

Supplementary material

Diversity and distribution of the dominant ant genus

Anonychomyrma (Hymenoptera: Formicidae) in the Australian Wet Tropics

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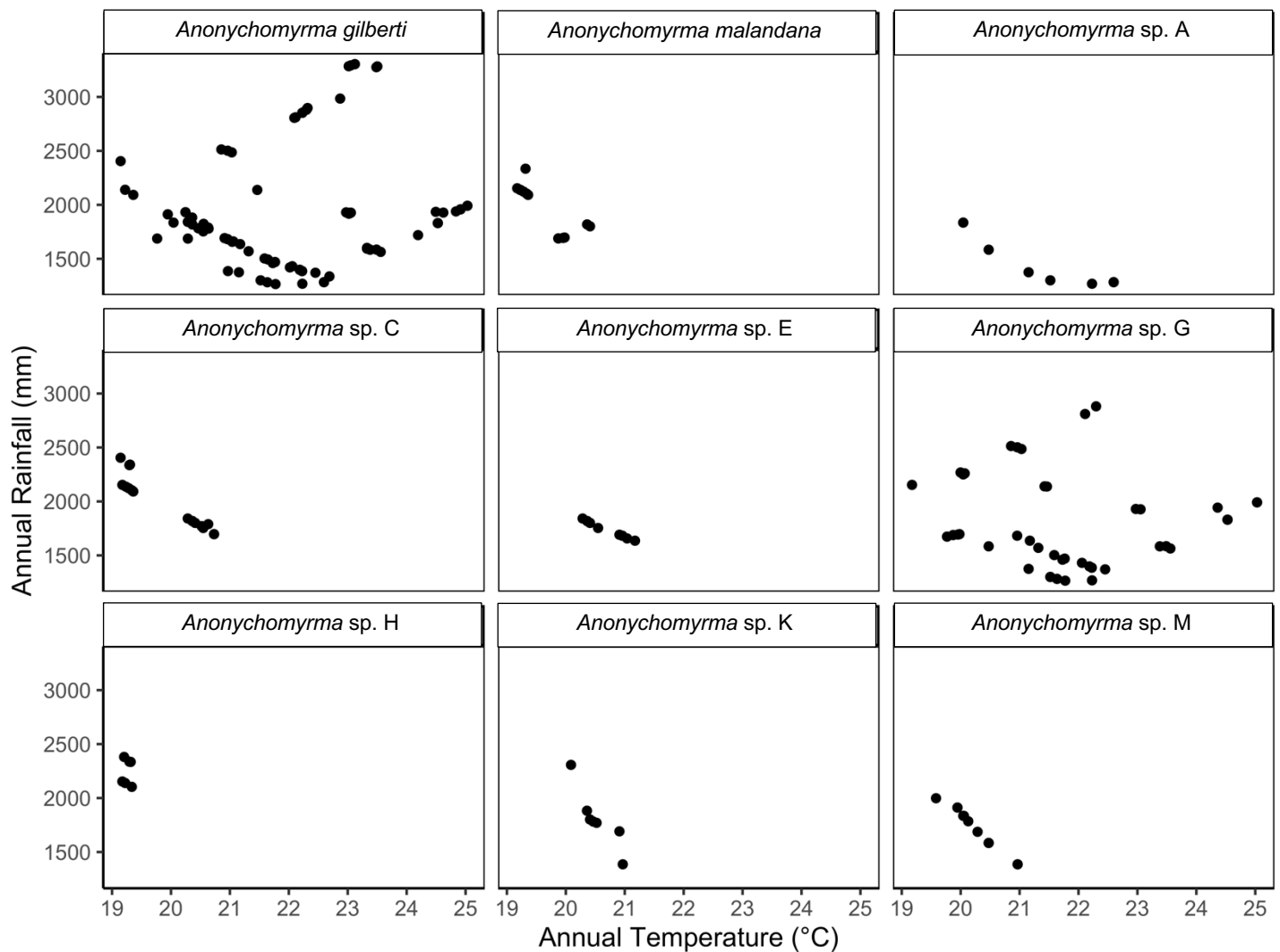
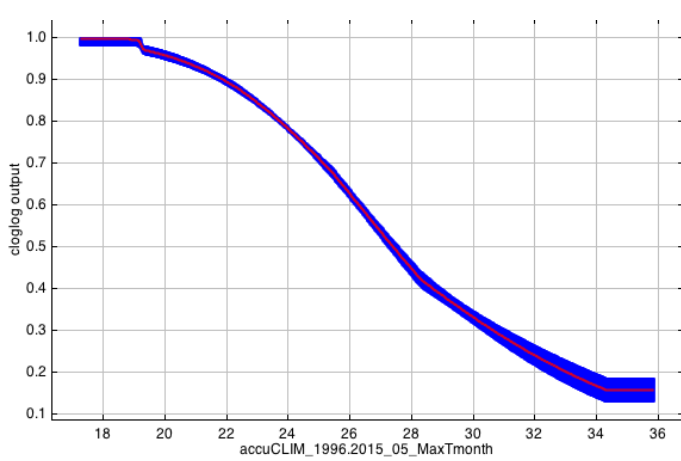


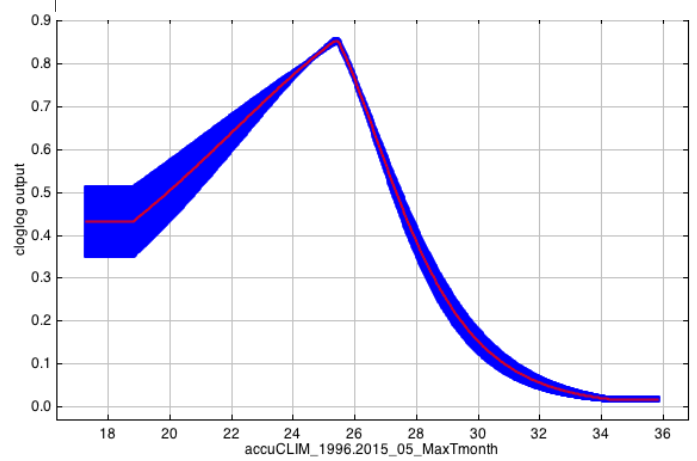
Figure S1. Environmental space occupied by nine species used in species distribution modelling based on our sampling across the AWT, annual rainfall and temperature from AccuClim layers [1].

Species responses to
accuCLIM 1996-2015 05: Maximum temperature of the warmest month

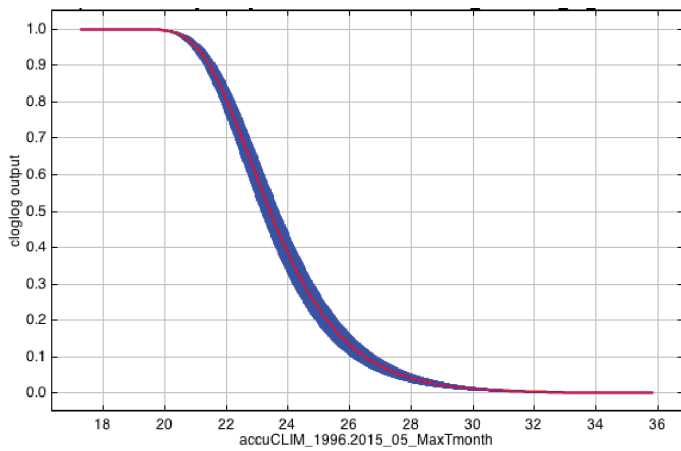
Anonychomyrma gilberti



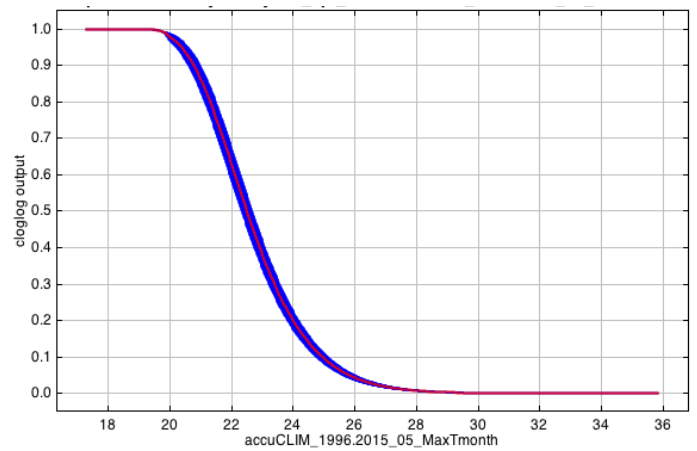
Anonychomyrma sp. G



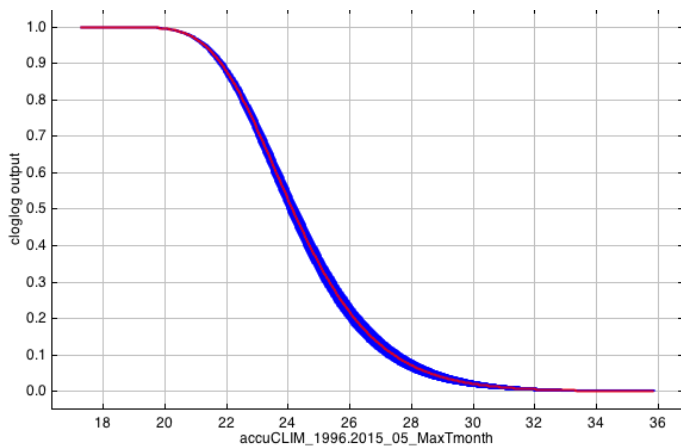
Anonychomyrma malandana



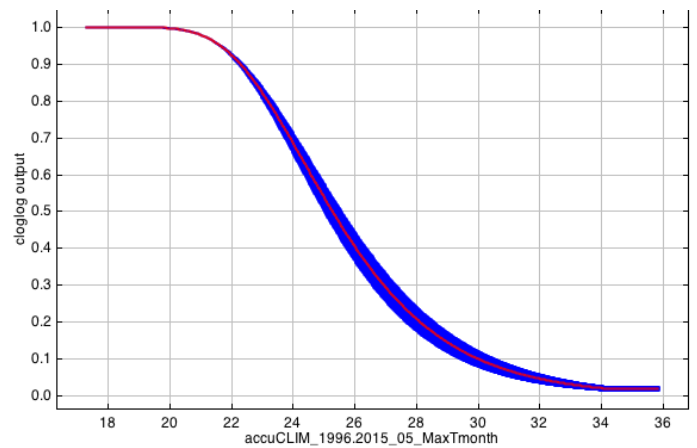
Anonychomyrma sp. C



Anonychomyrma sp. M



Anonychomyrma sp. E



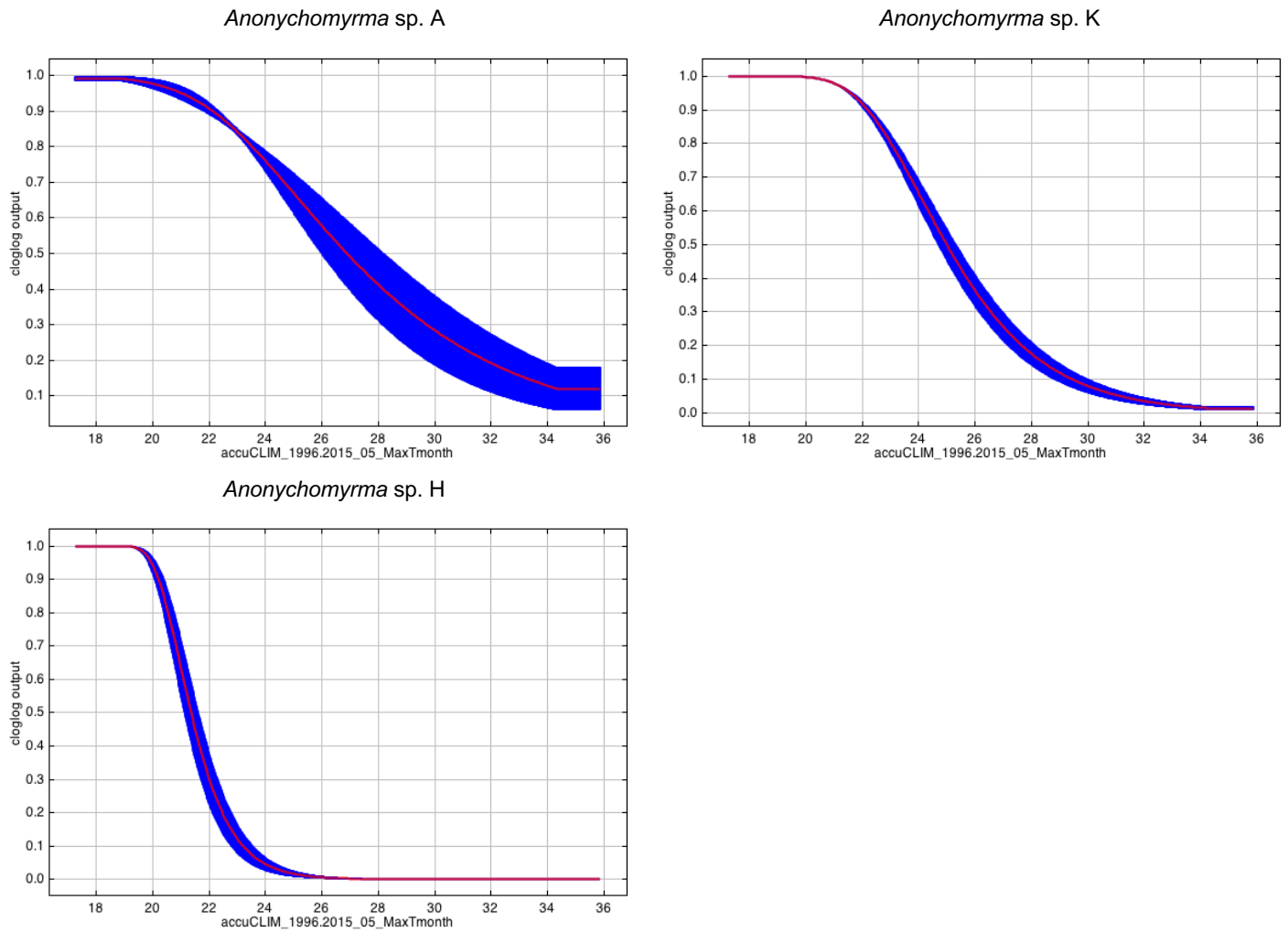
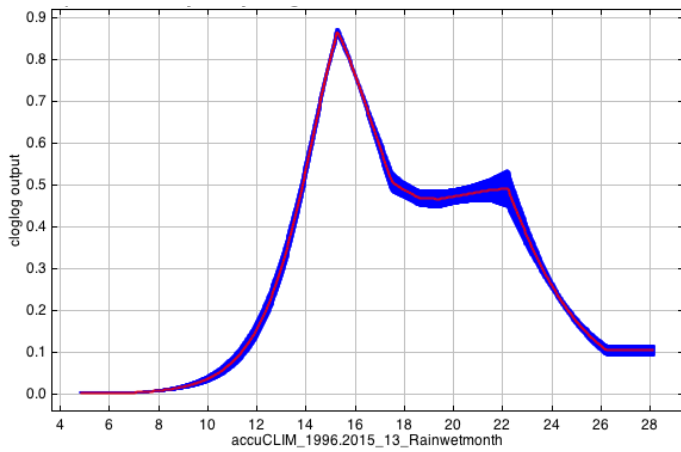


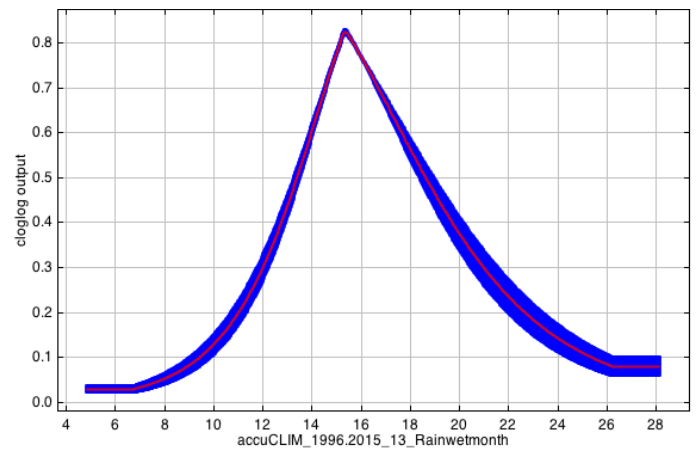
Figure S2: Species distribution modelling response curves showing *Anonychomyrma* species responses to accuCLIM 1996-2015 Variable 05: Maximum temperature of the warmest month. Included is those species that this variable ranked in the top three variables in regard to permutation importance. Response is the cloglog output from Maxent [2] which gives an estimate between 0-1 of probability of presence for that species. Plots show modeled probability of presence based off a model using only Maximum temperature of the warmest month.

Species responses to
accuCLIM 1996-2015 13: Rainfall of the wettest month

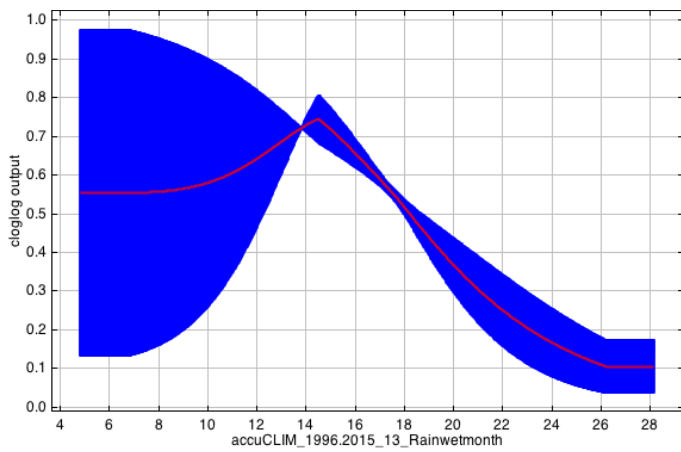
Anonychomyrma gilberti



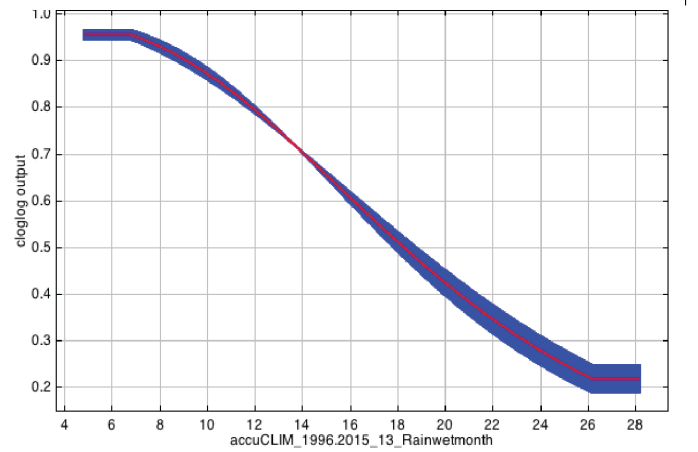
Anonychomyrma sp. G



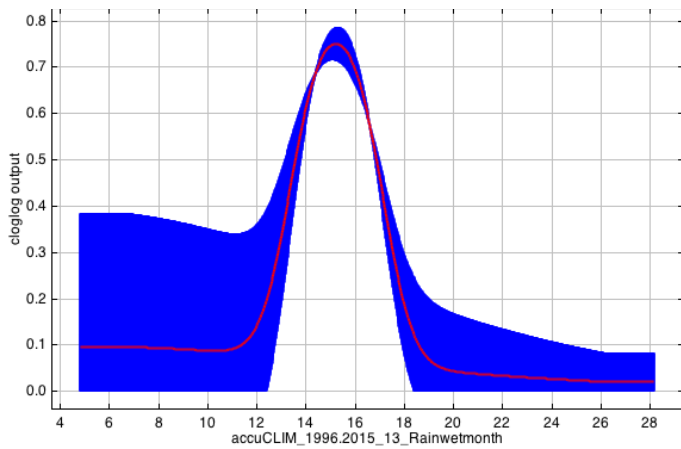
Anonychomyrma sp. C



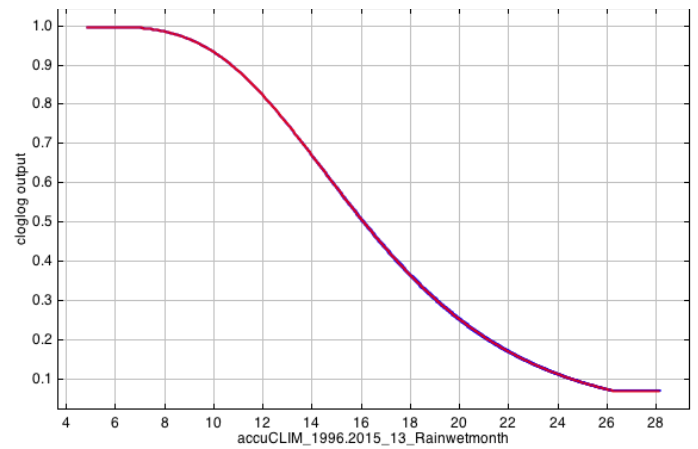
Anonychomyrma malandana



Anonychomyrma sp. M



Anonychomyrma sp. E



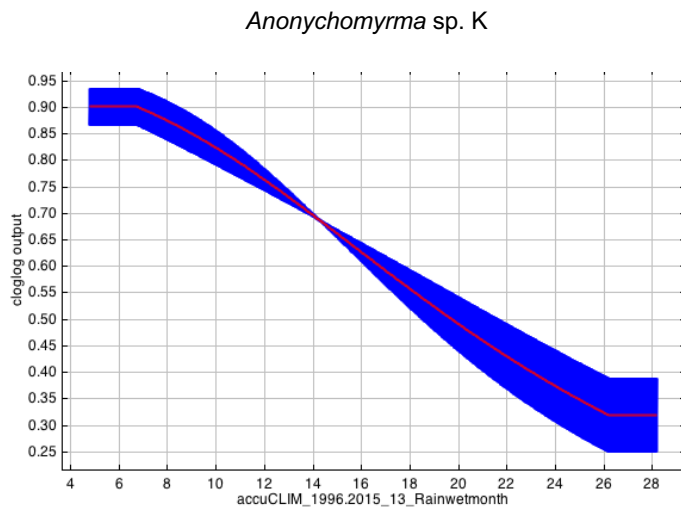


Figure S3: Species distribution modelling response curves showing *Anonychomyrma* species responses to accuCLIM 1996-2015 Variable 13: Rainfall of the wettest month. Included is those species that this variable ranked in the top three variables in regard to permutation importance. Response is the cloglog output from Maxent [2] which gives an estimate between 0-1 of probability of presence for that species. Plots show modeled probability of presence based off a model using only Rainfall of the wettest month.

Species responses to accuCLIM 1996-2015 15: Rainfall seasonality

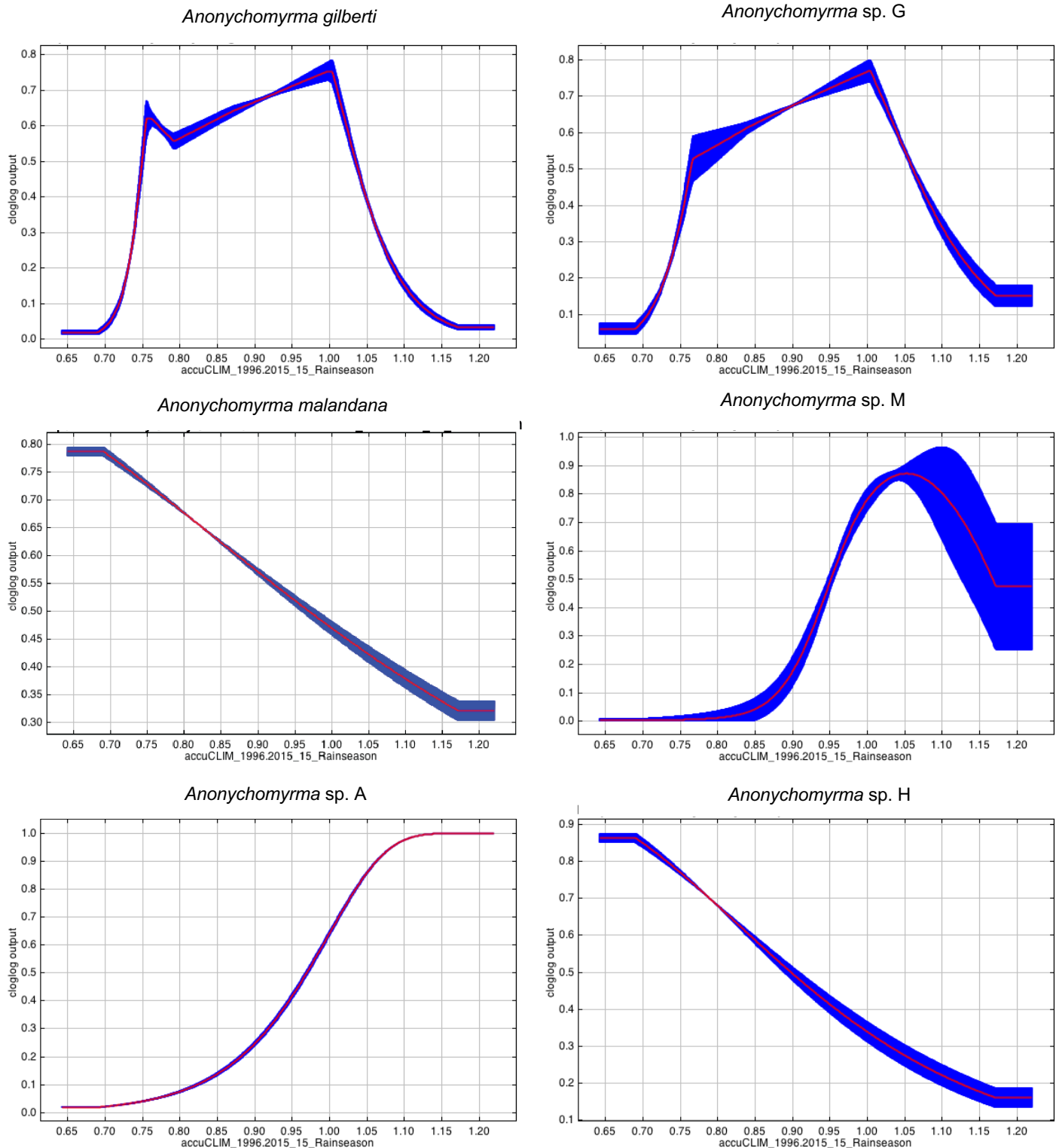


Figure S4: Species distribution modelling response curves showing *Anonychomyrma* species responses to accuCLIM 1996-2015 Variable 15: Rainfall seasonality. Included is those species that this variable ranked in the top three variables in regard to permutation importance. Response is the cloglog output from MaxEnt [2] which gives an estimate between 0-1 of probability of presence for that species. Plots show modeled probability of presence based off a model using only Rainfall seasonality.

References

1. Storlie, C.; Phillips, B.; VanDerWal, J.; Williams, S. Improved spatial estimates of climate predict patchier species distributions. *Diversity and Distributions* **2013**, *19*, 1106-1113.
2. Phillips, S.J.; Anderson, R.P.; Schapire, R.E. Maximum entropy modeling of species geographic distributions. *Ecol. Model.* **2006**, *190*, 231-259.