

SUPPLEMENTARY MATERIALS

Computational Graphs underlining the analysis in the paper, prepared by Paul Matthew. All charts in this section have been produced with Climate Consultant V6.0. Climate Consultant was developed by UCLA Energy Design Tools Group. Climate Consultant is copyrighted 1976, 1986, 2000, 2006, 2008 and 2010 through 2018 by the Regents of the University of California.

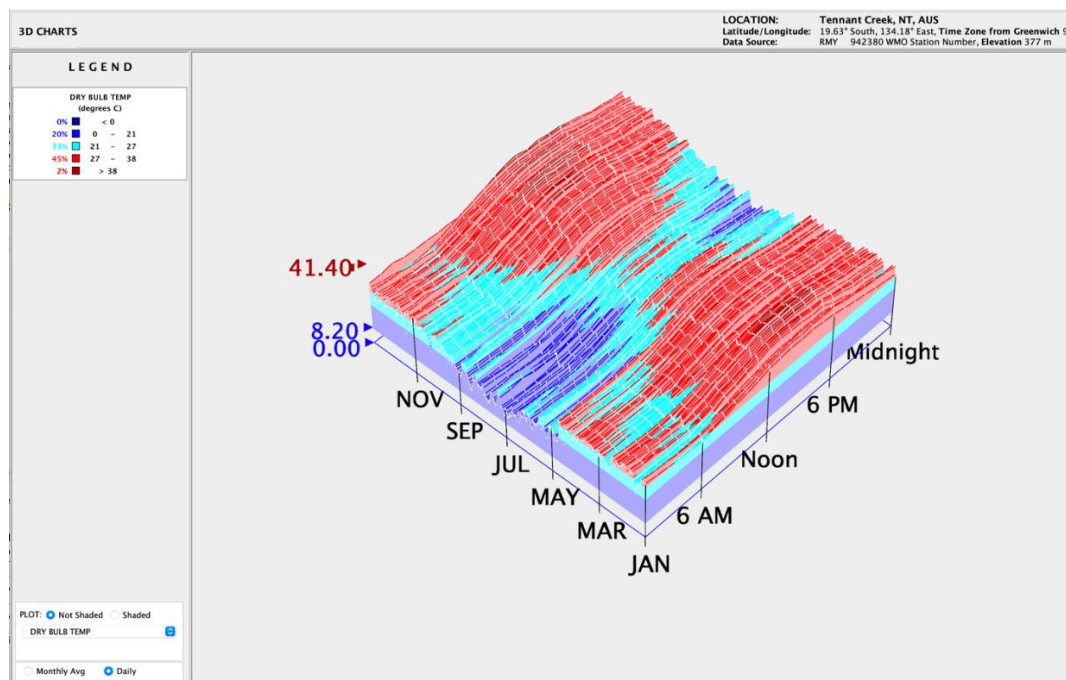


Figure 1. Three-dimensional graph of annual average temperatures and thermal comfort in Tennant Creek.

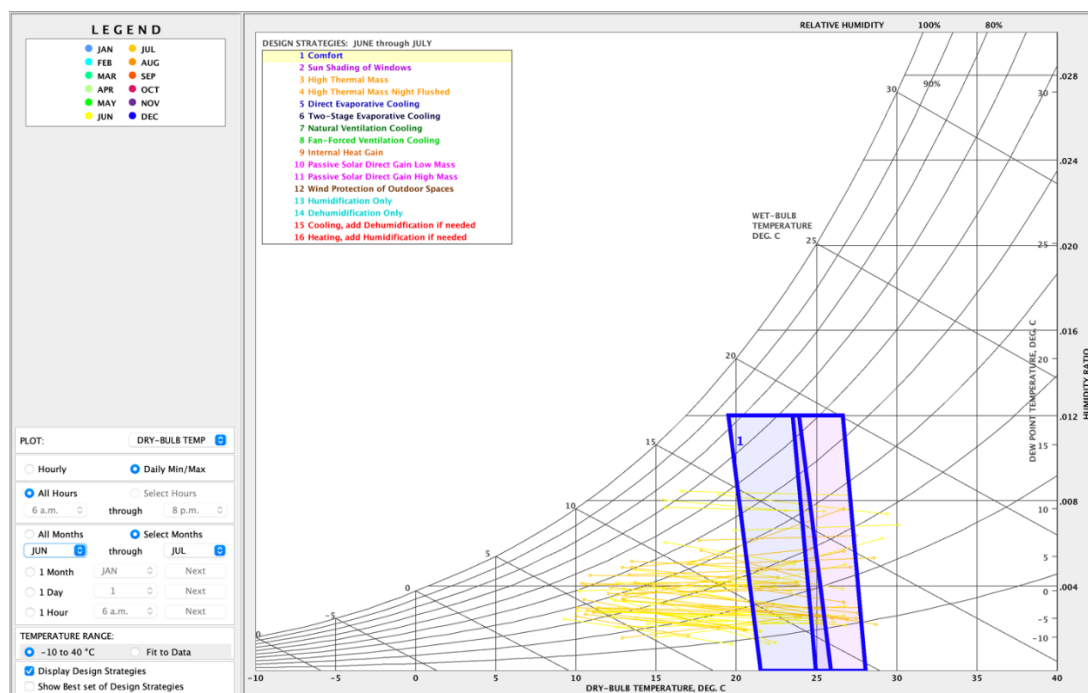


Figure 2. Psychrometric chart showing thermal comfort zone against conditions in Tennant Creek in June and July.

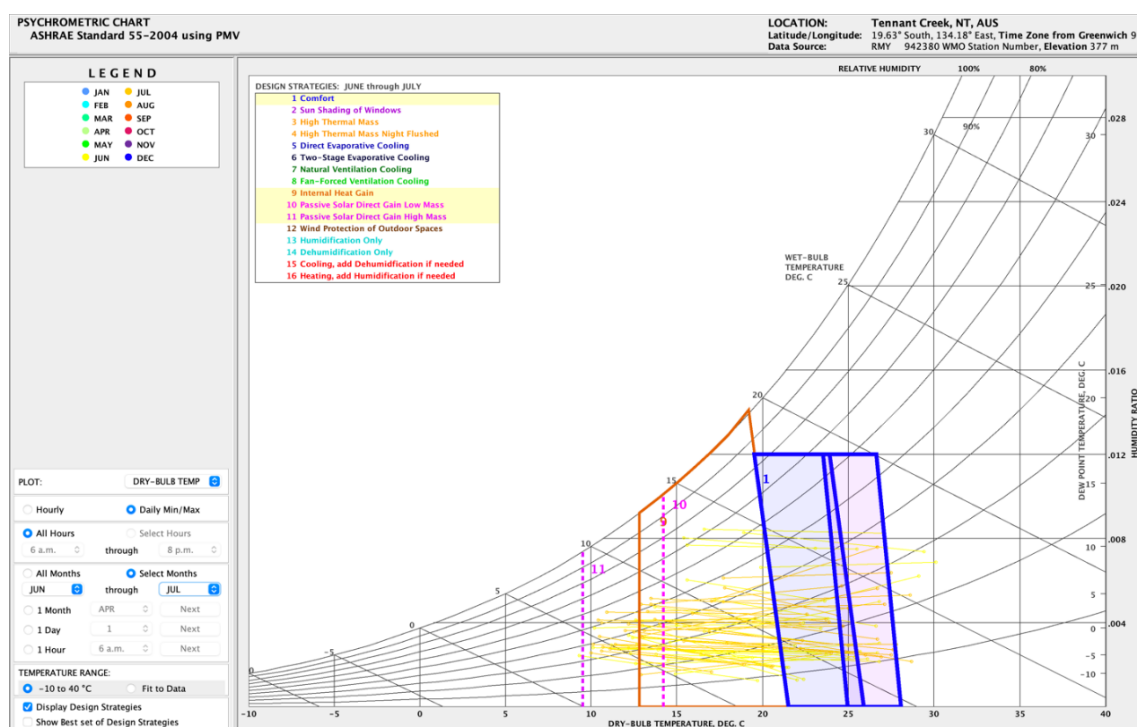


Figure 3. Psychrometric chart showing expanded thermal comfort zone from passive solar gain design strategies in winter, for low and high thermal mass dwellings, against daily conditions in Tennant Creek in June and July.

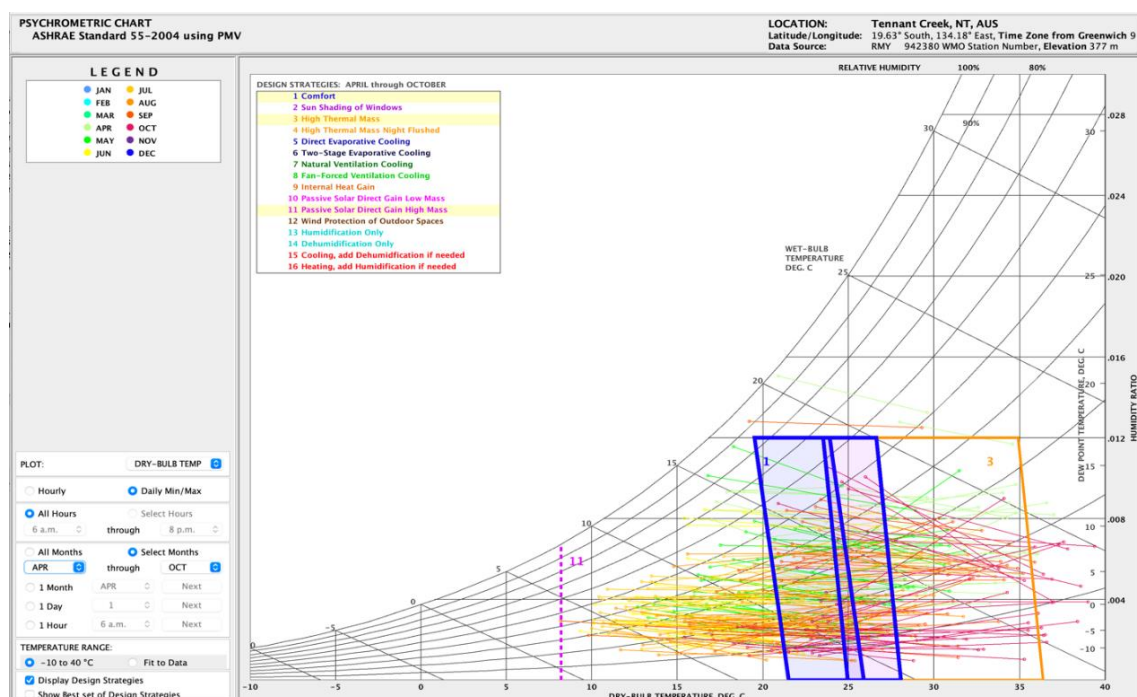


Figure 4. Psychrometric chart showing expanded thermal comfort zone from a high thermal mass design strategy, against daily conditions in Tennant Creek from April to November.

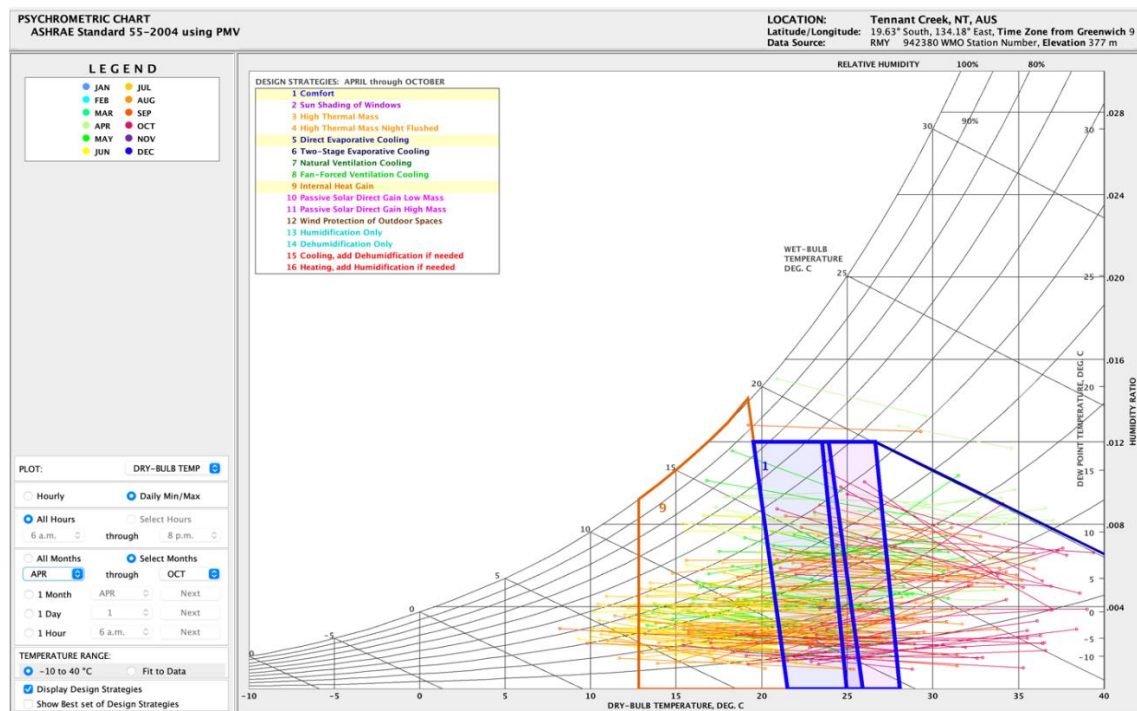


Figure 5. Psychrometric chart showing expanded thermal comfort zone from tightly-sealed building envelope design strategies against conditions in Tennant Creek from April to November.

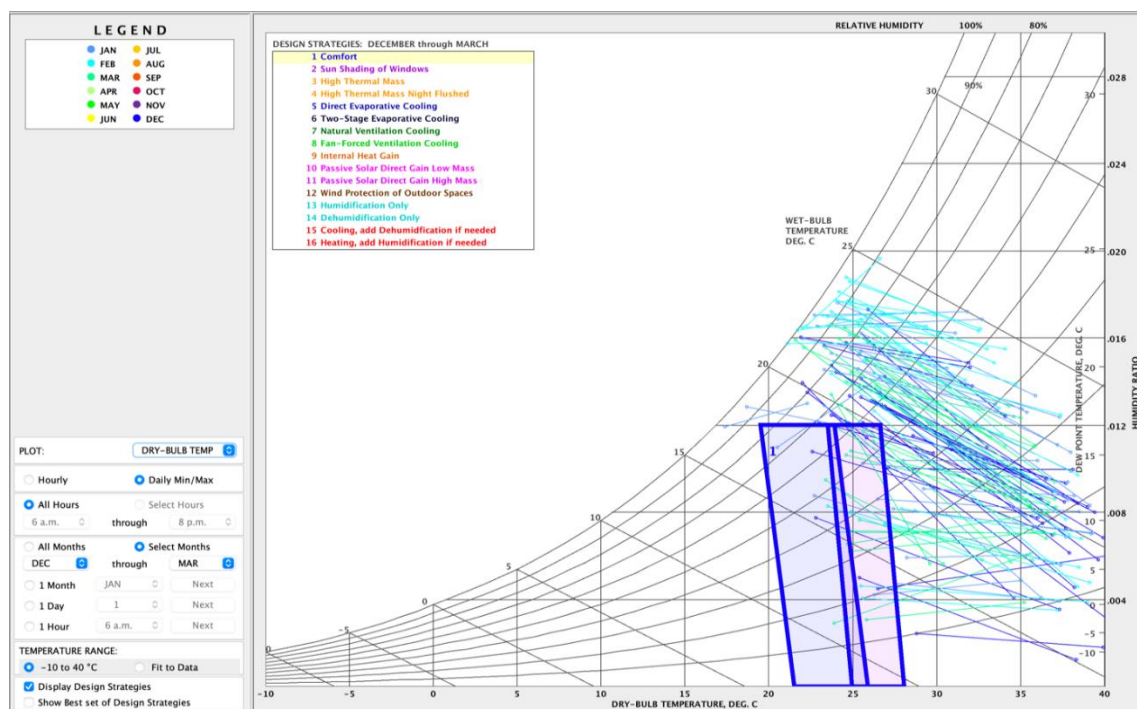


Figure 6. Psychrometric chart showing thermal comfort zone against conditions in Tennant Creek from December to March.

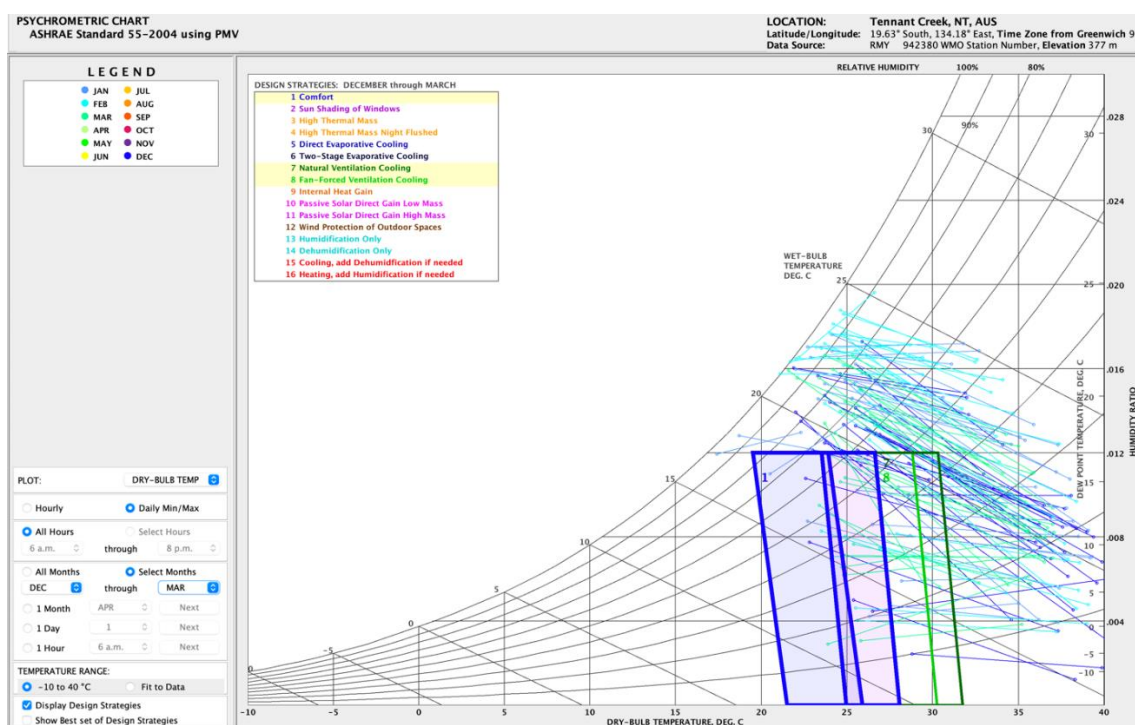


Figure 7. Psychrometric chart showing the expanded thermal comfort zone from natural ventilation design strategies, against conditions in Tennant Creek from December to March.

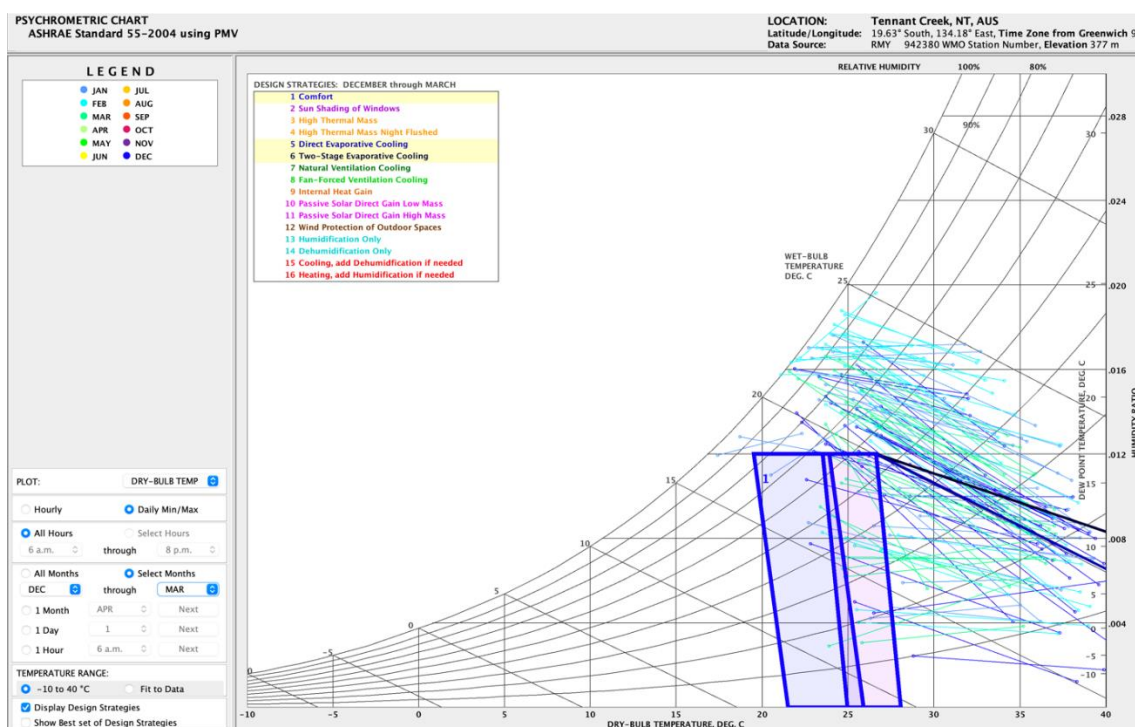


Figure 8. Psychrometric chart showing the expanded thermal comfort zone from evaporative cooling, against conditions in Tennant Creek from December to March.

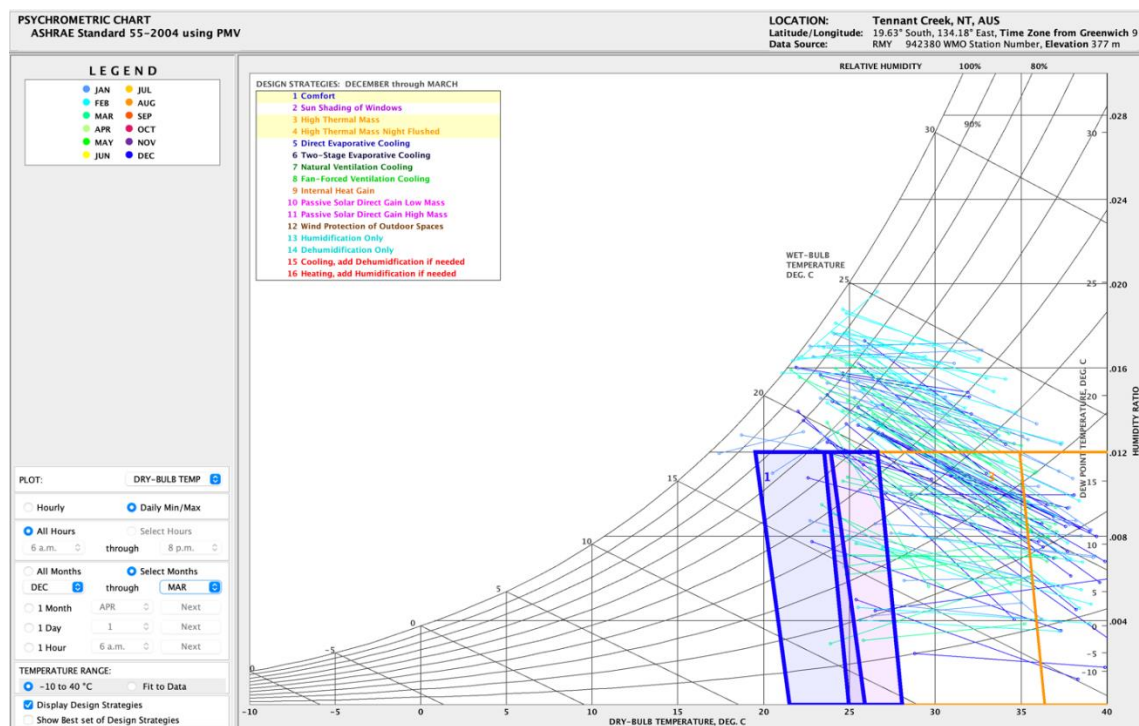


Figure 9. Psychrometric chart showing the expanded thermal comfort zone from night-purged high thermal mass design strategies, against conditions in Tennant Creek from December to March.