CODAR Data Availability

CODAR radial and total-current data is also available from HFRNet, a continent-wide repository of HF Radar measurements. An interactive mapping application there provides a graphical way to explore ocean currents, not only from Oceans 3.0, but from CODAR stations across the United States (and a single station in Mexico) as well.

Straight of Georgia Deployment

Radial data is available from the Westshore Coal Terminal station (VCOL) beginning on on November 24, 2011 and from the Iona Wastewater Treatment Plant (VION) beginning August 1, 2012. "Total" current data files are also available beginning August 1, 2012. Radial and total data files are generated hourly.

CSS and CSQ/Range data are available for each station for the same time period as the corresponding radial data. The exception to this is the CSQ files from the VCOL station in the five and half months between the date that acquisition started and June 10, 2012. An unnoticed default setting on the VCOL computer resulted in the CSQ files from this period being overwritten (apart from the CSQ files from February 6-7, 2012, which were recovered).

The VION station was switched from retaining CSQ files to retaining Range files on December 4, 2012. VCOL was switched to retaining Range files on December 19, 2012. Because VCOL is on a wireless router with limited bandwidth, CSQ/Range files are not fetched over the network, but rather are physically transferred via portable hard drive when site visits are made. As a result, there may be a lag of several months between acquisition and availability of CSQ/Range files from VCOL.

The range of high-frequency radio waves is greatly reduced over fresh water compared to the range over salty, highly-conductive water. For this reason, during the spring freshet, when the surface water in the Strait of Georgia is much less salty, one or both of the CODAR stations may return little or no current data in the area of overlap, resulting in no total current vectors being available. This will vary from year to year, but at the time of writing (May, 2013) it appears that total current vectors may be unavailable from early May to as late as July each year.

As of May 2016, the data acquisition framework was switched to the stations/combiners model. All of the formats will be available from then onward. The older files will migrate from the old scheme to the new devices over the next few months. The old scheme used a single device with multiple file mode fields to distinguish the stations. The new scheme is more flexible for expansion (we have added CODAR stations in Prince Rupert and there's potential for much more).