

**Ship Observations Team
National Report for 2008**

1.	Country	United States of America
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2.	Prepared by	Robert A. Luke, VOS Program manager, NOAA/National Weather Service
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3. Contributing national marine organizations:

Insert as applicable – VOS / VOSclim / SOOP / ASAP – Include additional detail where appropriate e.g (data management).

Organization	NOAA/NWS/NDBC
Programmes #	VOS
Website URL	http://www.vos.noaa.gov/

Organization	NOAA/NWS/NDBC & NOAA/NCDC
Programmes #	VOSclim
Website URL	http://www.vos.noaa.gov/vosclim.shtml or http://www.ncdc.noaa.gov/oa/climate/vosclim/vosclim.html

Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-VOS
Website URL	www.aoml.noaa.gov/goos

Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-XBT
Website URL	http://www.aoml.noaa.gov/phod/goos.php

Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-High Density XBT
Website URL	www.aoml.noaa.gov/phod/hdenxbt
Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-SIO High Density XBT
Website URL	http://www-hrx.ucsd.edu/
Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-Argo Program
Website URL	http://www.aoml.noaa.gov/phod/argo/index.php
Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-Global Drifter Program
Website URL	www.aoml.noaa.gov/phod/dac
Organization	NOAA/OAR/AOML/Global Ocean Observing Systems (GOOS) Center
Programmes #	SOOP-WHOI Autolmet Program
Website URL	http://uop.whoi.edu/vos/
Organization	NOAA/OAR/AOML-PMEL
Programmes #	SOOP-pCO ₂
Website URL	http://www.aoml.noaa.gov/ocd/gcc/co2research/index.html
Website URL	http://www.pmel.noaa.gov/co2/co2-home.html
Organization	NOAA/OAR/CMDL
Programmes #	SOOP-CO ₂
Website URL	http://www.oar.noaa.gov/atmosphere/atmos_cmdl.html

Appendix 1: List of National Focal Points for SOT / VOS / VOSClim / SOOP / ASAP

(insert Country)

Focal Point *	VOS	VOS	VOSClim
Name	Robert Luke	John Wasserman	Alan Hall
Title	VOS Project Manager	VOS Operations Manager	Computer Specialist
Agency	NOAA/NWS/NDBC	NOAA/NWS/NDBC	NOAA/NCDC
Postal Address	1007 Balch Blvd Stennis Space Center, MS 39529-6000	1007 Balch Blvd Stennis Space Center, MS 39529-6000	151 Patton Avenue Asheville, NC 28801-5001
Email	Robert.luke@noaa.gov	John.wasserman@noaa.gov	Alan.hall@noaa.gov
Telephone	228-688-1457	228-688-1818	828-271-4071
Facsimile	228-688-3923	228-688-3923	828-271-4022

Focal Point *	VOSClim	SOOP	SOOP
Name	Eric Freeman	Dr. Gustavo Goni	Jim Farrington
Title	Meteorologist/Senior Analyst	Oceanographer	SEAS Logistics
Agency	NOAA/NCDC	NOAA/OAR	NOAA/OAR
Postal Address	151 Patton Avenue Asheville, NC 28801-5001	4301 Rickenbacker Causeway	439 West York Street Norfolk, VA 23510
Email	Eric.freeman@noaa.gov	Gustavo.Goni@noaa.gov	James.w.farrington@noaa.gov
Telephone	828-271-4463	305-361-4339	757-441-3062
Facsimile	828-271-4022	305-361-4412	757-441-6495

Focal Point *	SOOP	SOOP	SOOP
Name	Carrie Wolfe	Sommyr Pochan	Steve Noah
Title	SOOP Contractor	Oceanographer/SEAS Operations	SOOP Contractor
Agency	SCMI	NOAA/OAR	Olympic Computer Services
Postal Address	439 West York St.	4301 Rickenbacker Causeway Miami, FL 33149	800 West Park Ave. Suite 1 Port Townsend, WA 98368
Email	Hbbio048@csun.edu	Sommyr.Pochan@noaa.gov	KARSTENO@aol.com
Telephone	310-519-3181	305-361-4304	425-238-6501
Facsimile	310-519-1054	305-361-4366	360-385-2400

Focal Point *	SOOP	SOOP	SOOP
Name	Derrick Snowden	Dr. Francis BRINGAS	Dr. Dean ROEMMICH
Title	Oceanographer	Oceanographer/SEAS Operations	Professor (MLRG/PORD)
Agency	NOAA	NOAA Atlantic Oceanographic and Meteorological Laboratory	Scripps Institution of Oceanography, UCSD
Postal Address	1100 Wayne Avenue Suite 1202 Silver Spring, MD 20910	4301 Rickenbacker Causeway Miami, FL 33149	9500 Gilman Drive # 0230 La Jolla, CA 92093-0230
Email	derrick.snowden@noaa.gov	francis.bringas@noaa.gov	droemmich@ucsd.edu
Telephone	301-427-2464	(305) 361-4316	(858) 534-2307
Facsimile	301-427-0033	(305) 361-4412	(858) 534-0704

* Insert as appropriate - SOT / VOS / VOSClm / SOOP / ASAP

Appendix 2: List of Port Meteorological Officers

(insert Country)

Port / Office	ANCHORAGE, AK	BALTIMORE, MD	CHARLESTON, SC
Name	Larry Hubble	VACANT	Tim Kenefick
Title	PMO	PMO	PMO
Postal Address	National Weather Service Alaska Region 222 West 7th Avenue #23 Anchorage, AK 99513-7575	National Weather Service, NOAA Maritime Center I, Suite 287 2200 Broening Highway Baltimore, MD 21224-6623	NOAA Coastal Services Center 2234 South Hobson Avenue Charleston, SC 29405-2413
Email	larry.hubble@noaa.gov		timothy.kenefick@noaa.gov
Telephone	907-271-5135	410-633-4709	843-740-1281
Facsimile	907-271-3711	410-633-4713	843-740-1289
Comment		Anticipated Hiring NLT 15 April 2009	

Port / Office	DULUTH, MN / GREAT LAKES	FORT LAUDERDALE, FL	HONOLULU, HI
Name	Vacant	David Dellinger	Derek LeeLoy
Title	PMO	PMO	Ocean Services Program Coordinator /PMO
Postal Address	National Weather Service, NOAA 5027 Miller trunk Hwy Duluth, MN 55811-1442	National Weather Service/NOAA 2550 Eisenhower Blvd., Suite 312 Fort Lauderdale FL 33316	National Weather Service Pacific Region HQ Grosvenor Center, Mauka Tower 737 Bishop Street, Suite 2200 Honolulu, HI 96813-3201
Email		david.dellinger@noaa.gov	derek.leeloy@noaa.gov
Telephone	218-729-0653/6794	954-463-4271	808-532-6439
Facsimile	218-729-0690	954-462-8963	808-532-5569
Comment	Position relocated to Duluth, MN Anticipated Hiring NLT 01 May 2009	New Hire effective 24 November 2008	

Port / Office	HOUSTON, TX	JACKSONVILLE, FL	KODIAK, AK
Name	Chris Fakes	Robert Niemeyer	Richard Courtney
Title	PMO	PMO	PMO
Postal Address	National Weather Service, NOAA 1353 FM646 Dickinson, TX 77539	National Weather Service, NOAA 13701 Fang Road Jacksonville, FL 32218-7933	National Weather Service, NOAA 600 Sandy Hook Street, Suite 1 Kodiak, AK 99615-6814
Email	chris.fakes@noaa.gov	rob.niemeyer@noaa.gov	richard.courtney@noaa.gov
Telephone	281-534-2640	904-741-5186 Ext. 117	907-487-2102
Facsimile	281-337-3798	904-741-0078	907-487-9730
Comment		New Hire – effective 15 September 2008	

Port / Office	LONG BEACH, CA	NEW ORLEANS, LA / GULF COAST	NEW YORK CITY, NY
Name	Brian Holmes	Paula Rychtar	James Luciani
Title	PMO	PMO	PMO
Postal Address	National Weather Service, NOAA 501 West Ocean Blvd., Room 4480 Long Beach, CA 90802-4213	National Weather Service, NOAA ATTN: Port Meteorological Officer c/o NOAA Fisheries P.O. Drawer 1207 Pascagoula, MS 39568-1207	National Weather Service, NOAA 110 Main Street, Suite 201 South Amboy, NJ 08879-1367
Email	brian.holmes@noaa.gov	paula.rychtar@noaa.gov	james.luciani@noaa.gov
Telephone	562-980-4090	504-289-2294	732-316-5409
Facsimile	562-980-4089		732-316-7643
Comment	New Hire – effective 15 March 2009		

Port / Office	NORFOLK, VA	SAN FRANCISCO BAY AREA	SEATTLE, WA
Name	Peter Gibino	Daniel Curtis	Patrick Brandow
Title	PMO	PMO	PMO
Postal Address	National Weather Service, NOAA 4034-B Geo. Wash. Mem. Hwy. Yorktown, VA 23692-2724	National Weather Service, NOAA 1301 Clay Street, Suite 1190N Oakland, CA 94612-5217	National Weather Service, NOAA 7600 Sand Point Way, N.E. BIN C15700 Seattle, WA 98115-6349
Email	peter.gibino@noaa.gov	daniel.curtis@noaa.gov	pat.brandow@noaa.gov
Telephone	757-877-1692	510-637-2960	206-526-6100
Facsimile	757-877-9561	510-637-2961	206-526-4571 or 6094
Comment			

Port / Office	VALDEZ, AK		
Name	Peggy Perales		
Title	OIC / PMO		
Postal Address	National Weather Service, NOAA Box 427 Valdez, AK 99686-0427		
Email	peggy.perales@noaa.gov		
Telephone	907-835-4505		
Facsimile	907-835-4598		
Comment	New Hire – effective 17 September 2008		

SOOP Report for 2008

United States of America

a. Programme description:			
Line	Agency	Sampling programme and mode (if applicable)	No. of ships
AX10	SOO SEAS/AOML	HD	1
AX10	SOO SEAS/AOML	FR	1
AX18	SOO SEAS/AOML	HD	1
AX22	SOO SEAS/AOML	HD	2
AX25	SOO SEAS/AOML	HD	1
AX32	SOO SEAS/AOML	HD	1
AX32	SOO SEAS/AOML	FR	1
AX07	SOO SEAS/AOML	HD	2
AX07	SOO SEAS/AOML	FR	2
AX08	SOO SEAS/AOML	HD	2
AX08	SOO SEAS/AOML	FR	2
IX15	SOO SEAS/SIO	HD	1
IX21	SOO SEAS/SIO	HD	1
IX31	SOO SEAS/SIO	HD	1
IX06	SOO SEAS/SIO	HD	1
PX50	SOO SEAS/SIO	HD	1
PX10	SOO SEAS/SIO	HD	1
PX10	SOO SEAS/AOML	FR	2
PX13	SOO SEAS/SIO	HD	1
PX13	SOO SEAS/AOML	FR	2
PX26	SOO SEAS/AOML	FR	2
PX28	SOO SEAS/SIO	FR	1
PX31	SOO SEAS/SIO	HD	1
PX31	SOO SEAS/AOML	FR	1

PX37	SOO SEAS/SIO	HD	1
PX37	SOO SEAS/AOML	FR	2
PX44	SOO SEAS/SIO	HD	1
PX44	SOO SEAS/AOML	FR	2
PX06	SOO SEAS/SIO	HD	1
PX08	SOO SEAS/SIO	HD	2
PX08	SOO SEAS/AOML	FR	2
PX83	SOO SEAS/AOML	FR	1

b. Data management

Agency	No. of JJVV messages on the GTS in 2007	Location of delayed-mode data
NOAA/AOML-SEAS	6886	NODC/AOML/SIO/CSIRO
SIO-SEAS	5096	NODC/AOML/SIO/CSIRO

c. Major challenges and difficulties:

- A real time transmission and quality control procedure for the thermosalinograph (TSG) data collected on board the cargo ships is being implemented.
- Transect AX18 (Buenos Aires to Cape Town) has demonstrated to be a serious challenge as it is very difficult to find ships doing this route. An alternate route between Cape Town and Santos (AX17) is being done when ships are available.
- The Skógafoss was lost to ship traffic realignment plans. This particular ship participated in high and low density XBT sampling, atmospheric and oceanic carbon dioxide and thermosalinograph programs at high latitudes in the Atlantic Ocean, so it was a major loss to multiple programs within SOOP. We are currently working to recruit the Reykjafoss that transits the same route.
- Recruiting ships for high density transect PX50 still continues to be a problem.
- Most data from deployments by international collaborators continue not being transmitted into the GTS.

d. Research / development / testing:

- After completion of the transition from SEAS-IV to SEAS 2000 data acquisition software, all SEAS expendable bathythermograph (XBT) data continue being transmitted from SOO to NOAA in full resolution profiles and all data are placed into the GTS by NOAA. We are now testing Iridium satellite transmission protocols for TSG and XBT data collected with SEAS 2000 on the Oleander and on AX10.
- We will test BUFR format transmission with XBT and TSG data during 2008.

e. Other comments:

- We continue to participate in collaborative programs with other institutions involved with XBT programs. Our contribution to the collaboration comes in the form of donating probes and supporting equipment when needed in exchange for management and ship greeting services. In particular we shipped 324 probes to IRD/Noumea, 540 probes to IRD/Brest, 324 probes to Brazil, and 648 probes to Australia.
- XBT transects will be re-evaluated following international and regional scientific panel recommendations, that will be discussed during the upcoming OceanObs meeting to be held in Venice in September 2009.

VOS and VOSClm Report for 2008

United States of America

a. Programme description:		
Category	No. of ships at 31 Dec 2008	Comments
<i>Selected</i>	837	Counts are becoming "Truer" with migration to MyVOS – MySQL Database
<i>Supplementary</i>	314	
<i>Auxiliary</i>	125	
<i>Other (specify)</i>	0	
Total National VOS Fleet	1280	

b. VOS:	
<i>Number of VOS vessels recruited in 2008</i>	205
<i>Number of VOS vessels de-recruited in 2008</i>	01
<i>Target number of ships in the national VOS Fleet</i>	1000+

c. VOSClm:	
<i>Number of VOSClm vessels at 31 December 2008</i>	17
<i>Number of VOSClm vessels recruited in 2008</i>	3
<i>Number of VOSClm de-recruitments in 2008</i>	0
<i>Number of VOSClm recruitments planned for 2009</i>	10
<i>Target number of ships to participate in VOSClm</i>	50

d. Automated observing systems:				
Type	No. of ships at 31 Dec 2008	Manual Input Yes / No	Method of Comms	2009 Planned installations
1	16	Yes	Email	?
2	05	Yes	Email/Inmarsat	?
3	20	Yes	Email/Inmarsat	?

e. Data management:	
<i>Total number of ship observations (BBXX) distributed on the GTS in 2008</i>	303,424
<i>Frequency of VOS data submitted to the GCC in 2008</i>	Quarterly

f. Electronic logbooks:		
Software & version	No. of ships at 31 Dec 2008	Implementation/upgrade plans
SEAS 8.0	1	Version dated 09/18/08 - contains requested modifications as per Logbook Comparison Test
Seas.6.57	272	Version dated 01/13/07 - Contains correction to Dewpoint Calculation method & encoding
Others	71	Earlier versions (including 52 that are still DOS based applications to support XBT encoding)
		2009 Goal is to annotate true version statistics into MyVOS and to upgrade all non DOS mandatory versions below 8.0

g. Major challenges and difficulties:

Getting limited ORACLE database records properly migrated into MyVOS database.
Back-filling existing ship records with Pub47 requested metadata

Retirement of PMOs in Baltimore, MD; Jacksonville, FL; and Long Beach, CA & passing of PMO Fort Lauderdale (cancer) – New Hires will take time to come up to speed.

Relocation of Great Lakes PMO office from Chicago to Duluth, MN will bring unique issues to deal with.

h. Research / development / testing:

Using NOAA ships sensors and SCS computer system to submit automated observations via AUTOIMET & SEAS or Email into Regional Server.
Expanding efforts into Research Vessel community and then to Merchant fleets

i. Other comments:

Migrated to MyVOS database 01 December 2008. MyVOS is a MySQL (version 5.0) relational based system.