

Additional model runs requested by the panel after MARAM/IWS/DEC16/Peng Clos/P4

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The below reproduces the table in MARAM/IWS/DEC16/Peng Clos/P4, with the additional results for model runs requested by the panel highlighted in yellow.

Source/Data range	Model type	Data type	Island	Effect size	SE/SD
(A) Ross-Gillespie and Butterworth 2016 from Table 6 ¹	Log LMM(?)	Agg.	Dassen	-0.08	0.22
			Robben	-0.13	0.20
(B) Sherley 2016 (results from fit with biomass omitted) ²	LMM (JAGS)	Disagg.	Dassen	0.02	0.02
			Robben	-0.11	0.03
(C) As Sherley 2016, but fit to 2004, 2008–2013 data ²	LMM (JAGS)	Disagg.	Dassen	0.003	0.03
			Robben	-0.12	0.03
(1) Adding fortnight to the hierarchical random effect (Year/Month/Fortnight) ^{1 and 2 shown}	LMM (JAGS)	Disagg.	Dassen	-0.05	0.03 ² (0.10 ¹)
			Robben	-0.06	0.03 ² (0.09 ¹)
(2) As Sherley 2016, but fit to 2004, 2008–2013 data, SD of difference of logged joint posterior ¹	LMM (JAGS)	Disagg.	Dassen	0.003	0.10
			Robben	-0.12	0.09
(3) 2004, 2008–2013 aggregated data, no biomass, year random effect ¹	Log LMM (nlme)	Agg.	Dassen	-0.08	0.23
			Robben	-0.12	0.20
(4) As (2) but fit to 2008–2015 disaggregated data ¹	LMM (JAGS)	Disagg.	Dassen	0.02	0.09
			Robben	-0.11	0.08
2004, 2008–2013 aggregated data, no biomass, year random effect ¹	Log LMM (JAGS)	Agg.	Dassen	-0.12	0.31
			Robben	-0.15	0.28
2004, 2008–2013 aggregated data, no biomass, year random effect ²	LMM (JAGS)	Agg.	Dassen	-0.04	0.11
			Robben	-0.06	0.10

Notes: 1. Results are in log space; 2. Results are in normal space; Agg. = aggregated data, meaning that the annual means are used; Disagg. = disaggregated data, meaning each of the original observations made in the field is used; nlme = model fit using the nlme library in R; JAGS = model fit using Bayesian inference and Just Another Gibbs Sampler (JAGS); LMM = linear mixed model; Log LMM linear mixed model on log transformed data.