

ASAP Report for 2011

EIG EUMETNET

a. Catalogue of ASAP vessels in 2011 (see Appendix 3):

b. Major challenges and difficulties:

Major technical problems are damages of the electronic/mechanic equipment due to permanent vibrations of the ship as well as unfavorable launching conditions when sailing at ca. 20 knots (turbulences etc.).

Most ships in the E-ASAP fleet are merchant container ships. The ASAP stations are operated by the nautical staff beside their routine tasks. Experience and knowledge differ widely from operator to operator, particularly at crew changes. Thus, operating errors are difficult to avoid.

One station was moved to another ship due to change in trade pattern. The station name was changed from ASGB01 to ASEU06.

Due to general shortages on the helium market several stations had to reduce sounding activities in the period October-December.

The French ASAP station ASFR3 faced Iridium satcom problems in the period April to November.

End of December some soundings from Danish stations were not switched through from DMI to the GTS. The problem was solved early in Jan 2012.

b. Other comments:

11 stations transmit TEMP and HiRes Bufr reports from the ships via Iridium. Further stations shall change to Iridium and commence HiRes BUFR transmission in 2012.

d. ASAP Performance						
Callsign	Total number of launches	Number of TEMP SHIP transmitted	Number of relaunches	Average terminal sounding height (km)	Balloon size (gm)	Percentage on GTS (see note)
ASEU01	173			24	350	100
ASEU02	167			21	350	90
ASEU03	220			23	350	79
ASEU04	167			22	350	82
ASEU05	242			24	350	97
ASEU06	151			23	350	87
ASDE01	411			20	200	93
ASDE02	324			20	200	97
ASDE03	285			20	200	89
ASDE04	381			22	200	85
ASFR1	297	290	0	23	300	85
ASFR2	292	281	0	22	300	93
ASFR3	283	271	0	22	300	77
ASFR4	293	282	0	23	300	93
ASDK01	407			22	300	85
ASDK02	416			22	300	86
ASDK3	467			22	300	76
ASES01	272			22	350	92

There is only little difference between the number of transmitted soundings from board the ships and the number of soundings on the GTS. Therefore the 'Percentage on GTS' is based on the number of launches on board versus the number of soundings on the GTS. This ratio includes failed launches and failed satcom transmissions.

Appendix 3. Catalogue of ships participating in ASAP in 2010.

(insert Country)

18 ASAP units operated during the year on 18 ships

Type of ship (1)	Ship name	Callsign	Comms method (2)	Windfind method / sonde type (3)	Launch method (4)	Launch height (5)	Area of operation (6)	ASAP unit ID No.
Research	Maria S. Merian	DBBT	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 15 m	Worldwide	ASEU01
Merchant	Liverpool Express	DDSD2	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic	ASEU02
Merchant	Endurance	ZCBE7	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU03
Merchant	Power	ZCBF3	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU04
Merchant	Atlantic Companion	SKPE	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 29 m	North Atlantic	ASEU05
Merchant	Atlantic Conveyor	SCKM	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 29 m	North Atlantic	ASEU06
Merchant	Atlantic Compass	SKUN	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 25 m	North Atlantic	ASDE01
Research	Meteor	DBBH	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 6 m	Worldwide	ASDE02
Merchant	Atlantic Concert	SKOZ	Iridium	GPS/Vaisala RS92	deck launcher (portable)	ca. 25 m	North Atlantic	ASDE03
Merchant	Dublin Express	DDSB2	Iridium	GPS/Vaisala RS92	deck launcher (fixed)	ca. 22 m	North Atlantic	ASDE04
Merchant	Fort Saint Louis	FQFL	Inmarsat C then Iridium (May 2011)	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR1
Merchant	Fort Saint Pierre	FQFM	Inmarsat C then Iridium (October 2011)	GPS 3D Modem M2K2 DC then GPS 3D Modem M10 (October 2011)	Deck Launcher (fixed)	27 m	Atlantic	ASFR2
Merchant	Fort Saint Georges	FQWZ	Inmarsat C then Iridium (April 2011)	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR3
Merchant	Fort Ste Marie	FQXJ	Inmarsat C	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR4

Merchant	Naja Arctica	OXVH2	Iridium	Loran/Vaisala RS92-KL GPS/VaisalaRS92-SGPW	Container (semi automatic)	Ca. 18 meter	North Atlantic	ASDK01
Merchant	Mary Arctica	OXGN2	Iridium	Loran/Vaisala RS92-KL GPS/VaisalaRS92-SGPW	Built-in launcher (semi automatic)	Ca. 15 meter	North Atlantic	ASDK02
Merchant	Nuka Arctica	OXYH2	Iridium	GPS/GRAW DFM-06	Container (semi automatic)	Ca. 18 meter	North Atlantic	ASDK3
Supply	Esperanza del Mar	EBUQ	Iridium	GPS/Vaisala RS92	container (semi automatic)	12	Canary Islands, off Mauritania	ASES01

- (1) **Type of ship:** Merchant, research, supply
(2) **Comms method:** Inmarsat C or others
(3) **Windfind method / sonde type:** eg. GPS/Vaisala RS80-G, Loran/Vaisala RS80-L, VIZ GPS Mark II Microsonde, etc
(4) **Launch method:** deck launcher (portable), deck launcher (fixed), container (manual), container (semi automatic), other
(5) **Launch height:** height above sea level from where the sonde is released
(6) **Ocean area:** North Pacific, North Atlantic, Indian Ocean, variable