Geoscientific
Model Development

Corrigendum to
"Dynamic Anthropogenic activitieS impacting Heat emissions (DASH v1.0): development and evaluation" published in Geosci. Model Dev., 13, 4891–4924, 2020

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1. The Greater London annual average total Q_F reported in the final paragraph of Sect. 5, p. 4907, should be 6.43 W m^{-2} (not 5.79 W m^{-2} as stated). The individual values for $Q_{F,B}$, $Q_{F,T}$, and $Q_{F,M}$ in the same paragraph are correct and sum to 6.43 W m^{-2}.

2. The caption in Table 5 states above ground level (a.g.l.) height of 60.9 m for the KSSW site. This is in fact the above sea level height, whilst above ground level height is 50.3 m. The caption should therefore read as follows: "Table 5. Observed meteorological variables at King's College London KSSW site, 50.3 m above ground level (Kotthaus and Grimmond, 2014; Ward et al., 2016). See Fig. 1a in Kotthaus and Grimmond (2014) for site location. From these other variables are derived.".

3. In Table 1 references to Tables 3 and 4 were inverted.

4. Table C2a has typographical errors from when the table was prepared.

   a. Values for roof and wall surface albedo, Θ, are incorrect.

   b. Pre-1965 values for roof and wall k_e, ρ and c_p were inverted for HB (house and bungalow) and Flat.

   c. Table C2a is corrected below.

5. The symbols for view factor, power ratings and time step in the notation list ($y_{b/g/s/i}$, $P P_{max}$, T) were incorrectly typeset. They should be $\psi_{b/g/s/i}$, P, P_{max} and t as elsewhere in the text. Table E1 below shows only the corrected rows.

Table 1. Sources of data used by DASH and the highest spatial resolution (columns) used in Greater London. Details are given in the other tables (Tab) and appendices (App.) indicated. Notation defined in text.

	Spatial scale						
	A_N	B					
Data category	OA	LSOA	MSOA	LA	City	London/national	
Population	Tab 2						
Activities					App. A		
Appliance					Tab C1		
Building Size	Tab 3						
Types					Tab 3		
Properties					Tab 3	Tab C2	
Transport Mode attributes						Tab 4	
Route speed limits				Tab 4			
Mode & route capacity	Tab 4						
Environmental conditions					Tab 5		

Table C2. Properties used in STEBBS vary by property age (< 1965, > 1965), type (HB – house & bungalow; flat), component (roof etc.) for **(a)** building fabric and external ground and **(b)** DHW. L: thickness (m); ε: emissivity; τ: effective transmissivity; Θ: surface albedo; k_e: effective thermal conductivity ($W\,m^{-1}\,K^{-1}$); ρ: density ($kg\,m^{-3}$); c_p: specific heat of air at constant pressure ($J\,kg^{-1}\,K^{-1}$) (Internal Air 1005); h: convection coefficient (Int: internal, Ext: external) ($W\,m^{-2}\,K^{-1}$); V_{FR}: volumetric flow rate of DHW per water user (dom: domestic, n-dom: non-domestic) ($10^{-3}\,m^3\,s^{-1}$); V_R: ventilation rate ($10^{-3}\,m^3\,s^{-1}$); V_T: DHW tank volume (m^3); WWR: window-to-wall ratio (0.4). Vessels: all other storage of DHW. For data sources refer to Table 3.

(a) Building fabric		Roof & wall		Window	Ground floor	Internal mass	External ground
		HB	Flat				
L	< 1965	0.241	0.327	0.005	0.5	–	2
	> 1965	0.373	0.373	0.02	0.5	–	
k_e	< 1965	0.835	0.837	1.05	0.752	0.121	1.28
	> 1965	0.104	0.104	0.041	0.690	0.121	
ρ	< 1965	1690	1692	2500	1540	873.7	–
	> 1965	1076	1076	1000.7	1470	873.7	–
c_p	< 1965	804.1	803.1	840	1012.8	967.9	–
	> 1965	865.9	865.9	902.4	1016	967.9	–
h	Int.	3	3	3	2.8	3	–
	Ext.	var[a]	var[a]	var[a]	–	–	–
	Θ	0.4	0.4	0.05	–	0	–
	ε	0.9	0.9	0.88	–	0.91	–
	τ	0	0	0.9	–	0	–
	V_R	600					–

[a] Varies with wind speed.

Table E1. Notation (with location of first mention).

	Description	First
$\psi_{b/g/s/i}$	View factor for buildings/ground/sky/surface i	B
P, P_{max}	Power rating, maximum power rating (W)	2.4.3
t	Time step (e.g. 10 min)	2.3