 3.70218 3.76925 3.83391 3.89621
3.9562 4.01392 4.06943 4.12279 4.17405 4.22327 4.27051 4.31583 4.35929 4.40096 4.44089 4.47914 4.51577 4.55085 4.58441
4.61653 4.64726 4.67664 4.70474 4.7316 4.75727 4.7818 4.80524 4.82763 4.84901 4.86943 4.88893 4.90766 4.92566 4.94284
4.95923 4.97487 4.98979 5.00403 5.01761 5.03057 5.04292 5.0547 5.06594 5.07665 5.08686 5.0966 5.10588 5.11473 5.12317
5.1312 5.13887 5.14617 5.15313 5.15976 5.16608 5.1721 5.17783 5.1833 5.18851 5.19347 5.19819 5.2027 #bodywt for gender,fleet:
1 / 2
 0 0.0168001 0.0290945 0.0483772 0.0768787 0.11631 0.167191 0.228462 0.297602 0.371179 0.445577 0.517605 0.584858
0.645821 0.699776 0.746634 0.786736 0.820675 0.849165 0.872946 0.892723 0.909138 0.922756 0.934058 0.943451 0.951275
0.957809 0.963283 0.967885 0.971768 0.975056 0.977852 0.980239 0.982285 0.984046 0.985567 0.986887 0.988035 0.989039
0.98992 0.990694 0.991379 0.991985 0.992524 0.993004 0.993433 0.993819 0.994165 0.994477 0.994759 0.995014 0.995246
0.995457 0.99565 0.995826 0.995987 0.996134 0.99627 0.996395 0.99651 0.996616 0.996714 0.996805 0.996889 0.996967 0.99704
0.997107 0.99717 0.997229 0.997284 0.997332 0.997376 0.997417 0.997455 0.997491 0.997525 0.997557 0.997587 0.997615
0.997641 0.997666 0.99769 0.997712 0.997733 0.997752 0.997771 0.997789 0.997805 0.997821 0.997836 0.99785 0.997863
0.997875 0.997887 0.997899 0.997909 0.997919 0.997929 0.997938 0.997947 0.997955 #selex for gender,fleet: 1 / 2
 0.0464132 0.170631 0.238962 0.315029 0.394896 0.475938 0.557331 0.639451 0.72314 0.809254 0.898447 0.991097 1.08731
1.18693 1.28965 1.39499 1.50243 1.61139 1.72132 1.83168 1.94199 2.05181 2.16075 2.26849 2.37473 2.47922 2.58177 2.6822
2.78037 2.87617 2.96952 3.06035 3.1486 3.23426 3.3173 3.39772 3.47552 3.55073 3.62337 3.69346 3.76106 3.8262 3.88894
3.94932 4.0074 4.06323 4.11688 4.16841 4.21788 4.26534 4.31087 4.35453 4.39637 4.43646 4.47486 4.51163 4.54683 4.58051
4.61274 4.64357 4.67305 4.70123 4.72818 4.75392 4.77853 4.80203 4.82448 4.84592 4.86639 4.88594 4.90471 4.92275 4.93996
4.95638 4.97205 4.987 5.00126 5.01487 5.02784 5.04022 5.05202 5.06328 5.07401 5.08424 5.09399 5.10329 5.11215 5.1206
5.12865 5.13632 5.14364 5.15061 5.15725 5.16358 5.16961 5.17535 5.18082 5.18604 5.19101 5.19574 5.20025 #bodywt for
gender,fleet: 1 / 3
 0 0.0122464 0.0277844 0.0579382 0.10913 0.184276 0.280134 0.388099 0.497637 0.599762 0.688826 0.762585 0.821312 0.866721
0.901095 0.926735 0.945679 0.959599 0.969807 0.977295 0.982802 0.98687 0.98989 0.992146 0.993843 0.995129 0.996111
0.996867 0.997454 0.997913 0.998274 0.998561 0.998791 0.998976 0.999127 0.99925 0.999351 0.999435 0.999505 0.999563
0.999613 0.999655 0.999691 0.999721 0.999748 0.99977 0.99979 0.999808 0.999823 0.999836 0.999848 0.999858 0.999868
0.999876 0.999883 0.99989 0.999896 0.999901 0.999906 0.99991 0.999915 0.999919 0.999922 0.999925 0.999928 0.99993
0.999932 0.999935 0.999937 0.999939 0.99994 0.999941 0.999943 0.999944 0.999945 0.999946 0.999947 0.999948 0.999949
0.99995 0.99995 0.999951 0.999952 0.999952 0.999953 0.999954 0.999954 0.999955 0.999955 0.999955 0.999956 0.999956
0.999957 0.999957 0.999957 0.999958 0.999958 0.999958 0.999958 0.999959 0.999959 #selex for gender,fleet: 1 / 3
 0.0428534 0.15441 0.217519 0.291459 0.374801 0.465599 0.561723 0.661248 0.762715 0.865192 0.968192 1.07153 1.17517
1.27915 1.38353 1.48828 1.59338 1.69873 1.80416 1.90951 2.01456 2.11908 2.22284 2.32562 2.42718 2.52733 2.62587 2.72263
2.81747 2.91025 3.00087 3.08923 3.17526 3.25892 3.34016 3.41896 3.4953 3.5692 3.64065 3.70967 3.7763 3.84057 3.9025 3.96216
4.01958 4.07481 4.12792 4.17895 4.22796 4.275 4.32015 4.36345 4.40496 4.44475 4.48287 4.51939 4.55435 4.58781 4.61984
4.65048 4.67978 4.7078 4.73459 4.7602 4.78466 4.80804 4.83038 4.85171 4.87208 4.89153 4.91023 4.9282 4.94535 4.96171
4.97733 4.99223 5.00645 5.02001 5.03294 5.04528 5.05704 5.06826 5.07896 5.08916 5.09888 5.10815 5.11698 5.12541 5.13343
5.14108 5.14838 5.15532 5.16195 5.16826 5.17427 5.18 5.18545 5.19066 5.19561 5.20033 5.20483 #bodywt for gender,fleet: 1 / 4

0 0.00881678 0.015454 0.0261573 0.042619 0.0666154 0.0996001 0.142241 0.194107 0.253647 0.31848 0.385845 0.453052 0.517827 0.578476 0.633919 0.683626 0.727498 0.765744 0.798769 0.82708 0.851226 0.871746 0.889149 0.903894 0.916387 0.92698 0.935975 0.943628 0.950154 0.955734 0.960519 0.964635 0.968186 0.97126 0.97393 0.976256 0.97829 0.980075 0.981645 0.983031 0.984258 0.985348 0.986319 0.987186 0.987963 0.988661 0.989289 0.989856 0.990369 0.990834 0.991257 0.991642 0.991993 0.992314 0.992609 0.992879 0.993127 0.993355 0.993566 0.993761 0.993941 0.994107 0.994262 0.994405 0.994539 0.994663 0.994778 0.994886 0.994987 0.995077 0.995157 0.995233 0.995303 0.99537 0.995432 0.99549 0.995545 0.995597 0.995646 0.995692 0.995735 0.995776 0.995814 0.99585 0.995885 0.995917 0.995948 0.995976 0.996004 0.99603 0.996054 0.996077 0.996099 0.99612 0.996139 0.996158 0.996176 0.996192 0.996208 0.996223 #selex for gender,fleet: 1 / 4
 0.0428892 0.154844 0.218548 0.293758 0.379517 0.474346 0.576339 0.683388 0.793476 0.904935 1.01657 1.12763 1.23774 1.34677 1.45474 1.5617 1.66776 1.77298 1.87739 1.98098 2.08371 2.18551 2.28628 2.3859 2.48424 2.58117 2.67655 2.77026 2.86217 2.95218 3.04018 3.12609 3.20985 3.29139 3.37067 3.44766 3.52233 3.59469 3.66473 3.73245 3.79789 3.86105 3.92198 3.98071 4.03727 4.09172 4.1441 4.19446 4.24285 4.28933 4.33395 4.37676 4.41782 4.4572 4.49493 4.53108 4.56571 4.59886 4.6306 4.66096 4.69001 4.7178 4.74437 4.76977 4.79405 4.81725 4.83941 4.86058 4.88081 4.90012 4.9187 4.93657 4.95364 4.96992 4.98546 5.00029 5.01443 5.02793 5.0408 5.05308 5.06478 5.07595 5.0866 5.09675 5.10643 5.11565 5.12445 5.13283 5.14082 5.14844 5.1557 5.16262 5.16921 5.17549 5.18148 5.18718 5.19262 5.19779 5.20273 5.20743 5.2119 #bodywt for gender,fleet: 1 / 5
 0 0.003319 0.00587066 0.0100751 0.0167577 0.0269681 0.0419069 0.0627582 0.0904536 0.125432 0.167485 0.215744 0.268804 0.324946 0.382368 0.439396 0.494621 0.546967 0.595697 0.640389 0.680875 0.717188 0.749499 0.778071 0.803215 0.825267 0.84456 0.861413 0.876126 0.888967 0.900181 0.909982 0.91856 0.926078 0.932679 0.938487 0.943608 0.948133 0.95214 0.955698 0.958863 0.961687 0.964211 0.966473 0.968505 0.970334 0.971985 0.973477 0.97483 0.976058 0.977175 0.978194 0.979124 0.979975 0.980755 0.981471 0.982129 0.982735 0.983294 0.983811 0.984289 0.984731 0.985141 0.985522 0.985876 0.986205 0.986512 0.986798 0.987065 0.987315 0.987538 0.987739 0.987927 0.988103 0.988268 0.988424 0.98857 0.988707 0.988836 0.988958 0.989073 0.989181 0.989283 0.989379 0.98947 0.989556 0.989637 0.989713 0.989785 0.989854 0.989919 0.98998 0.990038 0.990093 0.990145 0.990194 0.99024 0.990285 0.990326 0.990366 0.990404 #selex for gender,fleet: 1 / 5
 0.0438774 0.159725 0.225932 0.304371 0.394179 0.493918 0.601579 0.71474 0.830906 0.947896 1.0641 1.17854 1.29079 1.40076 1.50861 1.61457 1.71893 1.8219 1.92369 2.02441 2.12414 2.2229 2.32065 2.41734 2.51288 2.60715 2.70006 2.79147 2.88127 2.96935 3.05559 3.13992 3.22224 3.30249 3.38061 3.45657 3.53031 3.60184 3.67114 3.7382 3.80305 3.86569 3.92614 3.98445 4.04064 4.09475 4.14682 4.19691 4.24506 4.29131 4.33573 4.37837 4.41927 4.4585 4.4961 4.53213 4.56665 4.5997 4.63135 4.66163 4.69061 4.71832 4.74483 4.77017 4.7944 4.81755 4.83967 4.8608 4.88099 4.90026 4.91881 4.93666 4.9537 4.96996 4.98548 5.00029 5.01441 5.02789 5.04075 5.05301 5.06471 5.07586 5.08649 5.09663 5.1063 5.11552 5.1243 5.13268 5.14066 5.14827 5.15552 5.16243 5.16902 5.17529 5.18127 5.18697 5.1924 5.19757 5.2025 5.2072 5.21167 #bodywt for gender,fleet: 1 / 6
 0 0.00110971 0.00213142 0.00396327 0.0071304 0.0123965 0.0207851 0.033529 0.0519176 0.0770546 0.109592 0.149538 0.1962 0.248288 0.304118 0.361857 0.419745 0.476255 0.530182 0.58067 0.627187 0.669746 0.707529 0.74145 0.771487 0.79794 0.821143 0.841435 0.859147 0.874589 0.888047 0.899776 0.910006 0.918937 0.926746 0.933583 0.939582 0.944855 0.9495 0.953602 0.957233 0.960453 0.963317 0.965869 0.96815 0.970192 0.972025 0.973675 0.975162 0.976506 0.977723 0.978828 0.979832 0.980747 0.981583 0.982346 0.983046 0.983688 0.984278 0.984821 0.985322 0.985784 0.986211 0.986607 0.986973 0.987314 0.98763 0.987924 0.988198 0.988453 0.98868 0.988882 0.989072 0.989249 0.989415 0.989571 0.989717 0.989854 0.989983 0.990105 0.990219 0.990326 0.990428 0.990523 0.990613 0.990698 0.990778 0.990854 0.990926 0.990993 0.991057 0.991117 0.991175 0.991229 0.99128 0.991328 0.991374 0.991418 0.991459 0.991498 0.991535 #selex for gender,fleet: 1 / 6
 0.0500056 0.169091 0.235832 0.312174 0.396275 0.486352 0.580991 0.679237 0.780526 0.884551 0.991129 1.10011 1.21131 1.32451 1.43942 1.5557 1.67301 1.79093 1.90909 2.02709 2.14457 2.26118 2.37661 2.49057 2.60282 2.71313 2.82131 2.92721 3.03069 3.13165 3.23 3.32567 3.41863 3.50883 3.59628 3.68095 3.76287 3.84206 3.91853 3.99233 4.0635 4.13209 4.19814 4.26172 4.32287 4.38167 4.43817 4.49244 4.54455 4.59455 4.64252 4.68852 4.73261 4.77487 4.81535 4.85412 4.89124 4.92677 4.96077 4.99329 5.0244 5.05416 5.0826 5.10979 5.13578 5.16061 5.18434 5.207 5.22865 5.24932 5.26918 5.28825 5.30646 5.32384 5.34043 5.35626 5.37136 5.38578 5.39953 5.41265 5.42516 5.4371 5.44848 5.45934 5.46969 5.47956 5.48897 5.49795 5.50651 5.51466 5.52244 5.52985 5.53692 5.54365 5.55007 5.55619 5.56202 5.56758 5.57288 5.57793 5.58274 #bodywt for gender,fleet: 2 / 1
 0 0.0432816 0.0697005 0.107254 0.157132 0.218847 0.290079 0.367141 0.44584 0.522316 0.593601 0.657817 0.7141 0.762376 0.803103 0.837037 0.865062 0.888066 0.906883 0.922247 0.934791 0.945045 0.953443 0.960341 0.966027 0.970732 0.974642 0.977905 0.980641 0.982945 0.984895 0.986552 0.987967 0.989181 0.990226 0.991131 0.991917 0.992602 0.993202 0.993729 0.994194 0.994605 0.994971 0.995296 0.995587 0.995847 0.996081 0.996292 0.996483 0.996655 0.996812 0.996954 0.997084 0.997202 0.997311 0.99741 0.997501 0.997586 0.997663 0.997734 0.997801 0.997862 0.997918 0.997971 0.99802 0.998065 0.998108 0.998147 0.998184 0.998219 0.99825 0.998277 0.998303 0.998328 0.998351 0.998372 0.998393 0.998412 0.99843 0.998447 0.998462 0.998477 0.998492 0.998505 0.998518 0.99853 0.998541 0.998551 0.998562 0.998571 0.99858 0.998589 0.998597 0.998604 0.998612 0.998618 0.998625 0.998631 0.998637 0.998643 0.998648 #selex for gender,fleet: 2 / 1
 0.0511315 0.174959 0.245089 0.325778 0.414844 0.509889 0.608842 0.710273 0.813411 0.917969 1.02393 1.13139 1.24041 1.35103 1.46317 1.57665 1.69124 1.80663 1.92247 2.03841 2.15408 2.26912 2.38321 2.49604 2.60733 2.71684 2.82435 2.92969 3.03272 3.13329 3.23132 3.32673 3.41947 3.5095 3.59679 3.68134 3.76316 3.84226 3.91866 3.9924 4.06352 4.13207 4.19808 4.26163 4.32276 4.38154 4.43802 4.49228 4.54437 4.59437 4.64233 4.68832 4.73241 4.77466 4.81514 4.85391 4.89102 4.92655 4.96055 4.99307 5.02418 5.05393 5.08238 5.10957 5.13556 5.16039 5.18411 5.20678 5.22843 5.2491 5.26896 5.28803 5.30624 5.32362 5.34021 5.35604 5.37114 5.38556 5.39931 5.41243 5.42494 5.43688 5.44826 5.45912 5.46947 5.47934 5.48875 5.49773 5.50629 5.51444 5.52222 5.52963 5.5367 5.54344 5.54986 5.55597 5.56181 5.56736 5.57266 5.57771 5.58252 #bodywt for gender,fleet: 2 / 2
 0 0.0170603 0.0302754 0.0514152 0.0831066 0.12729 0.184368 0.252763 0.329159 0.40929 0.488881 0.564375 0.6333 0.6943 0.74696 0.79154 0.828719 0.859381 0.884469 0.904889 0.921458 0.934886 0.94577 0.954606 0.961796 0.967664 0.972472 0.976426 0.979693 0.982404 0.984665 0.98656 0.988155 0.989505 0.990652 0.991631 0.992472 0.993196 0.993822 0.994367 0.994841 0.995257 0.995623 0.995945 0.996231 0.996484 0.99671 0.996912 0.997093 0.997256 0.997403 0.997535 0.997655 0.997764 0.997863 0.997953 0.998036 0.998112 0.998181 0.998245 0.998303 0.998357 0.998407 0.998453 0.998496 0.998536 0.998572 0.998606 0.998638 0.998668 0.998694 0.998718 0.99874 0.99876 0.998779 0.998797 0.998814 0.99883 0.998845 0.998859 0.998873 0.998885 0.998897 0.998908 0.998918 0.998928 0.998938 0.998946 0.998955 0.998963 0.99897 0.998977 0.998984 0.99899 0.998996 0.999001 0.999007 0.999012 0.999017 0.999021 0.999025 #selex for gender,fleet: 2 / 2

0.055291 0.19336 0.2697 0.353564 0.440498 0.527922 0.615393 0.703702 0.79401 0.887366 0.9845 1.08577 1.19117 1.30043
1.41303 1.52837 1.64575 1.76449 1.88396 2.00356 2.12277 2.24115 2.3583 2.4739 2.58766 2.69937 2.80881 2.91585 3.02036
3.12223 3.22139 3.3178 3.4114 3.50218 3.59014 3.67528 3.75761 3.83716 3.91396 3.98806 4.0595 4.12832 4.19459 4.25836 4.3197
4.37866 4.43531 4.48971 4.54194 4.59205 4.64013 4.68622 4.7304 4.77274 4.81329 4.85213 4.88931 4.92489 4.95895 4.99152
5.02268 5.05248 5.08096 5.10819 5.13421 5.15908 5.18283 5.20553 5.2272 5.2479 5.26777 5.28686 5.30508 5.32248 5.33908
5.35492 5.37004 5.38447 5.39823 5.41135 5.42388 5.43582 5.44721 5.45808 5.46844 5.47832 5.48774 5.49672 5.50528 5.51344
5.52123 5.52865 5.53572 5.54246 5.54888 5.555 5.56084 5.5664 5.5717 5.57675 5.58156 #bodywt for gender,fleet: 2 / 3
 0 0.0125476 0.0294746 0.0631081 0.120806 0.205286 0.31161 0.42878 0.544379 0.648706 0.736485 0.806445 0.859958 0.899665
0.928492 0.949113 0.963727 0.974036 0.981301 0.986429 0.990064 0.992655 0.994515 0.995861 0.996843 0.997567 0.998104
0.998508 0.998814 0.999048 0.999228 0.999368 0.999479 0.999566 0.999636 0.999692 0.999737 0.999774 0.999805 0.99983
0.999851 0.999869 0.999884 0.999896 0.999907 0.999916 0.999924 0.999931 0.999937 0.999942 0.999947 0.999951 0.999954
0.999958 0.99996 0.999963 0.999965 0.999967 0.999969 0.99997 0.999972 0.999973 0.999974 0.999976 0.999977 0.999977
0.999978 0.999979 0.99998 0.99998 0.999981 0.999981 0.999982 0.999982 0.999983 0.999983 0.999983 0.999984 0.999984
0.999984 0.999985 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999986 0.999986 0.999987
0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 #selex for gender,fleet: 2 / 3
 0.0511829 0.175601 0.246608 0.329035 0.42103 0.520252 0.624299 0.73116 0.83945 0.948409 1.05774 1.16744 1.27761 1.38838
1.49983 1.61197 1.72473 1.83798 1.9515 2.06506 2.17837 2.29114 2.40309 2.51393 2.6234 2.73126 2.8373 2.94132 3.04317 3.1427
3.23981 3.33441 3.42643 3.51582 3.60255 3.68661 3.76799 3.8467 3.92269 3.99619 4.06704 4.13534 4.20114 4.26449 4.32544
4.38406 4.4404 4.49453 4.5465 4.59639 4.64426 4.69016 4.73417 4.77635 4.81676 4.85546 4.89252 4.92799 4.96194 4.99442
5.02549 5.0552 5.08361 5.11077 5.13673 5.16153 5.18523 5.20787 5.22949 5.25014 5.26998 5.28904 5.30724 5.32461 5.34118
5.357 5.3721 5.3865 5.40025 5.41336 5.42586 5.43779 5.44917 5.46002 5.47036 5.48023 5.48964 5.49861 5.50716 5.51531 5.52308
5.53049 5.53755 5.54429 5.5507 5.55682 5.56265 5.5682 5.57349 5.57854 5.58335 #bodywt for gender,fleet: 2 / 4
 0 0.00895616 0.0160999 0.0278752 0.0463072 0.0735094 0.111143 0.159822 0.218742 0.285732 0.357692 0.431215 0.503163
0.571041 0.633159 0.688601 0.737092 0.778824 0.814292 0.844149 0.86911 0.889877 0.907104 0.921374 0.933193 0.942989
0.951122 0.95789 0.963539 0.968268 0.972242 0.975594 0.978433 0.980846 0.982906 0.984671 0.986191 0.987504 0.988643
0.989634 0.990501 0.991261 0.99193 0.992522 0.993046 0.993511 0.993927 0.994298 0.994631 0.994931 0.995201 0.995445
0.995667 0.995868 0.996051 0.996217 0.99637 0.99651 0.996638 0.996755 0.996864 0.996963 0.997056 0.997141 0.99722
0.997293 0.997361 0.997424 0.997483 0.997538 0.997586 0.99763 0.99767 0.997708 0.997744 0.997778 0.997809 0.997838
0.997866 0.997892 0.997917 0.99794 0.997962 0.997982 0.998001 0.99802 0.998037 0.998053 0.998069 0.998083 0.998097
0.99811 0.998122 0.998134 0.998145 0.998155 0.998165 0.998174 0.998183 0.998192 0.9982 #selex for gender,fleet: 2 / 4
 0.0512242 0.176084 0.24777 0.331659 0.426429 0.530211 0.640741 0.755654 0.872831 0.990658 1.1081 1.22461 1.34002 1.45437
1.5678 1.68048 1.79254 1.90407 2.01509 2.12558 2.23544 2.34455 2.45276 2.5599 2.66578 2.77021 2.87302 2.97404 3.07311
3.17011 3.2649 3.3574 3.44752 3.5352 3.62039 3.70306 3.78319 3.86077 3.93582 4.00835 4.07837 4.14593 4.21107 4.27381
4.33422 4.39235 4.44824 4.50196 4.55356 4.60311 4.65066 4.69628 4.74003 4.78197 4.82216 4.86066 4.89753 4.93284 4.96663
4.99896 5.0299 5.05948 5.08778 5.11482 5.14068 5.16539 5.189 5.21156 5.23311 5.25369 5.27347 5.29248 5.31063 5.32796 5.3445
5.36028 5.37535 5.38972 5.40343 5.41651 5.42899 5.44089 5.45225 5.46307 5.4734 5.48325 5.49263 5.50158 5.51012 5.51826
5.52601 5.53341 5.54046 5.54717 5.55358 5.55968 5.5655 5.57104 5.57633 5.58136 5.58616 #bodywt for gender,fleet: 2 / 5
 0 0.00337227 0.00612146 0.01076 0.0182876 0.0299896 0.0473341 0.0717419 0.104264 0.145273 0.194281 0.249974 0.310418
0.373378 0.436635 0.498237 0.55665 0.610805 0.660077 0.704215 0.743258 0.777445 0.807144 0.832788 0.854833 0.873726
0.889888 0.903702 0.915507 0.925603 0.934248 0.941663 0.948035 0.953525 0.958267 0.962374 0.965942 0.96905 0.971766
0.974146 0.976239 0.978085 0.979717 0.981165 0.982453 0.983602 0.984629 0.985551 0.98638 0.987127 0.987801 0.988413
0.988967 0.989472 0.989932 0.990352 0.990736 0.991088 0.991412 0.991709 0.991983 0.992236 0.992469 0.992685 0.992886
0.993071 0.993244 0.993404 0.993554 0.993693 0.993817 0.993928 0.994031 0.994128 0.994219 0.994304 0.994385 0.99446
0.99453 0.994597 0.99466 0.994718 0.994774 0.994826 0.994876 0.994922 0.994966 0.995008 0.995047 0.995084 0.995119
0.995152 0.995184 0.995213 0.995241 0.995268 0.995293 0.995317 0.99534 0.995361 0.995382 #selex for gender,fleet: 2 / 5
 0.0523658 0.181449 0.255843 0.343189 0.442249 0.551164 0.667496 0.788474 0.911424 1.03419 1.15537 1.27426 1.3907 1.50485
1.61707 1.72772 1.83714 1.94562 2.05334 2.16043 2.26689 2.3727 2.47777 2.58197 2.68514 2.78711 2.8877 2.98674 3.08406
3.17951 3.27296 3.36429 3.45339 3.54019 3.62462 3.70663 3.7862 3.8633 3.93793 4.0101 4.07982 4.14711 4.21202 4.27457
4.33481 4.39279 4.44855 4.50216 4.55367 4.60314 4.65062 4.69618 4.73988 4.78177 4.82192 4.86039 4.89723 4.9325 4.96627
4.99859 5.0295 5.05907 5.08735 5.11439 5.14023 5.16493 5.18854 5.21109 5.23263 5.2532 5.27298 5.29199 5.31014 5.32746 5.344
5.35978 5.37484 5.38921 5.40292 5.41599 5.42847 5.44037 5.45172 5.46255 5.47287 5.48272 5.4921 5.50106 5.50959 5.51772
5.52548 5.53287 5.53992 5.54664 5.55304 5.55915 5.56496 5.57051 5.57579 5.58082 5.58562 #bodywt for gender,fleet: 2 / 6
 0 0.00113042 0.00223646 0.0042748 0.00788724 0.0140236 0.0239676 0.0392595 0.0614738 0.0918785 0.131083 0.17881
0.233882 0.29441 0.358115 0.422663 0.485952 0.546284 0.60244 0.653673 0.699643 0.740329 0.775944 0.806846 0.833477
0.85631 0.875815 0.892436 0.906582 0.918616 0.928857 0.937579 0.945021 0.95138 0.956828 0.961507 0.965536 0.969016
0.972031 0.97465 0.976933 0.97893 0.980681 0.982222 0.983582 0.984785 0.985854 0.986806 0.987655 0.988416 0.989099
0.989714 0.990268 0.990769 0.991224 0.991636 0.992012 0.992355 0.992668 0.992955 0.993218 0.993459 0.993682 0.993887
0.994076 0.994251 0.994413 0.994563 0.994702 0.994832 0.994946 0.995047 0.995142 0.99523 0.995313 0.99539 0.995463
0.995531 0.995595 0.995655 0.995711 0.995764 0.995814 0.995861 0.995905 0.995947 0.995986 0.996023 0.996058 0.996091
0.996122 0.996152 0.99618 0.996206 0.996231 0.996255 0.996277 0.996298 0.996318 0.996337 0.996355 #selex for gender,fleet: 2
/ 6
 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 0.0470743
0.0470743 0.0470743 0.0470743 0.0470743 0.0470743 #mean M for year Yinit: 2009 sex: 1

47.4105 44.5073 41.7616 39.0345 36.487 34.0295 31.6945 29.5349 28.0448 26.4167 25.7785 24.6885 24.6265 24.1911 23.8908
23.2318 22.91 22.5056 21.7579 20.4024 19.2471 17.7945 16.2429 14.6644 13.2122 11.7766 10.5447 9.42166 8.34632 7.33422
6.46223 5.68975 4.98709 4.37872 3.84829 3.39257 2.99884 2.66131 2.36809 2.11596 1.89897 1.71086 1.54856 1.40828 1.28609
1.17899 1.08528 1.00247 0.928828 0.863462 0.80503 0.752519 0.70466 0.66088 0.620728 0.583654 0.549361 0.517743 0.488488
0.461182 0.435733 0.412151 0.390028 0.369953 0.351223 0.333147 0.31589 0.299536 0.284116 0.269539 0.255749 0.24271
0.230373 0.218712 0.207683 0.197246 0.187378 0.178077 0.169276 0.160966 0.153104 0.145665 0.138627 0.131957 0.125634
0.11963 0.113932 0.108523 0.103385 0.0985044 0.0938639 0.0894568 0.085263 0.0812694 0.077464 0.0738421 0.0703941
0.0671112 0.063985 0.0610077 1.26111 #numbers for year Yinit: 2009 sex: 1
 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453
0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453
0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453
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0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 0.0465453
0.0465453 0.0465453 0.0465453 0.0465453 0.0465453 #mean M for year Yinit: 2009 sex: 2
 47.4105 44.5309 41.8057 39.096 36.5626 34.1157 31.7879 29.6327 28.146 26.5185 25.5825 24.7906 24.7281 24.2863 23.9734
23.2916 22.9369 22.4868 21.6809 20.26 19.0328 17.511 15.8979 14.2705 12.7817 11.327 10.0868 8.96825 7.911 6.92752 6.08744
5.34937 4.68291 4.10913 3.61123 3.18519 2.81842 2.50499 2.23347 2.00057 1.80054 1.62737 1.47809 1.34909 1.23669 1.13803
1.05158 0.975002 0.906704 0.845898 0.79135 0.74214 0.697084 0.655672 0.61751 0.582103 0.549199 0.518733 0.490434 0.463919
0.439124 0.416084 0.394406 0.374701 0.35627 0.338422 0.32133 0.305086 0.28973 0.275176 0.261374 0.248296 0.2359 0.224165
0.213055 0.202531 0.192573 0.183181 0.174288 0.165884 0.157927 0.150391 0.143254 0.136483 0.130056 0.123946 0.118141
0.112623 0.107376 0.102386 0.0976365 0.0931211 0.0888199 0.08472 0.0808095 0.0770842 0.0735347 0.0701523 0.0669286
0.063856 1.33677 #numbers for year Yinit: 2009 sex: 2
 41.2574 39.2647 37.0856 36.3063 34.898 34.9481 34.4719 34.1857 33.3783 33.045 32.5819 31.6085 29.7348 28.1346 26.083
23.8697 21.6015 19.5056 17.4224 15.6301 13.9908 12.4149 10.9264 9.64106 8.49973 7.459 6.55624 5.76777 5.08934 4.50238
3.99853 3.56026 3.18294 2.85784 2.57569 2.33201 2.12118 1.93739 1.77617 1.63502 1.51021 1.39919 1.3006 1.21246 1.13325
1.06105 0.995009 0.934448 0.87854 0.826836 0.779174 0.735084 0.69394 0.6556 0.62008 0.586762 0.556532 0.528332 0.501123
0.47515 0.45054 0.42734 0.405413 0.384672 0.365064 0.346513 0.328981 0.3124 0.296709 0.281873 0.267887 0.254654 0.242156
0.230332 0.219144 0.208557 0.198525 0.189011 0.179979 0.171406 0.163267 0.155537 0.148192 0.14121 0.134578 0.128268
0.122258 0.116532 0.111082 0.105894 0.100954 0.09625 0.0917703 0.0875036 0.0834394 0.0795676 0.0758788 0.0723639
0.0690144 0.0658222 1.36327 #numbers for year Ydeclare: 2002 sex: 1
 41.2574 39.2854 37.1246 36.3626 34.9675 35.029 34.5557 34.2615 33.4301 33.0555 32.5304 31.4754 29.5083 27.8035 25.6504
23.3462 21.005 18.8539 16.7414 14.9357 13.3018 11.7518 10.3053 9.0671 7.97686 6.99024 6.13939 5.39999 4.76648 4.22045
3.75333 3.3482 3.00033 2.70126 2.44208 2.21846 2.02506 1.85641 1.70828 1.57843 1.46335 1.36069 1.26927 1.18726 1.11328
1.04555 0.98331 0.925968 0.872778 0.823361 0.777618 0.735137 0.695346 0.658143 0.623578 0.591062 0.561509 0.533871
0.507112 0.481491 0.457146 0.434135 0.41233 0.391655 0.372067 0.353502 0.335929 0.319291 0.30353 0.288617 0.274549
0.261228 0.248638 0.236716 0.225424 0.214727 0.20458 0.194946 0.185788 0.177086 0.168813 0.160949 0.153467 0.146346
0.139577 0.133128 0.126981 0.121119 0.115534 0.110212 0.105141 0.100309 0.0957028 0.0913124 0.0871272 0.0831372
0.0793329 0.0757054 0.0722461 0.0689468 1.44552 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
170.492 170.492 170.481 170.464 170.443 170.433 170.421 170.411 170.402 170.392 170.379 170.356 170.329 170.297 170.267
170.232 170.19 170.152 170.1 170.063 170.017 169.958 169.896 169.84 169.784 169.732 169.676 169.614 169.555 169.438 169.185
168.7 168.273 168.124 167.932 167.798 167.652 167.469 167.313 167.191 167.039 166.84 166.619 166.353 166.034 165.758
165.523 165.341 165.123 164.879 164.669 164.396 164.085 163.783 163.454 162.97 162.423 161.8 160.918 160.047 159.059
158.084 156.878 155.605 153.419 151.037 149.049 145.98 142.097 138.434 136.036 133.071 130.799 128.112 124.892 120.314
117.485 112.123 106.049 100.47 96.9779 92.5059 88.9691 84.5171 83.7277 81.5306 82.3144 82.5149 84.3318 86.2818 88.1895
89.9592 91.7798 93.3051 94.8211 #Recruits
7.54689e+008 7.54689e+008 7.54492e+008 7.54171e+008 7.53794e+008 7.53608e+008 7.53405e+008 7.53212e+008
7.53043e+008 7.52864e+008 7.52633e+008 7.52222e+008 7.51727e+008 7.51145e+008 7.50595e+008 7.49969e+008 7.49215e+008
7.48526e+008 7.4758e+008 7.46922e+008 7.46103e+008 7.45048e+008 7.43938e+008 7.42937e+008 7.41939e+008 7.41018e+008
7.40024e+008 7.38925e+008 7.37885e+008 7.35832e+008 7.31395e+008 7.23036e+008 7.1579e+008 7.13278e+008 7.1007e+008
7.07841e+008 7.05433e+008 7.02421e+008 6.9988e+008 6.97899e+008 6.95435e+008 6.92226e+008 6.88707e+008 6.84497e+008
6.79487e+008 6.75209e+008 6.71582e+008 6.68807e+008 6.65497e+008 6.61825e+008 6.58688e+008 6.54628e+008 6.5006e+008
6.45666e+008 6.40945e+008 6.34056e+008 6.26426e+008 6.17873e+008 6.06064e+008 5.94714e+008 5.82198e+008 5.70217e+008
5.5586e+008 5.4125e+008 5.17369e+008 4.92961e+008 4.73757e+008 4.46005e+008 4.13832e+008 3.86124e+008 3.69223e+008
3.49541e+008 3.35296e+008 3.19306e+008 3.01279e+008 2.77556e+008 2.63906e+008 2.3991e+008 2.15334e+008 1.94873e+008
1.82975e+008 1.68651e+008 1.57989e+008 1.4533e+008 1.43169e+008 1.37279e+008 1.39359e+008 1.39895e+008 1.44821e+008
1.50251e+008 1.55713e+008 1.60917e+008 1.66416e+008 1.7114e+008 1.75944e+008 #SpawnBio
0.5075 0.5 0 # spawn-recr steepness, sigmaR, autocorr
low catch low h vector 1
 0 0 24.9078 94.1656 321.686 984.107 2661.24 6312.28 13160.4 24371.3 40690.4 62240.3 88554.7 118780 151919 187034 223351
260302 297507 334735 371861 408825 445603 482187 518571 554745 590694 626392 661809 696908 731651 765995 799898
833320 866219 898559 930305 961426 991894 1.02169e+006 1.05078e+006 1.07916e+006 1.10681e+006 1.13372e+006
1.15988e+006 1.1853e+006 1.20996e+006 1.23387e+006 1.25703e+006 1.27945e+006 1.30113e+006 1.32209e+006 1.34233e+006
1.36186e+006 1.3807e+006 1.39886e+006 1.41636e+006 1.4332e+006 1.44942e+006 1.46501e+006 1.48001e+006 1.49441e+006

1.50826e+006 1.52155e+006 1.5343e+006 1.54655e+006 1.55829e+006 1.56954e+006 1.58034e+006 1.59068e+006 1.60058e+006
1.61031e+006 1.61963e+006 1.62855e+006 1.63709e+006 1.64526e+006 1.65308e+006 1.66056e+006 1.66771e+006 1.67455e+006
1.68109e+006 1.68734e+006 1.69331e+006 1.69902e+006 1.70447e+006 1.70968e+006 1.71466e+006 1.71941e+006 1.72395e+006
1.72828e+006 1.73242e+006 1.73637e+006 1.74013e+006 1.74373e+006 1.74716e+006 1.75044e+006 1.75357e+006 1.75655e+006
1.75939e+006 1.76211e+006 1.7647e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0438752 0.157734 0.217595 0.286066 0.36172 0.44315 0.52919 0.618985 0.711961 0.807737 0.906046 1.00666 1.10935 1.21388
1.31997 1.42731 1.53559 1.64447 1.75361 1.86268 1.97135 2.07934 2.18635 2.29213 2.39645 2.49911 2.59993 2.69875 2.79545
2.88992 2.98206 3.07181 3.15912 3.24394 3.32627 3.40607 3.48337 3.55815 3.63045 3.70029 3.76771 3.83273 3.8954 3.95578
4.0139 4.06982 4.12361 4.1753 4.22497 4.27266 4.31845 4.36238 4.40452 4.44493 4.48366 4.52078 4.55633 4.59038 4.62298
4.65419 4.68405 4.71262 4.73995 4.76608 4.79107 4.81497 4.8378 4.85962 4.88048 4.9004 4.91955 4.93797 4.95555 4.97235
4.98838 5.00369 5.0183 5.03225 5.04556 5.05826 5.07039 5.08195 5.09299 5.10351 5.11356 5.12313 5.13227 5.14099 5.1493
5.15722 5.16478 5.17199 5.17886 5.18541 5.19166 5.19761 5.20329 5.2087 5.21386 5.21878 5.22347 #bodywt for gender,fleet: 1 / 1
 0 0.0545888 0.0836057 0.122828 0.172695 0.232257 0.299234 0.370483 0.442635 0.512678 0.578309 0.638043 0.691153 0.737509
0.777396 0.811351 0.840032 0.864127 0.884302 0.901167 0.915257 0.927037 0.936902 0.945179 0.952143 0.95802 0.962997
0.967227 0.970834 0.973922 0.976577 0.978866 0.980849 0.982573 0.984077 0.985393 0.98655 0.98757 0.988472 0.989273
0.989985 0.990621 0.991191 0.991702 0.992162 0.992577 0.992953 0.993294 0.993603 0.993885 0.994142 0.994378 0.994593
0.994791 0.994973 0.99514 0.995295 0.995438 0.99557 0.995692 0.995805 0.99591 0.996008 0.996099 0.996184 0.996264
0.996337 0.996407 0.996471 0.996532 0.996586 0.996636 0.996692 0.996725 0.996766 0.996805 0.996841 0.996875 0.996907
0.996937 0.996966 0.996993 0.997019 0.997043 0.997065 0.997087 0.997107 0.997127 0.997145 0.997162 0.997178 0.997194
0.997209 0.997222 0.997236 0.997248 0.99726 0.997271 0.997282 0.997292 0.997302 #selex for gender,fleet: 1 / 1
 0.0449487 0.16384 0.227101 0.299881 0.380437 0.466832 0.557332 0.650653 0.746001 0.842965 0.941378 1.04119 1.14238 1.2449
1.34866 1.45351 1.55925 1.66565 1.77242 1.87928 1.98594 2.09209 2.19747 2.3018 2.40484 2.50638 2.60623 2.7042 2.80017
2.89399 2.98559 3.07486 3.16176 3.24623 3.32824 3.40778 3.48484 3.55942 3.63155 3.70124 3.76851 3.83342 3.89599 3.95628
4.01432 4.07017 4.12389 4.17553 4.22515 4.27281 4.31855 4.36245 4.40456 4.44494 4.48365 4.52074 4.55628 4.59031 4.62289
4.65409 4.68393 4.71249 4.73981 4.76594 4.79092 4.8148 4.83763 4.85945 4.88029 4.90021 4.91936 4.93777 4.95535 4.97214
4.98817 5.00348 5.01809 5.03203 5.04534 5.05804 5.07016 5.08172 5.09276 5.10328 5.11332 5.1229 5.13204 5.14075 5.14906
5.15698 5.16454 5.17174 5.17861 5.18516 5.19141 5.19736 5.20304 5.20845 5.21361 5.21853 5.22322 #bodywt for gender,fleet: 1 /
2
 0 0.0211825 0.0357079 0.0578045 0.0894819 0.132036 0.185487 0.248355 0.317914 0.390779 0.463568 0.533411 0.598221
0.656736 0.708417 0.753272 0.79168 0.824234 0.85162 0.87454 0.89366 0.909584 0.922839 0.93388 0.943091 0.950791 0.957244
0.96267 0.967247 0.971121 0.974413 0.977221 0.979626 0.981693 0.983476 0.985021 0.986364 0.987536 0.988563 0.989465
0.990261 0.990965 0.99159 0.992146 0.992643 0.993088 0.993488 0.993847 0.994172 0.994466 0.994732 0.994975 0.995195
0.995397 0.995581 0.99575 0.995905 0.996047 0.996178 0.996299 0.996411 0.996514 0.99661 0.996699 0.996782 0.996858
0.99693 0.996996 0.997058 0.997116 0.997168 0.997215 0.997258 0.997299 0.997337 0.997373 0.997407 0.997439 0.997469
0.997497 0.997524 0.997549 0.997572 0.997595 0.997616 0.997636 0.997654 0.997672 0.997689 0.997705 0.99772 0.997734
0.997748 0.99776 0.997772 0.997784 0.997795 0.997805 0.997815 0.997824 0.997833 #selex for gender,fleet: 1 / 2
 0.0489949 0.182708 0.251656 0.327018 0.405225 0.484316 0.56396 0.644746 0.727543 0.81314 0.902094 0.994682 1.09091
1.19058 1.2933 1.39858 1.50586 1.6146 1.72422 1.83423 1.94413 2.05352 2.16202 2.26932 2.37513 2.47922 2.5814 2.68149
2.77938 2.87493 2.96808 3.05875 3.1469 3.23249 3.31551 3.39596 3.47383 3.54915 3.62194 3.69222 3.76004 3.82543 3.88844
3.94913 4.00754 4.06373 4.11775 4.16967 4.21954 4.26742 4.31338 4.35748 4.39977 4.44032 4.47918 4.51641 4.55208 4.58624
4.61893 4.65023 4.68018 4.70883 4.73623 4.76244 4.78749 4.81145 4.83434 4.85621 4.87712 4.89709 4.91628 4.93473 4.95234
4.96916 4.98522 5.00056 5.01519 5.02916 5.04249 5.05522 5.06736 5.07894 5.08999 5.10053 5.11059 5.12018 5.12934 5.13806
5.14638 5.15432 5.16189 5.16911 5.17599 5.18255 5.18881 5.19477 5.20046 5.20588 5.21104 5.21597 5.22066 #bodywt for
gender,fleet: 1 / 3
 0 0.0165373 0.036547 0.0737543 0.133879 0.217811 0.320006 0.430521 0.538876 0.63709 0.720802 0.788856 0.842241 0.883029
0.913612 0.936251 0.952877 0.965036 0.973919 0.980416 0.985183 0.988698 0.991304 0.993248 0.99471 0.995817 0.996662
0.997312 0.997817 0.998211 0.998522 0.998768 0.998966 0.999125 0.999254 0.999359 0.999446 0.999518 0.999578 0.999628
0.999671 0.999707 0.999737 0.999764 0.999786 0.999806 0.999823 0.999837 0.99985 0.999862 0.999872 0.999881 0.999889
0.999896 0.999902 0.999908 0.999913 0.999917 0.999922 0.999925 0.999929 0.999932 0.999935 0.999937 0.99994 0.999942
0.999944 0.999946 0.999947 0.999949 0.99995 0.999952 0.999953 0.999954 0.999955 0.999956 0.999957 0.999958
0.999959 0.999959 0.99996 0.99996 0.999961 0.999961 0.999962 0.999962 0.999963 0.999963 0.999963 0.999964 0.999964
0.999964 0.999965 0.999965 0.999965 0.999965 0.999966 0.999966 0.999966 0.999966 #selex for gender,fleet: 1 / 3
 0.0447659 0.163398 0.227035 0.300923 0.383654 0.473426 0.568337 0.666698 0.767218 0.869043 0.971685 1.07491 1.17861
1.28276 1.38734 1.4923 1.59755 1.70298 1.80843 1.91372 2.01863 2.12295 2.22646 2.32895 2.4302 2.53002 2.62823 2.72468
2.81922 2.91173 3.00211 3.09026 3.17614 3.25967 3.34082 3.41958 3.49593 3.56986 3.64139 3.71053 3.77732 3.84177 3.90392
3.96383 4.02152 4.07706 4.13048 4.18185 4.23122 4.27864 4.32418 4.36788 4.40981 4.45002 4.48857 4.52552 4.56092 4.59483
4.6273 4.65838 4.68813 4.7166 4.74383 4.76987 4.79477 4.81858 4.84134 4.8631 4.88388 4.90374 4.92285 4.94122 4.95877
4.97553 4.99153 5.0068 5.02138 5.0353 5.04859 5.06126 5.07336 5.0849 5.09592 5.10642 5.11644 5.12601 5.13512 5.14382
5.15212 5.16003 5.16757 5.17476 5.18162 5.18816 5.1944 5.20034 5.20601 5.21141 5.21656 5.22147 5.22615 #bodywt for
gender,fleet: 1 / 4
 0 0.0123736 0.0207712 0.0337184 0.0527823 0.0794523 0.114767 0.15896 0.211283 0.270082 0.333093 0.397837 0.461976
0.523571 0.581198 0.63396 0.68142 0.723509 0.760414 0.792494 0.820194 0.844 0.864391 0.881823 0.896712 0.909428 0.920296
0.929597 0.937569 0.944418 0.950315 0.955407 0.959816 0.963645 0.966979 0.969892 0.972445 0.974688 0.976666 0.978416
0.979967 0.981347 0.982577 0.983678 0.984665 0.985552 0.986351 0.987073 0.987727 0.988321 0.988861 0.989353 0.989802
0.990213 0.990589 0.990935 0.991253 0.991545 0.991816 0.992065 0.992296 0.99251 0.992708 0.992893 0.993064 0.993224
0.993372 0.993511 0.99364 0.993761 0.99387 0.993967 0.994059 0.994144 0.994225 0.9943 0.994372 0.994439 0.994502 0.994561
0.994617 0.99467 0.99472 0.994767 0.994811 0.994853 0.994893 0.99493 0.994966 0.994999 0.995031 0.995061 0.99509 0.995117
0.995142 0.995166 0.995189 0.995211 0.995232 0.995251 0.99527 #selex for gender,fleet: 1 / 4
 0.0451073 0.165428 0.230438 0.306504 0.392556 0.487026 0.587993 0.693432 0.801494 0.910717 1.02009 1.12902 1.23722 1.3446
1.45117 1.55699 1.66214 1.76664 1.87051 1.9737 2.07614 2.17775 2.27841 2.37797 2.47631 2.57328 2.66874 2.76255 2.8546

2.94476 3.03295 3.11907 3.20306 3.28485 3.36441 3.4417 3.51669 3.58939 3.65978 3.72788 3.79371 3.85729 3.91864 3.97781
4.03483 4.08974 4.1426 4.19345 4.24233 4.28931 4.33443 4.37775 4.41933 4.45922 4.49747 4.53414 4.56928 4.60294 4.63519
4.66606 4.69561 4.7239 4.75096 4.77684 4.8016 4.82527 4.8479 4.86953 4.8902 4.90996 4.92897 4.94727 4.96475 4.98145 4.99739
5.01261 5.02713 5.041 5.05424 5.06687 5.07892 5.09043 5.1014 5.11187 5.12186 5.13139 5.14048 5.14914 5.15741 5.1653 5.17281
5.17998 5.18682 5.19334 5.19955 5.20548 5.21113 5.21651 5.22165 5.22654 5.2312 #bodywt for gender,fleet: 1 / 5
 0 0.00452328 0.00784551 0.0132065 0.0215451 0.0340001 0.0517945 0.0760291 0.107433 0.146152 0.191651 0.242772 0.297912
0.355263 0.41304 0.469666 0.523873 0.574744 0.621697 0.664443 0.702923 0.737253 0.76766 0.794445 0.817941 0.83849
0.856428 0.872068 0.8857 0.897583 0.90795 0.917003 0.924921 0.931857 0.937945 0.9433 0.948021 0.952192 0.955886 0.959165
0.962083 0.964686 0.967013 0.969099 0.970974 0.972661 0.974184 0.975562 0.97681 0.977944 0.978976 0.979916 0.980776
0.981562 0.982283 0.982945 0.983554 0.984115 0.984633 0.985111 0.985553 0.985963 0.986343 0.986696 0.987024 0.987329
0.987614 0.987879 0.988127 0.988358 0.988566 0.988752 0.988927 0.98909 0.989244 0.989389 0.989525 0.989652 0.989773
0.989886 0.989993 0.990094 0.990189 0.990278 0.990363 0.990443 0.990519 0.99059 0.990658 0.990722 0.990782 0.99084
0.990894 0.990945 0.990994 0.99104 0.991084 0.991125 0.991164 0.991202 0.991237 #selex for gender,fleet: 1 / 5
 0.0461169 0.17056 0.238118 0.317476 0.407663 0.507143 0.613859 0.725437 0.839542 0.954217 1.06808 1.18032 1.29061 1.39892
1.50541 1.61028 1.71379 1.81613 1.91744 2.01783 2.11734 2.21596 2.31365 2.41032 2.50589 2.60023 2.69323 2.78476 2.8747
2.96293 3.04936 3.13388 3.21642 3.29691 3.3753 3.45153 3.52557 3.59742 3.66705 3.73448 3.79969 3.86272 3.92359 3.98231
4.03894 4.09349 4.14603 4.19659 4.24521 4.29195 4.33684 4.37999 4.4214 4.46112 4.49923 4.53577 4.57079 4.60434 4.63649
4.66727 4.69674 4.72495 4.75194 4.77776 4.80245 4.82607 4.84865 4.87023 4.89086 4.91057 4.92955 4.94783 4.96528 4.98195
4.99786 5.01306 5.02757 5.04142 5.05463 5.06725 5.07929 5.09077 5.10173 5.11219 5.12217 5.13168 5.14076 5.14942 5.15767
5.16555 5.17306 5.18022 5.18705 5.19356 5.19977 5.20568 5.21133 5.21671 5.22183 5.22672 5.23138 #bodywt for gender,fleet: 1 /
6
 0 0.00154453 0.00289709 0.00526506 0.00926313 0.0157531 0.0258402 0.0407852 0.061817 0.089876 0.125371 0.168037
0.216942 0.270629 0.327343 0.385268 0.442729 0.498319 0.550971 0.599955 0.644853 0.685503 0.721938 0.754333 0.782954
0.808116 0.830156 0.849412 0.866207 0.880844 0.893595 0.904708 0.9144 0.922863 0.930264 0.936746 0.942435 0.947438
0.951848 0.955743 0.959192 0.962254 0.964977 0.967406 0.969577 0.971522 0.973269 0.974841 0.97626 0.977543 0.978705
0.97976 0.980719 0.981594 0.982393 0.983124 0.983793 0.984408 0.984973 0.985494 0.985974 0.986417 0.986827 0.987206
0.987558 0.987885 0.988189 0.988472 0.988735 0.98898 0.989209 0.989394 0.989576 0.989746 0.989906 0.990057 0.990198
0.99033 0.990455 0.990572 0.990682 0.990786 0.990884 0.990977 0.991064 0.991146 0.991224 0.991297 0.991366 0.991432
0.991494 0.991552 0.991608 0.99166 0.99171 0.991757 0.991802 0.991844 0.991884 0.991922 0.991958 #selex for gender,fleet: 1 /
6
 0.0525563 0.17993 0.247375 0.323785 0.407423 0.496704 0.590408 0.687726 0.788169 0.891447 0.997362 1.10573 1.21635
1.32896 1.44326 1.55891 1.67555 1.79279 1.91024 2.02754 2.14432 2.26025 2.37504 2.48839 2.60008 2.70989 2.81763 2.92315
3.02631 3.12702 3.22519 3.32074 3.41365 3.50386 3.59137 3.67617 3.75827 3.83768 3.91444 3.98856 4.06009 4.12908 4.19557
4.25961 4.32126 4.38058 4.43763 4.49246 4.54515 4.59559 4.64443 4.69095 4.73567 4.77856 4.81968 4.85909 4.89685 4.93302
4.96766 5.00083 5.03257 5.06295 5.09202 5.11983 5.14643 5.17186 5.19618 5.21943 5.24165 5.26288 5.2833 5.30293 5.32168
5.3396 5.35671 5.37305 5.38865 5.40355 5.41777 5.43135 5.44432 5.45669 5.4685 5.47977 5.49053 5.50079 5.51058 5.51993
5.52884 5.53735 5.54546 5.5532 5.56059 5.56763 5.57435 5.58075 5.58686 5.59269 5.59825 5.60355 5.6086 #bodywt for
gender,fleet: 2 / 1
 0 0.0553774 0.0863557 0.128718 0.182905 0.247671 0.320196 0.396713 0.473314 0.546639 0.614257 0.67474 0.727535 0.772745
0.810896 0.842741 0.869117 0.89085 0.908704 0.923352 0.935371 0.945246 0.953376 0.960089 0.965651 0.970276 0.974137
0.977374 0.980101 0.982407 0.984366 0.986037 0.98747 0.988703 0.989769 0.990694 0.9915 0.992204 0.992823 0.993368 0.99385
0.994277 0.994657 0.994996 0.9953 0.995572 0.995818 0.996039 0.99624 0.996421 0.996586 0.996737 0.996874 0.996999
0.997114 0.99722 0.997317 0.997406 0.997489 0.997565 0.997635 0.997701 0.997761 0.997818 0.99787 0.997919 0.997964
0.998006 0.998046 0.998083 0.998116 0.998146 0.998174 0.998201 0.998225 0.998249 0.99827 0.998291 0.99831 0.998329
0.998346 0.998362 0.998378 0.998392 0.998406 0.998419 0.998431 0.998442 0.998453 0.998464 0.998474 0.998483 0.998492
0.9985 0.998508 0.998515 0.998522 0.998529 0.998536 0.998542 0.998547 #selex for gender,fleet: 2 / 1
 0.0538267 0.186823 0.258054 0.339168 0.427991 0.522288 0.620217 0.720557 0.822665 0.926304 1.03146 1.13819 1.24654 1.3565
1.46797 1.58077 1.69464 1.80929 1.92437 2.03955 2.15447 2.26879 2.38218 2.49435 2.60503 2.71399 2.82102 2.92594 3.02861
3.12891 3.22673 3.322 3.41466 3.50467 3.59201 3.67667 3.75866 3.83797 3.91464 3.9887 4.06017 4.12911 4.19556 4.25957
4.32119 4.38048 4.43751 4.49233 4.545 4.59559 4.64416 4.69077 4.73548 4.77837 4.81948 4.85889 4.89664 4.93281 4.96745
5.00061 5.03236 5.06274 5.09181 5.11961 5.14621 5.17164 5.19596 5.21921 5.24143 5.26266 5.28308 5.30271 5.32146 5.33937
5.35648 5.37282 5.38843 5.40333 5.41755 5.43113 5.44409 5.45647 5.46828 5.47955 5.4903 5.50057 5.51036 5.51971 5.52862
5.53713 5.54524 5.55298 5.56036 5.56741 5.57412 5.58053 5.58664 5.59247 5.59802 5.60332 5.60838 #bodywt for gender,fleet: 2 /
2
 0 0.0215796 0.0372142 0.0614136 0.0965083 0.143903 0.203384 0.272915 0.349035 0.427655 0.504876 0.577576 0.64366
0.702036 0.752436 0.795173 0.830916 0.860502 0.884813 0.904692 0.920903 0.934106 0.944862 0.953638 0.960813 0.966697
0.971539 0.97554 0.978859 0.981624 0.983938 0.985885 0.987529 0.988924 0.990114 0.991132 0.992008 0.992765 0.993421
0.993992 0.994492 0.99493 0.995316 0.995657 0.99596 0.996229 0.996469 0.996683 0.996876 0.99705 0.997206 0.997348
0.997476 0.997593 0.997699 0.997796 0.997884 0.997966 0.99804 0.998109 0.998172 0.99823 0.998284 0.998334 0.99838
0.998422 0.998462 0.998499 0.998533 0.998565 0.998594 0.998619 0.998643 0.998666 0.998687 0.998706 0.998725 0.998742
0.998758 0.998773 0.998788 0.998802 0.998814 0.998826 0.998838 0.998849 0.998859 0.998868 0.998877 0.998886 0.998894
0.998902 0.998909 0.998916 0.998922 0.998929 0.998934 0.99894 0.998945 0.99895 0.998955 #selex for gender,fleet: 2 / 2
 0.0586075 0.207928 0.284975 0.367903 0.452804 0.537936 0.623408 0.710207 0.799481 0.892172 0.988886 1.08986 1.195 1.30396
1.4162 1.53108 1.64793 1.76607 1.88488 2.0038 2.12232 2.24002 2.35652 2.4715 2.5847 2.6959 2.8049 2.91156 3.01575 3.11738
3.21636 3.31265 3.4062 3.497 3.58503 3.6703 3.75282 3.83261 3.90969 3.98412 4.05593 4.12516 4.19187 4.25612 4.31795 4.37744
4.43464 4.48961 4.54242 4.59314 4.64183 4.68854 4.73336 4.77633 4.81753 4.85701 4.89483 4.93107 4.96576 4.99898 5.03077
5.0612 5.09031 5.11816 5.14479 5.17026 5.19461 5.21789 5.24013 5.2614 5.28183 5.30148 5.32025 5.33818 5.3553 5.37165
5.38727 5.40218 5.41641 5.43 5.44298 5.45536 5.46718 5.47846 5.48922 5.49949 5.50929 5.51864 5.52756 5.53608 5.54419
5.55194 5.55933 5.56638 5.5731 5.57951 5.58562 5.59145 5.59702 5.60232 5.60738 #bodywt for gender,fleet: 2 / 3

0 0.017087 0.0389884 0.0804496 0.147738 0.240964 0.352609 0.470596 0.583126 0.682011 0.763514 0.82746 0.875799 0.911352
0.936996 0.955254 0.96815 0.977226 0.983611 0.988113 0.991301 0.993573 0.995203 0.996382 0.997243 0.997876 0.998347
0.9987 0.998968 0.999172 0.99933 0.999452 0.999549 0.999625 0.999685 0.999734 0.999774 0.999806 0.999833 0.999855
0.999873 0.999888 0.999901 0.999912 0.999921 0.999929 0.999936 0.999942 0.999947 0.999951 0.999955 0.999959 0.999962
0.999964 0.999967 0.999969 0.999971 0.999973 0.999974 0.999975 0.999977 0.999978 0.999979 0.99998 0.999981 0.999981
0.999982 0.999983 0.999983 0.999984 0.999984 0.999985 0.999985 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987
0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989
0.999989 0.999989 0.999989 0.99999 0.99999 0.99999 0.99999 0.99999 0.99999 #selex for gender,fleet: 2 / 3
 0.0536106 0.186343 0.258056 0.340523 0.431919 0.530069 0.632836 0.738469 0.845754 0.953995 1.06288 1.17233 1.28237
1.39306 1.50442 1.61641 1.72895 1.84187 1.95498 2.06805 2.18081 2.29298 2.40431 2.51453 2.6234 2.73068 2.83618 2.93971
3.04112 3.14029 3.2371 3.33147 3.42332 3.51261 3.59931 3.6834 3.76487 3.84373 3.91999 3.99367 4.06481 4.13345 4.19963
4.2634 4.3248 4.3839 4.44074 4.4954 4.54792 4.59837 4.64681 4.69331 4.73792 4.78071 4.82174 4.86106 4.89874 4.93484 4.96942
5.00252 5.03421 5.06454 5.09356 5.12132 5.14788 5.17327 5.19755 5.22077 5.24295 5.26416 5.28455 5.30416 5.3229 5.3408
5.35789 5.37422 5.38981 5.40469 5.41891 5.43247 5.44543 5.45779 5.46959 5.48085 5.4916 5.50185 5.51164 5.52098 5.52989
5.53838 5.54649 5.55423 5.5616 5.56864 5.57535 5.58175 5.58786 5.59368 5.59924 5.60453 5.60958 #bodywt for gender,fleet: 2 / 4
 0 0.0126026 0.0216487 0.0358669 0.0571166 0.0871369 0.127062 0.176985 0.235769 0.301211 0.370462 0.440542 0.508782
0.57309 0.632059 0.684924 0.731457 0.771818 0.806426 0.835841 0.860681 0.881563 0.899068 0.91372 0.92598 0.936244
0.944851 0.952081 0.95817 0.963314 0.967672 0.971378 0.97454 0.977247 0.979575 0.981583 0.983322 0.984833 0.986152
0.987306 0.98832 0.989213 0.990003 0.990704 0.991328 0.991885 0.992383 0.99283 0.993232 0.993595 0.993924 0.994221
0.994492 0.994738 0.994962 0.995168 0.995356 0.995528 0.995687 0.995833 0.995968 0.996092 0.996207 0.996314 0.996412
0.996504 0.996589 0.996669 0.996743 0.996812 0.996873 0.996928 0.99698 0.997028 0.997073 0.997116 0.997156 0.997193
0.997229 0.997262 0.997293 0.997323 0.997351 0.997377 0.997402 0.997425 0.997447 0.997468 0.997488 0.997507 0.997524
0.997541 0.997557 0.997572 0.997586 0.9976 0.997612 0.997624 0.997636 0.997647 0.997657 #selex for gender,fleet: 2 / 4
 0.0540146 0.188641 0.261915 0.346869 0.442033 0.545431 0.654787 0.767854 0.882737 0.99807 1.11303 1.22724 1.34059 1.45317
1.56512 1.67657 1.78763 1.89835 2.00872 2.11869 2.22813 2.33692 2.44487 2.55181 2.65754 2.76187 2.86462 2.96563 3.06473
3.16179 3.25669 3.34934 3.43964 3.52755 3.613 3.69597 3.77644 3.8544 3.92986 4.00282 4.07332 4.14138 4.20703 4.27032 4.3313
4.39001 4.44651 4.50085 4.55308 4.60327 4.65147 4.69775 4.74216 4.78477 4.82563 4.8648 4.90234 4.93831 4.97276 5.00575
5.03734 5.06757 5.0965 5.12419 5.15066 5.17599 5.2002 5.22336 5.24549 5.26664 5.28699 5.30657 5.32527 5.34314 5.3602 5.3765
5.39207 5.40693 5.42112 5.43467 5.4476 5.45994 5.47172 5.48297 5.4937 5.50394 5.51371 5.52304 5.53193 5.54042 5.54851
5.55624 5.5636 5.57063 5.57733 5.58373 5.58982 5.59564 5.60118 5.60647 5.61152 #bodywt for gender,fleet: 2 / 5
 0 0.00461383 0.00820409 0.0141284 0.0235208 0.0377641 0.0583289 0.0864948 0.123021 0.16789 0.220218 0.278378 0.340267
0.403632 0.466358 0.526678 0.583269 0.63527 0.682233 0.724048 0.760852 0.792949 0.820743 0.84468 0.865216 0.88279
0.897805 0.910628 0.921581 0.930945 0.938961 0.945835 0.951744 0.956836 0.961234 0.965045 0.968356 0.971242 0.973764
0.975975 0.977921 0.979636 0.981154 0.982501 0.9837 0.98477 0.985727 0.986585 0.987358 0.988054 0.988683 0.989253
0.989771 0.990242 0.990671 0.991063 0.991422 0.991751 0.992053 0.992331 0.992587 0.992824 0.993042 0.993244 0.993432
0.993606 0.993767 0.993917 0.994057 0.994188 0.994304 0.994408 0.994505 0.994595 0.994681 0.994761 0.994836 0.994906
0.994973 0.995035 0.995094 0.995149 0.995201 0.995251 0.995297 0.995341 0.995382 0.995421 0.995458 0.995493 0.995526
0.995558 0.995587 0.995615 0.995642 0.995667 0.995691 0.995713 0.995735 0.995755 0.995775 #selex for gender,fleet: 2 / 5
 0.0552083 0.19442 0.270517 0.359079 0.458727 0.567465 0.68279 0.802002 0.922637 1.04283 1.16143 1.27791 1.39224 1.5046
1.61533 1.72477 1.83322 1.94093 2.04804 2.15463 2.2607 2.36619 2.471 2.575 2.67801 2.77985 2.88036 2.97935 3.07667 3.17215
3.26567 3.3571 3.44635 3.53334 3.61799 3.70027 3.78015 3.85759 3.9326 4.00518 4.07534 4.1431 4.20851 4.27158 4.33237
4.39092 4.44727 4.50148 4.5536 4.6037 4.65182 4.69802 4.74237 4.78492 4.82572 4.86485 4.90235 4.93829 4.97271 5.00567
5.03723 5.06744 5.09636 5.12402 5.15048 5.17579 5.2 5.22314 5.24526 5.2664 5.28674 5.30631 5.32501 5.34287 5.35993 5.37623
5.39179 5.40664 5.42083 5.43437 5.4473 5.45964 5.47142 5.48266 5.49339 5.50363 5.5134 5.52272 5.53161 5.5401 5.54819
5.55591 5.56328 5.57031 5.57701 5.5834 5.5895 5.59531 5.60085 5.60614 5.61118 #bodywt for gender,fleet: 2 / 6
 0 0.00158138 0.00305208 0.00569527 0.0102628 0.0178228 0.0297486 0.0475881 0.0727967 0.106391 0.148642 0.198937
0.255837 0.317322 0.381115 0.44499 0.507014 0.565679 0.619947 0.669219 0.713266 0.752146 0.786114 0.815549 0.840897
0.862622 0.881181 0.897001 0.91047 0.921936 0.931701 0.940025 0.947132 0.953212 0.958425 0.962906 0.966769 0.970108
0.973003 0.975521 0.977717 0.979639 0.981327 0.982812 0.984125 0.985287 0.986319 0.987239 0.988061 0.988797 0.989458
0.990054 0.990591 0.991077 0.991518 0.991919 0.992283 0.992616 0.99292 0.993199 0.993455 0.99369 0.993906 0.994106
0.99429 0.99446 0.994618 0.994764 0.9949 0.995026 0.995138 0.995237 0.995329 0.995415 0.995496 0.995571 0.995642 0.995708
0.995771 0.995829 0.995884 0.995936 0.995985 0.996031 0.996074 0.996115 0.996154 0.99619 0.996224 0.996257 0.996288
0.996317 0.996344 0.99637 0.996394 0.996418 0.99644 0.996461 0.99648 0.996499 0.996517 #selex for gender,fleet: 2 / 6
 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 0.0484211
0.0484211 0.0484211 0.0484211 0.0484211 0.0484211 #mean M for year Yinit: 2009 sex: 1
 27.0866 25.4192 23.8426 22.2084 20.699 19.2212 17.8137 16.532 15.8581 14.9917 15.0319 14.5816 15.0981 15.2209 15.4642
15.3231 15.5407 15.6943 15.4922 14.5997 13.9539 12.9609 11.8449 10.6813 9.64819 8.59867 7.756 6.99557 6.23377 5.48363
4.85144 4.28799 3.75728 3.29946 2.89878 2.55677 2.26129 2.00927 1.78853 1.59871 1.43529 1.29277 1.16985 1.06379 0.97128
0.889917 0.818928 0.756094 0.70009 0.650587 0.606469 0.566958 0.530722 0.497569 0.467066 0.438804 0.412618 0.388576
0.366411 0.345673 0.326347 0.308558 0.291812 0.277056 0.263365 0.249804 0.236675 0.224171 0.212399 0.201278 0.190766
0.180847 0.171475 0.162634 0.154281 0.146374 0.138899 0.131871 0.125217 0.118941 0.113004 0.107388 0.10208 0.0970521
0.092287 0.0877631 0.0834728 0.0794043 0.075546 0.0718846 0.0684077 0.0651135 0.0619816 0.0590006 0.0561604 0.0534609
0.0508945 0.0484544 0.0461339 0.043927 0.882024 #numbers for year Yinit: 2009 sex: 1

0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 0.0476499
0.0476499 0.0476499 0.0476499 0.0476499 0.0476499 #mean M for year Yinit: 2009 sex: 2
 27.0866 25.4388 23.8793 22.2592 20.7612 19.2917 17.8899 16.6115 15.9416 15.0765 15.1217 14.6718 15.1923 15.313 15.549
15.391 15.5837 15.7009 15.4509 14.5044 13.7993 12.7506 11.5869 10.387 9.32707 8.26548 7.41672 6.65908 5.91139 5.1845 4.5768
4.03957 3.53714 3.106 2.73031 2.41082 2.13566 1.90164 1.69706 1.52145 1.37047 1.23884 1.12535 1.0274 0.941869 0.866508
0.800641 0.742185 0.689912 0.643571 0.602129 0.564875 0.530597 0.498967 0.469776 0.442591 0.41728 0.393946 0.37235
0.352062 0.333087 0.315573 0.29903 0.284442 0.270872 0.257366 0.24424 0.231697 0.219854 0.208635 0.198004 0.187948
0.178428 0.169433 0.160921 0.152854 0.145219 0.138033 0.131223 0.124792 0.118701 0.112933 0.107474 0.102296 0.0973822
0.0927099 0.0882728 0.0840591 0.0800576 0.0762553 0.0726398 0.0692102 0.0659454 0.0628341 0.0598661 0.0570419 0.0543541
0.0517956 0.0493601 0.0470413 0.961284 #numbers for year Yinit: 2009 sex: 2
 23.3808 22.5042 21.3588 21.5143 20.9758 21.836 22.1354 22.6127 22.5256 22.961 23.2979 23.0995 21.8576 20.9698 19.5457
17.9208 16.2092 14.6828 13.1203 11.8638 10.7252 9.57778 8.44188 7.48217 6.62419 5.81316 5.11188 4.49675 3.97071 3.5154
3.12643 2.78515 2.49121 2.23778 2.01645 1.82533 1.66023 1.51608 1.38918 1.27838 1.18025 1.09275 1.01538 0.94641 0.884637
0.82808 0.77616 0.728484 0.68432 0.64341 0.605857 0.571245 0.538868 0.508701 0.480939 0.454809 0.431786 0.410428 0.38928
0.36881 0.349317 0.33097 0.313639 0.297263 0.28181 0.267213 0.253445 0.240435 0.228121 0.216479 0.205532 0.195166
0.185389 0.176138 0.167387 0.159115 0.15128 0.143853 0.136801 0.130113 0.123771 0.117756 0.112047 0.106627 0.101491
0.0966077 0.09196 0.0875319 0.0833231 0.079322 0.0755178 0.0719003 0.0684599 0.0651876 0.0620749 0.0591137 0.0562962
0.0536152 0.0510638 0.0486355 0.978512 #numbers for year Ydeclare: 2002 sex: 1
 23.3808 22.5216 21.5627 21.0361 21.9089 22.2129 22.6861 22.9827 23.268 23.0001 21.6801 20.7039 19.1967
17.5003 15.7343 14.1673 12.5866 11.3206 10.186 9.06013 7.96028 7.03858 6.22144 5.4548 4.79556 4.21998 3.72972 3.30681
2.94663 2.63128 2.36022 2.12687 1.92318 1.74735 1.59544 1.46269 1.34563 1.24325 1.15236 1.07105 0.998963 0.934489 0.876533
0.823216 0.77403 0.728648 0.686396 0.647071 0.610826 0.577291 0.545794 0.516343 0.489165 0.463498 0.440865 0.419817
0.398874 0.378524 0.359081 0.340729 0.323346 0.306876 0.2913 0.276556 0.262625 0.249443 0.236949 0.225123 0.213992
0.20344 0.193476 0.184037 0.175097 0.166636 0.158609 0.15099 0.143746 0.136866 0.130332 0.124126 0.11823 0.112623
0.107304 0.102241 0.0974154 0.0928126 0.0884328 0.0842645 0.080297 0.0765202 0.0729247 0.0695013 0.0662416 0.0631375
0.0601811 0.0573653 0.0546829 0.0521275 1.06687 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
178.039 178.039 178.017 177.981 177.939 177.918 177.895 177.873 177.854 177.834 177.808 177.761 177.705 177.639 177.577
177.506 177.42 177.342 177.234 177.159 177.065 176.945 176.817 176.702 176.587 176.48 176.365 176.237 176.115 175.876
175.359 174.378 173.517 173.214 172.827 172.555 172.261 171.891 171.577 171.329 171.02 170.618 170.173 169.639 168.999
168.445 167.969 167.597 167.153 166.658 166.227 165.672 165.045 164.434 163.773 162.813 161.739 160.523 158.828 157.166
155.299 153.473 151.243 148.918 145.027 140.882 137.478 132.376 126.14 120.445 116.777 112.357 109.004 105.122 100.588
94.384 90.5642 83.6917 76.2328 69.6086 65.4346 60.2734 56.1648 51.1759 49.8567 47.098 47.2414 46.7616 47.8781 49.1294
50.341 51.4109 52.5456 53.3606 54.1731 #Recruits
7.43343e+008 7.43343e+008 7.43149e+008 7.42831e+008 7.4246e+008 7.42277e+008 7.42077e+008 7.41886e+008 7.4172e+008
7.41543e+008 7.41316e+008 7.40911e+008 7.40423e+008 7.39848e+008 7.39306e+008 7.38688e+008 7.37943e+008 7.37262e+008
7.36327e+008 7.35676e+008 7.34865e+008 7.3382e+008 7.3272e+008 7.31727e+008 7.30735e+008 7.29818e+008 7.28827e+008
7.2773e+008 7.2669e+008 7.24647e+008 7.2025e+008 7.11981e+008 7.0481e+008 7.02307e+008 6.99114e+008 6.96885e+008
6.94475e+008 6.91465e+008 6.88915e+008 6.8691e+008 6.84421e+008 6.81189e+008 6.7764e+008 6.73397e+008 6.68351e+008
6.64014e+008 6.60305e+008 6.57422e+008 6.53997e+008 6.502e+008 6.46917e+008 6.42707e+008 6.37982e+008 6.33414e+008
6.28506e+008 6.21442e+008 6.13628e+008 6.04888e+008 5.92914e+008 5.8138e+008 5.6868e+008 5.56493e+008 5.41943e+008
5.27126e+008 5.0312e+008 4.7858e+008 4.59175e+008 4.31283e+008 3.98998e+008 3.71113e+008 3.53907e+008 3.33907e+008
3.19242e+008 3.0279e+008 2.84251e+008 2.59989e+008 2.45651e+008 2.20929e+008 1.95553e+008 1.7419e+008 1.61258e+008
1.45801e+008 1.33897e+008 1.19898e+008 1.16277e+008 1.08809e+008 1.09194e+008 1.07908e+008 1.10906e+008 1.14294e+008
1.17602e+008 1.20547e+008 1.23693e+008 1.25969e+008 1.2825e+008 #SpawnBio
0.344 0.5 0 # spawn-recr steepness, sigmaR, autocorr
low catch mle steepness vector 1
 0 0 21.9348 84.1304 291.452 904.404 2480.97 5965.04 12586.6 23544.2 39628.9 61002.1 87216.9 117419 150599 185797 222224
259296 296626 333977 371220 408294 445176 481858 518333 554592 590618 626386 661866 697021 731810 766193 800126
833567 866478 898820 930558 961663 992106 1.02186e+006 1.05091e+006 1.07924e+006 1.10683e+006 1.13368e+006
1.15977e+006 1.1851e+006 1.20968e+006 1.2335e+006 1.25656e+006 1.27888e+006 1.30046e+006 1.32131e+006 1.34143e+006
1.36085e+006 1.37957e+006 1.39762e+006 1.41499e+006 1.43171e+006 1.4478e+006 1.46327e+006 1.47814e+006 1.49243e+006
1.50614e+006 1.51931e+006 1.53194e+006 1.54406e+006 1.55568e+006 1.56682e+006 1.57749e+006 1.58771e+006 1.5975e+006
1.60711e+006 1.61631e+006 1.62512e+006 1.63354e+006 1.64161e+006 1.64932e+006 1.65669e+006 1.66374e+006 1.67047e+006
1.67691e+006 1.68306e+006 1.68894e+006 1.69456e+006 1.69992e+006 1.70504e+006 1.70993e+006 1.7146e+006 1.71906e+006
1.72331e+006 1.72737e+006 1.73125e+006 1.73494e+006 1.73847e+006 1.74184e+006 1.74505e+006 1.74811e+006 1.75103e+006
1.75382e+006 1.75647e+006 1.75901e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0428692 0.153192 0.212758 0.281192 0.357026 0.438777 0.525197 0.615369 0.708681 0.804743 0.903288 1.0041 1.10697
1.21166 1.3179 1.42541 1.53387 1.64293 1.75227 1.86154 1.97042 2.07861 2.18583 2.29181 2.39632 2.49915 2.60012 2.69909
2.7959 2.89047 2.98269 3.07249 3.15983 3.24467 3.32697 3.40675 3.48399 3.5587 3.63091 3.70064 3.76793 3.83281 3.89533

3.95554 4.01349 4.06922 4.12281 4.1743 4.22375 4.27122 4.31678 4.36049 4.40239 4.44256 4.48105 4.51793 4.55324 4.58705
4.61941 4.65037 4.67999 4.70832 4.73541 4.76131 4.78607 4.80973 4.83234 4.85394 4.87457 4.89427 4.91321 4.93141 4.94879
4.96538 4.98121 4.99633 5.01075 5.02451 5.03764 5.05016 5.06211 5.07351 5.08438 5.09474 5.10463 5.11406 5.12305 5.13162
5.13979 5.14758 5.15501 5.16209 5.16883 5.17527 5.1814 5.18724 5.19281 5.19812 5.20318 5.208 5.21259 #bodywt for
gender,fleet: 1 / 1
 0 0.0484294 0.0752768 0.112217 0.159998 0.21799 0.284134 0.355346 0.428177 0.499431 0.566592 0.627983 0.682728 0.7306
0.77183 0.806935 0.836576 0.861458 0.882267 0.899636 0.914125 0.926218 0.936325 0.944789 0.951898 0.957886 0.962946
0.967239 0.970894 0.974017 0.976697 0.979005 0.981001 0.982733 0.984242 0.985561 0.986719 0.987738 0.988638 0.989437
0.990146 0.990779 0.991345 0.991853 0.992309 0.992721 0.993093 0.99343 0.993736 0.994015 0.994269 0.994501 0.994714
0.994909 0.995088 0.995253 0.995405 0.995545 0.995675 0.995795 0.995906 0.99601 0.996106 0.996195 0.996278 0.996356
0.996428 0.996496 0.996559 0.996619 0.996672 0.99672 0.996765 0.996808 0.996848 0.996885 0.996921 0.996954 0.996985
0.997015 0.997043 0.997069 0.997094 0.997117 0.997139 0.99716 0.99718 0.997199 0.997217 0.997233 0.997249 0.997264
0.997279 0.997292 0.997305 0.997317 0.997329 0.997339 0.99735 0.99736 0.997369 #selex for gender,fleet: 1 / 1
 0.0438883 0.15888 0.221688 0.294289 0.374938 0.461634 0.552554 0.646327 0.742099 0.839432 0.938153 1.03822 1.13963
1.24234 1.34629 1.45132 1.55726 1.66385 1.77083 1.8779 1.98477 2.09115 2.19673 2.30127 2.40452 2.50624 2.60626 2.70438
2.80047 2.89441 2.98609 3.07543 3.16236 3.24685 3.32886 3.40837 3.48539 3.5599 3.63194 3.70153 3.76869 3.83346 3.89588
3.956 4.01387 4.06954 4.12306 4.1745 4.22391 4.27134 4.31687 4.36054 4.40241 4.44256 4.48103 4.51788 4.55317 4.58696
4.61931 4.65026 4.67986 4.70818 4.73527 4.76116 4.78591 4.80956 4.83216 4.85375 4.87438 4.89408 4.91301 4.93121 4.94859
4.96517 4.981 4.99611 5.01053 5.02429 5.03741 5.04994 5.06188 5.07328 5.08414 5.09451 5.10439 5.11382 5.12281 5.13138
5.13955 5.14734 5.15476 5.16184 5.16859 5.17502 5.18115 5.18699 5.19256 5.19787 5.20293 5.20775 5.21234 #bodywt for
gender,fleet: 1 / 2
 0 0.0189229 0.0323133 0.0529866 0.0830661 0.124056 0.176224 0.238293 0.307636 0.380842 0.454414 0.525325 0.591334
0.651055 0.703861 0.749713 0.788969 0.822221 0.850169 0.873532 0.892995 0.909179 0.922629 0.933815 0.94313 0.950904
0.957409 0.962869 0.967468 0.971355 0.974653 0.977462 0.979863 0.981925 0.983702 0.98524 0.986575 0.987739 0.988757
0.989651 0.990439 0.991135 0.991753 0.992302 0.992793 0.993231 0.993625 0.993979 0.994299 0.994588 0.99485 0.995088
0.995305 0.995502 0.995683 0.995848 0.996 0.99614 0.996268 0.996387 0.996496 0.996597 0.996691 0.996778 0.996859 0.996934
0.997003 0.997068 0.997129 0.997186 0.997236 0.997281 0.997324 0.997364 0.997401 0.997436 0.997469 0.9975 0.997529
0.997556 0.997582 0.997607 0.99763 0.997651 0.997672 0.997691 0.997709 0.997727 0.997743 0.997758 0.997773 0.997787
0.9978 0.997812 0.997824 0.997835 0.997845 0.997855 0.997865 0.997874 0.997882 #selex for gender,fleet: 1 / 2
 0.0477025 0.17668 0.245345 0.321085 0.400134 0.4802 0.560714 0.642164 0.725408 0.811268 0.900348 0.992976 1.0892 1.18886
1.29158 1.39689 1.50425 1.6131 1.72287 1.83305 1.94314 2.05274 2.16145 2.26895 2.37496 2.47924 2.58158 2.68183 2.77984
2.8755 2.96873 3.05946 3.14765 3.23326 3.31627 3.39669 3.47451 3.54976 3.62246 3.69263 3.76033 3.82558 3.88844 3.94896
4.00719 4.06319 4.11701 4.16873 4.21838 4.26605 4.31178 4.35565 4.3977 4.43801 4.47663 4.51362 4.54905 4.58296 4.61541
4.64647 4.67617 4.70458 4.73175 4.75772 4.78254 4.80626 4.82902 4.85086 4.87126 4.89101 4.90999 4.92822 4.94563 4.96224
4.9781 4.99324 5.00768 5.02147 5.03461 5.04716 5.05913 5.07054 5.08143 5.09181 5.10171 5.11115 5.12015 5.12874 5.13692
5.14472 5.15216 5.15925 5.16601 5.17245 5.17859 5.18444 5.19002 5.19534 5.2004 5.20523 5.20983 #bodywt for gender,fleet: 1 / 3
 0 0.0142883 0.031975 0.0655623 0.121175 0.200757 0.299902 0.409286 0.518354 0.618599 0.705014 0.775914 0.831944 0.875009
0.907455 0.931567 0.949329 0.962352 0.971885 0.978869 0.984 0.987787 0.990597 0.992696 0.994275 0.995471 0.996384
0.997087 0.997633 0.998059 0.998395 0.998663 0.998876 0.999049 0.999189 0.999303 0.999397 0.999475 0.99954 0.999595
0.999641 0.99968 0.999713 0.999742 0.999766 0.999787 0.999806 0.999822 0.999836 0.999848 0.999859 0.999869 0.999878
0.999885 0.999892 0.999899 0.999904 0.999909 0.999914 0.999918 0.999921 0.999925 0.999928 0.999931 0.999933 0.999936
0.999938 0.99994 0.999942 0.999944 0.999945 0.999946 0.999948 0.999949 0.99995 0.999951 0.999952 0.999952 0.999953
0.999954 0.999955 0.999955 0.999956 0.999956 0.999957 0.999958 0.999958 0.999958 0.999959 0.999959 0.99996 0.99996
0.99996 0.999961 0.999961 0.999961 0.999962 0.999962 0.999962 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0438163 0.158937 0.222304 0.296202 0.379214 0.469471 0.564965 0.663897 0.764894 0.867065 0.969917 1.07323 1.17694
1.28105 1.38556 1.49045 1.59566 1.70106 1.80651 1.91183 2.01681 2.12123 2.22486 2.32747 2.42886 2.52883 2.62719 2.72377
2.81844 2.91106 3.00154 3.08977 3.17571 3.25928 3.34046 3.41921 3.49554 3.56943 3.6409 3.70997 3.77666 3.841 3.90303
3.96279 4.02033 4.0757 4.12895 4.18014 4.22931 4.27654 4.32186 4.36535 4.40706 4.44705 4.48538 4.5221 4.55727 4.59094
4.62318 4.65403 4.68355 4.71178 4.73878 4.7646 4.78928 4.81287 4.83541 4.85694 4.87752 4.89717 4.91606 4.93422 4.95157
4.96812 4.98392 4.99901 5.0134 5.02713 5.04024 5.05274 5.06466 5.07604 5.08689 5.09724 5.10711 5.11652 5.12549 5.13405
5.14221 5.14998 5.1574 5.16446 5.1712 5.17762 5.18374 5.18958 5.19514 5.20044 5.20549 5.2103 5.21488 #bodywt for
gender,fleet: 1 / 4
 0 0.010515 0.0180156 0.0298295 0.0475892 0.0729269 0.107082 0.150497 0.20257 0.261697 0.325558 0.391539 0.457138
0.520257 0.579344 0.633414 0.681982 0.724963 0.762552 0.795126 0.823162 0.84717 0.867661 0.885113 0.899964 0.9126 0.92336
0.932535 0.940372 0.947082 0.952841 0.957797 0.962075 0.965779 0.968995 0.971798 0.974247 0.976395 0.978284 0.97995
0.981425 0.982734 0.983899 0.984939 0.98587 0.986706 0.987457 0.988135 0.988748 0.989304 0.989809 0.990268 0.990687
0.991069 0.99142 0.991741 0.992036 0.992308 0.992558 0.992789 0.993003 0.9932 0.993384 0.993554 0.993712 0.993859
0.993996 0.994123 0.994242 0.994353 0.994453 0.994542 0.994626 0.994704 0.994787 0.994912 0.994974 0.995031
0.995086 0.995137 0.995185 0.99523 0.995273 0.995314 0.995352 0.995388 0.995422 0.995454 0.995485 0.995514 0.995541
0.995567 0.995592 0.995615 0.995637 0.995658 0.995677 0.995696 0.995714 0.995731 #selex for gender,fleet: 1 / 4
 0.0439901 0.160087 0.22441 0.300002 0.385856 0.480455 0.581895 0.688114 0.797186 0.907546 1.01809 1.12814 1.23737 1.34564
1.45299 1.55946 1.66513 1.77005 1.87424 1.97767 2.08029 2.18202 2.28275 2.38236 2.4807 2.57764 2.67306 2.7668 2.85877
2.94883 3.03691 3.1229 3.20675 3.2884 3.36779 3.4449 3.51971 3.59221 3.66241 3.7303 3.7959 3.85925 3.92037 3.9793 4.03607
4.09073 4.14333 4.19391 4.24253 4.28924 4.33409 4.37715 4.41845 4.45806 4.49604 4.53244 4.56731 4.60071 4.63268 4.66329
4.69258 4.7206 4.74741 4.77304 4.79755 4.82097 4.84336 4.86475 4.88519 4.90472 4.92351 4.94159 4.95885 4.97533 4.99107
5.00608 5.02041 5.03409 5.04714 5.05958 5.07146 5.09359 5.1039 5.11373 5.1231 5.13204 5.14056 5.14869 5.15643
5.16382 5.17086 5.17757 5.18397 5.19006 5.19587 5.20141 5.20669 5.21172 5.21652 5.22108 #bodywt for gender,fleet: 1 / 5
 0 0.00391377 0.00684258 0.0116101 0.0190942 0.0303849 0.0466896 0.0691484 0.0985918 0.135315 0.178951 0.228496 0.282453
0.339066 0.396549 0.453281 0.507927 0.559489 0.607307 0.651024 0.690523 0.725874 0.757275 0.785002 0.809377 0.830735
0.849409 0.865714 0.879944 0.892362 0.903205 0.912682 0.920977 0.928249 0.934635 0.940254 0.94521 0.949591 0.953472

0.956918 0.959985 0.962722 0.96517 0.967365 0.969336 0.971112 0.972715 0.974164 0.975478 0.976672 0.977758 0.978748
0.979653 0.980481 0.98124 0.981937 0.982578 0.983169 0.983714 0.984217 0.984683 0.985114 0.985514 0.985886 0.986231
0.986552 0.986852 0.987131 0.987392 0.987636 0.987854 0.98805 0.988234 0.988406 0.988568 0.98872 0.988863 0.988997
0.989124 0.989243 0.989356 0.989461 0.989561 0.989656 0.989745 0.989829 0.989908 0.989983 0.990054 0.990121 0.990185
0.990245 0.990302 0.990356 0.990407 0.990455 0.990501 0.990544 0.990586 0.990625 0.990662 #selex for gender,fleet: 1 / 5
 0.0450011 0.165152 0.232025 0.310905 0.400879 0.500463 0.607627 0.719979 0.835105 0.950938 1.06598 1.17935 1.29064
1.39982 1.50702 1.61248 1.71644 1.81913 1.9207 2.02128 2.12091 2.21961 2.31734 2.41402 2.50957 2.60388 2.69682 2.78828
2.87814 2.96628 3.0526 3.137 3.21942 3.29977 3.378 3.45407 3.52795 3.59962 3.66907 3.73629 3.8013 3.86412 3.92476 3.98326
4.03965 4.09397 4.14626 4.19656 4.24493 4.29142 4.33607 4.37894 4.42008 4.45954 4.49738 4.53366 4.56841 4.60171 4.63359
4.66412 4.69333 4.72128 4.74802 4.77359 4.79804 4.82142 4.84376 4.86511 4.88551 4.905 4.92376 4.94181 4.95905 4.97551
4.99122 5.00621 5.02053 5.03418 5.04721 5.05965 5.07151 5.08282 5.09362 5.10391 5.11373 5.12309 5.13202 5.14053 5.14864
5.15638 5.16376 5.17079 5.1775 5.18389 5.18998 5.19578 5.20132 5.20659 5.21161 5.2164 5.22097 #bodywt for gender,fleet: 1 / 6
 0 0.0013162 0.00249591 0.0045842 0.00814932 0.0140024 0.0232065 0.0370086 0.056669 0.083212 0.117171 0.158419 0.206148
0.258985 0.315212 0.373006 0.430651 0.486681 0.539958 0.58969 0.635402 0.676885 0.714141 0.747319 0.776671 0.802503
0.825151 0.844951 0.862231 0.877296 0.890425 0.90187 0.911854 0.920572 0.928196 0.934874 0.940735 0.945889 0.950431
0.954443 0.957995 0.961148 0.963952 0.966452 0.968687 0.970689 0.972486 0.974104 0.975564 0.976883 0.978078 0.979163
0.98015 0.981049 0.98187 0.982621 0.983309 0.983941 0.984521 0.985056 0.985549 0.986004 0.986425 0.986815 0.987176
0.987511 0.987823 0.988113 0.988383 0.988635 0.988859 0.989059 0.989246 0.989421 0.989585 0.989739 0.989883 0.990019
0.990147 0.990267 0.99038 0.990486 0.990586 0.990681 0.99077 0.990854 0.990934 0.991009 0.991079 0.991146 0.99121 0.99127
0.991326 0.99138 0.991431 0.991479 0.991524 0.991567 0.991608 0.991647 0.991684 #selex for gender,fleet: 1 / 6
 0.0513088 0.174637 0.241765 0.318167 0.402052 0.491734 0.585902 0.683677 0.784536 0.888179 0.994418 1.10308 1.21398
1.32688 1.44147 1.55742 1.67437 1.79194 1.90972 2.02734 2.14445 2.26069 2.37577 2.4894 2.60134 2.71137 2.81931 2.92499
3.02829 3.12909 3.22732 3.32291 3.41582 3.506 3.59346 3.67817 3.76016 3.83944 3.91603 3.98997 4.0613 4.13007 4.19632
4.26011 4.3215 4.38054 4.4373 4.49184 4.54422 4.5945 4.64276 4.68906 4.73345 4.77601 4.8168 4.85588 4.89331 4.92914 4.96345
4.99629 5.02771 5.05776 5.08651 5.114 5.14028 5.16541 5.18942 5.21237 5.23429 5.25524 5.27537 5.29471 5.31319 5.33083
5.34767 5.36375 5.3791 5.39375 5.40773 5.42107 5.43381 5.44595 5.45755 5.4686 5.47915 5.48922 5.49882 5.50797 5.5167
5.52503 5.53297 5.54055 5.54777 5.55465 5.56122 5.56748 5.57344 5.57913 5.58456 5.58973 5.59466 #bodywt for gender,fleet: 2 /
1
 0 0.0490961 0.0777753 0.117746 0.169824 0.233131 0.305074 0.38191 0.45958 0.534478 0.60391 0.666233 0.720747 0.767469
0.806893 0.839775 0.866972 0.889343 0.907682 0.922695 0.934985 0.945057 0.953329 0.960143 0.965774 0.970445 0.974336
0.977592 0.980328 0.982637 0.984595 0.986263 0.98769 0.988915 0.989973 0.99089 0.991688 0.992384 0.992995 0.993532
0.994006 0.994427 0.9948 0.995133 0.995431 0.995699 0.995939 0.996156 0.996351 0.996529 0.99669 0.996837 0.996971
0.997093 0.997205 0.997308 0.997402 0.997489 0.997569 0.997643 0.997712 0.997775 0.997834 0.997888 0.997939 0.997986
0.99803 0.998071 0.99811 0.998145 0.998178 0.998207 0.998234 0.998259 0.998283 0.998305 0.998327 0.998346 0.998365
0.998383 0.998399 0.998415 0.99843 0.998444 0.998457 0.99847 0.998481 0.998492 0.998503 0.998513 0.998522 0.998531
0.99854 0.998548 0.998555 0.998563 0.998569 0.998576 0.998582 0.998588 0.998593 #selex for gender,fleet: 2 / 1
 0.0525026 0.180991 0.251701 0.332627 0.421588 0.516266 0.61471 0.715598 0.818223 0.922324 1.02788 1.13498 1.24367 1.35395
1.46575 1.57887 1.69308 1.80808 1.92352 2.03906 2.15432 2.26897 2.38268 2.49515 2.60611 2.71531 2.82255 2.92766 3.03047
3.13088 3.22877 3.32409 3.41676 3.50675 3.59405 3.67863 3.76051 3.83969 3.91621 3.99008 4.06136 4.13008 4.1963 4.26005
4.32141 4.38043 4.43717 4.49169 4.54406 4.59434 4.64258 4.68887 4.73326 4.77582 4.8166 4.85567 4.8931 4.92893 4.96324
4.99607 5.02749 5.05755 5.08629 5.11378 5.14006 5.16519 5.1892 5.21215 5.23407 5.25502 5.27515 5.29449 5.31297 5.33061
5.34745 5.36353 5.37888 5.39353 5.40751 5.42085 5.43359 5.44574 5.45733 5.46839 5.47894 5.489 5.4986 5.50775 5.51649
5.52481 5.53275 5.54033 5.54755 5.55443 5.561 5.56726 5.57323 5.57892 5.58434 5.58951 5.59444 #bodywt for gender,fleet: 2 / 2
 0 0.0192514 0.0336583 0.0563154 0.0897053 0.135499 0.193782 0.262739 0.338975 0.418314 0.496676 0.57073 0.6382 0.697866
0.749388 0.793049 0.829522 0.859664 0.884385 0.904558 0.920971 0.934309 0.94515 0.953975 0.961174 0.967065 0.971903
0.975892 0.979195 0.981942 0.984237 0.986165 0.98779 0.989167 0.99034 0.991343 0.992204 0.992948 0.993591 0.994152
0.994641 0.99507 0.995447 0.99578 0.996076 0.996338 0.996572 0.996781 0.996969 0.997138 0.99729 0.997428 0.997552
0.997666 0.997769 0.997863 0.997949 0.998028 0.9981 0.998166 0.998228 0.998284 0.998336 0.998384 0.998429 0.99847
0.998509 0.998544 0.998578 0.998609 0.998636 0.998661 0.998684 0.998705 0.998725 0.998744 0.998762 0.998779 0.998795
0.998809 0.998823 0.998836 0.998849 0.998846 0.998871 0.998882 0.998891 0.998901 0.998909 0.998918 0.998926 0.998933
0.99894 0.998946 0.998953 0.998959 0.998964 0.99897 0.998975 0.998979 0.998984 #selex for gender,fleet: 2 / 2
 0.0569634 0.200727 0.277483 0.36093 0.446868 0.533141 0.619598 0.707139 0.796919 0.889935 0.986852 1.08797 1.19323
1.30233 1.41473 1.52982 1.64692 1.76534 1.88445 2.00369 2.12253 2.24054 2.35734 2.4726 2.58606 2.69748 2.80668 2.9135
3.01782 3.11954 3.21859 3.31491 3.40847 3.49924 3.58721 3.67239 3.75479 3.83444 3.91136 3.98561 4.05721 4.12622 4.19269
4.25668 4.31825 4.37746 4.43436 4.48904 4.54154 4.59194 4.64031 4.6867 4.73118 4.77382 4.81469 4.85383 4.89133 4.92722
4.96159 4.99447 5.02594 5.05604 5.08483 5.11236 5.13868 5.16383 5.18788 5.21086 5.23281 5.25378 5.27393 5.29329 5.31178
5.32943 5.34629 5.36238 5.37774 5.3924 5.40639 5.41975 5.43249 5.44465 5.45625 5.46732 5.47787 5.48794 5.49755 5.50671
5.51545 5.52378 5.53173 5.53931 5.54653 5.55342 5.55999 5.56626 5.57223 5.57792 5.58335 5.58852 5.59346 #bodywt for
gender,fleet: 2 / 3
 0 0.0147083 0.0340325 0.0714965 0.133976 0.222909 0.332028 0.449731 0.563869 0.665495 0.750118 0.817038 0.86793 0.905532
0.932748 0.952175 0.965924 0.975615 0.982439 0.987255 0.990669 0.993102 0.994848 0.996113 0.997035 0.997715 0.99822
0.9986 0.998887 0.999107 0.999276 0.999408 0.999512 0.999594 0.999659 0.999712 0.999754 0.999789 0.999818 0.999842
0.999861 0.999878 0.999892 0.999904 0.999914 0.999922 0.99993 0.999936 0.999942 0.999947 0.999951 0.999955 0.999958
0.999961 0.999963 0.999966 0.999968 0.99997 0.999971 0.999973 0.999974 0.999975 0.999977 0.999978 0.999978 0.999979
0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985
0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999988 0.999988
0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989 #selex for gender,fleet: 2 / 3
 0.0524184 0.181066 0.252443 0.334898 0.42659 0.525265 0.62866 0.734901 0.842694 0.95131 1.06044 1.17004 1.28017 1.39092
1.50234 1.61441 1.72706 1.84014 1.95344 2.06673 2.17973 2.29218 2.40378 2.51428 2.62341 2.73095 2.83668 2.94042 3.04202
3.14133 3.23826 3.33271 3.42461 3.51393 3.60062 3.68466 3.76606 3.84482 3.92095 3.99449 4.06546 4.13391 4.19988 4.26341

4.32458 4.38341 4.43999 4.49436 4.5466 4.59675 4.64489 4.69107 4.73537 4.77784 4.81854 4.85754 4.8949 4.93068 4.96493
4.99771 5.02908 5.05909 5.08779 5.11524 5.14149 5.16658 5.19056 5.21348 5.23538 5.2563 5.27641 5.29574 5.31419 5.33182
5.34865 5.36471 5.38005 5.39469 5.40866 5.422 5.43472 5.44686 5.45844 5.46949 5.48004 5.49009 5.49968 5.50883 5.51756
5.52588 5.53382 5.54138 5.5486 5.55548 5.56204 5.5683 5.57426 5.57995 5.58537 5.59053 5.59546 #bodywt for gender,fleet: 2 / 4
 0 0.0106984 0.0187773 0.0317657 0.0516096 0.0802328 0.119023 0.168318 0.227134 0.293283 0.363796 0.435497 0.505496
0.571514 0.632008 0.686139 0.733653 0.774721 0.809794 0.839475 0.864423 0.885297 0.90271 0.917216 0.929295 0.939362
0.947764 0.954792 0.960685 0.965643 0.969828 0.973373 0.976386 0.978959 0.981162 0.983058 0.984695 0.986113 0.987348
0.988425 0.98937 0.990201 0.990934 0.991582 0.992159 0.992672 0.993131 0.993542 0.993911 0.994244 0.994544 0.994816
0.995063 0.995288 0.995492 0.995679 0.99585 0.996007 0.99615 0.996283 0.996405 0.996517 0.996621 0.996717 0.996807
0.996889 0.996966 0.997038 0.997104 0.997166 0.997222 0.997271 0.997317 0.997361 0.997401 0.997439 0.997475 0.997509
0.99754 0.99757 0.997598 0.997624 0.997649 0.997673 0.997695 0.997716 0.997735 0.997754 0.997772 0.997788 0.997804
0.997819 0.997833 0.997846 0.997859 0.997871 0.997882 0.997893 0.997903 0.997913 0.997922 #selex for gender,fleet: 2 / 4
 0.052622 0.182357 0.254821 0.339219 0.43416 0.537728 0.647657 0.761646 0.877691 0.994303 1.11055 1.22596 1.34041 1.45393
1.56668 1.6788 1.7904 1.90156 2.01227 2.12251 2.23216 2.3411 2.44917 2.55618 2.66196 2.76631 2.86905 2.97002 3.06907
3.16606 3.26087 3.3534 3.44357 3.53133 3.61661 3.69939 3.77966 3.8574 3.93262 4.00533 4.07556 4.14334 4.20871 4.2717
4.33237 4.39076 4.44693 4.50094 4.55284 4.60268 4.65054 4.69647 4.74054 4.78279 4.8233 4.86212 4.89931 4.93493 4.96904
5.00169 5.03294 5.06284 5.09144 5.11879 5.14495 5.16995 5.19385 5.2167 5.23853 5.25939 5.27944 5.29873 5.31715 5.33474
5.35154 5.36757 5.38288 5.39749 5.41143 5.42474 5.43744 5.44956 5.46112 5.47215 5.48267 5.49271 5.50229 5.51142 5.52013
5.52844 5.53636 5.54391 5.55112 5.55799 5.56454 5.57078 5.57673 5.58241 5.58782 5.59298 5.5979 #bodywt for gender,fleet: 2 / 5
 0 0.00398505 0.00714593 0.0124106 0.0208416 0.0337679 0.0526546 0.0788489 0.113256 0.156055 0.206568 0.263332 0.324339
0.387354 0.450222 0.511088 0.568527 0.621573 0.669688 0.712687 0.750652 0.783851 0.812664 0.837529 0.858896 0.877206
0.892869 0.906259 0.917707 0.9275 0.935889 0.943088 0.949279 0.954615 0.959226 0.963222 0.966696 0.969723 0.97237
0.974691 0.976733 0.978535 0.980129 0.981543 0.982802 0.983926 0.984931 0.985833 0.986645 0.987376 0.988037 0.988636
0.98918 0.989675 0.990126 0.990538 0.990915 0.991261 0.991579 0.991871 0.99214 0.992389 0.992618 0.992831 0.993028
0.99321 0.99338 0.993538 0.993685 0.993822 0.993944 0.994053 0.994155 0.994251 0.99434 0.994424 0.994503 0.994577
0.994647 0.994713 0.994774 0.994832 0.994887 0.994939 0.994988 0.995034 0.995077 0.995118 0.995157 0.995194 0.995228
0.995261 0.995292 0.995321 0.995349 0.995376 0.995401 0.995424 0.995447 0.995468 0.995488 #selex for gender,fleet: 2 / 5
 0.0538053 0.188001 0.263261 0.351225 0.450586 0.559419 0.675254 0.795353 0.917151 1.03864 1.15854 1.27624 1.39163 1.50491
1.61639 1.72645 1.8354 1.94349 2.05091 2.15774 2.26399 2.36963 2.47455 2.57862 2.68168 2.78356 2.88407 2.98306 3.08034
3.17577 3.26922 3.36057 3.44971 3.53657 3.62108 3.7032 3.78289 3.86013 3.93492 4.00727 4.07718 4.14469 4.20982 4.27261
4.3331 4.39134 4.44738 4.50127 4.55307 4.60283 4.65062 4.69648 4.74049 4.78269 4.82316 4.86194 4.8991 4.93469 4.96877
5.0014 5.03263 5.06251 5.09109 5.11843 5.14458 5.16957 5.19346 5.2163 5.23812 5.25897 5.27902 5.29831 5.31672 5.33431
5.3511 5.36713 5.38243 5.39704 5.41098 5.42429 5.43698 5.4491 5.46066 5.47169 5.48221 5.49225 5.50182 5.51095 5.51966
5.52797 5.53589 5.54344 5.55064 5.55751 5.56406 5.5703 5.57626 5.58193 5.58734 5.5925 5.59742 #bodywt for gender,fleet: 2 / 6
 0 0.00134456 0.00262491 0.00495299 0.0090239 0.015845 0.0267441 0.043266 0.0669269 0.0988706 0.139539 0.188488 0.244411
0.305357 0.369048 0.43321 0.495828 0.555301 0.610501 0.660754 0.705775 0.74558 0.7804 0.810602 0.836628 0.858945 0.878015
0.894272 0.908116 0.919899 0.929932 0.938484 0.945785 0.952029 0.957381 0.96198 0.965944 0.969369 0.972338 0.97492
0.977171 0.979141 0.98087 0.982392 0.983735 0.984925 0.985982 0.986924 0.987765 0.988518 0.989194 0.989803 0.990353
0.99085 0.9913 0.99171 0.992083 0.992423 0.992734 0.993018 0.99328 0.99352 0.993741 0.993944 0.994133 0.994307 0.994468
0.994617 0.994756 0.994884 0.994998 0.995099 0.995193 0.995281 0.995363 0.99544 0.995513 0.99558 0.995644 0.995704
0.99576 0.995813 0.995862 0.995909 0.995953 0.995995 0.996034 0.996071 0.996106 0.996139 0.99617 0.9962 0.996228 0.996254
0.996279 0.996303 0.996325 0.996346 0.996366 0.996385 0.996403 #selex for gender,fleet: 2 / 6
 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 #mean M for year Yinit: 2009 sex: 1
 36.2694 34.0062 31.8684 29.7061 27.6987 25.7511 23.9009 22.2046 21.1681 19.9565 19.7237 18.9991 19.3042 19.2105 19.248
18.8996 18.9126 18.85 18.4254 17.3276 16.4613 15.2599 13.9418 12.5825 11.3531 10.1199 9.0947 8.16348 7.25175 6.37467
5.62679 4.96227 4.34781 3.81683 3.35316 2.95611 2.61318 2.31997 2.06435 1.84459 1.65549 1.49113 1.34938 1.22698 1.12032
1.0267 0.944905 0.872577 0.808199 0.751176 0.700281 0.654621 0.612922 0.574717 0.539657 0.507235 0.477224 0.44961
0.424105 0.400273 0.378063 0.357548 0.338272 0.321017 0.304957 0.289272 0.2742 0.259882 0.246391 0.233642 0.221585
0.210195 0.199425 0.189255 0.179641 0.170541 0.161937 0.153837 0.14617 0.138933 0.132087 0.12561 0.119484 0.11368
0.108178 0.102953 0.0979967 0.0932931 0.0888288 0.0845894 0.0805609 0.076739 0.0731033 0.0696417 0.0663432 0.0632056
0.0602203 0.0573796 0.054676 0.0521027 1.06428 #numbers for year Yinit: 2009 sex: 1
 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 #mean M for year Yinit: 2009 sex: 2
 36.2694 34.0281 31.9093 29.7627 27.7681 25.8301 23.9862 22.2936 21.2609 20.0502 19.8211 19.0959 19.403 19.3051 19.3329
18.9647 18.949 18.8453 18.3674 17.2099 16.2778 15.0139 13.6412 12.2394 10.9783 9.72973 8.69728 7.76959 6.87396 6.02288

45

5.30319 4.66895 4.08674 3.58637 3.15143 2.78044 2.46108 2.18886 1.95209 1.74899 1.57452 1.42301 1.29242 1.17966 1.08132
0.99487 0.919221 0.85216 0.792287 0.739096 0.691456 0.648554 0.609188 0.572943 0.539523 0.508463 0.479576 0.452886
0.428137 0.404921 0.383211 0.3631 0.344145 0.327154 0.311301 0.295755 0.280764 0.26648 0.252985 0.240196 0.228073
0.216594 0.20572 0.195435 0.185699 0.176475 0.167745 0.15952 0.151727 0.144365 0.137394 0.130791 0.124539 0.118608
0.112978 0.107626 0.102542 0.0977102 0.093119 0.0887537 0.0846006 0.080656 0.0768995 0.0733189 0.0699032 0.0666509
0.0635534 0.0606031 0.0577925 0.0551149 1.1428 #numbers for year Yinit: 2009 sex: 2
 31.1762 29.8034 28.1894 27.9673 27.0555 27.6167 27.6135 27.7993 27.4229 27.5635 27.5871 27.0707 25.5499 24.3538 22.6464
20.7499 18.7771 16.9848 15.1755 13.668 12.2935 10.9413 9.63489 8.51823 7.52336 6.60071 5.80173 5.10265 4.50303 3.98429
3.54012 3.1523 2.81845 2.53078 2.28044 2.0643 1.87746 1.7145 1.57133 1.44617 1.33543 1.23682 1.14945 1.07145 1.00147
0.937555 0.879002 0.825279 0.775607 0.729639 0.687351 0.6483 0.61182 0.57783 0.546438 0.516947 0.49055 0.465988 0.442004
0.41896 0.397075 0.376457 0.356976 0.338557 0.321158 0.30471 0.289179 0.274496 0.260599 0.247459 0.235087 0.223376
0.212322 0.201863 0.191967 0.182607 0.173738 0.165329 0.157345 0.149769 0.142579 0.135756 0.129276 0.123118 0.117275
0.111718 0.106426 0.101384 0.0965877 0.0920244 0.0876822 0.0835498 0.0796165 0.0758724 0.072308 0.0689143 0.0656828
0.0626053 0.0596743 0.0568825 1.1642 #numbers for year Ydeclare: 2002 sex: 1
 31.1762 29.8226 28.2253 28.0198 27.1205 27.6938 27.6945 27.8743 27.4767 27.5803 27.5471 26.9551 25.3485 24.0558 22.2561
20.2784 18.2421 16.4021 14.5693 13.0503 11.6805 10.3522 9.08486 8.01075 7.06182 6.18844 5.43643 4.78163 4.22231 3.74016
3.32867 2.9703 2.66253 2.39782 2.1677 1.96915 1.79754 1.64777 1.516 1.40064 1.29833 1.20697 1.12578 1.05306 0.987578
0.927499 0.872196 0.821214 0.773847 0.729806 0.689124 0.651412 0.616044 0.582977 0.552352 0.523491 0.497624 0.473493
0.449835 0.427026 0.405297 0.384772 0.365325 0.346892 0.329442 0.312913 0.297281 0.282483 0.268462 0.255192 0.242687
0.230839 0.219644 0.209042 0.198999 0.189489 0.180466 0.171901 0.163757 0.15602 0.148668 0.141682 0.135039 0.128718
0.122715 0.116998 0.111549 0.106351 0.101401 0.0966873 0.0921976 0.0879208 0.0838464 0.0799645 0.0762656 0.0727409
0.0693818 0.0661801 0.0631282 0.0602188 1.25055 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
173.133 173.133 173.117 173.091 173.061 173.046 173.03 173.014 173.001 172.986 172.968 172.934 172.894 172.847 172.803
172.752 172.691 172.635 172.558 172.504 172.437 172.351 172.259 172.177 172.095 172.019 171.936 171.845 171.758 171.587
171.216 170.51 169.889 169.671 169.391 169.195 168.983 168.716 168.49 168.312 168.089 167.799 167.478 167.092 166.628
166.227 165.884 165.617 165.298 164.942 164.634 164.235 163.782 163.341 162.863 162.163 161.377 160.482 159.226 157.989
156.593 155.22 153.532 151.76 148.754 145.514 142.829 138.743 133.657 128.934 125.866 122.12 119.264 115.92 111.964 106.444
103.04 96.7526 89.7825 83.4891 79.5352 74.5603 70.6088 65.7244 64.6254 62.0491 62.514 62.3525 63.8587 65.5077 67.1179
68.5856 70.117 71.3296 72.5388 #Recruits
7.48481e+008 7.48481e+008 7.48285e+008 7.47965e+008 7.47591e+008 7.47406e+008 7.47204e+008 7.47012e+008
7.46844e+008 7.46666e+008 7.46437e+008 7.46029e+008 7.45537e+008 7.44958e+008 7.44411e+008 7.43788e+008 7.43038e+008
7.42353e+008 7.41411e+008 7.40757e+008 7.39941e+008 7.3889e+008 7.37784e+008 7.36786e+008 7.3579e+008 7.34871e+008
7.33877e+008 7.32779e+008 7.31738e+008 7.29689e+008 7.25269e+008 7.16948e+008 7.09734e+008 7.07225e+008 7.04022e+008
7.01792e+008 6.99382e+008 6.96369e+008 6.93822e+008 6.91828e+008 6.89351e+008 6.8613e+008 6.82595e+008 6.78368e+008
6.73339e+008 6.69031e+008 6.65364e+008 6.62538e+008 6.59173e+008 6.55441e+008 6.52234e+008 6.48103e+008 6.4346e+008
6.38983e+008 6.34173e+008 6.272e+008 6.19481e+008 6.10837e+008 5.98946e+008 5.87506e+008 5.74899e+008 5.62816e+008
5.48363e+008 5.3365e+008 5.097e+008 4.8522e+008 4.65913e+008 4.38082e+008 4.05842e+008 3.78037e+008 3.60983e+008
3.41139e+008 3.26686e+008 3.10465e+008 2.92183e+008 2.68187e+008 2.54195e+008 2.29835e+008 2.04855e+008 1.83937e+008
1.71517e+008 1.56616e+008 1.45321e+008 1.31974e+008 1.2906e+008 1.22352e+008 1.2355e+008 1.23133e+008 1.27046e+008
1.31397e+008 1.35715e+008 1.39713e+008 1.43947e+008 1.47347e+008 1.5078e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
low catch mle steepness vector 2
 0 0 21.9348 84.1304 291.452 904.404 2480.97 5965.04 12586.6 23544.2 39628.9 61002.1 87216.9 117419 150599 185797 222224
259296 296626 333977 371220 408294 445176 481858 518333 554592 590618 626386 661866 697021 731810 766193 800126
833567 866478 898820 930558 961663 992106 1.02186e+006 1.05091e+006 1.07924e+006 1.10683e+006 1.13368e+006
1.15977e+006 1.1851e+006 1.20968e+006 1.2335e+006 1.25656e+006 1.27888e+006 1.30046e+006 1.32131e+006 1.34143e+006
1.36085e+006 1.37957e+006 1.39762e+006 1.41499e+006 1.43171e+006 1.4478e+006 1.46327e+006 1.47814e+006 1.49243e+006
1.50614e+006 1.51931e+006 1.53194e+006 1.54406e+006 1.55568e+006 1.56682e+006 1.57749e+006 1.58771e+006 1.5975e+006
1.60711e+006 1.61631e+006 1.62512e+006 1.63354e+006 1.64161e+006 1.64932e+006 1.65669e+006 1.66374e+006 1.67047e+006
1.67691e+006 1.68306e+006 1.68894e+006 1.69456e+006 1.69992e+006 1.70504e+006 1.70993e+006 1.7146e+006 1.71906e+006
1.72331e+006 1.72737e+006 1.73125e+006 1.73494e+006 1.73847e+006 1.74184e+006 1.74505e+006 1.74811e+006 1.75103e+006
1.75382e+006 1.75647e+006 1.75901e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0428692 0.153192 0.212758 0.281192 0.357026 0.438777 0.525197 0.615369 0.708681 0.804743 0.903288 1.0041 1.10697
1.21166 1.3179 1.42541 1.53387 1.64293 1.75227 1.86154 1.97042 2.07861 2.18583 2.29181 2.39632 2.49915 2.60012 2.69909
2.7959 2.89047 2.98269 3.07249 3.15983 3.24467 3.32697 3.40675 3.48399 3.5587 3.63091 3.70064 3.76793 3.83281 3.89533
3.95554 4.01349 4.06922 4.12281 4.1743 4.22375 4.27122 4.31678 4.36049 4.40239 4.44256 4.48105 4.51793 4.55324 4.58705
4.61941 4.65037 4.67999 4.70832 4.73541 4.76131 4.78607 4.80973 4.83234 4.85394 4.87457 4.89427 4.91321 4.93141 4.94879
4.96538 4.98121 4.99633 5.01075 5.02451 5.03764 5.05016 5.06211 5.07351 5.08438 5.09474 5.10463 5.11406 5.12305 5.13162
5.13979 5.14758 5.15501 5.16209 5.16883 5.17527 5.1814 5.18724 5.19281 5.19812 5.20318 5.208 5.21259 #bodywt for
gender,fleet: 1 / 1
 0 0.0484294 0.0752768 0.112217 0.159998 0.21799 0.284134 0.355346 0.428177 0.499431 0.566592 0.627983 0.682728 0.7306
0.77183 0.806935 0.836576 0.861458 0.882267 0.899636 0.914125 0.926218 0.936325 0.944789 0.951898 0.957886 0.962946
0.967239 0.970894 0.974017 0.976697 0.979005 0.981001 0.982733 0.984242 0.985561 0.986719 0.987738 0.988638 0.989437
0.990146 0.990779 0.991345 0.991853 0.992309 0.992721 0.993093 0.99343 0.993736 0.994015 0.994269 0.994501 0.994714
0.994909 0.995088 0.995253 0.995405 0.995545 0.995675 0.995795 0.995906 0.99601 0.996106 0.996195 0.996278 0.996356
0.996428 0.996496 0.996559 0.996619 0.996672 0.99672 0.996765 0.996808 0.996848 0.996885 0.996921 0.996954 0.996985

0.997015 0.997043 0.997069 0.997094 0.997117 0.997139 0.99716 0.99718 0.997199 0.997217 0.997233 0.997249 0.997264 0.997279 0.997292 0.997305 0.997317 0.997329 0.997339 0.99735 0.99736 0.997369 #selex for gender,fleet: 1 / 1
 0.0438883 0.15888 0.221688 0.294289 0.374938 0.461634 0.552554 0.646327 0.742099 0.839432 0.938153 1.03822 1.13963 1.24234 1.34629 1.45132 1.55726 1.66385 1.77083 1.8779 1.98477 2.09115 2.19673 2.30127 2.40452 2.50624 2.60626 2.70438 2.80047 2.89441 2.98609 3.07543 3.16236 3.24685 3.32886 3.40837 3.48539 3.5599 3.63194 3.70153 3.76869 3.83346 3.89588 3.956 4.01387 4.06954 4.12306 4.1745 4.22391 4.27134 4.31687 4.36054 4.40241 4.44256 4.48103 4.51788 4.55317 4.58696 4.61931 4.65026 4.67986 4.70818 4.73527 4.76116 4.78591 4.80956 4.83216 4.85375 4.87438 4.89408 4.91301 4.93121 4.94859 4.96517 4.981 4.99611 5.01053 5.02429 5.03741 5.04994 5.06188 5.07328 5.08414 5.09451 5.10439 5.11382 5.12281 5.13138 5.13955 5.14734 5.15476 5.16184 5.16859 5.17502 5.18115 5.18699 5.19256 5.19787 5.20293 5.20775 5.21234 #bodywt for gender,fleet: 1 / 2
 0 0.0189229 0.0323133 0.0529866 0.0830661 0.124056 0.176224 0.238293 0.307636 0.380842 0.454414 0.525325 0.591334 0.651055 0.703861 0.749713 0.788969 0.822221 0.850169 0.873532 0.892995 0.909179 0.922629 0.933815 0.94313 0.950904 0.957409 0.962869 0.967468 0.971355 0.974653 0.977462 0.979863 0.981925 0.983702 0.98524 0.986575 0.987739 0.988757 0.989651 0.990439 0.991135 0.991753 0.992302 0.992793 0.993231 0.993625 0.993979 0.994299 0.994588 0.99485 0.995088 0.995305 0.995502 0.995683 0.995848 0.996 0.99614 0.996268 0.996387 0.996496 0.996597 0.996691 0.996778 0.996859 0.996934 0.997003 0.997068 0.997129 0.997186 0.997236 0.997281 0.997324 0.997364 0.997401 0.997436 0.997469 0.9975 0.997529 0.997556 0.997582 0.997607 0.99763 0.997651 0.997672 0.997691 0.997709 0.997727 0.997743 0.997758 0.997773 0.997787 0.9978 0.997812 0.997824 0.997835 0.997845 0.997855 0.997865 0.997874 0.997882 #selex for gender,fleet: 1 / 2
 0.0477025 0.17668 0.245345 0.321085 0.400134 0.4802 0.560714 0.642164 0.725408 0.811268 0.900348 0.992976 1.0892 1.18886 1.29158 1.39689 1.50425 1.6131 1.72287 1.83305 1.94314 2.05274 2.16145 2.26895 2.37496 2.47924 2.58158 2.68183 2.77984 2.8755 2.96873 3.05946 3.14765 3.23326 3.31627 3.39669 3.47451 3.54976 3.62246 3.69263 3.76033 3.82558 3.88844 3.94896 4.00719 4.06319 4.11701 4.16873 4.21838 4.26605 4.31178 4.35565 4.3977 4.43801 4.47663 4.51362 4.54905 4.58296 4.61541 4.64647 4.67617 4.70458 4.73175 4.75772 4.78254 4.80626 4.82892 4.85058 4.87126 4.89101 4.90999 4.92822 4.94563 4.96224 4.9781 4.99324 5.00768 5.02147 5.03461 5.04716 5.05913 5.07054 5.08143 5.09181 5.10171 5.11115 5.12015 5.12874 5.13692 5.14472 5.15216 5.15925 5.16601 5.17245 5.17859 5.18444 5.19002 5.19534 5.2004 5.20523 5.20983 #bodywt for gender,fleet: 1 / 3
 0 0.0142883 0.031975 0.0655623 0.121175 0.200757 0.299902 0.409286 0.518354 0.618599 0.705014 0.775914 0.831944 0.875009 0.907455 0.931567 0.949329 0.962352 0.971885 0.978869 0.984 0.987787 0.990597 0.992696 0.994275 0.995471 0.996384 0.997087 0.997633 0.998059 0.998395 0.998663 0.998876 0.999049 0.999189 0.999303 0.999397 0.999475 0.99954 0.999595 0.999641 0.99968 0.999713 0.999742 0.999766 0.999787 0.999806 0.999822 0.999836 0.999848 0.999859 0.999869 0.999878 0.999885 0.999892 0.999899 0.999904 0.999909 0.999914 0.999918 0.999921 0.999925 0.999928 0.999931 0.999933 0.999936 0.999938 0.99994 0.999942 0.999944 0.999945 0.999946 0.999948 0.999949 0.99995 0.999951 0.999952 0.999952 0.999953 0.999954 0.999955 0.999955 0.999956 0.999956 0.999957 0.999958 0.999958 0.999958 0.999959 0.999959 0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999962 0.999962 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0438163 0.158937 0.222304 0.296202 0.379214 0.469471 0.564965 0.663897 0.764894 0.867065 0.969917 1.07323 1.17694 1.28105 1.38556 1.49045 1.59566 1.70106 1.80651 1.91183 2.01681 2.12123 2.22486 2.32747 2.42886 2.52883 2.62719 2.72377 2.81844 2.91106 3.00154 3.08977 3.17571 3.25928 3.34046 3.41921 3.49554 3.56943 3.6409 3.70997 3.77666 3.841 3.90303 3.96279 4.02033 4.0757 4.12895 4.18014 4.22931 4.27654 4.32186 4.36535 4.40706 4.44705 4.48538 4.5221 4.55727 4.59094 4.62318 4.65403 4.68355 4.71178 4.73878 4.7646 4.78928 4.81287 4.83541 4.85694 4.87752 4.89717 4.91606 4.93422 4.95157 4.96812 4.98392 4.99901 5.0134 5.02713 5.04024 5.05274 5.06466 5.07604 5.08689 5.09724 5.10711 5.11652 5.12549 5.13405 5.14221 5.14998 5.1574 5.16446 5.1712 5.17762 5.18374 5.18958 5.19514 5.20044 5.20549 5.2103 5.21488 #bodywt for gender,fleet: 1 / 4
 0 0.010515 0.0180156 0.0298295 0.0475892 0.0729269 0.107082 0.150497 0.20257 0.261697 0.325558 0.391539 0.457138 0.520257 0.579344 0.633414 0.681982 0.724963 0.762552 0.795126 0.823162 0.84717 0.867661 0.885113 0.899964 0.9126 0.92336 0.932535 0.940372 0.947082 0.952841 0.957797 0.962075 0.965779 0.968995 0.971798 0.974247 0.976395 0.978284 0.97995 0.981425 0.982734 0.983899 0.984939 0.98587 0.986706 0.987457 0.988135 0.988748 0.989304 0.989809 0.990268 0.990687 0.991069 0.99142 0.991741 0.992036 0.992308 0.992558 0.992789 0.993003 0.9932 0.993384 0.993554 0.993712 0.993859 0.993996 0.994123 0.994242 0.994353 0.994453 0.994542 0.994626 0.994704 0.994778 0.994847 0.994912 0.994974 0.995031 0.995086 0.995137 0.995185 0.99523 0.995273 0.995314 0.995352 0.995388 0.995422 0.995454 0.995485 0.995514 0.995541 0.995567 0.995592 0.995615 0.995637 0.995658 0.995677 0.995696 0.995714 0.995731 #selex for gender,fleet: 1 / 4
 0.0439901 0.160087 0.22441 0.300002 0.385856 0.480455 0.581895 0.688114 0.797186 0.907546 1.01809 1.12814 1.23737 1.34564 1.45299 1.55946 1.66513 1.77005 1.87424 1.97767 2.08029 2.18202 2.28275 2.38236 2.4807 2.57764 2.67306 2.7668 2.85877 2.94883 3.03691 3.1229 3.20675 3.2884 3.36779 3.4449 3.51971 3.59221 3.66241 3.7303 3.7959 3.85925 3.92037 3.9793 4.03607 4.09073 4.14333 4.19391 4.24253 4.28924 4.33409 4.37715 4.41845 4.45806 4.49604 4.53244 4.56731 4.60071 4.63268 4.66329 4.69258 4.7206 4.74741 4.77304 4.79755 4.82097 4.84336 4.86475 4.88519 4.90472 4.92351 4.94159 4.95885 4.97533 4.99107 5.00608 5.02041 5.03409 5.04714 5.05958 5.07146 5.08279 5.09359 5.1039 5.11373 5.1231 5.13204 5.14056 5.14869 5.15643 5.16382 5.17086 5.17757 5.18397 5.19006 5.19587 5.20141 5.20669 5.21172 5.21652 5.22108 #bodywt for gender,fleet: 1 / 5
 0 0.00391377 0.00684258 0.0116101 0.0190942 0.0303849 0.0466896 0.0691484 0.0985918 0.135315 0.178951 0.228496 0.282453 0.339066 0.396549 0.453281 0.507927 0.559489 0.607307 0.651024 0.690523 0.725874 0.757275 0.785002 0.809377 0.830735 0.849409 0.865714 0.879944 0.892362 0.903205 0.912682 0.920977 0.928249 0.934635 0.940254 0.94521 0.949591 0.953472 0.956918 0.959985 0.962722 0.96517 0.967365 0.969336 0.971112 0.972715 0.974164 0.975478 0.976672 0.977758 0.978748 0.979653 0.980481 0.98124 0.981937 0.982578 0.983169 0.983714 0.984217 0.984683 0.985114 0.985514 0.985886 0.986231 0.986552 0.986852 0.987131 0.987392 0.987636 0.987854 0.98805 0.988234 0.988406 0.988568 0.98872 0.988863 0.988997 0.989124 0.989243 0.989356 0.989461 0.989561 0.989656 0.989745 0.989829 0.989908 0.989983 0.990054 0.990121 0.990185 0.990245 0.990302 0.990356 0.990407 0.990455 0.990501 0.990544 0.990586 0.990625 0.990662 #selex for gender,fleet: 1 / 5
 0.0450011 0.165152 0.232025 0.310905 0.400879 0.500463 0.607627 0.719979 0.835105 0.950938 1.06598 1.17935 1.29064 1.39982 1.50702 1.61248 1.71644 1.81913 1.9207 2.02128 2.12091 2.21961 2.31734 2.41402 2.50957 2.60388 2.69682 2.78828 2.87814 2.96628 3.0526 3.137 3.21942 3.29977 3.378 3.45407 3.52795 3.59962 3.66907 3.73629 3.8013 3.86412 3.92476 3.98326 4.03965 4.09397 4.14626 4.19656 4.24493 4.29142 4.33607 4.37894 4.42008 4.45954 4.49738 4.53366 4.56841 4.60171 4.63359 4.66412 4.69333 4.72128 4.74802 4.77359 4.79804 4.82142 4.84376 4.86511 4.88551 4.905 4.92376 4.94181 4.95905 4.97551

4.99122 5.00621 5.02053 5.03418 5.04721 5.05965 5.07151 5.08282 5.09362 5.10391 5.11373 5.12309 5.13202 5.14053 5.14864 5.15638 5.16376 5.17079 5.1775 5.18389 5.18998 5.19578 5.20132 5.20659 5.21161 5.2164 5.22097 #bodywt for gender,fleet: 1 / 6
 0 0.0013162 0.00249591 0.0045842 0.00814932 0.0140024 0.0232065 0.0370086 0.056669 0.083212 0.117171 0.158419 0.206148 0.258985 0.315212 0.373006 0.430651 0.486681 0.539958 0.58969 0.635402 0.676885 0.714141 0.747319 0.776671 0.802503 0.825151 0.844951 0.862231 0.877296 0.890425 0.90187 0.911854 0.920572 0.928196 0.934874 0.940735 0.945889 0.950431 0.954443 0.957995 0.961148 0.963952 0.966452 0.968687 0.970689 0.972486 0.974104 0.975564 0.976883 0.978078 0.979163 0.98015 0.981049 0.98187 0.982621 0.983309 0.983941 0.984521 0.985056 0.985549 0.986004 0.986425 0.986815 0.987176 0.987511 0.987823 0.988113 0.988383 0.988635 0.988859 0.989059 0.989246 0.989421 0.989585 0.989739 0.989883 0.990019 0.990147 0.990267 0.99038 0.990486 0.990586 0.990681 0.99077 0.990854 0.990934 0.991009 0.991079 0.991146 0.99121 0.99127 0.991326 0.99138 0.991431 0.991479 0.991524 0.991567 0.991608 0.991647 0.991684 #selex for gender,fleet: 1 / 6
 0.0513088 0.174637 0.241765 0.318167 0.402052 0.491734 0.585902 0.683677 0.784536 0.888179 0.994418 1.10308 1.21398 1.32688 1.44147 1.55742 1.67437 1.79194 1.90972 2.02734 2.14445 2.26069 2.37577 2.4894 2.60134 2.71137 2.81931 2.92499 3.02829 3.12909 3.22732 3.32291 3.41582 3.506 3.59346 3.67817 3.76016 3.83944 3.91603 3.98997 4.0613 4.13007 4.19632 4.26011 4.3215 4.38054 4.4373 4.49184 4.54422 4.5945 4.64276 4.68906 4.73345 4.77601 4.8168 4.85588 4.89331 4.92914 4.96345 4.99629 5.02771 5.05776 5.08651 5.114 5.14028 5.16541 5.18942 5.21237 5.23429 5.25524 5.27537 5.29471 5.31319 5.33083 5.34767 5.36375 5.3791 5.39375 5.40773 5.42107 5.43381 5.44595 5.45755 5.4686 5.47915 5.48922 5.49882 5.50797 5.5167 5.52503 5.53297 5.54055 5.54777 5.55465 5.56122 5.56748 5.57344 5.57913 5.58456 5.58973 5.59466 #bodywt for gender,fleet: 2 / 1
 0 0.0490961 0.0777753 0.117746 0.169824 0.233131 0.305074 0.38191 0.45958 0.534478 0.60391 0.666233 0.720747 0.767469 0.806893 0.839775 0.866972 0.889343 0.907682 0.922695 0.934985 0.945057 0.953329 0.960143 0.965774 0.970445 0.974336 0.977592 0.980328 0.982637 0.984595 0.986263 0.98769 0.988915 0.989973 0.99089 0.991688 0.992384 0.992995 0.993532 0.994006 0.994427 0.9948 0.995133 0.995431 0.995699 0.995939 0.996156 0.996351 0.996529 0.99669 0.996837 0.996971 0.997093 0.997205 0.997308 0.997402 0.997489 0.997569 0.997643 0.997712 0.997775 0.997834 0.997888 0.997939 0.997986 0.99803 0.998071 0.99811 0.998145 0.998178 0.998207 0.998234 0.998259 0.998283 0.998305 0.998327 0.998346 0.998365 0.998383 0.998399 0.998415 0.99843 0.998444 0.998457 0.99847 0.998481 0.998492 0.998503 0.998513 0.998522 0.998531 0.99854 0.998548 0.998555 0.998563 0.998569 0.998576 0.998582 0.998588 0.998593 #selex for gender,fleet: 2 / 1
 0.0525026 0.180991 0.251701 0.332627 0.421588 0.516266 0.61471 0.715598 0.818223 0.922324 1.02788 1.13498 1.24367 1.35395 1.46575 1.57887 1.69308 1.80808 1.92352 2.03906 2.15432 2.26897 2.38268 2.49515 2.60611 2.71531 2.82255 2.92766 3.03047 3.13088 3.22877 3.32409 3.41676 3.50675 3.59405 3.67863 3.76051 3.83969 3.91621 3.99008 4.06136 4.13008 4.1963 4.26005 4.32141 4.38043 4.43717 4.49169 4.54406 4.59434 4.64258 4.68887 4.73326 4.77582 4.8166 4.85567 4.8931 4.92893 4.96324 4.99607 5.02749 5.05755 5.08629 5.11378 5.14006 5.16519 5.1892 5.21215 5.23407 5.25502 5.27515 5.29449 5.31297 5.33061 5.34745 5.36353 5.37888 5.39353 5.40751 5.42085 5.43359 5.44574 5.45733 5.46839 5.47894 5.489 5.4986 5.50775 5.51649 5.52481 5.53275 5.54033 5.54755 5.55443 5.561 5.56726 5.57323 5.57892 5.58434 5.58951 5.59444 #bodywt for gender,fleet: 2 / 2
 0 0.0192314 0.0336583 0.0563154 0.0897053 0.135499 0.193782 0.262739 0.338975 0.418314 0.496676 0.57073 0.6382 0.697866 0.749388 0.793049 0.829522 0.859664 0.884385 0.904558 0.920971 0.934309 0.94515 0.953975 0.961174 0.967065 0.971903 0.975892 0.979195 0.981942 0.984237 0.986165 0.98779 0.989167 0.99034 0.991343 0.992204 0.992948 0.993591 0.994152 0.994641 0.99507 0.995447 0.99578 0.996076 0.996338 0.996572 0.996781 0.996969 0.997138 0.99729 0.997428 0.997552 0.997666 0.997769 0.997863 0.997949 0.998028 0.9981 0.998166 0.998228 0.998284 0.998336 0.998384 0.998429 0.99847 0.998509 0.998544 0.998578 0.998609 0.998636 0.998661 0.998684 0.998705 0.998725 0.998744 0.998762 0.998779 0.998795 0.998809 0.998823 0.998836 0.998849 0.99886 0.998871 0.998882 0.998891 0.998901 0.998909 0.998918 0.998926 0.998933 0.99894 0.998946 0.998953 0.998959 0.998964 0.99897 0.998975 0.998979 0.998984 #selex for gender,fleet: 2 / 2
 0.0569634 0.200727 0.277483 0.36093 0.446868 0.533141 0.619598 0.707139 0.796919 0.889935 0.986852 1.08797 1.19323 1.30233 1.41473 1.52982 1.64692 1.76534 1.88445 2.00369 2.12253 2.24054 2.35734 2.4726 2.58606 2.69748 2.80668 2.9135 3.01782 3.11954 3.21859 3.31491 3.40847 3.49924 3.58721 3.67239 3.75479 3.83444 3.91136 3.98561 4.05721 4.12622 4.19269 4.25668 4.31825 4.37746 4.43436 4.48904 4.54154 4.59194 4.64031 4.6867 4.73118 4.77382 4.81469 4.85383 4.89133 4.92722 4.96159 4.99447 5.02594 5.05604 5.08483 5.11236 5.13868 5.16383 5.18788 5.21086 5.23281 5.25378 5.27393 5.29329 5.31178 5.32943 5.34629 5.36238 5.37774 5.3924 5.40639 5.41975 5.43249 5.44465 5.45625 5.46732 5.47787 5.48794 5.49755 5.50671 5.51545 5.52378 5.53173 5.53931 5.54653 5.55342 5.55999 5.56626 5.57223 5.57792 5.58335 5.58852 5.59346 #bodywt for gender,fleet: 2 / 3
 0 0.0147083 0.0340325 0.0714965 0.133976 0.222909 0.332028 0.449731 0.563869 0.665495 0.750118 0.817038 0.86793 0.905532 0.932748 0.952175 0.965924 0.975615 0.982439 0.987255 0.990669 0.993102 0.994848 0.996113 0.997035 0.997715 0.99822 0.9986 0.998887 0.999107 0.999276 0.999408 0.999512 0.999594 0.999659 0.999712 0.999754 0.999789 0.999818 0.999842 0.999861 0.999878 0.999892 0.999904 0.999914 0.999922 0.99993 0.999936 0.999942 0.999947 0.999951 0.999955 0.999958 0.999961 0.999963 0.999966 0.999968 0.99997 0.999971 0.999973 0.999974 0.999975 0.999977 0.999978 0.999978 0.999979 0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989 0.999989 #selex for gender,fleet: 2 / 3
 0.0524184 0.181066 0.252443 0.334898 0.42659 0.525265 0.62866 0.734901 0.842694 0.95131 1.06044 1.17004 1.28017 1.39092 1.50234 1.61441 1.72706 1.84014 1.95344 2.06673 2.17973 2.29218 2.40378 2.51428 2.62341 2.73095 2.83668 2.94042 3.04202 3.14133 3.23826 3.33271 3.42461 3.51393 3.60062 3.68466 3.76606 3.84482 3.92095 3.99449 4.06546 4.13391 4.19988 4.26341 4.32458 4.38341 4.43999 4.49436 4.5466 4.59675 4.64489 4.69107 4.73537 4.77784 4.81854 4.85754 4.8949 4.93068 4.96493 4.99771 5.02908 5.05909 5.08779 5.11524 5.14149 5.16658 5.19056 5.21348 5.23538 5.2563 5.27641 5.29574 5.31419 5.33182 5.34865 5.36471 5.38005 5.39469 5.40866 5.422 5.43472 5.44686 5.45844 5.46949 5.48004 5.49009 5.49968 5.50883 5.51756 5.52588 5.53382 5.54138 5.5486 5.55548 5.56204 5.5683 5.57426 5.57995 5.58537 5.59053 5.59546 #bodywt for gender,fleet: 2 / 4
 0 0.0106984 0.0187773 0.0317657 0.0516096 0.0802328 0.119023 0.168318 0.227134 0.293283 0.363796 0.435497 0.505496 0.571514 0.632008 0.686139 0.733653 0.774721 0.809794 0.839475 0.864423 0.885297 0.90271 0.917216 0.929295 0.939362 0.947764 0.954792 0.960685 0.965643 0.969828 0.973373 0.976386 0.978959 0.981162 0.983058 0.984695 0.986113 0.987348 0.988425 0.98937 0.990201 0.990934 0.991582 0.992159 0.992672 0.993131 0.993542 0.993911 0.994244 0.994544 0.994816 0.995063 0.995288 0.995492 0.995679 0.99585 0.996007 0.99615 0.996283 0.996405 0.996517 0.996621 0.996717 0.996807 0.996889 0.996966 0.997038 0.997104 0.997166 0.997222 0.997271 0.997317 0.997361 0.997401 0.997439 0.997475 0.997509

0.99754 0.99757 0.997598 0.997624 0.997649 0.997673 0.997695 0.997716 0.997735 0.997754 0.997772 0.997788 0.997804
0.997819 0.997833 0.997846 0.997859 0.997871 0.997882 0.997893 0.997903 0.997913 0.997922 #selex for gender,fleet: 2 / 4
 0.052622 0.182357 0.254821 0.339219 0.43416 0.537728 0.647657 0.761646 0.877691 0.994303 1.11055 1.22596 1.34041 1.45393
1.56668 1.6788 1.7904 1.90156 2.01227 2.12251 2.23216 2.3411 2.44917 2.55618 2.66196 2.76631 2.86905 2.97002 3.06907
3.16606 3.26087 3.3534 3.44357 3.53133 3.61661 3.69939 3.77966 3.8574 3.93262 4.00533 4.07556 4.14334 4.20871 4.2717
4.33237 4.39076 4.44693 4.50094 4.55284 4.60268 4.65054 4.69647 4.74054 4.78279 4.8233 4.86212 4.89931 4.93493 4.96904
5.00169 5.03294 5.06284 5.09144 5.11879 5.14495 5.16995 5.19385 5.2167 5.23853 5.25939 5.27944 5.29873 5.31715 5.33474
5.35154 5.36757 5.38288 5.39749 5.41143 5.42474 5.43744 5.44956 5.46112 5.47215 5.48267 5.49271 5.50229 5.51142 5.52013
5.52844 5.53636 5.54391 5.55112 5.55799 5.56454 5.57078 5.57673 5.58241 5.58782 5.59298 5.5979 #bodywt for gender,fleet: 2 / 5
 0 0.00398505 0.00714593 0.0124106 0.0208416 0.0337679 0.0526546 0.0788489 0.113256 0.156055 0.206568 0.263332 0.324339
0.387354 0.450222 0.511088 0.568527 0.621573 0.669688 0.712687 0.750652 0.783851 0.812664 0.837529 0.858896 0.877206
0.892869 0.906259 0.917707 0.9275 0.935889 0.943088 0.949279 0.954615 0.959226 0.963222 0.966696 0.969723 0.97237
0.974691 0.976733 0.978535 0.980129 0.981543 0.982802 0.983926 0.984931 0.985833 0.986645 0.987376 0.988037 0.988636
0.98918 0.989675 0.990126 0.990538 0.990915 0.991261 0.991579 0.991871 0.99214 0.992389 0.992618 0.992831 0.993028
0.99321 0.99338 0.993538 0.993685 0.993822 0.993944 0.994053 0.994155 0.994251 0.99434 0.994424 0.994503 0.994577
0.994647 0.994713 0.994774 0.994832 0.994887 0.994939 0.994988 0.995034 0.995077 0.995118 0.995157 0.995194 0.995228
0.995261 0.995292 0.995321 0.995349 0.995376 0.995401 0.995424 0.995447 0.995468 0.995488 #selex for gender,fleet: 2 / 5
 0.0538053 0.188001 0.263261 0.351225 0.450586 0.559419 0.675254 0.795353 0.917151 1.03864 1.15854 1.27624 1.39163 1.50491
1.61639 1.72645 1.8354 1.94349 2.05091 2.15774 2.26399 2.36963 2.47455 2.57862 2.68168 2.78356 2.88407 2.98306 3.08034
3.17577 3.26922 3.36057 3.44971 3.53657 3.62108 3.7032 3.78289 3.86013 3.93492 4.00727 4.07718 4.14469 4.20982 4.27261
4.3331 4.39134 4.44738 4.50127 4.55307 4.60283 4.65062 4.69648 4.74049 4.78269 4.82316 4.86194 4.8991 4.93469 4.96877
5.0014 5.03263 5.06251 5.09109 5.11843 5.14458 5.16957 5.19346 5.2163 5.23812 5.25897 5.27902 5.29831 5.31672 5.33431
5.3511 5.36713 5.38243 5.39704 5.41098 5.42429 5.43698 5.4491 5.46066 5.47169 5.48221 5.49225 5.50182 5.51095 5.51966
5.52797 5.53589 5.54344 5.55064 5.55751 5.56406 5.5703 5.57626 5.58193 5.58734 5.5925 5.59742 #bodywt for gender,fleet: 2 / 6
 0 0.00134456 0.00262491 0.00495299 0.0090239 0.015845 0.0267441 0.043266 0.0669269 0.0988706 0.139539 0.188488 0.244411
0.305357 0.369048 0.43321 0.495828 0.555301 0.610501 0.660754 0.705775 0.74558 0.7804 0.810602 0.836628 0.858945 0.878015
0.894272 0.908116 0.919899 0.929932 0.938484 0.945785 0.952029 0.957381 0.96198 0.965944 0.969369 0.972338 0.97492
0.977171 0.979141 0.98087 0.982392 0.983735 0.984925 0.985982 0.986924 0.987765 0.988518 0.989194 0.989803 0.990353
0.99085 0.9913 0.99171 0.992083 0.992423 0.992734 0.993018 0.99328 0.99352 0.993741 0.993944 0.994133 0.994307 0.994468
0.994617 0.994756 0.994884 0.994998 0.995099 0.995193 0.995281 0.995363 0.99544 0.995513 0.99558 0.995644 0.995704
0.99576 0.995813 0.995862 0.995909 0.995953 0.995995 0.996034 0.996071 0.996106 0.996139 0.99617 0.9962 0.996228 0.996254
0.996279 0.996303 0.996325 0.996346 0.996366 0.996385 0.996403 #selex for gender,fleet: 2 / 6
 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
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0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204
0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 0.0476204 #mean M for year Yinit: 2009 sex: 1
 36.2694 34.0062 31.8684 29.7061 27.6987 25.7511 23.9009 22.2046 21.1681 19.9565 19.7237 18.9991 19.3042 19.2105 19.248
18.8996 18.9126 18.85 18.4254 17.3276 16.4613 15.2599 13.9418 12.5825 11.3531 10.1199 9.0947 8.16348 7.25175 6.37467
5.62679 4.96227 4.34781 3.81683 3.35316 2.95611 2.61318 2.31997 2.06435 1.84459 1.65549 1.49113 1.34938 1.22698 1.12032
1.0267 0.944905 0.872577 0.808199 0.751176 0.700281 0.654621 0.612922 0.574717 0.539657 0.507235 0.477224 0.44961
0.424105 0.400273 0.378063 0.357548 0.338272 0.321017 0.304957 0.289272 0.2742 0.259882 0.246391 0.233642 0.221585
0.210195 0.199425 0.189255 0.179641 0.170541 0.161937 0.153837 0.14617 0.138933 0.132087 0.12561 0.119484 0.11368
0.108178 0.102953 0.0979967 0.0932931 0.0888288 0.0845894 0.0805609 0.076739 0.0731033 0.0696417 0.0663432 0.0632056
0.0602203 0.0573796 0.054676 0.0521027 1.06428 #numbers for year Yinit: 2009 sex: 1
 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 0.0469787
0.0469787 0.0469787 0.0469787 0.0469787 0.0469787 #mean M for year Yinit: 2009 sex: 2
 36.2694 34.0281 31.9093 29.7627 27.7681 25.8301 23.9862 22.2936 21.2609 20.0502 19.8211 19.0959 19.403 19.3051 19.3329
18.9647 18.949 18.8453 18.3674 17.2099 16.2778 15.0139 13.6412 12.2394 10.9783 9.72973 8.69728 7.76959 6.87396 6.02288
5.30319 4.66895 4.08674 3.58637 3.15143 2.78044 2.46108 2.18886 1.95209 1.74899 1.57452 1.42301 1.29242 1.17966 1.08132
0.99487 0.919221 0.85216 0.792287 0.739096 0.691456 0.648554 0.609188 0.572943 0.539523 0.508463 0.479576 0.452886
0.428137 0.404921 0.383211 0.3631 0.344145 0.327154 0.311301 0.295755 0.280764 0.26648 0.252985 0.240196 0.228073
0.216594 0.20572 0.195435 0.185699 0.176475 0.167745 0.15952 0.151727 0.144365 0.137394 0.130791 0.124539 0.118608
0.112978 0.107626 0.102542 0.0977102 0.093119 0.0887537 0.0846006 0.080656 0.0768995 0.0733189 0.0699032 0.0666509
0.0635534 0.0606031 0.0577925 0.0551149 1.1428 #numbers for year Yinit: 2009 sex: 2
 31.1762 29.8034 28.1894 27.9673 27.0555 27.6167 27.6135 27.7993 27.4229 27.5635 27.5871 27.0707 25.5499 24.3538 22.6464
20.7499 18.7771 16.9848 15.1755 13.668 12.2935 10.9413 9.63489 8.51823 7.52336 6.60071 5.80173 5.10265 4.50303 3.98429
3.54012 3.1523 2.81845 2.53078 2.28044 2.0643 1.87746 1.7145 1.57133 1.44617 1.33543 1.23682 1.14945 1.07145 1.00147
0.937555 0.879002 0.825279 0.775607 0.729639 0.687351 0.6483 0.61182 0.57783 0.546438 0.516947 0.49055 0.465988 0.442004

0.41896 0.397075 0.376457 0.356976 0.338557 0.321158 0.30471 0.289179 0.274496 0.260599 0.247459 0.235087 0.223376
0.212322 0.201863 0.191967 0.182607 0.173738 0.165329 0.157345 0.149769 0.142579 0.135756 0.129276 0.123118 0.117275
0.111718 0.106426 0.101384 0.0965877 0.0920244 0.0876822 0.0835498 0.0796165 0.0758724 0.072308 0.0689143 0.0656828
0.0626053 0.0596743 0.0568825 1.1642 #numbers for year Ydeclare: 2002 sex: 1
 31.1762 29.8226 28.2253 28.0198 27.1205 27.6938 27.6945 27.8743 27.4767 27.5803 27.5471 26.9551 25.3485 24.0558 22.2561
20.2784 18.2421 16.4021 14.5693 13.0503 11.6805 10.3522 9.08486 8.01075 7.06182 6.18844 5.43643 4.78163 4.22231 3.74016
3.32867 2.9703 2.66253 2.39782 2.1677 1.96915 1.79754 1.64777 1.516 1.40064 1.29833 1.20697 1.12578 1.05306 0.987578
0.927499 0.872196 0.821214 0.773847 0.729806 0.689124 0.651412 0.616044 0.582977 0.552352 0.523491 0.497624 0.473493
0.449835 0.427026 0.405297 0.384772 0.365325 0.346892 0.329442 0.312913 0.297281 0.282483 0.268462 0.255192 0.242687
0.230839 0.219644 0.209042 0.198999 0.189489 0.180466 0.171901 0.163757 0.15602 0.148668 0.141682 0.135039 0.128718
0.122715 0.116998 0.111549 0.106351 0.101401 0.0966873 0.0921976 0.0879208 0.0838464 0.0799645 0.0762656 0.0727409
0.0693818 0.0661801 0.0631282 0.0602188 1.25055 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
173.133 173.133 173.117 173.091 173.061 173.046 173.03 173.014 173.001 172.986 172.968 172.934 172.894 172.847 172.803
172.752 172.691 172.635 172.558 172.504 172.437 172.351 172.259 172.177 172.095 172.019 171.936 171.845 171.758 171.587
171.216 170.51 169.889 169.671 169.391 169.195 168.983 168.716 168.49 168.312 168.089 167.799 167.478 167.092 166.628
166.227 165.884 165.617 165.298 164.942 164.634 164.235 163.782 163.341 162.863 162.163 161.377 160.482 159.226 157.989
156.593 155.22 153.532 151.76 148.754 145.514 142.829 138.743 133.657 128.934 125.866 122.12 119.264 115.92 111.964 106.444
103.04 96.7526 89.7825 83.4891 79.5352 74.5603 70.6088 65.7244 64.6254 62.0491 62.514 62.3525 63.8587 65.5077 67.1179
68.5856 70.117 71.3296 72.5388 #Recruits
7.48481e+008 7.48481e+008 7.48285e+008 7.47965e+008 7.4751e+008 7.47406e+008 7.47204e+008 7.47012e+008
7.46844e+008 7.46666e+008 7.46437e+008 7.46029e+008 7.45537e+008 7.44958e+008 7.44411e+008 7.43788e+008 7.43038e+008
7.42353e+008 7.41411e+008 7.40757e+008 7.39941e+008 7.3889e+008 7.37784e+008 7.36786e+008 7.3579e+008 7.34871e+008
7.33877e+008 7.32779e+008 7.31738e+008 7.29689e+008 7.25269e+008 7.16948e+008 7.09734e+008 7.07225e+008 7.04022e+008
7.01792e+008 6.99382e+008 6.96369e+008 6.93822e+008 6.91828e+008 6.89351e+008 6.8613e+008 6.82595e+008 6.78368e+008
6.73339e+008 6.69031e+008 6.65364e+008 6.62538e+008 6.59173e+008 6.55441e+008 6.52234e+008 6.48103e+008 6.4346e+008
6.38983e+008 6.34173e+008 6.272e+008 6.19481e+008 6.10837e+008 5.98946e+008 5.87506e+008 5.74899e+008 5.62816e+008
5.48363e+008 5.3365e+008 5.097e+008 4.8522e+008 4.65913e+008 4.38082e+008 4.05842e+008 3.78037e+008 3.60983e+008
3.41139e+008 3.26686e+008 3.10465e+008 2.92183e+008 2.68187e+008 2.54195e+008 2.29835e+008 2.04855e+008 1.83937e+008
1.71517e+008 1.56616e+008 1.45321e+008 1.31974e+008 1.2906e+008 1.22352e+008 1.2355e+008 1.23133e+008 1.27046e+008
1.31397e+008 1.35715e+008 1.39713e+008 1.43947e+008 1.47347e+008 1.5078e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
catch mid high steepness vector 1
 0 0 19.9821 77.4202 270.83 848.763 2351.71 5708.49 12148.7 22890.4 38757.3 59942.1 86018.2 116136 149281 184483 220938
258054 295432 332832 370122 407239 444157 480870 517370 553648 589687 625463 660944 696094 730873 765238 799148
832561 865437 897738 929430 960482 990868 1.02056e+006 1.04954e+006 1.0778e+006 1.10532e+006 1.13208e+006
1.15809e+006 1.18333e+006 1.20782e+006 1.23155e+006 1.25452e+006 1.27674e+006 1.29821e+006 1.31896e+006 1.33898e+006
1.3583e+006 1.37692e+006 1.39485e+006 1.41212e+006 1.42874e+006 1.44473e+006 1.46009e+006 1.47486e+006 1.48904e+006
1.50265e+006 1.51572e+006 1.52825e+006 1.54027e+006 1.55179e+006 1.56283e+006 1.57341e+006 1.58354e+006 1.59324e+006
1.60276e+006 1.61187e+006 1.62059e+006 1.62893e+006 1.6369e+006 1.64453e+006 1.65182e+006 1.65879e+006 1.66545e+006
1.67182e+006 1.6779e+006 1.68371e+006 1.68925e+006 1.69455e+006 1.69961e+006 1.70443e+006 1.70904e+006 1.71344e+006
1.71763e+006 1.72164e+006 1.72546e+006 1.7291e+006 1.73258e+006 1.7359e+006 1.73906e+006 1.74208e+006 1.74495e+006
1.7477e+006 1.75031e+006 1.7528e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0421538 0.149953 0.209298 0.277709 0.353689 0.435693 0.522404 0.612848 0.706382 0.802601 0.90124 1.00209 1.10497
1.20963 1.31585 1.42332 1.53174 1.64078 1.75009 1.85935 1.96823 2.07642 2.18364 2.28962 2.39414 2.49697 2.59794 2.69689
2.79369 2.88822 2.9804 3.07016 3.15744 3.2422 3.32443 3.40411 3.48124 3.55585 3.62793 3.69753 3.76468 3.82942 3.89178
3.95183 4.00961 4.06518 4.11858 4.16989 4.21917 4.26646 4.31186 4.35534 4.39706 4.43704 4.47534 4.51203 4.54715 4.58077
4.61294 4.64372 4.67316 4.7013 4.72822 4.75394 4.77852 4.80201 4.82445 4.84589 4.86634 4.8859 4.90468 4.92273 4.93996
4.9564 4.97209 4.98706 5.00134 5.01497 5.02797 5.04036 5.05219 5.06347 5.07422 5.08447 5.09425 5.10357 5.11245 5.12092
5.129 5.13669 5.14403 5.15102 5.15768 5.16403 5.17008 5.17585 5.18134 5.18658 5.19156 5.19631 5.20084 #bodywt for
gender,fleet: 1 / 1
 0 0.0436719 0.0686759 0.103576 0.149369 0.205706 0.270763 0.341568 0.414649 0.486689 0.555002 0.617741 0.673888 0.723112
0.765582 0.801784 0.832367 0.858043 0.879511 0.897421 0.91235 0.924799 0.935192 0.943888 0.951181 0.957317 0.962497
0.966885 0.970616 0.973801 0.97653 0.978878 0.980906 0.982664 0.984194 0.98553 0.986702 0.987732 0.988642 0.989447
0.990162 0.9908 0.99137 0.991881 0.99234 0.992753 0.993127 0.993465 0.993772 0.994051 0.994306 0.994538 0.994751 0.994946
0.995125 0.99529 0.995442 0.995582 0.995711 0.995831 0.995942 0.996045 0.996141 0.99623 0.996313 0.99639 0.996462 0.99653
0.996593 0.996651 0.996705 0.996752 0.996797 0.996839 0.996879 0.996916 0.996951 0.996984 0.997015 0.997045 0.997072
0.997099 0.997123 0.997146 0.997168 0.997189 0.997209 0.997227 0.997245 0.997261 0.997277 0.997292 0.997306 0.99732
0.997332 0.997344 0.997356 0.997366 0.997377 0.997386 0.997395 #selex for gender,fleet: 1 / 1
 0.0431406 0.155373 0.217849 0.29032 0.371039 0.457961 0.549186 0.643274 0.73932 0.836862 0.935723 1.03587 1.13731 1.24002
1.34395 1.44896 1.55487 1.66144 1.7684 1.87547 1.98234 2.08872 2.19433 2.29888 2.40214 2.50387 2.60389 2.70201 2.7981
2.89201 2.98366 3.07296 3.15984 3.24427 3.3262 3.40563 3.48254 3.55695 3.62888 3.69833 3.76536 3.82999 3.89226 3.95222
4.00993 4.06543 4.11878 4.17005 4.21927 4.26653 4.31186 4.35535 4.39704 4.43699 4.47528 4.51194 4.54705 4.58065 4.61281
4.64357 4.673 4.70114 4.72804 4.75376 4.77833 4.80182 4.82425 4.84568 4.86614 4.88568 4.90446 4.9225 4.93973 4.95617
4.97185 4.98682 5.0011 5.01473 5.02772 5.04012 5.05194 5.06321 5.07397 5.08422 5.09399 5.10331 5.1122 5.12066 5.12874
5.13643 5.14377 5.15076 5.15742 5.16377 5.16982 5.17558 5.18107 5.18631 5.19129 5.19605 5.20057 #bodywt for gender,fleet: 1 /
2

0 0.0171869 0.0296538 0.0491314 0.0778158 0.117371 0.168272 0.22944 0.298359 0.371635 0.445697 0.517399 0.584369 0.645107 0.698902 0.745661 0.785716 0.819648 0.848161 0.871984 0.891817 0.908295 0.921976 0.933342 0.942797 0.950678 0.957266 0.962788 0.967434 0.971357 0.974681 0.977509 0.979925 0.981997 0.983781 0.985323 0.98666 0.987826 0.988844 0.989738 0.990525 0.99122 0.991836 0.992383 0.992871 0.993308 0.9937 0.994052 0.99437 0.994657 0.994917 0.995153 0.995368 0.995564 0.995743 0.995907 0.996057 0.996195 0.996323 0.99644 0.996548 0.996648 0.996741 0.996827 0.996906 0.99698 0.997049 0.997113 0.997173 0.997229 0.997279 0.997324 0.997365 0.997404 0.997441 0.997476 0.997508 0.997539 0.997567 0.997594 0.99762 0.997644 0.997666 0.997688 0.997708 0.997727 0.997745 0.997762 0.997778 0.997793 0.997807 0.997821 0.997834 0.997846 0.997857 0.997868 0.997878 0.997888 0.997897 0.997906 0.997915 #selex for gender,fleet: 1 / 2
0.0467737 0.172323 0.240725 0.316721 0.396426 0.477289 0.558526 0.640518 0.724101 0.810114 0.8992 0.991728 1.08779 1.18726 1.28978 1.39492 1.50213 1.61086 1.72055 1.83067 1.94074 2.05033 2.15905 2.26656 2.37258 2.47688 2.57923 2.67949 2.77749 2.87314 2.96635 3.05704 3.14518 3.23073 3.31367 3.394 3.47173 3.54687 3.61945 3.6895 3.75706 3.82217 3.88488 3.94524 4.0033 4.05914 4.11279 4.16432 4.2138 4.26128 4.30683 4.35051 4.39237 4.43249 4.47093 4.50773 4.54296 4.57669 4.60896 4.63982 4.66935 4.69757 4.72456 4.75035 4.775 4.79855 4.82105 4.84254 4.86306 4.88265 4.90147 4.91955 4.9368 4.95327 4.96899 4.98398 4.99829 5.01194 5.02495 5.03737 5.04921 5.06051 5.07128 5.08155 5.09134 5.10067 5.10957 5.11805 5.12614 5.13385 5.14119 5.14819 5.15487 5.16123 5.16728 5.17306 5.17856 5.1838 5.1888 5.19356 5.19809 #bodywt for gender,fleet: 1 / 3
0 0.0127052 0.0286521 0.0593828 0.111202 0.186822 0.282839 0.390622 0.499733 0.60133 0.689883 0.763217 0.821627 0.866821 0.901062 0.926628 0.945537 0.959447 0.969659 0.977159 0.982682 0.986764 0.989799 0.992068 0.993776 0.995073 0.996063 0.996826 0.997419 0.997883 0.998248 0.998539 0.998772 0.99896 0.999112 0.999237 0.99934 0.999425 0.999496 0.999555 0.999606 0.999648 0.999685 0.999716 0.999743 0.999766 0.999786 0.999804 0.999819 0.999833 0.999845 0.999856 0.999865 0.999873 0.999881 0.999888 0.999894 0.999899 0.999904 0.999909 0.999913 0.999917 0.99992 0.999923 0.999926 0.999929 0.999931 0.999933 0.999935 0.999937 0.999939 0.99994 0.999942 0.999943 0.999944 0.999945 0.999946 0.999947 0.999948 0.999949 0.999949 0.99995 0.999951 0.999952 0.999952 0.999953 0.999953 0.999954 0.999954 0.999955 0.999955 0.999955 0.999956 0.999956 0.999956 0.999957 0.999957 0.999957 0.999958 0.999958 0.999958 #selex for gender,fleet: 1 / 3
0.0431218 0.155657 0.218775 0.29263 0.375817 0.466432 0.562393 0.661812 0.763243 0.865747 0.968817 1.07224 1.17597 1.28002 1.38443 1.48919 1.59424 1.6995 1.80481 1.91 2.01487 2.11918 2.22273 2.32527 2.4266 2.52652 2.62482 2.72136 2.81598 2.90855 2.99897 3.08714 3.173 3.2565 3.33759 3.41626 3.49248 3.56626 3.63762 3.70656 3.77311 3.83731 3.89919 3.9588 4.01618 4.07139 4.12447 4.17548 4.22448 4.27152 4.31667 4.35997 4.4015 4.4413 4.47944 4.51598 4.55096 4.58446 4.61651 4.64718 4.67652 4.70457 4.7314 4.75704 4.78155 4.80497 4.82734 4.84871 4.86912 4.88862 4.90735 4.92537 4.94256 4.95897 4.97463 4.98957 5.00383 5.01743 5.0304 5.04278 5.05458 5.06584 5.07657 5.08681 5.09656 5.10587 5.11474 5.1232 5.13126 5.13894 5.14626 5.15324 5.15989 5.16623 5.17227 5.17803 5.18351 5.18874 5.19372 5.19846 5.20298 #bodywt for gender,fleet: 1 / 4
0 0.00920568 0.0159958 0.026853 0.0434219 0.0674112 0.100204 0.142423 0.193636 0.252345 0.316255 0.382703 0.449088 0.513193 0.573355 0.628499 0.678076 0.721962 0.760334 0.793567 0.822141 0.846583 0.867414 0.885129 0.900178 0.912962 0.923828 0.933076 0.940963 0.947702 0.953476 0.958437 0.962712 0.966407 0.96961 0.972397 0.974829 0.976959 0.978829 0.980477 0.981933 0.983224 0.984372 0.985396 0.986311 0.987131 0.987869 0.988533 0.989133 0.989677 0.99017 0.990619 0.991027 0.991401 0.991742 0.992055 0.992342 0.992606 0.99285 0.993074 0.993282 0.993474 0.993651 0.993816 0.993969 0.994112 0.994244 0.994368 0.994483 0.994591 0.994687 0.994773 0.994854 0.99493 0.995001 0.995067 0.99513 0.995189 0.995245 0.995297 0.995346 0.995392 0.995436 0.995477 0.995516 0.995553 0.995588 0.995621 0.995652 0.995681 0.995709 0.995735 0.99576 0.995783 0.995806 0.995827 0.995847 0.995866 0.995884 0.995901 0.995917 #selex for gender,fleet: 1 / 4
0.0431086 0.155864 0.219473 0.294473 0.379929 0.474412 0.576087 0.68292 0.792949 0.904523 1.01642 1.12787 1.23844 1.34795 1.45638 1.56376 1.67017 1.77567 1.88027 1.98398 2.08676 2.18854 2.28923 2.38872 2.48689 2.58362 2.67877 2.77223 2.86389 2.95363 3.04137 3.12703 3.21054 3.29184 3.37089 3.44766 3.52213 3.59429 3.66415 3.73171 3.79699 3.86002 3.92082 3.97944 4.0359 4.09026 4.14256 4.19285 4.24118 4.2876 4.33218 4.37495 4.41599 4.45533 4.49305 4.52919 4.56381 4.59696 4.62869 4.65907 4.68813 4.71592 4.7425 4.76792 4.79222 4.81544 4.83762 4.85882 4.87907 4.8984 4.91701 4.93492 4.95202 4.96834 4.98391 4.99877 5.01295 5.02648 5.03938 5.05169 5.06343 5.07463 5.08531 5.09549 5.1052 5.11446 5.12328 5.1317 5.13972 5.14736 5.15465 5.16159 5.16821 5.17452 5.18053 5.18626 5.19172 5.19692 5.20188 5.2066 5.2111 #bodywt for gender,fleet: 1 / 5
0 0.00350196 0.00611691 0.0103737 0.0170638 0.0271832 0.0418616 0.0622094 0.0891026 0.122966 0.163629 0.21031 0.261721 0.316265 0.372249 0.428077 0.482384 0.534106 0.582494 0.627095 0.667702 0.704304 0.737032 0.76611 0.791818 0.814466 0.834365 0.851821 0.867119 0.880523 0.89227 0.902572 0.911618 0.919571 0.926576 0.932755 0.938218 0.943058 0.947354 0.951176 0.954585 0.957632 0.960361 0.962811 0.965016 0.967004 0.968801 0.970428 0.971904 0.973246 0.974469 0.975585 0.976605 0.97754 0.978397 0.979185 0.97991 0.980578 0.981195 0.981766 0.982293 0.982783 0.983236 0.983658 0.98405 0.984415 0.984756 0.985073 0.98537 0.985647 0.985896 0.986119 0.986328 0.986525 0.986709 0.986883 0.987046 0.987199 0.987343 0.987479 0.987607 0.987728 0.987842 0.98795 0.988051 0.988147 0.988238 0.988323 0.988404 0.988481 0.988553 0.988622 0.988687 0.988748 0.988807 0.988862 0.988914 0.988964 0.989011 0.989055 0.989097 #selex for gender,fleet: 1 / 5
0.044212 0.161322 0.227689 0.306213 0.396026 0.495694 0.603221 0.716212 0.8322 0.949028 1.0651 1.17944 1.2916 1.4015 1.50928 1.61517 1.71944 1.82231 1.92397 2.02456 2.12413 2.22271 2.32028 2.41678 2.51212 2.60619 2.69889 2.79011 2.87971 2.96759 3.05366 3.13781 3.21997 3.30007 3.37805 3.45387 3.5275 3.59892 3.66812 3.73509 3.79986 3.86243 3.92283 3.98109 4.03724 4.09131 4.14337 4.19343 4.24157 4.28782 4.33224 4.37488 4.41579 4.45503 4.49265 4.5287 4.56324 4.59632 4.62799 4.65831 4.68732 4.71507 4.74161 4.76699 4.79125 4.81444 4.8366 4.85777 4.87799 4.89731 4.9159 4.93379 4.95087 4.96718 4.98274 4.99759 5.01175 5.02527 5.03817 5.05047 5.0622 5.07339 5.08406 5.09424 5.10394 5.1132 5.12202 5.13042 5.13844 5.14608 5.15336 5.1603 5.16692 5.17322 5.17923 5.19041 5.19561 5.20056 5.20528 5.20978 #bodywt for gender,fleet: 1 / 6
0 0.00113898 0.00217803 0.00403307 0.00722742 0.0125189 0.0209188 0.0336415 0.0519535 0.0769375 0.109234 0.148852 0.19512 0.246776 0.30217 0.359503 0.41704 0.473272 0.527 0.577368 0.623837 0.666148 0.704257 0.738282 0.76845 0.795052 0.818414 0.83887 0.856745 0.872347 0.885957 0.897832 0.908198 0.917256 0.925181 0.932127 0.938225 0.943589 0.948318 0.952496 0.956196 0.95948 0.962401 0.965007 0.967335 0.969422 0.971296 0.972982 0.974503 0.975879 0.977124 0.978255 0.979284 0.980221 0.981077 0.981859 0.982577 0.983235 0.98384 0.984397 0.984911 0.985385 0.985823 0.986229 0.986606 0.986955 0.98728 0.987582 0.987863 0.988125 0.988359 0.988567 0.988761 0.988943 0.989114 0.989274 0.989425 0.989566 0.989699 0.989823 0.989941 0.990052 0.990156 0.990254 0.990347 0.990434 0.990517 0.990595 0.990668 0.990738 0.990804 0.990866 0.990925 0.99098 0.991033 0.991083 0.99113 0.991175 0.991217 0.991258 0.991296 #selex for gender,fleet: 1 / 6

0.0503793 0.170702 0.237565 0.313948 0.398023 0.48803 0.582574 0.680711 0.781885 0.885786 0.992229 1.10106 1.2121 1.32511 1.43983 1.5559 1.67298 1.79068 1.9086 2.02636 2.14361 2.25998 2.37519 2.48893 2.60096 2.71107 2.81907 2.92479 3.0281 3.1289 3.22711 3.32265 3.41548 3.50558 3.59293 3.67752 3.75936 3.83848 3.91489 3.98865 4.05977 4.12833 4.19435 4.25791 4.31905 4.37785 4.43435 4.48862 4.54074 4.59076 4.63874 4.68476 4.72889 4.77117 4.81168 4.85048 4.88764 4.9232 4.95724 4.98981 5.02096 5.05076 5.07924 5.10648 5.13251 5.15739 5.18116 5.20387 5.22556 5.24628 5.26618 5.2853 5.30355 5.32098 5.33761 5.35349 5.36864 5.38309 5.39689 5.41005 5.4226 5.43458 5.446 5.45689 5.46728 5.47719 5.48664 5.49565 5.50424 5.51243 5.52024 5.52769 5.53478 5.54155 5.548 5.55414 5.56 5.56559 5.57091 5.57598 5.58082 #bodywt for gender,fleet: 2 / 1

 0 0.0442304 0.070952 0.108779 0.158833 0.220571 0.291655 0.368425 0.44674 0.522806 0.593706 0.657598 0.713632 0.761735 0.802355 0.836236 0.864248 0.88727 0.906121 0.921532 0.934127 0.944434 0.952884 0.959832 0.965564 0.970312 0.97426 0.977558 0.980325 0.982657 0.984631 0.986311 0.987746 0.988977 0.990039 0.990957 0.991756 0.992452 0.993062 0.993599 0.994072 0.99449 0.994862 0.995194 0.99549 0.995756 0.995994 0.996209 0.996403 0.996579 0.996739 0.996884 0.997017 0.997138 0.997248 0.99735 0.997443 0.997529 0.997608 0.997681 0.997749 0.997811 0.997869 0.997923 0.997973 0.99802 0.998063 0.998103 0.998141 0.998176 0.998208 0.998236 0.998263 0.998288 0.998312 0.998334 0.998354 0.998374 0.998392 0.99841 0.998426 0.998441 0.998456 0.99847 0.998483 0.998495 0.998506 0.998517 0.998528 0.998537 0.998547 0.998555 0.998564 0.998571 0.998579 0.998586 0.998593 0.998599 0.998605 0.998611 0.998616 #selex for gender,fleet: 2 / 1

 0.0515212 0.176678 0.246963 0.327716 0.416762 0.511725 0.61056 0.71186 0.814863 0.919284 1.0251 1.13241 1.24128 1.35172 1.46366 1.57693 1.6913 1.80645 1.92206 2.03776 2.15319 2.26799 2.38185 2.49445 2.60552 2.71482 2.82214 2.9273 3.03015 3.13056 3.22844 3.32372 3.41634 3.50625 3.59344 3.67791 3.75964 3.83867 3.91502 3.9871 4.05979 4.1283 4.19429 4.25782 4.31894 4.37771 4.4342 4.48846 4.54056 4.59057 4.63855 4.68456 4.72868 4.77096 4.81146 4.85026 4.88741 4.92298 4.95702 4.98958 5.02073 5.05053 5.07902 5.10625 5.13228 5.15716 5.18093 5.20364 5.22533 5.24605 5.26595 5.28507 5.30333 5.32075 5.33739 5.35326 5.36841 5.38287 5.39666 5.40982 5.42237 5.43435 5.44577 5.45667 5.46706 5.47697 5.48642 5.49543 5.50402 5.51221 5.52002 5.52746 5.53456 5.54132 5.54777 5.55392 5.55978 5.56536 5.57069 5.57576 5.58059 #bodywt for gender,fleet: 2 / 2

 0 0.0174561 0.0308611 0.052219 0.0841162 0.128436 0.18553 0.253796 0.329935 0.409729 0.488959 0.564118 0.632767 0.693564 0.746095 0.79061 0.827774 0.858458 0.883592 0.904072 0.920708 0.934205 0.945157 0.954056 0.961303 0.967224 0.972079 0.976075 0.979378 0.982122 0.984412 0.986332 0.987949 0.989318 0.990482 0.991477 0.99233 0.993066 0.993703 0.994256 0.994739 0.995162 0.995534 0.995863 0.996154 0.996412 0.996642 0.996848 0.997032 0.997198 0.997348 0.997483 0.997605 0.997716 0.997817 0.997909 0.997994 0.998071 0.998142 0.998207 0.998266 0.998322 0.998373 0.99842 0.998463 0.998504 0.998541 0.998576 0.998609 0.998639 0.998666 0.99869 0.998712 0.998733 0.998753 0.998771 0.998789 0.998805 0.99882 0.998835 0.998848 0.998861 0.998873 0.998884 0.998895 0.998905 0.998915 0.998924 0.998932 0.99894 0.998948 0.998955 0.998962 0.998968 0.998974 0.99898 0.998986 0.998991 0.998996 0.999 0.999005 #selex for gender,fleet: 2 / 2

 0.0557175 0.195257 0.271674 0.355455 0.442213 0.52945 0.616765 0.704953 0.795162 0.888422 0.98545 1.08659 1.19185 1.30092 1.41333 1.52845 1.64559 1.7641 1.88332 2.00268 2.12166 2.2398 2.35673 2.47211 2.58566 2.69717 2.80643 2.9133 3.01764 3.11936 3.21839 3.31467 3.40816 3.49883 3.5867 3.67175 3.75401 3.8335 3.91025 3.9843 4.0557 4.1245 4.19075 4.2545 4.31583 4.37478 4.43143 4.48585 4.53808 4.58822 4.63631 4.68242 4.72663 4.769 4.80958 4.84845 4.88567 4.9213 4.95539 4.98801 5.01921 5.04905 5.07758 5.10485 5.13092 5.15583 5.17963 5.20237 5.22409 5.24483 5.26475 5.28389 5.30216 5.3196 5.33624 5.35213 5.36729 5.38176 5.39556 5.40873 5.42129 5.43328 5.44471 5.45561 5.46601 5.47593 5.48538 5.4944 5.503 5.51119 5.51901 5.52646 5.53356 5.54033 5.54678 5.55293 5.5588 5.56438 5.56971 5.57479 5.57962 #bodywt for gender,fleet: 2 / 3

 0 0.0130225 0.030402 0.0646814 0.12307 0.208036 0.314464 0.431352 0.546425 0.650157 0.737399 0.806943 0.860169 0.899697 0.928425 0.948999 0.963599 0.973911 0.981188 0.986331 0.98998 0.992585 0.994457 0.995813 0.996804 0.997534 0.998078 0.998486 0.998795 0.999032 0.999215 0.999357 0.999469 0.999558 0.999629 0.999686 0.999732 0.99977 0.999801 0.999827 0.999848 0.999866 0.999881 0.999894 0.999905 0.999915 0.999923 0.99993 0.999936 0.999941 0.999946 0.99995 0.999953 0.999957 0.999959 0.999962 0.999964 0.999966 0.999968 0.99997 0.999971 0.999973 0.999974 0.999975 0.999976 0.999977 0.999978 0.999979 0.999979 0.99998 0.999981 0.999981 0.999982 0.999982 0.999982 0.999983 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 #selex for gender,fleet: 2 / 3

 0.0514995 0.176999 0.248024 0.330373 0.422222 0.521278 0.625193 0.731987 0.840282 0.949304 1.05873 1.16853 1.27878 1.38959 1.50104 1.61314 1.72581 1.83891 1.95226 2.0656 2.17867 2.2912 2.40288 2.51345 2.62266 2.73026 2.83605 2.93983 3.04145 3.14077 3.23768 3.3321 3.42395 3.51319 3.59978 3.68371 3.76498 3.84359 3.91956 3.99292 4.0637 4.13195 4.1977 4.26102 4.32194 4.38054 4.43687 4.49099 4.54296 4.59285 4.64072 4.68664 4.73066 4.77286 4.81329 4.85202 4.88911 4.92462 4.9586 4.99112 5.02222 5.05197 5.08042 5.10762 5.13362 5.15846 5.18221 5.20489 5.22655 5.24725 5.26713 5.28623 5.30447 5.32189 5.33851 5.35437 5.36951 5.38395 5.39774 5.41089 5.42343 5.4354 5.44681 5.4577 5.46808 5.47799 5.48743 5.49643 5.50502 5.5132 5.52101 5.52845 5.53554 5.5423 5.54875 5.55489 5.56074 5.56633 5.57164 5.57671 5.58154 #bodywt for gender,fleet: 2 / 4

 0 0.00935141 0.0166604 0.0286029 0.0471474 0.0743268 0.111721 0.159894 0.218056 0.28411 0.35507 0.427648 0.498798 0.566085 0.627835 0.683118 0.731629 0.77352 0.809245 0.839423 0.864736 0.885866 0.903451 0.918062 0.930198 0.940287 0.948686 0.955693 0.961556 0.966476 0.970619 0.974121 0.977092 0.979623 0.981787 0.983645 0.985247 0.986633 0.987837 0.988886 0.989805 0.990611 0.991322 0.991951 0.992508 0.993005 0.993447 0.993844 0.9942 0.99452 0.994809 0.995071 0.995308 0.995523 0.995719 0.995898 0.996062 0.996212 0.996349 0.996476 0.996592 0.9967 0.996799 0.996891 0.996976 0.997055 0.997128 0.997196 0.99726 0.997319 0.997371 0.997418 0.997462 0.997503 0.997542 0.997578 0.997612 0.997644 0.997674 0.997702 0.997729 0.997754 0.997777 0.9978 0.99782 0.99784 0.997859 0.997877 0.997893 0.997909 0.997924 0.997938 0.997951 0.997964 0.997976 0.997987 0.997998 0.998008 0.998017 0.998027 0.998035 #selex for gender,fleet: 2 / 4

 0.0514843 0.177233 0.248826 0.332507 0.426983 0.530444 0.640706 0.755479 0.872692 0.990731 1.10852 1.22548 1.34138 1.4562 1.57006 1.68309 1.79541 1.90711 2.01821 2.12868 2.23845 2.34741 2.45541 2.56229 2.66788 2.772 2.87449 2.97518 3.07394 3.17062 3.26511 3.35732 3.44716 3.53459 3.61954 3.70198 3.78191 3.85931 3.93419 4.00656 4.07645 4.14389 4.20892 4.27157 4.3319 4.38995 4.44578 4.49945 4.55101 4.60052 4.64805 4.69365 4.73739 4.77932 4.8195 4.85801 4.89489 4.9302 4.96401 4.99636 5.02731 5.05692 5.08524 5.11231 5.1382 5.16294 5.18658 5.20917 5.23075 5.25136 5.27118 5.29023 5.30842 5.32579 5.34236 5.35819 5.37329 5.3877 5.40144 5.41456 5.42708 5.43902 5.4504 5.46127 5.47162 5.4815 5.49092 5.49991 5.50847 5.51664 5.52443 5.53185 5.53893 5.54567 5.5521 5.55823 5.56408 5.56964 5.57495 5.58001 5.58483 #bodywt for gender,fleet: 2 / 5

0 0.00355784 0.00637496 0.0110689 0.0185988 0.0301843 0.0472074 0.0710018 0.10256 0.14225 0.189654 0.24358 0.302245 0.363566 0.42544 0.485992 0.543715 0.597529 0.646772 0.691139 0.730612 0.765372 0.795738 0.8221 0.844882 0.864505 0.881373 0.895857 0.90829 0.918968 0.928147 0.93605 0.942867 0.94876 0.953866 0.958302 0.962166 0.965542 0.968499 0.971097 0.973387 0.97541 0.977203 0.978797 0.980217 0.981486 0.982623 0.983644 0.984564 0.985394 0.986145 0.986826 0.987445 0.988008 0.988522 0.988992 0.989422 0.989817 0.99018 0.990514 0.990822 0.991106 0.991369 0.991612 0.991838 0.992047 0.992242 0.992423 0.992591 0.992749 0.992889 0.993015 0.993132 0.993242 0.993345 0.993442 0.993533 0.993618 0.993698 0.993774 0.993845 0.993912 0.993975 0.994034 0.994091 0.994144 0.994194 0.994241 0.994286 0.994328 0.994368 0.994405 0.994441 0.994475 0.994507 0.994537 0.994566 0.994593 0.994619 0.994644 0.994667 #selex for gender,fleet: 2 / 5
 0.05276 0.183235 0.257815 0.345268 0.444349 0.553205 0.669414 0.790233 0.913018 1.03564 1.1567 1.27549 1.39184 1.50592 1.61805 1.72859 1.8379 1.94624 2.05381 2.1607 2.26697 2.37257 2.47741 2.58138 2.68431 2.78605 2.88641 2.98522 3.08233 3.17758 3.27084 3.36198 3.45092 3.53756 3.62185 3.70374 3.78319 3.86019 3.93473 4.00682 4.07647 4.14371 4.20857 4.27108 4.33129 4.38925 4.445 4.4986 4.5501 4.59957 4.64706 4.69263 4.73634 4.77826 4.81843 4.85692 4.89379 4.9291 4.9629 4.99525 5.0262 5.05581 5.08413 5.11121 5.13709 5.16183 5.18548 5.20807 5.22965 5.25027 5.27009 5.28914 5.30734 5.32471 5.34128 5.35711 5.37221 5.38662 5.40037 5.41349 5.42601 5.43795 5.44934 5.4602 5.47056 5.48044 5.48986 5.49885 5.50741 5.51558 5.52337 5.53079 5.53787 5.54462 5.55105 5.55718 5.56303 5.5686 5.5739 5.57896 5.58379 #bodywt for gender,fleet: 2 / 6
 0 0.00116051 0.00228585 0.00435082 0.00799552 0.0141629 0.0241222 0.0393906 0.0615146 0.0917377 0.130658 0.178008 0.232636 0.292695 0.355949 0.420102 0.483079 0.543194 0.599229 0.65043 0.696442 0.73723 0.772989 0.804063 0.830882 0.853908 0.873606 0.890413 0.904736 0.916934 0.927326 0.936187 0.943753 0.950226 0.955776 0.960546 0.964656 0.968209 0.971289 0.973967 0.976302 0.978346 0.980139 0.981717 0.983111 0.984345 0.985441 0.986418 0.98729 0.988071 0.988772 0.989404 0.989973 0.990489 0.990956 0.99138 0.991767 0.992119 0.992441 0.992737 0.993007 0.993256 0.993485 0.993696 0.993891 0.994071 0.994238 0.994393 0.994536 0.99467 0.994788 0.994892 0.994989 0.995081 0.995166 0.995246 0.99532 0.995391 0.995456 0.995518 0.995576 0.995631 0.995683 0.995731 0.995777 0.99582 0.99586 0.995899 0.995935 0.995969 0.996001 0.996031 0.99606 0.996088 0.996113 0.996138 0.996161 0.996183 0.996203 0.996223 0.996242 #selex for gender,fleet: 2 / 6
 0.0467503 #mean M for year Yinit: 2009 sex: 1
 62.2505 58.3838 54.7172 51.1126 47.7291 44.4779 41.3919 38.5241 36.3696 34.124 33.3921 32.0461 32.0891 31.6253 31.3425 30.5696 30.2496 29.811 28.898 27.1497 25.6637 23.7636 21.7192 19.6293 17.7026 15.7908 14.1493 12.6498 11.2099 9.85195 8.68102 7.6427 6.69738 5.87867 5.16474 4.55139 4.02155 3.56741 3.17296 2.83386 2.54209 2.28922 2.07111 1.88265 1.71858 1.57482 1.44911 1.33808 1.23941 1.15188 1.07369 1.00348 0.939519 0.88105 0.827459 0.778004 0.732282 0.690148 0.65118 0.614822 0.580945 0.549564 0.520129 0.493431 0.468524 0.444484 0.421531 0.399778 0.37927 0.359883 0.341542 0.3242 0.307791 0.292281 0.277611 0.263726 0.250596 0.238218 0.226504 0.21544 0.204971 0.195063 0.185688 0.176802 0.168374 0.160372 0.152776 0.145562 0.138711 0.132199 0.126007 0.120126 0.114528 0.109195 0.104113 0.0992746 0.0946673 0.0902795 0.0861001 0.0821187 1.70926 #numbers for year Yinit: 2009 sex: 1
 0.0462233 #mean M for year Yinit: 2009 sex: 2
 62.2505 58.4145 54.7748 51.1929 47.828 44.5913 41.5157 38.6547 36.5058 34.2625 33.5365 32.1911 32.2375 31.7691 31.4737 30.6739 30.3131 29.8155 28.8253 26.9883 25.404 23.408 21.2775 19.1179 17.1381 15.1969 13.5408 12.0442 10.6261 9.30455 8.17492 7.1817 6.28431 5.51169 4.84134 4.26792 3.77445 3.35293 2.98789 2.67492 2.40622 2.17368 1.97332 1.80027 1.64956 1.51736 1.40159 1.29912 1.20779 1.12654 1.05371 0.988057 0.927983 0.872803 0.821985 0.774861 0.731088 0.690578 0.652964 0.617732 0.584792 0.554191 0.525402 0.499243 0.474777 0.451079 0.428381 0.406808 0.386415 0.367086 0.348755 0.331384 0.314918 0.29933 0.284569 0.270584 0.25735 0.244864 0.23304 0.221863 0.211278 0.201251 0.191753 0.18274 0.174183 0.166047 0.158314 0.150963 0.143972 0.137321 0.130989 0.124968 0.119231 0.113761 0.108543 0.10357 0.0988312 0.0943139 0.0900075 0.0859017 1.81089 #numbers for year Yinit: 2009 sex: 2
 53.6328 50.7205 47.6866 46.7773 45.015 45.2094 44.6937 44.4322 43.4688 43.1397 42.6318 41.4333 39.0207 36.9677 34.3021 31.4121 28.4412 25.6934 22.9554 20.6 18.4428 16.365 14.4 12.7026 11.1947 9.81918 8.62613 7.58436 6.6883 5.91337 5.24849 4.67042 4.173 3.74463 3.37304 3.05229 2.77495 2.53333 2.32151 2.1362 1.97246 1.82691 1.69776 1.58238 1.47876 1.38437 1.2981 1.21902 1.14606 1.07862 1.01648 0.959016 0.905412 0.855474 0.809221 0.765842 0.7265 0.689802 0.654388 0.620579 0.588543 0.558343 0.529799 0.502798 0.477271 0.45312 0.430293 0.408703 0.388269 0.368945 0.350726 0.333485 0.317199 0.301789 0.287204 0.273401 0.260319 0.247911 0.236128 0.224943 0.214321 0.204232 0.194643 0.185525 0.176864 0.16862 0.160768 0.153283 0.146158 0.139374 0.132913 0.126758 0.120896 0.11531 0.109988 0.104917 0.100084 0.0954778 0.0910869 0.0869009 1.81246 #numbers for year Ydeclare: 2002 sex: 1
 53.6328 50.7473 47.7366 46.8499 45.1054 45.3158 44.8058 44.5362 43.5439 43.163 42.5757 41.2707 38.7351 36.5433 33.7422 30.7302 27.6605 24.8373 22.0581 19.6824 17.5301 15.4848 13.5739 11.9377 10.4966 9.19234 8.06791 7.09117 6.25483 5.5344 4.91851 4.38468 3.92661 3.53305 3.19219 2.8983 2.6443 2.42297 2.22873 2.05858 1.90792 1.77362 1.65413 1.54702 1.45046 1.36213 1.281 1.20629 1.13703 1.07271 1.0132 0.957951 0.906212 0.857846 0.812921 0.770661 0.732266 0.696359 0.661586

0.628285 0.596639 0.566727 0.53838 0.5115 0.486031 0.46189 0.439038 0.417398 0.396896 0.377493 0.359186 0.341849 0.325459
0.309936 0.29523 0.281298 0.268077 0.255524 0.243589 0.232245 0.221459 0.211203 0.201444 0.192154 0.18332 0.174903
0.166877 0.159221 0.151925 0.144972 0.138344 0.132026 0.126003 0.12026 0.114783 0.109561 0.10458 0.0998297 0.0952979
0.0909745 1.92084 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
223.385 223.385 223.371 223.347 223.32 223.32 223.292 223.278 223.266 223.253 223.236 223.206 223.17 223.128 223.088
223.043 222.987 222.937 222.868 222.82 222.759 222.682 222.6 222.526 222.452 222.384 222.31 222.228 222.15 221.996 221.662
221.024 220.461 220.264 220.011 219.834 219.642 219.4 219.195 219.034 218.832 218.569 218.278 217.927 217.505 217.141
216.83 216.59 216.302 215.98 215.703 215.341 214.93 214.531 214.098 213.457 212.736 211.912 210.748 209.597 208.291 207.003
205.408 203.725 200.834 197.683 195.051 190.985 185.838 180.978 177.793 173.852 170.828 167.248 162.958 156.855 153.075
145.913 137.788 130.312 125.62 119.607 114.839 108.837 107.743 104.758 106.296 107.266 109.843 112.543 115.184 117.666
120.171 122.356 124.501 #Recruits
1.00254e+009 1.00254e+009 1.00227e+009 1.00184e+009 1.00134e+009 1.00109e+009 1.00082e+009 1.00057e+009
1.00034e+009 1.0001e+009 9.99794e+008 9.99245e+008 9.98584e+008 9.97806e+008 9.97072e+008 9.96235e+008 9.95227e+008
9.94307e+008 9.93042e+008 9.92162e+008 9.91067e+008 9.89658e+008 9.88175e+008 9.86837e+008 9.85505e+008 9.84275e+008
9.82943e+008 9.81475e+008 9.80085e+008 9.77343e+008 9.71417e+008 9.60255e+008 9.50579e+008 9.47222e+008 9.42936e+008
9.39958e+008 9.36737e+008 9.32709e+008 9.29312e+008 9.26659e+008 9.23359e+008 9.19067e+008 9.1436e+008 9.08733e+008
9.02034e+008 8.96313e+008 8.91462e+008 8.87748e+008 8.8332e+008 8.78409e+008 8.74209e+008 8.68778e+008 8.62665e+008
8.56789e+008 8.50473e+008 8.41267e+008 8.31065e+008 8.19634e+008 8.03857e+008 7.8869e+008 7.71965e+008 7.5595e+008
7.36766e+008 7.1724e+008 6.85339e+008 6.52732e+008 6.2707e+008 5.89992e+008 5.47007e+008 5.09984e+008 4.87386e+008
4.61072e+008 4.4201e+008 4.20619e+008 3.96505e+008 3.64787e+008 3.46513e+008 3.14426e+008 2.81567e+008 2.54199e+008
2.38254e+008 2.19069e+008 2.04768e+008 1.87807e+008 1.84833e+008 1.76892e+008 1.80952e+008 1.83546e+008 1.90575e+008
1.98148e+008 2.05777e+008 2.13154e+008 2.20814e+008 2.27675e+008 2.34582e+008 #SpawnBio
0.5075 0.5 0 # spawn-recr steepness, sigmaR, autocorr
catch mid high steepness vector 2
 0 0 19.9821 77.4202 270.83 848.763 2351.71 5708.49 12148.7 22890.4 38757.3 59942.1 86018.2 116136 149281 184483 220938
258054 295432 332832 370122 407239 444157 480870 517370 553648 589687 625463 660944 696094 730873 765238 799148
832561 865437 897738 929430 960482 990868 1.02056e+006 1.04954e+006 1.0778e+006 1.10532e+006 1.13208e+006
1.15809e+006 1.18333e+006 1.20782e+006 1.23155e+006 1.25452e+006 1.27674e+006 1.29821e+006 1.31896e+006 1.33898e+006
1.3583e+006 1.37692e+006 1.39485e+006 1.41212e+006 1.42874e+006 1.44473e+006 1.46009e+006 1.47486e+006 1.48904e+006
1.50265e+006 1.51572e+006 1.52825e+006 1.54027e+006 1.55179e+006 1.56283e+006 1.57341e+006 1.58354e+006 1.59324e+006
1.60276e+006 1.61187e+006 1.62059e+006 1.62893e+006 1.6369e+006 1.64453e+006 1.65182e+006 1.65879e+006 1.66545e+006
1.67182e+006 1.6779e+006 1.68371e+006 1.68925e+006 1.69455e+006 1.69961e+006 1.70443e+006 1.70904e+006 1.71344e+006
1.71763e+006 1.72164e+006 1.72546e+006 1.7291e+006 1.73258e+006 1.7359e+006 1.73906e+006 1.74208e+006 1.74495e+006
1.7477e+006 1.75031e+006 1.7528e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0421538 0.149953 0.209298 0.277709 0.353689 0.435693 0.522404 0.612848 0.706382 0.802601 0.90124 1.00209 1.10497
1.20963 1.31585 1.42332 1.53174 1.64078 1.75009 1.85935 1.96823 2.07642 2.18364 2.28962 2.39414 2.49697 2.59794 2.69689
2.79369 2.88822 2.9804 3.07016 3.15744 3.2422 3.32443 3.40411 3.48124 3.55585 3.62793 3.69753 3.76468 3.82942 3.89178
3.95183 4.00961 4.06518 4.11858 4.16989 4.21917 4.26646 4.31183 4.35534 4.39706 4.43704 4.47534 4.51203 4.54715 4.58077
4.61294 4.64372 4.67316 4.7013 4.72822 4.75394 4.77852 4.80201 4.82445 4.84589 4.86636 4.8859 4.90468 4.92273 4.93996
4.9564 4.97209 4.98706 5.00134 5.01497 5.02797 5.04036 5.05219 5.06347 5.07422 5.08447 5.09425 5.10357 5.11245 5.12092
5.129 5.13669 5.14403 5.15102 5.15768 5.16403 5.17008 5.17585 5.18134 5.18658 5.19156 5.19631 5.20084 #bodywt for
gender,fleet: 1 / 1
 0 0.0436719 0.0686759 0.103576 0.149369 0.205706 0.270763 0.341568 0.414649 0.486689 0.555002 0.617741 0.673888 0.723112
0.765582 0.801784 0.832367 0.858043 0.879511 0.897421 0.91235 0.924799 0.935192 0.943888 0.951181 0.957317 0.962497
0.966885 0.970616 0.973801 0.97653 0.978878 0.980906 0.982664 0.984194 0.98553 0.986702 0.987732 0.988642 0.989447
0.990162 0.9908 0.99137 0.991881 0.99234 0.992753 0.993127 0.993465 0.993772 0.994051 0.994306 0.994538 0.994751 0.994946
0.995125 0.99529 0.995442 0.995582 0.995711 0.995831 0.995942 0.996045 0.996141 0.99623 0.996313 0.99639 0.996462 0.99653
0.996593 0.996651 0.996705 0.996752 0.996797 0.996839 0.996879 0.996916 0.996951 0.996984 0.997015 0.997045 0.997072
0.997099 0.997123 0.997146 0.997168 0.997189 0.997209 0.997227 0.997245 0.997261 0.997277 0.997292 0.997306 0.99732
0.997332 0.997344 0.997356 0.997366 0.997377 0.997386 0.997395 #selex for gender,fleet: 1 / 1
 0.0431406 0.155373 0.217849 0.29032 0.371039 0.457961 0.549186 0.643274 0.73932 0.836862 0.935723 1.03587 1.13731 1.24002
1.34395 1.44896 1.55487 1.66144 1.7684 1.87547 1.98234 2.08872 2.19433 2.29888 2.40214 2.50387 2.60389 2.70201 2.7981
2.89201 2.98366 3.07296 3.15984 3.24427 3.3262 3.40563 3.48254 3.55695 3.62888 3.69833 3.76536 3.82999 3.89226 3.95222
4.00993 4.06543 4.11878 4.17005 4.21927 4.26653 4.31186 4.35535 4.39704 4.43699 4.47528 4.51194 4.54705 4.58065 4.61281
4.64357 4.673 4.70114 4.72804 4.75376 4.77833 4.80182 4.82425 4.84568 4.86614 4.88568 4.90446 4.9225 4.93973 4.95617
4.97185 4.98682 5.0011 5.01473 5.02772 5.04012 5.05194 5.06321 5.07397 5.08422 5.09399 5.10331 5.1122 5.12066 5.12874
5.13643 5.14377 5.15076 5.15742 5.16377 5.16982 5.17558 5.18107 5.18631 5.19129 5.19605 5.20057 #bodywt for gender,fleet: 1 /
2
 0 0.0171869 0.0296538 0.0491314 0.0778158 0.117371 0.168272 0.22944 0.298359 0.371635 0.445697 0.517399 0.584369
0.645107 0.698902 0.745661 0.785716 0.819648 0.848161 0.871984 0.891817 0.908295 0.921976 0.933342 0.942797 0.950678
0.957266 0.962788 0.967434 0.971357 0.974681 0.977509 0.979925 0.981997 0.983781 0.985323 0.98666 0.987826 0.988844
0.989738 0.990525 0.99122 0.991836 0.992383 0.992871 0.993308 0.9937 0.994052 0.99437 0.994657 0.994917 0.995153 0.995368
0.995564 0.995743 0.995907 0.996057 0.996195 0.996323 0.99644 0.996548 0.996648 0.996741 0.996827 0.996906 0.99698
0.997049 0.997113 0.997173 0.997229 0.997279 0.997324 0.997365 0.997404 0.997441 0.997476 0.997508 0.997539 0.997567
0.997594 0.99762 0.997644 0.997666 0.997688 0.997708 0.997727 0.997745 0.997762 0.997778 0.997793 0.997807 0.997821
0.997834 0.997846 0.997857 0.997868 0.997878 0.997888 0.997897 0.997906 0.997915 #selex for gender,fleet: 1 / 2

0.0467737 0.172323 0.240725 0.316721 0.396426 0.477289 0.558526 0.640518 0.724101 0.810114 0.8992 0.991728 1.08779 1.18726 1.28978 1.39492 1.50213 1.61086 1.72055 1.83067 1.94074 2.05033 2.15905 2.26656 2.37258 2.47688 2.57923 2.67949 2.77749 2.87314 2.96635 3.05704 3.14518 3.23073 3.31367 3.394 3.47173 3.54687 3.61945 3.6895 3.75706 3.82217 3.88488 3.94524 4.0033 4.05914 4.11279 4.16432 4.2138 4.26128 4.30683 4.35051 4.39237 4.43249 4.47093 4.50773 4.54296 4.57669 4.60896 4.63982 4.66935 4.69757 4.72456 4.75035 4.775 4.79855 4.82105 4.84254 4.86306 4.88265 4.90147 4.91955 4.9368 4.95327 4.96899 4.98398 4.99829 5.01194 5.02495 5.03737 5.04921 5.06051 5.07128 5.08155 5.09134 5.10067 5.10957 5.11805 5.12614 5.13385 5.14119 5.14819 5.15487 5.16123 5.16728 5.17306 5.17856 5.1838 5.1888 5.19356 5.19809 #bodywt for gender,fleet: 1 / 3
 0 0.0127052 0.0286521 0.0593828 0.111202 0.186822 0.282839 0.390622 0.499733 0.60133 0.689883 0.763217 0.821627 0.866821 0.901062 0.926628 0.945537 0.959447 0.969659 0.977159 0.982682 0.986764 0.989799 0.992068 0.993776 0.995073 0.996063 0.996826 0.997419 0.997883 0.998248 0.998539 0.998772 0.99896 0.999112 0.999237 0.99934 0.999425 0.999496 0.999555 0.999606 0.999648 0.999685 0.999716 0.999743 0.999766 0.999786 0.999804 0.999819 0.999833 0.999845 0.999856 0.999865 0.999873 0.999881 0.999888 0.999894 0.999899 0.999904 0.999909 0.999913 0.999917 0.99992 0.999923 0.999926 0.999929 0.999931 0.999933 0.999935 0.999937 0.999939 0.99994 0.999942 0.999943 0.999944 0.999945 0.999946 0.999947 0.999948 0.999949 0.999949 0.99995 0.999951 0.999952 0.999952 0.999953 0.999953 0.999954 0.999954 0.999955 0.999955 0.999955 0.999956 0.999956 0.999956 0.999957 0.999957 0.999957 0.999958 0.999958 0.999958 #selex for gender,fleet: 1 / 3
 0.0431218 0.155657 0.218775 0.29263 0.375817 0.466432 0.562393 0.661812 0.763243 0.865747 0.968817 1.07224 1.17597 1.28002 1.38443 1.48919 1.59424 1.6995 1.80481 1.91 2.01487 2.11918 2.22273 2.32527 2.4266 2.52652 2.62482 2.72136 2.81598 2.90855 2.99897 3.08714 3.173 3.2565 3.33759 3.41626 3.49248 3.56626 3.63762 3.70656 3.77311 3.83731 3.89919 3.9588 4.01618 4.07139 4.12447 4.17548 4.22448 4.27152 4.31667 4.35997 4.4015 4.4413 4.47944 4.51598 4.55096 4.58446 4.61651 4.64718 4.67652 4.70457 4.7314 4.75704 4.78155 4.80497 4.82734 4.84871 4.86912 4.88862 4.90735 4.92537 4.94256 4.95897 4.97463 4.98957 5.00383 5.01743 5.0304 5.04278 5.05458 5.06584 5.07657 5.08681 5.09656 5.10587 5.11474 5.1232 5.13126 5.13894 5.14626 5.15324 5.15989 5.16623 5.17227 5.17803 5.18351 5.18874 5.19372 5.19846 5.20298 #bodywt for gender,fleet: 1 / 4
 0 0.00920568 0.0159958 0.026853 0.0434219 0.0674112 0.100204 0.142423 0.193636 0.252345 0.316255 0.382703 0.449088 0.513193 0.573355 0.628499 0.678076 0.721962 0.760334 0.793567 0.822141 0.846583 0.867414 0.885129 0.900178 0.912962 0.923828 0.933076 0.940963 0.947702 0.953476 0.958437 0.962712 0.966407 0.96961 0.972397 0.974829 0.976959 0.978829 0.980477 0.981933 0.983224 0.984372 0.985396 0.986311 0.987131 0.987869 0.988533 0.989133 0.989677 0.99017 0.990619 0.991027 0.991401 0.991742 0.992055 0.992342 0.992606 0.99285 0.993074 0.993282 0.993474 0.993651 0.993816 0.993969 0.994112 0.994244 0.994368 0.994483 0.994591 0.994687 0.994773 0.994854 0.99493 0.995001 0.995067 0.99513 0.995189 0.995245 0.995297 0.995346 0.995392 0.995436 0.995477 0.995516 0.995553 0.995588 0.995621 0.995652 0.995681 0.995709 0.995735 0.99576 0.995783 0.995806 0.995827 0.995847 0.995866 0.995884 0.995901 0.995917 #selex for gender,fleet: 1 / 4
 0.0431086 0.155864 0.219473 0.294473 0.379929 0.474412 0.576087 0.68292 0.792949 0.904523 1.01642 1.12787 1.23844 1.34795 1.45638 1.56376 1.67017 1.77567 1.88027 1.98398 2.08676 2.18854 2.28923 2.38872 2.48689 2.58362 2.67877 2.77223 2.86389 2.95363 3.04137 3.12703 3.21054 3.29184 3.37089 3.44766 3.52213 3.59429 3.66415 3.73171 3.79699 3.86002 3.92082 3.97944 4.0359 4.09026 4.14256 4.19285 4.24118 4.2876 4.33218 4.37495 4.41599 4.45533 4.49305 4.52919 4.56381 4.59696 4.62869 4.65907 4.68813 4.71592 4.7425 4.76792 4.79222 4.81544 4.83762 4.85882 4.87907 4.8984 4.91701 4.93492 4.95202 4.96834 4.98391 4.99877 5.01295 5.02648 5.03938 5.05169 5.06343 5.07463 5.08531 5.09549 5.1052 5.11446 5.12328 5.1317 5.13972 5.14736 5.15465 5.16159 5.16821 5.17452 5.18053 5.18626 5.19172 5.19692 5.20188 5.2066 5.2111 #bodywt for gender,fleet: 1 / 5
 0 0.00350196 0.00611691 0.0103737 0.0170638 0.0271832 0.0418616 0.0622094 0.0891026 0.122966 0.163629 0.21031 0.261721 0.316265 0.372249 0.428077 0.482384 0.534106 0.582494 0.627095 0.667702 0.704304 0.737032 0.76611 0.791818 0.814466 0.834365 0.851821 0.867119 0.880523 0.89227 0.902572 0.911618 0.919571 0.926576 0.932755 0.938218 0.943058 0.947354 0.951176 0.954585 0.957632 0.960361 0.962811 0.965016 0.967004 0.968801 0.970428 0.971904 0.973246 0.974469 0.975585 0.976605 0.97754 0.978397 0.979185 0.97991 0.980578 0.981195 0.981766 0.982293 0.982783 0.983236 0.983658 0.98405 0.984415 0.984756 0.985073 0.98537 0.985647 0.985896 0.986119 0.986328 0.986525 0.986709 0.986883 0.987046 0.987199 0.987343 0.987479 0.987607 0.987728 0.987842 0.98795 0.988051 0.988147 0.988238 0.988323 0.988404 0.988481 0.988553 0.988622 0.988687 0.988748 0.988807 0.988862 0.988914 0.988964 0.989011 0.989055 0.989097 #selex for gender,fleet: 1 / 5
 0.044212 0.161322 0.227689 0.306213 0.396026 0.495694 0.603221 0.716212 0.8322 0.949028 1.0651 1.17944 1.2916 1.4015 1.50928 1.61517 1.71944 1.82231 1.92397 2.02456 2.12413 2.22271 2.32028 2.41678 2.51212 2.60619 2.69889 2.79011 2.87971 2.96759 3.05366 3.13781 3.21997 3.30007 3.37805 3.45387 3.5275 3.59892 3.66812 3.73509 3.79986 3.86243 3.92283 3.98109 4.03724 4.09131 4.14337 4.19343 4.24157 4.28782 4.33225 4.37493 4.41579 4.45503 4.49265 4.5287 4.56324 4.59632 4.62799 4.65831 4.68732 4.71507 4.74161 4.76699 4.79125 4.81444 4.8366 4.85777 4.87799 4.89731 4.9159 4.93379 4.95087 4.96718 4.98274 4.99759 5.01175 5.02527 5.03817 5.05047 5.0622 5.07339 5.08406 5.09424 5.10394 5.1132 5.12202 5.13042 5.13844 5.14608 5.15336 5.1603 5.16692 5.17322 5.17923 5.18496 5.19041 5.19561 5.20056 5.20528 5.20978 #bodywt for gender,fleet: 1 / 6
 0 0.00113898 0.00217803 0.00403307 0.00722742 0.0125189 0.0209188 0.0336415 0.0519535 0.0769375 0.109234 0.148852 0.19512 0.246776 0.30217 0.359503 0.41704 0.473272 0.527 0.577368 0.623837 0.666148 0.704257 0.738282 0.76845 0.795052 0.818414 0.83887 0.856745 0.872347 0.885957 0.897832 0.908198 0.917256 0.925181 0.932127 0.938225 0.943589 0.948318 0.952496 0.956196 0.95948 0.962401 0.965007 0.967335 0.969422 0.971296 0.972982 0.974503 0.975879 0.977124 0.978255 0.979284 0.980221 0.981077 0.981859 0.982577 0.983235 0.98384 0.984397 0.984911 0.985385 0.985823 0.986229 0.986606 0.986955 0.98728 0.987582 0.987863 0.988125 0.988359 0.988567 0.988761 0.988943 0.989114 0.989274 0.989425 0.989566 0.989699 0.989823 0.989941 0.990052 0.990156 0.990254 0.990347 0.990434 0.990517 0.990595 0.990668 0.990738 0.990804 0.990866 0.990925 0.99098 0.991033 0.991083 0.99113 0.991175 0.991217 0.991258 0.991296 #selex for gender,fleet: 1 / 6
 0.0503793 0.170702 0.237565 0.313948 0.398023 0.48803 0.582574 0.680711 0.781885 0.885786 0.992229 1.10106 1.2121 1.32511 1.43983 1.5559 1.67298 1.79068 1.9086 2.02636 2.14361 2.25998 2.37519 2.48893 2.60096 2.71107 2.81907 2.92479 3.0281 3.1289 3.22711 3.32265 3.41548 3.50558 3.59293 3.67752 3.75936 3.83848 3.91489 3.98865 4.05977 4.12833 4.19435 4.25791 4.31905 4.37785 4.43435 4.48862 4.54074 4.59076 4.63874 4.68476 4.72889 4.77117 4.81168 4.85048 4.88764 4.9232 4.95724 4.98981 5.02096 5.05076 5.07924 5.10648 5.13251 5.15739 5.18116 5.20387 5.22556 5.24628 5.26618 5.2853 5.30355 5.32098 5.33761 5.35349 5.36864 5.38309 5.39689 5.41005 5.4226 5.43458 5.446 5.45689 5.46728 5.47719 5.48664 5.49565 5.50424 5.51243 5.52024 5.52769 5.53478 5.54155 5.548 5.55414 5.56 5.56559 5.57091 5.57598 5.58082 #bodywt for gender,fleet: 2 / 1
 0 0.0442304 0.070952 0.108779 0.158833 0.220571 0.291655 0.368425 0.44674 0.522806 0.593706 0.657598 0.713632 0.761735 0.802355 0.836236 0.864248 0.88727 0.906121 0.921532 0.934127 0.944434 0.952884 0.959832 0.965564 0.970312 0.97426

55

0.977558 0.980325 0.982657 0.984631 0.986311 0.987746 0.988977 0.990039 0.990957 0.991756 0.992452 0.993062 0.993599
0.994072 0.99449 0.994862 0.995194 0.99549 0.995756 0.995994 0.996209 0.996403 0.996579 0.996739 0.996884 0.997017
0.997138 0.997248 0.99735 0.997443 0.997529 0.997608 0.997681 0.997749 0.997811 0.997869 0.997923 0.997973 0.99802
0.998063 0.998103 0.998141 0.998176 0.998208 0.998236 0.998263 0.998288 0.998312 0.998334 0.998354 0.998374 0.998392
0.99841 0.998426 0.998441 0.998456 0.99847 0.998483 0.998495 0.998506 0.998517 0.998528 0.998537 0.998547 0.998555
0.998564 0.998571 0.998579 0.998586 0.998593 0.998599 0.998605 0.998611 0.998616 #selex for gender,fleet: 2 / 1
 0.0515212 0.176678 0.246963 0.327716 0.416762 0.511725 0.61056 0.71186 0.814863 0.919284 1.0251 1.13241 1.24128 1.35172
1.46366 1.57693 1.6913 1.80645 1.92206 2.03776 2.15319 2.26799 2.38185 2.49445 2.60552 2.71482 2.82214 2.9273 3.03015
3.13056 3.22844 3.32372 3.41634 3.50625 3.59344 3.67791 3.75964 3.83867 3.91502 3.98871 4.05979 4.1283 4.19429 4.25782
4.31894 4.37771 4.4342 4.48846 4.54056 4.59057 4.63855 4.68456 4.72868 4.77096 4.81146 4.85026 4.88741 4.92298 4.95702
4.98958 5.02073 5.05053 5.07902 5.10625 5.13228 5.15716 5.18093 5.20364 5.22533 5.24605 5.26595 5.28507 5.30333 5.32075
5.33739 5.35326 5.36841 5.38287 5.39666 5.40982 5.42237 5.43435 5.44577 5.45667 5.46706 5.47697 5.48642 5.49543 5.50402
5.51221 5.52002 5.52746 5.53456 5.54132 5.54777 5.55392 5.55978 5.56536 5.57069 5.57576 5.58059 #bodywt for gender,fleet: 2 /
2
 0 0.0174561 0.0308611 0.052219 0.0841162 0.128436 0.18553 0.253796 0.329935 0.409729 0.488959 0.564118 0.632767 0.693564
0.746095 0.79061 0.827774 0.858458 0.883592 0.904072 0.920708 0.934205 0.945157 0.954056 0.961303 0.967224 0.972079
0.976075 0.979378 0.982122 0.984412 0.986332 0.987949 0.989318 0.990482 0.991477 0.99233 0.993066 0.993703 0.994256
0.994739 0.995162 0.995534 0.995863 0.996154 0.996412 0.996642 0.996848 0.997032 0.997198 0.997348 0.997483 0.997605
0.997716 0.997817 0.997909 0.997994 0.998071 0.998142 0.998207 0.998266 0.998322 0.998373 0.99842 0.998463 0.998504
0.998541 0.998576 0.998609 0.998639 0.998666 0.99869 0.998712 0.998733 0.998753 0.998771 0.998789 0.998805 0.99882
0.998835 0.998848 0.998861 0.998873 0.998884 0.998895 0.998905 0.998915 0.998924 0.998932 0.99894 0.998948 0.998955
0.998962 0.998968 0.998974 0.99898 0.998986 0.998991 0.998996 0.999 0.999005 #selex for gender,fleet: 2 / 2
 0.0557175 0.195257 0.271674 0.355455 0.442213 0.52945 0.616765 0.704953 0.795162 0.888422 0.98545 1.08659 1.19185 1.30092
1.41333 1.52845 1.64559 1.7641 1.88332 2.00268 2.12166 2.2398 2.35673 2.47211 2.58566 2.69717 2.80643 2.9133 3.01764
3.11936 3.21839 3.31467 3.40816 3.49883 3.5867 3.67175 3.75401 3.8335 3.91025 3.9843 4.0557 4.1245 4.19075 4.2545 4.31583
4.37478 4.43143 4.48585 4.53808 4.58822 4.63631 4.68242 4.769 4.80958 4.84845 4.88567 4.9213 4.95539 4.98801
5.01921 5.04905 5.07758 5.10485 5.13092 5.15583 5.17963 5.20237 5.22409 5.24483 5.26475 5.28389 5.30216 5.3196 5.33624
5.35213 5.36729 5.38176 5.39556 5.40873 5.42129 5.43328 5.44471 5.45561 5.46601 5.47593 5.48538 5.4944 5.503 5.51119
5.51901 5.52646 5.53356 5.54033 5.54678 5.55293 5.5588 5.56438 5.56971 5.57479 5.57962 #bodywt for gender,fleet: 2 / 3
 0 0.0130225 0.030402 0.0646814 0.12307 0.208036 0.314464 0.431352 0.546425 0.650157 0.737399 0.806943 0.860169 0.899697
0.928425 0.948999 0.963599 0.973911 0.981188 0.986331 0.98998 0.992585 0.994457 0.995813 0.996804 0.997534 0.998078
0.998486 0.998795 0.999032 0.999215 0.999357 0.999469 0.999558 0.999629 0.999686 0.999732 0.99977 0.999801 0.999827
0.999848 0.999866 0.999881 0.999894 0.999905 0.999915 0.999923 0.99993 0.999936 0.999941 0.999946 0.99995 0.999953
0.999957 0.999959 0.999962 0.999964 0.999966 0.999968 0.99997 0.999971 0.999973 0.999974 0.999975 0.999976 0.999977
0.999978 0.999979 0.999979 0.99998 0.999981 0.999981 0.999982 0.999982 0.999983 0.999983 0.999983 0.999984
0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999986
0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 #selex for gender,fleet: 2 / 3
 0.0514995 0.176999 0.248024 0.330373 0.422222 0.521278 0.625193 0.731987 0.840282 0.949304 1.05873 1.16853 1.27878
1.38959 1.50104 1.61314 1.72581 1.83891 1.95226 2.0656 2.17867 2.2912 2.40288 2.51345 2.62266 2.73026 2.83605 2.93983
3.04145 3.14077 3.23768 3.3321 3.42395 3.51319 3.59978 3.68371 3.76498 3.84359 3.91956 3.99292 4.0637 4.13195 4.1977
4.26102 4.32194 4.38054 4.43687 4.49099 4.54296 4.59285 4.64072 4.68664 4.73066 4.77286 4.81329 4.85202 4.88911 4.92462
4.9586 4.99112 5.02222 5.05197 5.08042 5.10762 5.13362 5.15846 5.18221 5.20489 5.22655 5.24725 5.26713 5.28623 5.30447
5.32189 5.33851 5.35437 5.36951 5.38395 5.39774 5.41089 5.42343 5.4354 5.44681 5.4577 5.46808 5.47799 5.48743 5.49643
5.50502 5.5132 5.52101 5.52845 5.53554 5.5423 5.54875 5.55489 5.56074 5.56633 5.57164 5.57671 #bodywt for
gender,fleet: 2 / 4
 0 0.00935141 0.0166604 0.0286029 0.0471474 0.0743268 0.111721 0.159894 0.218056 0.28411 0.35507 0.427648 0.498798
0.566085 0.627835 0.683118 0.731629 0.77352 0.809245 0.839423 0.864736 0.885866 0.903451 0.918062 0.930198 0.940287
0.948686 0.955693 0.961556 0.966476 0.970619 0.974121 0.977092 0.979623 0.981787 0.983645 0.985247 0.986633 0.987837
0.988886 0.989805 0.990611 0.991322 0.991951 0.992508 0.993005 0.993447 0.993844 0.9942 0.99452 0.994809 0.995071
0.995308 0.995523 0.995719 0.995898 0.996062 0.996349 0.996476 0.996592 0.9967 0.996799 0.996891 0.996976
0.997055 0.997128 0.997196 0.99726 0.997319 0.997371 0.997418 0.997462 0.997503 0.997542 0.997578 0.997612 0.997644
0.997674 0.997702 0.997729 0.997754 0.997777 0.9978 0.99782 0.99784 0.997859 0.997877 0.997893 0.997909 0.997924 0.997938
0.997951 0.997964 0.997976 0.997987 0.997998 0.998008 0.998017 0.998027 0.998035 #selex for gender,fleet: 2 / 4
 0.0514843 0.177233 0.248826 0.332507 0.426983 0.530444 0.640706 0.755479 0.872692 0.990731 1.10852 1.22548 1.34138 1.4562
1.57006 1.68309 1.79541 1.90711 2.01821 2.12868 2.23845 2.34741 2.45541 2.56229 2.66788 2.772 2.87449 2.97518 3.07394
3.17062 3.26511 3.35732 3.44716 3.53459 3.61954 3.70198 3.78191 3.85931 3.93419 4.00656 4.07645 4.14389 4.20892 4.27157
4.3319 4.38995 4.44578 4.49945 4.55101 4.60052 4.64805 4.69365 4.73739 4.77932 4.8195 4.85801 4.89489 4.9302 4.96401
4.99636 5.02731 5.05692 5.08524 5.11231 5.1382 5.16294 5.18658 5.20917 5.23075 5.25136 5.27118 5.29023 5.30842 5.32579
5.34236 5.35819 5.37329 5.3877 5.40144 5.41456 5.42708 5.43902 5.4504 5.46127 5.47162 5.4815 5.49092 5.49991 5.50847
5.51664 5.52443 5.53185 5.53893 5.54567 5.5521 5.55823 5.56408 5.56964 5.57495 5.58001 5.58483 #bodywt for gender,fleet: 2 / 5
 0 0.00355784 0.00637496 0.0110689 0.0185988 0.0301843 0.0472074 0.0710018 0.10256 0.14225 0.189654 0.24358 0.302245
0.363566 0.42544 0.485992 0.543715 0.597529 0.646772 0.691139 0.730612 0.765372 0.795738 0.8221 0.844882 0.864505
0.881373 0.895857 0.90829 0.918968 0.928147 0.93605 0.942867 0.94876 0.953866 0.958302 0.962166 0.965542 0.968499
0.971097 0.973387 0.97541 0.977203 0.978797 0.980217 0.981486 0.982623 0.983644 0.984564 0.985394 0.986145 0.986826
0.987445 0.988008 0.988522 0.988992 0.989422 0.989817 0.99018 0.990514 0.990822 0.991106 0.991369 0.991612 0.991838
0.992047 0.992242 0.992423 0.992591 0.992749 0.992889 0.993015 0.993132 0.993242 0.993345 0.993442 0.993533 0.993618
0.993698 0.993774 0.993845 0.993912 0.993975 0.994034 0.994091 0.994144 0.994194 0.994241 0.994286 0.994328 0.994368
0.994405 0.994441 0.994475 0.994507 0.994537 0.994566 0.994593 0.994619 0.994644 0.994667 #selex for gender,fleet: 2 / 5
 0.05276 0.183235 0.257815 0.345268 0.444349 0.553205 0.669414 0.790233 0.913018 1.03564 1.1567 1.27549 1.39184 1.50592
1.61805 1.72859 1.8379 1.94624 2.05381 2.1607 2.26697 2.37257 2.47741 2.58138 2.68431 2.78605 2.88641 2.98522 3.08233

3.17758 3.27084 3.36198 3.45092 3.53756 3.62185 3.70374 3.78319 3.86019 3.93473 4.00682 4.07647 4.14371 4.20857 4.27108
4.33129 4.38925 4.445 4.4986 4.5501 4.59957 4.64706 4.69263 4.73634 4.77826 4.81843 4.85692 4.89379 4.9291 4.9629 4.99525
5.0262 5.05581 5.08413 5.11121 5.13709 5.16183 5.18548 5.20807 5.22965 5.25027 5.27009 5.28914 5.30734 5.32471 5.34128
5.35711 5.37221 5.38662 5.40037 5.41349 5.42601 5.43795 5.44934 5.4602 5.47056 5.48044 5.48986 5.49885 5.50741 5.51558
5.52337 5.53079 5.53787 5.54462 5.55105 5.55718 5.56303 5.5686 5.5739 5.57896 5.58379 #bodywt for gender,fleet: 2 / 6
 0 0.00116051 0.00228585 0.00435082 0.00799552 0.0141629 0.0241222 0.0393906 0.0615146 0.0917377 0.130658 0.178008
0.232636 0.292695 0.355949 0.420102 0.483079 0.543194 0.599229 0.65043 0.696442 0.73723 0.772989 0.804063 0.830882
0.853908 0.873606 0.890413 0.904736 0.916934 0.927326 0.936187 0.943753 0.950226 0.955776 0.960546 0.964656 0.968209
0.971289 0.973967 0.976302 0.978346 0.980139 0.981717 0.983111 0.984345 0.985441 0.986418 0.98729 0.988071 0.988772
0.989404 0.989973 0.990489 0.990956 0.99138 0.991767 0.992119 0.992441 0.992737 0.993007 0.993256 0.993485 0.993696
0.993891 0.994071 0.994238 0.994393 0.994536 0.99467 0.994788 0.994892 0.994989 0.995081 0.995166 0.995246 0.99532
0.995391 0.995456 0.995518 0.995576 0.995631 0.995683 0.995731 0.995777 0.99582 0.99586 0.995899 0.995935 0.995969
0.996001 0.996031 0.99606 0.996088 0.996113 0.996138 0.996161 0.996183 0.996203 0.996223 0.996242 #selex for gender,fleet: 2
/ 6
 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503
0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503
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0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 0.0467503
0.0467503 0.0467503 0.0467503 0.0467503 0.0467503 #mean M for year Yinit: 2009 sex: 1
 62.2505 58.3838 54.7172 51.1126 47.7291 44.4779 41.3919 38.5241 36.3696 34.124 33.3921 32.0461 32.0891 31.6253 31.3425
30.5696 30.2496 29.811 28.898 27.1497 25.6637 23.7636 21.7192 19.6293 17.7026 15.7908 14.1493 12.6498 11.2099 9.85195
8.68102 7.6427 6.69738 5.87867 5.16474 4.55139 4.02155 3.56741 3.17296 2.83386 2.54209 2.28922 2.07111 1.88265 1.71858
1.57482 1.44911 1.33808 1.23941 1.15188 1.07369 1.00348 0.939519 0.88105 0.827459 0.778004 0.732282 0.690148 0.65118
0.614822 0.580945 0.549564 0.520129 0.493431 0.468524 0.444484 0.421531 0.399778 0.37927 0.359883 0.341542 0.3242
0.307791 0.292281 0.277611 0.263726 0.250596 0.238218 0.226504 0.21544 0.204971 0.195063 0.185688 0.176802 0.168374
0.160372 0.152776 0.145562 0.138711 0.132199 0.126007 0.120126 0.114528 0.109195 0.104113 0.0992746 0.0946673 0.0902795
0.0861001 0.0821187 1.70926 #numbers for year Yinit: 2009 sex: 1
 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
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0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 0.0462233
0.0462233 0.0462233 0.0462233 0.0462233 0.0462233 #mean M for year Yinit: 2009 sex: 2
 62.2505 58.4145 54.7748 51.1929 47.828 44.5913 41.5157 38.6547 36.5058 34.2625 33.5365 32.1911 32.2375 31.7691 31.4737
30.6739 30.3131 29.8155 28.8253 26.9883 25.404 23.408 21.2775 19.1179 17.1381 15.1969 13.5408 12.0442 10.6261 9.30455
8.17492 7.1817 6.28431 5.51169 4.84134 4.26792 3.77445 3.35293 2.98789 2.67492 2.40622 2.17368 1.97332 1.80027 1.64956
1.51736 1.40159 1.29912 1.20779 1.12654 1.05371 0.988057 0.927983 0.872803 0.821985 0.774861 0.731088 0.690578 0.652964
0.617732 0.584792 0.554191 0.525402 0.499243 0.474777 0.451079 0.428381 0.406808 0.386415 0.367086 0.348755 0.331384
0.314918 0.29933 0.284569 0.270584 0.25735 0.244864 0.23304 0.221863 0.211278 0.201251 0.191753 0.18274 0.174183 0.166047
0.158314 0.150963 0.143972 0.137321 0.130989 0.124968 0.119231 0.113761 0.108543 0.10357 0.0988312 0.0943139 0.0900075
0.0859017 1.81089 #numbers for year Yinit: 2009 sex: 2
 53.6328 50.7205 47.6866 46.7773 45.015 45.2094 44.6937 44.4322 43.4688 43.1397 42.6318 41.4333 39.0207 36.9677 34.3021
31.4121 28.4412 25.6934 22.9554 20.6 18.4428 16.365 14.4 12.7026 11.1947 9.81918 8.62613 7.58436 6.6883 5.91337 5.24849
4.67042 4.173 3.74463 3.37304 3.05229 2.77495 2.53333 2.32151 2.1362 1.97246 1.82691 1.69776 1.58238 1.47876 1.38437 1.2981
1.21902 1.14606 1.07862 1.01648 0.959016 0.905412 0.855474 0.809221 0.765842 0.7265 0.689802 0.654388 0.620579 0.588543
0.558343 0.529799 0.502798 0.477271 0.45312 0.430293 0.408703 0.388269 0.368945 0.350726 0.333485 0.317199 0.301789
0.287204 0.273401 0.260319 0.247911 0.236128 0.224943 0.214321 0.204232 0.194643 0.185525 0.176864 0.16862 0.160768
0.153283 0.146158 0.139374 0.132913 0.126758 0.120896 0.11531 0.109988 0.104917 0.100084 0.0954778 0.0910869 0.0869009
1.81246 #numbers for year Ydeclare: 2002 sex: 1
 53.6328 50.7473 47.7366 46.8499 45.1054 45.3158 44.8058 44.5362 43.5439 43.163 42.5757 41.2707 38.7351 36.5433 33.7422
30.7302 27.6605 24.8373 22.0581 19.6824 17.5301 15.4848 13.5739 11.9377 10.4966 9.19234 8.06791 7.09117 6.25483 5.5344
4.91851 4.38468 3.92661 3.53305 3.19219 2.8983 2.6443 2.42297 2.22873 2.05858 1.90792 1.77362 1.65413 1.54702 1.45046
1.36213 1.281 1.20629 1.13703 1.07271 1.0132 0.957951 0.906212 0.857846 0.812921 0.770661 0.732266 0.696359 0.661586
0.628285 0.596639 0.566727 0.53838 0.5115 0.486031 0.46189 0.439038 0.417398 0.396896 0.377493 0.359186 0.341849 0.325459
0.309936 0.29523 0.281298 0.268077 0.255524 0.243589 0.232245 0.221459 0.211203 0.201444 0.192154 0.18332 0.174903
0.166877 0.159221 0.151925 0.144972 0.138344 0.132026 0.126003 0.12026 0.114783 0.109561 0.10458 0.0998297 0.0952979
0.0909745 1.92084 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
223.385 223.385 223.371 223.347 223.32 223.307 223.292 223.278 223.266 223.253 223.236 223.206 223.17 223.128 223.088
223.043 222.987 222.937 222.868 222.82 222.759 222.682 222.6 222.526 222.452 222.384 222.31 222.228 222.15 221.996 221.662

221.024 220.461 220.264 220.011 219.834 219.642 219.4 219.195 219.034 218.832 218.569 218.278 217.927 217.505 217.141
216.83 216.59 216.302 215.98 215.703 215.341 214.93 214.531 214.098 213.457 212.736 211.912 210.748 209.597 208.291 207.003
205.408 203.725 200.834 197.683 195.051 190.985 185.838 180.978 177.793 173.852 170.828 167.248 162.958 156.855 153.075
145.913 137.788 130.312 125.62 119.607 114.839 108.837 107.743 104.758 106.296 107.266 109.843 112.543 115.184 117.666
120.171 122.356 124.501 #Recruits
1.00254e+009 1.00254e+009 1.00227e+009 1.00184e+009 1.00134e+009 1.00109e+009 1.00082e+009 1.00057e+009
1.00034e+009 1.0001e+009 9.99794e+008 9.99245e+008 9.98584e+008 9.97806e+008 9.97072e+008 9.96235e+008 9.95227e+008
9.94307e+008 9.93042e+008 9.92162e+008 9.91067e+008 9.89658e+008 9.88175e+008 9.86837e+008 9.85505e+008 9.84275e+008
9.82943e+008 9.81475e+008 9.80085e+008 9.77343e+008 9.71417e+008 9.60255e+008 9.50579e+008 9.47222e+008 9.42936e+008
9.39958e+008 9.36737e+008 9.32709e+008 9.29312e+008 9.26659e+008 9.23359e+008 9.19067e+008 9.1436e+008 9.08733e+008
9.02034e+008 8.96313e+008 8.91462e+008 8.87748e+008 8.8332e+008 8.78409e+008 8.74209e+008 8.68778e+008 8.62665e+008
8.56789e+008 8.50473e+008 8.41267e+008 8.31065e+008 8.19634e+008 8.03857e+008 7.8869e+008 7.71965e+008 7.5595e+008
7.36766e+008 7.1724e+008 6.85339e+008 6.52732e+008 6.2707e+008 5.89992e+008 5.47007e+008 5.09984e+008 4.87386e+008
4.61072e+008 4.4201e+008 4.20619e+008 3.96505e+008 3.64787e+008 3.46513e+008 3.14426e+008 2.81567e+008 2.54199e+008
2.38254e+008 2.19069e+008 2.04768e+008 1.87807e+008 1.84833e+008 1.76892e+008 1.80952e+008 1.83546e+008 1.90575e+008
1.98148e+008 2.05777e+008 2.13154e+008 2.20814e+008 2.27675e+008 2.34582e+008 #SpawnBio
0.5075 0.5 0 # spawn-recr steepness, sigmaR, autocorr
mid catch h low vector 1
 0 0 26.1833 98.3499 333.887 1015.05 2728.08 6434.22 13349.2 24622.7 40982.2 62538.8 88823.4 118988 152044 187063 223279
260128 297232 334361 371390 408258 444941 481431 517722 553804 589662 625270 660599 695613 730273 764538 798366
831715 864547 896824 928511 959578 989997 1.01974e+006 1.0488e+006 1.07714e+006 1.10476e+006 1.13164e+006
1.15779e+006 1.18318e+006 1.20783e+006 1.23173e+006 1.25489e+006 1.2773e+006 1.29898e+006 1.31994e+006 1.34019e+006
1.35973e+006 1.37858e+006 1.39676e+006 1.41427e+006 1.43113e+006 1.44737e+006 1.46298e+006 1.478e+006 1.49243e+006
1.5063e+006 1.51961e+006 1.5324e+006 1.54466e+006 1.55643e+006 1.56772e+006 1.57854e+006 1.58891e+006 1.59885e+006
1.60861e+006 1.61796e+006 1.62691e+006 1.63548e+006 1.64368e+006 1.65153e+006 1.65904e+006 1.66622e+006 1.67309e+006
1.67966e+006 1.68594e+006 1.69194e+006 1.69767e+006 1.70316e+006 1.70839e+006 1.71339e+006 1.71817e+006 1.72273e+006
1.72709e+006 1.73125e+006 1.73523e+006 1.73902e+006 1.74264e+006 1.74609e+006 1.74939e+006 1.75254e+006 1.75554e+006
1.7584e+006 1.76114e+006 1.76374e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0442974 0.15965 0.219645 0.288157 0.36377 0.445102 0.531005 0.620642 0.713446 0.80904 0.907155 1.00756 1.11004 1.21434
1.32018 1.42727 1.53528 1.64389 1.75275 1.86154 1.96994 2.07765 2.18439 2.28991 2.39399 2.49641 2.59701 2.69563 2.79213
2.88642 2.97839 3.06799 3.15517 3.23987 3.32208 3.4018 3.47901 3.55372 3.62597 3.69576 3.76314 3.82813 3.89079 3.95115
4.00928 4.06521 4.11901 4.17072 4.22042 4.26815 4.31397 4.35795 4.40013 4.44059 4.47938 4.51655 4.55216 4.58627 4.61894
4.65021 4.68013 4.70877 4.73617 4.76237 4.78743 4.81139 4.8343 4.85619 4.87711 4.8971 4.91612 4.93481 4.95246 4.96933
4.98543 5.0008 5.01548 5.02949 5.04286 5.05563 5.06781 5.07943 5.09053 5.10111 5.11121 5.12084 5.13003 5.13879 5.14716
5.15513 5.16273 5.16999 5.1769 5.1835 5.18979 5.19579 5.2015 5.20695 5.21215 5.21711 5.22183 #bodywt for gender,fleet: 1 / 1
 0 0.056091 0.0855272 0.125125 0.175249 0.234892 0.301759 0.372728 0.444484 0.514078 0.579259 0.638584 0.691347 0.737427
0.777106 0.810914 0.839497 0.863536 0.883684 0.900543 0.914644 0.926445 0.936336 0.944644 0.95164 0.95755 0.962558
0.966817 0.970452 0.973567 0.976246 0.978558 0.980562 0.982304 0.983825 0.985158 0.986329 0.987362 0.988276 0.989088
0.98981 0.990455 0.991033 0.991552 0.992019 0.992441 0.992823 0.993169 0.993484 0.99377 0.994032 0.994271 0.994491
0.994692 0.994877 0.995047 0.995205 0.99535 0.995484 0.995609 0.995724 0.995832 0.995931 0.996024 0.996111 0.996191
0.996267 0.996337 0.996403 0.996465 0.996521 0.996571 0.996618 0.996662 0.996704 0.996743 0.99678 0.996815 0.996848
0.996879 0.996908 0.996936 0.996962 0.996986 0.99701 0.997032 0.997052 0.997072 0.997091 0.997108 0.997125 0.997141
0.997156 0.99717 0.997184 0.997196 0.997209 0.99722 0.997231 0.997241 0.997251 #selex for gender,fleet: 1 / 1
 0.0453904 0.165902 0.229339 0.302192 0.38272 0.469007 0.559349 0.652485 0.747637 0.844401 0.942609 1.04221 1.14318
1.24547 1.34899 1.45359 1.55907 1.66519 1.77168 1.87826 1.98464 2.09051 2.19561 2.29968 2.40247 2.50377 2.60339 2.70115
2.79691 2.89055 2.98197 3.07109 3.15784 3.24219 3.32409 3.40353 3.4805 3.55502 3.62708 3.69672 3.76396 3.82884 3.89139
3.95166 4.00971 4.06557 4.1193 4.17096 4.22061 4.26829 4.31408 4.35802 4.40017 4.4406 4.47937 4.51651 4.55211 4.5862
4.61885 4.6501 4.68002 4.70865 4.73603 4.76223 4.78728 4.81123 4.83413 4.85601 4.87692 4.89691 4.91613 4.93461 4.95226
4.96912 4.98521 5.00058 5.01526 5.02927 5.04264 5.0554 5.06758 5.0792 5.09029 5.10087 5.11097 5.1206 5.12979 5.13855
5.14691 5.15488 5.16249 5.16974 5.17666 5.18325 5.18954 5.19553 5.20125 5.2067 5.2119 5.21685 5.22157 #bodywt for
gender,fleet: 1 / 2
 0 0.0217926 0.0365795 0.0589706 0.0909295 0.133692 0.187222 0.250013 0.31935 0.391887 0.464295 0.533754 0.598217
0.656443 0.707902 0.752601 0.79091 0.823412 0.850783 0.873715 0.892864 0.908828 0.92213 0.933222 0.942482 0.95023 0.95673
0.962198 0.966815 0.970725 0.974051 0.976889 0.97932 0.981411 0.983217 0.984781 0.986142 0.98733 0.988371 0.989286
0.990094 0.990808 0.991443 0.992008 0.992513 0.992965 0.993371 0.993737 0.994067 0.994366 0.994637 0.994883 0.995108
0.995312 0.9955 0.995672 0.995829 0.995974 0.996108 0.996231 0.996345 0.996451 0.996548 0.996639 0.996723 0.996801
0.996874 0.996942 0.997005 0.997064 0.997117 0.997164 0.997209 0.99725 0.997289 0.997326 0.997361 0.997393 0.997424
0.997453 0.99748 0.997505 0.997529 0.997552 0.997574 0.997594 0.997613 0.997631 0.997648 0.997665 0.99768 0.997695
0.997708 0.997721 0.997734 0.997745 0.997756 0.997767 0.997777 0.997786 0.997795 #selex for gender,fleet: 1 / 2
 0.0494841 0.18499 0.254003 0.329243 0.407229 0.486084 0.565523 0.64614 0.728791 0.81425 0.903058 0.995482 1.09153 1.19098
1.29346 1.39847 1.50549 1.61394 1.72327 1.83298 1.9426 2.05171 2.15994 2.26697 2.37253 2.47639 2.57834 2.67823 2.77591
2.87129 2.96428 3.0548 3.14282 3.22829 3.31121 3.39157 3.46936 3.54461 3.61735 3.68759 3.75537 3.82074 3.88374 3.94442
4.00283 4.05903 4.11307 4.16501 4.21491 4.26284 4.30884 4.35298 4.39532 4.43592 4.47483 4.51213 4.54785 4.58207 4.61483
4.64619 4.67621 4.70493 4.7324 4.75868 4.7838 4.80782 4.83079 4.85273 4.8737 4.89374 4.91301 4.93152 4.94921 4.9661 4.98222
4.99762 5.01232 5.02636 5.03975 5.05254 5.06474 5.07638 5.08749 5.09809 5.1082 5.11785 5.12705 5.13583 5.1442 5.15219
5.15981 5.16707 5.174 5.1806 5.1869 5.1929 5.19863 5.20409 5.20929 5.21426 5.21899 #bodywt for gender,fleet: 1 / 3
 0 0.0173127 0.0379758 0.0760526 0.137052 0.221576 0.323895 0.434081 0.541814 0.639306 0.722341 0.78984 0.842811 0.883314
0.913713 0.936243 0.952809 0.964941 0.973814 0.980314 0.985089 0.988613 0.99123 0.993184 0.994655 0.99577 0.996622
0.997278 0.997787 0.998186 0.9985 0.99875 0.998949 0.999111 0.999242 0.999349 0.999437 0.99951 0.999571 0.999622 0.999665
0.999701 0.999733 0.999759 0.999782 0.999802 0.999819 0.999834 0.999848 0.999859 0.999869 0.999879 0.999887 0.999894

0.9999 0.999906 0.999911 0.999916 0.99992 0.999924 0.999927 0.999931 0.999934 0.999936 0.999939 0.999941 0.999943
0.999945 0.999946 0.999948 0.999949 0.999951 0.999952 0.999953 0.999954 0.999955 0.999956 0.999956 0.999957 0.999958
0.999958 0.999959 0.99996 0.99996 0.999961 0.999961 0.999962 0.999962 0.999962 0.999963 0.999963 0.999963 0.999964
0.999964 0.999964 0.999965 0.999965 0.999965 0.999965 0.999966 0.999966 #selex for gender,fleet: 1 / 3
 0.0451344 0.165115 0.228798 0.302623 0.385204 0.474779 0.569495 0.667698 0.768115 0.869892 0.972524 1.07575 1.17947
1.28362 1.38817 1.49307 1.59824 1.70354 1.80882 1.91392 2.01861 2.1227 2.22596 2.32819 2.42918 2.52874 2.62671 2.72291
2.81721 2.9095 2.99966 3.08762 3.17331 3.25667 3.33768 3.4163 3.49252 3.56634 3.63778 3.70684 3.77355 3.83795 3.90006
3.95993 4.0176 4.07312 4.12654 4.17791 4.22728 4.27472 4.32028 4.36401 4.40597 4.44622 4.48481 4.5218 4.55725 4.59121
4.62373 4.65486 4.68467 4.71319 4.74048 4.76659 4.79156 4.81543 4.83825 4.86007 4.88092 4.90084 4.92001 4.93845 4.95606
4.97288 4.98895 5.00429 5.01893 5.03291 5.04625 5.05899 5.07115 5.08274 5.09381 5.10437 5.11445 5.12406 5.13323 5.14198
5.15032 5.15828 5.16587 5.17311 5.18001 5.18659 5.19287 5.19886 5.20456 5.21 5.21519 5.22014 5.22485 #bodywt for
gender,fleet: 1 / 4
 0 0.0129963 0.0216166 0.034787 0.0540187 0.0807275 0.11588 0.159668 0.211346 0.269312 0.331388 0.395189 0.458462
0.519329 0.576398 0.62878 0.676028 0.718049 0.755006 0.787226 0.815132 0.839185 0.859848 0.877563 0.892735 0.905727
0.916859 0.926409 0.934614 0.941678 0.947774 0.953048 0.957622 0.961602 0.965075 0.968113 0.970779 0.973127 0.975199
0.977034 0.978663 0.980114 0.981409 0.982569 0.98361 0.984547 0.985392 0.986156 0.986848 0.987477 0.988049 0.988571
0.989047 0.989484 0.989884 0.990252 0.99059 0.990902 0.991189 0.991455 0.991702 0.99193 0.992141 0.992338 0.992521
0.992692 0.99285 0.992999 0.993137 0.993266 0.993383 0.993487 0.993585 0.993677 0.993763 0.993844 0.99392 0.993992
0.99406 0.994124 0.994184 0.994241 0.994294 0.994345 0.994392 0.994437 0.99448 0.99452 0.994558 0.994595 0.994629
0.994661 0.994692 0.994721 0.994748 0.994774 0.994799 0.994822 0.994845 0.994866 0.994886 #selex for gender,fleet: 1 / 4
 0.0454219 0.166901 0.231847 0.307724 0.393488 0.487628 0.588298 0.693544 0.801566 0.910911 1.02055 1.12984 1.23845
1.34625 1.45321 1.55939 1.66481 1.76951 1.87349 1.97672 2.07914 2.18065 2.28116 2.38053 2.47864 2.57535 2.67052 2.76405
2.8558 2.94567 3.03356 3.1194 3.20312 3.28465 3.36396 3.44102 3.5158 3.5883 3.65852 3.72646 3.79214 3.85558 3.91682 3.97589
4.03282 4.08766 4.14045 4.19124 4.24008 4.28703 4.33212 4.37543 4.417 4.45689 4.49514 4.53182 4.56698 4.60066 4.63293
4.66384 4.69342 4.72174 4.74884 4.77476 4.79956 4.82328 4.84595 4.86763 4.88835 4.90815 4.92722 4.94558 4.96312 4.97987
4.99586 5.01114 5.02572 5.03964 5.05293 5.06562 5.07772 5.08928 5.1003 5.11082 5.12086 5.13043 5.13957 5.14828 5.15659
5.16452 5.17208 5.17929 5.18617 5.19273 5.19898 5.20494 5.21063 5.21605 5.22122 5.22615 5.23084 #bodywt for gender,fleet: 1 /
5
 0 0.00479154 0.00819966 0.0136284 0.0219719 0.0343028 0.0517624 0.0753748 0.105822 0.143253 0.187194 0.236596 0.289987
0.345687 0.402019 0.457474 0.51082 0.561142 0.607835 0.650573 0.689255 0.723948 0.754838 0.782188 0.806297 0.827485
0.846065 0.862337 0.876579 0.889045 0.899961 0.90953 0.917927 0.925308 0.931807 0.937541 0.942609 0.947099 0.951086
0.954634 0.957798 0.960627 0.963161 0.965437 0.967486 0.969334 0.971004 0.972517 0.973891 0.97514 0.976278 0.977317
0.978267 0.979138 0.979937 0.980672 0.981348 0.981972 0.982547 0.98308 0.983573 0.98403 0.984454 0.984848 0.985215
0.985556 0.985875 0.986172 0.986449 0.986709 0.986942 0.987151 0.987347 0.987531 0.987705 0.987867 0.98802 0.988164
0.9883 0.988428 0.988548 0.988662 0.988769 0.98887 0.988966 0.989056 0.989142 0.989222 0.989299 0.989371 0.989439
0.989504 0.989566 0.989624 0.989679 0.989731 0.98978 0.989827 0.989872 0.989914 0.989954 #selex for gender,fleet: 1 / 5
 0.0465693 0.172741 0.240531 0.320033 0.410268 0.5097 0.616284 0.727673 0.841562 0.956019 1.06968 1.18174 1.29186 1.40001
1.50634 1.61106 1.71439 1.81654 1.91766 2.01783 2.11712 2.2155 2.31295 2.40937 2.50469 2.59878 2.69154 2.78283 2.87254
2.96055 3.04677 3.1311 3.21346 3.29379 3.37202 3.44811 3.52204 3.59377 3.66331 3.73065 3.7958 3.85877 3.91959 3.97828
4.03487 4.08942 4.14194 4.1925 4.24113 4.28789 4.33282 4.37598 4.41741 4.45717 4.49532 4.5319 4.56697 4.60058 4.63277
4.66361 4.69314 4.7214 4.74845 4.77433 4.79909 4.82277 4.84541 4.86706 4.88775 4.90753 4.92657 4.94491 4.96243 4.97916
4.99514 5.0104 5.02497 5.03888 5.05216 5.06484 5.07693 5.08848 5.09949 5.11 5.12003 5.1296 5.13873 5.14744 5.15574 5.16366
5.17122 5.17843 5.1853 5.19185 5.1981 5.20406 5.20974 5.21516 5.22032 5.22525 5.22994 #bodywt for gender,fleet: 1 / 6
 0 0.0015912 0.0029707 0.0053749 0.00941665 0.0159509 0.0260688 0.0410099 0.0619773 0.0898887 0.125142 0.167475 0.215977
0.269224 0.325495 0.383009 0.440117 0.495428 0.547881 0.596746 0.641596 0.68226 0.71876 0.751258 0.780008 0.805318
0.827515 0.846933 0.863889 0.878682 0.891583 0.902838 0.912664 0.921251 0.928766 0.935354 0.94114 0.946232 0.950723
0.954693 0.958209 0.961332 0.964112 0.966592 0.96881 0.970798 0.972584 0.974193 0.975644 0.976957 0.978147 0.979227
0.98021 0.981107 0.981925 0.982674 0.983361 0.983991 0.984571 0.985105 0.985597 0.986052 0.986473 0.986863 0.987224
0.98756 0.987872 0.988162 0.988432 0.988685 0.988909 0.989109 0.989297 0.989472 0.989637 0.989791 0.989936 0.990072
0.9902 0.990321 0.990434 0.990541 0.990642 0.990737 0.990827 0.990912 0.990991 0.991067 0.991138 0.991206 0.99127 0.99133
0.991387 0.991441 0.991492 0.991541 0.991587 0.99163 0.991672 0.991711 0.991748 #selex for gender,fleet: 1 / 6
 0.053043 0.18203 0.249615 0.326065 0.409662 0.498844 0.592418 0.689588 0.789873 0.892984 0.99872 1.1069 1.21731 1.3297
1.44376 1.55917 1.67554 1.79251 1.9097 2.02672 2.14323 2.2589 2.37342 2.48653 2.59798 2.70756 2.81508 2.9204 3.02338
3.12391 3.22192 3.31733 3.4101 3.5002 3.5876 3.67231 3.75433 3.83368 3.91038 3.98445 4.05595 4.12491 4.19138 4.25542
4.31707 4.37639 4.43345 4.48831 4.54102 4.59165 4.64026 4.68692 4.73169 4.77462 4.81579 4.85526 4.89307 4.9293 4.964
4.99723 5.02903 5.05948 5.08861 5.11648 5.14314 5.16864 5.19302 5.21634 5.23862 5.25992 5.2804 5.3001 5.31892 5.33689
5.35407 5.37047 5.38613 5.40109 5.41538 5.42902 5.44204 5.45447 5.46633 5.47765 5.48846 5.49878 5.50862 5.51801 5.52698
5.53553 5.54369 5.55147 5.5589 5.56598 5.57274 5.57919 5.58533 5.5912 5.59679 5.60213 5.60721 #bodywt for gender,fleet: 2 / 1
 0 0.0569017 0.0883346 0.131105 0.185568 0.250413 0.322805 0.399006 0.475173 0.549039 0.615171 0.675242 0.727699 0.77265
0.810614 0.842334 0.868634 0.890328 0.90817 0.922824 0.934862 0.944763 0.952923 0.959668 0.96526 0.969915 0.973805
0.977069 0.97982 0.982148 0.984128 0.985818 0.987267 0.988515 0.989595 0.990532 0.991349 0.992064 0.992691 0.993244
0.993733 0.994167 0.994554 0.994899 0.995207 0.995485 0.995734 0.99596 0.996163 0.996348 0.996516 0.99667 0.996809
0.996937 0.997054 0.997162 0.997261 0.997352 0.997436 0.997514 0.997586 0.997652 0.997714 0.997772 0.997825 0.997875
0.997921 0.997964 0.998005 0.998043 0.998077 0.998107 0.998136 0.998163 0.998188 0.998212 0.998234 0.998255 0.998275
0.998294 0.998311 0.998328 0.998343 0.998358 0.998372 0.998386 0.998398 0.99841 0.998421 0.998432 0.998442 0.998451
0.99846 0.998469 0.998477 0.998485 0.998492 0.998499 0.998505 0.998512 0.998517 #selex for gender,fleet: 2 / 1
 0.0543364 0.189087 0.260505 0.341692 0.430482 0.524665 0.622435 0.722596 0.824518 0.92797 1.03293 1.13947 1.24761 1.35735
1.46858 1.58112 1.69473 1.80911 1.92393 2.03883 2.15347 2.26751 2.38063 2.49255 2.60298 2.71171 2.81852 2.92323 3.02571
3.12583 3.22348 3.3186 3.41113 3.50102 3.58826 3.67283 3.75473 3.83397 3.91059 3.98459 4.05603 4.12494 4.19137 4.25537
4.31699 4.37629 4.43333 4.48817 4.54087 4.59148 4.64009 4.68674 4.7315 4.77443 4.81559 4.85505 4.89286 4.92909 4.96378

4.99701 5.02881 5.05926 5.08839 5.11626 5.14292 5.16842 5.1928 5.21611 5.2384 5.2597 5.28018 5.29987 5.31869 5.33667
5.35384 5.37024 5.38591 5.40087 5.41515 5.42879 5.44181 5.45424 5.4661 5.47743 5.48824 5.49855 5.50839 5.51779 5.52675
5.5353 5.54346 5.55124 5.55867 5.56576 5.57251 5.57896 5.58511 5.59097 5.59657 5.6019 5.60699 #bodywt for gender,fleet: 2 / 2
 0 0.0222029 0.0381242 0.0626512 0.0980606 0.145685 0.205248 0.274685 0.350553 0.428812 0.505627 0.577932 0.643671
0.701772 0.751972 0.794578 0.830247 0.859804 0.884117 0.904021 0.920269 0.933517 0.944322 0.953145 0.960366 0.966293
0.971175 0.975211 0.978562 0.981356 0.983697 0.985666 0.98733 0.988743 0.989949 0.990981 0.99187 0.992638 0.993304
0.993884 0.994391 0.994837 0.995229 0.995576 0.995883 0.996157 0.996401 0.99662 0.996816 0.996992 0.997152 0.997296
0.997427 0.997546 0.997654 0.997753 0.997843 0.997926 0.998002 0.998072 0.998136 0.998195 0.99825 0.998301 0.998348
0.998391 0.998432 0.99847 0.998505 0.998537 0.998567 0.998593 0.998617 0.99864 0.998661 0.998681 0.9987 0.998718 0.998734
0.99875 0.998765 0.998778 0.998792 0.998804 0.998816 0.998827 0.998837 0.998847 0.998856 0.998865 0.998873 0.998881
0.998888 0.998895 0.998902 0.998908 0.998914 0.99892 0.998925 0.998931 0.998935 #selex for gender,fleet: 2 / 2
 0.0591734 0.210429 0.287525 0.370303 0.454962 0.539856 0.625135 0.711786 0.800937 0.893512 0.990098 1.09092 1.19589
1.30464 1.41665 1.53127 1.64785 1.76571 1.88424 2.00288 2.12113 2.23855 2.35479 2.46952 2.58249 2.69345 2.80225 2.90871
3.01271 3.11417 3.213 3.30915 3.40258 3.49326 3.58119 3.66637 3.74881 3.82854 3.90557 3.97996 4.05173 4.12094 4.18764
4.25187 4.31371 4.37321 4.43042 4.48542 4.53825 4.589 4.63772 4.68448 4.72934 4.77236 4.81361 4.85314 4.89103 4.92732
4.96207 4.99535 5.02721 5.0577 5.08687 5.11478 5.14148 5.16702 5.19143 5.21477 5.23709 5.25841 5.27892 5.29863 5.31746
5.33545 5.35264 5.36906 5.38473 5.3997 5.414 5.42765 5.44068 5.45312 5.46499 5.47632 5.48714 5.49746 5.50731 5.51671
5.52568 5.53424 5.5424 5.55019 5.55762 5.56471 5.57147 5.57792 5.58408 5.58995 5.59554 5.60088 5.60597 #bodywt for
gender,fleet: 2 / 3
 0 0.0178904 0.0405103 0.0829315 0.151164 0.244983 0.356678 0.474227 0.586035 0.684135 0.764939 0.828339 0.876291 0.91159
0.93708 0.955251 0.968103 0.977161 0.983542 0.988047 0.991243 0.993522 0.99516 0.996346 0.997212 0.997851 0.998326
0.998683 0.998953 0.99916 0.999319 0.999443 0.999541 0.999618 0.99968 0.999729 0.99977 0.999802 0.999829 0.999852 0.99987
0.999886 0.999899 0.99991 0.999919 0.999928 0.999935 0.999941 0.999946 0.99995 0.999954 0.999958 0.999961 0.999964
0.999966 0.999968 0.99997 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978 0.999979 0.99998 0.999981 0.999982
0.999982 0.999983 0.999984 0.999984 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987
0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989 0.999989 0.999989
0.999989 0.999989 0.999989 0.999989 0.99999 0.99999 0.99999 0.99999 #selex for gender,fleet: 2 / 3
 0.0540338 0.18822 0.259979 0.342381 0.433628 0.531595 0.634196 0.739713 0.846945 0.955186 1.0641 1.17359 1.28366 1.39435
1.50567 1.61759 1.73 1.84276 1.95567 2.0685 2.181 2.29291 2.40396 2.51389 2.62247 2.72947 2.8347 2.93798 3.03915 3.13809
3.23469 3.32886 3.42053 3.50966 3.59622 3.68017 3.76153 3.84028 3.91645 3.99007 4.06115 4.12974 4.19588 4.25961 4.321
4.38008 4.43692 4.49158 4.54411 4.59458 4.64305 4.68957 4.73422 4.77704 4.81811 4.85748 4.89521 4.93136 4.96598 4.99914
5.03089 5.06127 5.09035 5.11818 5.14479 5.17025 5.19459 5.21786 5.24011 5.26138 5.28184 5.30151 5.32031 5.33827 5.35543
5.37181 5.38724 5.40241 5.41668 5.4303 5.44331 5.45573 5.46758 5.4789 5.4897 5.5 5.50984 5.51922 5.52818 5.53672 5.54487
5.55265 5.56007 5.56715 5.5739 5.58034 5.58649 5.59235 5.59793 5.60326 5.60835 #bodywt for gender,fleet: 2 / 4
 0 0.0132348 0.0225208 0.0369806 0.0584077 0.0884549 0.128176 0.177619 0.235665 0.300184 0.368434 0.437548 0.504945
0.568592 0.627104 0.679713 0.726166 0.766591 0.80137 0.831031 0.856164 0.877362 0.895189 0.910157 0.92272 0.933269
0.942138 0.949609 0.955917 0.961259 0.965795 0.96966 0.972965 0.9758 0.978242 0.980353 0.982183 0.983777 0.985169
0.986389 0.987462 0.98841 0.989248 0.989993 0.990656 0.991249 0.99178 0.992257 0.992686 0.993074 0.993425 0.993744
0.994033 0.994297 0.994538 0.994758 0.99496 0.995145 0.995316 0.995473 0.995617 0.995751 0.995875 0.99599 0.996096
0.996195 0.996287 0.996373 0.996452 0.996527 0.996593 0.996653 0.996709 0.996761 0.99681 0.996856 0.996899 0.99694
0.996978 0.997014 0.997048 0.99708 0.99711 0.997139 0.997165 0.997191 0.997215 0.997237 0.997259 0.997279 0.997298
0.997316 0.997334 0.99735 0.997365 0.99738 0.997394 0.997407 0.997419 0.997431 0.997442 #selex for gender,fleet: 2 / 4
 0.0543739 0.190243 0.263446 0.348202 0.443079 0.546169 0.655282 0.768243 0.883192 0.998757 1.11408 1.22871 1.34252
1.45553 1.56784 1.67959 1.79084 1.90166 2.01204 2.12193 2.23122 2.33978 2.44747 2.5541 2.65949 2.76347 2.86586 2.96651
3.06526 3.16197 3.25655 3.34889 3.4389 3.52653 3.61174 3.69448 3.77474 3.85251 3.9278 4.00062 4.07098 4.13892 4.20447
4.26768 4.32859 4.38724 4.44369 4.49798 4.55019 4.60036 4.64856 4.69483 4.73925 4.78186 4.82274 4.86193 4.8995 4.9355
4.96998 5.00301 5.03464 5.06491 5.09389 5.12162 5.14814 5.17352 5.19778 5.22099 5.24317 5.26437 5.28478 5.30441 5.32318
5.3411 5.35822 5.37458 5.3902 5.40512 5.41936 5.43296 5.44594 5.45834 5.47017 5.48147 5.49225 5.50254 5.51235 5.52172
5.53066 5.53919 5.54733 5.5551 5.5625 5.56957 5.57631 5.58274 5.58888 5.59473 5.60031 5.60563 5.6107 #bodywt for
gender,fleet: 2 / 5
 0 0.0048858 0.00856793 0.0145632 0.0239524 0.0380382 0.0581947 0.0856144 0.121012 0.164393 0.214968 0.271255 0.331313
0.393036 0.454421 0.51376 0.569746 0.621495 0.668515 0.710637 0.747938 0.780664 0.809169 0.833861 0.855162 0.873487
0.889226 0.902732 0.914322 0.924275 0.932831 0.940199 0.946556 0.952053 0.956818 0.96096 0.96457 0.967724 0.970489
0.97292 0.975063 0.976957 0.978637 0.980131 0.981463 0.982653 0.98372 0.984679 0.985543 0.986323 0.987029 0.987669
0.988251 0.988781 0.989265 0.989708 0.990113 0.990485 0.990827 0.991142 0.991432 0.9917 0.991948 0.992178 0.992391
0.992589 0.992773 0.992944 0.993103 0.993252 0.993385 0.993503 0.993614 0.993718 0.993816 0.993907 0.993993 0.994074
0.99415 0.994222 0.994289 0.994353 0.994413 0.994469 0.994523 0.994573 0.994621 0.994666 0.994708 0.994748 0.994786
0.994822 0.994856 0.994889 0.994919 0.994948 0.994976 0.995002 0.995026 0.99505 0.995072 #selex for gender,fleet: 2 / 5
 0.0557307 0.196818 0.273169 0.361889 0.461591 0.570282 0.685475 0.8045 0.924928 1.04492 1.16332 1.27964 1.39381 1.50601
1.61658 1.72585 1.83412 1.94163 2.04851 2.15486 2.26068 2.36591 2.47046 2.57418 2.67692 2.7785 2.87874 2.97749 3.07456
3.16982 3.26313 3.35437 3.44344 3.53027 3.61478 3.69693 3.77668 3.85403 3.92895 4.00145 4.07155 4.13927 4.20463 4.26768
4.32845 4.38698 4.44334 4.49755 4.54969 4.5998 4.64795 4.69418 4.73856 4.78115 4.822 4.86117 4.89872 4.9347 4.96918 5.0022
5.03382 5.06409 5.09306 5.12078 5.14731 5.17268 5.19694 5.22015 5.24233 5.26353 5.28394 5.30357 5.32233 5.34026 5.35738
5.37373 5.38935 5.40427 5.41852 5.43212 5.4451 5.4575 5.46933 5.48063 5.49141 5.50169 5.51151 5.52088 5.52982 5.53835
5.54649 5.55426 5.56167 5.56873 5.57547 5.5819 5.58804 5.59389 5.59947 5.60479 5.60987 #bodywt for gender,fleet: 2 / 6
 0 0.00162938 0.00313006 0.00581483 0.010434 0.018048 0.0300133 0.0478521 0.0729891 0.106416 0.148394 0.198319 0.254783
0.315808 0.379159 0.442647 0.504363 0.562813 0.616959 0.666193 0.710274 0.749245 0.783364 0.812938 0.83846 0.860366
0.879105 0.895099 0.908735 0.920355 0.930262 0.938716 0.945941 0.952128 0.957437 0.962005 0.965944 0.969353 0.972309
0.974882 0.977128 0.979095 0.980822 0.982343 0.983687 0.984878 0.985937 0.98688 0.987723 0.988479 0.989157 0.989769
0.99032 0.99082 0.991273 0.991684 0.992059 0.992401 0.992714 0.993001 0.993264 0.993505 0.993728 0.993933 0.994123

0.994298 0.994461 0.994611 0.994751 0.994881 0.994996 0.995098 0.995193 0.995281 0.995364 0.995442 0.995515 0.995584
0.995648 0.995708 0.995765 0.995819 0.995869 0.995916 0.995961 0.996003 0.996043 0.99608 0.996116 0.996149 0.996181
0.996211 0.996239 0.996266 0.996291 0.996315 0.996338 0.996359 0.99638 0.996399 0.996417 #selex for gender,fleet: 2 / 6
 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229
0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229
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0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229
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0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 0.0481229
0.0481229 0.0481229 0.0481229 0.0481229 0.0481229 #mean M for year Yinit: 2009 sex: 1
 35.819 33.5384 31.3755 29.1834 27.1433 25.1637 23.2838 21.5589 20.4693 19.221 19.3589 18.8384 19.6163 19.867 20.281 20.1757
20.5531 20.8412 20.6423 19.4987 18.6827 17.3863 15.9147 14.3705 12.9974 11.5954 10.4701 9.45223 8.42817 7.41662 6.5633
5.80166 5.0832 4.4631 3.92016 3.45666 3.05617 2.71459 2.4154 2.15814 1.93668 1.74356 1.57706 1.43342 1.30818 1.19807
1.10205 1.01711 0.941449 0.874613 0.815089 0.761815 0.713068 0.668344 0.627295 0.589284 0.554086 0.521786 0.492024
0.464189 0.438256 0.414396 0.39194 0.372163 0.353817 0.335641 0.318042 0.301282 0.285504 0.270599 0.256512 0.243219
0.230661 0.218814 0.20762 0.197024 0.187004 0.177583 0.168661 0.160245 0.152281 0.144748 0.137626 0.130879 0.124483
0.11841 0.112649 0.107185 0.102002 0.0970835 0.0924115 0.0879844 0.0837743 0.0797663 0.0759466 0.0723154 0.0688625
0.0655787 0.0624552 0.0594839 1.20175 #numbers for year Yinit: 2009 sex: 1
 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 0.0473472
0.0473472 0.0473472 0.0473472 0.0473472 0.0473472 #mean M for year Yinit: 2009 sex: 2
 35.819 33.5644 31.4241 29.2508 27.2259 25.2578 23.3859 21.6664 20.5824 19.3367 19.4837 18.9664 19.7536 20.0052 20.4135
20.2887 20.636 20.8778 20.6153 19.398 18.5006 17.1263 15.5868 13.9902 12.5773 11.1556 10.0191 9.00218 7.99479 7.01272
6.19099 5.46366 4.78271 4.19823 3.68887 3.25577 2.88281 2.5657 2.28854 2.0507 1.84627 1.6681 1.51453 1.38204 1.26642
1.16459 1.07566 0.996776 0.926289 0.863849 0.808051 0.757929 0.711842 0.669344 0.630147 0.593664 0.559714 0.52843
0.499492 0.472314 0.446901 0.423453 0.401308 0.38179 0.363637 0.345563 0.327993 0.311203 0.295352 0.280335 0.266105
0.252645 0.239902 0.227862 0.216467 0.205666 0.195442 0.185818 0.176694 0.168077 0.159914 0.152181 0.144862 0.137918
0.131327 0.125058 0.119104 0.113449 0.108077 0.102971 0.0981156 0.0935087 0.0891221 0.0849409 0.0809512 0.0771538
0.0735389 0.0700972 0.0668201 0.0636993 1.31004 #numbers for year Yinit: 2009 sex: 2
 30.3721 28.9117 27.2296 27.5194 26.8816 28.1048 28.5815 29.2965 29.2598 29.9192 30.4457 30.2543 28.6654 27.5437 25.7
23.5826 21.3435 19.3459 17.2943 15.6457 14.1498 12.6378 11.138 9.87038 8.7362 7.66332 6.7356 5.92189 5.22622 4.62427
4.11022 3.65936 3.27122 2.93672 2.64473 2.39273 2.17515 1.9853 1.81829 1.67256 1.54359 1.42866 1.32712 1.23668 1.15572
1.08165 1.0137 0.951342 0.893607 0.840153 0.79111 0.745929 0.70368 0.664326 0.628121 0.594052 0.56405 0.536223 0.50866
0.481977 0.456568 0.432653 0.410064 0.388719 0.368578 0.349553 0.331608 0.314651 0.298598 0.28342 0.269148 0.255631
0.242878 0.230812 0.219395 0.208602 0.198376 0.188683 0.179477 0.170745 0.162462 0.154606 0.147149 0.140067 0.133355
0.126972 0.120896 0.115106 0.109601 0.104366 0.0993885 0.0946537 0.0901496 0.0858646 0.0817875 0.0779078 0.0742156
0.0707013 0.067356 0.0641713 1.29915 #numbers for year Ydeclare: 2002 sex: 1
 30.3721 28.9341 27.2716 27.5821 26.9604 28.2012 28.6858 29.3977 29.3389 29.9573 30.4179 30.136 28.444 27.205 25.2503
23.0365 20.7235 18.6699 16.5921 14.9287 13.436 11.9508 10.4974 9.27893 8.19805 7.18356 6.31136 5.55007 4.90195 4.34315
3.86751 3.45131 3.09379 2.78618 2.51784 2.28635 2.0865 1.91197 1.75819 1.62381 1.50459 1.39804 1.30364 1.21927 1.1435
1.07383 1.0096 0.950373 0.895259 0.843985 0.796749 0.753063 0.712042 0.673693 0.638314 0.604906 0.575464 0.548085
0.520831 0.494341 0.469032 0.445141 0.422511 0.40107 0.380791 0.361595 0.343458 0.326293 0.310022 0.294618 0.280119
0.266371 0.253386 0.241083 0.229429 0.218396 0.207929 0.197992 0.188541 0.179564 0.171037 0.162937 0.155239 0.147917
0.14097 0.134356 0.128051 0.122035 0.116309 0.110858 0.105669 0.100727 0.096022 0.0915409 0.0872729 0.0832074 0.0793344
0.0756445 0.0721286 0.0687781 1.41678 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
233.655 233.655 233.626 233.578 233.522 233.495 233.465 233.436 233.411 233.384 233.35 233.289 233.215 233.128 233.046
232.952 232.839 232.736 232.594 232.494 232.371 232.211 232.043 231.891 231.739 231.599 231.446 231.277 231.117 230.801
230.119 228.825 227.69 227.291 226.78 226.421 226.032 225.544 225.129 224.801 224.393 223.861 223.274 222.569 221.724
220.992 220.363 219.871 219.284 218.63 218.061 217.328 216.499 215.692 214.818 213.551 212.132 210.524 208.287 206.091
203.625 201.211 198.265 195.192 190.049 184.569 180.067 173.317 165.066 157.526 152.666 146.807 142.358 137.207 131.19
122.958 117.881 108.752 98.8413 90.0331 84.4733 77.5991 72.1193 65.4685 63.6891 59.9982 60.674 60.7442 62.3956 64.1759
65.9069 67.4825 69.1024 70.3836 71.6379 #Recruits
9.87535e+008 9.87535e+008 9.87275e+008 9.86851e+008 9.86356e+008 9.86112e+008 9.85845e+008 9.85591e+008 9.8537e+008
9.85135e+008 9.84832e+008 9.84291e+008 9.83639e+008 9.82872e+008 9.82148e+008 9.81322e+008 9.80327e+008 9.79418e+008
9.78169e+008 9.77298e+008 9.76214e+008 9.7482e+008 9.73351e+008 9.72025e+008 9.70701e+008 9.69477e+008 9.6815e+008
9.66686e+008 9.65296e+008 9.62569e+008 9.567e+008 9.45665e+008 9.36094e+008 9.32751e+008 9.28488e+008 9.25511e+008
9.2229e+008 9.18267e+008 9.14859e+008 9.12177e+008 9.08847e+008 9.04526e+008 8.99783e+008 8.94114e+008 8.87373e+008
8.81577e+008 8.7662e+008 8.72765e+008 8.68187e+008 8.63113e+008 8.58722e+008 8.53097e+008 8.46779e+008 8.40674e+008

8.34116e+008 8.24681e+008 8.14244e+008 8.0257e+008 7.86583e+008 7.71181e+008 7.54221e+008 7.37943e+008 7.18513e+008
6.98725e+008 6.66674e+008 6.3391e+008 6.07996e+008 5.70751e+008 5.27642e+008 4.90406e+008 4.67415e+008 4.40692e+008
4.21085e+008 3.99092e+008 3.7431e+008 3.41894e+008 3.22716e+008 2.89679e+008 2.55775e+008 2.27225e+008 2.0992e+008
1.89244e+008 1.73306e+008 1.54578e+008 1.49678e+008 1.39657e+008 1.41478e+008 1.41667e+008 1.46144e+008 1.51014e+008
1.55793e+008 1.6018e+008 1.64729e+008 1.68355e+008 1.71928e+008 #SpawnBio
0.344 0.5 0 # spawn-recr steepness, sigmaR, autocorr
mid catch h low vector 2
 0 0 26.1833 98.3499 333.887 1015.05 2728.08 6434.22 13349.2 24622.7 40982.2 62538.8 88823.4 118988 152044 187063 223279
260128 297232 334361 371390 408258 444941 481431 517722 553804 589662 625270 660599 695613 730273 764538 798366
831715 864547 896824 928511 959578 989997 1.01974e+006 1.0488e+006 1.07714e+006 1.10476e+006 1.13164e+006
1.15779e+006 1.18318e+006 1.20783e+006 1.23173e+006 1.25489e+006 1.2773e+006 1.29898e+006 1.31994e+006 1.34019e+006
1.35973e+006 1.37858e+006 1.39676e+006 1.41427e+006 1.43113e+006 1.44737e+006 1.46298e+006 1.478e+006 1.49243e+006
1.5063e+006 1.51961e+006 1.5324e+006 1.54466e+006 1.55643e+006 1.56772e+006 1.57854e+006 1.58891e+006 1.59885e+006
1.60861e+006 1.61796e+006 1.62691e+006 1.63548e+006 1.64368e+006 1.65153e+006 1.65904e+006 1.66622e+006 1.67309e+006
1.67966e+006 1.68594e+006 1.69194e+006 1.69767e+006 1.70316e+006 1.70839e+006 1.71339e+006 1.71817e+006 1.72273e+006
1.72709e+006 1.73125e+006 1.73523e+006 1.73902e+006 1.74264e+006 1.74609e+006 1.74939e+006 1.75254e+006 1.75554e+006
1.7584e+006 1.76114e+006 1.76374e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0442974 0.15965 0.219645 0.288157 0.36377 0.445102 0.531005 0.620642 0.713446 0.80904 0.907155 1.00756 1.11004 1.21434
1.32018 1.42727 1.53528 1.64389 1.75275 1.86154 1.96994 2.07765 2.18439 2.28991 2.39399 2.49641 2.59701 2.69563 2.79213
2.88642 2.97839 3.06799 3.15517 3.23987 3.32208 3.4018 3.47901 3.55372 3.62597 3.69576 3.76314 3.82813 3.89079 3.95115
4.00928 4.06521 4.11901 4.17072 4.22042 4.26815 4.31397 4.35795 4.40013 4.44059 4.47938 4.51655 4.55216 4.58627 4.61894
4.65021 4.68013 4.70877 4.73617 4.76237 4.78743 4.81139 4.8343 4.85619 4.87711 4.8971 4.91632 4.93481 4.95246 4.96933
4.98543 5.0008 5.01548 5.02949 5.04286 5.05563 5.06781 5.07943 5.09053 5.10111 5.11121 5.12084 5.13003 5.13879 5.14716
5.15513 5.16273 5.16999 5.1769 5.1835 5.18979 5.19579 5.2015 5.20695 5.21215 5.21711 5.22183 #bodywt for gender,fleet: 1 / 1
 0 0.056091 0.0855272 0.125125 0.175249 0.234892 0.301759 0.372728 0.444484 0.514078 0.579259 0.638584 0.691347 0.737427
0.777106 0.810914 0.839497 0.863536 0.883684 0.900543 0.914644 0.926445 0.936336 0.944644 0.95164 0.95755 0.962558
0.966817 0.970452 0.973567 0.976246 0.978558 0.980562 0.982304 0.983825 0.985158 0.986329 0.987362 0.988276 0.989088
0.98981 0.990455 0.991033 0.991552 0.992019 0.992441 0.992823 0.993169 0.993484 0.99377 0.994032 0.994271 0.994491
0.994692 0.994877 0.995047 0.995205 0.99535 0.995484 0.995609 0.995724 0.995832 0.995931 0.996024 0.996111 0.996191
0.996267 0.996337 0.996403 0.996465 0.996521 0.996571 0.996618 0.996662 0.996704 0.996743 0.99678 0.996815 0.996848
0.996879 0.996908 0.996936 0.996962 0.996986 0.99701 0.997032 0.997052 0.997072 0.997091 0.997108 0.997125 0.997141
0.997156 0.99717 0.997184 0.997196 0.997209 0.99722 0.997231 0.997241 0.997251 #selex for gender,fleet: 1 / 1
 0.0453904 0.165902 0.229339 0.302192 0.38272 0.469007 0.559349 0.652485 0.747637 0.844401 0.942609 1.04221 1.14318
1.24547 1.34899 1.45359 1.55907 1.66519 1.77168 1.87826 1.98424 2.09051 2.19561 2.29968 2.40247 2.50377 2.60339 2.70115
2.79691 2.89055 2.98197 3.07109 3.15784 3.24219 3.32409 3.40353 3.4805 3.55502 3.62708 3.69672 3.76396 3.82884 3.89139
3.95166 4.00971 4.06557 4.1193 4.17096 4.22061 4.26829 4.31408 4.35802 4.40017 4.4406 4.47937 4.51651 4.55211 4.5862
4.61885 4.6501 4.68002 4.70865 4.73603 4.76223 4.78728 4.81123 4.83413 4.85601 4.87692 4.89691 4.91613 4.93461 4.95226
4.96912 4.98521 5.00058 5.01526 5.02927 5.04264 5.0554 5.06758 5.0792 5.09029 5.10087 5.11097 5.1206 5.12979 5.13855
5.14691 5.15488 5.16249 5.16974 5.17666 5.18325 5.18954 5.19553 5.20125 5.2067 5.2119 5.21685 5.22157 #bodywt for
gender,fleet: 1 / 2
 0 0.0217926 0.0365795 0.0589706 0.0909295 0.133692 0.187222 0.250013 0.31935 0.391887 0.464295 0.533754 0.598217
0.656443 0.707902 0.752601 0.79091 0.823412 0.850783 0.873715 0.892864 0.908828 0.92213 0.933222 0.942482 0.95023 0.95673
0.962198 0.966815 0.970725 0.974051 0.976889 0.97932 0.981411 0.983217 0.984781 0.986142 0.98733 0.988371 0.989286
0.990094 0.990808 0.991443 0.992008 0.992513 0.992965 0.993371 0.993737 0.994067 0.994366 0.994637 0.994883 0.995108
0.995312 0.9955 0.995672 0.995829 0.995974 0.996108 0.996231 0.996345 0.996451 0.996548 0.996639 0.996723 0.996801
0.996874 0.996942 0.997005 0.997064 0.997117 0.997164 0.997209 0.99725 0.997289 0.997326 0.997361 0.997393 0.997424
0.997453 0.99748 0.997505 0.997529 0.997552 0.997574 0.997594 0.997613 0.997631 0.997648 0.997665 0.99768 0.997695
0.997708 0.997721 0.997734 0.997745 0.997756 0.997767 0.997777 0.997786 0.997795 #selex for gender,fleet: 1 / 2
 0.0494841 0.18499 0.254003 0.329243 0.407229 0.486047 0.565523 0.64614 0.728791 0.81425 0.903058 0.995482 1.09153 1.19098
1.29346 1.39847 1.50549 1.61394 1.72327 1.83298 1.9426 2.05171 2.15994 2.26697 2.37253 2.47639 2.57834 2.67823 2.77591
2.87129 2.96428 3.0548 3.14282 3.22829 3.31121 3.39157 3.46936 3.54461 3.61735 3.68759 3.75537 3.82074 3.88374 3.94442
4.00283 4.05903 4.11307 4.16501 4.21491 4.26284 4.30884 4.35298 4.39532 4.43592 4.47483 4.51213 4.54785 4.58207 4.61483
4.64619 4.67621 4.70493 4.7324 4.75868 4.7838 4.80782 4.83079 4.85273 4.8737 4.89374 4.91301 4.93152 4.94921 4.9661 4.98222
4.99762 5.01232 5.02636 5.03975 5.05254 5.06474 5.07638 5.08749 5.09809 5.1082 5.11785 5.12705 5.13583 5.1442 5.15219
5.15981 5.16707 5.174 5.1806 5.1869 5.1929 5.19863 5.20409 5.20929 5.21426 5.21899 #bodywt for gender,fleet: 1 / 3
 0 0.0173127 0.0379758 0.0760526 0.137052 0.221576 0.323895 0.434081 0.541814 0.639306 0.722341 0.78984 0.842811 0.883314
0.913713 0.936243 0.952809 0.964941 0.973814 0.980314 0.985089 0.988613 0.99123 0.993184 0.994655 0.99577 0.996622
0.997278 0.997787 0.998186 0.9985 0.99875 0.998949 0.999111 0.999242 0.999349 0.999437 0.99951 0.999571 0.999622 0.999665
0.999701 0.999733 0.999759 0.999782 0.999802 0.999819 0.999834 0.999848 0.999859 0.999869 0.999879 0.999887 0.999894
0.9999 0.999906 0.999911 0.999916 0.99992 0.999924 0.999927 0.999931 0.999934 0.999936 0.999939 0.999941 0.999943
0.999945 0.999946 0.999948 0.999949 0.999951 0.999952 0.999953 0.999954 0.999955 0.999956 0.999956 0.999957 0.999958
0.999958 0.999959 0.99996 0.99996 0.999961 0.999961 0.999962 0.999962 0.999962 0.999963 0.999963 0.999963 0.999964
0.999964 0.999964 0.999965 0.999965 0.999965 0.999965 0.999966 0.999966 #selex for gender,fleet: 1 / 3
 0.0451344 0.165115 0.228798 0.302623 0.385204 0.474779 0.569495 0.667698 0.768115 0.869892 0.972524 1.07575 1.17947
1.28362 1.38817 1.49307 1.59824 1.70354 1.80882 1.91392 2.01861 2.1227 2.22596 2.32819 2.42918 2.52874 2.62671 2.72291
2.81721 2.9095 2.99966 3.08762 3.17331 3.25667 3.33768 3.4163 3.49252 3.56634 3.63778 3.70684 3.77355 3.83795 3.90006
3.95993 4.0176 4.07312 4.12654 4.17791 4.22728 4.27472 4.32028 4.36401 4.40597 4.44622 4.48481 4.5218 4.55725 4.59121
4.62373 4.65486 4.68467 4.71319 4.74048 4.76659 4.79156 4.81543 4.83825 4.86007 4.88092 4.90084 4.92001 4.93845 4.95606
4.97288 4.98895 5.00429 5.01893 5.03291 5.04625 5.05899 5.07115 5.08274 5.09381 5.10437 5.11445 5.12406 5.13323 5.14198

5.15032 5.15828 5.16587 5.17311 5.18001 5.18659 5.19287 5.19886 5.20456 5.21 5.21519 5.22014 5.22485 #bodywt for gender,fleet: 1 / 4
 0 0.0129963 0.0216166 0.034787 0.0540187 0.0807275 0.11588 0.159668 0.211346 0.269312 0.331388 0.395189 0.458462 0.519329 0.576398 0.62878 0.676028 0.718049 0.755006 0.787226 0.815132 0.839185 0.859848 0.877563 0.892735 0.905727 0.916859 0.926409 0.934614 0.941678 0.947774 0.953048 0.957622 0.961602 0.965075 0.968113 0.970779 0.973127 0.975199 0.977034 0.978663 0.980114 0.981409 0.982569 0.98361 0.984547 0.985392 0.986156 0.986848 0.987477 0.988049 0.988571 0.989047 0.989484 0.989884 0.990252 0.99059 0.990902 0.991189 0.991455 0.991702 0.99193 0.992141 0.992338 0.992521 0.992692 0.99285 0.992999 0.993137 0.993266 0.993383 0.993487 0.993585 0.993677 0.993763 0.993844 0.99392 0.993992 0.99406 0.994124 0.994184 0.994241 0.994294 0.994345 0.994392 0.994437 0.99448 0.99452 0.994558 0.994595 0.994629 0.994661 0.994692 0.994721 0.994748 0.994774 0.994799 0.994822 0.994845 0.994866 0.994886 #selex for gender,fleet: 1 / 4
 0.0454219 0.166901 0.231847 0.307724 0.393488 0.487628 0.588298 0.693544 0.801566 0.910911 1.02055 1.12984 1.23845 1.34625 1.45321 1.55939 1.66481 1.76951 1.87349 1.97672 2.07914 2.18065 2.28116 2.38053 2.47864 2.57535 2.67052 2.76405 2.8558 2.94567 3.03356 3.1194 3.20312 3.28465 3.36396 3.44102 3.5158 3.5883 3.65852 3.72646 3.79214 3.85558 3.91682 3.97589 4.03282 4.08766 4.14045 4.19124 4.24008 4.28703 4.33212 4.37543 4.417 4.45689 4.49514 4.53182 4.56698 4.60066 4.63293 4.66384 4.69342 4.72174 4.74884 4.77476 4.79956 4.82328 4.84595 4.86763 4.88835 4.90815 4.92722 4.94558 4.96312 4.97987 4.99586 5.01114 5.02572 5.03964 5.05293 5.06562 5.07772 5.08928 5.1003 5.11082 5.12086 5.13043 5.13957 5.14828 5.15659 5.16452 5.17208 5.17929 5.18617 5.19273 5.19898 5.20494 5.21063 5.21605 5.22122 5.22615 5.23084 #bodywt for gender,fleet: 1 / 5
 0 0.00479154 0.00819966 0.0136284 0.0219719 0.0343028 0.0517624 0.0753748 0.105822 0.143253 0.187194 0.236596 0.289987 0.345687 0.402019 0.457474 0.51082 0.561142 0.607835 0.650573 0.689255 0.723948 0.754838 0.782188 0.806297 0.827485 0.846065 0.862337 0.876579 0.889045 0.899961 0.90953 0.917927 0.925308 0.931807 0.937541 0.942609 0.947099 0.951086 0.954634 0.957798 0.960627 0.963161 0.965437 0.967486 0.969334 0.971004 0.972517 0.973891 0.97514 0.976278 0.977317 0.978267 0.979138 0.979937 0.980672 0.981348 0.981972 0.982547 0.98308 0.983573 0.98403 0.984454 0.984848 0.985215 0.985556 0.985875 0.986172 0.986449 0.986709 0.986942 0.987151 0.987347 0.987531 0.987705 0.987867 0.98802 0.988164 0.9883 0.988428 0.988548 0.988662 0.988769 0.98887 0.988966 0.989056 0.989142 0.989222 0.989299 0.989371 0.989439 0.989504 0.989566 0.989624 0.989679 0.989731 0.98978 0.989827 0.989872 0.989914 0.989954 #selex for gender,fleet: 1 / 5
 0.0465693 0.172741 0.240531 0.320033 0.410268 0.5097 0.616284 0.727673 0.841562 0.956019 1.06968 1.18174 1.29186 1.40001 1.50634 1.61106 1.71439 1.81654 1.91766 2.01783 2.11712 2.2155 2.31295 2.40937 2.50469 2.59878 2.69154 2.78283 2.87254 2.96055 3.04677 3.1311 3.21346 3.29379 3.37202 3.44811 3.52204 3.59377 3.66331 3.73065 3.7958 3.85877 3.91959 3.97828 4.03487 4.08942 4.14194 4.1925 4.24113 4.28789 4.33282 4.37598 4.41741 4.45717 4.49532 4.5319 4.56697 4.60058 4.63277 4.66361 4.69314 4.7214 4.74845 4.77433 4.79909 4.82277 4.84541 4.86706 4.88775 4.90753 4.92657 4.94491 4.96243 4.97916 4.99514 5.0104 5.02497 5.03888 5.05216 5.06484 5.07693 5.08848 5.09949 5.11 5.12003 5.1296 5.13873 5.14744 5.15574 5.16366 5.17122 5.17843 5.1853 5.19185 5.1981 5.20406 5.20974 5.21516 5.22032 5.22525 5.22994 #bodywt for gender,fleet: 1 / 6
 0 0.0015912 0.0029707 0.0053749 0.00941665 0.0159509 0.0260688 0.0410099 0.0619773 0.0898887 0.125142 0.167475 0.215977 0.269224 0.325495 0.383009 0.440117 0.495428 0.547881 0.596746 0.641596 0.68226 0.71876 0.751258 0.780008 0.805318 0.827515 0.846933 0.863889 0.878682 0.891583 0.902838 0.912664 0.921251 0.928766 0.935354 0.94114 0.946232 0.950723 0.954693 0.958209 0.961332 0.964112 0.966592 0.96881 0.970798 0.972584 0.974193 0.975644 0.976957 0.978147 0.979227 0.98021 0.981107 0.981925 0.982674 0.983361 0.983991 0.984571 0.985105 0.985597 0.986052 0.986473 0.986863 0.987224 0.98756 0.987872 0.988162 0.988432 0.988685 0.988909 0.989109 0.989297 0.989472 0.989637 0.989791 0.989936 0.990072 0.9902 0.990321 0.990434 0.990541 0.990642 0.990737 0.990827 0.990912 0.990991 0.991067 0.991138 0.991206 0.99127 0.99133 0.991387 0.991441 0.991492 0.991541 0.991587 0.99163 0.991672 0.991711 0.991748 #selex for gender,fleet: 1 / 6
 0.053043 0.18203 0.249615 0.326065 0.409662 0.498844 0.592418 0.689588 0.789873 0.892984 0.99872 1.1069 1.21731 1.3297 1.44376 1.55917 1.67554 1.79251 1.9097 2.02672 2.14323 2.2589 2.37342 2.48653 2.59798 2.70756 2.81508 2.9204 3.02338 3.12391 3.22192 3.31733 3.4101 3.5002 3.5876 3.67231 3.75433 3.83368 3.91038 3.98445 4.05595 4.12491 4.19138 4.25542 4.31707 4.37639 4.43345 4.48831 4.54102 4.59165 4.64026 4.68692 4.73169 4.77462 4.81579 4.85526 4.89307 4.9293 4.964 4.99723 5.02903 5.05948 5.08861 5.11648 5.14314 5.16864 5.19302 5.21634 5.23862 5.25992 5.2804 5.3001 5.31892 5.33689 5.35407 5.37047 5.38613 5.40109 5.41538 5.42902 5.44204 5.45447 5.46633 5.47765 5.48846 5.49878 5.50862 5.51801 5.52698 5.53553 5.54369 5.55147 5.5589 5.56598 5.57274 5.57919 5.58533 5.5912 5.59679 5.60213 5.60721 #bodywt for gender,fleet: 2 / 1
 0 0.0569017 0.0883346 0.131105 0.185568 0.250413 0.322805 0.399006 0.475173 0.548019 0.615171 0.675242 0.727699 0.77265 0.810614 0.842334 0.868634 0.890328 0.90817 0.922824 0.934862 0.944763 0.952923 0.959668 0.96526 0.969915 0.973805 0.977069 0.97982 0.982148 0.984128 0.985818 0.987267 0.988515 0.989595 0.990532 0.991349 0.992064 0.992691 0.993244 0.993733 0.994167 0.994554 0.994899 0.995207 0.995485 0.995734 0.99596 0.996163 0.996348 0.996516 0.99667 0.996809 0.996937 0.997054 0.997162 0.997261 0.997352 0.997436 0.997514 0.997586 0.997652 0.997714 0.997772 0.997825 0.997875 0.997921 0.997964 0.998005 0.998043 0.998077 0.998107 0.998136 0.998163 0.998188 0.998212 0.998234 0.998255 0.998275 0.998294 0.998311 0.998328 0.998343 0.998358 0.998372 0.998386 0.998398 0.99841 0.998421 0.998432 0.998442 0.998451 0.99846 0.998469 0.998477 0.998485 0.998492 0.998499 0.998505 0.998512 0.998517 #selex for gender,fleet: 2 / 1
 0.0543364 0.189087 0.260505 0.341692 0.430482 0.524665 0.622435 0.722596 0.824518 0.92797 1.03293 1.13947 1.24761 1.35735 1.46858 1.58112 1.69473 1.80911 1.92393 2.03883 2.15347 2.26751 2.38063 2.49255 2.60298 2.71171 2.81852 2.92323 3.02571 3.12583 3.22348 3.3186 3.41113 3.50102 3.58826 3.67283 3.75473 3.83397 3.91059 3.98459 4.05603 4.12494 4.19137 4.25537 4.31699 4.37629 4.43333 4.48817 4.54087 4.59148 4.64009 4.68674 4.7315 4.77443 4.81559 4.85505 4.89286 4.92909 4.96378 4.99701 5.02881 5.05926 5.08839 5.11626 5.14292 5.16842 5.1928 5.21611 5.2384 5.2597 5.28018 5.29987 5.31869 5.33667 5.35384 5.37024 5.38591 5.40087 5.41515 5.42879 5.44181 5.45424 5.4661 5.47743 5.48824 5.49855 5.50839 5.51779 5.52675 5.5353 5.54346 5.55124 5.55867 5.56576 5.57251 5.57896 5.58511 5.59097 5.59657 5.6019 5.60699 #bodywt for gender,fleet: 2 / 2
 0 0.0222029 0.0381242 0.0626512 0.0980606 0.145685 0.205248 0.274685 0.350553 0.428812 0.505627 0.577932 0.643671 0.701772 0.751972 0.794578 0.830247 0.859804 0.884117 0.904021 0.920269 0.933517 0.944322 0.953145 0.960366 0.966293 0.971175 0.975211 0.978562 0.981356 0.983697 0.985666 0.98733 0.988743 0.989949 0.990981 0.99187 0.992638 0.993304 0.993884 0.994391 0.994837 0.995229 0.995576 0.995883 0.996157 0.996401 0.99662 0.996816 0.996992 0.997152 0.997296 0.997427 0.997546 0.997654 0.997753 0.997843 0.997926 0.998002 0.998072 0.998136 0.998195 0.99825 0.998301 0.998348 0.998391 0.998432 0.99847 0.998505 0.998537 0.998567 0.998593 0.998617 0.99864 0.998661 0.998681 0.9987 0.998718 0.998734

0.99875 0.998765 0.998778 0.998792 0.998804 0.998816 0.998827 0.998837 0.998847 0.998856 0.998865 0.998873 0.998881 0.998888 0.998895 0.998902 0.998908 0.998914 0.99892 0.998925 0.998931 0.998935 #selex for gender,fleet: 2 / 2
 0.0591734 0.210429 0.287525 0.370303 0.454962 0.539856 0.625135 0.711786 0.800937 0.893512 0.990098 1.09092 1.19589 1.30464 1.41665 1.53127 1.64785 1.76571 1.88424 2.00288 2.12113 2.23855 2.35479 2.46952 2.58249 2.69345 2.80225 2.90871 3.01271 3.11417 3.213 3.30915 3.40258 3.49326 3.58119 3.66637 3.74881 3.82854 3.90557 3.97996 4.05173 4.12094 4.18764 4.25187 4.31371 4.37321 4.43042 4.48542 4.53825 4.589 4.63772 4.68448 4.72934 4.77236 4.81361 4.85314 4.89103 4.92732 4.96207 4.99535 5.02721 5.0577 5.08687 5.11478 5.14148 5.16702 5.19143 5.21477 5.23709 5.25841 5.27892 5.29863 5.31746 5.33545 5.35264 5.36906 5.38473 5.3997 5.414 5.42765 5.44068 5.45312 5.46499 5.47632 5.48714 5.49746 5.50731 5.51671 5.52568 5.53424 5.5424 5.55019 5.55762 5.56471 5.57147 5.57792 5.58408 5.58995 5.59554 5.60088 5.60597 #bodywt for gender,fleet: 2 / 3
 0 0.0178904 0.0405103 0.0829315 0.151164 0.244983 0.356678 0.474227 0.586035 0.684135 0.764939 0.828339 0.876291 0.91159 0.93708 0.955251 0.968103 0.977161 0.983542 0.988047 0.991243 0.993522 0.99516 0.996346 0.997212 0.997851 0.998326 0.998683 0.998953 0.99916 0.999319 0.999443 0.999541 0.999618 0.99968 0.999729 0.99977 0.999802 0.999829 0.999852 0.99987 0.999886 0.999899 0.99991 0.999919 0.999928 0.999935 0.999941 0.999946 0.99995 0.999954 0.999958 0.999961 0.999964 0.999966 0.999968 0.99997 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978 0.999979 0.99998 0.999981 0.999982 0.999982 0.999983 0.999984 0.999984 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.99999 0.99999 0.99999 0.99999 #selex for gender,fleet: 2 / 3
 0.0540338 0.18822 0.259979 0.342381 0.433628 0.531595 0.634196 0.739713 0.846945 0.955186 1.0641 1.17359 1.28366 1.39435 1.50567 1.61759 1.73 1.84276 1.95567 2.0685 2.181 2.29291 2.40396 2.51389 2.62247 2.72947 2.8347 2.93798 3.03915 3.13809 3.23469 3.32886 3.42053 3.50966 3.59622 3.68017 3.76153 3.84028 3.91645 3.99007 4.06115 4.12974 4.19588 4.25961 4.321 4.38008 4.43692 4.49158 4.54411 4.59458 4.64305 4.68957 4.73422 4.77704 4.81811 4.85748 4.89521 4.93136 4.96598 4.99914 5.03089 5.06127 5.09035 5.11818 5.14479 5.17025 5.19459 5.21786 5.24011 5.26138 5.28184 5.30151 5.32031 5.33827 5.35543 5.37181 5.38746 5.40241 5.41668 5.4303 5.44331 5.45573 5.46758 5.4789 5.4897 5.5 5.50984 5.51922 5.52818 5.53672 5.54487 5.55265 5.56007 5.56715 5.5739 5.58034 5.58649 5.59235 5.59793 5.60326 5.60835 #bodywt for gender,fleet: 2 / 4
 0 0.0132348 0.0225208 0.0369806 0.0584077 0.0884549 0.128176 0.177619 0.235665 0.300184 0.368434 0.437548 0.504945 0.568592 0.627104 0.679713 0.726166 0.766591 0.80137 0.831031 0.856164 0.877362 0.895189 0.910157 0.92272 0.933269 0.942138 0.949609 0.955917 0.961259 0.965795 0.96966 0.972965 0.9758 0.978242 0.980353 0.982183 0.983777 0.985169 0.986389 0.987462 0.98841 0.989248 0.989993 0.990656 0.991249 0.99178 0.992257 0.992686 0.993074 0.993425 0.993744 0.994033 0.994297 0.994538 0.994758 0.99496 0.995145 0.995316 0.995473 0.995617 0.995751 0.995875 0.99599 0.996096 0.996195 0.996287 0.996373 0.996452 0.996527 0.996593 0.996653 0.996709 0.996761 0.99681 0.996856 0.996899 0.99694 0.996978 0.997014 0.997048 0.99708 0.99711 0.997139 0.997165 0.997191 0.997215 0.997237 0.997259 0.997279 0.997298 0.997316 0.997334 0.99735 0.997365 0.99738 0.997394 0.997407 0.997419 0.997431 0.997442 #selex for gender,fleet: 2 / 4
 0.0543739 0.190243 0.263446 0.348202 0.443079 0.546169 0.655282 0.768243 0.883192 0.998757 1.11408 1.22871 1.34252 1.45553 1.56784 1.67959 1.79084 1.90166 2.01204 2.12193 2.23122 2.33978 2.44747 2.5541 2.65949 2.76347 2.86586 2.96651 3.06526 3.16197 3.25655 3.34889 3.4389 3.52653 3.61174 3.69448 3.77474 3.85251 3.9278 4.00062 4.07098 4.13892 4.20447 4.26768 4.32859 4.38724 4.44369 4.49798 4.55019 4.60036 4.64856 4.69483 4.73925 4.78186 4.82274 4.86193 4.8995 4.9355 4.96998 5.00301 5.03464 5.06491 5.09389 5.12162 5.14814 5.17352 5.19778 5.22099 5.24317 5.26437 5.28478 5.30441 5.32318 5.3411 5.35822 5.37458 5.3902 5.40512 5.41936 5.43296 5.44594 5.45834 5.47017 5.48147 5.49225 5.50254 5.51235 5.52172 5.53066 5.53919 5.54733 5.5551 5.5625 5.56957 5.57631 5.58274 5.58888 5.59473 5.60031 5.60563 5.6107 #bodywt for gender,fleet: 2 / 5
 0 0.0048858 0.00856793 0.0145632 0.0239524 0.0380382 0.0581947 0.0856144 0.121012 0.164393 0.214968 0.271255 0.331313 0.393036 0.454421 0.51376 0.569746 0.621495 0.668515 0.710637 0.747938 0.780664 0.809169 0.833861 0.855162 0.873487 0.889226 0.902732 0.914322 0.924275 0.932831 0.940199 0.946556 0.952053 0.956818 0.96096 0.96457 0.967724 0.970489 0.97292 0.975063 0.976957 0.978637 0.980131 0.981463 0.982653 0.98372 0.984679 0.985543 0.986323 0.987029 0.987669 0.988251 0.988781 0.989265 0.989708 0.990113 0.990485 0.990827 0.991142 0.991432 0.9917 0.991948 0.992178 0.992391 0.992589 0.992773 0.992944 0.993103 0.993252 0.993385 0.993503 0.993614 0.993718 0.993816 0.993907 0.993993 0.994074 0.99415 0.994222 0.994289 0.994353 0.994413 0.994469 0.994523 0.994573 0.994621 0.994666 0.994708 0.994748 0.994786 0.994822 0.994856 0.994889 0.994919 0.994948 0.994976 0.995002 0.995026 0.99505 0.995072 #selex for gender,fleet: 2 / 5
 0.0557307 0.196818 0.273169 0.361889 0.461591 0.570282 0.685475 0.8045 0.924928 1.04492 1.16332 1.27964 1.39381 1.50601 1.61658 1.72585 1.83412 1.94163 2.04851 2.15486 2.26068 2.36591 2.47046 2.57418 2.67692 2.7785 2.87874 2.97749 3.07456 3.16982 3.26313 3.35437 3.44344 3.53027 3.61478 3.69693 3.77668 3.85403 3.92895 4.00145 4.07155 4.13927 4.20463 4.26768 4.32845 4.38698 4.44334 4.49755 4.54969 4.5998 4.64795 4.69418 4.73856 4.78115 4.822 4.86117 4.89872 4.9347 4.96918 5.0022 5.03382 5.06409 5.09306 5.12078 5.14731 5.17268 5.19694 5.22015 5.24233 5.26353 5.28394 5.30357 5.32233 5.34026 5.35738 5.37373 5.38935 5.40427 5.41852 5.43212 5.4451 5.4575 5.46933 5.48063 5.49141 5.50169 5.51151 5.52088 5.52982 5.53835 5.54649 5.55426 5.56167 5.56873 5.57547 5.5819 5.58804 5.59389 5.59947 5.60479 5.60987 #bodywt for gender,fleet: 2 / 6
 0 0.00162938 0.00313006 0.00581483 0.010434 0.018048 0.0300133 0.0478521 0.0729891 0.106416 0.148394 0.198319 0.254783 0.315808 0.379159 0.442647 0.504363 0.562813 0.616959 0.666193 0.710274 0.749245 0.783344 0.812938 0.83846 0.860366 0.879105 0.895099 0.908735 0.920355 0.930262 0.938716 0.945941 0.952128 0.957437 0.962005 0.965944 0.969353 0.972309 0.974882 0.977128 0.979095 0.980822 0.982343 0.983687 0.984878 0.985937 0.98688 0.987723 0.988479 0.989157 0.989769 0.99032 0.99082 0.991273 0.991684 0.992059 0.992401 0.992714 0.993001 0.993264 0.993505 0.993728 0.993933 0.994123 0.994298 0.994461 0.994611 0.994751 0.994881 0.994996 0.995098 0.995193 0.995281 0.995364 0.995442 0.995515 0.995584 0.995648 0.995708 0.995765 0.995819 0.995869 0.995916 0.995961 0.996003 0.996043 0.99608 0.996116 0.996149 0.996181 0.996211 0.996239 0.996266 0.996291 0.996315 0.996338 0.996359 0.99638 0.996399 0.996417 #selex for gender,fleet: 2 / 6
 0.0481229

0.0481229 #mean M for year Yinit: 2009 sex: 1

 35.819 33.5384 31.3755 29.1834 27.1433 25.1637 23.2838 21.5589 20.4693 19.221 19.3589 18.8384 19.6163 19.867 20.281 20.1757 20.5531 20.8412 20.6423 19.4987 18.6827 17.3863 15.9147 14.3705 12.9974 11.5954 10.4701 9.45223 8.42817 7.41662 6.5633 5.80166 5.0832 4.4631 3.92016 3.45666 3.05617 2.71459 2.4154 2.15814 1.93668 1.74356 1.57706 1.43342 1.30818 1.19807 1.10205 1.01711 0.941449 0.874613 0.815089 0.761815 0.713068 0.668344 0.627295 0.589284 0.554086 0.521786 0.492024 0.464189 0.438256 0.414396 0.39194 0.372163 0.353817 0.335641 0.318042 0.301282 0.285504 0.270599 0.256512 0.243219 0.230661 0.218814 0.20762 0.197024 0.187004 0.177583 0.168661 0.160245 0.152281 0.144748 0.137626 0.130879 0.124483 0.11841 0.112649 0.107185 0.102002 0.0970835 0.0924115 0.0879844 0.0837743 0.0797663 0.0759466 0.0723154 0.0688625 0.0655787 0.0624552 0.0594839 1.20175 #numbers for year Yinit: 2009 sex: 1

 0.0473472 #mean M for year Yinit: 2009 sex: 2

 35.819 33.5644 31.4241 29.2508 27.2259 25.2578 23.3859 21.6664 20.5824 19.3367 19.4837 18.9664 19.7536 20.0052 20.4135 20.2887 20.636 20.8778 20.6153 19.398 18.5006 17.1263 15.5868 13.9902 12.5773 11.1556 10.0191 9.00218 7.99479 7.01272 6.19099 5.46366 4.78271 4.19823 3.68887 3.25577 2.88281 2.5657 2.28854 2.0507 1.84627 1.6681 1.51453 1.38204 1.26642 1.16459 1.07566 0.996776 0.926289 0.863849 0.808051 0.757929 0.711842 0.669344 0.630147 0.593664 0.559714 0.52843 0.499492 0.472314 0.446901 0.423453 0.401308 0.38179 0.363637 0.345563 0.327993 0.311203 0.295352 0.280335 0.266105 0.252645 0.239902 0.227862 0.216467 0.205666 0.195442 0.185818 0.176694 0.168077 0.159914 0.152181 0.144862 0.137918 0.131327 0.125058 0.119104 0.113449 0.108077 0.102971 0.0981156 0.0935087 0.0891221 0.0849409 0.0809512 0.0771538 0.0735389 0.0700972 0.0668201 0.0636993 1.31004 #numbers for year Yinit: 2009 sex: 2

 30.3721 28.9117 27.2296 27.5194 26.8816 28.1048 28.5815 29.2965 29.2598 29.9192 30.4457 30.2543 28.6654 27.5437 25.7 23.5826 21.3435 19.3459 17.2943 15.6457 14.1498 12.6378 11.138 9.87038 8.7362 7.66332 6.7356 5.92189 5.22622 4.62427 4.11022 3.65936 3.27122 2.93672 2.64473 2.39273 2.17515 1.9853 1.81829 1.67256 1.54359 1.42866 1.32712 1.23668 1.15572 1.08165 1.0137 0.951342 0.893607 0.840153 0.79111 0.745929 0.70368 0.664326 0.628121 0.594052 0.56405 0.536223 0.50866 0.481977 0.456568 0.432653 0.410064 0.388719 0.368578 0.349553 0.331608 0.314651 0.298598 0.28342 0.269148 0.255631 0.242878 0.230812 0.219395 0.208602 0.198376 0.188683 0.179477 0.170745 0.162462 0.154606 0.147149 0.140067 0.133355 0.126972 0.120896 0.115106 0.109601 0.104366 0.0993885 0.0946537 0.0901496 0.0858646 0.0817875 0.0779078 0.0742156 0.0707013 0.067356 0.0641713 1.29915 #numbers for year Ydeclare: 2002 sex: 1

 30.3721 28.9341 27.2716 27.5821 26.9604 28.2012 28.6858 29.3977 29.3389 29.9573 30.4179 30.136 28.444 27.205 25.2503 23.0365 20.7235 18.6699 16.5921 14.9287 13.436 11.9508 10.4974 9.27893 8.19805 7.18356 6.31136 5.55007 4.90195 4.34315 3.86751 3.45131 3.09379 2.78618 2.51784 2.28635 2.0865 1.91197 1.75819 1.62381 1.50459 1.39804 1.30364 1.21927 1.1435 1.07383 1.0096 0.950373 0.895259 0.843985 0.796749 0.753063 0.712042 0.673693 0.638314 0.604906 0.575464 0.548085 0.520831 0.494341 0.469032 0.445141 0.422511 0.40107 0.380791 0.361595 0.343458 0.326293 0.310022 0.294618 0.280119 0.266371 0.253386 0.241083 0.229429 0.218396 0.207929 0.197992 0.188541 0.179564 0.171037 0.162937 0.155239 0.147917 0.14097 0.134356 0.128051 0.122035 0.116309 0.110858 0.105669 0.100727 0.096022 0.0915409 0.0872729 0.0832074 0.0793344 0.0756445 0.0721286 0.0687781 1.41678 #numbers for year Ydeclare: 2002 sex: 2

#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years

233.655 233.655 233.626 233.578 233.522 233.495 233.465 233.436 233.411 233.384 233.35 233.289 233.215 233.128 233.046 232.952 232.839 232.736 232.594 232.494 232.371 232.211 232.043 231.891 231.739 231.599 231.446 231.277 231.117 230.801 230.119 228.825 227.69 227.291 226.78 226.421 226.032 225.544 225.129 224.801 224.393 223.861 223.274 222.569 221.724 220.992 220.363 219.871 219.284 218.63 218.061 217.328 216.499 215.692 214.818 213.551 212.132 210.524 208.287 206.091 203.625 201.211 198.265 195.192 190.049 184.569 180.067 173.317 165.066 157.526 152.666 146.807 142.358 137.207 131.19 122.958 117.881 108.752 98.8413 90.0331 84.4733 77.5991 72.1193 65.4685 63.6891 59.9982 60.674 60.7442 62.3956 64.1759 65.9069 67.4825 69.1024 70.3836 71.6379 #Recruits

9.87535e+008 9.87535e+008 9.87275e+008 9.86851e+008 9.86356e+008 9.86112e+008 9.85845e+008 9.85591e+008 9.8537e+008 9.85135e+008 9.84832e+008 9.84291e+008 9.83639e+008 9.82872e+008 9.82148e+008 9.81322e+008 9.80327e+008 9.79418e+008 9.78169e+008 9.77298e+008 9.76214e+008 9.7482e+008 9.73351e+008 9.72025e+008 9.70701e+008 9.69477e+008 9.6815e+008 9.66686e+008 9.65296e+008 9.62569e+008 9.567e+008 9.45665e+008 9.36094e+008 9.32751e+008 9.28488e+008 9.25511e+008 9.2229e+008 9.18267e+008 9.14859e+008 9.12177e+008 9.08847e+008 9.04526e+008 8.99783e+008 8.94114e+008 8.87373e+008 8.81577e+008 8.7662e+008 8.72765e+008 8.68187e+008 8.63113e+008 8.58722e+008 8.53097e+008 8.46779e+008 8.40674e+008 8.34116e+008 8.24681e+008 8.14244e+008 8.0257e+008 7.86583e+008 7.71181e+008 7.54221e+008 7.37943e+008 7.18513e+008 6.98725e+008 6.66674e+008 6.3391e+008 6.07996e+008 5.70751e+008 5.27642e+008 4.90406e+008 4.67415e+008 4.40692e+008 4.21085e+008 3.99092e+008 3.7431e+008 3.41894e+008 3.22716e+008 2.89679e+008 2.55775e+008 2.27225e+008 2.0992e+008 1.89244e+008 1.73306e+008 1.54578e+008 1.49678e+008 1.39657e+008 1.41478e+008 1.41667e+008 1.46144e+008 1.51014e+008 1.55793e+008 1.6018e+008 1.64729e+008 1.68355e+008 1.71928e+008 #SpawnBio

0.344 0.5 0 # spawn-recr steepness, sigmaR, autocorr

base vector 1

 0 0 22.9416 87.4734 301.324 929.793 2536.63 6068.06 12748.2 23761.8 39884 61265.3 87455.9 117606 150713 185826 222162 259143 296381 333641 370795 407782 444577 481171 517560 553733 589674 625359 660757 695832 730544 764852 798713

832087 864933 897215 928897 959950 990344 1.02006e+006 1.04907e+006 1.07736e+006 1.10492e+006 1.13174e+006
1.15781e+006 1.18312e+006 1.20768e+006 1.23149e+006 1.25454e+006 1.27686e+006 1.29843e+006 1.31928e+006 1.3394e+006
1.35883e+006 1.37756e+006 1.39561e+006 1.41299e+006 1.42973e+006 1.44583e+006 1.46132e+006 1.4762e+006 1.4905e+006
1.50424e+006 1.51743e+006 1.53008e+006 1.54222e+006 1.55386e+006 1.56502e+006 1.57572e+006 1.58596e+006 1.59578e+006
1.60541e+006 1.61464e+006 1.62347e+006 1.63192e+006 1.64e+006 1.64774e+006 1.65514e+006 1.66221e+006 1.66897e+006
1.67543e+006 1.68161e+006 1.68751e+006 1.69315e+006 1.69853e+006 1.70368e+006 1.70859e+006 1.71328e+006 1.71776e+006
1.72203e+006 1.72611e+006 1.73001e+006 1.73372e+006 1.73727e+006 1.74065e+006 1.74388e+006 1.74696e+006 1.7499e+006
1.7527e+006 1.75537e+006 1.75792e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0432416 0.154883 0.214573 0.283047 0.358848 0.440515 0.526818 0.616856 0.710024 0.805932 0.904313 1.00495 1.10763
1.21212 1.31815 1.42543 1.53365 1.64246 1.75155 1.86056 1.96919 2.07713 2.1841 2.28984 2.39412 2.49674 2.5975 2.69627
2.7929 2.88729 2.97936 3.06902 3.15622 3.24094 3.32314 3.40282 3.47998 3.55462 3.62677 3.69645 3.7637 3.82855 3.89105
3.95124 4.00918 4.06491 4.1185 4.17 4.21947 4.26697 4.31256 4.35629 4.39823 4.43844 4.47697 4.51389 4.54925 4.5831 4.61551
4.64653 4.6762 4.70459 4.73173 4.75769 4.7825 4.80622 4.82889 4.85054 4.8713 4.89099 4.90999 4.92825 4.94568 4.96233
4.97821 4.99338 5.00786 5.02167 5.03485 5.04743 5.05942 5.07087 5.08179 5.0922 5.10214 5.11161 5.12064 5.12926 5.13747
5.1453 5.15277 5.15989 5.16667 5.17314 5.17931 5.18519 5.19079 5.19613 5.20122 5.20607 5.21069 #bodywt for gender,fleet: 1 / 1
 0 0.049638 0.0768352 0.11409 0.162086 0.220137 0.286167 0.357113 0.429572 0.500408 0.567155 0.628175 0.682611 0.730243
0.771299 0.806289 0.835861 0.86071 0.881515 0.898898 0.913414 0.925541 0.935686 0.944192 0.95134 0.957367 0.962466
0.966793 0.97048 0.973634 0.976341 0.978675 0.980693 0.982446 0.983974 0.985311 0.986484 0.987518 0.988431 0.989241
0.989961 0.990604 0.991179 0.991695 0.992159 0.992578 0.992956 0.993299 0.99361 0.993894 0.994153 0.994389 0.994606
0.994804 0.994987 0.995155 0.99531 0.995453 0.995585 0.995707 0.995821 0.995926 0.996024 0.996115 0.9962 0.99628 0.996354
0.996423 0.996487 0.996548 0.996602 0.996651 0.996697 0.996741 0.996782 0.99682 0.996856 0.99689 0.996922 0.996952
0.996981 0.997008 0.997033 0.997057 0.99708 0.997101 0.997122 0.997141 0.997159 0.997176 0.997192 0.997208 0.997222
0.997236 0.997249 0.997262 0.997273 0.997284 0.997295 0.997305 0.997315 #selex for gender,fleet: 1 / 1
 0.0442767 0.16069 0.223657 0.296324 0.376948 0.463551 0.554333 0.647948 0.743554 0.840718 0.939268 1.03916 1.14038
1.24289 1.34663 1.45144 1.55714 1.66348 1.77021 1.87703 1.98364 2.08976 2.1951 2.29939 2.4024 2.5039 2.6037 2.70162 2.79753
2.89129 2.9828 3.07199 3.15879 3.24315 3.32505 3.40447 3.4814 3.55584 3.62782 3.69735 3.76446 3.8292 3.8916 3.9517 4.00956
4.06523 4.11876 4.17021 4.21963 4.26709 4.31264 4.35634 4.39825 4.43843 4.47694 4.51384 4.54918 4.58302 4.61541 4.64641
4.67607 4.70445 4.73158 4.75753 4.78234 4.80605 4.8287 4.85035 4.87104 4.89079 4.90978 4.92804 4.94547 4.96211 4.978
4.99316 5.00763 5.02144 5.03462 5.04719 5.05919 5.07063 5.08155 5.09196 5.10189 5.11137 5.1204 5.12901 5.13722 5.14505
5.15252 5.15963 5.16642 5.17289 5.17905 5.18493 5.19053 5.19587 5.20096 5.20581 5.21043 #bodywt for gender,fleet: 1 / 2
 0 0.0194188 0.0330265 0.0539454 0.0842592 0.125418 0.177638 0.23962 0.308742 0.381633 0.454845 0.525399 0.59109 0.650551
0.703163 0.748885 0.788067 0.821289 0.84924 0.87263 0.892134 0.90837 0.921876 0.933119 0.94249 0.950318 0.956873 0.962379
0.96702 0.970945 0.974278 0.977118 0.979548 0.981636 0.983435 0.984993 0.986347 0.987527 0.98856 0.989467 0.990267
0.990974 0.991602 0.99216 0.992659 0.993105 0.993505 0.993866 0.99419 0.994484 0.994751 0.994993 0.995214 0.995415
0.995599 0.995768 0.995922 0.996065 0.996196 0.996316 0.996428 0.996531 0.996627 0.996715 0.996797 0.996874 0.996945
0.997011 0.997073 0.997131 0.997183 0.997229 0.997272 0.997313 0.997351 0.997386 0.99742 0.997452 0.997482 0.99751
0.997536 0.997561 0.997584 0.997606 0.997627 0.997647 0.997666 0.997683 0.9977 0.997716 0.997731 0.997745 0.997758
0.997771 0.997783 0.997794 0.997805 0.997815 0.997825 0.997834 0.997843 #selex for gender,fleet: 1 / 2
 0.0481289 0.178676 0.247414 0.32306 0.401917 0.481774 0.562105 0.643406 0.726523 0.812263 0.901218 0.993703 1.08977
1.18923 1.29174 1.39682 1.50393 1.61252 1.72203 1.83194 1.94177 2.05111 2.15957 2.26682 2.3726 2.47666 2.5788 2.67885
2.77668 2.87217 2.96525 3.05584 3.1439 3.2294 3.31231 3.39264 3.47038 3.54556 3.6182 3.68833 3.75599 3.82121 3.88405
3.94456 4.00279 4.05879 4.11262 4.16435 4.21402 4.26171 4.30748 4.35137 4.39347 4.43382 4.47248 4.50952 4.54499 4.57895
4.61146 4.64256 4.67232 4.70079 4.72801 4.75404 4.77892 4.80269 4.82542 4.84713 4.86787 4.88768 4.90671 4.925 4.94246
4.95914 4.97505 4.99024 5.00474 5.01858 5.03178 5.04438 5.05639 5.06786 5.07879 5.08922 5.09917 5.10866 5.1177 5.12633
5.13456 5.1424 5.14988 5.157 5.1638 5.17028 5.17645 5.18234 5.18795 5.1933 5.1984 5.20326 5.20789 #bodywt for gender,fleet: 1 /
3
 0 0.0148964 0.0331114 0.0674245 0.1238 0.203934 0.303239 0.412381 0.52093 0.620547 0.706362 0.776763 0.832419 0.875227
0.907509 0.931524 0.949235 0.962236 0.971765 0.978754 0.983896 0.987694 0.990516 0.992626 0.994215 0.99542 0.996341
0.99705 0.997601 0.998032 0.998372 0.998642 0.998859 0.999033 0.999175 0.999291 0.999387 0.999466 0.999532 0.999587
0.999634 0.999674 0.999708 0.999737 0.999762 0.999783 0.999802 0.999819 0.999833 0.999846 0.999857 0.999867 0.999875
0.999883 0.99989 0.999897 0.999902 0.999907 0.999912 0.999916 0.99992 0.999923 0.999927 0.999929 0.999932 0.999934
0.999937 0.999939 0.999941 0.999942 0.999944 0.999945 0.999947 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952
0.999953 0.999954 0.999954 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958 0.999959 0.999959 0.999959
0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999961 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0441368 0.160428 0.223824 0.29765 0.380509 0.470576 0.56589 0.664688 0.765614 0.867773 0.970655 1.07402 1.17778 1.28193
1.38644 1.4913 1.59644 1.70174 1.80705 1.9122 2.01698 2.12117 2.22457 2.32694 2.42809 2.52781 2.62592 2.72227 2.81671
2.90911 2.99938 3.08742 3.17318 3.25658 3.33761 3.41623 3.49243 3.56621 3.63759 3.70657 3.77318 3.83746 3.89944 3.95916
4.01667 4.07202 4.12525 4.17643 4.2256 4.27283 4.31817 4.36167 4.4034 4.44342 4.48177 4.51853 4.55373 4.58745 4.61972
4.65062 4.68018 4.70846 4.73551 4.76137 4.7861 4.80974 4.83233 4.85392 4.87454 4.89424 4.91319 4.93141 4.9488 4.96541
4.98127 4.9964 5.01085 5.02463 5.03778 5.05034 5.06231 5.07373 5.08463 5.09502 5.10494 5.11439 5.12341 5.132 5.1402 5.14802
5.15547 5.16258 5.16935 5.17581 5.18196 5.18783 5.19342 5.19875 5.20383 5.20868 5.21329 #bodywt for gender,fleet: 1 / 4
 0 0.0110167 0.0187059 0.0307103 0.0486106 0.0739681 0.107951 0.150956 0.202384 0.26068 0.323611 0.38866 0.453411
0.515827 0.574386 0.62811 0.676502 0.719451 0.757125 0.789872 0.81814 0.842419 0.8632 0.88095 0.896095 0.909015 0.920045
0.929472 0.937543 0.944468 0.950424 0.95556 0.960002 0.963854 0.967206 0.97013 0.97269 0.974938 0.976917 0.978666
0.980215 0.981592 0.982819 0.983916 0.984898 0.98578 0.986575 0.987292 0.987941 0.98853 0.989065 0.989552 0.989997
0.990404 0.990776 0.991118 0.991432 0.991721 0.991988 0.992234 0.992462 0.992673 0.992868 0.99305 0.993219 0.993376
0.993522 0.993658 0.993786 0.993905 0.994011 0.994107 0.994197 0.994281 0.99436 0.994434 0.994504 0.994569 0.994631
0.994689 0.994744 0.994796 0.994845 0.994891 0.994934 0.994975 0.995014 0.995051 0.995086 0.995118 0.995149 0.995179
0.995207 0.995233 0.995258 0.995282 0.995304 0.995325 0.995346 0.995365 0.995383 #selex for gender,fleet: 1 / 4

0.0442583 0.161339 0.225582 0.300974 0.386531 0.480789 0.581916 0.687927 0.796944 0.907419 1.01823 1.12865 1.23831
1.34704 1.45482 1.56167 1.66766 1.77283 1.87718 1.9807 2.08334 2.18501 2.28563 2.38508 2.48322 2.57994 2.6751 2.76858
2.86027 2.95006 3.03786 3.12359 3.20717 3.28856 3.36772 3.44461 3.51921 3.59151 3.66153 3.72925 3.79471 3.85792 3.91892
3.97774 4.03441 4.08899 4.14151 4.19203 4.2406 4.28727 4.33208 4.37511 4.41639 4.45599 4.49396 4.53036 4.56523 4.59864
4.63062 4.66125 4.69056 4.7186 4.74543 4.77109 4.79563 4.81909 4.84151 4.86294 4.88341 4.90297 4.9218 4.93993 4.95724
4.97376 4.98954 5.0046 5.01897 5.03269 5.04578 5.05827 5.07019 5.08156 5.09241 5.10276 5.11262 5.12203 5.13101 5.13957
5.14773 5.15551 5.16293 5.17001 5.17675 5.18318 5.18931 5.19515 5.20072 5.20603 5.21109 5.21591 5.2205 #bodywt for
gender,fleet: 1 / 5
 0 0.00414071 0.00714514 0.0119744 0.0194675 0.0306543 0.0466662 0.0685674 0.0971359 0.13266 0.174823 0.222716 0.274967
0.329946 0.385974 0.441507 0.495247 0.546207 0.593711 0.637366 0.677016 0.712685 0.744528 0.772786 0.797747 0.819721
0.839019 0.855942 0.870771 0.883763 0.89515 0.905139 0.91391 0.921625 0.928421 0.934419 0.939723 0.944424 0.948598
0.952314 0.955629 0.958593 0.96125 0.963635 0.965783 0.96772 0.969471 0.971058 0.972498 0.973808 0.975001 0.976091
0.977088 0.978001 0.978839 0.979609 0.980319 0.980973 0.981576 0.982135 0.982652 0.983131 0.983575 0.983989 0.984373
0.984731 0.985065 0.985376 0.985667 0.985939 0.986184 0.986403 0.986608 0.986802 0.986983 0.987153 0.987314 0.987465
0.987607 0.98774 0.987867 0.987985 0.988098 0.988204 0.988304 0.988398 0.988488 0.988572 0.988652 0.988727 0.988799
0.988867 0.988931 0.988991 0.989049 0.989103 0.989155 0.989204 0.98925 0.989294 0.989336 #selex for gender,fleet: 1 / 5
 0.0453961 0.167046 0.234116 0.313112 0.403113 0.502636 0.609667 0.721838 0.836765 0.952407 1.06728 1.1805 1.29167 1.40073
1.50782 1.61316 1.71699 1.81953 1.92095 2.02135 2.1208 2.21929 2.31681 2.41327 2.5086 2.60268 2.6954 2.78664 2.87628
2.96422 3.05034 3.13457 3.21681 3.297 3.37508 3.45102 3.52478 3.59634 3.66569 3.73282 3.79776 3.86051 3.9211 3.97956
4.03592 4.09021 4.14248 4.19278 4.24115 4.28764 4.3323 4.37518 4.41634 4.45583 4.4937 4.53 4.56479 4.59813 4.63005 4.66061
4.68987 4.71787 4.74465 4.77028 4.79478 4.8182 4.84059 4.862 4.88245 4.90198 4.9208 4.9389 4.9562 4.97271 4.98847 5.00352
5.01788 5.03159 5.04467 5.05715 5.06906 5.08042 5.09126 5.1016 5.11146 5.12087 5.12984 5.13839 5.14655 5.15433 5.16174
5.16881 5.17555 5.18198 5.1881 5.19394 5.19951 5.20481 5.20987 5.21469 5.21928 #bodywt for gender,fleet: 1 / 6
 0 0.00135421 0.00255624 0.00467462 0.00827589 0.0141649 0.0233922 0.0371844 0.0567779 0.0831749 0.116896 0.157819
0.205152 0.257555 0.313344 0.370729 0.42802 0.483768 0.536844 0.586453 0.632113 0.673607 0.710924 0.744202 0.773681
0.79966 0.822464 0.842426 0.859866 0.875088 0.888368 0.899956 0.910074 0.918917 0.926657 0.933442 0.939401 0.944645
0.94927 0.953357 0.956978 0.960193 0.963054 0.965607 0.96789 0.969935 0.971773 0.973428 0.974921 0.976271 0.977494
0.978605 0.979616 0.980537 0.981378 0.982148 0.982853 0.983501 0.984097 0.984645 0.985151 0.985618 0.98605 0.98645
0.986821 0.987165 0.987485 0.987783 0.988061 0.988319 0.98855 0.988755 0.988947 0.989127 0.989296 0.989454 0.989603
0.989742 0.989874 0.989997 0.990113 0.990223 0.990326 0.990423 0.990515 0.990602 0.990684 0.990761 0.990834 0.990903
0.990968 0.99103 0.991088 0.991143 0.991195 0.991245 0.991292 0.991336 0.991379 0.991418 0.991456 #selex for gender,fleet: 1
/ 6
 0.0517415 0.176504 0.243766 0.32021 0.404062 0.49366 0.587715 0.685362 0.786084 0.889583 0.995666 1.10416 1.21488 1.32757
1.44194 1.55767 1.67438 1.79169 1.90922 2.02659 2.14344 2.25943 2.37427 2.48766 2.59938 2.70919 2.81692 2.92241 3.02553
3.12617 3.22425 3.3197 3.41248 3.50255 3.5899 3.67453 3.75644 3.83565 3.91218 3.98608 4.05737 4.12611 4.19234 4.25611
4.31749 4.37654 4.4333 4.48785 4.54025 4.59056 4.63884 4.68517 4.7296 4.77219 4.81302 4.85214 4.88962 4.9255 4.95986
4.99274 5.02421 5.05432 5.08312 5.11067 5.13701 5.16219 5.18625 5.20926 5.23124 5.25224 5.27242 5.29182 5.31035 5.32805
5.34494 5.36108 5.37648 5.39118 5.40521 5.4186 5.43139 5.44358 5.45522 5.46633 5.47692 5.48703 5.49667 5.50587 5.51464
5.52301 5.53099 5.5386 5.54586 5.55278 5.55938 5.56567 5.57167 5.57739 5.58285 5.58805 5.59301 #bodywt for gender,fleet: 2 / 1
 0 0.0503239 0.079383 0.119697 0.172005 0.235365 0.307169 0.3837 0.460961 0.535411 0.604415 0.666367 0.720584 0.767088
0.806364 0.839155 0.866308 0.888668 0.90702 0.92206 0.934385 0.944498 0.952812 0.959667 0.965337 0.970046 0.973971
0.977258 0.980022 0.982357 0.984339 0.986027 0.987473 0.988715 0.989788 0.990718 0.991528 0.992235 0.992856 0.993402
0.993884 0.994312 0.994692 0.995031 0.995334 0.995607 0.995851 0.996072 0.996272 0.996453 0.996617 0.996767 0.996903
0.997028 0.997142 0.997247 0.997344 0.997432 0.997514 0.99759 0.99766 0.997724 0.997784 0.99784 0.997892 0.99794 0.997985
0.998027 0.998066 0.998103 0.998136 0.998166 0.998193 0.998219 0.998244 0.998267 0.998288 0.998309 0.998328 0.998346
0.998363 0.998379 0.998394 0.998408 0.998422 0.998435 0.998447 0.998458 0.998469 0.998479 0.998489 0.998498 0.998507
0.998515 0.998523 0.99853 0.998537 0.998544 0.99855 0.998556 0.998562 #selex for gender,fleet: 2 / 1
 0.0529548 0.182993 0.253877 0.334873 0.423808 0.518389 0.616695 0.717427 0.819891 0.92383 1.02923 1.13615 1.24465 1.35474
1.46631 1.57921 1.69318 1.80793 1.92311 2.03838 2.15339 2.26778 2.38124 2.49347 2.60419 2.71317 2.8202 2.92511 3.02774
3.12798 3.22572 3.32089 3.41343 3.50331 3.5905 3.67499 3.75679 3.8359 3.91236 3.98619 4.05743 4.12612 4.19231 4.25605
4.31741 4.37642 4.43317 4.4877 4.54009 4.59038 4.63866 4.68498 4.7294 4.77199 4.81282 4.85193 4.8894 4.92529 4.95964
4.99252 5.02399 5.0541 5.0829 5.11045 5.13678 5.16196 5.18603 5.20903 5.23101 5.25201 5.2722 5.2916 5.31013 5.32782 5.34472
5.36085 5.37625 5.39095 5.40499 5.41838 5.43116 5.44336 5.455 5.4661 5.4767 5.4868 5.49645 5.50564 5.51442 5.52278 5.53076
5.53837 5.54563 5.55255 5.55915 5.56545 5.57145 5.57717 5.58262 5.58782 5.59278 #bodywt for gender,fleet: 2 / 2
 0 0.0197584 0.0344038 0.0573349 0.0909872 0.136966 0.195301 0.264149 0.34013 0.419119 0.497096 0.570782 0.637939
0.697363 0.748717 0.792279 0.828706 0.858844 0.883589 0.903804 0.92027 0.933665 0.944565 0.953445 0.960697 0.966636
0.971518 0.975546 0.978884 0.981663 0.983986 0.985937 0.987584 0.98898 0.990169 0.991187 0.992062 0.992816 0.993471
0.99404 0.994537 0.994974 0.995357 0.995697 0.995997 0.996264 0.996503 0.996716 0.996907 0.997079 0.997234 0.997375
0.997502 0.997617 0.997722 0.997818 0.997906 0.997986 0.99806 0.998128 0.99819 0.998248 0.998301 0.99835 0.998396
0.998438 0.998477 0.998514 0.998548 0.998579 0.998608 0.998633 0.998656 0.998678 0.998699 0.998718 0.998736 0.998753
0.99877 0.998785 0.998799 0.998812 0.998825 0.998837 0.998848 0.998859 0.998869 0.998878 0.998887 0.998895 0.998903
0.998911 0.998918 0.998925 0.998931 0.998937 0.998943 0.998949 0.998954 0.998959 0.998963 #selex for gender,fleet: 2 / 2
 0.057462 0.20294 0.279764 0.363096 0.448822 0.534881 0.621161 0.708565 0.798234 0.891143 0.987944 1.08892 1.19402 1.30292
1.41512 1.52997 1.64681 1.76498 1.88383 2.0028 2.12138 2.23914 2.3557 2.47072 2.58396 2.69517 2.80416 2.9108 3.01495
3.11651 3.21542 3.3116 3.40504 3.49569 3.58357 3.66866 3.75099 3.83058 3.90745 3.98165 4.05321 4.1222 4.18865 4.25263
4.31419 4.3734 4.43032 4.485 4.53753 4.58795 4.63635 4.68277 4.72729 4.76997 4.81087 4.85006 4.8876 4.92355 4.95796 4.9909
5.02242 5.05257 5.08142 5.109 5.13537 5.16059 5.18469 5.20772 5.22973 5.25075 5.27096 5.29038 5.30892 5.32663 5.34354
5.35968 5.3751 5.38981 5.40385 5.41726 5.43005 5.44226 5.4539 5.46502 5.47562 5.48573 5.49538 5.50458 5.51336 5.52174
5.52972 5.53734 5.5446 5.55153 5.55813 5.56443 5.57043 5.57616 5.58162 5.58682 5.59178 #bodywt for gender,fleet: 2 / 3

0 0.0153383 0.0352453 0.0735162 0.136826 0.226319 0.335533 0.452886 0.566403 0.667334 0.751332 0.817762 0.868309 0.905687 0.932771 0.952127 0.965844 0.975525 0.982351 0.987176 0.990599 0.993042 0.994799 0.996071 0.997001 0.997687 0.998197 0.99858 0.998871 0.999093 0.999265 0.999398 0.999503 0.999587 0.999653 0.999706 0.99975 0.999785 0.999814 0.999838 0.999859 0.999875 0.99989 0.999902 0.999912 0.999921 0.999928 0.999935 0.99994 0.999945 0.99995 0.999954 0.999957 0.99996 0.999963 0.999965 0.999967 0.999969 0.999971 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978 0.999979 0.99998 0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3
 0.0527909 0.182715 0.254126 0.33651 0.428054 0.526553 0.629798 0.735946 0.843714 0.95236 1.06156 1.17123 1.28141 1.39219 1.50359 1.6156 1.72814 1.84106 1.95418 2.06724 2.18 2.29219 2.40352 2.51374 2.62259 2.72986 2.83533 2.93882 3.04018 3.13928 3.236 3.33026 3.42199 3.51115 3.59769 3.68161 3.76289 3.84155 3.91759 3.99106 4.06196 4.13036 4.19629 4.25979 4.32093 4.37975 4.43632 4.49069 4.54292 4.59309 4.64124 4.68745 4.73177 4.77427 4.815 4.85404 4.89144 4.92725 4.96154 4.99437 5.02578 5.05584 5.0846 5.1121 5.13839 5.16354 5.18757 5.21054 5.23249 5.25346 5.27362 5.29301 5.31152 5.3292 5.34608 5.3622 5.37758 5.39227 5.40629 5.41968 5.43245 5.44464 5.45626 5.46736 5.47795 5.48805 5.49768 5.50687 5.51564 5.524 5.53197 5.53958 5.54683 5.55374 5.56034 5.56663 5.57262 5.57834 5.58379 5.58899 5.59394 #bodywt for gender,fleet: 2 / 4
 0 0.0112081 0.0194904 0.0326853 0.0526774 0.0813067 0.119879 0.168685 0.226757 0.291977 0.361489 0.432231 0.501405 0.566791 0.626865 0.680783 0.728262 0.769437 0.804722 0.834683 0.859953 0.881166 0.89892 0.913755 0.926147 0.936503 0.945171 0.95244 0.958551 0.963705 0.968064 0.971765 0.974918 0.977613 0.979928 0.981921 0.983646 0.985142 0.986446 0.987587 0.988587 0.989468 0.990247 0.990937 0.99155 0.992097 0.992586 0.993025 0.993419 0.993775 0.994096 0.994387 0.994652 0.994892 0.995112 0.995312 0.995495 0.995664 0.995818 0.995961 0.996092 0.996213 0.996325 0.996429 0.996525 0.996614 0.996697 0.996774 0.996846 0.996913 0.996973 0.997026 0.997076 0.997123 0.997167 0.997208 0.997247 0.997283 0.997317 0.997349 0.99738 0.997408 0.997435 0.997461 0.997485 0.997507 0.997529 0.997549 0.997568 0.997586 0.997603 0.997619 0.997635 0.997649 0.997663 0.997676 0.997688 0.9977 0.997711 0.997721 0.997731 #selex for gender,fleet: 2 / 4
 0.0529334 0.183739 0.256122 0.340315 0.434963 0.538212 0.647881 0.761743 0.877834 0.994665 1.11127 1.22712 1.34203 1.45602 1.56916 1.68161 1.79344 1.90474 2.0155 2.1257 2.23523 2.34399 2.45182 2.55855 2.66402 2.76804 2.87045 2.97108 3.06979 3.16645 3.26094 3.35317 3.44306 3.53055 3.61559 3.69815 3.7782 3.85576 3.93098 4.00337 4.07346 4.14112 4.20638 4.26928 4.32987 4.3882 4.44432 4.49828 4.55014 4.59996 4.6478 4.69372 4.73778 4.78003 4.82055 4.85938 4.89659 4.93223 4.96636 4.99904 5.03031 5.06024 5.08888 5.11627 5.14246 5.16751 5.19145 5.21433 5.23621 5.25711 5.27721 5.29654 5.31501 5.33265 5.34949 5.36557 5.38093 5.39558 5.40957 5.42293 5.43567 5.44783 5.45944 5.47051 5.48107 5.49115 5.50077 5.50994 5.51869 5.52703 5.53499 5.54258 5.54982 5.55672 5.5633 5.56958 5.57556 5.58127 5.58671 5.5919 5.59684 #bodywt for gender,fleet: 2 / 5
 0 0.00421519 0.00745709 0.0127869 0.0212203 0.0340135 0.0525402 0.0780597 0.111424 0.152822 0.201654 0.256592 0.315784 0.377147 0.438638 0.498472 0.555246 0.607981 0.656096 0.699352 0.737771 0.771566 0.801065 0.826663 0.84878 0.867832 0.884213 0.898283 0.910366 0.920749 0.92968 0.937374 0.944014 0.949759 0.954739 0.959069 0.962844 0.966143 0.969036 0.971579 0.973821 0.975803 0.977561 0.979124 0.980518 0.981764 0.982881 0.983884 0.984788 0.985605 0.986344 0.987014 0.987623 0.988178 0.988685 0.989148 0.989572 0.989962 0.99032 0.990649 0.990953 0.991234 0.991494 0.991734 0.991957 0.992164 0.992356 0.992535 0.992702 0.992858 0.992997 0.993121 0.993237 0.993346 0.993448 0.993544 0.993634 0.993718 0.993798 0.993873 0.993943 0.99401 0.994073 0.994132 0.994187 0.99424 0.99429 0.994337 0.994381 0.994423 0.994463 0.9945 0.994536 0.994569 0.994601 0.994631 0.99466 0.994687 0.994713 0.994737 0.99476 #selex for gender,fleet: 2 / 5
 0.0542657 0.190101 0.265582 0.35368 0.453079 0.561858 0.677564 0.797489 0.919099 1.04041 1.16015 1.27771 1.39298 1.50614 1.61751 1.72743 1.83623 1.94415 2.05138 2.158 2.26403 2.36942 2.4741 2.57792 2.68072 2.78235 2.88262 2.98137 3.07843 3.17365 3.2669 3.35805 3.44702 3.53373 3.61809 3.70008 3.77966 3.8568 3.9315 4.00377 4.07362 4.14107 4.20616 4.26892 4.32938 4.38761 4.44364 4.49753 4.54933 4.5991 4.6469 4.69279 4.73682 4.77905 4.81955 4.85837 4.89557 4.9312 4.96532 4.998 5.02927 5.0592 5.08783 5.11522 5.14142 5.16646 5.19041 5.2133 5.23517 5.25608 5.27618 5.29552 5.31399 5.33162 5.34847 5.36455 5.37991 5.39456 5.40855 5.42191 5.43465 5.44682 5.45842 5.4695 5.48006 5.49014 5.49976 5.50893 5.51768 5.52602 5.53398 5.54157 5.54881 5.55572 5.5623 5.56858 5.57456 5.58027 5.58571 5.5909 5.59584 #bodywt for gender,fleet: 2 / 6
 0 0.00138366 0.00268882 0.00505141 0.00916502 0.01603 0.0269587 0.0434713 0.0670552 0.0988287 0.139223 0.187802 0.243288 0.30377 0.367015 0.430785 0.493091 0.552344 0.607418 0.657633 0.702688 0.742585 0.777539 0.807905 0.83411 0.856612 0.875867 0.892304 0.906318 0.91826 0.92844 0.937126 0.944548 0.950902 0.956353 0.961042 0.965085 0.968582 0.971615 0.974253 0.976556 0.978571 0.980341 0.9819 0.983277 0.984496 0.98558 0.986546 0.987409 0.988182 0.988877 0.989502 0.990067 0.990578 0.991041 0.991462 0.991845 0.992195 0.992515 0.992808 0.993076 0.993323 0.993551 0.993761 0.993954 0.994133 0.994299 0.994453 0.994596 0.994728 0.994846 0.99495 0.995047 0.995137 0.995222 0.995302 0.995376 0.995446 0.995512 0.995573 0.995631 0.995686 0.995737 0.995785 0.995831 0.995874 0.995914 0.995952 0.995988 0.996022 0.996055 0.996085 0.996114 0.996141 0.996167 0.996191 0.996214 0.996236 0.996257 0.996277 0.996295 #selex for gender,fleet: 2 / 6
 0.0473093 #mean M for year Yinit: 2009 sex: 1
 47.7673 44.7179 41.8291 38.9521 36.2649 33.6738 31.2166 28.9499 27.379 25.6742 25.4653 24.5931 25.1068 25.0833 25.2368 24.8665 24.982 24.5022 23.0915 21.9866 20.4171 18.6803 16.8792 15.2472 13.603 12.2359 10.9913 9.76854 8.5892 7.58271 6.68731 5.85839 5.14179 4.51584 3.97982 3.51685 3.12104 2.77601 2.47944 2.22426 2.00252 1.81133 1.64629 1.50253 1.37639 1.26625 1.1689 1.08231 1.00567 0.9373 0.876008 0.820068 0.768847 0.721873 0.678459 0.638294 0.601356 0.567255 0.535404 0.50573 0.47833 0.452589 0.429558 0.408128 0.387192 0.367072 0.34796 0.329953 0.312936 0.296845 0.281643 0.26727 0.253697 0.240864 0.228717 0.217231 0.206414 0.196175 0.186509 0.177362 0.168707 0.160519 0.152761 0.145404 0.138418

0.131788 0.125496 0.119522 0.113848 0.108456 0.103339 0.0984703 0.0938337 0.0894144 0.0852097 0.0812082 0.0773995
0.0737739 0.070322 1.44585 #numbers for year Yinit: 2009 sex: 1
 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
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0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 #mean M for year Yinit: 2009 sex: 2
 47.7673 44.7467 41.8828 39.0267 36.3565 33.7784 31.3304 29.0697 27.5044 25.8019 25.6008 24.7305 25.2508 25.2258 25.3702
24.9769 25.0572 25.0133 24.4542 22.9622 21.7671 20.1107 18.2969 16.4349 14.7565 13.088 11.7078 10.4651 9.2615 8.11519
7.14509 6.28933 5.50312 4.82734 4.23992 3.73899 3.30788 2.94053 2.62112 2.34723 2.112 1.90781 1.73188 1.58004 1.44769
1.3314 1.2297 1.13962 1.05925 0.987895 0.924039 0.866576 0.813883 0.765401 0.720724 0.679225 0.640648 0.605023 0.572003
0.541037 0.512087 0.485278 0.460011 0.437374 0.416255 0.395538 0.375557 0.356518 0.338531 0.321485 0.305325 0.290024
0.275529 0.261819 0.248839 0.236539 0.224896 0.213924 0.203527 0.193702 0.184397 0.175581 0.167232 0.15931 0.151789
0.144638 0.137842 0.131383 0.125244 0.119406 0.113851 0.103546 0.0987533 0.09418 0.0898242 0.0856748 0.0817215
0.0779545 0.0743648 1.55232 #numbers for year Yinit: 2009 sex: 2
 40.5015 38.3845 36.0833 35.8931 34.7755 35.6246 35.7182 36.0647 35.6588 35.943 36.0676 35.4654 33.5139 31.9906 29.7766
27.3031 24.7211 22.3738 19.9972 18.0179 16.2108 14.4287 12.7041 11.2294 9.91479 8.69492 7.6386 6.71448 5.92208 5.23681
4.6503 4.13841 3.69796 3.31862 2.98866 2.70393 2.45794 2.24351 2.05525 1.89078 1.74537 1.61598 1.50142 1.39922 1.30759
1.22396 1.1474 1.07719 1.01231 0.952293 0.897111 0.846176 0.79861 0.754302 0.713395 0.67497 0.640594 0.608611 0.577372
0.547355 0.518846 0.49199 0.466614 0.44262 0.419957 0.398531 0.378298 0.35917 0.341064 0.323942 0.307818 0.292554
0.278142 0.264505 0.2516 0.239391 0.227822 0.21685 0.206431 0.196543 0.187158 0.178248 0.169786 0.161742 0.15411 0.146848
0.139932 0.13334 0.127068 0.121099 0.115419 0.110011 0.104863 0.0999605 0.0952925 0.0908469 0.0866126 0.0825791
0.0787365 0.0750753 1.54676 #numbers for year Ydeclare: 2002 sex: 1
 40.5015 38.4092 36.1294 35.961 34.8603 35.7264 35.827 36.168 35.7367 35.9747 36.0267 35.3259 33.2614 31.6099 29.2727
26.6901 24.022 21.6092 19.1992 17.2024 15.3993 13.6469 11.9726 10.5531 9.29853 8.14347 7.14918 6.28374 5.54488 4.90834
4.3654 3.89285 3.48727 3.13864 2.83575 2.57459 2.34902 2.1523 1.97936 1.82806 1.694 1.57436 1.46815 1.37308 1.28754 1.20911
1.13695 1.07048 1.00874 0.951369 0.898395 0.849306 0.80328 0.760257 0.720422 0.682884 0.649255 0.617886 0.58712 0.557452
0.529186 0.502485 0.477187 0.453205 0.430502 0.408996 0.388655 0.369398 0.351149 0.333874 0.317593 0.302164 0.287583
0.273771 0.260686 0.248292 0.236532 0.225366 0.214747 0.204657 0.195067 0.185951 0.177282 0.169033 0.161196 0.15373
0.146613 0.139822 0.133353 0.127192 0.121322 0.110398 0.105318 0.100477 0.0958623 0.091463 0.0872689 0.0832698
0.0794563 1.66126 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
227.032 227.032 227.011 226.977 226.937 226.917 226.896 226.875 226.857 226.838 226.814 226.77 226.717 226.655 226.597
226.53 226.449 226.375 226.273 226.202 226.114 226 225.88 225.772 225.663 225.563 225.454 225.333 225.219 224.994 224.504
223.573 222.755 222.467 222.098 221.84 221.56 221.208 220.908 220.673 220.379 219.995 219.572 219.062 218.45 217.921
217.467 217.115 216.694 216.223 215.816 215.288 214.689 214.107 213.476 212.551 211.512 210.331 208.672 207.038 205.193
203.378 201.148 198.805 194.831 190.546 186.993 181.584 174.849 168.59 164.52 159.549 155.753 151.308 146.048 138.708
134.173 125.8 116.512 108.115 102.827 96.173 90.8777 84.3338 82.8355 79.3655 80.4882 81.0031 83.1743 85.4811 87.7372
89.8344 91.9719 93.7687 95.5347 #Recruits
9.94349e+008 9.94349e+008 9.94088e+008 9.9366e+008 9.93161e+008 9.92915e+008 9.92646e+008 9.9239e+008 9.92167e+008
9.91929e+008 9.91624e+008 9.91078e+008 9.90421e+008 9.89647e+008 9.88918e+008 9.88086e+008 9.87083e+008 9.86168e+008
9.8491e+008 9.84034e+008 9.82944e+008 9.8154e+008 9.80063e+008 9.7873e+008 9.77401e+008 9.76173e+008 9.74843e+008
9.73376e+008 9.71986e+008 9.69249e+008 9.63347e+008 9.5224e+008 9.42609e+008 9.39257e+008 9.3498e+008 9.32e+008
9.28777e+008 9.24749e+008 9.21345e+008 9.18677e+008 9.15361e+008 9.11053e+008 9.06327e+008 9.00678e+008 8.93957e+008
8.88199e+008 8.83296e+008 8.79515e+008 8.75015e+008 8.70026e+008 8.65736e+008 8.60212e+008 8.54001e+008 8.48016e+008
8.41585e+008 8.32268e+008 8.21953e+008 8.10404e+008 7.94523e+008 7.7924e+008 7.62399e+008 7.46255e+008 7.26948e+008
7.07291e+008 6.75307e+008 6.42613e+008 6.16822e+008 5.79649e+008 5.36587e+008 4.99446e+008 4.7665e+008 4.50129e+008
4.30796e+008 4.09104e+008 3.84657e+008 3.52586e+008 3.33862e+008 3.01298e+008 2.6791e+008 2.39944e+008 2.2331e+008
2.03367e+008 1.8823e+008 1.70361e+008 1.66392e+008 1.57372e+008 1.60265e+008 1.616e+008 1.67286e+008 1.73429e+008
1.79543e+008 1.85321e+008 1.91307e+008 1.96416e+008 2.01509e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
base vector 2
 0 0 22.9416 87.4734 301.324 929.793 2536.63 6068.06 12748.2 23761.8 39884 61265.3 87455.9 117606 150713 185826 222162
259143 296381 333641 370795 407782 444577 481171 517560 553733 589674 625359 660757 695832 730544 764852 798713
832087 864933 897215 928897 959950 990344 1.02006e+006 1.04907e+006 1.07736e+006 1.10492e+006 1.13174e+006
1.15781e+006 1.18312e+006 1.20768e+006 1.23149e+006 1.25454e+006 1.27686e+006 1.29843e+006 1.31928e+006 1.3394e+006
1.35883e+006 1.37756e+006 1.39561e+006 1.41299e+006 1.42973e+006 1.44583e+006 1.46132e+006 1.4762e+006 1.4905e+006
1.50424e+006 1.51743e+006 1.53008e+006 1.54222e+006 1.55386e+006 1.56502e+006 1.57572e+006 1.58596e+006 1.59578e+006
1.60541e+006 1.61464e+006 1.62347e+006 1.63192e+006 1.64e+006 1.64774e+006 1.65514e+006 1.66221e+006 1.66897e+006
1.67543e+006 1.68161e+006 1.68751e+006 1.69315e+006 1.69853e+006 1.70368e+006 1.70859e+006 1.71328e+006 1.71776e+006
1.72203e+006 1.72611e+006 1.73001e+006 1.73372e+006 1.73727e+006 1.74065e+006 1.74388e+006 1.74696e+006 1.7499e+006
1.7527e+006 1.75537e+006 1.75792e+006 #female fecundity; weighted by N in year Y_init across morphs and areas

0.0432416 0.154883 0.214573 0.283047 0.358848 0.440515 0.526818 0.616856 0.710024 0.805932 0.904313 1.00495 1.10763 1.21212 1.31815 1.42543 1.53365 1.64246 1.75155 1.86056 1.96919 2.07713 2.1841 2.28984 2.39412 2.49674 2.5975 2.69627 2.7929 2.88729 2.97936 3.06902 3.15622 3.24094 3.32314 3.40282 3.47998 3.55462 3.62677 3.69645 3.7637 3.82855 3.89105 3.95124 4.00918 4.06491 4.1185 4.17 4.21947 4.26697 4.31256 4.35629 4.39823 4.43844 4.47697 4.51389 4.54925 4.5831 4.61551 4.64653 4.6762 4.70459 4.73173 4.75769 4.7825 4.80622 4.82889 4.85054 4.87123 4.89099 4.90999 4.92825 4.94568 4.96233 4.97821 4.99338 5.00786 5.02167 5.03485 5.04743 5.05942 5.07087 5.08179 5.0922 5.10214 5.11161 5.12064 5.12926 5.13747 5.1453 5.15277 5.15989 5.16667 5.17314 5.17931 5.18519 5.19079 5.19613 5.20122 5.20607 5.21069 #bodywt for gender,fleet: 1 / 1
 0 0.049638 0.0768352 0.11409 0.162086 0.220137 0.286167 0.357113 0.429572 0.500408 0.567155 0.628175 0.682611 0.730243 0.771299 0.806289 0.835861 0.86071 0.881515 0.898898 0.913414 0.925541 0.935686 0.944192 0.95134 0.957367 0.962466 0.966793 0.97048 0.973634 0.976341 0.978675 0.980693 0.982446 0.983974 0.985311 0.986484 0.987518 0.988431 0.989241 0.989961 0.990604 0.991179 0.991695 0.992159 0.992578 0.992956 0.993299 0.99361 0.993894 0.994153 0.994389 0.994606 0.994804 0.994987 0.995155 0.99531 0.995453 0.995585 0.995707 0.995821 0.995926 0.996024 0.996115 0.9962 0.99628 0.996354 0.996423 0.996487 0.996548 0.996602 0.996651 0.996697 0.996741 0.996782 0.99682 0.996856 0.99689 0.996922 0.996952 0.996981 0.997008 0.997033 0.997057 0.99708 0.997101 0.997122 0.997141 0.997159 0.997176 0.997192 0.997208 0.997222 0.997236 0.997249 0.997262 0.997273 0.997284 0.997295 0.997305 0.997315 #selex for gender,fleet: 1 / 1
 0.0442767 0.16069 0.223657 0.296324 0.376948 0.463551 0.554333 0.647948 0.743554 0.840718 0.939268 1.03916 1.14038 1.24289 1.34663 1.45144 1.55714 1.66348 1.77021 1.87703 1.98364 2.08976 2.1951 2.29939 2.4024 2.5039 2.6037 2.70162 2.79753 2.89129 2.9828 3.07199 3.15879 3.24315 3.32505 3.40447 3.4814 3.55584 3.62782 3.69735 3.76446 3.8292 3.8916 3.9517 4.00956 4.06523 4.11876 4.17021 4.21963 4.26709 4.31264 4.35634 4.39825 4.43843 4.47694 4.51384 4.54918 4.58302 4.61541 4.64641 4.67607 4.70445 4.73158 4.75753 4.78234 4.80605 4.8287 4.85035 4.87104 4.89079 4.90978 4.92804 4.94547 4.96211 4.978 4.99316 5.00763 5.02144 5.03462 5.04719 5.05919 5.07063 5.08155 5.09196 5.10189 5.11137 5.1204 5.12901 5.13722 5.14505 5.15252 5.15963 5.16642 5.17289 5.17905 5.18493 5.19053 5.19587 5.20096 5.20581 5.21043 #bodywt for gender,fleet: 1 / 2
 0 0.0194188 0.0330265 0.0539454 0.0842592 0.125418 0.177638 0.23962 0.308742 0.381633 0.454845 0.525399 0.59109 0.650551 0.703163 0.748885 0.788067 0.821289 0.84924 0.87263 0.892134 0.90837 0.921876 0.933119 0.94249 0.950318 0.956873 0.962379 0.96702 0.970945 0.974278 0.977118 0.979548 0.981636 0.983435 0.984993 0.986347 0.987527 0.98856 0.989467 0.990267 0.990974 0.991602 0.99216 0.992659 0.993105 0.993505 0.993865 0.99419 0.994484 0.994751 0.994993 0.995214 0.995415 0.995599 0.995768 0.995922 0.996065 0.996196 0.996316 0.996428 0.996531 0.996627 0.996715 0.996797 0.996874 0.996945 0.997011 0.997073 0.997131 0.997183 0.997229 0.997272 0.997313 0.997351 0.997386 0.99742 0.997452 0.997482 0.99751 0.997536 0.997561 0.997584 0.997606 0.997627 0.997647 0.997666 0.997683 0.9977 0.997716 0.997731 0.997745 0.997758 0.997771 0.997783 0.997794 0.997805 0.997815 0.997825 0.997834 0.997843 #selex for gender,fleet: 1 / 2
 0.0481289 0.178676 0.247414 0.32306 0.401917 0.481774 0.562105 0.643406 0.726523 0.812263 0.901218 0.993703 1.08977 1.18923 1.29174 1.39682 1.50393 1.61252 1.72203 1.83194 1.94177 2.05111 2.15957 2.26682 2.3726 2.47666 2.5788 2.67885 2.77668 2.87217 2.96525 3.05584 3.1439 3.2294 3.31231 3.39264 3.47038 3.54556 3.6182 3.68833 3.75599 3.82121 3.88405 3.94456 4.00279 4.05879 4.11262 4.16435 4.21402 4.26171 4.30748 4.35137 4.39347 4.43382 4.47248 4.50952 4.54499 4.57895 4.61146 4.64256 4.67232 4.70079 4.72801 4.75404 4.77892 4.80269 4.82542 4.84713 4.86787 4.88768 4.90671 4.925 4.94246 4.95914 4.97505 4.99024 5.00474 5.01858 5.03178 5.04438 5.05639 5.06786 5.07879 5.08922 5.09917 5.10866 5.1177 5.12633 5.13456 5.1424 5.14988 5.157 5.1638 5.17028 5.17645 5.18234 5.18795 5.1933 5.1984 5.20326 5.20789 #bodywt for gender,fleet: 1 / 3
 0 0.0148964 0.0331114 0.0674245 0.1238 0.203934 0.303239 0.412381 0.52093 0.620547 0.706362 0.776763 0.832419 0.875227 0.907509 0.931524 0.949235 0.962236 0.971765 0.978754 0.983896 0.987694 0.990516 0.992626 0.994215 0.99542 0.996341 0.99705 0.997601 0.998032 0.998372 0.998642 0.998859 0.999033 0.999175 0.999291 0.999387 0.999466 0.999532 0.999587 0.999634 0.999674 0.999708 0.999737 0.999762 0.999783 0.999802 0.999819 0.999833 0.999846 0.999857 0.999867 0.999875 0.999883 0.99989 0.999897 0.999902 0.999907 0.999912 0.999916 0.99992 0.999923 0.999927 0.999929 0.999932 0.999934 0.999937 0.999939 0.999941 0.999942 0.999944 0.999945 0.999947 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952 0.999953 0.999954 0.999954 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958 0.999959 0.999959 0.999959 0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999961 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0441368 0.160428 0.223824 0.29765 0.380509 0.470576 0.56589 0.664688 0.765614 0.867773 0.970655 1.07402 1.17778 1.28193 1.38644 1.4913 1.59644 1.70174 1.80705 1.9122 2.01698 2.12117 2.22457 2.32694 2.42809 2.52781 2.62592 2.72227 2.81671 2.90911 2.99938 3.08742 3.17318 3.25658 3.33761 3.41623 3.49243 3.56621 3.63759 3.70657 3.77318 3.83746 3.89944 3.95916 4.01667 4.07202 4.12525 4.17643 4.2256 4.27283 4.31817 4.36167 4.4034 4.44342 4.48177 4.51853 4.55373 4.58745 4.61972 4.65062 4.68018 4.70846 4.73551 4.76137 4.7861 4.80974 4.83233 4.85392 4.87454 4.89424 4.91319 4.93141 4.9488 4.96541 4.98127 4.9964 5.01085 5.02463 5.03778 5.05034 5.06231 5.07373 5.08463 5.09502 5.10494 5.11439 5.12341 5.132 5.1402 5.14802 5.15547 5.16258 5.16935 5.17581 5.18196 5.18783 5.19342 5.19875 5.20383 5.20868 5.21329 #bodywt for gender,fleet: 1 / 4
 0 0.0110167 0.0187059 0.0307103 0.0486106 0.0739681 0.107951 0.150956 0.202384 0.26068 0.323611 0.38866 0.453411 0.515827 0.574386 0.62811 0.676502 0.719451 0.757125 0.789872 0.81814 0.842419 0.8632 0.88095 0.896095 0.909015 0.920045 0.929472 0.937543 0.944468 0.950424 0.95556 0.960002 0.963854 0.967206 0.97013 0.97269 0.974938 0.976917 0.978666 0.980215 0.981592 0.982819 0.983916 0.984898 0.98578 0.986575 0.987292 0.987941 0.98853 0.989065 0.989552 0.989997 0.990404 0.990776 0.991118 0.991432 0.991721 0.991988 0.992234 0.992462 0.992673 0.992868 0.99305 0.993219 0.993376 0.993522 0.993658 0.993786 0.993905 0.994011 0.994107 0.994197 0.994281 0.99436 0.994434 0.994504 0.994569 0.994631 0.994689 0.994744 0.994796 0.994845 0.994891 0.994934 0.994975 0.995014 0.995051 0.995086 0.995118 0.995149 0.995179 0.995207 0.995233 0.995258 0.995282 0.995304 0.995325 0.995346 0.995365 0.995383 #selex for gender,fleet: 1 / 4
 0.0442583 0.161339 0.225582 0.300974 0.386531 0.480789 0.581916 0.687927 0.796944 0.907419 1.01823 1.12865 1.23831 1.34704 1.45482 1.56167 1.66766 1.77283 1.87718 1.9807 2.08334 2.18501 2.28563 2.38508 2.48322 2.57994 2.6751 2.76858 2.86027 2.95006 3.03786 3.12359 3.20717 3.28856 3.36772 3.44461 3.51921 3.59151 3.66153 3.72925 3.79471 3.85792 3.91892 3.97774 4.03441 4.08899 4.14151 4.19203 4.2406 4.28727 4.33208 4.37511 4.41639 4.45599 4.49396 4.53036 4.56523 4.59864 4.63062 4.66125 4.69056 4.7186 4.74543 4.77109 4.79563 4.81909 4.84151 4.86294 4.88341 4.90297 4.9218 4.93993 4.95724 4.97376 4.98954 5.0046 5.01897 5.03269 5.04578 5.05827 5.07019 5.08156 5.09241 5.10276 5.11262 5.12203 5.13101 5.13957 5.14773 5.15551 5.16293 5.17001 5.17675 5.18318 5.18931 5.19515 5.20072 5.20603 5.21109 5.21591 5.2205 #bodywt for gender,fleet: 1 / 5

0 0.00414071 0.00714514 0.0119744 0.0194675 0.0306543 0.0466662 0.0685674 0.0971359 0.13266 0.174823 0.222716 0.274967
0.329946 0.385974 0.441507 0.495247 0.546207 0.593711 0.637366 0.677016 0.712685 0.744528 0.772786 0.797747 0.819721
0.839019 0.855942 0.870771 0.883763 0.89515 0.905139 0.91391 0.921625 0.928421 0.934419 0.939723 0.944424 0.948598
0.952314 0.955629 0.958593 0.96125 0.963635 0.965783 0.96772 0.969471 0.971058 0.972498 0.973808 0.975001 0.976091
0.977088 0.978001 0.978839 0.979609 0.980319 0.980973 0.981576 0.982135 0.982652 0.983131 0.983575 0.983989 0.984373
0.984731 0.985065 0.985376 0.985667 0.985939 0.986184 0.986403 0.986608 0.986802 0.986983 0.987153 0.987314 0.987465
0.987607 0.98774 0.987867 0.987985 0.988098 0.988204 0.988304 0.988398 0.988488 0.988572 0.988652 0.988727 0.988799
0.988867 0.988931 0.988991 0.989049 0.989103 0.989155 0.989204 0.98925 0.989294 0.989336 #selex for gender,fleet: 1 / 5
 0.0453961 0.167046 0.234116 0.313112 0.403113 0.502636 0.609667 0.721838 0.836765 0.952407 1.06728 1.1805 1.29167 1.40073
1.50782 1.61316 1.71699 1.81953 1.92095 2.02135 2.1208 2.21929 2.31681 2.41327 2.5086 2.60268 2.6954 2.78664 2.87628
2.96422 3.05034 3.13457 3.21681 3.297 3.37508 3.45102 3.52478 3.59634 3.66569 3.73282 3.79776 3.86051 3.9211 3.97956
4.03592 4.09021 4.14248 4.19278 4.24115 4.28764 4.3323 4.37518 4.41634 4.45583 4.4937 4.53 4.56479 4.59813 4.63005 4.66061
4.68987 4.71787 4.74465 4.77028 4.79478 4.8182 4.84059 4.862 4.88245 4.90198 4.9208 4.9389 4.9562 4.97271 4.98847 5.00352
5.01788 5.03159 5.04467 5.05715 5.06906 5.08042 5.09126 5.1016 5.11146 5.12087 5.12984 5.13839 5.14655 5.15433 5.16174
5.16881 5.17555 5.18198 5.1881 5.19394 5.19951 5.20481 5.20987 5.21469 5.21928 #bodywt for gender,fleet: 1 / 6
 0 0.00135421 0.00255624 0.00467462 0.00827589 0.0141649 0.0233922 0.0371844 0.0567779 0.0831749 0.116896 0.157819
0.205152 0.257555 0.313344 0.370729 0.42802 0.483768 0.536844 0.586453 0.632113 0.673607 0.710924 0.744202 0.773681
0.79966 0.822464 0.842426 0.859866 0.875088 0.888368 0.899956 0.910074 0.918917 0.926657 0.933442 0.939401 0.944645
0.94927 0.953357 0.956978 0.960193 0.963054 0.965607 0.96789 0.969935 0.971773 0.973428 0.974921 0.976271 0.977494
0.978605 0.979616 0.980537 0.981378 0.982148 0.982853 0.983501 0.984097 0.984645 0.985151 0.985618 0.98605 0.98645
0.986821 0.987165 0.987485 0.987783 0.988061 0.988319 0.98855 0.988755 0.988947 0.989127 0.989296 0.989454 0.989603
0.989742 0.989874 0.989997 0.990113 0.990223 0.990326 0.990423 0.990515 0.990602 0.990684 0.990761 0.990834 0.990903
0.990968 0.99103 0.991088 0.991143 0.991195 0.991245 0.991292 0.991336 0.991379 0.991418 0.991456 #selex for gender,fleet: 1
/ 6
 0.0517415 0.176504 0.243766 0.32021 0.404062 0.49366 0.587715 0.685362 0.786084 0.889583 0.995666 1.10416 1.21488 1.32757
1.44194 1.55767 1.67438 1.79169 1.90922 2.02659 2.14344 2.25943 2.37427 2.48766 2.59938 2.70919 2.81692 2.92241 3.02553
3.12617 3.22425 3.3197 3.41248 3.50255 3.5899 3.67453 3.75644 3.83565 3.91218 3.98608 4.05737 4.12611 4.19234 4.25611
4.31749 4.37654 4.4333 4.48785 4.54025 4.59056 4.63884 4.68517 4.7296 4.77219 4.81302 4.85214 4.88962 4.9255 4.95986
4.99274 5.02421 5.05432 5.08312 5.11067 5.13701 5.16219 5.18625 5.20926 5.23124 5.25224 5.27242 5.29182 5.31035 5.32805
5.34494 5.36108 5.37648 5.39118 5.40521 5.4186 5.43139 5.44358 5.45522 5.46633 5.47692 5.48703 5.49667 5.50587 5.51464
5.52301 5.53099 5.5386 5.54586 5.55278 5.55938 5.56567 5.57167 5.57739 5.58285 5.58805 5.59301 #bodywt for gender,fleet: 2 / 1
 0 0.0503239 0.079383 0.119697 0.172005 0.235365 0.307169 0.3837 0.460961 0.535411 0.604415 0.666367 0.720584 0.767088
0.806364 0.839155 0.866308 0.888668 0.90702 0.92206 0.934385 0.944498 0.952812 0.959667 0.965337 0.970046 0.973971
0.977258 0.980022 0.982357 0.984339 0.986027 0.987473 0.988715 0.989788 0.990718 0.991528 0.992235 0.992856 0.993402
0.993884 0.994312 0.994692 0.995031 0.995334 0.995607 0.995851 0.996072 0.996272 0.996453 0.996617 0.996767 0.996903
0.997028 0.997142 0.997247 0.997344 0.997432 0.997514 0.99759 0.99766 0.997724 0.997784 0.99784 0.997892 0.99794 0.997985
0.998027 0.998066 0.998103 0.998136 0.998166 0.998193 0.998219 0.998244 0.998267 0.998288 0.998309 0.998328 0.998346
0.998363 0.998379 0.998394 0.998408 0.998422 0.998435 0.998447 0.998458 0.998469 0.998479 0.998489 0.998498 0.998507
0.998515 0.998523 0.99853 0.998537 0.998544 0.99855 0.998556 0.998562 #selex for gender,fleet: 2 / 1
 0.0529548 0.182993 0.253877 0.334873 0.423808 0.518389 0.616695 0.717427 0.819891 0.92383 1.02923 1.13615 1.24465 1.35474
1.46631 1.57921 1.69318 1.80793 1.92311 2.03838 2.15339 2.26778 2.38124 2.49347 2.60419 2.71317 2.8202 2.92511 3.02774
3.12798 3.22572 3.32089 3.41343 3.50331 3.5905 3.67499 3.75679 3.8359 3.91236 3.98619 4.05743 4.12612 4.19231 4.25605
4.31741 4.37642 4.43317 4.4877 4.54009 4.59038 4.63866 4.68498 4.7294 4.77199 4.81282 4.85193 4.8894 4.92529 4.95964
4.99252 5.02399 5.0541 5.0829 5.11045 5.13678 5.16196 5.18603 5.20903 5.23101 5.25201 5.2722 5.2916 5.31013 5.32782 5.34472
5.36085 5.37625 5.39095 5.40499 5.41838 5.43116 5.44336 5.455 5.4661 5.4767 5.4868 5.49645 5.50564 5.51442 5.52278 5.53076
5.53837 5.54563 5.55255 5.55915 5.56545 5.57145 5.57717 5.58262 5.58782 5.59278 #bodywt for gender,fleet: 2 / 2
 0 0.0197584 0.0344038 0.0573349 0.0909872 0.136966 0.195301 0.264149 0.34013 0.419119 0.497096 0.570782 0.637939
0.697363 0.748717 0.792279 0.828706 0.858844 0.883589 0.903804 0.92027 0.933665 0.944565 0.953445 0.960697 0.966636
0.971518 0.975546 0.978884 0.981663 0.983986 0.985937 0.987584 0.98898 0.990169 0.991187 0.992062 0.992816 0.993471
0.99404 0.994537 0.994974 0.995357 0.995697 0.995997 0.996264 0.996503 0.996716 0.996907 0.997079 0.997234 0.997375
0.997502 0.997617 0.997722 0.997818 0.997906 0.997986 0.99806 0.998128 0.998191 0.998248 0.998301 0.99835 0.998396
0.998438 0.998477 0.998514 0.998548 0.998579 0.998608 0.998633 0.998656 0.998678 0.998699 0.998718 0.998736 0.998753
0.99877 0.998785 0.998799 0.998812 0.998825 0.998837 0.998848 0.998859 0.998869 0.998878 0.998887 0.998895 0.998903
0.998911 0.998918 0.998925 0.998931 0.998937 0.998943 0.998949 0.998954 0.998959 0.998963 #selex for gender,fleet: 2 / 2
 0.057462 0.20294 0.279764 0.363096 0.448822 0.534881 0.621161 0.708565 0.798234 0.891143 0.987944 1.08892 1.19402 1.30292
1.41512 1.52997 1.64681 1.76498 1.88383 2.0028 2.12138 2.23914 2.3557 2.47072 2.58396 2.69517 2.80416 2.9108 3.01495
3.11651 3.21542 3.3116 3.40504 3.49569 3.58357 3.66866 3.75099 3.83058 3.90745 3.98165 4.05321 4.1222 4.18865 4.25263
4.31419 4.3734 4.43032 4.485 4.53753 4.58795 4.63635 4.68277 4.72729 4.76997 4.81087 4.85006 4.8876 4.92355 4.95796 4.9909
5.02242 5.05257 5.08142 5.109 5.13537 5.16059 5.18469 5.20772 5.22973 5.25075 5.27096 5.29038 5.30892 5.32663 5.34354
5.35968 5.3751 5.38981 5.40385 5.41726 5.43005 5.44226 5.4539 5.46502 5.47562 5.48573 5.49538 5.50458 5.51336 5.52174
5.52972 5.53734 5.5446 5.55153 5.55813 5.56443 5.57043 5.57616 5.58162 5.58682 5.59178 #bodywt for gender,fleet: 2 / 3
 0 0.0153383 0.0352453 0.0735162 0.136826 0.226319 0.335533 0.452886 0.566403 0.667334 0.751332 0.817762 0.868309
0.905687 0.932771 0.952127 0.965844 0.975525 0.982351 0.987176 0.990599 0.993042 0.994799 0.996071 0.997001 0.997687
0.998197 0.99858 0.998871 0.999093 0.999265 0.999398 0.999503 0.999587 0.999653 0.999706 0.99975 0.999785 0.999814
0.999838 0.999859 0.999875 0.99989 0.999902 0.999912 0.999921 0.999928 0.999935 0.99994 0.999945 0.99995 0.999954
0.999957 0.99996 0.999963 0.999965 0.999967 0.999969 0.999971 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978
0.999979 0.99998 0.99998 0.999981 0.999982 0.999982 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985
0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987
0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3

0.0527909 0.182715 0.254126 0.33651 0.428054 0.526553 0.629798 0.735946 0.843714 0.95236 1.06156 1.17123 1.28141 1.39219
1.50359 1.6156 1.72814 1.84106 1.95418 2.06724 2.18 2.29219 2.40352 2.51374 2.62259 2.72986 2.83533 2.93882 3.04018 3.13928
3.236 3.33026 3.42199 3.51115 3.59769 3.68161 3.76289 3.84155 3.91759 3.99106 4.06196 4.13036 4.19629 4.25979 4.32093
4.37975 4.43632 4.49069 4.54292 4.59309 4.64124 4.68745 4.73177 4.77427 4.815 4.85404 4.89144 4.92725 4.96154 4.99437
5.02578 5.05584 5.0846 5.1121 5.13839 5.16354 5.18757 5.21054 5.23249 5.25346 5.27362 5.29301 5.31152 5.3292 5.34608 5.3622
5.37758 5.39227 5.40629 5.41968 5.43245 5.44464 5.45626 5.46736 5.47795 5.48805 5.49768 5.50687 5.51564 5.524 5.53197
5.53958 5.54683 5.55374 5.56034 5.56663 5.57262 5.57834 5.58379 5.58899 5.59394 #bodywt for gender,fleet: 2 / 4
 0 0.0112081 0.0194904 0.0326853 0.0526774 0.0813067 0.119879 0.168685 0.226757 0.291977 0.361489 0.432231 0.501405
0.566791 0.626865 0.680783 0.728262 0.769437 0.804722 0.834683 0.859953 0.881166 0.89892 0.913755 0.926147 0.936503
0.945171 0.95244 0.958551 0.963705 0.968064 0.971765 0.974918 0.977613 0.979928 0.981921 0.983646 0.985142 0.986446
0.987587 0.988587 0.989468 0.990247 0.990937 0.99155 0.992097 0.992586 0.993025 0.993419 0.993775 0.994096 0.994387
0.994652 0.994892 0.995112 0.995312 0.995495 0.995664 0.995818 0.995961 0.996092 0.996213 0.996325 0.996429 0.996525
0.996614 0.996697 0.996774 0.996846 0.996913 0.996973 0.997026 0.997076 0.997123 0.997167 0.997208 0.997247 0.997283
0.997317 0.997349 0.99738 0.997408 0.997435 0.997461 0.997485 0.997507 0.997529 0.997549 0.997568 0.997586 0.997603
0.997619 0.997635 0.997649 0.997663 0.997676 0.997688 0.9977 0.997711 0.997721 0.997731 #selex for gender,fleet: 2 / 4
 0.0529334 0.183739 0.256122 0.340315 0.434963 0.538212 0.647881 0.761743 0.877834 0.994665 1.11127 1.22712 1.34203
1.45602 1.56916 1.68161 1.79344 1.90474 2.0155 2.1257 2.23523 2.34399 2.45182 2.55855 2.66402 2.76804 2.87045 2.97108
3.06979 3.16645 3.26094 3.35317 3.44306 3.53055 3.61559 3.69819 3.7782 3.85576 3.9308 4.00337 4.07346 4.14112 4.20638
4.26928 4.32987 4.3882 4.44432 4.49828 4.55014 4.59996 4.6478 4.69372 4.73778 4.78003 4.82055 4.85938 4.89659 4.93223
4.96636 4.99904 5.03031 5.06024 5.08888 5.11627 5.14246 5.16751 5.19145 5.21433 5.23621 5.25711 5.27721 5.29654 5.31501
5.33265 5.34949 5.36557 5.38093 5.39558 5.40957 5.42293 5.43567 5.44783 5.45944 5.47051 5.48107 5.49115 5.50077 5.50994
5.51869 5.52703 5.53499 5.54258 5.54982 5.55672 5.5633 5.56958 5.57556 5.58127 5.58671 5.5919 5.59684 #bodywt for
gender,fleet: 2 / 5
 0 0.00421519 0.00745709 0.0127869 0.0212203 0.0340135 0.0525402 0.0780597 0.111424 0.152822 0.201654 0.256592 0.315784
0.377147 0.438638 0.498472 0.555246 0.607981 0.656096 0.699352 0.737771 0.771566 0.801065 0.826663 0.84878 0.867832
0.884213 0.898283 0.910366 0.920749 0.92968 0.937374 0.944014 0.949759 0.954739 0.959069 0.962844 0.966143 0.969036
0.971579 0.973821 0.975803 0.977561 0.979124 0.980518 0.981764 0.982881 0.983884 0.984788 0.985605 0.986344 0.987014
0.987623 0.988178 0.988685 0.989148 0.989572 0.989962 0.99032 0.990649 0.990953 0.991234 0.991494 0.991734 0.991957
0.992164 0.992356 0.992535 0.992702 0.992858 0.992997 0.993121 0.993237 0.993346 0.993448 0.993544 0.993634 0.993718
0.993798 0.993873 0.993943 0.99401 0.994073 0.994132 0.994187 0.99424 0.99429 0.994337 0.994381 0.994423 0.994463 0.9945
0.994536 0.994569 0.994601 0.994631 0.99466 0.994687 0.994713 0.994737 0.99476 #selex for gender,fleet: 2 / 5
 0.0542657 0.190101 0.265582 0.35368 0.453079 0.561858 0.677564 0.797489 0.919099 1.04041 1.16015 1.27771 1.39298 1.50614
1.61751 1.72743 1.83623 1.94415 2.05138 2.158 2.26403 2.36942 2.4741 2.57792 2.68072 2.78235 2.88262 2.98137 3.07843
3.17365 3.2669 3.35805 3.44702 3.53373 3.61809 3.70008 3.77966 3.8568 3.9315 4.00377 4.07362 4.14107 4.20616 4.26892
4.32938 4.38761 4.44364 4.49753 4.54933 4.5991 4.6469 4.69279 4.73682 4.77905 4.81955 4.85837 4.89557 4.9312 4.96532 4.998
5.02927 5.0592 5.08783 5.11522 5.14142 5.16646 5.19041 5.2133 5.23517 5.25608 5.27618 5.29552 5.31399 5.33162 5.34847
5.36455 5.37991 5.39456 5.40855 5.42191 5.43465 5.44682 5.4695 5.48006 5.49014 5.49976 5.50893 5.51768 5.52602
5.53398 5.54157 5.54881 5.55572 5.5623 5.56858 5.57456 5.58027 5.58571 5.5909 5.59584 #bodywt for gender,fleet: 2 / 6
 0 0.00138366 0.00268882 0.00505141 0.00916502 0.01603 0.0269587 0.0434713 0.0670552 0.0988287 0.139223 0.187802
0.243288 0.30377 0.367015 0.430785 0.493091 0.552344 0.607418 0.657633 0.702688 0.742585 0.777539 0.807905 0.83411
0.856612 0.875867 0.892304 0.906318 0.91826 0.92844 0.937126 0.944548 0.950902 0.956353 0.961042 0.965085 0.968582
0.971615 0.974253 0.976556 0.978571 0.980341 0.9819 0.983277 0.984496 0.98558 0.986546 0.987409 0.988182 0.988877
0.989502 0.990067 0.990578 0.991041 0.991462 0.991845 0.992195 0.992515 0.992808 0.993076 0.993323 0.993551 0.993761
0.993954 0.994133 0.994299 0.994453 0.994596 0.994728 0.994846 0.99495 0.995047 0.995137 0.995222 0.995302 0.995376
0.995446 0.995512 0.995573 0.995631 0.995686 0.995737 0.995785 0.995831 0.995874 0.995914 0.995952 0.995988 0.996022
0.996055 0.996085 0.996114 0.996141 0.996167 0.996191 0.996214 0.996236 0.996257 0.996277 0.996295 #selex for gender,fleet: 2
/ 6
 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
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0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 #mean M for year Yinit: 2009 sex: 1
 47.7673 44.7179 41.8291 38.9521 36.2649 33.6738 31.2166 28.9499 27.379 25.6742 25.4653 24.5931 25.1068 25.0833 25.2368
24.8665 24.982 24.9908 24.5022 23.0915 21.9866 20.4171 18.6803 16.8792 15.2472 13.603 12.2359 10.9913 9.76854 8.5892
7.58271 6.68731 5.85839 5.14179 4.51584 3.97982 3.51685 3.12104 2.77601 2.47944 2.22426 2.00252 1.81133 1.64629 1.50253
1.37639 1.26625 1.1689 1.08231 1.00567 0.9373 0.876008 0.820068 0.768847 0.721873 0.678459 0.638294 0.601356 0.567255
0.535404 0.50573 0.47833 0.452589 0.429558 0.408128 0.387192 0.367072 0.34796 0.329953 0.312936 0.296845 0.281643 0.26727
0.253697 0.240864 0.228717 0.217231 0.206414 0.196175 0.186509 0.177362 0.168707 0.160519 0.152761 0.145404 0.138418
0.131788 0.125496 0.119522 0.113848 0.108456 0.103339 0.0984703 0.0938337 0.0894144 0.0852097 0.0812082 0.0773995
0.0737739 0.070322 1.44585 #numbers for year Yinit: 2009 sex: 1
 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
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0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663

0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 #mean M for year Yinit: 2009 sex: 2
 47.7673 44.7467 41.8828 39.0267 36.3565 33.7784 31.3304 29.0697 27.5044 25.8019 25.6008 24.7305 25.2508 25.2258 25.3702
24.9769 25.0572 25.0133 24.4542 22.9622 21.7671 20.1107 18.2969 16.4349 14.7565 13.088 11.7078 10.4651 9.2615 8.11519
7.14509 6.28933 5.50312 4.82734 4.23992 3.73899 3.30788 2.94053 2.62112 2.34723 2.112 1.90781 1.73188 1.58004 1.44769
1.3314 1.2297 1.13962 1.05925 0.987895 0.924039 0.866576 0.813883 0.765401 0.720724 0.679225 0.640648 0.605023 0.572003
0.541037 0.512087 0.485278 0.460011 0.437374 0.416255 0.395538 0.375557 0.356518 0.338531 0.321485 0.305325 0.290024
0.275529 0.261819 0.248839 0.236539 0.224896 0.213924 0.203527 0.193702 0.184397 0.175581 0.167232 0.15931 0.151789
0.144638 0.137842 0.131383 0.125244 0.119406 0.113851 0.108573 0.103546 0.0987533 0.09418 0.0898242 0.0856748 0.0817215
0.0779545 0.0743648 1.55232 #numbers for year Yinit: 2009 sex: 2
 40.5015 38.3845 36.0833 35.8931 34.7755 35.6246 35.7182 36.0647 35.6588 35.943 36.0676 35.4654 33.5139 31.9906 29.7766
27.3031 24.7211 22.3738 19.9972 18.0179 16.2108 14.4287 12.7041 11.2294 9.91479 8.69492 7.6386 6.71448 5.92208 5.23681
4.6503 4.13841 3.69796 3.31862 2.98866 2.70393 2.45794 2.24351 2.05525 1.89078 1.74537 1.61598 1.50142 1.39922 1.30759
1.22396 1.1474 1.07719 1.01231 0.952293 0.897111 0.846176 0.79861 0.754302 0.713395 0.67497 0.640594 0.608611 0.577372
0.547355 0.518846 0.49199 0.466614 0.44262 0.419957 0.398531 0.378298 0.35917 0.341064 0.323942 0.307818 0.292554
0.278142 0.264505 0.2516 0.239391 0.227822 0.21685 0.206431 0.196543 0.187158 0.178248 0.169786 0.161742 0.15411 0.146848
0.139932 0.13334 0.127068 0.121099 0.115419 0.110011 0.104863 0.0999605 0.0952925 0.0908469 0.0866126 0.0825791
0.0787365 0.0750753 1.54676 #numbers for year Ydeclare: 2002 sex: 1
 40.5015 38.4092 36.1294 35.961 34.8603 35.7264 35.827 36.168 35.7367 35.9747 36.0267 35.3259 33.2614 31.6099 29.2727
26.6901 24.022 21.6092 19.1992 17.2024 15.3993 13.6469 11.9726 10.5531 9.29853 8.14347 7.14918 6.28374 5.54488 4.90834
4.3654 3.89285 3.48727 3.13864 2.83575 2.57459 2.34902 2.1523 1.97936 1.82806 1.694 1.57436 1.46815 1.37308 1.28754 1.20911
1.13695 1.07048 1.00874 0.951369 0.898395 0.849306 0.80328 0.760257 0.720422 0.682884 0.649255 0.617886 0.58712 0.557452
0.529186 0.502485 0.477187 0.453205 0.430502 0.408996 0.388655 0.369398 0.351149 0.333874 0.317593 0.302164 0.287583
0.273771 0.260686 0.248292 0.236532 0.225366 0.214747 0.204657 0.195067 0.185951 0.177282 0.169033 0.161196 0.15373
0.146613 0.139822 0.133353 0.127192 0.121322 0.115728 0.110398 0.105318 0.100477 0.0958623 0.091463 0.0872689 0.0832698
0.0794563 1.66126 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
227.032 227.032 227.011 226.977 226.937 226.917 226.896 226.875 226.857 226.838 226.814 226.77 226.717 226.655 226.597
226.53 226.449 226.375 226.273 226.202 226.114 226 225.88 225.772 225.663 225.563 225.454 225.333 225.219 224.994 224.504
223.573 222.755 222.467 222.098 221.84 221.56 221.208 220.908 220.673 220.379 219.995 219.572 219.062 218.45 217.921
217.467 217.115 216.694 216.223 215.816 215.288 214.689 214.107 213.476 212.551 211.512 210.331 208.672 207.038 205.193
203.378 201.148 198.805 194.831 190.546 186.993 181.584 174.849 168.59 164.52 159.549 155.753 151.308 146.048 138.708
134.173 125.8 116.512 108.115 102.827 96.173 90.8777 84.3338 82.8355 79.3655 80.4882 81.0031 83.1743 85.4811 87.7372
89.8344 91.9719 93.7687 95.5347 #Recruits
9.94349e+008 9.94349e+008 9.94088e+008 9.9366e+008 9.93161e+008 9.92915e+008 9.92646e+008 9.9239e+008 9.92167e+008
9.91929e+008 9.91624e+008 9.91078e+008 9.90421e+008 9.89647e+008 9.88918e+008 9.88086e+008 9.87083e+008 9.86168e+008
9.8491e+008 9.84034e+008 9.82944e+008 9.8154e+008 9.80063e+008 9.7873e+008 9.77401e+008 9.76173e+008 9.74843e+008
9.73376e+008 9.71986e+008 9.69249e+008 9.63347e+008 9.5224e+008 9.42609e+008 9.39257e+008 9.3498e+008 9.32e+008
9.28777e+008 9.24749e+008 9.21345e+008 9.18677e+008 9.15361e+008 9.11053e+008 9.06327e+008 9.00678e+008 8.93957e+008
8.88199e+008 8.83296e+008 8.79515e+008 8.75015e+008 8.70026e+008 8.65736e+008 8.60212e+008 8.54001e+008 8.48016e+008
8.41585e+008 8.32268e+008 8.21953e+008 8.10404e+008 7.94523e+008 7.7924e+008 7.62399e+008 7.46255e+008 7.26948e+008
7.07291e+008 6.75307e+008 6.42613e+008 6.16822e+008 5.79649e+008 5.36587e+008 4.99446e+008 4.7665e+008 4.50129e+008
4.30796e+008 4.09104e+008 3.84657e+008 3.52586e+008 3.33862e+008 3.01298e+008 2.6791e+008 2.39944e+008 2.2331e+008
2.03367e+008 1.8823e+008 1.70361e+008 1.66392e+008 1.57372e+008 1.60265e+008 1.616e+008 1.67286e+008 1.73429e+008
1.79543e+008 1.85321e+008 1.91307e+008 1.96416e+008 2.01509e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
base vector 3
 0 0 22.9416 87.4734 301.324 929.793 2536.63 6068.06 12748.2 23761.8 39884 61265.3 87455.9 117606 150713 185826 222162
259143 296381 333641 370795 407782 444577 481171 517560 553733 589674 625359 660757 695832 730544 764852 798713
832087 864933 897215 928897 959950 990344 1.02006e+006 1.04907e+006 1.07736e+006 1.10492e+006 1.13174e+006
1.15781e+006 1.18312e+006 1.20768e+006 1.23149e+006 1.25454e+006 1.27686e+006 1.29843e+006 1.31928e+006 1.3394e+006
1.35883e+006 1.37756e+006 1.39561e+006 1.41299e+006 1.42973e+006 1.44583e+006 1.46132e+006 1.4762e+006 1.4905e+006
1.50424e+006 1.51743e+006 1.53008e+006 1.54222e+006 1.55386e+006 1.56502e+006 1.57572e+006 1.58596e+006 1.59578e+006
1.60541e+006 1.61464e+006 1.62347e+006 1.63192e+006 1.64e+006 1.64774e+006 1.65514e+006 1.66221e+006 1.66897e+006
1.67543e+006 1.68161e+006 1.68751e+006 1.69315e+006 1.69853e+006 1.70368e+006 1.70859e+006 1.71328e+006 1.71776e+006
1.72203e+006 1.72611e+006 1.73001e+006 1.73372e+006 1.73727e+006 1.74065e+006 1.74388e+006 1.74696e+006 1.7499e+006
1.7527e+006 1.75537e+006 1.75792e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0432416 0.154883 0.214573 0.283047 0.358848 0.440515 0.526818 0.616856 0.710024 0.805932 0.904313 1.00495 1.10763
1.21212 1.31815 1.42543 1.53365 1.64246 1.75155 1.86056 1.96919 2.07713 2.1841 2.28984 2.39412 2.49674 2.5975 2.69627
2.7929 2.88729 2.97936 3.06902 3.15622 3.24094 3.32314 3.40282 3.47998 3.55462 3.62677 3.69645 3.7637 3.82855 3.89105
3.95124 4.00918 4.06491 4.1185 4.17 4.21947 4.26697 4.31256 4.35629 4.39823 4.43844 4.47697 4.51389 4.54925 4.5831 4.61551
4.64653 4.6762 4.70459 4.73173 4.75769 4.7825 4.80622 4.82889 4.85054 4.87123 4.89099 4.90999 4.92825 4.94568 4.96233
4.97821 4.99338 5.00786 5.02167 5.03485 5.04743 5.05942 5.07087 5.08179 5.0922 5.10214 5.11161 5.12064 5.12926 5.13747
5.1453 5.15277 5.15989 5.16667 5.17314 5.17931 5.18519 5.19079 5.19613 5.20122 5.20607 5.21069 #bodywt for gender,fleet: 1 / 1
 0 0 0.049638 0.0768352 0.11409 0.162086 0.220137 0.286167 0.357113 0.429572 0.500408 0.567155 0.628175 0.682611 0.730243
0.771299 0.806289 0.835861 0.86071 0.881515 0.898898 0.913414 0.925541 0.935686 0.944192 0.95134 0.957367 0.962466

0.966793 0.97048 0.973634 0.976341 0.978675 0.980693 0.982446 0.983974 0.985311 0.986484 0.987518 0.988431 0.989241
0.989961 0.990604 0.991179 0.991695 0.992159 0.992578 0.992956 0.993299 0.99361 0.993894 0.994153 0.994389 0.994606
0.994804 0.994987 0.995155 0.99531 0.995453 0.995585 0.995707 0.995821 0.995926 0.996024 0.996115 0.9962 0.99628 0.996354
0.996423 0.996487 0.996548 0.996602 0.996651 0.996697 0.996741 0.996782 0.99682 0.996856 0.99689 0.996922 0.996952
0.996981 0.997008 0.997033 0.997057 0.99708 0.997101 0.997122 0.997141 0.997159 0.997176 0.997192 0.997208 0.997222
0.997236 0.997249 0.997262 0.997273 0.997284 0.997295 0.997305 0.997315 #selex for gender,fleet: 1 / 1
 0.0442767 0.16069 0.223657 0.296324 0.376948 0.463551 0.554333 0.647948 0.743554 0.840718 0.939268 1.03916 1.14038
1.24289 1.34663 1.45144 1.55714 1.66348 1.77021 1.87703 1.98364 2.08976 2.1951 2.29939 2.4024 2.5039 2.6037 2.70162 2.79753
2.89129 2.9828 3.07199 3.15879 3.24315 3.32505 3.40447 3.4814 3.55584 3.62782 3.69735 3.76446 3.8292 3.8916 3.9517 4.00956
4.06523 4.11876 4.17021 4.21963 4.26709 4.31264 4.35634 4.39825 4.43843 4.47694 4.51384 4.54918 4.58302 4.61541 4.64641
4.67607 4.70445 4.73158 4.75753 4.78234 4.80605 4.8287 4.85035 4.87104 4.89079 4.90978 4.92804 4.94547 4.96211 4.978
4.99316 5.00763 5.02144 5.03462 5.04719 5.05919 5.07063 5.08155 5.09196 5.10189 5.11137 5.1204 5.12901 5.13722 5.14505
5.15252 5.15963 5.16642 5.17289 5.17905 5.18493 5.19053 5.19587 5.20096 5.20581 5.21043 #bodywt for gender,fleet: 1 / 2
 0 0.0194188 0.0330265 0.0539454 0.0842592 0.125418 0.177638 0.23962 0.308742 0.381633 0.454845 0.525399 0.59109 0.650551
0.703163 0.748885 0.788067 0.821289 0.84924 0.87263 0.892134 0.90837 0.921876 0.933119 0.94249 0.950318 0.956873 0.962379
0.96702 0.970945 0.974278 0.977118 0.979548 0.981636 0.983435 0.984993 0.986347 0.987527 0.98856 0.989467 0.990267
0.990974 0.991602 0.99216 0.992659 0.993105 0.993505 0.993865 0.99419 0.994484 0.994751 0.994993 0.995214 0.995415
0.995599 0.995768 0.995922 0.996065 0.996196 0.996316 0.996428 0.996531 0.996627 0.996715 0.996797 0.996874 0.996945
0.997011 0.997073 0.997131 0.997183 0.997229 0.997272 0.997313 0.997351 0.997386 0.99742 0.997452 0.997482 0.99751
0.997536 0.997561 0.997584 0.997606 0.997627 0.997647 0.997666 0.997683 0.9977 0.997716 0.997731 0.997745 0.997758
0.997771 0.997783 0.997794 0.997805 0.997815 0.997825 0.997834 0.997843 #selex for gender,fleet: 1 / 2
 0.0481289 0.178676 0.247414 0.32306 0.401917 0.481774 0.562105 0.643406 0.726523 0.812263 0.901218 0.993703 1.08977
1.18923 1.29174 1.39682 1.50393 1.61252 1.72203 1.83194 1.94177 2.05111 2.15957 2.26682 2.3726 2.47666 2.5788 2.67885
2.77668 2.87217 2.96525 3.05584 3.1439 3.2294 3.31231 3.39264 3.47038 3.54556 3.6182 3.68833 3.75599 3.82121 3.88405
3.94456 4.00279 4.05879 4.11262 4.16435 4.21402 4.26171 4.30748 4.35137 4.39347 4.43382 4.47248 4.50952 4.54499 4.57895
4.61146 4.64256 4.67232 4.70079 4.72801 4.75404 4.77892 4.80269 4.82542 4.84713 4.86787 4.88768 4.90671 4.925 4.94246
4.95914 4.97505 4.99024 5.00474 5.01858 5.03178 5.04438 5.05639 5.06786 5.07879 5.08922 5.09917 5.10866 5.1177 5.12633
5.13456 5.1424 5.14988 5.157 5.1638 5.17028 5.17645 5.18234 5.18795 5.1933 5.1984 5.20326 5.20789 #bodywt for gender,fleet: 1 /
3
 0 0.0148964 0.0331114 0.0674245 0.1238 0.203934 0.303239 0.412381 0.52093 0.620547 0.706362 0.776763 0.832419 0.875227
0.907509 0.931524 0.949235 0.962236 0.971765 0.978754 0.983896 0.987694 0.990516 0.992626 0.994215 0.99542 0.996341
0.99705 0.997601 0.998032 0.998372 0.998642 0.998859 0.999033 0.999175 0.999291 0.999387 0.999466 0.999532 0.999587
0.999634 0.999674 0.999708 0.999737 0.999762 0.999783 0.999802 0.999819 0.999833 0.999846 0.999857 0.999867 0.999875
0.999883 0.99989 0.999897 0.999902 0.999907 0.999912 0.999916 0.99992 0.999923 0.999927 0.999929 0.999932 0.999934
0.999937 0.999939 0.999941 0.999942 0.999944 0.999945 0.999947 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952
0.999953 0.999954 0.999954 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958 0.999959 0.999959 0.999959
0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999961 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0441368 0.160428 0.223824 0.29765 0.380509 0.470576 0.56589 0.664688 0.765614 0.867773 0.970655 1.07402 1.17778 1.28193
1.38644 1.4913 1.59644 1.70174 1.80705 1.9122 2.01698 2.12117 2.22457 2.32694 2.42809 2.52781 2.62592 2.72227 2.81671
2.90911 2.99938 3.08742 3.17318 3.25658 3.33761 3.41623 3.49243 3.56621 3.63759 3.70657 3.77318 3.83746 3.89944 3.95916
4.01667 4.07202 4.12525 4.17643 4.2256 4.27283 4.31817 4.36167 4.4034 4.44342 4.48177 4.51853 4.55373 4.58745 4.61972
4.65062 4.68018 4.70846 4.73551 4.76137 4.7861 4.80974 4.83233 4.85392 4.87454 4.89424 4.91319 4.93141 4.9488 4.96541
4.98127 4.9964 5.01085 5.02463 5.03778 5.05034 5.06231 5.07373 5.08463 5.09502 5.10494 5.11439 5.12341 5.132 5.1402 5.14802
5.15547 5.16258 5.16935 5.17581 5.18196 5.18783 5.19342 5.19875 5.20383 5.20868 5.21329 #bodywt for gender,fleet: 1 / 4
 0 0.0110167 0.0187059 0.0307103 0.0486106 0.0739681 0.107951 0.150956 0.202384 0.26068 0.323611 0.38866 0.453411
0.515827 0.574386 0.62811 0.676502 0.719451 0.757125 0.789872 0.81814 0.842419 0.8632 0.88095 0.896095 0.909015 0.920045
0.929472 0.937543 0.944468 0.950424 0.95556 0.960002 0.963854 0.967206 0.97013 0.97269 0.974938 0.976917 0.978666
0.980215 0.981592 0.982819 0.983916 0.984898 0.98578 0.986575 0.987292 0.987941 0.98853 0.989065 0.989552 0.989997
0.990404 0.990776 0.991118 0.991432 0.991721 0.991988 0.992234 0.992462 0.992673 0.992868 0.99305 0.993219 0.993376
0.993522 0.993658 0.993786 0.993905 0.994011 0.994107 0.994198 0.994281 0.99436 0.994434 0.994504 0.994569 0.994631
0.994689 0.994744 0.994796 0.994845 0.994891 0.994934 0.994975 0.995014 0.995051 0.995086 0.995118 0.995149 0.995179
0.995207 0.995233 0.995258 0.995282 0.995304 0.995325 0.995346 0.995365 0.995383 #selex for gender,fleet: 1 / 4
 0.0442583 0.161339 0.225582 0.300974 0.386531 0.480789 0.581916 0.687927 0.796944 0.907419 1.01823 1.12865 1.23831
1.34704 1.45482 1.56167 1.66766 1.77283 1.87718 1.9807 2.08334 2.18501 2.28563 2.38508 2.48322 2.57994 2.6751 2.76858
2.86027 2.95006 3.03786 3.12359 3.20717 3.28856 3.36772 3.44461 3.51921 3.59151 3.66153 3.72925 3.79471 3.85792 3.91892
3.97774 4.03441 4.08899 4.14151 4.19203 4.2406 4.28727 4.33208 4.37511 4.41639 4.45599 4.49396 4.53036 4.56523 4.59864
4.63062 4.66125 4.69056 4.7186 4.74543 4.77109 4.79563 4.81909 4.84151 4.86294 4.88341 4.90297 4.9218 4.93993 4.95724
4.97376 4.98954 5.0046 5.01897 5.03269 5.04578 5.05827 5.07019 5.08156 5.09241 5.10276 5.11262 5.12203 5.13101 5.13957
5.14773 5.15551 5.16293 5.17001 5.17675 5.18318 5.18931 5.19515 5.20072 5.20603 5.21109 5.21591 5.2205 #bodywt for
gender,fleet: 1 / 5
 0 0.00414071 0.00714514 0.0119744 0.0194675 0.0306543 0.0466662 0.0685674 0.0971359 0.13266 0.174823 0.222716 0.274967
0.329946 0.385974 0.441507 0.495247 0.546207 0.593711 0.637366 0.677016 0.712685 0.744528 0.772786 0.797747 0.819721
0.839019 0.855942 0.870771 0.883763 0.89515 0.905139 0.91391 0.921625 0.928421 0.934419 0.939723 0.944424 0.948598
0.952314 0.955629 0.958593 0.96125 0.963635 0.965783 0.96772 0.969471 0.971058 0.972498 0.973808 0.975001 0.976091
0.977088 0.978001 0.978839 0.979609 0.980319 0.980973 0.981576 0.982135 0.982652 0.983131 0.983575 0.983989 0.984373
0.984731 0.985065 0.985376 0.985667 0.985939 0.986184 0.986403 0.986608 0.986802 0.986983 0.987153 0.987314 0.987465
0.987607 0.98774 0.987867 0.987985 0.988098 0.988204 0.988304 0.988398 0.988488 0.988572 0.988652 0.988727 0.988799
0.988867 0.988931 0.988991 0.989049 0.989103 0.989155 0.989204 0.98925 0.989294 0.989336 #selex for gender,fleet: 1 / 5
 0.0453961 0.167046 0.234116 0.313112 0.403113 0.502636 0.609667 0.721838 0.836765 0.952407 1.06728 1.1805 1.29167 1.40073
1.50782 1.61316 1.71699 1.81953 1.92095 2.02135 2.1208 2.21929 2.31681 2.41327 2.5086 2.60268 2.6954 2.78664 2.87628

2.96422 3.05034 3.13457 3.21681 3.297 3.37508 3.45102 3.52478 3.59634 3.66569 3.73282 3.79776 3.86051 3.9211 3.97956
4.03592 4.09021 4.14248 4.19278 4.24115 4.28764 4.3323 4.37518 4.41634 4.45583 4.4937 4.53 4.56479 4.59813 4.63005 4.66061
4.68987 4.71787 4.74465 4.77028 4.79478 4.8182 4.84059 4.862 4.88245 4.90198 4.9208 4.9389 4.9562 4.97271 4.98847 5.00352
5.01788 5.03159 5.04467 5.05715 5.06906 5.08042 5.09126 5.1016 5.11146 5.12087 5.12984 5.13839 5.14655 5.15433 5.16174
5.16881 5.17555 5.18198 5.1881 5.19394 5.19951 5.20481 5.20987 5.21469 5.21928 #bodywt for gender,fleet: 1 / 6
 0 0.00135421 0.00255624 0.00467462 0.00827589 0.0141649 0.0233922 0.0371844 0.0567779 0.0831749 0.116896 0.157819
0.205152 0.257555 0.313344 0.370729 0.42802 0.483768 0.536844 0.586453 0.632113 0.673607 0.710924 0.744202 0.773681
0.79966 0.822464 0.842426 0.859866 0.875088 0.888368 0.899956 0.910074 0.918917 0.926657 0.933442 0.939401 0.944645
0.94927 0.953357 0.956978 0.960193 0.963054 0.965607 0.96789 0.969935 0.971773 0.973428 0.974921 0.976271 0.977494
0.978605 0.979616 0.980537 0.981378 0.982148 0.982853 0.983501 0.984097 0.984645 0.985151 0.985618 0.98605 0.98645
0.986821 0.987165 0.987485 0.987783 0.988061 0.988319 0.98855 0.988755 0.988947 0.989127 0.989296 0.989454 0.989603
0.989742 0.989874 0.989997 0.990113 0.990223 0.990326 0.990423 0.990515 0.990602 0.990684 0.990761 0.990834 0.990903
0.990968 0.99103 0.991088 0.991143 0.991195 0.991245 0.991292 0.991336 0.991379 0.991418 0.991456 #selex for gender,fleet: 1
/ 6
 0.0517415 0.176504 0.243766 0.32021 0.404062 0.49366 0.587715 0.685362 0.786084 0.889583 0.995666 1.10416 1.21488 1.32757
1.44194 1.55767 1.67438 1.79169 1.90922 2.02659 2.14344 2.25943 2.37427 2.48766 2.59938 2.70919 2.81692 2.92241 3.02553
3.12617 3.22425 3.3197 3.41248 3.50255 3.5899 3.67453 3.75644 3.83565 3.91218 3.98608 4.05737 4.12611 4.19234 4.25611
4.31749 4.37654 4.4333 4.48785 4.54025 4.59056 4.63884 4.68517 4.7296 4.77219 4.81302 4.85214 4.88962 4.9255 4.95986
4.99274 5.02421 5.05432 5.08312 5.11067 5.13701 5.16219 5.18625 5.20926 5.23124 5.25224 5.27242 5.29182 5.31035 5.32805
5.34494 5.36108 5.37648 5.39118 5.40521 5.4186 5.43139 5.44358 5.45522 5.46633 5.47692 5.48703 5.49667 5.50587 5.51464
5.52301 5.53099 5.5386 5.54586 5.55278 5.55938 5.56567 5.57167 5.57739 5.58285 5.58805 5.59301 #bodywt for gender,fleet: 2 / 1
 0 0.0503239 0.079383 0.119697 0.172005 0.235365 0.307169 0.3837 0.460961 0.535411 0.604415 0.666367 0.720584 0.767088
0.806364 0.839155 0.866308 0.888668 0.90702 0.92206 0.934385 0.944498 0.952812 0.959667 0.965337 0.970046 0.973971
0.977258 0.980022 0.982357 0.984339 0.986027 0.987473 0.988715 0.989788 0.990718 0.991528 0.992235 0.992856 0.993402
0.993884 0.994312 0.994692 0.995031 0.995334 0.995607 0.995851 0.996072 0.996272 0.996453 0.996617 0.996767 0.996903
0.997028 0.997142 0.997247 0.997344 0.997432 0.997514 0.99759 0.99766 0.997724 0.997784 0.99784 0.997892 0.997941 0.997985
0.998027 0.998066 0.998103 0.998136 0.998166 0.998193 0.998219 0.998244 0.998267 0.998288 0.998309 0.998328 0.998346
0.998363 0.998379 0.998394 0.998408 0.998422 0.998435 0.998447 0.998458 0.998469 0.998479 0.998489 0.998498 0.998507
0.998515 0.998523 0.99853 0.998537 0.998544 0.99855 0.998556 0.998562 #selex for gender,fleet: 2 / 1
 0.0529548 0.182993 0.253877 0.334873 0.423808 0.518389 0.616695 0.717427 0.819891 0.92383 1.02923 1.13615 1.24465 1.35474
1.46631 1.57921 1.69318 1.80793 1.92311 2.03838 2.15339 2.26778 2.38124 2.49347 2.60419 2.71317 2.8202 2.92511 3.02774
3.12798 3.22572 3.32089 3.41343 3.50331 3.5905 3.67499 3.75679 3.8359 3.91236 3.98619 4.05743 4.12612 4.19231 4.25605
4.31741 4.37642 4.43317 4.4877 4.54009 4.59038 4.63866 4.68498 4.7294 4.77199 4.81282 4.85193 4.8894 4.92529 4.95964
4.99252 5.02399 5.0541 5.0829 5.11045 5.13678 5.16196 5.18603 5.20903 5.23101 5.25201 5.2722 5.2916 5.31013 5.32782 5.34472
5.36085 5.37625 5.39095 5.40499 5.41838 5.43116 5.44336 5.455 5.4661 5.4767 5.4868 5.49645 5.50564 5.51442 5.52278 5.53076
5.53837 5.54563 5.55255 5.55915 5.56545 5.57145 5.57717 5.58262 5.58782 5.59278 #bodywt for gender,fleet: 2 / 2
 0 0.0197584 0.0344038 0.0573349 0.0909872 0.136966 0.195301 0.264149 0.34013 0.419119 0.497096 0.570782 0.637939
0.697363 0.748717 0.792279 0.828706 0.858844 0.883589 0.903804 0.92027 0.933665 0.944565 0.953445 0.960697 0.966636
0.971518 0.975546 0.978884 0.981663 0.983986 0.985937 0.987584 0.98898 0.990169 0.991187 0.992062 0.992816 0.993471
0.99404 0.994537 0.994974 0.995357 0.995697 0.995997 0.996264 0.996503 0.996716 0.996907 0.997079 0.997234 0.997375
0.997502 0.997617 0.997722 0.997818 0.997906 0.997986 0.99806 0.998128 0.99819 0.998248 0.998301 0.99835 0.998396
0.998438 0.998477 0.998514 0.998548 0.998579 0.998608 0.998633 0.998656 0.998678 0.998699 0.998718 0.998736 0.998753
0.99877 0.998785 0.998799 0.998812 0.998825 0.998837 0.998848 0.998859 0.998869 0.998878 0.998887 0.998895 0.998903
0.998911 0.998918 0.998925 0.998931 0.998937 0.998943 0.998949 0.998954 0.998959 0.998963 #selex for gender,fleet: 2 / 2
 0.057462 0.20294 0.279764 0.363096 0.448822 0.534881 0.621161 0.708565 0.798234 0.891143 0.987944 1.08892 1.19402 1.30292
1.41512 1.52997 1.64681 1.76498 1.88383 2.0028 2.12138 2.23914 2.3557 2.47072 2.58396 2.69517 2.80416 2.9108 3.01495
3.11651 3.21542 3.3116 3.40504 3.49569 3.58357 3.66866 3.75099 3.83058 3.90745 3.98165 4.05321 4.1222 4.18865 4.25263
4.31419 4.3734 4.43032 4.485 4.53753 4.58795 4.63635 4.68277 4.72729 4.76997 4.81087 4.85006 4.8876 4.92355 4.95796 4.9909
5.02242 5.05257 5.08142 5.109 5.13537 5.16059 5.18469 5.20772 5.22973 5.25075 5.27096 5.29038 5.30892 5.32663 5.34354
5.35968 5.3751 5.38981 5.40385 5.41726 5.43005 5.44226 5.4539 5.46502 5.47562 5.48573 5.49538 5.50458 5.51336 5.52174
5.52972 5.53734 5.5446 5.55153 5.55813 5.56443 5.57043 5.57616 5.58162 5.58682 5.59178 #bodywt for gender,fleet: 2 / 3
 0 0.0153383 0.0352453 0.0735162 0.136826 0.226319 0.335533 0.452886 0.566403 0.667334 0.751332 0.817762 0.868309
0.905687 0.932771 0.952127 0.965844 0.975525 0.982351 0.987176 0.990599 0.993042 0.994799 0.996071 0.997001 0.997687
0.998197 0.99858 0.998871 0.999093 0.999265 0.999398 0.999503 0.999587 0.999653 0.999706 0.99975 0.999785 0.999814
0.999838 0.999859 0.999875 0.99989 0.999902 0.999912 0.999921 0.999928 0.999935 0.99994 0.999945 0.99995 0.999954
0.999957 0.99996 0.999963 0.999965 0.999967 0.999969 0.999971 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978
0.999979 0.99998 0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985
0.999985 0.999986 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987
0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3
 0.0527909 0.182715 0.254126 0.33651 0.428054 0.526553 0.629798 0.735946 0.843714 0.95236 1.06156 1.17123 1.28141 1.39219
1.50359 1.6156 1.72814 1.84106 1.95418 2.06724 2.18 2.29219 2.40352 2.51374 2.62259 2.72986 2.83533 2.93882 3.04018 3.13928
3.236 3.33026 3.42199 3.51115 3.59769 3.68161 3.76289 3.84155 3.91759 3.99106 4.06196 4.13036 4.19629 4.25979 4.32093
4.37975 4.43632 4.49069 4.54292 4.59309 4.64124 4.68745 4.73177 4.77427 4.815 4.85404 4.89144 4.92725 4.96154 4.99437
5.02578 5.05584 5.0846 5.1121 5.13839 5.16354 5.18757 5.21054 5.23249 5.25346 5.27362 5.29301 5.31152 5.3292 5.34608 5.3622
5.37758 5.39227 5.40629 5.41968 5.43245 5.44464 5.45626 5.46736 5.47795 5.48805 5.49768 5.50687 5.51564 5.524 5.53197
5.53958 5.54683 5.55374 5.56034 5.56663 5.57262 5.57834 5.58379 5.58899 5.59394 #bodywt for gender,fleet: 2 / 4
 0 0.0112081 0.0194904 0.0326853 0.0526774 0.0813067 0.119975 0.168685 0.226757 0.291977 0.361489 0.432231 0.501405
0.566791 0.626865 0.680783 0.728262 0.769437 0.804722 0.834683 0.859953 0.881166 0.89892 0.913755 0.926147 0.936503
0.945171 0.95244 0.958551 0.963705 0.968064 0.971765 0.974918 0.977613 0.979928 0.981921 0.983646 0.985142 0.986446
0.987587 0.988587 0.989468 0.990247 0.990937 0.99155 0.992097 0.992586 0.993025 0.993419 0.993775 0.994096 0.994387

0.994652 0.994892 0.995112 0.995312 0.995495 0.995664 0.995818 0.995961 0.996092 0.996213 0.996325 0.996429 0.996525
0.996614 0.996697 0.996774 0.996846 0.996913 0.996973 0.997026 0.997076 0.997123 0.997167 0.997208 0.997247 0.997283
0.997317 0.997349 0.99738 0.997408 0.997435 0.997461 0.997485 0.997507 0.997529 0.997549 0.997568 0.997586 0.997603
0.997619 0.997635 0.997649 0.997663 0.997676 0.997688 0.9977 0.997711 0.997721 0.997731 #selex for gender,fleet: 2 / 4
 0.0529334 0.183739 0.256122 0.340315 0.434963 0.538212 0.647881 0.761743 0.877834 0.994665 1.11127 1.22712 1.34203
1.45602 1.56916 1.68161 1.79344 1.90474 2.0155 2.1257 2.23523 2.34399 2.45182 2.55855 2.66402 2.76804 2.87045 2.97108
3.06979 3.16645 3.26094 3.35317 3.44306 3.53055 3.61559 3.69815 3.7782 3.85576 3.9308 4.00337 4.07346 4.14112 4.20638
4.26928 4.32987 4.3882 4.44432 4.49828 4.55014 4.59996 4.6478 4.69372 4.73778 4.78003 4.82055 4.85938 4.89659 4.93223
4.96636 4.99904 5.03031 5.06024 5.08888 5.11627 5.14246 5.16751 5.19145 5.21433 5.23621 5.25711 5.27721 5.29654 5.31501
5.33265 5.34949 5.36557 5.38093 5.39558 5.40957 5.42293 5.43567 5.44783 5.45944 5.47051 5.48107 5.49115 5.50077 5.50994
5.51869 5.52703 5.53499 5.54258 5.54982 5.55672 5.5633 5.56958 5.57556 5.58127 5.58671 5.5919 5.59684 #bodywt for
gender,fleet: 2 / 5
 0 0.00421519 0.00745709 0.0127869 0.0212203 0.0340135 0.0525402 0.0780597 0.111424 0.152822 0.201654 0.256592 0.315784
0.377147 0.438638 0.498472 0.555246 0.607981 0.656096 0.699352 0.737771 0.771566 0.801065 0.826663 0.84878 0.867832
0.884213 0.898283 0.910366 0.920749 0.92968 0.937374 0.944014 0.949759 0.954739 0.959069 0.962844 0.966143 0.969036
0.971579 0.973821 0.975803 0.977561 0.979124 0.980518 0.981764 0.982881 0.983884 0.984788 0.985605 0.986344 0.987014
0.987623 0.988178 0.988685 0.989148 0.989572 0.989962 0.99032 0.990649 0.990953 0.991234 0.991494 0.991734 0.991957
0.992164 0.992356 0.992535 0.992702 0.992858 0.992997 0.993121 0.993237 0.993346 0.993448 0.993544 0.993634 0.993718
0.993798 0.993873 0.993943 0.99401 0.994073 0.994132 0.994187 0.99424 0.99429 0.994337 0.994381 0.994423 0.994463 0.9945
0.994536 0.994569 0.994601 0.994631 0.99466 0.994687 0.994713 0.994737 0.99476 #selex for gender,fleet: 2 / 5
 0.0542657 0.190101 0.265582 0.35368 0.453079 0.561858 0.677564 0.797489 0.919099 1.04041 1.16015 1.27771 1.39298 1.50614
1.61751 1.72743 1.83623 1.94415 2.05138 2.158 2.26403 2.36942 2.4741 2.57792 2.68072 2.78235 2.88262 2.98137 3.07843
3.17365 3.2669 3.35805 3.44702 3.53373 3.61809 3.70008 3.77966 3.8568 3.9315 4.00377 4.07362 4.14107 4.20616 4.26892
4.32938 4.38761 4.44364 4.49753 4.54933 4.5991 4.6469 4.69279 4.73682 4.77905 4.81955 4.85837 4.89557 4.9312 4.96532 4.998
5.02927 5.0592 5.08783 5.11522 5.14142 5.16646 5.19041 5.2133 5.23517 5.25608 5.27618 5.29552 5.31399 5.33162 5.34847
5.36455 5.37991 5.39456 5.40855 5.42191 5.43465 5.44682 5.45842 5.46955 5.48006 5.49014 5.49976 5.50893 5.51768 5.52602
5.53398 5.54157 5.54881 5.55572 5.5623 5.56858 5.57456 5.58027 5.58571 5.5909 5.59584 #bodywt for gender,fleet: 2 / 6
 0 0.00138366 0.00268882 0.00505141 0.00916502 0.01603 0.0269587 0.0434713 0.0670552 0.0988287 0.139223 0.187802
0.243288 0.30377 0.367015 0.430785 0.493091 0.552344 0.607418 0.657633 0.702688 0.742585 0.777539 0.807905 0.83411
0.856612 0.875867 0.892304 0.906318 0.91826 0.92844 0.937126 0.944548 0.950902 0.956353 0.961042 0.965085 0.968582
0.971615 0.974253 0.976556 0.978571 0.980341 0.9819 0.983277 0.984496 0.98558 0.986546 0.987409 0.988182 0.988877
0.989502 0.990067 0.990578 0.991041 0.991462 0.991845 0.992195 0.992515 0.992808 0.993076 0.993323 0.993551 0.993761
0.993954 0.994133 0.994299 0.994453 0.994596 0.994728 0.994846 0.99495 0.995047 0.995137 0.995222 0.995302 0.995376
0.995446 0.995512 0.995573 0.995631 0.995686 0.995737 0.995785 0.995831 0.995874 0.995914 0.995952 0.995988 0.996022
0.996055 0.996085 0.996114 0.996141 0.996167 0.996191 0.996214 0.996236 0.996257 0.996277 0.996295 #selex for gender,fleet: 2
/ 6
 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 0.0473093
0.0473093 0.0473093 0.0473093 0.0473093 0.0473093 #mean M for year Yinit: 2009 sex: 1
 47.7673 44.7179 41.8291 38.9521 36.2649 33.6738 31.2166 28.9499 27.379 25.6742 25.4653 24.5931 25.1068 25.0833 25.2368
24.8665 24.982 24.9908 24.5022 23.0915 21.9866 20.4171 18.6803 16.8792 15.2472 13.603 12.2359 10.9913 9.76854 8.5892
7.58271 6.68731 5.85839 5.14179 4.51584 3.97982 3.51685 3.12104 2.77601 2.47944 2.22426 2.00252 1.81133 1.64629 1.50253
1.37639 1.26625 1.1689 1.08231 1.00567 0.9373 0.876008 0.820068 0.768847 0.721873 0.678459 0.638294 0.601356 0.567255
0.535404 0.50573 0.47833 0.452589 0.429558 0.408128 0.387192 0.367072 0.34796 0.329953 0.312936 0.296845 0.281643 0.26727
0.253697 0.240864 0.228717 0.217231 0.206414 0.196175 0.186509 0.177362 0.168707 0.160519 0.152761 0.145404 0.138418
0.131788 0.125496 0.119522 0.113848 0.108456 0.103339 0.0984703 0.0938337 0.0894144 0.0852097 0.0812082 0.0773995
0.0737739 0.070322 1.44585 #numbers for year Yinit: 2009 sex: 1
 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
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0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 0.0466663
0.0466663 0.0466663 0.0466663 0.0466663 0.0466663 #mean M for year Yinit: 2009 sex: 2
 47.7673 44.7467 41.8828 39.0267 36.3565 33.7784 31.3304 29.0697 27.5044 25.8019 25.6008 24.7305 25.2508 25.2258 25.3702
24.9769 25.0572 25.0133 24.4542 22.9622 21.7671 20.1107 18.2969 16.4349 14.7565 13.088 11.7078 10.4651 9.2615 8.11519
7.14509 6.28933 5.50312 4.82734 4.23992 3.73899 3.30788 2.94053 2.62112 2.34723 2.112 1.90781 1.73188 1.58004 1.44769
1.3314 1.2297 1.13962 1.05925 0.987895 0.924039 0.866576 0.813883 0.765401 0.720724 0.679225 0.640648 0.605023 0.572003
0.541037 0.512087 0.485278 0.460011 0.437374 0.416255 0.395538 0.375557 0.356518 0.338531 0.321485 0.305325 0.290024
0.275529 0.261819 0.248839 0.236539 0.224896 0.213924 0.203527 0.193702 0.184397 0.175581 0.167232 0.15931 0.151789
0.144638 0.137842 0.131383 0.125244 0.119406 0.113851 0.108573 0.103546 0.0987533 0.09418 0.0898242 0.0856748 0.0817215
0.0779545 0.0743648 1.55232 #numbers for year Yinit: 2009 sex: 2

40.5015 38.3845 36.0833 35.8931 34.7755 35.6246 35.7182 36.0647 35.6588 35.943 36.0676 35.4654 33.5139 31.9906 29.7766
27.3031 24.7211 22.3738 19.9972 18.0179 16.2108 14.4287 12.7041 11.2294 9.91479 8.69492 7.6386 6.71448 5.92208 5.23681
4.6503 4.13841 3.69796 3.31862 2.98866 2.70393 2.45794 2.24351 2.05525 1.89078 1.74537 1.61598 1.50142 1.39922 1.30759
1.22396 1.1474 1.07719 1.01231 0.952293 0.897111 0.846176 0.79861 0.754302 0.713395 0.67497 0.640594 0.608611 0.577372
0.547355 0.518846 0.49199 0.466614 0.44262 0.419957 0.398531 0.378298 0.35917 0.341064 0.323942 0.307818 0.292554
0.278142 0.264505 0.2516 0.239391 0.227822 0.21685 0.206431 0.196543 0.187158 0.178248 0.169786 0.161742 0.15411 0.146848
0.139932 0.13334 0.127068 0.121099 0.115419 0.110011 0.104863 0.0999605 0.0952925 0.0908469 0.0866126 0.0825791
0.0787365 0.0750753 1.54676 #numbers for year Ydeclare: 2002 sex: 1
 40.5015 38.4092 36.1294 35.961 34.8603 35.7264 35.827 36.168 35.7367 35.9747 36.0267 35.3259 33.2614 31.6099 29.2727
26.6901 24.022 21.6092 19.1992 17.2024 15.3993 13.6469 11.9726 10.5531 9.29853 8.14347 7.14918 6.28374 5.54488 4.90834
4.3654 3.89285 3.48727 3.13864 2.83575 2.57459 2.34902 2.1523 1.97936 1.82806 1.694 1.57436 1.46815 1.37308 1.28754 1.20911
1.13695 1.07048 1.00874 0.951369 0.898395 0.849306 0.80328 0.760257 0.720422 0.682884 0.649255 0.617886 0.58712 0.557452
0.529186 0.502485 0.477187 0.453205 0.430502 0.408996 0.388655 0.369398 0.351149 0.333874 0.317593 0.302164 0.287583
0.273771 0.260686 0.248292 0.236532 0.225366 0.214747 0.204657 0.195067 0.185951 0.177282 0.169033 0.161196 0.15373
0.146613 0.139822 0.133353 0.127192 0.121322 0.115728 0.110398 0.105318 0.100477 0.0958623 0.091463 0.0872689 0.0832698
0.0794563 1.66126 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
227.032 227.032 227.011 226.977 226.937 226.917 226.896 226.875 226.857 226.838 226.814 226.77 226.717 226.655 226.597
226.53 226.449 226.375 226.273 226.202 226.114 226 225.88 225.772 225.663 225.563 225.454 225.333 225.219 224.994 224.504
223.573 222.755 222.467 222.098 221.84 221.56 221.208 220.908 220.673 220.379 219.995 219.572 219.062 218.45 217.921
217.467 217.115 216.694 216.223 215.816 215.288 214.689 214.107 213.476 212.551 211.512 210.331 208.672 207.038 205.193
203.378 201.148 198.805 194.831 190.546 186.993 181.584 174.849 168.59 164.52 159.549 155.753 151.308 146.048 138.708
134.173 125.8 116.512 102.827 96.173 90.8777 84.3338 82.8355 79.3655 80.4882 81.0031 83.1743 85.4811 87.7372
89.8344 91.9719 93.7687 95.5347 #Recruits
9.94349e+008 9.94349e+008 9.94088e+008 9.9366e+008 9.93161e+008 9.92915e+008 9.92646e+008 9.9239e+008 9.92167e+008
9.91929e+008 9.91624e+008 9.91078e+008 9.90421e+008 9.89647e+008 9.88918e+008 9.88086e+008 9.87083e+008 9.86168e+008
9.8491e+008 9.84034e+008 9.82944e+008 9.8154e+008 9.80063e+008 9.7873e+008 9.77401e+008 9.76173e+008 9.74843e+008
9.73376e+008 9.71986e+008 9.69249e+008 9.63347e+008 9.5224e+008 9.42609e+008 9.39257e+008 9.3498e+008 9.32e+008
9.28777e+008 9.24749e+008 9.21345e+008 9.18677e+008 9.15361e+008 9.11053e+008 9.06327e+008 9.00678e+008 8.93957e+008
8.88199e+008 8.83296e+008 8.79515e+008 8.75154e+008 8.70026e+008 8.65736e+008 8.60212e+008 8.54001e+008 8.48016e+008
8.41585e+008 8.32268e+008 8.21953e+008 8.10404e+008 7.94523e+008 7.7924e+008 7.62399e+008 7.46255e+008 7.26948e+008
7.07291e+008 6.75307e+008 6.42613e+008 6.16822e+008 5.79649e+008 5.36587e+008 4.99446e+008 4.7665e+008 4.50129e+008
4.30796e+008 4.09104e+008 3.84657e+008 3.52586e+008 3.33862e+008 3.01298e+008 2.6791e+008 2.39944e+008 2.2331e+008
2.03367e+008 1.8823e+008 1.70361e+008 1.66392e+008 1.57372e+008 1.60265e+008 1.616e+008 1.67286e+008 1.73429e+008
1.79543e+008 1.85321e+008 1.91307e+008 1.96416e+008 2.01509e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
base vector 4
 0 0 22.9416 87.4734 301.324 929.793 2536.63 6068.06 12748.2 23761.8 39884 61265.3 87455.9 117606 150713 185826 222162
259143 296381 333641 370795 407782 444577 481171 517560 553733 589674 625359 660757 695832 730544 764852 798713
832087 864933 897215 928897 959950 990344 1.02006e+006 1.04907e+006 1.07736e+006 1.10492e+006 1.13174e+006
1.15781e+006 1.18312e+006 1.20768e+006 1.23149e+006 1.25454e+006 1.27686e+006 1.29843e+006 1.31928e+006 1.3394e+006
1.35883e+006 1.37756e+006 1.39561e+006 1.41299e+006 1.42973e+006 1.44583e+006 1.46132e+006 1.4762e+006 1.4905e+006
1.50424e+006 1.51743e+006 1.53008e+006 1.54222e+006 1.55386e+006 1.56502e+006 1.57572e+006 1.58596e+006 1.59578e+006
1.60541e+006 1.61464e+006 1.62347e+006 1.63192e+006 1.64e+006 1.64774e+006 1.65514e+006 1.66221e+006 1.66897e+006
1.67543e+006 1.68161e+006 1.68751e+006 1.69315e+006 1.69853e+006 1.70368e+006 1.70859e+006 1.71328e+006 1.71776e+006
1.72203e+006 1.72611e+006 1.73001e+006 1.73372e+006 1.73727e+006 1.74065e+006 1.74388e+006 1.74696e+006 1.7499e+006
1.7527e+006 1.75537e+006 1.75792e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0432416 0.154883 0.214573 0.283047 0.358848 0.440515 0.526818 0.616856 0.710024 0.805932 0.904313 1.00495 1.10763
1.21212 1.31815 1.42543 1.53365 1.64246 1.75155 1.86056 1.96919 2.07713 2.1841 2.28984 2.39412 2.49674 2.5975 2.69627
2.7929 2.88729 2.97936 3.06902 3.15622 3.24094 3.32314 3.40282 3.47998 3.55462 3.62677 3.69645 3.7637 3.82855 3.89105
3.95124 4.00918 4.06491 4.1185 4.17 4.21947 4.26697 4.31256 4.35629 4.39823 4.43844 4.47697 4.51389 4.54925 4.5831 4.61551
4.64653 4.6762 4.70459 4.73173 4.75769 4.7825 4.80622 4.82889 4.85054 4.87123 4.89099 4.90999 4.92825 4.94568 4.96233
4.97821 4.99338 5.00786 5.02167 5.03485 5.04743 5.05942 5.07087 5.08179 5.0922 5.10214 5.11161 5.12064 5.12926 5.13747
5.1453 5.15277 5.15989 5.16667 5.17314 5.17931 5.18519 5.19079 5.19613 5.20122 5.20607 5.21069 #bodywt for gender,fleet: 1 / 0
 0 0.049638 0.0768352 0.11409 0.162086 0.220137 0.286167 0.357113 0.429572 0.500408 0.567155 0.628175 0.682611 0.730243
0.771299 0.806289 0.835861 0.86071 0.881515 0.898898 0.913414 0.925541 0.935686 0.944192 0.95134 0.957367 0.962466
0.966793 0.97048 0.973634 0.976341 0.978675 0.980693 0.982446 0.983974 0.985311 0.986484 0.987518 0.988431 0.989241
0.989961 0.990604 0.991179 0.991695 0.992159 0.992578 0.992956 0.993299 0.99361 0.993894 0.994153 0.994389 0.994606
0.994804 0.994987 0.995155 0.99531 0.995453 0.995585 0.995707 0.995821 0.995926 0.996024 0.996115 0.9962 0.99628 0.996354
0.996423 0.996487 0.996548 0.996602 0.996651 0.996697 0.996741 0.996782 0.99682 0.996856 0.99689 0.996922 0.996952
0.996981 0.997008 0.997033 0.997057 0.99708 0.997101 0.997122 0.997141 0.997159 0.997176 0.997192 0.997208 0.997222
0.997236 0.997249 0.997262 0.997273 0.997284 0.997295 0.997305 0.997315 #selex for gender,fleet: 1 / 1
 0.0442767 0.16069 0.223657 0.296324 0.376948 0.463551 0.554333 0.647948 0.743554 0.840718 0.939268 1.03916 1.14038
1.24289 1.34663 1.45144 1.55714 1.66348 1.77021 1.87703 1.98364 2.08976 2.1951 2.29939 2.4024 2.5039 2.6037 2.70162 2.79753
2.89129 2.9828 3.07199 3.15879 3.24315 3.32505 3.40447 3.4814 3.55584 3.62782 3.69735 3.76446 3.8292 3.8916 3.9517 4.00956
4.06523 4.11876 4.17021 4.21963 4.26709 4.31264 4.35634 4.39825 4.43843 4.47694 4.51384 4.54918 4.58302 4.61541 4.64641
4.67607 4.70445 4.73158 4.75753 4.78234 4.80605 4.8287 4.85035 4.87104 4.89079 4.90978 4.92804 4.94547 4.96211 4.978

4.99316 5.00763 5.02144 5.03462 5.04719 5.05919 5.07063 5.08155 5.09196 5.10189 5.11137 5.1204 5.12901 5.13722 5.14505 5.15252 5.15963 5.16642 5.17289 5.17905 5.18493 5.19053 5.19587 5.20096 5.20581 5.21043 #bodywt for gender,fleet: 1 / 2
 0 0.0194188 0.0330265 0.0539454 0.0842592 0.125418 0.177638 0.23962 0.308742 0.381633 0.454845 0.525399 0.59109 0.650551 0.703163 0.748885 0.788067 0.821289 0.84924 0.87263 0.892134 0.90837 0.921876 0.933119 0.94249 0.950318 0.956873 0.962379 0.96702 0.970945 0.974278 0.977118 0.979548 0.981636 0.983435 0.984993 0.986347 0.987527 0.98856 0.989467 0.990267 0.990974 0.991602 0.99216 0.992659 0.993105 0.993505 0.993865 0.99419 0.994484 0.994751 0.994993 0.995214 0.995415 0.995599 0.995768 0.995922 0.996065 0.996196 0.996316 0.996428 0.996531 0.996627 0.996715 0.996797 0.996874 0.996945 0.997011 0.997073 0.997131 0.997183 0.997229 0.997272 0.997313 0.997351 0.997386 0.99742 0.997452 0.997482 0.99751 0.997536 0.997561 0.997584 0.997606 0.997627 0.997647 0.997666 0.997683 0.9977 0.997716 0.997731 0.997745 0.997758 0.997771 0.997783 0.997794 0.997805 0.997815 0.997825 0.997834 0.997843 #selex for gender,fleet: 1 / 2
 0.0481289 0.178676 0.247414 0.32306 0.401917 0.481774 0.562105 0.643406 0.726523 0.812263 0.901218 0.993703 1.08977 1.18923 1.29174 1.39682 1.50393 1.61252 1.72203 1.83194 1.94177 2.05111 2.15957 2.26682 2.3726 2.47666 2.5788 2.67885 2.77668 2.87217 2.96525 3.05584 3.1439 3.2294 3.31231 3.39264 3.47038 3.54556 3.6182 3.68833 3.75599 3.82121 3.88405 3.94456 4.00279 4.05879 4.11262 4.16435 4.21402 4.26171 4.30748 4.35137 4.39347 4.43382 4.47248 4.50952 4.54499 4.57895 4.61146 4.64256 4.67232 4.70079 4.72801 4.75404 4.77892 4.80269 4.82542 4.84713 4.86787 4.88768 4.90671 4.925 4.94246 4.95914 4.97505 4.99024 5.00474 5.01858 5.03178 5.04438 5.05639 5.06786 5.07879 5.08922 5.09917 5.10866 5.1177 5.12633 5.13456 5.1424 5.14988 5.157 5.1638 5.17028 5.17645 5.18234 5.18795 5.1933 5.1984 5.20326 5.20789 #bodywt for gender,fleet: 1 / 3
 0 0.0148964 0.0331114 0.0674245 0.1238 0.203934 0.303239 0.412381 0.52093 0.620547 0.706362 0.776763 0.832419 0.875227 0.907509 0.931524 0.949235 0.962236 0.971765 0.978754 0.983896 0.987694 0.990516 0.992626 0.994215 0.99542 0.996341 0.99705 0.997601 0.998032 0.998372 0.998642 0.998859 0.999033 0.999175 0.999291 0.999387 0.999466 0.999532 0.999587 0.999634 0.999674 0.999708 0.999737 0.999762 0.999783 0.999802 0.999819 0.999833 0.999846 0.999857 0.999867 0.999875 0.999883 0.99989 0.999897 0.999902 0.999907 0.999912 0.999916 0.99992 0.999923 0.999927 0.999929 0.999932 0.999934 0.999937 0.999939 0.999941 0.999942 0.999944 0.999945 0.999947 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952 0.999953 0.999954 0.999954 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958 0.999959 0.999959 0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 0.999962 0.999962 #selex for gender,fleet: 1 / 3
 0.0441368 0.160428 0.223824 0.29765 0.380509 0.470576 0.56589 0.664688 0.765614 0.867773 0.970655 1.07402 1.17778 1.28193 1.38644 1.4913 1.59644 1.70174 1.80705 1.9122 2.01698 2.12117 2.22457 2.32694 2.42809 2.52781 2.62592 2.72227 2.81671 2.90911 2.99938 3.08742 3.17318 3.25658 3.33761 3.41623 3.49243 3.56621 3.63759 3.70657 3.77318 3.83746 3.89944 3.95916 4.01667 4.07202 4.12525 4.17643 4.2256 4.27283 4.31817 4.36167 4.4034 4.44342 4.48177 4.51853 4.55373 4.58745 4.61972 4.65062 4.68018 4.70846 4.73551 4.76137 4.7861 4.80974 4.83233 4.85392 4.87454 4.89424 4.91319 4.93141 4.9488 4.96541 4.98127 4.9964 5.01085 5.02463 5.03778 5.05034 5.06231 5.07373 5.08463 5.09502 5.10494 5.11439 5.12341 5.132 5.1402 5.14802 5.15547 5.16258 5.16935 5.17581 5.18196 5.18783 5.19342 5.19875 5.20383 5.20868 5.21329 #bodywt for gender,fleet: 1 / 4
 0 0.0110167 0.0187059 0.0307103 0.0486106 0.0739681 0.107951 0.150956 0.202384 0.26068 0.323611 0.38866 0.453411 0.515827 0.574386 0.62811 0.676502 0.719451 0.757125 0.789872 0.81814 0.842419 0.8632 0.88095 0.896095 0.909015 0.920045 0.929472 0.937543 0.944468 0.950424 0.95556 0.960002 0.963854 0.967206 0.97013 0.97269 0.974938 0.976917 0.978666 0.980215 0.981592 0.982819 0.983916 0.984898 0.98578 0.986575 0.987292 0.987941 0.98853 0.989065 0.989552 0.989997 0.990404 0.990776 0.991118 0.991432 0.991721 0.991988 0.992234 0.992462 0.992673 0.992868 0.99305 0.993219 0.993376 0.993522 0.993658 0.993786 0.993905 0.994011 0.994107 0.994197 0.994281 0.99436 0.994434 0.994504 0.994569 0.994631 0.994689 0.994744 0.994796 0.994845 0.994891 0.994934 0.994975 0.995014 0.995051 0.995086 0.995118 0.995149 0.995179 0.995207 0.995233 0.995258 0.995282 0.995304 0.995325 0.995346 0.995365 0.995383 #selex for gender,fleet: 1 / 4
 0.0442583 0.161339 0.225582 0.300974 0.386531 0.480789 0.581916 0.687927 0.796944 0.907419 1.01823 1.12865 1.23831 1.34704 1.45482 1.56167 1.66766 1.77283 1.87718 1.9807 2.08334 2.18501 2.28563 2.38508 2.48322 2.57994 2.6751 2.76858 2.86027 2.95006 3.03786 3.12359 3.20717 3.28856 3.36772 3.44461 3.51921 3.59151 3.66153 3.72925 3.79471 3.85792 3.91892 3.97774 4.03441 4.08899 4.14151 4.19203 4.2406 4.28727 4.33208 4.37511 4.41639 4.45599 4.49396 4.53036 4.56523 4.59864 4.63062 4.66125 4.69056 4.7186 4.74543 4.77109 4.79563 4.81909 4.84151 4.86294 4.88341 4.90297 4.9218 4.93993 4.95724 4.97376 4.98954 5.0046 5.01897 5.03269 5.04578 5.05827 5.07019 5.08156 5.09241 5.10276 5.11262 5.12203 5.13101 5.13957 5.14773 5.15551 5.16293 5.17001 5.17675 5.18318 5.18931 5.19515 5.20072 5.20603 5.21109 5.21591 5.2205 #bodywt for gender,fleet: 1 / 5
 0 0.00414071 0.00714514 0.0119744 0.0194675 0.0306543 0.0466662 0.0685674 0.0971359 0.13266 0.174823 0.222716 0.274967 0.329946 0.385974 0.441507 0.495247 0.546207 0.593711 0.637366 0.677016 0.712685 0.744528 0.772786 0.797747 0.819721 0.839019 0.855942 0.870771 0.883763 0.89515 0.905139 0.91391 0.921625 0.928421 0.934419 0.939723 0.944424 0.948598 0.952314 0.955629 0.958593 0.96125 0.963635 0.965783 0.96772 0.969471 0.971058 0.972498 0.973808 0.975001 0.976091 0.977088 0.978001 0.978839 0.979609 0.980319 0.980973 0.981576 0.982135 0.982652 0.983131 0.983575 0.983989 0.984373 0.984731 0.985065 0.985376 0.985667 0.985939 0.986184 0.986403 0.986608 0.986802 0.986983 0.987153 0.987314 0.987465 0.987607 0.98774 0.987867 0.987985 0.988098 0.988204 0.988304 0.988398 0.988488 0.988572 0.988652 0.988727 0.988799 0.988867 0.988931 0.988991 0.989049 0.989103 0.989155 0.989204 0.98925 0.989294 0.989336 #selex for gender,fleet: 1 / 5
 0.0453961 0.167046 0.234116 0.313112 0.403113 0.502636 0.609667 0.721838 0.836765 0.952407 1.06728 1.1805 1.29167 1.40073 1.50782 1.61316 1.71699 1.81953 1.92095 2.02135 2.1208 2.21929 2.31681 2.41327 2.5086 2.60268 2.6954 2.78664 2.87628 2.96422 3.05034 3.13457 3.21681 3.297 3.37508 3.45102 3.52478 3.59634 3.66569 3.73282 3.79776 3.86051 3.9211 3.97956 4.03592 4.09021 4.14248 4.19278 4.24115 4.28764 4.3323 4.37518 4.41634 4.45583 4.4937 4.53 4.56479 4.59813 4.63005 4.66061 4.68987 4.71787 4.74465 4.77028 4.79478 4.8182 4.84059 4.862 4.88245 4.90198 4.9208 4.9389 4.9562 4.97271 4.98847 5.00352 5.01788 5.03159 5.04467 5.05715 5.06906 5.08042 5.09126 5.1016 5.11146 5.12087 5.12984 5.13839 5.14655 5.15433 5.16174 5.16881 5.17555 5.18198 5.1881 5.19394 5.19951 5.20481 5.20987 5.21469 5.21928 #bodywt for gender,fleet: 1 / 6
 0 0.00135421 0.00255624 0.00467462 0.00827589 0.0141649 0.0233922 0.0371844 0.0567779 0.0831749 0.116896 0.157819 0.205152 0.257555 0.313344 0.370729 0.42802 0.483768 0.536844 0.586453 0.632113 0.673607 0.710924 0.744202 0.773681 0.79966 0.822464 0.842426 0.859866 0.875088 0.888368 0.899956 0.910074 0.918917 0.926657 0.933442 0.939401 0.944645 0.94927 0.953357 0.956978 0.960193 0.963054 0.965607 0.96789 0.969935 0.971773 0.973428 0.974921 0.976271 0.977494 0.978605 0.979616 0.980537 0.981378 0.982148 0.982853 0.983501 0.984097 0.984645 0.985151 0.985618 0.98605 0.98645 0.986821 0.987165 0.987485 0.987783 0.988061 0.988319 0.98855 0.988755 0.988947 0.989127 0.989296 0.989454 0.989603

0.989742 0.989874 0.989997 0.990113 0.990223 0.990326 0.990423 0.990515 0.990602 0.990684 0.990761 0.990834 0.990903 0.990968 0.99103 0.991088 0.991143 0.991195 0.991245 0.991292 0.991336 0.991379 0.991418 0.991456 #selex for gender,fleet: 1 / 6
 0.0517415 0.176504 0.243766 0.32021 0.404062 0.49366 0.587715 0.685362 0.786084 0.889583 0.995666 1.10416 1.21488 1.32757 1.44194 1.55767 1.67438 1.79169 1.90922 2.02659 2.14344 2.25943 2.37427 2.48766 2.59938 2.70919 2.81692 2.92241 3.02553 3.12617 3.22425 3.3197 3.41248 3.50255 3.5899 3.67453 3.75644 3.83565 3.91218 3.98608 4.05737 4.12611 4.19234 4.25611 4.31749 4.37654 4.4333 4.48785 4.54025 4.59056 4.63884 4.68517 4.7296 4.77219 4.81302 4.85214 4.88962 4.9255 4.95986 4.99274 5.02421 5.05432 5.08312 5.11067 5.13701 5.16219 5.18625 5.20926 5.23124 5.25224 5.27242 5.29182 5.31035 5.32805 5.34494 5.36108 5.37648 5.39118 5.40521 5.4186 5.43139 5.44358 5.45522 5.46633 5.47692 5.48703 5.49667 5.50587 5.51464 5.52301 5.53099 5.5386 5.54586 5.55278 5.55938 5.56567 5.57167 5.57739 5.58285 5.58805 5.59301 #bodywt for gender,fleet: 2 / 1
 0 0.0503239 0.079383 0.119697 0.172005 0.235365 0.307169 0.3837 0.460961 0.535411 0.604415 0.666367 0.720584 0.767088 0.806364 0.839155 0.866308 0.888668 0.90702 0.92206 0.934385 0.944498 0.952812 0.959667 0.965337 0.970046 0.973971 0.977258 0.980022 0.982357 0.984339 0.986027 0.987473 0.988715 0.989788 0.990718 0.991528 0.992235 0.992856 0.993402 0.993884 0.994312 0.994692 0.995031 0.995334 0.995607 0.995851 0.996072 0.996272 0.996453 0.996617 0.996767 0.996903 0.997028 0.997142 0.997247 0.997344 0.997432 0.997514 0.99759 0.99766 0.997724 0.997784 0.99784 0.997892 0.99794 0.997985 0.998027 0.998066 0.998103 0.998136 0.998166 0.998193 0.998219 0.998244 0.998267 0.998288 0.998309 0.998328 0.998346 0.998363 0.998379 0.998394 0.998408 0.998422 0.998435 0.998447 0.998458 0.998469 0.998479 0.998489 0.998498 0.998507 0.998515 0.998523 0.99853 0.998537 0.998544 0.99855 0.998556 0.998562 #selex for gender,fleet: 2 / 1
 0.0529548 0.182993 0.253877 0.334873 0.423808 0.518389 0.616695 0.717427 0.819891 0.92383 1.02923 1.13615 1.24465 1.35474 1.46631 1.57921 1.69318 1.80793 1.92311 2.03838 2.15339 2.26778 2.38124 2.49347 2.60419 2.71317 2.8202 2.92511 3.02774 3.12798 3.22572 3.32089 3.41343 3.50331 3.5905 3.67499 3.75679 3.8359 3.91236 3.98619 4.05743 4.12612 4.19231 4.25605 4.31741 4.37642 4.43317 4.4877 4.54009 4.59038 4.63866 4.68498 4.7294 4.77199 4.81282 4.85193 4.8894 4.92529 4.95964 4.99252 5.02399 5.0541 5.0829 5.11045 5.13678 5.16196 5.18603 5.20903 5.23101 5.25201 5.2722 5.2916 5.31013 5.32782 5.34472 5.36085 5.37625 5.39095 5.40499 5.41838 5.43116 5.44336 5.455 5.4661 5.4767 5.4868 5.49645 5.50564 5.51442 5.52278 5.53076 5.53837 5.54563 5.55255 5.55915 5.56545 5.57145 5.57717 5.58262 5.58782 5.59278 #bodywt for gender,fleet: 2 / 2
 0 0.0197584 0.0344038 0.0573349 0.0909872 0.136966 0.195301 0.264149 0.34013 0.419119 0.497096 0.570782 0.637939 0.697363 0.748717 0.792279 0.828706 0.858844 0.883589 0.903804 0.92027 0.933665 0.944565 0.953445 0.960697 0.966636 0.971518 0.975546 0.978884 0.981663 0.983986 0.985937 0.987584 0.98898 0.990169 0.991187 0.992062 0.992816 0.993471 0.99404 0.994537 0.994974 0.995357 0.995697 0.995997 0.996264 0.996503 0.996716 0.996907 0.997079 0.997234 0.997375 0.997502 0.997617 0.997722 0.997818 0.997906 0.997986 0.99806 0.998128 0.99819 0.998248 0.998301 0.99835 0.998396 0.998438 0.998477 0.998514 0.998548 0.998579 0.998608 0.998633 0.998656 0.998678 0.998699 0.998718 0.998736 0.998753 0.99877 0.998785 0.998799 0.998812 0.998825 0.998837 0.998848 0.998859 0.998869 0.998878 0.998887 0.998895 0.998903 0.998911 0.998918 0.998925 0.998931 0.998937 0.998943 0.998949 0.998954 0.998959 0.998963 #selex for gender,fleet: 2 / 2
 0.057462 0.20294 0.279764 0.363096 0.448822 0.534881 0.621161 0.708565 0.798234 0.891143 0.987944 1.08892 1.19402 1.30292 1.41512 1.52997 1.64681 1.76498 1.88383 2.0028 2.12138 2.23914 2.3557 2.47097 2.58396 2.69517 2.80416 2.9108 3.01495 3.11651 3.21542 3.3116 3.40504 3.49569 3.58357 3.66866 3.75099 3.83058 3.90745 3.98165 4.05321 4.1222 4.18865 4.25263 4.31419 4.3734 4.43032 4.485 4.53753 4.58795 4.63635 4.68277 4.72729 4.76997 4.81087 4.85006 4.8876 4.92355 4.95796 4.9909 5.02242 5.05257 5.08142 5.109 5.13537 5.16059 5.18469 5.20772 5.22973 5.25075 5.27096 5.29038 5.30892 5.32663 5.34354 5.35968 5.3751 5.38981 5.40385 5.41726 5.43005 5.44226 5.4539 5.46502 5.47562 5.48573 5.49538 5.50458 5.51336 5.52174 5.52972 5.53734 5.5446 5.55153 5.55813 5.56443 5.57043 5.57616 5.58162 5.58682 5.59178 #bodywt for gender,fleet: 2 / 3
 0 0.0153383 0.0352453 0.0735162 0.136826 0.226319 0.335533 0.452886 0.566403 0.667334 0.751332 0.817762 0.868309 0.905687 0.932771 0.952127 0.965844 0.975525 0.982351 0.987176 0.990599 0.993042 0.994799 0.996071 0.997001 0.997687 0.998197 0.99858 0.998871 0.999093 0.999265 0.999398 0.999503 0.999587 0.999653 0.999706 0.99975 0.999785 0.999814 0.999838 0.999859 0.999875 0.99989 0.999902 0.999912 0.999921 0.999928 0.999935 0.99994 0.999945 0.99995 0.999954 0.999957 0.99996 0.999963 0.999965 0.999967 0.999969 0.999971 0.999972 0.999974 0.999975 0.999976 0.999977 0.999978 0.999979 0.99998 0.99998 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3
 0.0527909 0.182715 0.254126 0.33651 0.428054 0.526553 0.629798 0.735946 0.843714 0.95236 1.06156 1.17123 1.28141 1.39219 1.50359 1.6156 1.72814 1.84106 1.95418 2.06724 2.18 2.29219 2.40352 2.51374 2.62259 2.72986 2.83533 2.93882 3.04018 3.13928 3.236 3.33026 3.42199 3.51106 3.59769 3.68161 3.76289 3.84155 3.91759 3.99106 4.06196 4.13036 4.19629 4.25979 4.32093 4.37975 4.43632 4.49069 4.54292 4.59309 4.64124 4.68745 4.73177 4.77427 4.815 4.85404 4.89144 4.92725 4.96154 4.99437 5.02578 5.05584 5.0846 5.1121 5.13839 5.16354 5.18757 5.21054 5.23249 5.25346 5.27362 5.29301 5.31152 5.3292 5.34608 5.3622 5.37758 5.39227 5.40629 5.41968 5.43245 5.44464 5.45626 5.46736 5.47795 5.48805 5.49768 5.50687 5.51564 5.524 5.53197 5.53958 5.54683 5.55374 5.56034 5.56663 5.57262 5.57834 5.58379 5.58899 5.59394 #bodywt for gender,fleet: 2 / 4
 0 0.0112081 0.0194904 0.0326853 0.0526774 0.0813067 0.119879 0.168685 0.226757 0.291977 0.361489 0.432231 0.501405 0.566791 0.626865 0.680783 0.728262 0.769437 0.804722 0.834683 0.859953 0.881166 0.89892 0.913755 0.926147 0.936503 0.945171 0.95244 0.958551 0.963705 0.968064 0.971765 0.974918 0.977613 0.979928 0.981921 0.983646 0.985142 0.986446 0.987587 0.988587 0.989468 0.990247 0.990937 0.99155 0.992097 0.992586 0.993025 0.993419 0.993775 0.994096 0.994387 0.994652 0.994892 0.995112 0.995312 0.995495 0.995664 0.995818 0.995961 0.996092 0.996213 0.996325 0.996429 0.996525 0.996614 0.996697 0.996774 0.996846 0.996913 0.996973 0.997026 0.997076 0.997123 0.997167 0.997208 0.997247 0.997283 0.997317 0.997349 0.99738 0.997408 0.997435 0.997461 0.997485 0.997507 0.997529 0.997549 0.997568 0.997586 0.997603 0.997619 0.997635 0.997649 0.997663 0.997676 0.997688 0.9977 0.997711 0.997721 0.997731 #selex for gender,fleet: 2 / 4
 0.0529334 0.183739 0.256122 0.340315 0.434963 0.538212 0.647881 0.761743 0.877834 0.994665 1.11127 1.22712 1.34203 1.45602 1.56916 1.68161 1.79344 1.90474 2.0155 2.1257 2.23523 2.34399 2.45182 2.55855 2.66402 2.76804 2.87045 2.97108 3.06979 3.16645 3.26094 3.35317 3.44306 3.53055 3.61559 3.69815 3.7782 3.85576 3.9308 4.00337 4.07346 4.14112 4.20638 4.26928 4.32987 4.3882 4.44432 4.49828 4.55014 4.59996 4.6478 4.69372 4.73778 4.78003 4.82055 4.85938 4.89659 4.93223 4.96636 4.99904 5.03031 5.06024 5.08888 5.11627 5.14246 5.16751 5.19145 5.21433 5.23621 5.25711 5.27721 5.29654 5.31501 5.33265 5.34949 5.36557 5.38093 5.39558 5.40957 5.42293 5.43567 5.44783 5.45944 5.47051 5.48107 5.49115 5.50077 5.50994

5.51869 5.52703 5.53499 5.54258 5.54982 5.55672 5.5633 5.56958 5.57556 5.58127 5.58671 5.5919 5.59684 #bodywt for gender,fleet: 2 / 5

 0 0.00421519 0.00745709 0.0127869 0.0212203 0.0340135 0.0525402 0.0780597 0.111424 0.152822 0.201654 0.256592 0.315784 0.377147 0.438638 0.498472 0.555246 0.607981 0.656096 0.699352 0.737771 0.771566 0.801065 0.826663 0.84878 0.867832 0.884213 0.898283 0.910366 0.920749 0.92968 0.937374 0.944014 0.949759 0.954739 0.959069 0.962844 0.966143 0.969036 0.971579 0.973821 0.975803 0.977561 0.979124 0.980518 0.981764 0.982881 0.983884 0.984788 0.985605 0.986344 0.987014 0.987623 0.988178 0.988685 0.989148 0.989572 0.989962 0.99032 0.990649 0.990953 0.991234 0.991494 0.991734 0.991957 0.992164 0.992356 0.992535 0.992702 0.992858 0.992997 0.993121 0.993237 0.993346 0.993448 0.993544 0.993634 0.993718 0.993798 0.993873 0.993943 0.99401 0.994073 0.994132 0.994187 0.99424 0.99429 0.994337 0.994381 0.994423 0.99945 0.994536 0.994569 0.994601 0.994631 0.99466 0.994687 0.994713 0.994737 0.99476 #selex for gender,fleet: 2 / 5

 0.0542657 0.190101 0.265582 0.35368 0.453079 0.561858 0.677564 0.797489 0.919099 1.04041 1.16015 1.27771 1.39298 1.50614 1.61751 1.72743 1.83623 1.94415 2.05138 2.158 2.26403 2.36942 2.4741 2.57792 2.68072 2.78235 2.88262 2.98137 3.07843 3.17365 3.2669 3.35805 3.44702 3.53373 3.61809 3.70008 3.77966 3.8568 3.9315 4.00377 4.07362 4.14107 4.20616 4.26892 4.32938 4.38761 4.44364 4.49753 4.54933 4.5991 4.6469 4.69279 4.73682 4.77905 4.81955 4.85837 4.89557 4.9312 4.96532 4.998 5.02927 5.0592 5.08783 5.11522 5.14142 5.16646 5.19041 5.2133 5.23517 5.25608 5.27618 5.29552 5.31399 5.33162 5.34847 5.36455 5.37991 5.39456 5.40855 5.42191 5.43465 5.44682 5.45842 5.4695 5.48006 5.49014 5.49976 5.50893 5.51768 5.52602 5.53398 5.54157 5.54881 5.55572 5.5623 5.56858 5.57456 5.58027 5.58571 5.5909 5.59584 #bodywt for gender,fleet: 2 / 6

 0 0.00138366 0.00268882 0.00505141 0.00916502 0.01603 0.0269587 0.0434713 0.0670552 0.0988287 0.139223 0.187802 0.243288 0.30377 0.367015 0.430785 0.493091 0.552344 0.607414 0.657633 0.702688 0.742585 0.777539 0.807905 0.83411 0.856612 0.875867 0.892304 0.906318 0.91826 0.92844 0.937126 0.944548 0.950902 0.956353 0.961042 0.965085 0.968582 0.971615 0.974253 0.976556 0.978571 0.980341 0.9819 0.983277 0.984496 0.98558 0.986546 0.987409 0.988182 0.988877 0.989502 0.990067 0.990578 0.991041 0.991462 0.991845 0.992195 0.992515 0.992808 0.993076 0.993323 0.993551 0.993761 0.993954 0.994133 0.994299 0.994453 0.994596 0.994728 0.994846 0.99495 0.995047 0.995137 0.995222 0.995302 0.995376 0.995446 0.995512 0.995573 0.995631 0.995686 0.995737 0.995785 0.995831 0.995874 0.995914 0.995952 0.995988 0.996022 0.996055 0.996085 0.996114 0.996141 0.996167 0.996191 0.996214 0.996236 0.996257 0.996277 0.996295 #selex for gender,fleet: 2 / 6

 0.0473093 #mean M for year Yinit: 2009 sex: 1

 47.7673 44.7179 41.8291 38.9521 36.2649 33.6738 31.2166 28.9499 27.379 25.6742 25.4653 25.4931 25.1068 25.0833 25.2368 24.8665 24.982 24.9908 24.5022 23.0915 21.9866 20.4171 18.6803 16.8792 15.2472 13.603 12.2359 10.9913 9.76854 8.5892 7.58271 6.68731 5.85839 5.14179 4.51584 3.97982 3.51685 3.12104 2.77601 2.47944 2.22426 2.00252 1.81133 1.64629 1.50253 1.37639 1.26625 1.1689 1.08231 1.00567 0.9373 0.876008 0.820068 0.768847 0.721873 0.678459 0.638294 0.601356 0.567255 0.535404 0.50573 0.47833 0.452589 0.429558 0.408128 0.387192 0.367072 0.34796 0.329953 0.312936 0.296845 0.281643 0.26727 0.253697 0.240864 0.228717 0.217231 0.206414 0.196175 0.186509 0.177362 0.168707 0.160519 0.152761 0.145404 0.138418 0.131788 0.125496 0.119522 0.113848 0.108456 0.103339 0.0984703 0.0938337 0.0894144 0.0852097 0.0812082 0.0773995 0.0737739 0.070322 1.44585 #numbers for year Yinit: 2009 sex: 1

 0.0466663 #mean M for year Yinit: 2009 sex: 2

 47.7673 44.7467 41.8828 39.0267 36.3565 33.7784 31.3304 29.0697 27.5044 25.8019 25.6008 24.7305 25.2508 25.2258 25.3702 24.9769 25.0572 25.0133 24.4542 22.9622 21.7671 20.1107 18.2969 16.4349 14.7565 13.088 11.7078 10.4651 9.2615 8.11519 7.14509 6.28933 5.50312 4.82734 4.23992 3.73899 3.30788 2.94053 2.61112 2.34723 2.112 1.90781 1.73188 1.58004 1.44769 1.3314 1.2297 1.13962 1.05925 0.987895 0.924039 0.866576 0.813883 0.765401 0.720724 0.679225 0.640648 0.605023 0.572003 0.541037 0.512087 0.485278 0.460011 0.437374 0.416255 0.395538 0.375557 0.356518 0.338531 0.321485 0.305325 0.290024 0.275529 0.261819 0.248839 0.236539 0.224896 0.213924 0.203527 0.193702 0.184397 0.175581 0.167232 0.15931 0.151789 0.144638 0.137842 0.131383 0.125244 0.119406 0.113851 0.108573 0.103546 0.0987533 0.09418 0.0898242 0.0856748 0.0817215 0.0779545 0.0743648 1.55232 #numbers for year Yinit: 2009 sex: 2

 40.5015 38.3845 36.0833 35.8931 34.7755 35.6246 35.7182 36.0647 35.6588 35.943 36.0676 35.4654 33.5139 31.9906 29.7766 27.3031 24.7211 22.3738 19.9972 18.0179 16.2108 14.4287 12.7041 11.2294 9.91479 8.69492 7.6386 6.71448 5.92208 5.23681 4.6503 4.13841 3.69796 3.31862 2.98866 2.70393 2.45794 2.24351 2.05525 1.89078 1.74537 1.61598 1.50142 1.39922 1.30759 1.22396 1.1474 1.07719 1.01231 0.952293 0.897111 0.846176 0.79861 0.754302 0.713395 0.67497 0.640594 0.608611 0.577372 0.547355 0.518846 0.49199 0.466614 0.44262 0.419957 0.398531 0.378298 0.35917 0.341064 0.323942 0.307818 0.292554 0.278142 0.264505 0.2516 0.239391 0.227822 0.21685 0.206431 0.196543 0.187158 0.178248 0.169786 0.161742 0.15411 0.146848 0.139932 0.13334 0.127068 0.121099 0.115419 0.110011 0.104863 0.0999605 0.0952925 0.0908469 0.0866126 0.0825791 0.0787365 0.0750753 1.54676 #numbers for year Ydeclare: 2002 sex: 1

 40.5015 38.4092 36.1294 35.961 34.8603 35.7264 35.827 36.168 35.7367 35.9747 36.0267 35.3259 33.2614 31.6099 29.2727 26.6901 24.022 21.6092 19.1992 17.2024 15.3993 13.6469 11.9726 10.5531 9.29853 8.14347 7.14918 6.28374 5.54488 4.90834

4.3654 3.89285 3.48727 3.13864 2.83575 2.57459 2.34902 2.1523 1.97936 1.82806 1.694 1.57436 1.46815 1.37308 1.28754 1.20911 1.13695 1.07048 1.00874 0.951369 0.898395 0.849306 0.80328 0.760257 0.720422 0.682884 0.649255 0.617886 0.58712 0.557452 0.529186 0.502485 0.477187 0.453205 0.430502 0.408996 0.388655 0.369398 0.351149 0.333874 0.317593 0.302164 0.287583 0.273771 0.260686 0.248292 0.236532 0.225366 0.214747 0.204657 0.195067 0.185951 0.177282 0.169033 0.161196 0.15373 0.146613 0.139822 0.133353 0.127192 0.121322 0.115728 0.110398 0.105318 0.100477 0.0958623 0.091463 0.0872689 0.0832698 0.0794563 1.66126 #numbers for year Ydeclare: 2002 sex: 2

#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
227.032 227.032 227.011 226.977 226.937 226.917 226.896 226.875 226.857 226.838 226.814 226.77 226.717 226.655 226.597 226.53 226.449 226.375 226.273 226.202 226.114 226 225.88 225.772 225.663 225.563 225.454 225.333 225.219 224.994 224.504 223.573 222.755 222.467 222.098 221.84 221.56 221.208 220.908 220.673 220.379 219.995 219.572 219.062 218.45 217.921 217.467 217.115 216.694 216.223 215.816 215.288 214.689 214.107 213.476 212.551 211.512 210.331 208.672 207.038 205.193 203.378 201.148 198.805 194.831 190.546 186.993 181.584 174.849 168.59 164.52 159.549 155.753 151.308 146.048 138.708 134.173 125.8 116.512 108.115 102.827 96.173 90.8777 84.3338 82.8355 79.3655 80.4882 81.0031 83.1743 85.4811 87.7372 89.8344 91.9719 93.7687 95.5347 #Recruits
9.94349e+008 9.94349e+008 9.94088e+008 9.9366e+008 9.93161e+008 9.92915e+008 9.92646e+008 9.9239e+008 9.92167e+008 9.91929e+008 9.91624e+008 9.91078e+008 9.90421e+008 9.89647e+008 9.88918e+008 9.88086e+008 9.87083e+008 9.86168e+008 9.8491e+008 9.84034e+008 9.82944e+008 9.8154e+008 9.80063e+008 9.7873e+008 9.77401e+008 9.76173e+008 9.74843e+008 9.73376e+008 9.71986e+008 9.69249e+008 9.63347e+008 9.5224e+008 9.42609e+008 9.39257e+008 9.3498e+008 9.32e+008 9.28777e+008 9.24749e+008 9.21345e+008 9.18677e+008 9.15361e+008 9.11053e+008 9.06327e+008 9.00678e+008 8.93957e+008 8.88199e+008 8.83296e+008 8.79515e+008 8.75015e+008 8.70026e+008 8.65736e+008 8.60212e+008 8.54001e+008 8.48016e+008 8.41585e+008 8.32268e+008 8.21953e+008 8.10404e+008 7.94523e+008 7.7924e+008 7.62399e+008 7.46255e+008 7.26948e+008 7.07291e+008 6.75307e+008 6.42613e+008 6.16822e+008 5.79649e+008 5.36587e+008 4.99446e+008 4.7665e+008 4.50129e+008 4.30796e+008 4.09104e+008 3.84657e+008 3.52586e+008 3.33862e+008 3.01298e+008 2.6791e+008 2.39944e+008 2.2331e+008 2.03367e+008 1.8823e+008 1.70361e+008 1.66392e+008 1.57372e+008 1.60265e+008 1.616e+008 1.67286e+008 1.73429e+008 1.79543e+008 1.85321e+008 1.91307e+008 1.96416e+008 2.01509e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
high catch high steepness vector 1
 0 0 20.7282 79.9296 278.344 868.387 2395.46 5790.93 12280.4 23071.3 38974.1 60172 86234.9 116317 149408 184544 220928 257970 295275 332602 369820 406865 443713 480354 516783 552991 588960 624666 660079 695162 729875 764178 798026 831380 864200 896448 928090 959096 989437 1.01909e+006 1.04804e+006 1.07626e+006 1.10374e+006 1.13048e+006 1.15646e+006 1.18169e+006 1.20615e+006 1.22986e+006 1.25282e+006 1.27503e+006 1.2965e+006 1.31723e+006 1.33725e+006 1.35657e+006 1.37518e+006 1.39312e+006 1.41039e+006 1.42701e+006 1.443e+006 1.45838e+006 1.47315e+006 1.48734e+006 1.50096e+006 1.51404e+006 1.52658e+006 1.53861e+006 1.55015e+006 1.5612e+006 1.57179e+006 1.58194e+006 1.59165e+006 1.60119e+006 1.61031e+006 1.61904e+006 1.6274e+006 1.63539e+006 1.64303e+006 1.65034e+006 1.65733e+006 1.664e+006 1.67038e+006 1.67648e+006 1.6823e+006 1.68786e+006 1.69318e+006 1.69825e+006 1.70309e+006 1.70771e+006 1.71212e+006 1.71633e+006 1.72035e+006 1.72418e+006 1.72784e+006 1.73133e+006 1.73466e+006 1.73783e+006 1.74086e+006 1.74375e+006 1.7465e+006 1.74913e+006 1.75163e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0424535 0.151317 0.210773 0.279227 0.355191 0.437138 0.523764 0.61411 0.707538 0.803644 0.902162 1.00288 1.10561 1.21013 1.31618 1.42347 1.5317 1.64054 1.74965 1.85871 1.96738 2.07537 2.18238 2.28817 2.39249 2.49514 2.59594 2.69472 2.79136 2.88574 2.97779 3.06741 3.15457 3.23923 3.32136 3.40095 3.478 3.55254 3.62456 3.69411 3.76121 3.8259 3.88824 3.94826 4.00602 4.06157 4.11497 4.16627 4.21554 4.26284 4.30822 4.35175 4.39348 4.43348 4.4718 4.50851 4.54365 4.5773 4.6095 4.64031 4.66978 4.69796 4.72491 4.75067 4.77528 4.79881 4.82128 4.84275 4.86326 4.88284 4.90166 4.91975 4.93701 4.95349 4.96921 4.98422 4.99854 5.0122 5.02524 5.03767 5.04953 5.06084 5.07162 5.08191 5.09171 5.10107 5.10998 5.11848 5.12658 5.13431 5.14167 5.14869 5.15537 5.16175 5.16782 5.17361 5.17913 5.18439 5.1894 5.19417 5.19872 #bodywt for gender,fleet: 1 / 1
 0 0.0445609 0.0698371 0.10499 0.150962 0.20736 0.272339 0.342941 0.415729 0.487433 0.55541 0.617846 0.673739 0.722766 0.765095 0.801202 0.83173 0.857382 0.87885 0.896774 0.911729 0.924209 0.934637 0.943368 0.950698 0.956868 0.962081 0.966499 0.970259 0.97347 0.976223 0.978593 0.980641 0.982417 0.983964 0.985315 0.9865 0.987542 0.988463 0.989279 0.990003 0.990649 0.991227 0.991745 0.99221 0.99263 0.993009 0.993352 0.993664 0.993947 0.994205 0.994441 0.994658 0.994856 0.995038 0.995205 0.995359 0.995502 0.995633 0.995755 0.995868 0.995973 0.99607 0.996161 0.996245 0.996324 0.996397 0.996466 0.99653 0.99659 0.996644 0.996693 0.996738 0.996781 0.996822 0.99686 0.996895 0.996929 0.996961 0.99699 0.997019 0.997045 0.99707 0.997094 0.997116 0.997138 0.997158 0.997176 0.997194 0.997211 0.997227 0.997242 0.997257 0.99727 0.997283 0.997296 0.997307 0.997318 0.997329 0.997338 0.997348 #selex for gender,fleet: 1 / 1
 0.0434527 0.156828 0.219442 0.291976 0.372687 0.459545 0.55067 0.64464 0.740562 0.837979 0.936713 1.03673 1.13802 1.24059 1.34435 1.44919 1.55491 1.66128 1.76805 1.87491 1.98157 2.08775 2.19314 2.29749 2.40055 2.5021 2.60194 2.69989 2.79581 2.88957 2.98108 3.07024 3.157 3.24132 3.32315 3.40248 3.47932 3.55366 3.62551 3.69492 3.76189 3.82648 3.88872 3.94865 4.00634 4.06183 4.11517 4.16642 4.21565 4.26291 4.30825 4.35175 4.39345 4.43343 4.47173 4.50842 4.54355 4.57718 4.60936 4.64016 4.66962 4.69779 4.72473 4.75048 4.77509 4.79861 4.82108 4.84254 4.86304 4.88262 4.90143 4.91951 4.93677 4.95325 4.96897 4.98398 4.99829 5.01195 5.02498 5.03742 5.04927 5.06058 5.07136 5.08165 5.09145 5.1008 5.10972 5.11821 5.12632 5.13404 5.1414 5.14842 5.1551 5.16148 5.16755 5.17334 5.17886 5.18411 5.18912 5.19389 5.19844 #bodywt for gender,fleet: 1 / 2
 0 0.0175539 0.0301874 0.0498568 0.0787282 0.118422 0.169373 0.230476 0.299224 0.372247 0.446017 0.517427 0.584135 0.644659 0.698295 0.744948 0.784941 0.818849 0.847366 0.871214 0.891083 0.907605 0.921335 0.932749 0.942252 0.950179 0.956809 0.962371 0.967053 0.971008 0.974362 0.977217 0.979657 0.98175 0.983553 0.985112 0.986466 0.987645 0.988676 0.989581 0.990378 0.991082 0.991706 0.992261 0.992757 0.9932 0.993597 0.993954 0.994277 0.994568 0.994832 0.995072 0.99529 0.995489 0.995671 0.995837 0.99599 0.996131 0.99626 0.996379 0.996489 0.996591 0.996685 0.996772 0.996853 0.996928 0.996998 0.997064 0.997125 0.997181 0.997232 0.997278 0.99732 0.99736 0.997397 0.997433 0.997466 0.997497

0.997526 0.997553 0.997579 0.997604 0.997627 0.997648 0.997669 0.997688 0.997706 0.997724 0.99774 0.997755 0.99777
0.997784 0.997797 0.997809 0.997821 0.997832 0.997843 0.997853 0.997862 0.997871 0.997879 #selex for gender,fleet: 1 / 2
 0.0471118 0.173912 0.242387 0.318322 0.397885 0.478588 0.559686 0.641568 0.725059 0.810988 0.899985 0.99241 1.08835
1.18767 1.29004 1.39499 1.50201 1.61053 1.72001 1.82991 1.93977 2.04914 2.15765 2.26496 2.3708 2.4749 2.57708 2.67717
2.77502 2.87053 2.9636 3.05417 3.14219 3.22763 3.31048 3.39073 3.46838 3.54345 3.61597 3.68597 3.75349 3.81856 3.88124
3.94158 3.99963 4.05545 4.10909 4.16062 4.2101 4.25759 4.30315 4.34684 4.38873 4.42887 4.46732 4.50415 4.53941 4.57316
4.60546 4.63636 4.66591 4.69418 4.7212 4.74703 4.77171 4.7953 4.81783 4.83935 4.85991 4.87954 4.8984 4.91651 4.93381
4.95031 4.96607 4.9811 4.99544 5.00912 5.02218 5.03463 5.04651 5.05784 5.06864 5.07894 5.08876 5.09813 5.10706 5.11557
5.12368 5.13142 5.13879 5.14582 5.15252 5.1589 5.16498 5.17078 5.17631 5.18157 5.18659 5.19137 5.19592 #bodywt for
gender,fleet: 1 / 3
 0 0.0131509 0.029493 0.0607802 0.113205 0.189286 0.285467 0.393088 0.501802 0.602899 0.690964 0.763887 0.821987 0.866966
0.901071 0.926557 0.945426 0.959322 0.969533 0.977041 0.982575 0.98667 0.989717 0.991997 0.993716 0.995021 0.996019
0.996789 0.997387 0.997855 0.998224 0.998518 0.998754 0.998944 0.999098 0.999225 0.999329 0.999415 0.999487 0.999548
0.999599 0.999642 0.999679 0.999711 0.999738 0.999762 0.999782 0.9998 0.999816 0.99983 0.999842 0.999853 0.999862
0.999871 0.999879 0.999886 0.999892 0.999897 0.999902 0.999907 0.999911 0.999915 0.999919 0.999922 0.999925 0.999927
0.99993 0.999932 0.999934 0.999936 0.999938 0.999939 0.99994 0.999942 0.999943 0.999944 0.999945 0.999946 0.999947
0.999948 0.999948 0.999949 0.99995 0.999951 0.999951 0.999952 0.999952 0.999953 0.999953 0.999954 0.999954 0.999955
0.999955 0.999955 0.999956 0.999956 0.999956 0.999957 0.999957 0.999957 0.999957 #selex for gender,fleet: 1 / 3
 0.0433738 0.156832 0.219967 0.293757 0.376815 0.467273 0.563095 0.662422 0.763823 0.866354 0.969491 1.073 1.17681 1.28093
1.38538 1.49014 1.59516 1.70035 1.80556 1.91062 2.01533 2.11946 2.22281 2.32515 2.42627 2.52597 2.62406 2.72039 2.81481
2.90719 2.99742 3.08542 3.17112 3.25447 3.33542 3.41395 3.49006 3.56373 3.63499 3.70384 3.77032 3.83445 3.89628 3.95583
4.01317 4.06834 4.12139 4.17238 4.22136 4.2684 4.31353 4.35684 4.39837 4.43818 4.47633 4.51287 4.54787 4.58138 4.61346
4.64415 4.67351 4.70159 4.72844 4.75412 4.77865 4.8021 4.82451 4.84591 4.86635 4.88588 4.90465 4.92269 4.93992 4.95636
4.97206 4.98703 5.00133 5.01496 5.02797 5.04038 5.05221 5.0635 5.07426 5.08453 5.09432 5.10365 5.11255 5.12103 5.12912
5.13683 5.14418 5.15119 5.15786 5.16422 5.17029 5.17607 5.18158 5.18682 5.19182 5.19659 5.20113 #bodywt for gender,fleet: 1 /
4
 0 0.00958023 0.0165156 0.0275197 0.044194 0.0681867 0.100818 0.142668 0.193303 0.251269 0.314347 0.379962 0.44559
0.50907 0.568768 0.623614 0.673047 0.71692 0.755384 0.788787 0.817585 0.842283 0.863387 0.881379 0.896701 0.909747
0.920861 0.93034 0.93844 0.945376 0.951329 0.956453 0.960876 0.964705 0.96803 0.970926 0.973458 0.975677 0.977628
0.979349 0.980872 0.982224 0.983426 0.9845 0.98546 0.986322 0.987098 0.987797 0.988429 0.989002 0.989522 0.989995
0.990427 0.990821 0.991182 0.991513 0.991817 0.992096 0.992354 0.992592 0.992812 0.993015 0.993204 0.993378 0.993541
0.993692 0.993833 0.993964 0.994087 0.994201 0.994303 0.994395 0.994481 0.994562 0.994637 0.994708 0.994775 0.994838
0.994897 0.994953 0.995005 0.995055 0.995101 0.995145 0.995187 0.995226 0.995263 0.995298 0.995331 0.995363 0.995392
0.99542 0.995447 0.995472 0.995496 0.995518 0.995554 0.995579 0.995597 0.995614 #selex for gender,fleet: 1 / 4
 0.043321 0.156855 0.220401 0.295238 0.38045 0.474648 0.576056 0.682705 0.792679 0.904344 1.01647 1.12825 1.23921 1.34914
1.45797 1.56573 1.67246 1.7782 1.883 1.98682 2.08966 2.19143 2.29206 2.39144 2.48947 2.58602 2.68098 2.77423 2.86566
2.95517 3.04268 3.12811 3.21139 3.29247 3.37131 3.44787 3.52216 3.59414 3.66383 3.73124 3.79638 3.85927 3.91995 3.97846
4.03482 4.08909 4.14131 4.19152 4.23979 4.28616 4.33068 4.37342 4.41442 4.45374 4.49143 4.52755 4.56215 4.59529 4.62702
4.65739 4.68645 4.71425 4.74084 4.76626 4.79057 4.8138 4.836 4.85721 4.87748 4.89683 4.91547 4.9334 4.95052 4.96686 4.98246
4.99735 5.01156 5.02511 5.03804 5.05038 5.06215 5.07337 5.08408 5.09428 5.10402 5.1133 5.12215 5.13059 5.13863 5.1463
5.15361 5.16058 5.16722 5.17355 5.17958 5.18533 5.19081 5.19603 5.201 5.20574 5.21026 #bodywt for gender,fleet: 1 / 5
 0 0.00366874 0.0063386 0.0106392 0.0173324 0.027368 0.0418158 0.0617233 0.0879193 0.120815 0.160269 0.205572 0.255533
0.308658 0.363349 0.418081 0.471529 0.522644 0.570671 0.615133 0.655792 0.692601 0.725656 0.755148 0.78133 0.804485
0.824908 0.842889 0.858703 0.872605 0.884828 0.89558 0.905049 0.913397 0.920769 0.927289 0.933066 0.938195 0.942759
0.946827 0.950462 0.953717 0.956638 0.959265 0.961631 0.963769 0.965703 0.967457 0.969051 0.970501 0.971824 0.973033
0.974139 0.975153 0.976084 0.976941 0.97773 0.978458 0.97913 0.979752 0.980328 0.980862 0.981358 0.981819 0.982248
0.982648 0.98302 0.983368 0.983693 0.983997 0.98427 0.984515 0.984746 0.984962 0.985165 0.985356 0.985535 0.985704
0.985863 0.986013 0.986154 0.986287 0.986413 0.986531 0.986643 0.986749 0.986849 0.986944 0.987033 0.987118 0.987198
0.987273 0.987345 0.987413 0.987477 0.987538 0.987596 0.987651 0.987703 0.987752 0.987799 #selex for gender,fleet: 1 / 5
 0.0445298 0.162844 0.229379 0.308007 0.397852 0.497478 0.604901 0.717743 0.833561 0.95022 1.06614 1.18034 1.29239 1.40218
1.50986 1.61565 1.71981 1.82257 1.92411 2.02455 2.12398 2.2224 2.31981 2.41613 2.51129 2.60519 2.69771 2.78875 2.87818
2.9659 3.05181 3.13581 3.21782 3.29778 3.37564 3.45135 3.52487 3.59619 3.6653 3.7322 3.7969 3.85941 3.91976 3.97797 4.03408
4.08812 4.14015 4.1902 4.23832 4.28456 4.32897 4.37161 4.41253 4.45177 4.4894 4.52547 4.56003 4.59313 4.62482 4.65516
4.68419 4.71197 4.73854 4.76395 4.78824 4.81146 4.83365 4.85485 4.87511 4.89446 4.91308 4.93101 4.94813 4.96446 4.98006
4.99494 5.00914 5.0227 5.03562 5.04796 5.05972 5.07095 5.08165 5.09186 5.10159 5.11087 5.11972 5.12816 5.1362 5.14387
5.15117 5.15814 5.16478 5.17111 5.17714 5.18289 5.18837 5.19359 5.19856 5.2033 5.20782 #bodywt for gender,fleet: 1 / 6
 0 0.00116793 0.0022252 0.00410607 0.00733389 0.0126636 0.0210992 0.0338414 0.0521389 0.0770561 0.10922 0.148638
0.194646 0.246001 0.30108 0.358106 0.415367 0.471368 0.52492 0.575166 0.621567 0.663856 0.701984 0.736058 0.766299
0.792992 0.816455 0.837018 0.855002 0.870711 0.884427 0.896402 0.906863 0.916011 0.92402 0.931043 0.937213 0.942643
0.947433 0.951667 0.955417 0.958748 0.961712 0.964357 0.966722 0.968841 0.970745 0.972459 0.974005 0.975404 0.976671
0.977821 0.978868 0.979822 0.980693 0.98149 0.982221 0.982891 0.983508 0.984075 0.984599 0.985082 0.985529 0.985943
0.986327 0.986683 0.987014 0.987323 0.987609 0.987877 0.988115 0.988327 0.988526 0.988712 0.988886 0.98905 0.989203
0.989347 0.989483 0.989611 0.989731 0.989844 0.98995 0.990051 0.990145 0.990235 0.990319 0.990399 0.990474 0.990545
0.990612 0.990676 0.990736 0.990793 0.990847 0.990898 0.990946 0.990992 0.991035 0.991076 0.991115 #selex for gender,fleet: 1
/ 6
 0.050726 0.172202 0.239186 0.315618 0.39968 0.489633 0.584098 0.682146 0.783224 0.887023 0.993356 1.10206 1.21297 1.32583
1.44038 1.55629 1.67318 1.79068 1.9084 2.02597 2.14301 2.25918 2.37419 2.48774 2.59958 2.70951 2.81734 2.9229 3.02606
3.12672 3.22479 3.32021 3.41293 3.50292 3.59017 3.67467 3.75644 3.83549 3.91184 3.98554 4.05662 4.12514 4.19113 4.25466
4.31578 4.37456 4.43105 4.48532 4.53743 4.58745 4.63544 4.68147 4.72561 4.76791 4.80844 4.84726 4.88443 4.92002 4.95409
4.98668 5.01786 5.04768 5.0762 5.10347 5.12953 5.15444 5.17824 5.20099 5.22271 5.24346 5.2634 5.28255 5.30084 5.3183

5.33497 5.35087 5.36606 5.38054 5.39437 5.40756 5.42015 5.43215 5.4436 5.45453 5.46495 5.47488 5.48436 5.4934 5.50201
5.51023 5.51807 5.52553 5.53266 5.53944 5.54592 5.55208 5.55797 5.56357 5.56891 5.57401 5.57886 #bodywt for gender,fleet: 2 /
1
 0 0.0451326 0.0721512 0.110256 0.160507 0.222309 0.293301 0.369841 0.447836 0.523544 0.594098 0.657687 0.713478 0.761402
0.8019 0.835709 0.863686 0.886699 0.905562 0.920996 0.933623 0.943964 0.95245 0.959433 0.965199 0.969978 0.973955
0.977279 0.98007 0.982423 0.984417 0.986114 0.987565 0.98881 0.989884 0.990814 0.991622 0.992328 0.992946 0.99349 0.99397
0.994395 0.994772 0.995108 0.995409 0.995679 0.995921 0.996139 0.996337 0.996515 0.996678 0.996825 0.99696 0.997083
0.997196 0.997299 0.997394 0.997481 0.997562 0.997636 0.997705 0.997769 0.997828 0.997883 0.997933 0.997981 0.998025
0.998066 0.998105 0.99814 0.998173 0.998202 0.998229 0.998254 0.998278 0.998301 0.998322 0.998342 0.998361 0.998378
0.998395 0.998411 0.998425 0.998439 0.998453 0.998465 0.998477 0.998488 0.998498 0.998508 0.998518 0.998527 0.998535
0.998543 0.998551 0.998558 0.998565 0.998571 0.998577 0.998583 0.998589 #selex for gender,fleet: 2 / 1
 0.0518825 0.17828 0.248716 0.329539 0.418578 0.513476 0.612213 0.713401 0.816289 0.920593 1.0263 1.13347 1.24221 1.3525
1.46428 1.57738 1.69156 1.80652 1.92193 2.03742 2.15264 2.26724 2.38089 2.4933 2.60418 2.71329 2.82044 2.92543 3.02812
3.12839 3.22614 3.32129 3.41379 3.5036 3.59069 3.67507 3.75673 3.83569 3.91197 3.98561 4.05664 4.12511 4.19107 4.25457
4.31567 4.37442 4.43089 4.48515 4.53725 4.58726 4.63524 4.68127 4.72539 4.76769 4.80821 4.84703 4.88421 4.91979 4.95386
4.98645 5.01763 5.04745 5.07597 5.10324 5.1293 5.15421 5.17801 5.20075 5.22248 5.24323 5.26317 5.28232 5.30061 5.31807
5.33473 5.35064 5.36582 5.38031 5.39414 5.40733 5.41992 5.43192 5.44337 5.4543 5.46472 5.47465 5.48413 5.49317 5.50179 5.51
5.51784 5.52531 5.53243 5.53922 5.54569 5.55186 5.55774 5.56334 5.56868 5.57378 5.57863 #bodywt for gender,fleet: 2 / 2
 0 0.0178304 0.0314187 0.0529919 0.0851013 0.129579 0.186726 0.254918 0.330863 0.410382 0.489302 0.564163 0.632556
0.693155 0.745548 0.78998 0.827106 0.857786 0.88294 0.903455 0.920134 0.933678 0.944677 0.953622 0.960913 0.966873
0.971763 0.975791 0.979124 0.981893 0.984206 0.986145 0.98778 0.989164 0.990342 0.991349 0.992213 0.992958 0.993603
0.994164 0.994654 0.995083 0.99546 0.995794 0.996089 0.996351 0.996584 0.996793 0.996981 0.997149 0.997301 0.997438
0.997563 0.997676 0.997778 0.997872 0.997958 0.998036 0.998108 0.998174 0.998235 0.998291 0.998343 0.998391 0.998436
0.998477 0.998515 0.99855 0.998583 0.998614 0.998642 0.998666 0.998689 0.99871 0.99873 0.998749 0.998767 0.998783
0.998799 0.998814 0.998828 0.998841 0.998853 0.998864 0.998875 0.998886 0.998895 0.998904 0.998913 0.998921 0.998929
0.998936 0.998943 0.99895 0.998956 0.998962 0.998967 0.998973 0.998978 0.998982 0.998987 #selex for gender,fleet: 2 / 2
 0.0561099 0.197006 0.273498 0.357206 0.443809 0.530885 0.61807 0.706161 0.796295 0.889487 0.986439 1.08749 1.19263
1.30157 1.41381 1.52875 1.64571 1.76401 1.88303 2.00218 2.12095 2.23889 2.35561 2.4708 2.58417 2.6955 2.8046 2.91131 3.0155
3.11709 3.21599 3.31214 3.40552 3.4961 3.58387 3.66884 3.75103 3.83045 3.90714 3.98115 4.0525 4.12126 4.18748 4.25121
4.31251 4.37145 4.4281 4.4825 4.53474 4.58488 4.63297 4.6791 4.72332 4.7657 4.80631 4.8452 4.88244 4.91809 4.95221 4.98485
5.01608 5.04595 5.07451 5.10182 5.12791 5.15286 5.17669 5.19946 5.22122 5.24199 5.26195 5.28112 5.29942 5.31689 5.33357
5.3495 5.36469 5.37919 5.39303 5.40623 5.41882 5.43084 5.4423 5.45323 5.46366 5.4736 5.48308 5.49213 5.50075 5.50897
5.51681 5.52429 5.53141 5.53821 5.54468 5.55086 5.55674 5.56235 5.5677 5.57279 5.57765 #bodywt for gender,fleet: 2 / 3
 0 0.0134818 0.0312969 0.0661983 0.125256 0.210707 0.317262 0.433913 0.548509 0.651686 0.738415 0.807551 0.860485
0.899823 0.928437 0.94895 0.963522 0.973827 0.981106 0.986256 0.989915 0.992529 0.99441 0.995774 0.996771 0.997507
0.998055 0.998467 0.99878 0.999019 0.999204 0.999348 0.999461 0.999551 0.999623 0.999681 0.999728 0.999766 0.999797
0.999824 0.999845 0.999864 0.999879 0.999892 0.999903 0.999913 0.999921 0.999928 0.999934 0.99994 0.999945 0.999949
0.999952 0.999956 0.999959 0.999961 0.999964 0.999966 0.999967 0.999969 0.999971 0.999972 0.999973 0.999974 0.999976
0.999976 0.999977 0.999978 0.999979 0.99998 0.99998 0.999981 0.999981 0.999982 0.999982 0.999982 0.999983 0.999983
0.999983 0.999984 0.999984 0.999984 0.999984 0.999985 0.999985 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986
0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.99987 #selex for gender,fleet: 2 / 3
 0.0517912 0.178292 0.249341 0.331628 0.423355 0.522271 0.626074 0.732815 0.841124 0.950213 1.05974 1.16964 1.27998
1.39086 1.50233 1.6144 1.727 1.84 1.9532 2.06637 2.17924 2.29155 2.403 2.51335 2.62232 2.72969 2.83525 2.93882 3.04023
3.13936 3.23609 3.33033 3.42203 3.51112 3.59758 3.68139 3.76255 3.84106 3.91695 3.99023 4.06094 4.12912 4.19483 4.25809
4.31898 4.37755 4.43385 4.48795 4.53991 4.5898 4.63766 4.68358 4.72761 4.76981 4.81026 4.849 4.8861 4.92163 4.95563 4.98817
5.0193 5.04907 5.07755 5.10477 5.1308 5.15567 5.17944 5.20216 5.22385 5.24458 5.26449 5.28363 5.3019 5.31934 5.336 5.35189
5.36706 5.38154 5.39535 5.40853 5.42111 5.4331 5.44455 5.45546 5.46587 5.4758 5.48527 5.4943 5.50292 5.51113 5.51895
5.52642 5.53353 5.54032 5.54678 5.55295 5.55883 5.56443 5.56977 5.57486 5.57971 #bodywt for gender,fleet: 2 / 4
 0 0.00973136 0.0171973 0.0292994 0.0479558 0.075127 0.11232 0.160055 0.217552 0.282778 0.352844 0.424567 0.494987
0.561719 0.62311 0.678222 0.726722 0.768731 0.804665 0.835112 0.860728 0.882175 0.900074 0.914989 0.927411 0.937763
0.946402 0.953628 0.959686 0.964781 0.96908 0.972721 0.975816 0.978456 0.980717 0.982662 0.98434 0.985795 0.98706
0.988164 0.989131 0.989982 0.990732 0.991396 0.991986 0.992511 0.992981 0.993401 0.993779 0.994119 0.994426 0.994704
0.994956 0.995185 0.995394 0.995585 0.995759 0.995919 0.996066 0.996201 0.996326 0.99644 0.996546 0.996645 0.996736
0.99682 0.996898 0.996971 0.997039 0.997102 0.997159 0.997209 0.997256 0.9973 0.997342 0.997381 0.997417 0.997451
0.997484 0.997514 0.997542 0.997569 0.997595 0.997619 0.997641 0.997662 0.997682 0.997701 0.997719 0.997736 0.997752
0.997767 0.997782 0.997795 0.997808 0.99782 0.997832 0.997843 0.997853 0.997863 0.997872 #selex for gender,fleet: 2 / 4
 0.0517302 0.178325 0.249856 0.333373 0.42761 0.530805 0.640842 0.755497 0.872738 0.990959 1.10906 1.22641 1.34274 1.45798
1.57223 1.68559 1.79816 1.91003 2.02121 2.1317 2.24141 2.35024 2.45807 2.56474 2.67009 2.77395 2.87617 2.97658 3.07505
3.17145 3.26567 3.35762 3.44722 3.5344 3.61913 3.70137 3.78111 3.85833 3.93305 4.00528 4.07503 4.14235 4.20727 4.26982
4.33006 4.38803 4.4438 4.49741 4.54892 4.59839 4.64588 4.69145 4.73516 4.77707 4.81725 4.85574 4.89262 4.92793 4.96173
4.99409 5.02505 5.05467 5.083 5.11009 5.13599 5.16074 5.1844 5.20701 5.22861 5.24925 5.26909 5.28817 5.30639 5.32378
5.34038 5.35623 5.37136 5.3858 5.39957 5.41272 5.42526 5.43723 5.44864 5.45953 5.46991 5.47981 5.48926 5.49827 5.50686
5.51505 5.52285 5.5303 5.5374 5.54417 5.55062 5.55677 5.56263 5.56822 5.57354 5.57862 5.58346 #bodywt for gender,fleet: 2 / 5
 0 0.00372671 0.00660276 0.0113431 0.0188714 0.0303512 0.0470918 0.0703532 0.101077 0.13963 0.185643 0.238028 0.295132
0.354994 0.415619 0.475198 0.532254 0.585704 0.634857 0.679367 0.719166 0.754389 0.785308 0.812279 0.835693 0.855952
0.87344 0.888518 0.901511 0.912712 0.922374 0.930721 0.937944 0.944206 0.949648 0.954389 0.958529 0.962154 0.965337
0.96814 0.970614 0.972806 0.974751 0.976483 0.978029 0.979412 0.980654 0.98177 0.982777 0.983687 0.984511 0.985259
0.985939 0.986559 0.987125 0.987643 0.988118 0.988554 0.988955 0.989325 0.989666 0.989981 0.990272 0.990542 0.990792
0.991025 0.991241 0.991442 0.991629 0.991804 0.991961 0.992101 0.992231 0.992354 0.992469 0.992577 0.992679 0.992774

0.992864 0.992948 0.993028 0.993102 0.993173 0.99324 0.993302 0.993362 0.993418 0.993471 0.993521 0.993568 0.993613 0.993655 0.993695 0.993733 0.993769 0.993803 0.993835 0.993865 0.993894 0.993922 0.993948 #selex for gender,fleet: 2 / 5
 0.0531282 0.184912 0.25968 0.34725 0.446373 0.555193 0.671301 0.791975 0.914597 1.03706 1.15797 1.27664 1.39288 1.50686 1.61889 1.72933 1.83852 1.94673 2.05415 2.16089 2.26699 2.37241 2.47707 2.58084 2.68358 2.78512 2.88529 2.98392 3.08085 3.17593 3.26902 3.36002 3.44881 3.53532 3.61949 3.70127 3.78062 3.85752 3.93198 4.004 4.07359 4.14077 4.20558 4.26805 4.32823 4.38615 4.44188 4.49547 4.54696 4.59642 4.64391 4.68948 4.7332 4.77512 4.81531 4.85381 4.8907 4.92603 4.95985 4.99222 5.0232 5.05283 5.08118 5.10828 5.1342 5.15897 5.18265 5.20527 5.22688 5.24753 5.26738 5.28647 5.3047 5.3221 5.33871 5.35456 5.3697 5.38414 5.39792 5.41107 5.42362 5.43559 5.44701 5.4579 5.46829 5.4782 5.48764 5.49666 5.50525 5.51344 5.52125 5.5287 5.5358 5.54257 5.54903 5.55518 5.56105 5.56664 5.57196 5.57704 5.58188 #bodywt for gender,fleet: 2 / 6
 0 0.00119017 0.00233569 0.00443017 0.00811429 0.0143281 0.0243318 0.0396264 0.0617365 0.0918839 0.130653 0.177775 0.232116 0.291853 0.354782 0.418637 0.481362 0.541287 0.597199 0.648337 0.694342 0.735168 0.771 0.802171 0.829102 0.852248 0.872068 0.888997 0.903436 0.915744 0.926238 0.935193 0.942845 0.949397 0.955017 0.959851 0.964019 0.967624 0.97075 0.973469 0.975842 0.977918 0.979742 0.981347 0.982765 0.984022 0.985138 0.986132 0.987021 0.987816 0.988531 0.989175 0.989756 0.990281 0.990758 0.991191 0.991585 0.991945 0.992274 0.992575 0.992851 0.993105 0.993339 0.993555 0.993754 0.993938 0.994108 0.994266 0.994413 0.994549 0.99467 0.994777 0.994876 0.994969 0.995057 0.995138 0.995215 0.995286 0.995354 0.995417 0.995477 0.995533 0.995585 0.995635 0.995681 0.995725 0.995767 0.995806 0.995843 0.995878 0.995911 0.995942 0.995972 0.996 0.996026 0.996051 0.996075 0.996097 0.996118 0.996138 0.996157 #selex for gender,fleet: 2 / 6
 0.046456 #mean M for year Yinit: 2009 sex: 1
 92.2485 86.4383 80.9146 75.539 70.4688 65.6161 61.0141 56.7162 53.2187 49.7209 48.7874 46.9166 47.1565 46.624 46.3658 45.3561 45.0311 44.5169 43.2674 40.7283 38.5766 35.7772 32.7432 29.6264 26.7472 23.8791 21.4148 19.1589 16.9865 14.933 13.1607 11.5872 10.1532 8.91061 7.82669 6.89538 6.09083 5.40125 4.80233 4.2875 3.84458 3.46075 3.12975 2.84383 2.59497 2.37701 2.1865 2.01832 1.86893 1.73651 1.61828 1.51216 1.41557 1.32732 1.24647 1.17191 1.103 1.03954 0.980868 0.926146 0.875175 0.827974 0.783708 0.743573 0.706136 0.669998 0.635493 0.602793 0.571965 0.542824 0.515256 0.48919 0.464528 0.441215 0.419163 0.398288 0.378547 0.359932 0.342313 0.325669 0.309918 0.295008 0.280896 0.267519 0.25483 0.242778 0.231336 0.220468 0.210144 0.200331 0.190998 0.18213 0.173688 0.165645 0.157977 0.150676 0.143722 0.137097 0.130786 0.124773 2.6135 #numbers for year Yinit: 2009 sex: 1
 0.0459322 #mean M for year Yinit: 2009 sex: 2
 92.2485 86.4836 80.9993 75.6573 70.6148 65.7843 61.1989 56.9129 53.425 49.9326 49.0122 47.1469 47.3978 46.8645 46.5935 45.5487 45.1675 44.5681 43.2036 40.5292 38.2266 35.2781 32.1086 28.8806 25.9152 22.9969 20.5053 18.249 16.1053 14.1036 12.3911 10.884 9.52123 8.34771 7.32947 6.4586 5.70931 5.06945 4.51547 4.04064 3.63309 3.28049 2.97678 2.71457 2.48631 2.28618 2.11105 1.9561 1.81811 1.69543 1.58553 1.48653 1.39601 1.3129 1.23641 1.16552 1.0997 1.03881 0.982298 0.929379 0.879916 0.833978 0.790763 0.75151 0.7148 0.679235 0.645169 0.612789 0.58218 0.553168 0.525654 0.499581 0.474864 0.451464 0.429303 0.408304 0.388429 0.369674 0.351909 0.335114 0.319204 0.304131 0.289848 0.276294 0.263421 0.251181 0.239545 0.22848 0.217956 0.207941 0.198405 0.189335 0.180692 0.172449 0.164582 0.157085 0.149938 0.143124 0.136626 0.13043 2.76712 #numbers for year Yinit: 2009 sex: 2
 78.7054 73.9375 69.173 67.9847 65.4977 65.963 65.3523 65.1248 63.8356 63.5012 62.8911 61.231 57.7302 54.762 50.8588 46.6068 42.2221 38.163 34.1081 30.6197 27.4206 24.3333 21.4095 18.883 16.637 14.5873 12.8095 11.2572 9.92233 8.76827 7.77845 6.91816 6.17819 5.54119 4.98885 4.5123 4.10044 3.74182 3.4276 3.15288 2.91028 2.69476 2.50368 2.33307 2.17994 2.04055 1.9132 1.79655 1.68896 1.58957 1.49802 1.41341 1.33449 1.26099 1.19294 1.12912 1.07127 1.0173 0.965217 0.91549 0.86837 0.82395 0.781967 0.742253 0.704706 0.669182 0.635603 0.603842 0.573777 0.545343 0.518531 0.493154 0.46918 0.44649 0.425012 0.404683 0.385411 0.36713 0.349768 0.333282 0.317624 0.30275 0.28861 0.275162 0.262385 0.250221 0.238633 0.227585 0.217065 0.207045 0.197501 0.188408 0.179744 0.171487 0.163619 0.156118 0.148969 0.142153 0.135653 0.129456 2.7173 #numbers for year Ydeclare: 2002 sex: 1
 78.7054 73.9762 69.2453 68.0903 65.6299 66.1208 65.5212 65.2856 63.9574 63.5504 62.8256 61.0093 57.3259 54.1504 50.0435 45.6069 41.0717 36.8964 32.7764 29.254 26.0588 23.0169 20.1714 17.7343 15.5868 13.6427 11.9669 10.5117 9.2663 8.19401 7.27782 6.48411 5.80342 5.2189 4.71292 4.27691 3.90032 3.57236 3.28474 3.03297 2.8102 2.61177 2.43535 2.27731 2.13494 2.00477 1.88528 1.77532 1.67342 1.57882 1.49133 1.41014 1.33411 1.26307 1.19709 1.13502 1.07865 1.02594 0.97488 0.925973 0.879493 0.835558 0.79392 0.754435 0.71702 0.681555 0.64798 0.616182 0.586052 0.557533 0.530621 0.505128 0.481025 0.458193 0.436558 0.416058 0.396603 0.378126 0.360555 0.343851 0.327967 0.31286 0.298482 0.284793 0.271772 0.259364 0.24753 0.236237 0.225474 0.215214 0.205432 0.196105 0.18721 0.178727 0.170636 0.162919 0.155556 0.148532 0.14183 0.135434 2.87795 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962

84

1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
329.808 329.808 329.787 329.753 329.712 329.692 329.671 329.65 329.632 329.613 329.588 329.544 329.49 329.427 329.368 329.3
329.219 329.144 329.041 328.969 328.88 328.765 328.644 328.534 328.424 328.323 328.213 328.091 327.976 327.748 327.251
326.304 325.47 325.177 324.801 324.538 324.253 323.893 323.588 323.349 323.05 322.658 322.225 321.704 321.077 320.536
320.074 319.717 319.288 318.809 318.396 317.858 317.247 316.653 316.008 315.055 313.983 312.758 311.026 309.314 307.372
305.455 303.081 300.575 296.271 291.577 287.654 281.594 273.915 266.659 261.897 256.002 251.472 246.109 239.677 230.525
224.845 214.084 201.864 190.602 183.512 174.424 167.201 158.105 156.407 151.854 154.907 157.411 161.51 165.709 169.816
173.721 177.597 181.097 184.497 #Recruits
1.49896e+009 1.49896e+009 1.49857e+009 1.49792e+009 1.49717e+009 1.49679e+009 1.49639e+009 1.496e+009 1.49566e+009
1.4953e+009 1.49484e+009 1.49402e+009 1.49302e+009 1.49185e+009 1.49075e+009 1.48949e+009 1.48798e+009 1.48659e+009
1.4847e+009 1.48337e+009 1.48173e+009 1.47961e+009 1.47738e+009 1.47537e+009 1.47337e+009 1.47152e+009 1.46951e+009
1.46731e+009 1.46522e+009 1.4611e+009 1.4522e+009 1.43543e+009 1.4209e+009 1.41585e+009 1.40941e+009 1.40493e+009
1.40009e+009 1.39403e+009 1.38892e+009 1.38493e+009 1.37996e+009 1.3735e+009 1.36642e+009 1.35796e+009 1.34789e+009
1.33928e+009 1.33199e+009 1.32639e+009 1.31973e+009 1.31234e+009 1.30602e+009 1.29784e+009 1.28865e+009 1.2798e+009
1.2703e+009 1.25645e+009 1.24112e+009 1.22393e+009 1.20022e+009 1.17742e+009 1.15228e+009 1.1282e+009 1.09936e+009
1.07001e+009 1.02207e+009 9.73072e+008 9.345e+008 8.78776e+008 8.1418e+008 7.58538e+008 7.24549e+008 6.84977e+008
6.56289e+008 6.24101e+008 5.87822e+008 5.40126e+008 5.12611e+008 4.64352e+008 4.1494e+008 3.73769e+008 3.49741e+008
3.20845e+008 2.99278e+008 2.73717e+008 2.69129e+008 2.57099e+008 2.65122e+008 2.71834e+008 2.83086e+008 2.94967e+008
3.06951e+008 3.18695e+008 3.30703e+008 3.41861e+008 3.52997e+008 #SpawnBio
0.5075 0.5 0 # spawn-recr steepness, sigmaR, autocorr
high catch low steepness vector 1
 0 0 27.4129 102.382 345.645 1044.88 2792.57 6552.16 13532.7 24868.9 41271.7 62840.6 89104 119218 152203 187138 223265
260023 297037 334079 371022 407806 444406 480813 517022 553023 588800 624329 659580 694518 729104 763298 797057
830342 863112 895331 926964 957981 988354 1.01806e+006 1.04707e+006 1.07538e+006 1.10297e+006 1.12983e+006
1.15595e+006 1.18133e+006 1.20596e+006 1.22985e+006 1.253e+006 1.27541e+006 1.29709e+006 1.31805e+006 1.33829e+006
1.35784e+006 1.3767e+006 1.39488e+006 1.4124e+006 1.42928e+006 1.44553e+006 1.46116e+006 1.47619e+006 1.49064e+006
1.50453e+006 1.51787e+006 1.53067e+006 1.54296e+006 1.55475e+006 1.56606e+006 1.5769e+006 1.5873e+006 1.59726e+006
1.60704e+006 1.61642e+006 1.6254e+006 1.63399e+006 1.64222e+006 1.65009e+006 1.65763e+006 1.66484e+006 1.67173e+006
1.67832e+006 1.68463e+006 1.69065e+006 1.69641e+006 1.70191e+006 1.70717e+006 1.7122e+006 1.717e+006 1.72158e+006
1.72596e+006 1.73014e+006 1.73413e+006 1.73795e+006 1.74159e+006 1.74506e+006 1.74837e+006 1.75154e+006 1.75456e+006
1.75744e+006 1.76019e+006 1.76281e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.044689 0.161429 0.221558 0.290117 0.365704 0.446953 0.532737 0.622232 0.714881 0.810311 0.908251 1.00848 1.11076
1.21484 1.32047 1.42733 1.53511 1.64347 1.75209 1.86063 1.96879 2.07626 2.18277 2.28806 2.39192 2.49413 2.59453 2.69296
2.78929 2.88341 2.97523 3.0647 3.15174 3.23633 3.31844 3.39806 3.4752 3.54984 3.62203 3.69177 3.75911 3.82408 3.88671
3.94707 4.00518 4.06112 4.11492 4.16665 4.21636 4.26411 4.30996 4.35397 4.39619 4.43669 4.47551 4.51273 4.54839 4.58255
4.61526 4.64658 4.67657 4.70526 4.73271 4.75897 4.78409 4.8081 4.83106 4.85301 4.87399 4.89404 4.91332 4.93186 4.94957
4.96649 4.98265 4.99808 5.01281 5.02687 5.0403 5.05312 5.06535 5.07702 5.08817 5.0988 5.10894 5.11862 5.12785 5.13666
5.14506 5.15308 5.16073 5.16802 5.17497 5.1816 5.18793 5.19396 5.19971 5.2052 5.21043 5.21541 5.22017 #bodywt for
gender,fleet: 1 / 1
 0 0.0574956 0.0873365 0.127308 0.177707 0.237474 0.30429 0.37505 0.446484 0.515694 0.58048 0.639434 0.691873 0.737685
0.777154 0.810804 0.839274 0.863236 0.883336 0.900169 0.914259 0.926061 0.93596 0.944281 0.951294 0.957221 0.962248
0.966526 0.970179 0.973311 0.976006 0.978334 0.980352 0.982107 0.983641 0.984984 0.986166 0.987208 0.988131 0.98895
0.98968 0.990332 0.990916 0.991441 0.991913 0.99234 0.992726 0.993076 0.993394 0.993685 0.993949 0.994192 0.994414
0.994618 0.994805 0.994978 0.995137 0.995284 0.995421 0.995547 0.995664 0.995773 0.995874 0.995968 0.996056 0.996138
0.996214 0.996286 0.996352 0.996415 0.996472 0.996523 0.996571 0.996616 0.996658 0.996698 0.996735 0.996771 0.996804
0.996835 0.996865 0.996893 0.99692 0.996945 0.996968 0.996991 0.997012 0.997032 0.997051 0.997069 0.997086 0.997102
0.997117 0.997131 0.997145 0.997158 0.99717 0.997182 0.997193 0.997204 0.997214 #selex for gender,fleet: 1 / 1
 0.0458 0.167819 0.231432 0.304365 0.384882 0.471082 0.561287 0.654259 0.749233 0.845814 0.943836 1.04324 1.14401 1.2461
1.3494 1.45377 1.55902 1.6649 1.77114 1.87748 1.9836 2.08923 2.19409 2.29792 2.40049 2.50157 2.60098 2.69854 2.79412 2.8876
2.97886 3.06784 3.15446 3.23869 3.32048 3.39983 3.47672 3.55116 3.62317 3.69275 3.75995 3.8248 3.88733 3.94759 4.00562
4.06148 4.11522 4.16689 4.21656 4.26426 4.31007 4.35405 4.39624 4.4367 4.47551 4.5127 4.54834 4.58248 4.61518 4.64648
4.67645 4.70513 4.73257 4.75882 4.78393 4.80794 4.83089 4.85283 4.87381 4.89385 4.91312 4.93166 4.94937 4.96628 4.98244
4.99786 5.01259 5.02665 5.04007 5.05289 5.06512 5.07679 5.08793 5.09856 5.1087 5.11838 5.12761 5.13642 5.14482 5.15283
5.16048 5.16777 5.17472 5.18135 5.18768 5.19371 5.19946 5.20494 5.21017 5.21516 5.21991 #bodywt for gender,fleet: 1 / 2
 0 0.0223604 0.0373956 0.0600715 0.0923115 0.135296 0.188939 0.251705 0.320882 0.393156 0.465242 0.534367 0.598516
0.656473 0.707716 0.752254 0.790453 0.822886 0.850221 0.873141 0.892298 0.908281 0.92161 0.932732 0.942025 0.949807
0.956339 0.961838 0.966483 0.970421 0.97377 0.976631 0.979082 0.981192 0.983014 0.984593 0.985968 0.987168 0.988221
0.989146 0.989962 0.990685 0.991327 0.991899 0.99241 0.992868 0.993279 0.993649 0.993984 0.994286 0.994561 0.994811
0.995038 0.995246 0.995436 0.99561 0.99577 0.995917 0.996053 0.996178 0.996294 0.9964 0.9965 0.996591 0.996677 0.996756
0.99683 0.996899 0.996963 0.997023 0.997077 0.997125 0.99717 0.997212 0.997252 0.997289 0.997324 0.997357 0.997389
0.997418 0.997445 0.997471 0.997496 0.997519 0.997541 0.997561 0.997581 0.997599 0.997617 0.997633 0.997649 0.997664
0.997678 0.997691 0.997704 0.997715 0.997727 0.997737 0.997748 0.997757 0.997766 #selex for gender,fleet: 1 / 2
 0.0499363 0.1871 0.256177 0.331314 0.409105 0.487754 0.567013 0.647484 0.730011 0.815352 0.904037 0.996321 1.0922 1.19147
1.29374 1.39853 1.50531 1.6135 1.72258 1.83203 1.9414 2.05025 2.15824 2.26503 2.37037 2.47401 2.57576 2.67546 2.77297
2.86819 2.96102 3.05141 3.1393 3.22467 3.30748 3.38775 3.46547 3.54066 3.61333 3.68353 3.75128 3.81662 3.8796 3.94027
3.99867 4.05487 4.10892 4.16088 4.2108 4.25875 4.30478 4.34895 4.39132 4.43196 4.47092 4.50826 4.54404 4.5783 4.61112
4.64253 4.6726 4.70137 4.7289 4.75523 4.78042 4.8045 4.82752 4.84952 4.87055 4.89065 4.90997 4.92854 4.94628 4.96323
4.97941 4.99487 5.00962 5.02371 5.03716 5.04999 5.06225 5.07394 5.0851 5.09574 5.1059 5.1156 5.12484 5.13367 5.14208
5.15011 5.15777 5.16507 5.17203 5.17868 5.18501 5.19105 5.19681 5.2023 5.20754 5.21253 5.21729 #bodywt for gender,fleet: 1 / 3

85

0 0.0180548 0.0393366 0.078231 0.140048 0.225122 0.327555 0.437436 0.544592 0.641413 0.723816 0.790795 0.843376 0.883608 0.913831 0.936254 0.952761 0.964862 0.973725 0.980225 0.985005 0.988538 0.991163 0.993126 0.994605 0.995727 0.996585 0.997247 0.99776 0.998163 0.99848 0.998732 0.998934 0.999098 0.99923 0.999339 0.999428 0.999502 0.999564 0.999616 0.999659 0.999696 0.999728 0.999755 0.999778 0.999799 0.999816 0.999832 0.999845 0.999857 0.999867 0.999876 0.999885 0.999892 0.999898 0.999904 0.99991 0.999914 0.999919 0.999923 0.999926 0.999929 0.999932 0.999935 0.999937 0.99994 0.999942 0.999944 0.999946 0.999947 0.999949 0.99995 0.999951 0.999952 0.999953 0.999954 0.999955 0.999956 0.999956 0.999957 0.999958 0.999958 0.999959 0.999959 0.99996 0.99996 0.999961 0.999961 0.999962 0.999962 0.999963 0.999963 0.999963 0.999963 0.999964 0.999964 0.999964 0.999965 0.999965 0.999965 0.999965 #selex for gender,fleet: 1 / 3
0.0454756 0.16671 0.230449 0.304235 0.386699 0.476115 0.570667 0.668735 0.769061 0.870792 0.973412 1.07665 1.18037 1.28452 1.38905 1.4939 1.59898 1.70417 1.80932 1.91424 2.01875 2.12263 2.22568 2.32768 2.42844 2.52778 2.62551 2.72149 2.81558 2.90766 2.99763 3.08541 3.17093 3.25414 3.33501 3.4135 3.4896 3.56333 3.63467 3.70365 3.7703 3.83463 3.89669 3.95652 4.01416 4.06966 4.12307 4.17443 4.22381 4.27125 4.31682 4.36056 4.40254 4.44282 4.48144 4.51846 4.55395 4.58794 4.62051 4.65169 4.68154 4.71011 4.73744 4.7636 4.78861 4.81254 4.83541 4.85728 4.87818 4.89815 4.91737 4.93587 4.95354 4.97041 4.98653 5.00192 5.01662 5.03065 5.04404 5.05683 5.06903 5.08068 5.0918 5.1024 5.11252 5.12218 5.13139 5.14018 5.14857 5.15657 5.1642 5.17147 5.17841 5.18503 5.19134 5.19736 5.2031 5.20857 5.21379 5.21877 5.22351 #bodywt for gender,fleet: 1 / 4
0 0.0135812 0.0224077 0.0357859 0.055178 0.0819356 0.116963 0.160414 0.211543 0.268793 0.330056 0.39303 0.455535 0.515747 0.572304 0.624325 0.671358 0.713292 0.750267 0.782587 0.810653 0.834907 0.855797 0.87375 0.889163 0.902392 0.913753 0.923519 0.931928 0.939181 0.945452 0.950888 0.95561 0.959725 0.963321 0.966472 0.969241 0.971682 0.973839 0.975752 0.977452 0.978967 0.980322 0.981536 0.982626 0.983608 0.984495 0.985297 0.986024 0.986685 0.987287 0.987837 0.988339 0.988799 0.989221 0.989609 0.989966 0.990296 0.9906 0.990881 0.991141 0.991383 0.991607 0.991815 0.992009 0.992189 0.992358 0.992515 0.992661 0.992799 0.992922 0.993033 0.993137 0.993234 0.993326 0.993412 0.993494 0.99357 0.993642 0.99371 0.993774 0.993834 0.993891 0.993945 0.993996 0.994044 0.994089 0.994132 0.994172 0.994211 0.994247 0.994282 0.994314 0.994345 0.994375 0.994402 0.994429 0.994454 0.994478 0.9945 0.994521 #selex for gender,fleet: 1 / 4
0.0457223 0.168315 0.233239 0.30899 0.394542 0.488429 0.588866 0.693958 0.801945 0.911383 1.02123 1.13081 1.23976 1.3479 1.4552 1.56166 1.66731 1.77218 1.87627 1.97954 2.08193 2.18337 2.28374 2.38295 2.48086 2.57734 2.67228 2.76555 2.85704 2.94665 3.03429 3.11988 3.20335 3.28466 3.36375 3.4406 3.51519 3.58751 3.65756 3.72535 3.79089 3.85421 3.91534 3.97431 4.03115 4.08591 4.13864 4.18938 4.23817 4.28508 4.33015 4.37344 4.41499 4.45487 4.49312 4.5298 4.56497 4.59866 4.63095 4.66187 4.69148 4.71982 4.74695 4.7729 4.79773 4.82148 4.84419 4.86591 4.88667 4.9065 4.92561 4.94402 4.9616 4.9784 4.99444 5.00976 5.02439 5.03836 5.05169 5.06442 5.07657 5.08817 5.09923 5.10979 5.11987 5.12949 5.13866 5.14741 5.15576 5.16373 5.17132 5.17857 5.18548 5.19207 5.19836 5.20435 5.21007 5.21552 5.22072 5.22567 5.2304 #bodywt for gender,fleet: 1 / 5
0 0.00502433 0.00850213 0.0139824 0.0223217 0.0345376 0.0517055 0.0747868 0.104425 0.14077 0.183398 0.231344 0.283245 0.337524 0.392595 0.447012 0.499572 0.549368 0.595782 0.638459 0.677261 0.71222 0.743486 0.771288 0.795901 0.817619 0.836739 0.853547 0.868312 0.881279 0.892673 0.902691 0.911509 0.919283 0.926145 0.932215 0.937594 0.94237 0.94662 0.950409 0.953796 0.956829 0.959552 0.962001 0.964208 0.966203 0.968008 0.969645 0.971134 0.972489 0.973725 0.974855 0.975889 0.976838 0.97771 0.978511 0.97925 0.979932 0.980562 0.981145 0.981685 0.982186 0.982651 0.983084 0.983487 0.983862 0.984212 0.984539 0.984844 0.98513 0.985387 0.985618 0.985835 0.986038 0.986229 0.986409 0.986578 0.986737 0.986887 0.987029 0.987162 0.987288 0.987407 0.987519 0.987625 0.987725 0.98782 0.987909 0.987994 0.988074 0.98815 0.988222 0.98829 0.988354 0.988415 0.988473 0.988528 0.98858 0.98863 0.988677 0.988721 #selex for gender,fleet: 1 / 5
0.0469931 0.174791 0.242821 0.322488 0.412802 0.512223 0.618711 0.729936 0.843619 0.957852 1.07129 1.18313 1.29305 1.40101 1.50714 1.61167 1.71482 1.81678 1.91769 2.01767 2.11674 2.21491 2.31213 2.40834 2.50343 2.59731 2.68985 2.78094 2.87045 2.95828 3.04432 3.12849 3.21069 3.29088 3.36897 3.44495 3.51877 3.59041 3.65987 3.72713 3.79222 3.85514 3.91592 3.97457 4.03115 4.08567 4.13819 4.18875 4.23738 4.28415 4.32909 4.37227 4.41373 4.45352 4.4917 4.52832 4.56343 4.59707 4.62931 4.6602 4.68977 4.71808 4.74518 4.77112 4.79593 4.81966 4.84235 4.86405 4.8848 4.90463 4.92372 4.94212 4.95969 4.97648 4.99252 5.00783 5.02245 5.03641 5.04974 5.06247 5.07461 5.0862 5.09727 5.10783 5.1179 5.12751 5.13668 5.14543 5.15378 5.16174 5.16934 5.17658 5.18349 5.19008 5.19637 5.20236 5.20808 5.21353 5.21872 5.22368 5.2284 #bodywt for gender,fleet: 1 / 6
0 0.001636 0.00304305 0.00548639 0.00957969 0.0161753 0.0263561 0.0413468 0.0623306 0.090205 0.125353 0.16751 0.215773 0.268737 0.324708 0.381927 0.438767 0.493852 0.546129 0.59487 0.639647 0.680282 0.716789 0.749325 0.778137 0.803523 0.825808 0.845319 0.862371 0.877259 0.890253 0.901508 0.911508 0.920175 0.927764 0.934421 0.940271 0.945422 0.949966 0.953985 0.957547 0.960711 0.963529 0.966044 0.968293 0.97031 0.972123 0.973756 0.97523 0.976563 0.977771 0.978869 0.979868 0.980779 0.981611 0.982373 0.983071 0.983712 0.984302 0.984845 0.985346 0.985809 0.986237 0.986634 0.987002 0.987343 0.987661 0.987957 0.988232 0.988489 0.988718 0.988922 0.989112 0.989291 0.989459 0.989616 0.989764 0.989903 0.990033 0.990156 0.990272 0.990381 0.990484 0.99058 0.990672 0.990758 0.99084 0.990917 0.99099 0.991058 0.991123 0.991185 0.991243 0.991298 0.991351 0.9914 0.991447 0.991492 0.991534 0.991574 0.991612 #selex for gender,fleet: 1 / 6
0.0534865 0.18395 0.251674 0.328172 0.411742 0.500847 0.594312 0.691359 0.791513 0.894485 1.00007 1.1081 1.21834 1.33055 1.44442 1.55962 1.67579 1.79254 1.9095 2.02629 2.14258 2.25802 2.37233 2.48522 2.59647 2.70585 2.81319 2.91833 3.02115 3.12153 3.21939 3.31467 3.40732 3.4973 3.58461 3.66923 3.75117 3.83045 3.90709 3.98111 4.05257 4.12149 4.18794 4.25195 4.31359 4.37291 4.42997 4.48483 4.53755 4.58819 4.63683 4.68351 4.7283 4.77126 4.81246 4.85196 4.88981 4.92608 4.96082 4.99409 5.02594 5.05643 5.0856 5.11352 5.14023 5.16578 5.19021 5.21357 5.2359 5.25725 5.27778 5.29752 5.31639 5.33441 5.35163 5.36808 5.38379 5.3988 5.41313 5.42681 5.43987 5.45235 5.46425 5.47562 5.48647 5.49682 5.5067 5.51613 5.52513 5.53372 5.54191 5.54973 5.55719 5.56431 5.5711 5.57757 5.58375 5.58964 5.59527 5.60063 5.60574 #bodywt for gender,fleet: 2 / 1
0 0.0583233 0.0901966 0.133378 0.188145 0.253125 0.325459 0.401432 0.477253 0.549694 0.616436 0.676129 0.728264 0.772954 0.810718 0.842291 0.868488 0.890115 0.907916 0.922549 0.93458 0.944482 0.952651 0.959407 0.965013 0.969683 0.973588 0.976867 0.979632 0.981974 0.983966 0.985667 0.987127 0.988385 0.989473 0.990419 0.991243 0.991964 0.992598 0.993157 0.993651 0.994089 0.99448 0.994829 0.995141 0.995422 0.995674 0.996109 0.996466 0.996621 0.996763 0.996892 0.997011 0.99712 0.99722 0.997313 0.997398 0.997477 0.99755 0.997617 0.99768 0.997738 0.997792 0.997843 0.99789 0.997934 0.997975 0.998013 0.998048 0.998079 0.998108 0.998135 0.998161 0.998185 0.998207 0.998229 0.998249 0.998268 0.998286 0.998303 0.998319 0.998334 0.998348 0.998361 0.998374 0.998386 0.998398 0.998408 0.998419 0.998428 0.998437 0.998446 0.998454 0.998462 0.998469 0.998477 0.998483 0.99849 0.998496 #selex for gender,fleet: 2 / 1

0.0548002 0.191155 0.262755 0.344021 0.432794 0.526887 0.624524 0.724532 0.826296 0.929588 1.03439 1.14076 1.24873
1.35829 1.46932 1.58166 1.69506 1.80922 1.9238 2.03847 2.15288 2.2667 2.3796 2.49129 2.60152 2.71004 2.81666 2.9212 3.0235
3.12346 3.22097 3.31596 3.40836 3.49814 3.58528 3.66975 3.75157 3.83075 3.9073 3.98126 4.05265 4.12153 4.18793 4.25191
4.31352 4.37281 4.42985 4.48469 4.5374 4.58803 4.63665 4.68332 4.72811 4.77106 4.81226 4.85175 4.8896 4.92587 4.9606
4.99387 5.02572 5.0562 5.08538 5.1133 5.14001 5.16555 5.18998 5.21334 5.23567 5.25702 5.27755 5.29729 5.31616 5.33418
5.3514 5.36785 5.38356 5.39857 5.4129 5.42658 5.43964 5.45212 5.46402 5.47539 5.48624 5.49659 5.50647 5.5159 5.5249 5.53349
5.54168 5.5495 5.55696 5.56408 5.57087 5.57734 5.58352 5.58942 5.59504 5.6004 5.60551 #bodywt for gender,fleet: 2 / 2
 0 0.0227805 0.038974 0.063819 0.099546 0.147423 0.207116 0.276528 0.352225 0.430204 0.506684 0.578647 0.644073 0.701912
0.751908 0.794367 0.829937 0.859435 0.88372 0.903617 0.919873 0.933138 0.943966 0.952814 0.960062 0.966015 0.970921
0.97498 0.978352 0.981166 0.983523 0.985508 0.987186 0.988612 0.989828 0.990871 0.991768 0.992544 0.993217 0.993804
0.994317 0.994767 0.995164 0.995515 0.995826 0.996103 0.996351 0.996572 0.996771 0.99695 0.997111 0.997257 0.99739
0.99751 0.99762 0.99772 0.997812 0.997896 0.997973 0.998043 0.998109 0.998169 0.998225 0.998276 0.998324 0.998368
0.998409 0.998447 0.998483 0.998516 0.998546 0.998572 0.998597 0.99862 0.998642 0.998662 0.998681 0.998699 0.998716
0.998732 0.998747 0.998761 0.998774 0.998787 0.998799 0.99881 0.99882 0.99883 0.99884 0.998849 0.998857 0.998865 0.998873
0.99888 0.998887 0.998893 0.998899 0.998905 0.99891 0.998916 0.998921 #selex for gender,fleet: 2 / 2
 0.0596831 0.212687 0.289828 0.372475 0.456926 0.541621 0.626744 0.71328 0.802343 0.894837 0.991334 1.09205 1.19688
1.30548 1.41731 1.53173 1.64809 1.76572 1.88402 2.00242 2.12043 2.23763 2.35365 2.46816 2.58092 2.69169 2.80029 2.90658
3.01042 3.11172 3.21041 3.30643 3.39974 3.49032 3.57815 3.66324 3.74561 3.82527 3.90224 3.97658 4.04831 4.11749 4.18416
4.24838 4.31021 4.3697 4.42691 4.48191 4.53476 4.58552 4.63426 4.68104 4.72593 4.76898 4.81026 4.84983 4.88775 4.92408
4.95887 4.99219 5.02409 5.05463 5.08385 5.11181 5.13855 5.16414 5.1886 5.21199 5.23435 5.25572 5.27628 5.29604 5.31492
5.33296 5.35019 5.36665 5.38238 5.39739 5.41173 5.42543 5.4385 5.45098 5.4629 5.47427 5.48513 5.49549 5.50538 5.51482
5.52382 5.53242 5.54061 5.54844 5.5559 5.56302 5.56982 5.5763 5.58248 5.58838 5.59401 5.59937 5.60449 #bodywt for
gender,fleet: 2 / 3
 0 0.0186543 0.0419513 0.085274 0.154396 0.248782 0.36055 0.47772 0.588879 0.686259 0.76641 0.829291 0.876864 0.911907
0.937234 0.955307 0.968105 0.977135 0.983504 0.988006 0.991203 0.993486 0.995128 0.996318 0.997189 0.997831 0.998309
0.998668 0.998941 0.99915 0.999311 0.999436 0.999535 0.999613 0.999675 0.999725 0.999766 0.999799 0.999827 0.999849
0.999868 0.999884 0.999897 0.999909 0.999918 0.999926 0.999933 0.99994 0.999945 0.999949 0.999954 0.999957 0.99996
0.999963 0.999966 0.999968 0.99997 0.999971 0.999973 0.999974 0.999976 0.999977 0.999978 0.999979 0.99998 0.999981
0.999981 0.999982 0.999983 0.999983 0.999984 0.999984 0.999985 0.999985 0.999985 0.999986 0.999986 0.999986 0.999987
0.999987 0.999987 0.999987 0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999989 0.999989 0.999989
0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.999989 0.99999 #selex for gender,fleet: 2 / 3
 0.054417 0.189927 0.261739 0.344097 0.435227 0.533045 0.635512 0.740937 0.84813 0.956378 1.06533 1.17487 1.28498 1.39568
1.50699 1.61885 1.73117 1.84381 1.95656 2.0692 2.1815 2.29318 2.40399 2.51369 2.62202 2.72879 2.83379 2.93684 3.0378
3.13654 3.23294 3.32694 3.41845 3.50743 3.59384 3.67768 3.75892 3.83758 3.91366 3.98719 4.05821 4.12674 4.19283 4.25653
4.31789 4.37695 4.43377 4.48842 4.54095 4.59142 4.6399 4.68643 4.7311 4.77394 4.81503 4.85443 4.89219 4.92837 4.96303
4.99622 5.028 5.05843 5.08755 5.11541 5.14207 5.16757 5.19196 5.21528 5.23757 5.25888 5.27938 5.29911 5.31795 5.33596
5.35316 5.36959 5.38529 5.40028 5.41459 5.42826 5.44131 5.45377 5.46566 5.47702 5.48786 5.4982 5.50807 5.51749 5.52648
5.53506 5.54325 5.55106 5.55851 5.56562 5.57241 5.57888 5.58505 5.59094 5.59656 5.60191 5.60702 #bodywt for gender,fleet: 2 /
4
 0 0.013827 0.0233353 0.0380205 0.0596192 0.0897098 0.129275 0.178327 0.235756 0.299492 0.366884 0.435157 0.50181
0.564862 0.62295 0.675305 0.721655 0.762103 0.797003 0.826853 0.852218 0.873674 0.891768 0.907002 0.919821 0.930613
0.939708 0.947387 0.953886 0.959399 0.964092 0.968097 0.971528 0.974478 0.977021 0.979223 0.981136 0.982803 0.984261
0.985541 0.986668 0.987664 0.988547 0.989331 0.990031 0.990656 0.991217 0.991721 0.992175 0.992586 0.992958 0.993295
0.993603 0.993882 0.994138 0.994372 0.994587 0.994784 0.994965 0.995132 0.995287 0.995429 0.995561 0.995684 0.995797
0.995903 0.996001 0.996092 0.996177 0.996257 0.996328 0.996392 0.996451 0.996507 0.99656 0.996609 0.996655 0.996699
0.99674 0.996778 0.996815 0.996849 0.996881 0.996912 0.996941 0.996968 0.996993 0.997018 0.997041 0.997062 0.997083
0.997103 0.997121 0.997138 0.997155 0.997171 0.997186 0.9972 0.997213 0.997226 0.997238 #selex for gender,fleet: 2 / 4
 0.0547086 0.191745 0.264917 0.349534 0.444196 0.54705 0.655975 0.768855 0.883861 0.999619 1.11524 1.23023 1.34443 1.4578
1.57044 1.68244 1.79388 1.9048 2.01521 2.12504 2.23422 2.34261 2.45008 2.55646 2.66158 2.76526 2.86735 2.96769 3.06613
3.16255 3.25684 3.3489 3.43866 3.52605 3.61103 3.69415 3.77363 3.85123 3.92636 3.99903 4.06926 4.13709 4.20254 4.26566
4.32649 4.38507 4.44147 4.49572 4.54789 4.59803 4.6462 4.69246 4.73686 4.77948 4.82035 4.85955 4.89713 4.93314 4.96764
5.00069 5.03234 5.06264 5.09164 5.1194 5.14596 5.17136 5.19566 5.2189 5.24112 5.26236 5.28281 5.30248 5.32129 5.33925
5.35642 5.37281 5.38847 5.40343 5.41772 5.43136 5.44438 5.45682 5.46869 5.48002 5.49084 5.50116 5.51101 5.52042 5.52939
5.53795 5.54612 5.55392 5.56136 5.56846 5.57523 5.58169 5.58785 5.59372 5.59933 5.60468 5.60978 #bodywt for gender,fleet: 2 /
5
 0 0.00512116 0.00887781 0.014927 0.0243048 0.0382482 0.0580532 0.0848422 0.119294 0.16143 0.210536 0.265245 0.323748
0.384061 0.444272 0.50273 0.558144 0.609618 0.656626 0.698953 0.736628 0.769851 0.798932 0.824244 0.846183 0.865142
0.881495 0.895587 0.907729 0.918194 0.927223 0.935025 0.941778 0.947635 0.952727 0.957165 0.961043 0.96444 0.967425
0.970055 0.972378 0.974435 0.976263 0.977891 0.979346 0.980647 0.981816 0.982868 0.983816 0.984674 0.985451 0.986156
0.986799 0.987384 0.987919 0.988408 0.988857 0.98927 0.989649 0.989998 0.990321 0.990619 0.990895 0.99115 0.991388
0.991608 0.991813 0.992004 0.992182 0.992348 0.992496 0.992629 0.992753 0.992869 0.992979 0.993081 0.993178 0.993268
0.993354 0.993434 0.99351 0.993581 0.993648 0.993712 0.993772 0.993828 0.993882 0.993932 0.99398 0.994025 0.994068
0.994108 0.994147 0.994183 0.994217 0.99425 0.994281 0.99431 0.994338 0.994364 0.994389 #selex for gender,fleet: 2 / 5
 0.05621 0.19903 0.275632 0.364522 0.4643 0.572971 0.688059 0.806916 0.92714 1.04691 1.16511 1.28124 1.39522 1.50725
1.61765 1.72675 1.83484 1.94216 2.04885 2.155 2.26061 2.36563 2.46995 2.57345 2.67597 2.77734 2.87738 2.97592 3.07281
3.16789 3.26102 3.3521 3.44103 3.52772 3.61211 3.69415 3.7738 3.85106 3.9259 3.99834 4.06838 4.13605 4.20138 4.26439
4.32513 4.38365 4.43999 4.49421 4.54635 4.59647 4.64462 4.69087 4.73527 4.77788 4.81876 4.85796 4.89554 4.93156 4.96608
4.99914 5.03079 5.06111 5.09012 5.11789 5.14446 5.16987 5.19418 5.21743 5.23966 5.26091 5.28136 5.30105 5.31985 5.33782
5.35499 5.3714 5.38706 5.40202 5.41631 5.42996 5.44298 5.45542 5.4673 5.47863 5.48945 5.49978 5.50964 5.51904 5.52802
5.53659 5.54476 5.55256 5.56 5.5671 5.57387 5.58033 5.5865 5.59237 5.59798 5.60333 5.60843 #bodywt for gender,fleet: 2 / 6

0 0.00167521 0.00320641 0.00593593 0.0106158 0.0183039 0.0303475 0.0482511 0.0734158 0.106809 0.148679 0.19842 0.254637 0.315377 0.378433 0.441644 0.503123 0.561387 0.615403 0.664562 0.708618 0.747603 0.781748 0.811411 0.837017 0.859016 0.877851 0.893941 0.90767 0.919379 0.929369 0.9379 0.945196 0.951447 0.956815 0.961435 0.965422 0.968873 0.971868 0.974476 0.976753 0.978747 0.980499 0.982043 0.983407 0.984617 0.985692 0.98665 0.987507 0.988275 0.988964 0.989586 0.990147 0.990655 0.991115 0.991534 0.991916 0.992264 0.992582 0.992874 0.993142 0.993388 0.993614 0.993823 0.994016 0.994195 0.99436 0.994514 0.994656 0.994789 0.994906 0.995009 0.995106 0.995196 0.995281 0.99536 0.995435 0.995505 0.99557 0.995632 0.99569 0.995744 0.995795 0.995844 0.995889 0.995932 0.995973 0.996011 0.996047 0.996081 0.996114 0.996144 0.996173 0.9962 0.996226 0.996251 0.996274 0.996296 0.996317 0.996336 0.996355 #selex for gender,fleet: 2 / 6
 0.0478637 #mean M for year Yinit: 2009 sex: 1
 53.578 50.0548 46.7039 43.3803 40.2643 37.2667 34.4277 31.8035 29.8727 27.8479 28.1686 27.4961 28.7867 29.2836 30.0309 29.9896 30.6806 31.2329 31.0363 29.3859 28.2261 26.3191 24.1319 21.8224 19.7653 17.654 15.96 14.4237 12.8713 11.3326 10.0331 8.87134 7.77349 6.82522 5.99438 5.28487 4.67162 4.1485 3.6902 3.29609 2.95681 2.66096 2.40589 2.18588 1.9941 1.82555 1.67862 1.54869 1.43302 1.3309 1.24 1.1587 1.08435 1.01617 0.953633 0.895756 0.842188 0.793059 0.747812 0.705508 0.666111 0.629876 0.595779 0.565766 0.53793 0.510346 0.483638 0.458202 0.434261 0.411646 0.390274 0.370108 0.351058 0.333088 0.316107 0.300031 0.284829 0.270533 0.256993 0.244218 0.232129 0.22069 0.209875 0.199627 0.189911 0.180684 0.17193 0.163626 0.155748 0.148269 0.141165 0.134432 0.128029 0.121931 0.116119 0.110592 0.105336 0.100336 0.09558 0.0910543 1.84944 #numbers for year Yinit: 2009 sex: 1
 0.0470853 #mean M for year Yinit: 2009 sex: 2
 53.578 50.0938 46.7766 43.4811 40.3881 37.4083 34.5824 31.9674 30.0453 28.0252 28.3635 27.6994 29.0096 29.5135 30.2583 30.1926 30.8435 31.3297 31.0387 29.2752 27.9897 25.9606 23.6654 21.2707 19.1478 17.0013 15.2853 13.7461 12.2152 10.7183 9.46438 8.35296 7.31101 6.41626 5.63621 4.97292 4.40173 3.9161 3.49168 3.12751 2.81454 2.54182 2.3068 2.10412 1.92729 1.77164 1.63576 1.51532 1.40775 1.31253 1.22749 1.15115 1.081 1.01636 0.956769 0.901332 0.849771 0.802284 0.758375 0.717149 0.678613 0.643067 0.6095 0.579931 0.552433 0.525046 0.498419 0.472974 0.448953 0.426197 0.404634 0.384238 0.36493 0.346686 0.329419 0.313048 0.29755 0.28296 0.269125 0.256056 0.243673 0.231941 0.220835 0.210296 0.200289 0.190772 0.181729 0.173139 0.164979 0.157221 0.149842 0.14284 0.136171 0.129813 0.123746 0.117969 0.112469 0.107231 0.102243 0.0974916 2.01619 #numbers for year Yinit: 2009 sex: 2
 44.6387 42.0017 39.2328 39.7759 38.9245 40.8608 41.6796 42.8588 42.9116 44.0091 44.9055 44.7195 42.4268 40.8288 38.1372 35.0254 31.7225 28.774 25.736 23.2967 21.0797 18.8322 16.5983 14.7092 13.0173 11.4155 10.0301 8.81488 7.77603 6.87726 6.1099 5.43703 4.85794 4.35904 3.92369 3.54811 3.22399 2.9413 2.69275 2.476 2.28429 2.11357 1.96282 1.82864 1.70861 1.59885 1.49821 1.4059 1.32048 1.24143 1.16895 1.10219 1.03979 0.981682 0.928242 0.877961 0.833705 0.792663 0.751999 0.712631 0.675142 0.639859 0.606535 0.575046 0.545336 0.517271 0.490799 0.465785 0.442103 0.419708 0.398648 0.378701 0.35988 0.342067 0.325213 0.309277 0.294177 0.27986 0.266261 0.253361 0.241123 0.229513 0.218491 0.208021 0.198098 0.18866 0.179674 0.171108 0.162962 0.155216 0.147848 0.140838 0.134169 0.127822 0.121782 0.116034 0.110562 0.105352 0.100392 0.0956692 1.9474 #numbers for year Ydeclare: 2002 sex: 1
 44.6387 42.0344 39.2936 39.8674 39.0406 41.0048 41.8382 43.0163 43.0399 44.0804 44.882 44.5633 42.1172 40.3439 37.4849 34.2268 30.8104 27.7752 24.6947 22.2298 20.0143 17.8041 15.6372 13.8197 12.2062 10.6909 9.3882 8.25129 7.28371 6.44977 5.74023 5.11964 4.58679 4.12854 3.72898 3.38449 3.08723 2.82779 2.59934 2.39985 2.22299 2.06502 1.92517 1.80027 1.68816 1.58515 1.49023 1.40275 1.32138 1.24571 1.17603 1.11161 1.05113 0.994608 0.942477 0.893253 0.849894 0.809578 0.769429 0.7304 0.693106 0.657903 0.624558 0.592964 0.563083 0.534797 0.50807 0.482775 0.458793 0.436087 0.414711 0.39444 0.375291 0.357146 0.339954 0.323676 0.30823 0.293565 0.279614 0.266361 0.253769 0.241807 0.230436 0.219619 0.209355 0.199579 0.190259 0.181364 0.172897 0.164835 0.157157 0.149845 0.142881 0.136247 0.129927 0.123906 0.118168 0.112701 0.10749 0.102523 2.1238 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
345.67 345.67 345.627 345.556 345.472 345.432 345.387 345.344 345.307 345.268 345.217 345.126 345.016 344.887 344.765 344.625 344.458 344.304 344.093 343.945 343.762 343.525 343.275 343.049 342.823 342.614 342.387 342.136 341.898 341.429 340.416 338.493 336.807 336.214 335.453 334.92 334.342 333.616 332.999 332.511 331.903 331.112 330.238 329.189 327.932 326.844 325.907 325.175 324.301 323.328 322.48 321.389 320.155 318.954 317.654 315.768 313.657 311.265 307.937 304.669 300.999 297.406 293.022 288.446 280.791 272.632 265.926 255.871 243.575 232.336 225.084 216.341 209.696 202.002 193.013 180.715 173.121 159.473 144.651 131.47 123.137 112.834 104.612 94.6358 91.9388 86.3854 88.1219 89.2775 92.0018 94.8451 97.6193 100.209 102.804 105.018 107.156 #Recruits

1.47666e+009 1.47666e+009 1.47627e+009 1.47563e+009 1.47489e+009 1.47452e+009 1.47412e+009 1.47374e+009
1.47341e+009 1.47306e+009 1.4726e+009 1.47179e+009 1.47081e+009 1.46966e+009 1.46857e+009 1.46733e+009 1.46583e+009
1.46447e+009 1.46259e+009 1.46128e+009 1.45966e+009 1.45756e+009 1.45536e+009 1.45337e+009 1.45138e+009 1.44953e+009
1.44754e+009 1.44534e+009 1.44325e+009 1.43916e+009 1.43035e+009 1.41378e+009 1.39941e+009 1.39439e+009 1.38799e+009
1.38351e+009 1.37867e+009 1.37263e+009 1.3675e+009 1.36347e+009 1.35847e+009 1.35197e+009 1.34484e+009 1.33632e+009
1.32619e+009 1.31748e+009 1.31003e+009 1.30423e+009 1.29735e+009 1.28972e+009 1.28312e+009 1.27466e+009 1.26516e+009
1.25599e+009 1.24613e+009 1.23195e+009 1.21627e+009 1.19873e+009 1.17472e+009 1.15158e+009 1.12611e+009 1.10165e+009
1.07247e+009 1.04274e+009 9.94608e+008 9.45402e+008 9.06477e+008 8.50536e+008 7.85792e+008 7.29864e+008 6.9531e+008
6.55151e+008 6.25667e+008 5.926e+008 5.55345e+008 5.06633e+008 4.77783e+008 4.28132e+008 3.77185e+008 3.34275e+008
3.08234e+008 2.77132e+008 2.53138e+008 2.24961e+008 2.17513e+008 2.02398e+008 2.07093e+008 2.10233e+008 2.17686e+008
2.25542e+008 2.33283e+008 2.40578e+008 2.47955e+008 2.54304e+008 2.60485e+008 #SpawnBio
0.344 0.5 0 # spawn-recr steepness, sigmaR, autocorr
high catch mid steepness vector 1
 0 0 23.916 90.7093 310.887 954.418 2590.73 6168.54 12906.8 23977.3 40140.3 61535.3 87709.7 117817 150861 185900 222156
259055 296211 333391 370465 407374 444091 480608 516920 553017 588883 624493 659817 694820 729463 763703 797499
830811 863598 895824 927454 958457 988807 1.01848e+006 1.04745e+006 1.07571e+006 1.10324e+006 1.13003e+006
1.15607e+006 1.18137e+006 1.20591e+006 1.2297e+006 1.25275e+006 1.27505e+006 1.29662e+006 1.31746e+006 1.33759e+006
1.35701e+006 1.37574e+006 1.3938e+006 1.41119e+006 1.42793e+006 1.44405e+006 1.45954e+006 1.47444e+006 1.48876e+006
1.50251e+006 1.51571e+006 1.52838e+006 1.54053e+006 1.55219e+006 1.56337e+006 1.57408e+006 1.58435e+006 1.59418e+006
1.60383e+006 1.61308e+006 1.62193e+006 1.6304e+006 1.63851e+006 1.64626e+006 1.65368e+006 1.66077e+006 1.66756e+006
1.67404e+006 1.68024e+006 1.68616e+006 1.69181e+006 1.69722e+006 1.70238e+006 1.70731e+006 1.71202e+006 1.71651e+006
1.72081e+006 1.7249e+006 1.72881e+006 1.73255e+006 1.73611e+006 1.73951e+006 1.74275e+006 1.74585e+006 1.7488e+006
1.75161e+006 1.7543e+006 1.75686e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0435892 0.156464 0.216278 0.284799 0.360581 0.442178 0.52838 0.618298 0.711336 0.807106 0.90534 1.00582 1.10833 1.21264
1.31848 1.42556 1.53356 1.64216 1.75102 1.85981 1.96821 2.07593 2.18268 2.28821 2.39228 2.49469 2.59527 2.69386 2.79032
2.88456 2.97647 3.066 3.15308 3.23769 3.31979 3.39938 3.47646 3.55103 3.62312 3.69274 3.75995 3.82476 3.88723 3.9474
4.00533 4.06105 4.11464 4.16615 4.21562 4.26313 4.30874 4.35249 4.39446 4.43469 4.47326 4.51021 4.5456 4.5795 4.61194 4.643
4.67272 4.70114 4.72833 4.75434 4.77919 4.80296 4.82567 4.84737 4.86811 4.88791 4.90696 4.92526 4.94274 4.95944 4.97537
4.99058 5.0051 5.01896 5.03219 5.0448 5.05684 5.06833 5.07929 5.08974 5.09972 5.10923 5.1183 5.12695 5.13519 5.14306
5.15056 5.15771 5.16453 5.17103 5.17723 5.1813 5.18877 5.19413 5.19925 5.20413 5.20878 #bodywt for gender,fleet: 1 / 1
 0 0.0507784 0.0783153 0.115886 0.164112 0.222258 0.288225 0.358965 0.431115 0.501589 0.567968 0.628648 0.682792 0.730189
0.771068 0.80593 0.835417 0.860216 0.880996 0.898374 0.912897 0.925041 0.935208 0.943739 0.950915 0.956969 0.962093
0.966446 0.970157 0.973333 0.976061 0.978413 0.980444 0.982218 0.983761 0.985111 0.986296 0.987341 0.988264 0.989084
0.989812 0.990463 0.991045 0.991567 0.992037 0.992462 0.992845 0.993193 0.993508 0.993796 0.994058 0.994298 0.994518
0.994719 0.994905 0.995075 0.995232 0.995378 0.995512 0.995636 0.995751 0.995859 0.995958 0.996051 0.996137 0.996218
0.996293 0.996363 0.996429 0.99649 0.996545 0.996595 0.996642 0.996686 0.996728 0.996767 0.996804 0.996838 0.996871
0.996902 0.996931 0.996958 0.996984 0.997008 0.997031 0.997053 0.997074 0.997093 0.997112 0.997129 0.997146 0.997162
0.997176 0.99719 0.997204 0.997216 0.997228 0.99724 0.997251 0.997261 0.997271 #selex for gender,fleet: 1 / 1
 0.0446395 0.162385 0.225511 0.298251 0.378867 0.465395 0.556059 0.649533 0.744989 0.841999 0.940392 1.04012 1.14117
1.24351 1.34705 1.45166 1.55715 1.66328 1.76978 1.87637 1.98276 2.08864 2.19376 2.29783 2.40063 2.50193 2.60153 2.69927
2.795 2.8886 2.97996 3.06901 3.15568 3.23993 3.32173 3.40105 3.47789 3.55226 3.62418 3.69365 3.76072 3.82542 3.88779
3.94787 4.00572 4.06138 4.11491 4.16636 4.21579 4.26325 4.30882 4.35254 4.39448 4.43469 4.47323 4.51016 4.54553 4.57941
4.61184 4.64288 4.67259 4.701 4.72818 4.75417 4.77903 4.80278 4.82548 4.84718 4.86791 4.88771 4.90675 4.92505 4.94253
4.95922 4.97515 4.99036 5.00488 5.01873 5.03195 5.04457 5.05661 5.06809 5.07905 5.0895 5.09947 5.10898 5.11805 5.1267
5.13494 5.14281 5.15031 5.15746 5.16427 5.17077 5.17697 5.18288 5.18851 5.19387 5.19899 5.20387 5.20851 #bodywt for
gender,fleet: 1 / 2
 0 0.0198846 0.0337003 0.0548587 0.0854087 0.126751 0.179055 0.240994 0.309952 0.382585 0.455488 0.525727 0.591127
0.650344 0.702766 0.748352 0.787446 0.82062 0.848554 0.87195 0.891476 0.907743 0.921287 0.93257 0.941982 0.949849
0.956442 0.961984 0.966658 0.970613 0.973973 0.976838 0.979291 0.981398 0.983216 0.98479 0.986158 0.987352 0.988397
0.989316 0.990125 0.990841 0.991477 0.992042 0.992547 0.992999 0.993405 0.993771 0.9941 0.994399 0.994669 0.994915
0.995139 0.995343 0.99553 0.995701 0.995858 0.996002 0.996135 0.996258 0.996371 0.996476 0.996573 0.996663 0.996746
0.996824 0.996896 0.996964 0.997027 0.997085 0.997138 0.997185 0.997229 0.99727 0.997309 0.997345 0.99738 0.997412
0.997442 0.99747 0.997497 0.997523 0.997547 0.997569 0.99759 0.99761 0.997629 0.997647 0.997664 0.99768 0.997696 0.99771
0.997724 0.997736 0.997749 0.99776 0.997771 0.997781 0.997791 0.997801 0.99781 #selex for gender,fleet: 1 / 2
 0.0485258 0.180537 0.249347 0.324913 0.403601 0.483273 0.563443 0.644613 0.727622 0.813262 0.90211 0.994475 1.0904 1.1897
1.29202 1.3969 1.5038 1.61215 1.72143 1.8311 1.9407 2.0498 2.15803 2.26507 2.37064 2.47449 2.57644 2.67632 2.77398 2.86932
2.96225 3.05271 3.14065 3.22604 3.30885 3.38909 3.46676 3.54187 3.61446 3.68454 3.75215 3.81734 3.88016 3.94065 3.99886
4.05486 4.10869 4.16042 4.21011 4.25781 4.3036 4.34752 4.38963 4.43001 4.46871 4.50578 4.54129 4.57529 4.60784 4.63898
4.66879 4.6973 4.72456 4.75064 4.77556 4.79939 4.82216 4.84391 4.8647 4.88456 4.90364 4.92198 4.93949 4.95621 4.97217
4.98741 5.00195 5.01583 5.02907 5.04171 5.05377 5.06528 5.07625 5.08672 5.09671 5.10623 5.11532 5.12398 5.13224 5.14012
5.14763 5.15479 5.16162 5.16813 5.17434 5.18025 5.18589 5.19127 5.19639 5.20128 5.20593 #bodywt for gender,fleet: 1 / 3
 0 0.0154827 0.0342029 0.0692072 0.126307 0.206964 0.306426 0.415347 0.523412 0.622441 0.707689 0.777617 0.832914
0.875472 0.907591 0.931508 0.949166 0.962142 0.971663 0.978654 0.983803 0.987612 0.990444 0.992563 0.99416 0.995373
0.996301 0.997016 0.997571 0.998007 0.99835 0.998623 0.998842 0.999019 0.999163 0.99928 0.999377 0.999457 0.999524
0.999581 0.999628 0.999668 0.999703 0.999732 0.999758 0.999779 0.999799 0.999815 0.99983 0.999843 0.999854 0.999864
0.999873 0.999881 0.999888 0.999895 0.9999 0.999906 0.99991 0.999915 0.999918 0.999922 0.999925 0.999928 0.999931
0.999933 0.999936 0.999938 0.99994 0.999941 0.999943 0.999944 0.999946 0.999947 0.999948 0.999949 0.99995 0.999951
0.999951 0.999952 0.999953 0.999954 0.999954 0.999955 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958
0.999959 0.999959 0.999959 0.99996 0.99996 0.99996 0.99996 0.999961 0.999961 0.999961 #selex for gender,fleet: 1 / 3

0.0444355 0.161822 0.225257 0.299032 0.381769 0.471677 0.566838 0.665521 0.766386 0.868533 0.971441 1.07485 1.17866 1.28284 1.38737 1.4922 1.59728 1.70249 1.80769 1.91268 2.01729 2.1213 2.22448 2.32664 2.42756 2.52706 2.62496 2.72109 2.81532 2.90753 2.9976 3.08547 3.17106 3.25431 3.33519 3.41368 3.48977 3.56345 3.63473 3.70362 3.77016 3.83438 3.8963 3.95598 4.01345 4.06877 4.12198 4.17314 4.2223 4.26953 4.31487 4.35838 4.40012 4.44015 4.47852 4.5153 4.55053 4.58427 4.61658 4.6475 4.6771 4.70541 4.7325 4.7584 4.78317 4.80685 4.82948 4.85111 4.87177 4.89152 4.9105 4.92877 4.94621 4.96286 4.97876 4.99394 5.00842 5.02225 5.03545 5.04804 5.06005 5.07152 5.08245 5.09288 5.10283 5.11232 5.12138 5.13001 5.13824 5.14609 5.15357 5.16071 5.16752 5.174 5.18019 5.18608 5.1917 5.19706 5.20217 5.20704 5.21168 #bodywt for gender,fleet: 1 / 4
 0 0.0114939 0.01936 0.0315438 0.04958 0.0749674 0.108811 0.151466 0.202334 0.259902 0.322011 0.386228 0.450214 0.511984 0.57005 0.623439 0.671646 0.714541 0.752266 0.785145 0.813602 0.838109 0.859139 0.877146 0.892548 0.905718 0.916986 0.926638 0.934919 0.942038 0.948172 0.953471 0.958062 0.962049 0.965524 0.96856 0.971222 0.973562 0.975625 0.97745 0.979069 0.980509 0.981793 0.982942 0.983972 0.984898 0.985733 0.986487 0.98717 0.98779 0.988353 0.988867 0.989336 0.989765 0.990158 0.99052 0.990852 0.991157 0.991439 0.9917 0.991941 0.992165 0.992372 0.992564 0.992743 0.99291 0.993065 0.99321 0.993345 0.993471 0.993585 0.993686 0.993782 0.993871 0.993955 0.994034 0.994109 0.994178 0.994244 0.994306 0.994365 0.99442 0.994472 0.994521 0.994567 0.994611 0.994652 0.994692 0.994729 0.994764 0.994797 0.994828 0.994858 0.994886 0.994913 0.994938 0.994962 0.994984 0.995006 0.995026 0.995046 #selex for gender,fleet: 1 / 4
 0.0445158 0.162545 0.226745 0.301992 0.387318 0.481305 0.582179 0.688016 0.796984 0.907548 1.01857 1.12931 1.23933 1.34845 1.45659 1.56378 1.67005 1.77544 1.87994 1.98354 2.0862 2.18784 2.28837 2.38768 2.48566 2.58218 2.67712 2.77037 2.86182 2.95137 3.03892 3.12441 3.20776 3.28893 3.36787 3.44455 3.51896 3.59108 3.66093 3.7285 3.79382 3.8569 3.91773 3.97649 4.03307 4.08756 4.14001 4.19047 4.23898 4.2856 4.33038 4.37337 4.41463 4.45421 4.49216 4.52855 4.56342 4.59682 4.62882 4.65945 4.68877 4.71683 4.74367 4.76935 4.79391 4.81739 4.83983 4.86129 4.88179 4.90137 4.92024 4.9384 4.95574 4.9723 4.98812 5.00321 5.01762 5.03138 5.0445 5.05703 5.06898 5.08039 5.09127 5.10165 5.11155 5.12099 5.13 5.13859 5.14678 5.15459 5.16204 5.16914 5.17591 5.18237 5.18853 5.19439 5.19999 5.20532 5.2104 5.21525 5.21986 #bodywt for gender,fleet: 1 / 5
 0 0.0043432 0.00741138 0.0122903 0.0197855 0.0308763 0.0466307 0.0680497 0.0958676 0.130366 0.171266 0.217737 0.26851 0.322058 0.376797 0.431248 0.484152 0.534533 0.581703 0.625246 0.664973 0.700871 0.73306 0.761747 0.787193 0.809684 0.829514 0.846968 0.862317 0.875812 0.887678 0.898119 0.907316 0.915427 0.922591 0.928931 0.93455 0.939542 0.943985 0.947947 0.951489 0.954662 0.957511 0.960073 0.962384 0.964471 0.966361 0.968075 0.969633 0.971051 0.972346 0.973529 0.974612 0.975605 0.976517 0.977357 0.97813 0.978844 0.979504 0.980114 0.980679 0.981204 0.981691 0.982144 0.982565 0.982958 0.983324 0.983666 0.983986 0.984285 0.984554 0.984796 0.985022 0.985235 0.985435 0.985623 0.9858 0.985967 0.986124 0.986272 0.986411 0.986543 0.986667 0.986784 0.986894 0.986999 0.987098 0.987191 0.98728 0.987363 0.987442 0.987517 0.987588 0.987656 0.987719 0.98778 0.987837 0.987891 0.987943 0.987992 0.988038 #selex for gender,fleet: 1 / 5
 0.0457685 0.168839 0.236114 0.315244 0.4053 0.504798 0.611728 0.723742 0.83848 0.953923 1.06861 1.18165 1.29266 1.40157 1.50851 1.61371 1.71739 1.81978 1.92103 2.02127 2.12053 2.21884 2.31616 2.41243 2.50756 2.60144 2.69397 2.78502 2.87448 2.96224 3.04819 3.13226 3.21435 3.2944 3.37236 3.44818 3.52183 3.59329 3.66256 3.72962 3.79449 3.85719 3.91773 3.97615 4.03247 4.08674 4.13899 4.18928 4.23764 4.28413 4.32879 4.37169 4.41286 4.45236 4.49026 4.52658 4.5614 4.59477 4.62672 4.65732 4.68661 4.71465 4.74147 4.76713 4.79167 4.81514 4.83758 4.85902 4.87951 4.89909 4.91795 4.9361 4.95344 4.96999 4.9858 5.00089 5.0153 5.02905 5.04217 5.0547 5.06665 5.07805 5.08893 5.0993 5.1092 5.11864 5.12765 5.13624 5.14443 5.15224 5.15969 5.16679 5.17356 5.18002 5.18617 5.19204 5.19763 5.20296 5.20805 5.21289 5.21751 #bodywt for gender,fleet: 1 / 6
 0 0.00139123 0.00261633 0.00476752 0.00841188 0.0143517 0.0236296 0.0374585 0.0570557 0.0834039 0.11701 0.157748 0.204834 0.256947 0.312428 0.369513 0.426531 0.482049 0.534945 0.584429 0.630015 0.671481 0.708808 0.742128 0.771672 0.797732 0.820629 0.840689 0.858231 0.873554 0.886933 0.898615 0.908823 0.91775 0.925569 0.932428 0.938454 0.943761 0.948443 0.952583 0.956252 0.959511 0.962413 0.965002 0.967319 0.969395 0.971262 0.972942 0.974459 0.975831 0.977075 0.978204 0.979232 0.980169 0.981025 0.981809 0.982527 0.983186 0.983792 0.98435 0.984866 0.985341 0.985781 0.986189 0.986567 0.986918 0.987244 0.987548 0.987831 0.988094 0.988329 0.988539 0.988734 0.988918 0.98909 0.989251 0.989403 0.989546 0.98968 0.989806 0.989924 0.990036 0.990141 0.990241 0.990334 0.990423 0.990506 0.990585 0.990659 0.99073 0.990797 0.99086 0.990919 0.990976 0.991029 0.99108 0.991128 0.991173 0.991216 0.991257 0.991296 #selex for gender,fleet: 1 / 6
 0.0521392 0.178226 0.24562 0.322114 0.405946 0.495479 0.589441 0.686983 0.787591 0.89097 0.996924 1.10528 1.21585 1.32837 1.44257 1.55811 1.67462 1.79172 1.90904 2.02619 2.14283 2.25861 2.37323 2.48643 2.59794 2.70757 2.81512 2.92044 3.0234 3.12389 3.22183 3.31715 3.40981 3.49978 3.58703 3.67157 3.7534 3.83254 3.90901 3.98285 4.0541 4.1228 4.189 4.25276 4.31412 4.37315 4.42991 4.48446 4.53686 4.58717 4.63547 4.68184 4.72626 4.76888 4.80973 4.84888 4.88638 4.9223 4.95669 4.98961 5.02112 5.05126 5.0801 5.10769 5.13406 5.15928 5.18339 5.20643 5.22845 5.24949 5.26972 5.28916 5.30773 5.32547 5.34241 5.35858 5.37402 5.38876 5.40283 5.41626 5.42908 5.44131 5.45299 5.46413 5.47476 5.4849 5.49457 5.5038 5.51261 5.52101 5.52902 5.53666 5.54394 5.55089 5.55752 5.56384 5.56986 5.57561 5.58109 5.58631 5.5913 #bodywt for gender,fleet: 2 / 1
 0 0.0514797 0.0809087 0.12157 0.174131 0.237592 0.309323 0.385625 0.46255 0.536616 0.605239 0.666848 0.72078 0.767062 0.806176 0.838856 0.86594 0.888262 0.9066 0.921641 0.933979 0.944111 0.952448 0.959327 0.965021 0.969754 0.973702 0.97701 0.979794 0.982147 0.984144 0.985848 0.987307 0.988562 0.989646 0.990586 0.991404 0.99212 0.992748 0.993301 0.993789 0.994222 0.994607 0.994951 0.995258 0.995534 0.995782 0.996006 0.996209 0.996392 0.996559 0.996711 0.99685 0.996976 0.997093 0.997199 0.997297 0.997387 0.99747 0.997547 0.997618 0.997684 0.997755 0.997802 0.997855 0.997904 0.997949 0.997992 0.998032 0.998069 0.998103 0.998133 0.998161 0.998187 0.998212 0.998236 0.998258 0.998278 0.998298 0.998316 0.998334 0.99835 0.998365 0.99838 0.998394 0.998407 0.998419 0.998431 0.998442 0.998452 0.998462 0.998471 0.99848 0.998488 0.998496 0.998504 0.998511 0.998518 0.998524 0.99853 0.998536 #selex for gender,fleet: 2 / 1
 0.0533699 0.18484 0.255892 0.336964 0.425888 0.520392 0.618582 0.719181 0.821509 0.92531 1.03057 1.13734 1.24569 1.35561 1.46701 1.57972 1.69349 1.80803 1.923 2.03805 2.15284 2.26701 2.38026 2.49228 2.6028 2.71158 2.81843 2.92317 3.02564 3.12572 3.22332 3.31836 3.41078 3.50055 3.58764 3.67204 3.75375 3.8328 3.90919 3.98297 4.05416 4.12281 4.18897 4.2527 4.31403 4.37304 4.42978 4.48431 4.53669 4.587 4.63529 4.68162 4.72606 4.76868 4.80953 4.84867 4.88617 4.92208 4.95647 4.98939 5.02089 5.05104 5.07988 5.10746 5.13384 5.15905 5.18316 5.20621 5.22823 5.24927 5.26949 5.28894 5.30751 5.32524 5.34218 5.35835 5.37379 5.38853 5.4026 5.41603 5.42885 5.44109 5.45276 5.4639 5.47453 5.48467 5.49435 5.50358 5.51238 5.52078 5.52879 5.53643 5.54372 5.55067 5.55729 5.56361 5.56964 5.57538 5.58086 5.58609 5.59107 #bodywt for gender,fleet: 2 / 2

0 0.020233 0.0351066 0.0583057 0.092225 0.138412 0.196841 0.26564 0.34144 0.420151 0.497803 0.571167 0.638036 0.697228
0.748408 0.791853 0.82821 0.858316 0.883056 0.903285 0.919776 0.933204 0.944139 0.953056 0.960343 0.966315 0.971228
0.975284 0.978647 0.981448 0.983791 0.985761 0.987424 0.988834 0.990036 0.991065 0.99195 0.992713 0.993375 0.993952
0.994455 0.994897 0.995286 0.99563 0.995935 0.996205 0.996447 0.996663 0.996857 0.997032 0.997189 0.997332 0.997461
0.997578 0.997685 0.997783 0.997872 0.997953 0.998028 0.998097 0.99816 0.998219 0.998273 0.998323 0.998369 0.998412
0.998452 0.998489 0.998524 0.998556 0.998584 0.99861 0.998634 0.998656 0.998677 0.998697 0.998716 0.998733 0.998749
0.998765 0.998779 0.998793 0.998806 0.998818 0.998829 0.99884 0.99885 0.99886 0.998869 0.998877 0.998886 0.998893
0.998901 0.998907 0.998914 0.99892 0.998926 0.998932 0.998937 0.998942 0.998947 #selex for gender,fleet: 2 / 2
 0.0579158 0.204959 0.281846 0.365078 0.450621 0.536496 0.622631 0.709928 0.799514 0.892348 0.989066 1.08994 1.19492
1.30368 1.4157 1.53036 1.647 1.76495 1.88358 2.00233 2.12069 2.23823 2.35457 2.4694 2.58243 2.69345 2.80228 2.90875 3.01274
3.11415 3.21292 3.30898 3.4023 3.49285 3.58063 3.66564 3.7479 3.82741 3.90423 3.97838 4.0499 4.11885 4.18527 4.24923
4.31078 4.36998 4.42689 4.48158 4.53411 4.58454 4.63295 4.67939 4.72393 4.76663 4.80756 4.84678 4.88435 4.92033 4.95477
4.98775 5.0193 5.04949 5.07837 5.106 5.13241 5.15766 5.1818 5.20488 5.22693 5.24799 5.26824 5.2877 5.30628 5.32403 5.34098
5.35717 5.37262 5.38737 5.40146 5.4149 5.42773 5.43997 5.45165 5.4628 5.47344 5.48359 5.49327 5.50251 5.51132 5.51972
5.52774 5.53538 5.54267 5.54963 5.55626 5.56258 5.56861 5.57436 5.57985 5.58507 5.59006 #bodywt for gender,fleet: 2 / 3
 0 0.0159423 0.0364044 0.0754423 0.139546 0.229582 0.338913 0.455968 0.568923 0.669211 0.752619 0.818577 0.86878 0.905929
0.932869 0.952142 0.965815 0.975475 0.982295 0.987121 0.990549 0.992998 0.99476 0.996038 0.996973 0.997663 0.998177
0.998564 0.998857 0.999081 0.999255 0.99939 0.999496 0.99958 0.999648 0.999702 0.999746 0.999782 0.999811 0.999836
0.999856 0.999873 0.999888 0.9999 0.99991 0.999919 0.999927 0.999934 0.999939 0.999944 0.999949 0.999953 0.999956
0.999959 0.999962 0.999964 0.999966 0.999968 0.99997 0.999972 0.999973 0.999974 0.999976 0.999977 0.999978 0.999978
0.999979 0.99998 0.999981 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985
0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987
0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3
 0.053131 0.184227 0.255678 0.33801 0.429434 0.527788 0.630908 0.736982 0.844735 0.953417 1.06268 1.17242 1.28268 1.39349
1.50489 1.61687 1.72933 1.84214 1.9551 2.06799 2.18055 2.29251 2.40361 2.51359 2.62221 2.72924 2.83449 2.93776 3.03891
3.1378 3.23434 3.32842 3.41999 3.509 3.59541 3.6792 3.76038 3.83893 3.91489 3.98828 4.05912 4.12745 4.19333 4.25679 4.31789
4.37669 4.43324 4.48759 4.53982 4.58998 4.63814 4.68435 4.72868 4.77119 4.81194 4.851 4.88842 4.92426 4.95858 4.99144
5.02288 5.05297 5.08176 5.1093 5.13563 5.16081 5.18488 5.20788 5.22987 5.25088 5.27108 5.2905 5.30906 5.32677 5.34369
5.35985 5.37528 5.39 5.40406 5.41748 5.43029 5.44251 5.45418 5.46531 5.47593 5.48606 5.49573 5.50495 5.51374 5.52213
5.53014 5.53777 5.54505 5.552 5.55862 5.56493 5.57095 5.5767 5.58217 5.58739 5.59237 #bodywt for gender,fleet: 2 / 4
 0 0.0116918 0.0201649 0.0335545 0.0536915 0.0823422 0.12074 0.169135 0.226568 0.290984 0.35962 0.429511 0.497944
0.562749 0.622426 0.676125 0.723541 0.764782 0.800228 0.830416 0.855953 0.877452 0.895497 0.910617 0.923281 0.933892
0.942794 0.950277 0.956583 0.961911 0.966428 0.970269 0.973548 0.976356 0.978771 0.980854 0.982659 0.984227 0.985596
0.986794 0.987846 0.988774 0.989595 0.990323 0.99097 0.991548 0.992066 0.99253 0.992948 0.993325 0.993666 0.993976
0.994257 0.994512 0.994746 0.994959 0.995154 0.995334 0.995498 0.99565 0.99579 0.995919 0.996039 0.99615 0.996252
0.996348 0.996436 0.996519 0.996595 0.996667 0.996731 0.996788 0.996842 0.996892 0.996939 0.996983 0.997025 0.997064
0.997101 0.997135 0.997168 0.997199 0.997227 0.997255 0.997281 0.997305 0.997328 0.997349 0.99737 0.997389 0.997408
0.997425 0.997442 0.997457 0.997472 0.997486 0.997499 0.997512 0.997524 0.997535 0.997546 #selex for gender,fleet: 2 / 4
 0.0532252 0.185042 0.257376 0.341417 0.435835 0.538829 0.648287 0.762045 0.878176 0.995191 1.11209 1.22833 1.34365
1.45803 1.57154 1.68428 1.79634 1.90778 2.0186 2.12878 2.23824 2.34685 2.45449 2.561 2.66621 2.76995 2.87207 2.9724 3.07082
3.16719 3.26141 3.35337 3.44301 3.53025 3.61507 3.69742 3.77728 3.85466 3.92954 4.00196 4.07192 4.13946 4.20462 4.26743
4.32793 4.38619 4.44224 4.49615 4.54796 4.59775 4.64556 4.69145 4.73549 4.77774 4.81825 4.85707 4.89428 4.92993 4.96407
4.99676 5.02805 5.058 5.08665 5.11406 5.14028 5.16535 5.18932 5.21223 5.23413 5.25506 5.27519 5.29457 5.31307 5.33074
5.34762 5.36373 5.37912 5.39381 5.40784 5.42122 5.434 5.44619 5.45783 5.46893 5.47953 5.48964 5.49928 5.50848 5.51726
5.52563 5.53362 5.54123 5.5485 5.55543 5.56203 5.56834 5.57434 5.58007 5.58554 5.59075 5.59571 #bodywt for gender,fleet: 2 / 5
 0 0.0044201 0.00773027 0.0131123 0.0215421 0.0342147 0.0524279 0.0773684 0.109845 0.15005 0.197449 0.25082 0.308443
0.368359 0.428624 0.487515 0.543655 0.596057 0.644109 0.687528 0.726291 0.760558 0.790618 0.816829 0.839582 0.85927
0.87627 0.890932 0.903575 0.914479 0.923892 0.932029 0.939075 0.945188 0.950505 0.955139 0.959189 0.962738 0.965856
0.968604 0.971031 0.973182 0.975093 0.976795 0.978314 0.979675 0.980897 0.981997 0.982988 0.983885 0.984697 0.985435
0.986106 0.986719 0.987278 0.98779 0.988259 0.98869 0.989087 0.989452 0.989789 0.990101 0.990389 0.990656 0.990904
0.991135 0.991349 0.991548 0.991734 0.991908 0.992063 0.992202 0.992331 0.992453 0.992567 0.992675 0.992775 0.99287
0.992959 0.993043 0.993122 0.993197 0.993267 0.993333 0.993396 0.993455 0.99351 0.993563 0.993613 0.99366 0.993705
0.993747 0.993787 0.993825 0.99386 0.993894 0.993926 0.993957 0.993986 0.994013 0.994039 #selex for gender,fleet: 2 / 5
 0.0546918 0.192055 0.267757 0.355998 0.455456 0.564207 0.679809 0.799576 0.921 1.04212 1.16168 1.27909 1.39421 1.50723
1.61846 1.72824 1.83689 1.94466 2.05172 2.15816 2.264 2.3692 2.47367 2.57729 2.67989 2.78131 2.88139 2.97994 3.07681
3.17186 3.26494 3.35594 3.44477 3.53133 3.61558 3.69745 3.77693 3.85398 3.9286 4.0008 4.07059 4.13799 4.20304 4.26576
4.32619 4.3844 4.44041 4.49429 4.54609 4.59586 4.64367 4.68956 4.7336 4.77586 4.81637 4.85521 4.89243 4.92809 4.96225
4.99495 5.02626 5.05622 5.08489 5.11232 5.13855 5.16363 5.18762 5.21054 5.23246 5.2534 5.27354 5.29292 5.31143 5.32911
5.34599 5.36211 5.37751 5.3922 5.40623 5.41962 5.4324 5.4446 5.45624 5.46735 5.47795 5.48808 5.49771 5.50692 5.5157 5.52407
5.53206 5.53968 5.54695 5.55388 5.56049 5.56679 5.57281 5.57854 5.584 5.58921 5.59418 #bodywt for gender,fleet: 2 / 6
 0 0.00142156 0.00275227 0.00515234 0.0093166 0.0162428 0.0272344 0.0437948 0.0673883 0.0991107 0.139379 0.187755
0.242976 0.303155 0.36609 0.429572 0.491631 0.550694 0.605639 0.655781 0.700817 0.740738 0.775749 0.806195 0.832497
0.855104 0.874467 0.891012 0.90513 0.917171 0.927444 0.936215 0.943716 0.950141 0.955657 0.960404 0.9645 0.968044
0.971119 0.973796 0.976133 0.978179 0.979977 0.981561 0.98296 0.9842 0.985302 0.986285 0.987163 0.98795 0.988657 0.989294
0.989868 0.990389 0.99086 0.991289 0.99168 0.992036 0.992362 0.992661 0.992935 0.993187 0.993419 0.993633 0.99383
0.994013 0.994182 0.994339 0.994485 0.99462 0.994744 0.994846 0.994945 0.995038 0.995124 0.995205 0.995281 0.995353
0.99542 0.995483 0.995542 0.995598 0.99565 0.995699 0.995746 0.99579 0.995831 0.99587 0.995907 0.995942 0.995975 0.996006
0.996035 0.996063 0.996089 0.996114 0.996138 0.99616 0.996182 0.996202 0.996221 #selex for gender,fleet: 2 / 6
 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327

0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 #mean M for year Yinit: 2009 sex: 1
 71.0788 66.4399 62.0329 57.7102 53.6483 49.7551 46.0694 42.6483 39.9966 37.29 37.1153 35.9349 36.8538 36.9598 37.3353
36.9126 37.2257 37.3708 36.7491 34.7073 33.121 30.8114 28.2329 25.544 23.1028 20.6325 18.5779 16.7031 14.8544 13.0665
11.539 10.1782 8.91666 7.8254 6.8717 6.05482 5.34915 4.74582 4.21982 3.76771 3.37871 3.0407 2.74931 2.49782 2.2788 2.08669
1.91902 1.7709 1.63921 1.52271 1.41885 1.3258 1.24092 1.16325 1.09206 1.0263 0.96549 0.909597 0.85802 0.809863 0.765012
0.723613 0.684728 0.649953 0.6176 0.585988 0.555608 0.52675 0.499563 0.473873 0.449581 0.426634 0.404937 0.384449
0.365077 0.346738 0.329394 0.313061 0.297596 0.282994 0.269175 0.256096 0.243722 0.231994 0.220871 0.210307 0.20028
0.190761 0.181724 0.173139 0.164977 0.157232 0.14986 0.142839 0.136145 0.129775 0.123712 0.11794 0.112443 0.10721 2.21716
#numbers for year Yinit: 2009 sex: 1
 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 0.0463898
0.0463898 0.0463898 0.0463898 0.0463898 0.0463898 #mean M for year Yinit: 2009 sex: 2
 71.0788 66.4826 62.1127 57.821 53.7846 49.9114 46.2405 42.8299 40.1873 37.4857 37.3266 36.1533 37.0879 37.1973 37.5655
37.1132 37.3784 37.4479 36.7213 34.5552 32.8303 30.385 27.6847 24.8978 22.3808 19.868 17.7886 15.9119 14.0883 12.3472
10.8724 9.56979 8.37182 7.34175 6.44619 5.68252 5.02537 4.46549 3.97876 3.56146 3.20316 2.89219 2.62434 2.39323 2.19188
2.01504 1.86049 1.72365 1.60164 1.4934 1.3966 1.30954 1.22976 1.1564 1.08884 1.02612 0.967836 0.91404 0.864201 0.817475
0.773802 0.733372 0.695271 0.661151 0.629322 0.59809 0.567966 0.53926 0.51214 0.486441 0.462078 0.439011 0.417157
0.396486 0.376915 0.358365 0.340805 0.324252 0.308565 0.293738 0.279691 0.266381 0.253774 0.24181 0.230449 0.219643
0.209373 0.199611 0.190331 0.181503 0.173102 0.165119 0.157513 0.15026 0.143337 0.136743 0.13046 0.124472 0.118765
0.113326 2.37976 #numbers for year Yinit: 2009 sex: 2
 59.4623 55.8442 52.1513 52.0071 50.4614 51.8706 52.1428 52.7968 52.3188 52.8779 53.1933 52.4089 49.5859 47.3987 44.1623
40.5257 36.7166 33.2508 29.7319 26.8022 24.1235 21.4753 18.9082 16.7121 14.7528 12.9335 11.358 9.97961 8.7979 7.77616
6.90192 6.13914 5.48303 4.91814 4.42698 4.00331 3.63746 3.31871 3.039 2.79479 2.579 2.38711 2.21732 2.06595 1.93032 1.80661
1.6934 1.58966 1.49383 1.40523 1.3238 1.24868 1.17854 1.11322 1.05294 0.996318 0.945688 0.898587 0.852574 0.808356
0.766359 0.726799 0.689419 0.654077 0.620695 0.589134 0.559332 0.531154 0.504479 0.479252 0.455493 0.432996 0.411755
0.391651 0.372623 0.35462 0.337556 0.321373 0.306001 0.291411 0.277561 0.26441 0.251917 0.240041 0.228769 0.218043
0.207825 0.198085 0.188815 0.179992 0.171592 0.163595 0.155979 0.148726 0.141818 0.135237 0.128968 0.122994 0.117302
0.111877 2.31866 #numbers for year Ydeclare: 2002 sex: 1
 59.4623 55.8801 52.2182 52.1061 50.5861 52.0223 52.3076 52.9572 52.4452 52.9398 53.1506 52.2217 49.2307 46.852 43.4301
39.6282 35.6875 32.1207 28.5484 25.589 22.9127 20.306 17.8117 15.6961 13.8251 12.1019 10.6186 9.32786 8.22632 7.27773
6.46901 5.76548 5.16193 4.64341 4.19314 3.80509 3.47014 3.17819 2.92171 2.69748 2.49893 2.32187 2.16478 2.02428 1.89793
1.78216 1.67571 1.57769 1.48671 1.40218 1.32417 1.25191 1.18417 1.12086 1.06226 1.00704 0.957598 0.911477 0.866227
0.822587 0.781006 0.741726 0.704508 0.669227 0.635826 0.604184 0.574255 0.545919 0.519061 0.493635 0.469667 0.44695
0.425479 0.405136 0.38586 0.3676 0.350271 0.333813 0.318161 0.303284 0.289142 0.275698 0.26291 0.250739 0.239174 0.228155
0.217648 0.207619 0.198066 0.188963 0.180289 0.172022 0.164143 0.156632 0.149471 0.142644 0.136134 0.129927 0.124006
0.118359 2.48958 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
335.538 335.538 335.507 335.456 335.397 335.368 335.336 335.305 335.279 335.25 335.214 335.149 335.071 334.979 334.891
334.792 334.672 334.562 334.411 334.306 334.175 334.006 333.827 333.666 333.505 333.356 333.194 333.015 332.845 332.511
331.784 330.402 329.186 328.759 328.211 327.827 327.411 326.887 326.442 326.092 325.655 325.085 324.455 323.696 322.786 322
321.325 320.801 320.173 319.473 318.867 318.081 317.19 316.324 315.385 314.009 312.465 310.707 308.239 305.809 303.063
300.363 297.043 293.555 287.64 281.258 275.966 267.905 257.864 248.526 242.449 235.022 229.345 222.698 214.827 203.844
197.045 184.501 170.575 157.972 150.02 140.01 132.032 122.173 119.88 114.628 117.067 118.925 122.428 126.054 129.604
132.962 136.314 139.279 142.158 #Recruits
1.48682e+009 1.48682e+009 1.48642e+009 1.48578e+009 1.48503e+009 1.48466e+009 1.48426e+009 1.48388e+009
1.48354e+009 1.48318e+009 1.48273e+009 1.48191e+009 1.48092e+009 1.47976e+009 1.47866e+009 1.47741e+009 1.4759e+009
1.47453e+009 1.47264e+009 1.47132e+009 1.46969e+009 1.46758e+009 1.46536e+009 1.46336e+009 1.46136e+009 1.45951e+009
1.45751e+009 1.45531e+009 1.45322e+009 1.44911e+009 1.44024e+009 1.42357e+009 1.4091e+009 1.40406e+009 1.39764e+009
1.39316e+009 1.38831e+009 1.38226e+009 1.37714e+009 1.37313e+009 1.36814e+009 1.36166e+009 1.35455e+009 1.34606e+009
1.33596e+009 1.3273e+009 1.31993e+009 1.31424e+009 1.30747e+009 1.29996e+009 1.29351e+009 1.2852e+009 1.27586e+009
1.26686e+009 1.25719e+009 1.24318e+009 1.22768e+009 1.21032e+009 1.18646e+009 1.1635e+009 1.13819e+009 1.11393e+009
1.08492e+009 1.05538e+009 1.00733e+009 9.58215e+008 9.19461e+008 8.63612e+008 7.9892e+008 7.43118e+008 7.08845e+008
6.68975e+008 6.39891e+008 6.07265e+008 5.70498e+008 5.22288e+008 4.9411e+008 4.45151e+008 3.94963e+008 3.5291e+008
3.27863e+008 2.97844e+008 2.75036e+008 2.48129e+008 2.42063e+008 2.2843e+008 2.34717e+008 2.39557e+008 2.48808e+008
2.58558e+008 2.68284e+008 2.77647e+008 2.8716e+008 2.95713e+008 3.04148e+008 #SpawnBio

0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr
high catch mid steepness vector 2
 0 0 23.916 90.7093 310.887 954.418 2590.73 6168.54 12906.8 23977.3 40140.3 61535.3 87709.7 117817 150861 185900 222156
259055 296211 333391 370465 407374 444091 480608 516920 553017 588883 624493 659817 694820 729463 763703 797499
830811 863598 895824 927454 958457 988807 1.01848e+006 1.04745e+006 1.07571e+006 1.10324e+006 1.13003e+006
1.15607e+006 1.18137e+006 1.20591e+006 1.2297e+006 1.25275e+006 1.27505e+006 1.29662e+006 1.31746e+006 1.33759e+006
1.35701e+006 1.37574e+006 1.3938e+006 1.41119e+006 1.42793e+006 1.44405e+006 1.45954e+006 1.47444e+006 1.48876e+006
1.50251e+006 1.51571e+006 1.52838e+006 1.54053e+006 1.55219e+006 1.56337e+006 1.57408e+006 1.58435e+006 1.59418e+006
1.60383e+006 1.61308e+006 1.62193e+006 1.6304e+006 1.63851e+006 1.64626e+006 1.65368e+006 1.66077e+006 1.66756e+006
1.67404e+006 1.68024e+006 1.68616e+006 1.69181e+006 1.69722e+006 1.70238e+006 1.70731e+006 1.71202e+006 1.71651e+006
1.72081e+006 1.7249e+006 1.72881e+006 1.73255e+006 1.73611e+006 1.73951e+006 1.74275e+006 1.74585e+006 1.7488e+006
1.75161e+006 1.7543e+006 1.75686e+006 #female fecundity; weighted by N in year Y_init across morphs and areas
 0.0435892 0.156464 0.216278 0.284799 0.360581 0.442178 0.52838 0.618298 0.711336 0.807106 0.90534 1.00582 1.10833 1.21264
1.31848 1.42556 1.53356 1.64216 1.75102 1.85981 1.96821 2.07593 2.18268 2.28821 2.39228 2.49469 2.59527 2.69386 2.79032
2.88456 2.97647 3.066 3.15308 3.23769 3.31979 3.39938 3.47646 3.55103 3.62312 3.69274 3.75995 3.82476 3.88723 3.9474
4.00533 4.06105 4.11464 4.16615 4.21562 4.26313 4.30874 4.35249 4.39446 4.43469 4.47326 4.51021 4.5456 4.5795 4.61194 4.643
4.67272 4.70114 4.72833 4.75434 4.77919 4.80296 4.82567 4.84737 4.86811 4.88791 4.90696 4.92526 4.94274 4.95944 4.97537
4.99058 5.0051 5.01896 5.03219 5.0448 5.05684 5.06833 5.07929 5.08974 5.09972 5.10923 5.1183 5.12695 5.13519 5.14306
5.15056 5.15771 5.16453 5.17103 5.17723 5.18313 5.18877 5.19413 5.19925 5.20413 5.20878 #bodywt for gender,fleet: 1 / 1
 0 0.0507784 0.0783153 0.115886 0.164112 0.222258 0.288225 0.358965 0.431115 0.501589 0.567968 0.628648 0.682792 0.730189
0.771068 0.80593 0.835417 0.860216 0.880996 0.898374 0.912897 0.925041 0.935208 0.943739 0.950915 0.956969 0.962093
0.966446 0.970157 0.973333 0.976061 0.978413 0.980449 0.982218 0.983761 0.985111 0.986296 0.987341 0.988264 0.989084
0.989812 0.990463 0.991045 0.991567 0.992037 0.992462 0.992845 0.993193 0.993508 0.993796 0.994058 0.994298 0.994518
0.994719 0.994905 0.995075 0.995232 0.995378 0.995512 0.995636 0.995751 0.995859 0.995958 0.996051 0.996137 0.996218
0.996293 0.996363 0.996429 0.99649 0.996545 0.996595 0.996642 0.996686 0.996728 0.996767 0.996804 0.996838 0.996871
0.996902 0.996931 0.996958 0.996984 0.997008 0.997031 0.997053 0.997074 0.997093 0.997112 0.997129 0.997146 0.997162
0.997176 0.99719 0.997204 0.997216 0.997228 0.99724 0.997251 0.997261 0.997271 #selex for gender,fleet: 1 / 1
 0.0446395 0.162385 0.225511 0.298251 0.378867 0.465395 0.556059 0.649533 0.744989 0.841999 0.940392 1.04012 1.14117
1.24351 1.34705 1.45166 1.55715 1.66328 1.76978 1.87637 1.98276 2.08864 2.19376 2.29783 2.40063 2.50193 2.60153 2.69927
2.795 2.8886 2.97996 3.06901 3.15568 3.23993 3.32173 3.40105 3.47789 3.55226 3.62418 3.69365 3.76072 3.82542 3.88779
3.94787 4.00572 4.06138 4.11491 4.16636 4.21579 4.26325 4.30882 4.35254 4.39448 4.43469 4.47323 4.51016 4.54553 4.57941
4.61184 4.64288 4.67259 4.701 4.72818 4.75417 4.77903 4.80278 4.82548 4.84718 4.86791 4.88771 4.90675 4.92505 4.94253
4.95922 4.97515 4.99036 5.00488 5.01873 5.03195 5.04457 5.05661 5.06809 5.07905 5.0895 5.09947 5.10898 5.11805 5.1267
5.13494 5.14281 5.15031 5.15746 5.16427 5.17077 5.17697 5.18288 5.18851 5.19387 5.19899 5.20387 5.20851 #bodywt for
gender,fleet: 1 / 2
 0 0.0198846 0.0337003 0.0548587 0.0854087 0.126751 0.179055 0.240994 0.309952 0.382585 0.455488 0.525727 0.591127
0.650344 0.702766 0.748352 0.787446 0.82062 0.848554 0.87195 0.891476 0.907743 0.921287 0.93257 0.941982 0.949849
0.956442 0.961984 0.966658 0.970613 0.973973 0.976838 0.979291 0.981398 0.983216 0.98479 0.986158 0.987352 0.988397
0.989316 0.990125 0.990841 0.991477 0.992042 0.992547 0.992999 0.993405 0.993771 0.9941 0.994399 0.994669 0.994915
0.995139 0.995343 0.99553 0.995701 0.995858 0.996002 0.996135 0.996258 0.996371 0.996476 0.996573 0.996663 0.996746
0.996824 0.996896 0.996964 0.997027 0.997085 0.997138 0.997185 0.997229 0.99727 0.997309 0.997345 0.99738 0.997412
0.997442 0.99747 0.997497 0.997523 0.997547 0.997569 0.99759 0.99761 0.997629 0.997647 0.997664 0.99768 0.997696 0.99771
0.997724 0.997736 0.997749 0.99776 0.997771 0.997781 0.997791 0.997801 0.99781 #selex for gender,fleet: 1 / 2
 0.0485258 0.180537 0.249347 0.324913 0.403601 0.483273 0.563443 0.644613 0.727622 0.813262 0.90211 0.994475 1.0904 1.1897
1.29202 1.3969 1.5038 1.61215 1.72143 1.8311 1.9407 2.0498 2.15803 2.26507 2.37064 2.47449 2.57644 2.67632 2.77398 2.86932
2.96225 3.05271 3.14065 3.22604 3.30885 3.38909 3.46676 3.54187 3.61446 3.68454 3.75215 3.81734 3.88016 3.94065 3.99886
4.05486 4.10869 4.16042 4.21011 4.25781 4.3036 4.34752 4.38963 4.43001 4.46871 4.50578 4.54129 4.57529 4.60784 4.63898
4.66879 4.6973 4.72456 4.75064 4.77556 4.79939 4.82216 4.84391 4.8647 4.88456 4.90364 4.92198 4.93949 4.95621 4.97217
4.98741 5.00195 5.01583 5.02907 5.04171 5.05377 5.06528 5.07625 5.08672 5.09671 5.10623 5.11532 5.12398 5.13224 5.14012
5.14763 5.15479 5.16162 5.16813 5.17434 5.18025 5.18589 5.19127 5.19639 5.20128 5.20593 #bodywt for gender,fleet: 1 / 3
 0 0.0154827 0.0342029 0.0692072 0.126307 0.206964 0.306426 0.415347 0.523412 0.622441 0.707689 0.777617 0.832914
0.875472 0.907591 0.931508 0.949166 0.962142 0.971663 0.978654 0.983803 0.987612 0.990444 0.992563 0.99416 0.995373
0.996301 0.997016 0.997571 0.998007 0.99835 0.998623 0.998842 0.999019 0.999163 0.99928 0.999377 0.999457 0.999524
0.999581 0.999628 0.999668 0.999703 0.999732 0.999758 0.999779 0.999799 0.999815 0.99983 0.999843 0.999854 0.999864
0.999873 0.999881 0.999888 0.999895 0.9999 0.999906 0.99991 0.999915 0.999918 0.999922 0.999925 0.999928 0.999931
0.999933 0.999936 0.999938 0.99994 0.999941 0.999943 0.999944 0.999946 0.999947 0.999948 0.999949 0.99995 0.999951
0.999951 0.999952 0.999953 0.999954 0.999954 0.999955 0.999955 0.999956 0.999956 0.999957 0.999957 0.999958 0.999958
0.999959 0.999959 0.999959 0.99996 0.99996 0.99996 0.999961 #selex for gender,fleet: 1 / 3
 0.0444355 0.161822 0.225257 0.299032 0.381769 0.471677 0.566838 0.665521 0.766386 0.868533 0.971441 1.07485 1.17866
1.28284 1.38737 1.4922 1.59728 1.70249 1.80769 1.91268 2.01729 2.1213 2.22448 2.32664 2.42756 2.52706 2.62496 2.72109
2.81532 2.90753 2.9976 3.08547 3.17106 3.25431 3.33519 3.41368 3.48977 3.56345 3.63473 3.70362 3.77016 3.83438 3.8963
3.95598 4.01345 4.06877 4.12198 4.17314 4.2223 4.26953 4.31487 4.35838 4.40012 4.44015 4.47852 4.5153 4.55053 4.58427
4.61658 4.6475 4.6771 4.70541 4.7325 4.7584 4.78317 4.80685 4.82948 4.85111 4.87177 4.89152 4.9105 4.92877 4.94621 4.96286
4.97876 4.99394 5.00842 5.02225 5.03545 5.04804 5.06005 5.07152 5.08245 5.09288 5.10283 5.11232 5.12138 5.13001 5.13824
5.14609 5.15357 5.16071 5.16752 5.174 5.18019 5.18608 5.1917 5.19706 5.20217 5.20704 5.21168 #bodywt for gender,fleet: 1 / 4
 0 0.0114939 0.01936 0.0315438 0.04958 0.0749674 0.108811 0.151466 0.202334 0.259902 0.322011 0.386228 0.450214 0.511984
0.57005 0.623439 0.671646 0.714541 0.752266 0.785145 0.813602 0.838105 0.859139 0.877146 0.892548 0.905718 0.916986
0.926638 0.934919 0.942038 0.948172 0.953471 0.958062 0.962049 0.965524 0.96856 0.971222 0.973562 0.975625 0.97745
0.979069 0.980509 0.981793 0.982942 0.983972 0.984898 0.985733 0.986487 0.98717 0.98779 0.988353 0.988867 0.989336
0.989765 0.990158 0.99052 0.990852 0.991157 0.991439 0.9917 0.991941 0.992165 0.992372 0.992564 0.992743 0.99291 0.993065

0.99321 0.993345 0.993471 0.993585 0.993686 0.993782 0.993871 0.993955 0.994034 0.994109 0.994178 0.994244 0.994306
0.994365 0.99442 0.994472 0.994521 0.994567 0.994611 0.994652 0.994692 0.994729 0.994764 0.994797 0.994828 0.994858
0.994886 0.994913 0.994938 0.994962 0.994984 0.995006 0.995026 0.995046 #selex for gender,fleet: 1 / 4
 0.0445158 0.162545 0.226745 0.301992 0.387318 0.481305 0.582179 0.688016 0.796984 0.907548 1.01857 1.12931 1.23933
1.34845 1.45659 1.56378 1.67005 1.77544 1.87994 1.98354 2.0862 2.18784 2.28837 2.38768 2.48566 2.58218 2.67712 2.77037
2.86182 2.95137 3.03892 3.12441 3.20776 3.28893 3.36787 3.44455 3.51896 3.59108 3.66093 3.7285 3.79382 3.8569 3.91778
3.97649 4.03307 4.08756 4.14001 4.19047 4.23898 4.2856 4.33038 4.37337 4.41463 4.45421 4.49216 4.52855 4.56342 4.59682
4.62882 4.65945 4.68877 4.71683 4.74367 4.76935 4.79391 4.81739 4.83983 4.86129 4.88179 4.90137 4.92024 4.9384 4.95574
4.9723 4.98812 5.00321 5.01762 5.03138 5.0445 5.05703 5.06898 5.08039 5.09127 5.10165 5.11155 5.12099 5.13 5.13859 5.14678
5.15459 5.16204 5.16914 5.17591 5.18237 5.18853 5.19439 5.19999 5.20532 5.2104 5.21525 5.21986 #bodywt for gender,fleet: 1 / 5
 0 0.0043432 0.00741138 0.0122903 0.0197855 0.0308763 0.0466307 0.0680497 0.0958676 0.130366 0.171266 0.217737 0.26851
0.322058 0.376797 0.431248 0.484152 0.534533 0.581703 0.625246 0.664973 0.700871 0.73306 0.761747 0.787193 0.809684
0.829514 0.846968 0.862317 0.875812 0.887678 0.898119 0.907316 0.915427 0.922591 0.928931 0.93455 0.939542 0.943985
0.947947 0.951489 0.954662 0.957511 0.960073 0.962384 0.964471 0.966361 0.968075 0.969633 0.971051 0.972346 0.973529
0.974612 0.975605 0.976517 0.977357 0.97813 0.978844 0.979504 0.980114 0.980679 0.981204 0.981691 0.982144 0.982565
0.982958 0.983324 0.983666 0.983986 0.984285 0.984554 0.984796 0.985022 0.985235 0.985435 0.985623 0.9858 0.985967
0.986124 0.986272 0.986411 0.986543 0.986667 0.986784 0.986894 0.986999 0.987098 0.987191 0.987283 0.987363 0.987442
0.987517 0.987588 0.987656 0.987719 0.98778 0.987837 0.987891 0.987943 0.987992 0.988038 #selex for gender,fleet: 1 / 5
 0.0457685 0.168839 0.236114 0.315244 0.4053 0.504798 0.611728 0.723742 0.83848 0.953923 1.06861 1.18165 1.29266 1.40157
1.50851 1.61371 1.71739 1.81978 1.92103 2.02127 2.12053 2.21884 2.31616 2.41243 2.50756 2.60144 2.69397 2.78502 2.87448
2.96224 3.04819 3.13226 3.21435 3.2944 3.37236 3.44818 3.52183 3.59329 3.66256 3.72962 3.79449 3.85719 3.91773 3.97615
4.03247 4.08674 4.13899 4.18928 4.23764 4.28413 4.32879 4.37169 4.41286 4.45236 4.49026 4.52658 4.5614 4.59477 4.62672
4.65732 4.68661 4.71465 4.74147 4.76713 4.79167 4.81514 4.83758 4.85902 4.87951 4.89909 4.91795 4.9361 4.95344 4.96999
4.9858 5.00089 5.0153 5.02905 5.04217 5.0547 5.06665 5.07805 5.08893 5.0993 5.1092 5.11864 5.12765 5.13624 5.14443 5.15224
5.15969 5.16679 5.17356 5.18002 5.18617 5.19204 5.19763 5.20296 5.20805 5.21289 5.21751 #bodywt for gender,fleet: 1 / 6
 0 0.00139123 0.00261633 0.00476752 0.00841188 0.0143296 0.0236296 0.0374585 0.0570557 0.0834309 0.11701 0.157748
0.204834 0.256947 0.312428 0.369513 0.426531 0.482049 0.534945 0.584429 0.630015 0.671481 0.708808 0.742128 0.771672
0.797732 0.820629 0.840689 0.858231 0.873554 0.886933 0.898615 0.908823 0.91775 0.925569 0.932428 0.938454 0.943761
0.948443 0.952583 0.956252 0.959511 0.962413 0.965002 0.967319 0.969395 0.971262 0.972942 0.974459 0.975831 0.977075
0.978204 0.979232 0.980169 0.981025 0.981809 0.982527 0.983186 0.983792 0.98435 0.984866 0.985341 0.985781 0.986189
0.986567 0.986918 0.987244 0.987548 0.987831 0.988094 0.988329 0.988539 0.988734 0.988918 0.98909 0.989251 0.989403
0.989546 0.98968 0.989806 0.989924 0.990036 0.990141 0.990241 0.990334 0.990423 0.990506 0.990585 0.990659 0.99073
0.990797 0.99086 0.990919 0.990976 0.991029 0.99108 0.991128 0.991173 0.991216 0.991257 0.991296 #selex for gender,fleet: 1 /
6
 0.0521392 0.178226 0.24562 0.322114 0.405946 0.495479 0.589441 0.686983 0.787591 0.89097 0.996924 1.10528 1.21585 1.32837
1.44257 1.55811 1.67462 1.79172 1.90904 2.02619 2.14283 2.25861 2.37323 2.48643 2.59794 2.70757 2.81512 2.92044 3.0234
3.12389 3.22183 3.31715 3.40981 3.49978 3.58703 3.67157 3.7534 3.83254 3.90901 3.98285 4.0541 4.1228 4.189 4.25276 4.31412
4.37315 4.42991 4.48446 4.53686 4.58717 4.63547 4.68181 4.72626 4.76888 4.80973 4.84888 4.88638 4.9223 4.95669 4.98961
5.02112 5.05126 5.0801 5.10769 5.13406 5.15928 5.18339 5.20643 5.22845 5.24949 5.26972 5.28916 5.30773 5.32547 5.34241
5.35858 5.37402 5.38876 5.40283 5.41626 5.42908 5.44131 5.45299 5.46413 5.47476 5.4849 5.49457 5.5038 5.51261 5.52101
5.52902 5.53666 5.54394 5.55089 5.55752 5.56384 5.56986 5.57561 5.58109 5.58631 5.5913 #bodywt for gender,fleet: 2 / 1
 0 0.0514797 0.0809087 0.12157 0.174131 0.237592 0.309323 0.385625 0.46255 0.536616 0.605239 0.666848 0.72078 0.767062
0.806176 0.838856 0.86594 0.888262 0.9066 0.921641 0.933979 0.944111 0.952448 0.959327 0.965021 0.969754 0.973702 0.97701
0.979794 0.982147 0.984144 0.985848 0.987307 0.988562 0.989646 0.990586 0.991404 0.99212 0.992748 0.993301 0.993789
0.994222 0.994607 0.994951 0.995258 0.995534 0.995782 0.996006 0.996209 0.996392 0.996559 0.996711 0.99685 0.996976
0.997093 0.997199 0.997297 0.997387 0.99747 0.997547 0.997618 0.997684 0.997745 0.997802 0.997855 0.997904 0.997949
0.997992 0.998032 0.998069 0.998103 0.998133 0.998161 0.998187 0.998212 0.998236 0.998258 0.998278 0.998298 0.998316
0.998334 0.99835 0.998365 0.99838 0.998394 0.998407 0.998419 0.998431 0.998442 0.998452 0.998462 0.998471 0.99848
0.998488 0.998496 0.998504 0.998511 0.998518 0.998524 0.99853 0.998536 #selex for gender,fleet: 2 / 1
 0.0533699 0.18484 0.255892 0.336964 0.425888 0.520392 0.618582 0.719181 0.821509 0.92531 1.03057 1.13734 1.24569 1.35561
1.46701 1.57972 1.69349 1.80803 1.923 2.03805 2.15284 2.26701 2.38026 2.49228 2.6028 2.71158 2.81843 2.92317 3.02564
3.12572 3.22332 3.31836 3.41078 3.50055 3.58764 3.67204 3.75375 3.8328 3.90919 3.98297 4.05416 4.12281 4.18897 4.2527
4.31403 4.37304 4.42978 4.48431 4.53669 4.587 4.63529 4.68162 4.72606 4.76868 4.80953 4.84867 4.88617 4.92208 4.95647
4.98939 5.02089 5.05104 5.07988 5.10746 5.13384 5.15905 5.18316 5.20621 5.22823 5.24927 5.26949 5.28894 5.30751 5.32524
5.34218 5.35835 5.37379 5.38853 5.4026 5.41603 5.42885 5.44109 5.45276 5.4639 5.47453 5.48467 5.49435 5.50358 5.51238
5.52078 5.52879 5.53643 5.54372 5.55067 5.55729 5.56361 5.56964 5.57538 5.58086 5.58609 5.59107 #bodywt for gender,fleet: 2 /
2
 0 0.020233 0.0351066 0.0583057 0.092225 0.138412 0.196841 0.26564 0.34144 0.420151 0.497803 0.571167 0.638036 0.697228
0.748408 0.791853 0.82821 0.858316 0.883056 0.903285 0.919776 0.933204 0.944139 0.953056 0.960343 0.966315 0.971228
0.975284 0.978647 0.981448 0.983791 0.985761 0.987424 0.988834 0.990036 0.991065 0.99195 0.992713 0.993375 0.993952
0.994455 0.994897 0.995286 0.99563 0.995935 0.996205 0.996447 0.996663 0.996857 0.997032 0.997189 0.997332 0.997461
0.997578 0.997685 0.997783 0.997872 0.997953 0.998028 0.998097 0.99816 0.998219 0.998273 0.998323 0.998369 0.998412
0.998452 0.998489 0.998524 0.998556 0.998584 0.99861 0.998634 0.998656 0.998677 0.998697 0.998716 0.998733 0.998749
0.998765 0.998779 0.998793 0.998806 0.998818 0.998829 0.99884 0.99885 0.99886 0.998869 0.998877 0.998886 0.998893
0.998901 0.998907 0.998914 0.99892 0.998926 0.998932 0.998937 0.998942 0.998947 #selex for gender,fleet: 2 / 2
 0.0579158 0.204959 0.281846 0.365078 0.450621 0.536496 0.622631 0.709928 0.799514 0.892348 0.989066 1.08994 1.19492
1.30368 1.4157 1.53036 1.647 1.76495 1.88358 2.00233 2.12069 2.23823 2.35457 2.4694 2.58243 2.69345 2.80228 2.90875 3.01274
3.11415 3.21292 3.30898 3.4023 3.49285 3.58063 3.66564 3.7479 3.82741 3.90423 3.97838 4.0499 4.11885 4.18527 4.24923
4.31078 4.36998 4.42689 4.48158 4.53411 4.58454 4.63295 4.67939 4.72393 4.76663 4.80756 4.84678 4.88435 4.92033 4.95477
4.98775 5.0193 5.04949 5.07837 5.106 5.13241 5.15766 5.1818 5.20488 5.22693 5.24799 5.26824 5.2877 5.30628 5.32403 5.34098

5.35717 5.37262 5.38737 5.40146 5.4149 5.42773 5.43997 5.45165 5.4628 5.47344 5.48359 5.49327 5.50251 5.51132 5.51972
5.52774 5.53538 5.54267 5.54963 5.55626 5.56258 5.56861 5.57436 5.57985 5.58507 5.59006 #bodywt for gender,fleet: 2 / 3
 0 0.0159423 0.0364044 0.0754423 0.139546 0.229582 0.338913 0.455968 0.568923 0.669211 0.752619 0.818577 0.86878 0.905929
0.932869 0.952142 0.965815 0.975475 0.982295 0.987121 0.990549 0.992998 0.99476 0.996038 0.996973 0.997663 0.998177
0.998564 0.998857 0.999081 0.999255 0.99939 0.999496 0.99958 0.999648 0.999702 0.999746 0.999782 0.999811 0.999836
0.999856 0.999873 0.999888 0.9999 0.99991 0.999919 0.999927 0.999934 0.999939 0.999944 0.999949 0.999953 0.999956
0.999959 0.999962 0.999964 0.999966 0.999968 0.99997 0.999972 0.999973 0.999974 0.999976 0.999977 0.999978 0.999978
0.999979 0.99998 0.999981 0.999981 0.999982 0.999982 0.999983 0.999983 0.999984 0.999984 0.999984 0.999985 0.999985
0.999985 0.999985 0.999986 0.999986 0.999986 0.999986 0.999986 0.999987 0.999987 0.999987 0.999987 0.999987 0.999987
0.999987 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 0.999988 #selex for gender,fleet: 2 / 3
 0.053131 0.184227 0.255678 0.33801 0.429434 0.527788 0.630908 0.736982 0.844735 0.953417 1.06268 1.17242 1.28268 1.39349
1.50489 1.61687 1.72933 1.84214 1.9551 2.06799 2.18055 2.29251 2.40361 2.51359 2.62221 2.72924 2.83449 2.93776 3.03891
3.1378 3.23434 3.32842 3.41999 3.509 3.59541 3.6792 3.76038 3.83893 3.91489 3.98828 4.05912 4.12745 4.19333 4.25679 4.31789
4.37669 4.43324 4.48759 4.53982 4.58998 4.63814 4.68435 4.72868 4.77119 4.81194 4.851 4.88842 4.92426 4.95858 4.99144
5.02288 5.05297 5.08176 5.1093 5.13563 5.16081 5.18488 5.20788 5.22987 5.25088 5.27108 5.2905 5.30906 5.32677 5.34369
5.35985 5.37528 5.39 5.40406 5.41748 5.43029 5.44251 5.45418 5.46531 5.47593 5.48606 5.49573 5.50495 5.51374 5.52213
5.53014 5.53777 5.54505 5.552 5.55862 5.56493 5.57095 5.5767 5.58217 5.58739 5.59237 #bodywt for gender,fleet: 2 / 4
 0 0.0116918 0.0201649 0.0335545 0.0536915 0.0823422 0.12074 0.169135 0.226568 0.290984 0.35962 0.429511 0.497944
0.562749 0.622426 0.676125 0.723541 0.764782 0.800228 0.830416 0.855953 0.877452 0.895497 0.910617 0.923281 0.933892
0.942794 0.950277 0.956583 0.961911 0.966428 0.970269 0.973548 0.976356 0.978771 0.980854 0.982659 0.984227 0.985596
0.986794 0.987846 0.988774 0.989595 0.990323 0.99097 0.991548 0.992066 0.99253 0.992948 0.993325 0.993666 0.993976
0.994257 0.994512 0.994746 0.994959 0.995154 0.995334 0.995498 0.99565 0.99579 0.995919 0.996039 0.99615 0.996252
0.996348 0.996436 0.996519 0.996595 0.996667 0.996731 0.996788 0.996842 0.996892 0.996939 0.996983 0.997025 0.997064
0.997101 0.997135 0.997168 0.997199 0.997227 0.997255 0.997281 0.997305 0.997328 0.997349 0.99737 0.997389 0.997408
0.997425 0.997442 0.997457 0.997472 0.997486 0.997499 0.997512 0.997524 0.997535 0.997546 #selex for gender,fleet: 2 / 4
 0.0532252 0.185042 0.257376 0.341417 0.435835 0.538829 0.648287 0.762045 0.878176 0.995191 1.11209 1.22833 1.34365
1.45803 1.57154 1.68428 1.79634 1.90778 2.0186 2.12878 2.23824 2.34685 2.45449 2.561 2.66621 2.76995 2.87207 2.9724 3.07082
3.16719 3.26141 3.35337 3.44301 3.53025 3.61507 3.69742 3.77728 3.85466 3.92954 4.00196 4.07192 4.13946 4.20462 4.26743
4.32793 4.38619 4.44224 4.49615 4.54796 4.59775 4.64556 4.69145 4.73549 4.77774 4.81825 4.85707 4.89428 4.92993 4.96407
4.99676 5.02805 5.058 5.08665 5.11406 5.14028 5.16535 5.18932 5.21223 5.23413 5.25506 5.27519 5.29457 5.31307 5.33074
5.34762 5.36373 5.37912 5.39381 5.40784 5.42122 5.434 5.44619 5.45783 5.46893 5.47953 5.48964 5.49928 5.50848 5.51726
5.52563 5.53362 5.54123 5.5485 5.55543 5.56203 5.56834 5.57434 5.58007 5.58554 5.59075 5.59571 #bodywt for gender,fleet: 2 / 5
 0 0.0044201 0.00773027 0.0131123 0.0215421 0.0342147 0.0524279 0.0773684 0.109845 0.15005 0.197449 0.25082 0.308443
0.368359 0.428624 0.487515 0.543655 0.596057 0.644109 0.687528 0.726291 0.760558 0.790618 0.816829 0.839582 0.85927
0.87627 0.890932 0.903575 0.914479 0.923892 0.932029 0.939075 0.945188 0.950505 0.955139 0.959189 0.962738 0.965856
0.968604 0.971031 0.973182 0.975093 0.976795 0.978314 0.979675 0.980897 0.981997 0.982988 0.983885 0.984697 0.985435
0.986106 0.986719 0.987278 0.98779 0.988259 0.98869 0.989087 0.989452 0.989789 0.990101 0.990389 0.990656 0.990904
0.991135 0.991349 0.991548 0.991734 0.991908 0.992063 0.992202 0.992331 0.992453 0.992567 0.992675 0.992775 0.99287
0.992959 0.993043 0.993122 0.993197 0.993267 0.993333 0.993396 0.993455 0.99351 0.993563 0.993613 0.99366 0.993705
0.993747 0.993787 0.993825 0.99386 0.993894 0.993926 0.993957 0.993986 0.994013 0.994039 #selex for gender,fleet: 2 / 5
 0.0546918 0.192055 0.267757 0.355998 0.455456 0.564207 0.679809 0.799576 0.921 1.04212 1.16168 1.27909 1.39421 1.50723
1.61846 1.72824 1.83689 1.94466 2.05172 2.15816 2.264 2.3692 2.47367 2.57729 2.67989 2.78131 2.88139 2.97994 3.07681
3.17186 3.26494 3.35594 3.44477 3.53133 3.61558 3.69745 3.77693 3.85398 3.9286 4.0008 4.07059 4.13799 4.20304 4.26576
4.32619 4.3844 4.44041 4.49429 4.54609 4.59586 4.64367 4.68956 4.7336 4.77586 4.81637 4.85521 4.89243 4.92809 4.96225
4.99495 5.02626 5.05622 5.08489 5.11232 5.13855 5.16363 5.18762 5.21054 5.23246 5.2534 5.27354 5.29292 5.31143 5.32911
5.34599 5.36211 5.37751 5.3922 5.40623 5.41962 5.4324 5.4446 5.45624 5.46735 5.47795 5.48806 5.49771 5.50692 5.5157 5.52407
5.53206 5.53968 5.54695 5.55388 5.56049 5.56679 5.57281 5.57854 5.584 5.58921 5.59418 #bodywt for gender,fleet: 2 / 6
 0 0.00142156 0.00275227 0.00515234 0.0093166 0.0162428 0.0272344 0.0437948 0.0673883 0.0991107 0.139379 0.187755
0.242976 0.303155 0.36609 0.429572 0.491631 0.550694 0.605639 0.655781 0.700817 0.740738 0.775749 0.806195 0.832497
0.855104 0.874467 0.891012 0.90513 0.917171 0.927444 0.936215 0.943716 0.950141 0.955657 0.960404 0.9645 0.968044
0.971119 0.973796 0.976133 0.978179 0.979977 0.981561 0.98296 0.9842 0.985302 0.986285 0.987163 0.98795 0.988657 0.989294
0.989868 0.990389 0.99086 0.991289 0.99168 0.992036 0.992362 0.992661 0.992935 0.993187 0.993419 0.993633 0.99383
0.994013 0.994182 0.994339 0.994485 0.99462 0.99474 0.994846 0.994945 0.995038 0.995124 0.995205 0.995281 0.995353
0.99542 0.995483 0.995542 0.995598 0.99565 0.995699 0.995746 0.99579 0.995831 0.99587 0.995907 0.995942 0.995975 0.996006
0.996035 0.996063 0.996089 0.996114 0.996138 0.99616 0.996182 0.996202 0.996221 #selex for gender,fleet: 2 / 6
 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 0.0470327
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0.0470327 0.0470327 0.0470327 0.0470327 0.0470327 #mean M for year Yinit: 2009 sex: 1
 71.0788 66.4399 62.0329 57.7102 53.6483 49.7551 46.0694 42.6483 39.9966 37.29 37.1153 35.9349 36.8538 36.9598 37.3353
36.9126 37.2257 37.3708 36.7491 34.7073 33.121 30.8114 28.2329 25.544 23.1028 20.6325 18.5779 16.7031 14.8544 13.0665
11.539 10.1782 8.91666 7.8254 6.8717 6.05482 5.34915 4.74582 4.21982 3.76771 3.37871 3.0407 2.74931 2.49782 2.2788 2.08669
1.91902 1.7709 1.63921 1.52271 1.41885 1.3258 1.24092 1.16325 1.09206 1.0263 0.96549 0.909597 0.85802 0.809863 0.765012
0.723613 0.684728 0.649953 0.6176 0.585988 0.555608 0.52675 0.499563 0.473873 0.449581 0.426634 0.404937 0.384449
0.365077 0.346738 0.329394 0.313061 0.297596 0.282994 0.269175 0.256096 0.243722 0.231994 0.220871 0.210307 0.20028

0.190761 0.181724 0.173139 0.164977 0.157232 0.14986 0.142839 0.136145 0.129775 0.123712 0.11794 0.112443 0.10721 2.21716 #numbers for year Yinit: 2009 sex: 1
 0.0463898 #mean M for year Yinit: 2009 sex: 2
 71.0788 66.4826 62.1127 57.821 53.7846 49.9114 46.2405 42.8299 40.1873 37.4857 37.3266 36.1533 37.0879 37.1973 37.5655 37.1132 37.3784 37.4479 36.7213 34.5552 32.8303 30.385 27.6847 24.8978 22.3808 19.868 17.7886 15.9119 14.0883 12.3472 10.8724 9.56979 8.37182 7.34175 6.44619 5.68252 5.02537 4.46549 3.97876 3.56146 3.20316 2.89219 2.62434 2.39323 2.19188 2.01504 1.86049 1.72365 1.60164 1.4934 1.3966 1.30954 1.22976 1.1564 1.08884 1.02612 0.967836 0.91404 0.864201 0.817475 0.773802 0.733372 0.695271 0.661151 0.629322 0.59809 0.567966 0.53926 0.51214 0.486441 0.462078 0.439011 0.417157 0.396486 0.376915 0.358365 0.340805 0.324252 0.308565 0.293738 0.279691 0.266381 0.253774 0.24181 0.230449 0.219643 0.209373 0.199611 0.190331 0.181503 0.173102 0.165119 0.157513 0.15026 0.143337 0.136743 0.13046 0.124472 0.118765 0.113326 2.37976 #numbers for year Yinit: 2009 sex: 2
 59.4623 55.8442 52.1513 52.0071 50.4614 51.8706 52.1428 52.7968 52.3188 52.8779 53.1933 52.4089 49.5859 47.3987 44.1623 40.5257 36.7166 33.2508 29.7319 26.8022 24.1235 21.4753 18.9082 16.7121 14.7528 12.9335 11.358 9.97961 8.7979 7.77616 6.90192 6.13914 5.48303 4.91814 4.42698 4.00331 3.63746 3.31871 3.039 2.79479 2.579 2.38711 2.21732 2.06595 1.93032 1.80661 1.6934 1.58966 1.49383 1.40523 1.3238 1.24868 1.17854 1.11322 1.05294 0.996318 0.945688 0.898587 0.852574 0.808356 0.766359 0.726799 0.689419 0.654077 0.620695 0.589134 0.559332 0.531154 0.504479 0.479252 0.455493 0.432996 0.411755 0.391651 0.372623 0.35462 0.337556 0.321373 0.306001 0.291411 0.277561 0.26441 0.251917 0.240041 0.228769 0.218043 0.207825 0.198085 0.188815 0.179992 0.171592 0.163595 0.155979 0.148726 0.141818 0.135237 0.128968 0.122994 0.117302 0.111877 2.31866 #numbers for year Ydeclare: 2002 sex: 1
 59.4623 55.8801 52.2182 52.1061 50.5861 52.0223 52.3076 52.9572 52.4452 52.9398 53.1506 52.2217 49.2307 46.852 43.4301 39.6282 35.6875 32.1207 28.5484 25.589 22.9127 20.306 17.8117 15.6961 13.8251 12.1019 10.6186 9.32786 8.22632 7.27773 6.46901 5.76548 5.16193 4.64341 4.19314 3.80509 3.47014 3.17819 2.92171 2.69748 2.49893 2.32187 2.16478 2.02428 1.89793 1.78216 1.67571 1.57769 1.48671 1.40218 1.32417 1.25191 1.18417 1.12086 1.06226 1.00704 0.957598 0.911477 0.866227 0.822587 0.781006 0.741726 0.704508 0.669227 0.635826 0.604184 0.574255 0.545919 0.519061 0.493635 0.469667 0.44695 0.425479 0.405136 0.38586 0.3676 0.350271 0.333813 0.318161 0.303284 0.289142 0.275698 0.26291 0.250739 0.239174 0.228155 0.217648 0.207619 0.198066 0.188963 0.180289 0.172022 0.164143 0.156632 0.149471 0.142644 0.136134 0.129927 0.124006 0.118359 2.48958 #numbers for year Ydeclare: 2002 sex: 2
#R0 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 #years
335.538 335.538 335.507 335.456 335.397 335.368 335.336 335.305 335.279 335.25 335.214 335.149 335.071 334.979 334.891 334.792 334.672 334.562 334.411 334.306 334.175 334.006 333.827 333.666 333.505 333.356 333.194 333.015 332.845 332.511 331.784 330.402 329.186 328.759 328.211 327.827 327.411 326.887 326.442 326.092 325.655 325.085 324.455 323.696 322.786 322 321.325 320.801 320.173 319.473 318.867 318.081 317.19 316.324 315.385 314.009 312.465 310.707 308.239 305.809 303.063 300.363 297.043 293.555 287.64 281.258 275.966 267.905 257.864 248.526 242.449 235.022 229.345 222.698 214.827 203.844 197.045 184.501 170.575 157.972 150.02 140.01 132.032 122.173 119.88 114.628 117.067 118.925 122.428 126.054 129.604 132.962 136.314 139.279 142.158 #Recruits
1.48682e+009 1.48682e+009 1.48642e+009 1.48578e+009 1.48503e+009 1.48466e+009 1.48426e+009 1.48388e+009 1.48354e+009 1.48318e+009 1.48273e+009 1.48191e+009 1.48092e+009 1.47976e+009 1.47866e+009 1.47741e+009 1.4759e+009 1.47453e+009 1.47264e+009 1.47132e+009 1.46969e+009 1.46758e+009 1.46536e+009 1.46336e+009 1.46136e+009 1.45951e+009 1.45751e+009 1.45531e+009 1.45322e+009 1.44911e+009 1.44024e+009 1.42357e+009 1.4091e+009 1.40406e+009 1.39764e+009 1.39316e+009 1.38831e+009 1.38226e+009 1.37714e+009 1.37313e+009 1.36814e+009 1.36166e+009 1.35455e+009 1.34606e+009 1.33596e+009 1.3273e+009 1.31993e+009 1.31424e+009 1.30747e+009 1.29996e+009 1.29351e+009 1.2852e+009 1.27586e+009 1.26686e+009 1.25719e+009 1.24318e+009 1.22768e+009 1.21032e+009 1.18646e+009 1.1635e+009 1.13819e+009 1.11393e+009 1.08492e+009 1.05538e+009 1.00733e+009 9.58215e+008 9.19461e+008 8.63612e+008 7.9892e+008 7.43118e+008 7.08845e+008 6.68975e+008 6.39891e+008 6.07265e+008 5.70498e+008 5.22288e+008 4.9411e+008 4.45151e+008 3.94963e+008 3.5291e+008 3.27863e+008 2.97844e+008 2.75036e+008 2.48129e+008 2.42063e+008 2.2843e+008 2.34717e+008 2.39557e+008 2.48808e+008 2.58558e+008 2.68284e+008 2.77647e+008 2.8716e+008 2.95713e+008 3.04148e+008 #SpawnBio
0.416781 0.5 0 # spawn-recr steepness, sigmaR, autocorr