

University of Waterloo Weather Station Monthly Summary - September 2006

Believe or not, overall it was an average month of temperature. However the gauge that most people would use to judge, the average daily high temperatures, were 1.5 degrees below average. These are the coldest September daytime temperatures we have seen in the eight year history of the University of Waterloo weather station. Typically there is about a 50/50 chance that there will see at least one 30 degree day in the month of September, this year the highest temperature was only 25.7 °C.

But these colder high temperatures were offset by the average daily low temperatures that were 1.7 degrees above average. Of course most people are much more aware of deviations in the daytime highs when they are awake and outside than what is happening with the nighttime lows when they are inside asleep.

To answer the question of why, I looked at the incoming solar radiation for the month and saw that it was the cloudiest month of September we have recorded at the station. Having an abundance of clouds causes the daytime temperatures to be lower because of the lack of direct solar heating of the ground and then at night they hold in the earth's heat to make the nighttime temperatures higher.

We had 117.2 mm of precipitation this month compared to an average of only 87.5 mm. This is the most we have ever seen in the month of September at the University of Waterloo weather station. Obviously, that made it an above average month for precipitation

There were also a lot of days where we saw some precipitation; there were 22 days where it did rain, compared to the average of only 12 rainy days for the month. To put it another way, there were only 8 days this month when it didn't rain.

This month put the total precipitation for the year of 778.6 mm even more above the 677.2 mm that we would expect at this time.

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

Summary for September 2006:

Maximum Temperature 25.7 °C

Minimum Temperature 2.3 °C

Average Daily High Temperature 18.6 °C (Long term average 20.0 °C)

Average Daily Low Temperature 10.3 °C (Long term average 8.3 °C)

Total Precipitation 117.2 mm (Long term average 87.5 mm)

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