# Notes on Loop Current Data Issues Concatenated files October 2013

## **InterOcean S-4**

AA371T.D: Salinity Adjusted upward by 0.923

AA372C.D: Noisy, not concatenated but left as a deployment 2 file

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#### MicroCat

AA322T.D: Salinity issues, only T concatenated

AA222T.D: Salinity issues, only T concatenated

AB32AT.D: Various displacement/linear corrections to salinity, between 2010-07-04 and 2011-01-19, in the deployment 2 file for the concatenation. Original deployment 2 file is retained (AB322T.D).

#### **ADCP**

AB25BC.D/L03-L13: The upper levels of the ADCP on B2 for deployment 2 had large gaps that could not be patched but the shorter remaining data in each level were good, so split files were assembled into a separate profile directories. Trailing data after the last gap are in AB254C.D.

AC15BC.D/L05-L10: The upper levels of the ADCP on C1 for deployment 2 had large gaps that could not be patched but the shorter remaining data in each level were good, so split files were assembled into a separate profile directory.

#### Aanderaa

All start times for Aanderaa's on the tall moorings have been adjusted to 1 hour earlier than used for deployment 1. This is due to the 2-hour sampling period chosen for these instruments. The time recorded by the instrument is the end time of the 2-hour sampling period, which is correct for the temperature and pressure as they are instantaneous measurements. However, the currents

are vector averaged over the entire 2-hour sampling period so the mid-point of this 2-hour period is now what is reported on the data CD. This does not affect the Aanderaa's on the short moorings, they all recorded at 1 hour intervals.

All tall mooring Aanderaa data were interpolated to 1-hour data and given a filename ending in "1". For example, AA192C.D (a 2-hour sampling interval file) was interpolated to 1-hour data with the filename AA192C.1.

All velocity files at 900 and 1300 m (A??9?C.D and A??B?C.D) have had new calibrations applied (October 2013). These were older Aanderaa rotor instruments that had a change in the speed calibration formula for sampling intervals of 120 minutes. The updated files have speeds that are approximately twice that given by the original speed formula in the instrument manual. The original formula only applied to the special conditions of 120-minute sampling intervals.

## **NDBC Data**

For all atmospheric pressure data, 1000 mb was subtracted from the values obtained from NDBC. For example a reading of 1021mb from NDBC will appear in this dataset as 21mb.

# **Deployment 1 Issues**

- 1. Low speeds or rotor stalls are in the file AC291C.D, no change to the file at this time.
- 2. Rotor fouled at near end of the record for AA491C.D
- 3. Rotor stall in part of the record for AB291C.D, no change to the file at this time.
- 4. Rotor stall in part of the record for AB2B1C.D, no change to the file at this time.
- 5. Rotor stall in part of the record for AC191C.D, no change to the file at this time.