

## STATUS OF GLOBAL VOS AUTOMATION AS AT DECEMBER 2012

**Table 1 – Status of VOS Automatic Weather Stations**

Country	Type of AWS	Method of Comms	Manual Entry Facility	Number of Ships with AWS									
				31/12/2002	31/12/2004	31/12/2005	31/12/2006	31/12/2007	31/12/2008	31/12/2009	31/12/2010	31/12/2011	31/12/2012
Australia	Vaisala Milos 500 AWS	Inmarsat C (Data Mode)	Yes	9	11	10	8	9	9	8	8	8	6
	TECHSAS/ Other	Inmarsat Fleet Broadband	No								1	1	1
Brazil	VAISALA Maritime Observation System MAWS410	(not known)	No								4	6	6
Canada	AVOS – AXYS Technologies	Inmarsat C	Yes	13	14	14	39	41	45	35	18	4	2
		Iridium	Yes					1	1	17	35	48	49****
China	DJQ-1	BDS	No								33	(2)	2
	XZC2-2SA	Inmarsat C CDMA, BDS	No								12	(12)	12
	XZC2-2SC	Inmarsat C CDMA, BDS	No									(36)	36
	XZC6-1	Inmarsat C CDMA, BDS	No								35	(17)	17
Croatia	BAROS	Iridium SBD	No									1*****	
Denmark	BATOS	Inmarsat C (Data Mode)	Yes	-	-	-	2	See EUMETNET					
EUMETNET	BATOS	Inmarsat C (Data Mode)	Yes					5	5	6	8	10	10
	BAROS	Iridium SBD	No					0	4	9	13	15	16
France	BATOS	Inmarsat C (Data Mode)	Yes	19	30	39	45	48	54	56	58	56	58
	Mini BATOS	Inmarsat C (Data Mode)	No		1	2	3	3	1	-	-		

	MINOS	Argos	No		6	7	8	8	7	8	7	6	5
	BAROS	Iridium	No					1	-	-	-		
<b>Germany</b>	Vaisala Milos 500 AWS	Meteosat DCP	No	23	21	21	17	18	17	16	17	17	17
	Ships' own data logger	Inmarsat/ Iridium	Yes							2	2	2	2
<b>Indonesia</b>	TECHSENSE MET	Inmarsat	No								(6)	6	
	PROJEX DX4 PRO	GPRS	No								(1)	1	[1]
<b>Ireland</b>	Vaisala Milos AWS	Meteosat	No	1	1	1	1	1	1	-	-		-
	BATOS	Iridium	No							1	2		-
<b>Italy</b>	BAROS ++	Iridium	No										3****
	BAROS	Iridium	No										3****
<b>Japan</b>	Integrated System for Marine Met Observation (Koshin Denki Kogyo Co)	Inmarsat (4) MTSAT(2)	Some	13	12	13	9	9	9	9	6	6	6
	Weather Observation System (Nippon)	Inmarsat C	Some				4	5	5	6	6	6	5
	SOAR - Shipboard Oceanographic & Atmospheric Radiation (Brookhaven National Laboratory)	Inmarsat C	Yes				1	1	1	1	1	1	1
	Ogasawara Keiki	Inmarsat	No				3	1	1	-	-		
	Seisakusho Co (Japan)	Inmarsat F	No				-	1	1	-	-		
	JRCS MFG. Co. Ltd (Japan)												
<b>New Zealand</b>	Sutron 9000RTU	MTSAT	Yes	1	1	1	1	1	1	1	1	1	1
	mSTAR-SHIP	GPRS Cell	No					1	1	1	1	1	1
<b>Norway</b>	AWS	VSAT	some	-	-	17	17	18	16	15	(15)	(15)	(5)
<b>Russia</b>	GM6	Inmarsat C	Yes	-	38	(38)	(38)	(38)	(38)	0	0	0	0

<b>South Africa</b>	Vaisala Milos 520	Inmarsat C	Yes	-		1	(1)	1	1	1	1	1	2	
<b>Spain</b>	Vaisala MAWS 410	Inmarsat C	Yes	1	1	(1)	1	1	1	1	1	1	1	
<b>United Kingdom</b>	Automet	Inmarsat	No	1	1	1	1	1	0	0	0	0	0	
	MINOS –GP	Argos	No	-	-	1	2	6	5	5	5	3	2	
	MINOS-GPW	Argos	No	-	-	1	2	1	1	1	1	1	1	
	BATOS	Inmarsat C (Data Mode)	Yes	-	-	-	1	3	3	2	5**	4**	4**	
	AVOS	Inmarsat	Yes					1	1***	0	0	0	0	
	Metpod	Iridium	No						1	1	0	0	0	
	Metocean Deck Buoy	Iridium	No						2	2	2	1	0	
	AMOS - Automated Marine Observing System ( met Office)	Iridium	No						-	-	-	21	33	
<b>United States</b>	SEAS-Autolmet NOAA SCS (Science Computing System) Type 1	VSAT Email	Yes	-	3	(3)	0	3	16*	2	9	12	12	
	NOAA SCS Type 2	VSAT Email	No	-	-	-	-	-	-	23	8	3	3	
	Non NOAA (developed by Alaska Region)	Email	No									7	7	
	Other ship owned AWS systems	Email	Yes								12	5	6	
<b>TOTAL</b>					<b>81</b>	<b>140</b>	<b>171</b>	<b>204</b>	<b>227</b>	<b>250</b>	<b>229</b>	<b>334</b>	<b>337</b>	<b>336</b>

Notes -

Numbers in brackets not confirmed

Sweden advised 1 AWS system in 2012 but details not yet confirmed

\*2008 number corrected in 2009 - different from 2008 report

\*\* (includes 3 systems installed by Met Office on behalf of E-SURFMAR)

\*\*\* System Transferred to Environment Canada

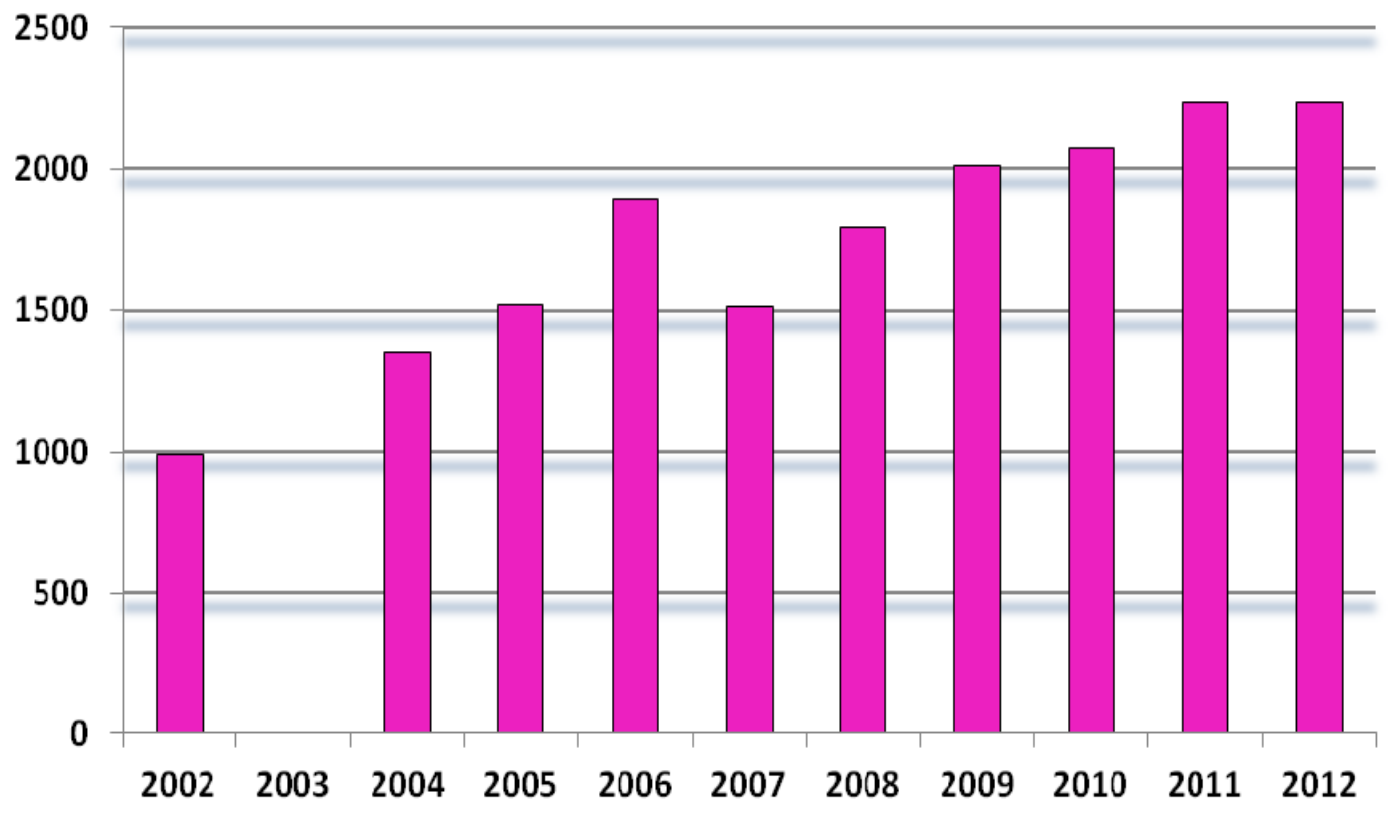
\*\*\*\* 2 systems on training establishments

\*\*\*\*\* (E-SURFMAR systems)



United States	SEAS	353	439	447	622	129	344	524	507	722	849
	TurboWin							3	-	5	30
<b>TOTAL</b>		<b>993</b>	<b>1353</b>	<b>1522</b>	<b>1893</b>	<b>1512</b>	<b>1795</b>	<b>2009</b>	<b>2073</b>	<b>2237</b>	<b>2235</b>

## Number of Electronic Logbooks 2002 to 2012



## AWS Systems 2002 to 2012

