

Ecography

ECOG-03427

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Supplementary material

Appendix 1

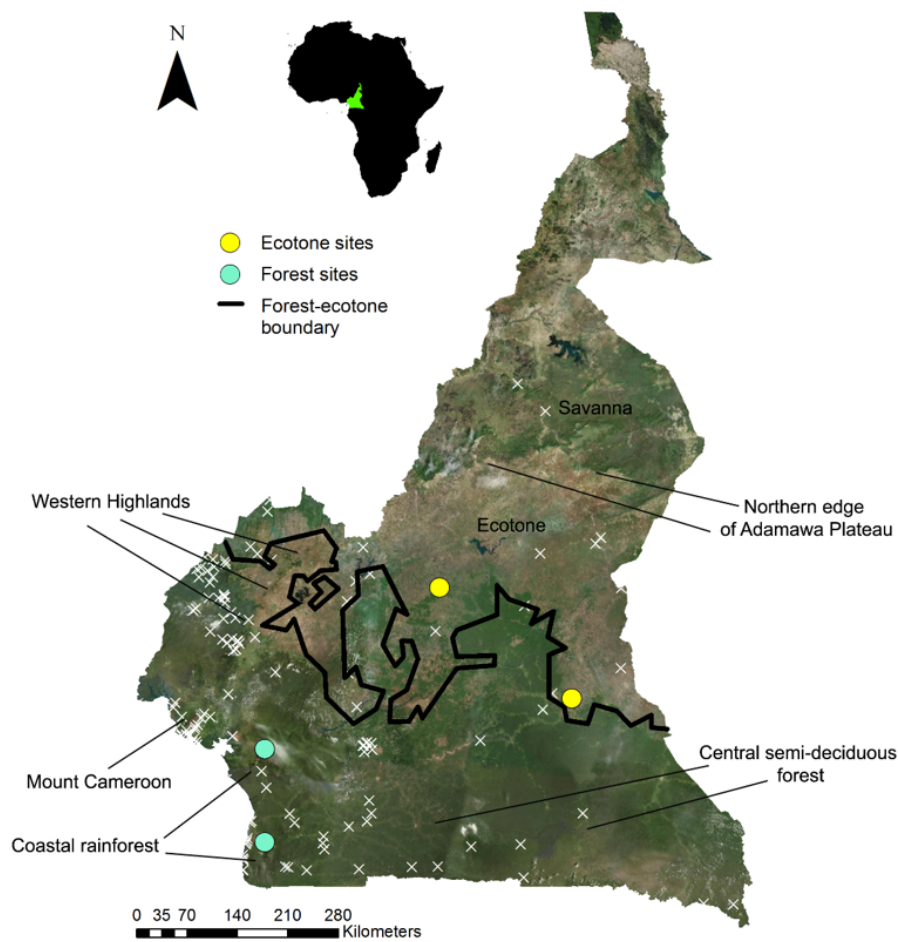


Figure A1. Map of Cameroon, showing the two ecotone (yellow circles) and two forest (blue circles) sites we sampled for the thermal suitability analyses, as well as a black line demarcating the boundary between forest and ecotone. White cross marks indicate individual presences of *T. affinis* used for the ecological niche modelling. Image source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

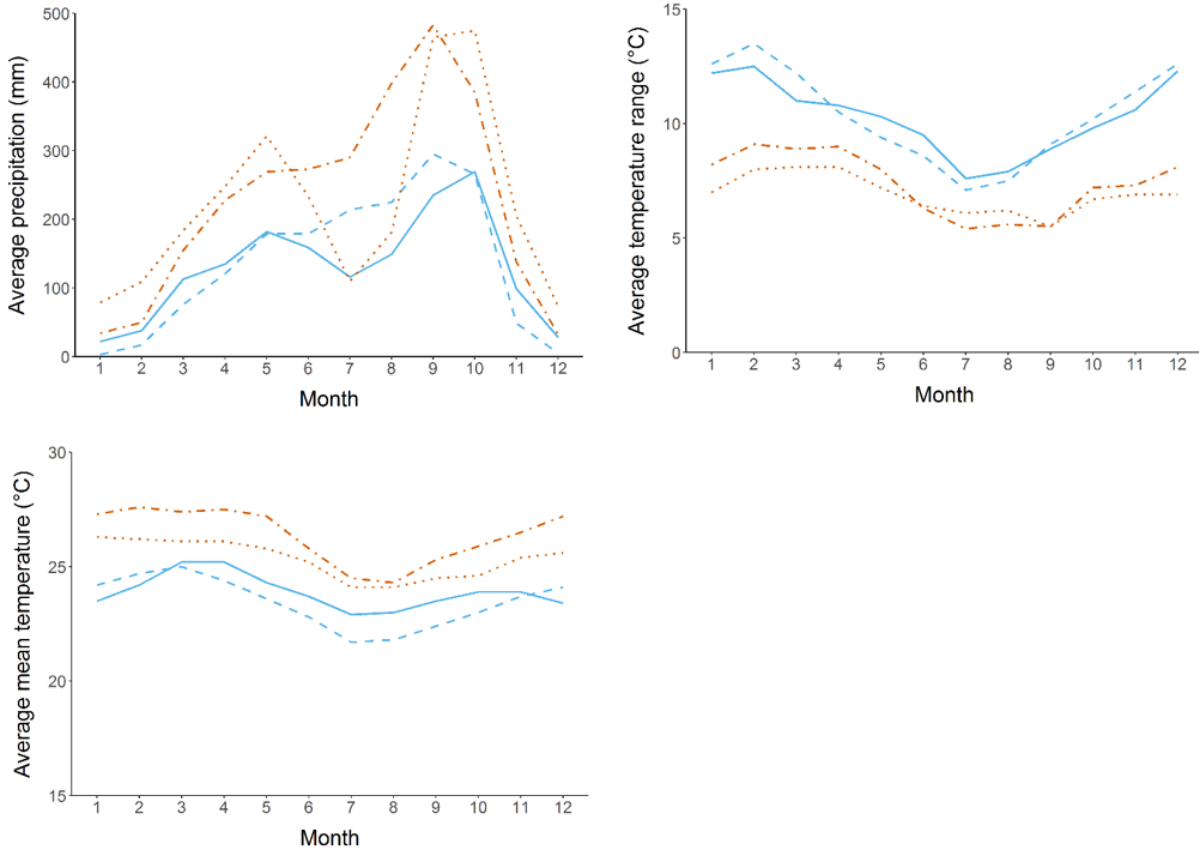


Figure A2. Monthly averages for precipitation (upper left), temperature range (upper right) and mean temperature (lower left) derived from WorldClim at a 30 arc-sec resolution for our four sites. Forest sites are shown in red, with the dotted and dot-dash lines representing Kribi (2.718, 9.877) and Malimba (3.885, 10.099), respectively. Ecotone sites are shown in blue, with the solid and dashed lines representing Bazzama (4.506, 13.937) and Doume (5.895, 12.280), respectively.

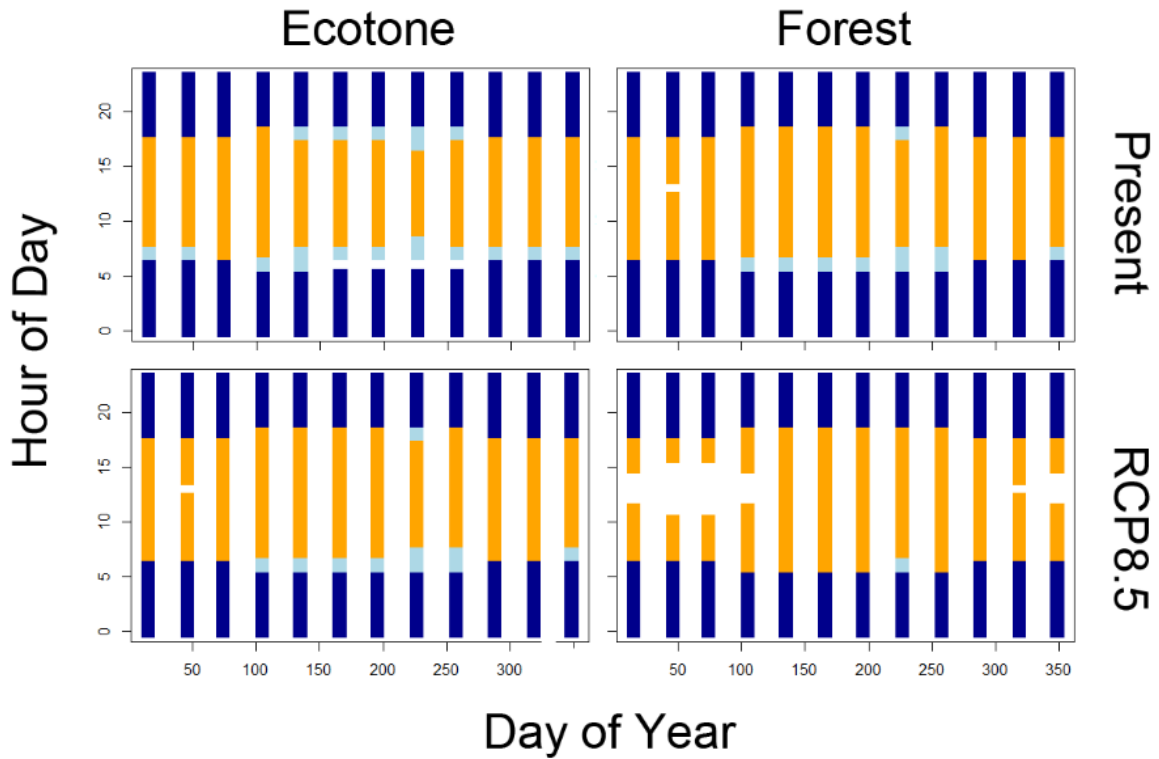


Figure A3. Potential daily activity windows within thermal constraints for skinks from both ecotone (left) and forest (right) in present environmental conditions (top) and under an RCP8.5 emission scenario (bottom), as direct output from NicheMapR set to run for the middle day of each month in a year at one of our ecotone sites, Doume (5.895, 12.280). Yellow bars represent hours where activity is possible, light blue where only basking is possible, gaps where activity is not possible, while dark blue indicates night time, i.e. no activity.

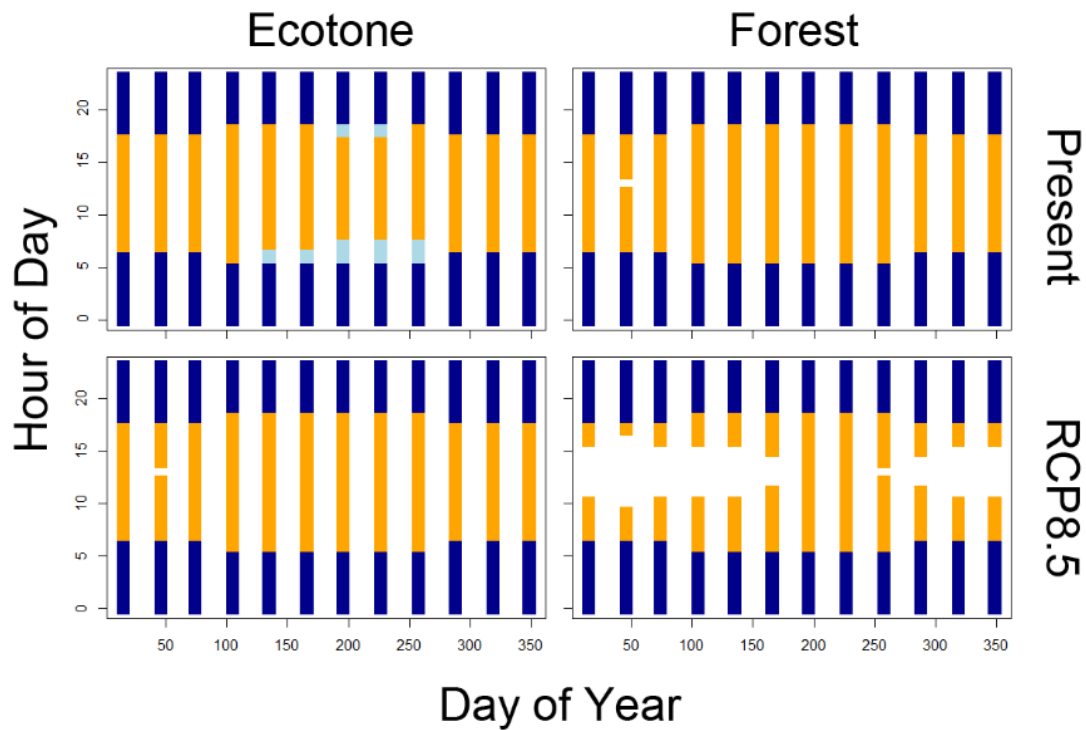


Figure A4. Potential daily activity windows within thermal constraints for skinks from both ecotone (left) and forest (right) in present environmental conditions (top) and under an RCP8.5 emission scenario (bottom), as direct output from NicheMapR set to run for the middle day of each month in a year at one of our forest sites, Kribi (2.718, 9.877). Yellow bars represent hours where activity is possible, light blue where only basking is possible, gaps where activity is not possible, while dark blue indicates night time, i.e. no activity.

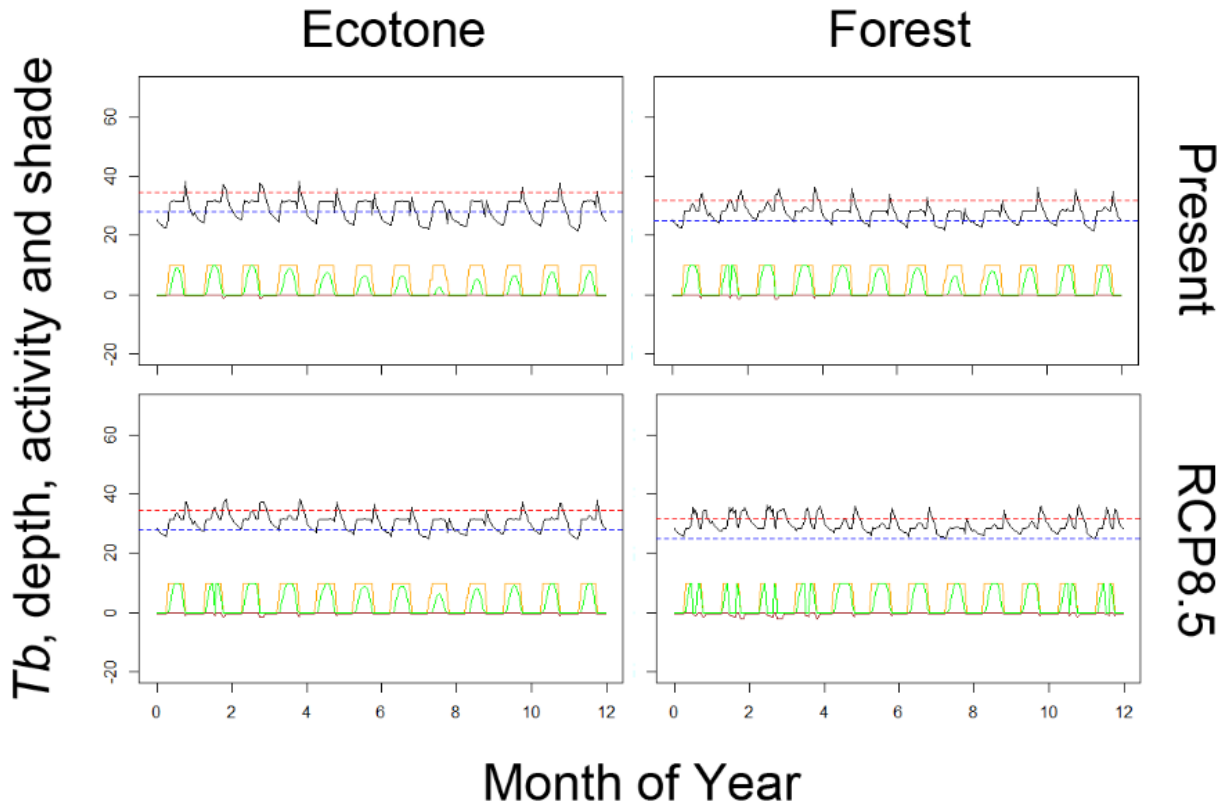


Figure A5. Plots of detailed NicheMapR output for skinks from both ecotone (left) and forest (right) in present environmental conditions (top) and under an RCP8.5 emission scenario (bottom), when set to run for the middle day of each month in a year at one of our ecotone sites, Doume (5.895, 12.280). The black line denotes body temperature, while the dashed red and blue lines represent VT_{max} and VT_{min} , respectively. The orange line shows activity, where there is activity possible at 10, only basking at 5 and no activity at 0. The green line depicts shade seeking as a shade cover percentage divided by 10. The brown line indicates depth (in m) if there is burrowing.

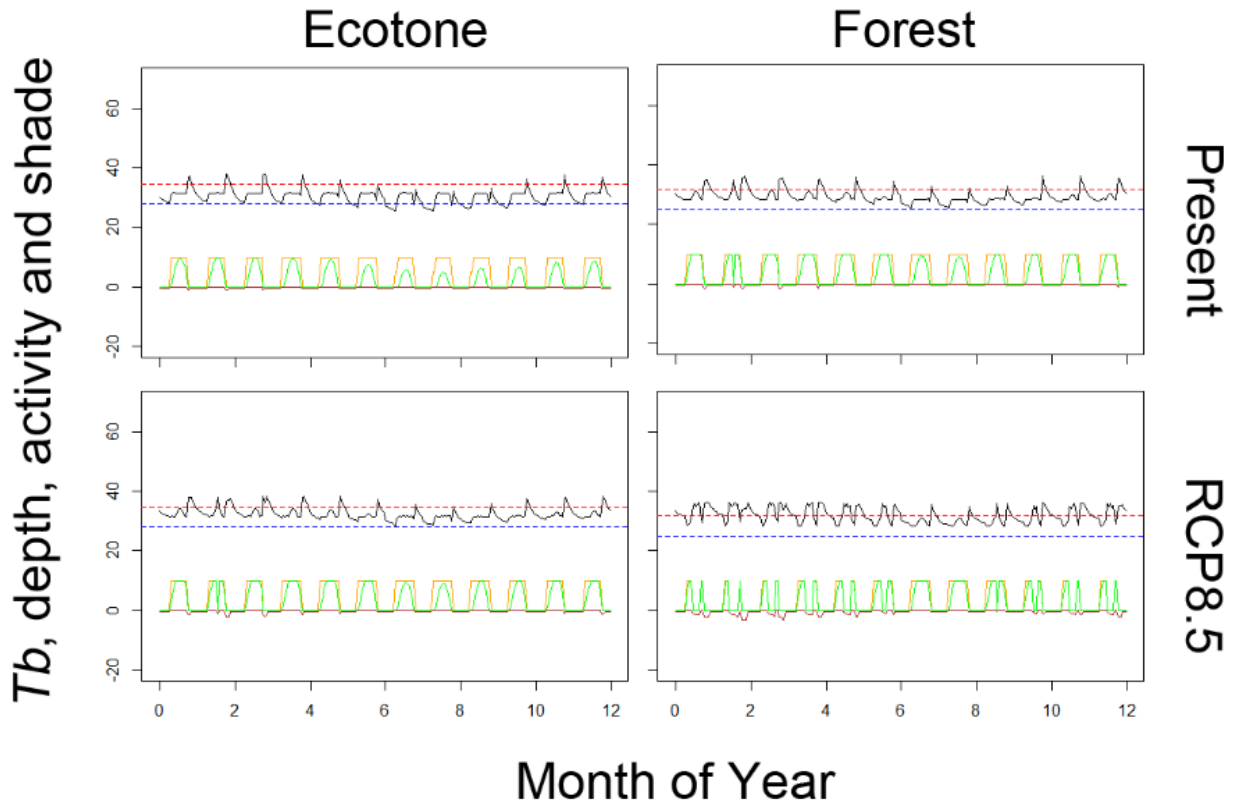


Figure A6. Plots of detailed NicheMapR output for skinks from both ecotone (left) and forest (right) in present environmental conditions (top) and under an RCP8.5 emission scenario (bottom), when set to run for the middle day of each month in a year at one of our ecotone sites, Kribi (2.718, 9.877). The black line denotes body temperature, while the dashed red and blue lines represent VT_{max} and VT_{min} , respectively. The orange line shows activity, where there is activity possible at 10, only basking at 5 and no activity at 0. The green line depicts shade seeking as a shade cover percentage divided by 10. The brown line indicates depth (in m) if there is burrowing.

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