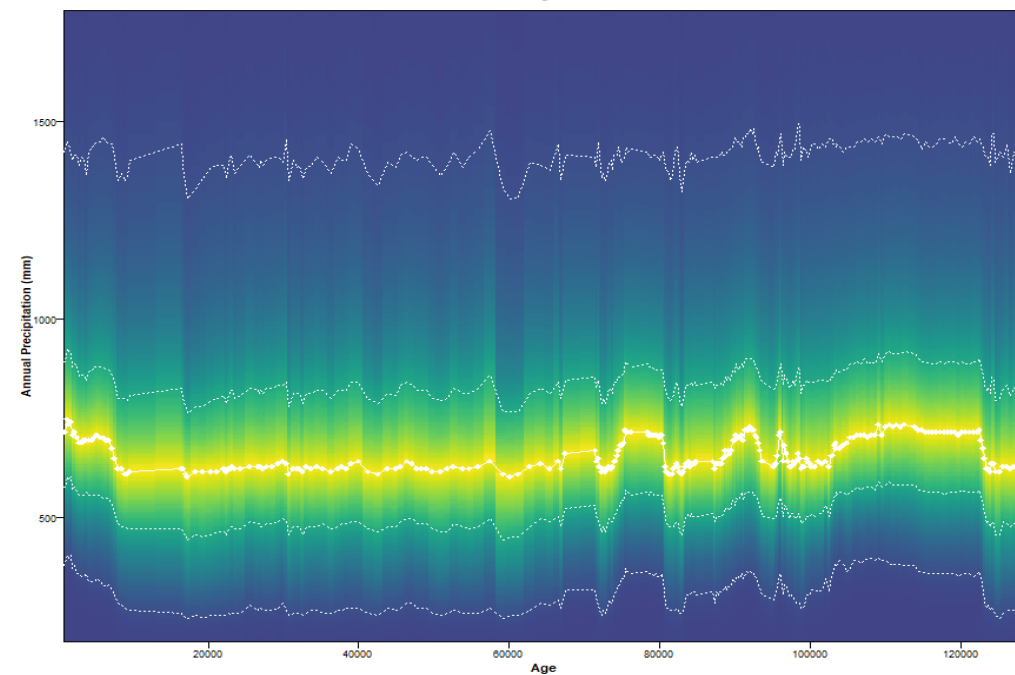
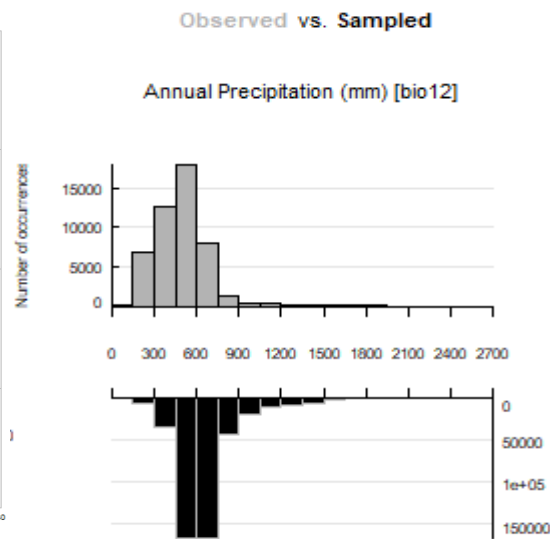
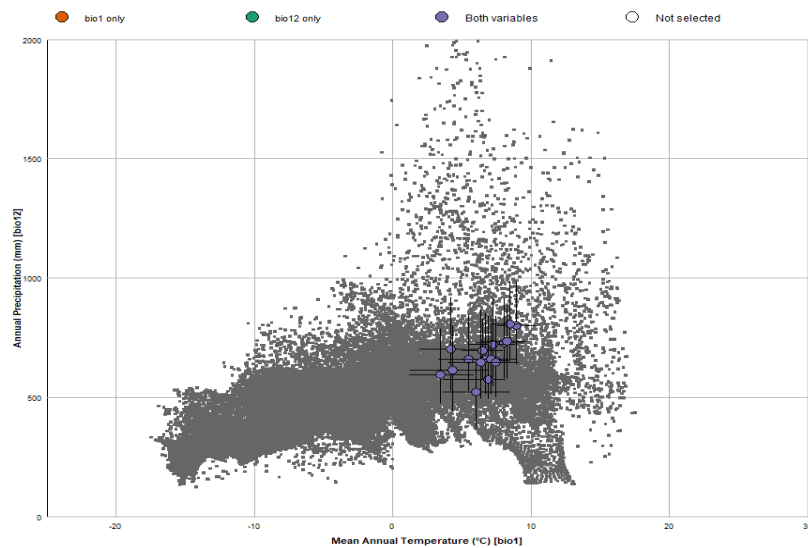
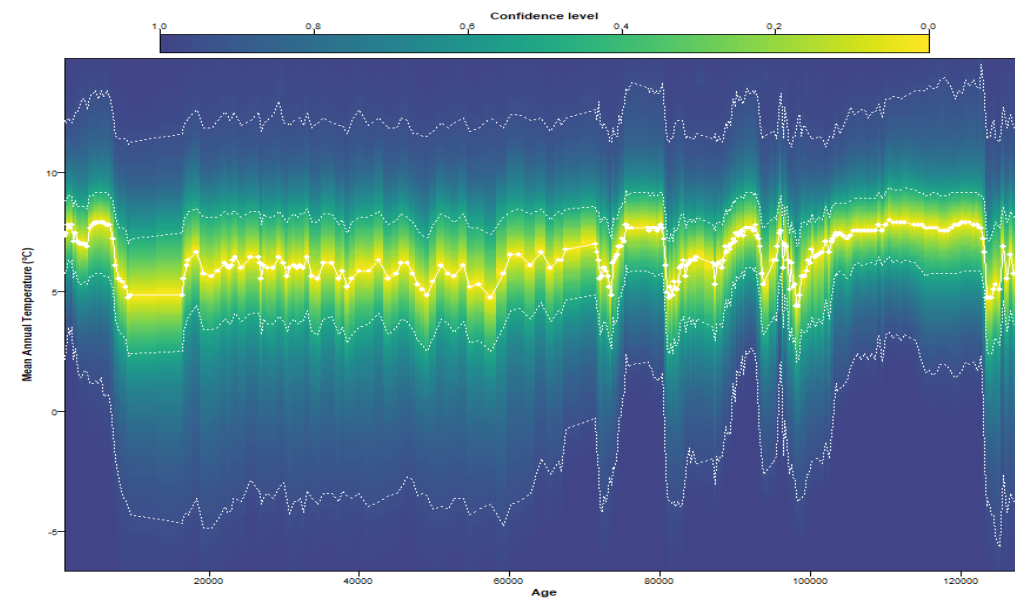
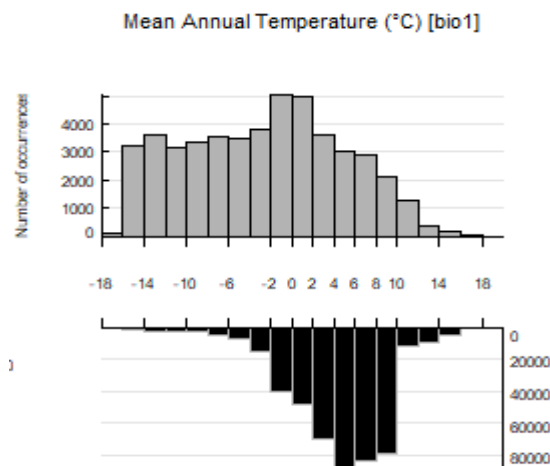
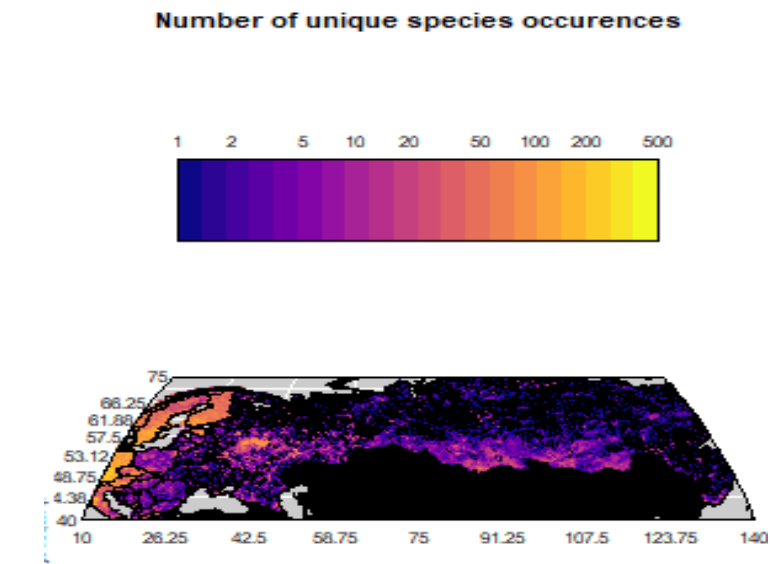


22/11/2023	Premières sorties du modèle crest à partir des données polliniques de La Grande Pile ( <i>Guiot et al., 1989</i> ) < 140,000 ans (template fichier input)	Localiser par itération la « meilleure » zone de calibration (argument <i>get_modern_data</i> ), comparer avec les reconstitutions de <i>Guiot et al.</i> puis sortir un modèle d'âge 14C Quelle est la zone de calibration à retenir ? Sous quels critères ?	Belles tendances mais quantifications difficiles de bio 1 et bio12 au cours du temps résultant probablement : (1) Difficulté à échantillonner des climats froids = quelle zone actuelle est la plus représentative du climat pendant le LGM ? (2) Inclure l'Europe de l'Ouest dans la zone de calibration reste compliquée ? Niveau de troncature des données de cal. ! (3) Hétérogénéité de maillage des données de calibration en Europe (Ouest vs. Est) (3bis) Trouver des taxons identiques entre la zone de calibration et les espèces individuelles de LGP-input (4) Faible diversité de taxons échantillonnés = qualité de données initiales
29/11/2023	Secondes sorties de modèle crest toujours dans l'optique de comparer les <i>climateSpace</i> avec des zones de calibration différentes en entrée, mise à jour de la base de données (v.1.3.0) et points de calage 14C de <i>Woillard et al., 1981</i>	Ajouter le paramètre <i>climateWithObs</i> aux calibrations, intégrer le modèle d'âge (maximum likelihood with overdispersion), PSE de De Beaulieu et de Reille puis étudier ses sorties de modèle. Dans quelle mesure la diversité taxonomique influe les reconstitutions ?	Améliorations mais non satisfaisant en rééchantillonnant (espèces climatiques où nous avons des observables) : (1) L'ensemble des taxons sont plus corrélés à bio1 qu'avant (distribution gaussienne marquée) (2) Les recon pulvio. sont nettement plus faibles que les prédictions de <i>Guiot et al., 1989</i> (encore problème de quantification ?) (3) Les recon à partir de De Beaulieu et al., semblent être plus cohérentes avec la littérature → Mais zone de calibration plus contrainte (chercher à couvrir l'Ouest de l'Europe) (4) Difficile d'augmenter l'amplitude de bio12 sur cette reconstitution → Troncage à l'Est de l'Europe ?

# Réponses des reconstitutions paléo-températures et paléo-précipitations aux changements de zone de calibration comparable au climat du LGM

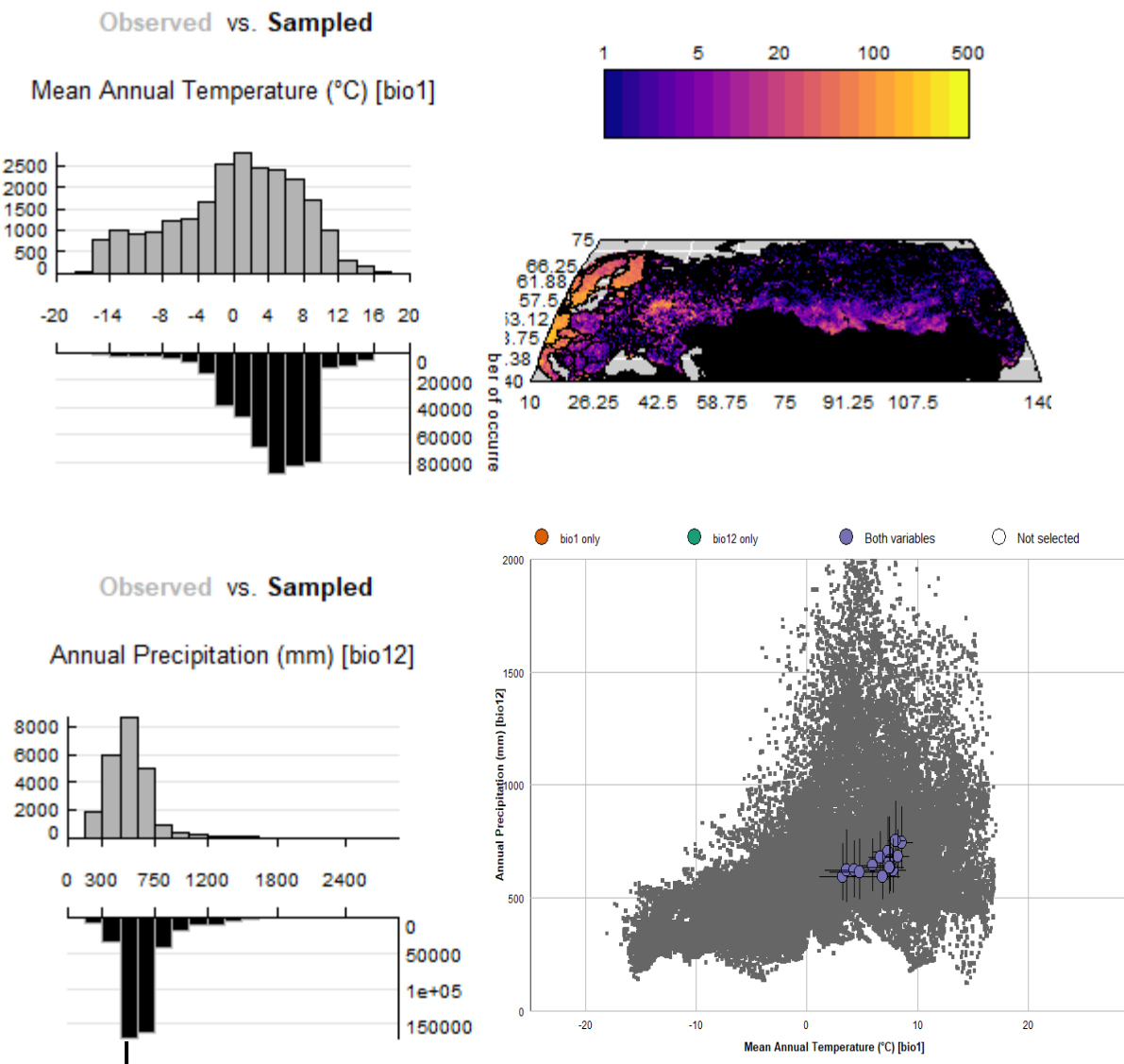
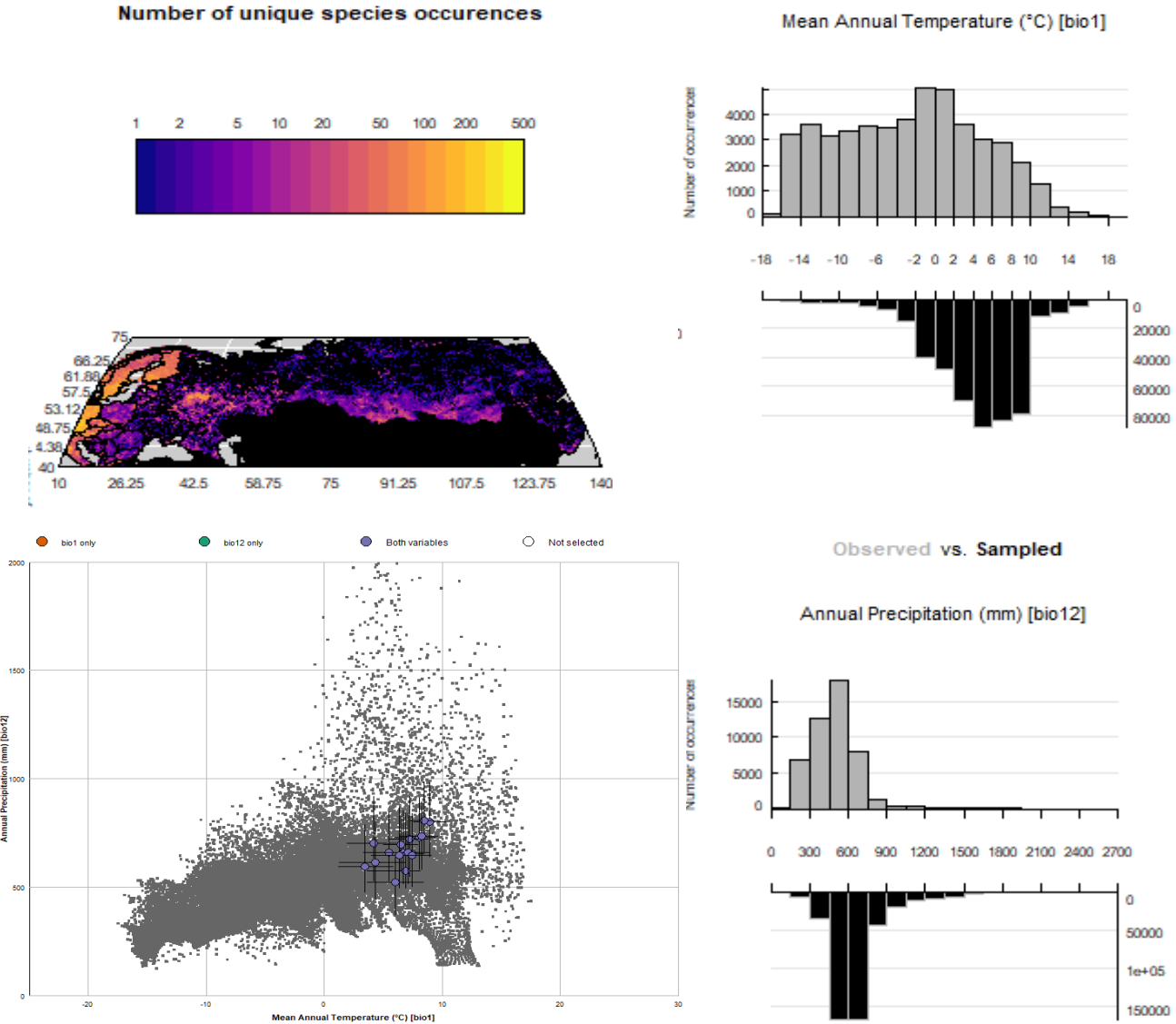
(40°N-75°N)  
(10-140°E) – 1Cas



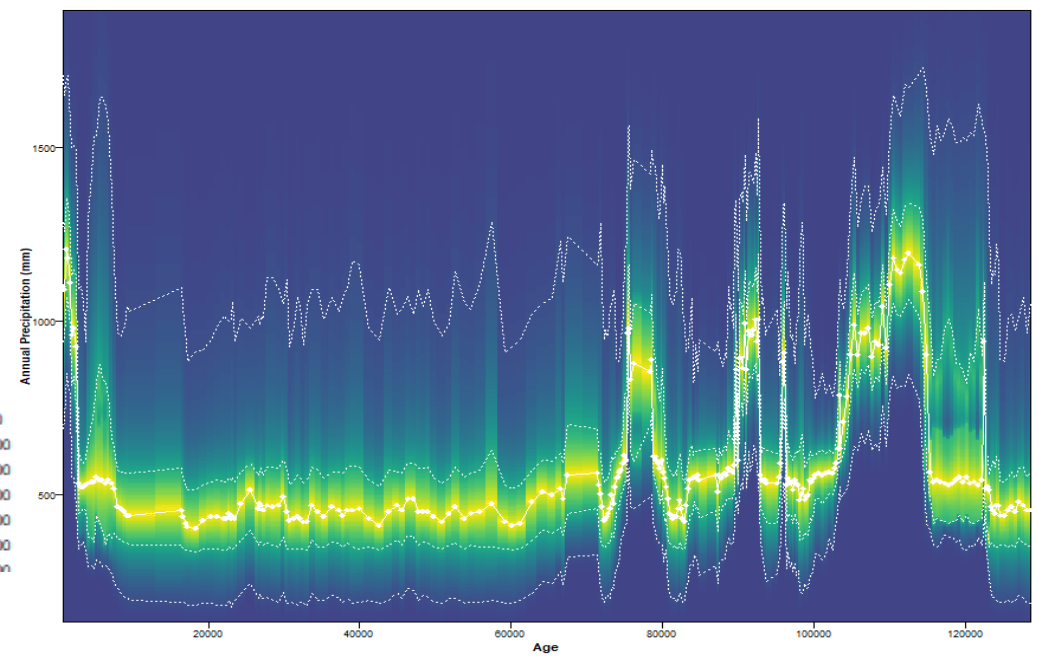
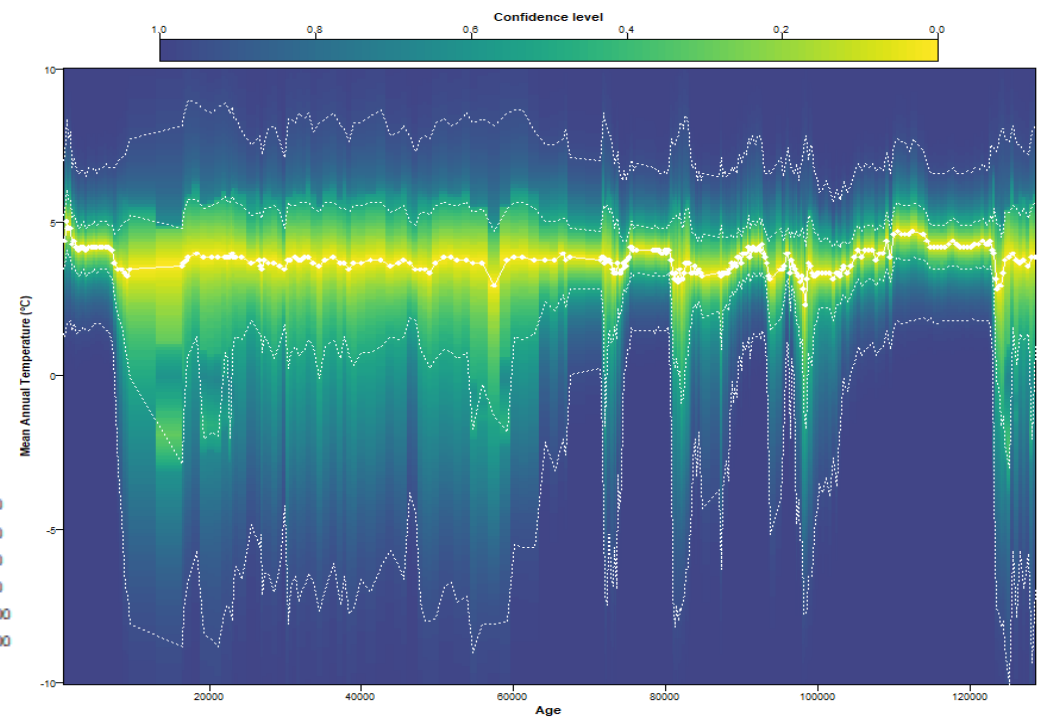
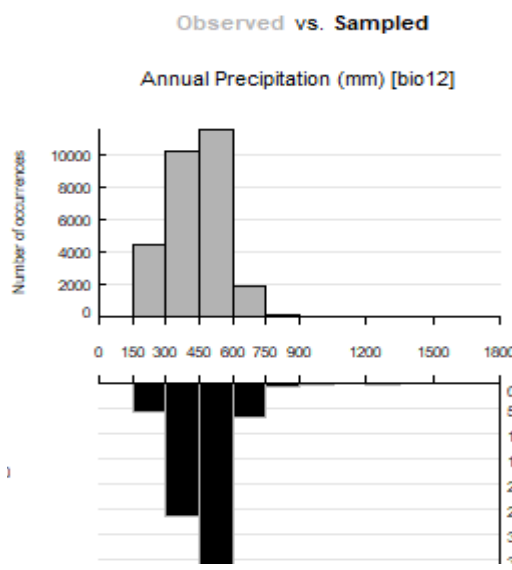
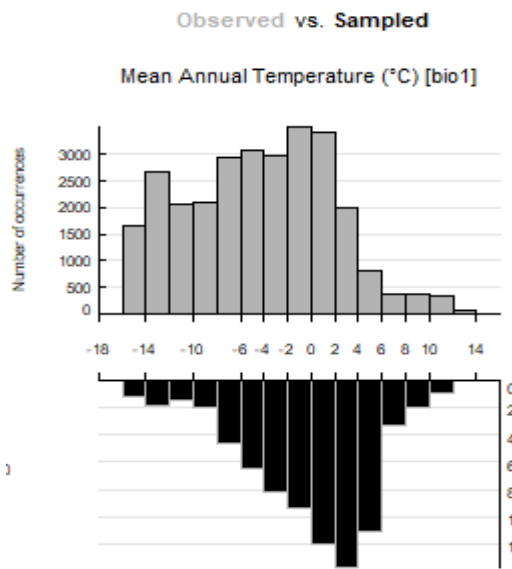
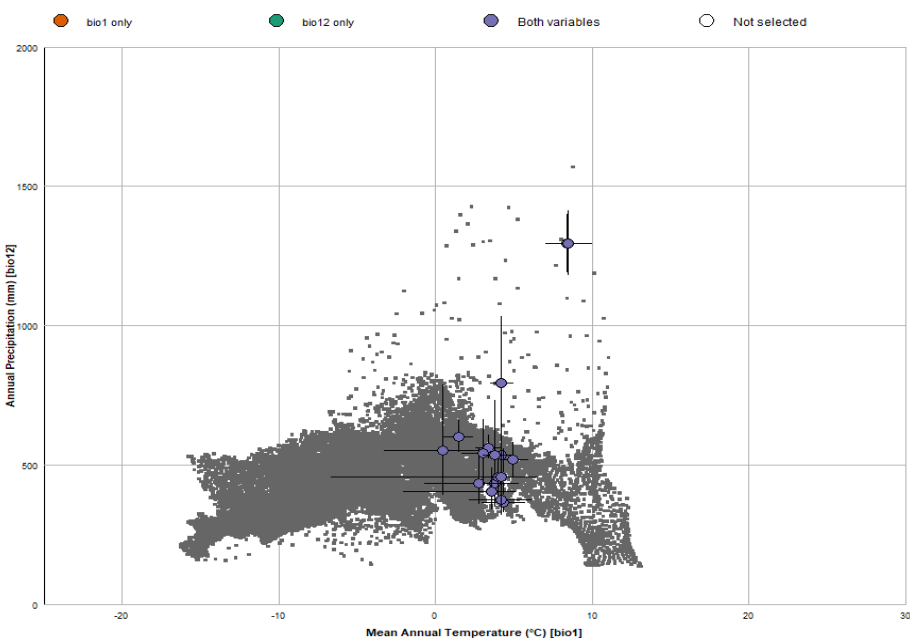
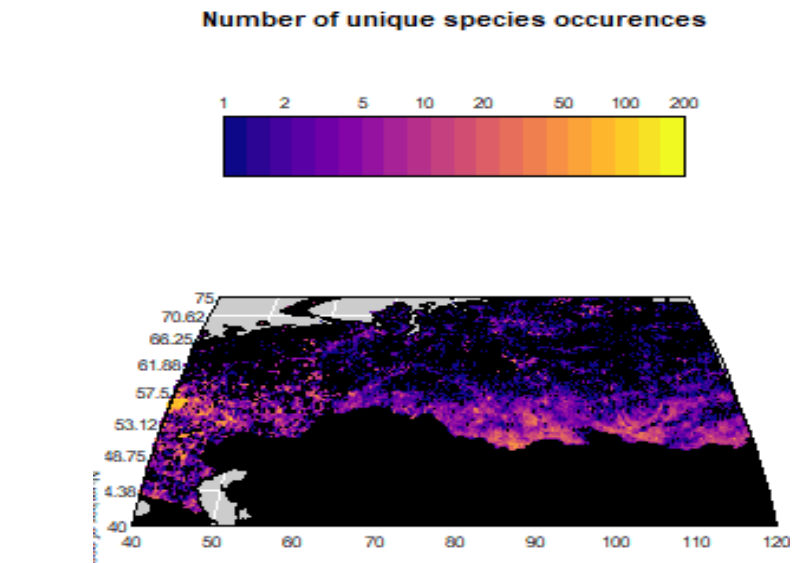
(40°N-75°N)  
(10-140°E) – 1Cas

Without climate

With climate

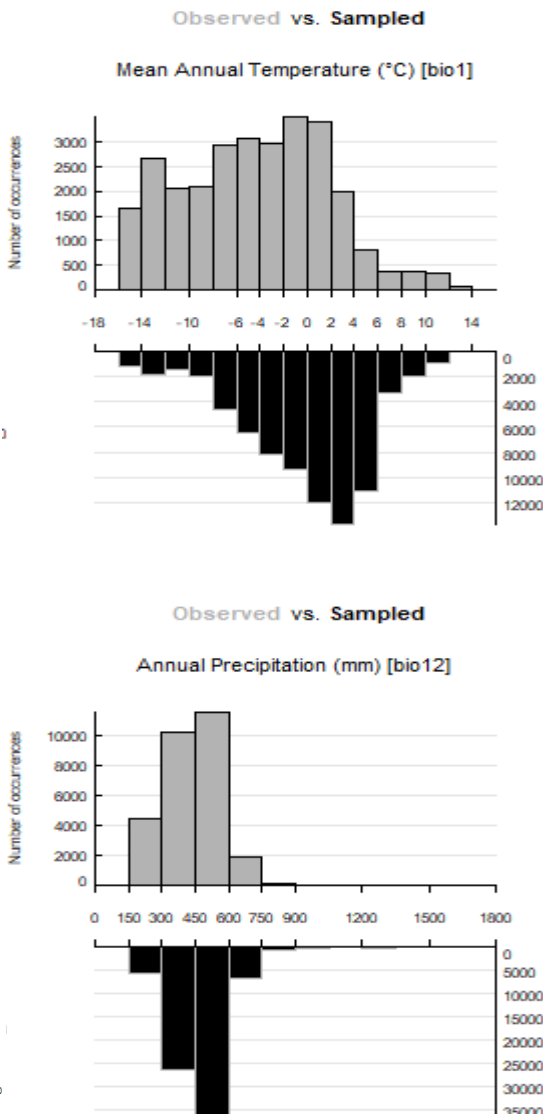
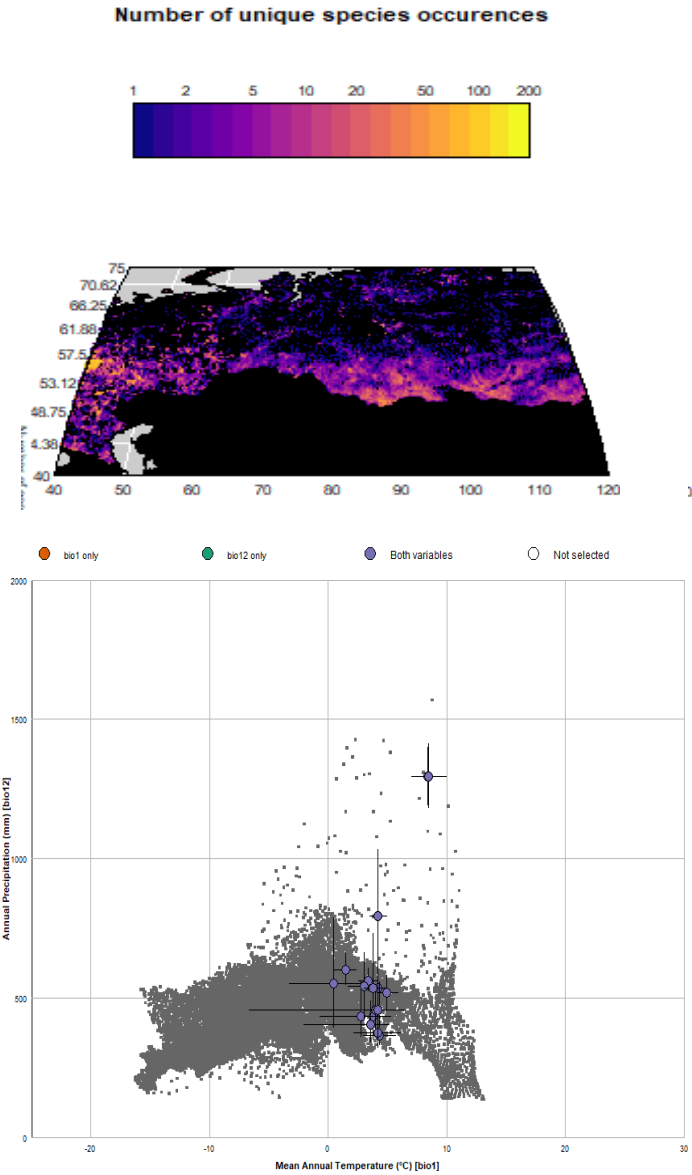


(40°N-75°N)  
(40-120°E)- 2Cas

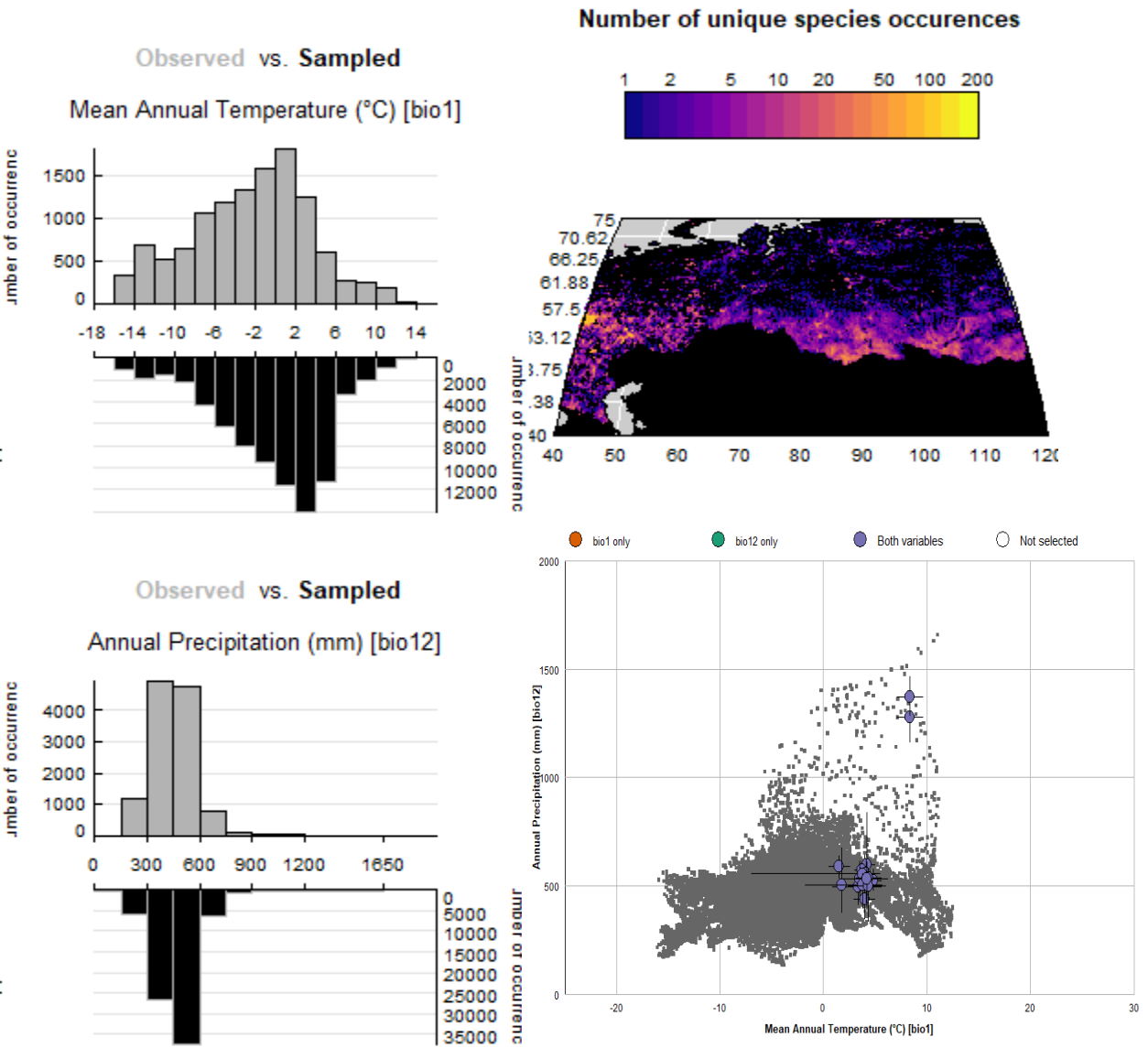


(40°N-75°N)  
(40-120°E)- 2Cas

Without climateWithObs

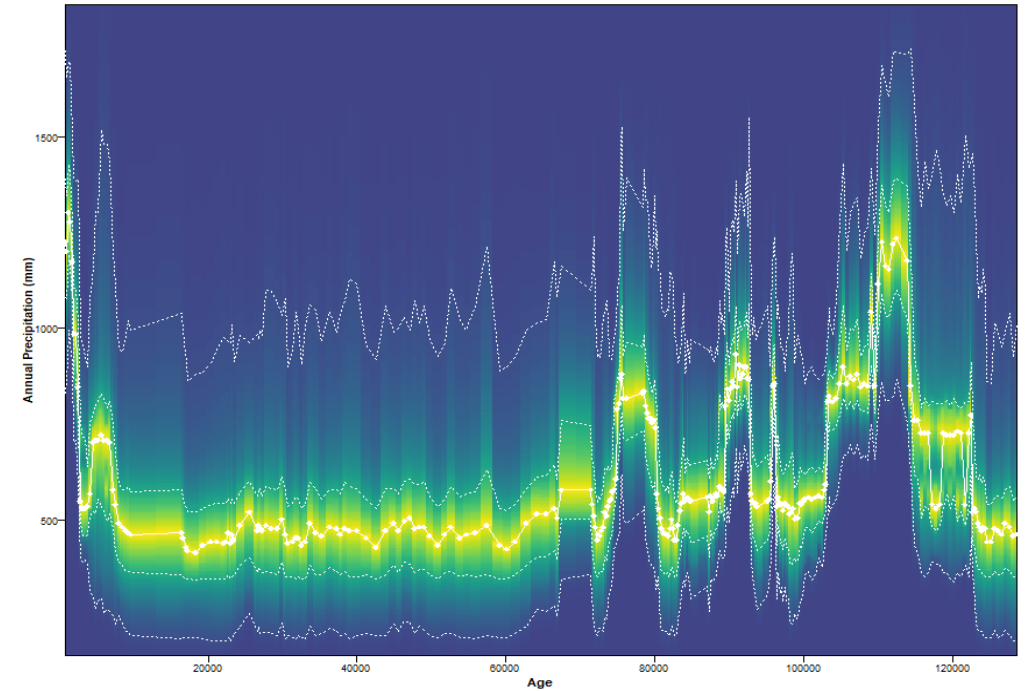
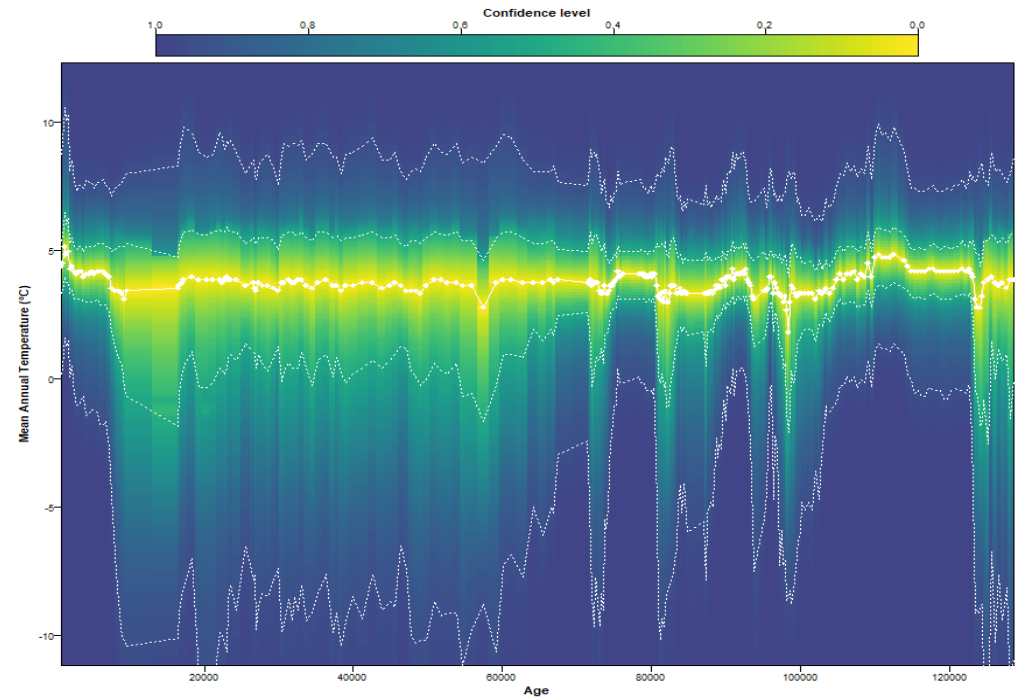
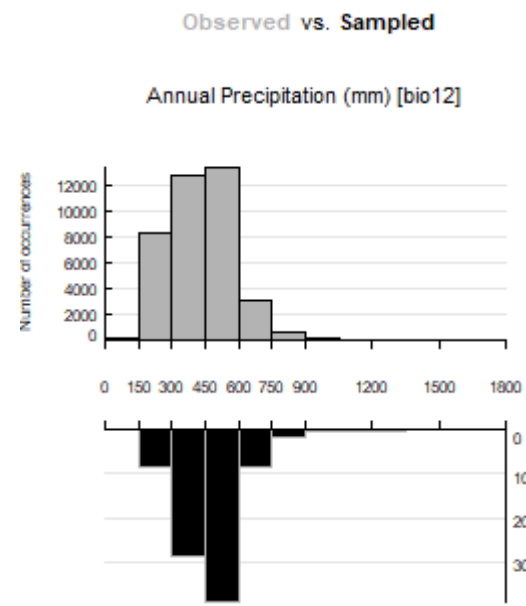
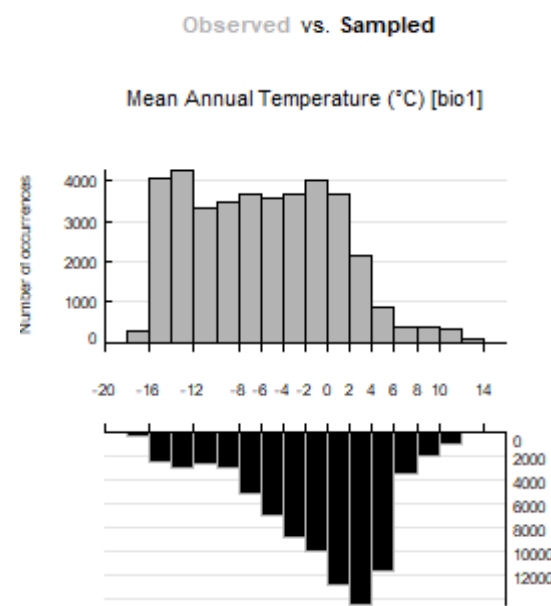
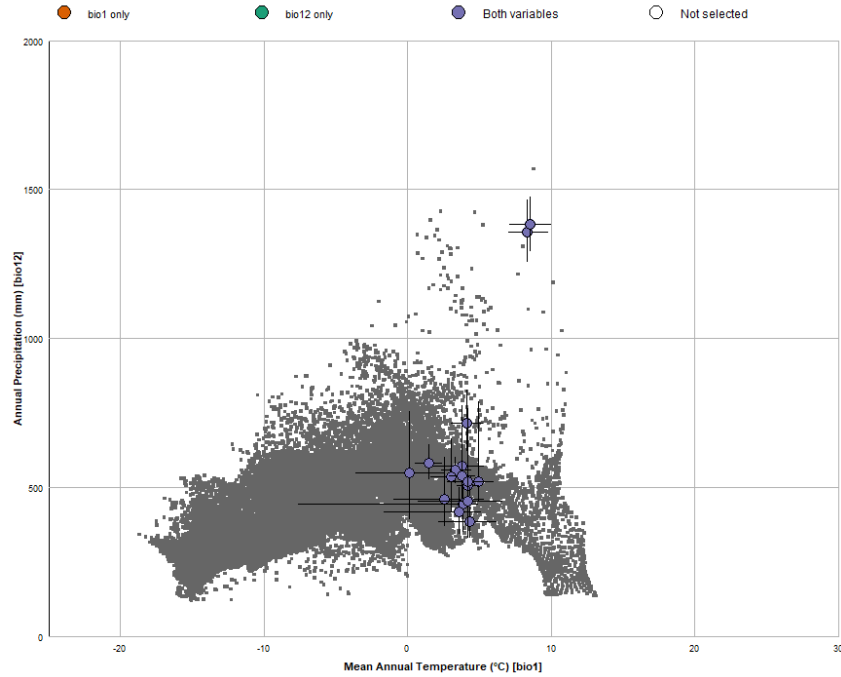
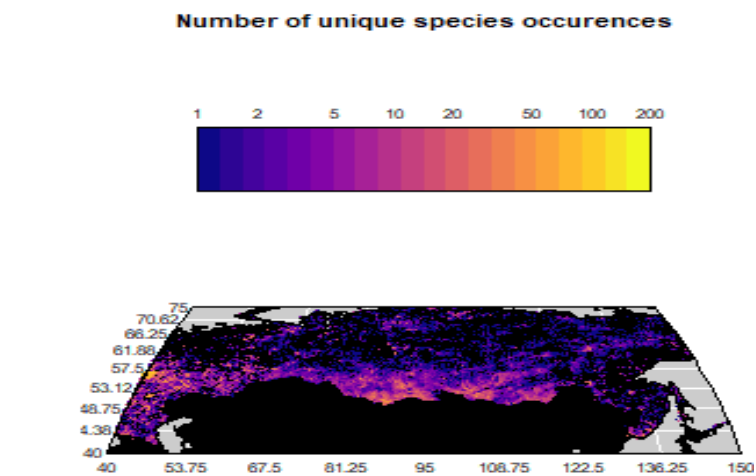


With climateWithObs





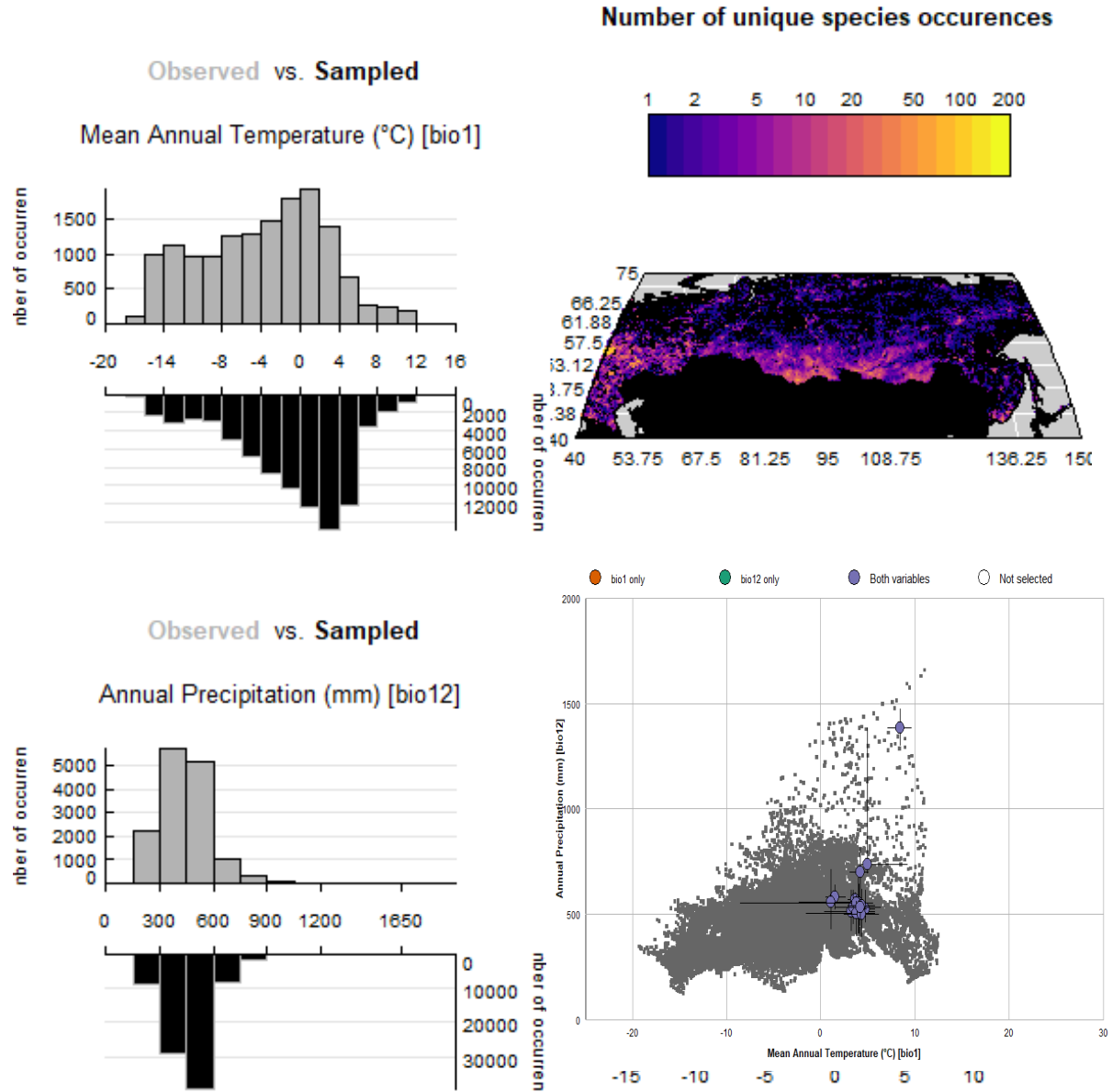
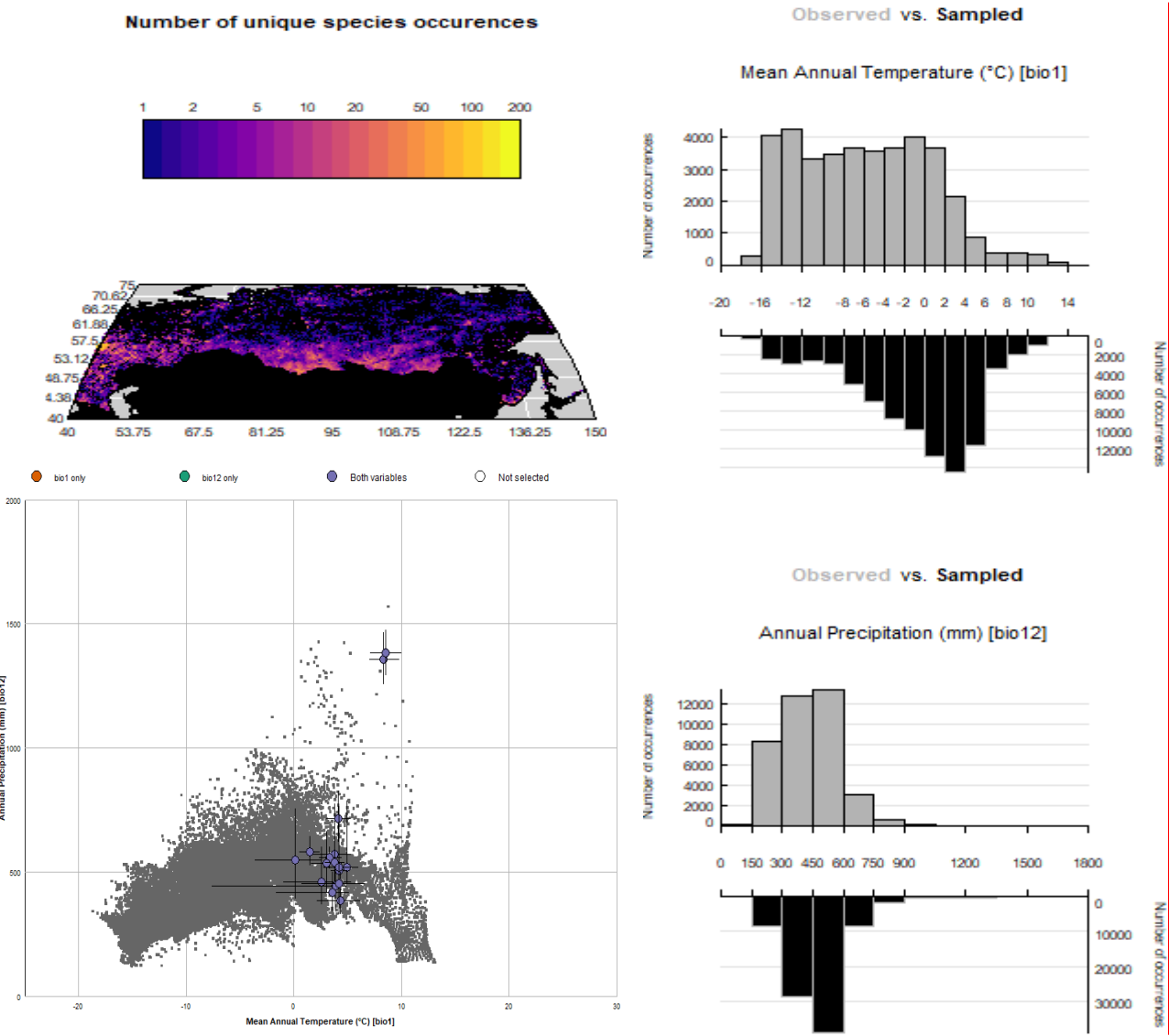
(40°N-75°N)  
(40-150°E)- 3Cas



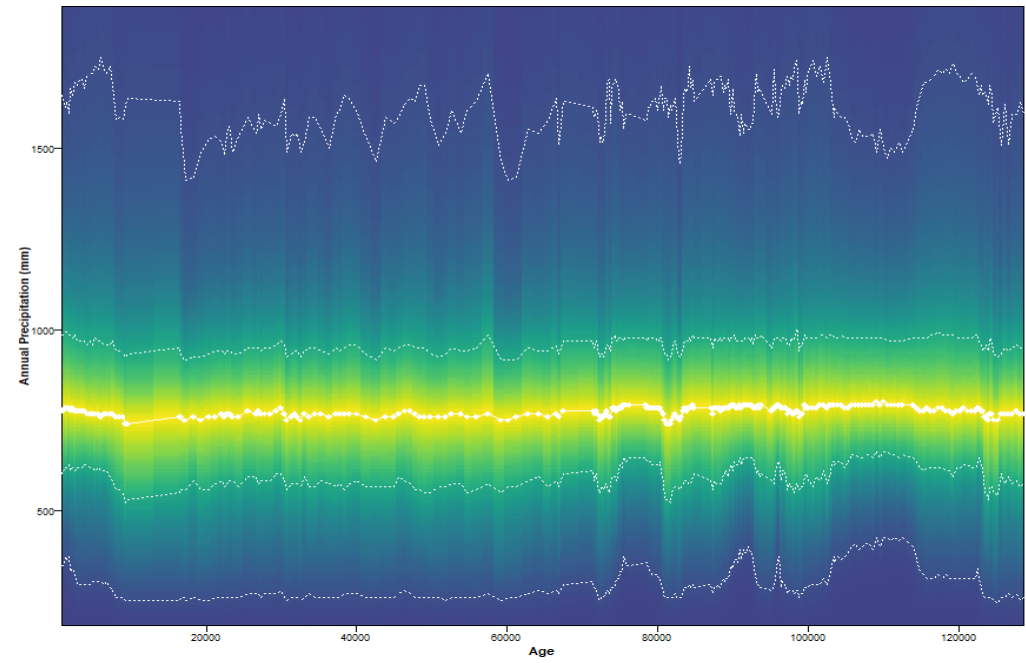
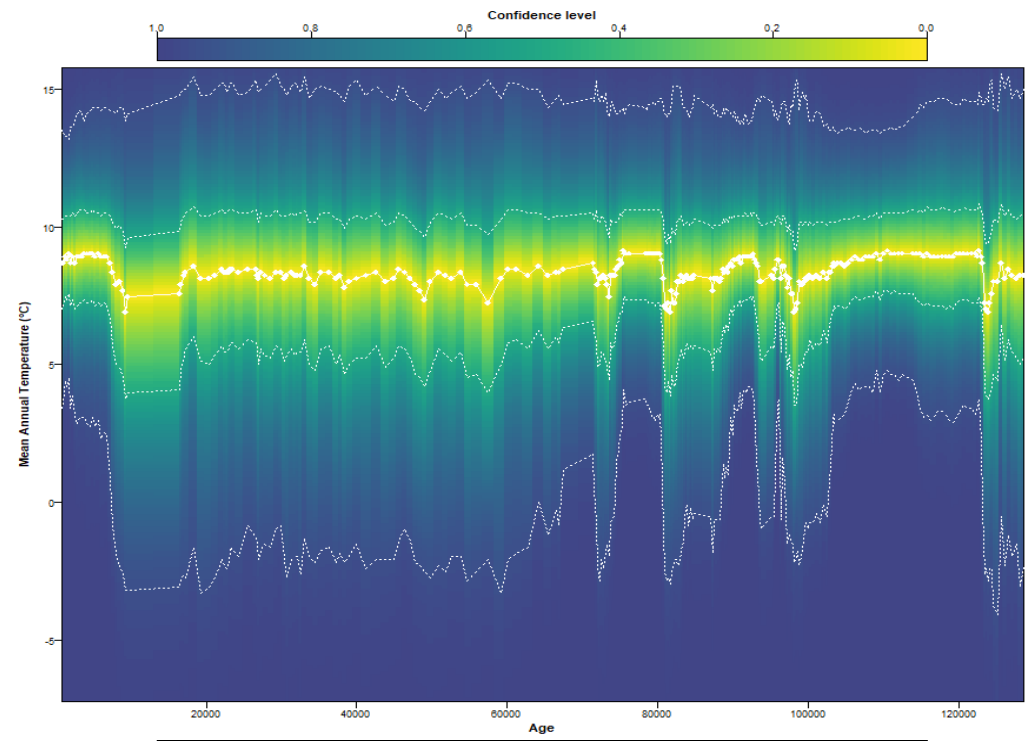
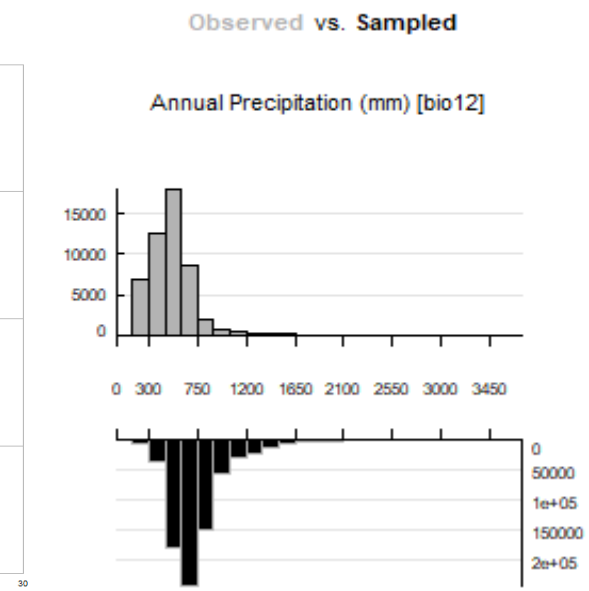
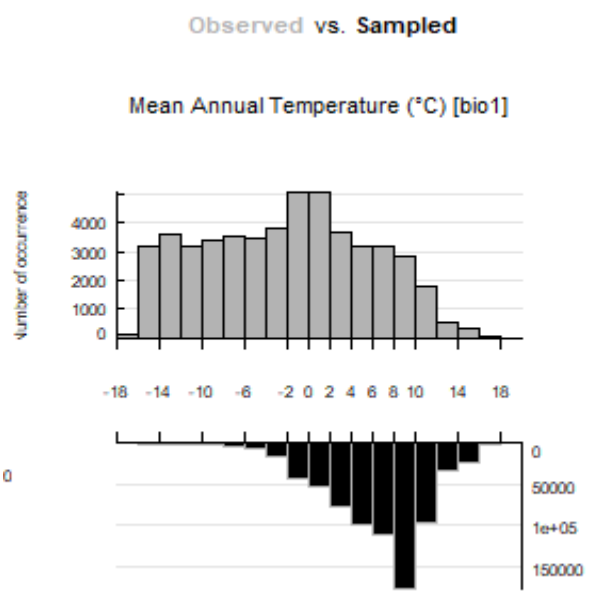
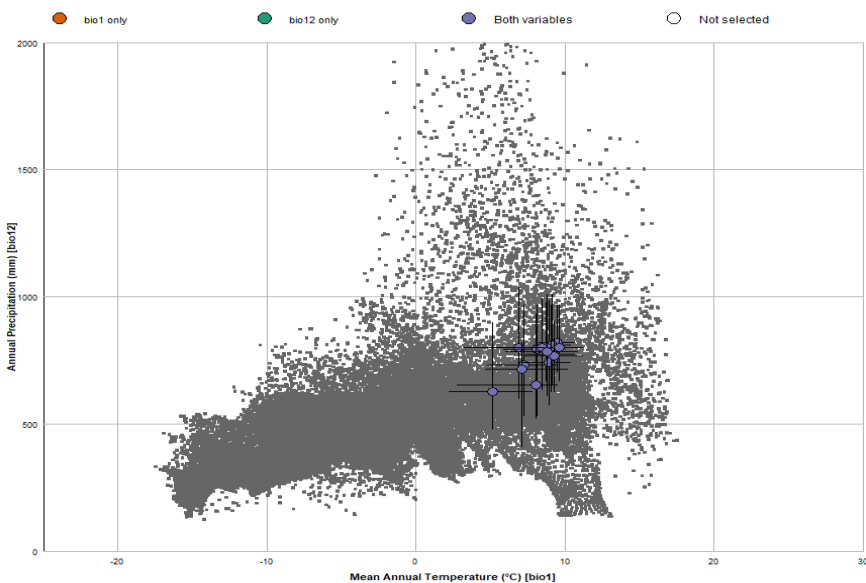
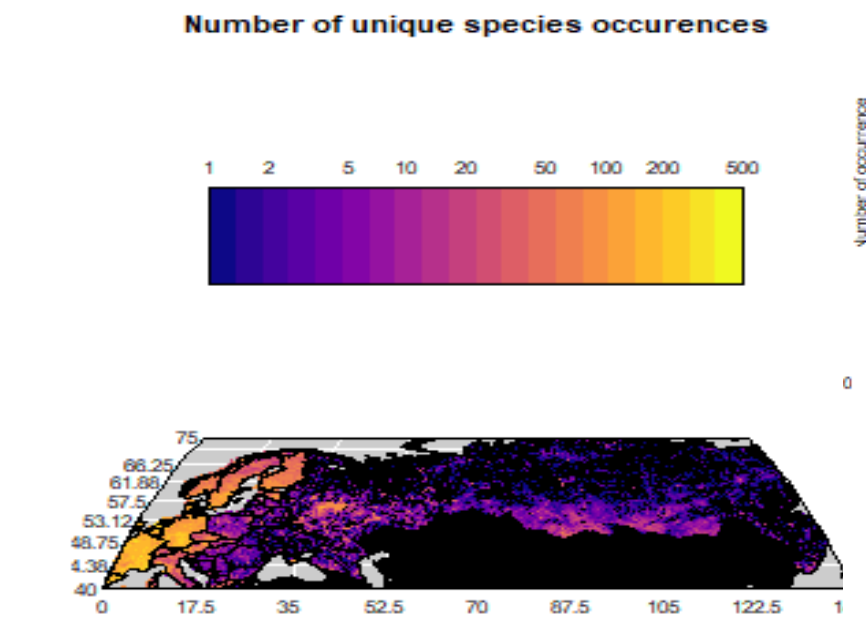
(40°N-75°N)  
(40-150°E)- 3Cas

Without climateWithObs

With climateWithObs



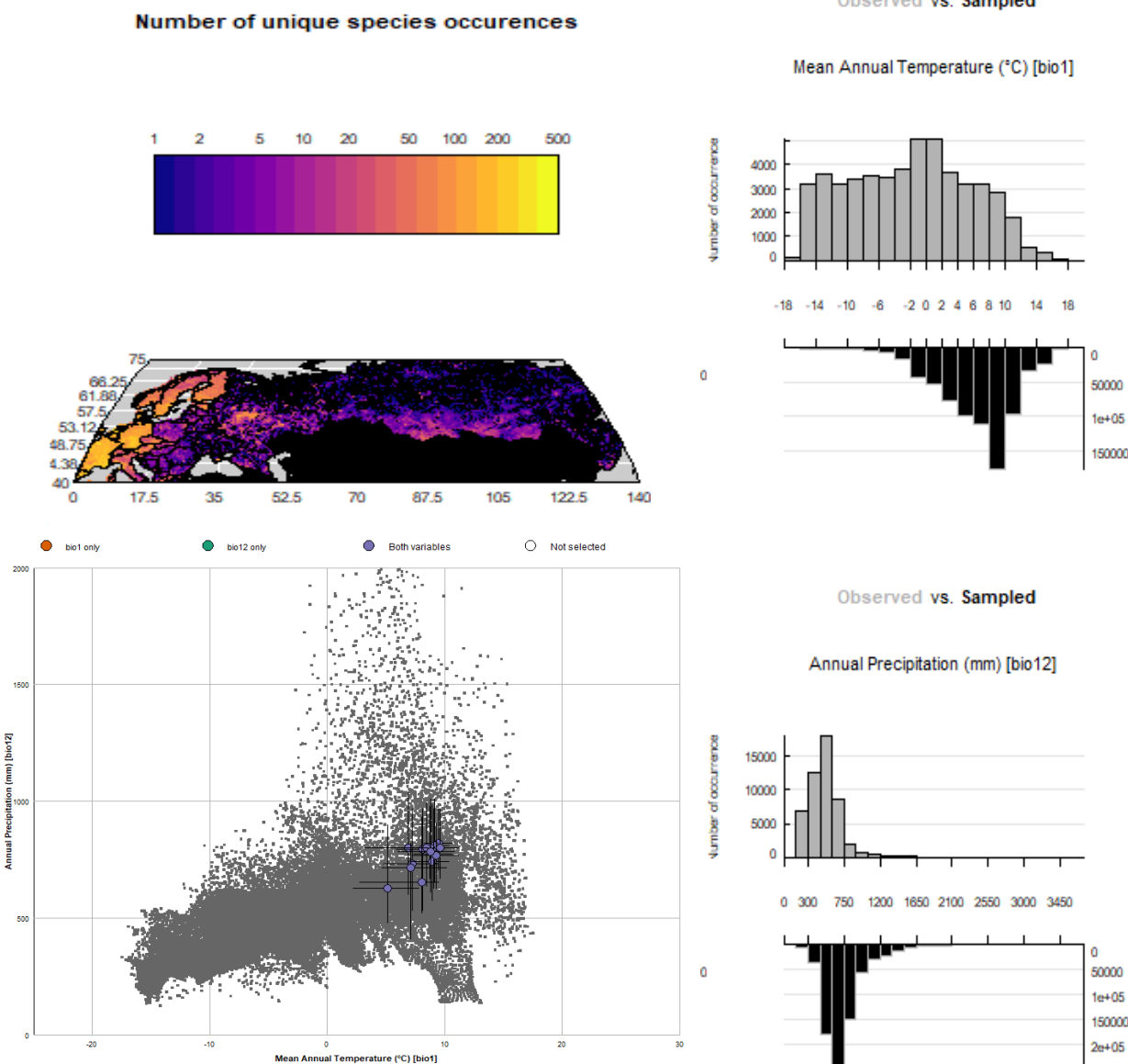
(40°N-75°N)  
(0-140°E) - 4Cas



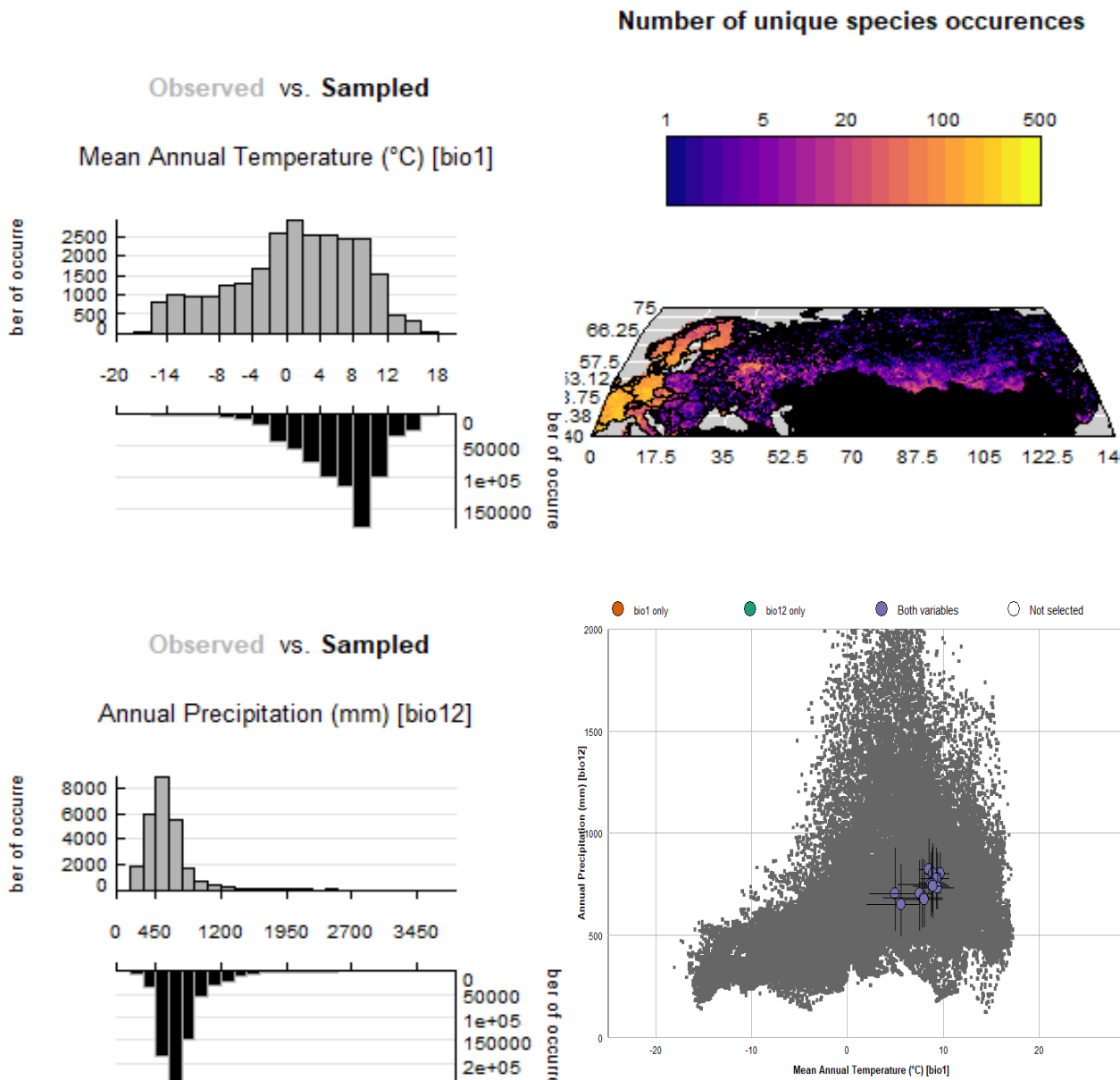


(40°N-75°N)  
(0-140°E) - 4Cas

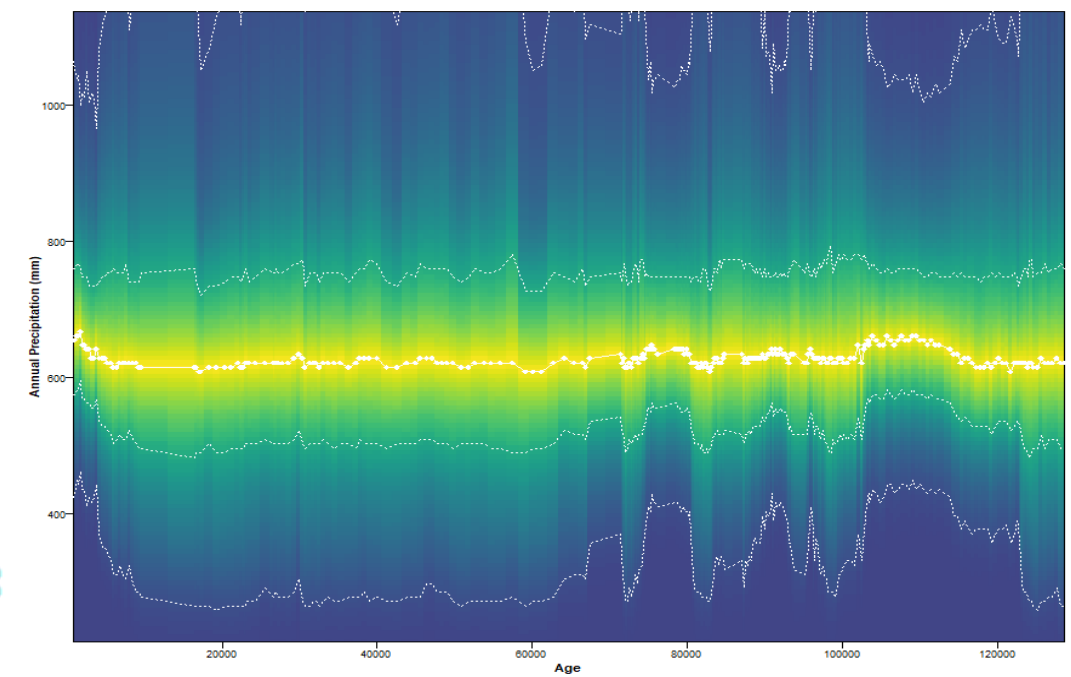
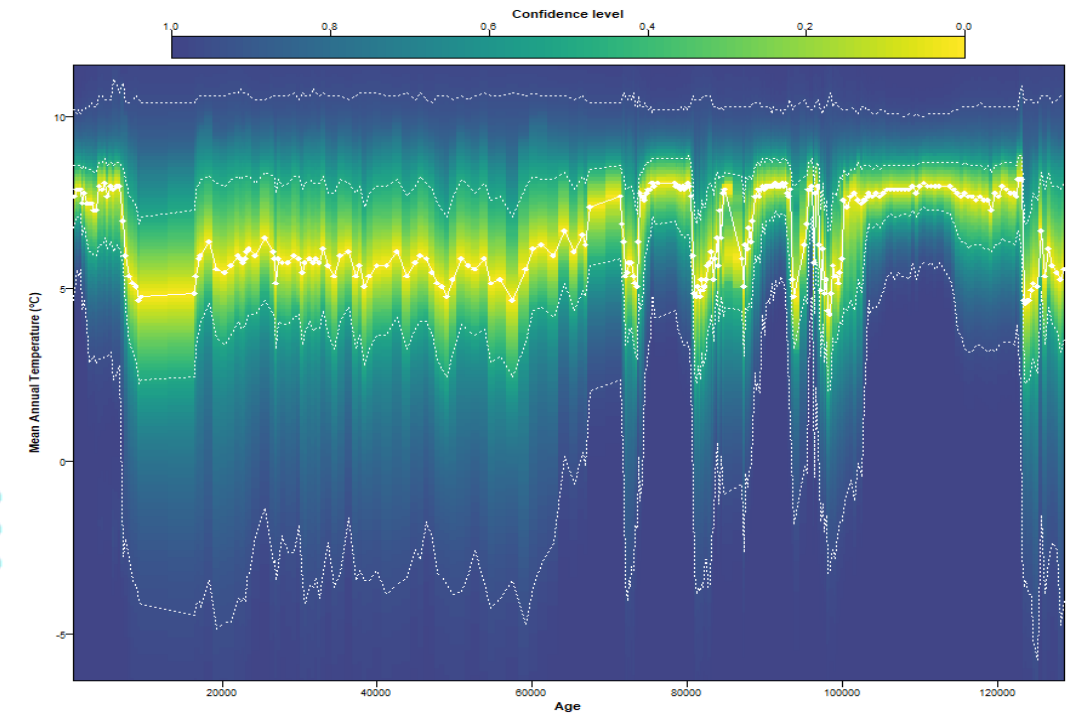
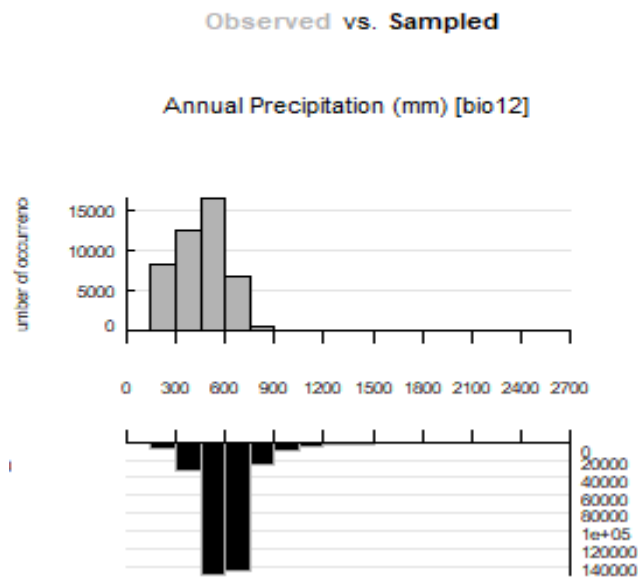
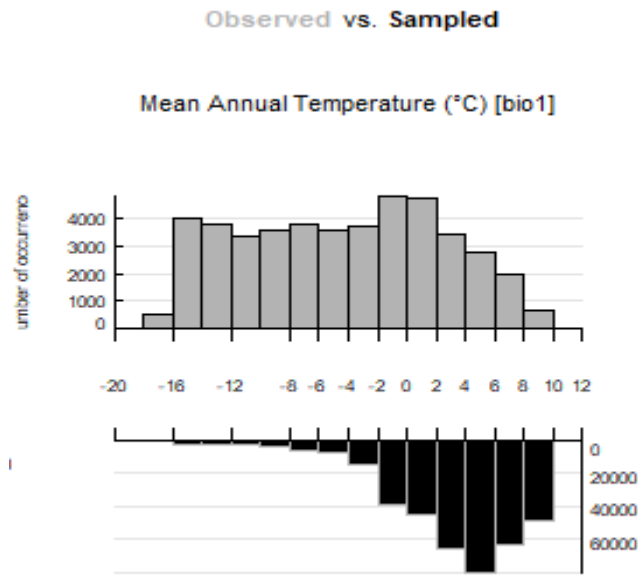
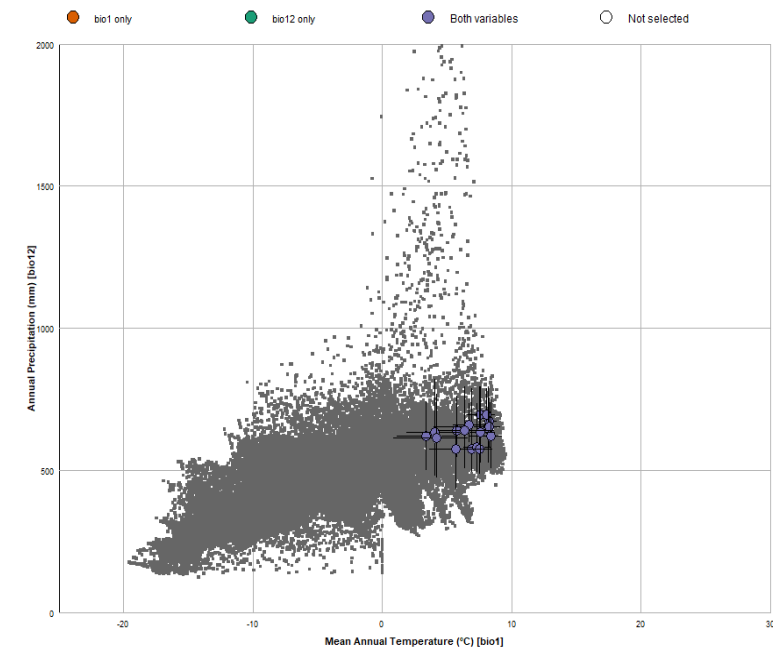
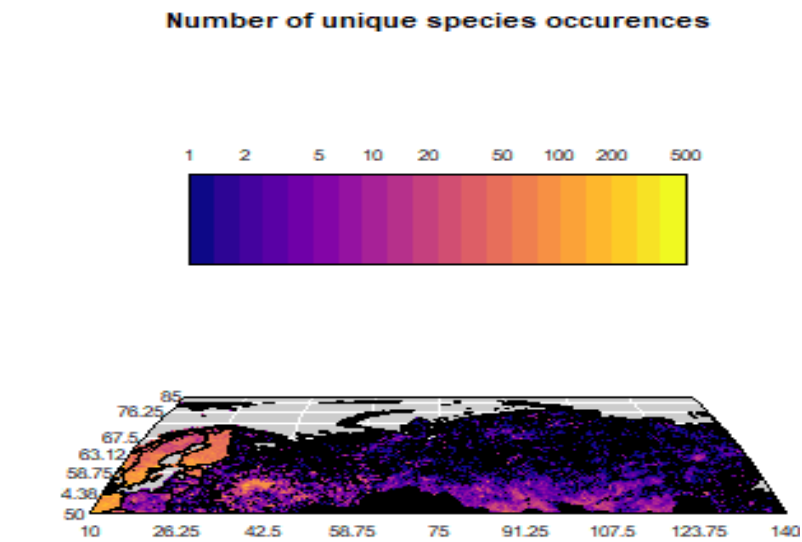
Without climateWithObs



With climateWithObs

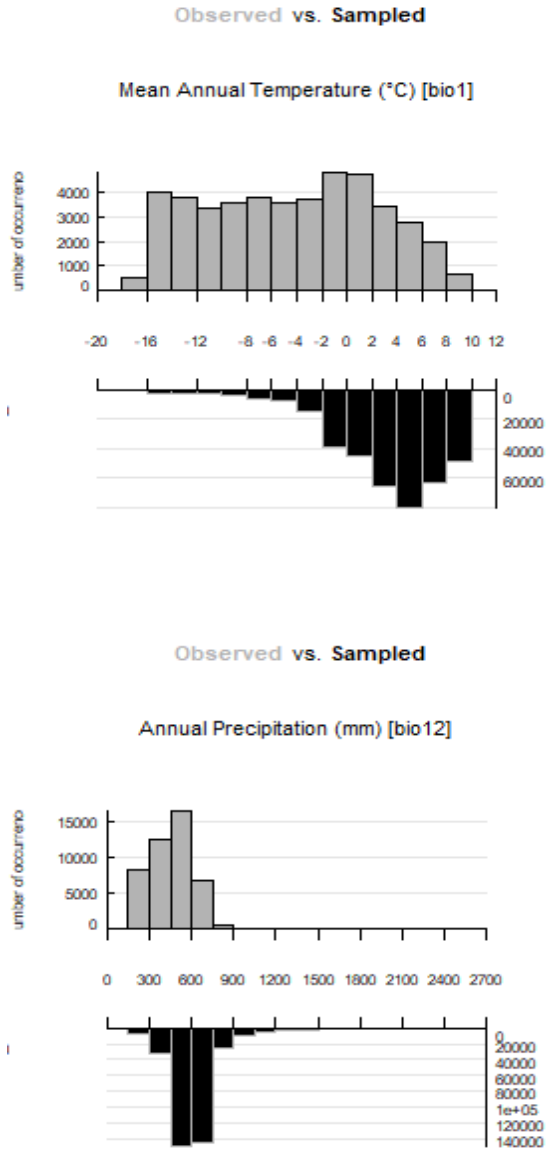
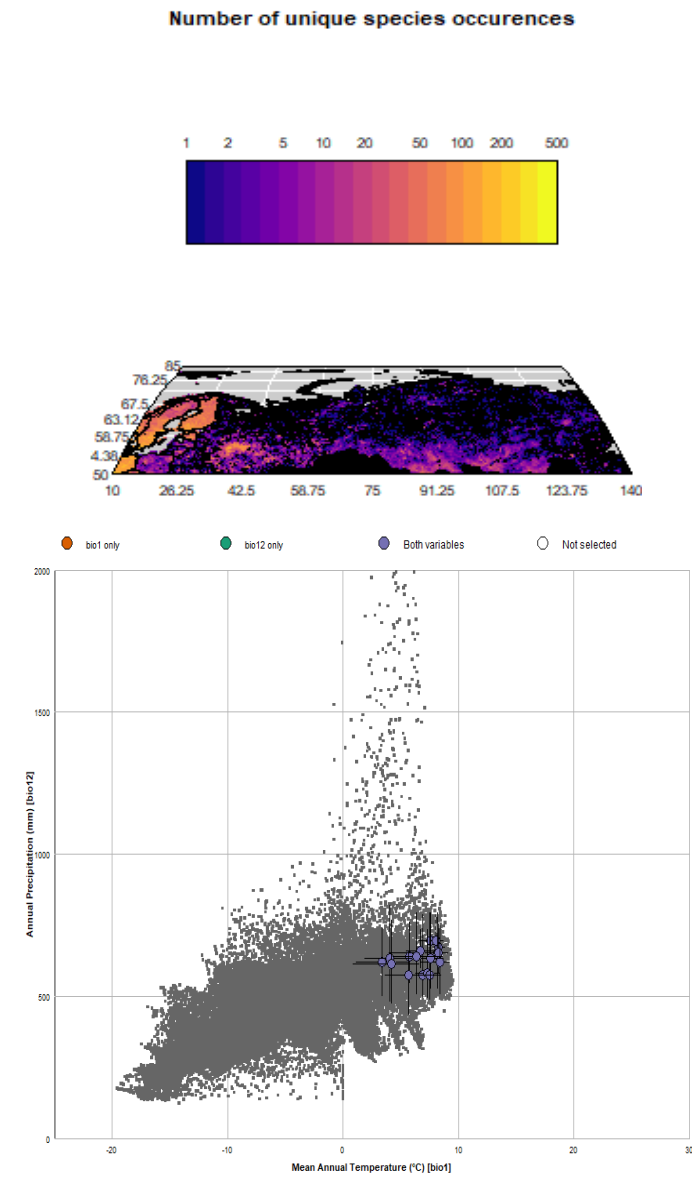


(50°N-85°N)  
(10-140°E) - 5Cas

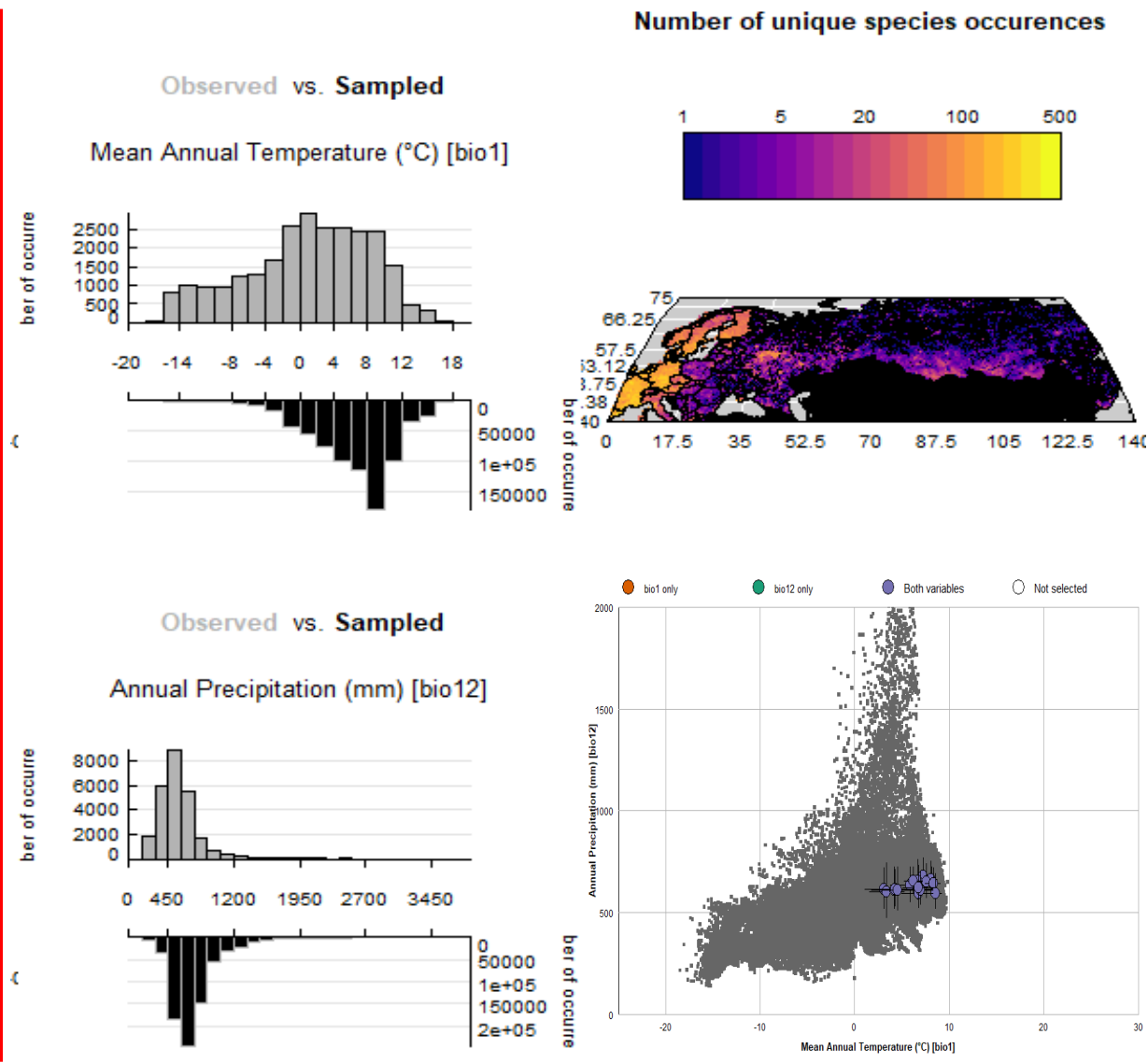


(50°N-85°N)  
(10-140°E) - 5Cas

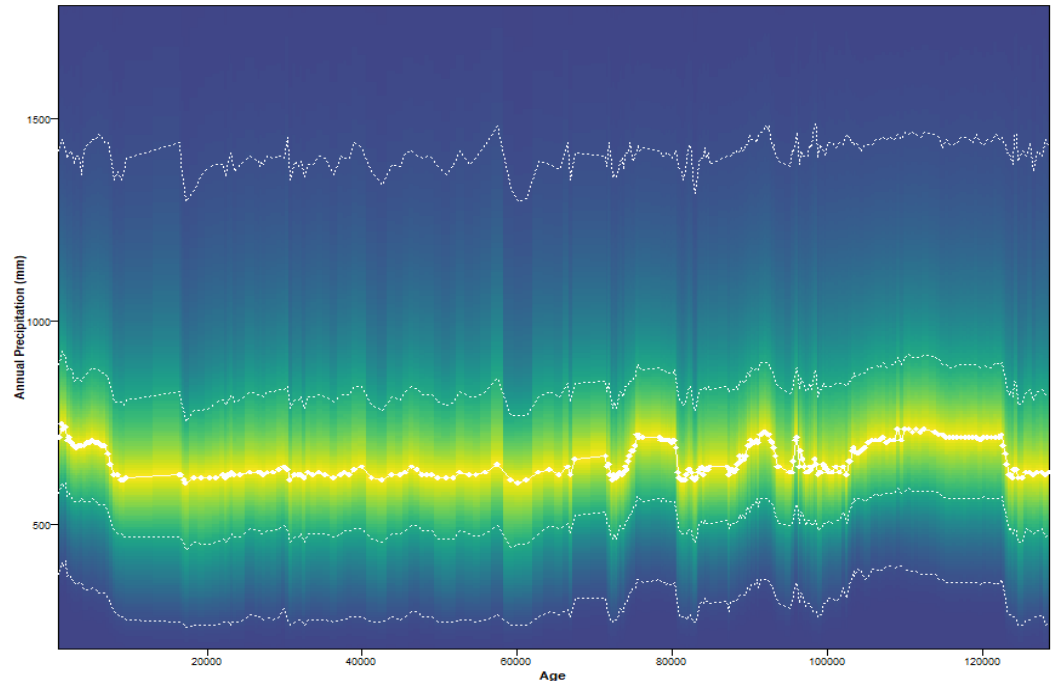
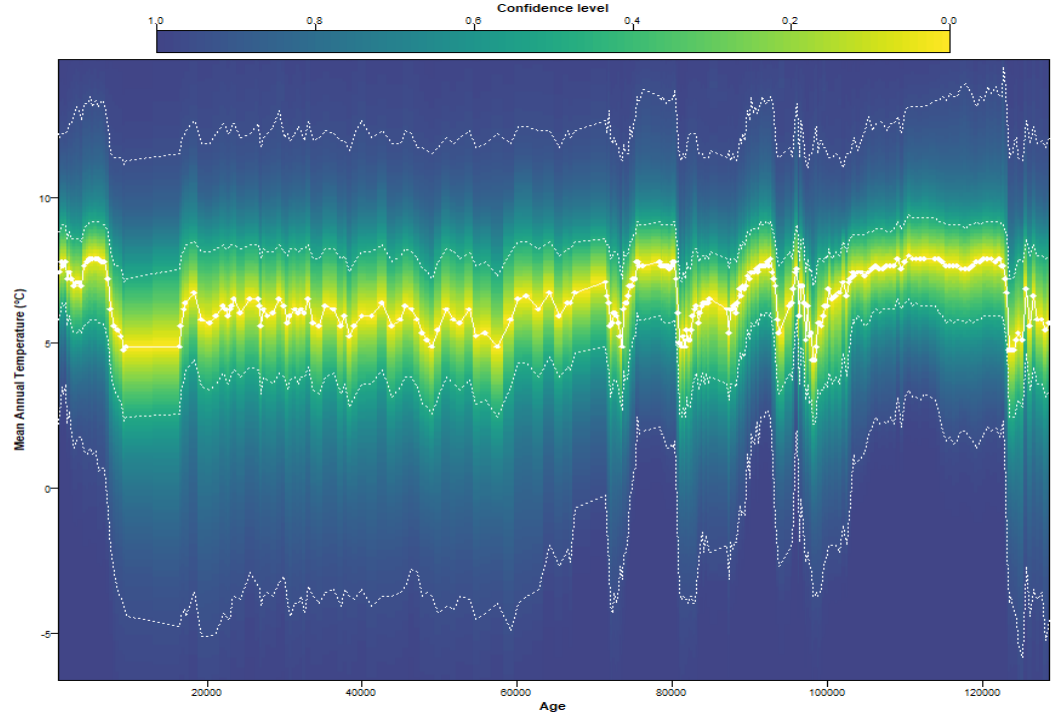
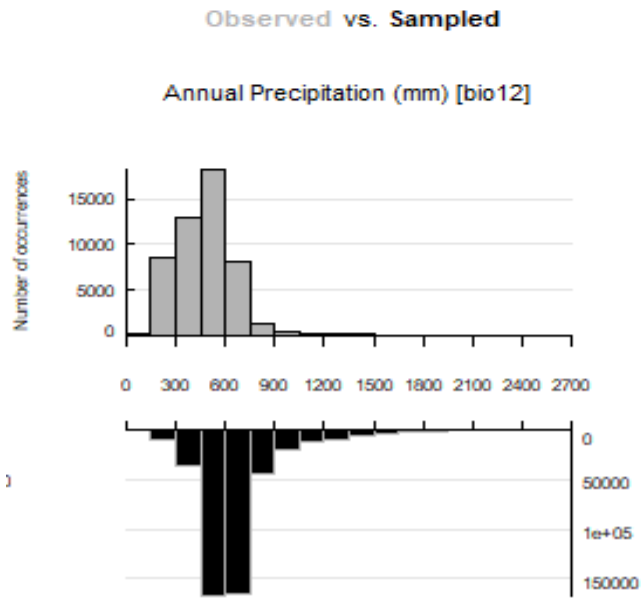
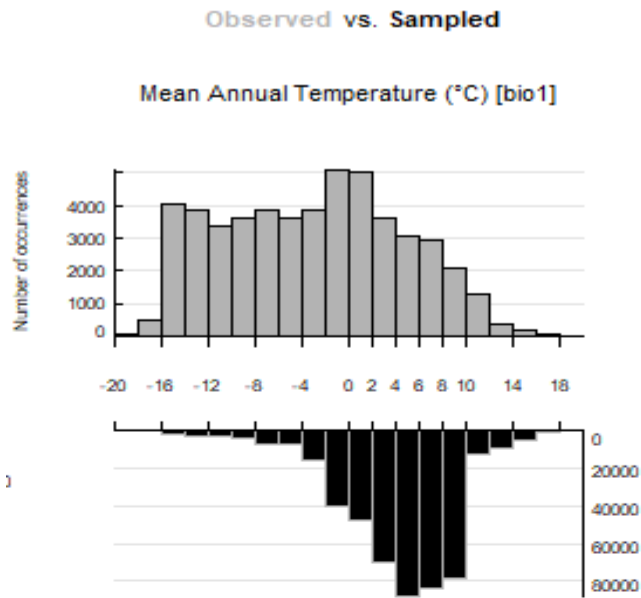
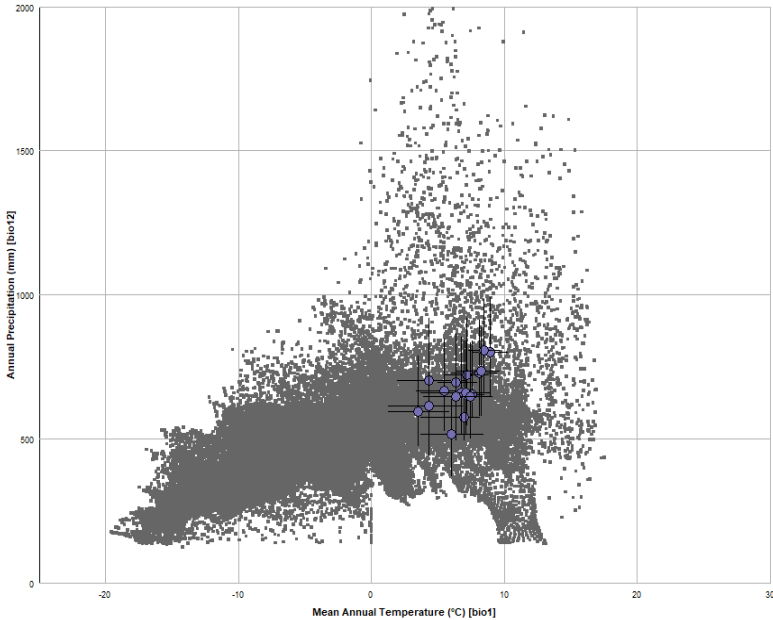
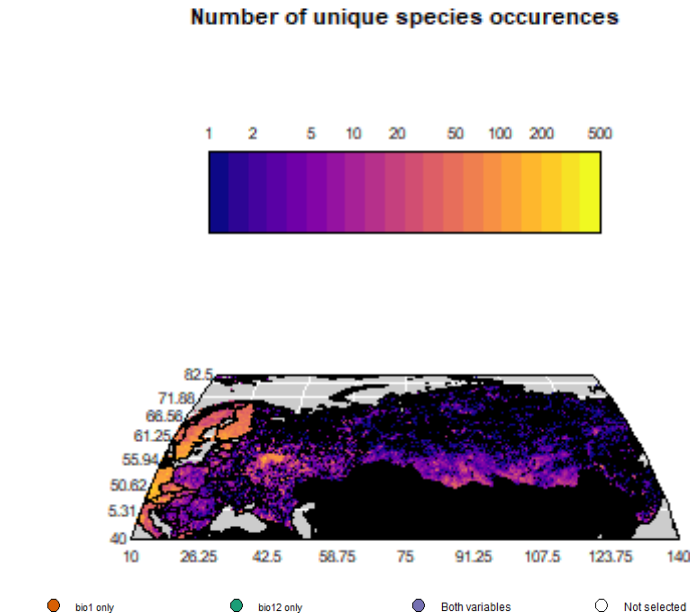
Without climate



With climate

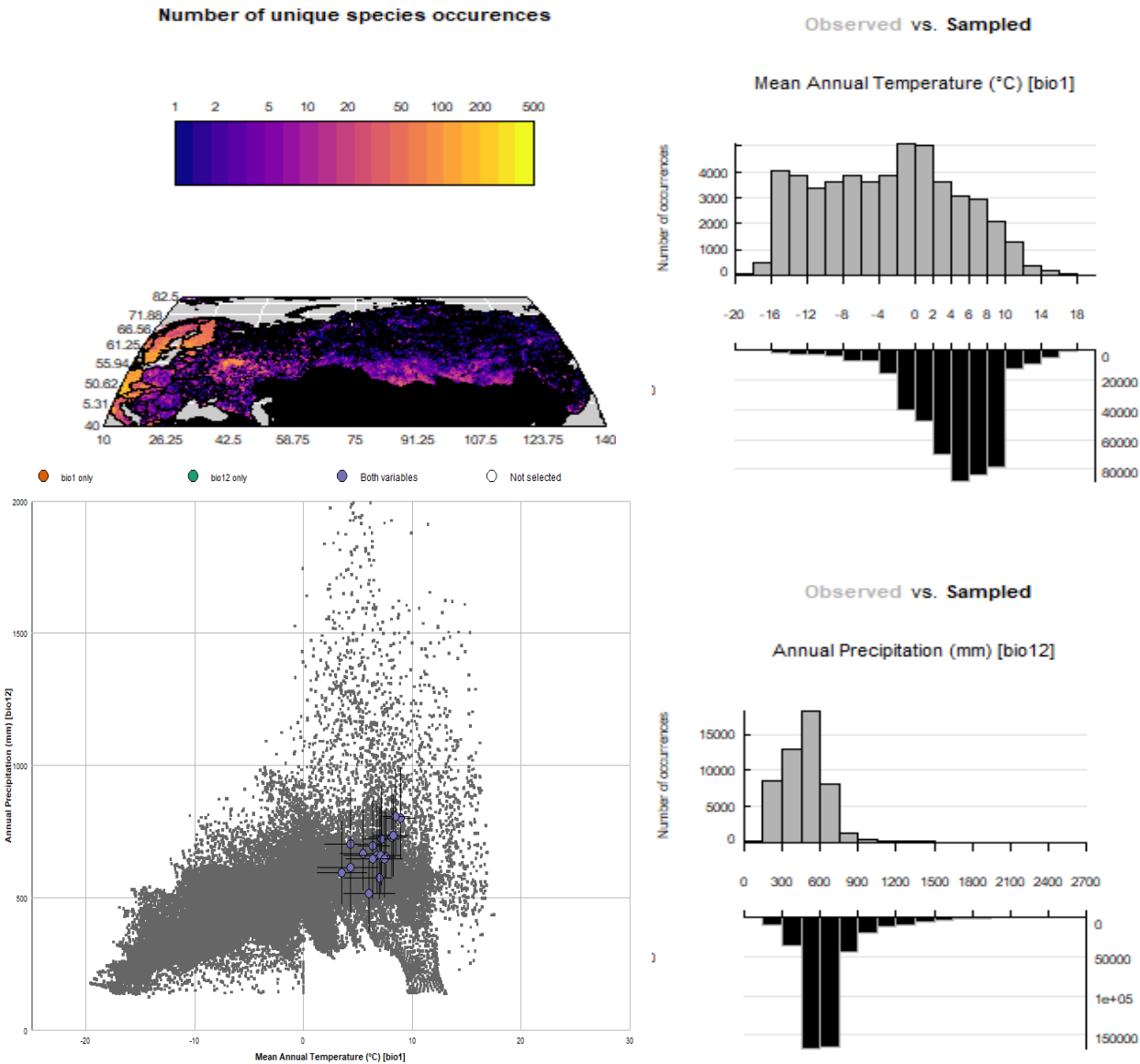


(40°N-95°N)  
(10-140°E) - 6Cas

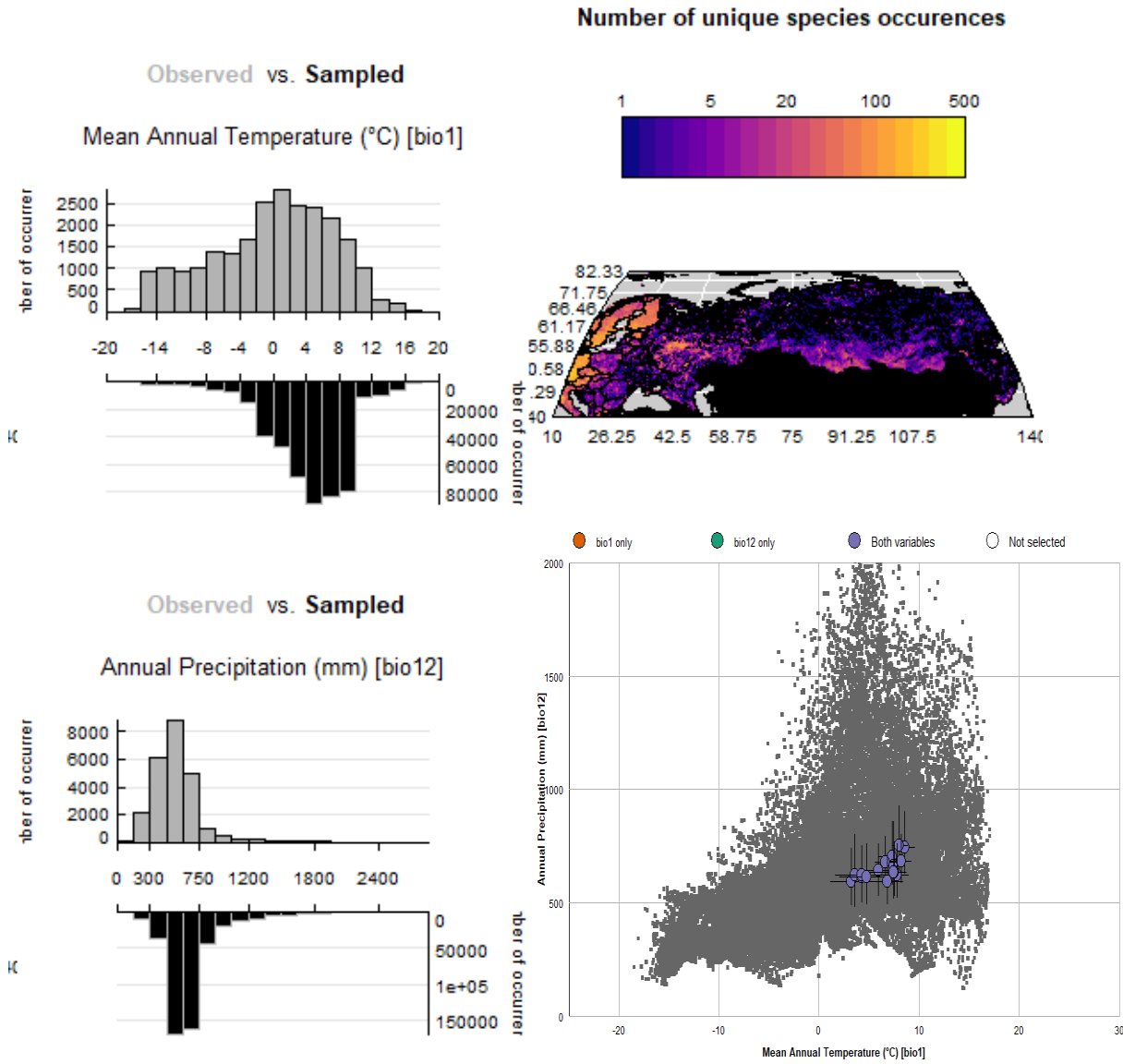


(40°N-95°N)  
(10-140°E) - 6Cas

Without climateWithObs

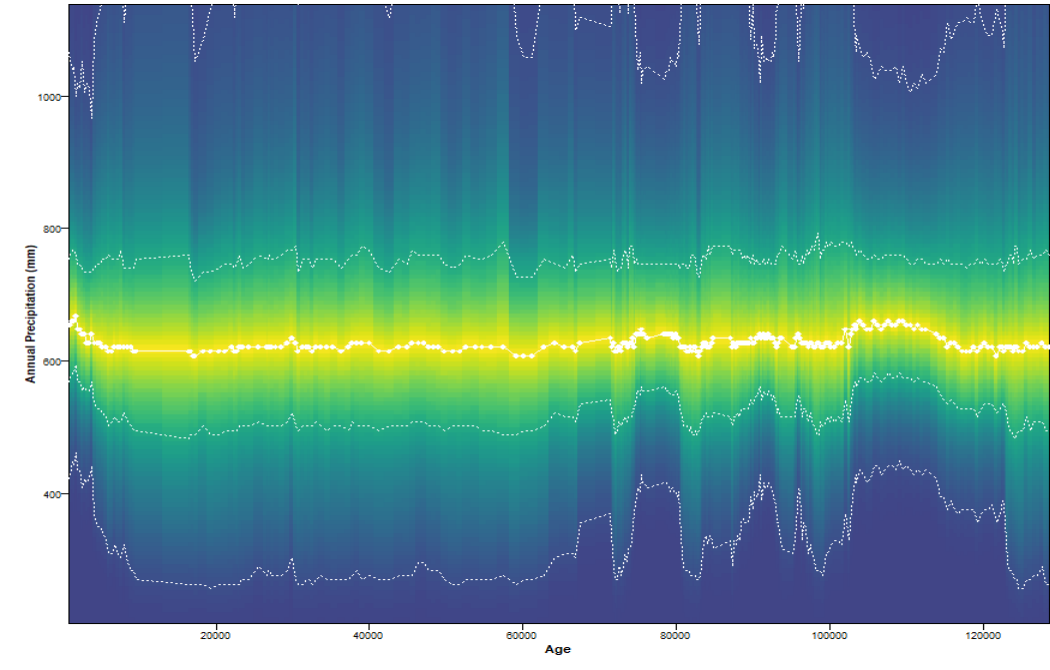
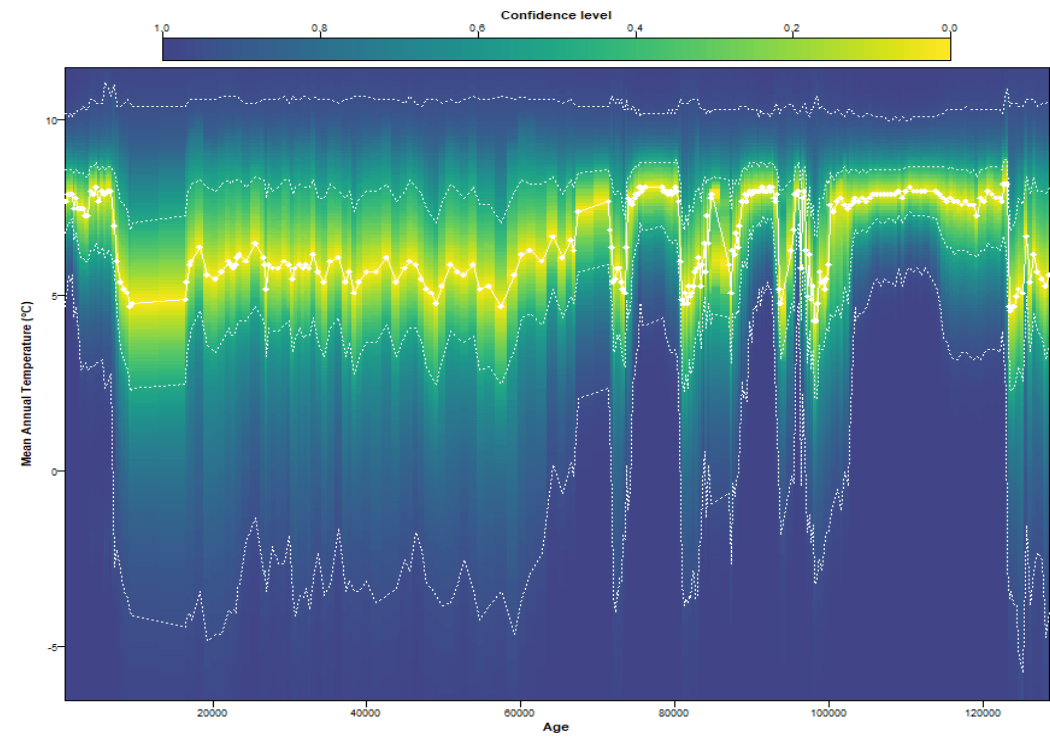
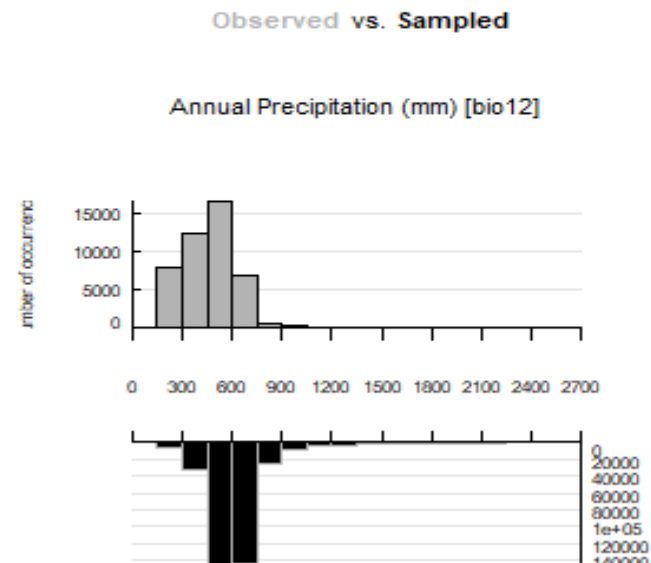
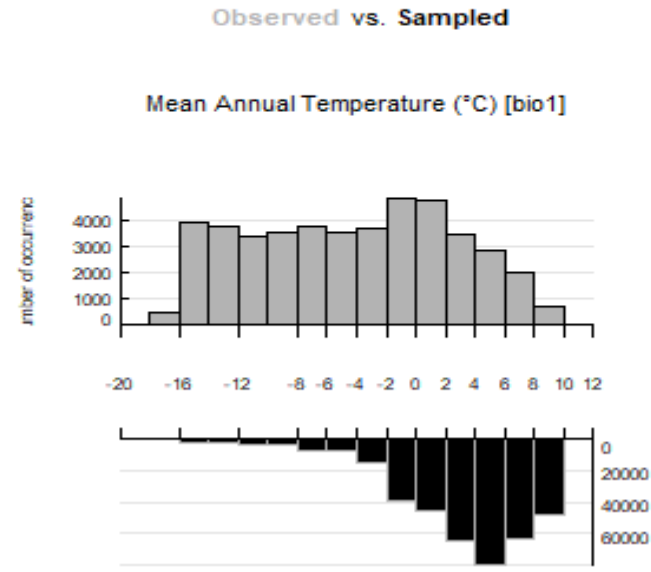
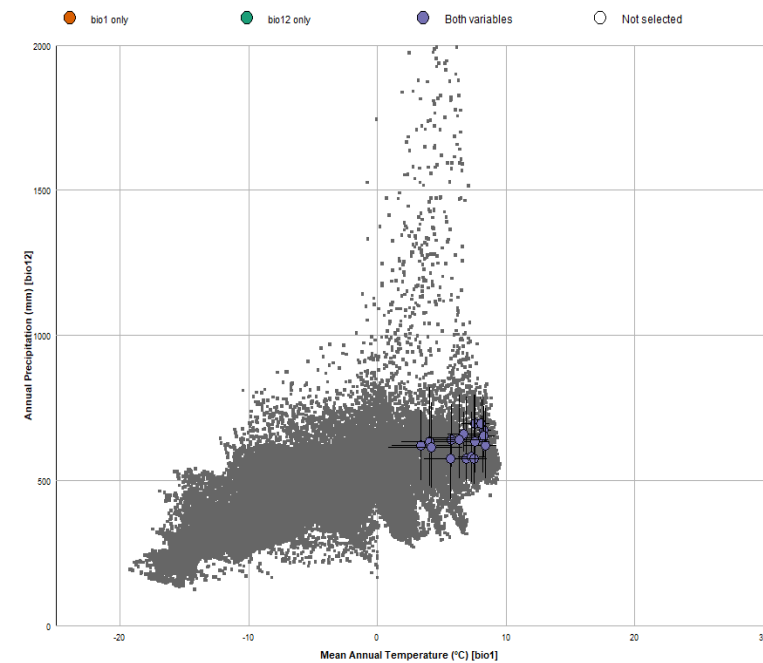
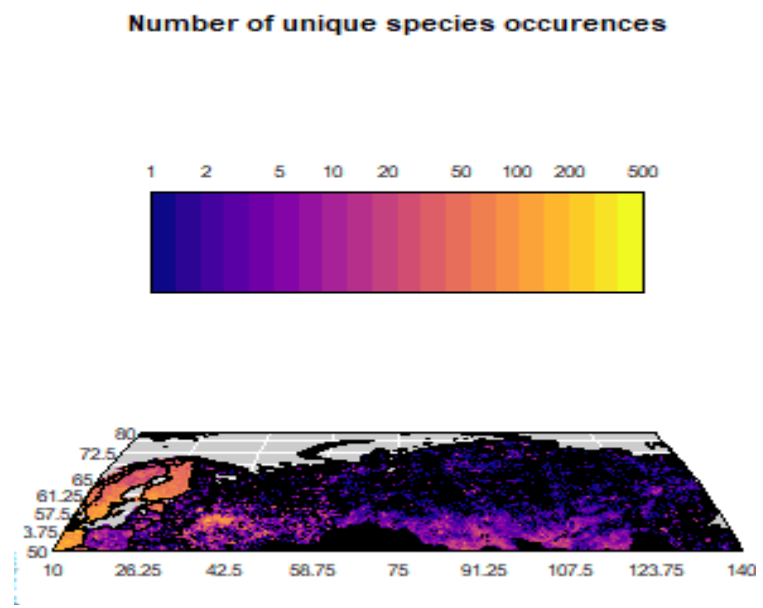


With climateWithObs





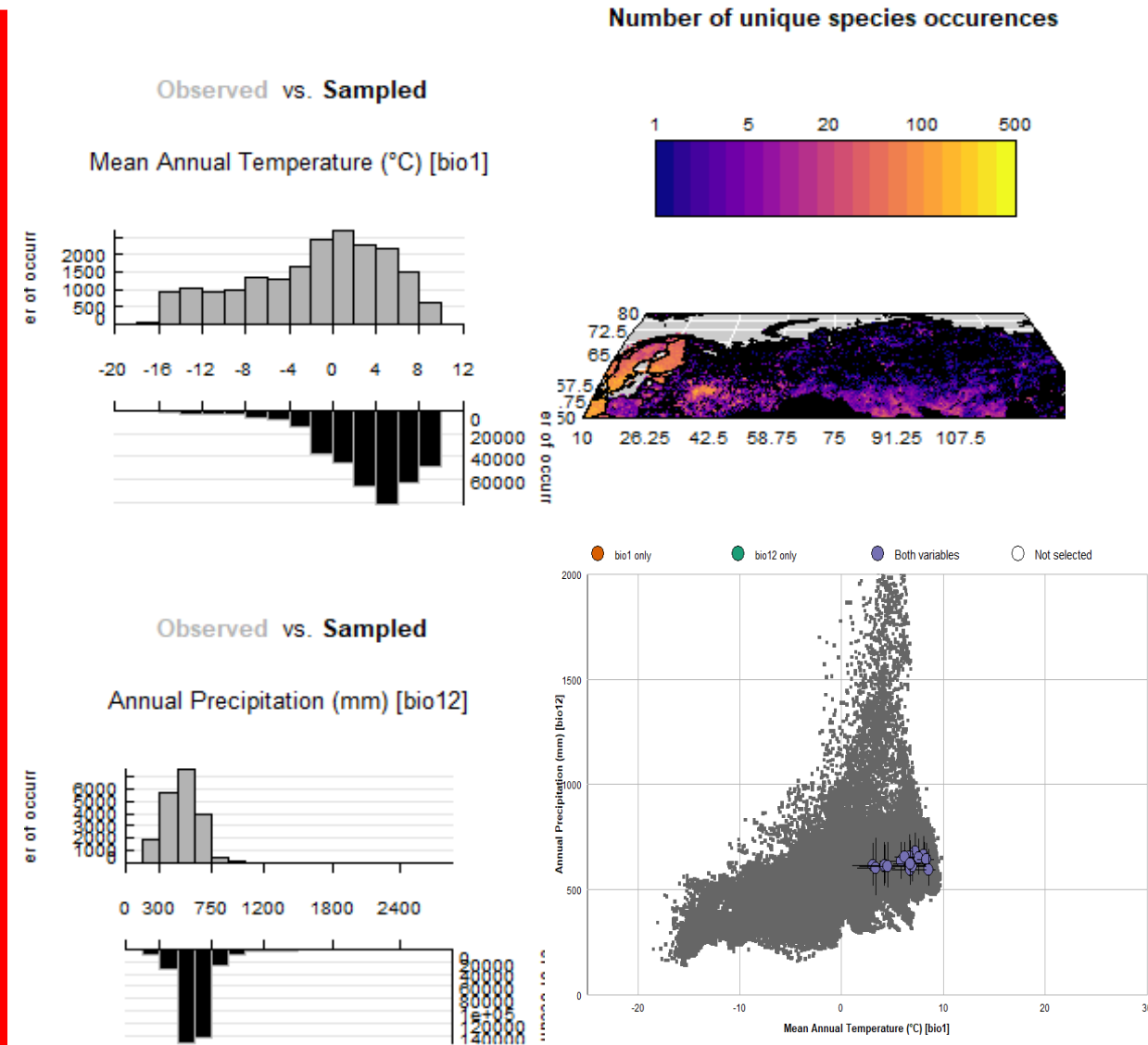
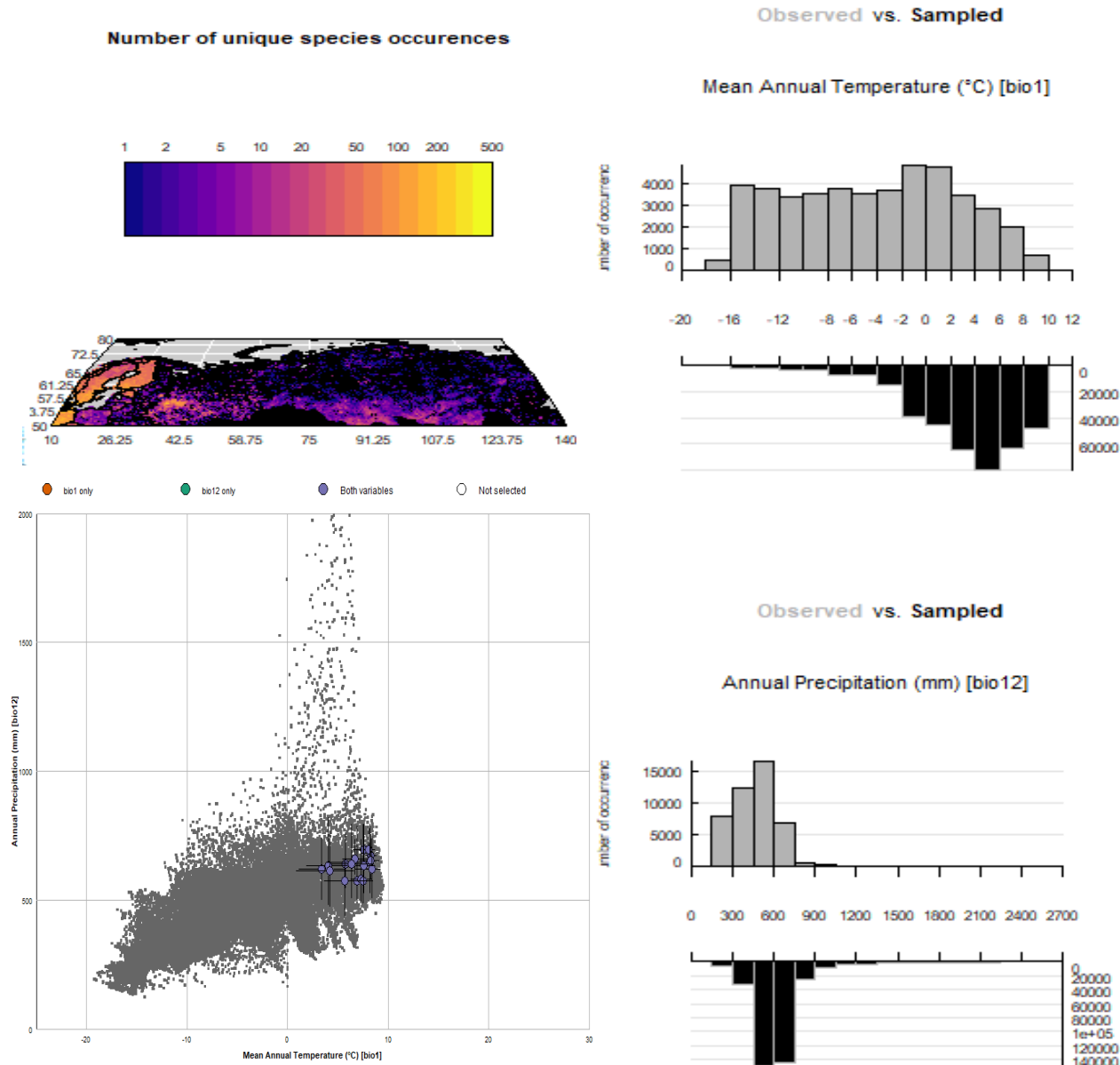
(50°N-80°N)  
(10-140°E) - 7Cas



(50°N-80°N)  
(10-140°E) - 7Cas

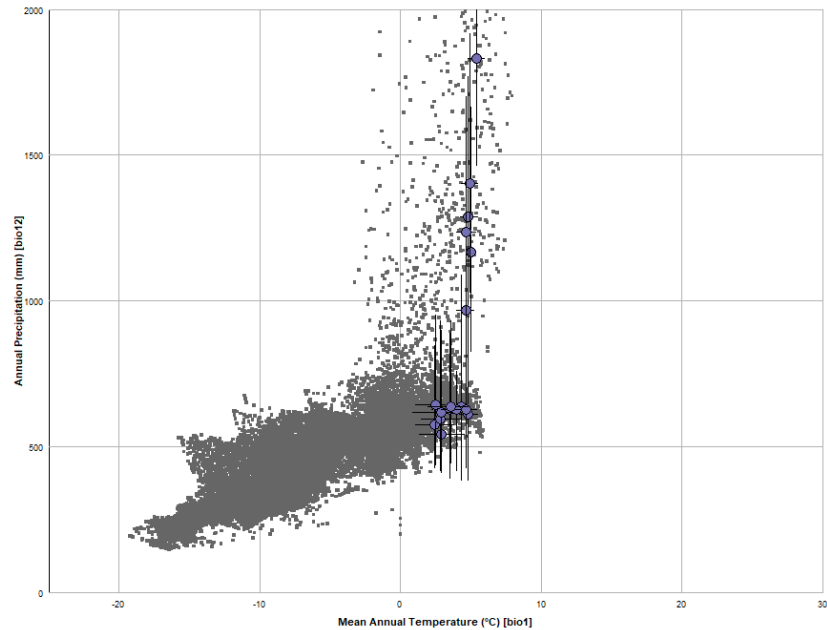
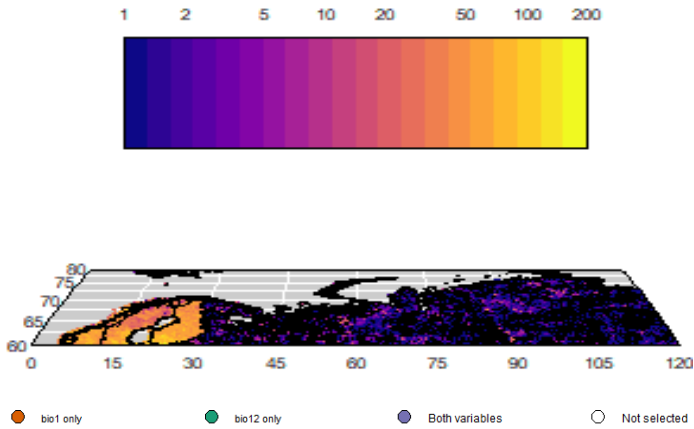
## Without climateWithObs

## With climateWithObs



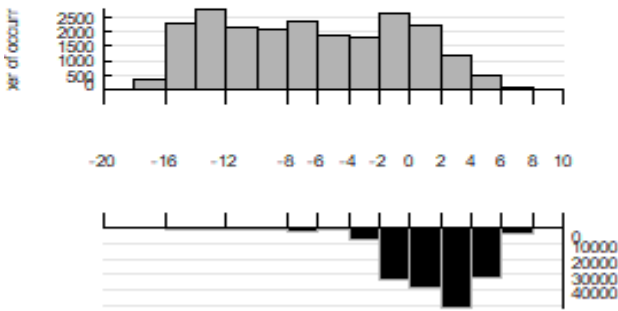
(60°N-80°N)  
(0-120°E) - 8Cas

Number of unique species occurrences



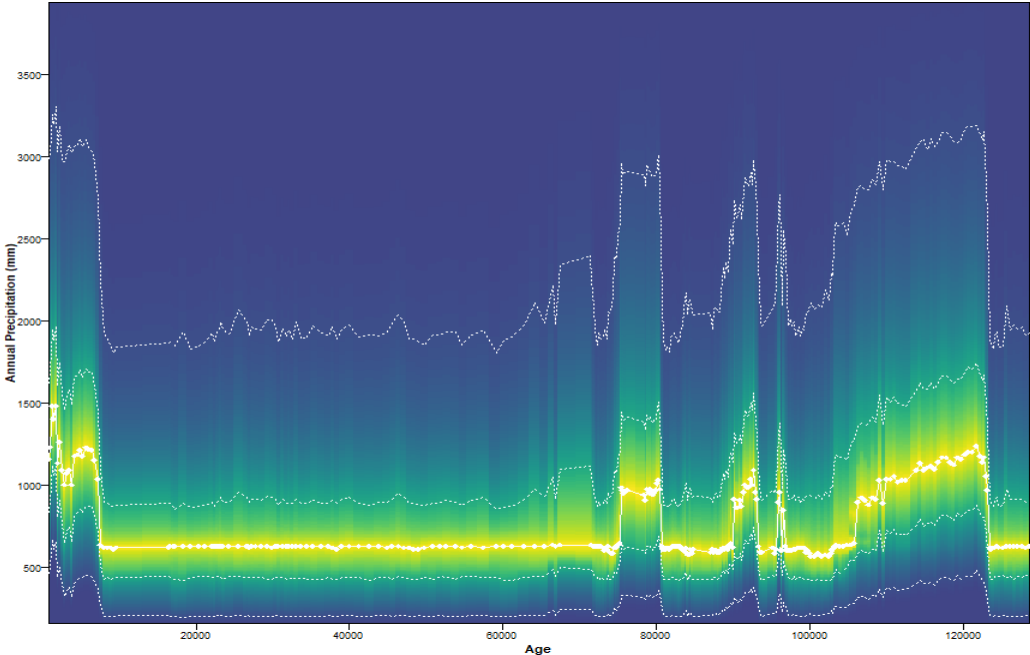
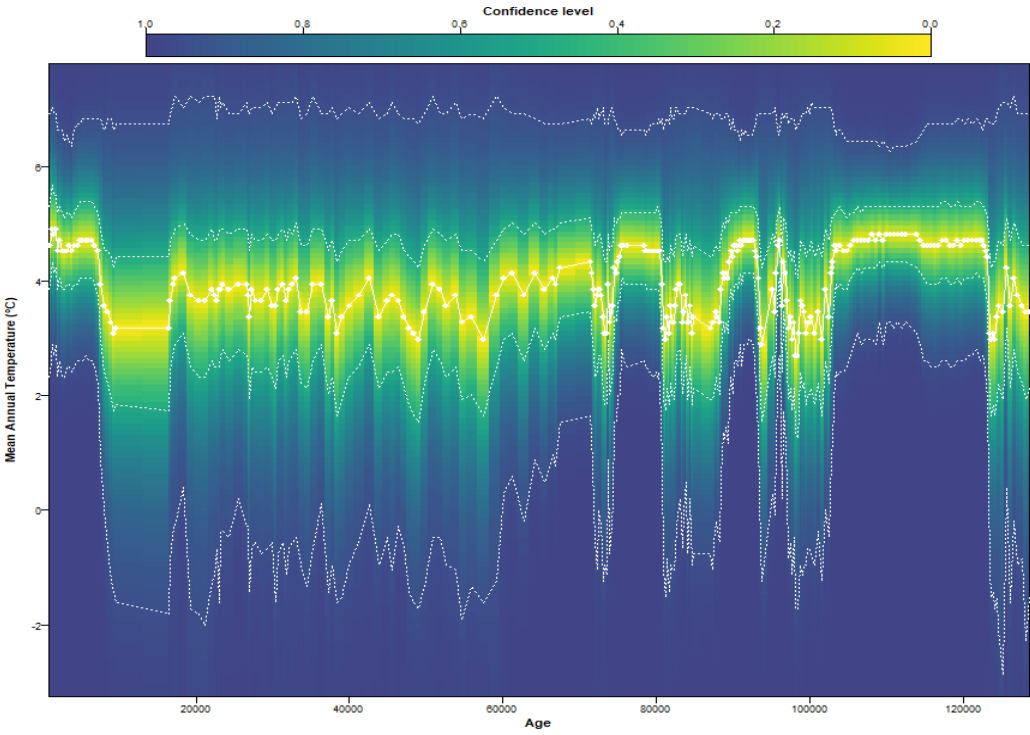
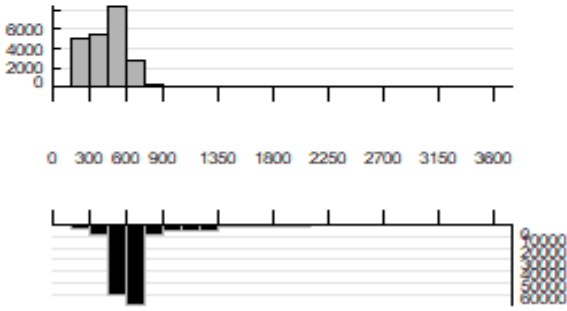
Observed vs. Sampled

Mean Annual Temperature (°C) [bio1]



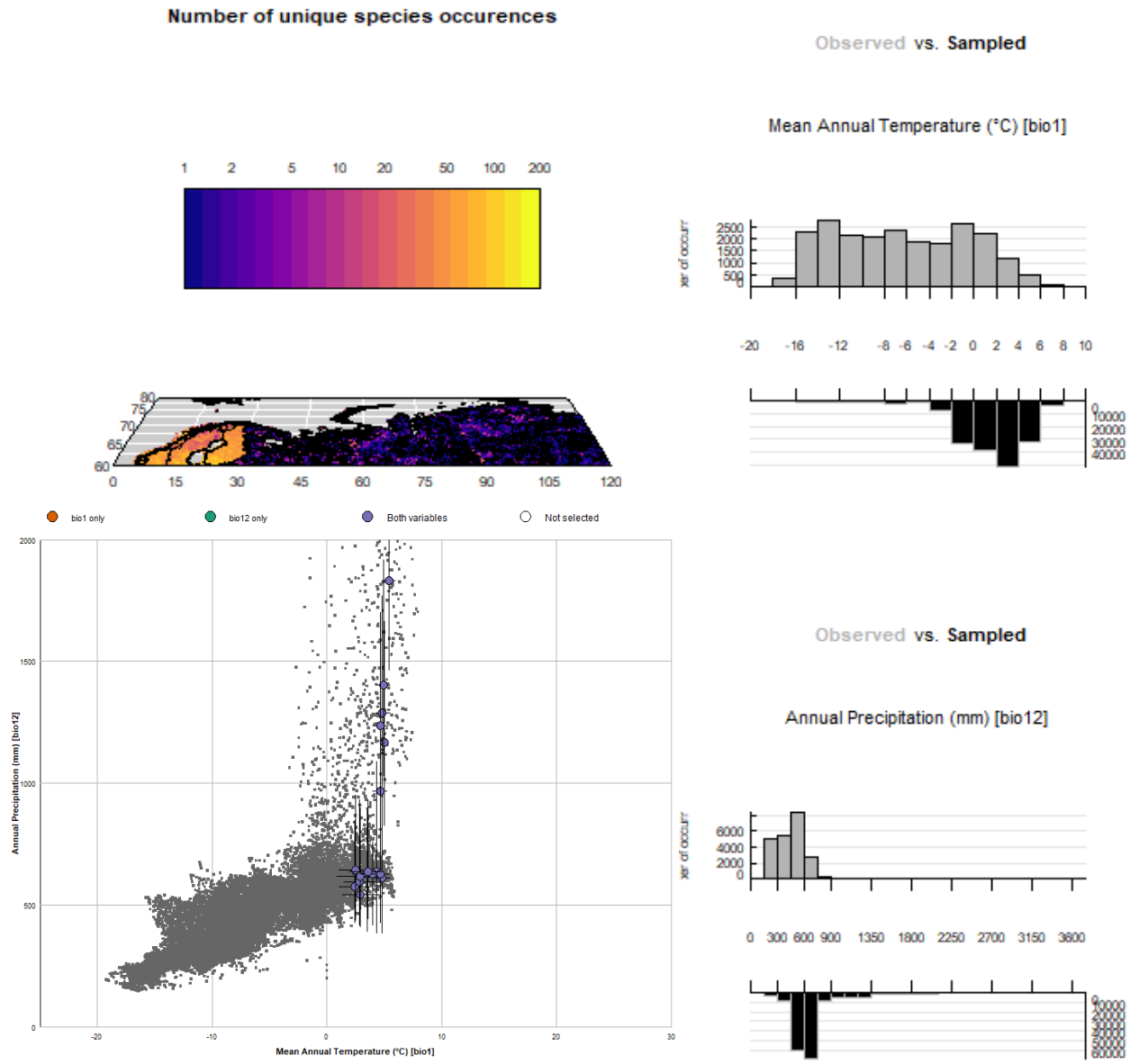
Observed vs. Sampled

Annual Precipitation (mm) [bio12]

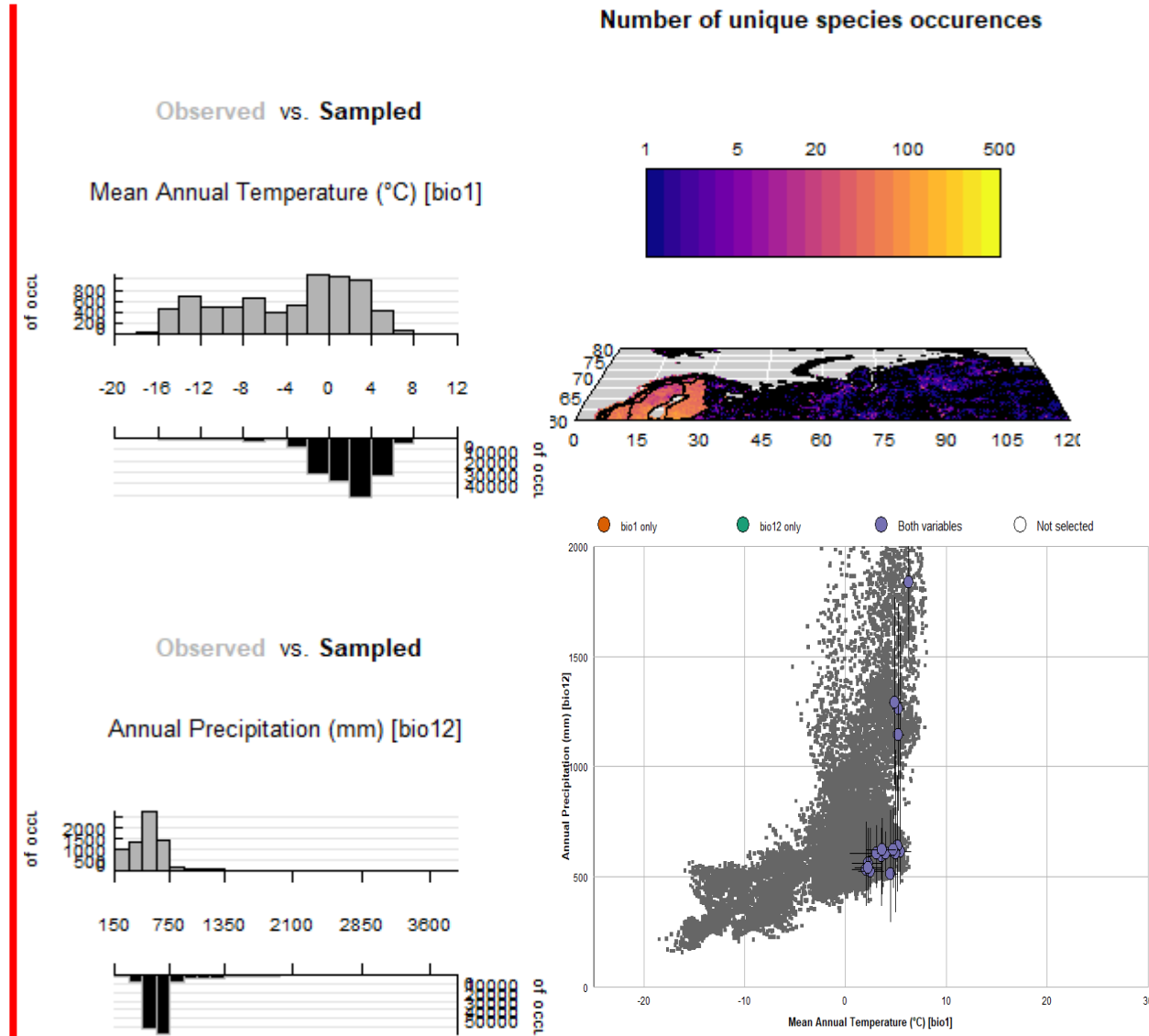


(60°N-80°N)  
(0-120°E) - 8Cas

Without climateWithObs

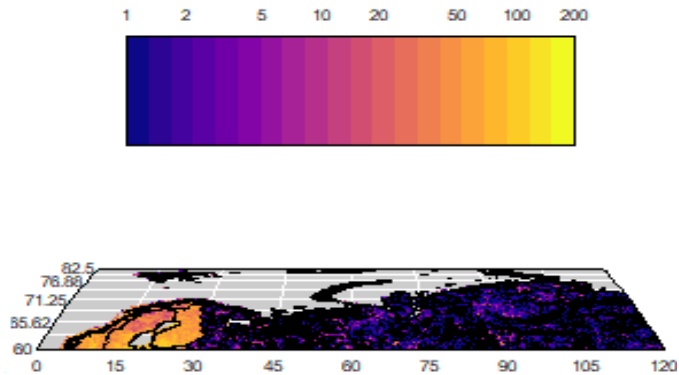


With climateWithObs

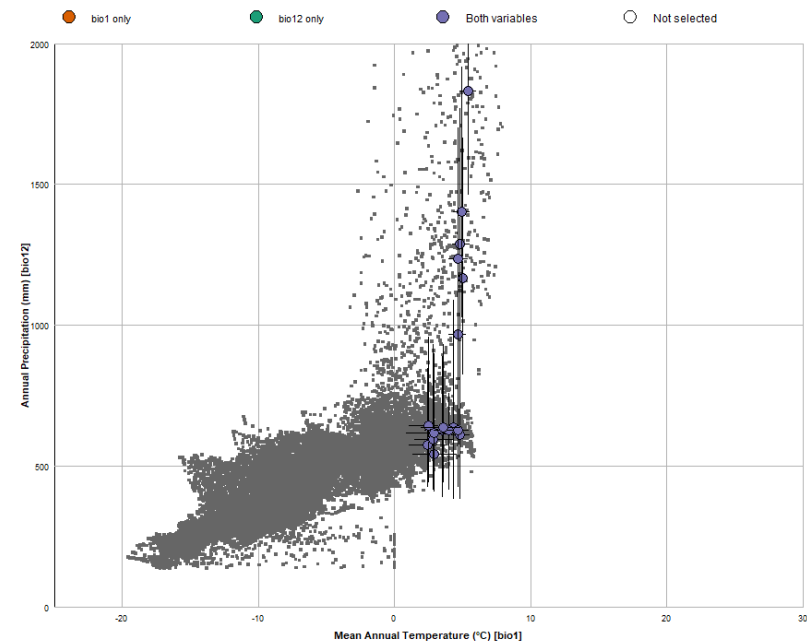
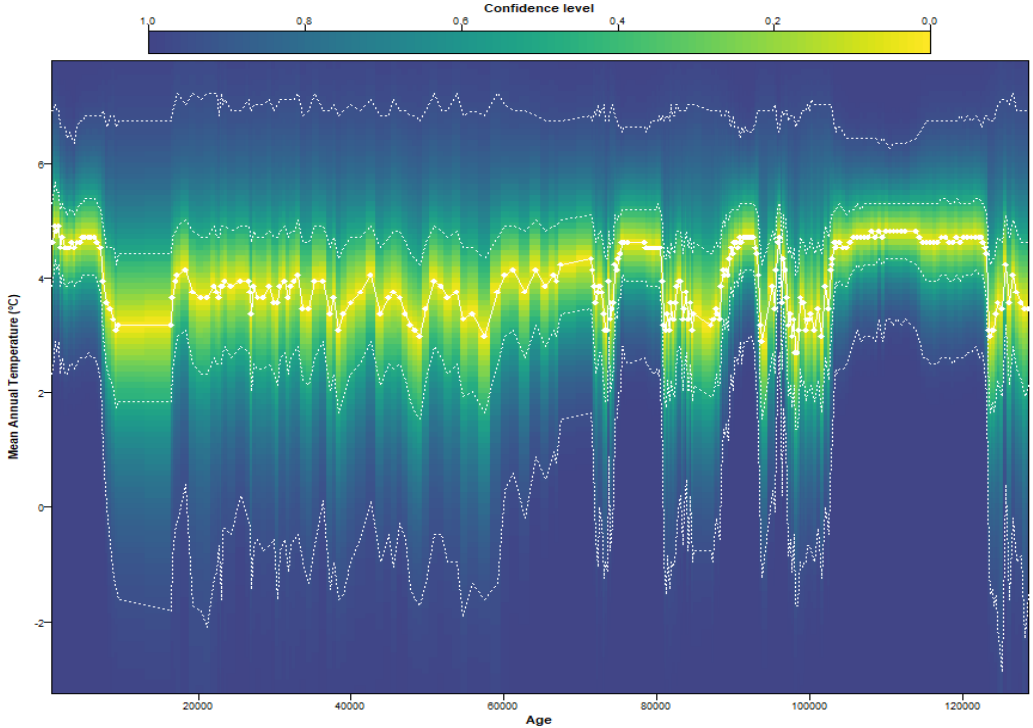
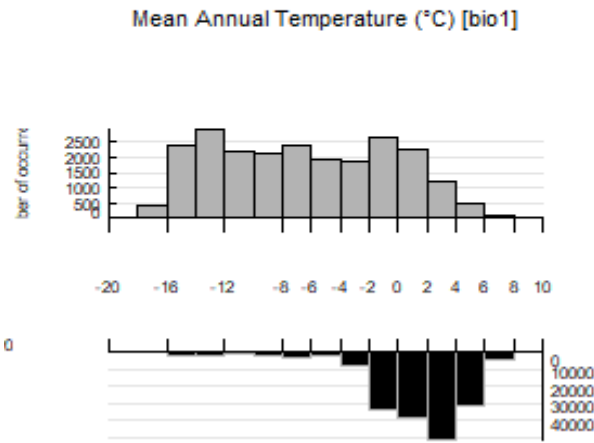


(60°N-90°N)  
(10-120°E) - 9Cas

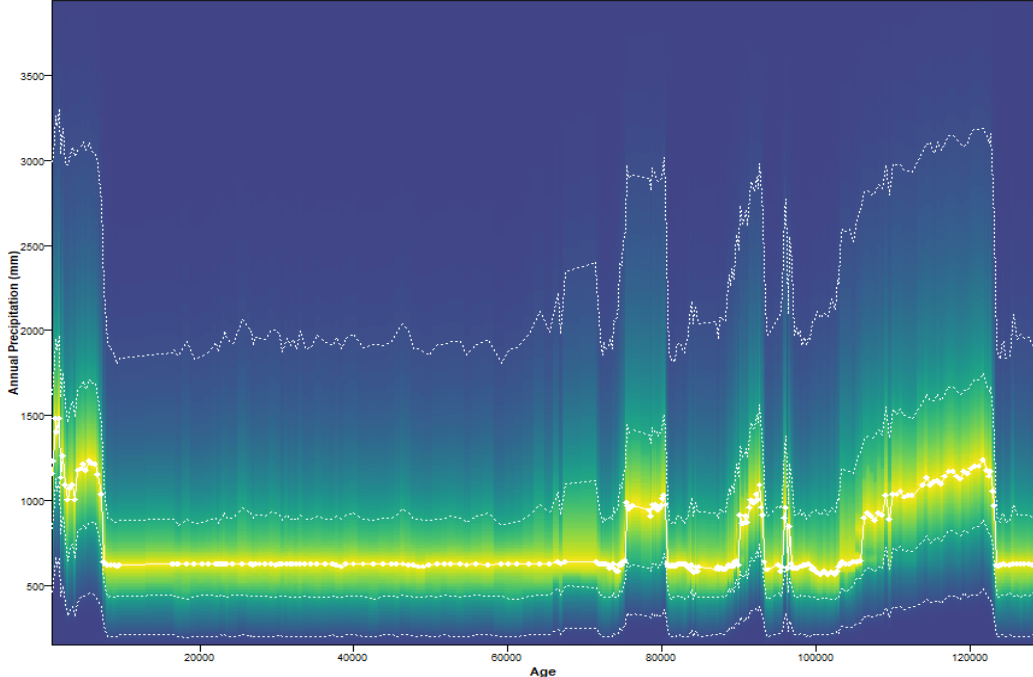
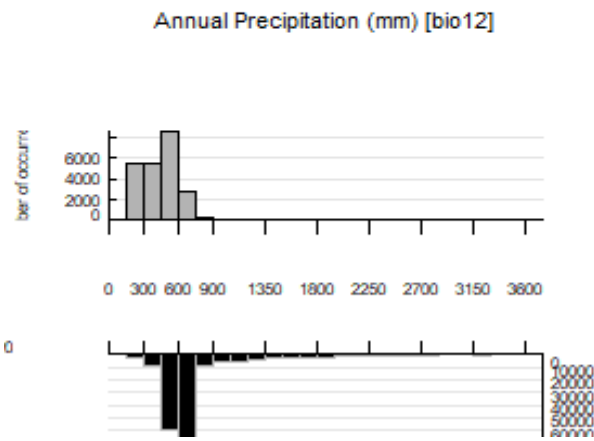
Number of unique species occurrences



Observed vs. Sampled



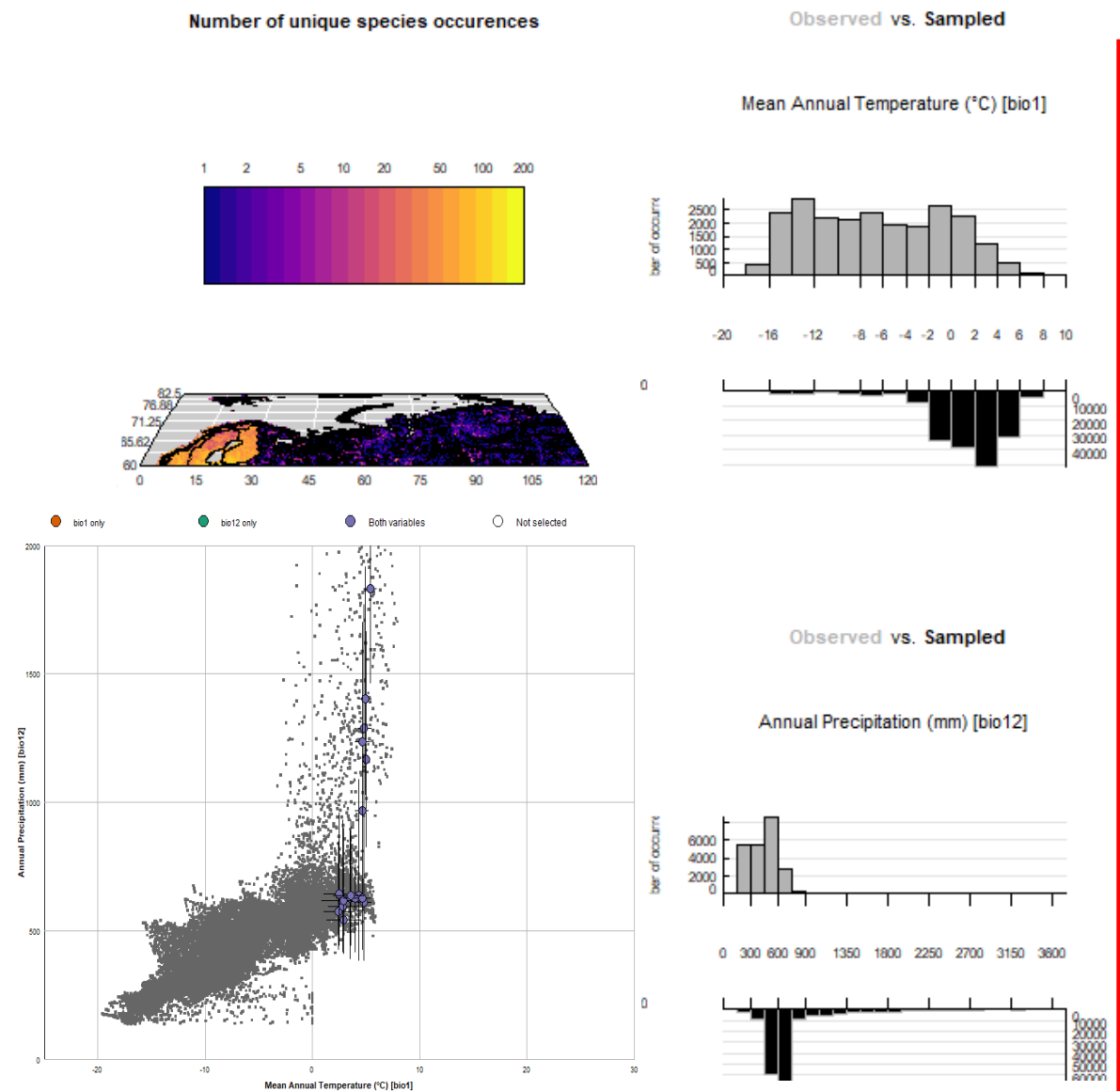
Observed vs. Sampled



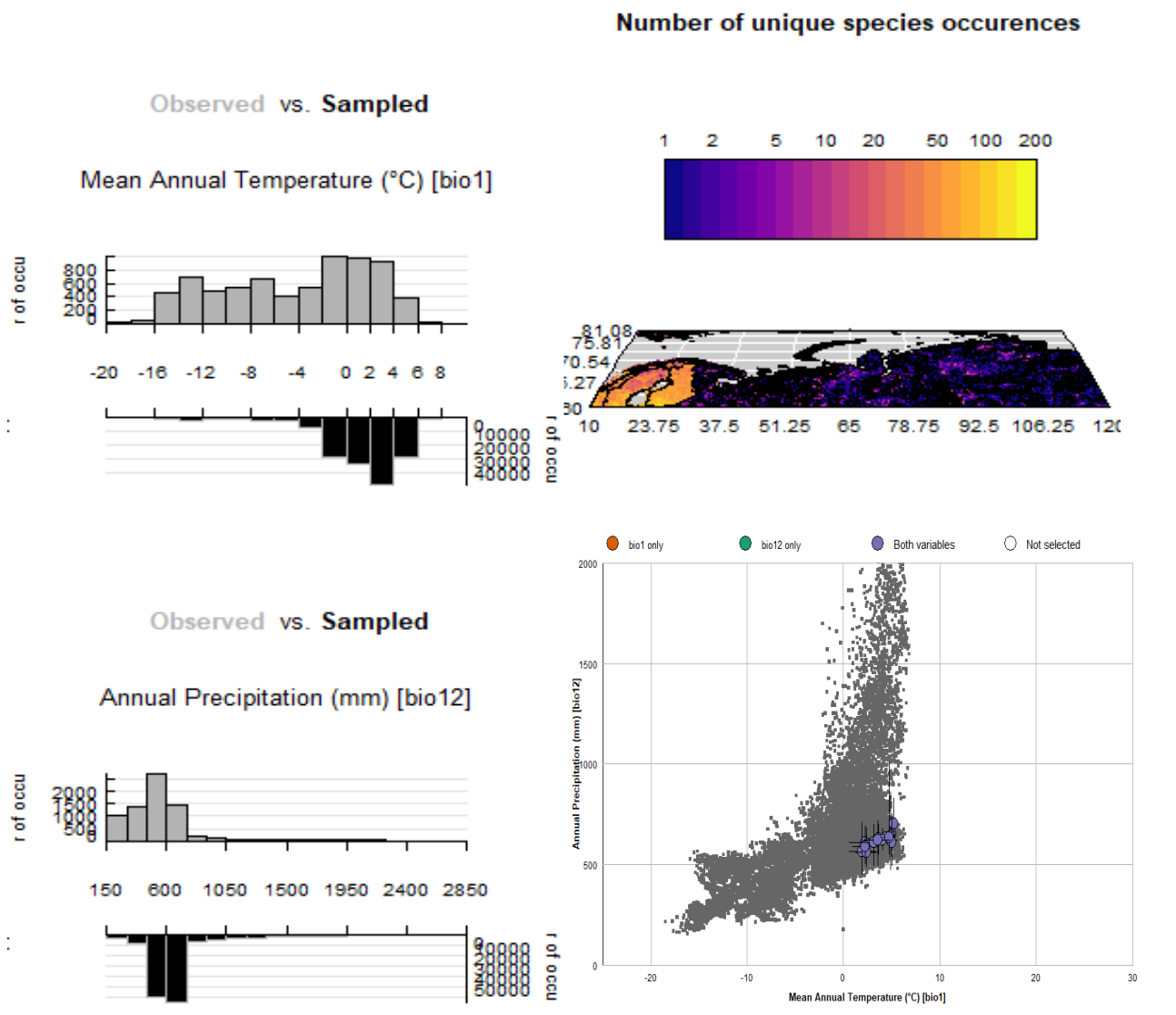


(60°N-90°N)  
(10-120°E) - 9Cas

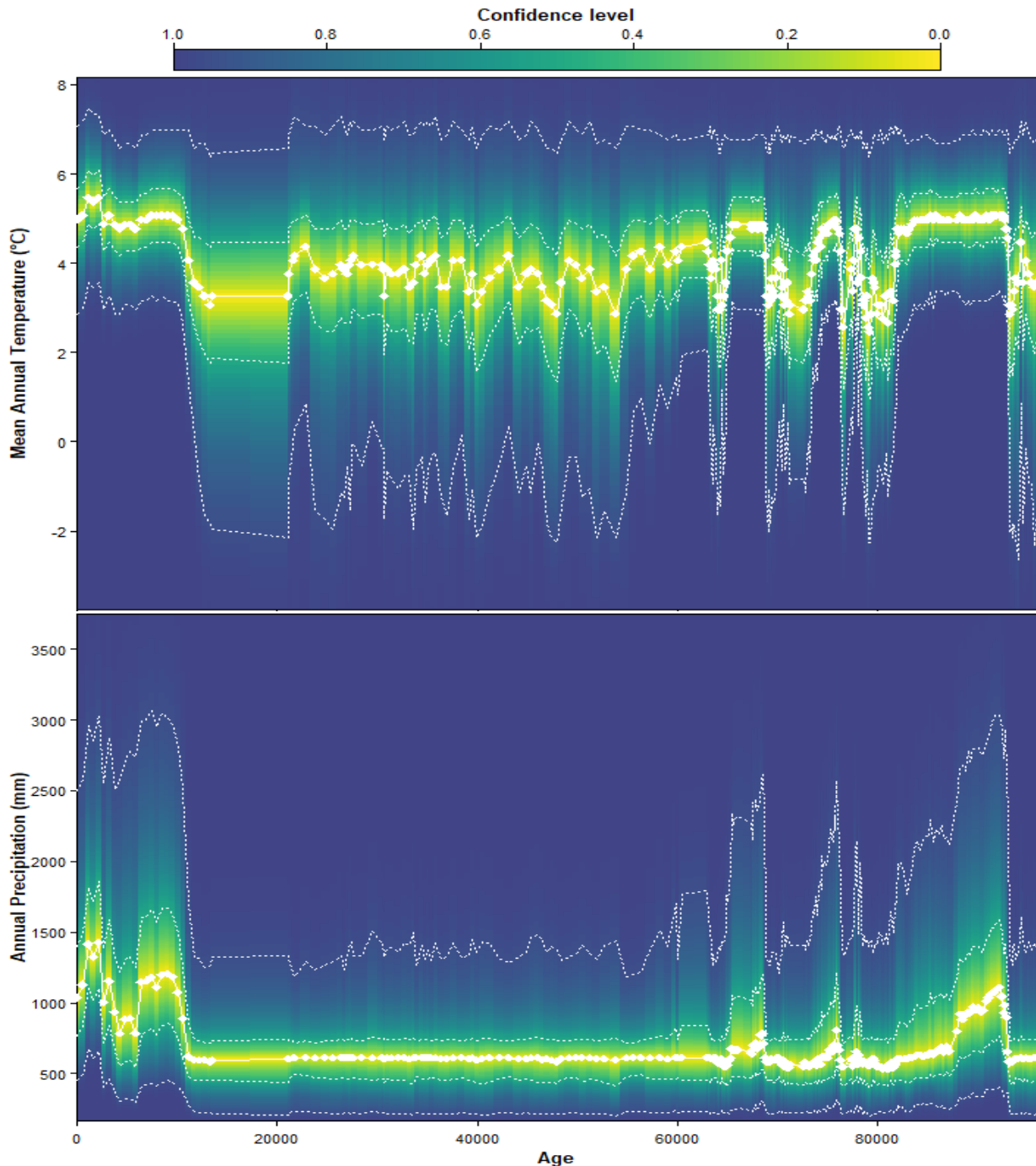
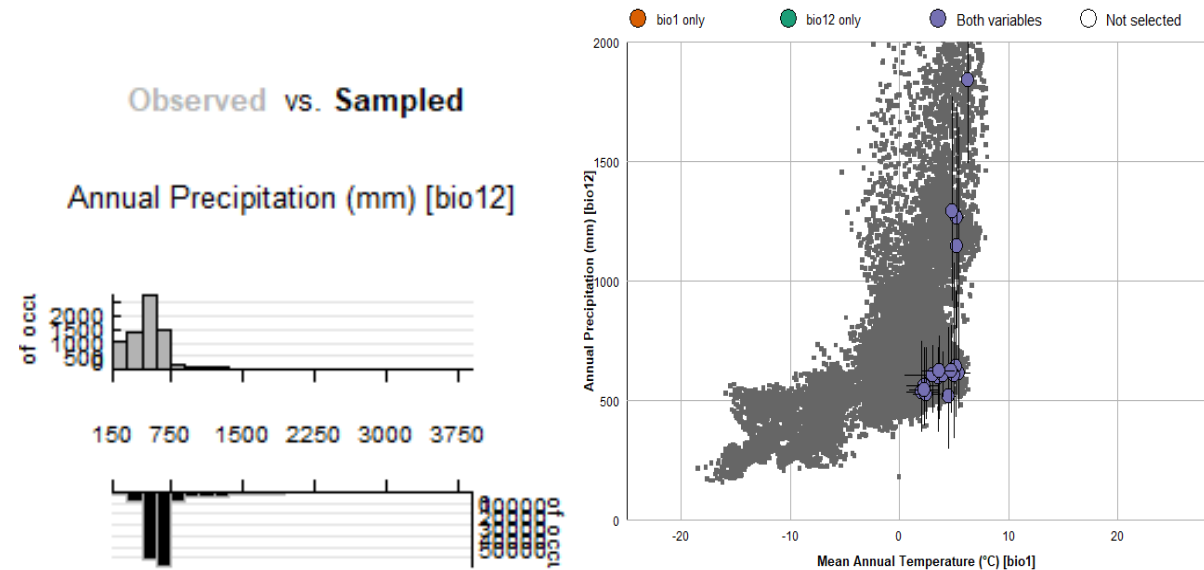
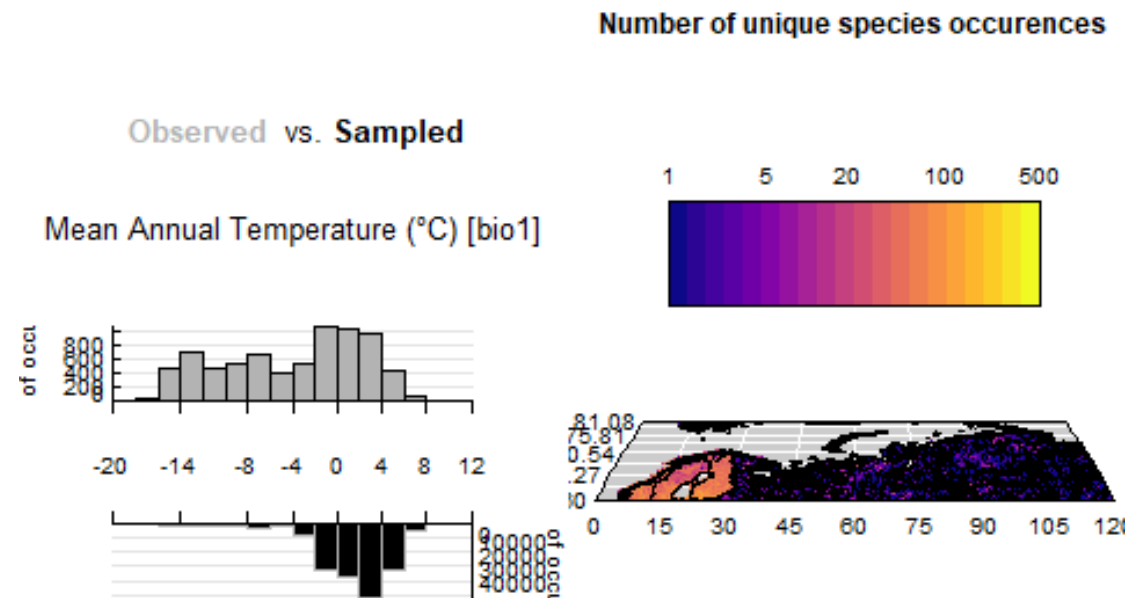
Without climateWithObs



With climateWithObs



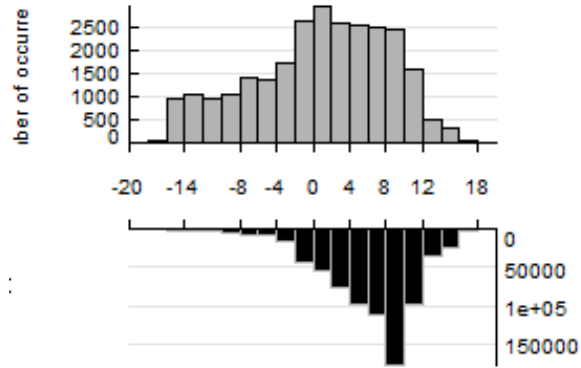
(60°N-90°N)  
(0-120°E) - 10Cas



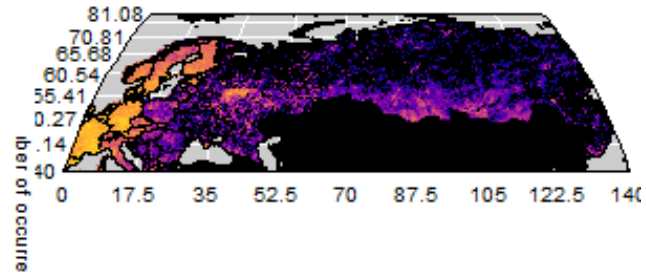
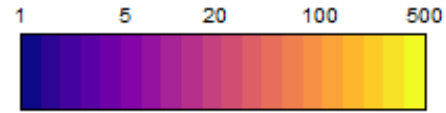
(40°N-90°N)  
(0-140°E) - 11Cas

Observed vs. Sampled

Mean Annual Temperature (°C) [bio1]

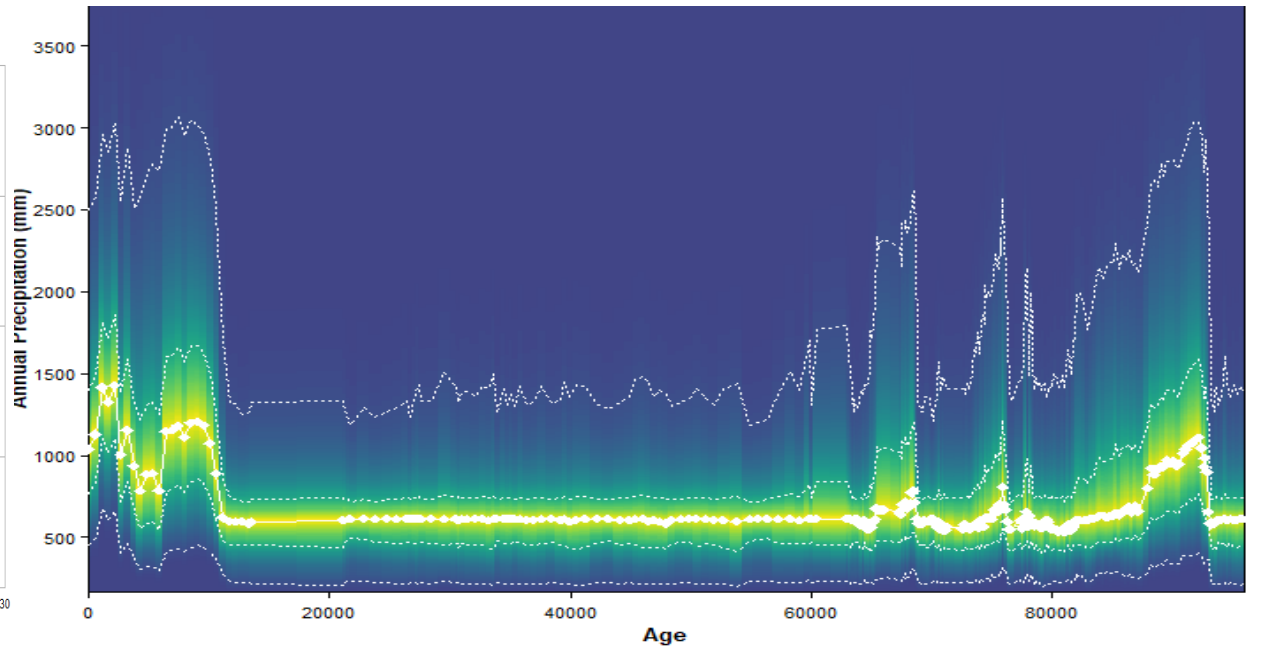
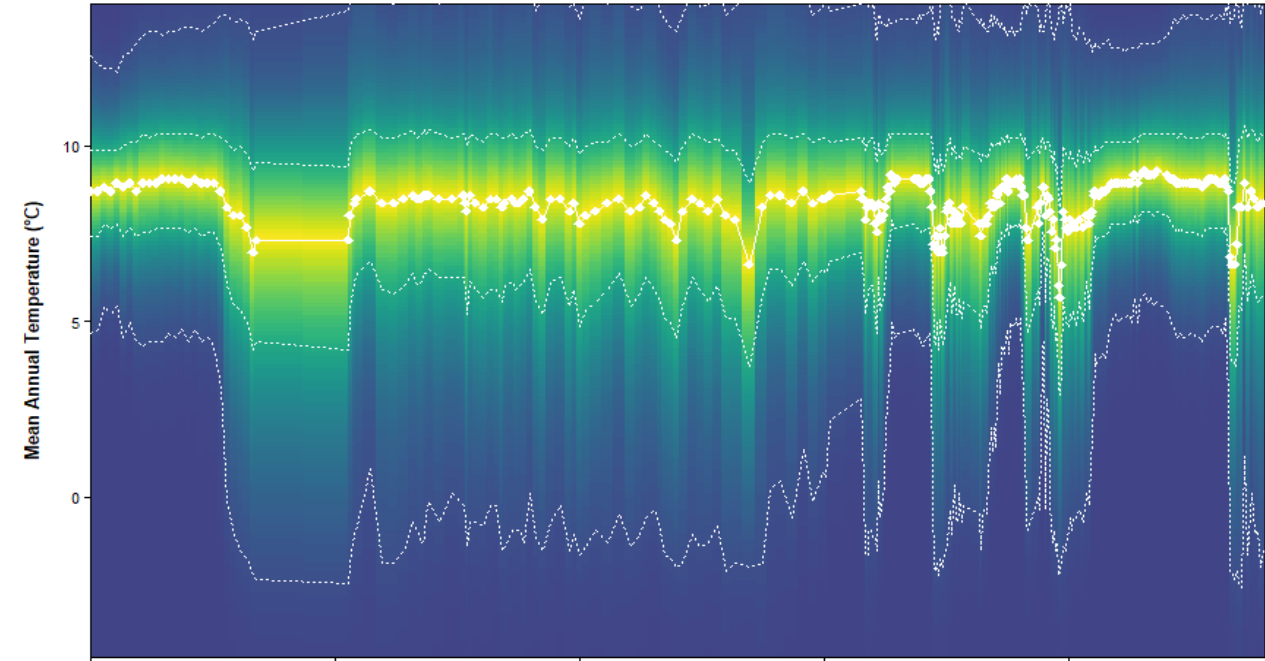
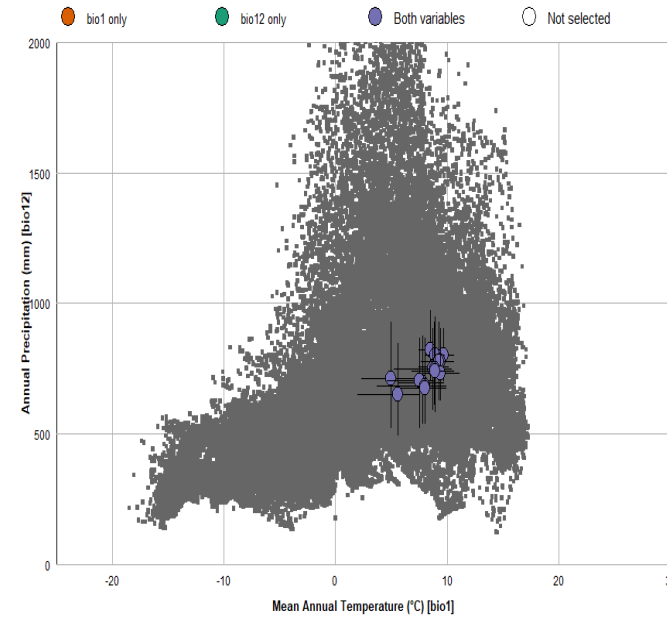
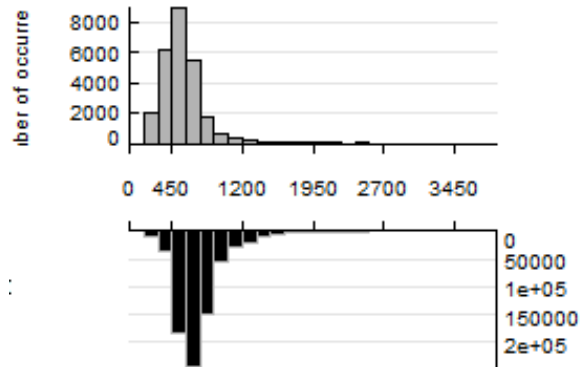


Number of unique species occurrences



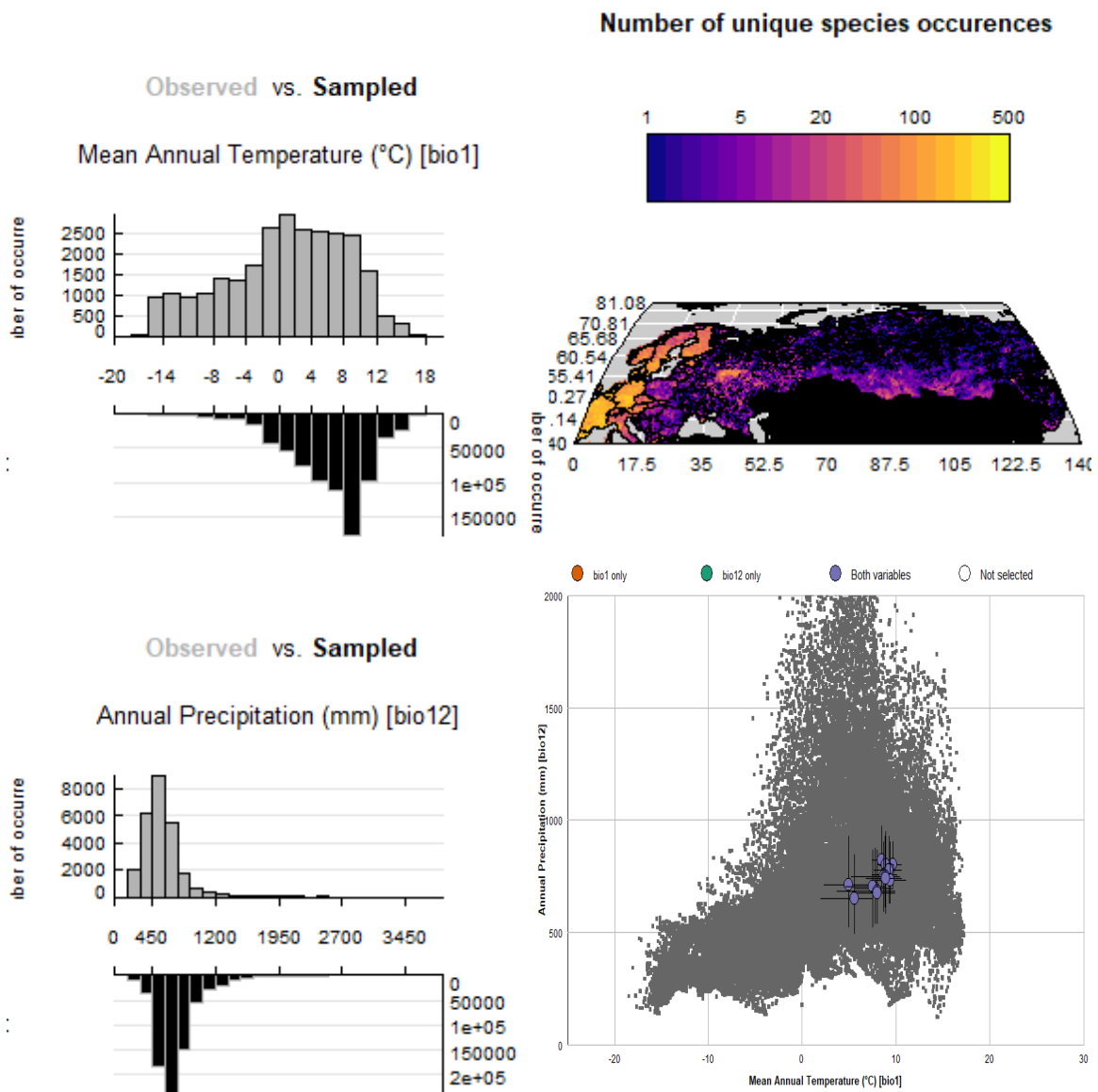
Observed vs. Sampled

Annual Precipitation (mm) [bio12]

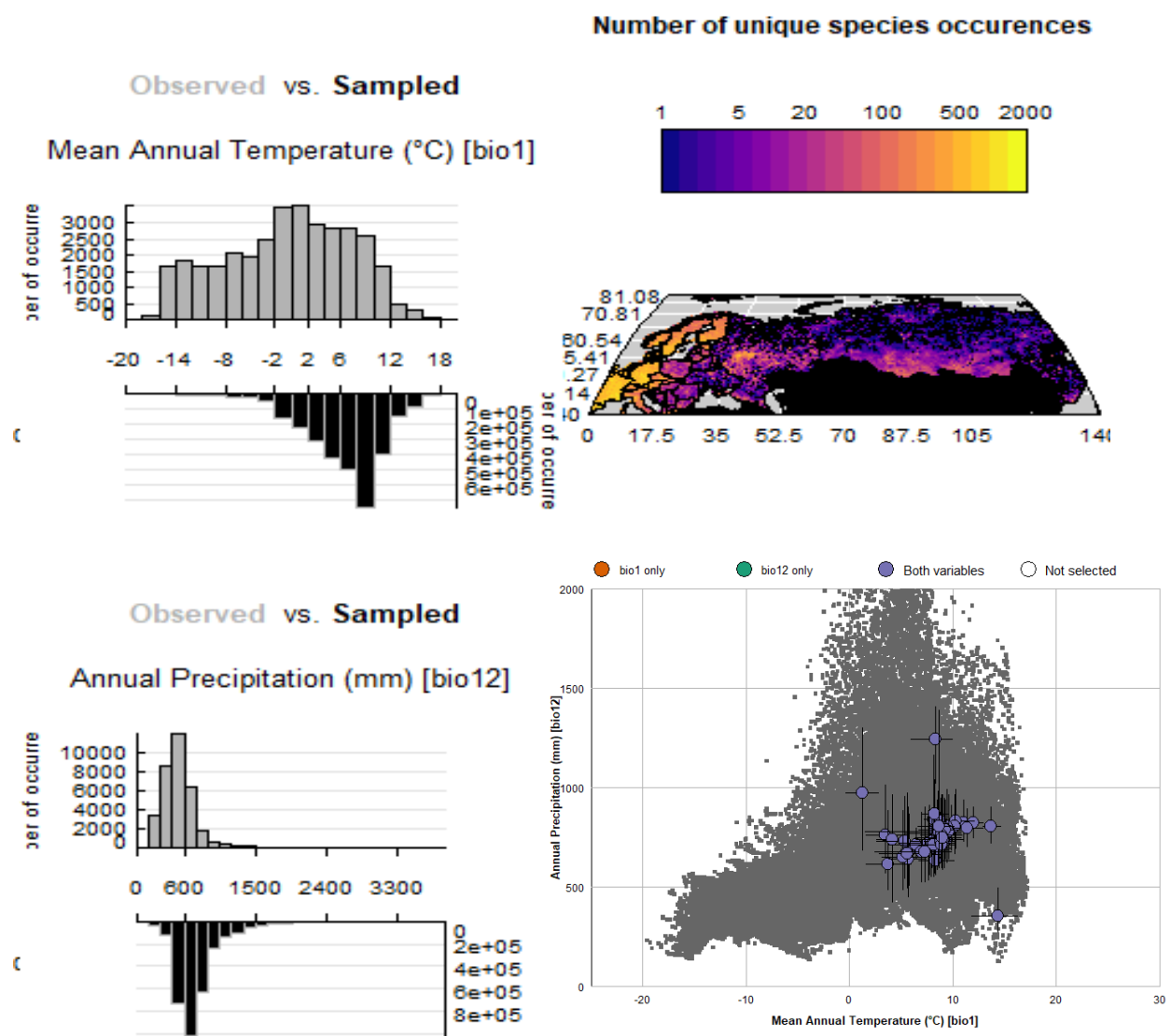


(50°N-90°N)  
(10-140°E) - 11Cas

Without climateWithObs



With climateWithObs

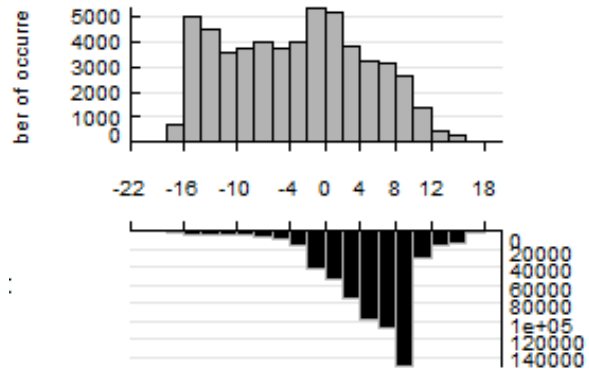




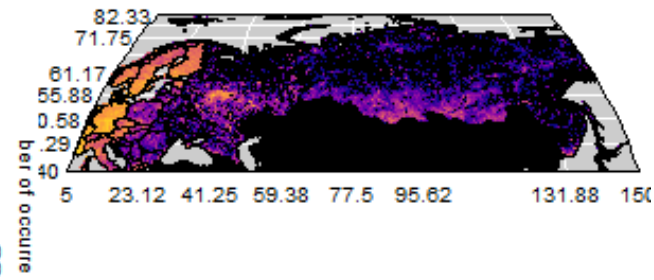
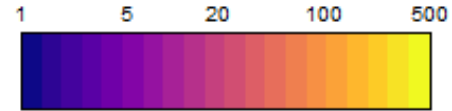
(40°N-95°N)  
(5-150°E) - 12Cas

### Observed vs. Sampled

Mean Annual Temperature (°C) [bio1]

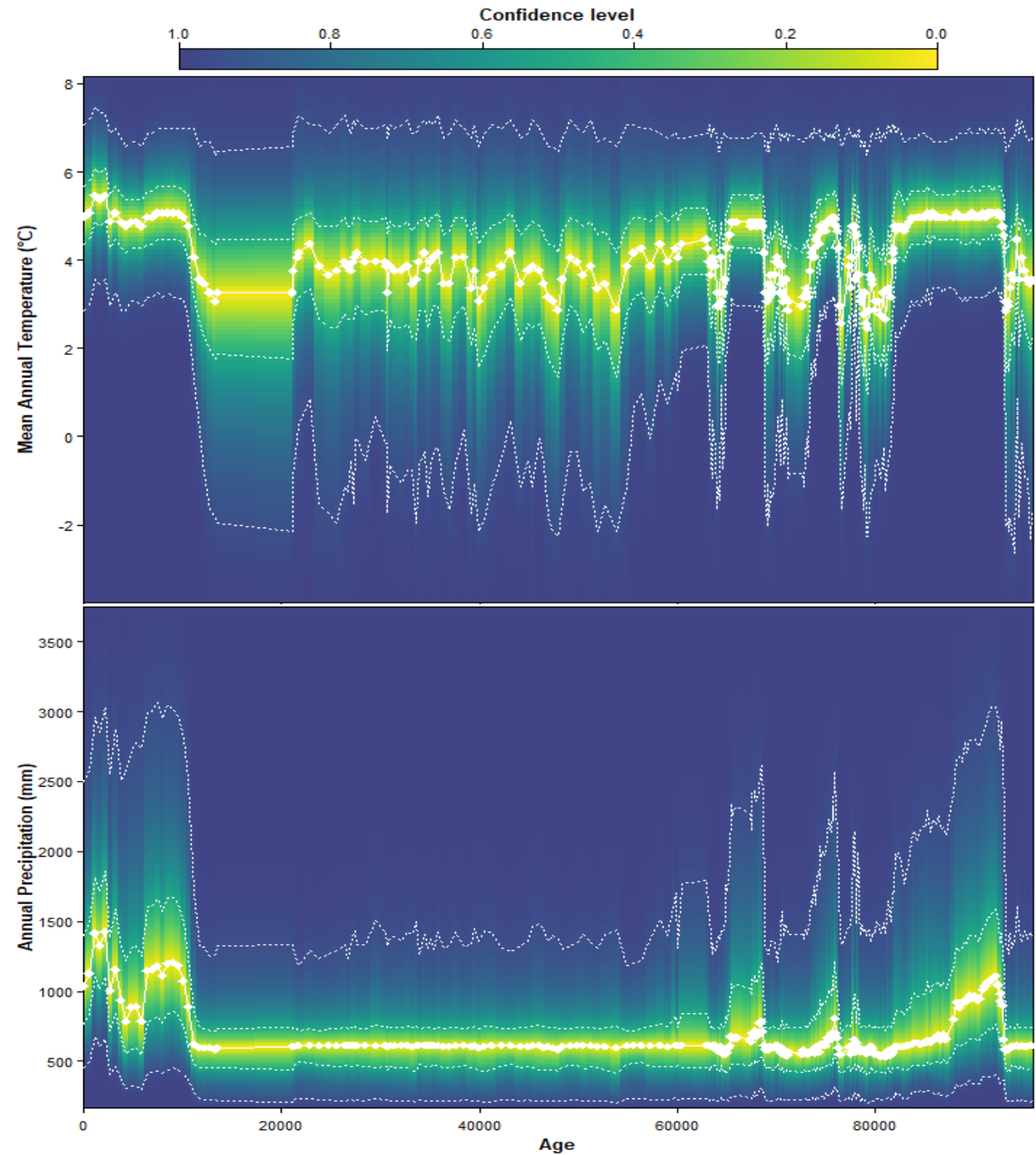
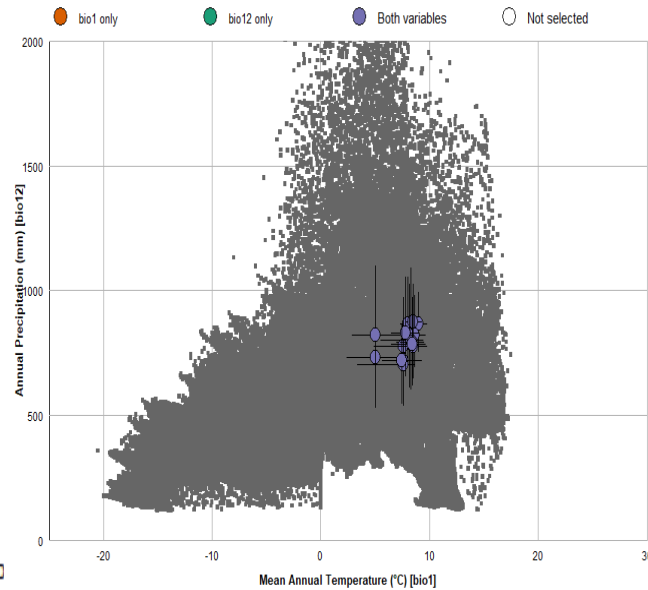
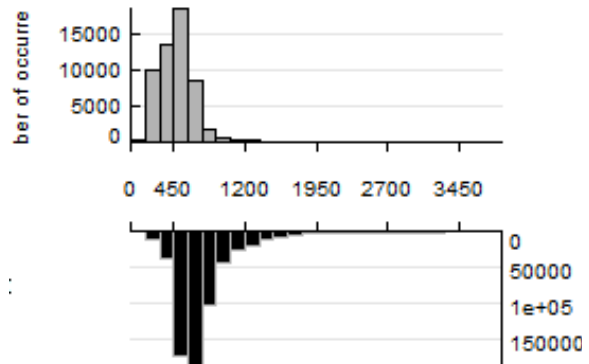


### Number of unique species occurrences



### Observed vs. Sampled

Annual Precipitation (mm) [bio12]

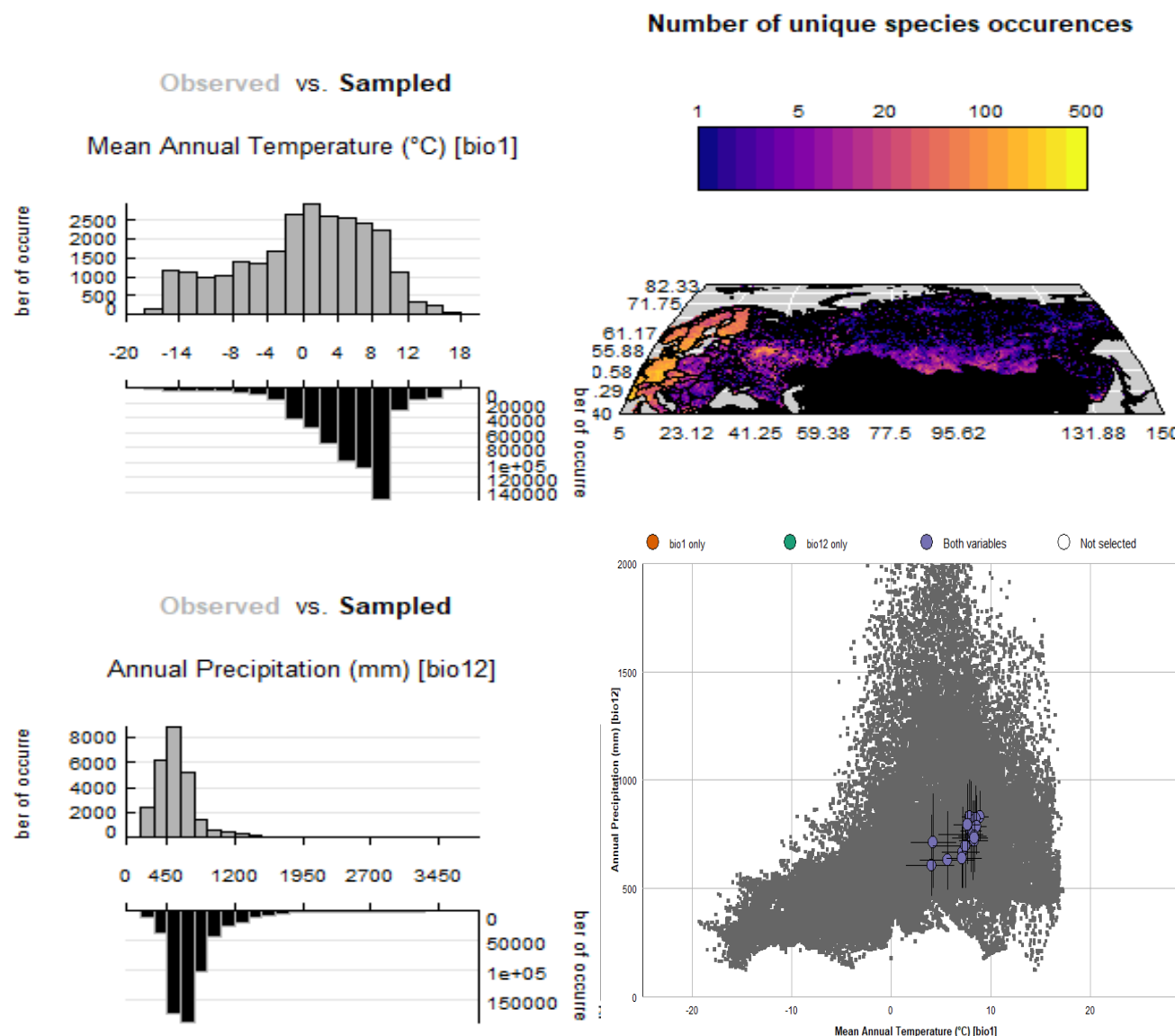
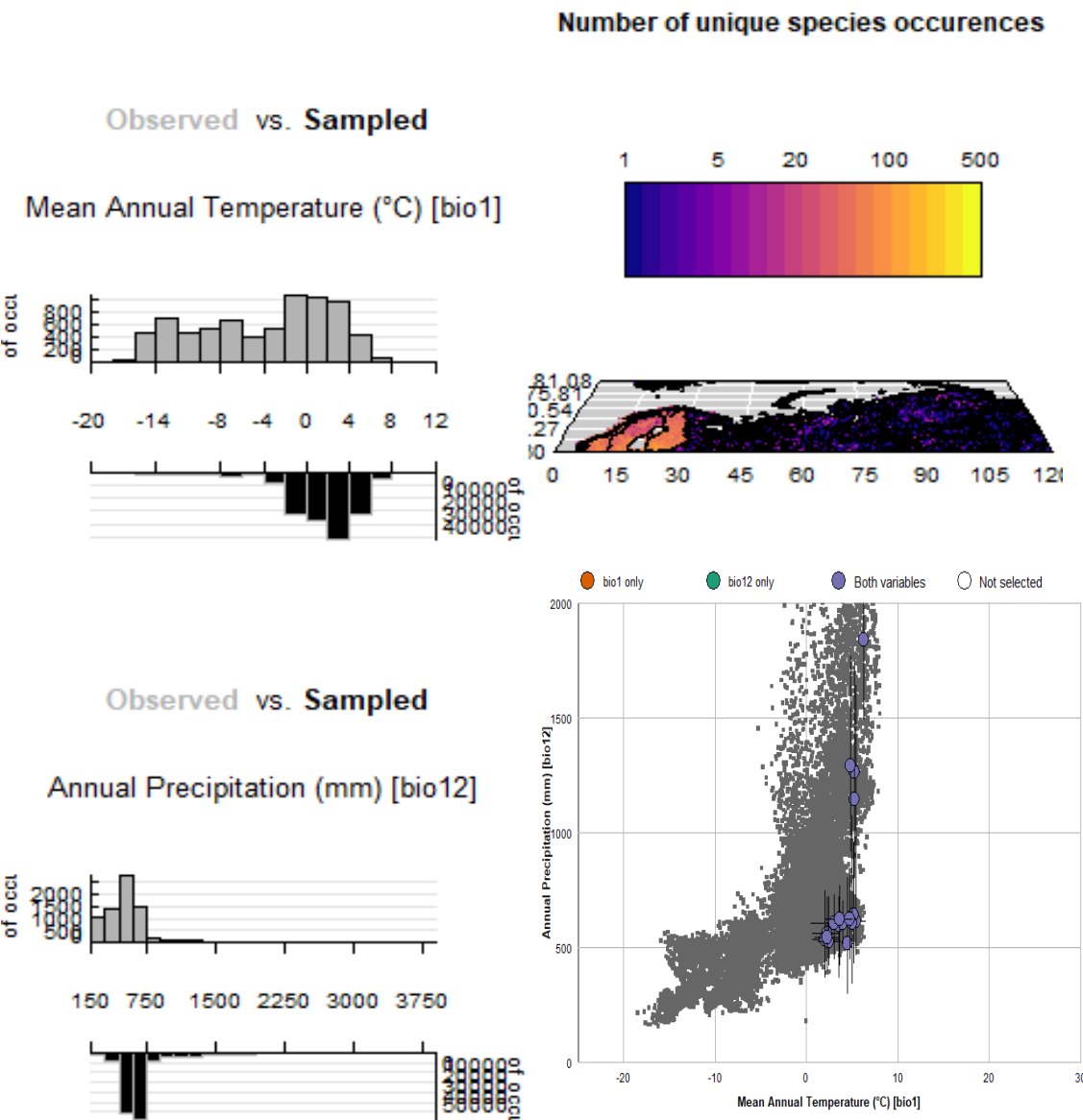




(40°N-95°N)  
(5-150°E) - 12Cas

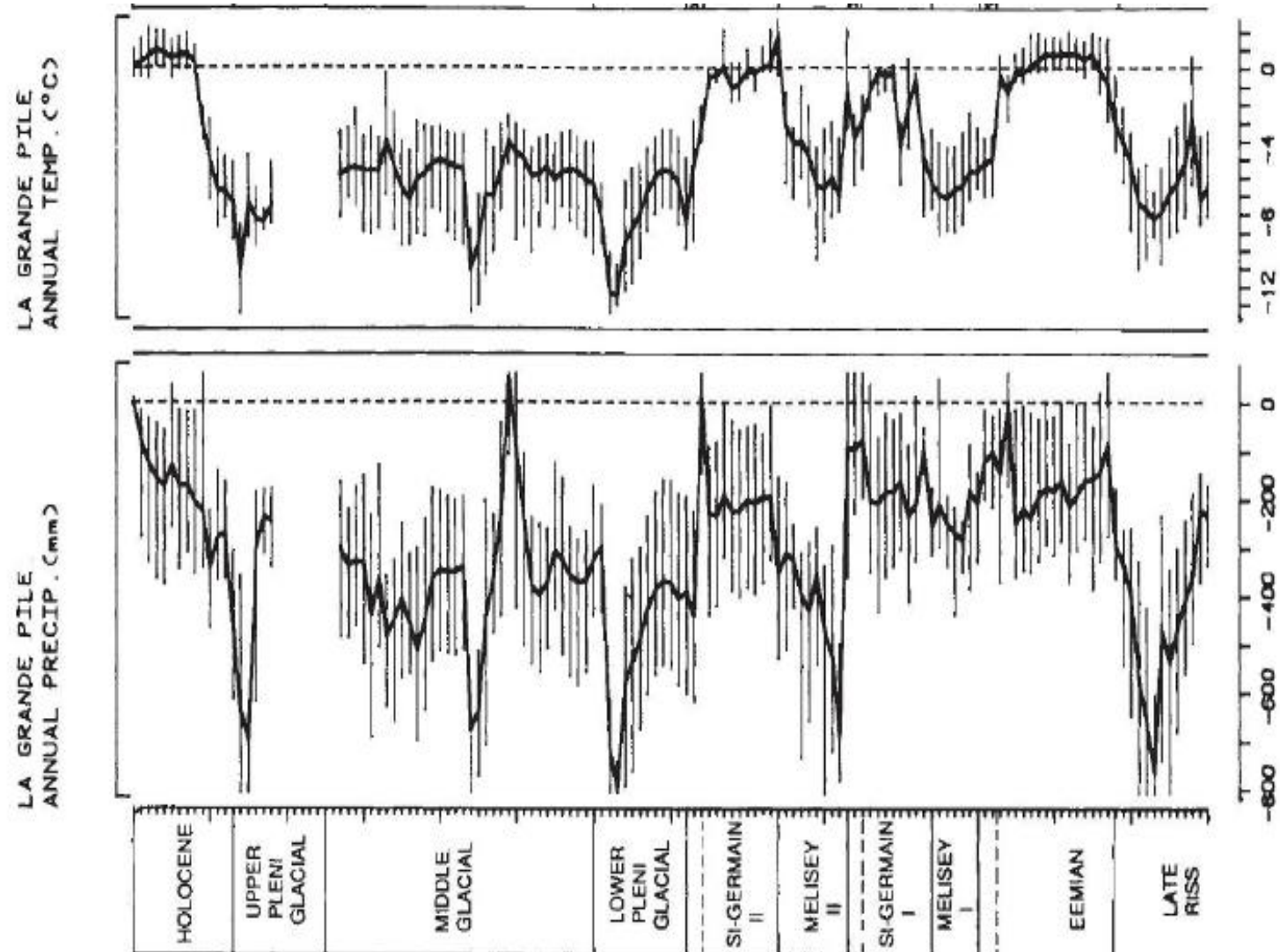
Without climate

With climate



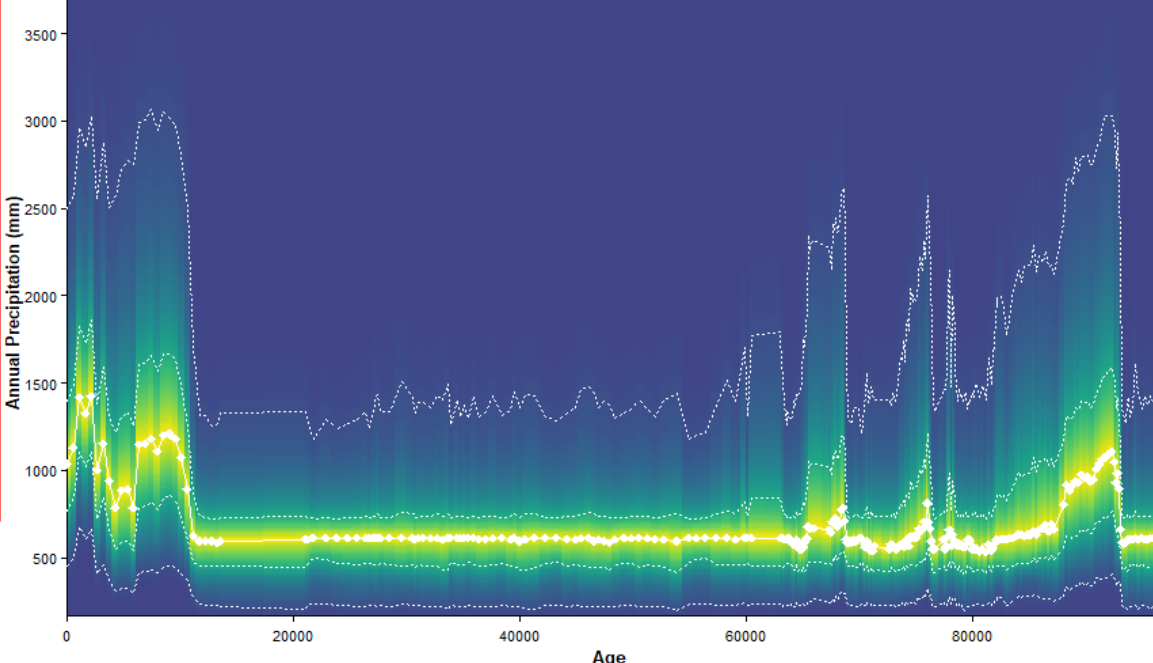
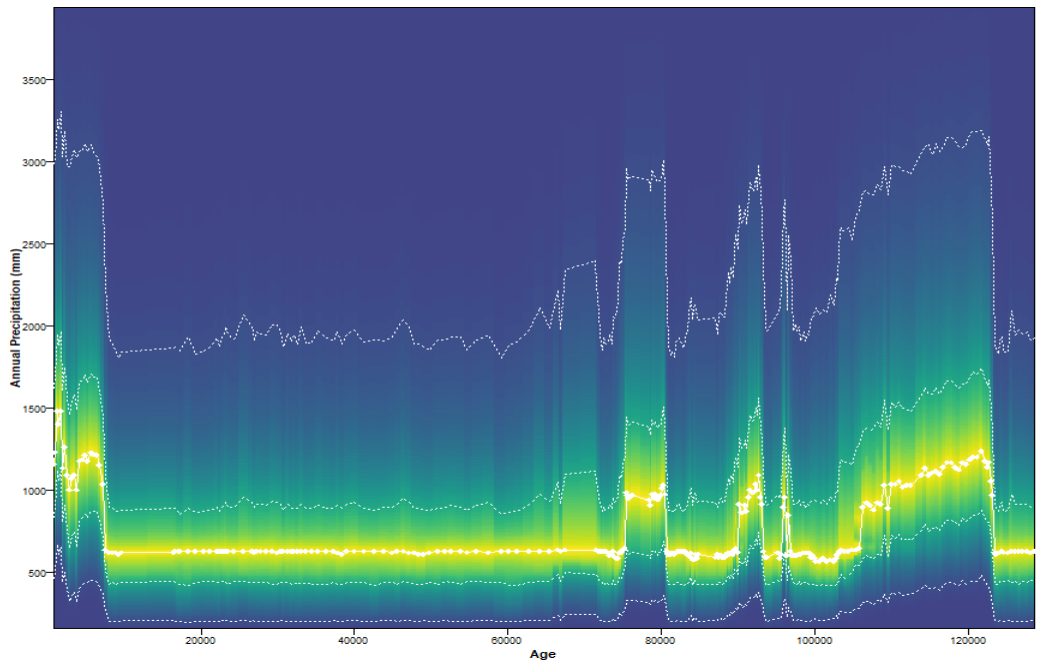
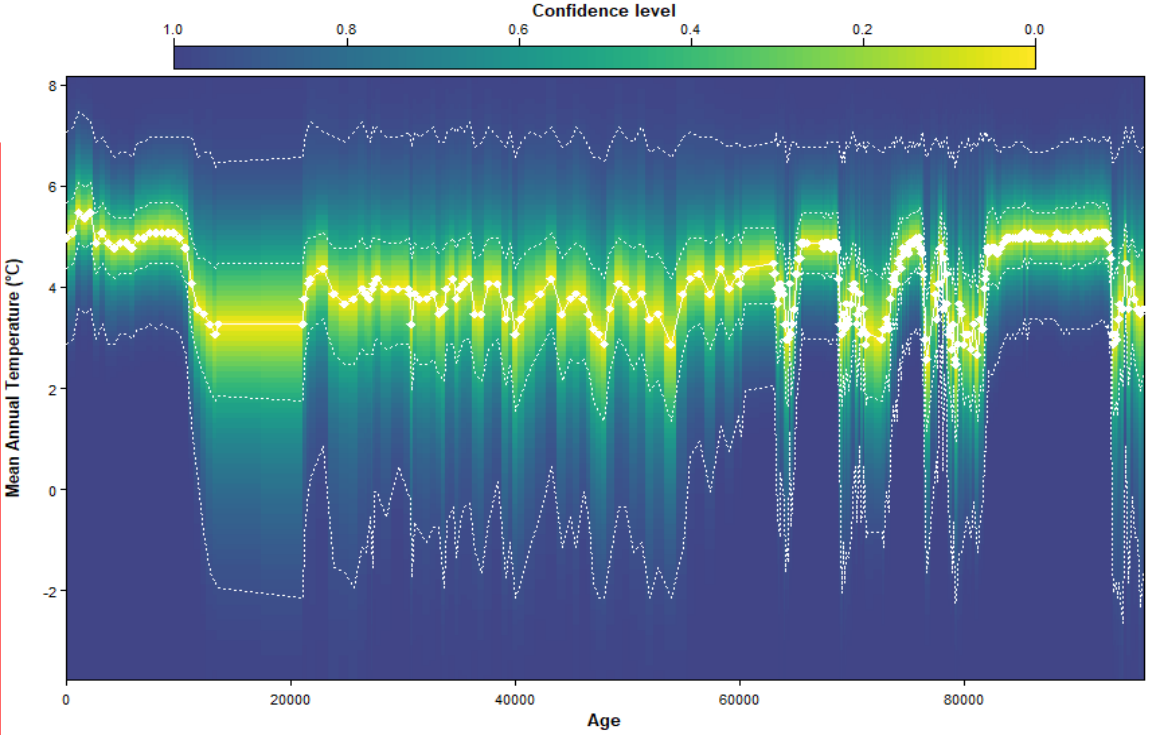
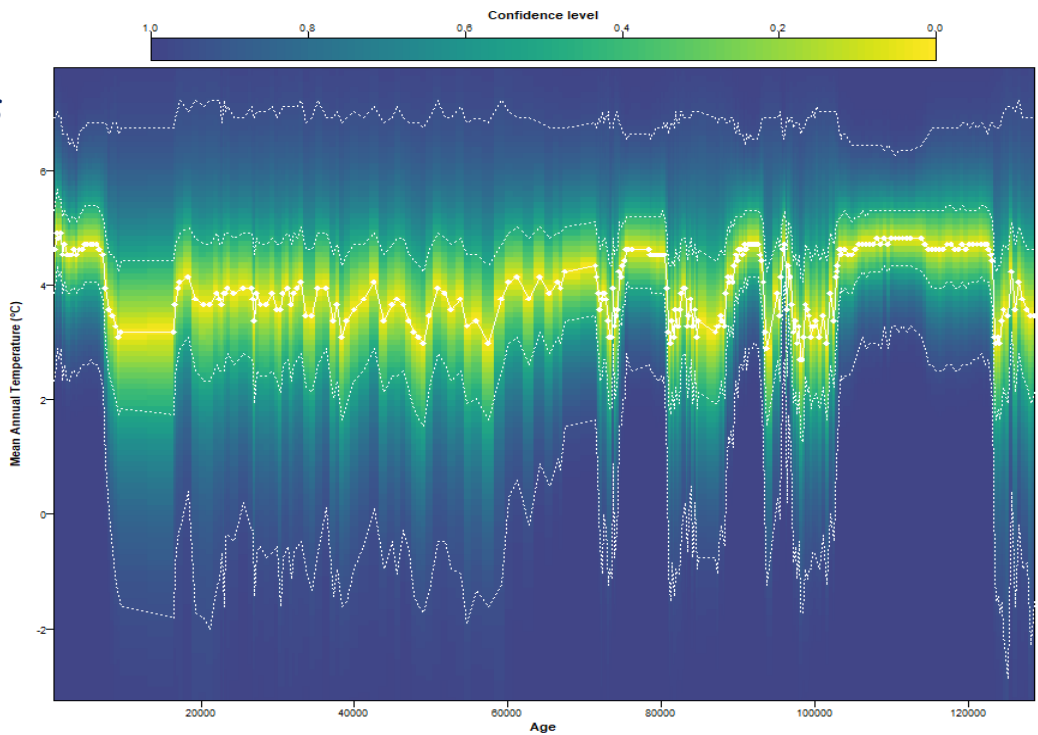
**Guiot et al., 1984**

Anomalie de paléo-température et paléo-précipitation



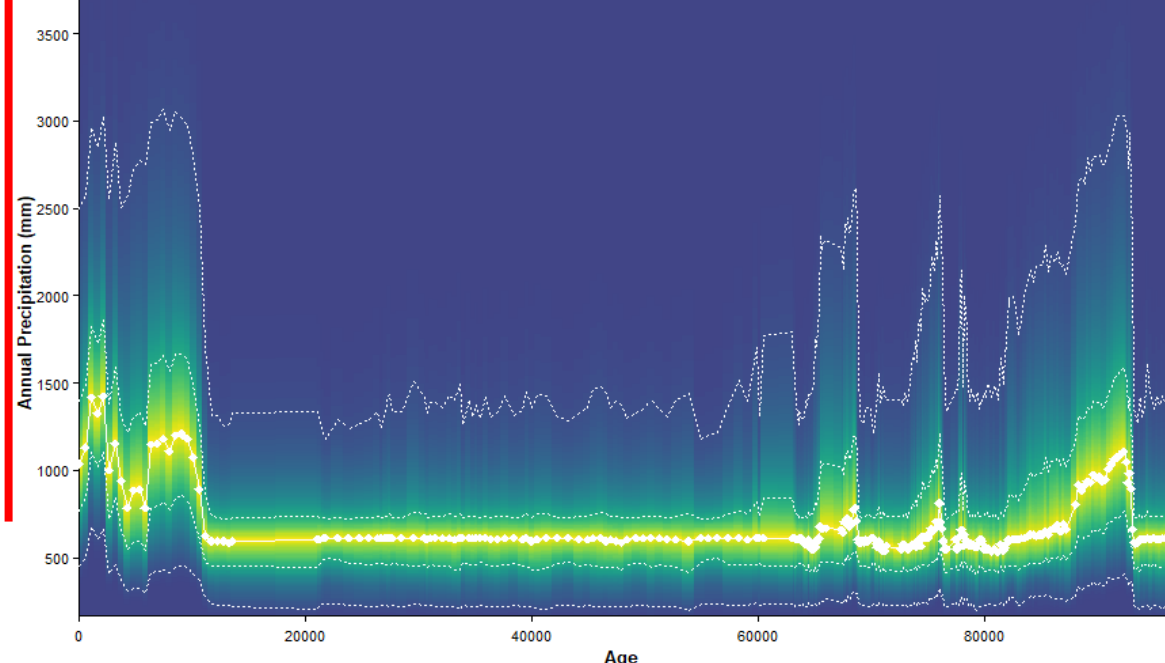
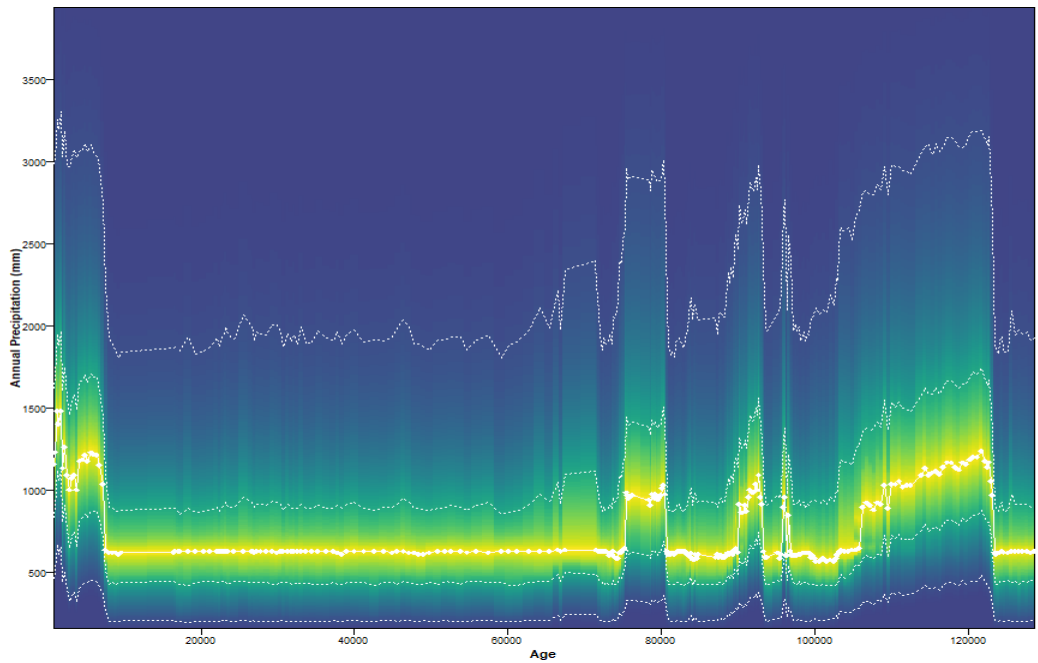
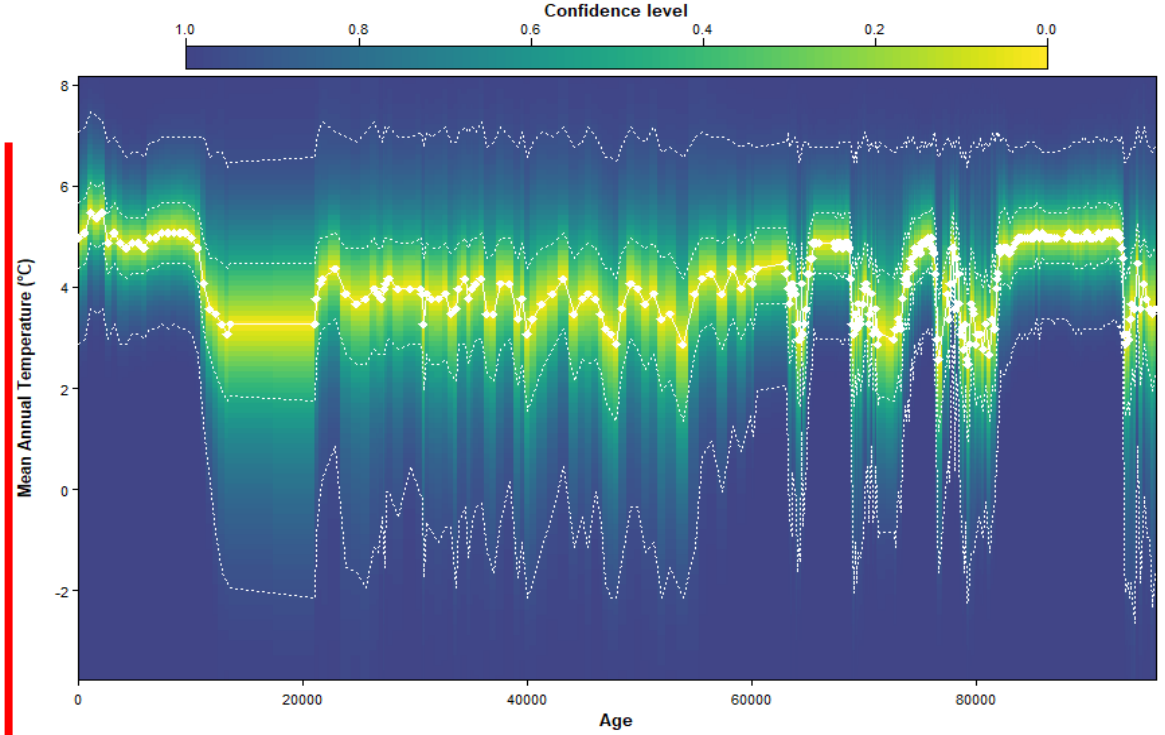
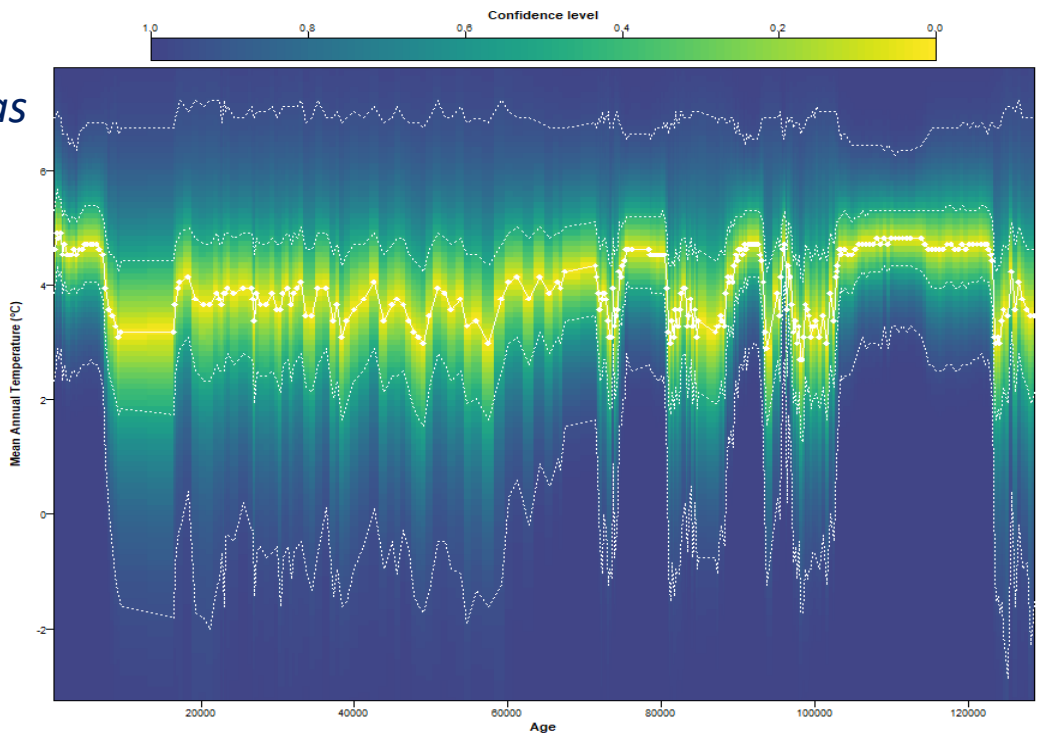
(60°N-80°N)  
(0-120°E) - 8Cas

Whitout  
And  
With



(60°N-90°N)  
(0-120°E) - 10Cas

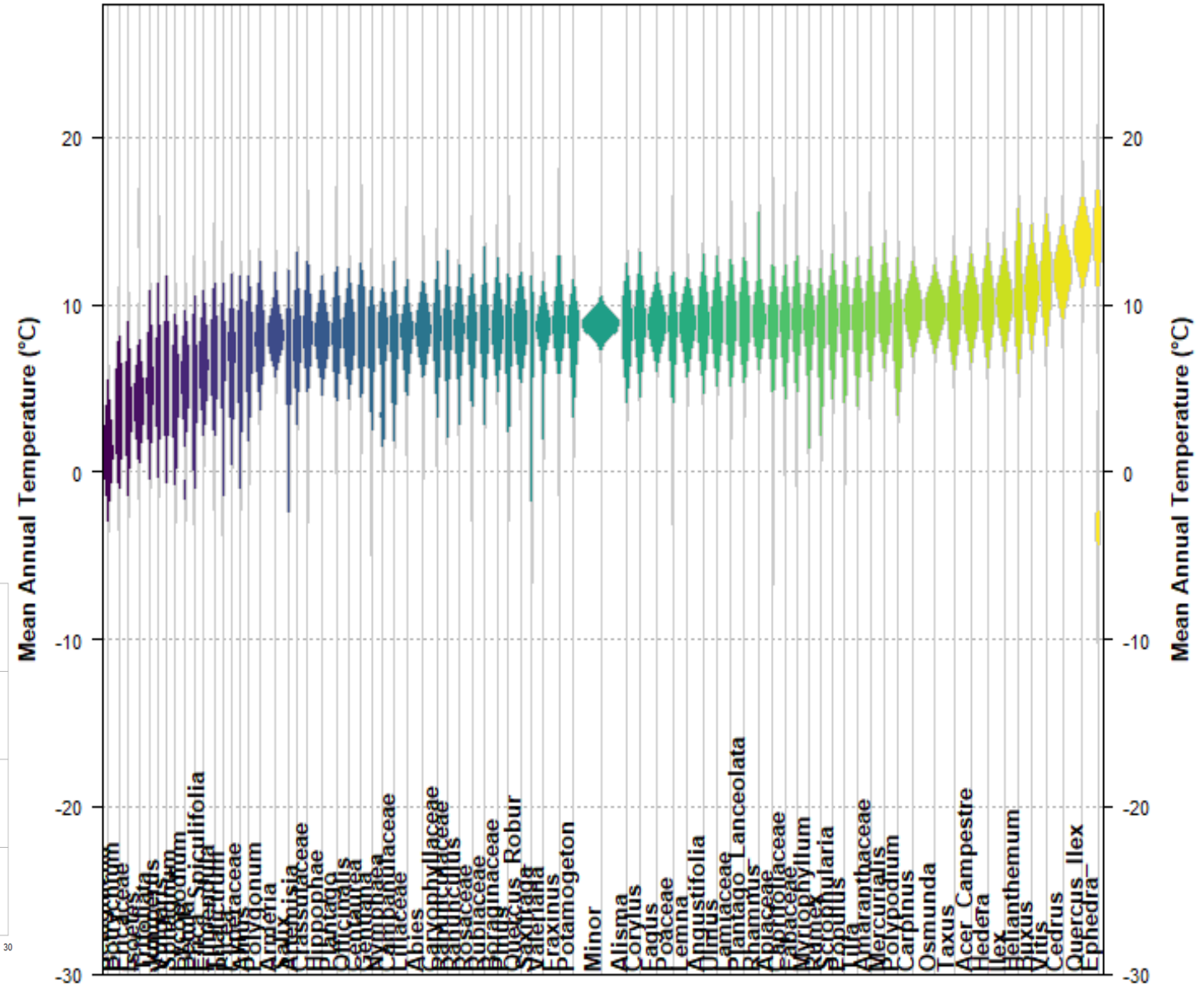
Whitout  
And  
With





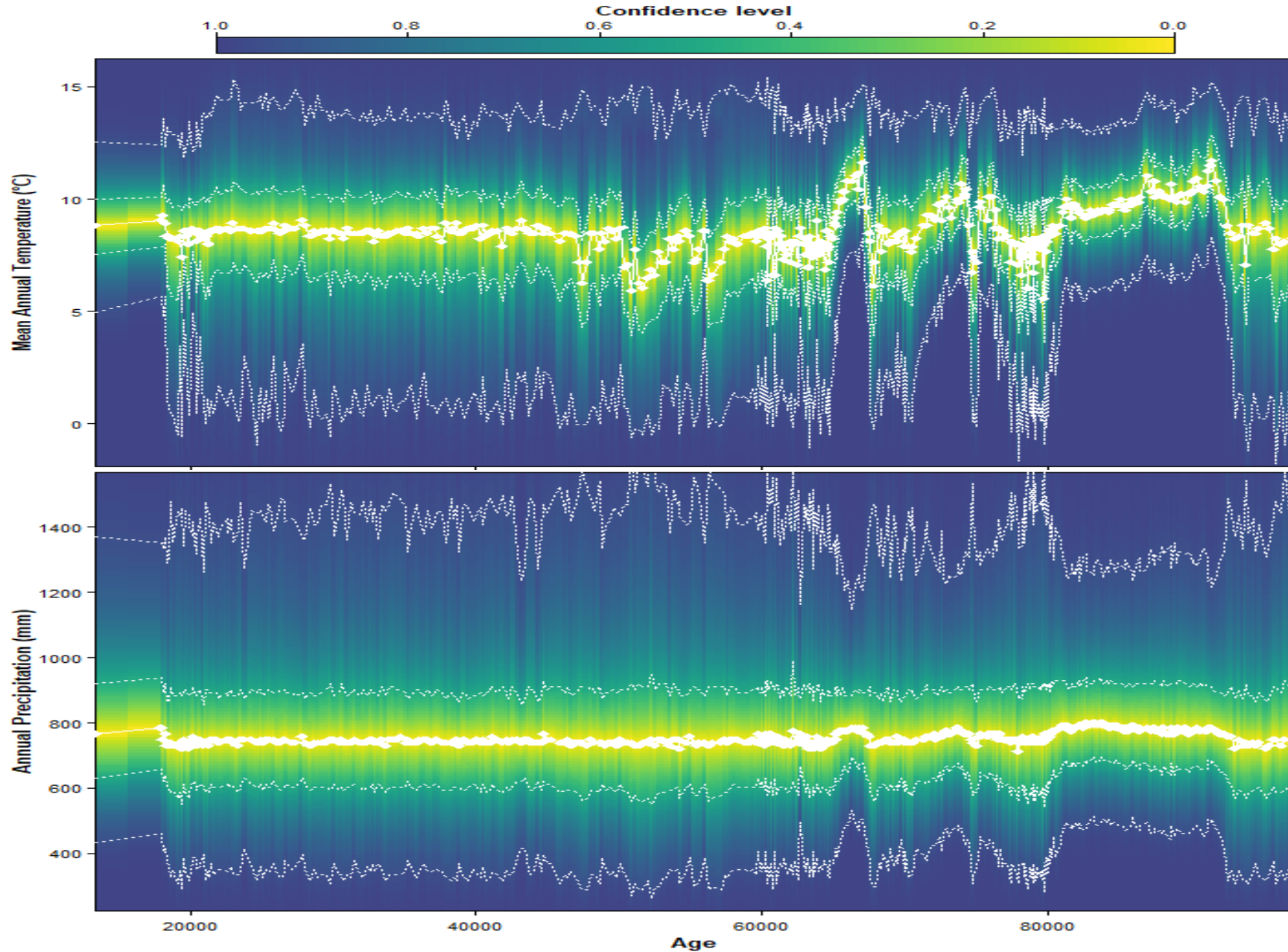
## With climateWithObs

*(0-140°E) - 11Cas*



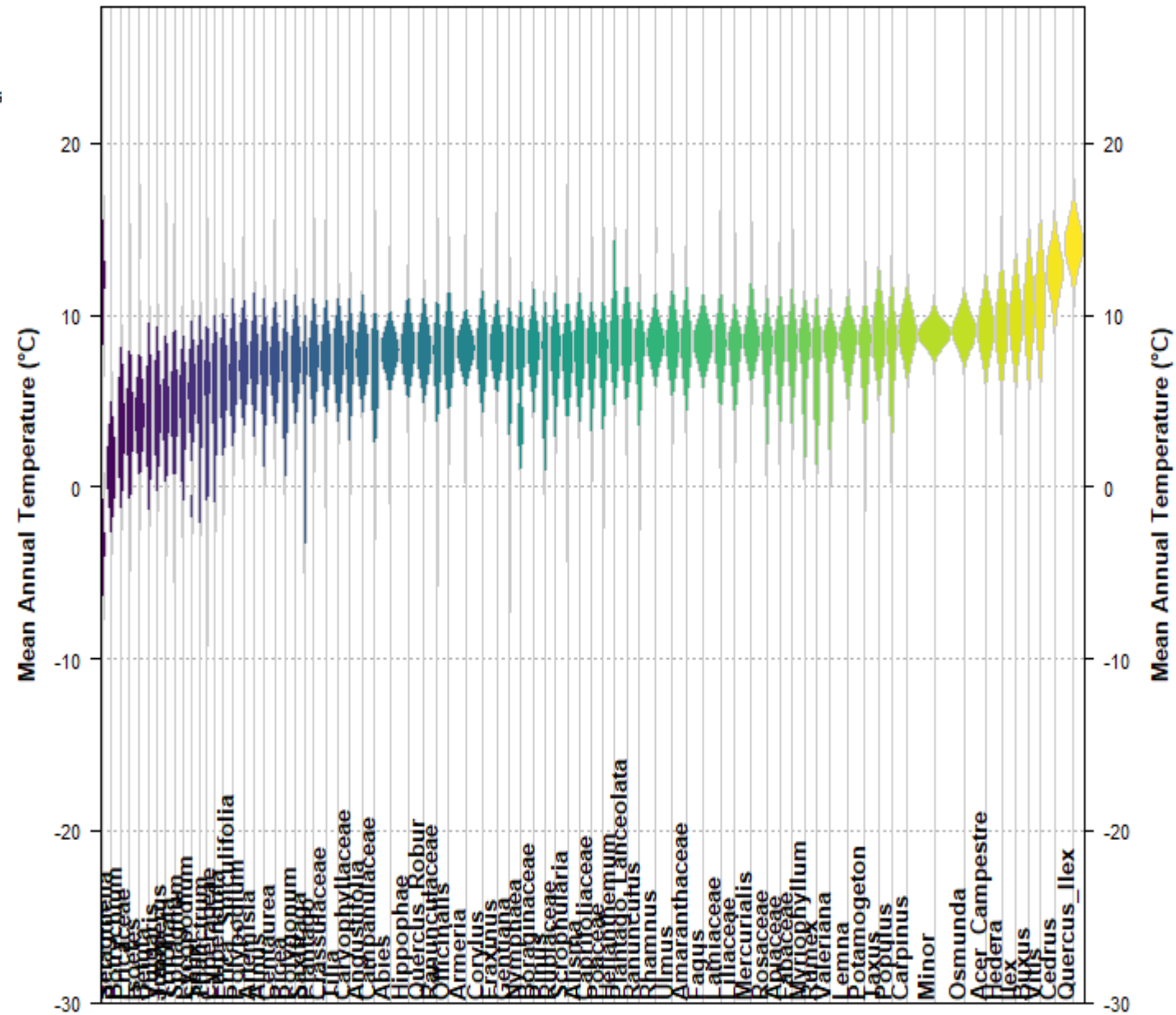
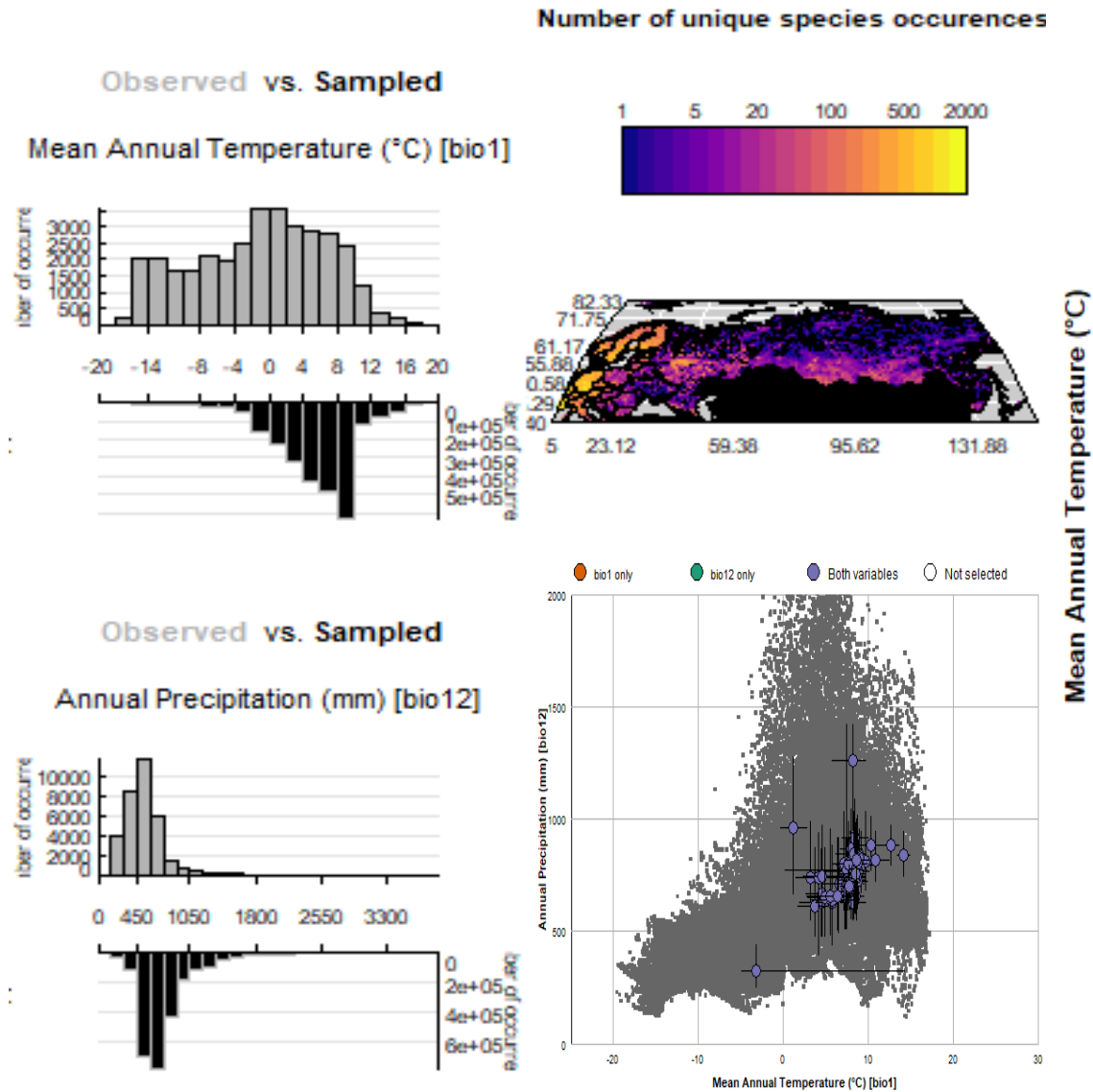


(40°N-90°N)  
(0-140°E) - 11Cas



## With climateWithObs

(40°N-95°N)  
(5-150°E) - 12Cas



(60°N-90°N)  
(0-120°E) - 10Cas

