Update of Table 1 from PENG/P7 including the effective specifications for run 5 and 10 of PENG/P5

Table 1: Summary of the specifications for the OM parameters used to generate data for the runs for which results are presented in this document. The table has been divided into two sections – the first for the OM4 results presented in Figure 1A and 1B, and the second for the OM3 specifications presented in Figure 2. Note that the OM4 results included in Figure 2 are the same as for Figure 1A and B. Grey highlighting has been used to indicate where key parameters are changed within each section or between sections. A dash indicates the parameter is not included in the OM in question. In the table below:

M is the number of simulations conducted for each run,

N is the number of penguins sampled each year at each island,

n_b is the number of years considered for each run,

n_c is the number of number of levels considered for the unknown covariate,

$a(1, 2)$ is a vector with the values assumed for the island effect a_i for island i,

δ is the value of the closure effect,

σ_b is the standard deviation of the year effect,

σ_c is the standard deviation of the unknown covariate effect,

σ_ϵ is the standard deviation of the observation error term for OM3

$\sigma_{\epsilon2}$ is the standard error deviation of the observation error term for OM4, and

σ_η is the standard error deviation of the process error term for OM3 and OM4.

OM	M	N	n_b	n_c	$a(1, 2)$	δ	σ_b	σ_c	σ_ϵ	$\sigma_{\epsilon2}$	σ_η	$\sqrt{\sigma_{\epsilon2}^2 + \sigma_\eta^2}$
OM4 from PENG/P7 (Figures 1A and 1B) **Similar to Run 5 of PENG/P5**	1000	10	30	-	(0, 0.3)	0.1	0.2	-	-	1	0.02	1.0002
	1000	10	30	-	(0, 0.3)	0.1	0.2	-	-	0.8663	0.5	1.0002
	1000	10	30	-	(0, 0.3)	0.1	0.2	-	-	0.5	0.8663	1.0002
	1000	10	30	-	(0, 0.3)	0.1	0.2	-	-	0.02	1	1.0002
	1000	30	30	-	(0, 0.3)	0.1	0.2	-	-	1	0.02	1.0002
	1000	30	30	-	(0, 0.3)	0.1	0.2	-	-	0.8663	0.5	1.0002
	1000	30	30	-	(0, 0.3)	0.1	0.2	-	-	0.5	0.8663	1.0002
	1000	30	30	-	(0, 0.3)	0.1	0.2	-	-	0.02	1	1.0002
	1000	200	30	-	(0, 0.3)	0.1	0.2	-	-	1	0.02	1.0002
	1000	200	30	-	(0, 0.3)	0.1	0.2	-	-	0.8663	0.5	1.0002
	1000	200	30	-	(0, 0.3)	0.1	0.2	-	-	0.5	0.8663	1.0002
	1000	200	30	-	(0, 0.3)	0.1	0.2	-	-	0.02	1	1.0002
OM2 Run 5 of PENG/P5	1000	200	30	-	(0, 0.3)	0.1	0.0	-	-	1.0002	0.20	1.0200
OM2 Run 10 of PENG/P5	1000	30	30	-	(0, 0.2)	0.1	0.0	-	-	0.40	0.10	0.412

OM	M	N	n_b	n_c	$a(1, 2)$	δ	σ_b	σ_c	σ_ϵ	$\sigma_{\epsilon2}$	σ_η	$\sqrt{\sigma_\epsilon^2 + \sigma_\eta^2 + \sigma_c^2}$
OM3 from PENG/P7 (Figure 2)	1000	10	30	5	(0, 0.3)	0.1	0.2	1.00	0.02	-	0.02	1.0002
	1000	10	30	5	(0, 0.3)	0.1	0.2	0.8663	0.02	-	0.5	1.0002
	1000	10	30	5	(0, 0.3)	0.1	0.2	0.50	0.02	-	0.8663	1.0002
	1000	10	30	5	(0, 0.3)	0.1	0.2	0.00	0.02	-	1	1.0002
Similar to Run 5 of Peng/P5	1000	200	30	5	(0, 0.3)	0.1	0.2	1.00	0.02	-	0.02	1.0002
	1000	200	30	5	(0, 0.3)	0.1	0.2	0.8663	0.02	-	0.5	1.0002
	1000	200	30	5	(0, 0.3)	0.1	0.2	0.50	0.02	-	0.8663	1.0002
	1000	200	30	5	(0, 0.3)	0.1	0.2	0.00	0.02	-	1	1.0002
OM1 Run 5 of PENG/P5	1000	200	30	5	(0, 0.3)	0.1	0.0	1.00	0.02	-	0.2	1.002
OM1 Run 10 of PENG/P5	1000	30	30	5	(0,0.2)	0.1	0.0	0.35	0.20	-	0.10	0.415