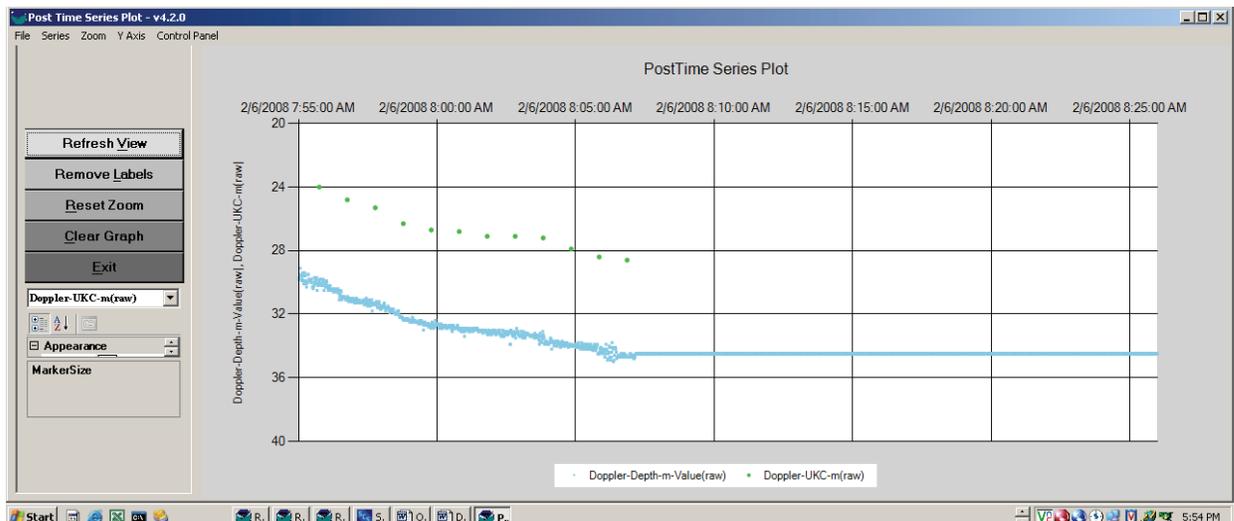
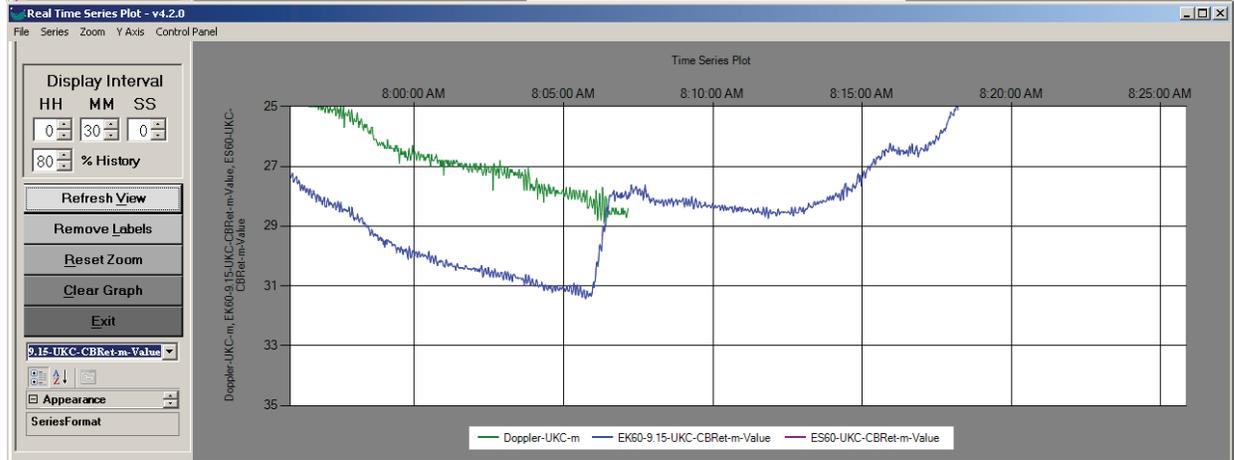


SCS "Value" Data Logging Problem NOAA Ship OSCAR DYSON, February 6, 2008 GMT

Derived sensors continue logging and plotting data, even when the Base Sensor/Instrument is turned off. In the top image, Doppler-Depth-m-Value is derived from the base NMEA child, Doppler-UKC-m (in bottom image). The Doppler was turned off. Data stopped logging to the DOPPLER-VDDPT-RAW_YYYYMMDD-hhmmss.Raw file, but NOT to the Doppler-Depth-m_YYYYMMDD-hhmmss.Raw file (see data lines below). The line continuation is not a result of SeriesFrom = line. See the PostPlot using SeriesForm = point; Doppler-Depth-m-Value continues to plot because the data exists in the Doppler-Depth-m_YYYYMMDD-hhmmss.Raw file.



Last two lines in the “DOPPLER-VDDPT-RAW_yyyymmdd-hhmmss.Raw” file before Doppler is turned off:

```
02/06/2008,08:05:50.800,$VDDPT,28.4,,200.0*42
02/06/2008,08:06:51.409,$VDDPT,28.6,,200.0*40
```

Data line continuation in the corresponding “Doppler-Depth-m_yyyymmdd-hhmmss.Raw” file:

```
02/06/2008,08:06:51.940,$DERIV,34.7,28.6,
02/06/2008,08:06:52.940,$DERIV,34.7,28.6,
02/06/2008,08:06:53.940,$DERIV,34.7,28.6,
02/06/2008,08:06:54.940,$DERIV,34.7,28.6,
02/06/2008,08:06:55.940,$DERIV,34.7,28.6,
02/06/2008,08:06:56.940,$DERIV,34.5,28.4,
02/06/2008,08:06:57.940,$DERIV,34.6,28.5,
02/06/2008,08:06:58.940,$DERIV,34.7,28.6,
02/06/2008,08:06:59.940,$DERIV,34.5,28.4,
02/06/2008,08:07:00.940,$DERIV,34.7,28.6,
02/06/2008,08:07:01.940,$DERIV,34.6,28.5,
02/06/2008,08:07:02.940,$DERIV,34.6,28.5,
02/06/2008,08:07:03.956,$DERIV,34.6,28.5,
02/06/2008,08:07:04.956,$DERIV,34.7,28.6,
02/06/2008,08:07:05.956,$DERIV,34.8,28.7,
02/06/2008,08:07:06.955,$DERIV,34.8,28.7,
02/06/2008,08:07:07.955,$DERIV,34.7,28.6,
02/06/2008,08:07:08.955,$DERIV,34.6,28.5,
02/06/2008,08:07:09.955,$DERIV,34.5,28.4,
02/06/2008,08:07:10.955,$DERIV,34.5,28.4,
02/06/2008,08:07:11.955,$DERIV,34.5,28.4,
02/06/2008,08:07:12.955,$DERIV,34.5,28.4,
02/06/2008,08:07:13.955,$DERIV,34.5,28.4,
02/06/2008,08:07:14.955,$DERIV,34.5,28.4,
02/06/2008,08:07:15.955,$DERIV,34.5,28.4,
02/06/2008,08:07:16.971,$DERIV,34.5,28.4,
02/06/2008,08:07:17.971,$DERIV,34.5,28.4,
02/06/2008,08:07:18.971,$DERIV,34.5,28.4,
02/06/2008,08:07:19.971,$DERIV,34.5,28.4,
02/06/2008,08:07:20.971,$DERIV,34.5,28.4,
02/06/2008,08:07:21.971,$DERIV,34.5,28.4,
```

Raw value does not remain = 28.6.

Nor does the raw value = 28.6 once the derived value stabilizes.

The derived data somehow changes for another ~18 seconds after the last VDDPT message is logged (Doppler is turned off).

This has implications for anything and everything that utilizes derived values for data, i.e. events (Bridge MOA) in addition to real-time plots and displays. Tom Stepka notified. Do not depend on any \$DERIV data values. Go to RAW NMEA files, such as DOPPLER-VDDPT-RAW_yyyymmdd-hhmmss.Raw, for data to use in final analyses.