The impact of climate and land use change on Greek centipede biodiversity and conservation

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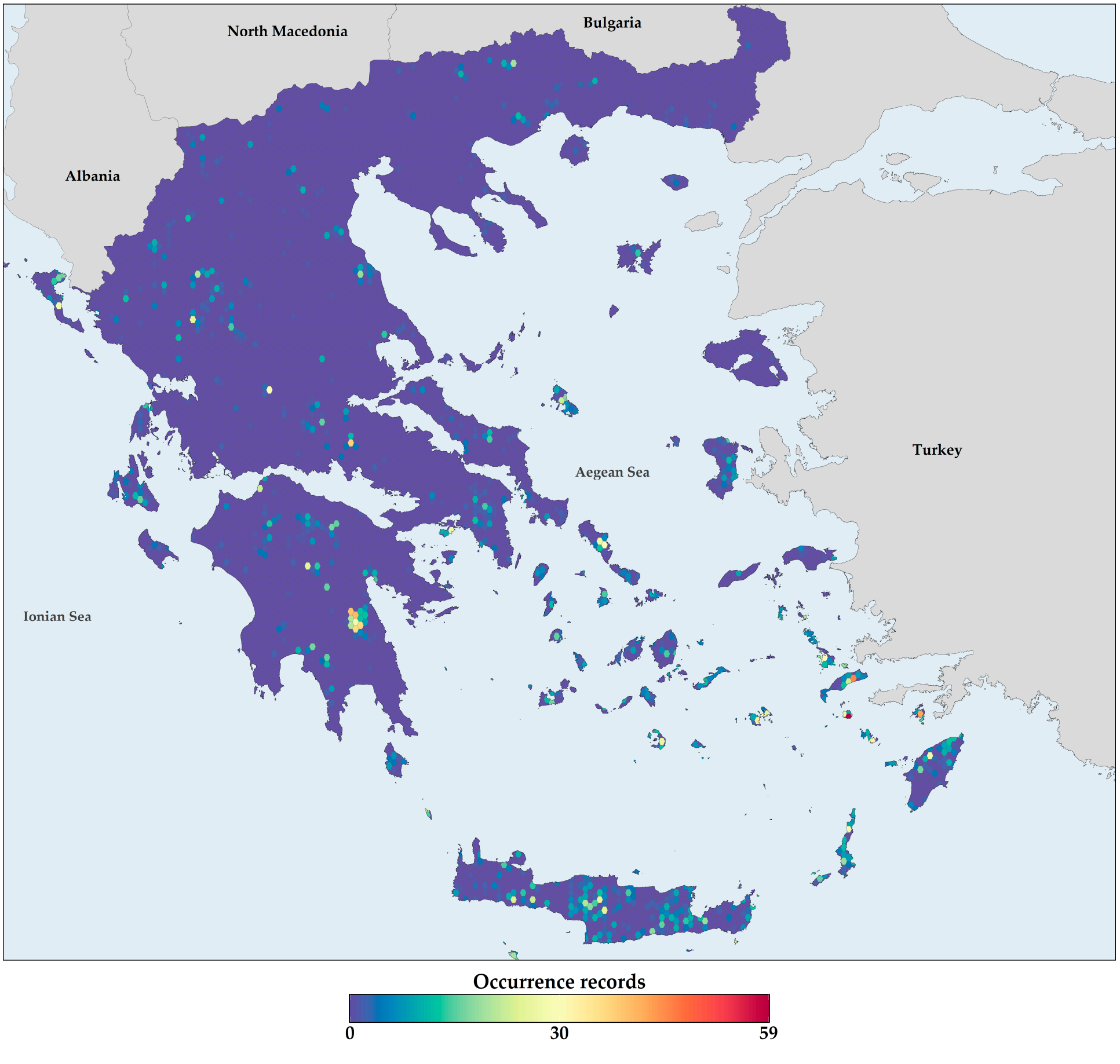


Figure S1. Cumulative occurrence records per grid cell of centipedes in Greece. The data were drawn from the published literature and from species samples stored at the collections of the Natural History Museum of Crete.

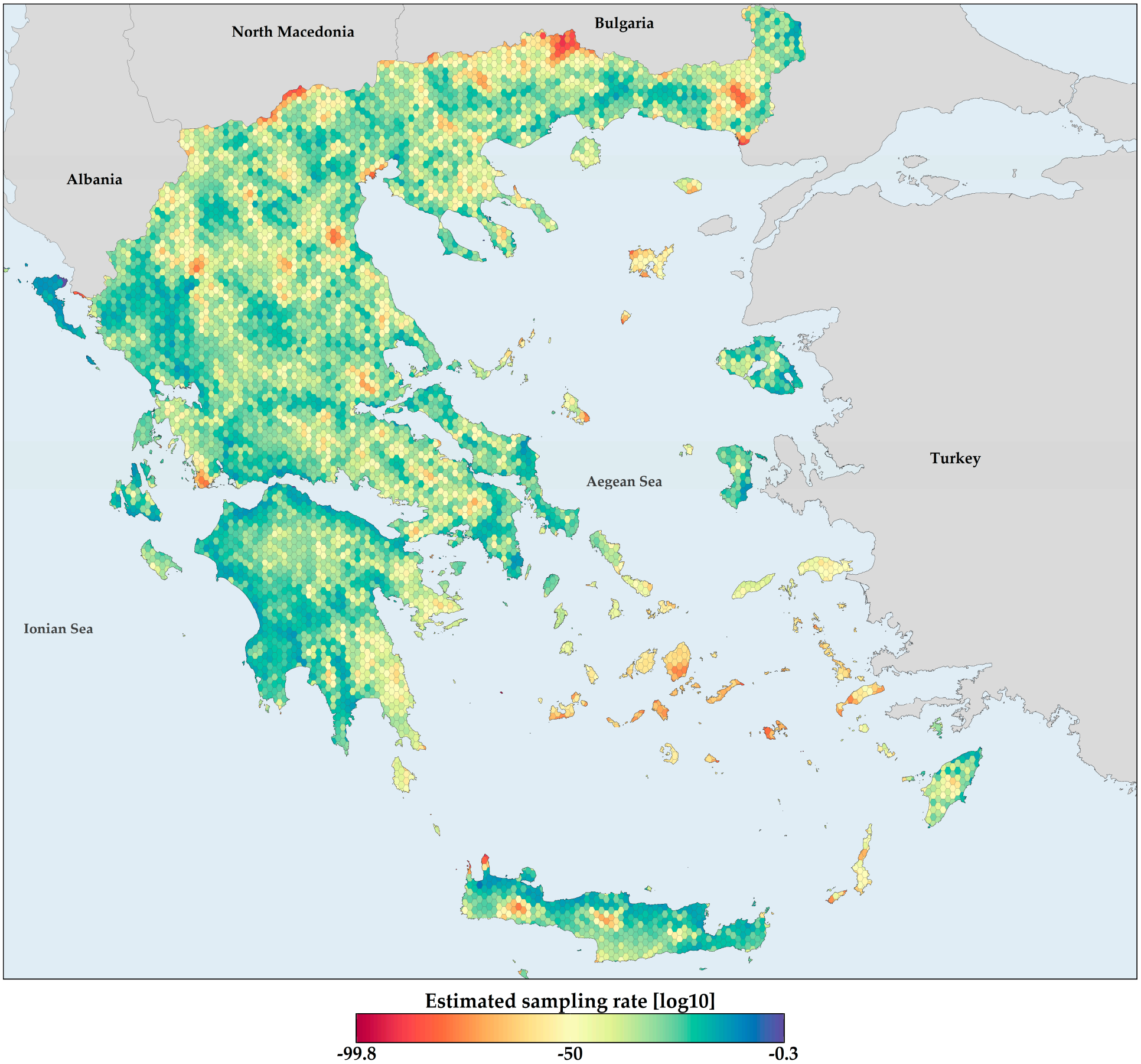


Figure S2. Geographical representation of sampling effort for all analyzed species, shown as log−10 transformed values. The dark red regions indicate underexplored areas.

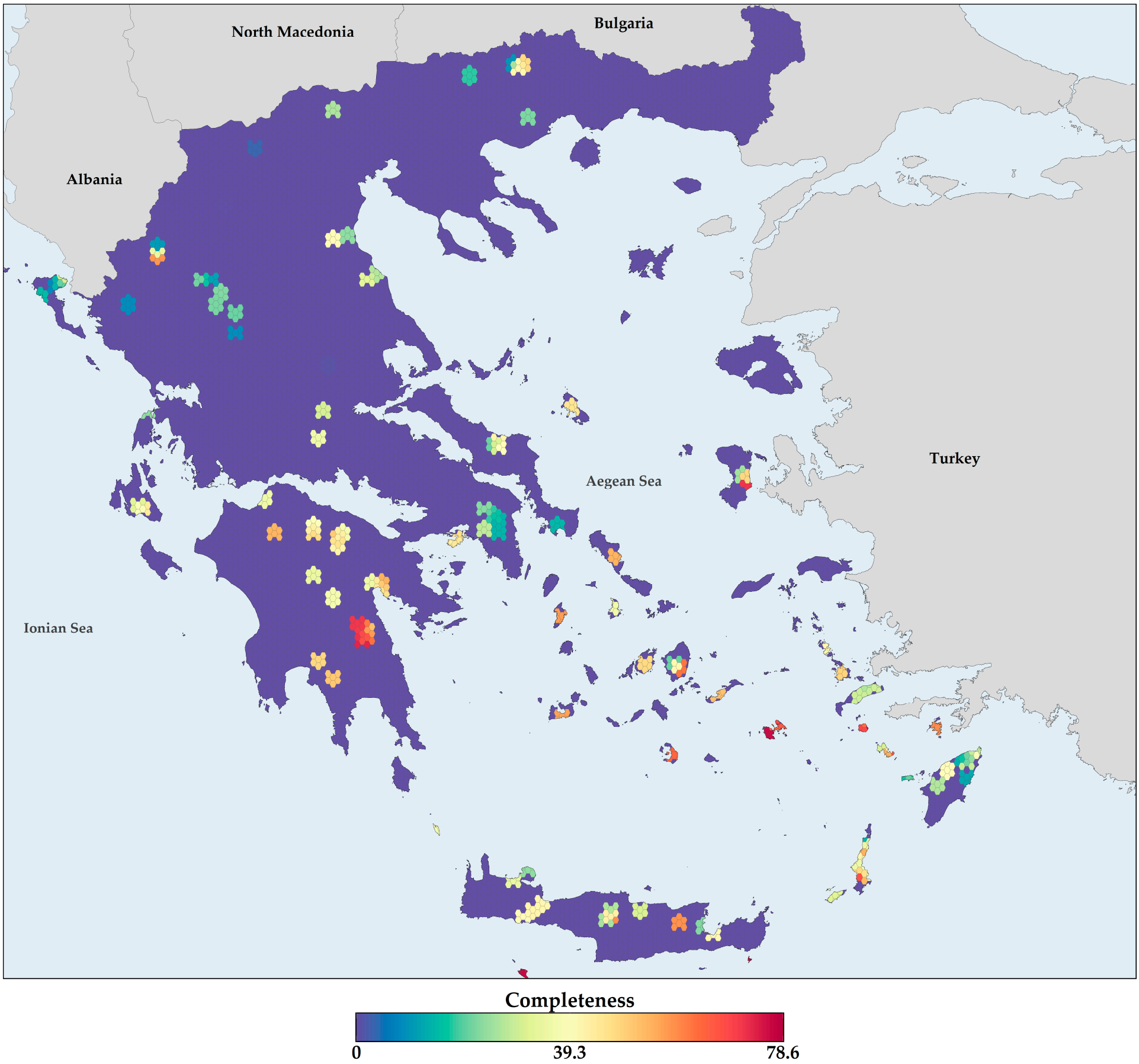


Figure S3. Survey completeness for all the species included in our analyses.

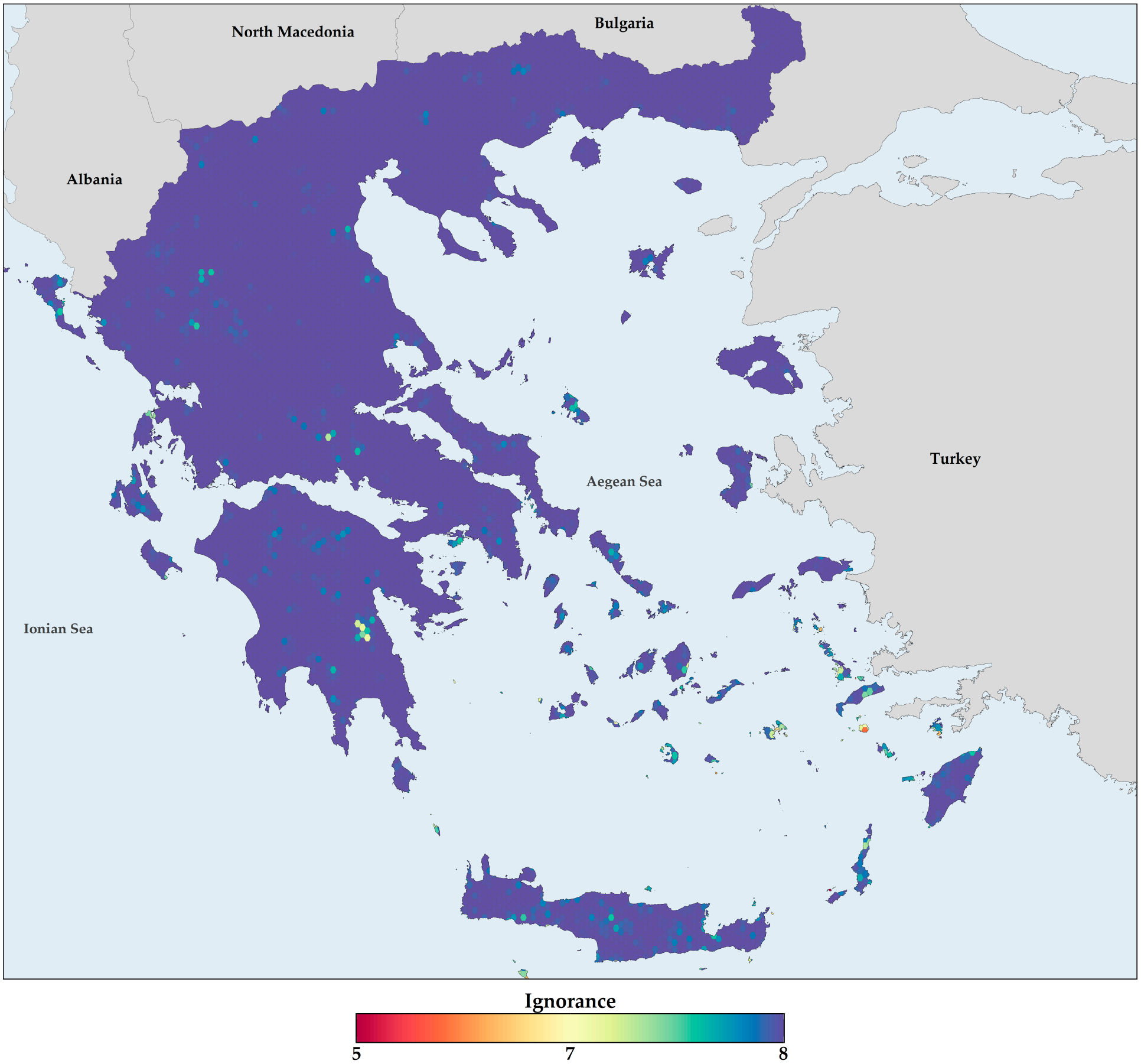


Figure S4. Spatial distribution of relative faunistic ignorance. The color gradient depicts relative ignorance values from 5 (red, indicating minimal relative ignorance) to 8 (blue, representing maximal relative ignorance).

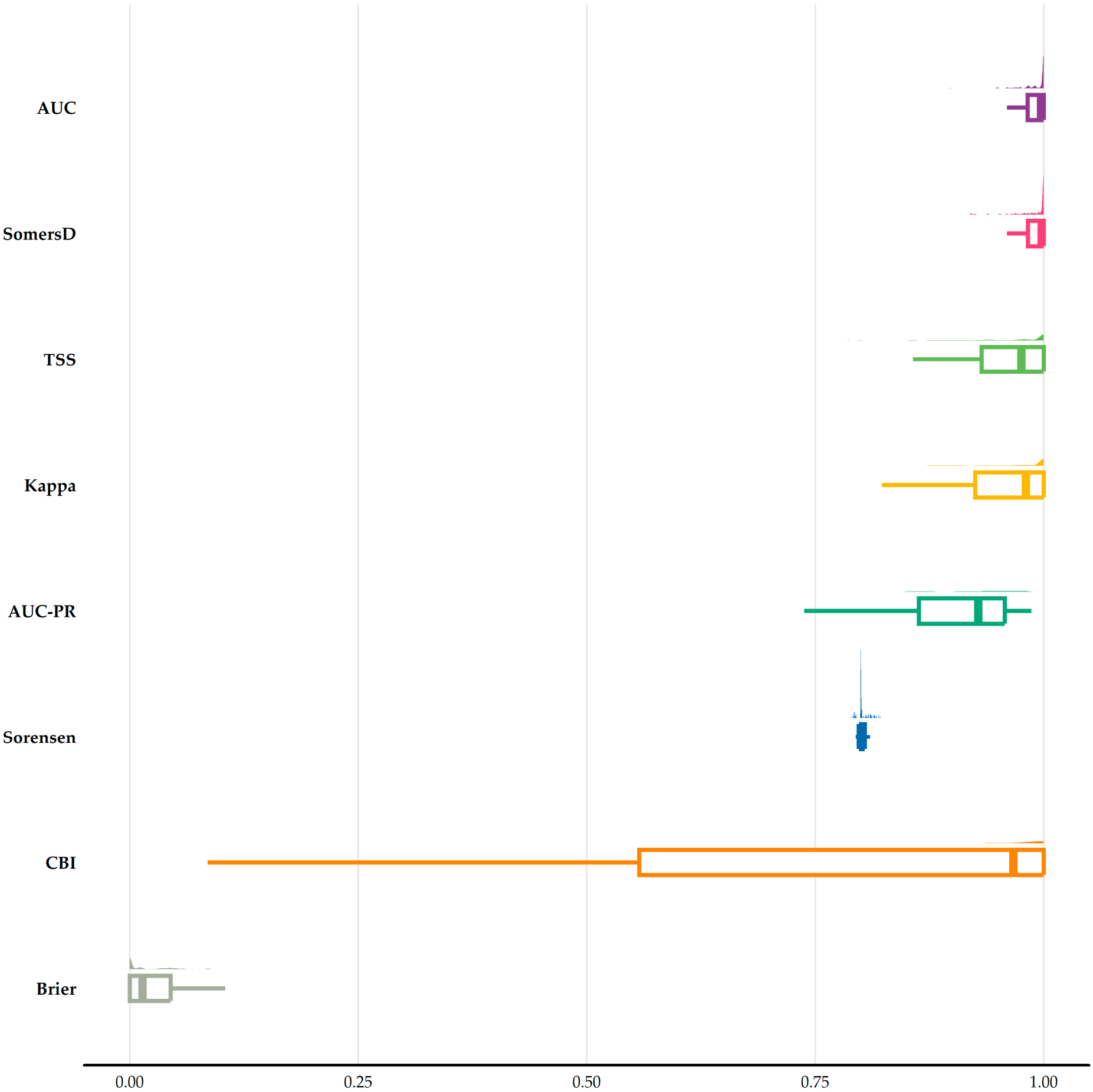


Figure S5. Raincloud plot of the model performance evaluation metrics. AUC: Area under the curve. AUC-PR: Area under the curve for Precision-Recall. CBI: Continuous Boyce Index. TSS: True skill statistic.

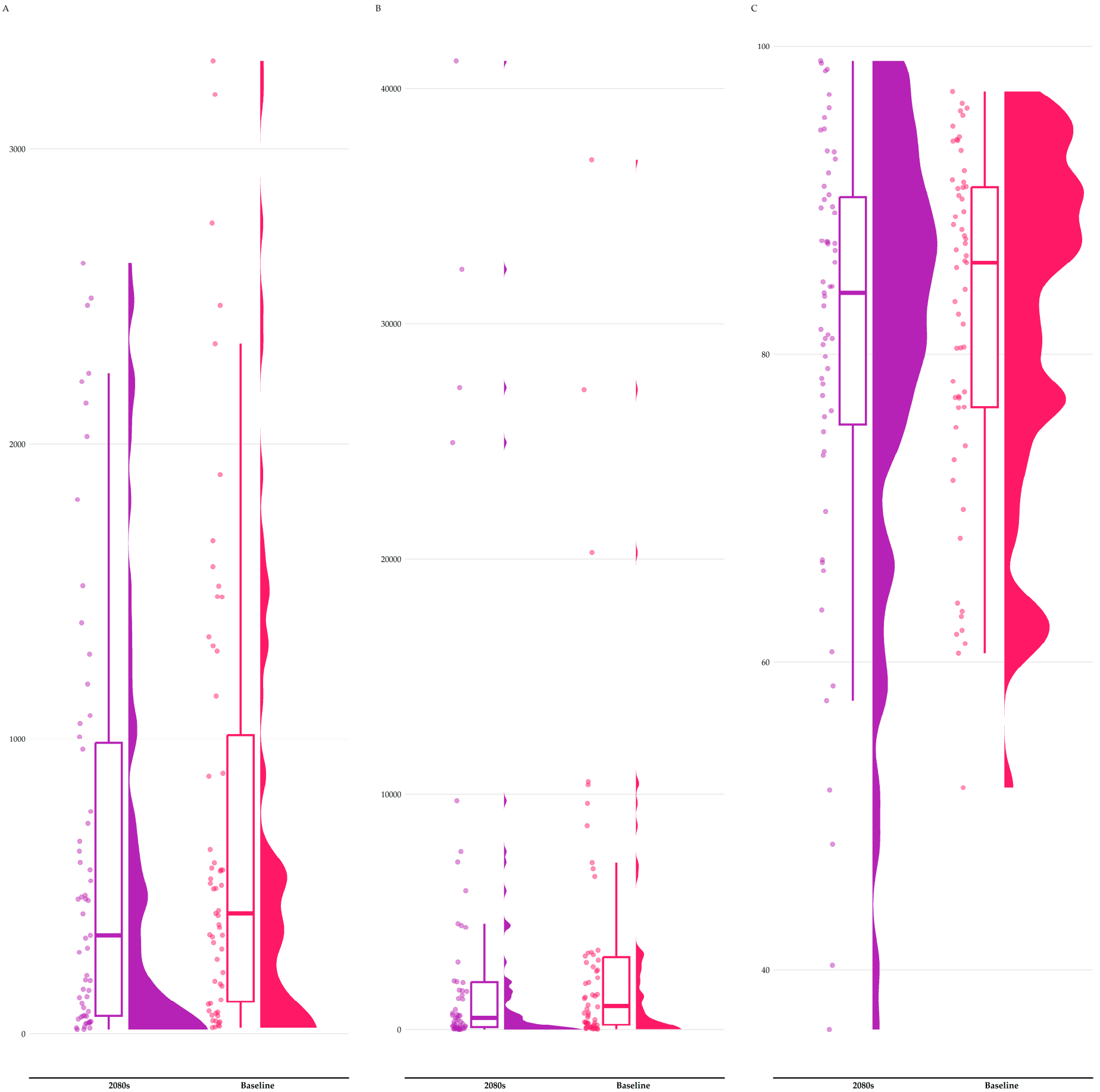


Figure S6. Raincloud plot of the (A) number of patches, (B) effective mesh size and (C) cohesion index for all centipede species that were included in our analyses under the baseline period and the Ensemble RCP 8.5 SSP5 combination in the 2080s.

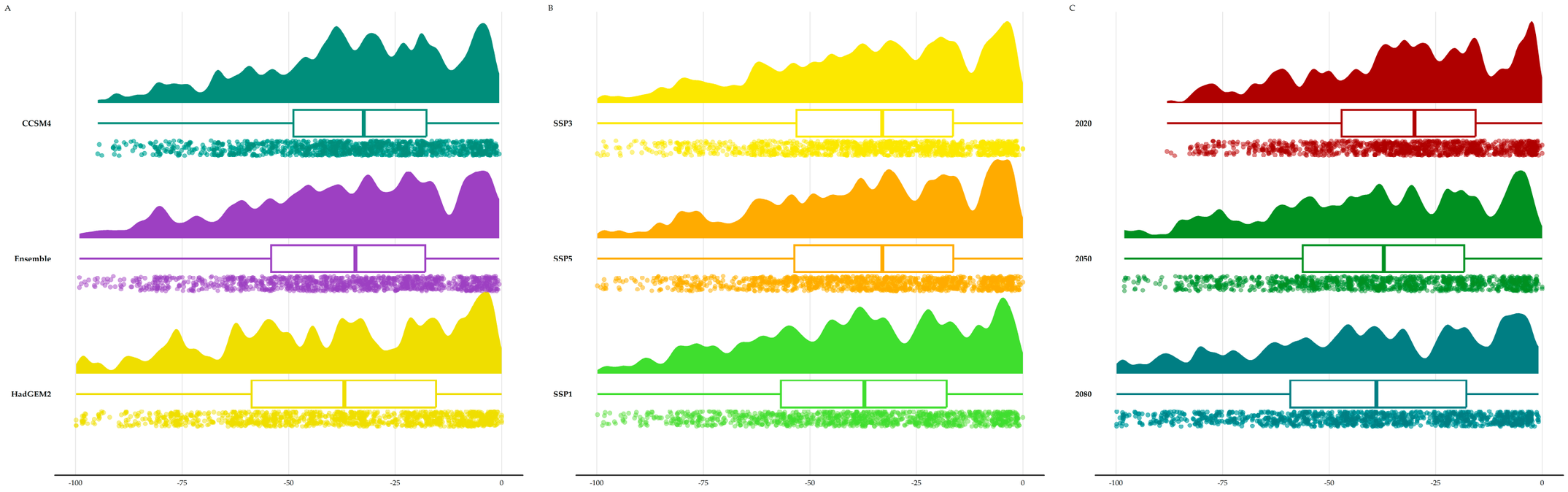


Figure S7. Raincloud plot of the projected proportion of area range loss for all the taxa we included in our analyses under (A) all Global Circulation Models (GCM), (B) Representative Concentration Pathways (RCP) and Shared Socioeconomic Pathways (SSP) combination, and (C) across three time periods.

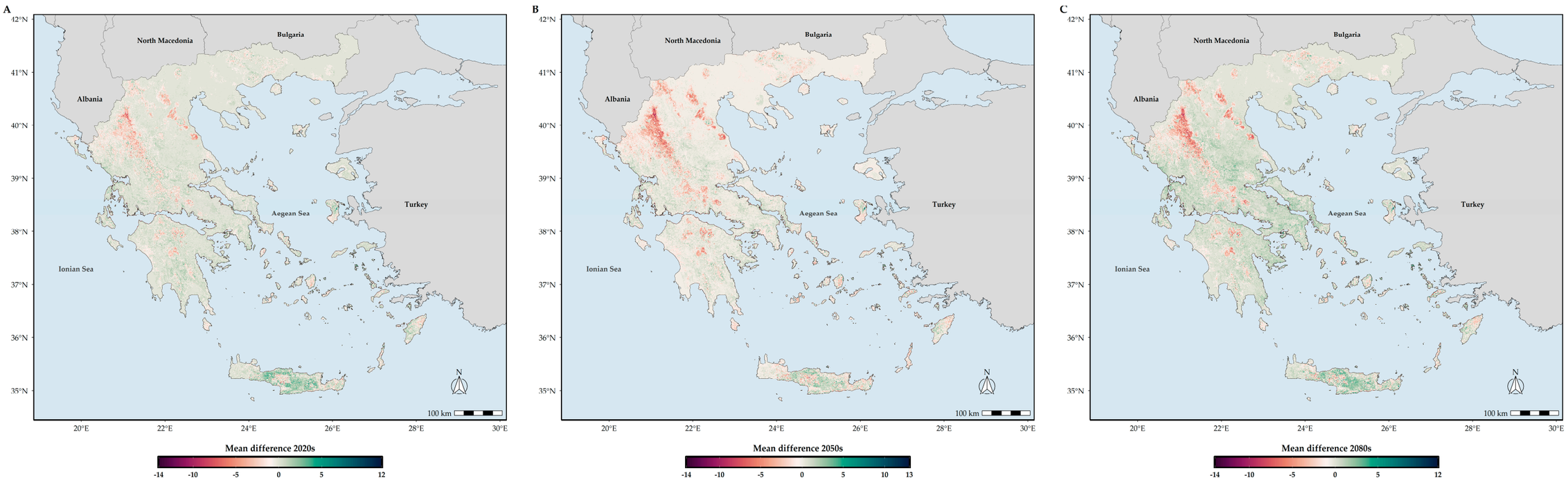


Figure S8. Mean difference in centipede species richness. It depicts the average change in future species richness compared to the species richness for the baseline period. The analysis involves subtracting the current species richness from each Global Circulation Model (GCM)/Representative Concentration Pathway (RCP) species richness raster under the Shared Socioeconomic Pathway 5 (SSP5). This process is repeated for three future time periods: (A) the 2020s, (B) the 2050s, and (C) the 2080s. The resulting differences are then averaged to represent the mean change in species richness across all included taxa.

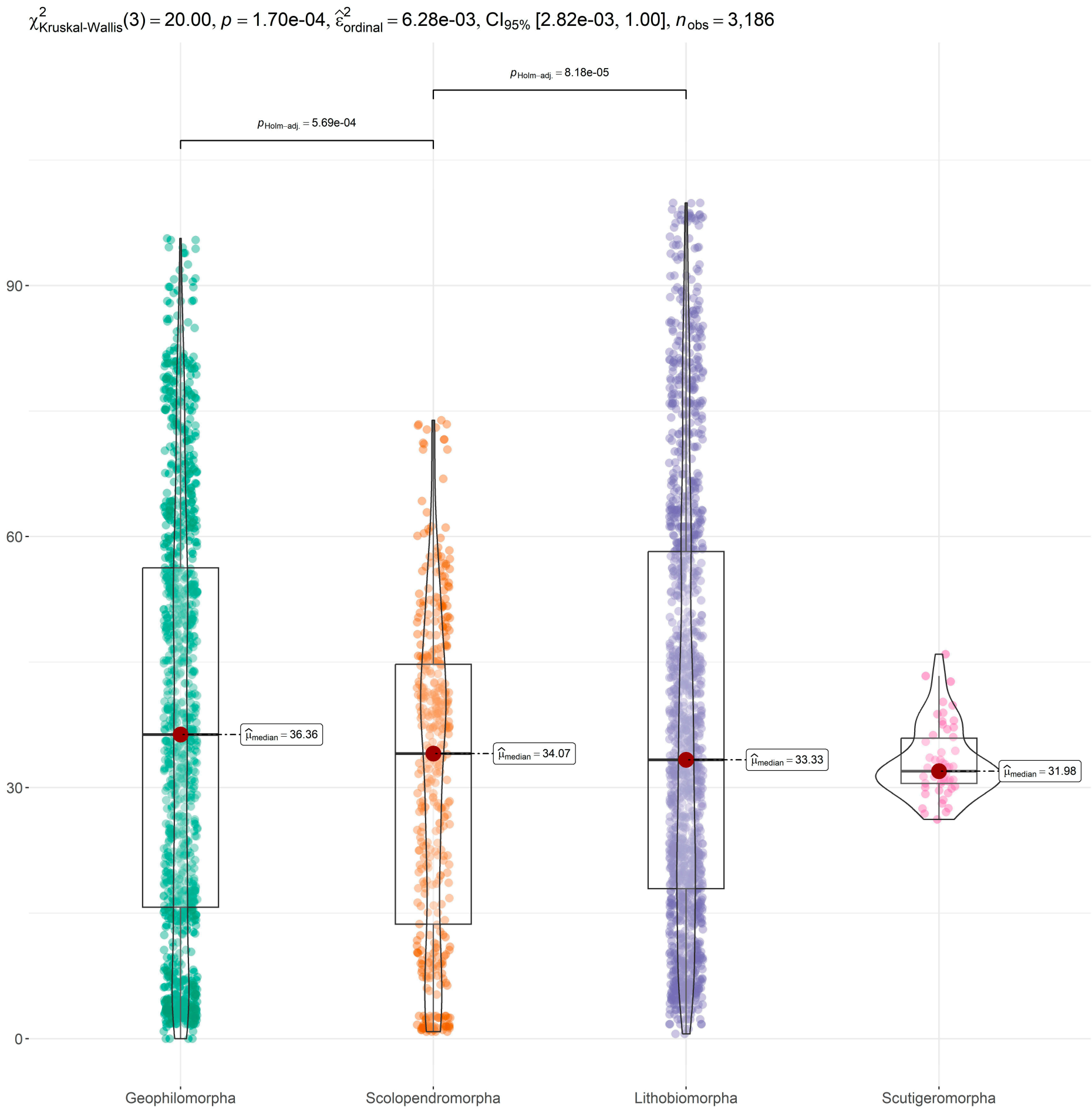


Figure S9. Raincloud plots of the median projected proportion of area range loss for all the taxa we included in our analyses under all Global Circulation Models (GCM), Representative Concentration Pathways (RCP) and Shared Socioeconomic Pathways (SSP) combination for every period across the different centipede Orders.

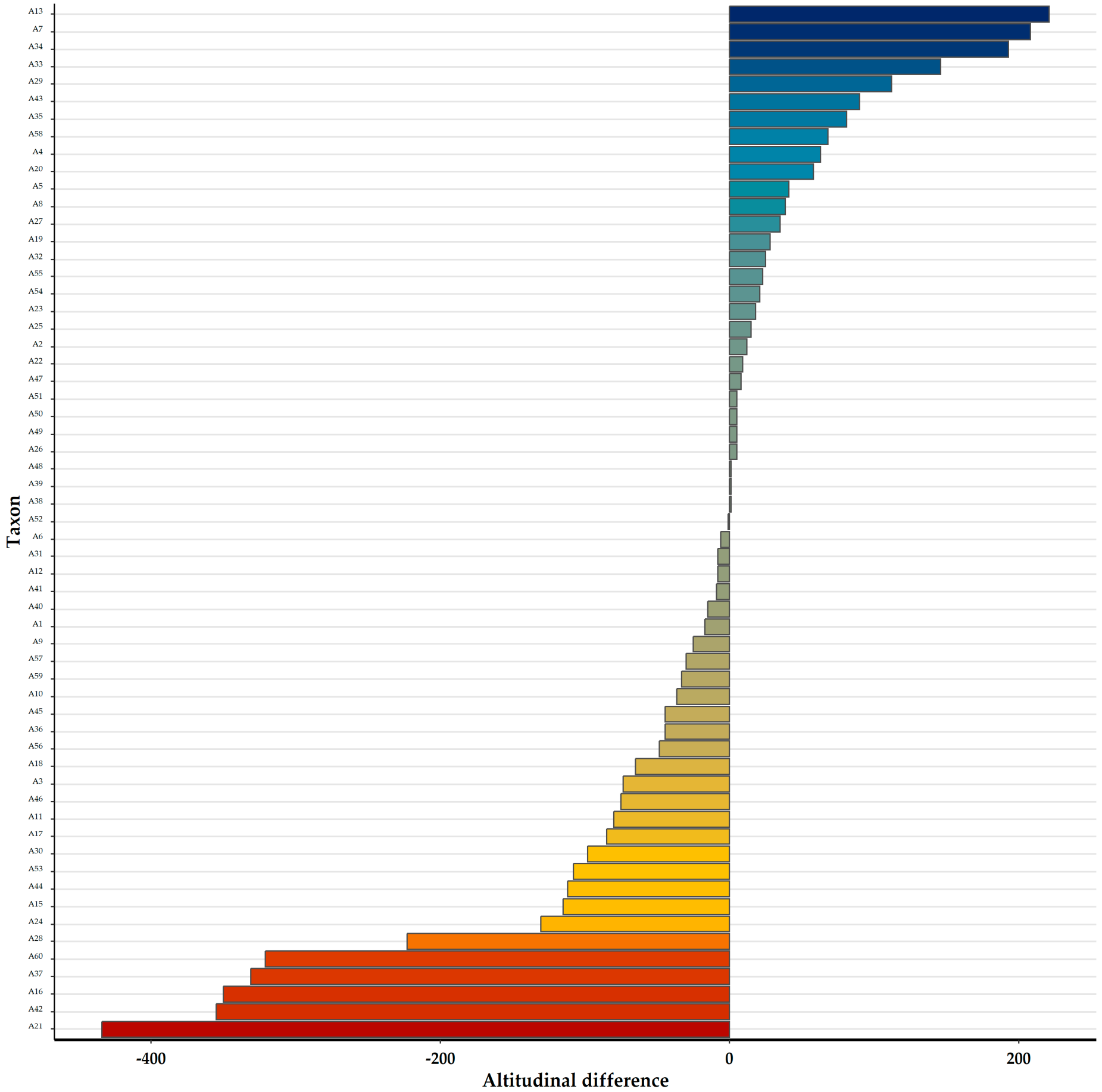


Figure S10. Projected median changes in altitudinal range (meters) for analyzed taxa, comparing baseline conditions with three time periods: 2020s, 2050s and 2080s. The corresponding species names to the taxon coded numbering can be found in Table S7.

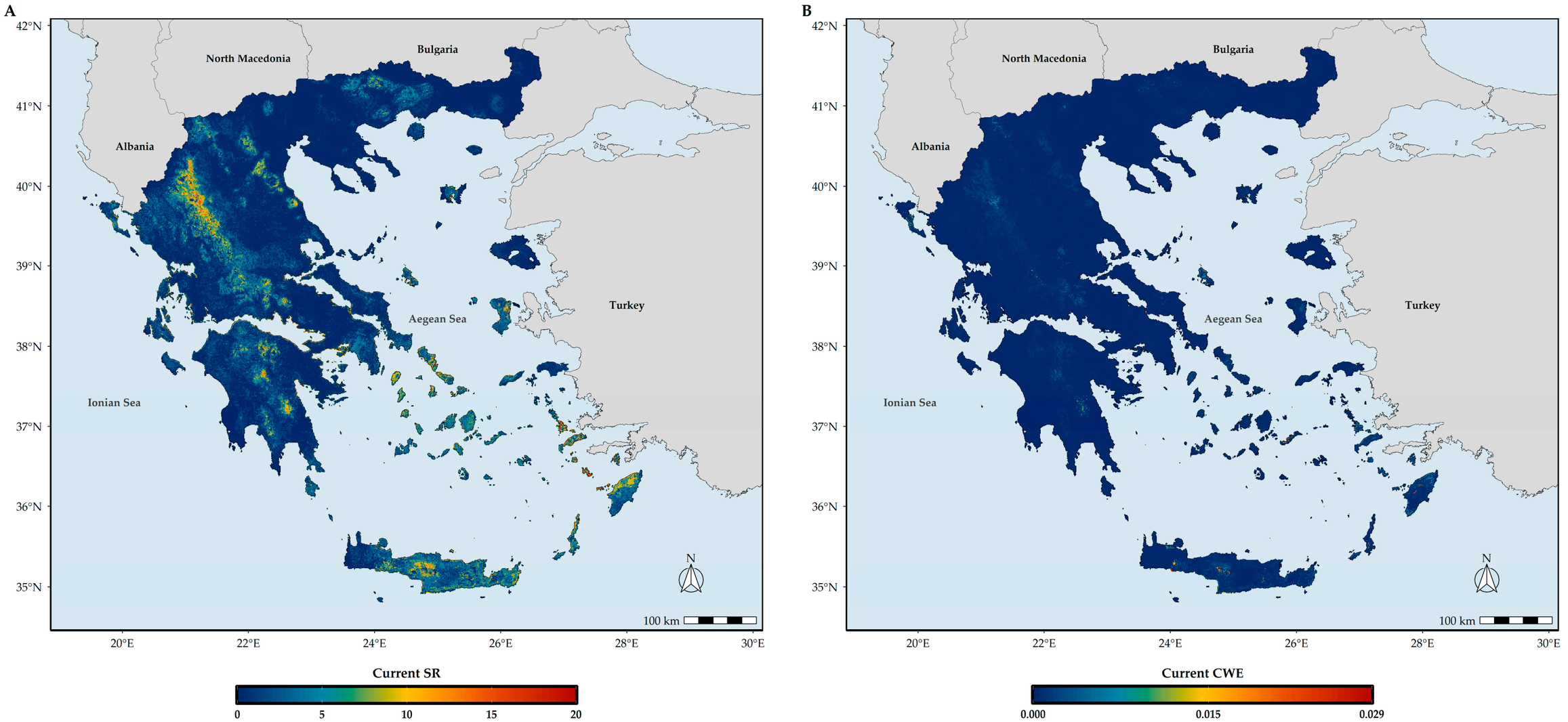


Figure S11. (A) Current species richness (SR) and (B) corrected-weighted endemism (CWE).

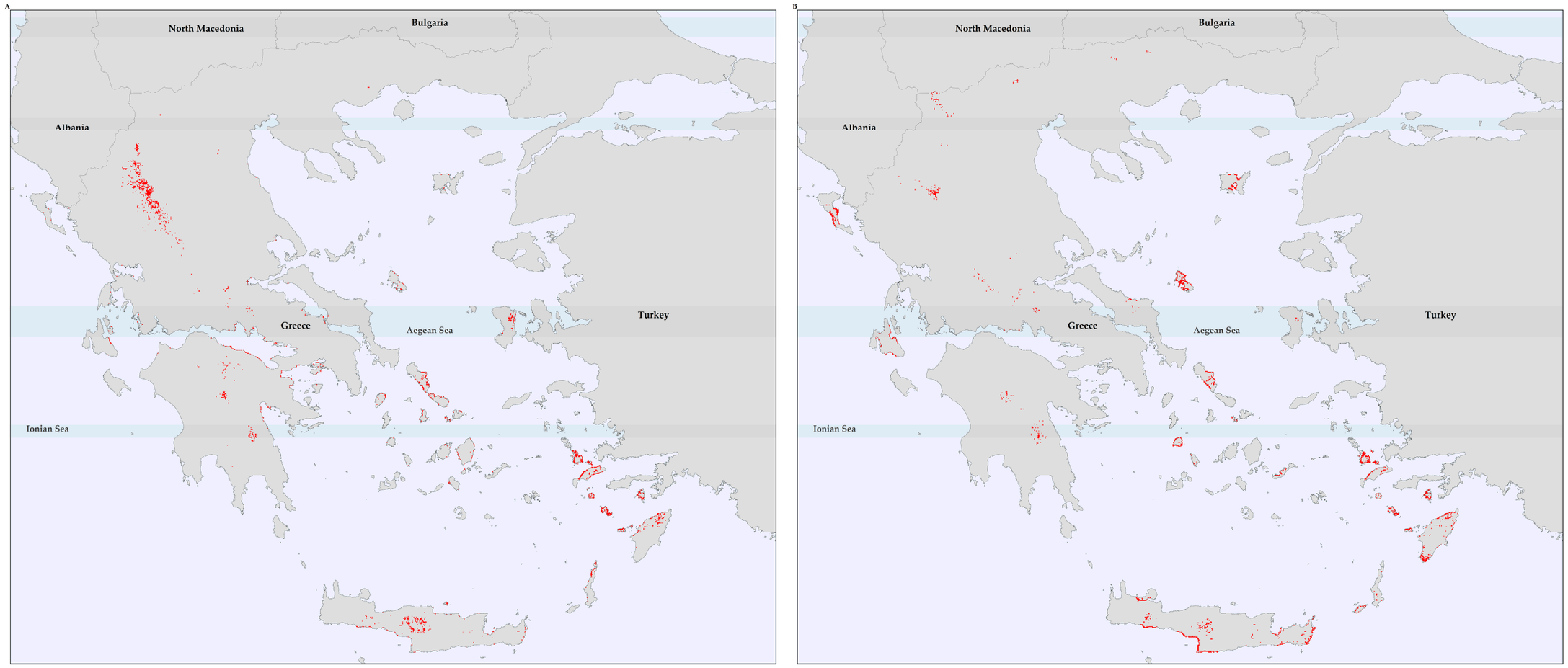


Figure S12. Anthropocene refugia (Priority Hotspots) (marked with red cells), for (A) species richness and (B) CWE under the strict consensus rule, meaning we only considered cells currently serving and projected to continue serving as Priority Hotspots across every combination of GCM, RCP, SSP, and period.