~ integrating & coordinating international ship-based observing programmes for JCOMM ~





PMO-IV Introduction

PMO-IV and Support to Global Ocean Observations using Ship Logistics 8-10 December 2010, Orlando, FL, USA

> Julie Fletcher Chair VOS Panel

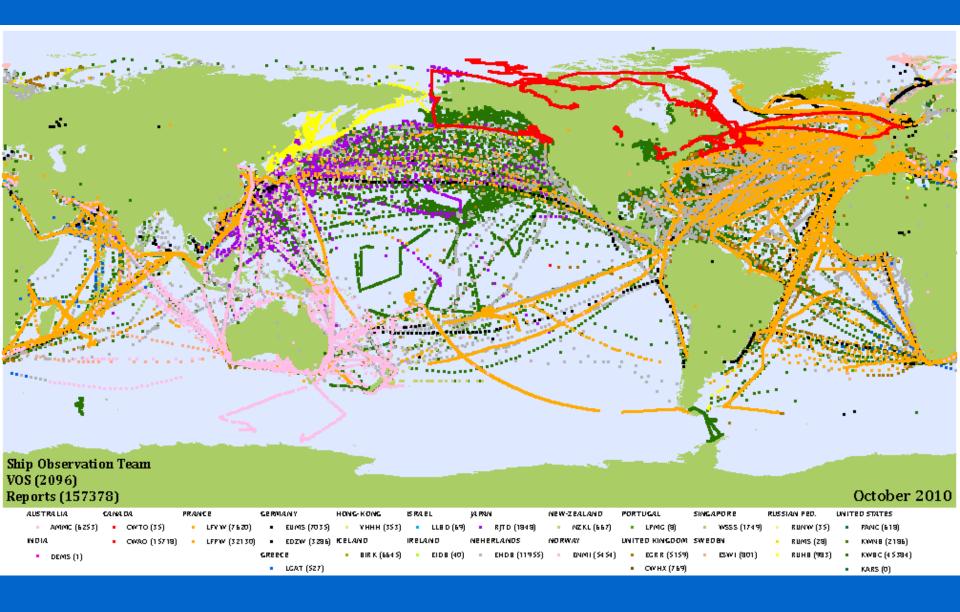


Outline

1. Global VOS Overview

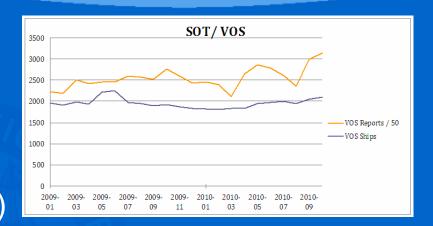
- 2. PMO role
- 3. Action Items from PMO-III
- 4. Developments since PMO-III

VOS - October 2010



Global VOS Numbers

- ~ 25 countries operate a VOS
- ~ 4000 global VOS
- 325 VOSClim (September 2010)



- ~ 230 VOS with an AWS (December 2009)
- ~ 2000 active VOS per month (at least one report)
- ~ 123,000 observations per month / 1.4 M per year

Global VOS Numbers

Precise VOS numbers rely on national input

Sources:

- ESURFMAR VOS database
- WMO Pub 47 last update Q3 2008
- JCOMMOPs
- DAC
- National Annual SOT Reports
- Numbers

PMO role

- PMO role underpins the global VOS
- PMO efforts directly affect the number of VOS ships and the quantity and quality of observations
- PMO is a unique role
- It is challenging, but rewarding
- PMO must be self reliant, practical, adaptable, diplomatic...
- PMO must work hard to sell the 'VOS' idea
- PMO works alone but relies on national and international support
- PMO-IV opportunity to upskill and standardise on global practices
- PMO-IV chance to meet and build relationships with PMOs

International PMO Co-operation

5 Aug 2010 Hi Julie,

We are just playing our role in the WMO-PMO community by supporting each and other VOSs.

So nothing great, just keeping our community spirit going and I believe that the expecting from us when VOS Scheme started in order for it to be success.

Best regards,
Ong Chin Hong.
Technical Support Officer. Technical Services Department.
Meteorological Services Division.
Singapore

Action Items from PMO-III

- 26 Action Items
- 16 Completed and 10 Ongoing
- Action Items

VOS Developments since PMO-III

- SOT-IV and SOT-V, Geneva, 2007 and 2009
- Panel work progressed by members and TTs
- Until late 90s VOS organised at a national level
- Now greater global co-ordination and standardisation under SOT
- PMO role has evolved due to new demands
- PMO role expanded to provide logistical help for other global ocean programmes

VOS Developments since PMO-III (1)

- New VOS Classes
- What is required to upgrade to VOSClim class
- Results of the E-logbook inter-comparison
- Latest changes in the 3 E-logbook types
- New metadata requirements
- Metadata collection tools and XML generator
- Submission schedule and exchange formats
- Inspection of foreign VOS
- Generic Ship Design document

VOS Developments since PMO-III (2)

- VOS databases
- WMO Pub 47 online catalogue/database
- VOS Website Program promotion initiatives
- Codes, introduction of BUFR
- Ship security and callsign masking
- Alternative methods of sending observations
- SOT trial of IMO Number for callsign
- E-Surfmar TT on AWS
- Expanded role of the PMOs

