

WORLD METEOROLOGICAL ORGANIZATION

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INTERGOVERNMENTAL OCEANOGRAPHIC  
COMMISSION (OF UNESCO)

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

SHIP OBSERVATIONS TEAM (SOT)

EIGHTH SESSION

CAPE TOWN, SOUTH AFRICA, 20-24 APRIL 2015

SOT-8 / Doc. 8.1.2  
(09.04.2015)

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ITEM: 8.1.2

Original: ENGLISH

## REPORT FROM THE SOT TECHNICAL COORDINATOR ON VOS SUPPORT

*(Submitted by Martin Kramp (SOT Technical Coordinator, JCOMMOPS))*

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### Summary and purpose of the document

This document also provides information on support that Mr Kramp has provided to the VOS Panel during the last intersessional period.

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### ACTION PROPOSED

The VOS Panel will be providing further guidance to the SOT Technical Coordinator regarding the kind of support he can provide to the Team.

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**Appendices: A.** VOS status Maps

**- A - DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT**

8.1.2.1 The SOT Technical Coordinator, Mr Martin Kramp reported on his activities in support of the VOS Panel during the last intersessional period. He used the opportunity to thank the Panel members for their good cooperation and feedback since SOT-7.

8.1.2.2 The production of regular maps has been resumed in early 2013, and ever since evolved with a growing number of maps focusing on special VOS aspects (such as parameters, masking, automatization, regional). Mr Kramp presented the current set of VOS maps and demonstrated the structure of multi-layer pdf versions. He requested feedback from the Panel on further requirements.

8.1.2.3 Mr Kramp reported on the platform metadata control performed on a monthly basis by the TC, and demonstrated how day-to-day information available at E-Surfmar are extracted, analyzed and archived. He thanked the Panel for the ongoing cooperation in platform metadata matters, and stressed that providing complete and coherent platform metadata (including mask information and mandatory footnotes) is crucial for monitoring, and performance measurement.

8.1.2.4 Mr Kramp explained that in contrast to monitoring reports from other sources, JCOMMOPS VOS reports are manually revised to exclude numerous and partly difficult to identify non-VOS platforms. He recommended a more appropriate use of table 2201 (vessel type) to facilitate this analysis.

8.1.2.5 The Panel noted that numerous duplicates had been identified on the GTS, with a large number having bilateral agreements as identified (and in the meantime mostly eliminated) origin. Bilateral agreements also allowed identifying missing data from the GTS. JCOMMOPS VOS reports take into account these circumstances.

8.1.2.6 Mr Kramp reported on ongoing recruiting activities with 3<sup>rd</sup> party contributors (see also agenda item 7.8), that frequently operate in undersampled sea areas (e.g. yachts in the Southern Ocean). Recurrent issues with such contributors are i) complexity of TurboWin without appropriate training, and ii) missing instrument recommendations. He stated that ship operators had shown willingness to self-fund more appropriate equipment, and to use existing email facilities for the transmission of the observations. Data from ship-owned instruments are mostly available from the navigation system (standardized NMEA data stream), and automated test submissions successfully took place in 2014.

8.1.2.8 Mr Kramp attended in 2014 the yearly International Research Ship Operators Meeting (IRSO) and presented details of the VOS Scheme with the goal to facilitate the collection and GTS-transmission of meteorological data from more research ships. Progress is expected by the next session of IRSO in October 2015.

8.1.2.9 The Panel thanked Mr Kramp for the good progress in VOS support and monitoring, and made the following recommendations:

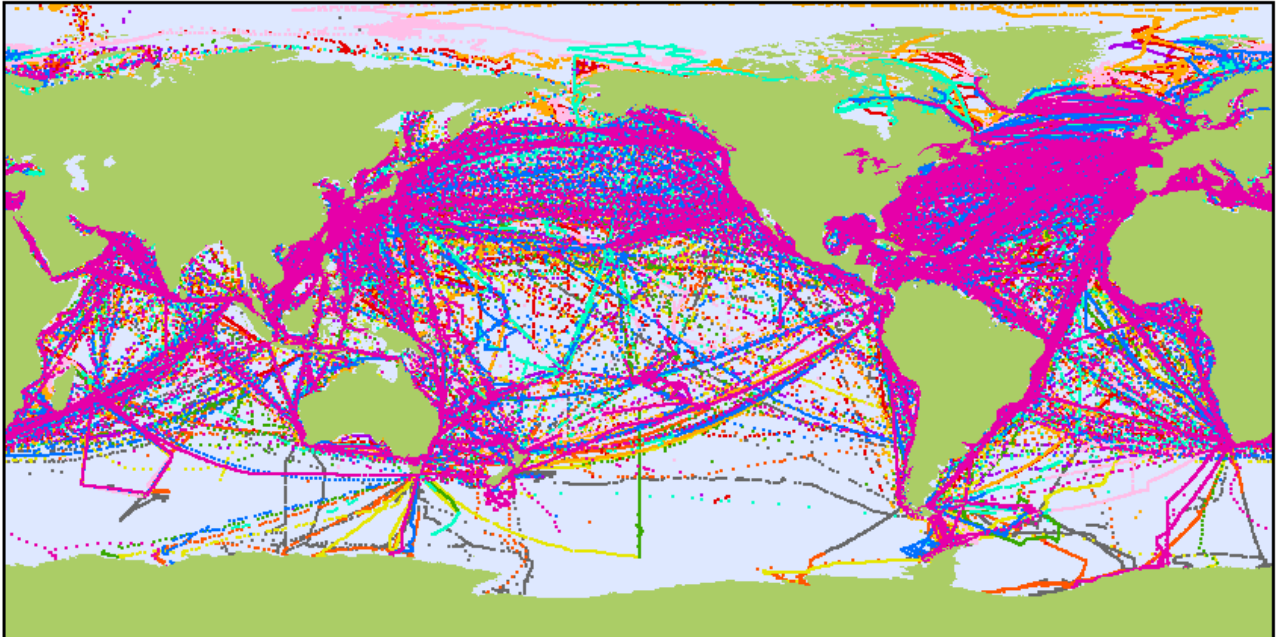
- (i) The Panel members, with assistance of the SOT Technical Coordinator to identify resources and initiate the development of "Turbowin Light" (possibly as option in TurboWin), or similar software for basic parameters, and/or smartphone application (**action; Panel members and M. Kramp; SOT-9**); and
- (ii) The Panel members, with assistance of the SOT Technical Coordinator to identify resources and initiate the development of a sensor-free mini-AWS or application, using data from ship-owned instruments (NMEA data stream) and satellite facilities to code and submit 3<sup>rd</sup> party observations (**action; Panel members and M. Kramp; SOT-9**);

3.4.16 The Panel decided on the following action items:

- (i) The SOT Technical Coordinator to continue with 3rd party recruiting activities, with a focus on undersampled sea areas (**action; M. Kramp; ongoing**);
  - (ii) The SOT Technical Coordinator to expand a cooperation with IRSO, with the aim to receive more data from research vessels (possibly without involvement of a NMS) (**action; M. Kramp; SOT-9**);
  - (iii) The SOT Technical Coordinator to routinely produce new maps and statistics focusing on [TBD] (**action; M. Kramp; SOT-9**).
  - (iv) Registration of all non-VOS platforms as “other” (OT, table 2201) vessel type (vssl) with appropriate footnote (Pub47 and E-Surfmar), until an appropriate metadata collection mechanism for such platforms has been set up by the DBCP coordinator (**action; Panel members; ongoing**); and
  - (v) The chair of the Task Team on Instrument Standards, with assistance from the SOT Technical Coordinator to create a list of existing, complying, and cost-effective 3<sup>rd</sup> party equipment (**action; H. Kleta; Apr. 2016**).
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APPENDIX A

VOS MAPS



Ship Observations Team

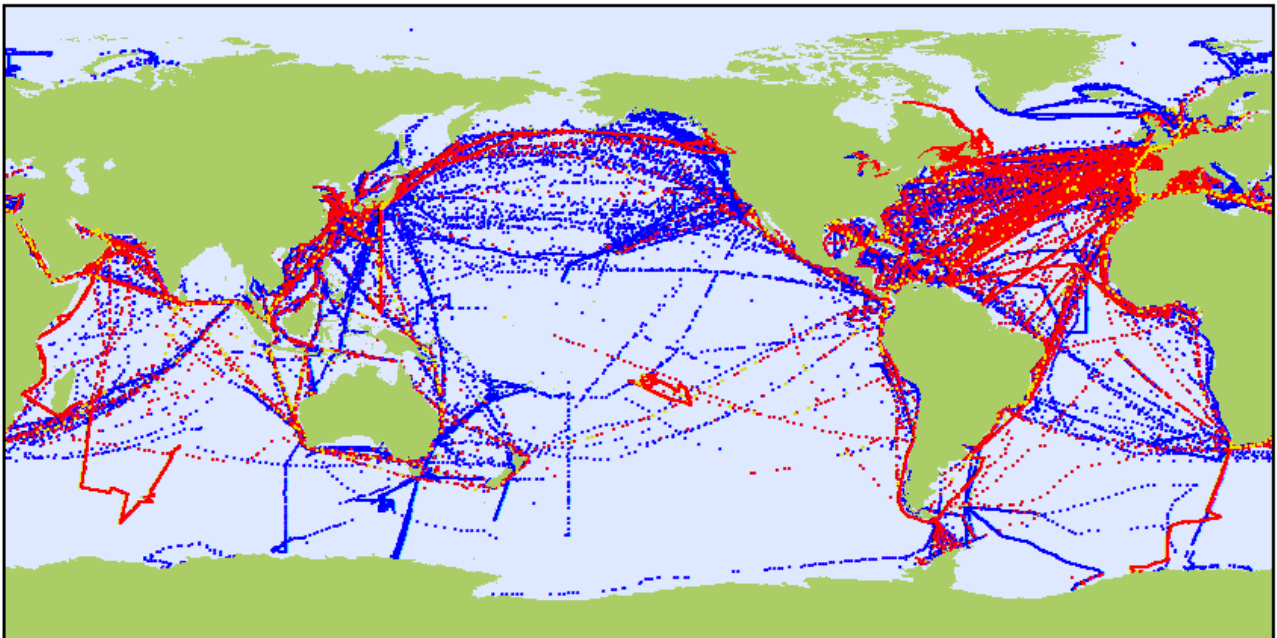
VOS (2261 / 2127813)

2014



(Active platform-IDs / number of observations)

- VOS-Dec (153128)
- VOS-Sep (193891)
- VOS-Jun (175653)
- VOS-Mar (184830)
- VOS-Nov (181264)
- VOS-Aug (202423)
- VOS-May (179242)
- VOS-Feb (159202)
- VOS-Oct (158874)
- VOS-Jul (197285)
- VOS-Apr (172885)
- VOS-Jan (169136)



Ship Observations Team

VOS - VOSCLIM

January 2015

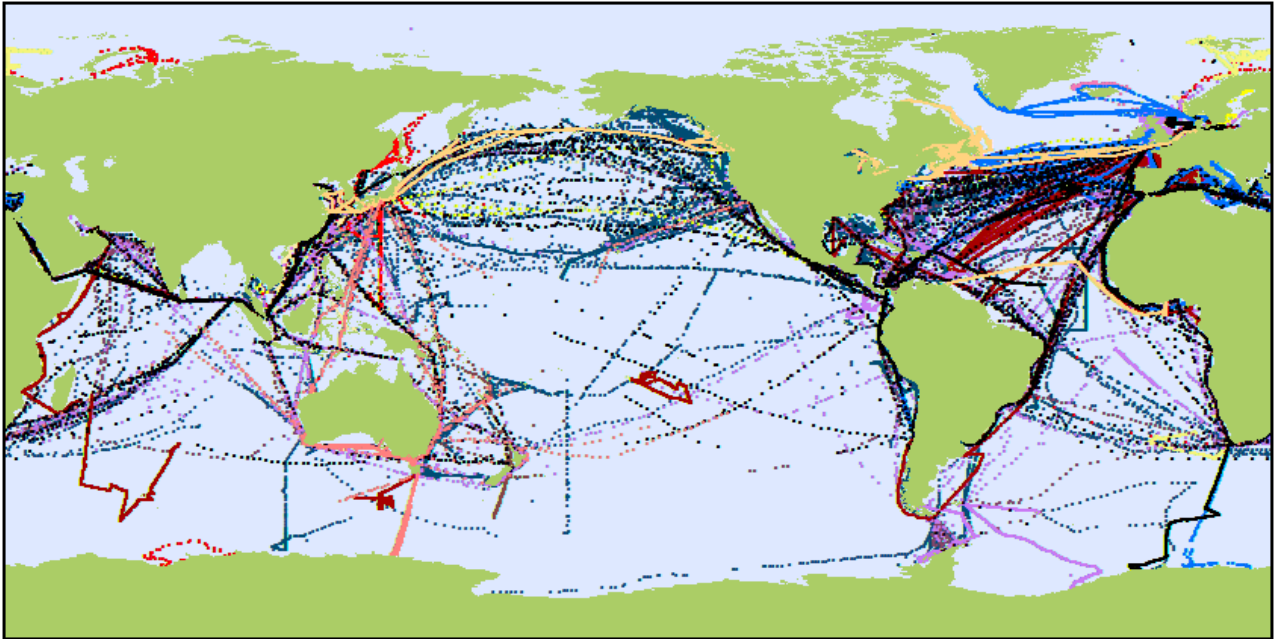


(Active platform-IDs / number of observations in period)

- VOS (1447 / 156833)
- VOSCLIM (399 / 60680)
- VOSCLIM > 120' (175 / 1009)

Percentage of VOSCLIM ships in global active VOS: 28%. Target: >25%  
 VOS ships with at least 20 observations: 908 / 63%. Target: 100%  
 VOSCLIM observations on the GTS within 120 min.: 59671 / 98%. Target: >95%

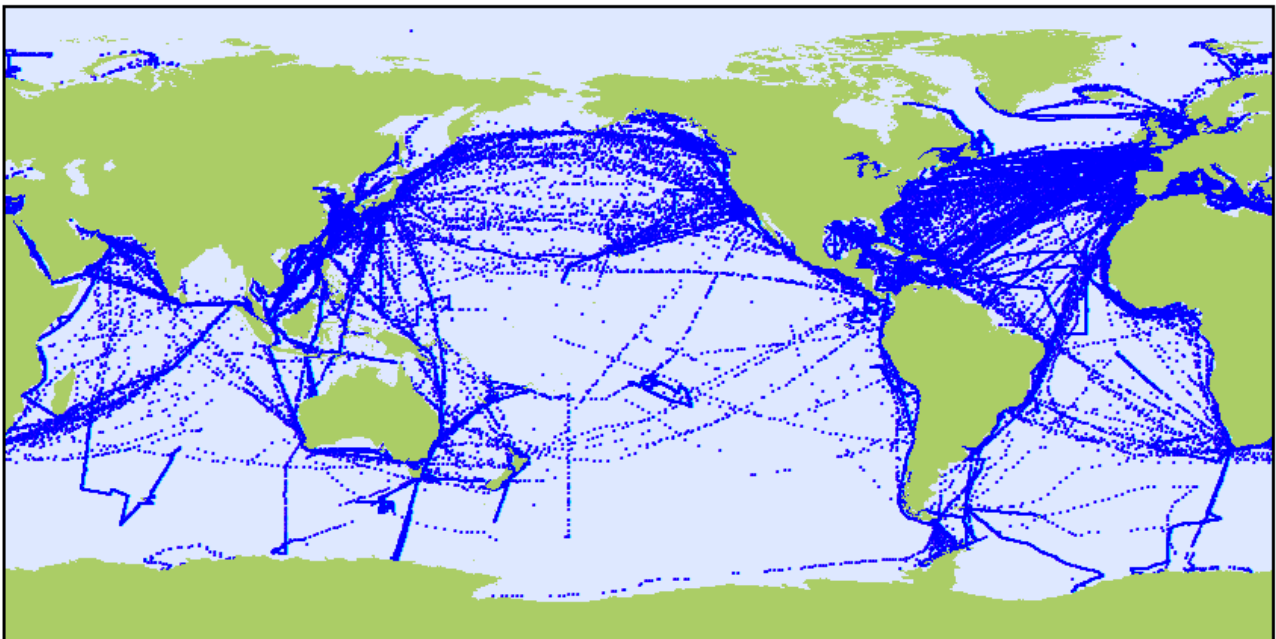






**Ship Observations Team** **VOS by recruiting Country** **January 2015**  
 (N° of active IDs / N° of observations in period, without generic call sign SHIP)

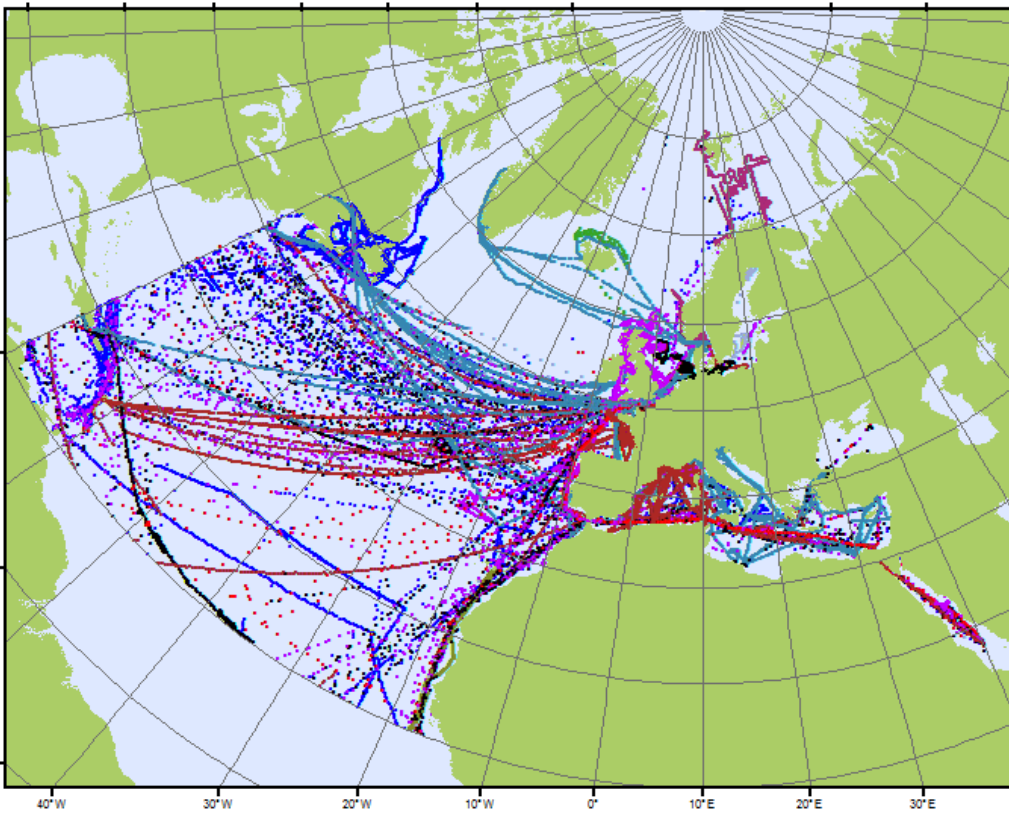
• AU (38/2870)	• ES (1/620)	• GB (236/29243)	• IE (2/24)	• IS (2/109)	• MY (4/65)	• NZ (18/1668)	• US (483/32384)
• CA (45/30500)	• EU (26/9790)	• GR (1/44)	• IL (4/60)	• JP (24/1020)	• NL (68/2901)	• RU (23/715)	• n/d (25/1232)
• DE (353/20981)	• FR (47/16668)	• HK (43/1599)	• IN (1/8)	• KR (2/2)	• NO (4/2102)	• SE (17/2248)	





**Ship Observations Team** **VOS (1447 / 156833)** **January 2015**  
 (Active platform-IDs / number of observations in period)



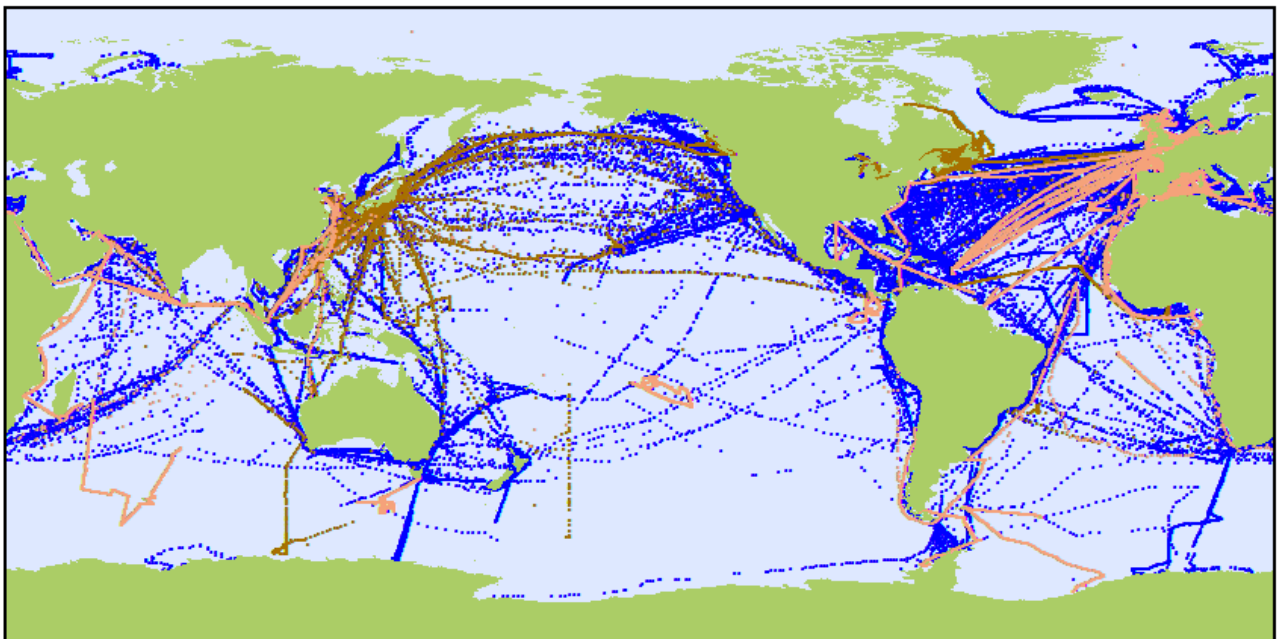
**Ship Observations Team**

**VOS EUMETNET AREA January 2015**

Active EUMETNET IDs: 444 with 62125 observations

Active Non-EUMETNET IDs: 183 with 19146 observations

- DE (14101)
- ES (563)
- EU (8776)
- FR (11901)
- GB (22087)
- GR (44)
- IE (24)
- IS (109)
- NL (1134)
- NO (1496)
- SE (1890)
- Global (81271)



Ship Observations Team

**VOS - MASK and SHIP**

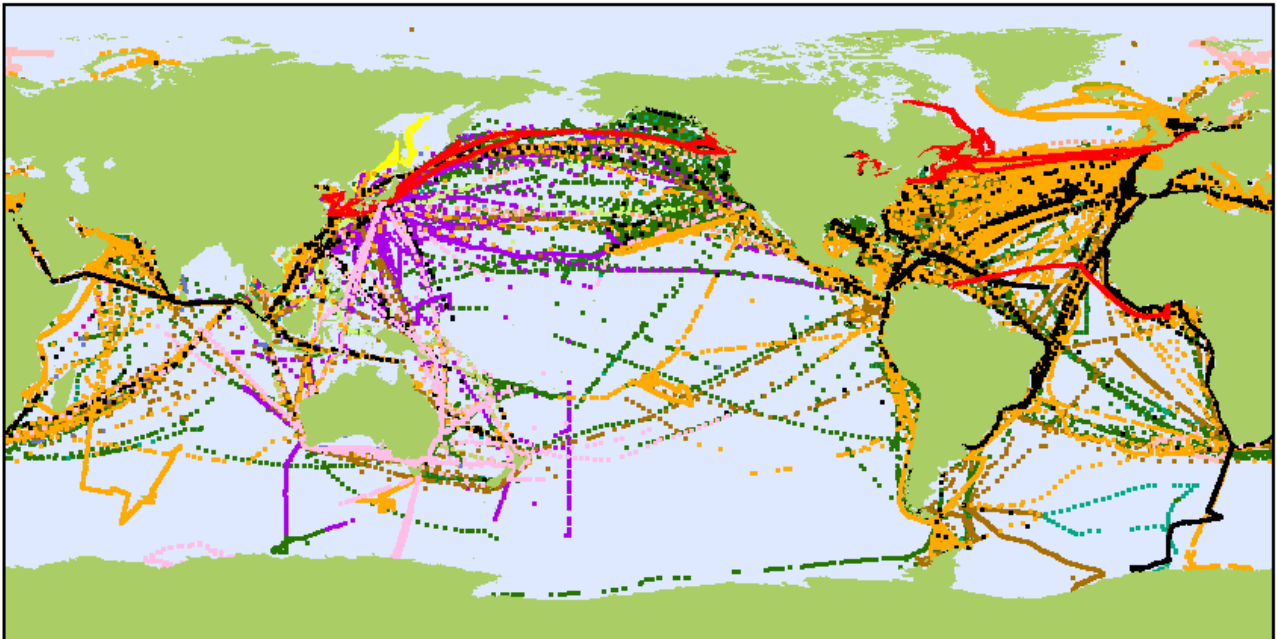
January 2015



(Active platform-IDs / number of observations in period)

- VOS (1447 / 156833)
- VOS-MASK (123 / 39895)
- VOS-SHIP (? / 28674)





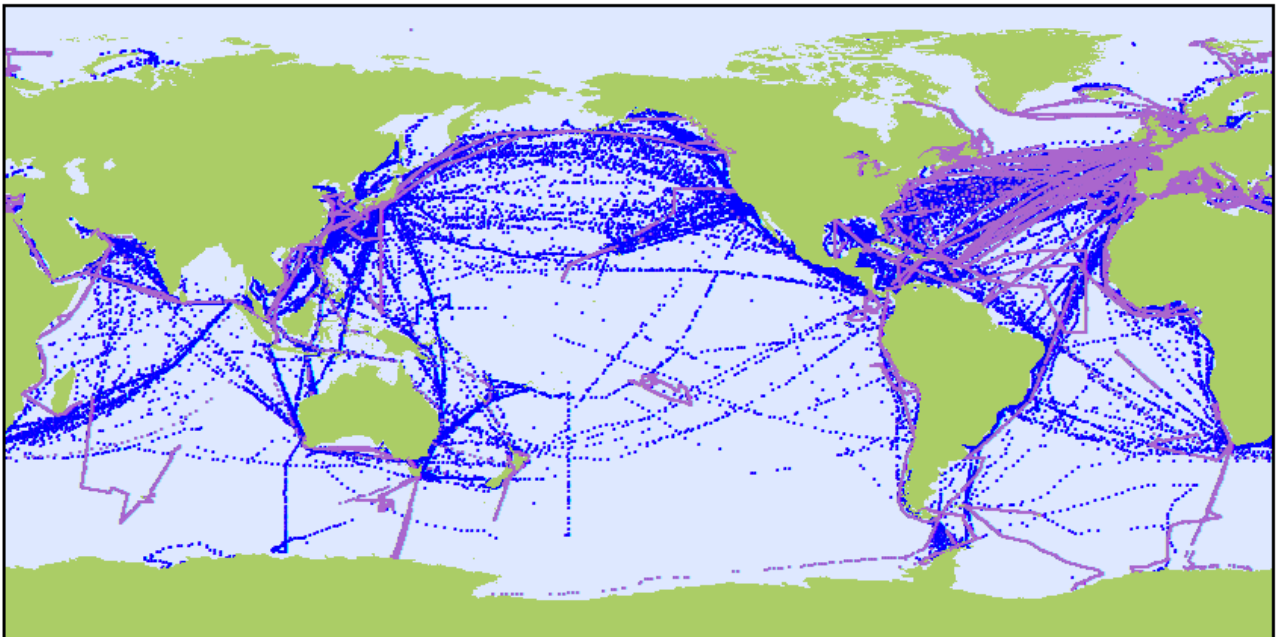
Ship Observations Team

VOS by GTS Centre (Number of observations in period)

January 2015



AU	DE	GB	ID	IN	KR	NZ	PT	US
• AMMC (2992)	• EDZIV (14379)	• EGRR (25977)	• WIIIX (0)	• DEMS (52)	• FKSL (2)	• NZKL (1343)	• LPMG (5)	• KWBC (32227)
CA	• EUMS (0)	GR	IE	IS	NL	RU	SE	• PANC (2895)
• CWHX (0)	FR	• LGAT (0)	• EIDB (24)	• BIRK (109)	• EHOB (0)	• RUHB (459)	• ESWI (2734)	• KARS (4)
• CNAO (54980)	• LFPW (2759)	HK	IL	JP	NO	• RUNW (0)	SG	• KWNB (0)
FJ	• LFPW (35254)	• VHHH (1274)	• LLBD (3)	• RUTD (4419)	• ENM (1973)	• RUMS (30)	• WSSS (746)	ZA
• NFFN (0)								• FAPR (104)



Ship Observations Team

VOS - AWS

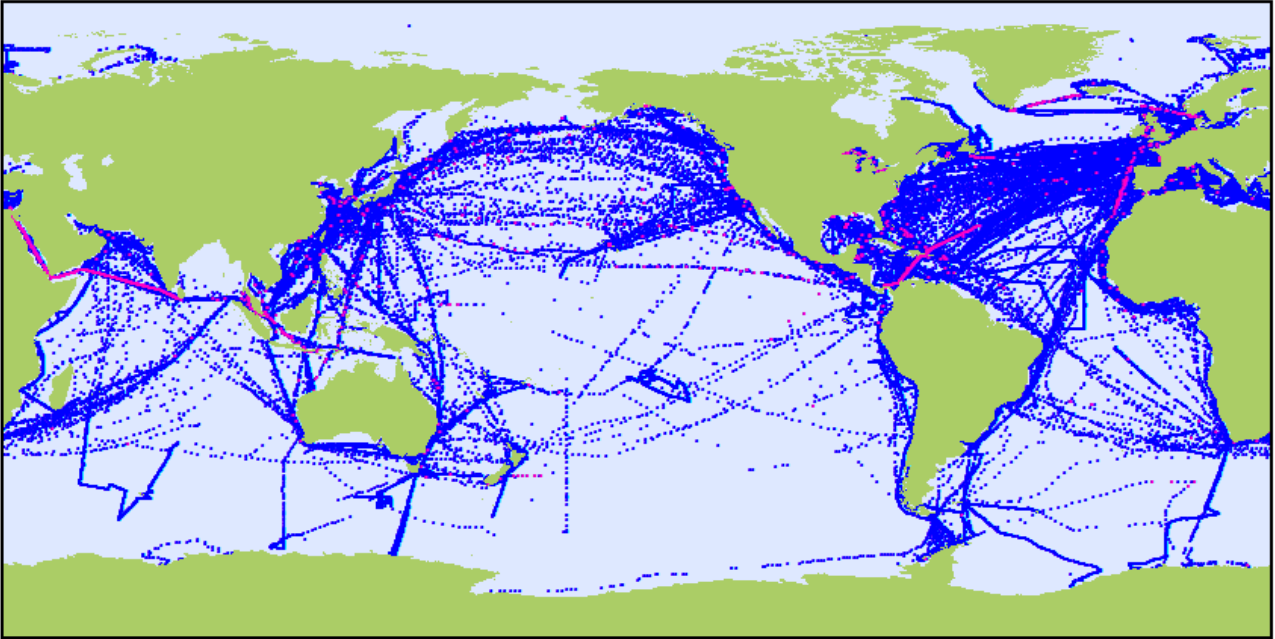
January 2015



(Active platform-IDs / number of observations in period)

• VOS (1447/ 156833) • VOS with AWS (255 / 108491)





Ship Observations Team

VOS - Air Pressure

January 2015



(Active platform IDs / number of observations in period)

• VOS (1447 / 156833) • Observations without Air Pressure (5063)

Observations without Air Pressure came from 203 different IDs, including 'SHIP'.  
31 IDs (without 'SHIP') have sent more than 10 reports without Air Pressure.

