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Maximum extent of human heat stress reduction on building areas due to urban greening

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Highlights

- Heat stress is analyzed by methods of planning-related urban human-biometeorology.
- The validated version 4.0 BETA of the ENVI-met model provides reliable simulation results.
- Simulations of different urban land use scenarios show their specific heat impacts.
- The maximum extent of human heat stress reduction by urban greening is quantified.
- Each type of building increases area-related human heat stress on hot summer days.

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