Submitted to the City of Madison Plan Commission 02/04/2010

Description of Figures

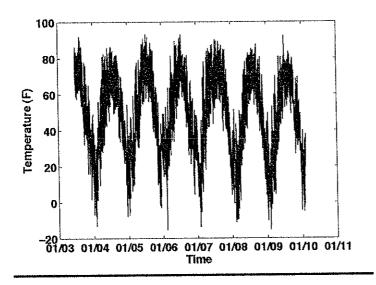


FIGURE 1: This plot shows the entire temperature record (Fahrenheit) from the AOS rooftop measurement station. The horizontal axis is time, from January 2003 to January 2011.

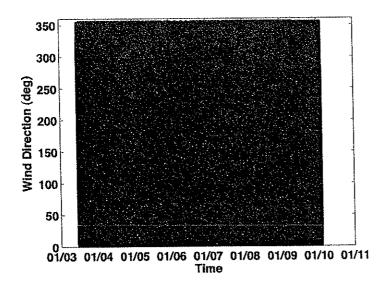


FIGURE 2: This plot shows the entire wind-direction record (degrees) from the AOS rooftop measurement site. Since it is very evenly distributed, with no seasonal patterns, there is little value in looking at the "average" of this dataset.

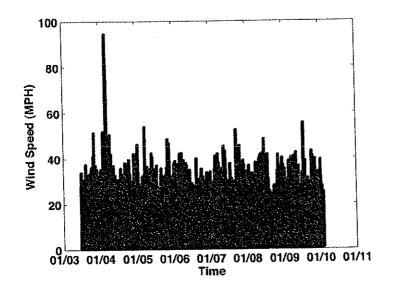


FIGURE 3: This plot shows the entire wind-speed record (in MPH) from the AOS rooftop measurement site.

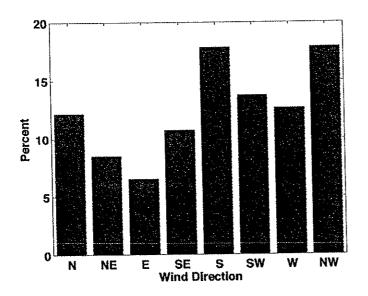


FIGURE 4: This plot shows the percentage of total cases for each wind direction for the entire data set plotted in Figure 2.

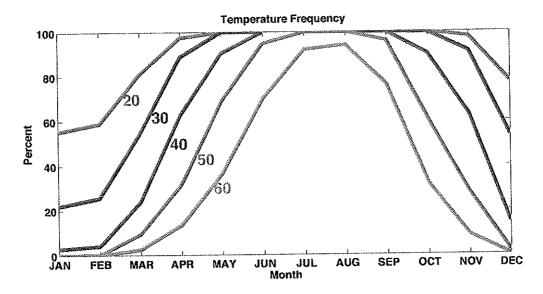


FIGURE 5: This plot shows the percentage of total cases for which the temperature was greater than the amounts shown, for each month. For example, in January, temperatures were above 30 degrees ~20% of the time, and above 20 degrees ~55% of the time.

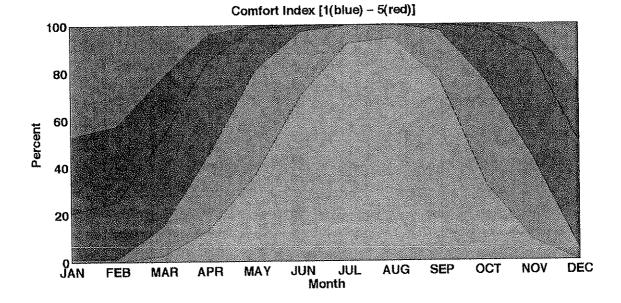


FIGURE 6: This plot shows the percentage of total cases for which the "comfort index" is at least at the level indicated (1-5), for each month. A description of the comfort index qualifiers is below. For example, in January, the comfort index was at least "2" ~53% of the time and at least "3" ~20% of the time.

1 Temperature under 20 degrees OR Temperature under 30 degrees with winds greater than 15 MPH from a direction between NW and NE OR Temperature under 45 degrees with winds greater than 30 MPH from a direction between NW and NE 2 Temperature under 30 degrees OR Temperature under 45 degrees with winds greater than 15 MPH from a direction between NW and NE ***** 3 Temperature under 45 degrees OR Temperature under 60 degrees with winds greater than 15 MPH from a direction between NW and NE 4 Temperature under 60 degrees OR Temperature above 60 degrees with winds greater than 30 MPH from a direction between NW and NE 5

Comfort Index

Temperature above 60 degrees and winds NOT between NW and NE at 30+ MPH



