

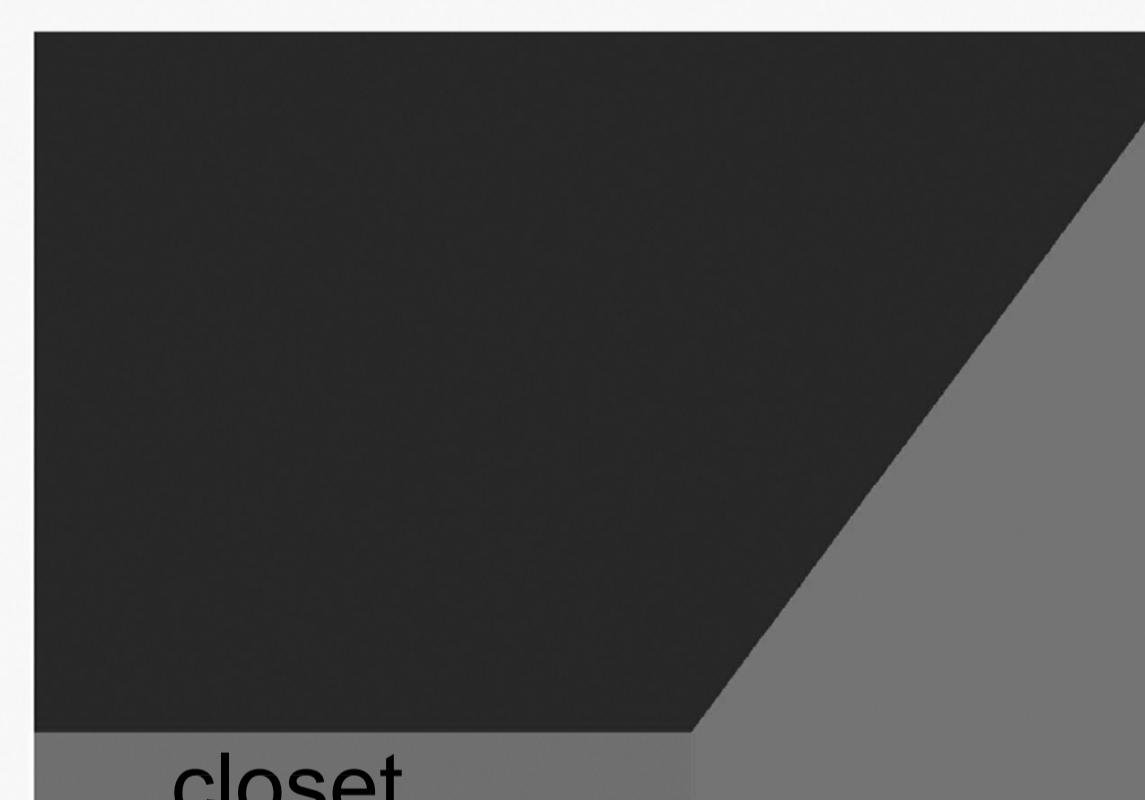
adjacent building



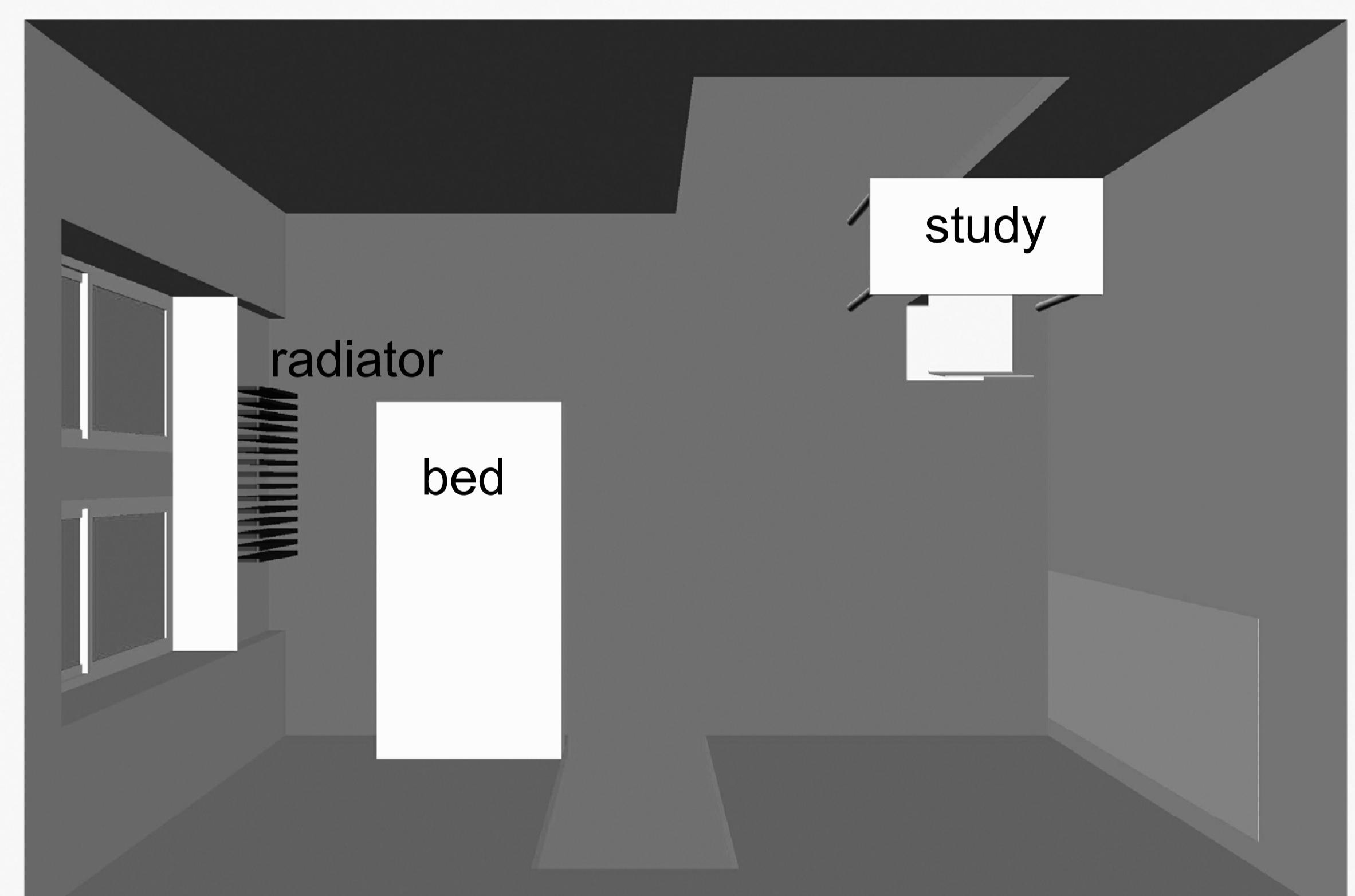
neighboring apartment



bathroom



closet



study

radiator

bed

hallway



kitchen

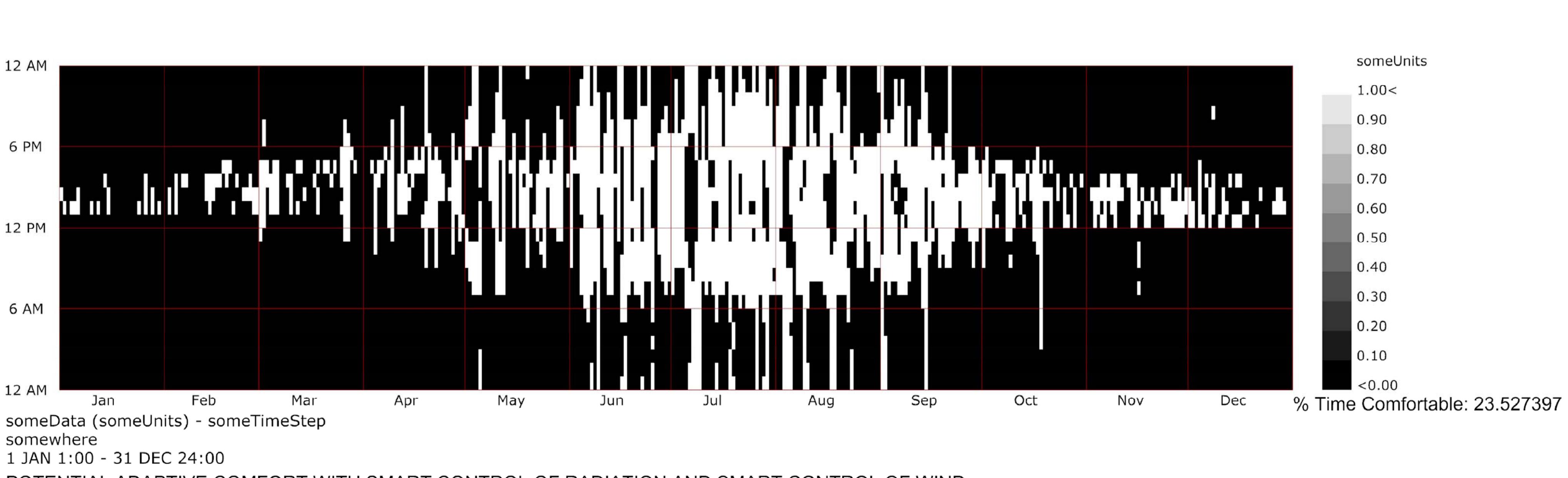
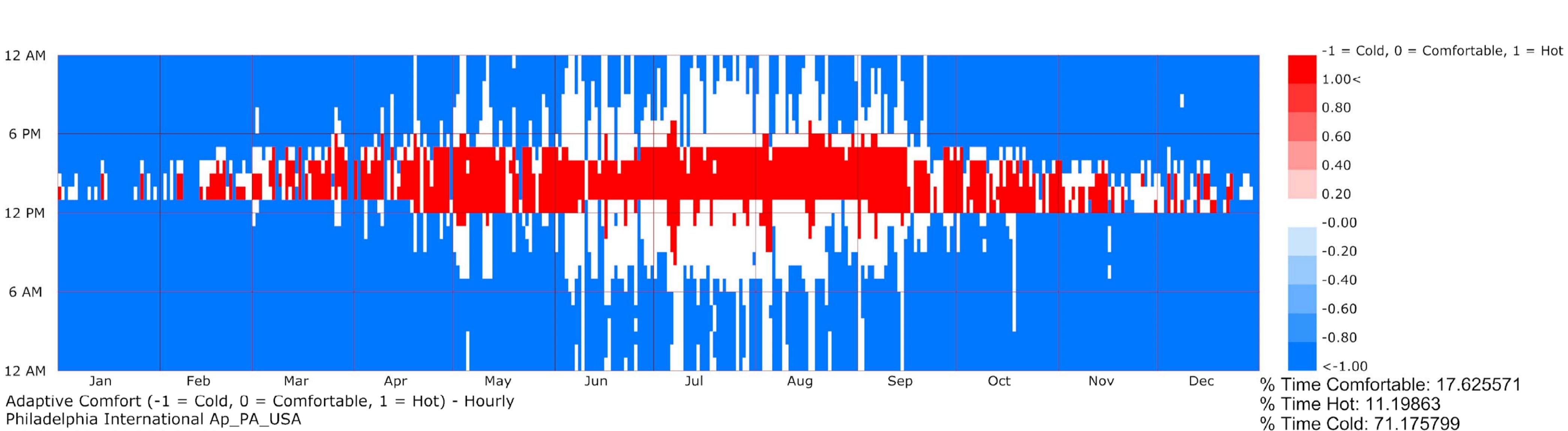
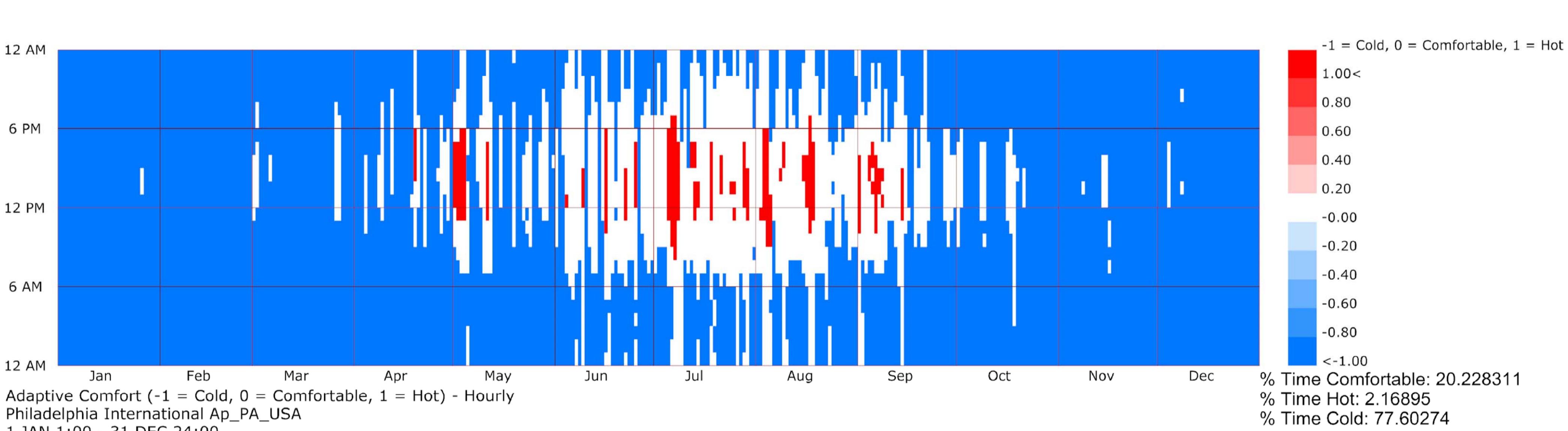
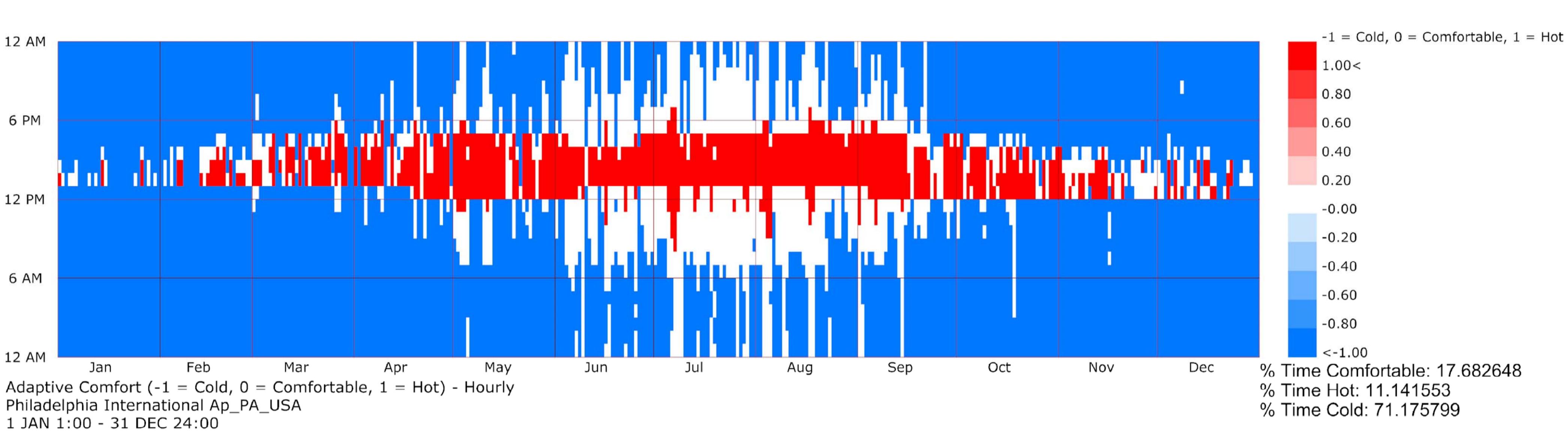
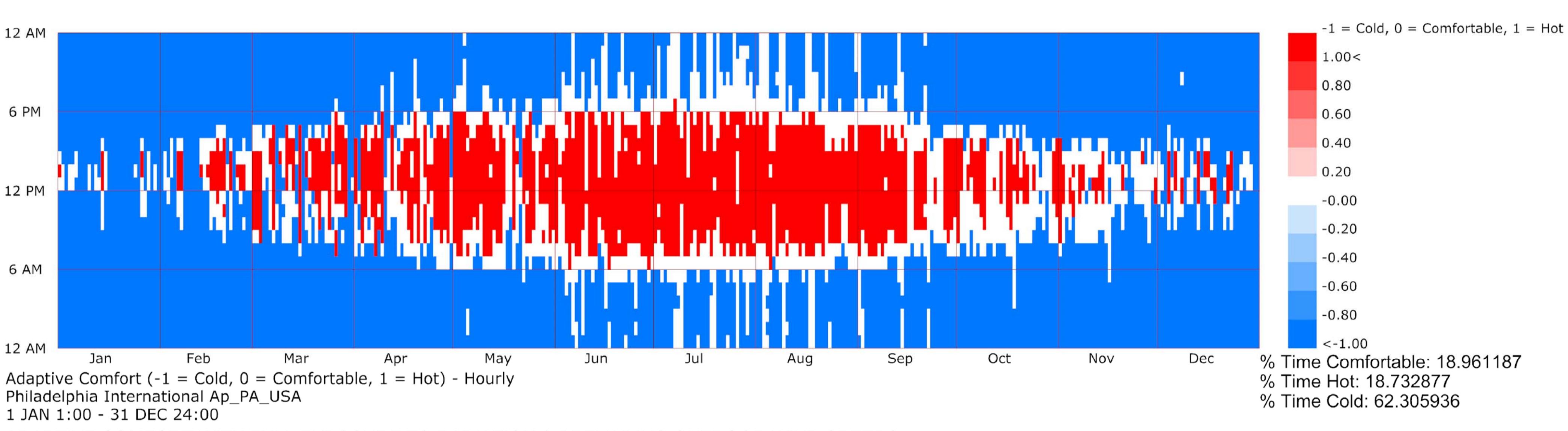
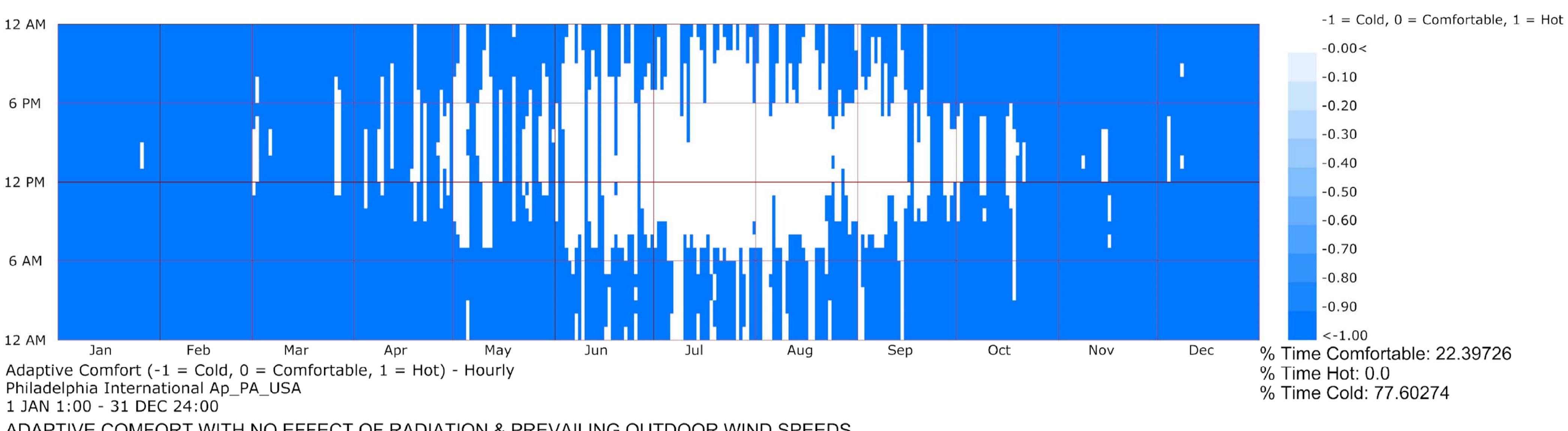
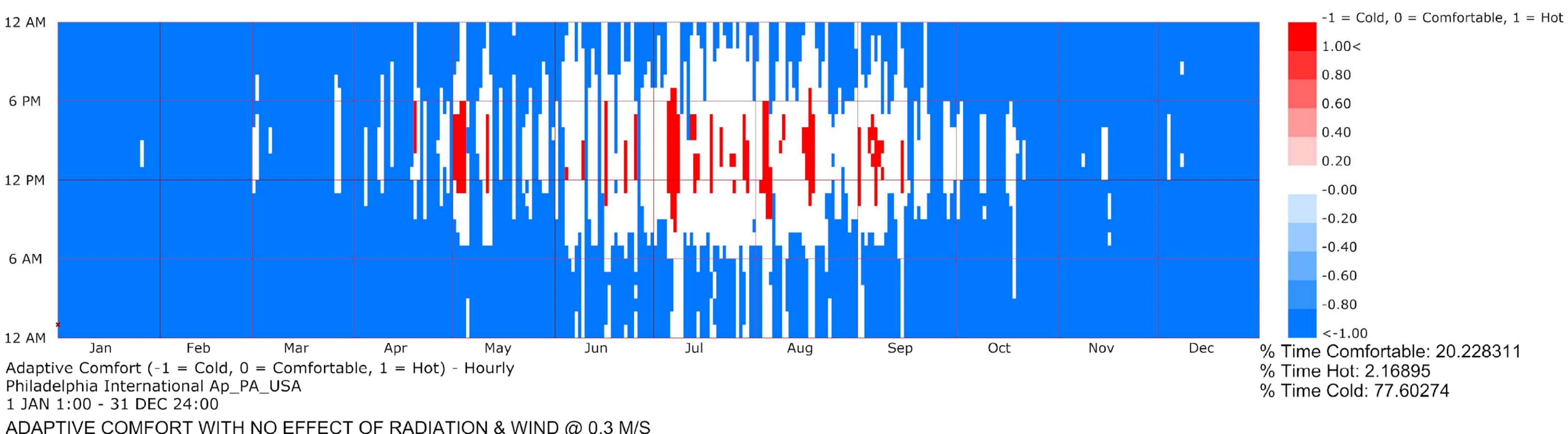
neighboring apartment

LOCATION

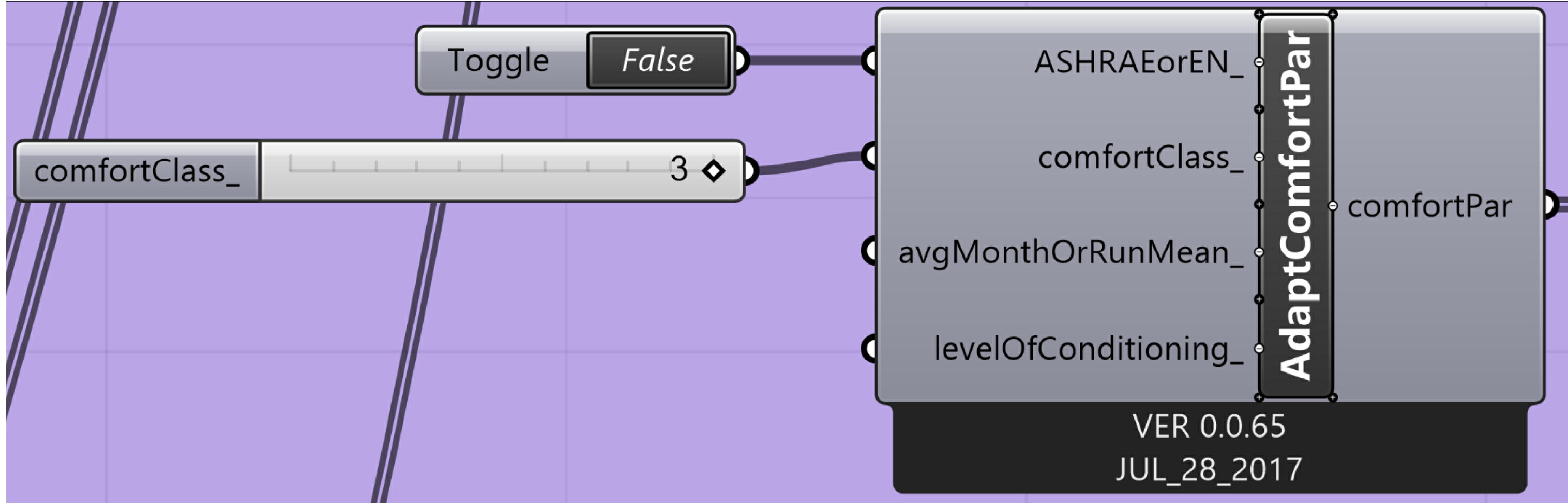
- Philadelphia, PA, USA

APARTMENT FEATURES

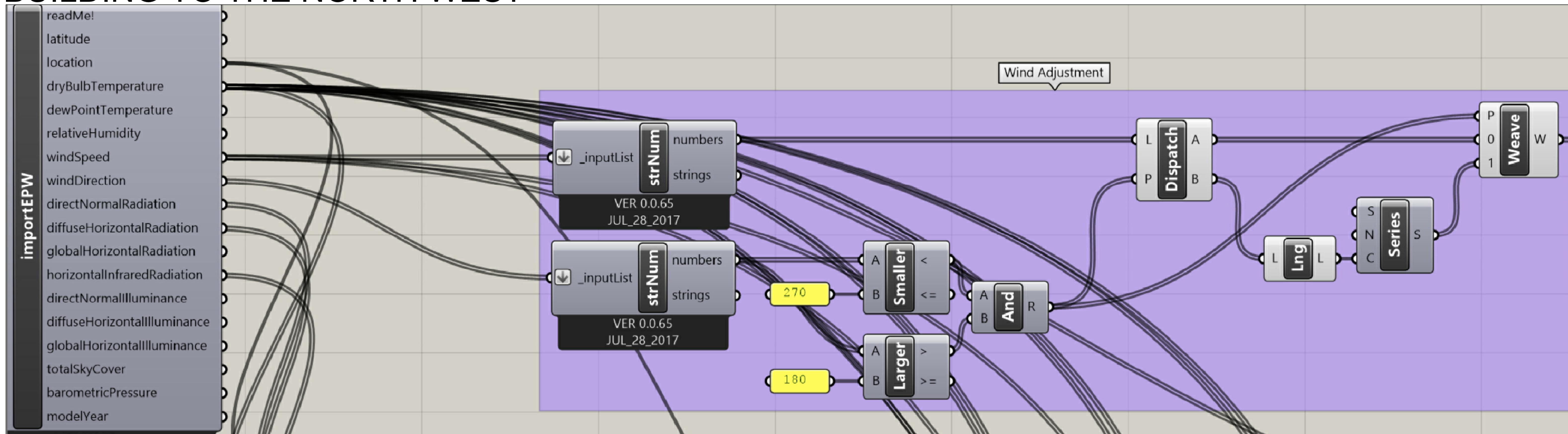
- Four storey building
- 3rd floor studio apartment
- West facing windows
- Four storey adjacent building to the North West
- Steam radiator for heating
- No air-conditioner



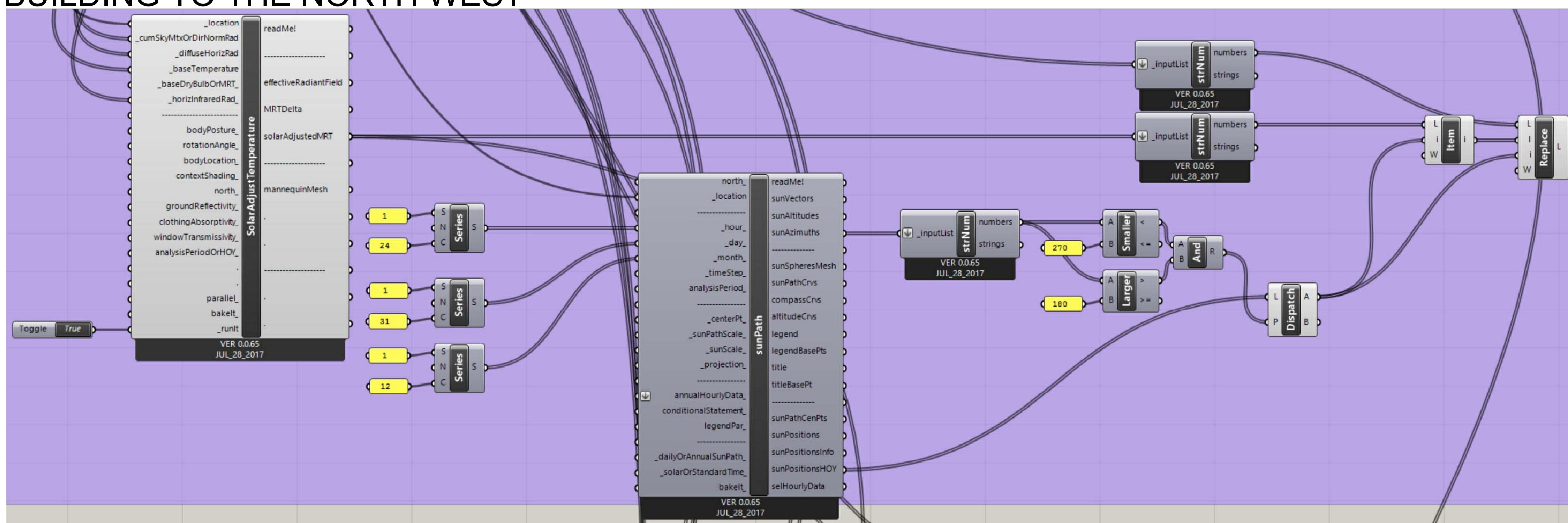
COMFORT PARAMETERS: EN-15251, Comfort Class 3



ADJUSTMENT FOR WIND ONLY FROM WEST-FACING WINDOWS BLOCKED BY ADJACENT BUILDING TO THE NORTH WEST



ADJUSTMENT FOR RADIATION ONLY FROM WEST-FACING WINDOWS BLOCKED BY ADJACENT BUILDING TO THE NORTH WEST



OBSERVATIONS:

- The cooling effect from opening windows to gain exposure to winds is negligible due to the orientation of windows and obstructions from adjacent buildings.
- Radiation decreases the time one feels cold in the space from 78% to 71%.
- Radiation increases the time one feels hot in the space from 2% to 11%.

CONCLUSIONS:

- It is best to block wind entering from the windows.
- The control of radiation entering from the windows is the most effective strategy for passive climate control.