WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

JOINT WMO/IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY (JCOMM)
EXPERT TEAM ON MARINE CLIMATOLOGY

FIRST SESSION

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REVIEW OF THE OPERATIONS OF THE GLOBAL COLLECTING CENTRES

Report of Responsible Members

(Submitted by Responsible Members)

Summary and Purpose of Document

This document contains a report by a Responsible Member (United Kingdom), and a report by a Contributing Member (Argentina)

ACTION PROPOSED

The Expert Team on Marine Climatology is invited to:

(a) Review the operation/activities of the Responsible Members;

(b) Identify any deficiencies and consider possible further improvements of the data exchange system;

(c) Consider future activities of Responsible Members under the MCSS and make recommendations as appropriate.

Appendices: A. Report by United Kingdom

B. National report - Argentina

Report by a Responsible Member

UNITED KINGDOM

Introduction

The United Kingdom is one of 8 Responsible Members for the Marine Climatological Summaries Scheme (MCSS), with responsibility for the North Atlantic area. It is also one of the two Global Collecting Centres (GCC).

Data processing

The United Kingdom uses the Minimum Quality Control (MQC) software issued by the GCCs to process the data it receives from the UK Voluntary Observing Fleet (VOF).

Since 2002 we have processed 181234 UK logbook observations (Jan 02 – May 04 inclusive), and submitted 166742 to the GCC exchange (within the same period). However, these observations are global, not just for the UK area of responsibility. Also, the timescale from UK processing to submission to GCC exchange is currently experiencing a substantial time-lag (of approx. 2 years). This is due to a number of staffing / resource issues within the UK Met Office.

MCSS

The UK has had no requests for these MCSS, since taking on GCC responsibility (in 1993). Due to our resource issues we have not routinely produced the Summaries, though the Met Office would do so on request (as stated in the Manual for Marine Meteorological Services).

NATIONAL REPORT – ARGENTINA

CONTRIBUTING MEMBER

Servicio Meteorológico de la Armada Argentina (SMARA)

Activities

1. Argentina started its contribution to the Marine Climatological Summaries Scheme (MCSS) in 2001. Until this year the last list of the recruited ships included in the WMO Publication No. 47, comprised of fourteen merchant vessels as well as their company, committed to participate in the VOS (Voluntary Observing Ships). This can be seen in Table 1. This contribution consisted of the 2239 observations of the 1950-2001 period. This Contributing Member (CM) applied the Minimum Quality Control (MQC) Standard before sending data to the GCCs (Global Collecting Centres). The data were in the required International Marine Meteorological Tape (IMMT-1) format. The data were exchanged by e-mail.

2. Unfortunately, at the end of 2001, SMARA didn't receive any observation reports. Several ships have changed their usual area of activity, moved into new regions without the possibility to visit Argentinian harbours. This caused contact interruptions with many ships, affecting collection regularity for logbooks and diskettes that contain ship's reports. Moreover the list of VOS included in the WMO publication No. 47 was not updated. This situation continued during 2002 and the new Port Meteorological Officer (PMO) for Argentina informed that other ships had been contacted to participate and that their recruitment could approximately start in late 2002. However few data for 2002 could be collected and sent during the following year.

3. Argentina has been submitting data to GCCs on a quarterly basis without interruptions since January 2003. SMARA developed new advanced quality control procedures for marine climatological data, which are now internally applied. During 2003, the total amount of data submitted by Argentina to the GCCs consisted of 436 observations, corresponding to the recruited ships listed in Table 2. Data are stored in the new IMMT-2 format.

4. Although a high percentage of data now comes through GTS, there is still a considerable amount of data coming from meteorological logbooks that require digitalization.

Distributions over the period

5. Amount distribution of observations during all periods shows data originating from as early as 1960. About 50% was not older than 1994. Detailed distribution can be seen in Fig. 1.

6. Amount of observation reports submitted per month varied greatly (Fig. 2). More complete data are observed in April and May.

7. Spatial distribution reflects, as usual, that the main shipping lanes are distributed along the coast, with data concentrated near harbours. Fig. 3 shows the spatial distribution near the coast for the whole period. The main concentration of data can be seen near main Argentinian harbours (Buenos Aires, Trelew, Bahía Blanca and Ushuaia).

Software

8. SMARA developed a Quality Control software (SIMAR) which apply to other kinds of advanced quality control, based on:

a. WMO MQCS version 4 (Rec. 9, JCOMM-I)

b. KNMI - KN-89-01 - Revised Quality Control Procedures of Marine Climatological data collected from Dutch Voluntary Observing Ships and the Bureau of Marine Affairs, Ing. M. Stam.

c. Quality Control Procedures of the National Ice Centre for Ice Observations.

11. SMARA developed a Quality Control Software Automatic System (QCSHIP), which provides immediate minimum quality checks right after composition of the observation. Only one ship has been using this software (Since 1999). This ship, A.R.A. "Almirante Irizar", is equipped with personal computers and software to store observations on diskette in the internationally-agreed format.

(This was done by Elisa Nure, personal communicator)

Considerations

12. The following comments can be made:

a. Communication with PMOs is a very critical issue, making CM's work easier.

b. The WMO Publication No. 47 has not been updated on regular basis, causing frustration for the CMs.

c. A substantial number of JCOMM-related publications have been issued during the past 12 months, including both meeting and technical reports. All publications are available through the JCOMM web page. All those technical publications have provided very valuable support to this CM in implementing their marine related activities.

d. The WMO Publications related with the marine meteorology activities should be sent to the Marine Meteorological Services directly to facilitate the work.

Summary

13. Argentina started its contribution to the Marine Climatological Summaries Scheme (MCSS) in 2001. Minimum quality controls (MQC) have been applied. International Marine Meteorological Tape (IMMT) formats have been used for delay-mode collection and storing of observation results. All Marine climatological digitized data have been submitted directly to Global Collecting Centres (GCCs) on a four-month basis.

Table 1: List of Recruited Argentina VOS (until 2001)

3EUH4 Dr. Juan Bautista Alberdi
ELOO9 ESSO Bahía Blanca
ELQW3 ESSO Bayway
ELOP4 ESSO Río Grande
ELOP5 ESSO Río Negro
ELOP8 ESSO San Sebastián
ELOP6 ESSO Santa Cruz
ELQM3 Estrella Atlántica
ELOK9 Estrella Austral
LQYX Glaciar Ameghino
LRAC Glaciar Perito Moreno
LQOK Isla Gran Malvina
LRIS Isla Soledad
ELQW4 Palm Beach
3ETR4 Presidente Sarmiento

Table 2: List of Recruited Argentina VOS (since 2003)

3 FYK9 José Fuch
3FYL9 Pte. Arturo Illia
3ELY3 Río Gallegos
3FWH3 Libertador San Martín
LOAI Almte IRIZAR
HODT Río Gallegos I
HOLX San Julián

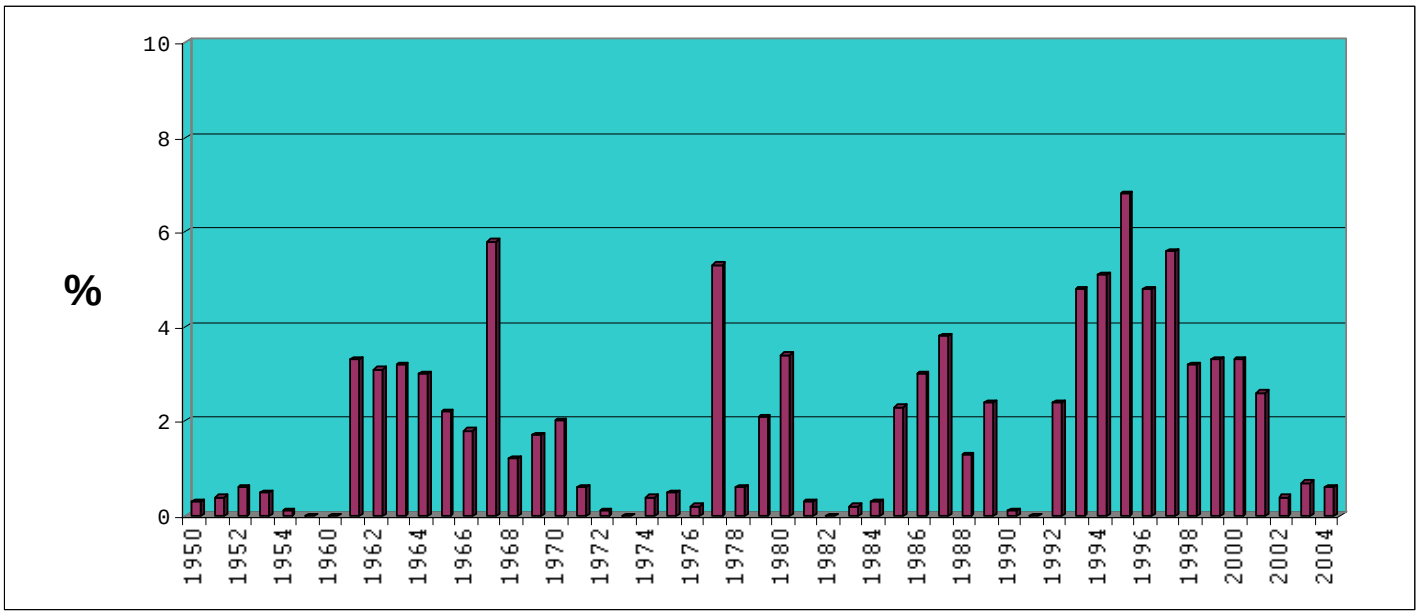

Fig. 1: Amount of the observations per year

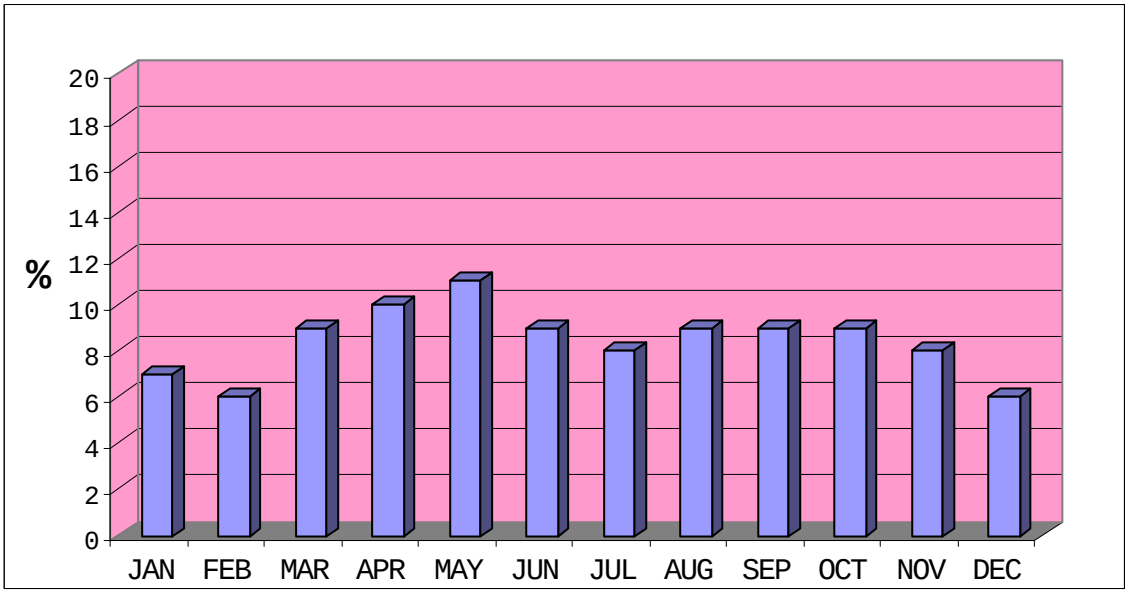

Fig. 2: Amount of the observations per month

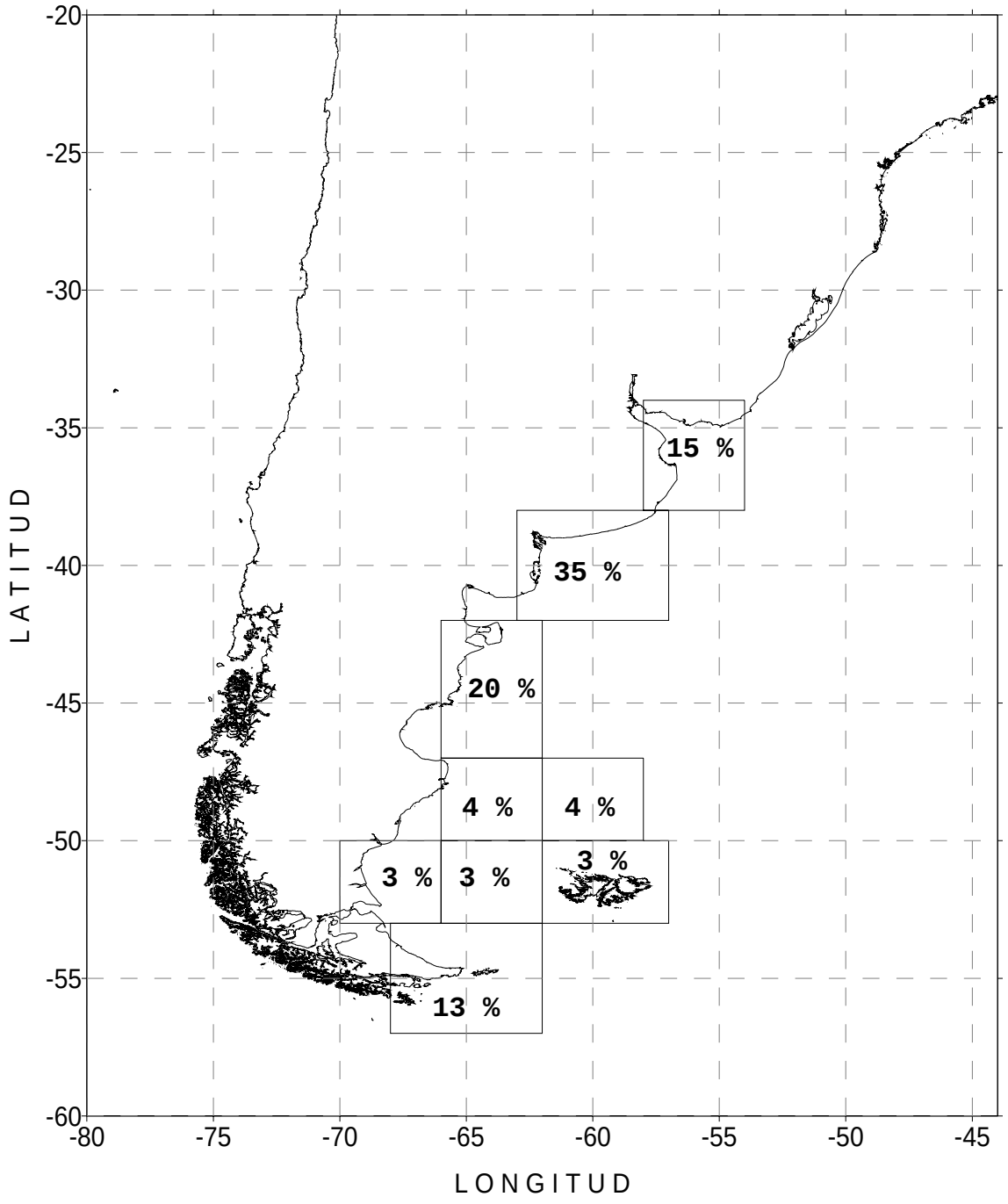

Fig. 3: Spatial distribution of the observations near the coast