

Choice of climate data influences predictions for current and future global invasion risks for two *Phelsuma* geckos

Dubos et al.

Supporting information

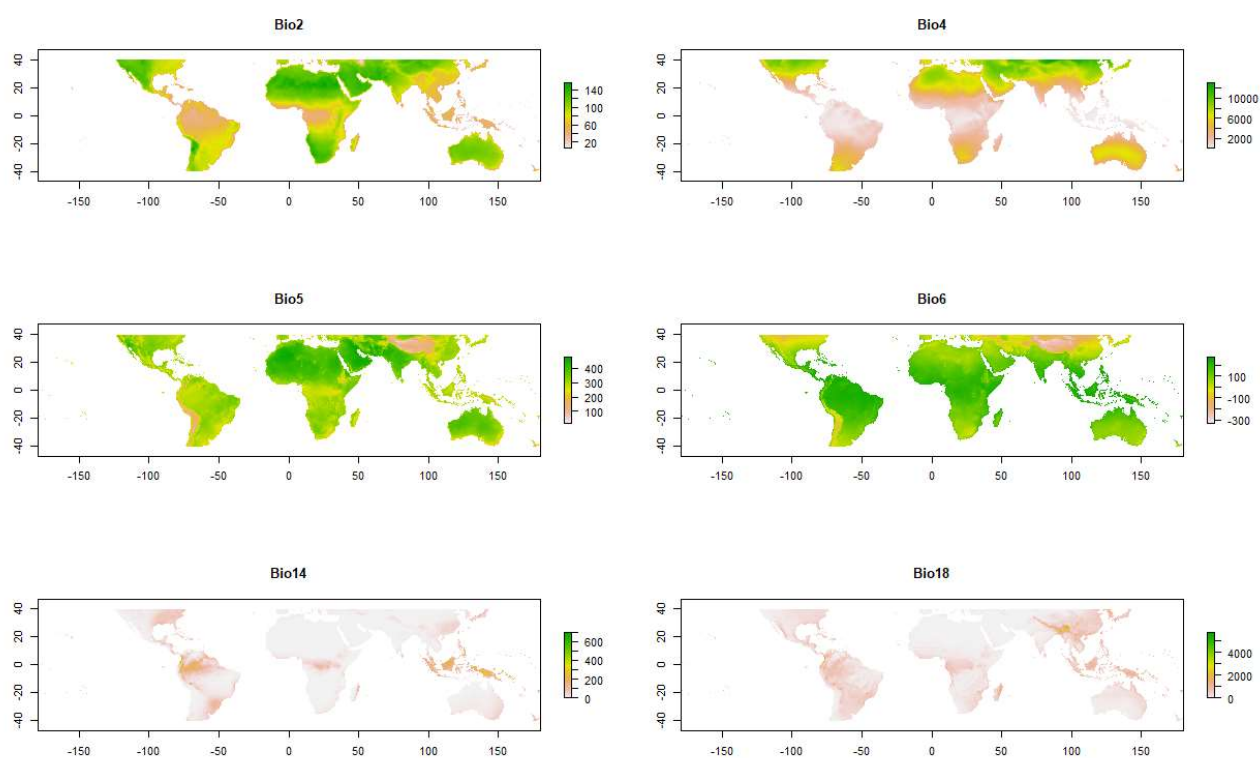


Fig. S1 Selected predictors obtained from CHELSA

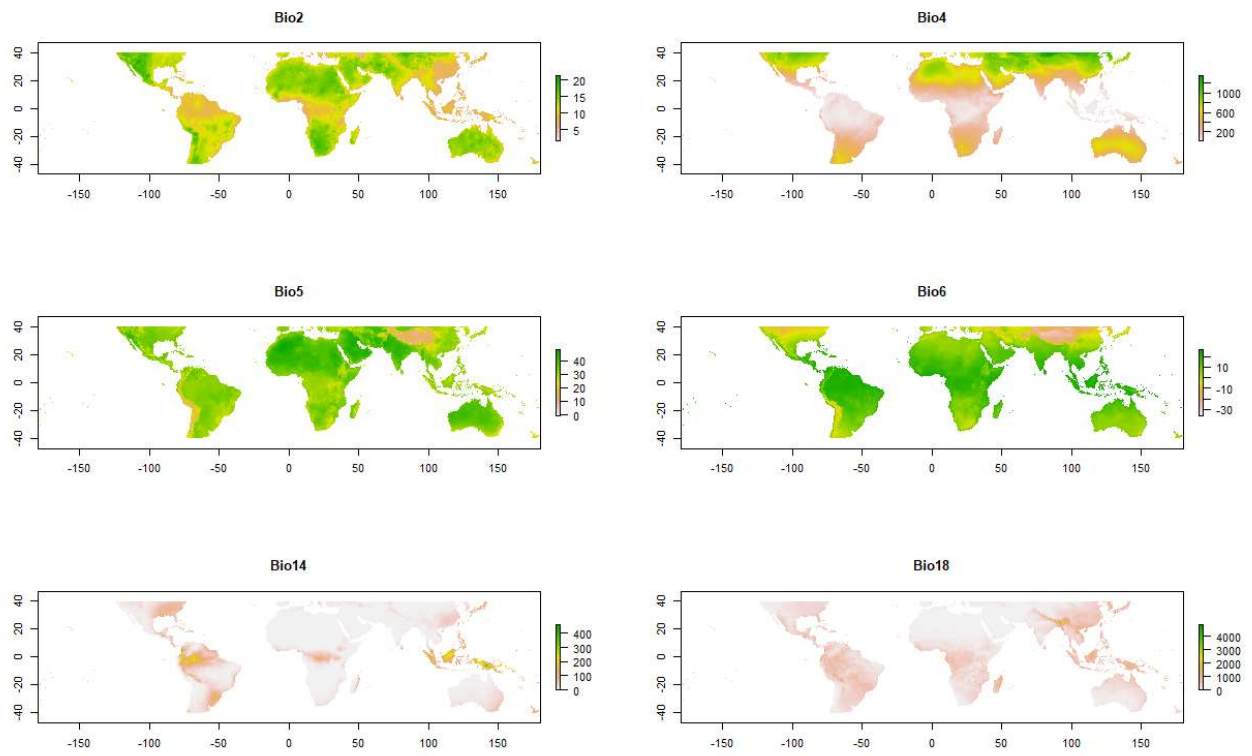


Fig. S2 Selected predictors obtained from Worldclim

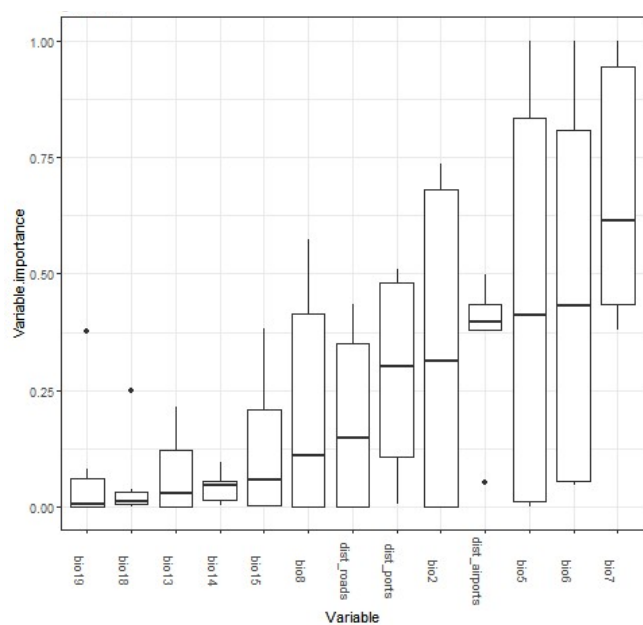
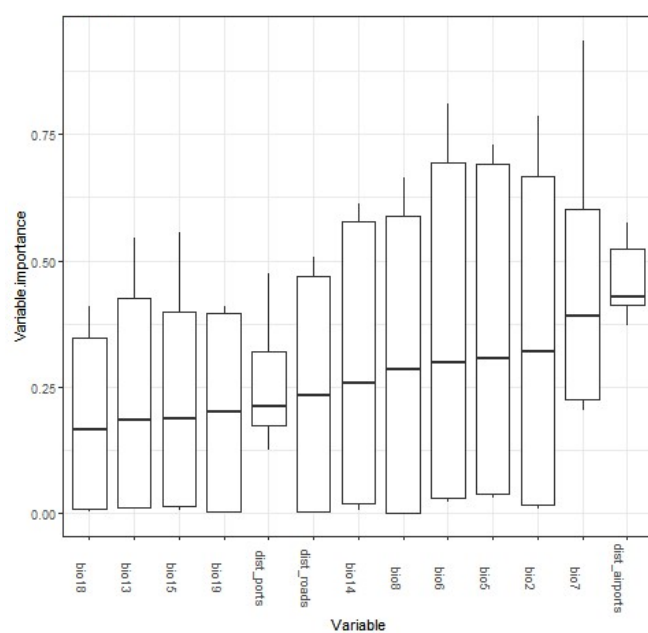


Fig S3. Variable importance for *Phelsuma grandis* based on CHELSA climate data (left: uncorrected models; right: sample bias-corrected models).

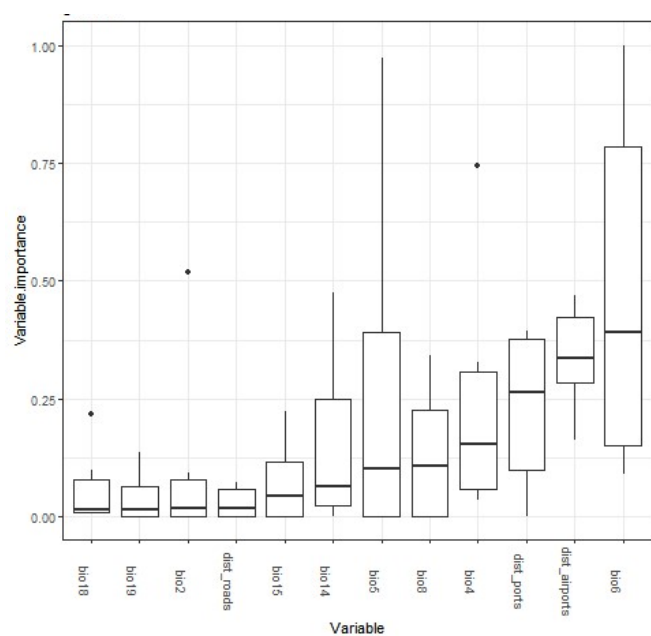
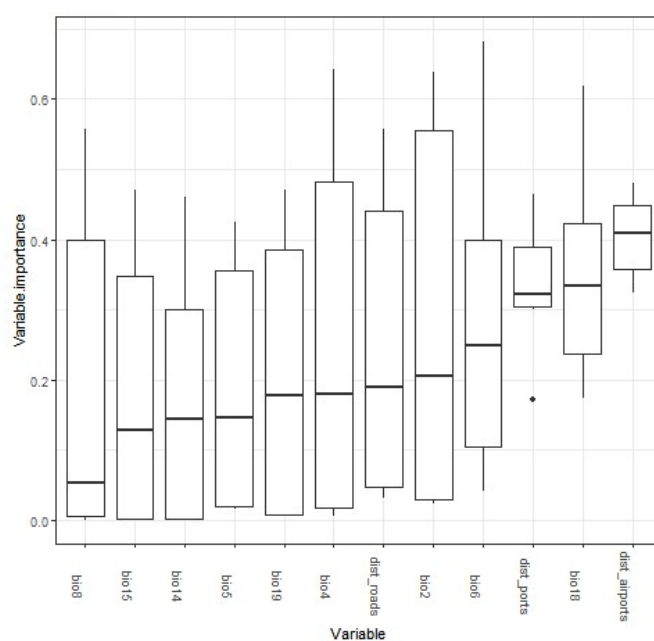


Fig S4. Variable importance for *Phelsuma grandis* based on Worldclim climate data (left: uncorrected models; right: sample bias-corrected models).

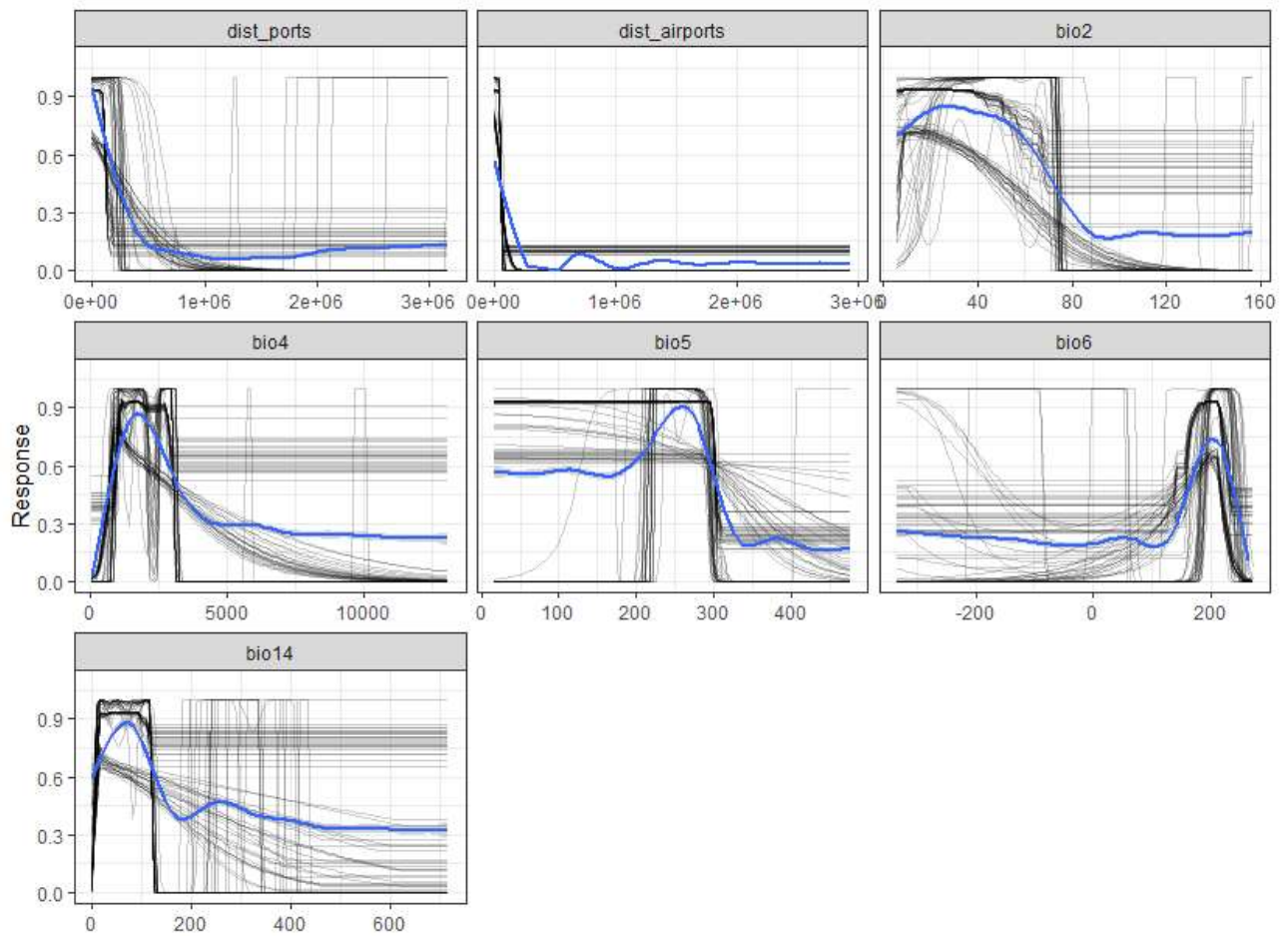


Fig. S5 Response curves for *Phelsuma grandis* distribution models, bias-corrected and calibrated with CHELSA climate data. Black lines are individual response curves for each model iteration, blue lines are smoothed responses.

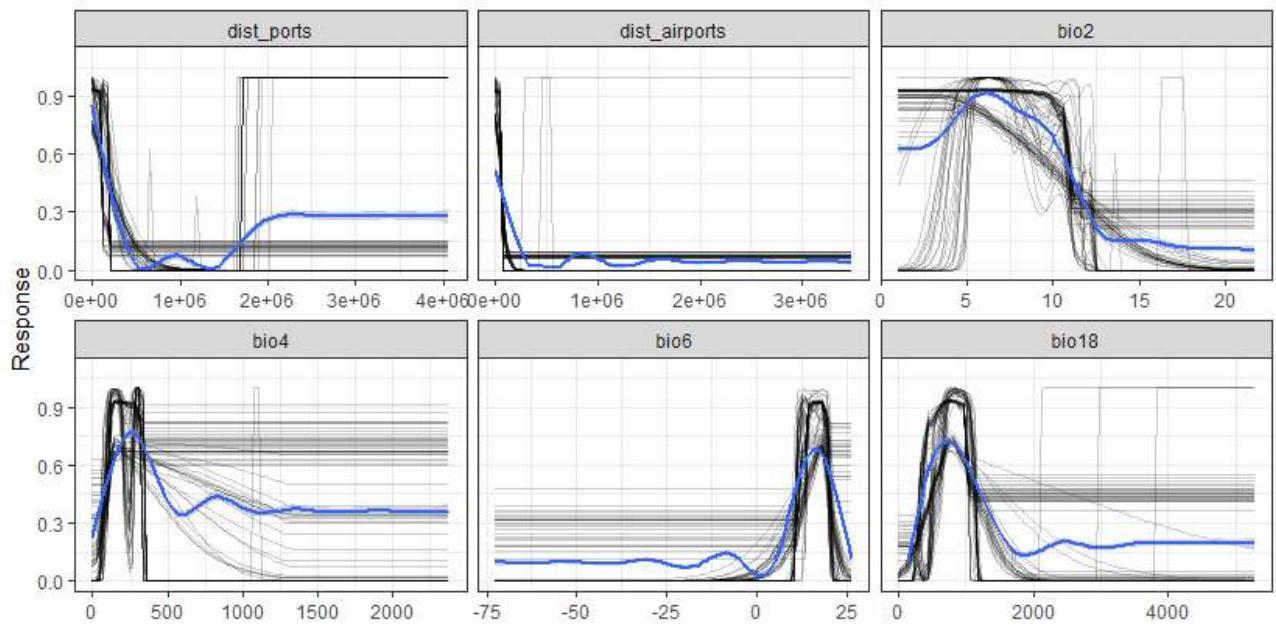


Fig. S6 Response curves for *Phelsuma grandis* distribution models, bias-corrected and calibrated with Worldclim climate data. Black lines are individual response curves for each model iteration, blue lines are smoothed responses.

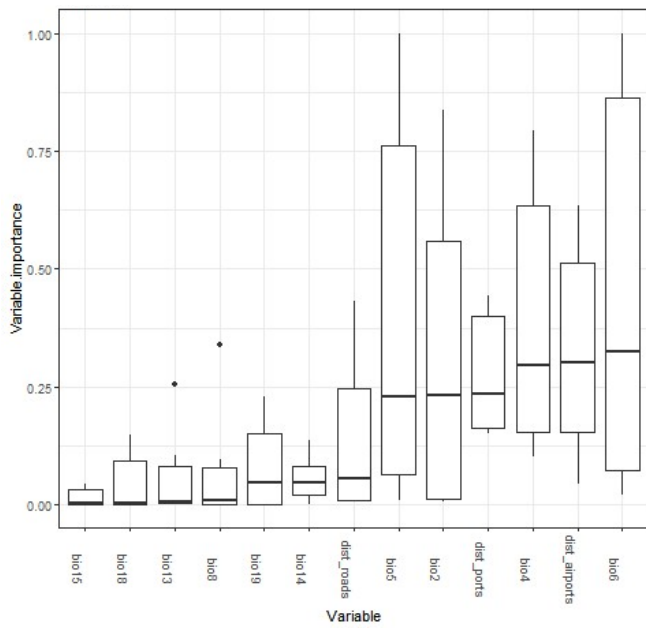
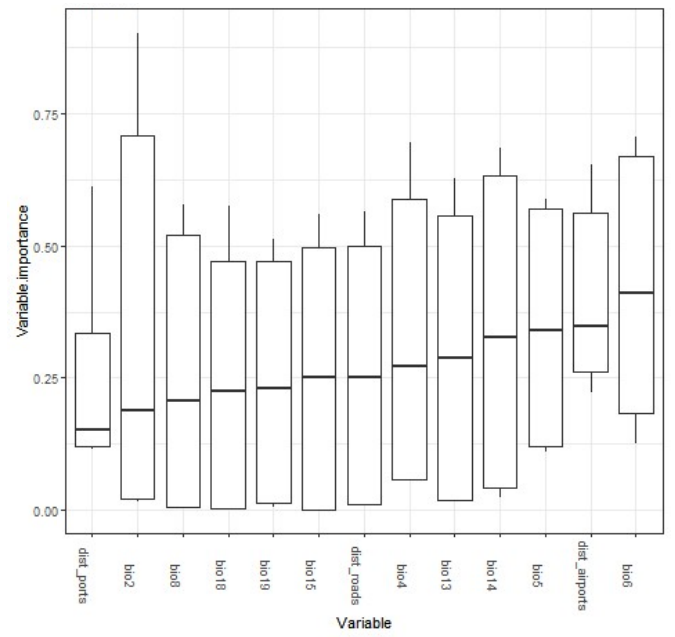


Fig S7. Variable importance for *Phelsuma laticauda* based on CHELSA climate data (left: uncorrected models; right: sample bias-corrected models).

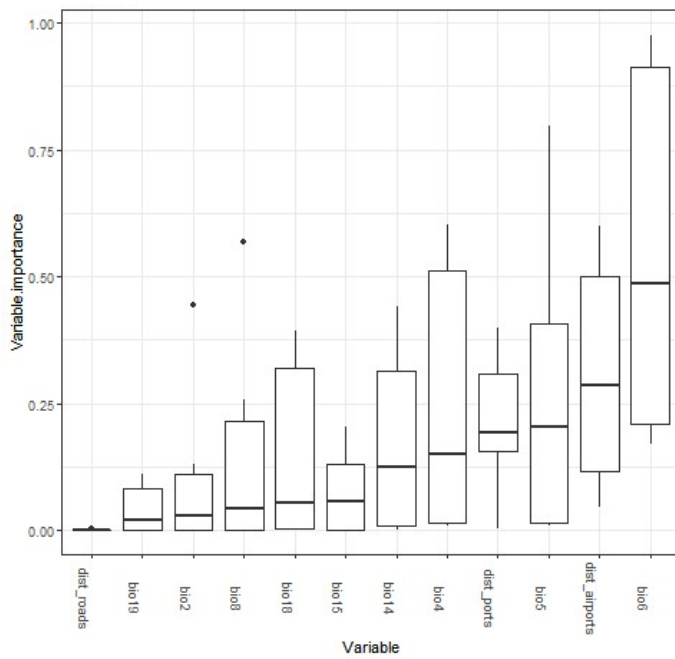
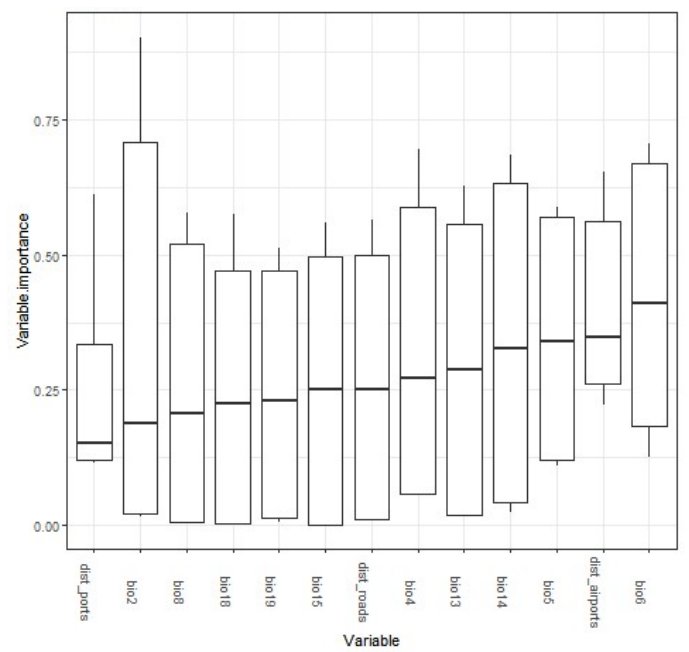


Fig S8. Variable importance for *Phelsuma laticauda* based on Worldclim climate data (left: uncorrected models; right: sample bias-corrected models).

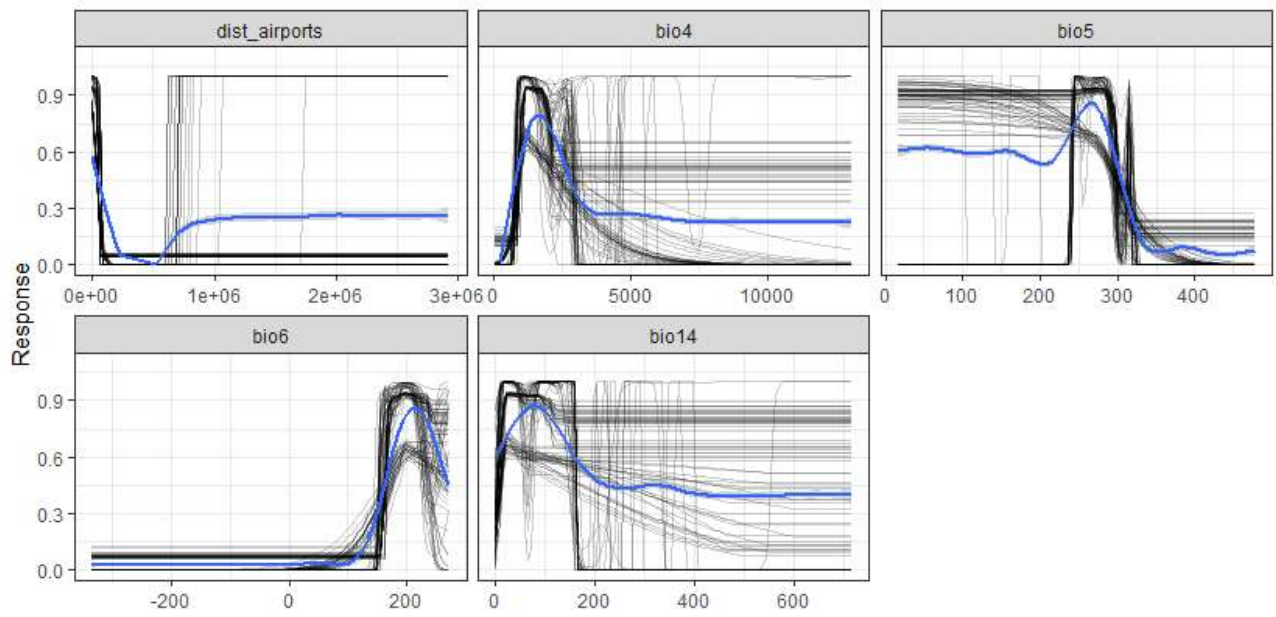


Fig. S9 Response curves for *Phelsuma laticauda* distribution models, bias-corrected and calibrated with CHELSA climate data. Black lines are individual response curves for each model iteration, blue lines are smoothed responses.

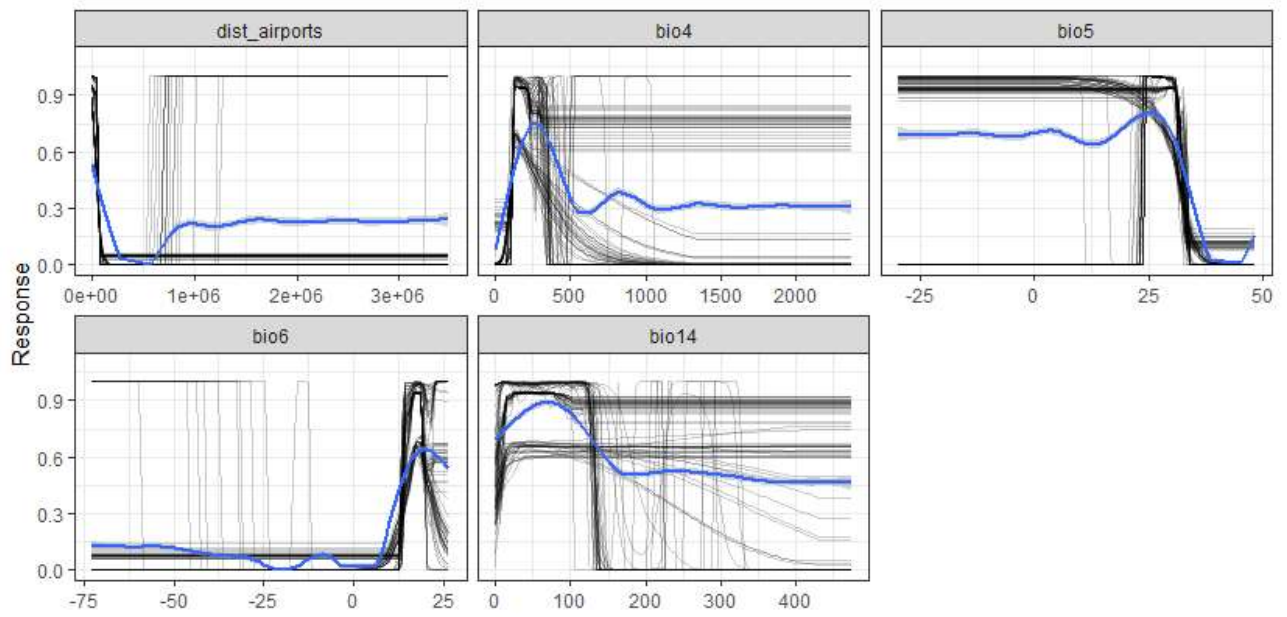


Fig. S10 Response curves for *Phelsuma laticauda* distribution models, bias-corrected and calibrated with Worldclim climate data. Black lines are individual response curves for each model iteration, blue lines are smoothed responses.

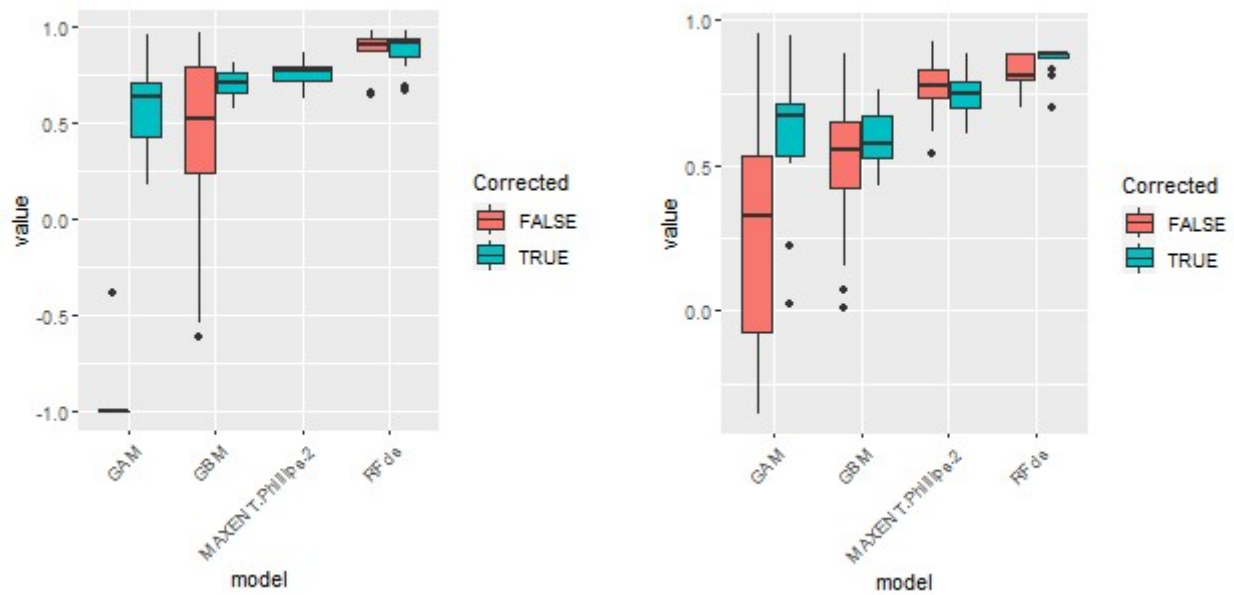


Fig. S11 Model performance for *P. grandis* (Boyce index) for four modelling techniques individually, for two modalities of sample bias correction (red: uncorrected; blue: corrected) and two climate data (left: CHELSA; right: Worldclim). Boxes represent 25-75% quantiles and the bar represent the median.

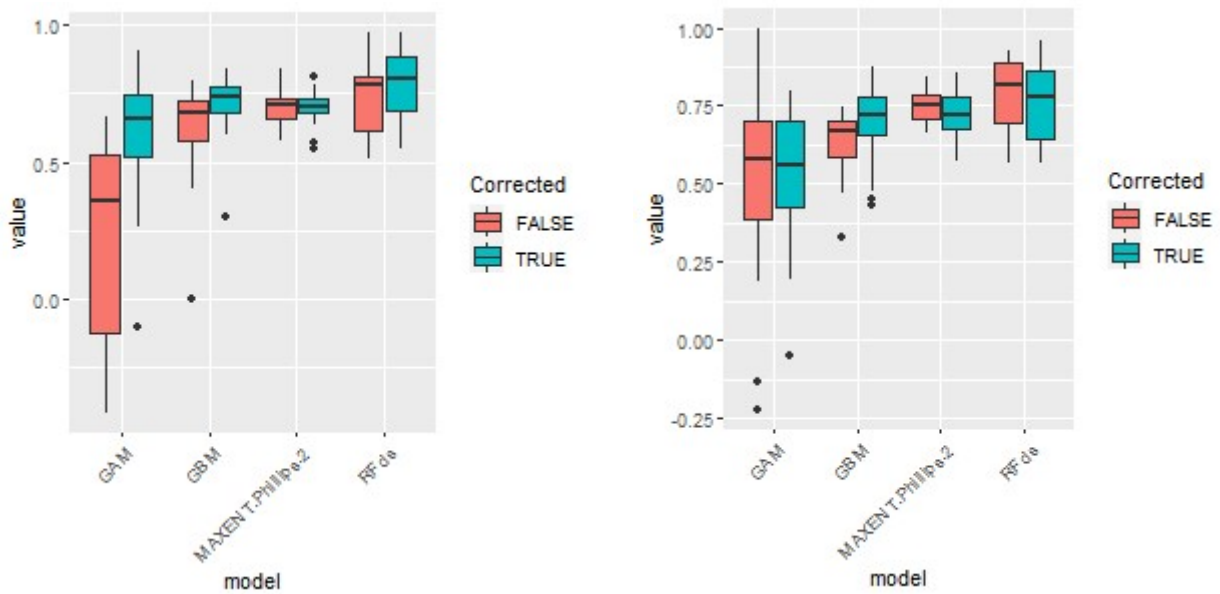
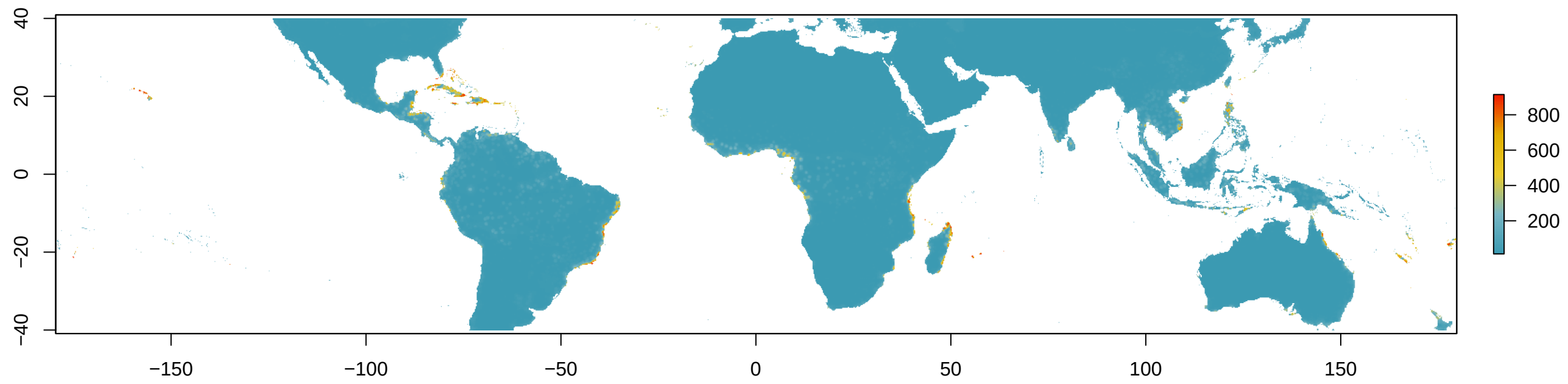
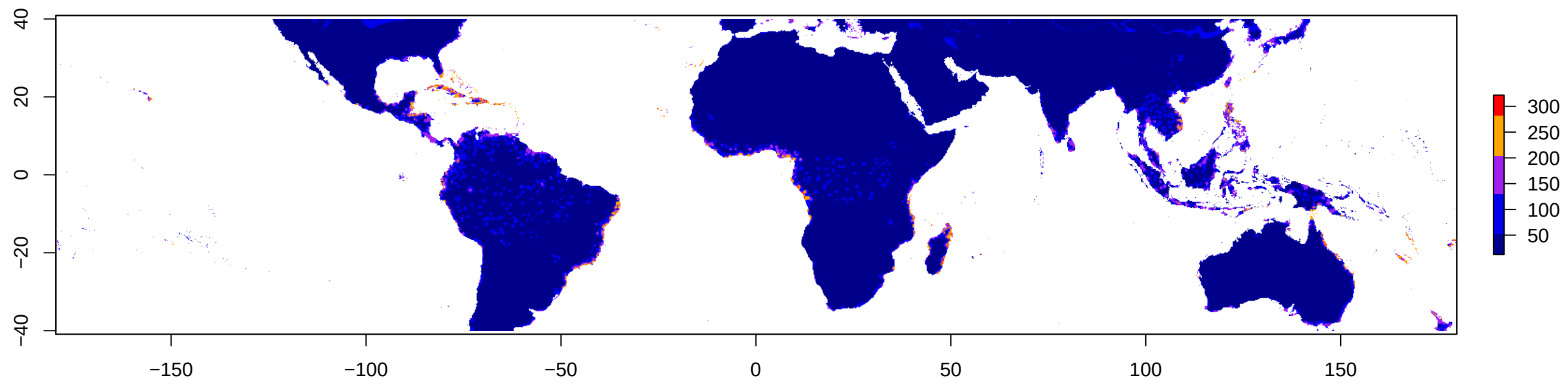


Fig. S12 Model performance for *P. laticauda* (Boyce index) for four modelling techniques individually, for two modalities of sample bias correction (red: uncorrected; blue: corrected) and two climate data (left: CHELSA; right: Worldclim). Boxes represent 25-75% quantiles and the bar represent the median.

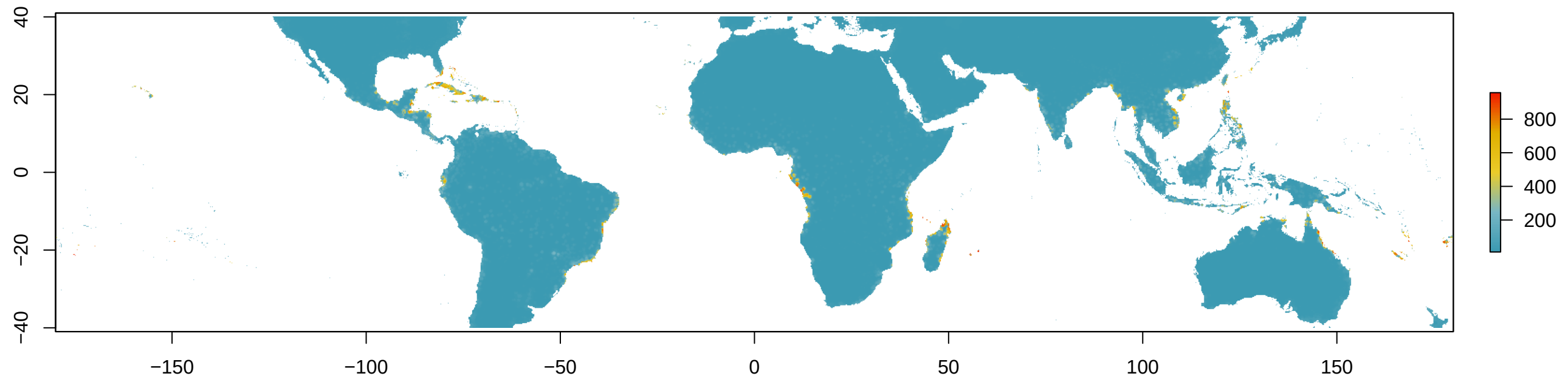
Mean prediction, *Phelsuma grandis* (CHELSA)



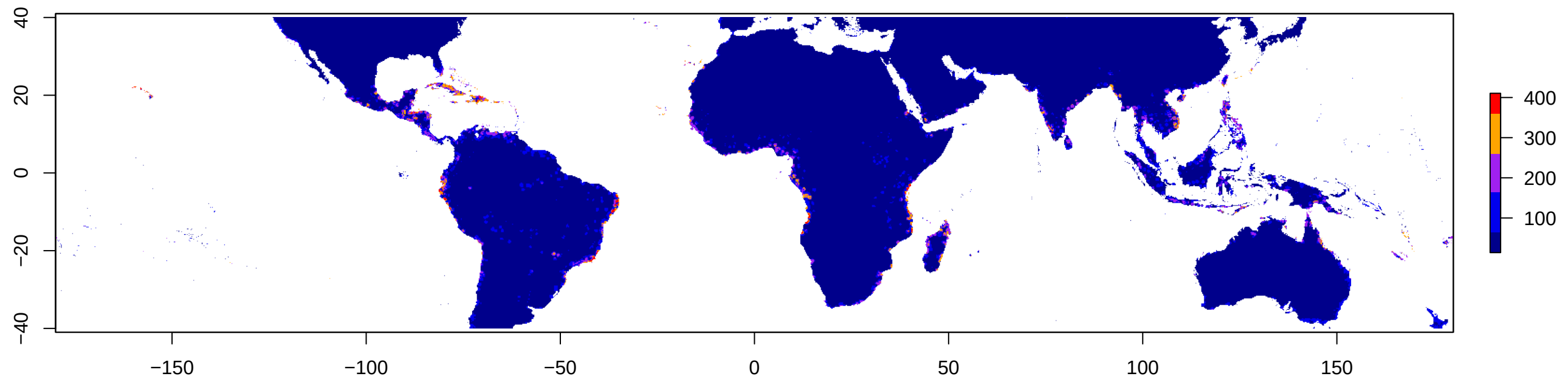
SD prediction, *Phelsuma grandis* (CHELSA)

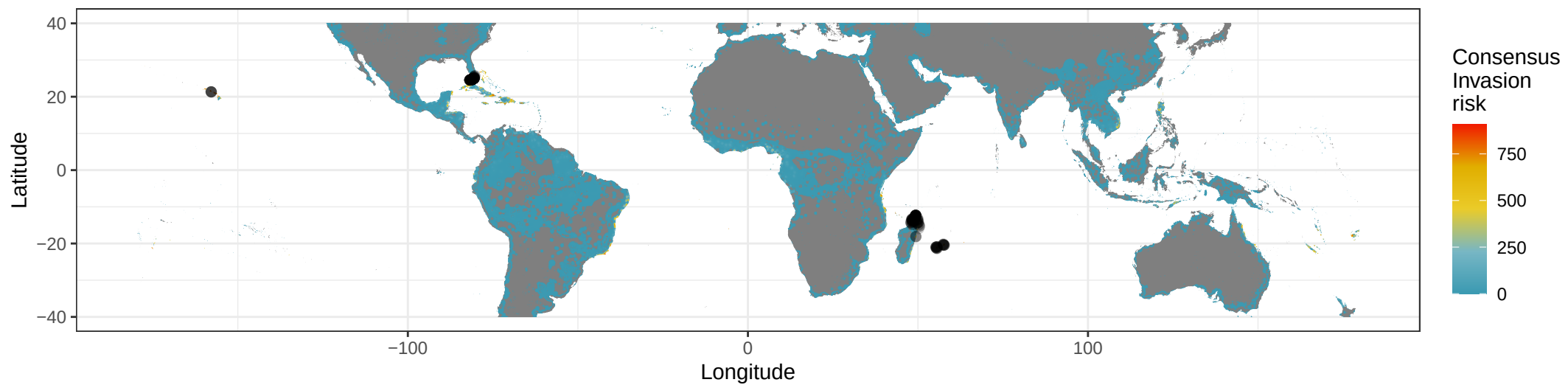
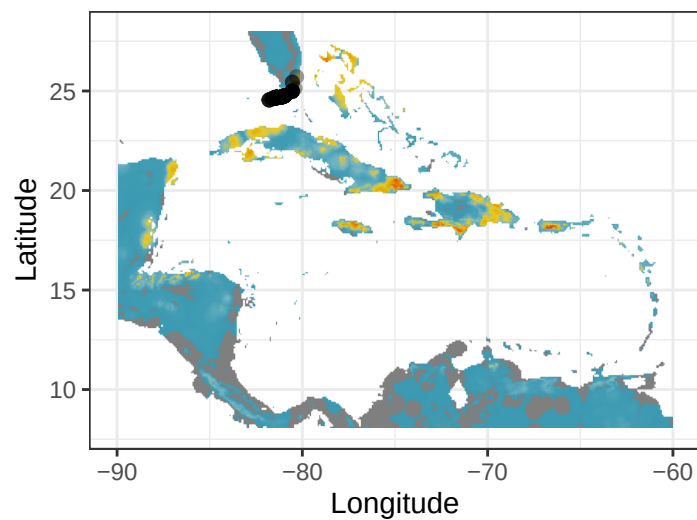
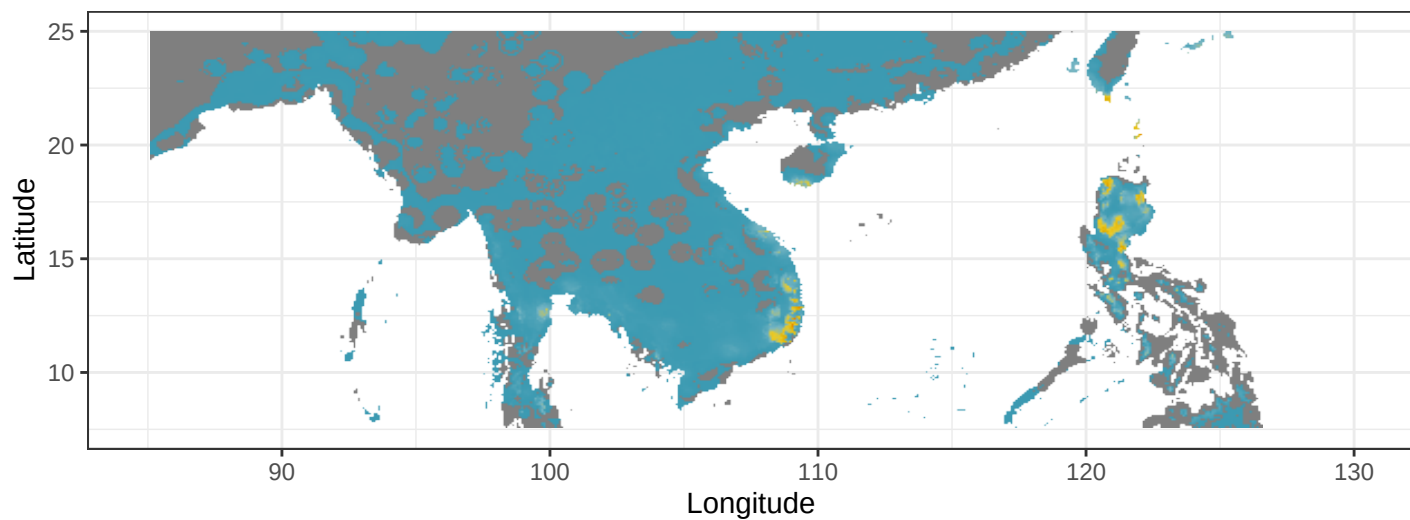
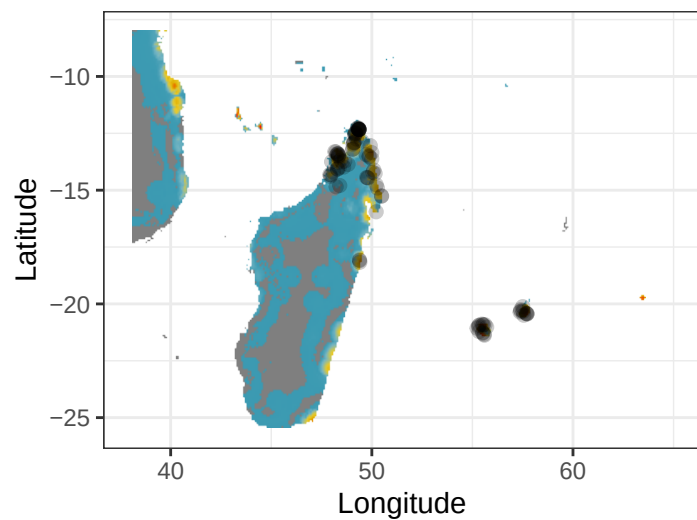
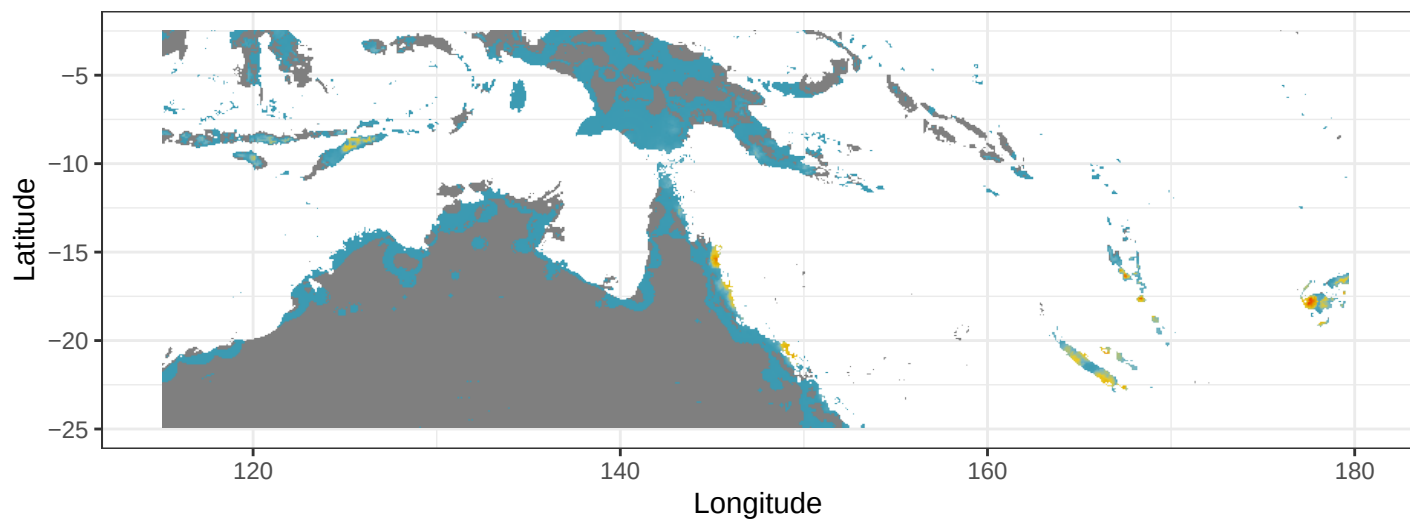


Mean prediction, *Phelsuma grandis* (Worldclim)

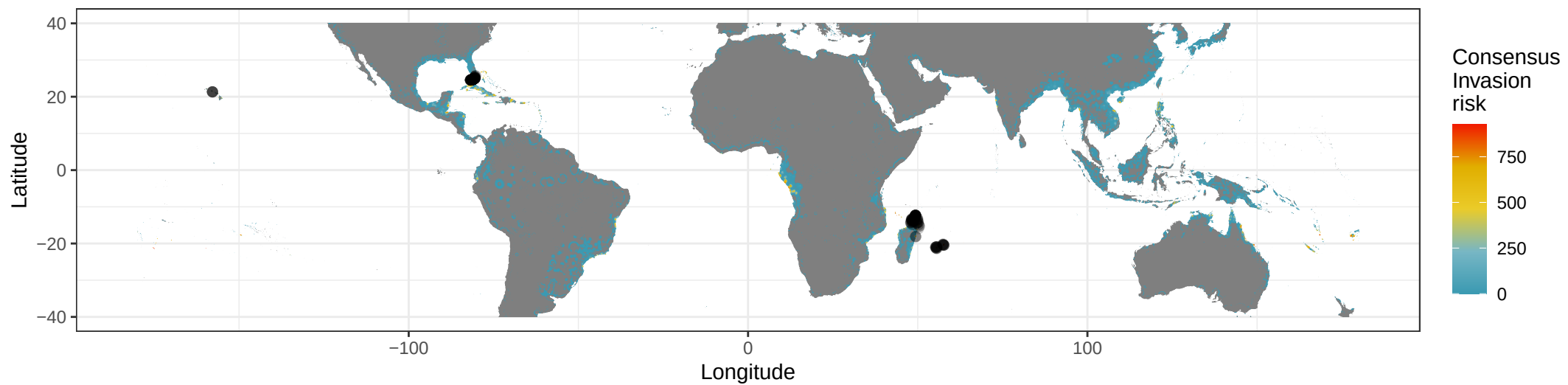


SD prediction, *Phelsuma grandis* (Worldclim)

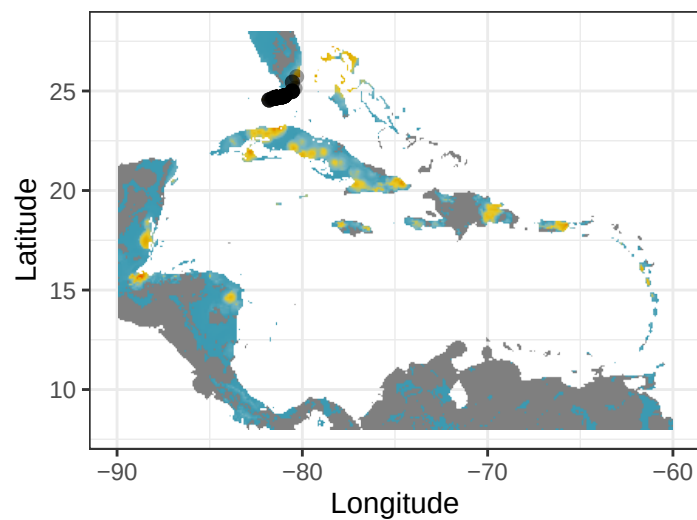


CHELSEA**Caribbean****South-East Asia****Western Indian Ocean****Oceania**

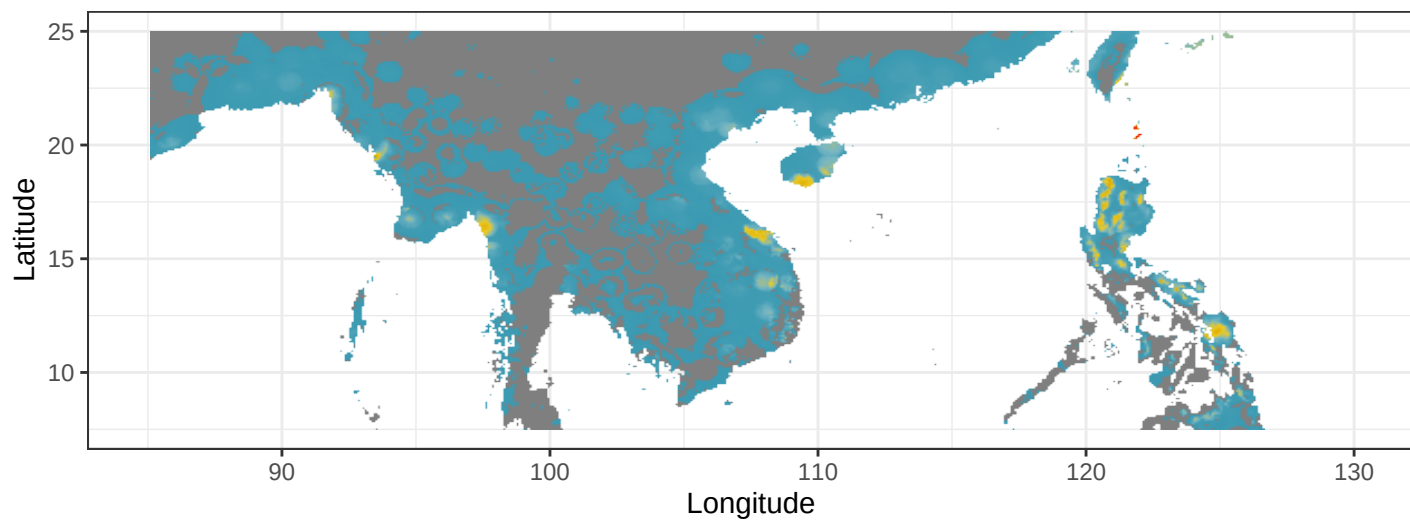
Worldclim



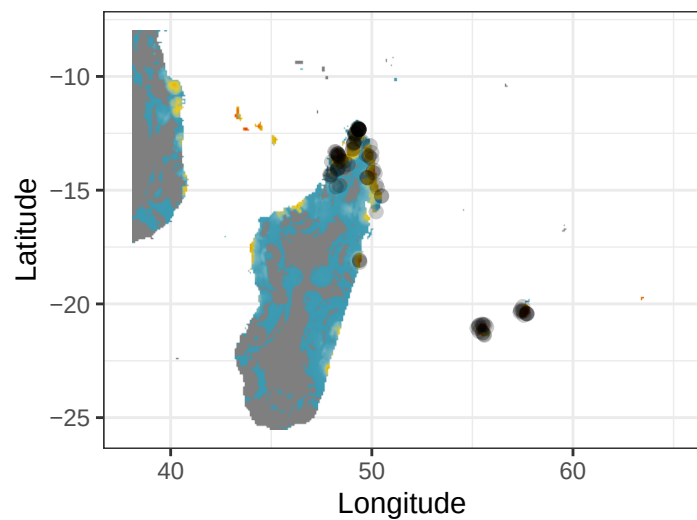
Caribbean



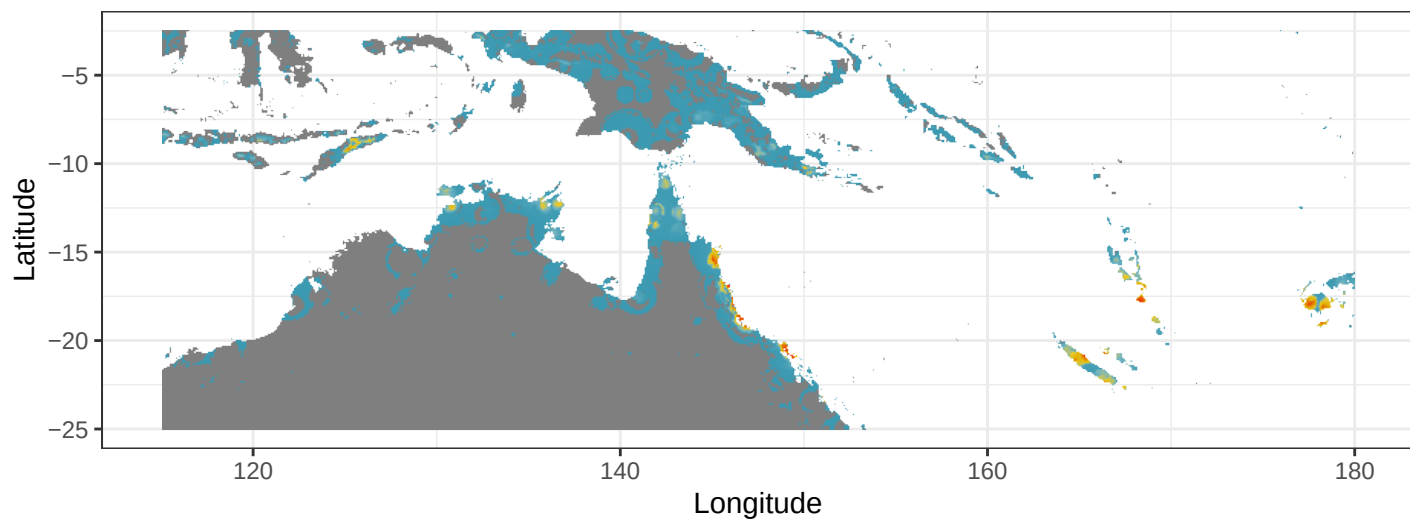
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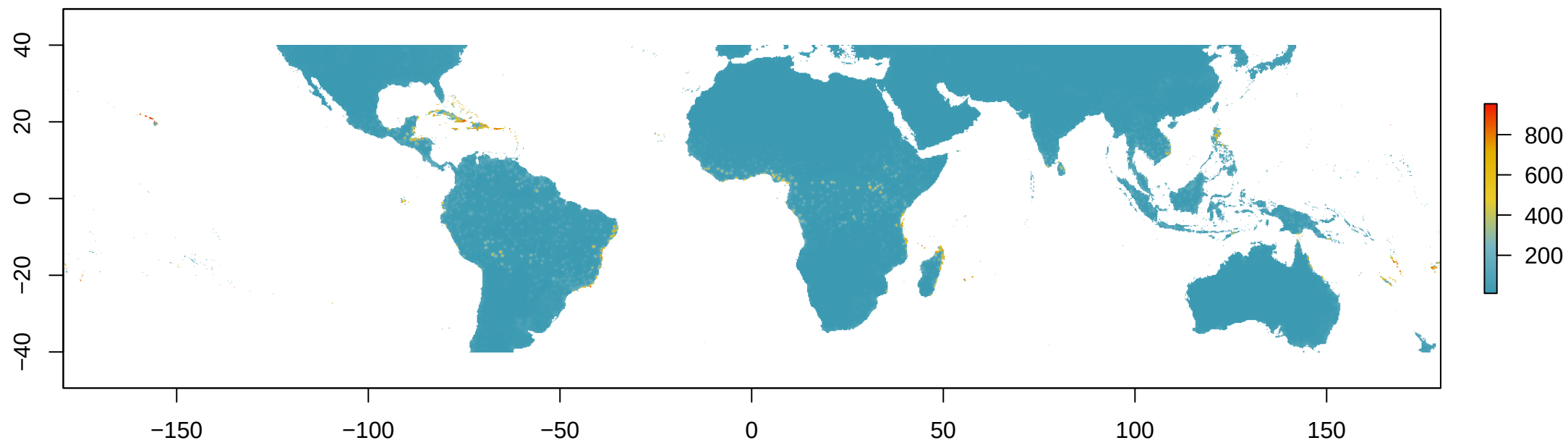
Western Indian Ocean



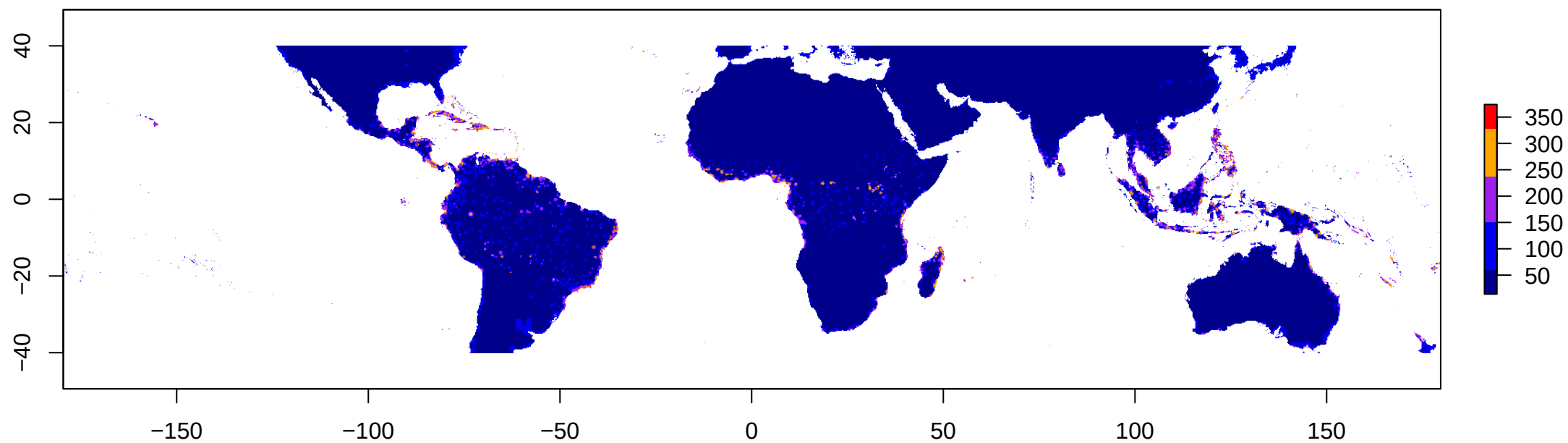
Oceania



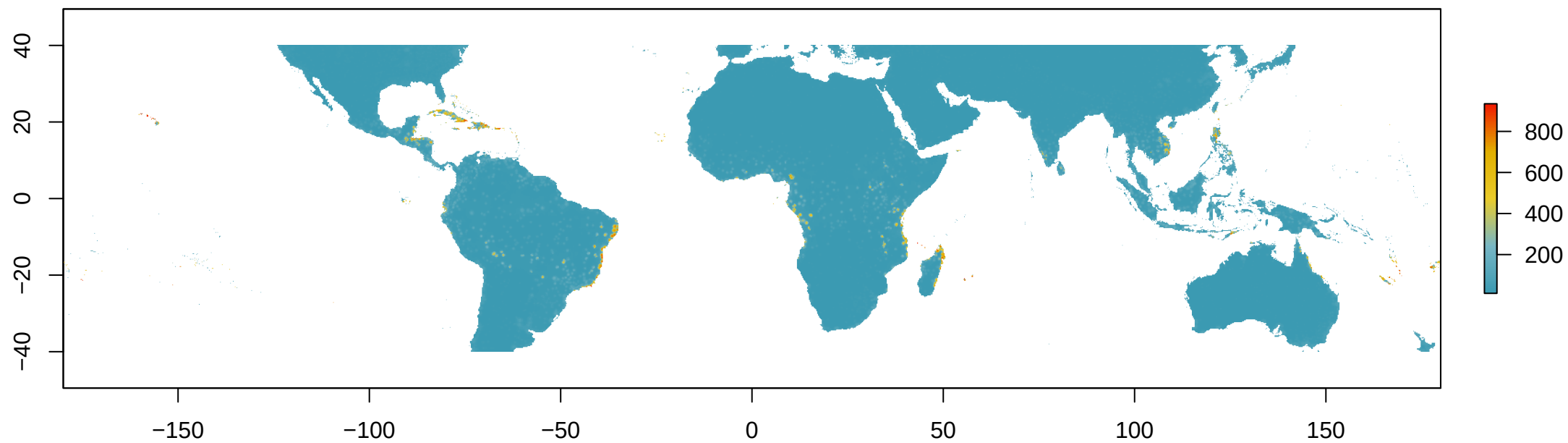
Mean prediction, *Phelsuma laticauda* (CHELSA)



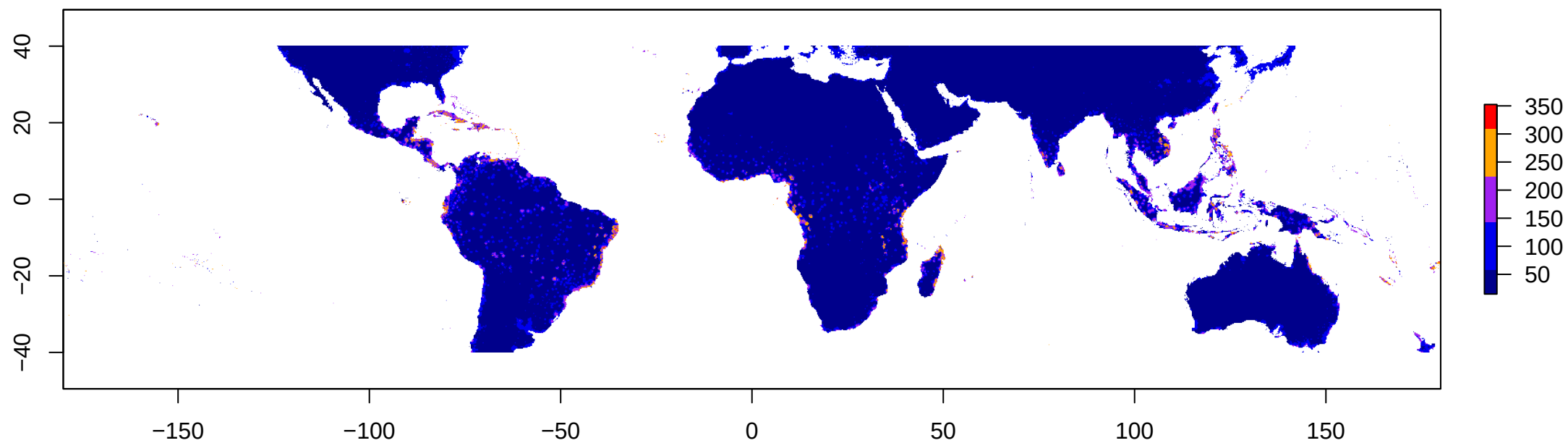
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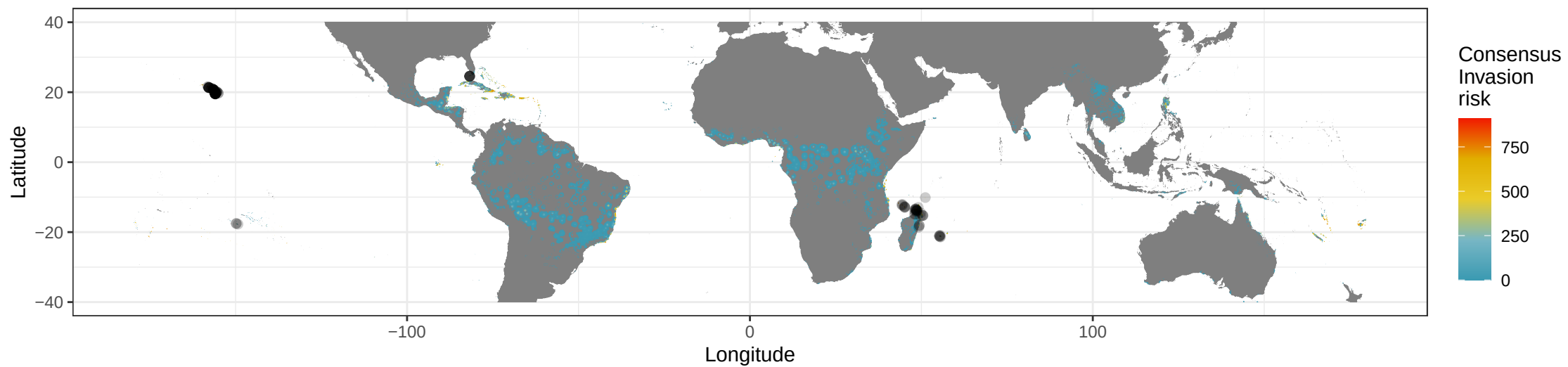
Mean prediction, *Phelsuma laticauda* (Worldclim)



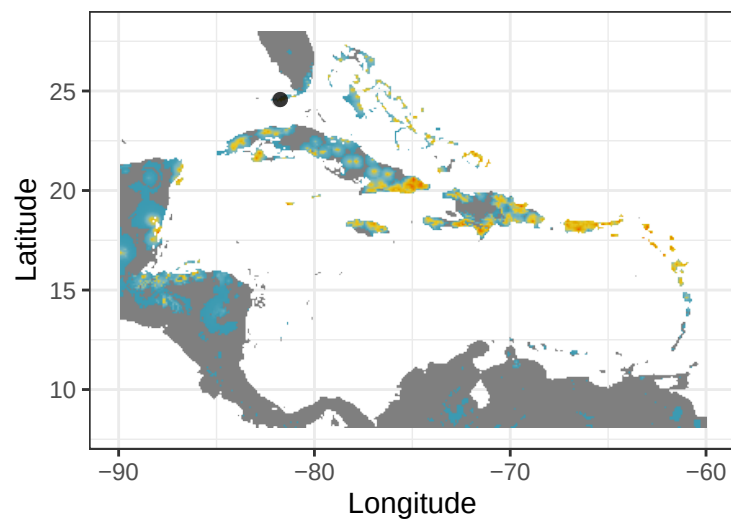
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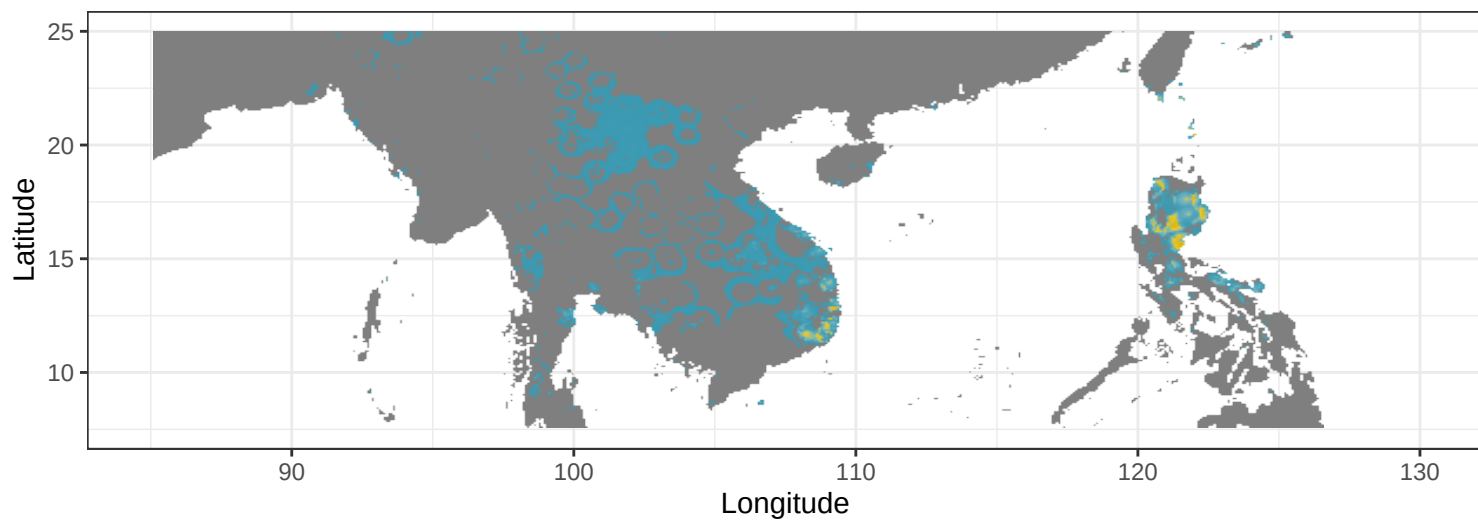
CHELSEA



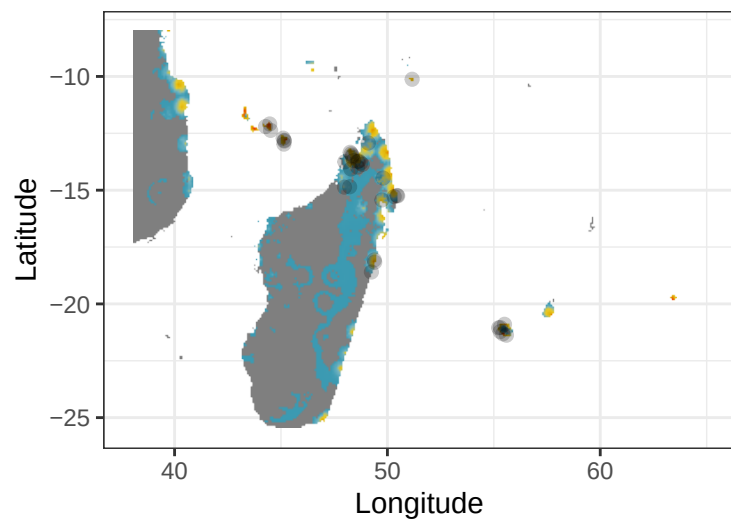
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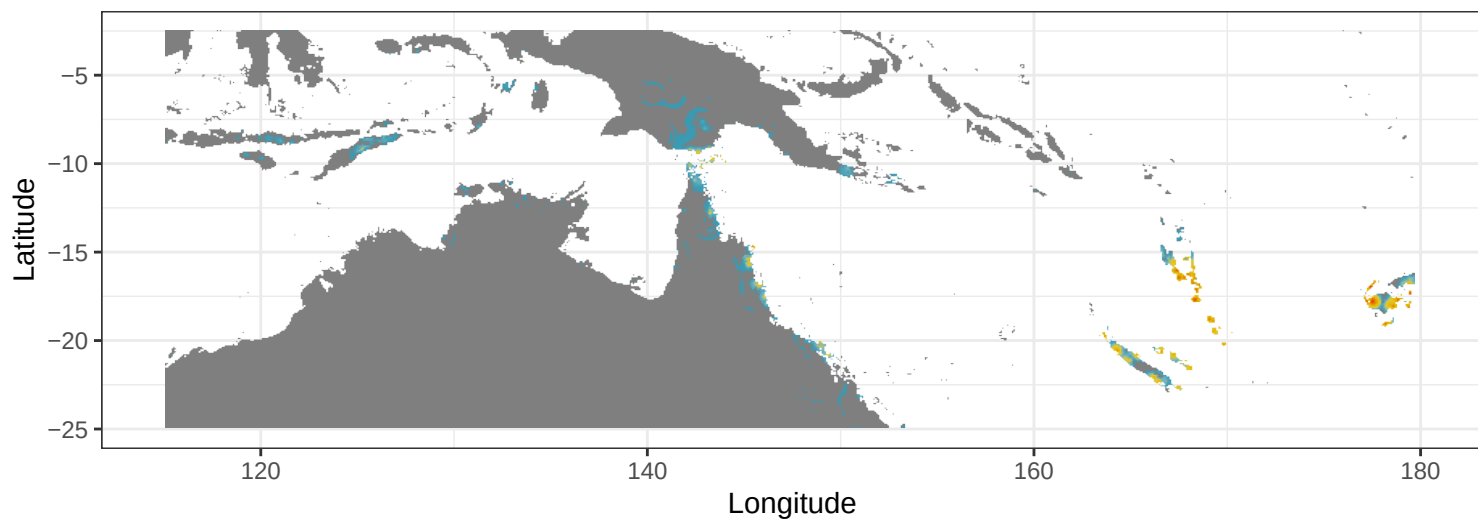
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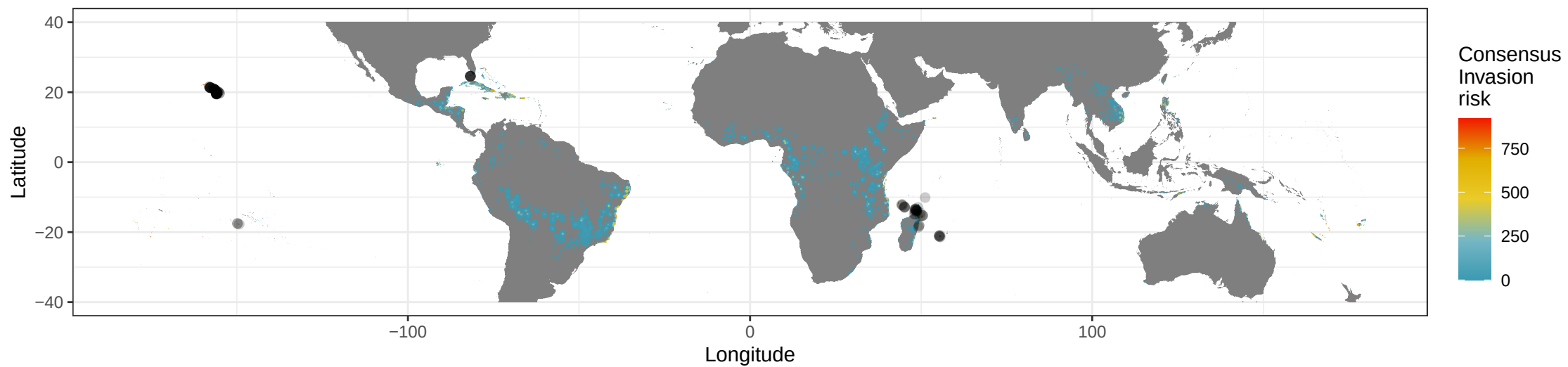
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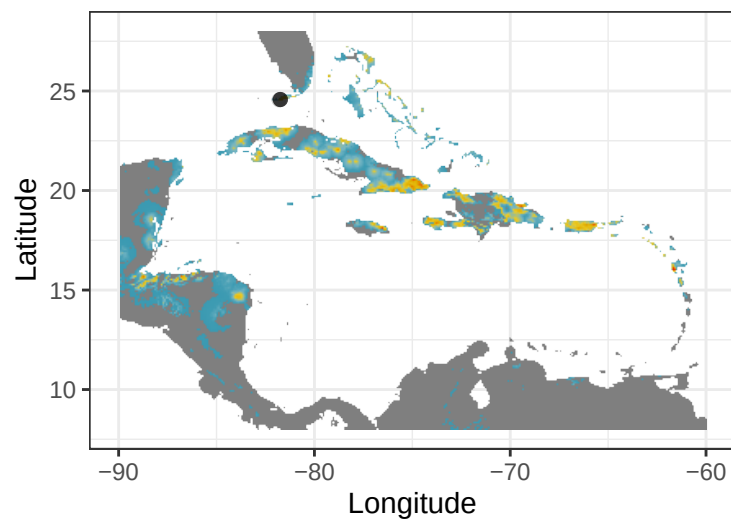
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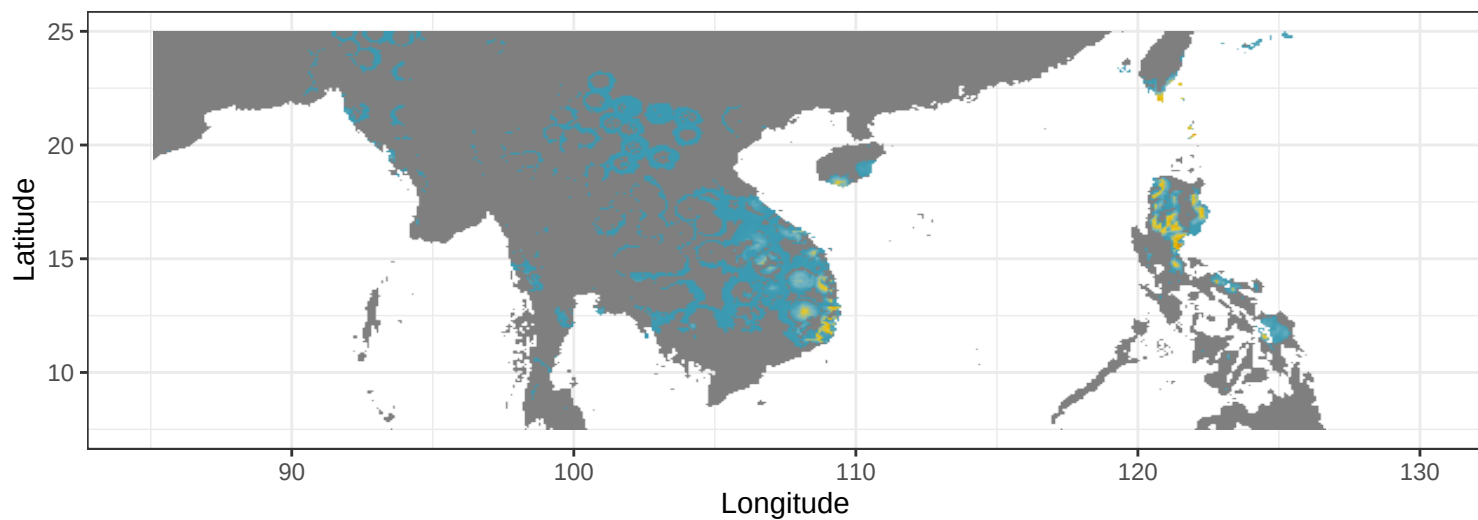
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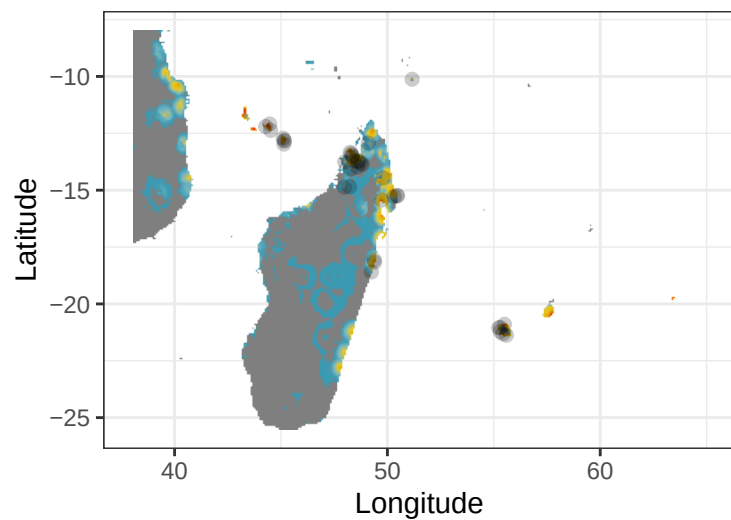
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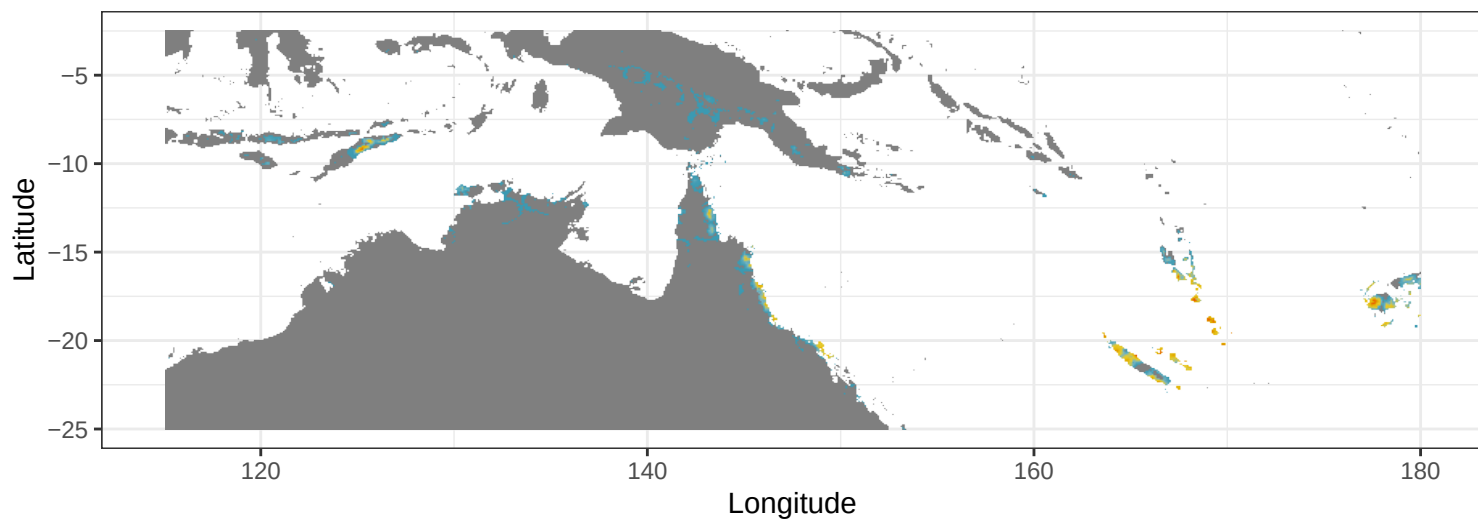
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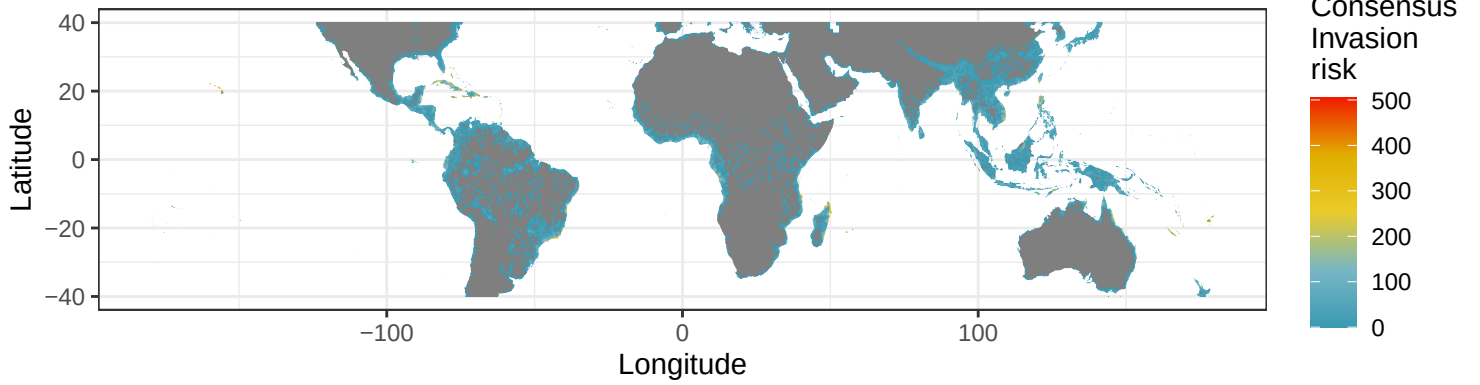
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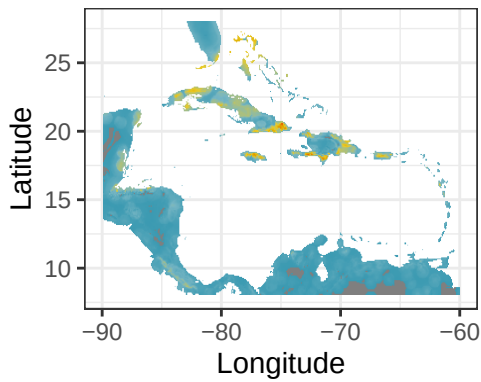
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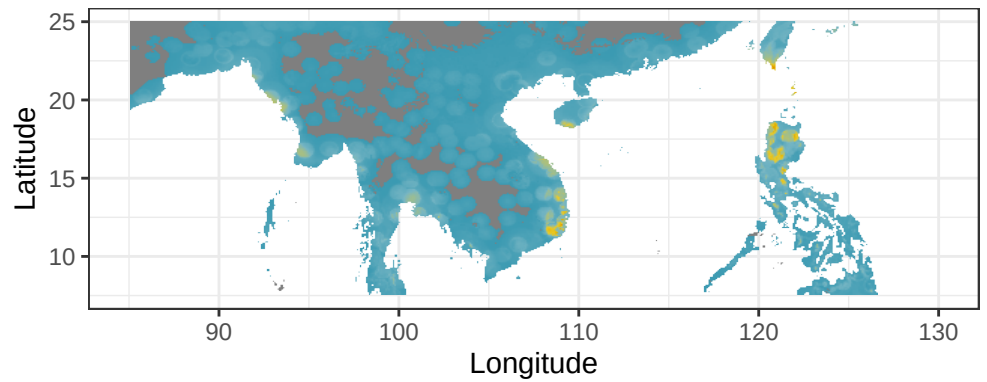
Consensus, SSP126



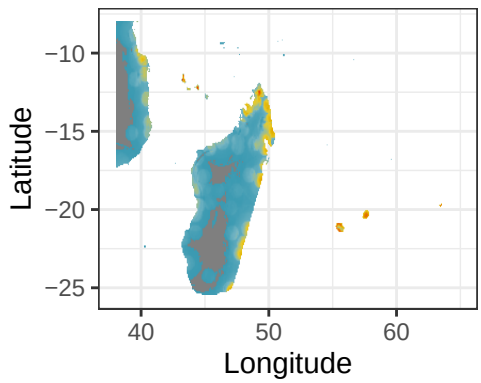
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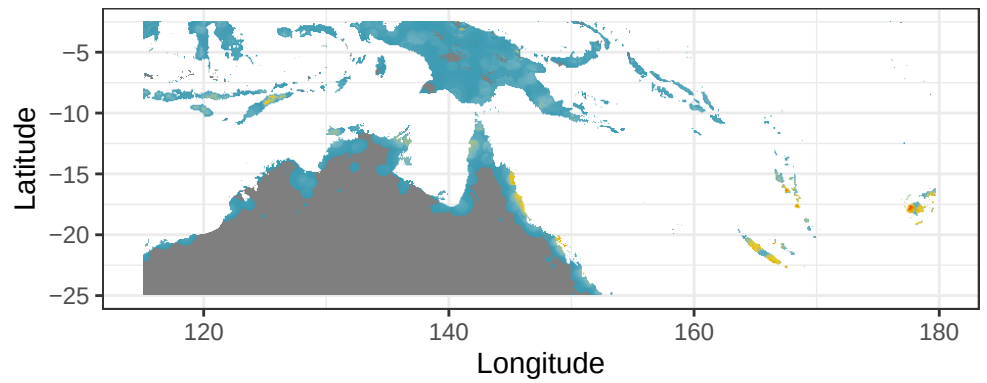
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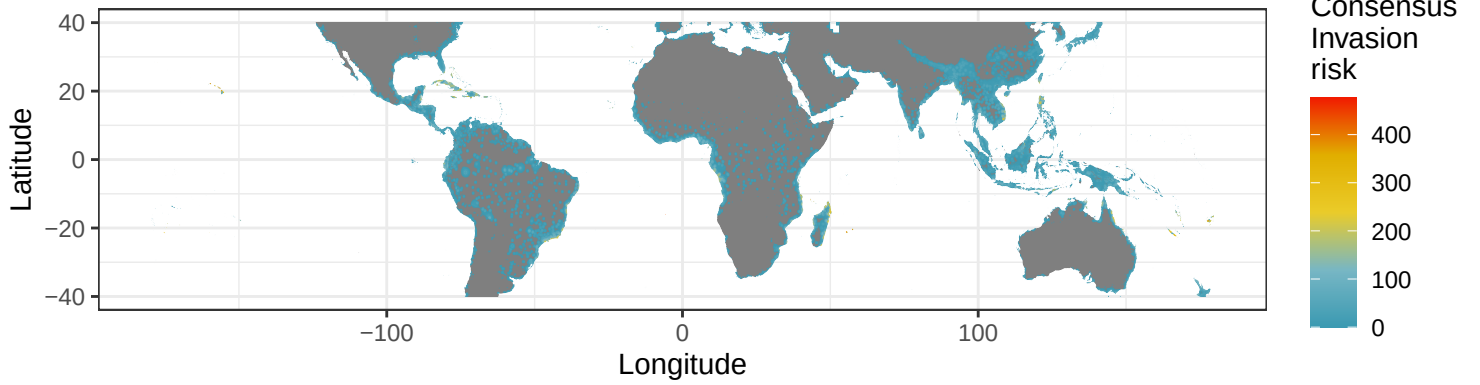
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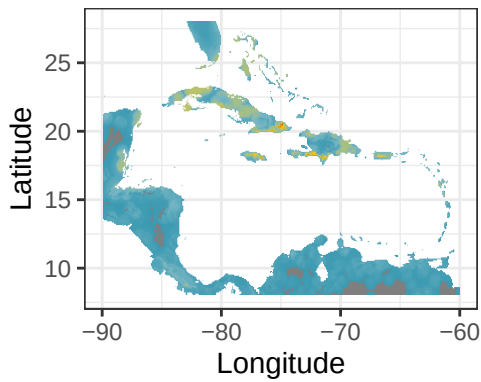
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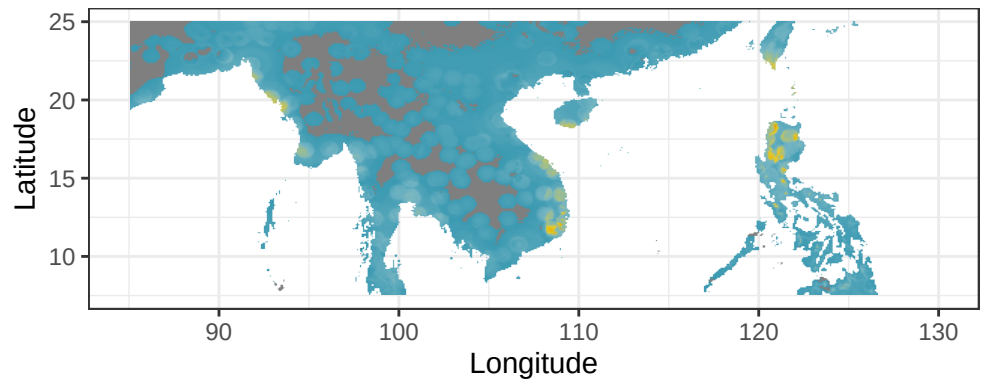
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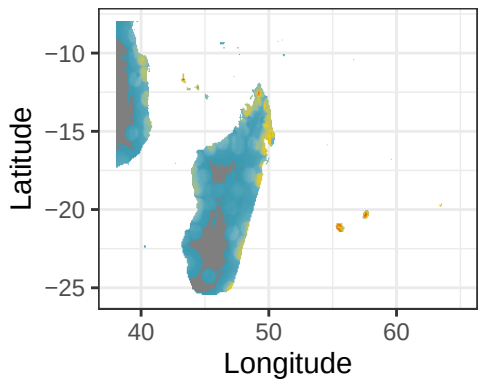
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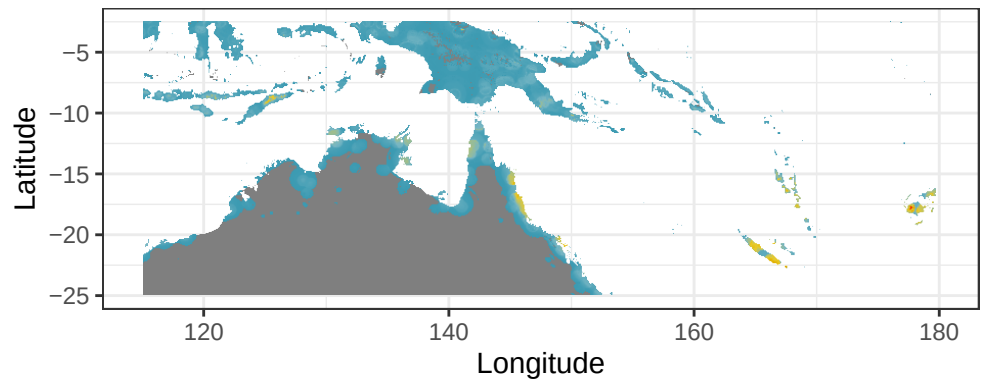
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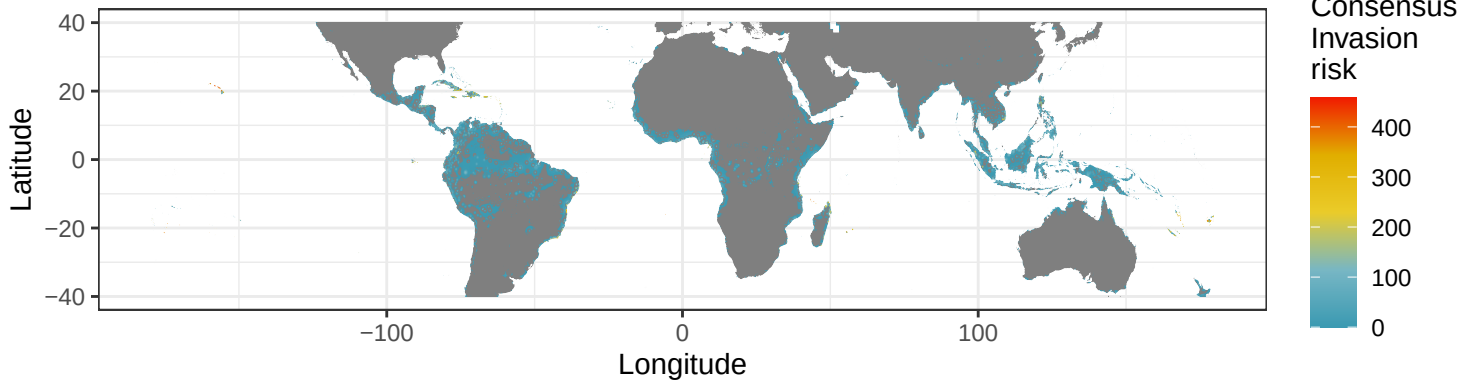
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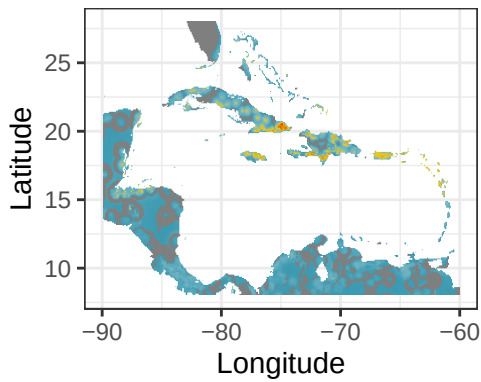
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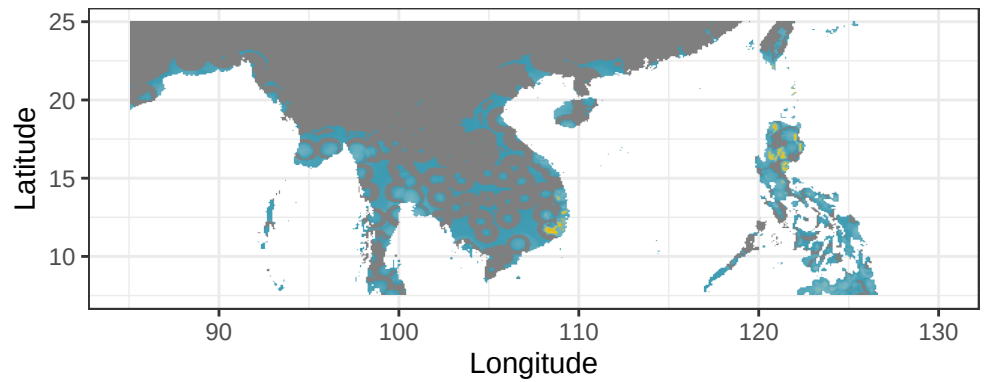
Consensus, SSP126



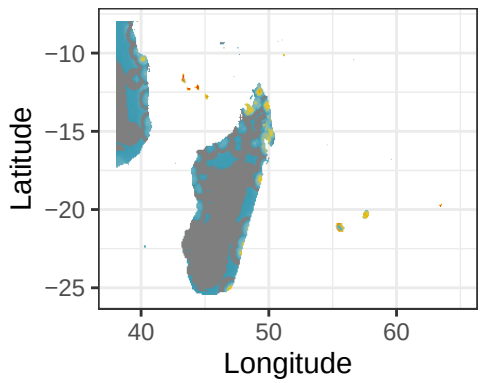
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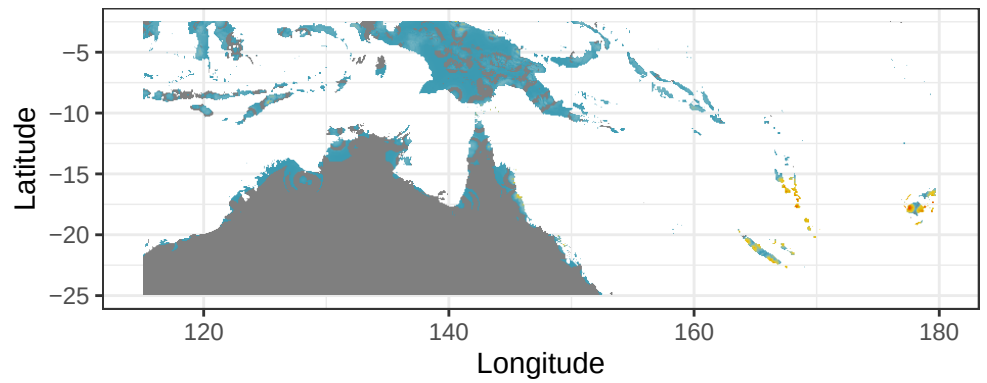
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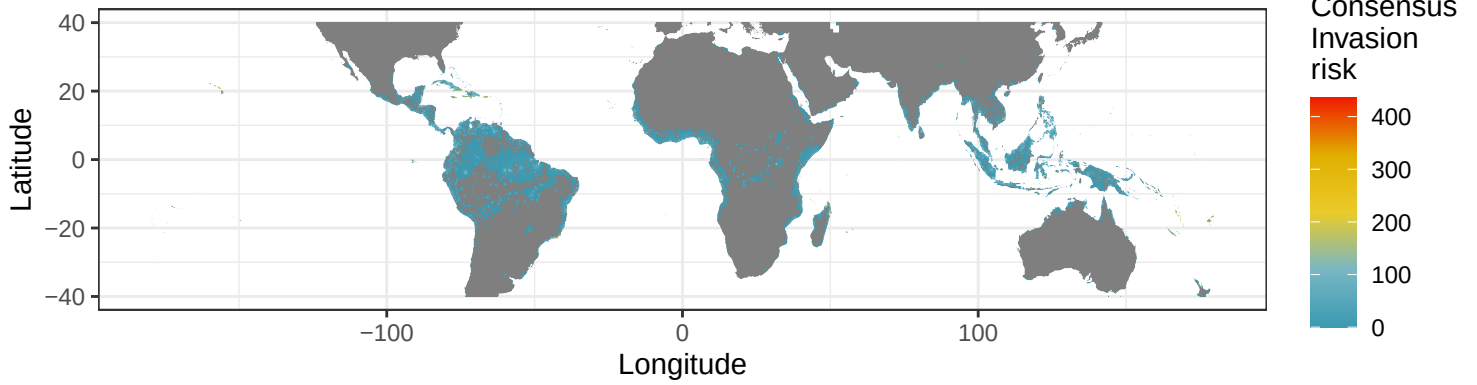
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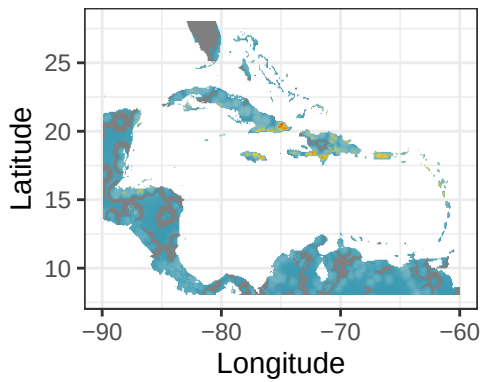
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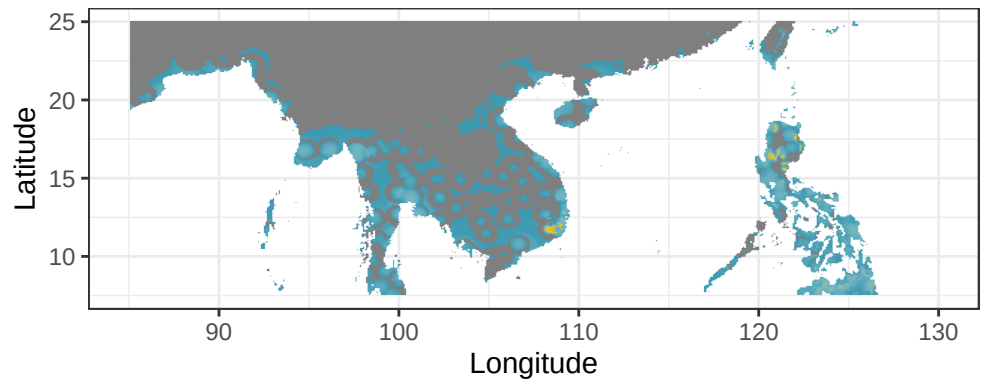
Consensus, SSP585



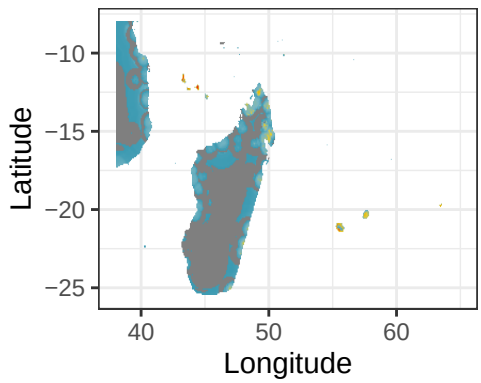
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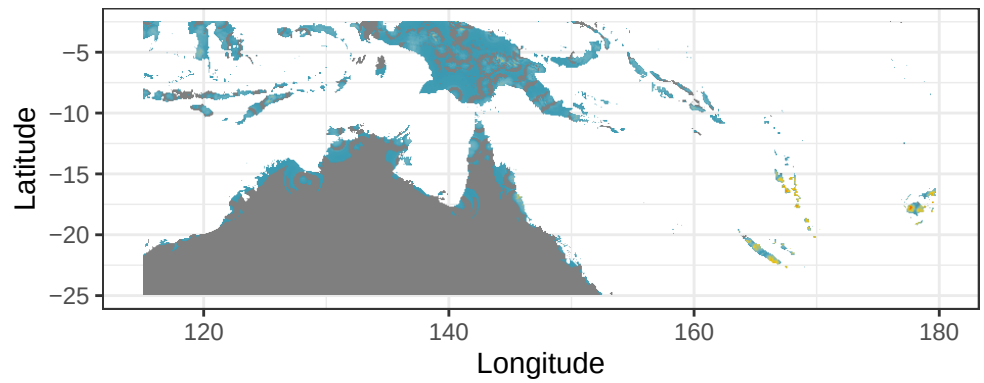
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Western Indian Ocean



Oceania



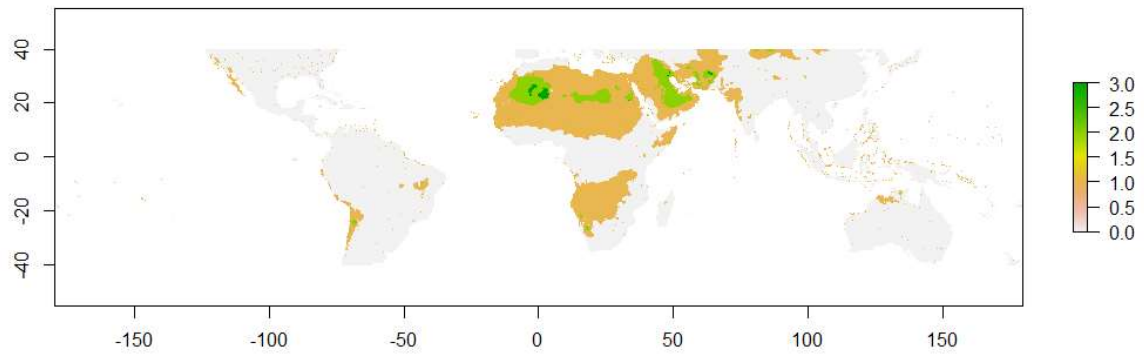


Fig. S25 Example of clamping mask for HadGem2-AO SSP585 from CHELSA for the year 2070.

The scale indicates the number of predictors for which novel conditions are met.

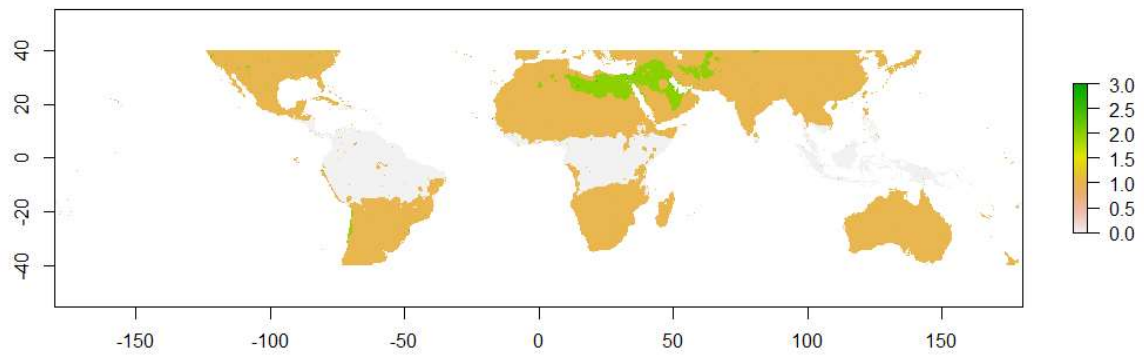


Fig. S26 Example of clamping mask for HadGem2-AO SSP585 from Worldclim for the year 2070. The

scale indicates the number of predictors for which novel conditions are met.

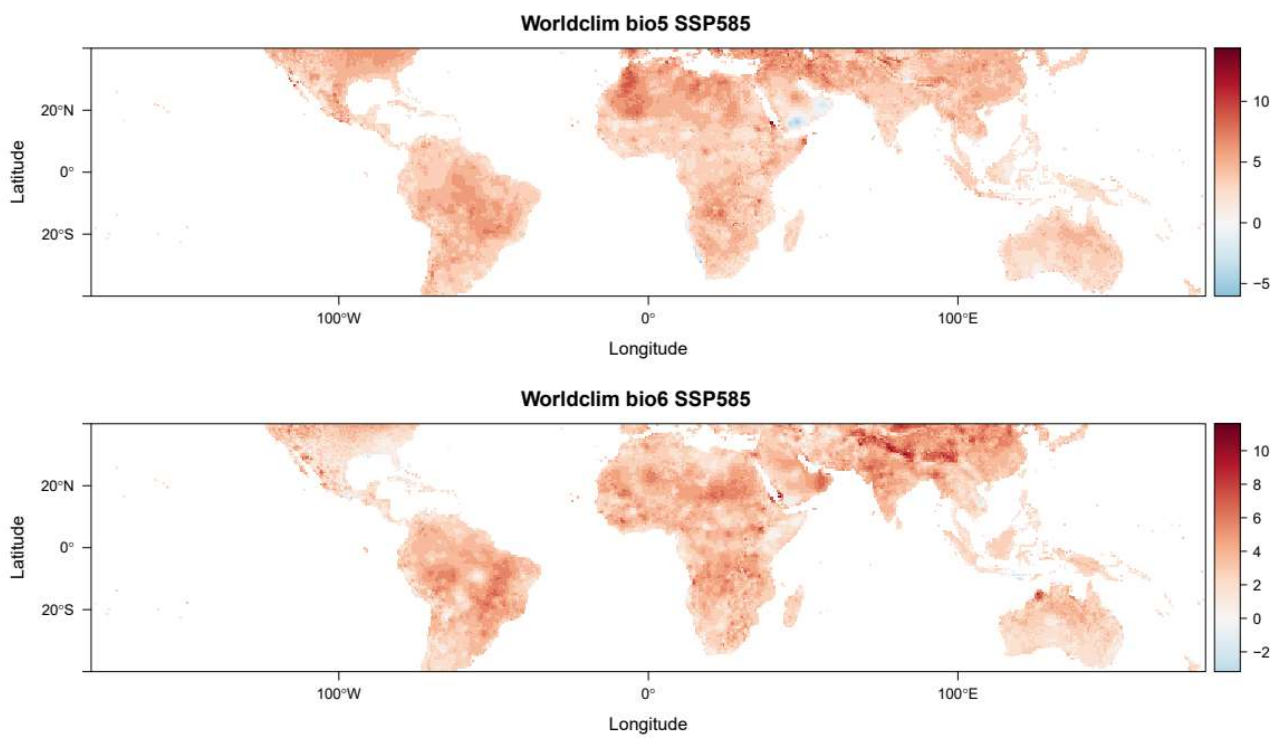


Fig. S27 Differences between current and 2070 conditions for HadGem2-AO SSP585 from Worldclim for bio5 and bio6.