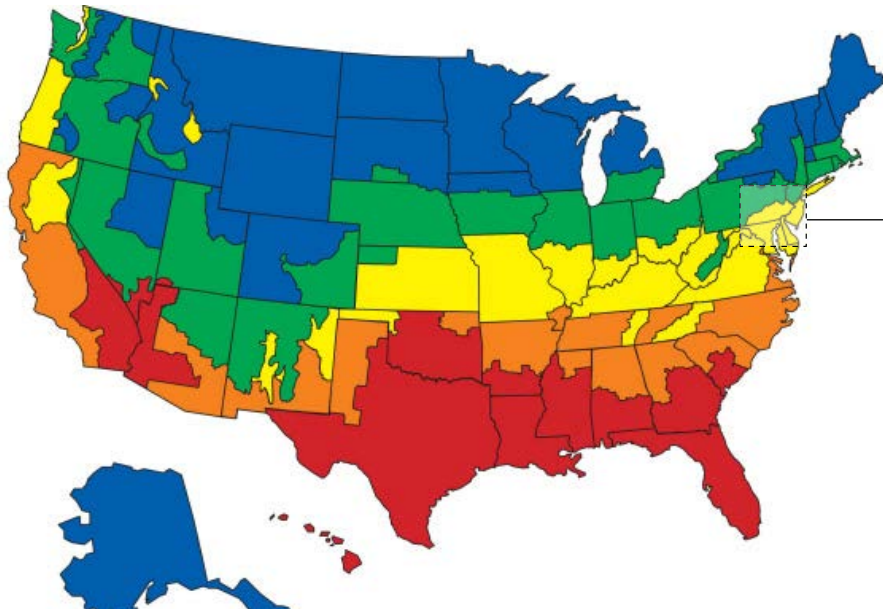


THERMAL AND VISUAL COMFORT MAXIMIZATION OF AN UNCONDITIONED SPACE

PHILADELPHIA, PA

DAWOON JUNG

FALL 2016 / ARCH 753 BUILDING PERFORMANCE SIMULATION
PENNDDESIGN / UNIVERSITY OF PENNSYLVANIA



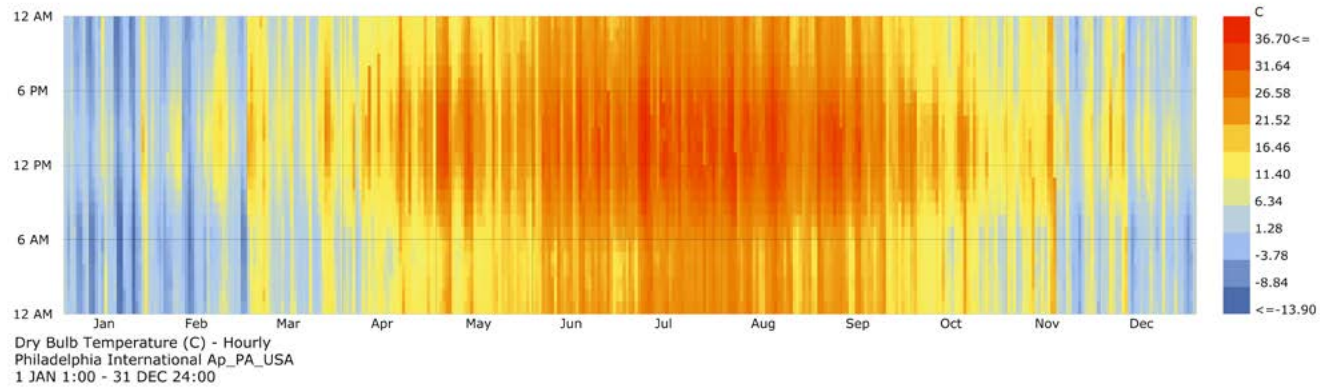
WEATHER DATA: PHILADELPHIA.INTL.AP7244080_TMY3
LATITUDE: 39.87
LONGITUDE: -75.23

Climate Zones

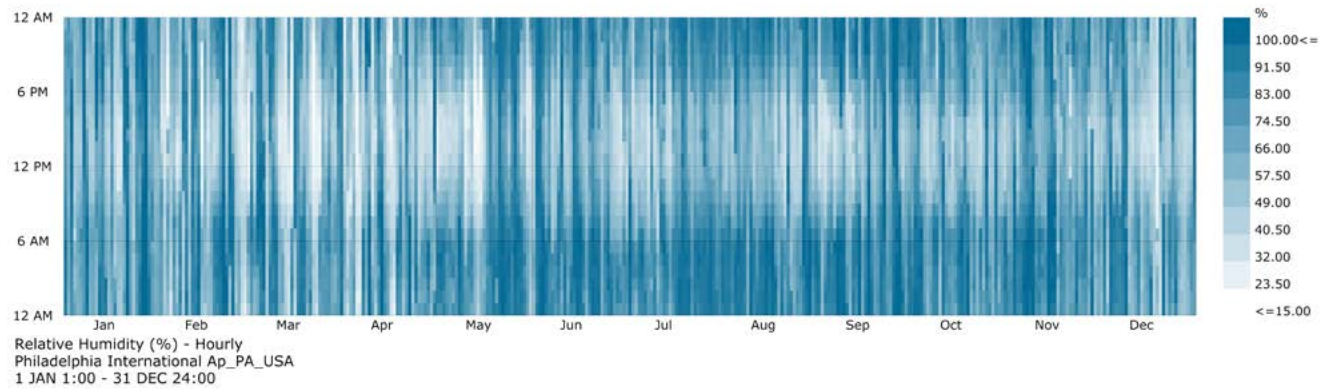
- Zone 1 is less than 2,000 CDD and greater than 7,000 HDD
- Zone 2 is less than 2,000 CDD and 5,500 ~ 7,000 HDD
- Zone 3 is less than 2,000 CDD and 4,000 ~ 5,499 HDD
- Zone 4 is less than 2,000 CDD and less than 4,000 HDD
- Zone 5 is 2,000 CDD or more and less than 4,000 HDD

EXTERIOR FACTORS

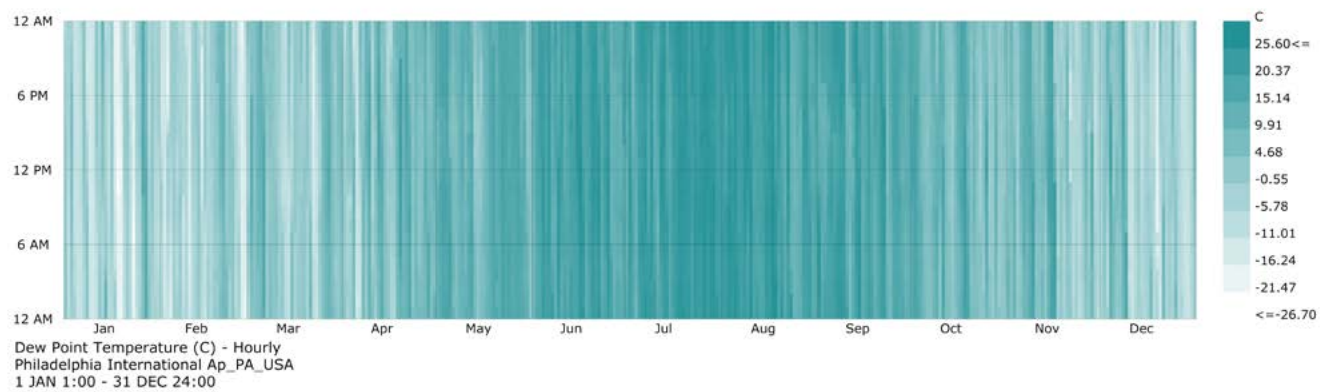
DRY BULB TEMPERATURE

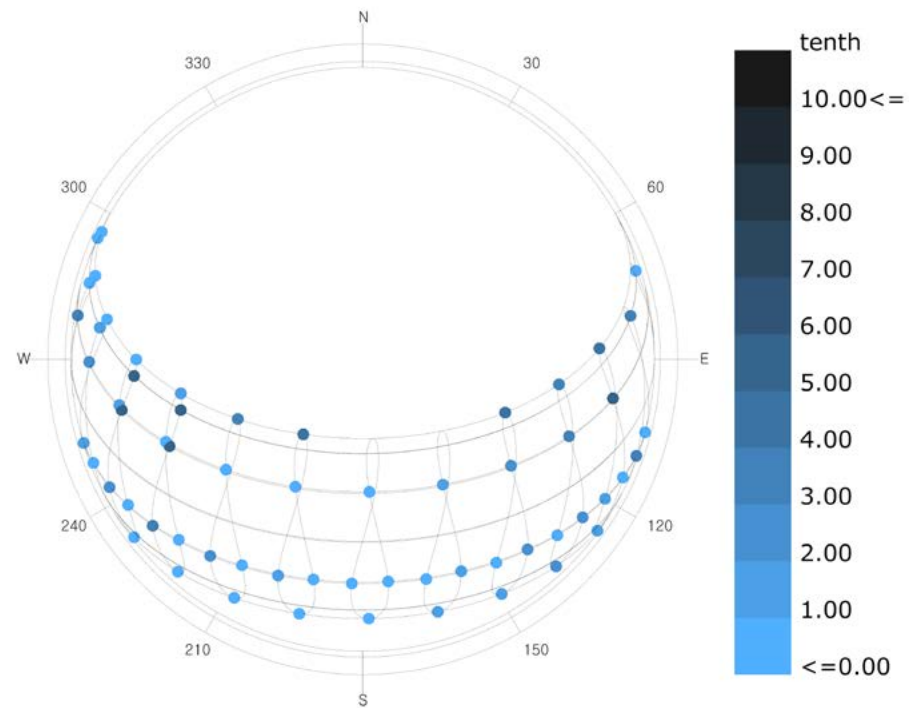


RELATIVE HUMIDITY



DEW POINT TEMPERATURE





Sun-Path Diagram - Latitude: 39.17
 Hourly Data: Total Cloud Cover (tenth)
 Baltimore Blt Washngtn IntL_MD_USA
 ...
 Conditional Selection Applied:
 Total Cloud Cover < 6
 61.0 hours of total 145.0 sun up hours(42.07%).

Psychrometric Chart
Philadelphia International Ap_PA_USA
1 JAN 1:00 - 31 DEC 24:00

