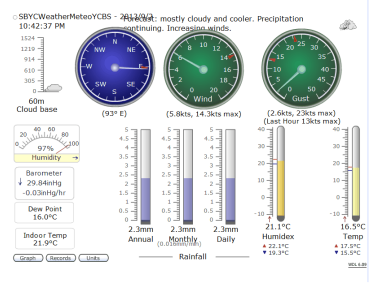
Shediac Bay Yacht Club / Yacht Club de la Baie de Shediac

USING WEATHER DISPLAY LIVE (WDLive)

Weather is an interesting topic, not only because it is arguably the most used introduction to conversations, but also because I'm sure we have many weather buffs among our members - people who want to understand weather, weather indicators etc. This note is to explain the live online display from our weather station, mounted above the tower on building "A".

(Weather prediction, like the weather itself is not an absolute or even homogenous thing. A weather forecast for the Strait for example, cannot be accurate for the entire Strait, there will be dozens of local variations. Same when we have rain or snow in Moncton, but sunny and dry in Moncton, or the reverse. So don't assume when on a lengthy cruise that the weather will be the same everywhere exactly as predicted. Watch the clouds, watch the barometer, and watch the wind. If you know how to interpret and connect these indicators, your predictions for the specific area you are in will likely be more accurate than the "official" versions. To learn more about these key indicators consider taking the excellent **CPS weather course**).

Hardware & Connections

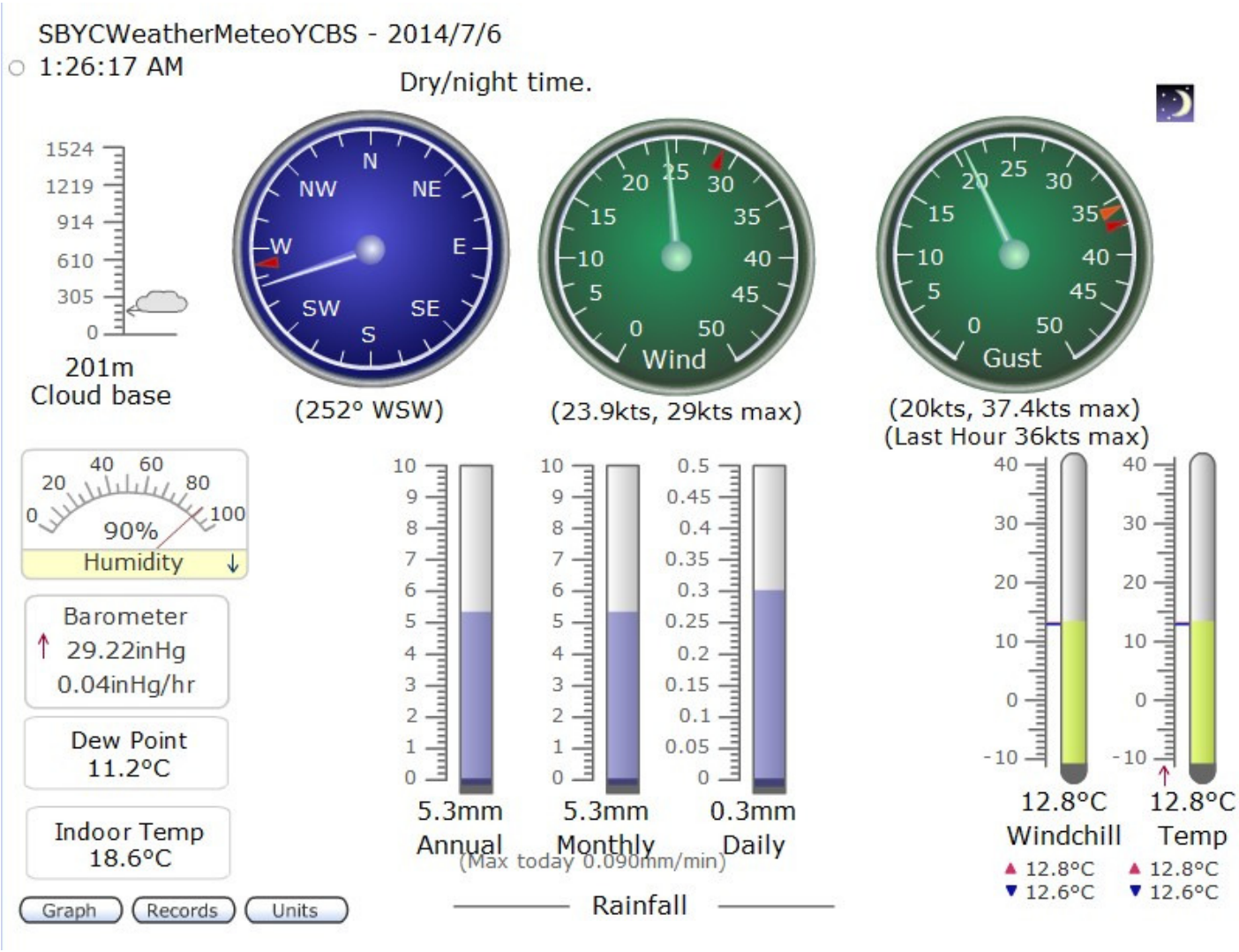
				
Davis Vantage Pro II **weather station**, wireless to wall display	Wired →	**PC**, weatherlink installed	Internet →	**WDLive display** on SBYC Website

Software

1) Davis weatherlink

2) Weather Display Live by Brian Hamilton, who besides being a well-known weather buff, is a software developer and a dairy farmer in New Zealand. There were also early collaborators in the development of WDLive from the UK and Germany.

The WDLive web display (you may want to print this & the next page)



To see the WDLive display, go to: http://sbyc.ca, click the link "Current weather conditions (real time) at SBYC" just below the Commodore's message

The WDLive system updates every 4 seconds (may be less frequent depending on internet traffic). In the upper left corner there is a little circle (called a heartbeat) which shows 4 possible colours - clear or green (the system is alive), yellow (data on the way), red (data received), orange (no data received, accompanied by a text message to the right). Orange means the system is down at the moment. Just try again a bit later.

To the right of the heartbeat is normally the name of the weather station, except if it's not receiving data as above. To the right of that is the date and time. Mid screen is a text display alternating between current general weather conditions and a forecast developed from the weather station's data. On the far right at top icons appear as needed to show rain, or a cloud with a face blowing, etc.

Just below the station name is the height of cloud base. Point at its text and you'll get a rectangular "balloon" with the definition.

To the right of the cloud base is the wind direction gauge. This shows the average wind direction over the last 4 seconds. Point at its text and you'll get a balloon. While pointed at the balloon left click it and you'll get a graph of the last 24 hr history of wind direction.

(Note re the wind speed & gust gauges. When there are frequent large gusts these ***should be considered as connected*** entities - the wind gauge will show the approximate average between lowest wind and the largest gusts, since in such cases there is almost no "steady" wind).

Next to the wind direction gauge is the wind speed gauge which shows the 10 minute average wind speed, plus the maximum for the day. Click its balloon for a graph.

Next to wind is the gust gauge, the needle shows the gust in the last 4 seconds, the red arrowhead shows the maximum gust for the day, the slightly less red arrowhead shows the maximum gust for the last hour. Click the gauge's balloon to get a graph.

Going back to the left side, below the cloud base is the Humidity. Click its balloon to get a graph.

Below the humidity gauge is the barometer. Click its balloon to get a graph.

Dew point and Indoor temperature are below the humidity gauge.

Skip to the far right to see the current air temperature. Click its balloon to get a graph.

Left of the temp is the Humidex - how hot it feels considering the humidity. Click its balloon to get a graph. If the humidex gauge falls below about 17 deg C, it disappears and a windchill indicator takes its place.

The rainfall indicators are self explanatory. You can click each indicator's text to get graphs.

At the lower left corner, click "Graph" to see a variety graphs you can choose, basically the same as those noted above.

To the right of Graph is "Records". Once the system has been working awhile, you may be interested in short and long term temperature highs & lows etc. The colour of the "LED" to the left of each record indicates:
RED: record set within the last day.
Orange (or yellow depending on your display): within the last 7 days
Green: older than 7 days

Next right is the Units button. The default units are mostly metric, you can select others if you wish. Your selection will be remembered for you if your browser is configured to keep Flash Local Shared Objects, which are similar to browser cookies.

Finally, to save bandwidth the display will time out if nothing has been clicked in it for 10 minutes. On session timeout a button will appear to allow you to restart viewing.

Below the WDLive display are inserted frames with the Marine weather forecast, land forecast, the closest Radar to Shediac (Chipman NB), tide predictions and lastly, Automatic Identification System (AIS) for vessels so-equipped. All of these frames are scrollable and clickable. At the very bottom of the page are inks to the Environment Canada Lightening Danger Map, and the Canadian and US National Hurricane centres

2013.09.02/MD, Revised 2014.07.22, 2014.09.03, 2015.04.04/MD