

E-SURFMAR Report

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E-SURFMAR

EUMETNET Members

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 Prediction (NWP)

■ Two components

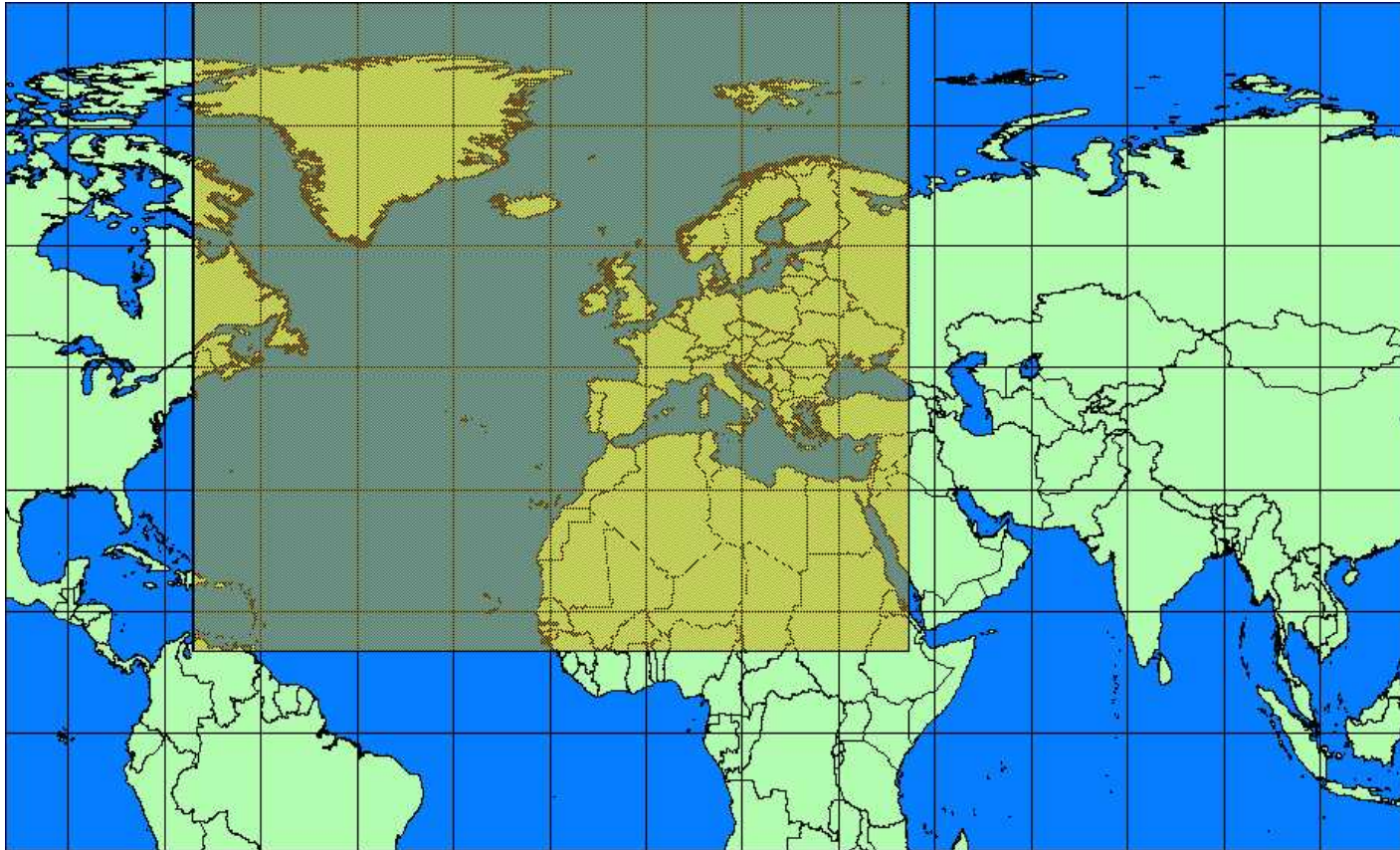
- Conventional Voluntary Observing Ships (VOS)
or ships equipped with Automated Weather Stations (S-AWS)
- Drifting and Moored Data Buoys

Cooperations

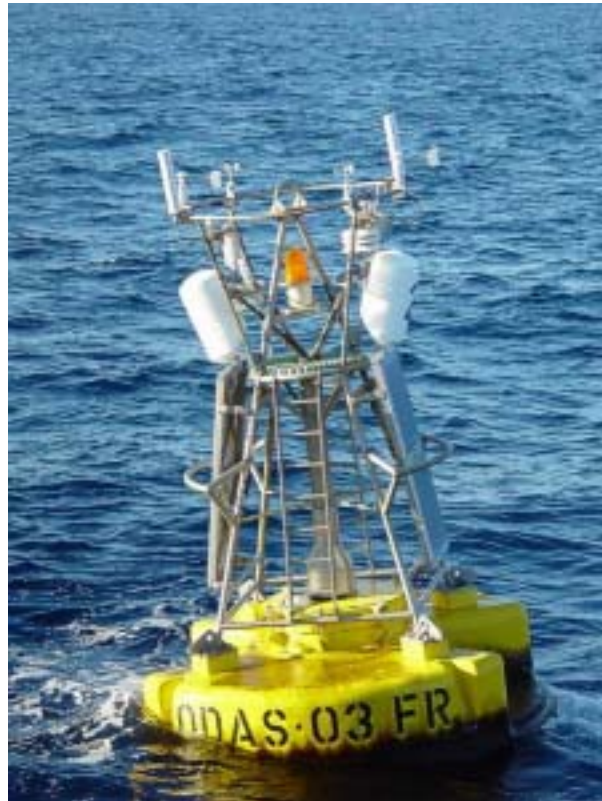
■ E-SURFMAR

- 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 Buoy Cooperation Panel (DBCP) and the JCOMM Ship Observation Team (SOT). JCOMM is the Joint WMO-IOC Commission of Oceanography and Marine Meteorology.
- 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

Data Buoy Technical Advisory Group (DB-TAG) - is an action group of the DBCP

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)

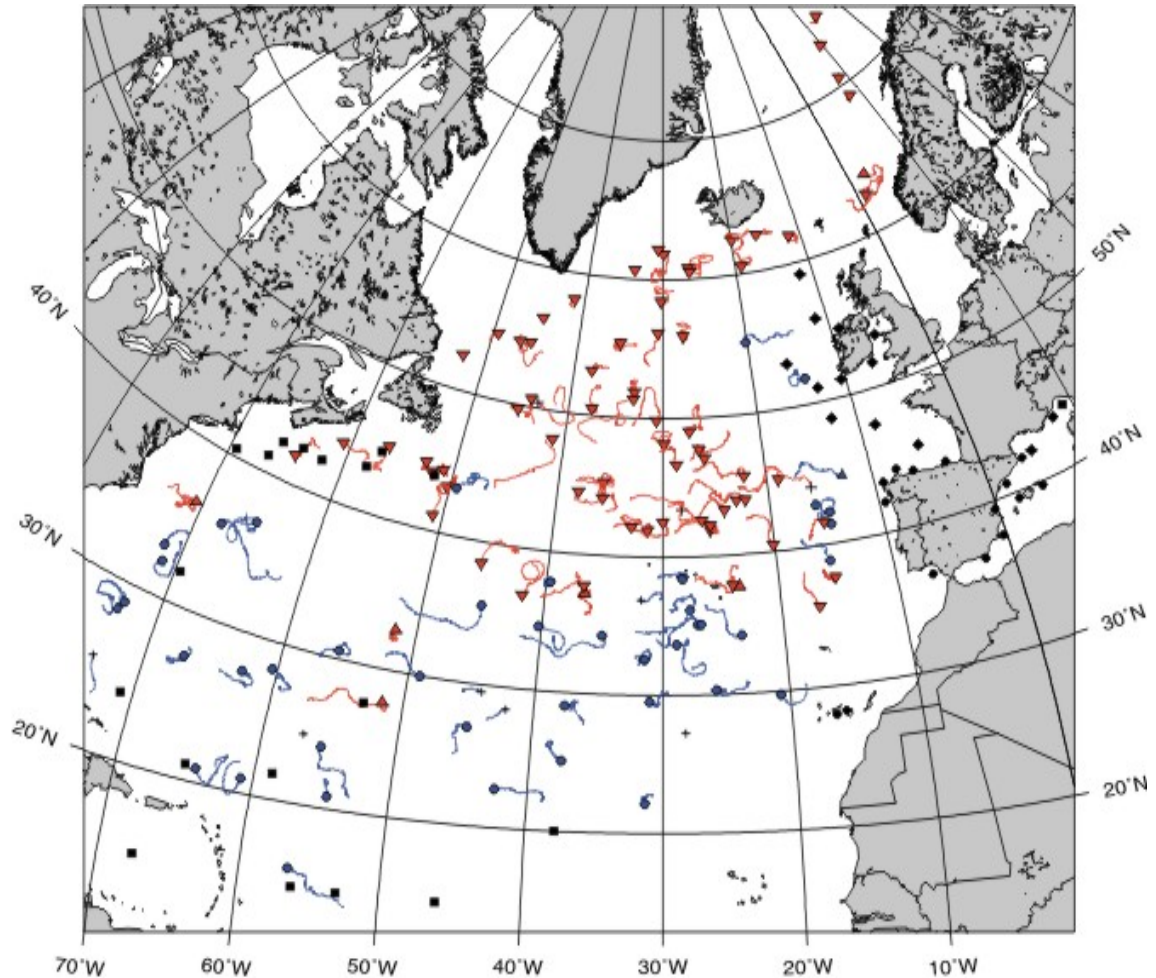
May 2012 (Las Palmas)

Data Buoy Programme Manager

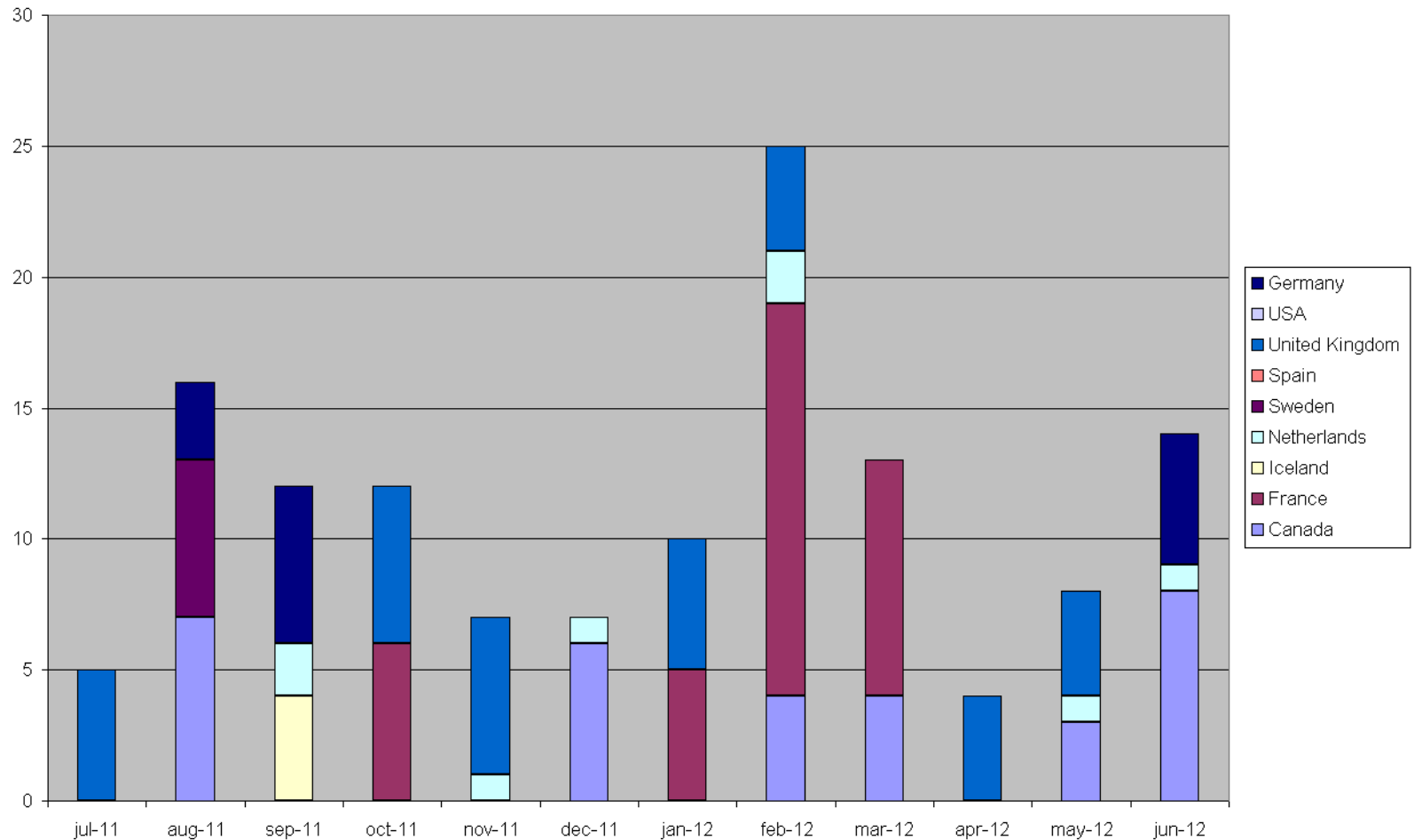
Network status

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

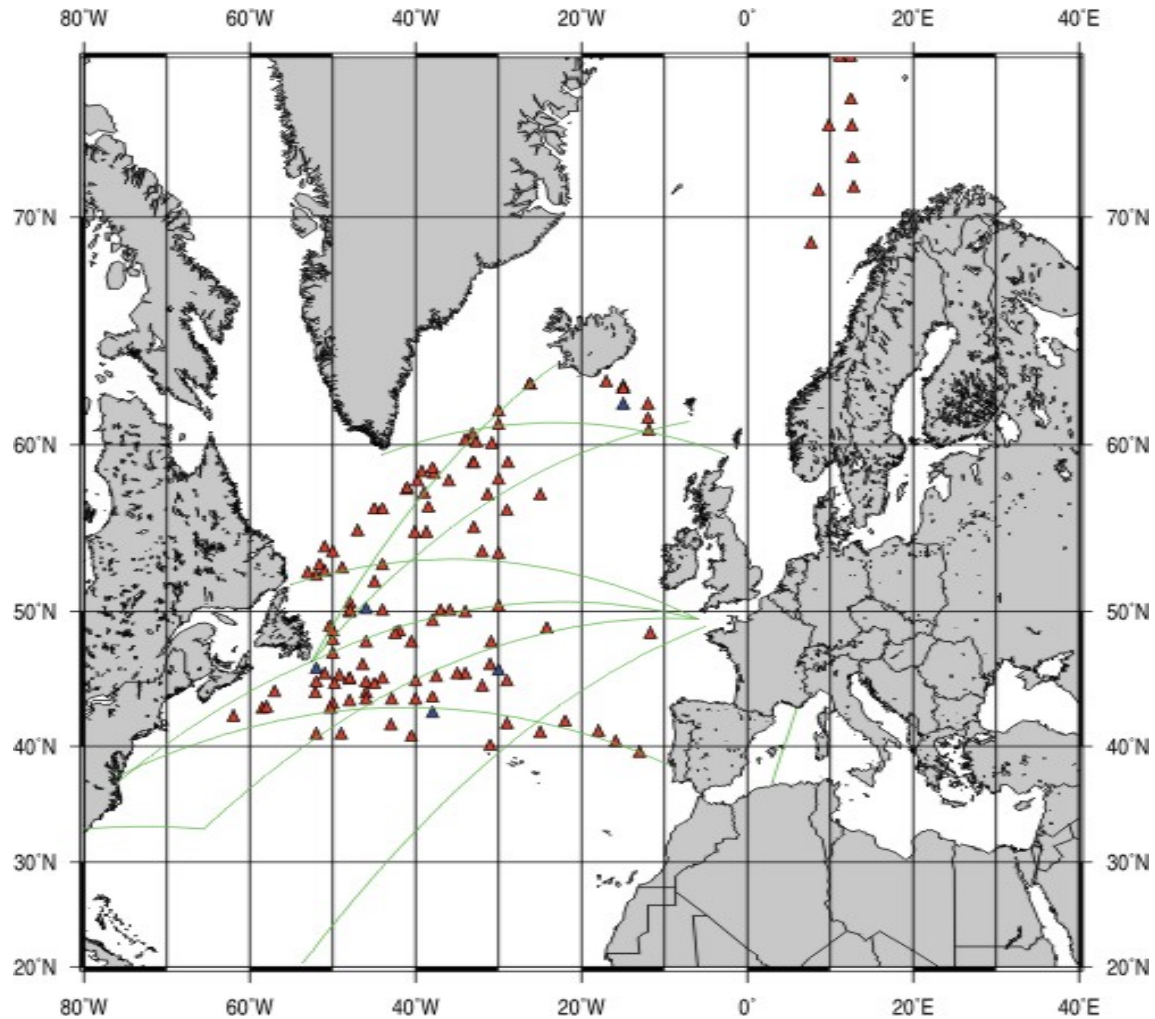
June 2012



Drifting buoys deployed (July11-June12) (133 units)

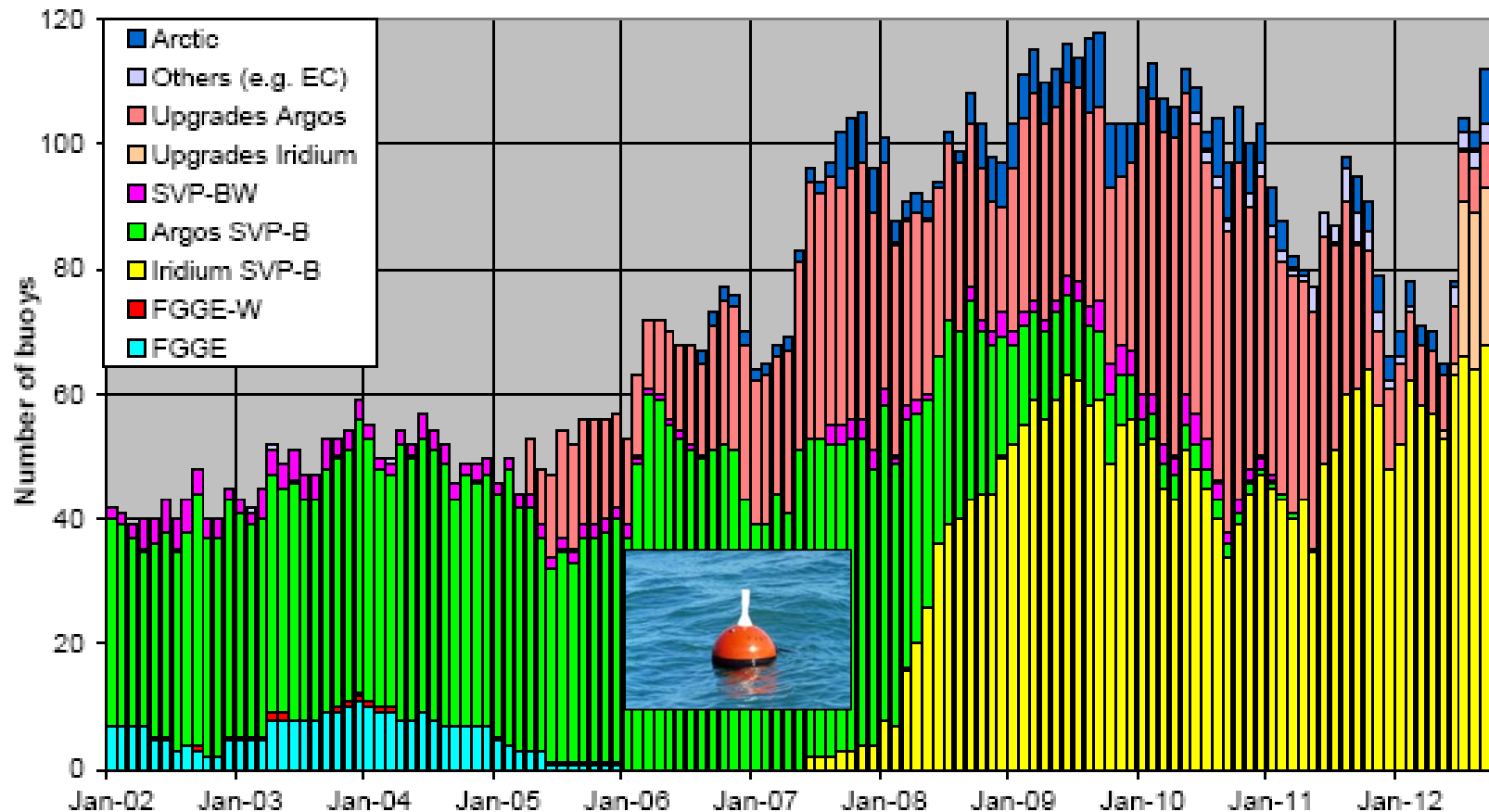


Deployment locations

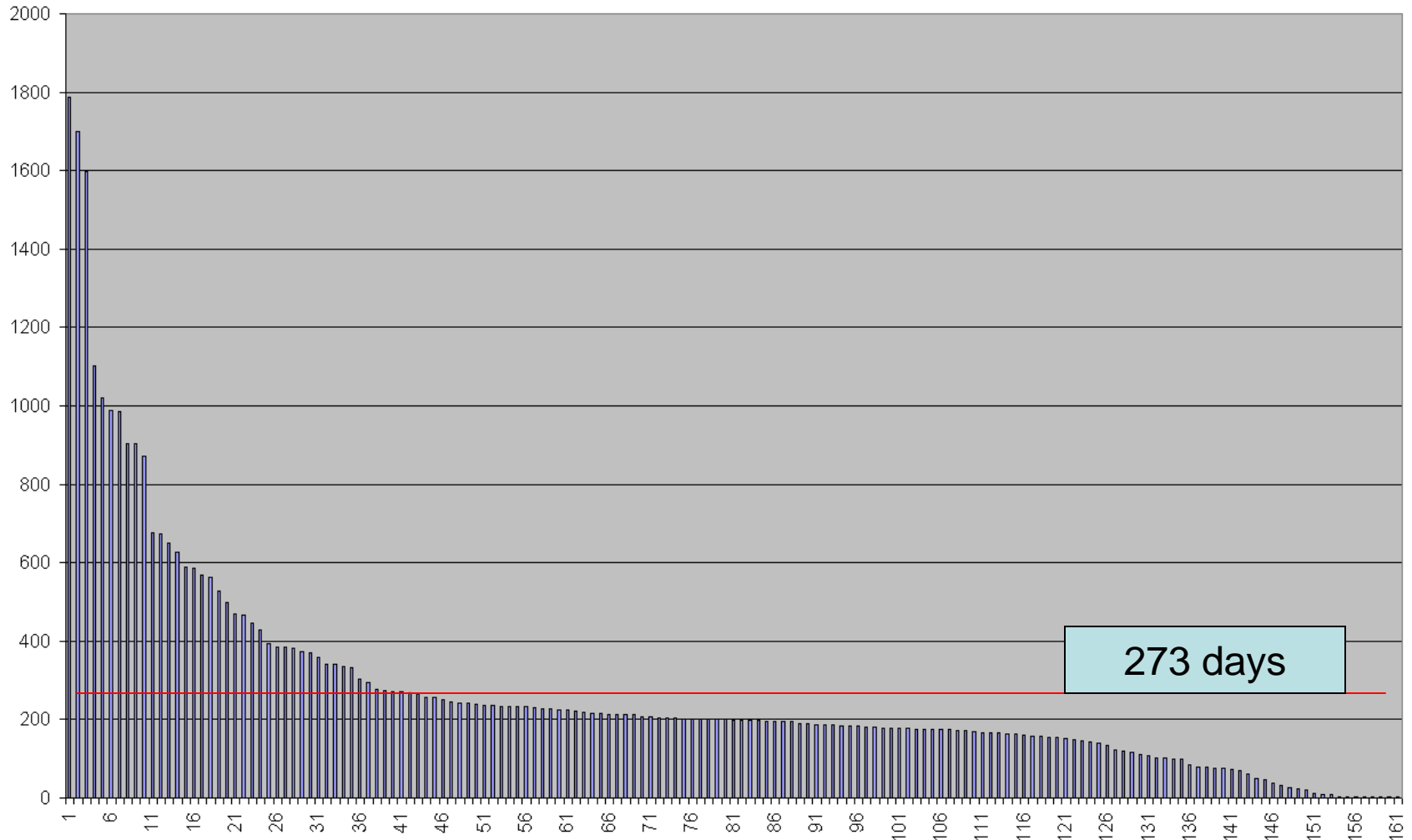


Drifting Buoys (number of buoys in operation)

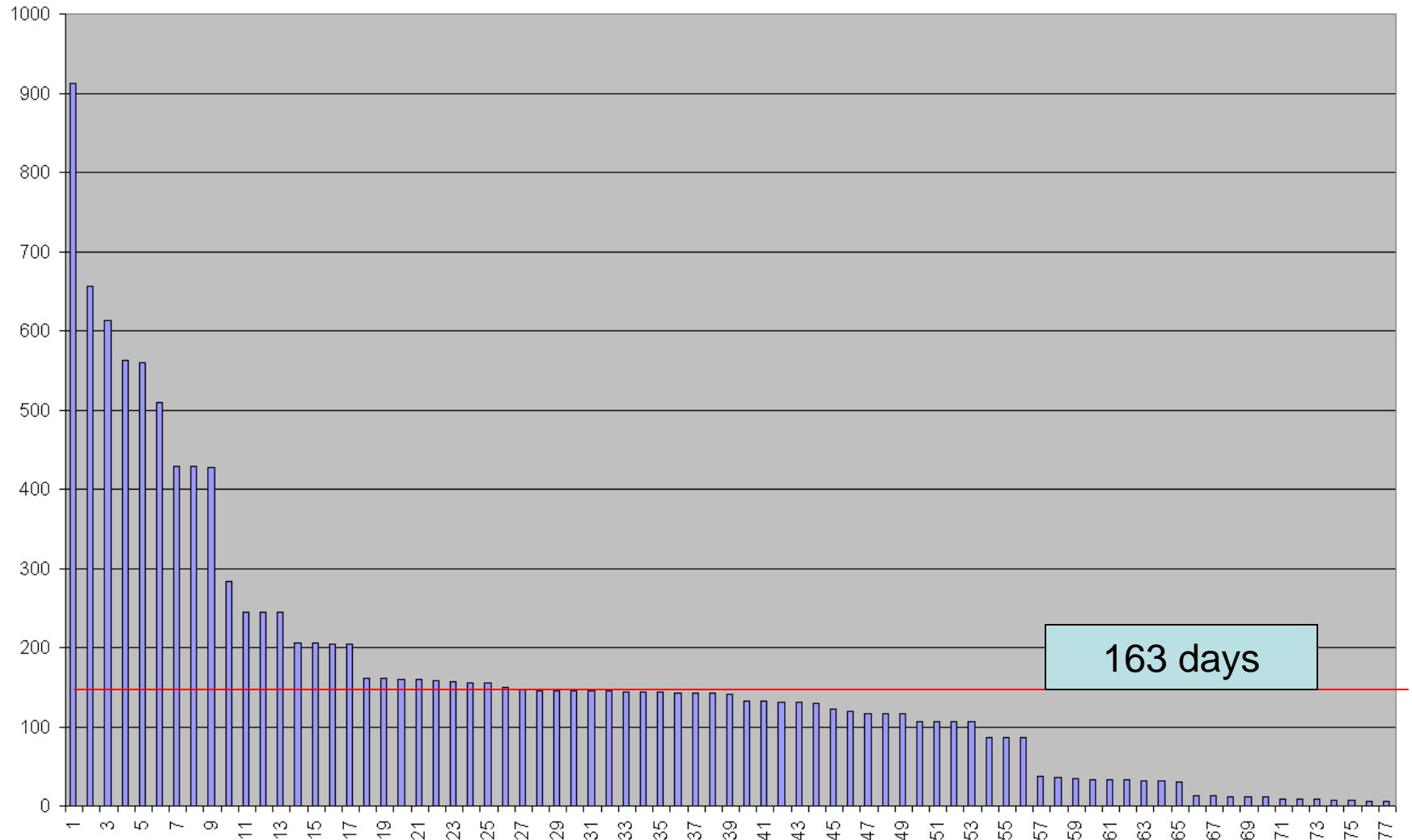
Drifting buoys in North Atlantic
EGOS then E-SURFMAR



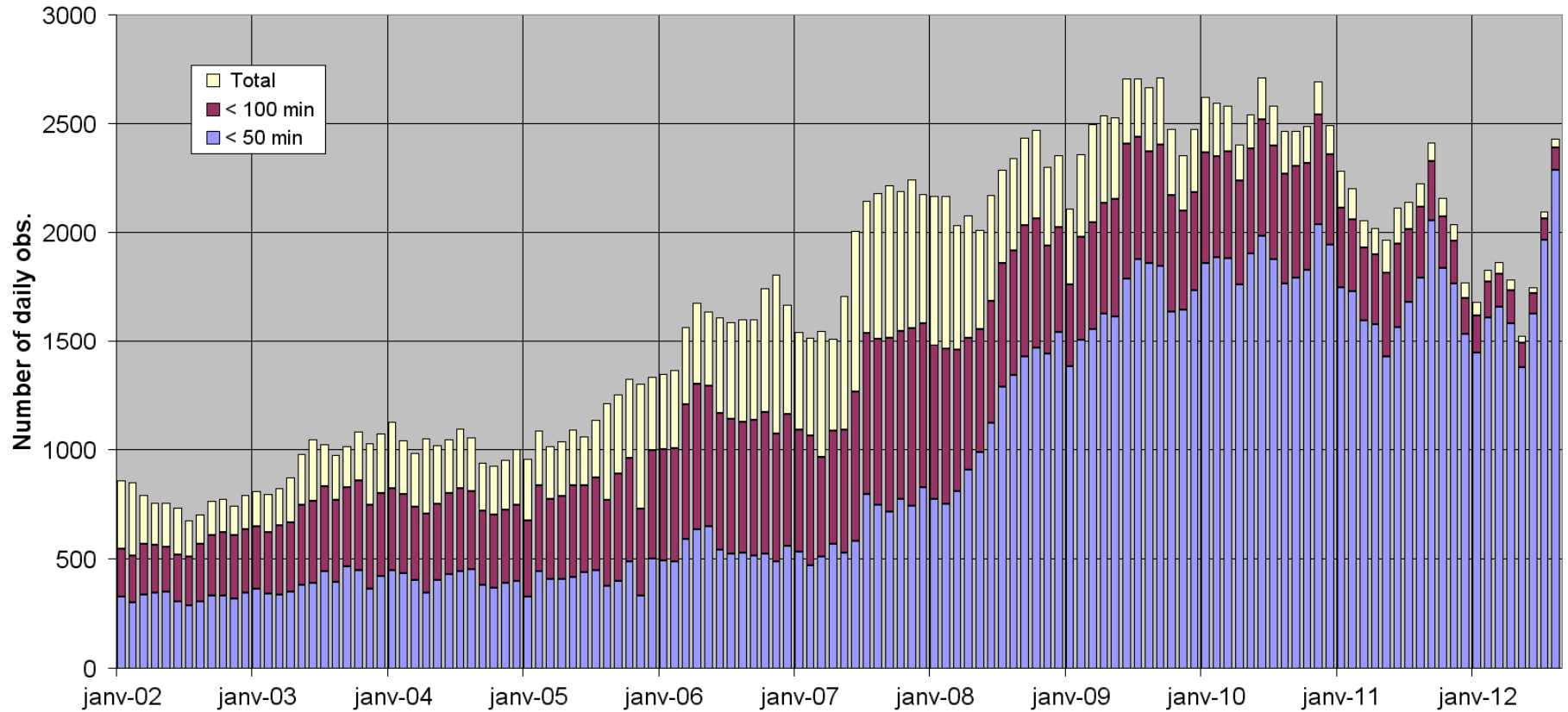
Average lifetime of buoys (AP) (161 units)



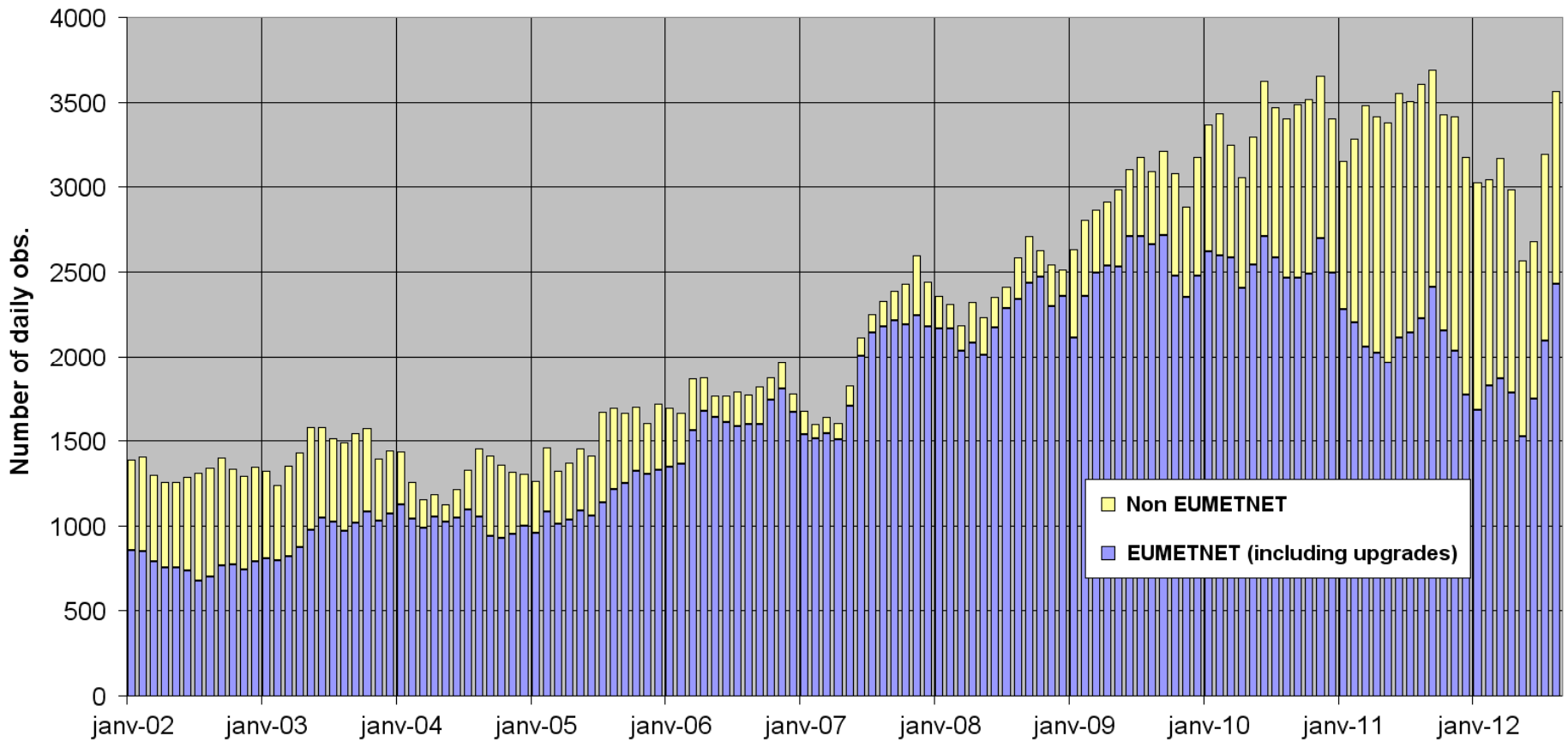
Age of the network (77 buoys)



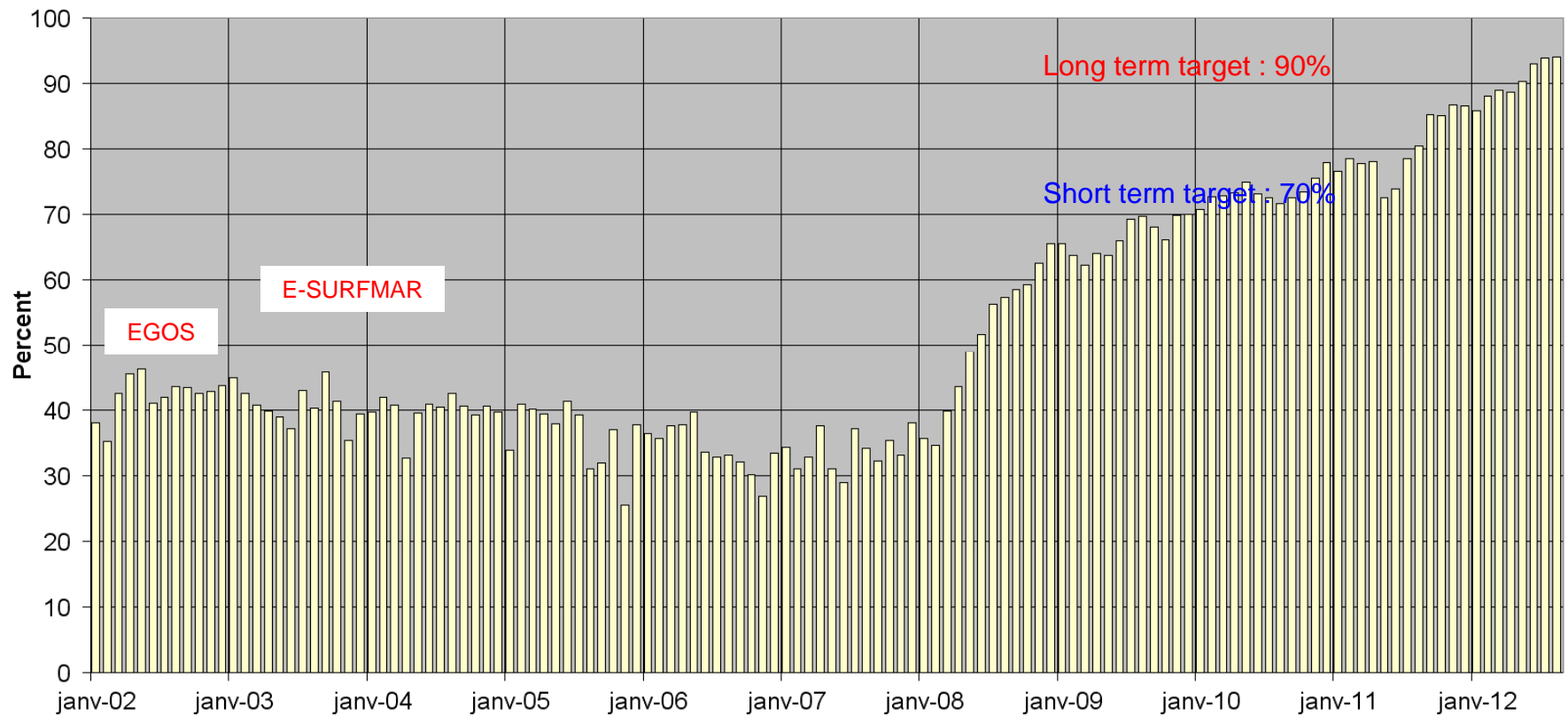
Drifting Buoys Number of observations



Drifting Buoys (Data availability)



Drifting Buoys (Data timeliness % < 50 min)



Contribution to IPY and EUCOS north area

- Contribution through IABP

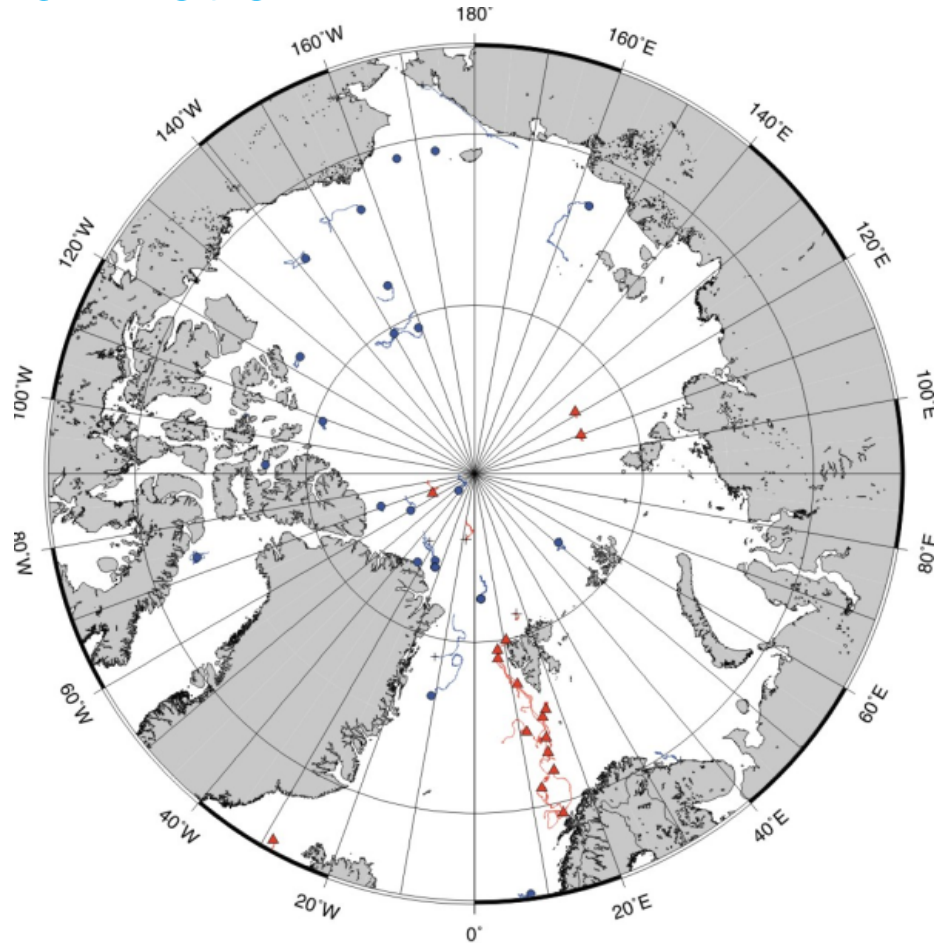
- 2 IcesAir in 2006,
- 3 ICEB buoys in 2007
- 4 SVP-B (2 Argos – 2 Iridium) in 2007
- 5 SVP-B (Argos) in 2008
- 15 SVP-B (Argos) in 2009
- extra free buoys from 2009 (10 to MetNo + 2 to NOAA) in 2010
- 3 New ICEB (2 Argos, 1 Iridium) + 12 SVP-B (Iridium) in 2011
- 22 SVP-B (Iridium) in 2012

North EUCOS area and Arctic

All buoys on the map are measuring
air pressure at least

Non-EUMETNET drifting buoys in blue

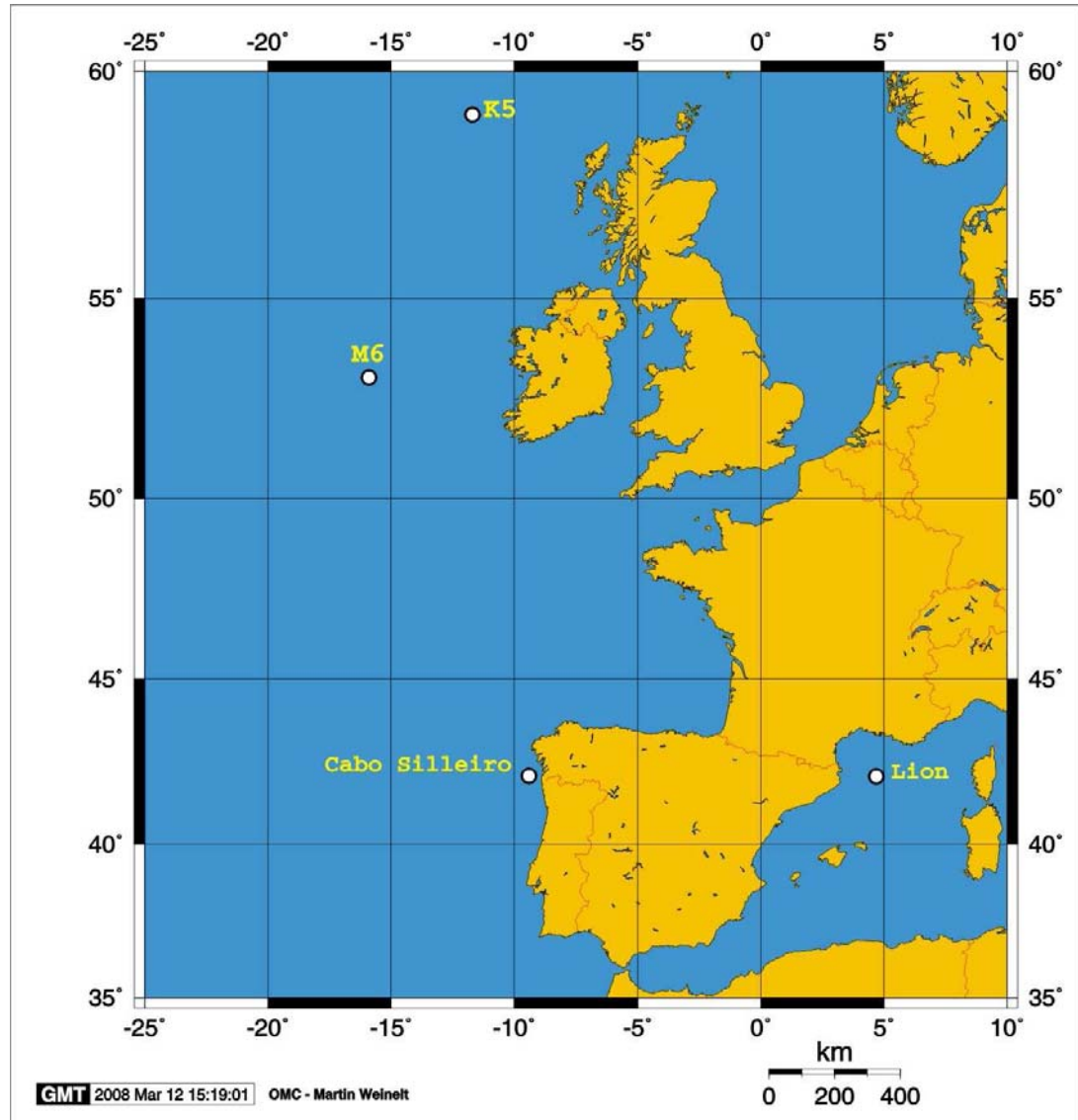
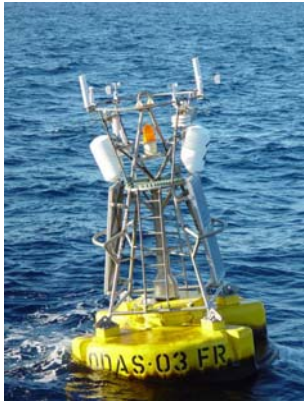
EUMETNET drifting buoys in red



August 2012

EUCOS Moored Buoys

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

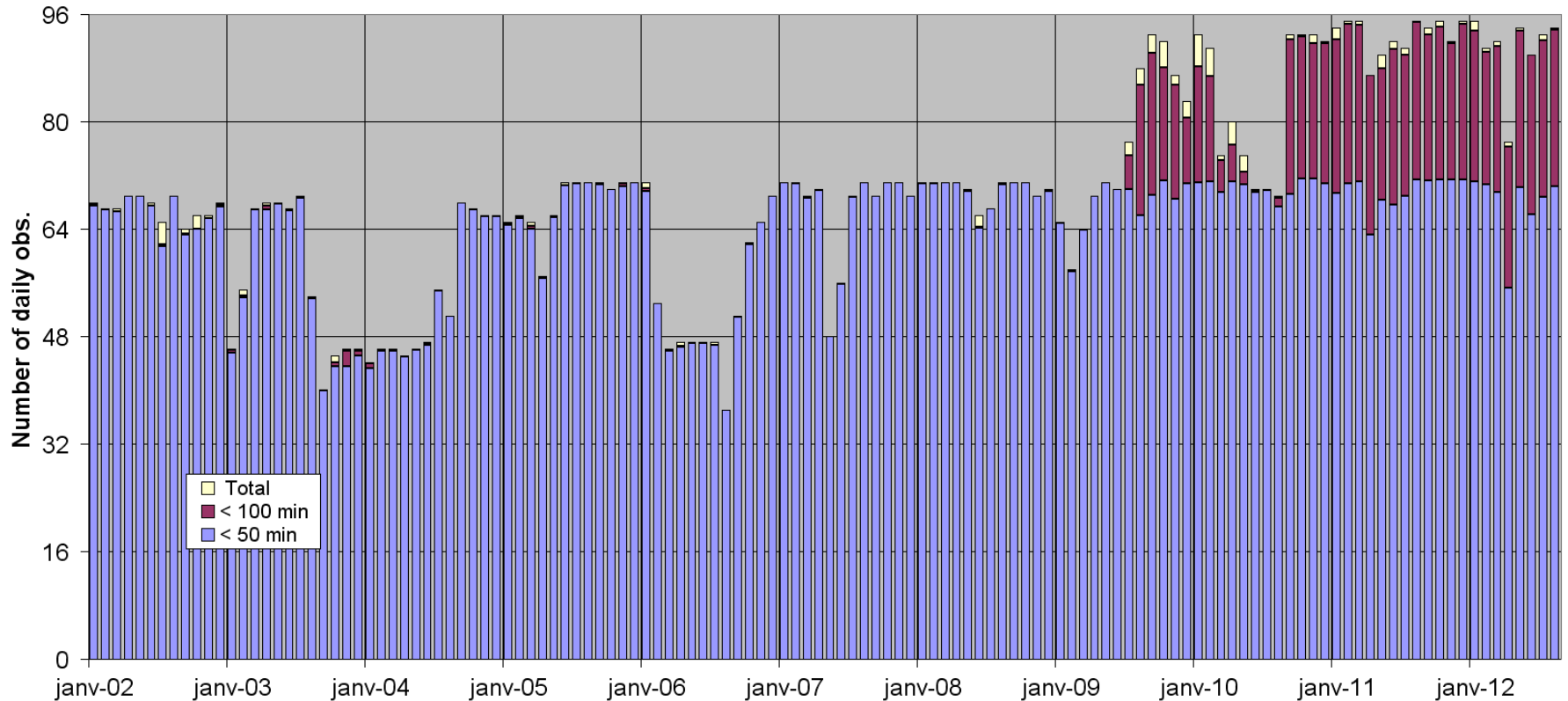


EUCOS Moored Buoys

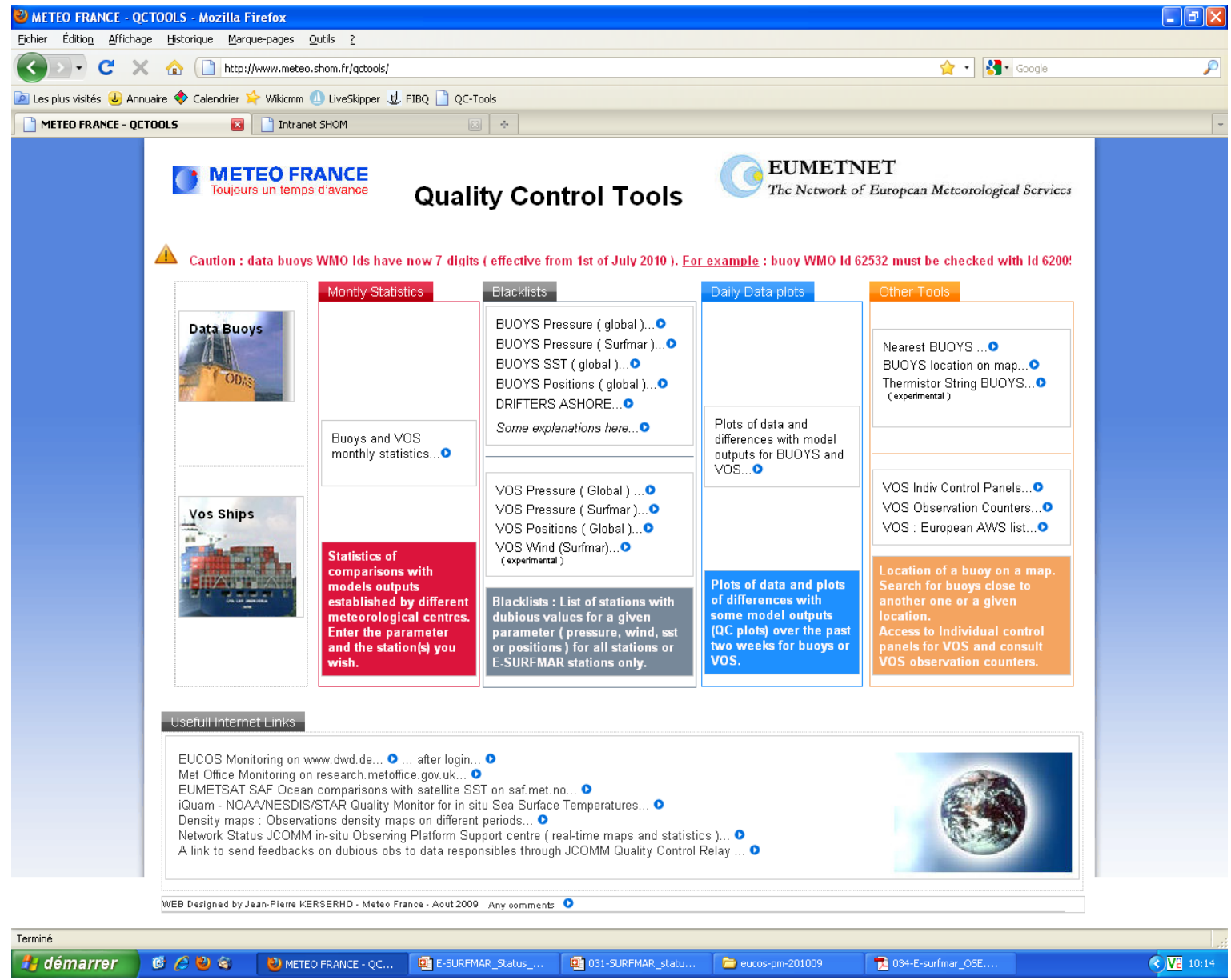
WMO	Name	Type	Country	GTS reports
64045	K5	K-pattern	UK	FM-13 SHIP FM-96 BUFR (spectral wave)
62095	M6	K-pattern	Ireland	FM-13 SHIP
62084	Cabo Silleiro	SeaWatch	Spain	FM-96 BUFR
61002	Lion	K-pattern	France	FM-13 SHIP FM-65 WAVEOB

Moored Buoys 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 Mozilla Firefox browser window displaying the METEO FRANCE QCTOOLS website. The browser's address bar shows the URL <http://www.meteo.shom.fr/qctools/>. The website header 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 is displayed: **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 website is organized into several tool categories:

- Montly Statistics**: Includes "Buoy and VOS monthly statistics..." and "Statistics of comparisons with models outputs established by different meteorological centres. Enter the parameter and the station(s) you wish."
- Blacklists**: Lists "BUOYS Pressure (global)...", "BUOYS Pressure (Surfmar)...", "BUOYS SST (global)...", "BUOYS Positions (global)...", "DRIFTERS ASHORE...", and "Some explanations here...". It also lists "VOS Pressure (Global)...", "VOS Pressure (Surfmar)...", "VOS Positions (Global)...", and "VOS Wind (Surfmar)... (experimental)". A description states: "Blacklists : List of stations with dubious values for a given parameter (pressure, wind, sst or positions) for all stations or E-SURFMAR stations only."
- Daily Data plots**: Includes "Plots of data and differences with model outputs for BUOYS and VOS..." and "Plots of data and plots of differences with some model outputs (QC plots) over the past two weeks for buoys or VOS."
- Other Tools**: Includes "Nearest BUOYS ...", "BUOYS location on map...", "Thermistor String BUOYS... (experimental)", "VOS Indiv Control Panels...", "VOS Observation Counters...", "VOS : European AWS list...", and "Location of a buoy on a map. Search for buoys close to another one or a given location. Access to Individual control panels for VOS and consult VOS observation counters."

A "Usefull internet Links" section provides links to "EUCOS Monitoring on www.dwd.de...", "Met Office Monitoring on research.metoffice.gov.uk...", "EUMETSAT SAF Ocean comparisons with satellite SST on saf.met.no...", "iQuam - NOAA/NESDIS/STAR Quality Monitor for in situ Sea Surface Temperatures...", "Density maps : Observations density maps on different periods...", "Network Status JCOMM in-situ Observing Platform Support centre (real-time maps and statistics)...", and "A link to send feedbacks on dubious obs to data responsables through JCOMM Quality Control Relay...".

The footer of the website states: "WEB Designed by Jean-Pierre KERSERHO - Meteo France - Aout 2009 - Any comments".

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/>