

Figure S1: habitat preference

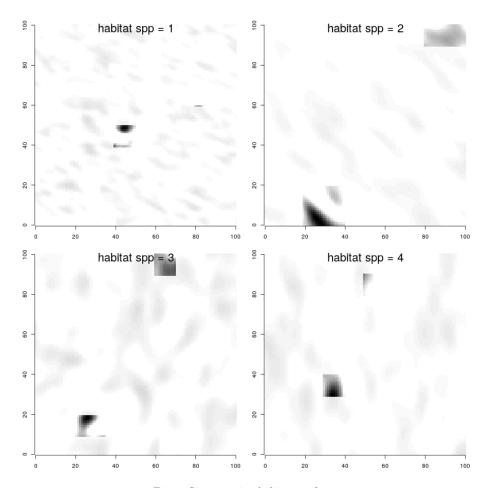


Figure S2: spawning habitat preference

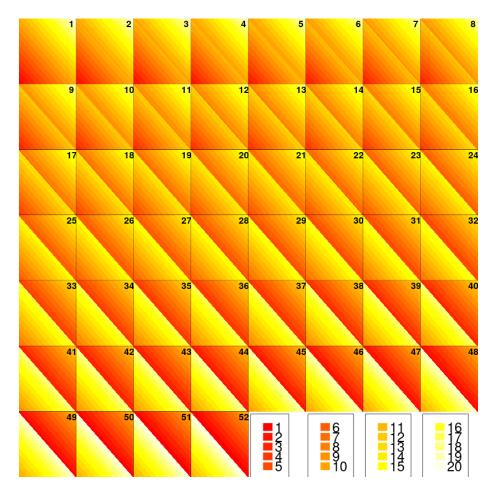


Figure S3: Spatiotemporal temperature gradient

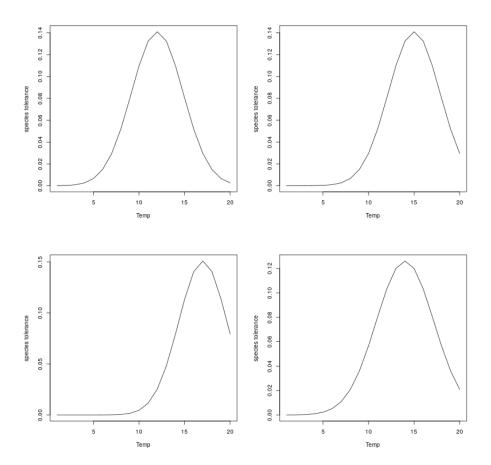


Figure S4: Species thermal tolerances

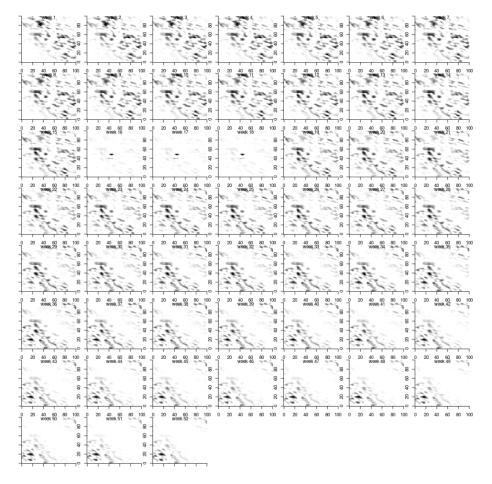


Figure S5: Spatiotemporal habitat suitability - population  $1\,$ 

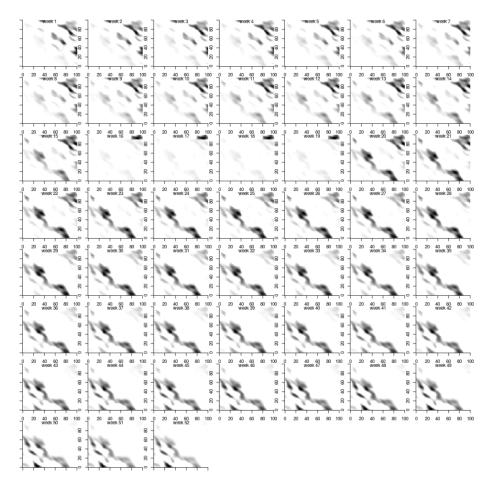


Figure S6: Spatiotemporal habitat suitability - population  $2\,$ 

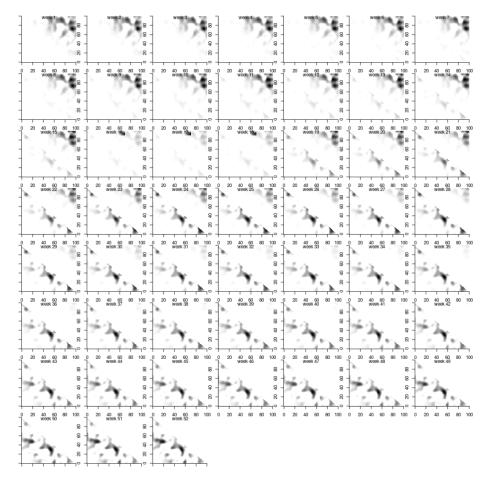


Figure S7: Spatiotemporal habitat suitability - population 3

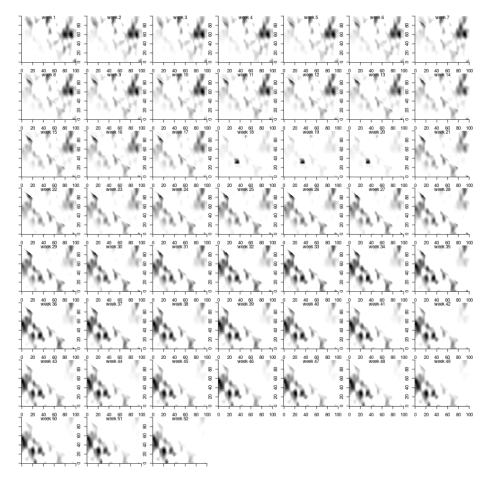


Figure S8: Spatiotemporal habitat suitability - population 4

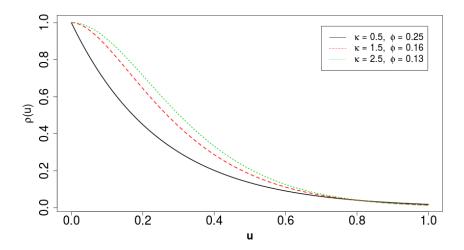


Figure S9: Example of different implementation of the Matern correlation function on auto-correlation distance  $\frac{1}{2}$