

Recommender: Denis Réale

I have read the new draft of the manuscript and your responses to the two reviewers (and my) comments. I greatly appreciate that you provided thorough explanations and justifications of your choices.

We thank the Recommender for this additional feedback on our work. We have now further revised the text to account for these remaining comments, as detailed below.

1) a complete description (i.e. both coefficients and 95%CI of fixed effects and variance estimates of random effects e.g. shown as a proportion of the total variance) of the selected model (Table S1-5) for each population is essential for the readers to make their opinion about the results.

In response to your comment, we have now added an additional table per population in the Supplementary Materials (Tables S1b-S5b) which provides the full details of the selected model, including coefficients for the fixed effects and the variance components for the random effects.

2) variance among years will provide important biological information on how body mass in the middle of the winter (intercept) vary among years in each population. This type of results totally fits with your objectives: based on your second hypothesis we should expect higher among-year variance in body mass at the intercept in Sweden than in France. You may also quickly discuss the variance in slopes among years, and the among-individual variance.

I would suggest you to add one table in the core document showing these effects. I'm convinced that once this table is added to the paper I will very quickly (this time!) write my recommendation for your publication.

In response to your comment, we have:

- **Added an additional table to the core of the text (Table 2) to provide estimates of variation attributed to the residual, fixed and random components of the models. In particular, we have highlighted the proportion of variance attributable to the random effect of year on the body mass-date slope which, under our second hypothesis, should be higher in Sweden than in France.**
- **In connection with this, we have also briefly referred to this expectation in the Introduction (L. 79), reported these estimates in the Results (L. 173-176) and discussed their implications in terms of among-individual differences (L. 261-263) and among-year variation in over-winter body mass change (L. 192-194 & 223-226) in the Discussion.**