









Sarah North SOT-V - May 2009, Geneva, Switzerland





#### Tasks Assigned -

- 1. Coordinate, maintain, promote and enhance the VOS Climate project, monitor its performance, and encourage increased participation.
- 2. Revise the VOS Climate project document to reflect the current procedures and to clarify and revise where necessary the responsibilities of the VOSClim data centres;
- 3. Review all relevant JCOMM Publications to make sure they are kept up to date and comply with Quality Management terminology;
- 4. Prepare a report to SOT-IV on, inter-alia, the following over-arching VOSClim issues
  - a. Should VOSClim be continued as a project, or developed into a separate long-term operational programme? If so, what form should this programme take?
  - b. Is the high-quality dataset a valuable resource? If so, how should it be updated operationally?
  - c. How can the lessons of VOSClim be used to improve data quality in the wider VOS?



## Ship Recruitment

Revised target set at SOT IV reached!!	Number of Active VOSCIim Ships at SOT III	Number of Active VOSClim ships at SOT IV	Number of Active VOSClim ships at SOT V
Australia	10	12	10
Canada	14	40	47
France	6	23	48
Germany	11	22	32
India	21	22	22
Japan	5	5	5
Netherlands	1	19	37
New Zealand	-	1	1
UK	33	62	54
USA	12	12	17
TOTALS	113	218	273



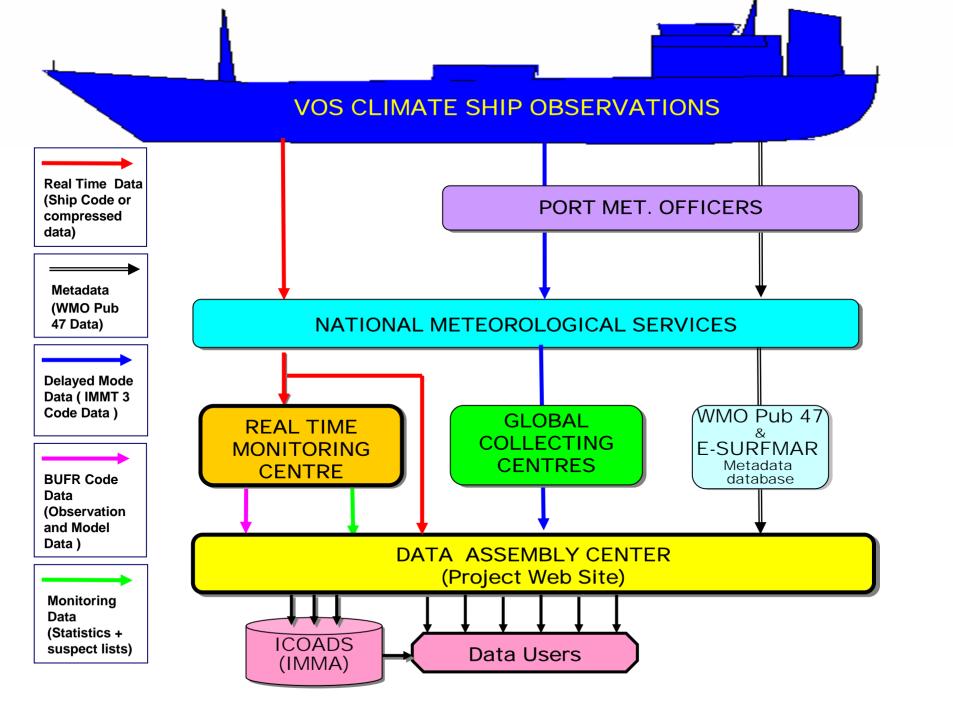
#### Electronic logs & AWS software

#### **TurboWin**

- VOS are still self-recruiting to VOSClim this is not discouraged (provided metadata/VOSClim ship list is up to date)
- TurboWin will need to be amended if VOSClim ceases to be a special project
- Password protection for the Metadata module in TurboWin

#### **AWS Software**

An intercomparison study for AWS software (AVOS, BATOS, MAWS etc) is needed [Action]





Data Flow

- Since 2002 the Met Office RTMC has been transferring the VOSClim ship reports with the appended forecast model data to the DAC at NCDC.
- Backup copies of the RTMC data is also made available via FTP

#### Delayed mode data

- Since 2003 the IMMT data collected by PMOs and including the additional project parameters - has been processed by the GCCs before being sent to the DAC
- Problems with availability of the delayed mode data have now been resolved.
- However only 9 of the 10 participating countries are submitting IMMT data
- VOSClim IMMT observations did not increase significantly in 2008 (48583 obs) amounting to 6% of total submissions
- DAC now calculates the number of obs with and without additional project elements and obs from unlisted ships
  © Crown copyright Met Office



#### Metadata

- Metadata is in Pub 47 format (as for standard VOS) but WMO Metadata website isn't being updated each quarter [Action]
- A decision on where digital imagery and schematic drawings is to be stored is still pending – although some images are now on the project website. However the E-SURFMAR Metadata database could solve this problem [Action]
- In response to the introduction of Pub 47 V3 in July 2007 the project recommended that form VOSP002 should be used for collecting metadata
  - ...but the metadata module in TurboWin allows the metadata to be collected electronically on board so the need to fill in hardcopy VOSP002 forms should not be mandatory [Action]
- A timed facility on TurboWin could be useful to remind officers on ships trading overseas to return their log metadata and IMMT log

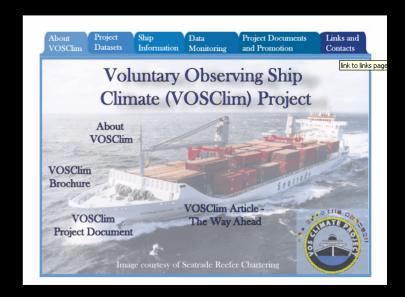


#### Project website

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

Design and layout was improved in 2006 and further improvements have been made since SOT IV

- Previous metadata removed and link made to Pub47 on WMO website
- Link to form VOSP002 added
- Ship list amended to include former names & call signs and details of when masking applied
- Previous delays in updating the ship list and website information are now resolved

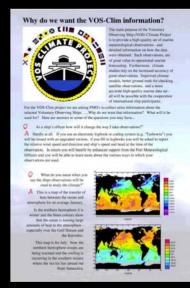


A decision will need to be made about the future of the project website [Action]



#### Project Promotion

- Electronic copies of the project brochure are downloadable from the project website and from TurboWin. (Printed copies in short supply now)
- Revision of the project document and the VOSClim brochure (Task 2) has been postponed pending a decision about integrating VOSClim into the VOS Scheme [Action/Task]
- The VOSClim Certificate of Appreciation will also need to be revised if VOSClim is integrated operationally [Action/Task]
- Project logo will need revision and could perhaps be adapted for VOS generally ?







#### Monitoring & Masking

- Monitoring statistics and suspect lists are issued by the RTMC and made available to the DAC on the Met Office external FTP server
- Problems about the availability of the monitoring statistics on the website have been resolved
- Masking has not, so far, had a major impact as only a few project ships are masked
- The proposed JCOMMOPS look up table for Mask v Real call signs will help the RTMC – but the use of non unique SHIP call signs could present major problems for the RTMC



#### Report of the VOSClim Task Team Summary of status

- The Project is now operationally mature and the target number of ships has been achieved
- VOSClim data flow process now working well with model data, GTS data and GCC delayed mode data all available via the project website – and now flowing on to ICOADS

#### But.....

- There are only a few users of the data sets and no analysis has been undertaken with VOSClim data since SOT IV
- The volume of data is less than hoped for and insufficient for scientific scrutiny



# Report of the VOSClim Task Team Future of VOSClim

Factors that will impact on the future evolution of VOSClim include...

- Migration to BUFR and away from SHIP code
- Increased use of electronic logbooks
- Growth in shipborne AWS systems
- New transmission systems
- Availability of PMO resources
- Work of TT-DMVOS to change VOS data flow



# Report of the VOSClim Task Team Future of VOSClim

The Task Team and its scientific advisers recommend that.....

- The 'Project' Status of VOSClim should be ended
- The benefits of VOSClim should be applied to the wider VOS
- Apply the principles of the VOSClim data flow to the whole VOS (subject to TT-DMVOS work)
- VOSClim should be fully integrated into the VOS Scheme as a separate category of VOS within the context of Pub 47 metadata

[Further discussion under agenda item III-4.1]







Questions





# Report of the VOSClim Task Team Actions

- Undertake an intercomparison study for AWS software
- WMO Pub47 Metadata updated each quarter
- A repository for digital imagery and schematic drawings ( use the E-SURFMAR Metadata database ?)
- Option to collect metadata via TurboWin or form VOSP002
- A timed facility on TurboWin to remind officers on ships trading overseas to return their metadata and IMMT logs
- Revision of the project document and the VOSClim brochure
- Revision of the VOSClim Certificate of Appreciation
- The future of the VOSClim Website
- Revision of the Project logo

# Report of the VOSCIim Task Team Future of VOSCIim



Do we need logos for different VOS types?