University of Waterloo Weather Station Monthly Summary - December 2005

For the first time since May we had a colder than average month. However, there was only one really cold spell (on the 11th and 12th), the rest of the time it wasn't that far below average and it got warm at the end of the month.

The daily high temperatures were almost 2.5 degrees less than average while the daily low temperatures were very close to average. This shows that the difference between the daytime and nighttime temperatures (the diurnal variation) wasn't very large; this is what we would expect at this time of the year as compared to the summer. The reason is that during the summer the ground absorbs more of the incoming radiation from the sun and thus heats up during the day, when there is snow cover much of the incoming radiation is reflected back to atmosphere and the ground surface doesn't heat up as much.

There was only 43.0 mm of precipitation measured in December, this is about 58% of the average amount we would expect. However, as it was colder during the first part of the month, a lot of precipitation fell in the form of snow and stayed around till the new year. I think this made the less then average precipitation deceiving as people were able to look at (and had to shovel) almost all of the precipitation that did fall.

The total precipitation for the year (812.4 mm) was below average (907.9 mm).

Environment Canada prediction of temperature for the month: Below Average Actual Temperature: Below Average

Summary for December 2005: Maximum Temperature 3.5 C Minimum Temperature -21.0 C Average Daily High Temperature -2.8 C (Long term average -0.3 C) Average Daily Low Temperature -7.4 C (Long term average -7.5 C) Total Precipitation 43.0 mm (Long term average 73.7 mm)

(Long term averages based on 1970-2000 data for the Waterloo Wellington Airport)