



# Modernisation of the Marine Climatological Summaries Scheme (MCSS)

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CLIMAR-III, Gdynia, Poland - 6th May 2008



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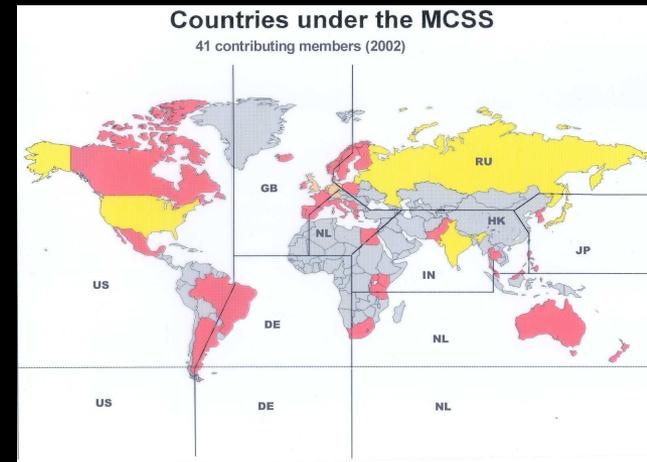
This presentation covers the following areas

- MCSS Background
- MCSS Current Process
- The Need for Change
- The Future & Task Teams



# Background - MCSS & GCC History

- 1963** Marine Climatological Summaries Scheme (MCSS) established by WMO
  - To create an international effort in collection and storage of data and preparation & publishing of routine climate charts of the oceans
  - Eight Responsible Members were identified and given an area of responsibility
  
- 1981** Obligation to prepare climate summaries ceased
  - now only optional
  
- 1993** 2 Global Collecting Centres (GCCs) set up
  - To improve data flow and quality
  - The existing GCC data flow process began
  
- 2007** 2 Task Teams were established to work on a modernised data flow, storage and data products



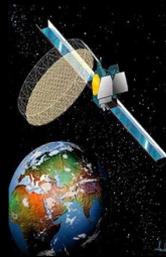


# Current Process - GCC Data Processing

## 2 GCCs – UK (Edinburgh) and Germany (Hamburg)

- Contributing Members (inc. UK & Germany) submit VOS logbook data to both GCCs “regularly”
- GCCs check data to WMO agreed Minimum QC Standards and feedback on quality to CM (e.g. any duplicate data, invalid times etc)
- All data received by GCCs is combined and distributed to 8 RMs quarterly
- VOSClm ship data is separated from the quarterly dataset and submitted to DAC

# Current Process - GCC Data Processing



GTS

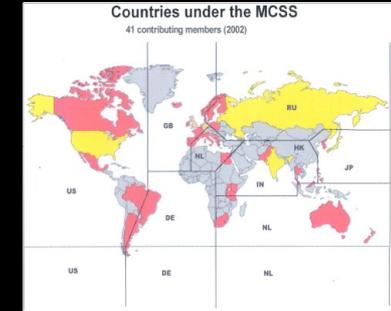


Data



Contributing Member  
(apply MQCS)

GCCs check to  
Minimum Quality  
Control Standards

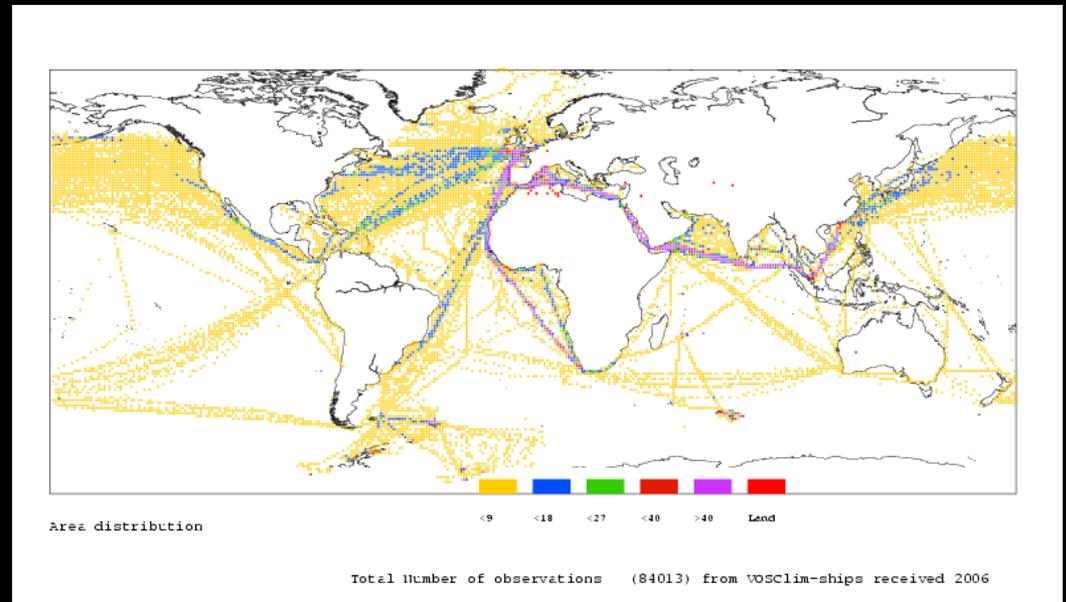


Data



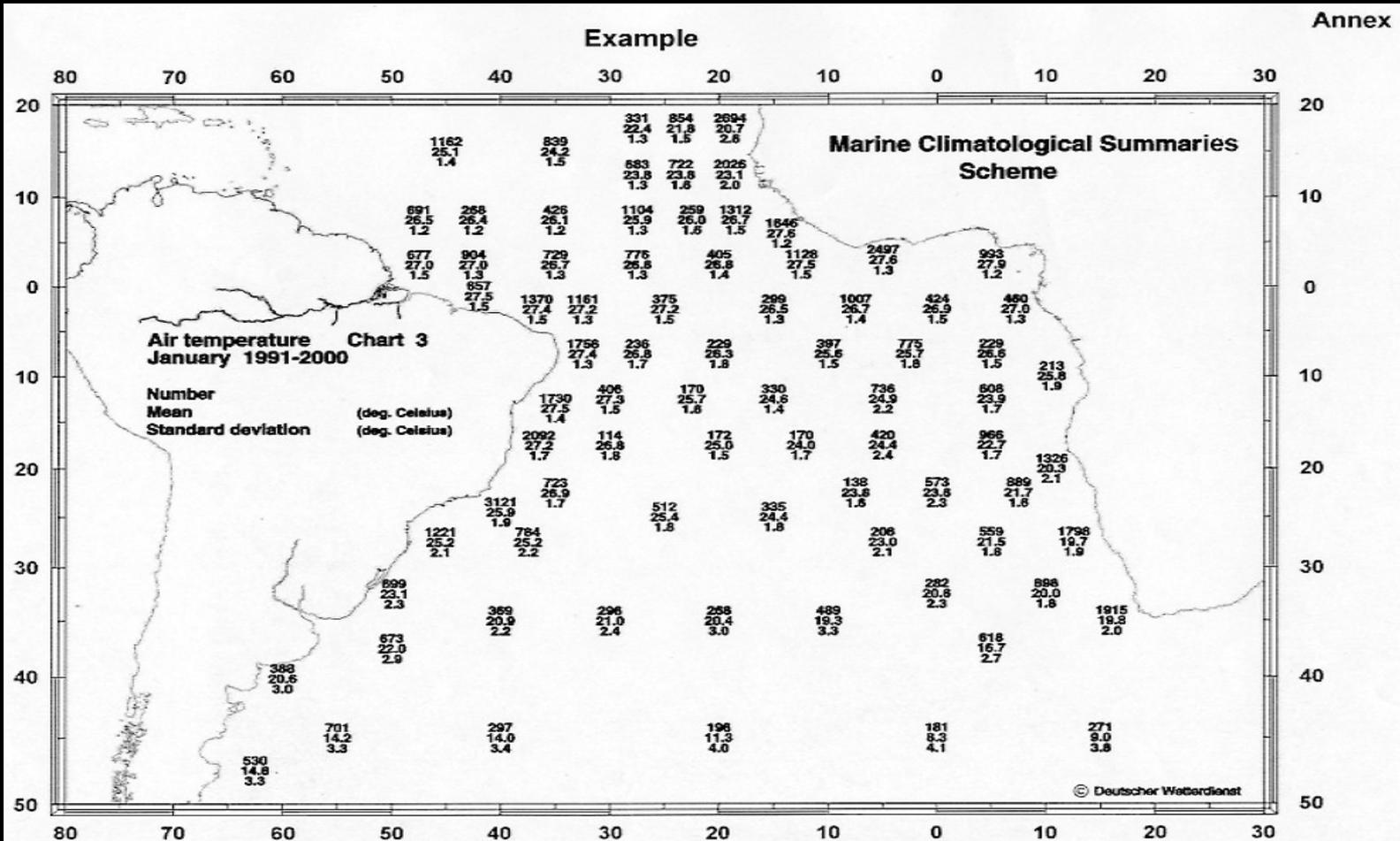
## Current Process - GCC Data Processing (2)

- At the year end a 'GCC Annual Report' is published highlighting GCCs work and data received
- RMs receive >1million observations from GCCs each year
- RMs produce Climatological Summaries optionally but very few do so routinely





# Current Process - Climatological Summary Example





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# The Need for Change

- In 2004 it was decided a questionnaire should be circulated to gather opinions on the scheme – results highlighted the process needed modernising
- Also, technology advances allow all Responsible Members to receive and store all global data (not just their area of responsibility) – so there is much duplication of effort - system is now outdated
- At JCOMM's Expert Team on Marine Climatology meeting last year it was proposed that MCSS should be modernised
- 2 task teams were appointed -
  - TT-Delayed Mode Voluntary Observing Ship data for the data flow and data management, **TT-DMVOS**
  - TT-Marine and Oceanographic Climatological Summaries for the end data products, **TT-MOCS**



**Met Office**

## TT-DMVOS – Work Plan / Work Done

The GCCs met in Hamburg, Germany in July 2007 to discuss items for a work plan.

After much emailing a 3-year work plan was agreed with the rest of TT-DMVOS and was published in August 2007 (copies available).

This plan includes all tasks that should be addressed in order to develop a modernised MCSS that reduces duplication of effort and provides a much improved overall service.

There has been some work carried out by the GCCs since, including:

- Mutual links created on GCCs websites
- Comparison of IMMT with IMMA
- Arranging a meeting here after CLIMAR-III
- Produced 2 proposals in line with agreed tasks
- GCCs have become more proactive in data collection



**Met Office**

## TT-DMVOS - Questionnaire

As part of becoming more proactive, the GCCs produced a questionnaire in December to gain information from potential CMs:

- Does CM run an active VOS Fleet?
- Would CM like to share their data with MCSS?

Giving “true” number of potential Contributing Members within MCSS (opposed to 41 that has not been updated for some time)

Questionnaire distributed to 41 countries and results were:

29 countries replied

- 17 already contributing regularly
- 6 do not have VOS Fleet
- 6 require some assistance from GCCs to enable data flow
- giving 23 “true” CMs within the scheme

With the GCC’s support more data should be available



# TT-DMVOS/TT-MOCS Meeting

10<sup>th</sup> May 2008

To discuss progress and tasks further there will be a working group meeting after CLIMAR-III

- On: Saturday 10<sup>th</sup> May
- Time: 09:00 – 15:00
- Venue: .....Gdynia, Poland

All are welcome to a meeting on Saturday to discuss work done so far, proposals, issues and future work – Agenda is available.

Please let me know if you are attending



# TT-DMVOS/TT-MOCS Meeting

## Discussion Points

### Topics for action/discussion will include

- Finalise the Terms of Reference for submission to ETMC
- Future roles of Responsible Member's & GCCs
  - these should be revised in line with modernised data flow
  - to reduce duplication of effort
- Proposal for a revised VOSClm data flow
  - currently there are issues with omitting data from VOSClm archive for ships reporting VOSClm elements but that are not yet registered with the project
  - it is proposed that all data be sent to VOSClm archive where it would be DAC's responsibility.



# TT-DMVOS/TT-MOCS Meeting

## Discussion Points (2)

- Storage for both delayed-mode & real-time data
  - should both data types be stored as part of MCSS?
  - if so where is most suitable?
  - what benefit would there be to include real-time within MCSS?
  - should delayed-mode data be archived with GCCs?



# TT-DMVOS/TT-MOCS Meeting

## Discussion Points (3)

- The definition of Higher Quality Control Standards (HQCS)
  - what are the user requirements?
  - what should HQCS actually be?
  - who uses the current MQCS flags?
  - Should archived data be stored with HQCS flags?
  - Should quarterly dataset be compiled/distributed with MQCS or HQCS flags?
  - Does this subject overlap with WIGOS?



# TT-DMVOS/TT-MOCS Meeting

## Discussion Points (4)

- Proposal on how to implement minor changes to MQCS-V before next ETMC into 2011
  - Task team will be asked to allow MQCS-VI to start being used immediately when GCCs are checking data quality
- TT-MOCS work – informal discussion on Saturday afternoon
  - what are the user requirements for end products?
  - How will HQCS be involved within products?
- It is important ownership of tasks is formally established to “push” work forward and meet deadlines



# TT-DMVOS/TT-MOCS Meeting Post Meeting

- After meeting minutes will be written up and distributed
- Progress to be made with tasks - being lead by the “Task Owner”

If you find this work interesting and/or feel you could contribute please come along to meeting on Saturday



# Questions & answers

Remember TT-DMVOS & TT-MOCS meeting on Saturday 10<sup>th</sup> May!