



E-SURFMAR Report

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E-SURFMAR

EUMETNET

29 European Meteorological Services.

Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, FYROM, Germany, Greece, Hungary, Iceland, Italy, Ireland, Latvia, Luxembourg, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, United Kingdom

17 out of them are participating in E-SURFMAR

EUMETNET is an IEG from 2009

■ Objectives

- to coordinate, optimise and progressively integrate the European activities for surface observations over the sea in support of Numerical Weather Predictions

■ Two components

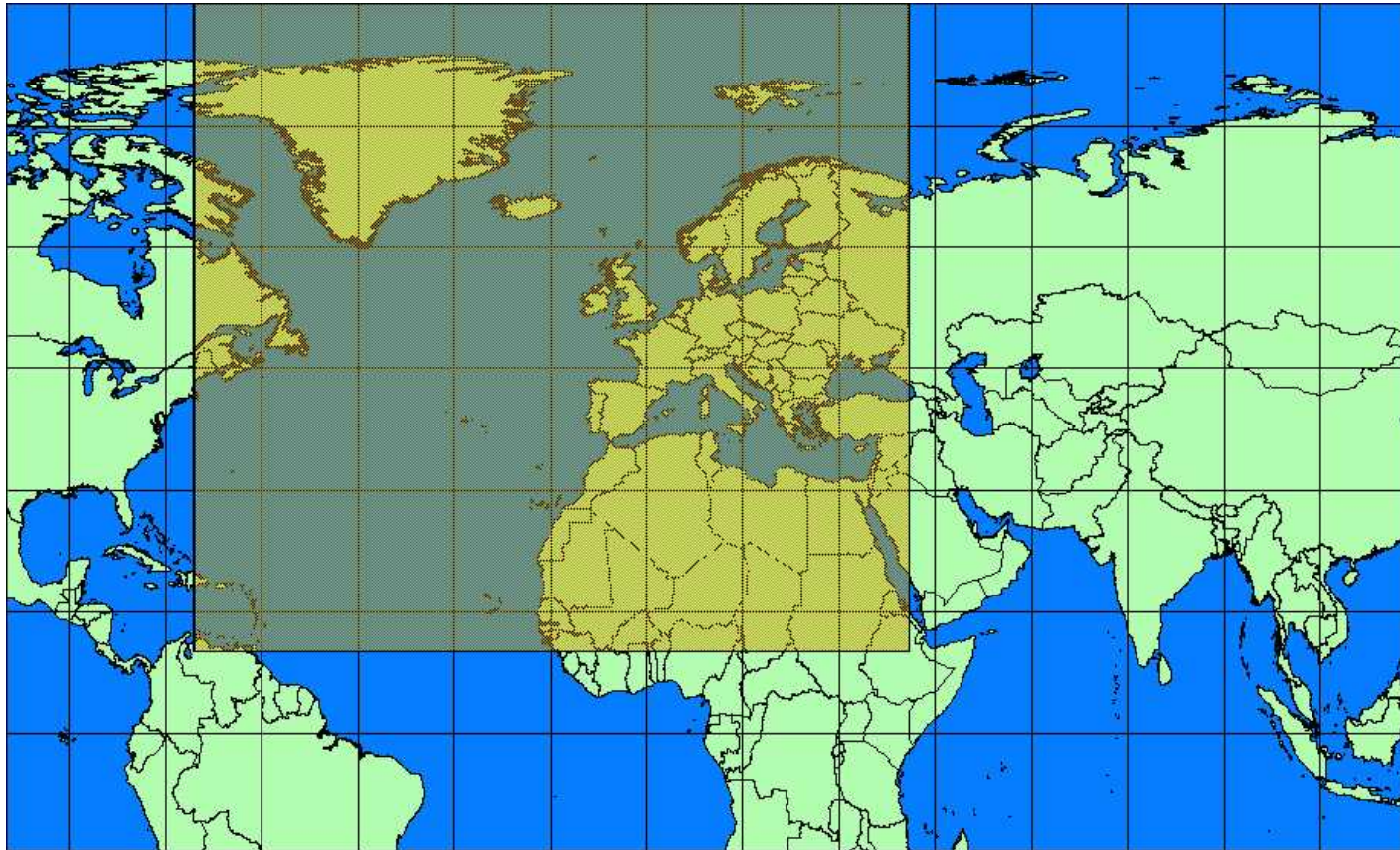
- Conventional Voluntary Observing Ships (VOS)
or ships equipped with Automated Weather Stations (S-AWS)
- Drifting and Moored Data Buoys

Cooperations

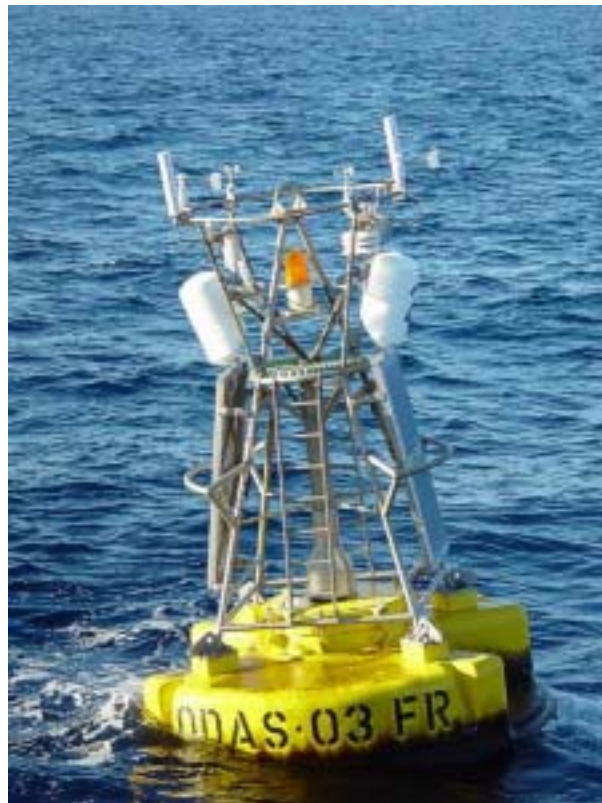
■ E-SURFMAR

- contributes to:
 - the World Weather Watch of WMO - all observations are reported onto its Global Telecommunication System (GTS) in real time -,
 - and the GMES Marine Core Service
- works closely with the JCOMM Data Cooperation Panel (DBCP) and the JCOMM Ship Observation Team (SOT)
- cooperates with NOAA and the Meteorological Service of Canada, as well as with Puertos del Estado and other European oceanographic agencies among MOON members

E-SURFMAR area



Data Buoys



Data Buoys Management

E-SURFMAR is responsible for the European meteorological data buoys and is an action group of the DBCP

Data Buoy Technical Advisory Group

Meetings:

January (Geneva) and May 2005 (Hamburg)

June 2006 (Galway)

May 2007 (Larnaka)

May 2008 (Reykjavik)





May 2009 (Southampton)

May 2010 (Madrid)

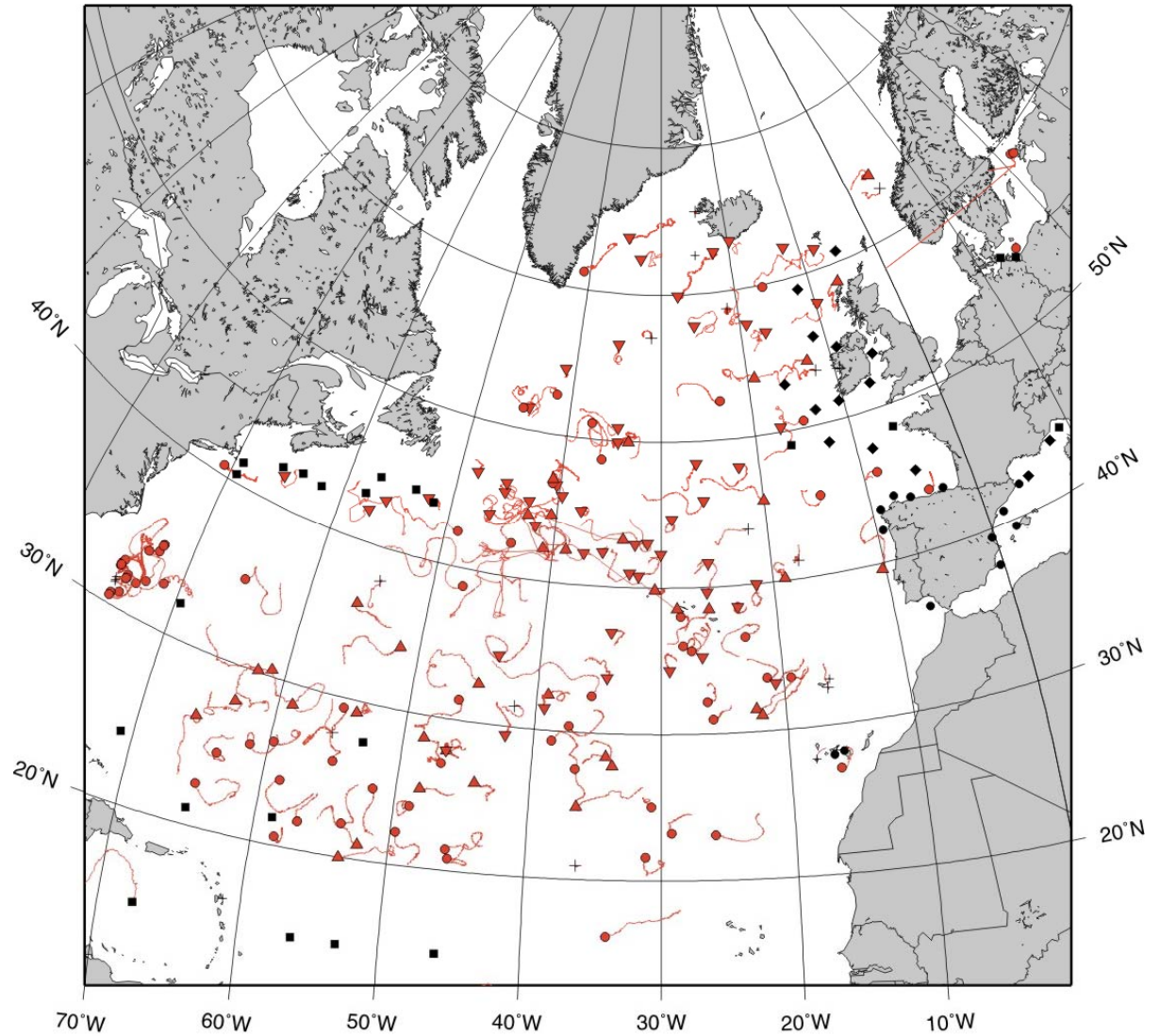
May 2011 (Héraklion)

Data Buoy Programme Manager

Network status

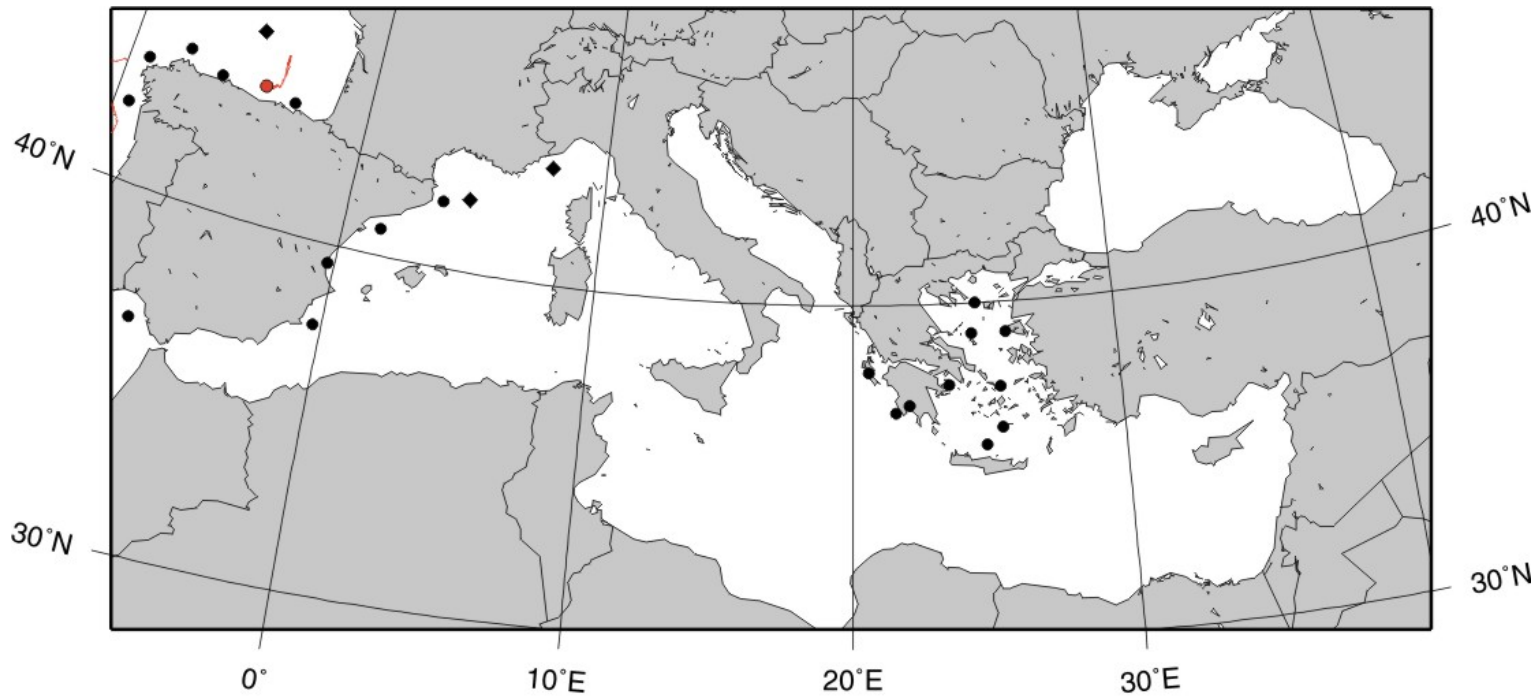
-  Iridium SVP-B
-  Argos SVP-B
-  SVP-BW
-  (moored buoys)

June 2011

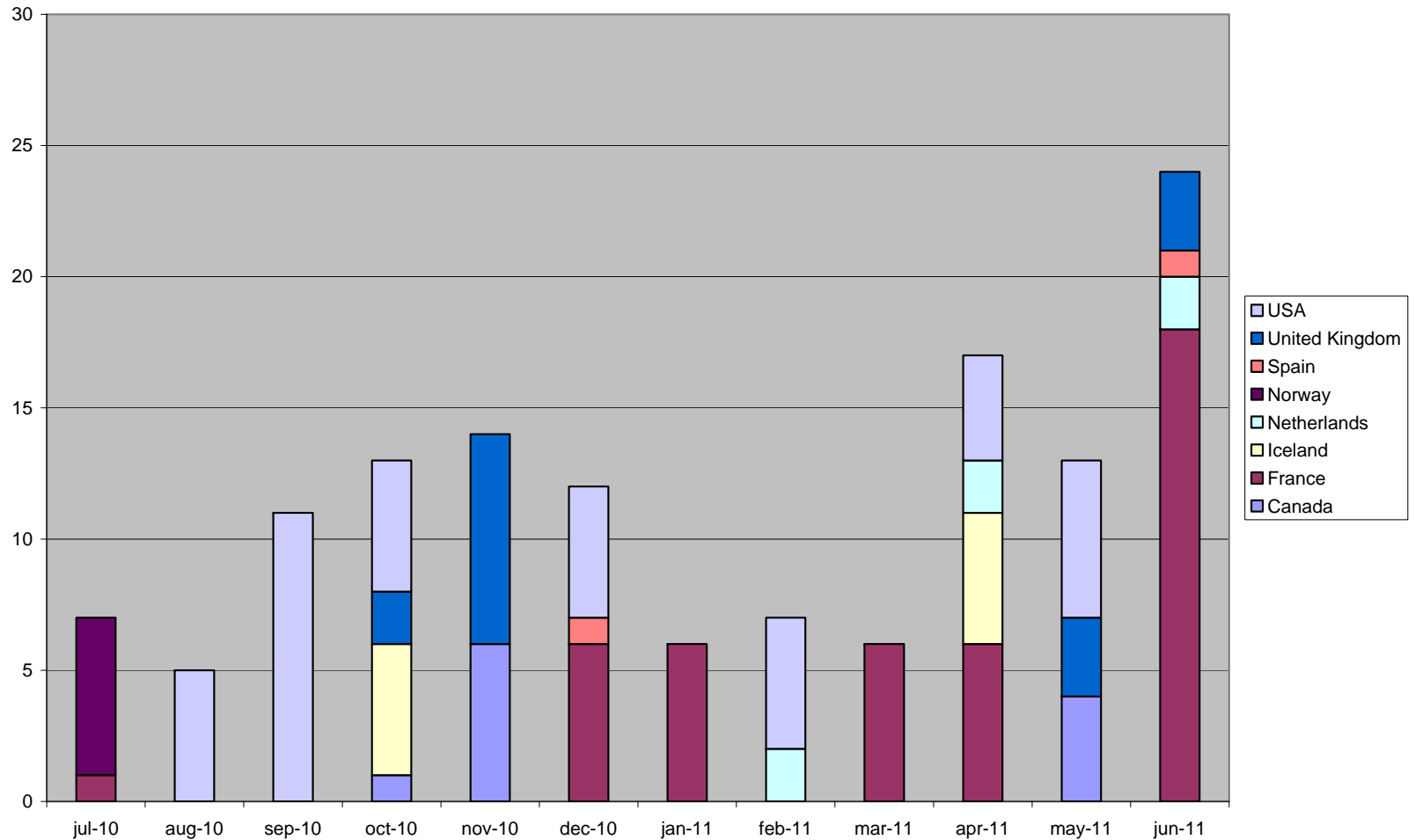


Network status

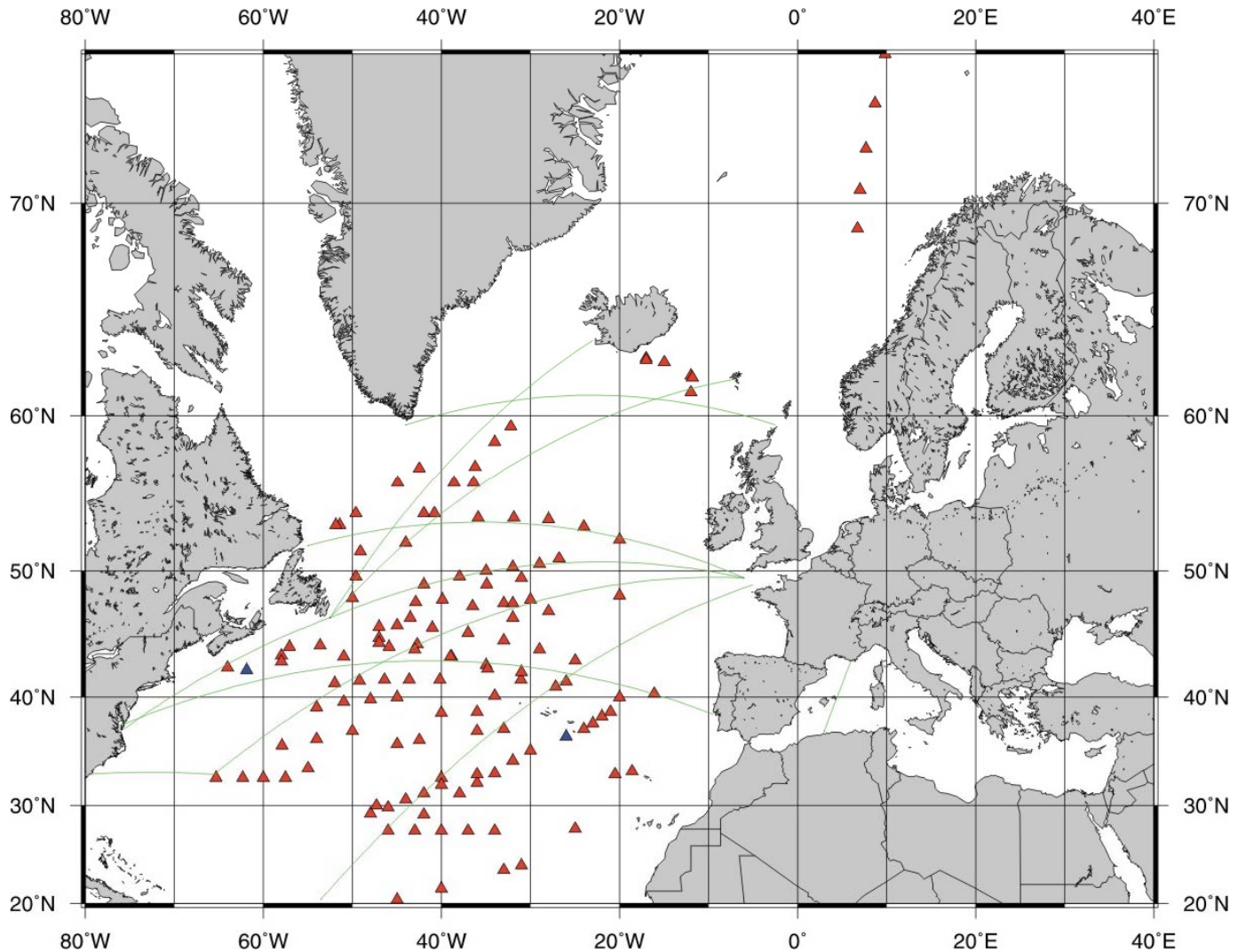
June 2011



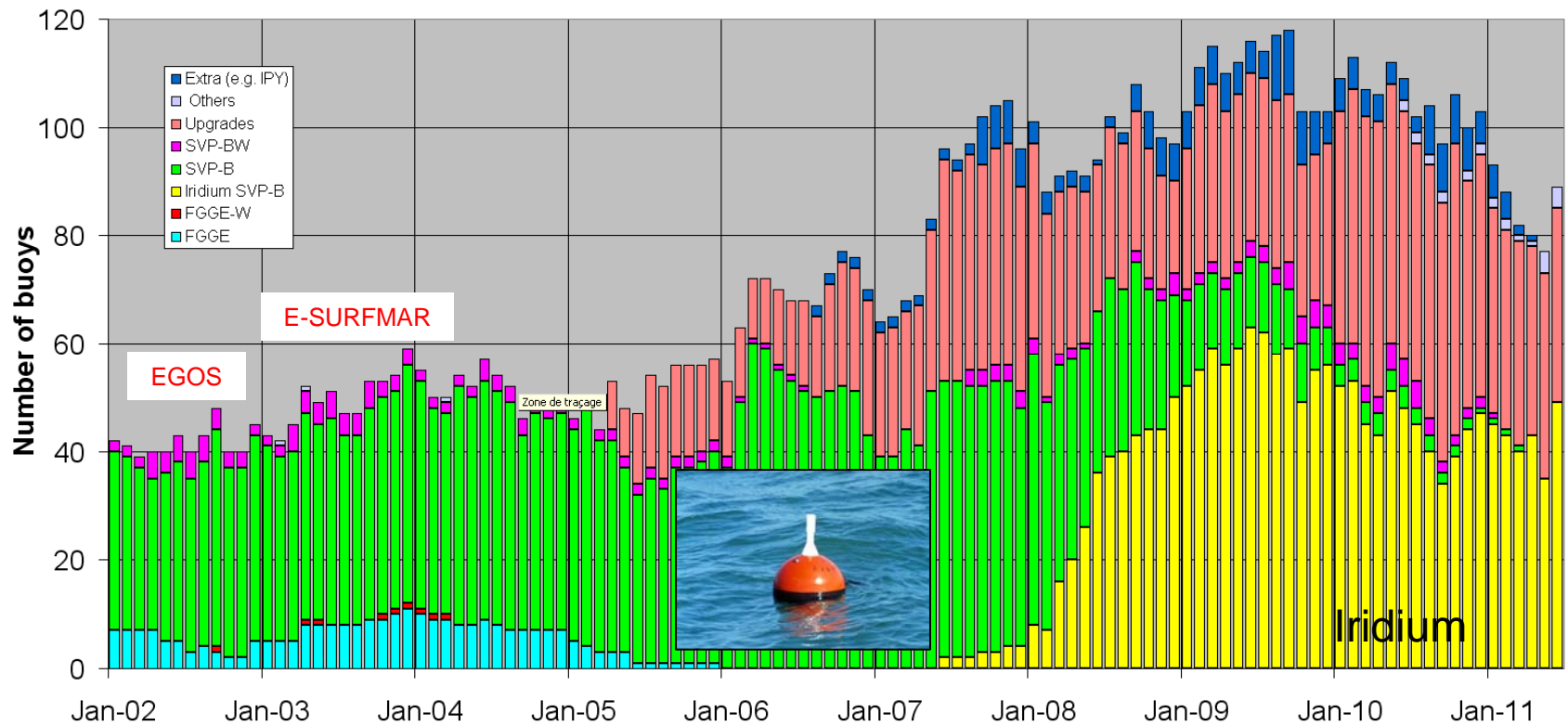
Drifting buoys deployed (July10-June11) (135 units)



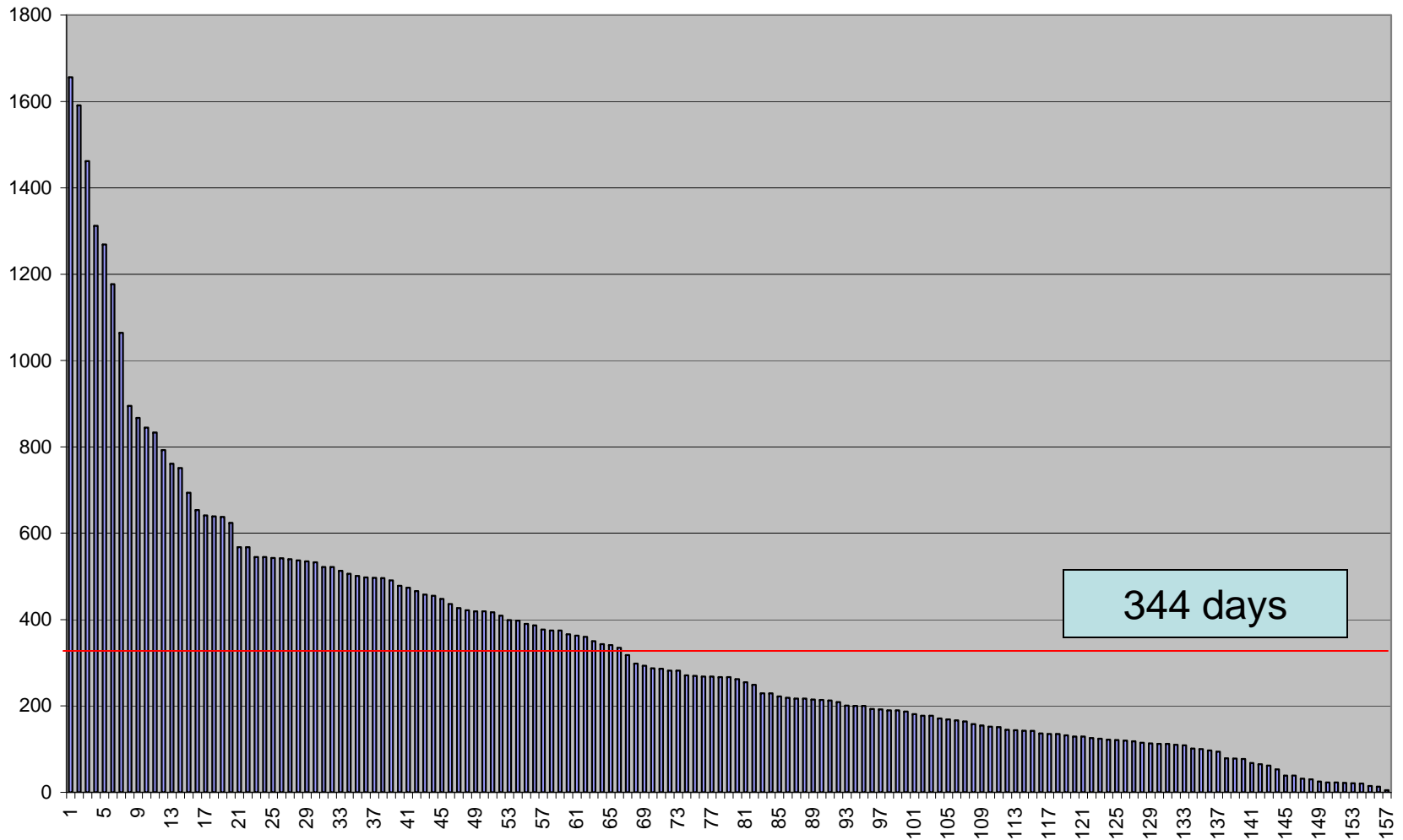
Deployment locations



Drifting Buoys (number of buoys in operation)

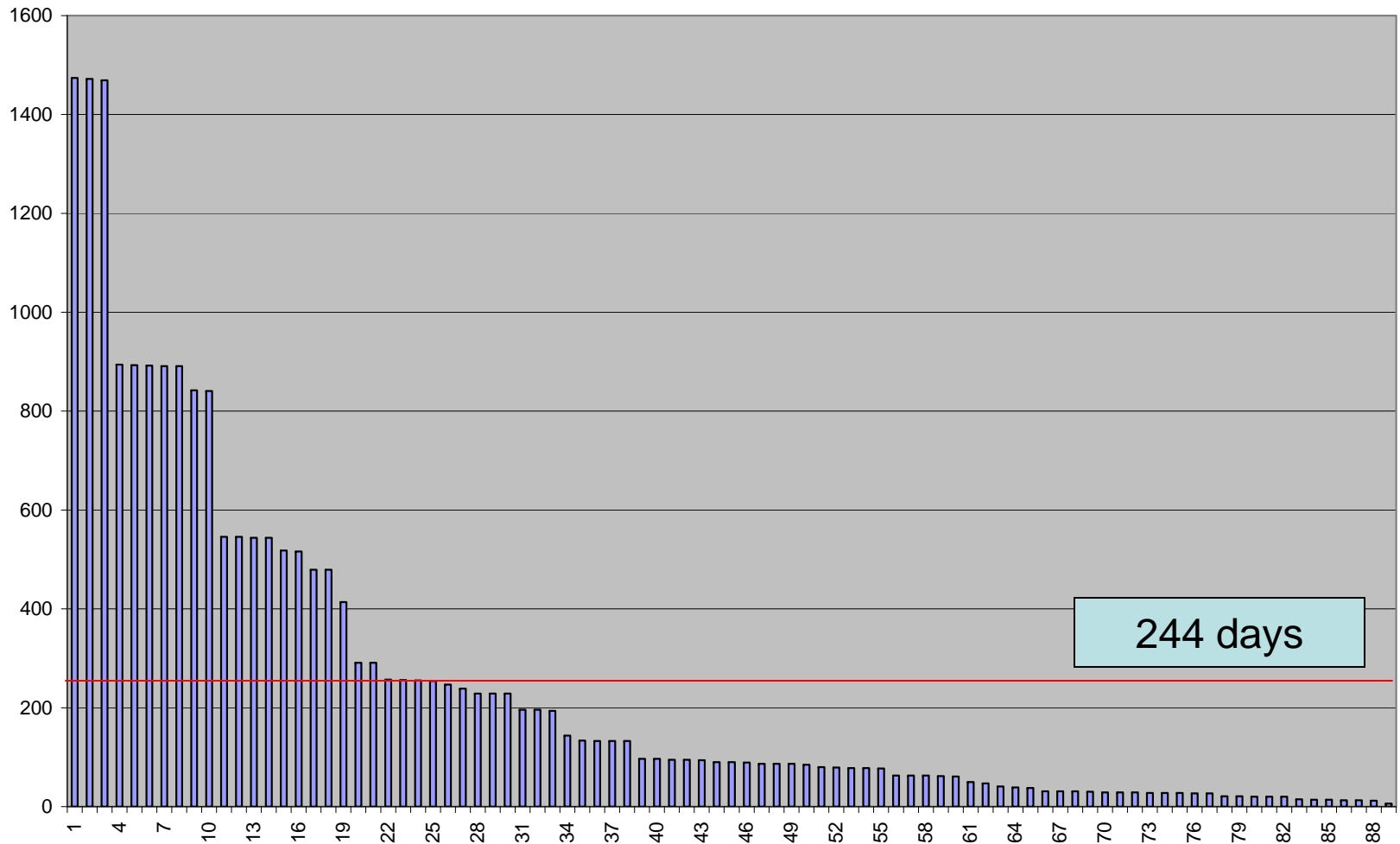


Lifetime of buoys (AP) (158 units)



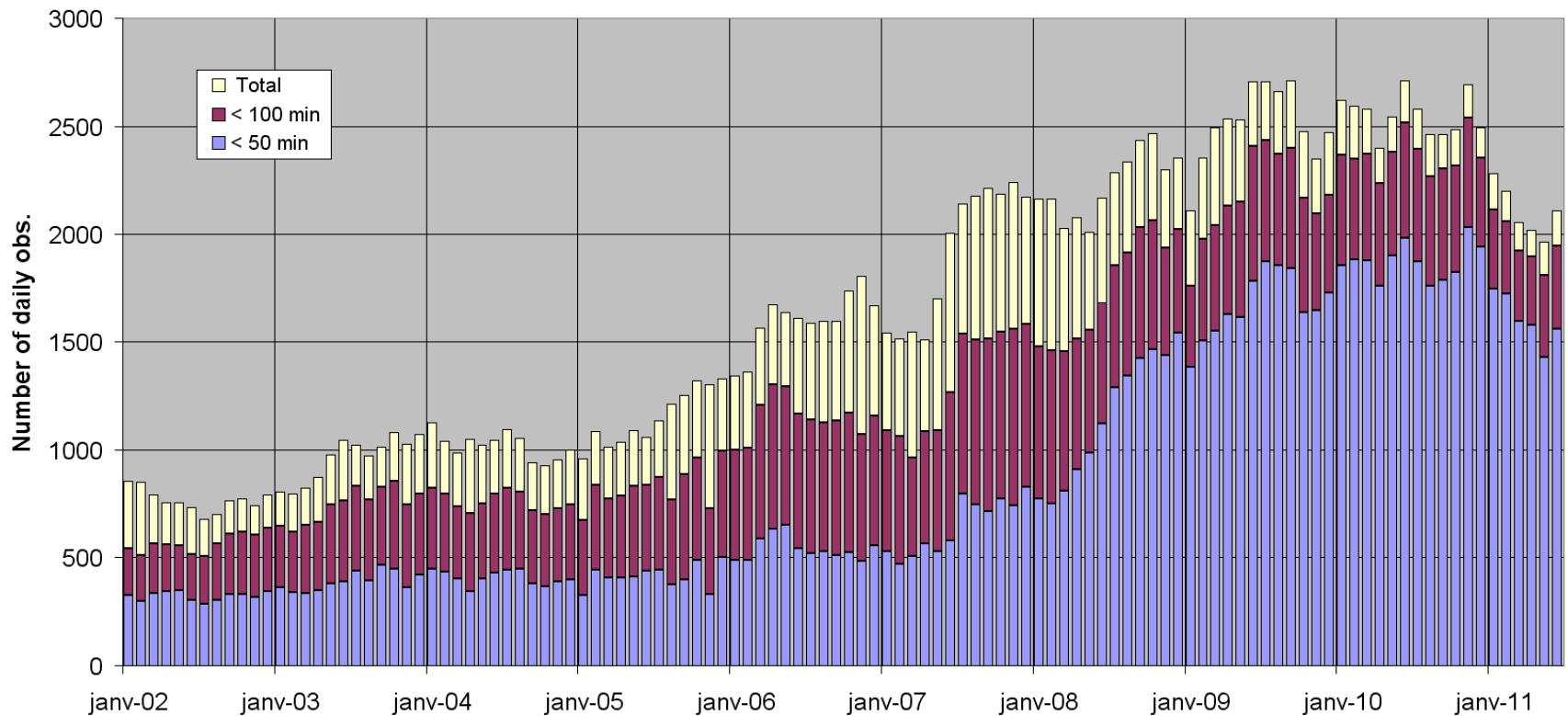
344 days

Age of the network (89 buoys)

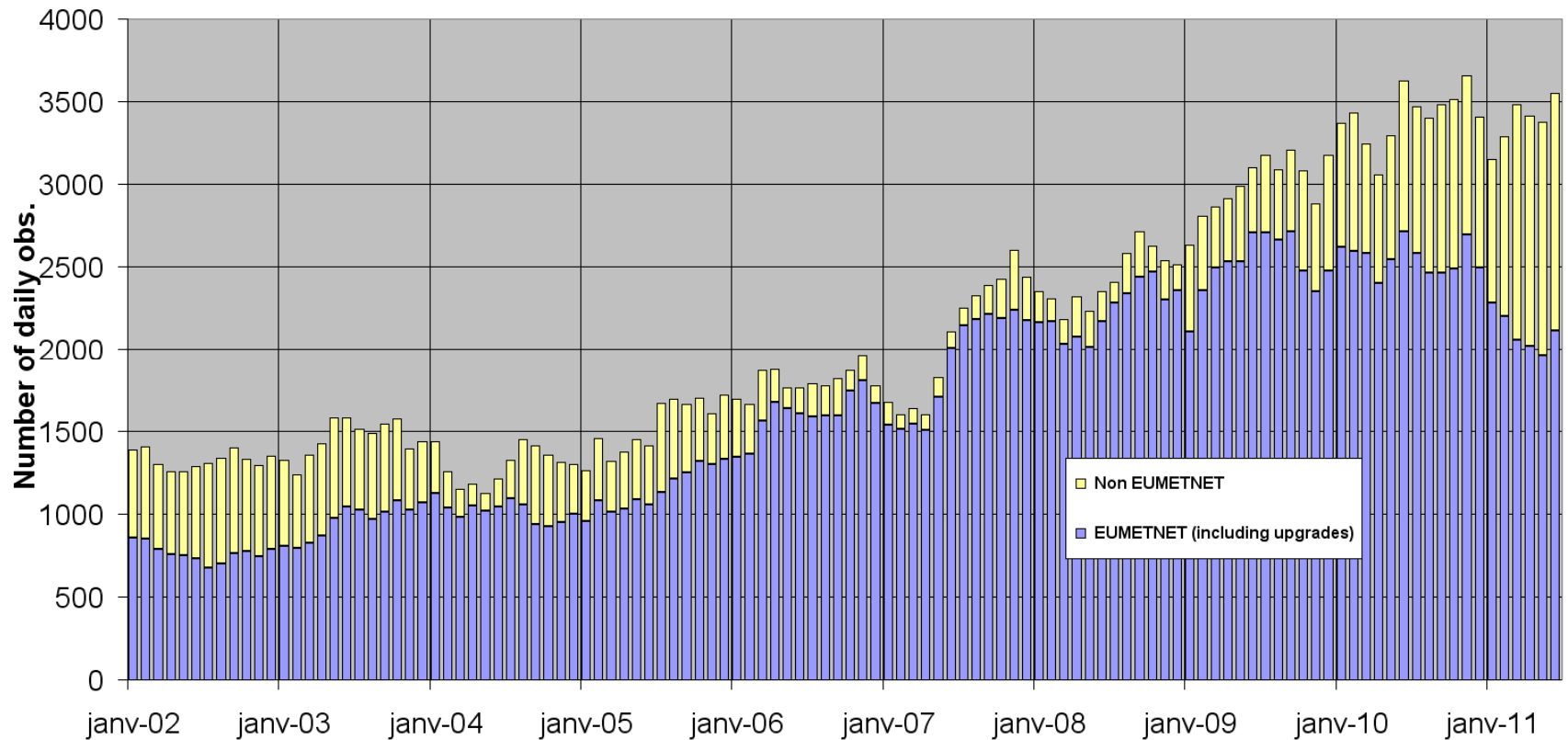


Drifting Buoys Number of observations

EGOS then EUCOS drifting buoys - Data availability
Average number of hourly observations per day

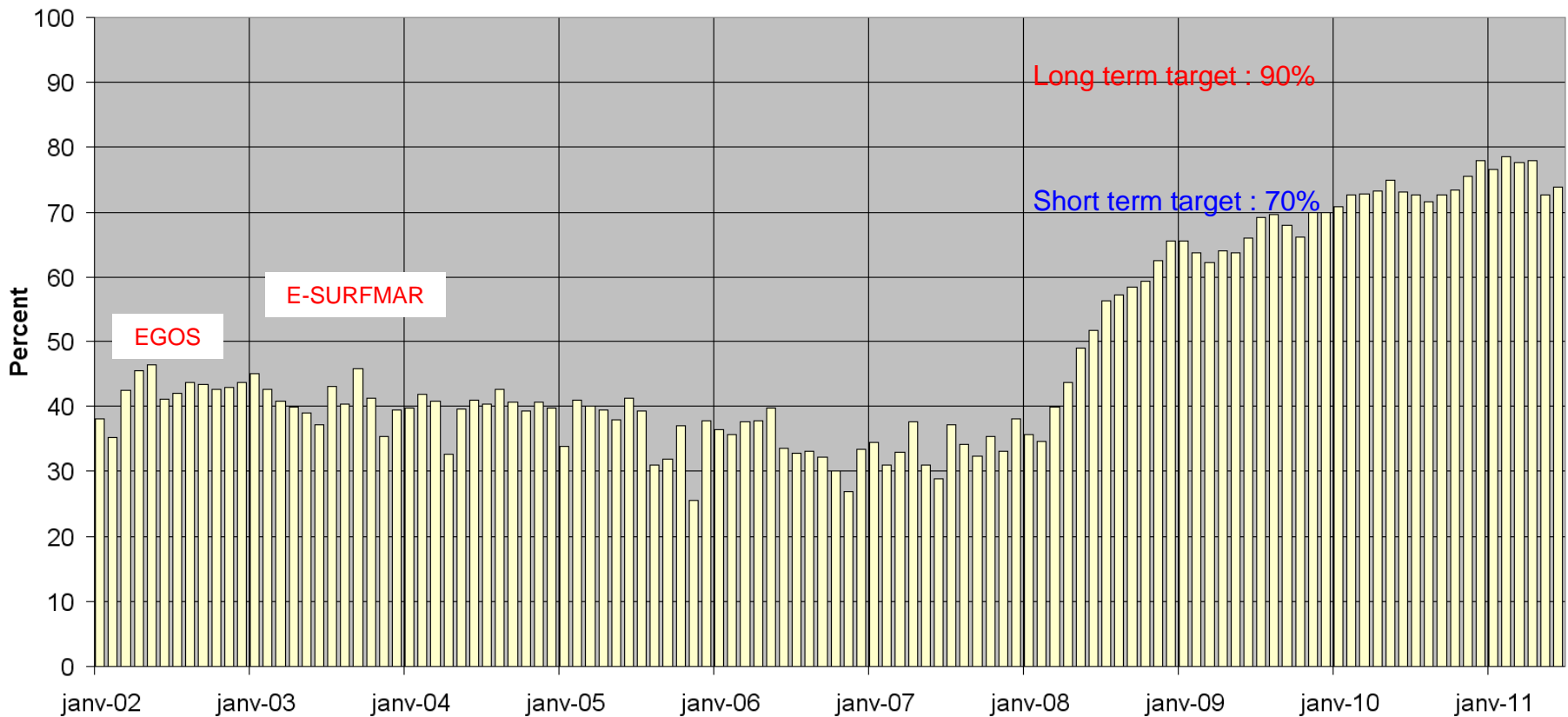


Drifting Buoys (Data availability)



Drifting Buoys (Data timeliness)

EGOS then EUCOS drifting buoys - Data availability
Percentage of data arrived within 50 minutes



Contribution to IPY and EUCOS north area

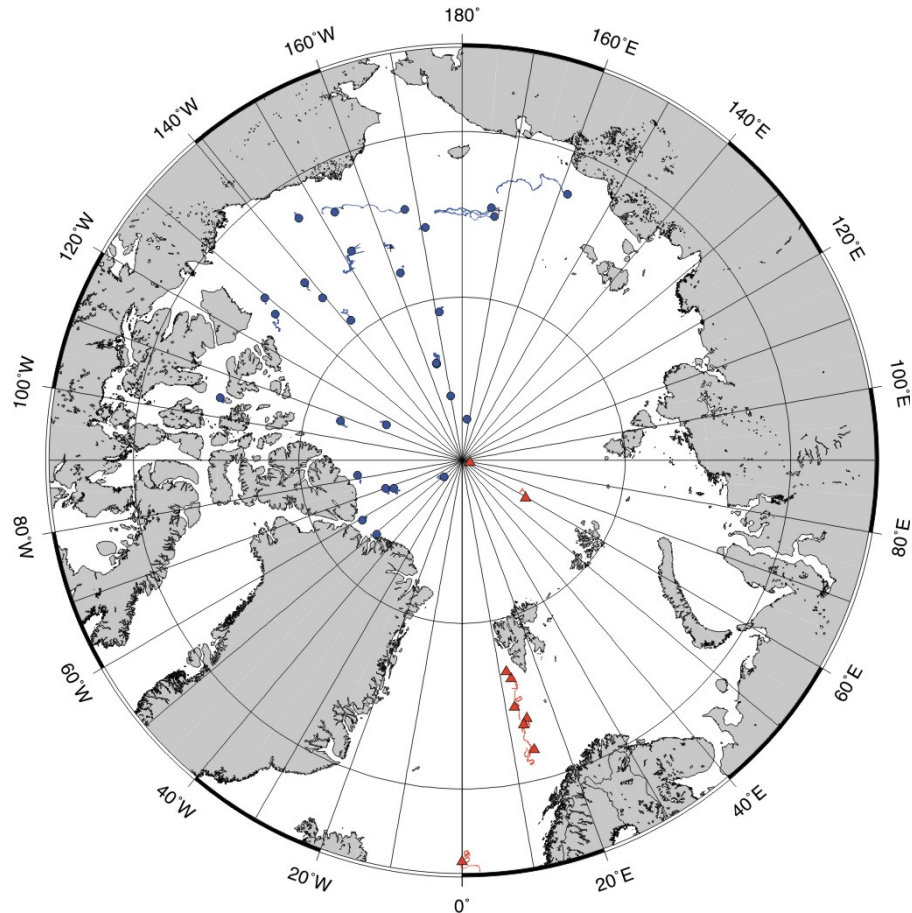
- Contribution through IABP

- 2 IcesAir in 2006,
- 3 ICEB buoys in 2007
- 4 SVP-B (2 Argos – 2 Iridium) in 2007
- 5 SVP-B (Argos) in 2008
- 15 SVP-B (Argos) in 2009
- extra free buoys from 2009 (10 to MetNo + 2 to NOAA) in 2010
- 3 New ICEB (2 Argos, 1 Iridium) + 12 SVP-B (Iridium) in 2011

North eucos area and Arctic

All buoys on the map are measuring
air pressure at least

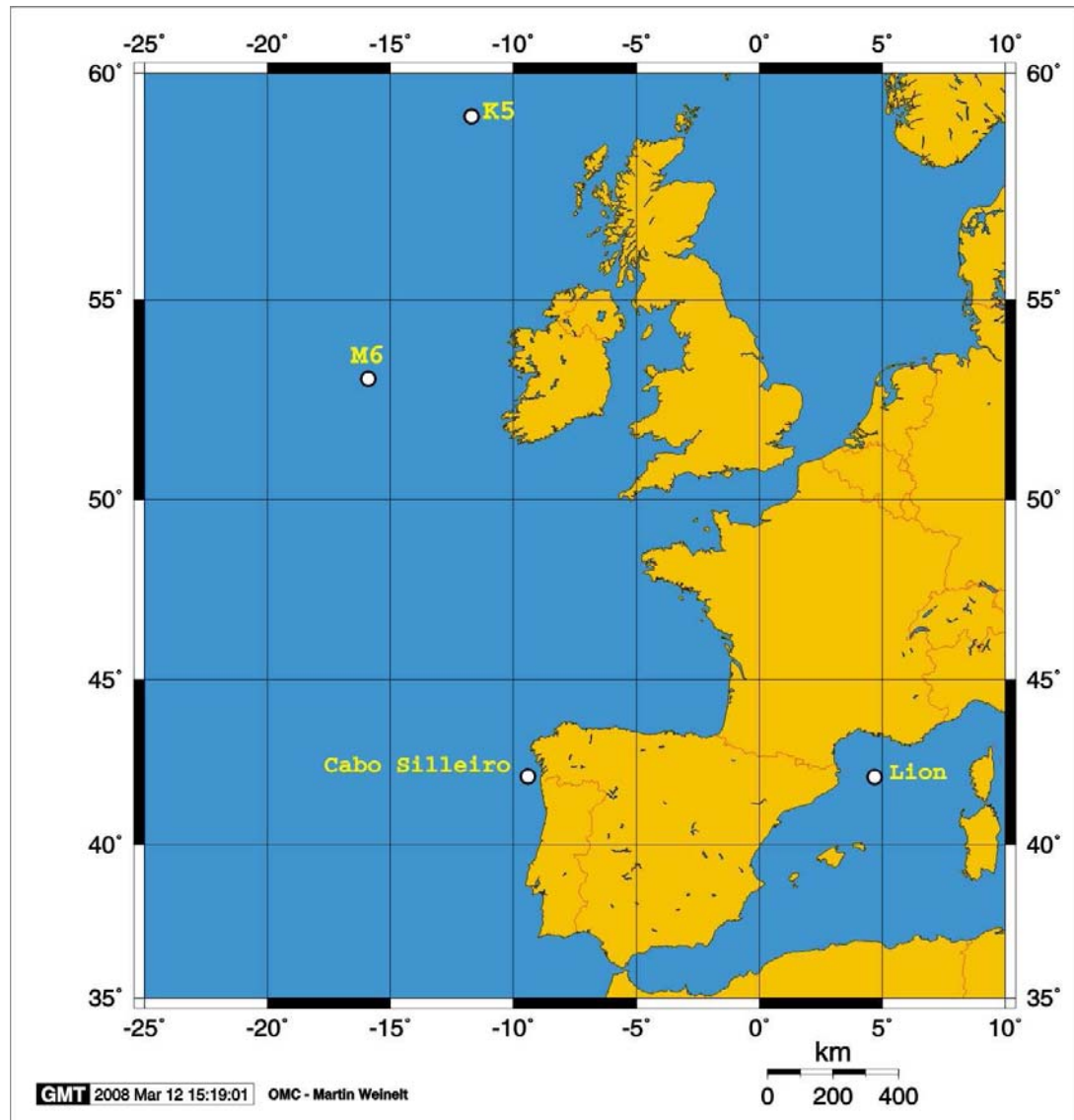
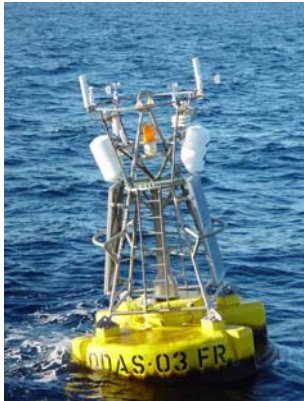
Non-Eumetnet drifting buoys in blue
Eumetnet drifting buoys in red



August 2011

EUCOS Moored Buoys

- K5 operated by the Met Office
- M6 operated by MRI and Met Eireann
- Cabo Silleiro operated by Puertos del Estado
- Lion operated by Meteo-France



EUCOS Moored Buoys

WMO	Name	Type	Country	GTS reports
64045	K5	K-pattern	UK	FM-13 SHIP
62095	M6	K-pattern	Ireland	FM-13 SHIP
62084	Cabo Silleiro	SeaWatch	Spain	FM-96 BUFR
61002	Lion	K-pattern	France	FM-13 SHIP FM-65 WAVEOB

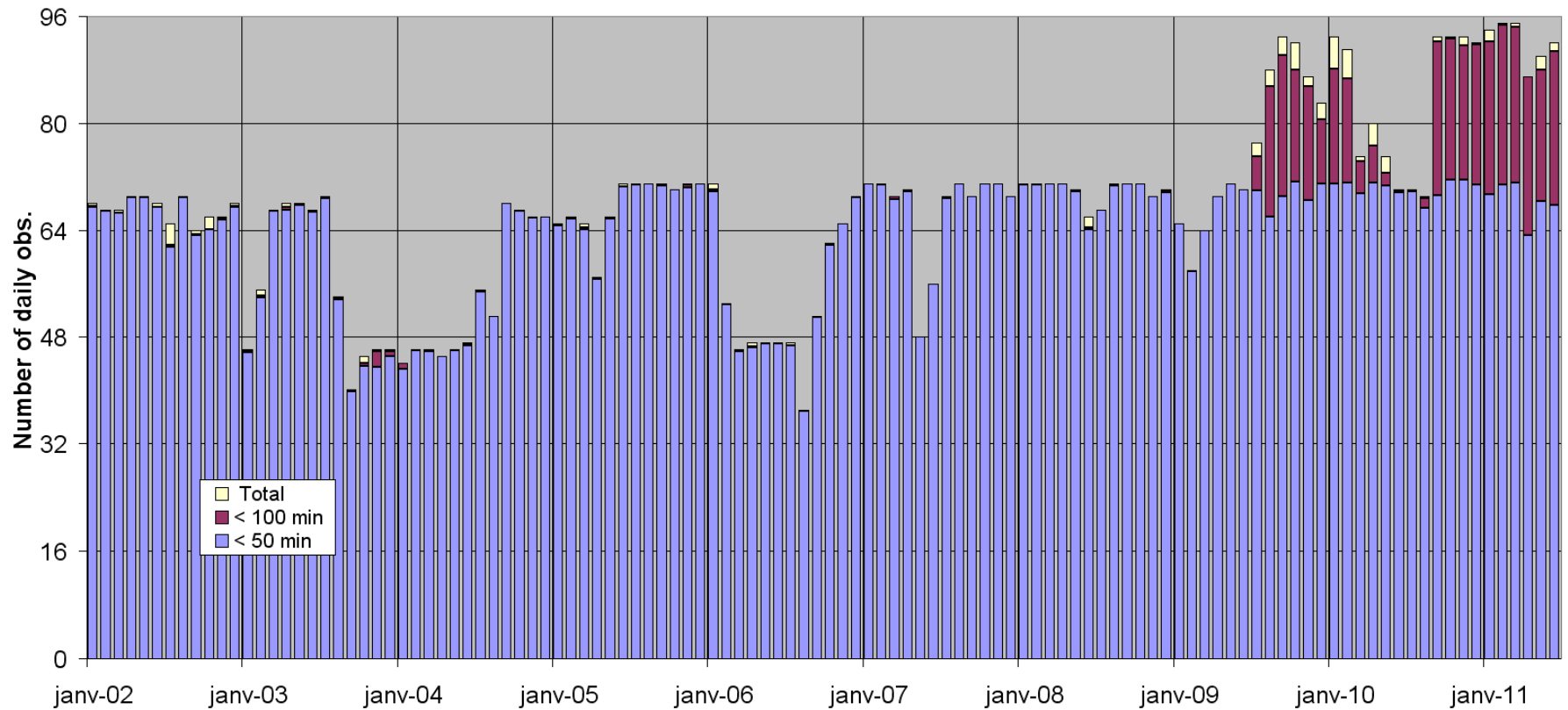
Moored Buoys

Non exhaustive list of moored buoy networks outside Met Office, Met Eireann, Puertos del Estado and Meteo-France networks

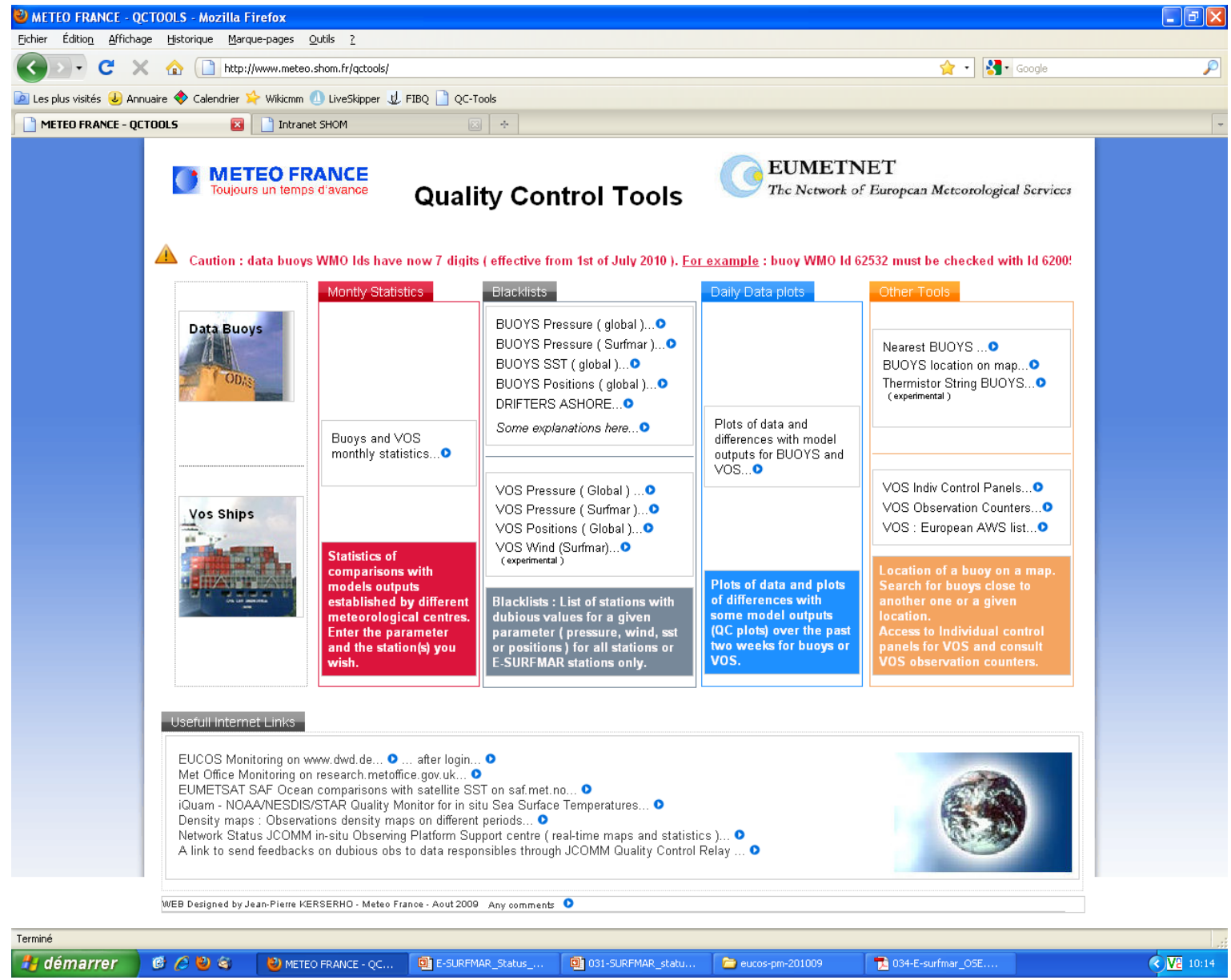
Country	Name	Nb of Buoys	Buoy Type and GTS transmission
France	CETMEF	~10	<ul style="list-style-type: none"> ▪ Waveriders ▪ FM13 SHIP and FM65 WAVEOB
Germany	BSH	3+2	<ul style="list-style-type: none"> ▪ Specific ▪ FM12 SYNOP and FM13 SHIP
Greece	Poseidon (HCMR)	10	<ul style="list-style-type: none"> ▪ SeaWatch and WaveScan ▪ FM94 BUFR
Italy	RON (Ispra)	17	<ul style="list-style-type: none"> ▪ WatchKeeper ▪ FM94 BUFR
UK	Wavenet (CEFAS)	18	<ul style="list-style-type: none"> ▪ Waveriders ▪ FM94 BUFR
UK	Jersey	1	<ul style="list-style-type: none"> ▪ Specific WMO 62027
UK	PML	2	<ul style="list-style-type: none"> ▪ Hippo Marine Ltd ▪ FM13 SHIP

Moored Buoys data availability (EUCOS)

(K5, M1 then M6 and Lion, then Cabo Silleiro)
Data availability - Average number of hourly observations per day



Data Quality Control Tools



The screenshot shows a web browser window with the address bar displaying 'http://www.meteo.shom.fr/qctools/'. The page title is 'METEO FRANCE - QCTOOLS - Mozilla Firefox'. The browser's address bar shows the URL and search engines like Google. The website content includes the METEO FRANCE logo with the tagline 'Toujours un temps d'avance' and the EUMETNET logo with the tagline 'The Network of European Meteorological Services'. The main heading is 'Quality Control Tools'. A caution message states: 'Caution : data buoys WMO Ids have now 7 digits (effective from 1st of July 2010). For example : buoy WMO Id 62532 must be checked with Id 6200!'. The page is organized into several tool categories: 'Montly Statistics' (with a link to 'Buoy and VOS monthly statistics...'), 'Blacklists' (listing various buoy parameters like BUOYS Pressure, BUOYS SST, BUOYS Positions, DRIFTERS ASHORE, VOS Pressure, VOS Positions, and VOS Wind), 'Daily Data plots' (with a link to 'Plots of data and differences with model outputs for BUOYS and VOS...'), and 'Other Tools' (including 'Nearest BUOYS...', 'BUOYS location on map...', 'Thermistor String BUOYS...', 'VOS Indiv Control Panels...', 'VOS Observation Counters...', and 'VOS : European AWS list...'). A 'Usefull internet Links' section at the bottom lists resources like EUCOS Monitoring, Met Office Monitoring, EUMETSAT SAF, iQuam, Density maps, Network Status JCOMM, and a feedback link. The footer of the website mentions 'WEB Designed by Jean-Pierre KERSERHO - Meteo France - Aout 2009'. The Windows taskbar at the bottom shows the 'démarrer' button and several open applications, including the current website and various data files.

Data buoys reporting

- Monthly report
- Annual report
- Working area of the E-SURFMAR website based on mediawiki, every participant to the programme can easily collaborate on its content

<http://esurfmar.meteo.fr/>

- Public website

<http://www.eucos.net/>