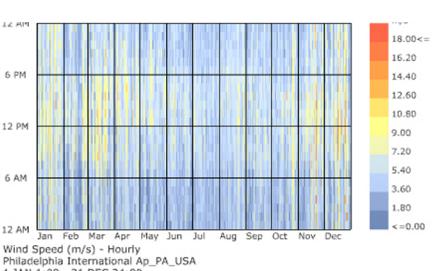
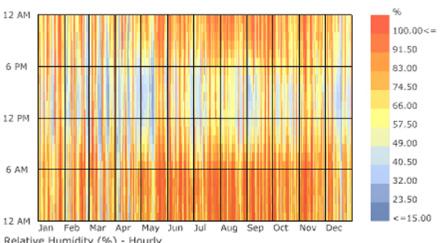
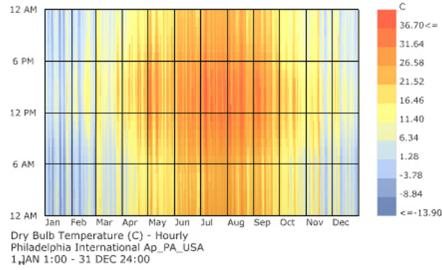


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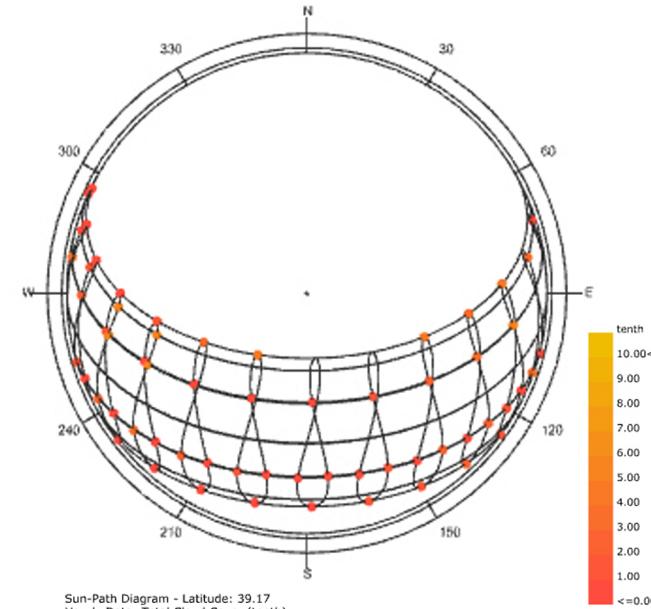
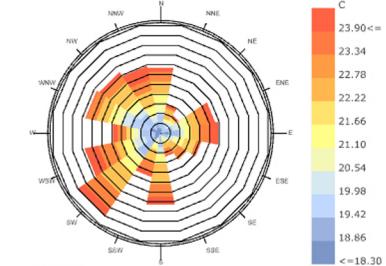
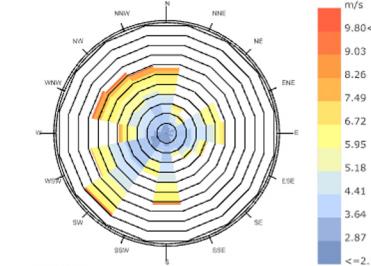
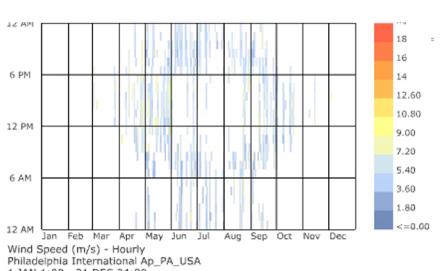
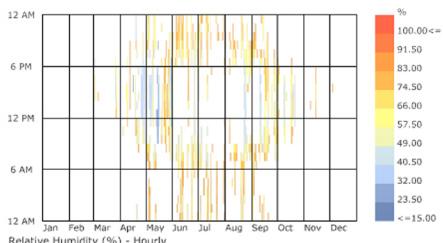
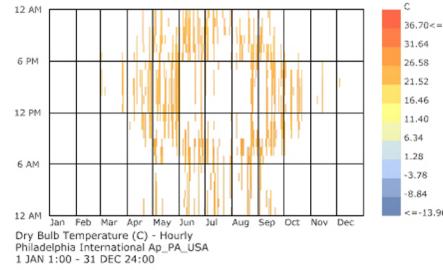
Building Performance Simulation Assignment-2

Site: Philadelphia

Overall Annual Report



Annual comfort Report



Notice: The comfort ranges are assumed based on the UTCI nad ASRAE-55 standards

Inference:

- From the charts it is clear that maximum comfort is achieved in the day & noon during the months from May to September, noon & evenings during April, May, September & October and nights during May to September.
- From the wind-rose: Major winds are from the south-west direction, but are mostly hot during the summer

Solution:

- Shading for the windows is required during the summer months, but not during the rest of the year. So an active/dynamic shading system can be an option.
- Use of smart glass for the window panels.
- Openable windows can be a better option over the fixed ones to allow natural ventilation over the year except for the winter months