Bosei Maru 2 Bridge Data Quality Control Report

David F. Zierden and Shawn R. Smith

World Ocean Circulation Experiment (WOCE)

Surface Meteorological Data Assembly Center

Center for Ocean Atmospheric Prediction Studies

Florida State University

July 15, 1997

Report WOCEMET 97-18

Version 1.0

Introduction:

This report summarizes the quality of surface meteorological data collected by the Bosei Maru 2 (identifier: JGAW) bridge crew during one WOCE cruise. The data were provided to the Florida State University Data Assembly Center (DAC) in electronic format by M. Fukasawa at Tokai University, Japan. They were converted to standard DAC netCDF format. The data were then processed using an automated screening program which adds quality control flags to the data, highlighting potential problems. Finally, the Data Quality Evaluator reviews the data and current flags. Flags are then added, modified, and deleted according to the judgement of the Data Quality Evaluator and other DAC personnel. An in depth description of the WOCE quality control procedures can be found in Smith et al. (1996). The data quality control report summarizes all flags for the Bosei Maru 2 bridge data and explains reasons why these flags were assigned.

Statistical Information:

The Bosei Maru 2 data are expected to include observations taken every hour on the WOCE cruise. Values for the following variables were collected:

Time	(TIME)
Latitude	(LAT)
Longitude	(LON)
Ocean Relative Wind Direction	(DIR)
Ocean Relative Wind Speed	(SPD)
Sea Temperature	(TS)
Atmospheric Pressure	(P)
Air Temperature	(T)
Relative Humidity	(RH)
Total Cloud Amount	(TCA)*

* Checked only for correct WMO coding.

Details of the cruise including cruise dates, number of records, number of values, number of flags, and percentage flagged are listed in Table 1. A total of 2,529 values are evaluated with 1 flag

added by the preprocessor and Data Quality Evaluator for a total of 0.04 percent of the values being flagged.

Table 1: Statistical Cruise Information

CTC	Dates	Number of Records	Number of Values	Number of Flags	Percentage Flagged
P__02W/00	01/20/94 - 02/02/94	281	2,529	1	0.04

Summary:

The bridge data for the Bosei Maru 2 are of excellent quality. Only one flag was assigned in the entire data set, an "S" for a solitary spike in sea temperature. The only variable of concern is wind direction, which was only measured to the nearest 22.5 degree increment. DIR data may not be sufficiently accurate to fulfill the user's purposes. All the other variables seem to be very reliable and should present no problems 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