

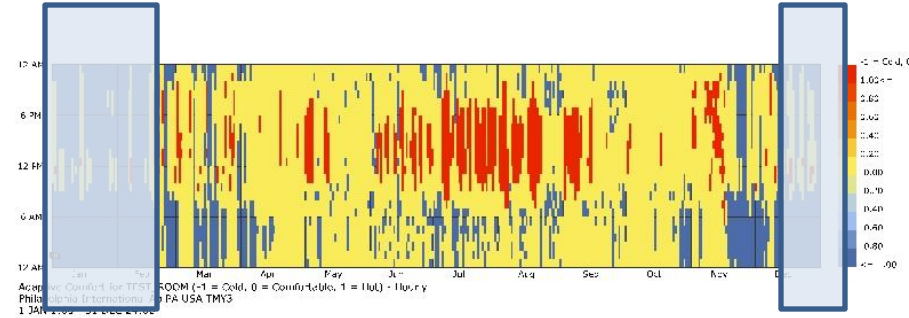
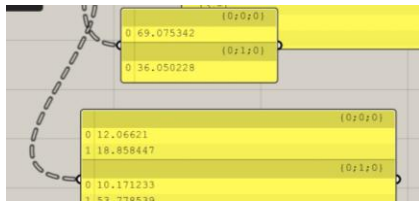
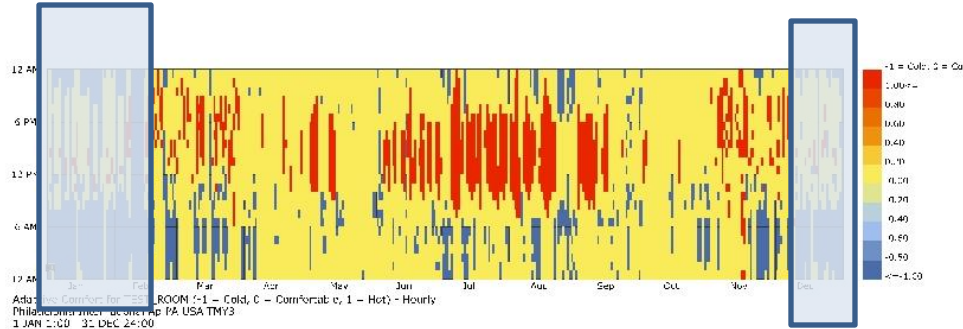
Indoor Comfort Analysis

Pegah Mathur

22 November 2015

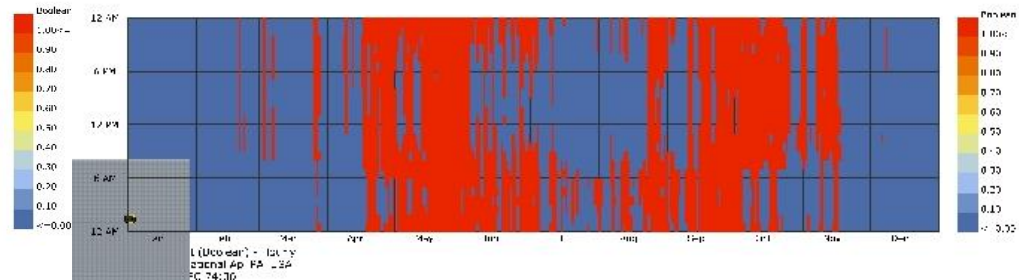
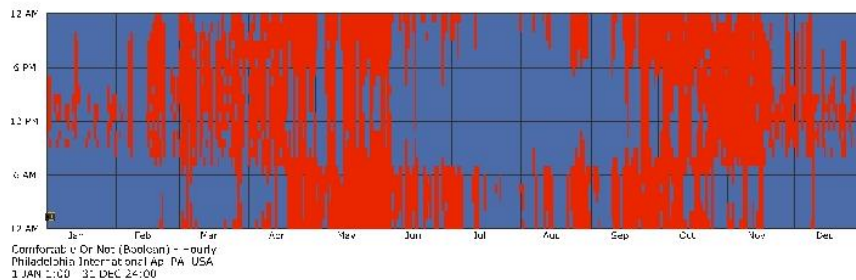
Indoor Comfort Analysis

- Base case, Without any shading



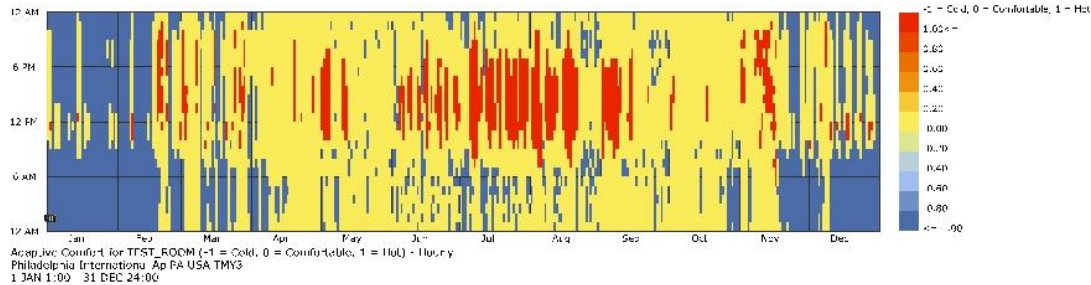
The only difference showing on adaptive comfort chart is on months of January, February, November and December.

Natural Ventilation is conditioning the summer time which is making this happen.

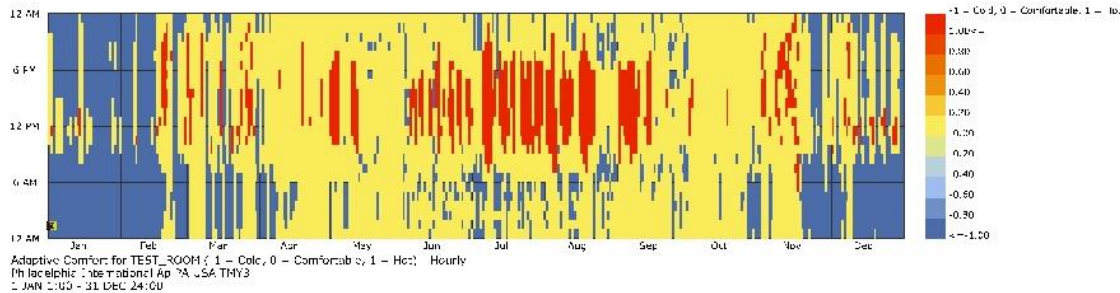


Shading Transformation Process

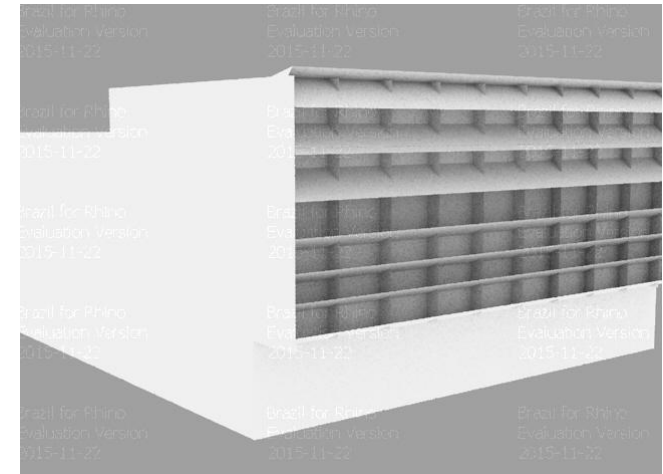
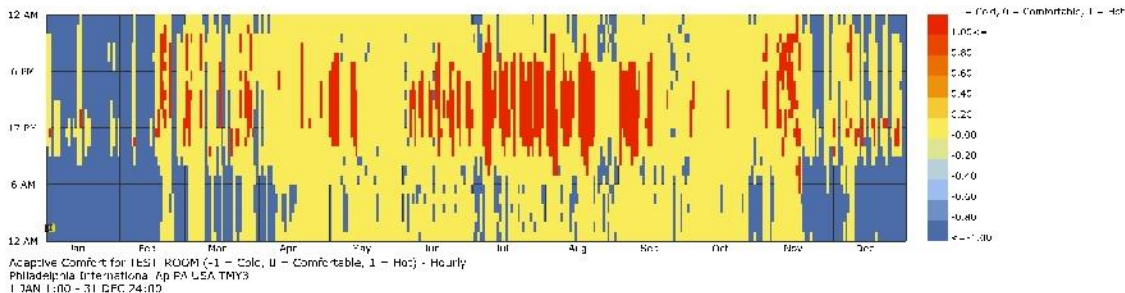
Adaptive comfort: 56%



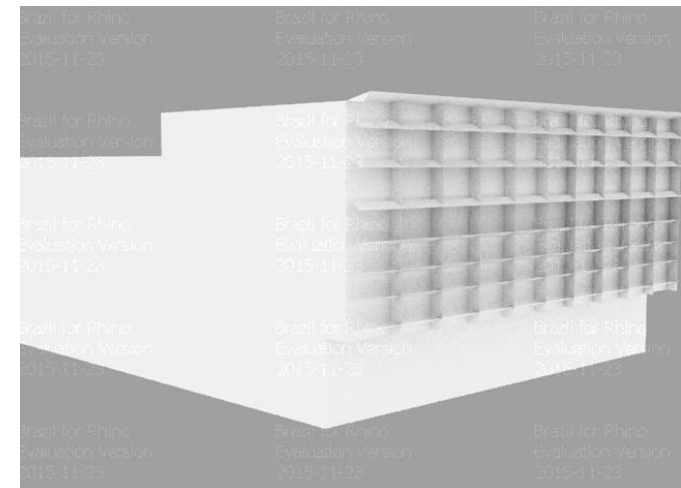
Adaptive comfort : 62%



Adaptive Comfort: 63.89%

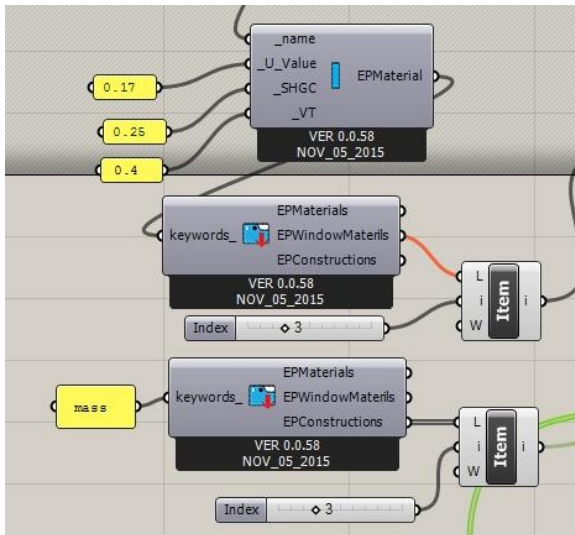


As the hot and cold days shows the problem in the room which is causing discomfort is the cold days in winter, so the only solution is to let more solar radiation come in.

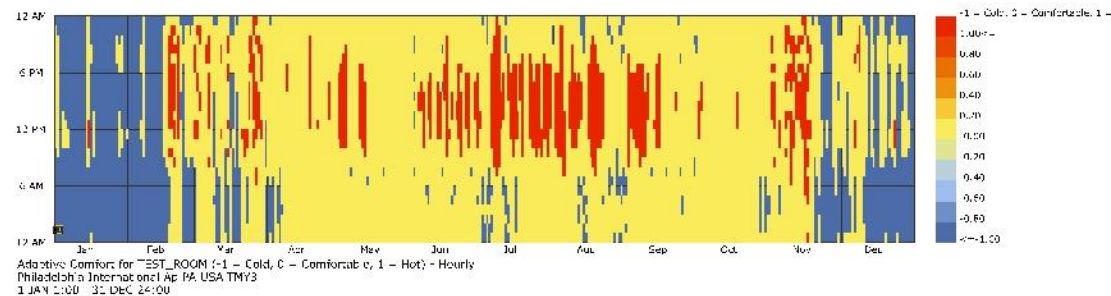


Other parameters changing

- Material assigning



Assigning mass for the wall material to add thermal mass and triple glazed window (thermotheclow SGHC) increased the thermal comfort very much slightly from 62 to 63.89%.



Hanging the ration of window to wall is changed to 0.3 and has the effect of increasing the percent of adaptive comfort to 67.48%. Changing the ration between wall and window to above 0.5 will result in reverse and will decrease the comfort percentage.

