Supporting information for:

Drivers of the fungal spore bioaerosol budget: observational analysis and global modelling

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Table S1: global emissions, burden and lifetime for the population and statistical model for two sensitivity runs

Emission scheme	Simulation	Emission (Tg year-1)	Burden (Gg)	Lifetime (days)
Population model	Dilution factor = 0.3	2.7	15.8	2.1
Statistical model	Dilution factor = 0.3	2.9	12.0	1.4
Population model	Rainout efficieny = 0.0	3.4	25.6	2.9
Statistical model	Rainout efficieny = 0.0	3.7	20.0	2.1

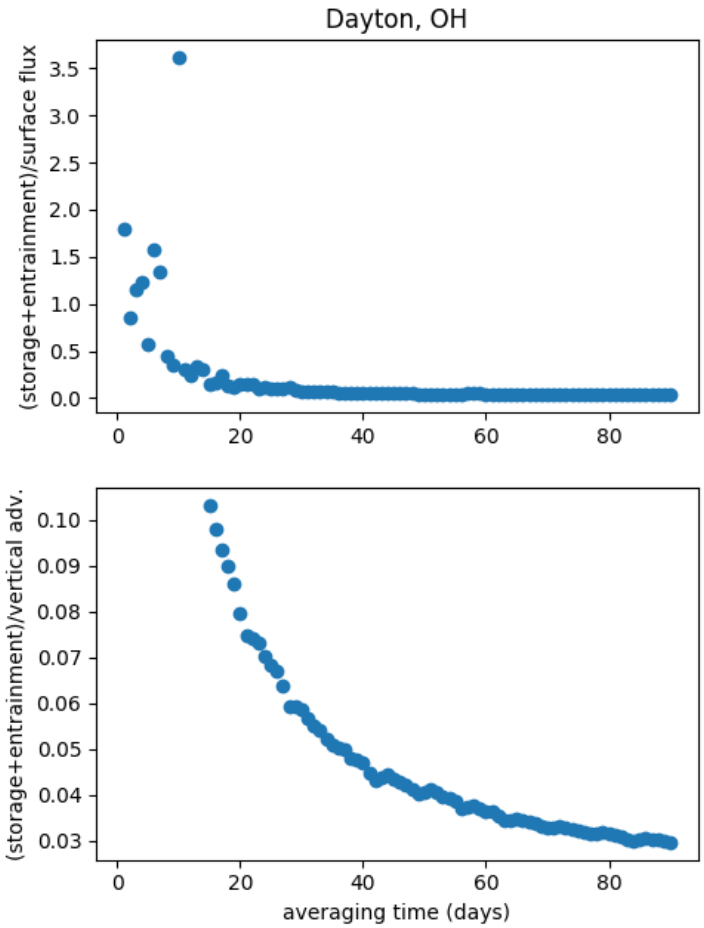

Figure S1: ratio of storage+entrainment vs. the net surface flux and vertical advection for different averaging times

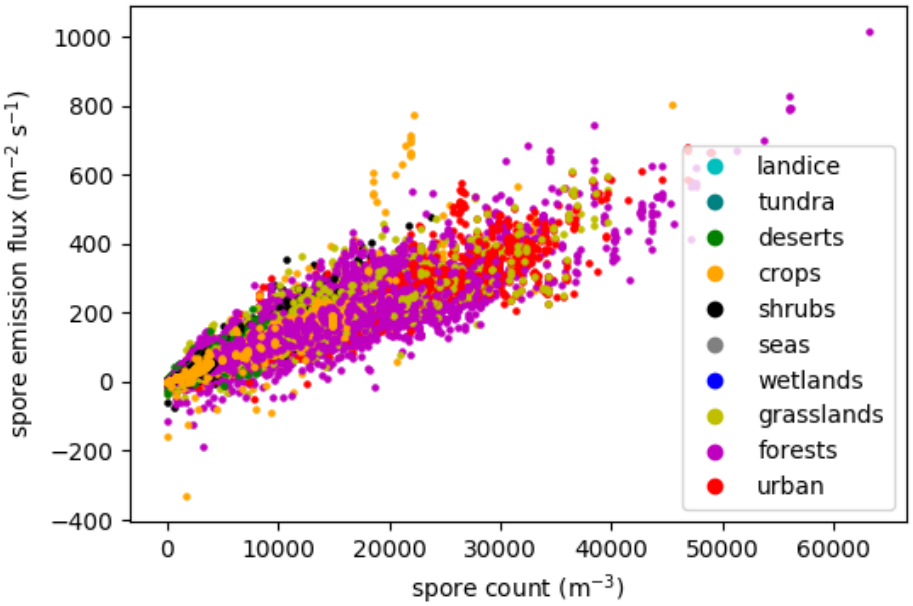

Figure S2: relationship between spore counts and derived emissions for different land use types. Each point represents a daily spore count at a single AAAAI station

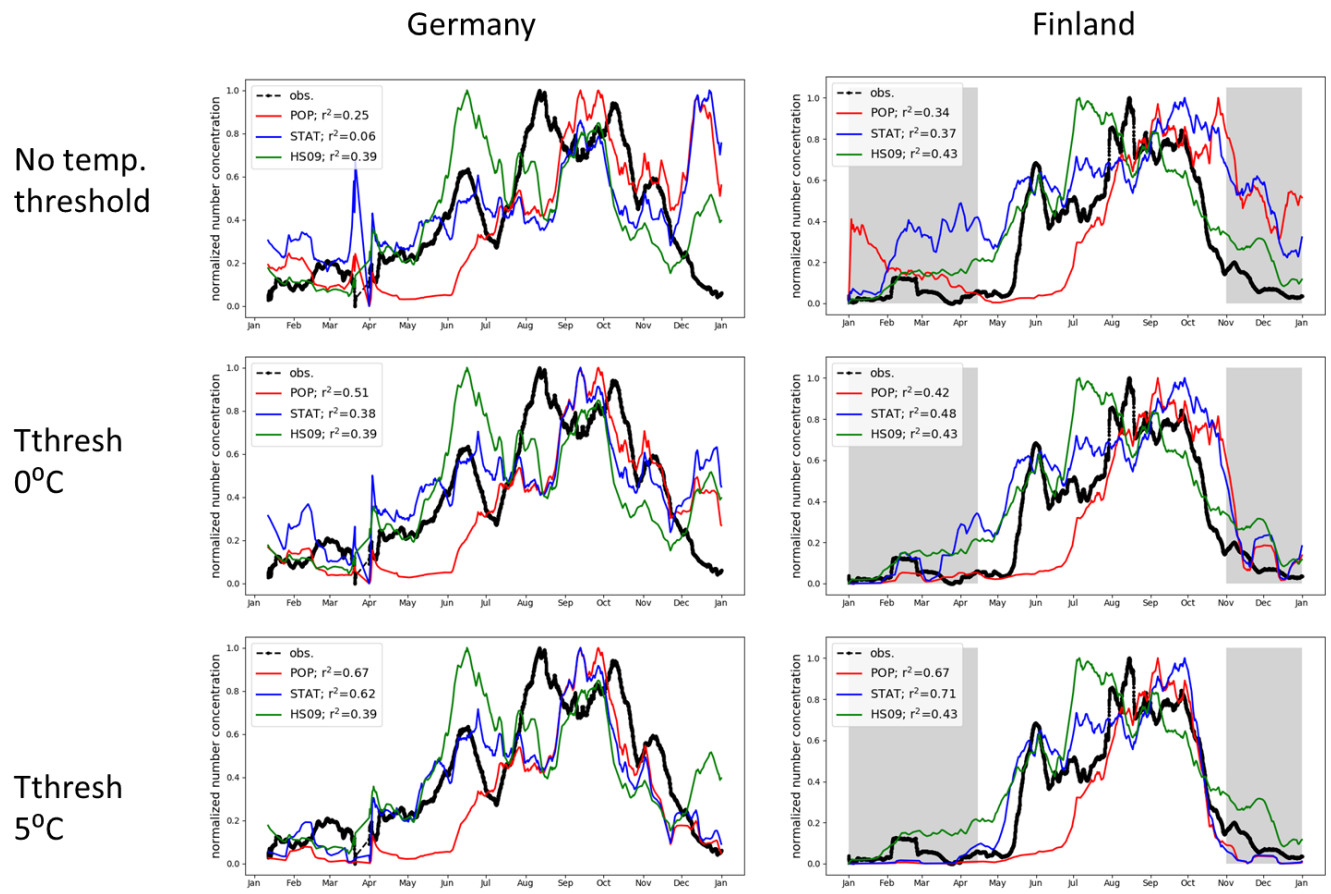

Figure S3: sensitivity to chosen temperature threshold of modeled spore concentrations at the sites in Germany and Finland. No temperature threshold (top), threshold of 0°C (middle) and threshold of 5°C (bottom)