Supplementary materials: Carbon footprint of academic air travel: a case study in Switzerland

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Table S1. Used DEFRA metrics to calculate CO₂e emission over the studied time period. Note that the DEFRA coefficient of year N is determined by the emissions of the aviation industry of year N, and is applied to trips executed in year N+1.

Flight type	Service class	CO2e intensity (kg/km)		
		2013	2014	2015
Domestic (<785 km)	Average	0.172	0.155	0.158
Short-haul	Economy	0.097	0.084	0.088
international (785-3700	Business	0.145	0.126	0.132
km)	First	0.145	0.111	0.096
Long-haul	Economy	0.087	0.080	0.073
international (>3700	Business	0.253	0.231	0.213
km)	First	0.350	0.318	0.294

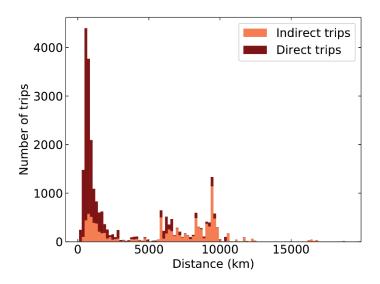


Figure S1. Number of direct (brown) and indirect trips (coral) as a function of distance between the departure and destination airport. Most trips that were performed are intracontinental. The intercontinental trips are mainly indirect, while the intracontinental ones are mainly direct.

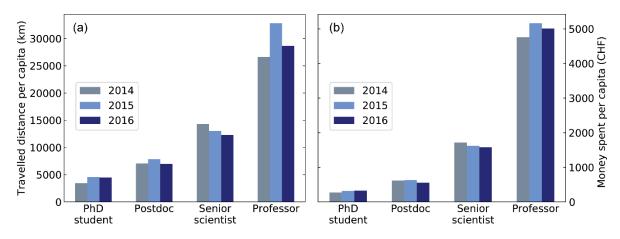


Figure S2. (a) Average per capita annual distance travelled by a PhD student, Postdoc, senior scientist and professor at EPFL. (b) Annual amount of money spent per capita on air travel for the same categories. These quantities also show a clear increase with seniority.

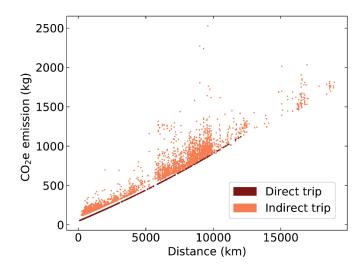


Figure S3. Carbon footprint of direct (brown) and indirect (coral) trips. Business and first class trips were replaced by their corresponding economy class trip to exclude the influence of service class. We see that most indirect trips cause much higher emissions compared to direct trips over the same distance.