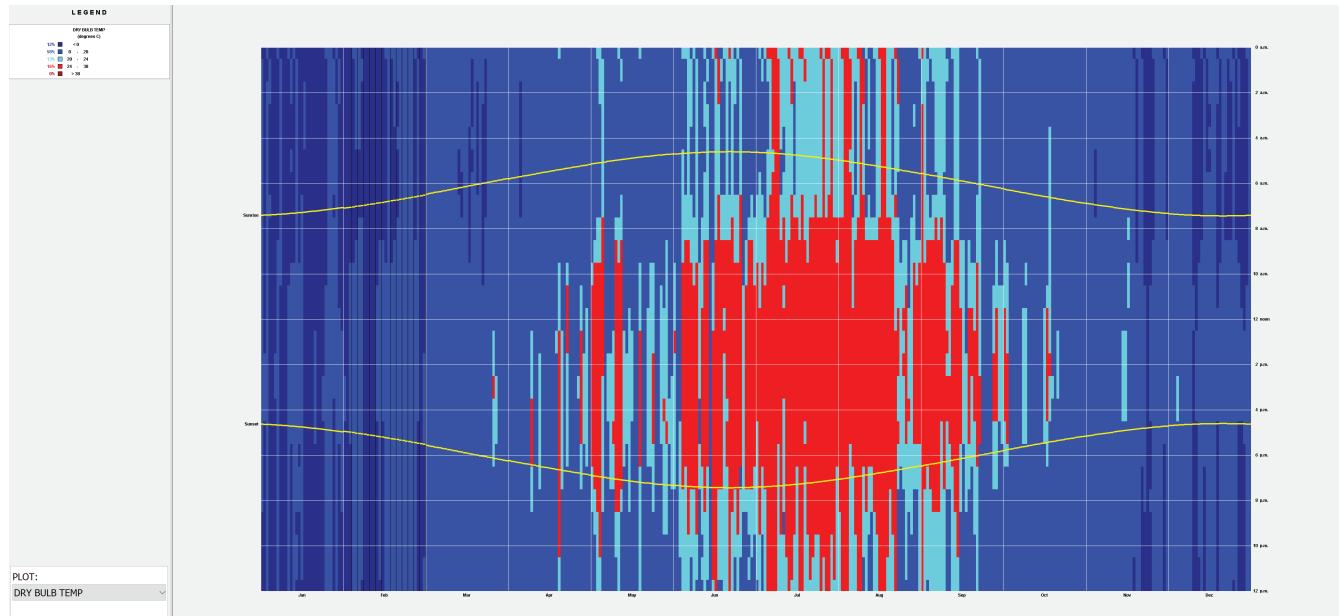


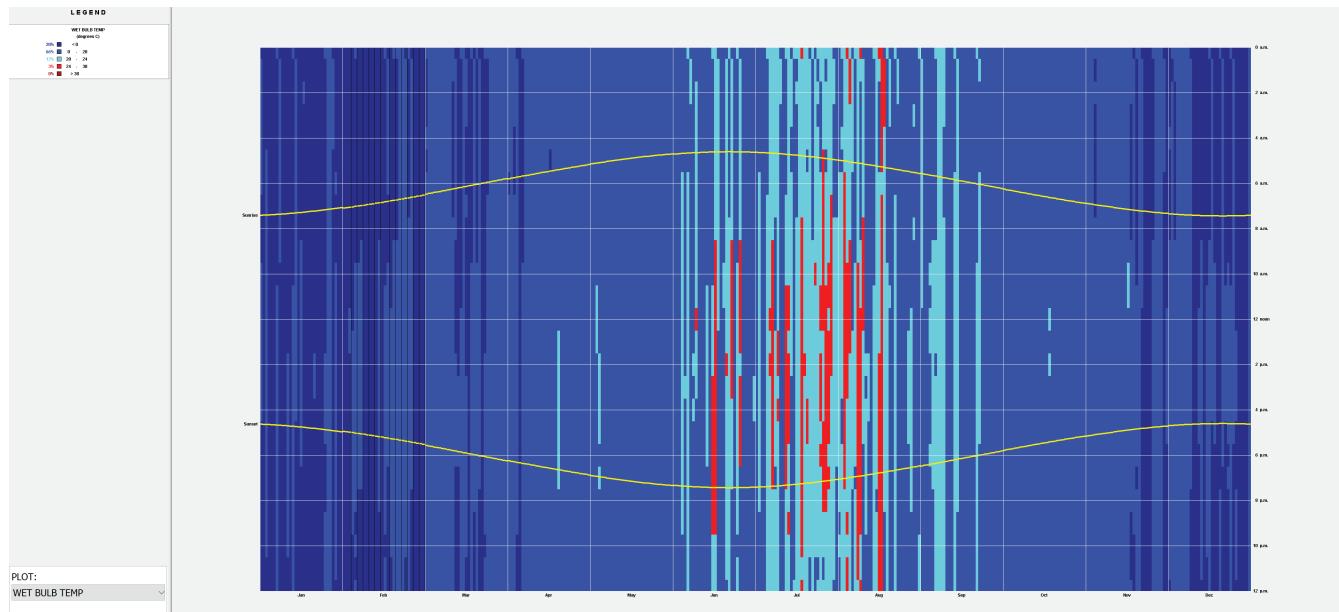
# Climate Analysis 2

Carla Bonilla

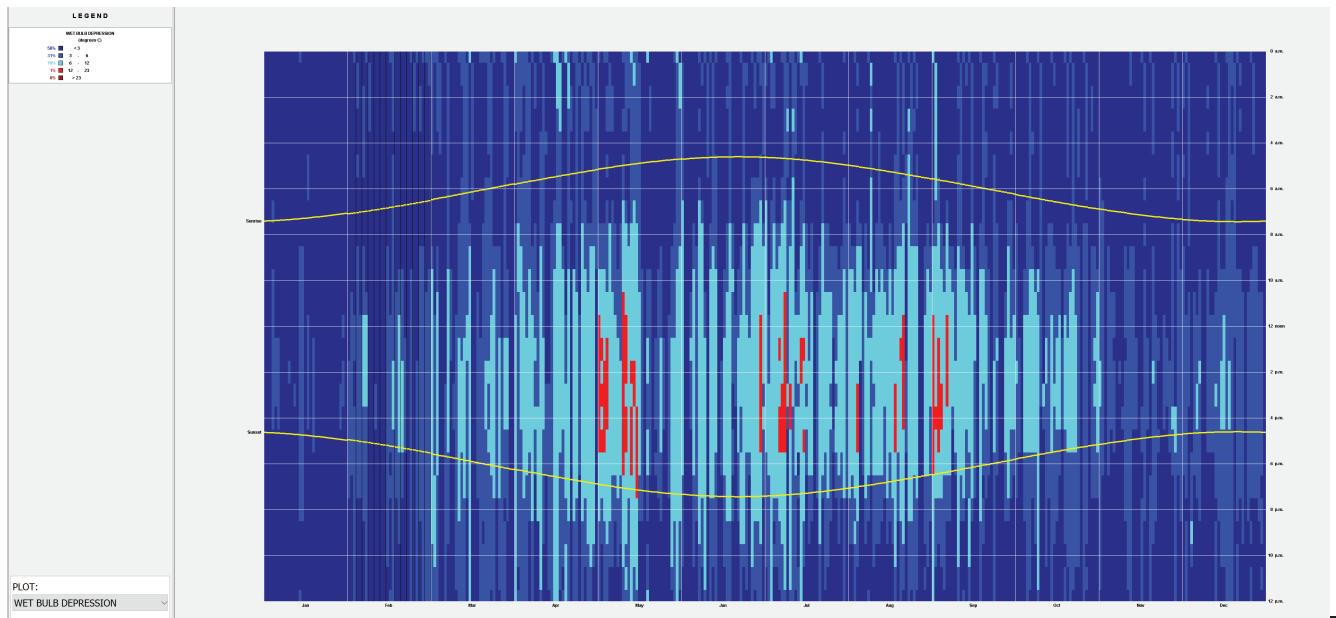
Weather Report - Philadelphia



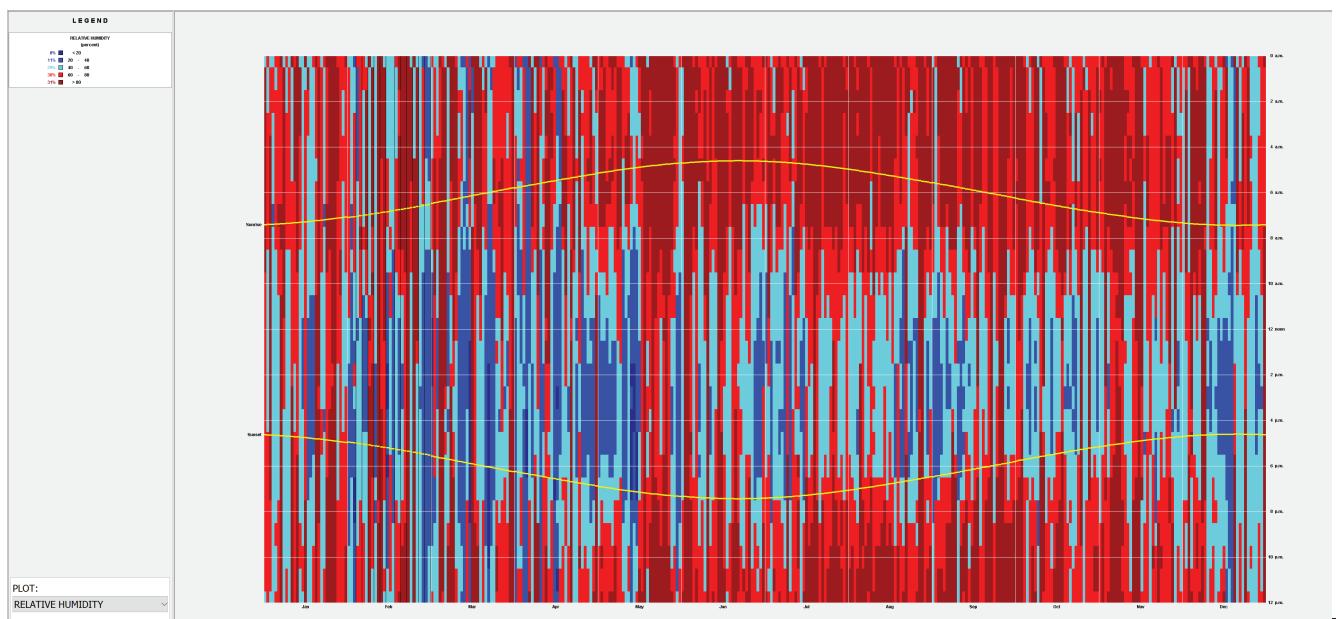
Dry Bulb Temperature Chart



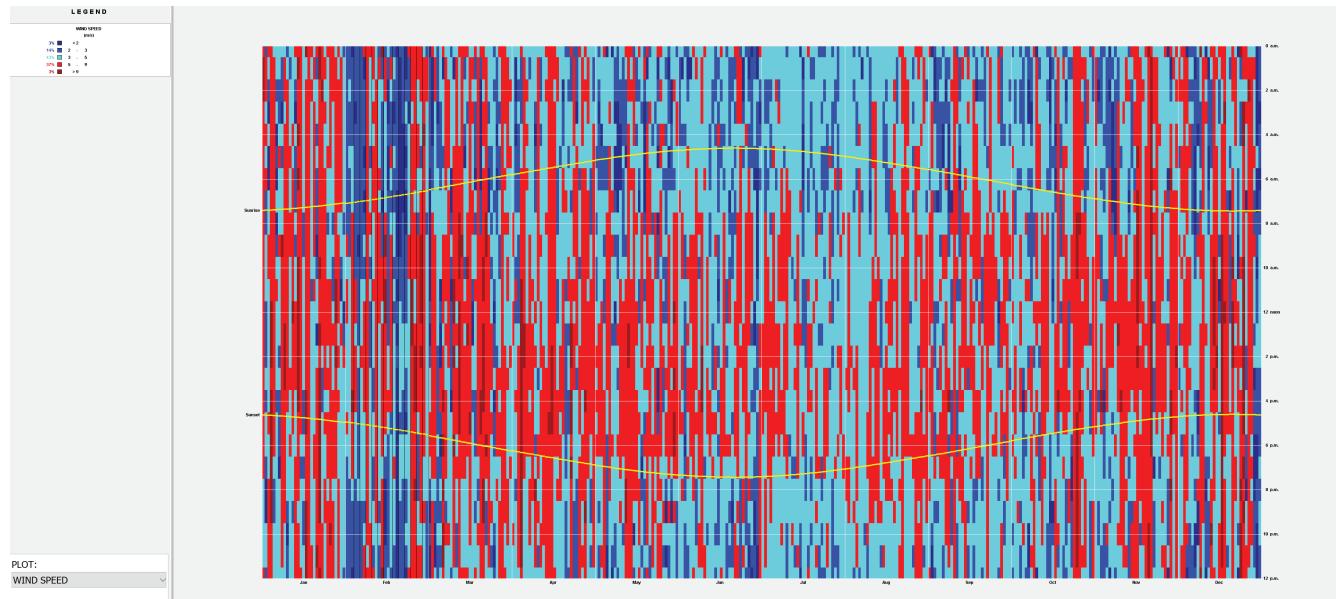
Wet Bulb Temperature Chart



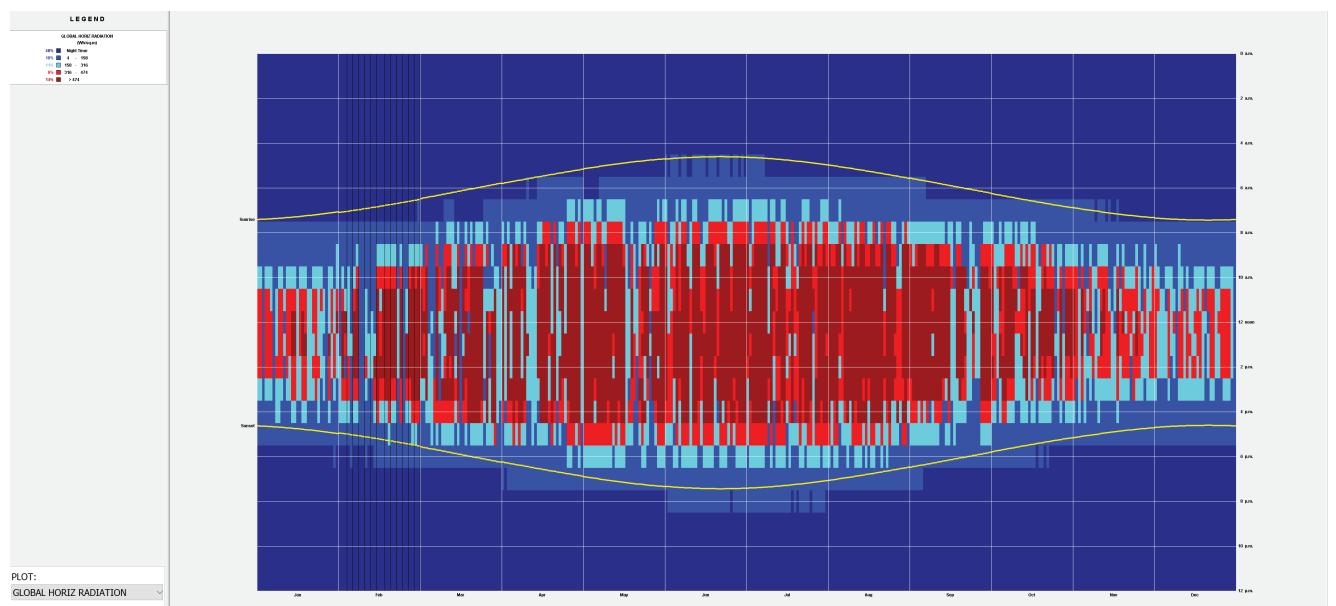
Wet Bulb Depression Chart



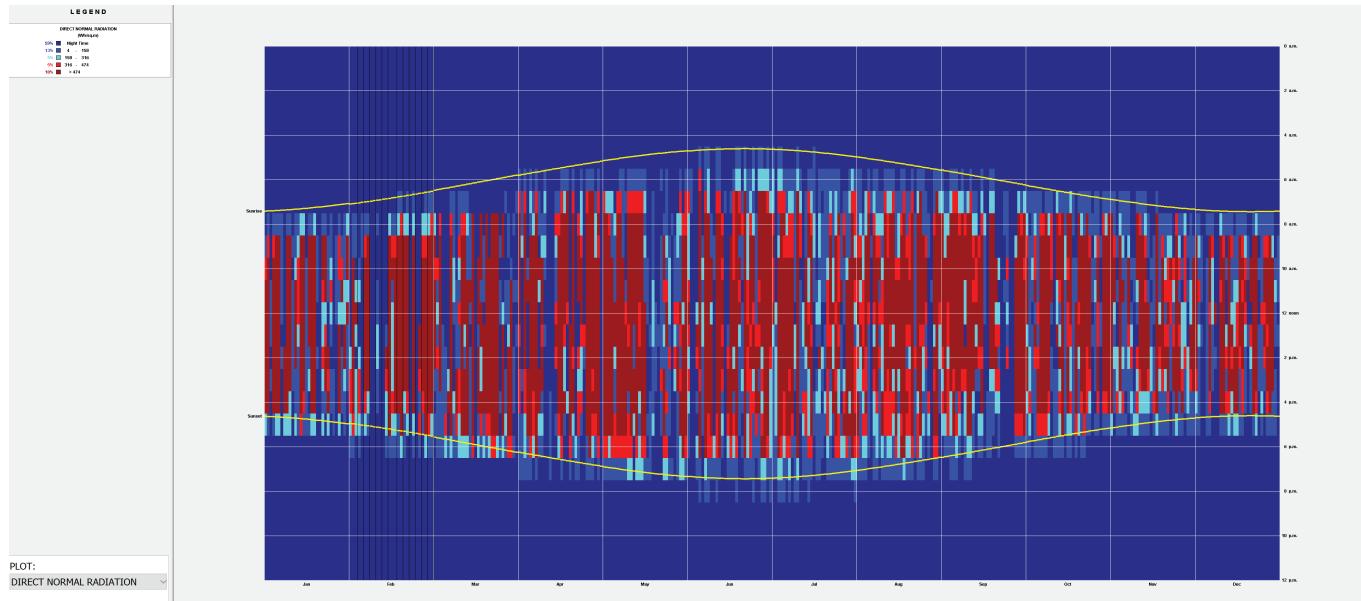
Relative Humidity Chart



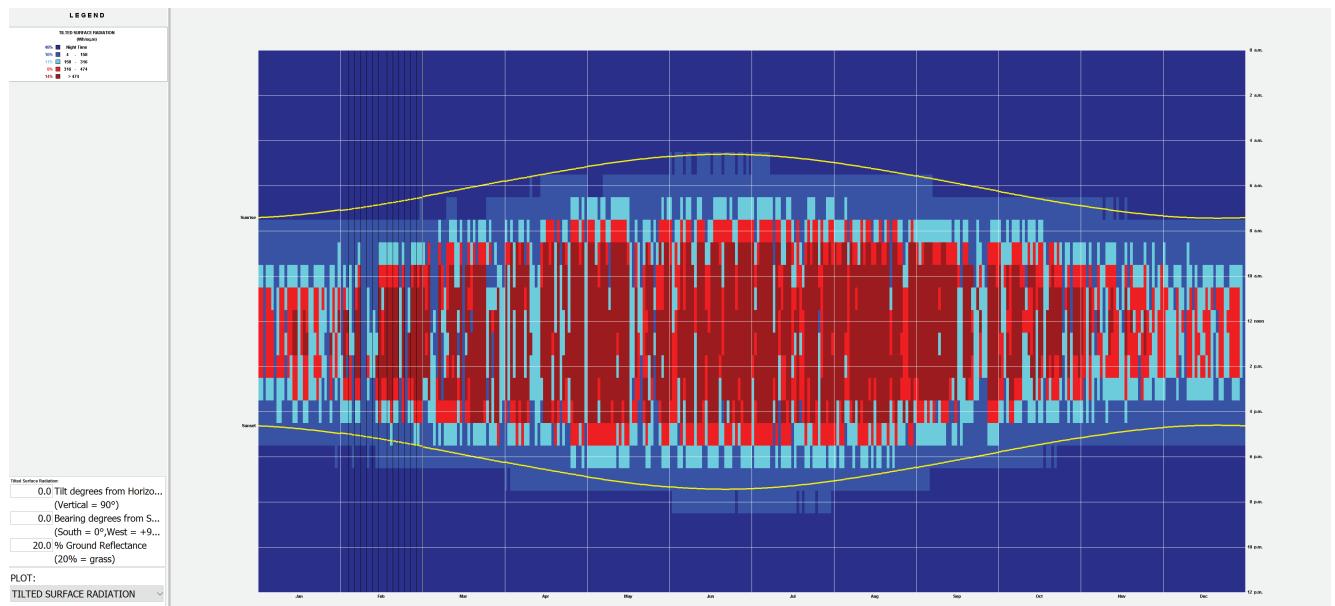
Wind Speed



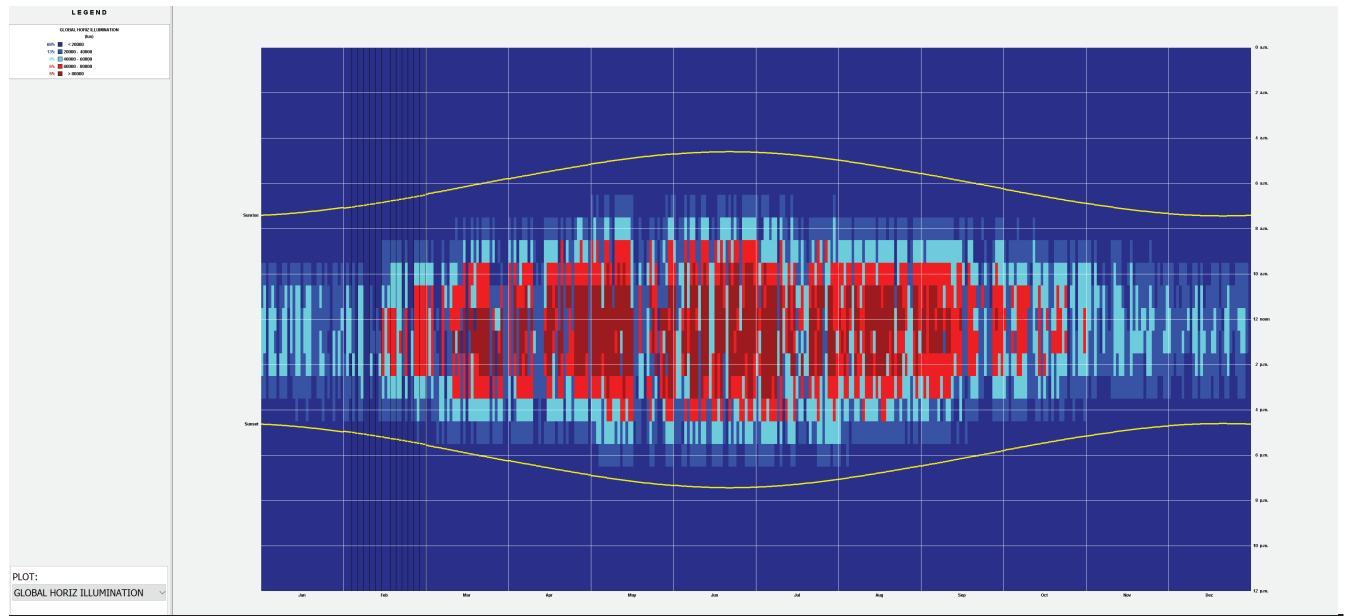
Global Horizontal Radiation Chart



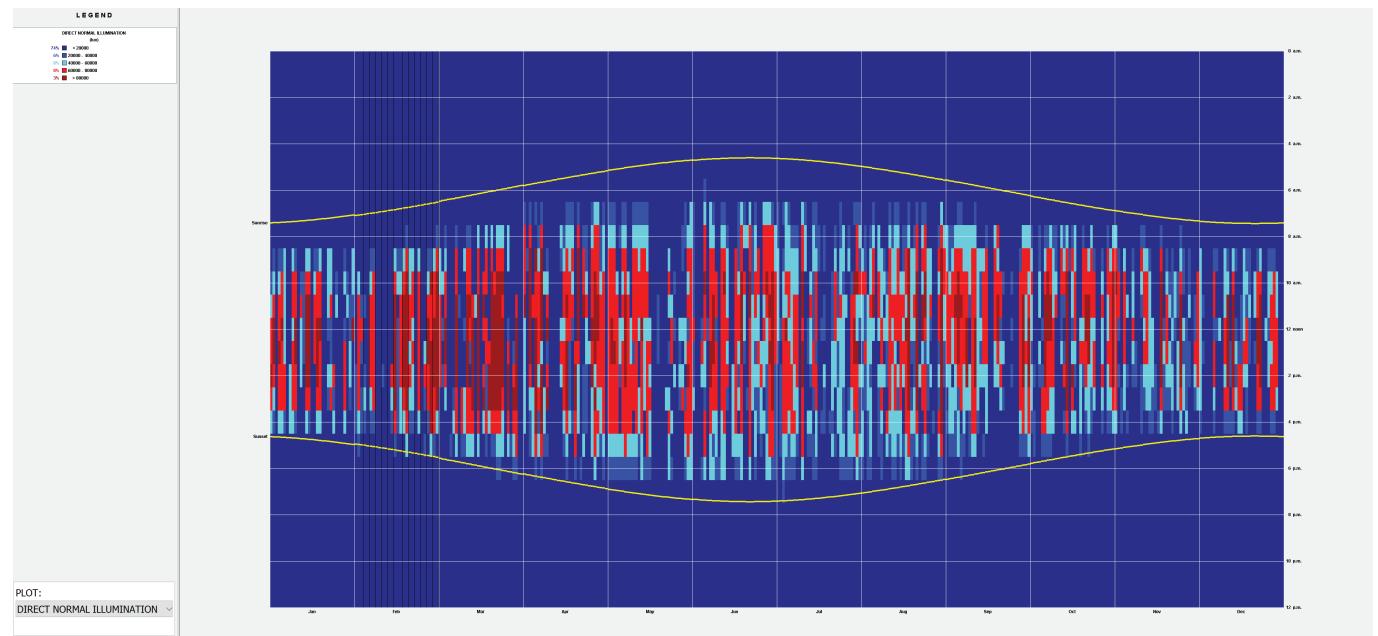
Dry Bulb Temperature Chart



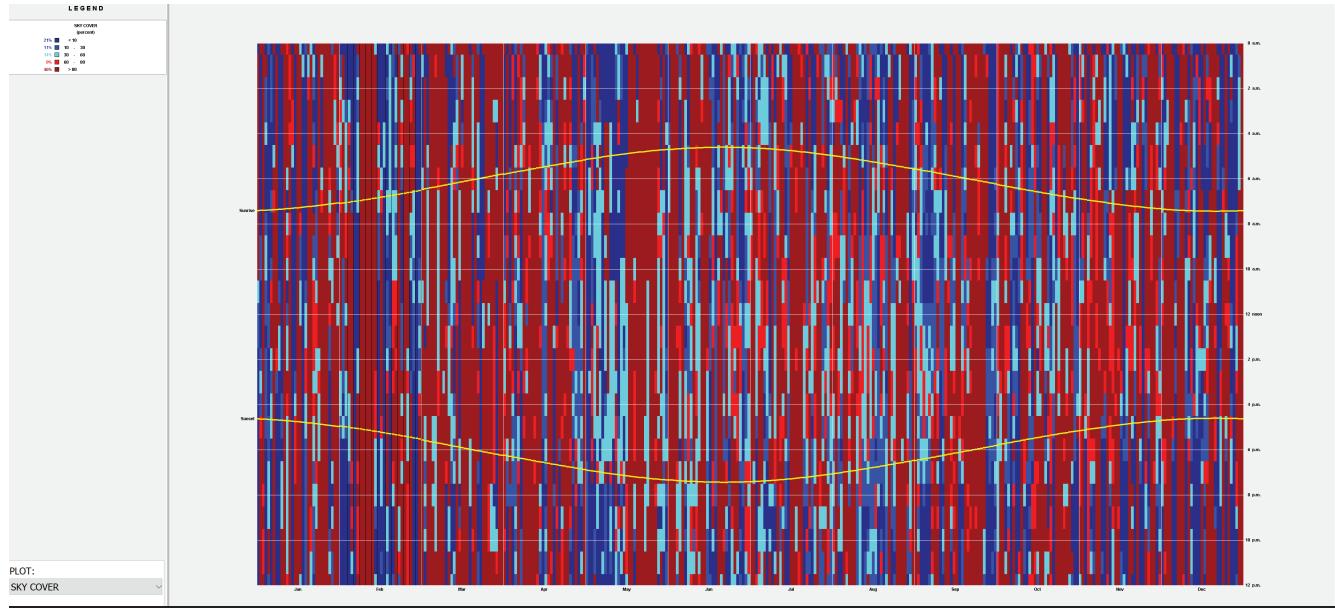
Tilted Surface Radiation Chart



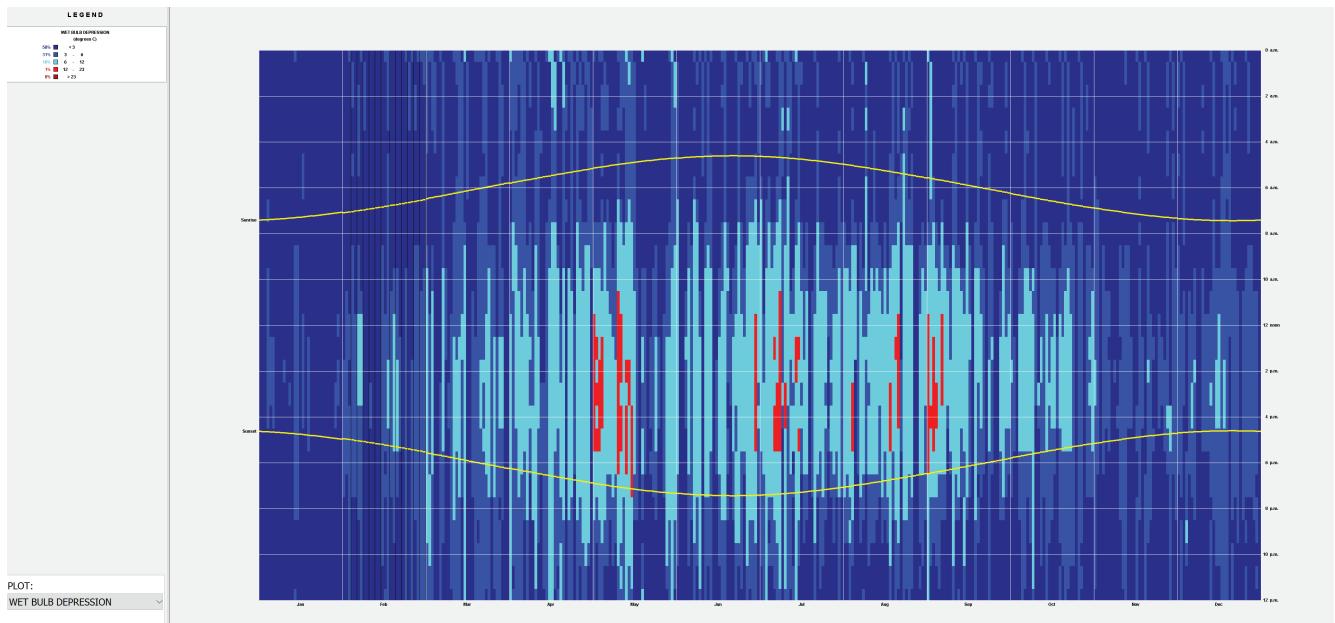
Global Horizontal Illumination Chart



Direct Normal Illumination Chart



Sky Cover Chart



Wet Bulb Depression Chart

Most important passive design strategies:

- 1) Passive Solar Heating: Graphs showing dry-bulb temperature throughout the year, show temperatures below 20 C throughout the winter. Radiation graph shows still a considerable amount of radiation during winter time. Thus windows can be designed to catch a lot of such radiation. Windows facing south will allow for sun radiation to enter space and passively heat it during winter. Sun shading the south facing windows would also allow for heat to not enter spaces during the Summer time.
- 2) Using Low E glass on north, west and east, but not on the south facing windows: It would help stop the heat from escaping the building during winter and the cold during the summer, but would allow for passive heating on the south side during winter time.
- 3) Natural ventilation and the use of ceiling fans : Wind speed graph shows a more or less consistent wind speed pattern. Throughout the summer natural ventilation would reduce or avoid completely the use of air conditioning.