

VOS Report for 2014

Country =

a. Programme description:				
Category	No. of ships at 31 Dec 2014	Recruitments in 2014	De-recruitments In 2014	Comments
<i>Selected</i>	152	1	94	Policy and VOS data base adjustments in the US VOS program accounted for a large number of de-recruitments in 2014
<i>Selected AWS</i>	15		2	
<i>VOSclim</i>	5			
<i>VOSclim AWS</i>	4			
<i>Supplementary</i>	453	96	144	Policy and VOS data base adjustments in the US VOS program accounted for a large number of de-recruitments in 2014
<i>Supplementary AWS</i>	12			
<i>Auxiliary</i>	187	20	82	Policy and VOS data base adjustments in the US VOS program accounted for a large number of de-recruitments in 2014
<i>Auxiliary AWS</i>	3	1		
<i>Other</i>	0	1*	19	*US Support Fleet
National VOS Total	831			

National VOS Target	600
National VOSclim Target	300

b. Data management:

<i>Total number of ship observations (BBXX) distributed on the GTS in 2014</i>	427,961
<i>Dates when VOS data submitted to the GCCs in 2014</i>	Monthly

c. Shipboard Automatic Weather System				
Type	No. of ships at 31 Dec 2014	Manual Input Yes / No	Method of Comms	Year1 Plans
Integrated using compliant e-logbook with SCS and ships instrumentation.	6	yes	VSAT/Ships email	n/a
Integrated using non-compliant e-logbook with SCS and ships instrumentation.	7	Yes	VSAT/Ships email	Upgrade to use compliant software
Integrated using no e-logbook	24	No	Email	n/a

d. Electronic logbooks: (TurboWin, SEAS, OBSJMA)		
Software & version	No. of ships at 31 Dec 2014	Implementation plans
SEAS AutoIMET 9.1.4.2.2.5	6	n/a
AMVER/SEAS AutoIMET 8.00/6.57	7	Upgrade to compliant SEAS AutoIMET 9.1.4.2.2.5
AMVERSEAS 8.00/6.57	447	Upgrade to Turbowin
AMVERSEAS >8.00/6.57	39	Upgrade to Turbowin
Turbowin 5.1 (TEST)	1	
TurboWin + 2.2 (TEST)	27	
Turbowin 5.0	108	
Turbowin >4.5	13	Upgrade to TW 5.0 or better
TurboWeb	2	

e. Standard Meteorological Equipment: (Types and Settings)		
Equipment Type / Element	Manual Instrumentation	AWS Instrumentation
Barometer	Belfort Aneroid	none
	Fischer Aneroid	
	<i>Default national setting</i> Mean Sea Level	<i>Mean Sea Level</i>
Barograph	Belfort marine barograph	none
	DBX1 electronic barograph	
<i>Default national setting</i>	Meteograf electronic	
	Mean Sea Level	<i>Mean Sea Level</i>
Thermometers	Zeal Glycol Glass	
Sea Surface Temperature	Ships injection sensor	none
Wind Speed	Estimated	none
Wind Direction	Estimated	none

f. PMO ship visit activities: (if a visit is for dual purposes, include all purposes)			
Activity	Manual Ship	AWS Ship	Comment
Routine VOS inspections	931	25	
VOS recruitment visits	1052	0	25 successful recruitments , 68 Candidate, 959 Uninterested in VOS
VOS de-recruitment visits	0	0	
VOS courtesy or foreign visits	272	0	
<i>Total visits to VOS</i>	2280		
Routine ASAP inspections	0		
ASAP recruitment visits	0		
ASAP de-recruitment visits	0		
ASAP courtesy visits	0		
<i>Total visits to ASAP</i>	0		
Routine SOOP visits	0		
SOOP recruitment visits	2		PMO contacted AOML about potential SOOP candidates.
SOOP de-recruitment visits	0		
SOOP courtesy visits	1		PMO delivered buoys for AOML
<i>Total visits to SOOP</i>	3		

Visits in support of DBCP (drifting buoys)	0		
Visits in support of Argo (profiling floats)	0		
<i>Total visits to other programs</i>	3		
Total visits by national PMOs	2283	<i>Sum of all ship visits (VOS + ASAP + SOOP) + visits to other program (DBCP + Argo)</i>	

g. Major challenges and difficulties:

- Resourcing the VOS program to allow for better standardization of instrumentation, practices and procedures; and to improve US best practices to align with international best practices.
Standard Practices across all 6 NWS regions need better monitoring
- Introducing autonomous Automated Weather Sensors, (AWS) into VOS, within budget constraints.

h. Research / development / testing:

The US VOS Program has been interacting with the NDBC for research of AWS that may apply to VOS in the future. NDBC is developing the **Self-Contained Ocean Observations Payload (SCOOP)** which are self-contained units that include environmental sensors, processing components, satellite communications, and power in one sealed unit. NDBC have prototype SCOOP packages in development and testing in 2015. The prototype SCOOPS may become available to the US VOS program in 2016 with production possibly by 2017.

i. Other comments

Recruitment of ships that fall under the category of ZZ, ZY, US Support Fleet produced 176 new participants. NOAA and the NWS continues to evaluate process with these classes of ships, especially in regards to quality assurance and standardized communications methods.

The US intends to increase its VOSlim Fleet dramatically beginning in 2015 with acquisition of new instrumentation, better metadata collection tools and methods.