

SWMM-UrbanEVA: A Model for the Evapotranspiration of Urban Vegetation

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Table S1. Exemplary growth factors gf (-) for different species.

no.	Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	grass ¹	0.29	0.29	0.29	0.43	0.86	1.14	1.29	1.71	2.00	1.71	1.14	0.86
2	extensive green ²	0.68	0.68	0.68	1.01	1.18	1.35	1.35	1.35	1.18	1.01	0.85	0.68
3	intensive green ²	0.68	0.68	0.68	1.01	1.18	1.35	1.35	1.35	1.18	1.01	0.85	0.68
4	humid surfaces ²	0.55	0.55	0.83	1.10	1.38	1.38	1.38	1.38	1.38	0.83	0.69	0.55
5	coniferous ²	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
6	deciduous ²	0.09	0.09	0.26	0.69	1.21	1.90	2.07	2.07	1.90	1.38	0.26	0.09
7	vegetation general ³	0.35	0.35	0.43	0.66	1.08	1.70	1.81	1.85	1.70	1.13	0.54	0.40

¹ reference: [1]; ² reference: [2]; ³ evaluation of various species: [3]

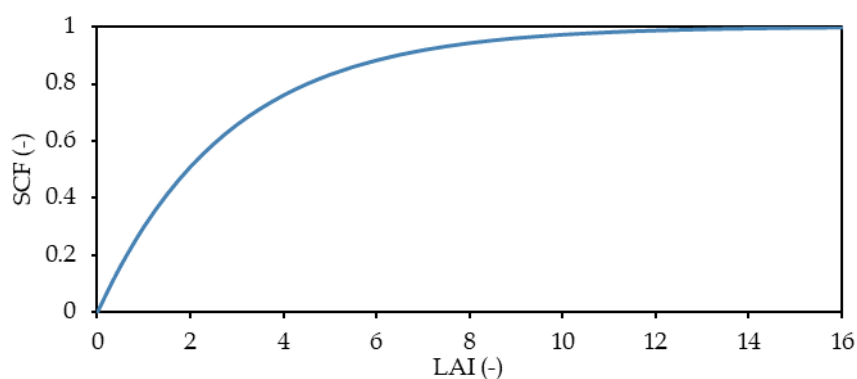
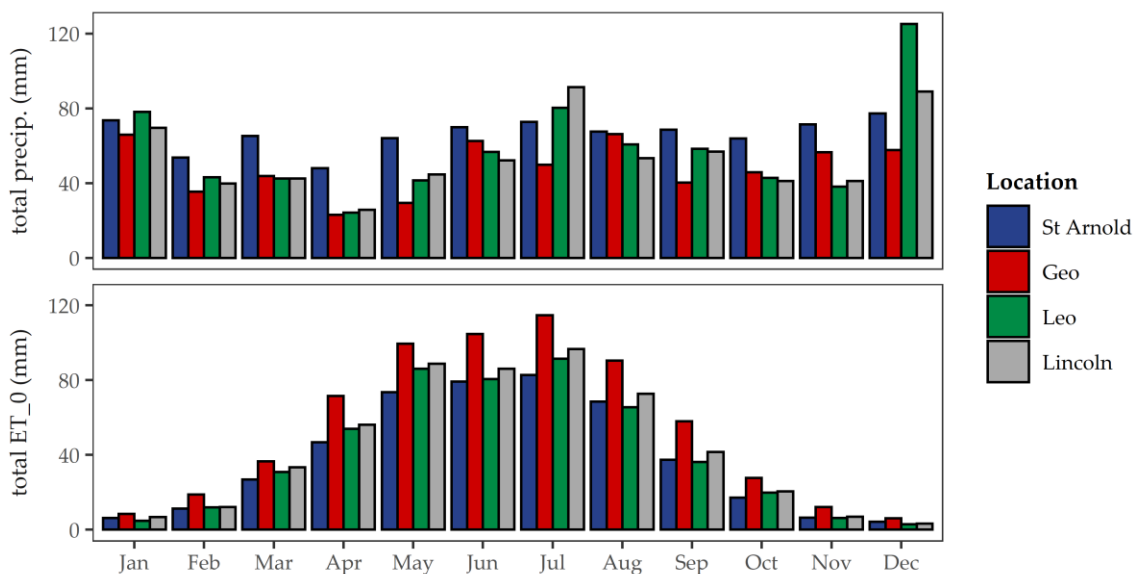


Figure S2. Change of the SCF as a function of the LAI. Calculation according to [2,4,5].

Table S3. Exemplary K_c values for different types of BGI and the parameters used for calculation.

Type	albedo (-)	crop height (m)	LAI (-)	r_s ($s \cdot m^{-1}$)	r_i ($s \cdot m^{-1}$)	K_c (-)
grass	0.23 ¹	0.12	2 ¹	70 ¹	-	1
coniferous	0.12 ²	10	12 ²	-	800 ⁴	1.5
deciduous	0.24 ²	10	8 ²	-	360 ⁵	1.5
green roof extensive	0.24 ²	0.15	2 ²	70 ¹	-	1.2
green roof intensive	0.24 ²	0.3	4 ²	70 ¹	-	1.3
infiltration trench	0.23 ¹	0.12	2 ¹	70 ¹	-	1
raingarden with reeds	0.23 ²	2	10 ²	70 ¹	-	1.9

¹ reference: [6] ; ² reference: [7]; ³ reference: [8]; ⁴ reference: [9]; ⁵ reference: [10]

**Figure S4.** Mean monthly totals for precipitation (top) and ET_0 (bottom) of the locations under consideration.

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