We would like to thank the editor for their comment and decision.

- Our point-by-point responses are in *blue*

Editor:

- I am happy to accept your paper subject to one technical adaptation:
  L362
  This increases by a factor of 10^2 when realistic geometries are used in SPARTACUS-Urban. The full-temperature DART runs are a factor of 10^7 slower than the most complex SPARTACUS-Urban simulations.
  Would you please add on what machine you are running and if that is wall time, cpu time, node-seconds, etc.
- *The details of the runs compared between DART/SPARTACUS/Harman are given in Table 5. The full details of the computation and machine are given in the caption to Table 5.*

Table 1 Absolute run-time of Harman (Sect. Error! Reference source not found.), SPARTACUS-Urban (open-source version 0.7.3 compiled with gfortran, O3 optimization), and DART (version 5.7.5 build number 1126) for simulations with n vertical layers, and N diffuse streams per hemisphere. All runs undertaken in a Linux environment on a dual Xeon E5-2667 v3 processor with 256 GB of RAM, with a single-thread for Harman and SPARTACUS-Urban, but for DART 14 parallel threads using 32 CPU.

Model	n	N	Time (s)	Time relative to Harman
Harman	1	-	2×10^{-5}	-
SPARTACUS-Urban	1	8	3×10^{-5}	1.5
	6	8	4×10^{-4}	20
	151	1	2×10^{-3}	100
	151	4	2×10^{-3}	100
	151	8	2×10^{-3}	100
DART	151	-	6.6×10^{4}	3.3×10^{9}