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CORRIGENDUM

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The geography of spatial synchrony

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In the article "The geography of spatial synchrony" (Ecol. Lett. 20 (7), 801–814), an error in the analysis code had a quantitatively small effect on the variable importance weights (Σw) reported in Tables 1 and 3. The corrected tables are shown below. The corrections have no substantive effect on conclusions made by the authors. R code containing the bug was released as Appendix S10. The bug was in the function "sum.var.weights". Appendix S10 is superseded by an R package developed by the authors and available on GitHub: <https://github.com/reumandc/mms>. The package code is accompanied by a vignette and extensive unit tests. The package can be installed into R via the following:

```
>library(devtools)
>install_github(repo="reumandc/mms", ref="stable")
```

among other ways.

Table 1 Matrix regression recovers operating mechanisms A–D of geography of synchrony in simulated data, and in a complex scenario with combined mechanisms

Simulated scenario	Driver 1 synchrony	Driver 2 synchrony	Density-dependence	Driver sensitivity	Dispersal
A) Driver 1 synchrony pattern	**β = 0.944**	β = 0.037	β = −0.122	β = 0.009	β = −0.812
	***P* < 0.001**	*P* = 0.477	*P* = 0.627	*P* = 0.785	*P* = 0.968
	Σ*w* = 1.000	Σ*w* = 0.195	Σ*w* = 0.230	Σ*w* = 0.175	Σ*w* = 0.350
B) Changing density-dependence	**β = 0.366**	β = 0.084	**β = 0.423**	β = 0.111	β = −17.53
	***P* = 0.002**	*P* = 0.501	***P* < 0.001**	*P* = 0.174	*P* = 0.664
	Σ*w* = 0.520	Σ*w* = 0.260	**Σ*w* = 0.970**	Σ*w* = 0.335	Σ*w* = 0.355
C) Changing driver sensitivity	β = −0.011	β = 0.078	β = −0.283	**β = 0.742**	β = 29.289
	P = 0.908	*P* = 0.432	*P* = 0.133	***P* < 0.001**	*P* = 0.315
	Σ*w* = 0.245	Σ*w* = 0.190	Σ*w* = 0.195	**Σ*w* = 1.000**	Σ*w* = 0.385
D) Unequal dispersal	**β = 0.064**	β = −0.002	β = −0.020	β = 0.005	**β = 1.223**
	***P* < 0.001**	*P* = 0.764	*P* = 0.882	*P* = 0.882	***P* < 0.001**
	Σ*w* = 0.970	Σ*w* = 0.330	Σ*w* = 0.230	Σ*w* = 0.345	**Σ*w* = 1.000**
Combined mechanisms (see caption, main text)	**β = 0.407**	**β = 0.147**	β = 0.203	β = −0.055	**β = 1.068**
	***P* < 0.001**	***P* < 0.001**	*P* = 0.348	*P* = 0.297	***P* < 0.001**
	Σ*w* = 1.000	**Σ*w* = 0.870**	Σ*w* = 0.260	Σ*w* = 0.225	**Σ*w* = 0.980**

The combined scenario involved unequal dispersal and two operating environmental drivers, each affecting the populations equally and having different spatial structures. Model coefficients are denoted β. *P*-values, based on 1000 permutations, are for tests comparing the 5-predictor model to the model with the predictor in the column header removed. Variable importance (Σw) is quantified by summing, over all models containing each variable, model weights generated using the leave-n-out resampling procedure (see text and Appendix S4 for details). Bold font indicates statistically significant effects.

Table 3 Matrix regression coefficients (β), *P*-values, and variable importance weights (Σw) of predictors of gypsy moth synchrony at long (4–12 years) timescales

Predictor	β	*P*	Σ*w*
Density dependence similarity	0.156	0.260	0.355
Forest type similarity	−0.222	0.198	0.460
Synchrony in PC1 scores	−0.114	0.787	0.345
Synchrony in PC2 scores	**0.699**	**0.003**	**0.915**
Proximity	0.181	0.260	0.480

Coefficients and *P*-values come from the full model including all predictors. Importance weights were generated using model selection methods (Appendices S4, S8). Bold font indicates statistically significant effects.