

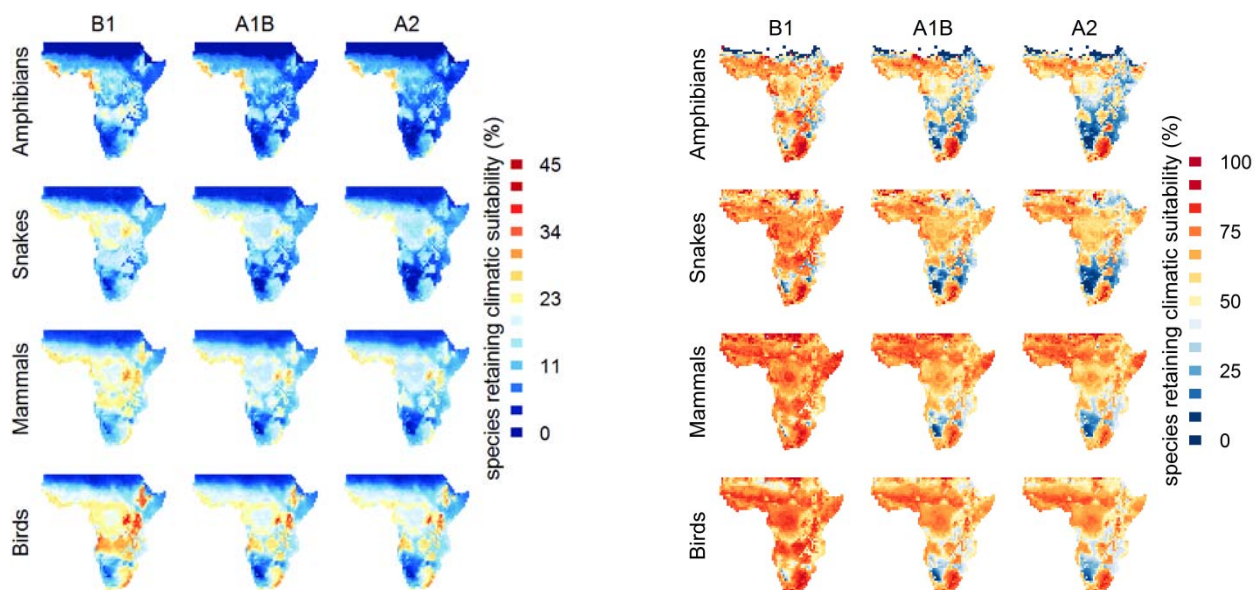
## Addendum to

Garcia, R.A., Burgess, N.D., Cabeza, M., Rahbek, C. & Araújo, M.B. 2012.

Exploring consensus in 21st century projections of climatically suitable areas for African vertebrates. *Global Change Biology* 18: 1253-1269.

Figure 7 in Garcia *et al.* (2012) shows the percentage of species projected to retain climatic suitability under each emissions scenario. For each location  $i$ , the proportion  $R$  of species retaining climatic suitability is given by  $R_i = r_i \times 100 / N$ , where  $r_i$  is the number of species that retain climatic suitability in location  $i$  under climate change and  $N$  is the total number of species in sub-Saharan Africa in the baseline period. Differences across taxa and across emissions scenarios are visible. But because the proportions of retention throughout the region are relative to the same total number of species, it is the areas of high baseline richness that are emphasised.

As this figure may lead to misinterpretations, we show below an alternative figure where *in situ* retention is calculated in relation to local (rather than total) species richness. In this case, the proportion  $R$  of species retaining climatic suitability in location  $i$  is given by  $R_i = r_i \times 100 / n_i$ , where  $r_i$  is the number of species that retain climatic suitability in location  $i$  under climate change and  $n_i$  is the number of species in location  $i$  in the baseline scenario. Here the variability among scenarios is still clear, as is the greater potential impact of climate change on *in situ* climatic suitability for amphibians and snakes in comparison to mammals and birds. However, by normalising the retention of climatic suitability to local species richness, the alternative maps emphasise the areas where higher proportions of local richness are projected to retain climatic suitability, irrespective of total richness. As such, the alternative figure might be perceived as providing more useful information for examining the regional impacts of climate change on climatic suitability for sub-Saharan African vertebrates.



**Figure 7 in Garcia *et al.* 2012** Percentage of species predicted to retain climatic suitability under each emissions scenario. The proportion of the total numbers of species of amphibians ( $n = 284$ ), snakes ( $n = 310$ ), mammals ( $n = 623$ ) and birds ( $n = 1506$ ) that are projected to retain climatic suitability in each location are shown for the median ensemble of all bioclimatic envelope models and for the 'maximum consensus' general circulation model cluster under the A2, A1B and B1 emissions scenarios.

**Alternative figure** Percentage of species predicted to retain climatic suitability under each emissions scenario. The proportion of the local numbers of species of amphibians, snakes, mammals and birds that are projected to retain climatic suitability in each location are shown for the median ensemble of all bioclimatic envelope models and for the 'maximum consensus' general circulation model cluster under the A2, A1B and B1 emissions scenarios.