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## Research interests

Land-atmosphere interactions, Micrometeorology, and Urban climate

## Employment

### Academic Staff

Chair of Meteorology  
Technische Universität Dresden  
1 Oct 2021 → present

## Research outputs

### Space-scale resolved surface fluxes across a heterogeneous, mid-latitude forested landscape

Paleri, S., Desai, A. R., Metzger, S., Durden, D., Butterworth, B. J., Mauder, M., Kohnert, K., & 1 others Serafimovich, A., 22 Nov 2022, In: *Journal of Geophysical Research: Atmospheres*. 127, 23, e2022JD037138.

### Incorporating the effect of heterogeneous surface heating into a semi-empirical model of the surface energy balance closure

Wanner, L., Roberti, D. R., Calaf, M. & Mauder, M., 1 Jun 2022, In: *PLoS one*. 17, 6, e0268097.

### A Model of the Energy Balance Gap Based on Atmospheric Stability and Surface Heterogeneity

Wanner, L., Calaf, M., Paleri, S., Kadum, H., Butterworth, B., Desai, A. & Mauder, M., 27 Mar 2022

### Options to correct local turbulent flux measurements for large-scale fluxes using an approach based on large-eddy simulation

Mauder, M., Ibrom, A., Wanner, L., Roo, F. D., Brügger, P., Kiese, R. & Pilegaard, K., 16 Dec 2021, In: *Atmospheric measurement techniques*. 14, 12

### Enteric methane emission estimates for Kenyan cattle in a nighttime enclosure using a backward Lagrangian Stochastic dispersion technique

Wolz, K., Leitner, S., Merbold, L., Wolf, B. & Mauder, M., 29 Nov 2021, In: *Theoretical and applied climatology*. 147, 3-4, p. 1091-1103 13 p.

### Novel approach to observing system simulation experiments improves information gain of surface-atmosphere field measurements

Metzger, S., Durden, D., Paleri, S., Sühling, M., Butterworth, B. J., Florian, C., Mauder, M., & 4 others Plummer, D. M., Wanner, L., Xu, K. & Desai, A. R., 1 Nov 2021, In: *Atmospheric measurement techniques*. 14, 11