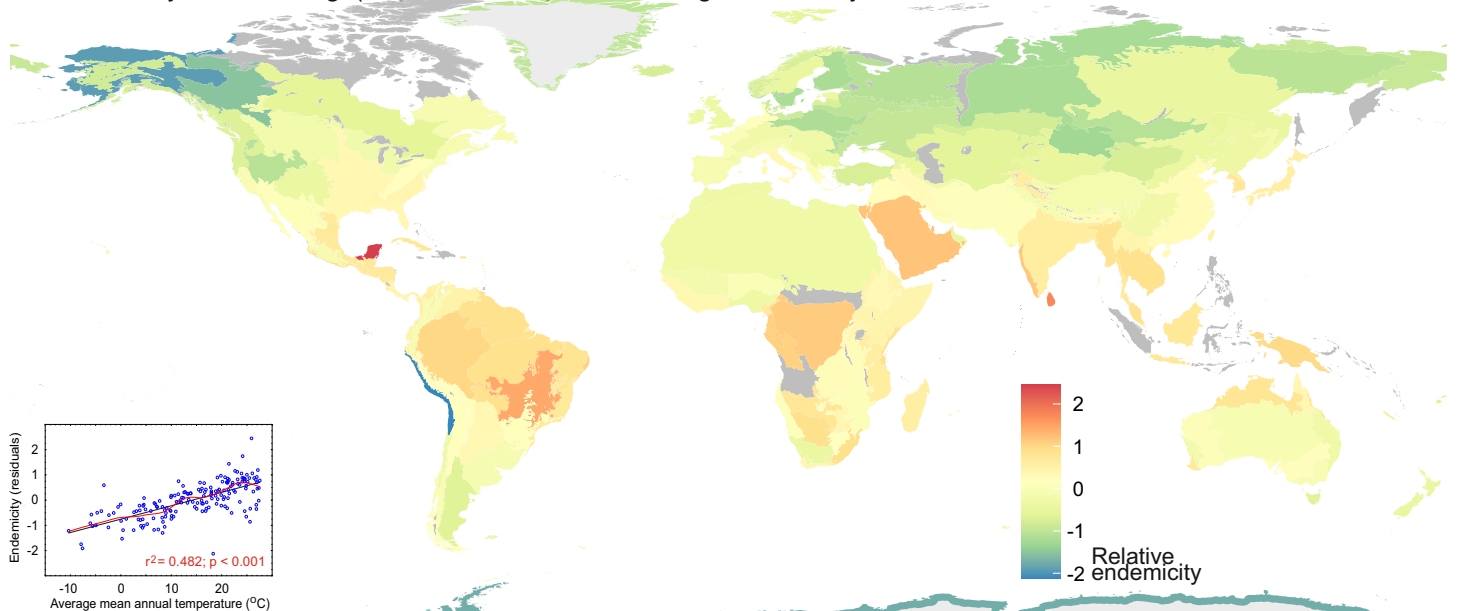


Arbuscular mycorrhizal fungi (only Glomeromycota): average endemicity



Ectomycorrhizal fungi: average endemicity

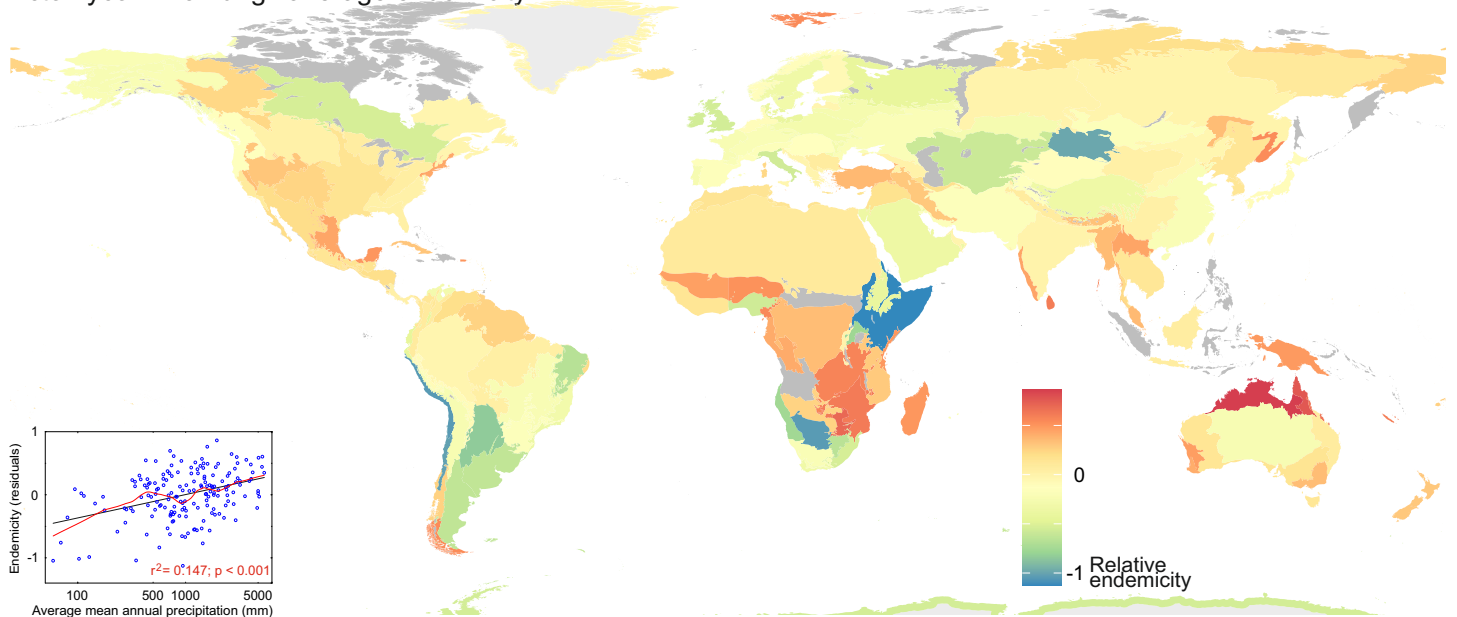
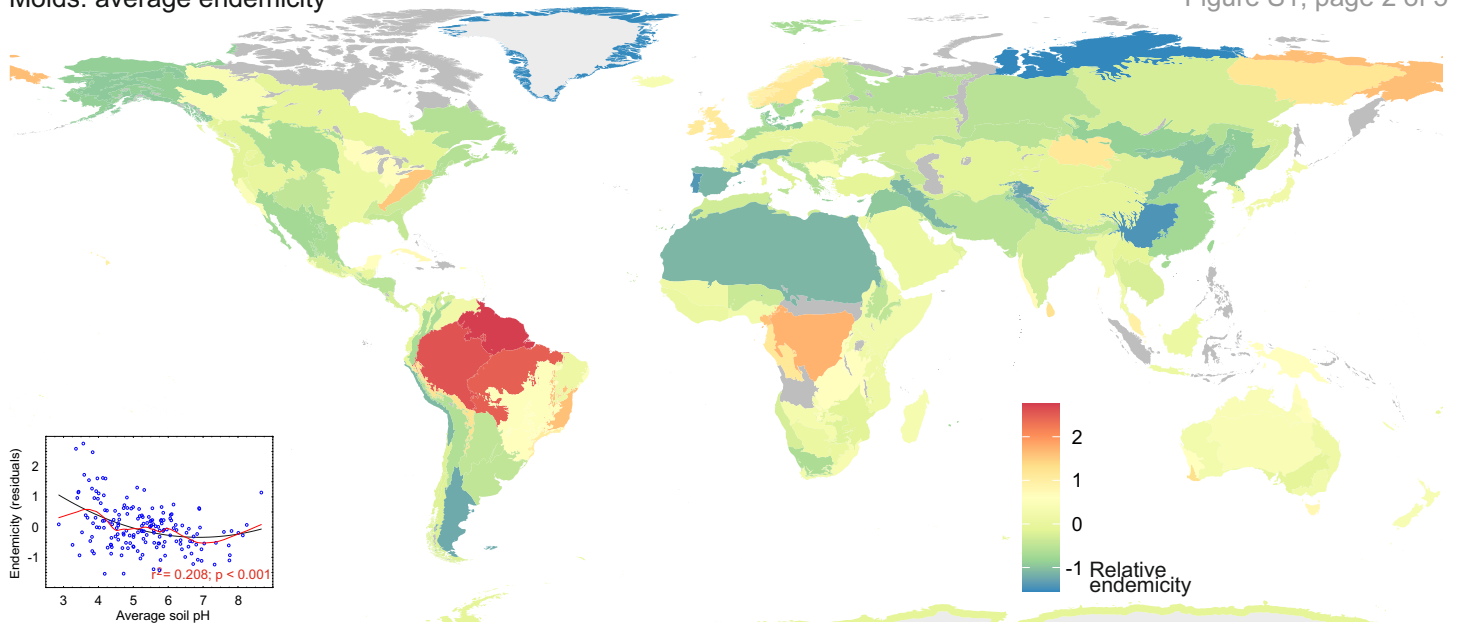
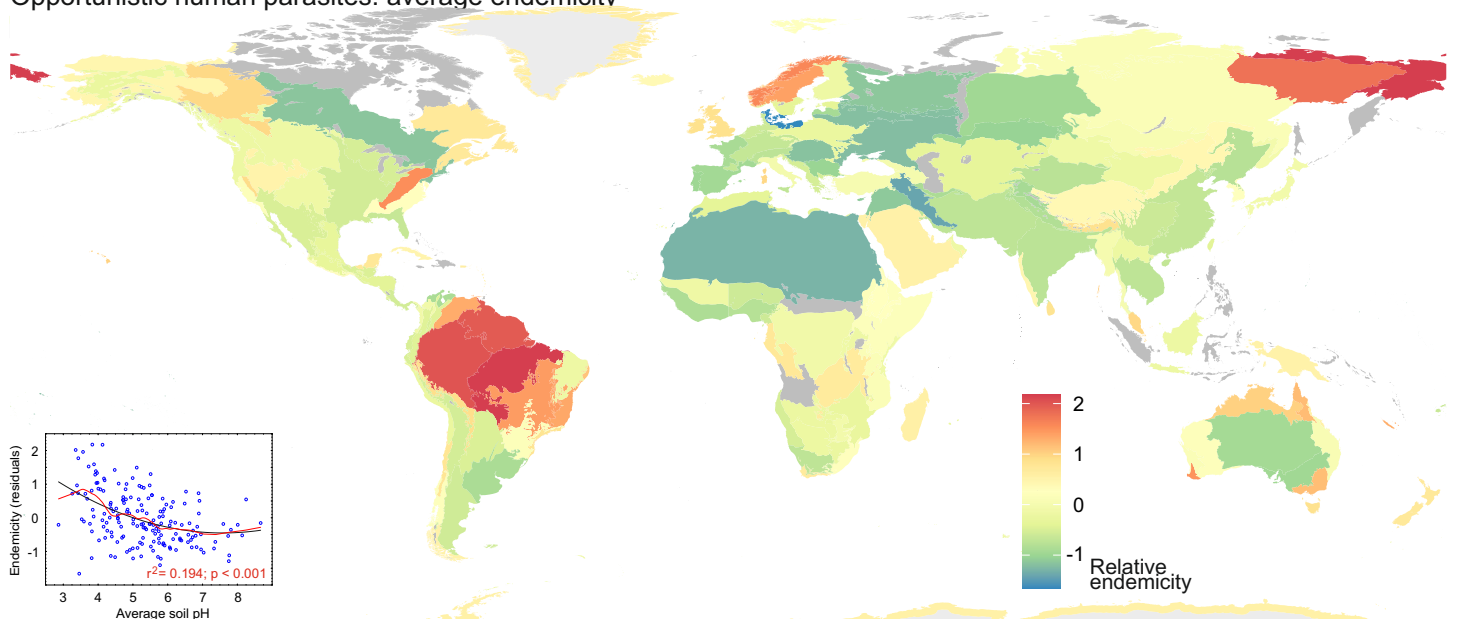


FIGURE S1 Average endemicity of fungal functional groups and five endemicity metrics of all fungi at the ecoregion scale. The insets indicate relationships to the best predictor (black line, best linear or quadratic fit; red line, lowest curve).



Opportunistic human parasites: average endemicity



Pathogens: average endemicity

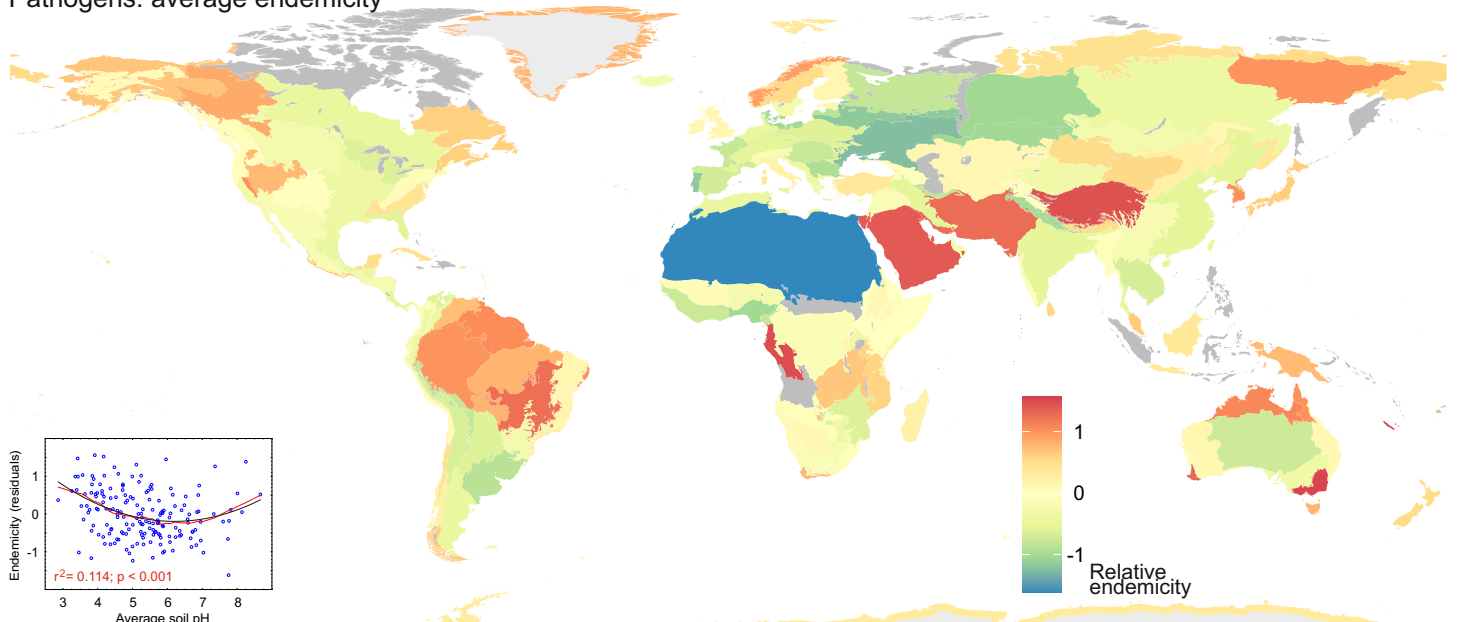
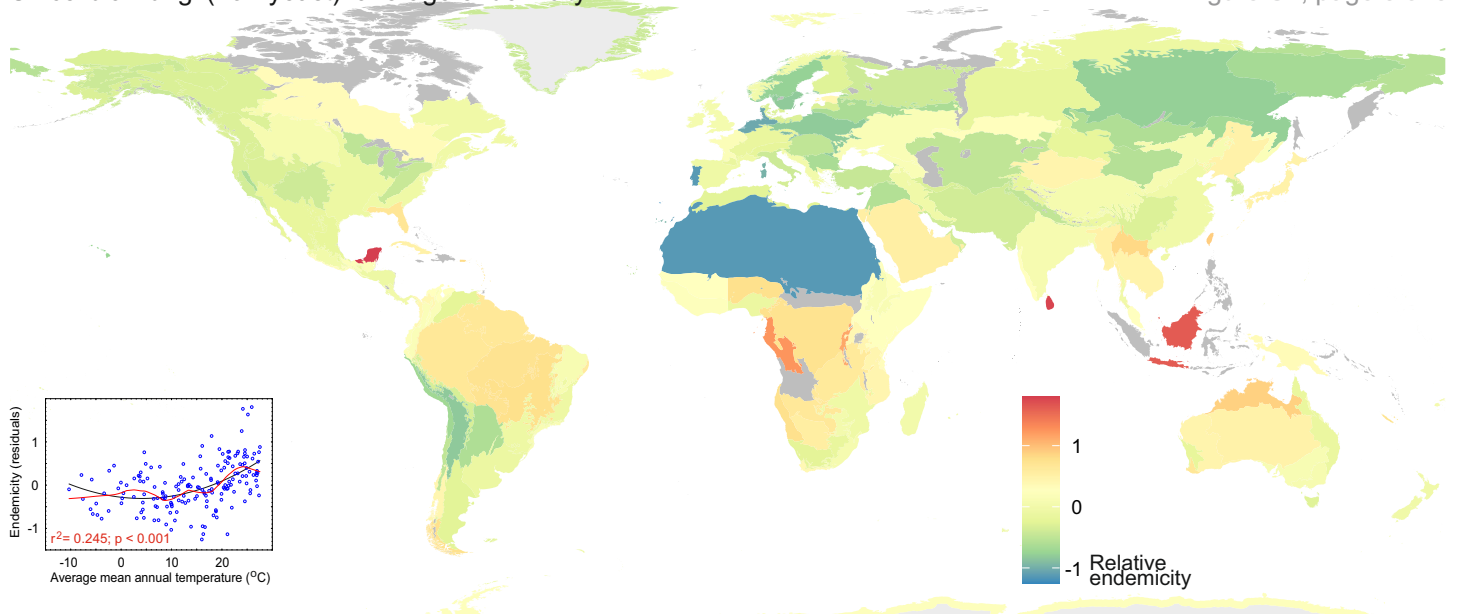


FIGURE S1 Average endemicity of fungal functional groups and five endemicity metrics of all fungi at the ecoregion scale. The insets indicate relationships to the best predictor (black line, best linear or quadratic fit; red line, lowess curve).



Yeasts: average endemicity

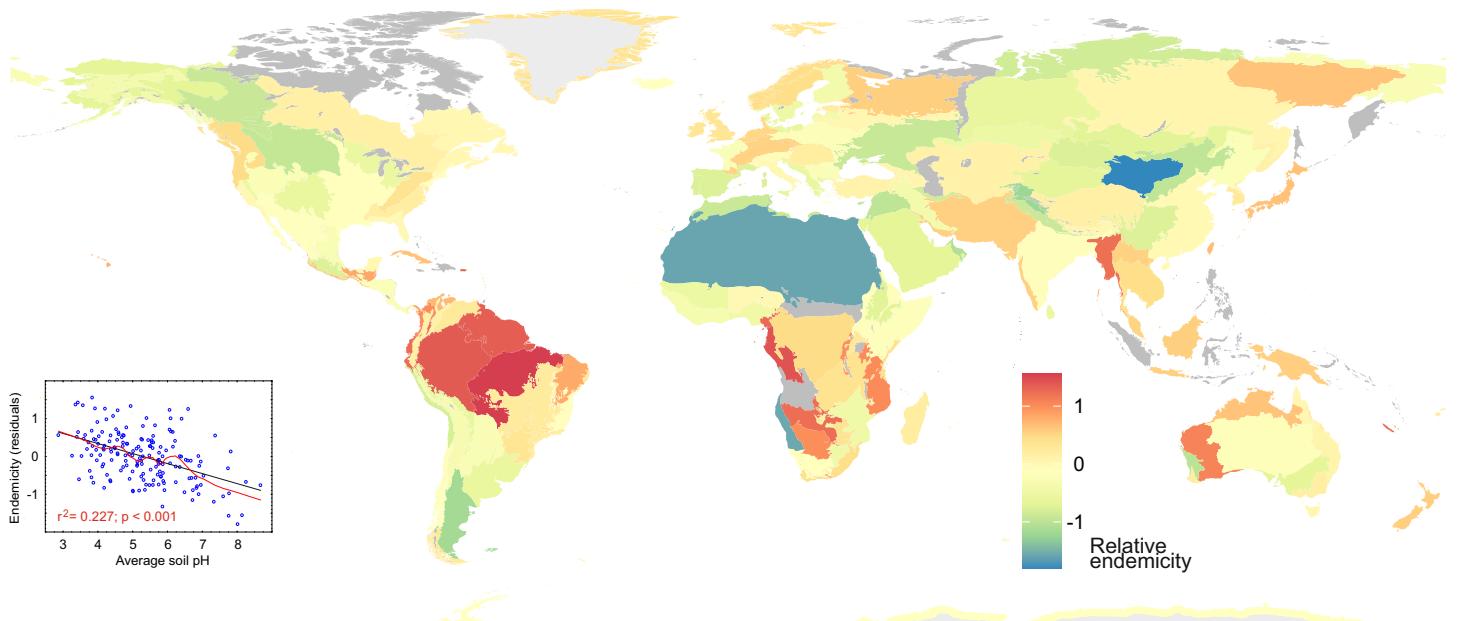
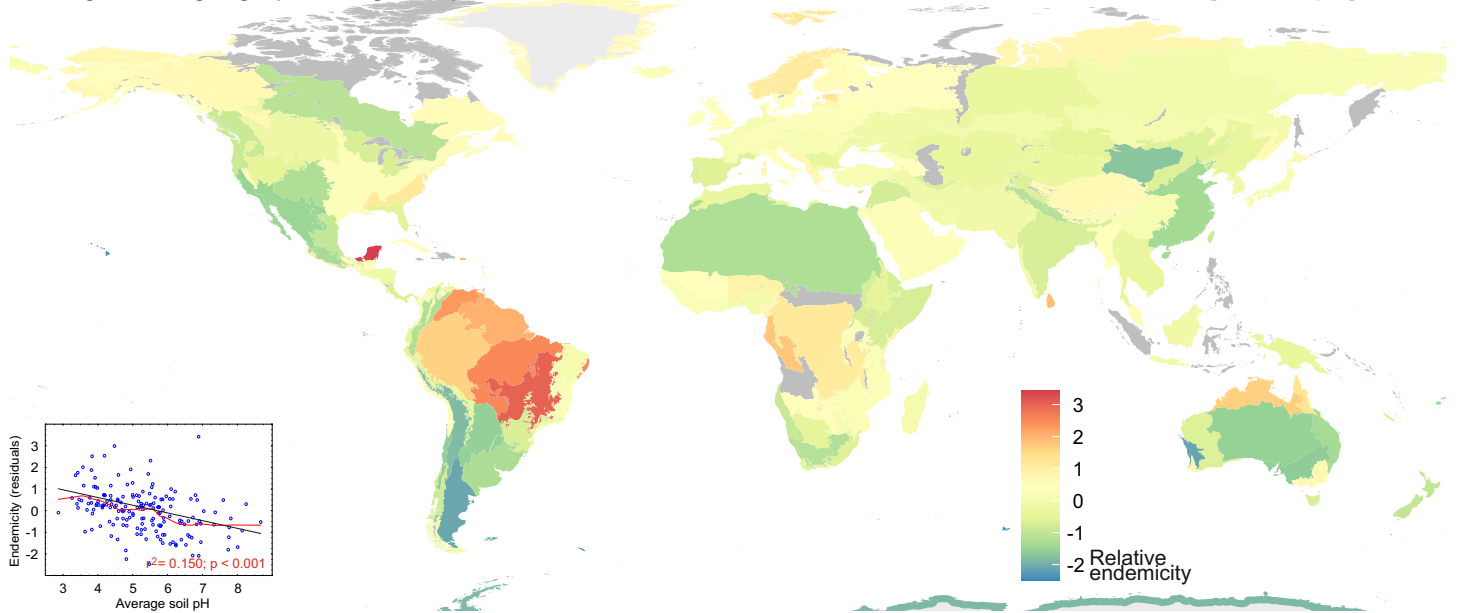
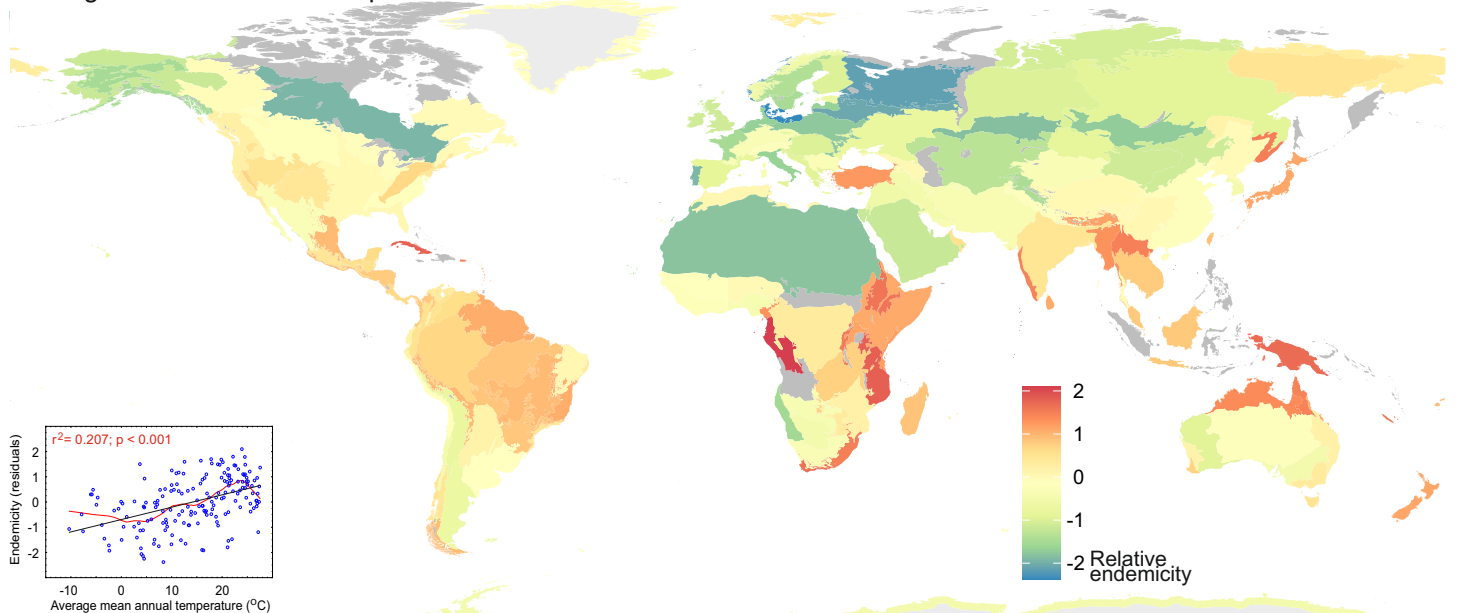


FIGURE S1 Average endemicity of fungal functional groups and five endemicity metrics of all fungi at the ecoregion scale. The insets indicate relationships to the best predictor (black line, best linear or quadratic fit; red line, lowess curve).



All fungi: number of endemic species



All fungi: proportion of endemic species

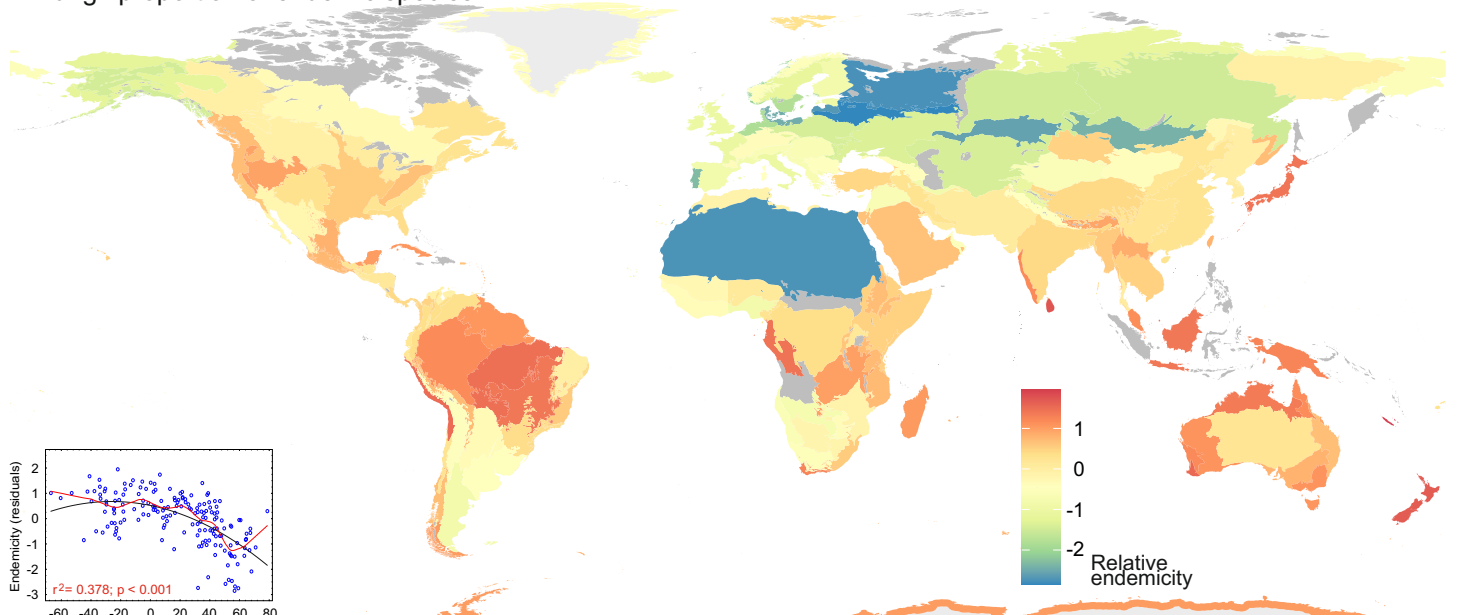
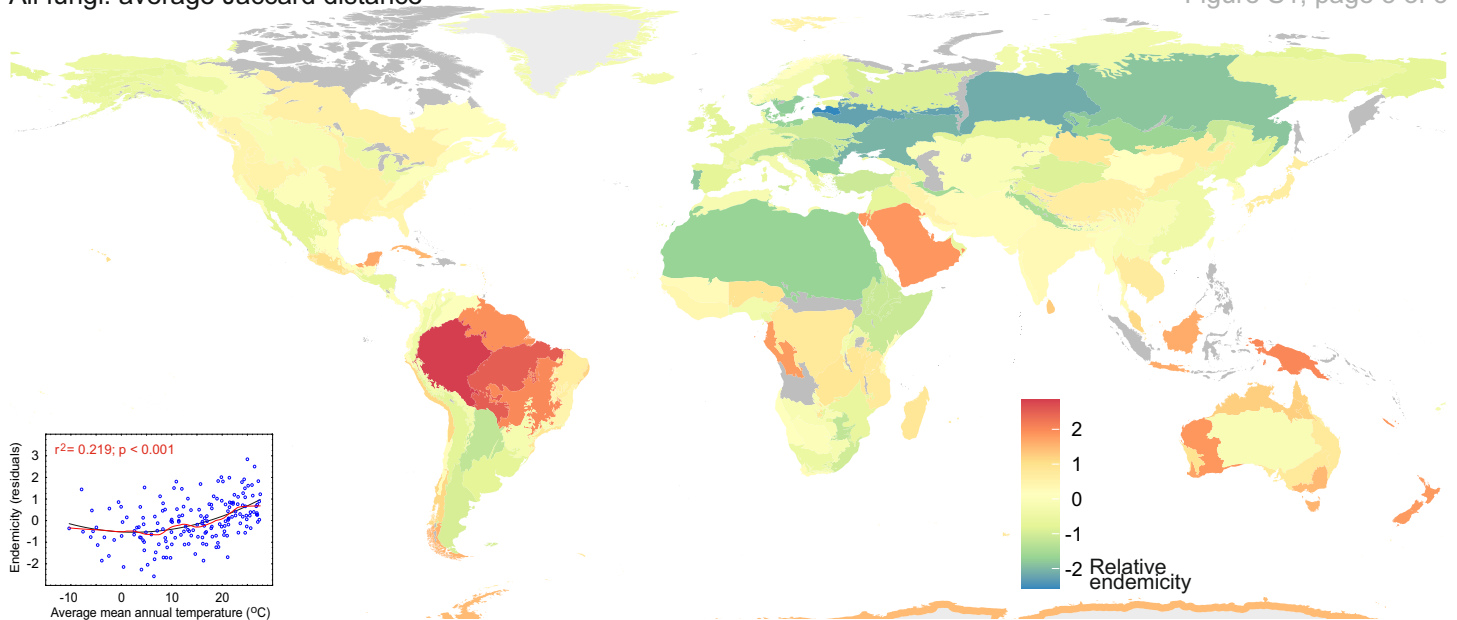
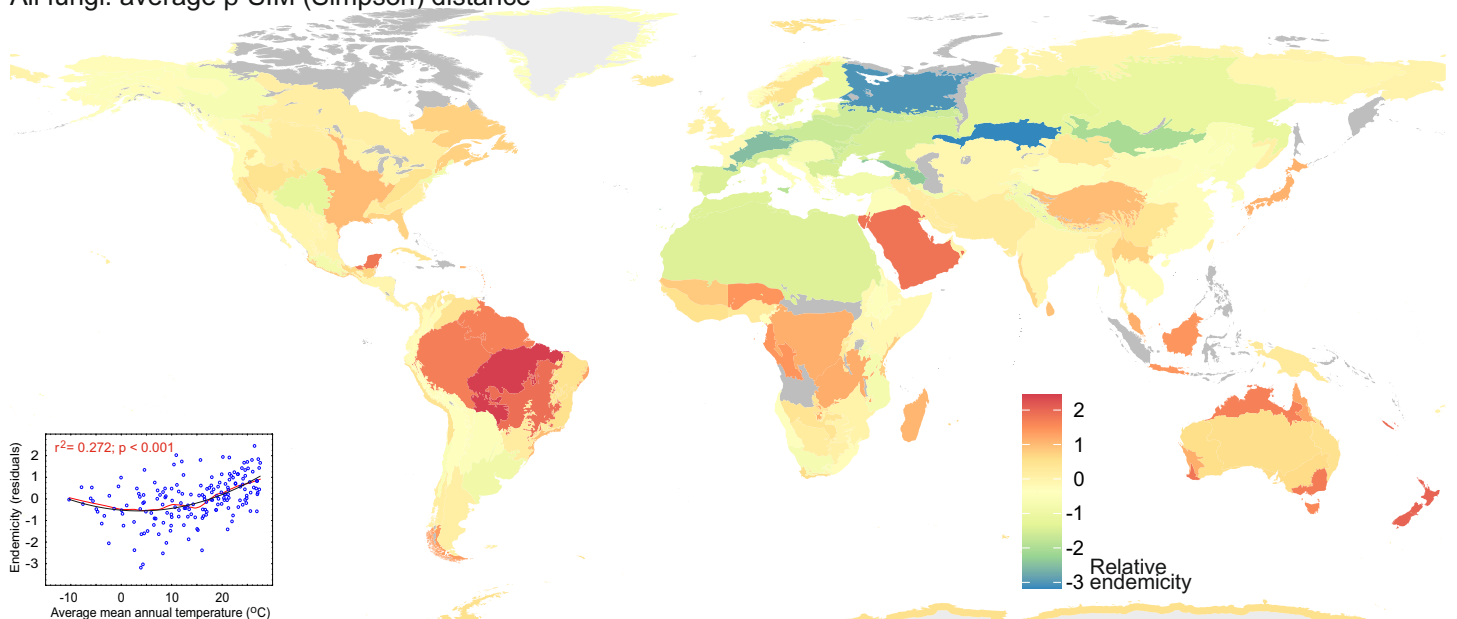
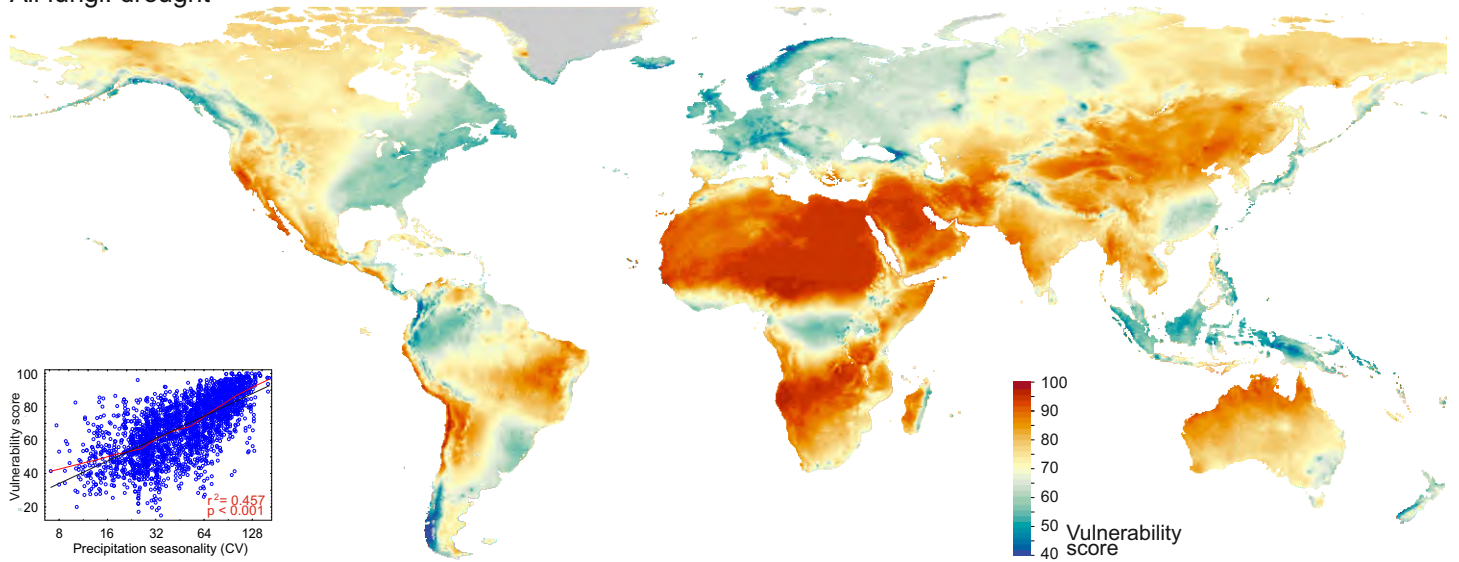


FIGURE S1 Average endemicity of fungal functional groups and five endemicity metrics of all fungi at the ecoregion scale. The insets indicate relationships to the best predictor (black line, best linear or quadratic fit; red line, lowess curve).

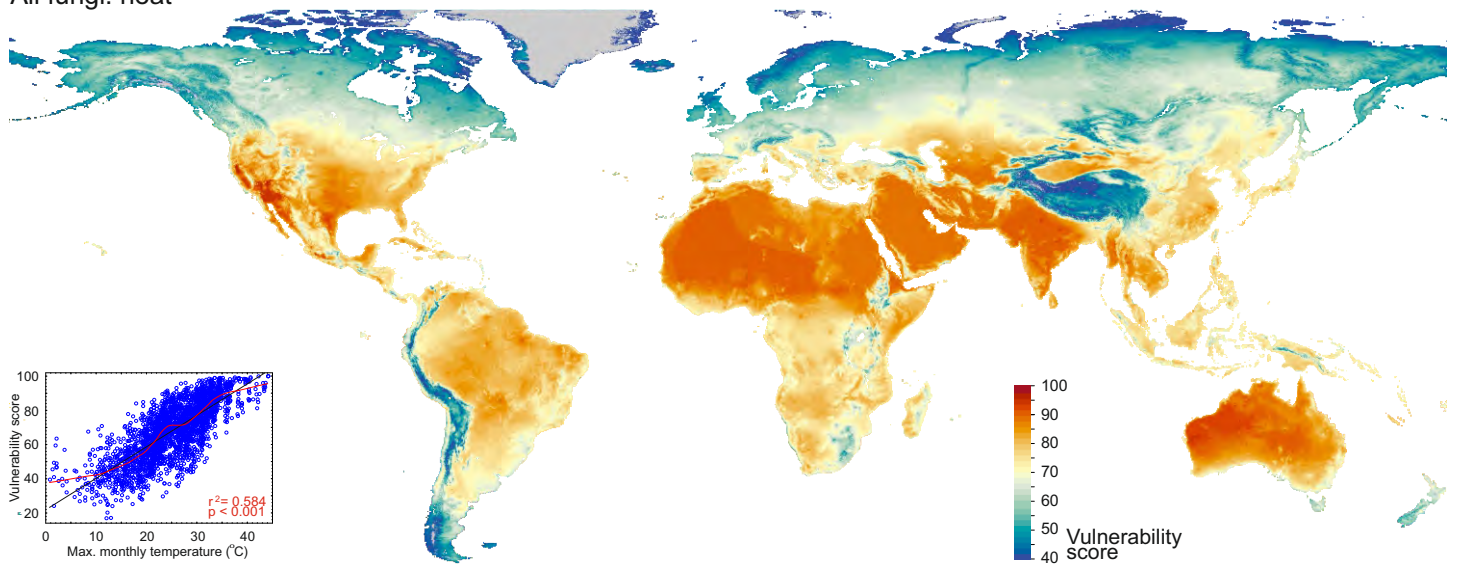
All fungi: average  $\beta$ -SIM (Simpson) distance

**FIGURE S1** Average endemicity of fungal functional groups and five endemicity metrics of all fungi at the ecoregion scale. The insets indicate relationships to the best predictor (black line, best linear or quadratic fit; red line, lowess curve).

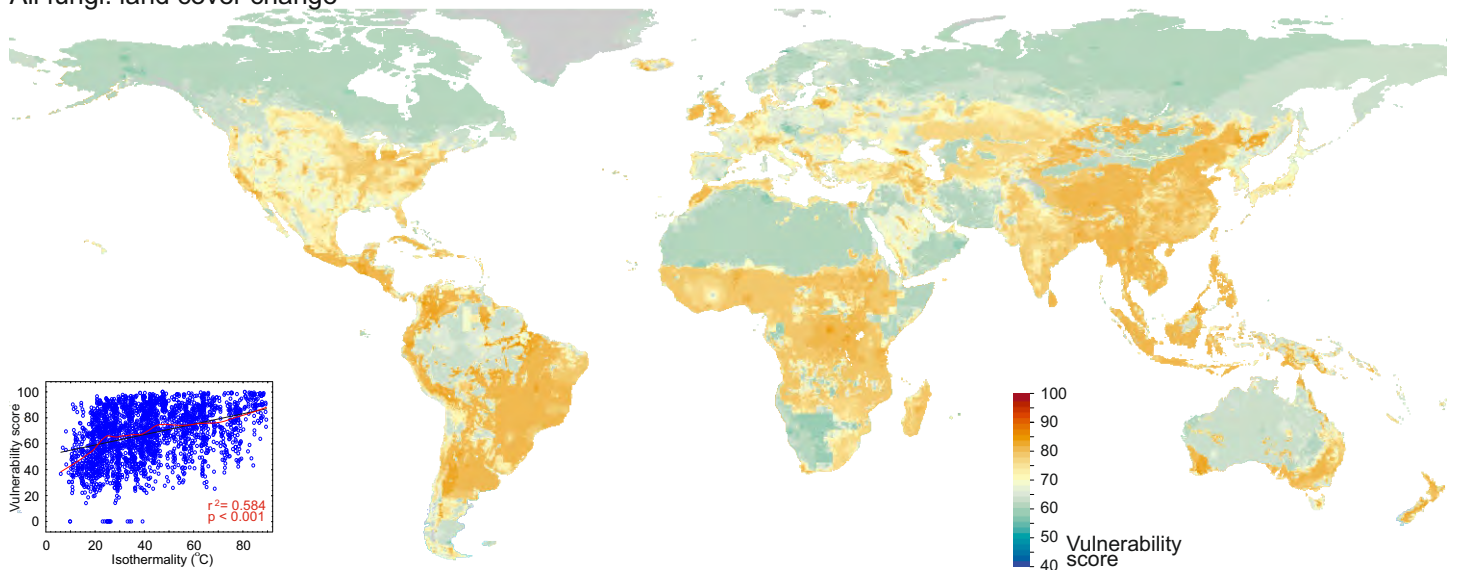
### All fungi: drought



### All fungi: heat

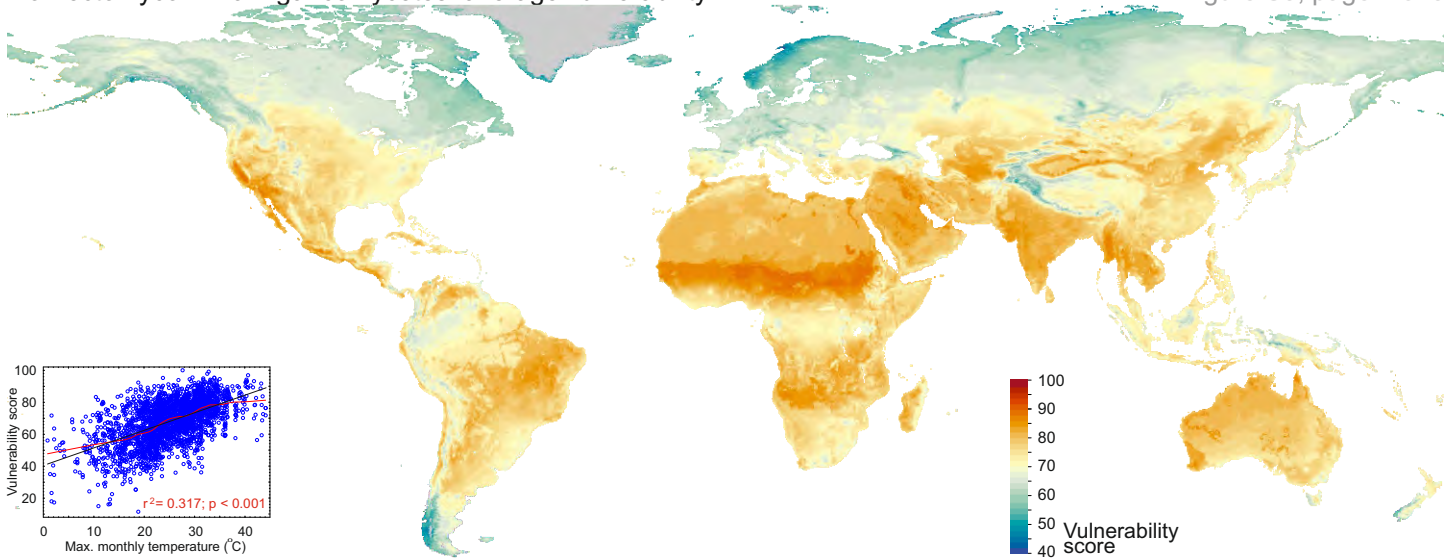


### All fungi: land cover change

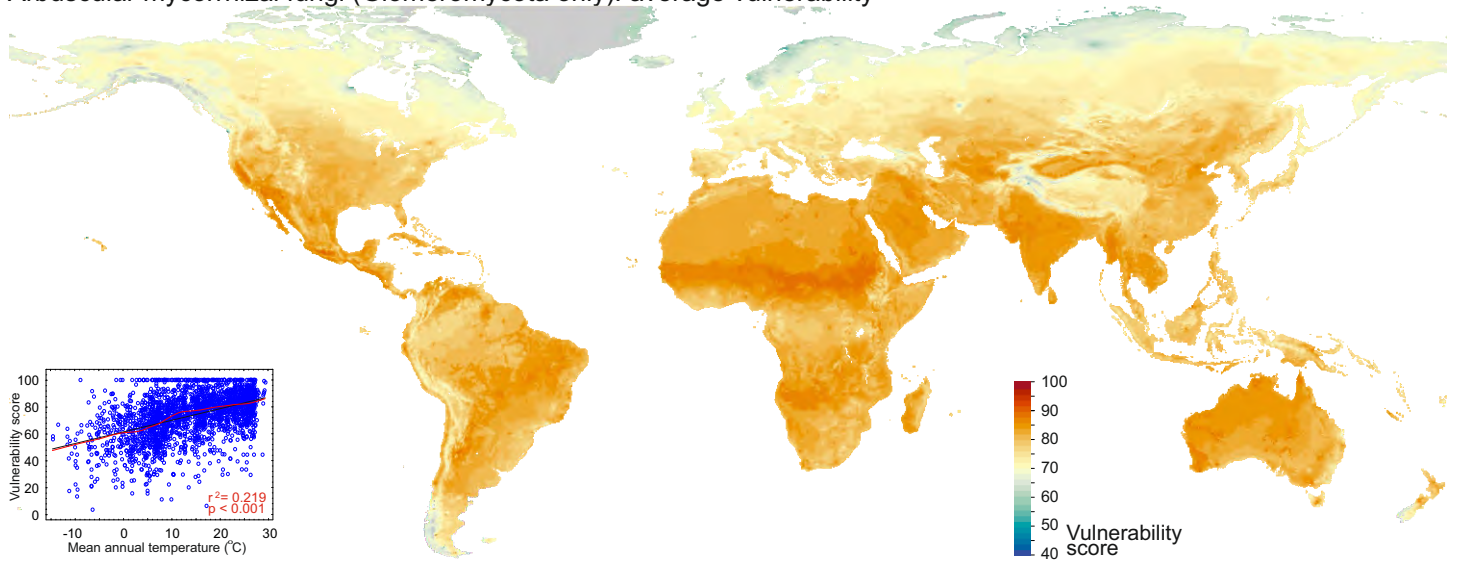


**Figure S2** Vulnerability of all fungi to drought, heat, and land cover change based on cokriging. Insets indicate relationships to the best predictor. Error estimates are given in Figure S4.

Non-ectomycorrhizal Agaricomycetes: average vulnerability



Arbuscular mycorrhizal fungi (Glomeromycota only): average vulnerability



Ectomycorrhizal fungi: average vulnerability

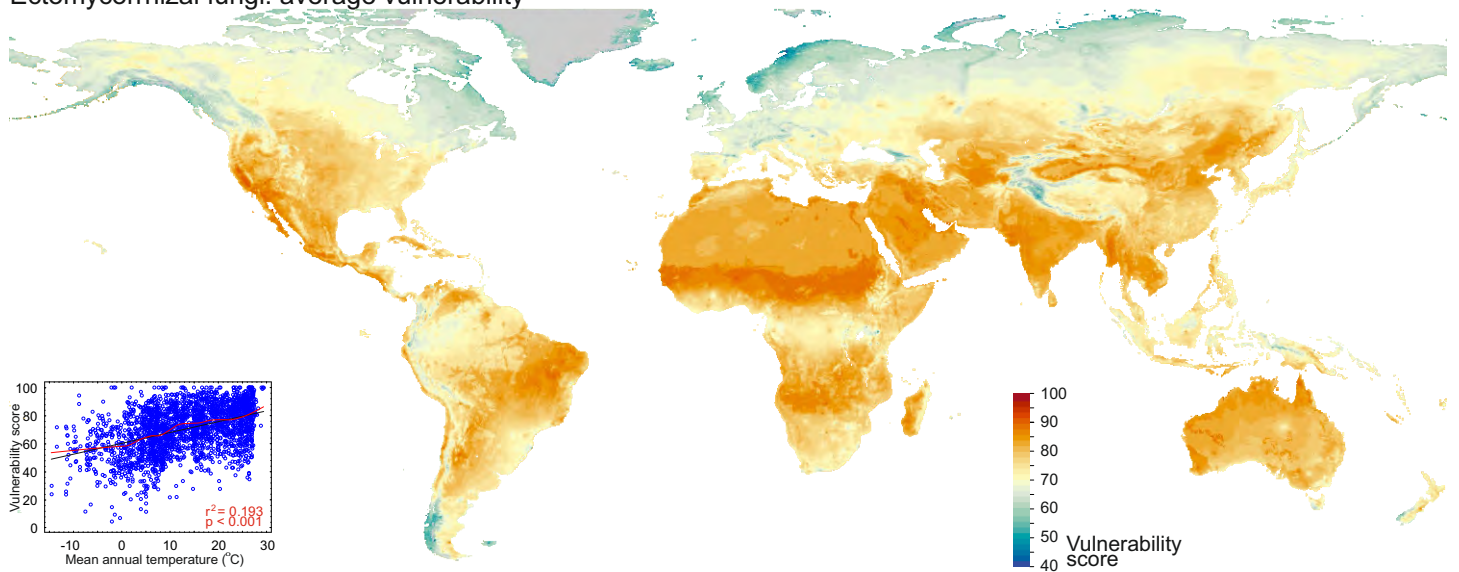
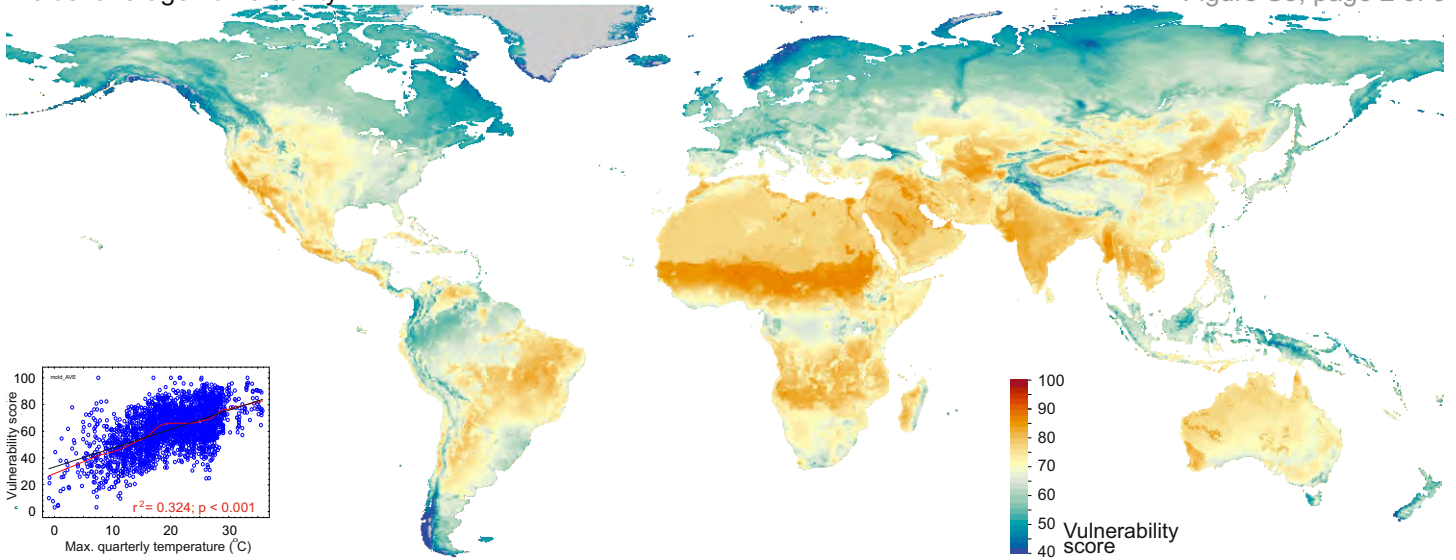
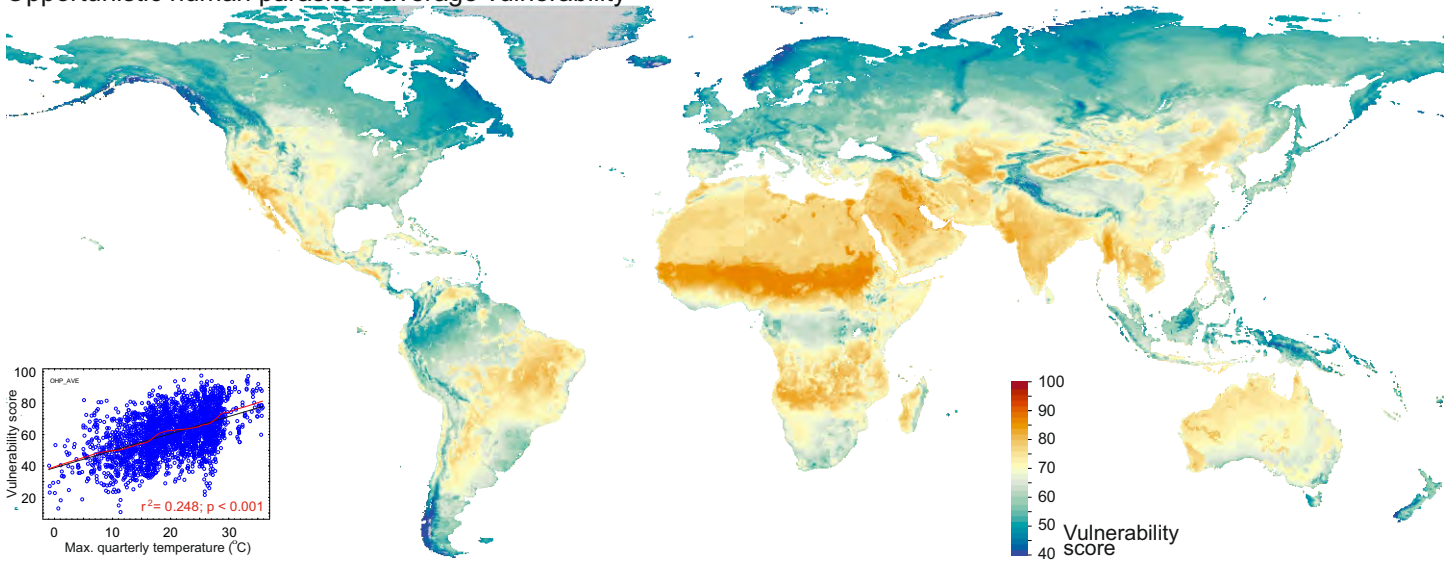


FIGURE S3 Average vulnerability of fungal functional groups to drought, heat, and land cover change based on cokriging. The insets indicate relationships to the best predictor. Error estimates are given in Figure S4.

Molds: average vulnerability



Opportunistic human parasites: average vulnerability



Pathogens: average vulnerability

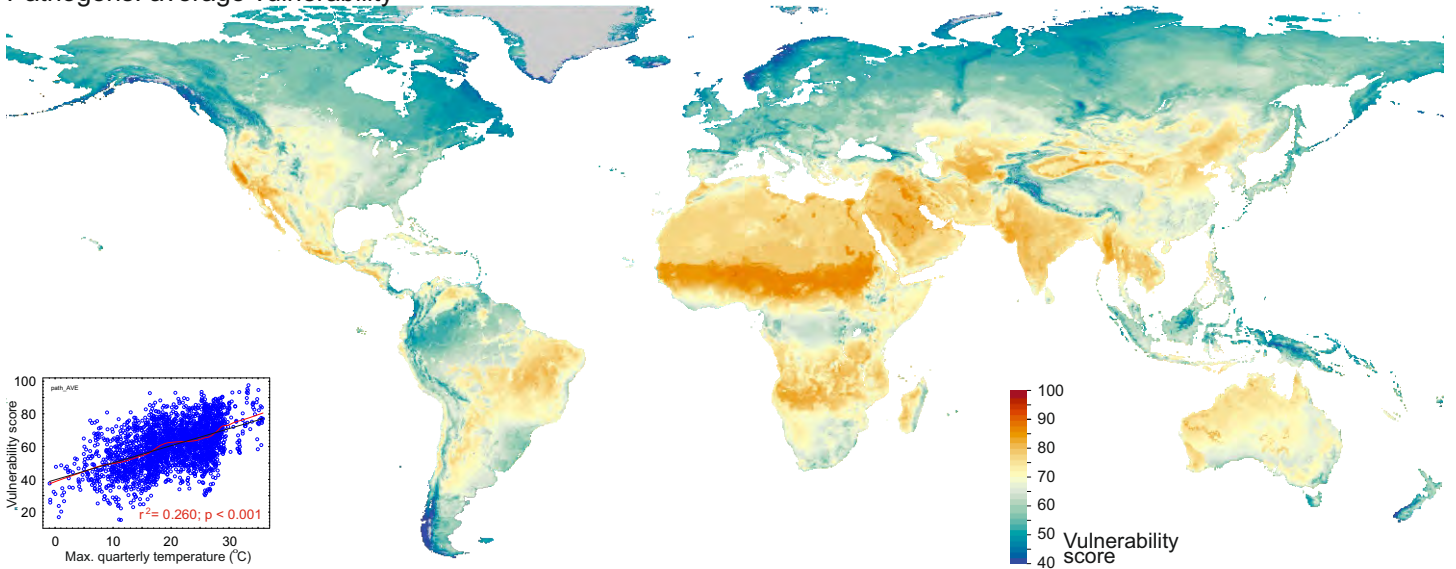
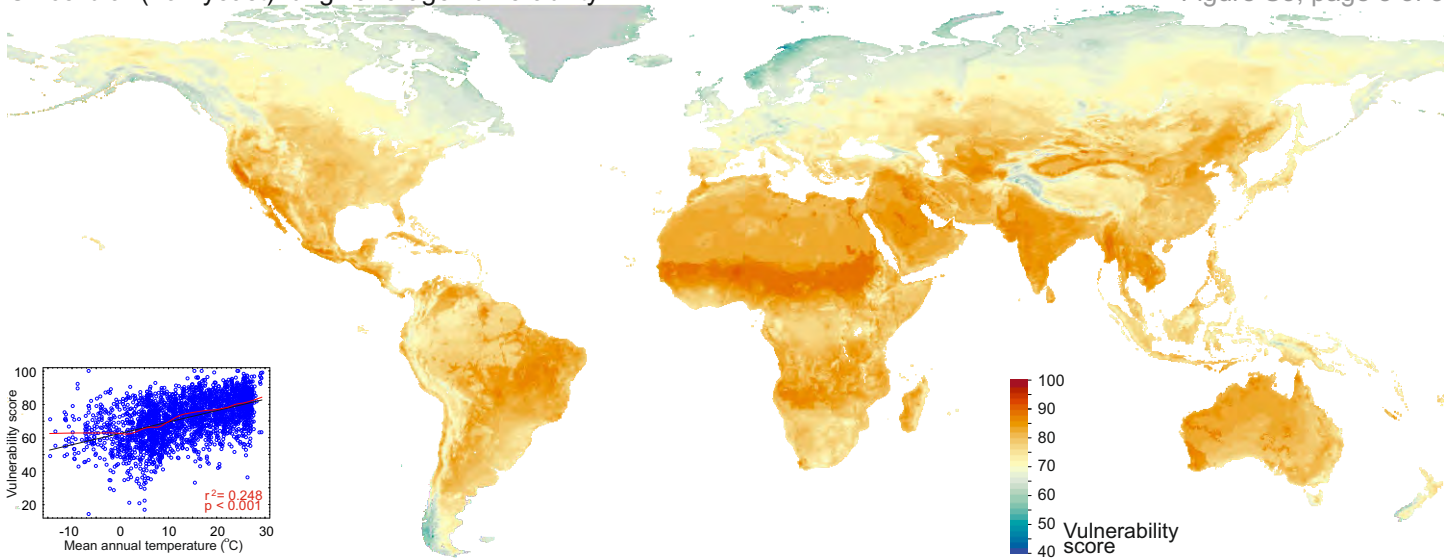


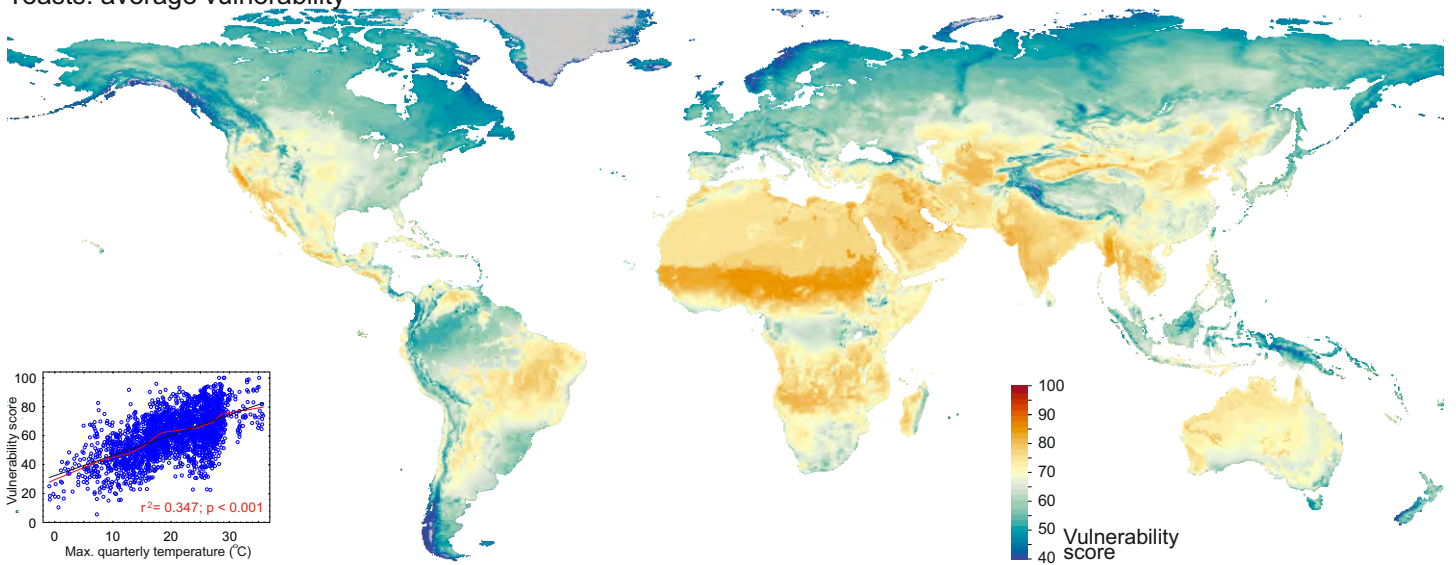
FIGURE S3 Average vulnerability of fungal functional groups to drought, heat, and land cover change based on cokriging. The insets indicate relationships to the best predictor. Error estimates are given in Figure S4.



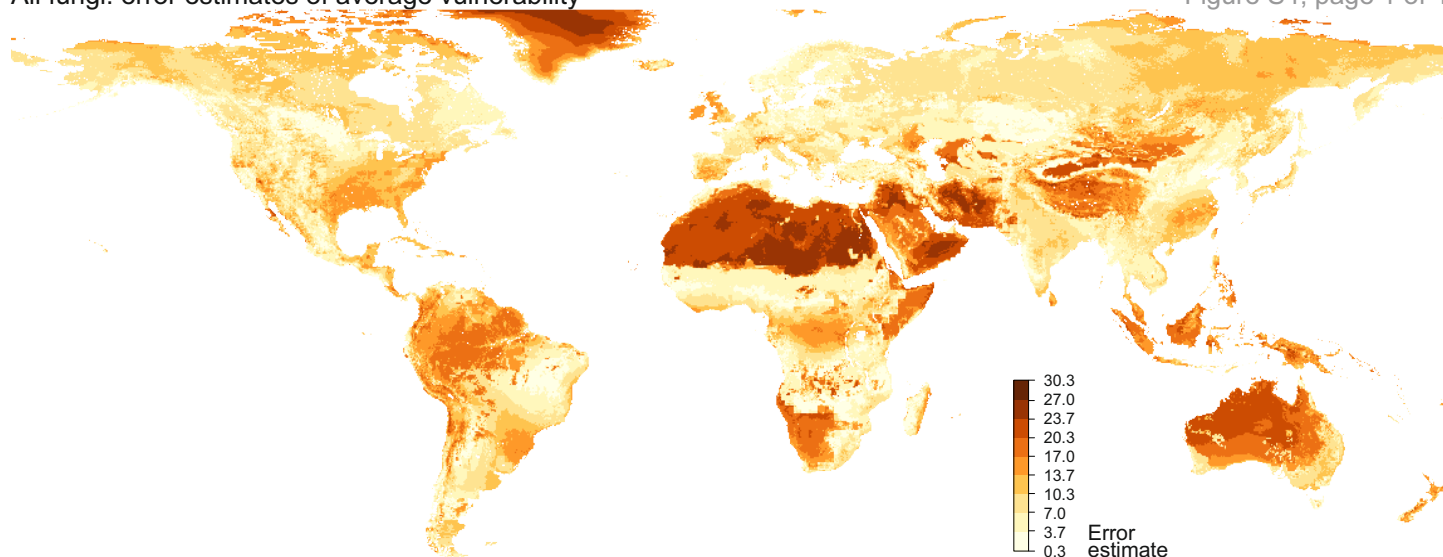
Unicellular (non-yeast) fungi: average vulnerability



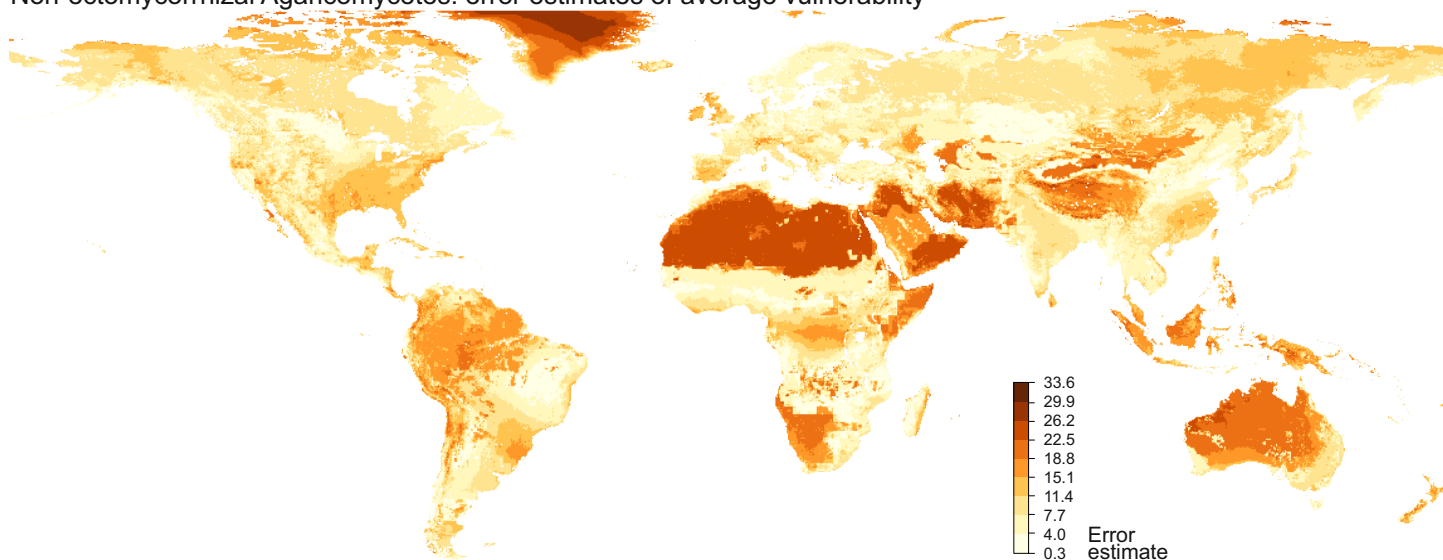
Yeasts: average vulnerability



**FIGURE S3** Average vulnerability of fungal functional groups to drought, heat, and land cover change based on cokriging. The insets indicate relationships to the best predictor. Error estimates are given in Figure S4.



Non-ectomycorrhizal Agaricomycetes: error estimates of average vulnerability



Arbuscular mycorrhizal fungi (Glomeromycota only): error estimates of average vulnerability

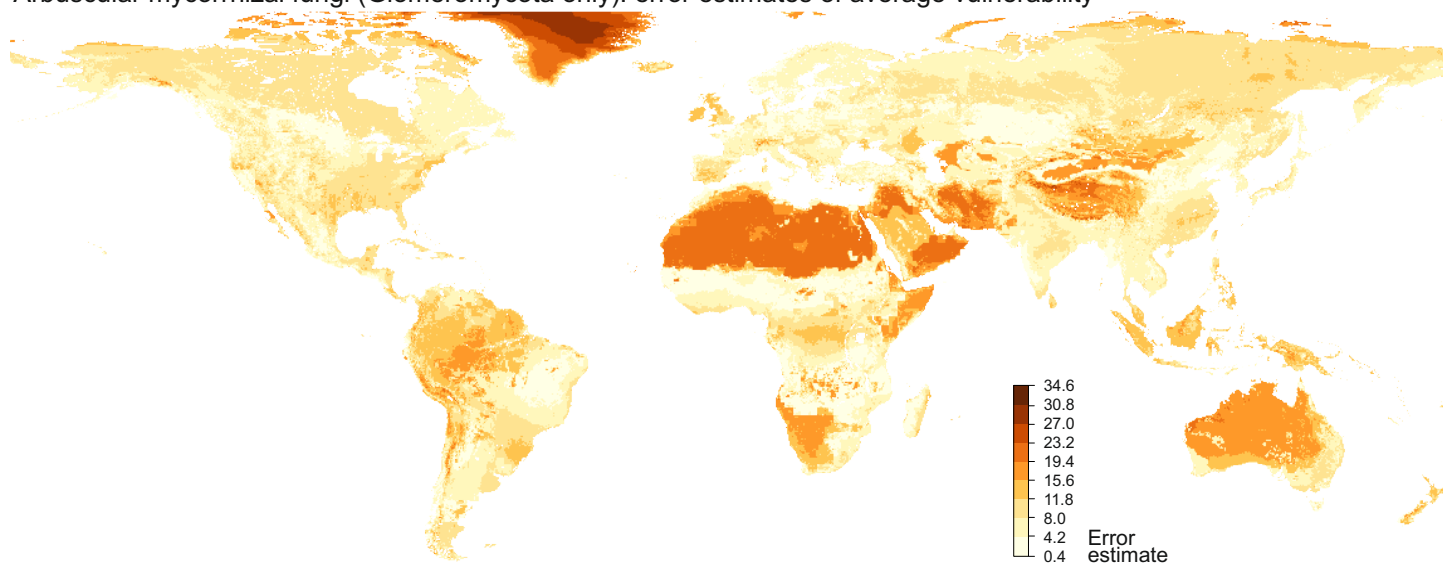
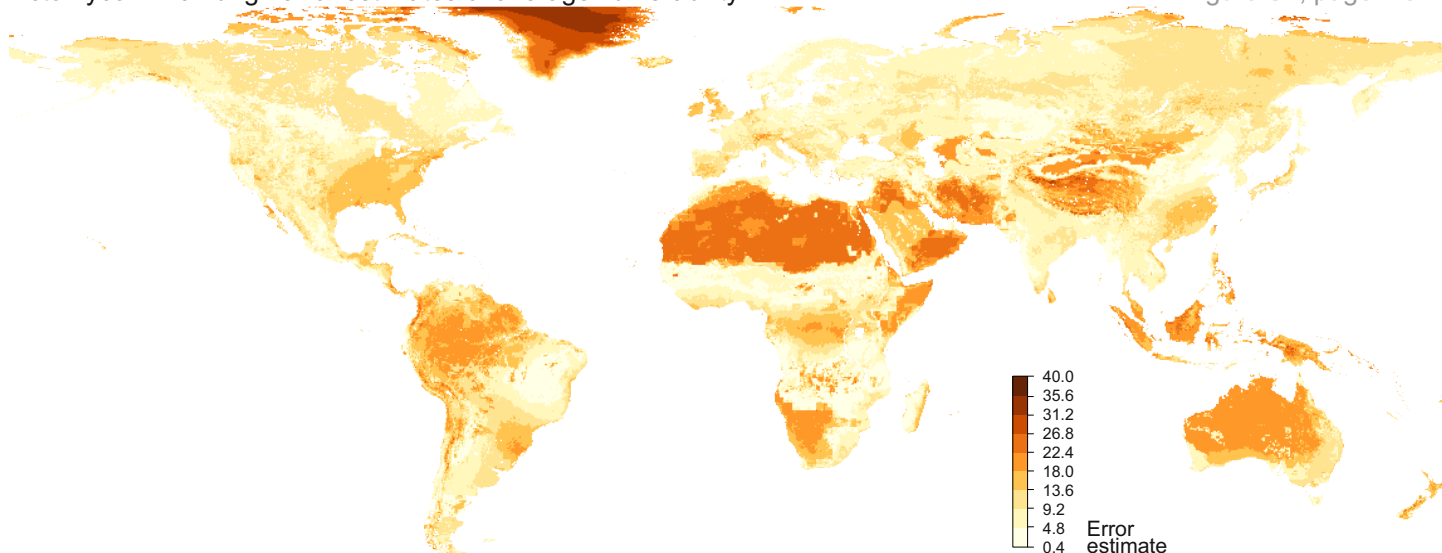
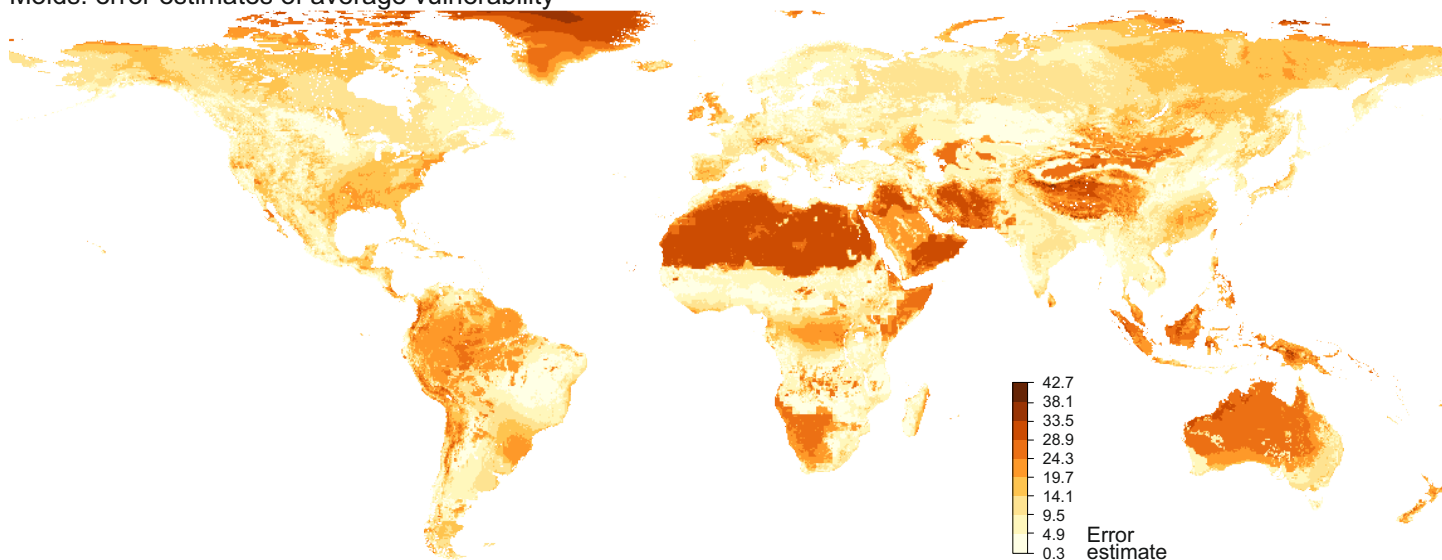


FIGURE S4 Error estimates of vulnerability of all fungi and fungal functional groups.



Molds: error estimates of average vulnerability



Opportunistic human parasites: error estimates of average vulnerability

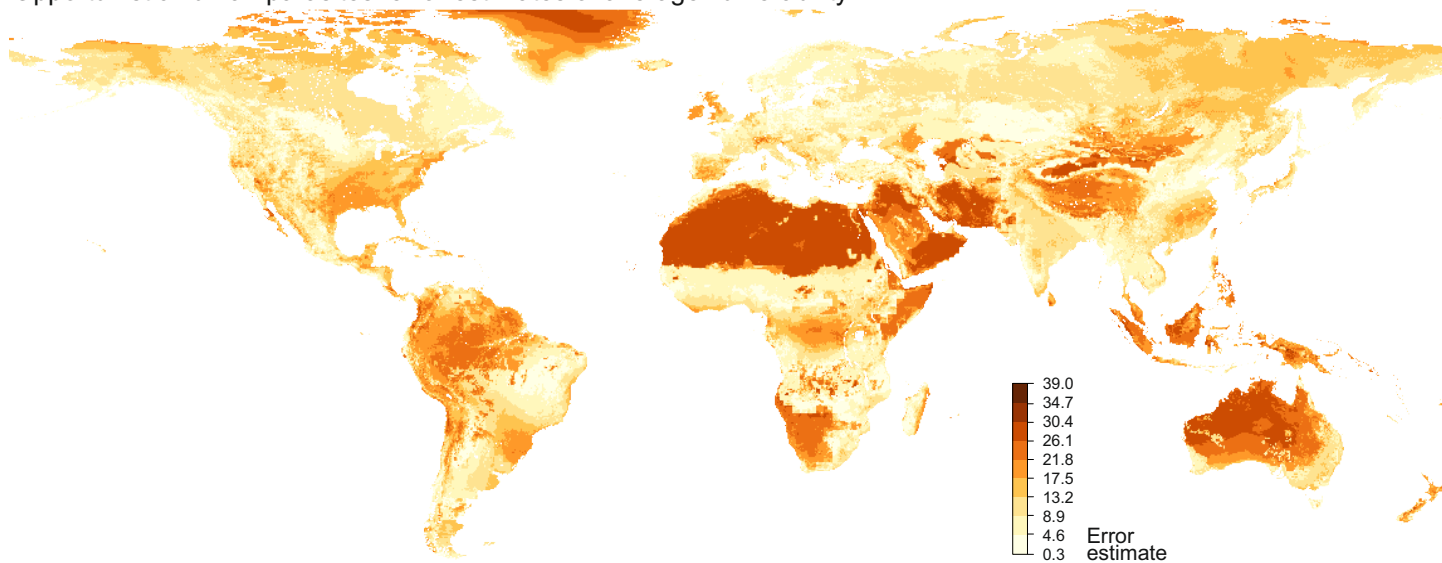
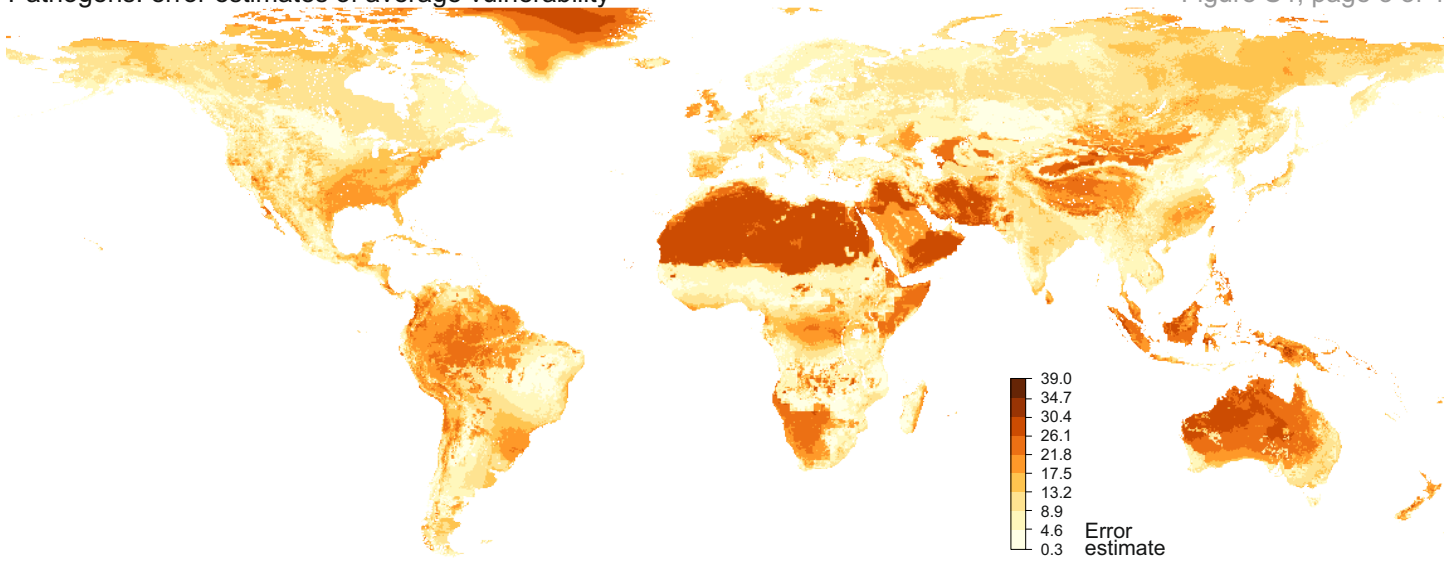
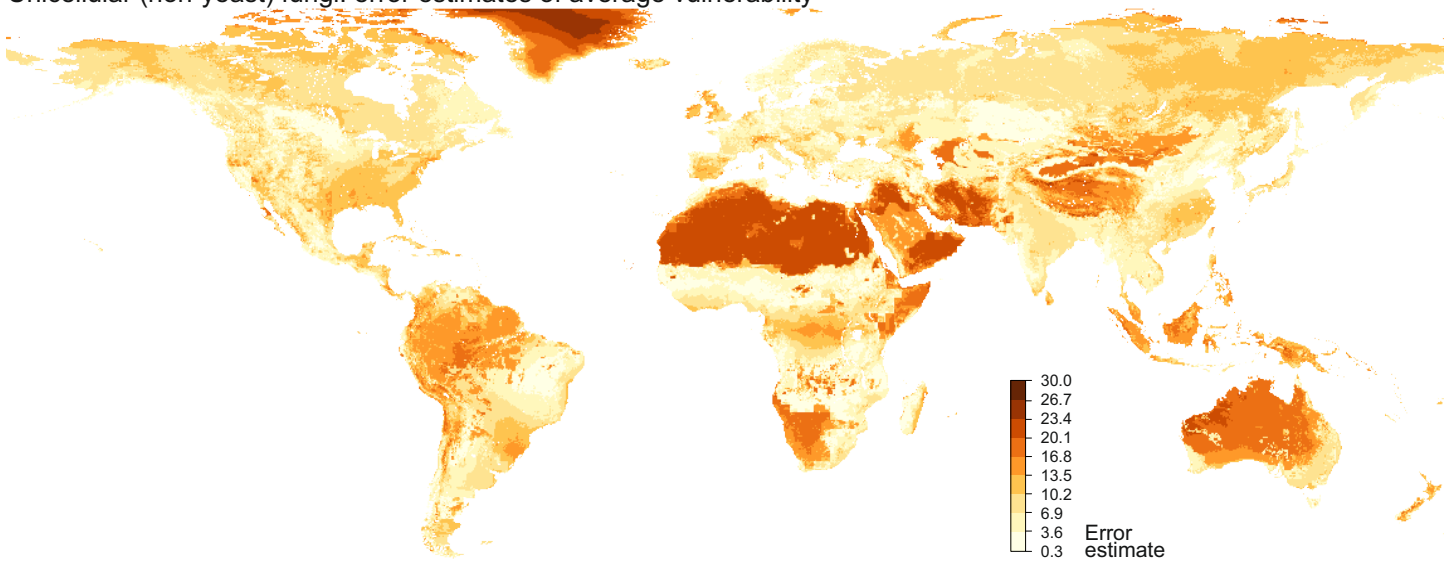


FIGURE S4 Error estimates of vulnerability of all fungi and fungal functional groups.



Unicellular (non-yeast) fungi: error estimates of average vulnerability



Yeasts: error estimates of average vulnerability

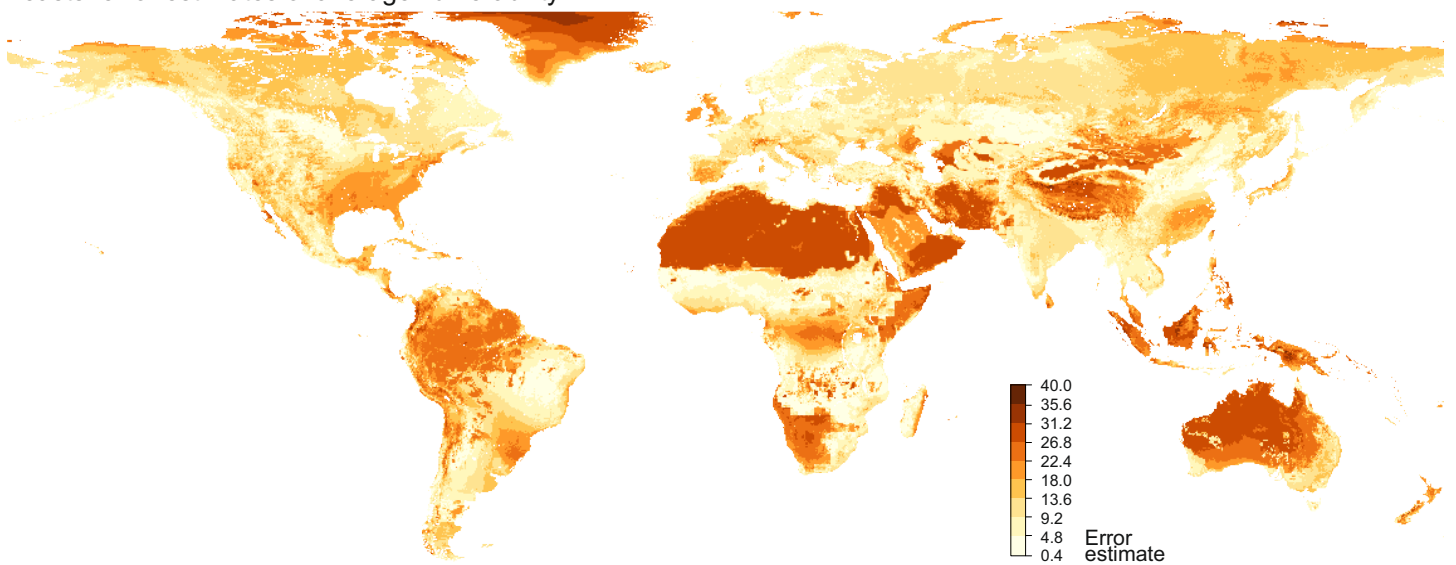
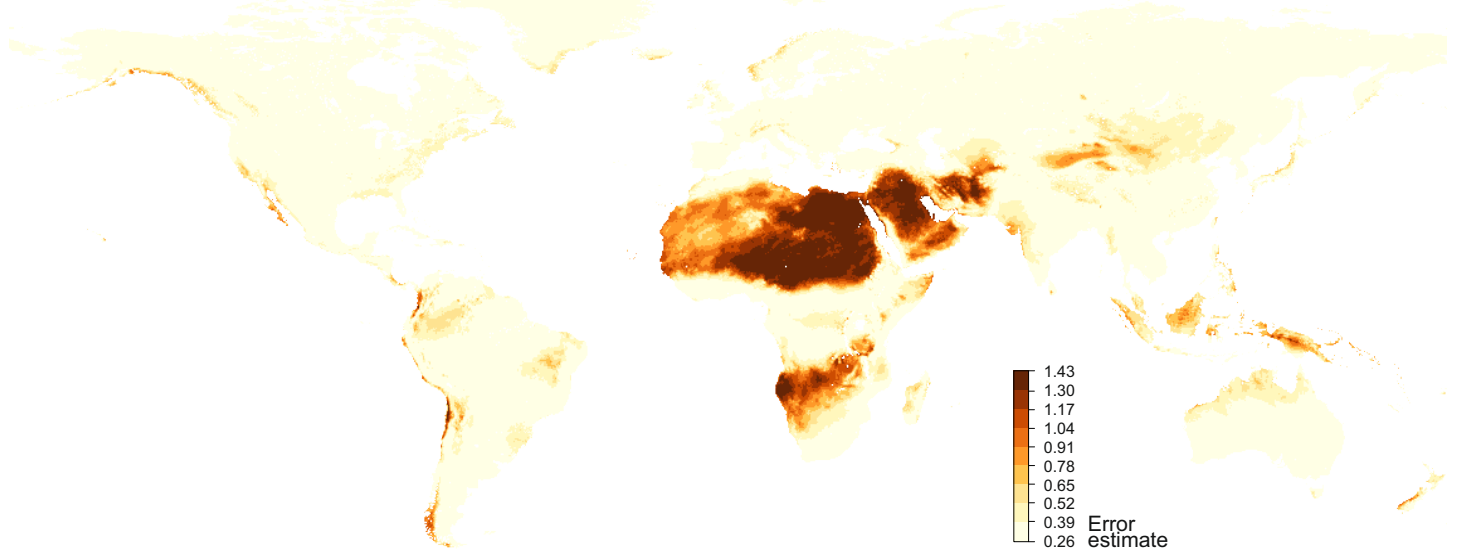
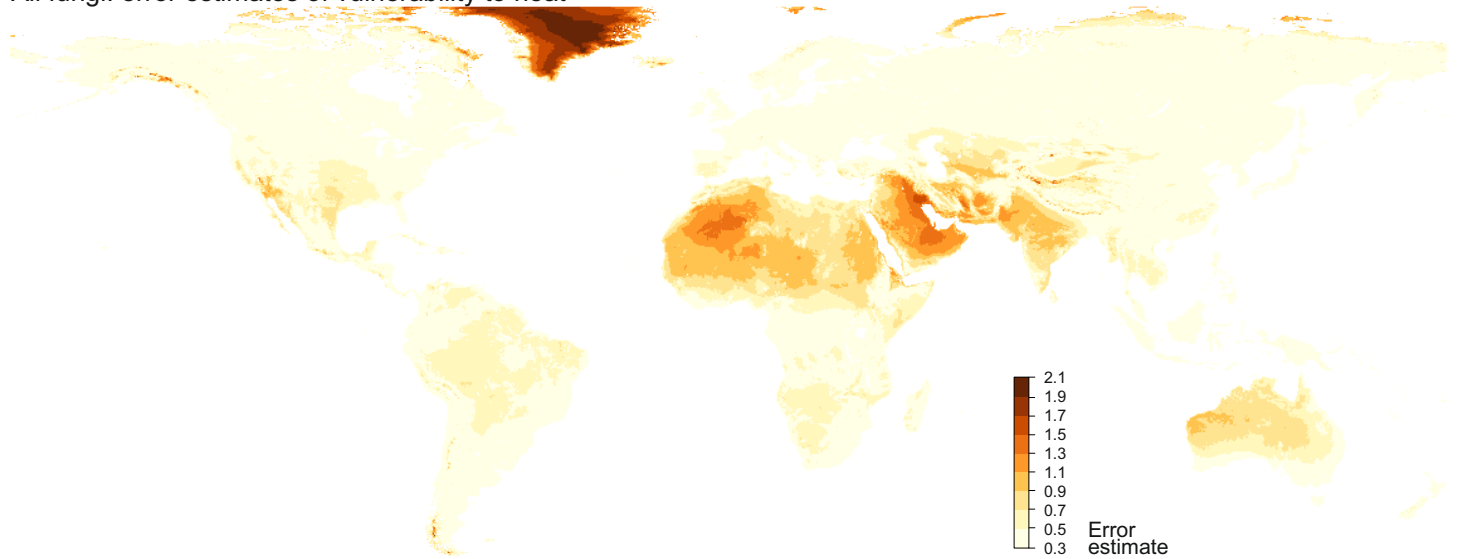


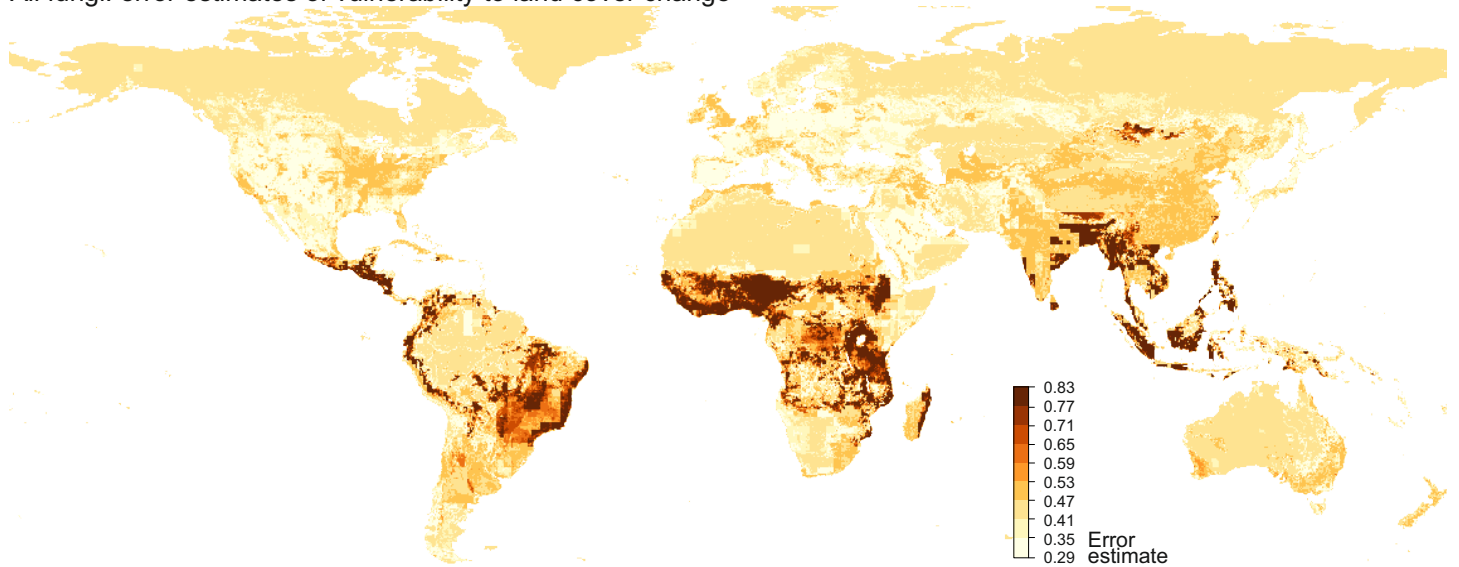
FIGURE S4 Error estimates of vulnerability of all fungi and fungal functional groups.



All fungi: error estimates of vulnerability to heat



All fungi: error estimates of vulnerability to land cover change



**FIGURE S4** Error estimates of vulnerability of all fungi and fungal functional groups.