

Heincke AWS Quality Control Report

Cruises:
AR_16_/01
AR_16_/02
AR_16_/03
AR_16_/06
AR_16_/08

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Introduction:

The data referenced in this report were collected from the research vessel Heincke(call sign: DBCK; data provider: Inst. For Baltic Sea Research; PI: H.C. John) DATADIS Automatic Weather System(AWS) for 5 different WOCE cruises. The data were recieved in electronic format and converted to a standard FSU format. During the conversion, several changes were made to the data. These changes are outlined in Appendix A. Then they were preprocessed using an automated data checking program. Next a visual inspection was completed by a Data Quality Evaluator who reviewed, modified and added appropriate quality control (QC) flags to the data. Details of the WOCE QC can be found in Smith et al (1996). The data quality control report summarizes the flags for the Heincke AWS data, including those added by both the preprocessor and the analyst.

Statistical Information:

The first 4 cruises in the data set from the Heincke was expected to include minute resolution data taken in 4-1 hour intervals each day. The other 2 cruises include one minute resolution data taken for the entire day each day. The start and end dates, the number of records and values and the number and percentage of flags added are given in table 1.

Time (TIME), latitude (LAT), longitude (LON), platform course (PL_CRS), platform speed (PL_SPD), earth relative wind direction (DIR), earth relative wind speed (SPD), sea temperature (TS), atmospheric pressure (P), air temperature (T), and wet-bulb temperature (TW) were analyzed for all the cruises. In addition, platform speed measured by an electromagnetic log (PL_SPD2), and platform speed measured by a doppler log (PL_SPD3), were

Table 1: List of dates and number of records for each cruise.

Appendix A

At time 6324786 the wind direction of 0 has been converted to 360 degrees due to a wind speed of 90

At time 6331877 the wind direction of 0 has been converted to 360 degrees due to a wind speed of 42

At time 6335565 the wind speed of 0 has initiated a calm wind conversion.

At time 6204254 the wind direction of 0 has been converted to 360 degrees due to a wind speed of 65