

Marion Dufresne Meteorological Data Quality Control Report

Cruises: ISS01_/05

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Introduction:

The data referenced in this report were collected from the research vessel Marion Dufresne (call sign: FNGB; data provider: IFRTP/CNRS, France; P.I.: J. Gaillard) bridge logs for 1 WOCE cruise. These data were received in electronic format and converted to a standard FSU format. 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 Marion Dufresne bridge log data, including those added by both the preprocessor and the analyst.

Statistical Information:

This data set was expected to include hourly observations recorded in the Marion Dufresne bridge log. The details of the cruise, including start and end date, number of values, records, and flags, and percentage flagged are outlined in Table 1.

Table 1: Statistical Cruise Information

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Summary:

There were no significant problems with this data set. The only questionable data was SPD. At first glance, these data are full of gaps, and have a range of nearly 80m/s. However, the Marion Dufresne Cruise Report indicated that the ship operated in foul weather and encountered waves as high as 20 meters. The information from the cruise report supports the extremely high wind speeds recorded. As a result, 7 "I" flags have been assigned during periods of peak wind speed.

B:Minor Problems:

T and TW were each assigned 64 "D" flags. One possibility for these flags is that there may have been a rounding problem with the data. Further speculation as to the cause of these flags is left to the user.

Table 2:Number of Flags and Percentage Flagged for Each Variable

Variable	Number of Flags	Percentage Flagged
T	64	
TW	64	

Final Note:

These data are in very good shape. The minor problems indicated by the "G" flags and "B" flags most likely are the result of the extreme weather conditions that this ship encountered. In addition, most of the variables have some missing values, but this data set should be quite usable.

References:

Smith, S.R., C. Harvey, and D.M. Legler, 1996: Handbook of Quality Control Procedures and Methods for Surface Meteorology Data. WOCE Report No. 141/96, Report WOCEMET 96-1, Center for Ocean Atmospheric Prediction Studies, Florida State University, Tallahassee, FL 32310.