WORLD METEOROLOGICAL ORGANIZATION INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

JOINT WMO / IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY (JCOMM)

SHIP OBSERVATIONS TEAM

FIFTH SESSION

GENEVA, SWITZERLAND, 18-22 MAY 2009

SOT-V/Doc. III-3.6 (30.03.2009)

ITEM III-3.6

Original: ENGLISH

REPORT BY THE VOSCLIM DATA ACQUISITION CENTRE

(Submitted by Eric Freeman and Alan Hall, VOSClim DAC)

Summary and purpose of the document

This report, by the National Climatic Data Center (acting as the DAC for the VOS Climate Project), provides information on the present status of the DAC activities in accordance with its Terms of Reference. It includes information on the status of the project website, including the collection and provision of real-time and delayed-mode observation data, metadata, ship listings and other project information.

ACTION PROPOSED

The Team will review the information contained in this report, and comment and make decisions or recommendations as appropriate, in particular with regard to the following:

- (a) Call sign masking and future data processing at the DAC.
- (b) Notification of new recruits to the DAC immediately upon initiation of the new vessel.

Appendix: None

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- A - DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT

III-3.6.1 Data Assembly

III-3.6.1.1 Mr Alan Hall (NOAA/NCDC, USA) reported on the activities of the VOSClim Data Assembly Centre (DAC). The NOAA National Climatic Data Center (NCDC) is the Data Assembly Center (DAC) for the VOSClim Project. NCDC maintains several archives in support of the VOSClim Project and hosts a web presence¹ for access to project information and data. The archive consists of three data streams:

- GTS near-real time collection of ship observations
- BUFR ship observations plus model fields
- GCC Global Collection Centers delayed mode ship observations
- III-3.6.1.2 VOSClim observations from all streams are captured based on the most current ship list² available. GTS ship observations are transmitted over the GTS under a variety of WMO headers. BUFR ship observations are transmitted daily via GTS under WMO abbreviated header IZZX40 from the UK Met Office.
- III-3.6.1.3 Beginning the first quarter of 2008, the DAC relieved the GCC of its duty to parse VOSClim observations from the full GCC global delayed mode file. The DAC receives the GCC global file, parses the observations, and places the data on the VOSClim website. A report containing the number of VOSClim observations by participating country is also generated and provided to the GCC for inclusion in its annual report.
- III-3.6.1.4 All observations are decoded into the International Maritime Meteorological Archive (IMMA) format³ and placed on the project web site¹.

III-3.6.2 VOSClim Web Page and Data Access

- III-3.6.2.1 Mr Hall reported that the VOSClim web page retained its user-friendly format and continued to receive positive feedback from researchers and others interested in the VOSClim project. Data access is available in text file format and anonymous FTP. The text files are kept on an FTP server divided by data source, year, and month. This simpler access is easier to maintain by the DAC and supports automated download of data.
- III-3.6.2.2 The URL for web access is http://www.ncdc.noaa.gov/oa/climate/vosclim/vosclimdata.html and allows viewing of the data directly by any browser. For an automated download, the data is available on an anonymous FTP site ftp://ftp.ncdc.noaa.gov/pub/data/vosclim. In either location, separate folders exist for each year beginning with 2001. The data is not duplicated in any way. Also available for download from the FTP site is the VOSClim Ship List in MS Excel format; award pictures; ship pictures; and the statistics and suspect ship reports.

III-3.6.3 VOSClim Ship List and Participation

III-3.6.3.1 The Team noted with appreciation that the number of recruited ships was up to 278. The original goal of recruited ships was 200. Participation in VOSClim continues to increase. Forty-two ships were recruited in 2008 and 2009 while only 11 vessels were withdrawn during the same period.

III-3.6.4 Call Sign Masking Impacts on the DAC

¹ http://www.ncdc.noaa.gov/oa/climate/vosclim/vosclim.html

² http://www1.ncdc.noaa.gov/pub/data/vosclim/vosclimshiplist.xls

³ http://www.ncdc.noaa.gov/oa/documentlibrary/vosclim/imma.pdf

- III-3.6.4.1 Mr Hall reported that impacts due to call sign masking had been minimal to date. For security concerns, the project ship list does not include masked call signs under which a particular ship may report. Due to this factor, only original call signs on the project ship list are currently being parsed.
- III-3.6.4.2 As recommended at the Task Team on Delayed Mode VOS data (TT-DMVOS) meeting (Gydinia, Poland, 10 May 2008), an archive was set up at the National Climatic Data Center(NCDC) to store US VOS observations with original call signs (after a 90-day periodicity) which were initially transmitted over the GTS with a masked call sign. To date, the released, un-masked data is only being archived, with intentions that it will be used later for data archaeology purposes.

III-3.6.5 The Team made the following recommendations

- III-3.6.5.1 Call sign masking, and future data processing at the DAC [to be completed according to the meeting's discussion].
- III-3.6.5.2 Recruitment dates: On several occasions, the recruitment date of a ship is significantly different from the date submitted to the DAC. For optimum processing of VOSClim data, the Team recommended notification of new recruits to the DAC immediately upon initiation of the new vessel (*action, SOT members, ongoing*).