

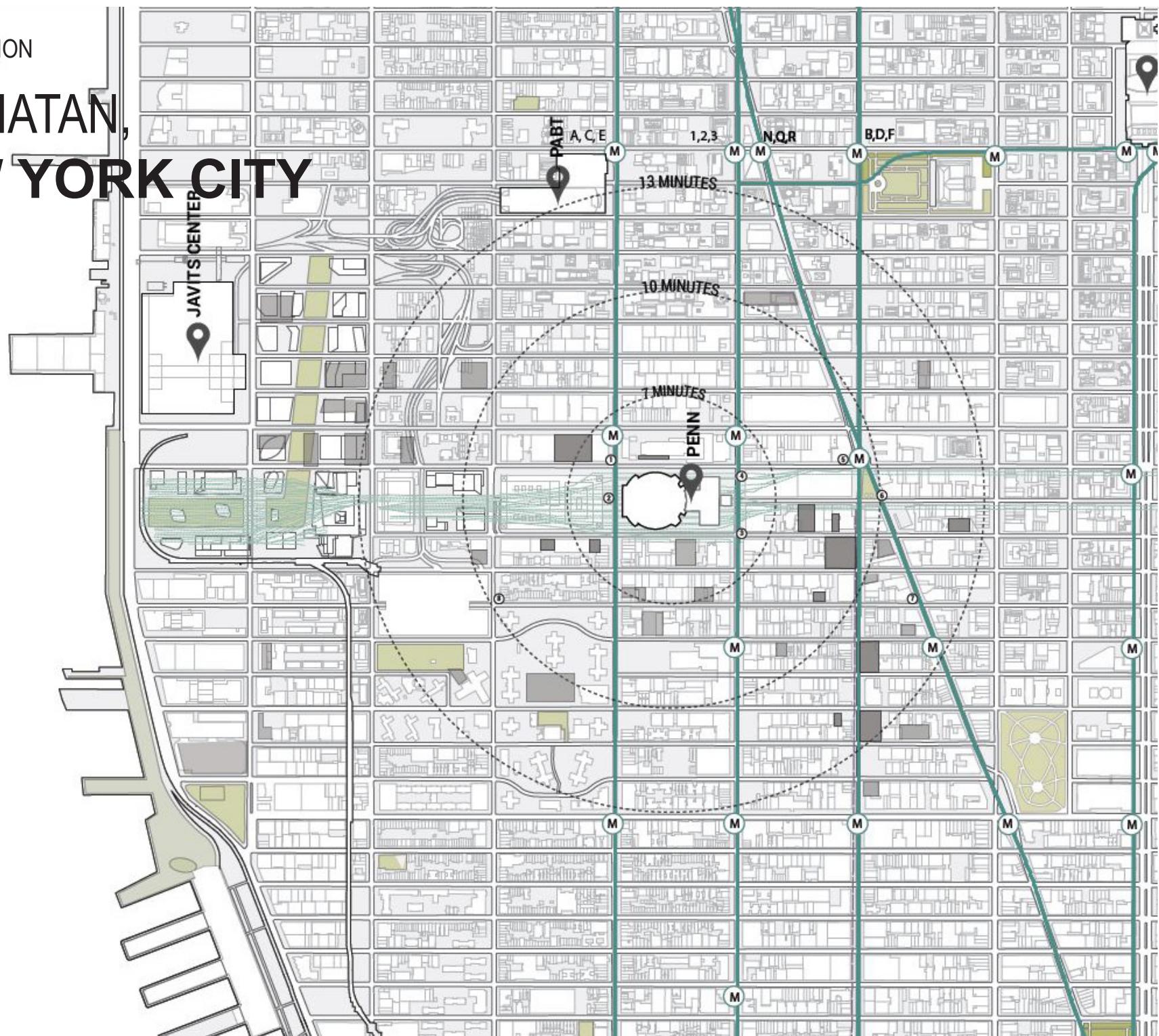
ARCH-753-001-Building Performance Simulation

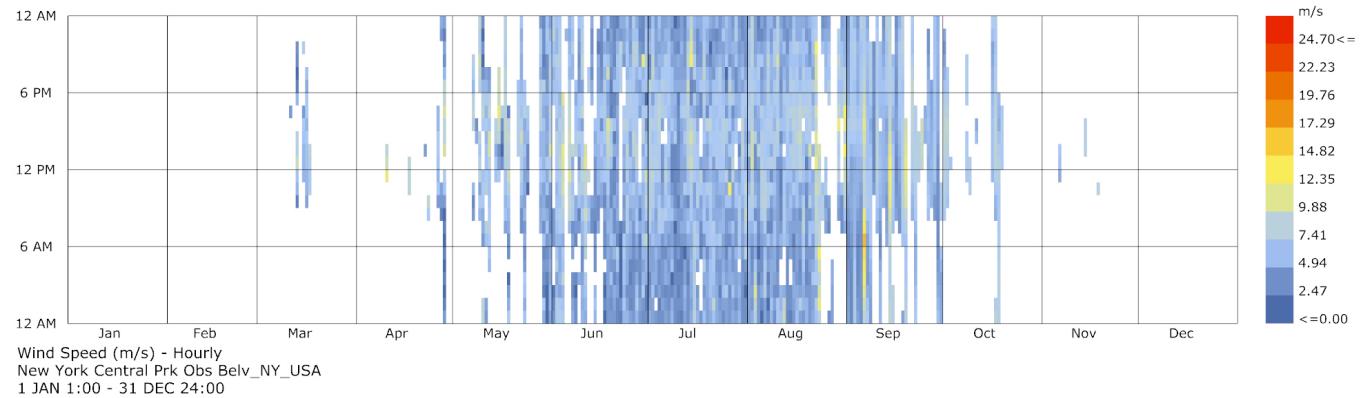
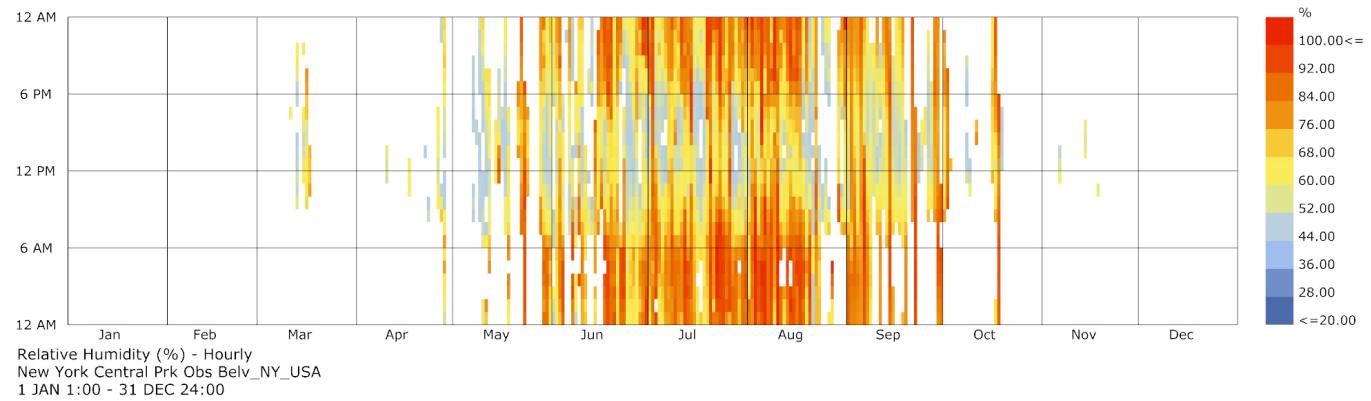
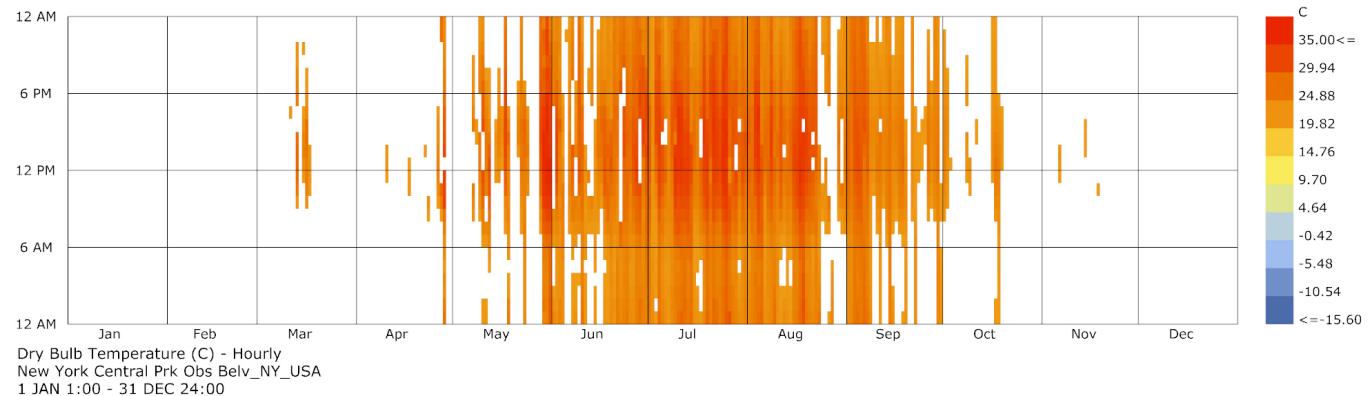
**Site Analysis + Passive design strategies**

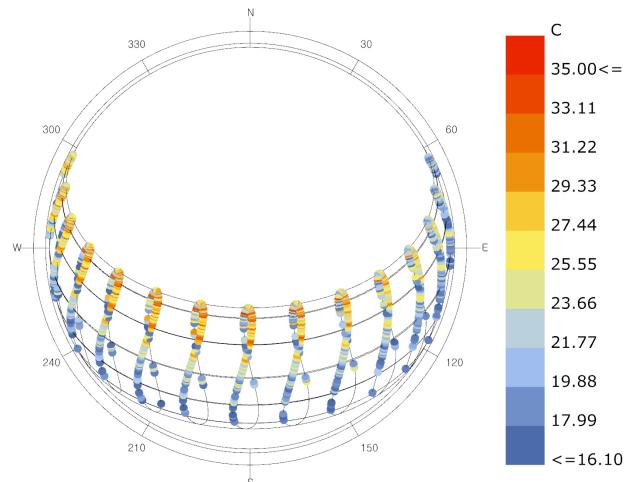
Jaeho Jin  
Assignment 1  
2015.09.21

SITE LOCATION

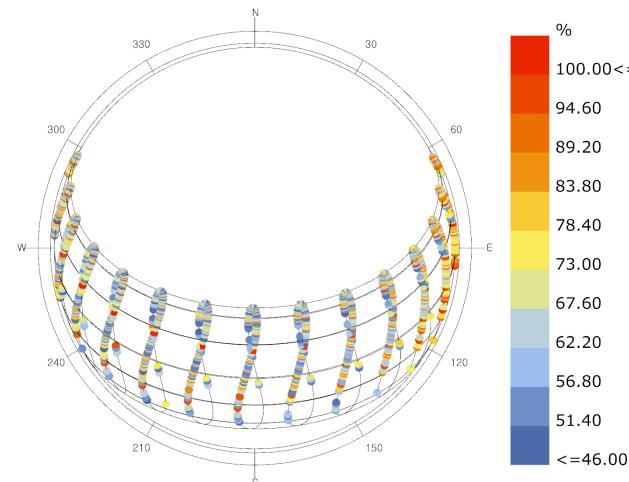
# MANHATTAN, NEW YORK CITY



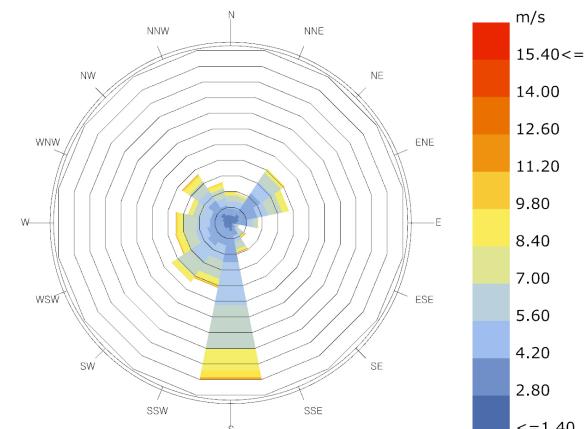




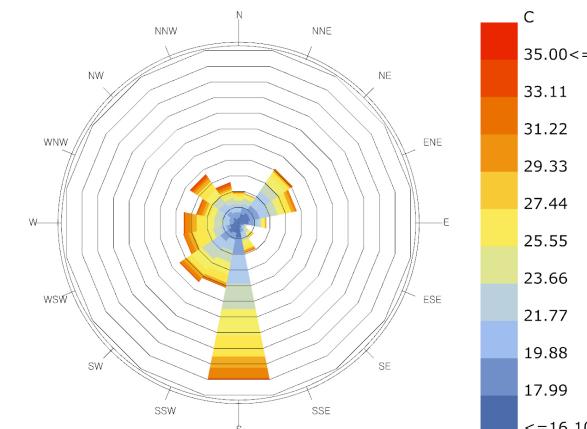
Sun-Path Diagram - Latitude: 40.78  
Hourly Data: Dry Bulb Temperature (C)  
New York Central Prk Obs Belv\_NY\_USA  
...  
Conditional Selection Applied:  
Dry Bulb Temperature>16  
and Relative Humidity>45  
1886.0 hours of total 4404.0 sun up hours(42.82%).



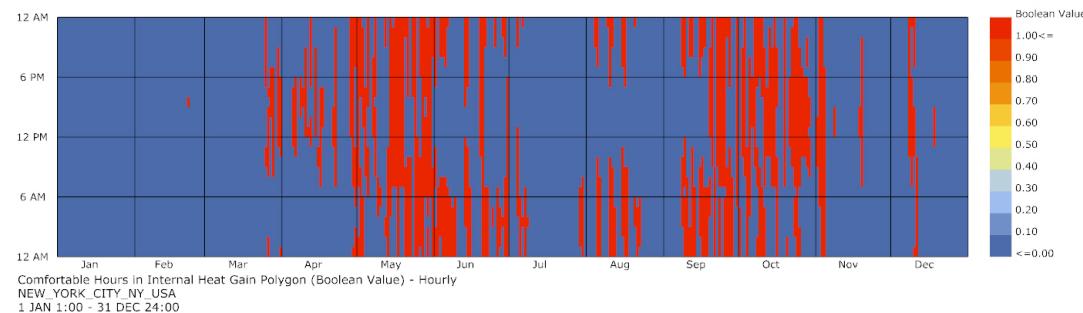
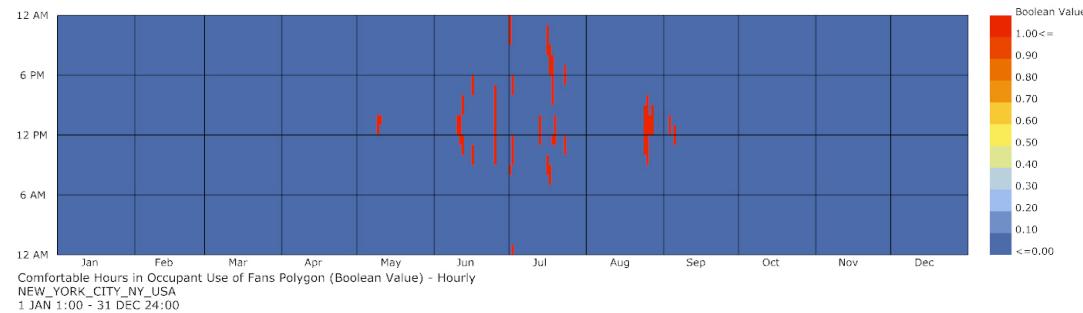
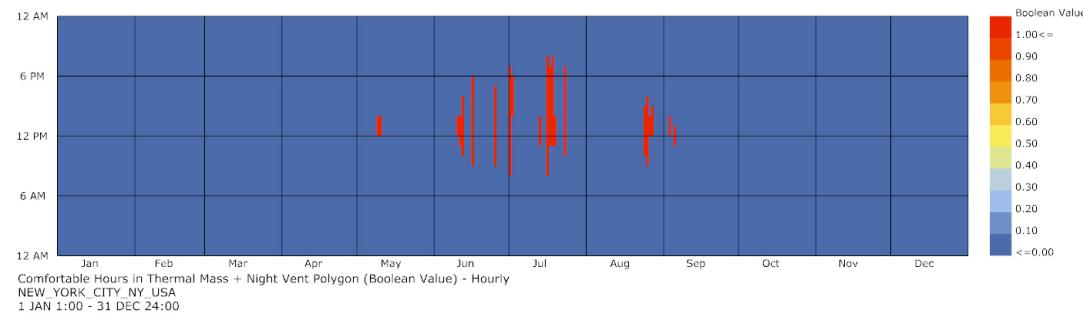
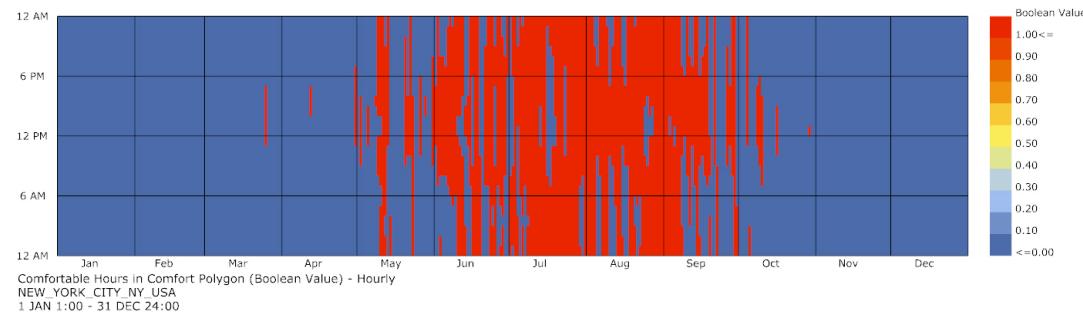
Sun-Path Diagram - Latitude: 40.78  
Hourly Data: Relative Humidity (%)  
New York Central Prk Obs Belv\_NY\_USA  
...  
Conditional Selection Applied:  
Dry Bulb Temperature>16  
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1886.0 hours of total 4404.0 sun up hours(42.82%).



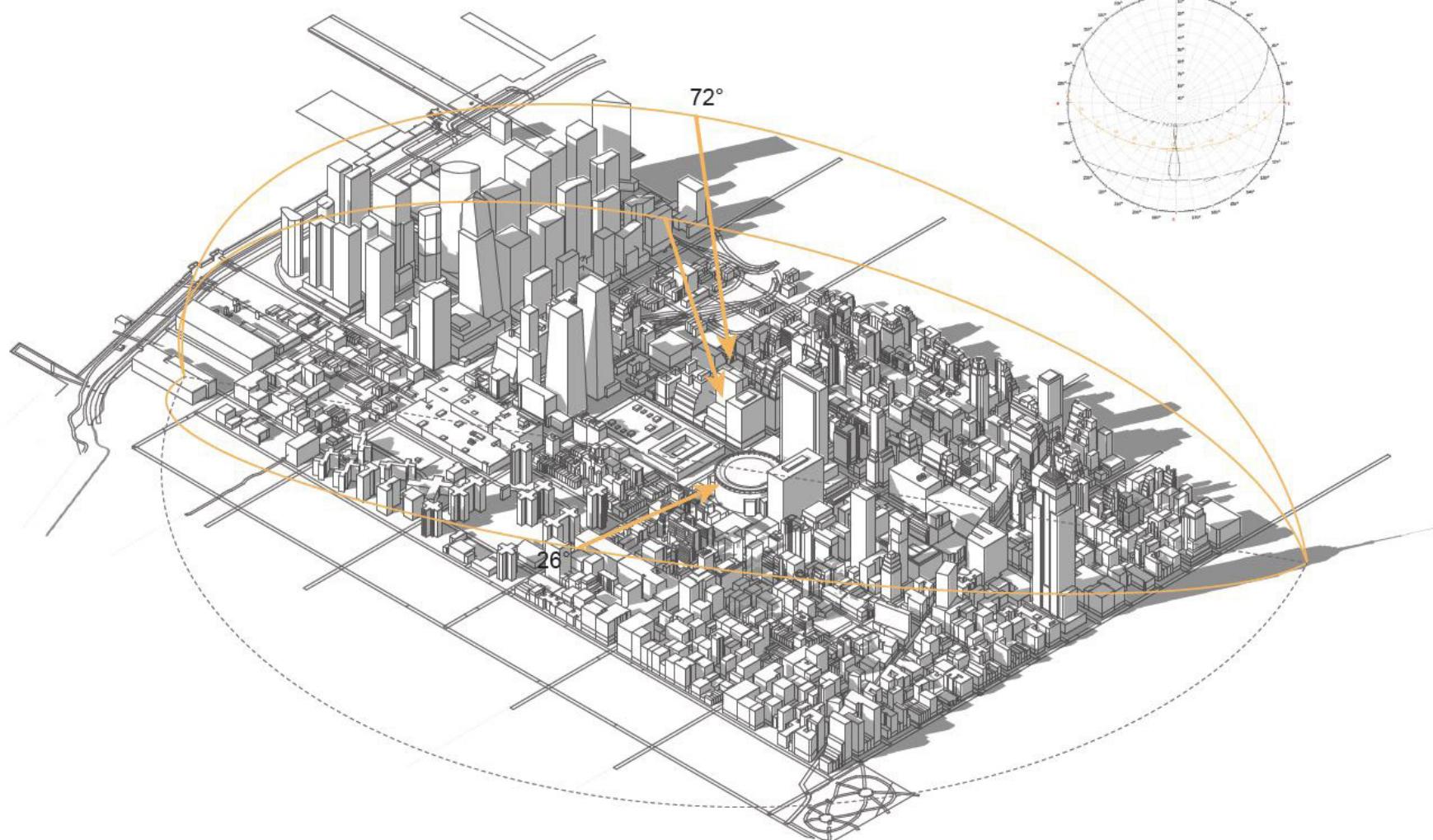
Wind-Rose  
New York Central Prk Obs Belv\_NY\_USA  
1 JAN 1:00 - 31 OCT 24:00  
Hourly Data: Wind Speed (m/s)  
Calm for 0.00% of the time = 0 hours.  
Each closed polyline shows frequency of 0.9%. = 65 hours.  
...  
Conditional Selection Applied:  
Wind Speed>1  
and Dry Bulb Temperature>16  
3388.0 hours of total 8760.0 hours (38.68%).



Wind-Rose  
New York Central Prk Obs Belv\_NY\_USA  
1 JAN 1:00 - 31 OCT 24:00  
Hourly Data: Dry Bulb Temperature (C)  
Calm for 0.00% of the time = 0 hours.  
Each closed polyline shows frequency of 0.9%. = 65 hours.  
...  
Conditional Selection Applied:  
Wind Speed>1  
and Dry Bulb Temperature>16  
3388.0 hours of total 8760.0 hours (38.68%).



## SUN PATH



## WIND ENERGY POTENTIAL - BELOW AVERAGE

not good for energy but useful for microclimate

