University of Waterloo Weather Station adds graphs of recent weather data to website

The University of Waterloo Weather Station has added graphs of the most recent weather conditions on our very popular website: weather.uwaterloo.ca. The graphs show the trends in temperature, precipitation, pressure, shortwave radiation, and wind speed. You can now easily see when the high temperature of the day occurred or if it is windier today than it was yesterday.

We have had many requests over the years to put up something like this on the weather station website, but up until now we haven't been able to come up with a solution that fit within our current method of collecting and storing the weather data. However, an individual within the Department of Civil and Environmental Engineering came up with a method to put the live graphs on the website. The method consists of various interactions between the weather station database and the webserver, the programming work was done by Wayne Jenkinson, a graduate student in Civil and Environmental Engineering as well as the founder of Praxis Technologies.

We tried to keep the graphs simple by only putting one parameter on each graph. Doing a survey of other weather graphs on the internet found that most were far too busy with multiple parameters on a single graph, this made them very hard to read. We also limited the number of parameters to the five that we think are the most interesting to see in graphical form although we could add others in the future.

In addition to the measured values, the temperature graph also shows the average high and low temperatures for that day, this makes it easy to see when we are having a particular hot or cold day. And before you ask, no we don't do that for the other parameters as they don't really have the same annual trends in their values (except for shortwave radiation and we are working on showing the average values for that one).

Right now the graphs show the weather conditions from both the previous and current day, however in the future we hope to expand the graphs to show weekly and monthly data. People are reminded that all the data from the station are available from the Data Archives page (weather.uwaterloo.ca/data.html), just not in graphical form.

We are interested in what the public thinks about the weather graphs so please send your comments to: weather@civmail.uwaterloo.ca