

A very cold and dry February

Just how cold was it this February? Well it was a) the coldest February and b) the second coldest for any month that we have ever recorded in the nine year history of the University of Waterloo Weather station (the coldest month we have recorded was January of 2004). Overall we were about 4 degrees less than average, making it the first month that has been significantly lower than average since December of 2005.

On February 19th it got up to 2.9 °C making it one of only 5 above average days we saw during the month. It also broke a run of 22 below average days stretching back to January 27th, quite a contrast to the run of 31 straight days of above average temperatures we had between December and January.

It will be interesting to see how the winter overall will come out with its runs of very high and then very low temperatures. Right now it looks like it will shake out to be an average winter, we'll see the final answer in about 3 weeks.

The 27.4 mm of precipitation in the month was the lowest amount for February we have seen at the UW weather station. February is typically the month with the lowest precipitation at only 51.3 mm and believe it or not we usually see almost half of it as rain.

This February almost all of the precipitation came as snow as we probably had about 5-7 mm of rain (or maybe freezing rain). It is hard to say exactly, as we can't really measure the different types of precipitation unless we had a human observer at the station. But in essence we had pretty much an average amount of snow during the month but we were missing the rainfall component.

The total precipitation for the year is now 92.5 mm, below the average for this time of year that is 115.7 mm.

And now to answer a question I get all the time: Why is precipitation measured in mm in the winter, shouldn't it be cm of snowfall?

In the winter the precipitation is still measured in mm, this number is referred to as the snow water equivalent. This is the number of mm of water that would result if the amount of snow that fell were melted into liquid water. We don't report the total snowfall in cm (which is essentially a volume) because the density of snow can vary greatly. For example, the 15 cm of light fluffy snow we had on the 13-14th of February contained as much water as the 5.5 cm of heavy snow we got on the 25th.

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

Summary for February 2007:

Maximum Temperature 3.3 °C

Minimum Temperature -26.8 °C

Average Daily High Temperature -5.9 °C (Long term average -1.9 °C)

Average Daily Low Temperature -14.4 °C (Long term average -10.5 °C)

Total Precipitation 27.4 mm (Long term average 51.3 mm)

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