Environmental Science: Atmospheres



CORRECTION

View Article Online



Cite this: Environ. Sci.: Atmos., 2022, 2,

Correction: Impacts of a near-future supersonic aircraft fleet on atmospheric composition and climate

Sebastian D. Eastham,*ab Thibaud Fritz,a Inés Sanz-Morère,a Prakash Prashanth,a Florian Allroggen, ab Ronald G. Prinn, bc Raymond L. Spethab and Steven R. H. Barrettab

DOI: 10.1039/d2ea90009b

rsc.li/esatmospheres

Correction for 'Impacts of a near-future supersonic aircraft fleet on atmospheric composition and climate' by Sebastian D. Eastham et al., Environ. Sci.: Atmos., 2022, https://doi.org/10.1039/D1EA00081K.

The authors regret that the units for NO_x in Table 1 were shown incorrectly in the original article. The corrected version of Table 1 is as shown below

Table 1 Average emissions indices and key information for each fleet. All units are g per kg of fuel burn. Emissions of NO_x are given on an NO_2 mass basis. Emissions of VOCs are given on a CH_4 mass basis. Sulfur emissions are split between SO_2 and H_2SO_4 as described in the main text. Subsonic aircraft BC emissions are calculated for each flight using the FOX method.³⁴ * indicates that a single fleet-wide emissions index is used during all flight phases

	Subsonic	SST 1.6	SST 2.2
NO _x	15	8.8	19
CO	8.3	6.3	15
VOCs	1.0	1.6	10
BC	0.082	0.030*	0.030*
OC	0.020	0.030*	0.030*
Sulfur	0.6*	0.6*	0.6*
H_2SO_4	0.036*	0.036*	0.036*
H ₂ O	1231*	1231*	1231*
Fuel (kg) per seat km	0.023	0.12	0.20
Total annual fuel burn (Tg)	426	19.3	14.9
Total annual NO_x emitted (Tg)	6.5	0.17	0.28
Cruise altitude (km)	9–12	15-17	18-20
Cruise Mach no.	<1	1.6	2.2

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

Laboratory for Aviation and the Environment, Department of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, MA 02139, USA. E-mail:

^bJoint Program for the Science and Policy of Global Change, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, USA