

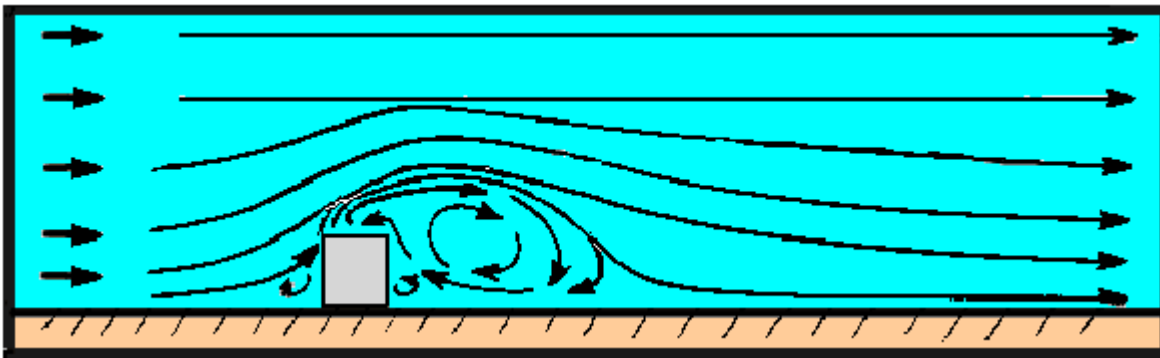
## Screened rain / snow gauges

A rain / snow gauge with a wind screen:

<http://physics.stackexchange.com/questions/181263/rain-measurement-with-wind-blowing>  
[http://hubbardbrook.org/w6\\_tour/rain-gauge-stop/precipitation.htm](http://hubbardbrook.org/w6_tour/rain-gauge-stop/precipitation.htm)



Wind screens are added to slow the wind and reduce problems caused by localized winds that are created by a rain / snow gauge disrupting the small to microscale wind field around the gauge. As shown in the following diagram, wind perturbations can carry precipitation over and beyond the rain gauge (the grey box in the image below). This can lead to smaller precipitation accumulations in the rain/snow gauge than in the area just around it.



(Original image from <http://www.islandnet.com/~see/weather/elements/citywind.htm> )

The more elaborate weather station (below) run by the Agrometeorology group at the Elora Research Station (University of Guelph - 43 39N, 80 25W; 376m AMSL) has been going since 1971. Note the current variety of automated precipitation sensors (for more information see <https://ses.uoguelph.ca/weather-records-services> and <http://ses.uoguelph.ca/~tgillesp/WrStnPanorama.htm> ).

