Hesperides Standard Bridge Observations Data Quality Control Report

Cruise: A__05_/00

David F. Zierden and Shawn R. Smith

World Ocean Circulation Experiment (WOCE)

Surface Meteorological Data Assembly Center

Center for Ocean Atmosphere Prediction Studies

Florida State University

February 23, 1997

Report WOCEMET 97-10

Version 1.0

Introduction:

The data referenced in this report were collected from the research vessel Hesperides (Call sign: unknown; Data Provider: IEO, Madrid, Spain/ Gregario Parilla) Standard Bridge Observations for 1 WOCE cruise. These data were received in electronic format and converted to the standard FSU format. They were then 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 procedures can be found in Smith et al (1996). The data quality control report summarizes the flags for the Hesperides Standard Bridge Observations, including those added by both the preprocessor and the Data Quality Evaluator.

Statistical Information:

The data referenced in this report were expected to include observations taken roughly every 2 hours by the Hesperides bridge crew. The details of the cruise including start and end date, number of values, number of records, number of flags and percentage flagged are outlined in table 1.

Table 1: Statistical Cruise Information

CTC	Dates	Number of Records	Number of Values	Number of Flags	Percentage Flagged
A__05_/00	07/20/92 - 08/06/92	260	1300	14	1.08

Time (TIME), latitude (LAT), longitude (LON), earth relative wind direction (DIR), and earth relative wind speed (SPD) were analyzed. A total of 1300 values were checked, with 12 "F" flags

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

Variable	F	Total Number of Flags	Percentage of Variable flagged
TIME		0	0
LAT	7	7	2.69
LON	7	7	2.69
DIR		0	0
SPD		0	0
Total Number of Flags	14	14	1.08
Percentage of Flags used	1.08	1.08	

added by the prescreener and 2 “F” flags added by the evaluator, resulting in 1.08 percent of the data being flagged. The distribution of these flags for each variable is detailed in table 2.

Summary:

The Standard Bridge Observations from the Hesperides proved to be very reliable. The only flagged variables were LAT and LON, which were each given 6 “F” flags by the prescreener and 1 “F” flag by the evaluator. Consecutive records show a ship movement of up to 1 degree of latitude or longitude in under 2 hours, resulting in an unrealistic speed when checked by the preprocessor or the evaluator. Caution should be used with these records. No other problems with the data were found.

Final Note:

These data are in outstanding condition and should prove very reliable for the user.

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 32301.