A Web-based Visualization Tool for the ASHRAE Global Thermal Comfort Database II

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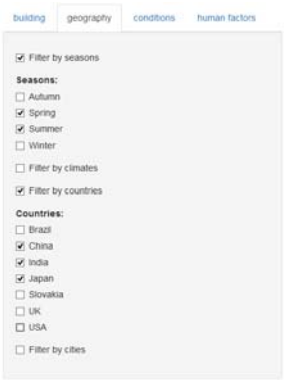
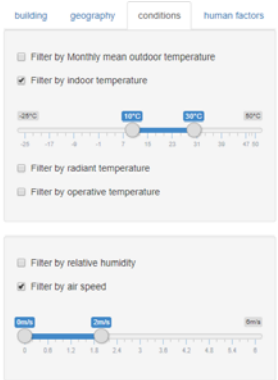
OBJECTIVE & BACKGROUND

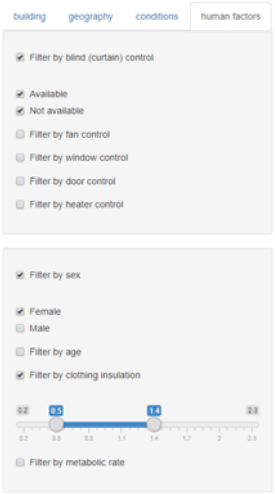
- To provide an user friendly web-based interface to visually explore the ASHRAE Global Thermal Comfort Database II
- To allow users customize and compare subset of the database
- The visualization tool is built with R and it is an open resource available at:

https://cbe-berkeley.shinyapps.io/comfortdatabase/

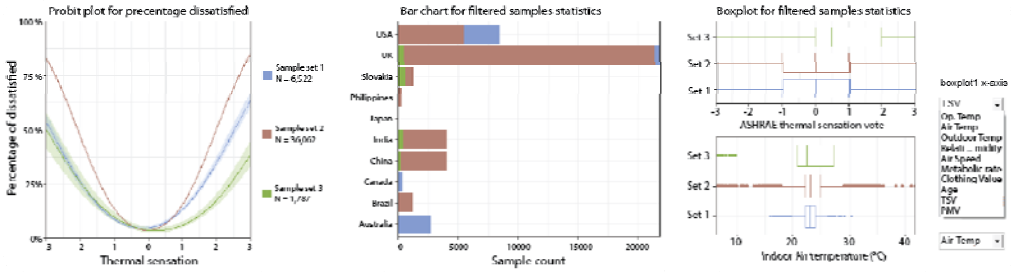
DATASET SELECTION (four categories)





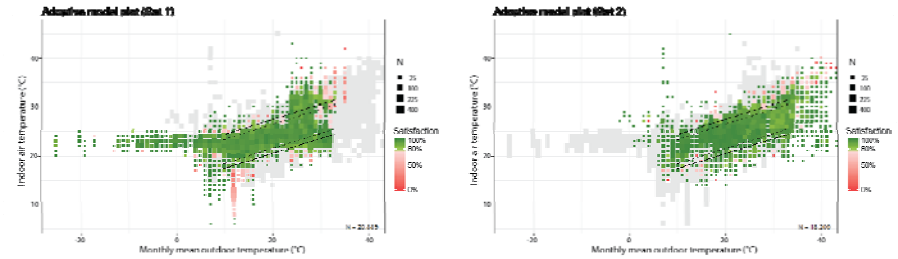


VISUALIZATION OUTPUTS (three pages)



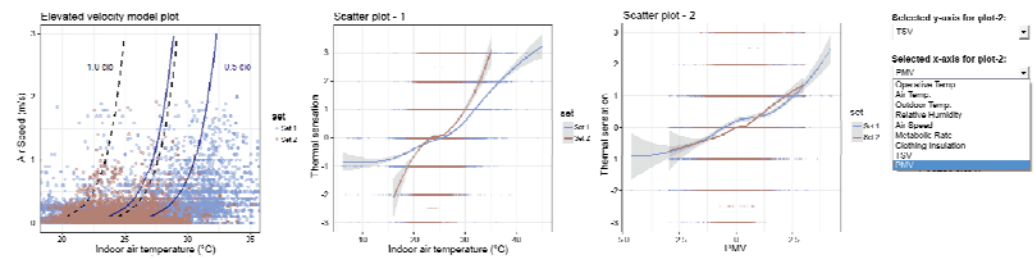
Satisfaction page

Evaluates subject's thermal dissatisfaction on thermal sensation (or PMV) scale and shows summary statistics



Adaptive model page

Compares selected dataset according to the adaptive thermal comfort model



Scatter plot page

Plots raw data with the elevated velocity comfort zone and customizable x-y relationships

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