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

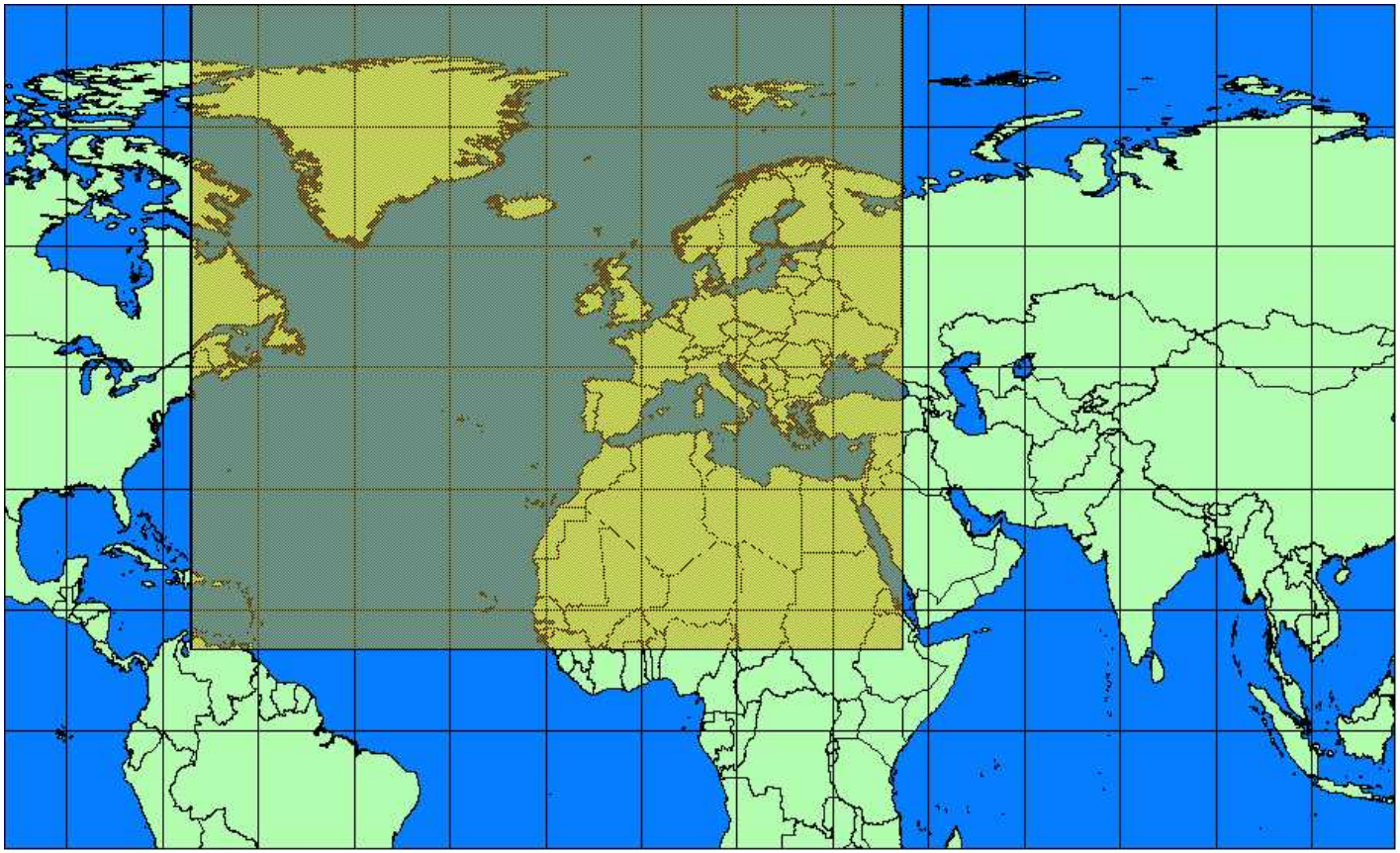
EUMETNET is an IEG from 2009

- **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

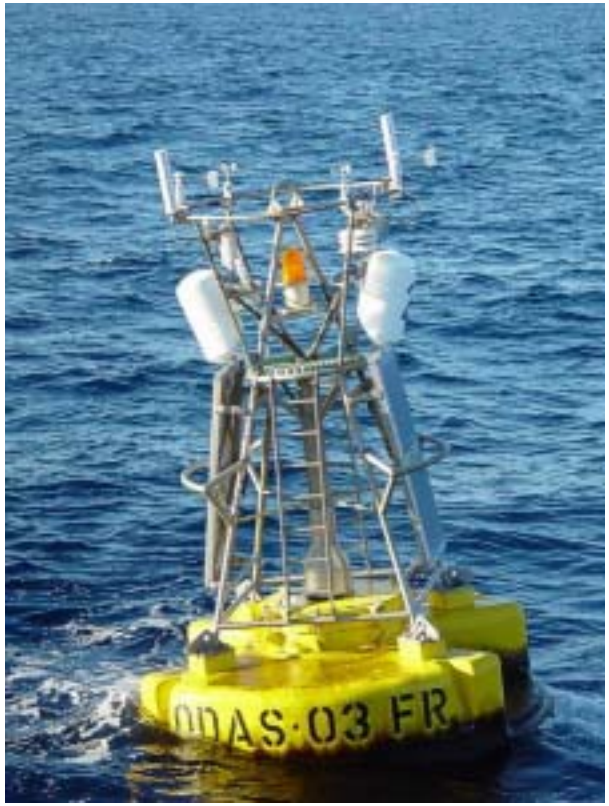
Cooperations

- **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)

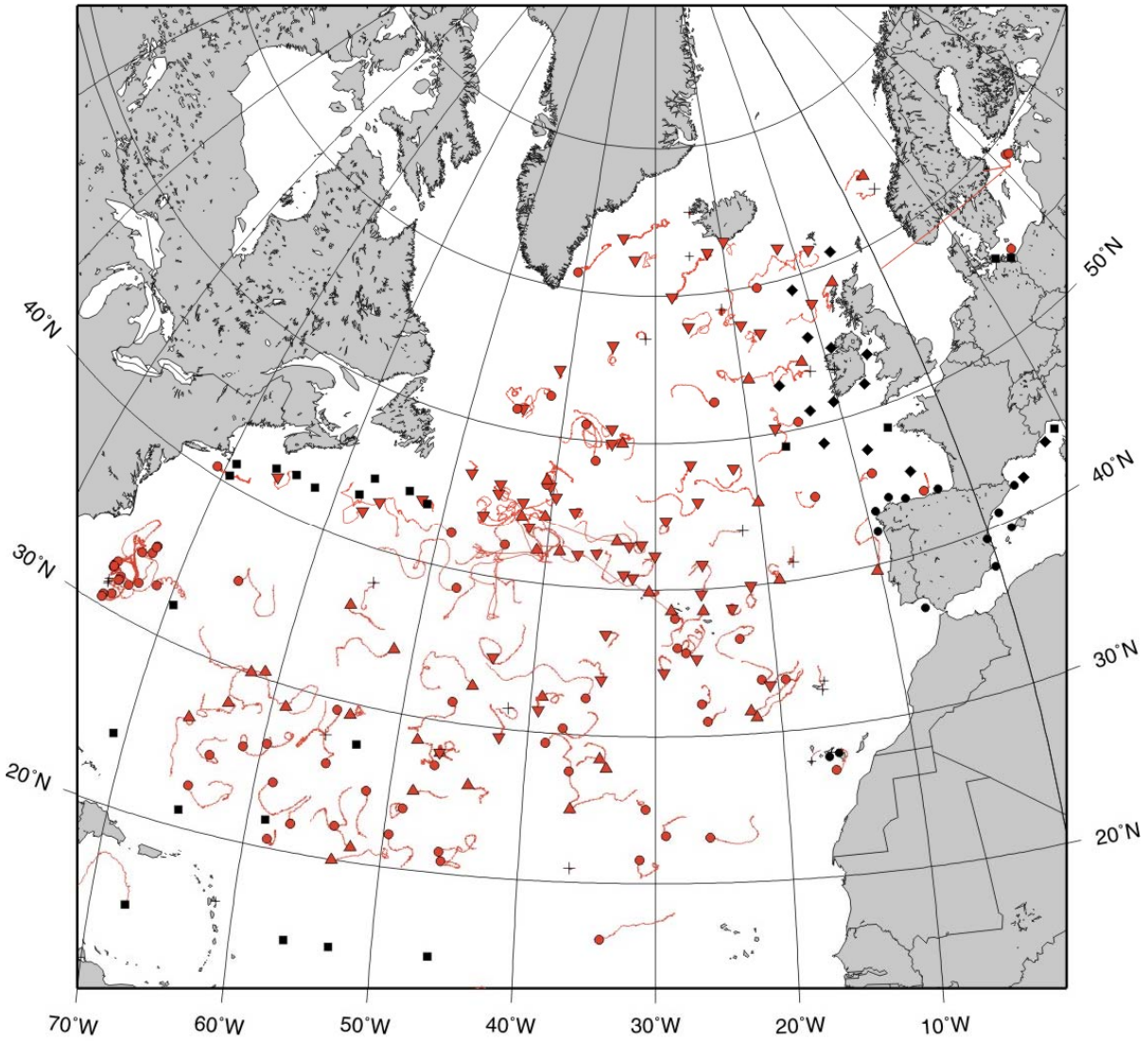
Data Buoy Programme Manager

Network status

- Iridium SVP-B
- Argos SVP-B
- SVP-BW

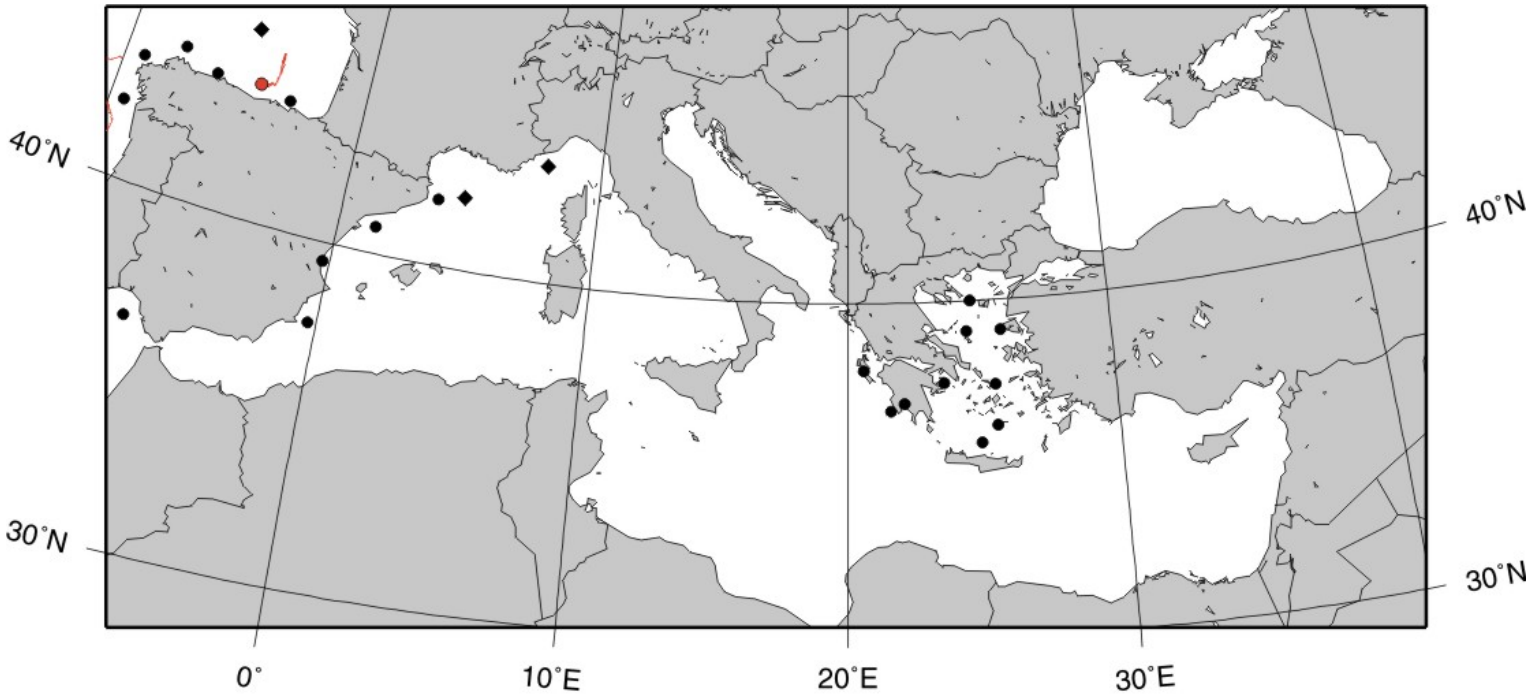
- *(moored buoys)*

June 2011

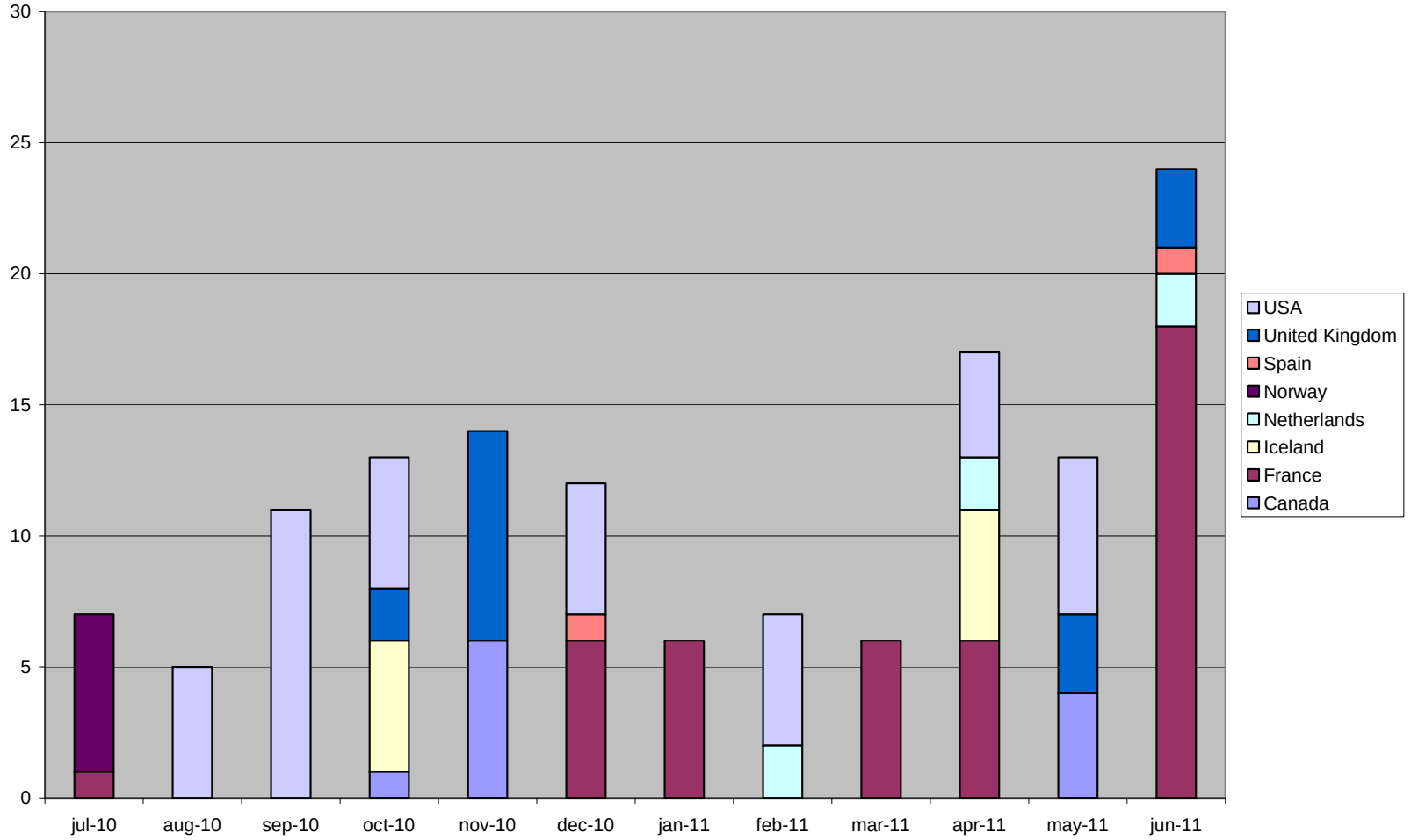


Network status

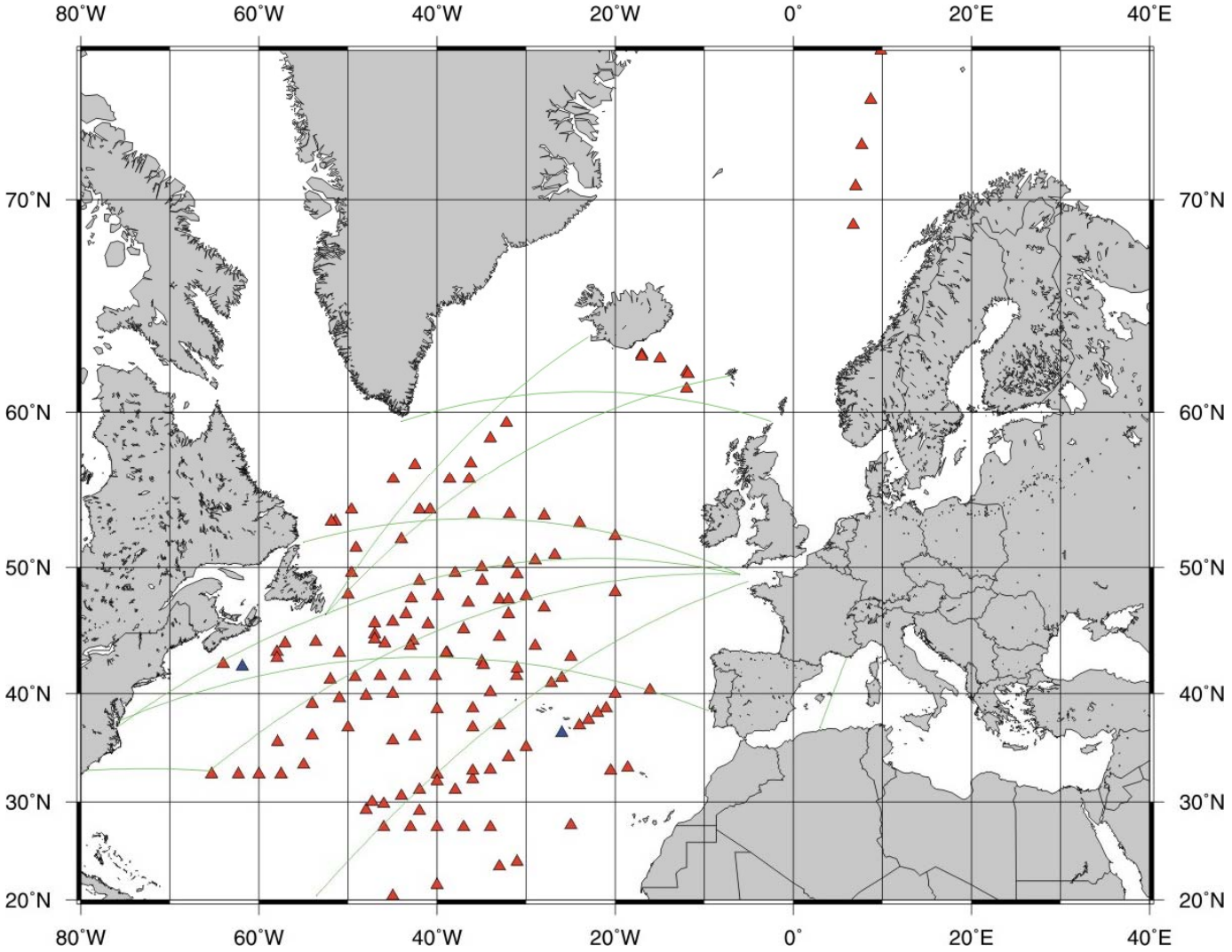
June 2011



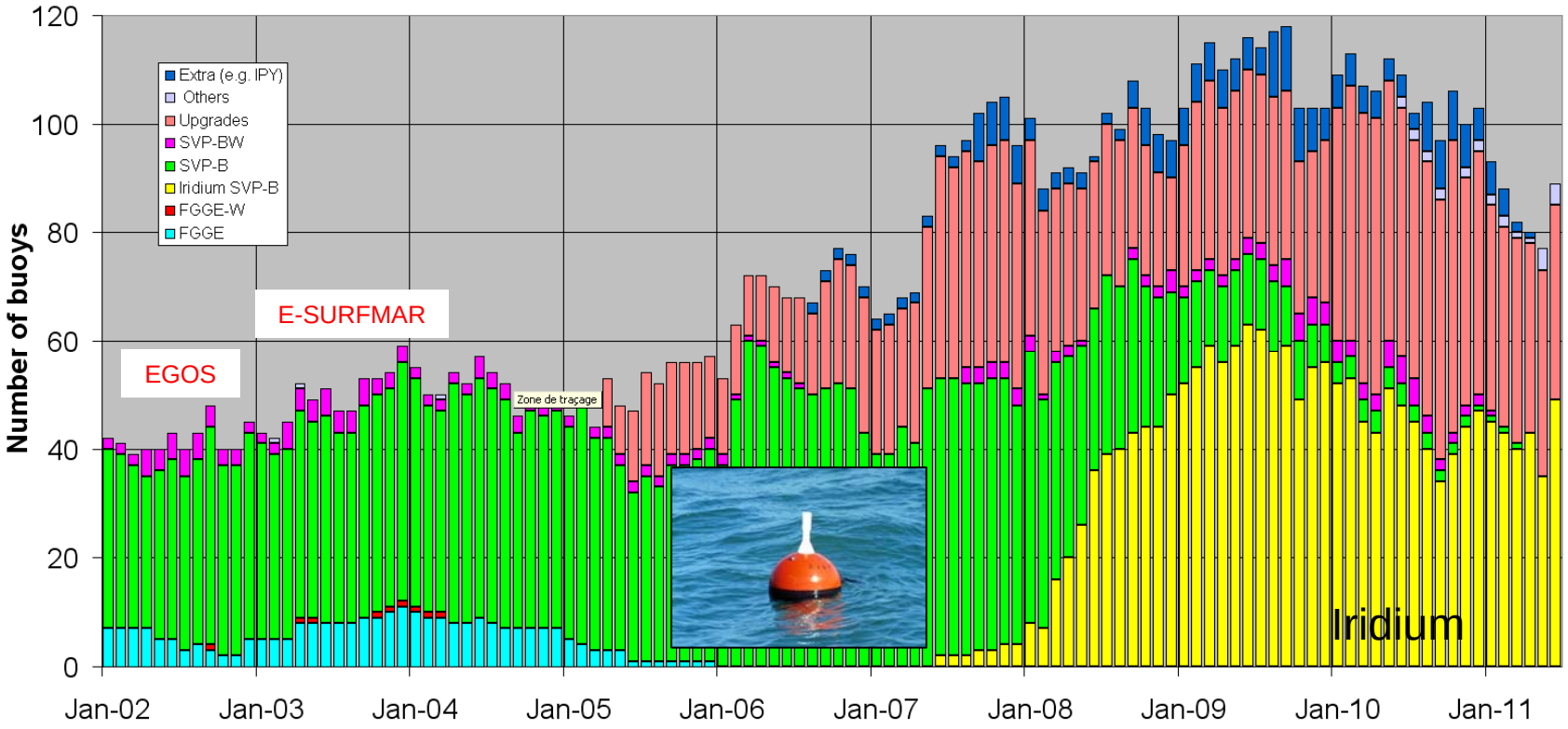
Drifting buoys deployed (July10-June11) (135 units)



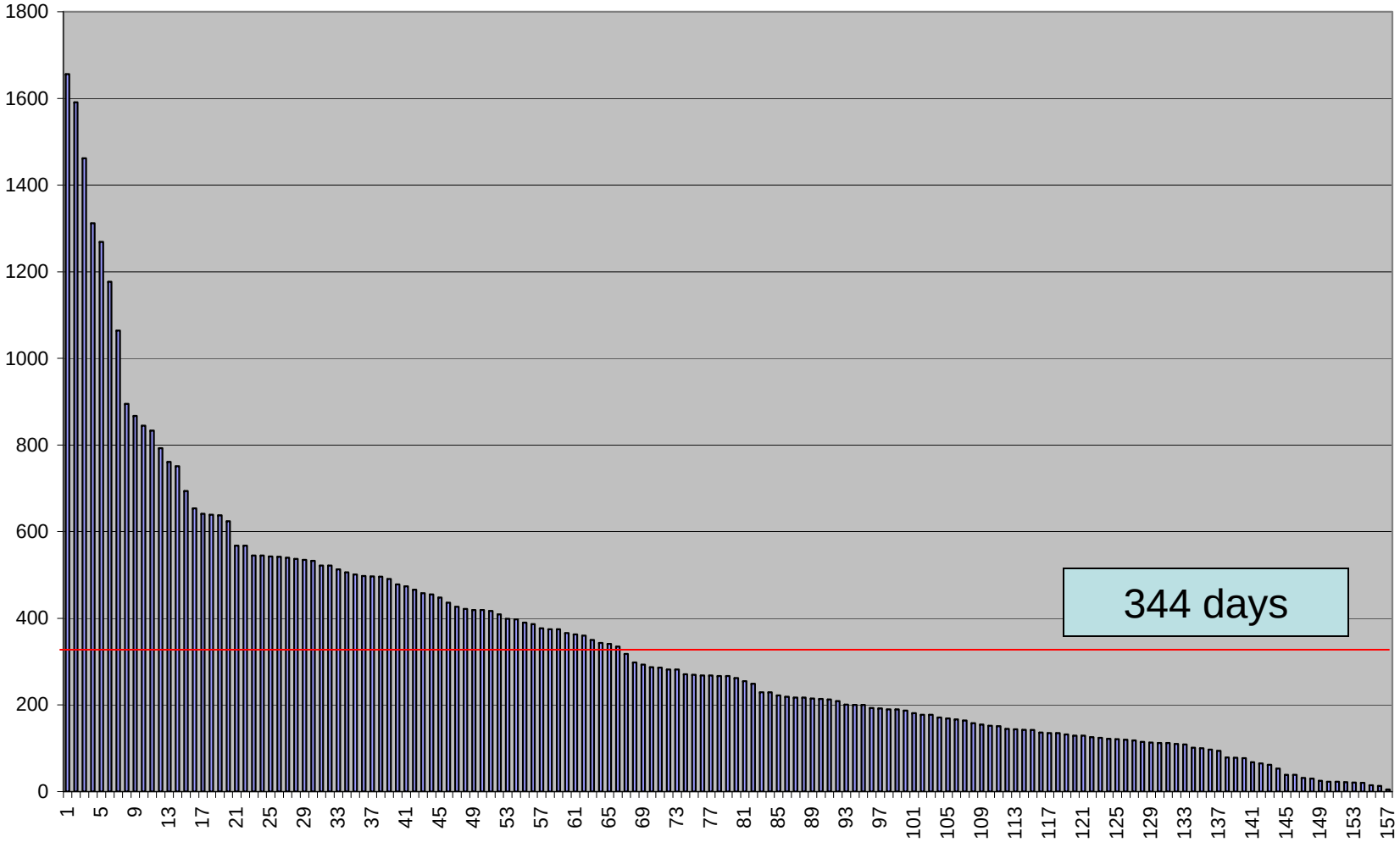
Deployment locations



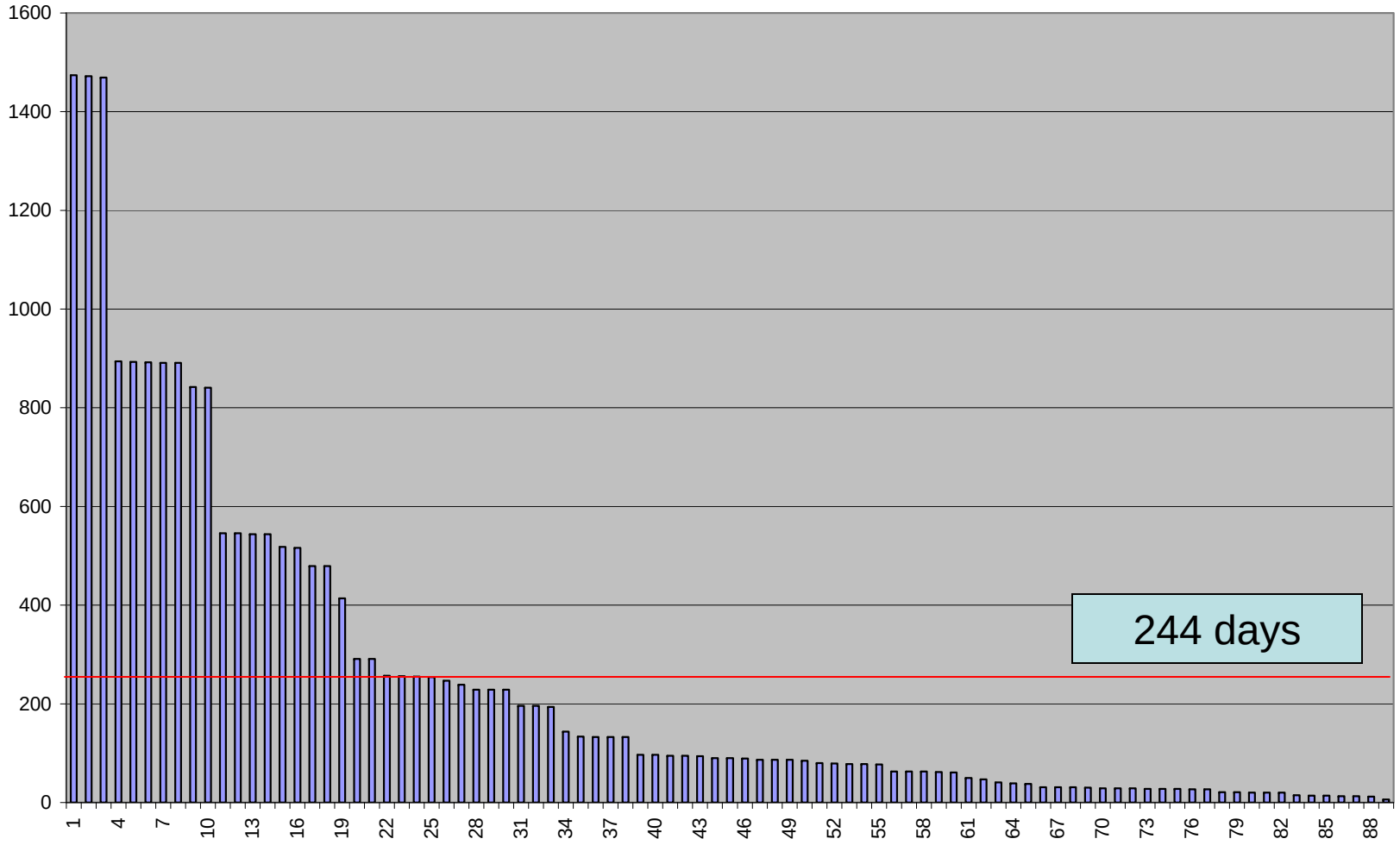
Drifting Buoys (number of buoys in operation)



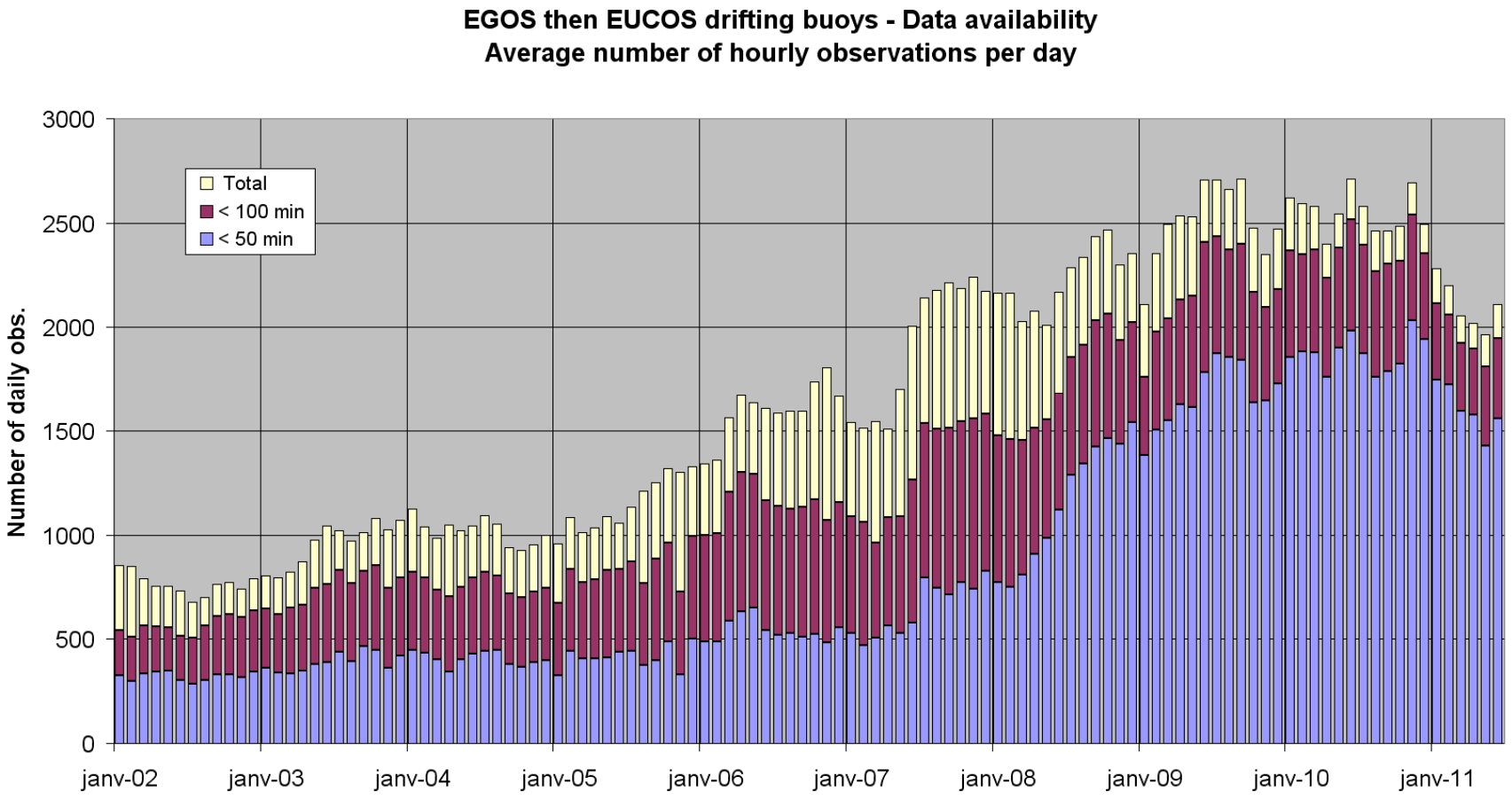
Lifetime of buoys (AP) (158 units)



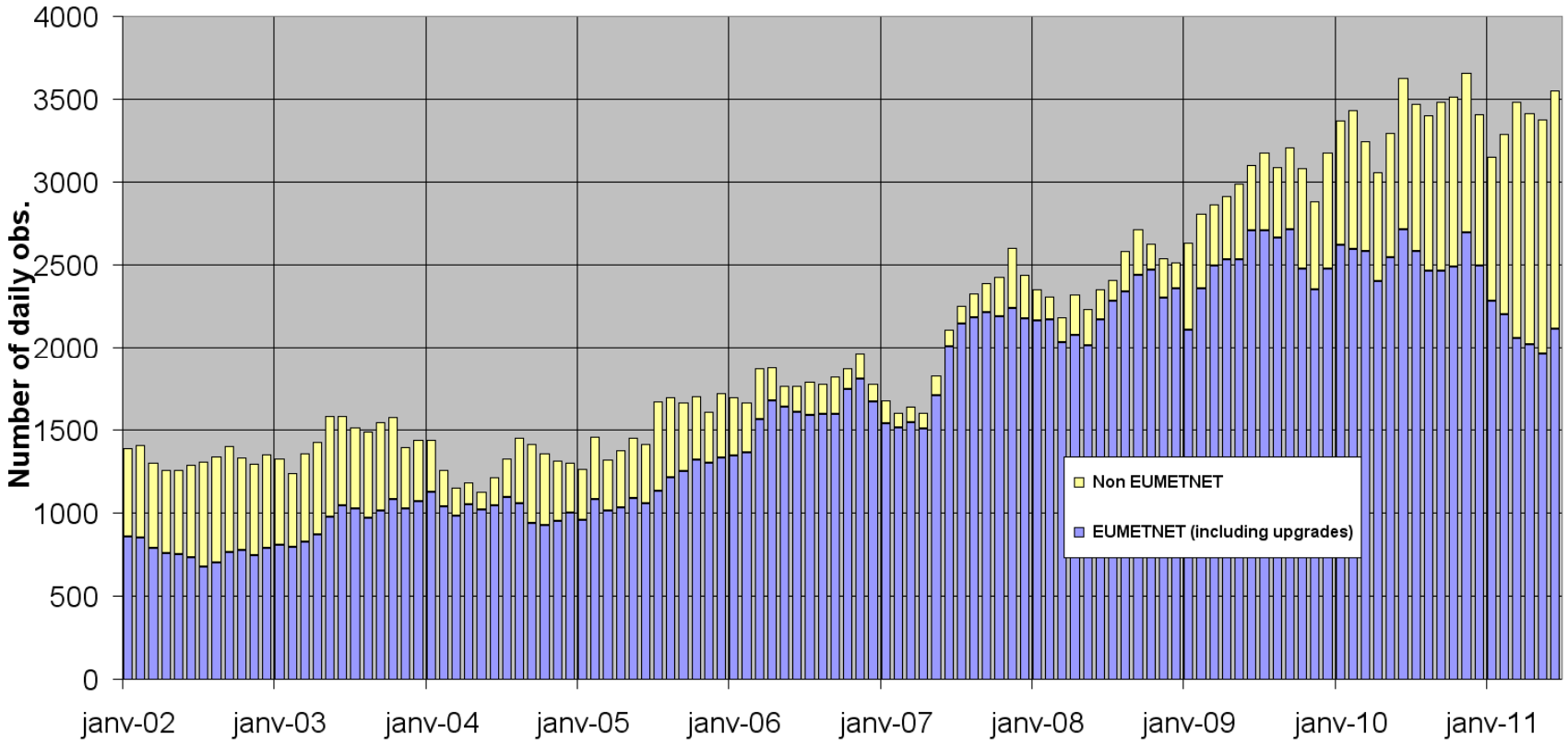
Age of the network (89 buoys)



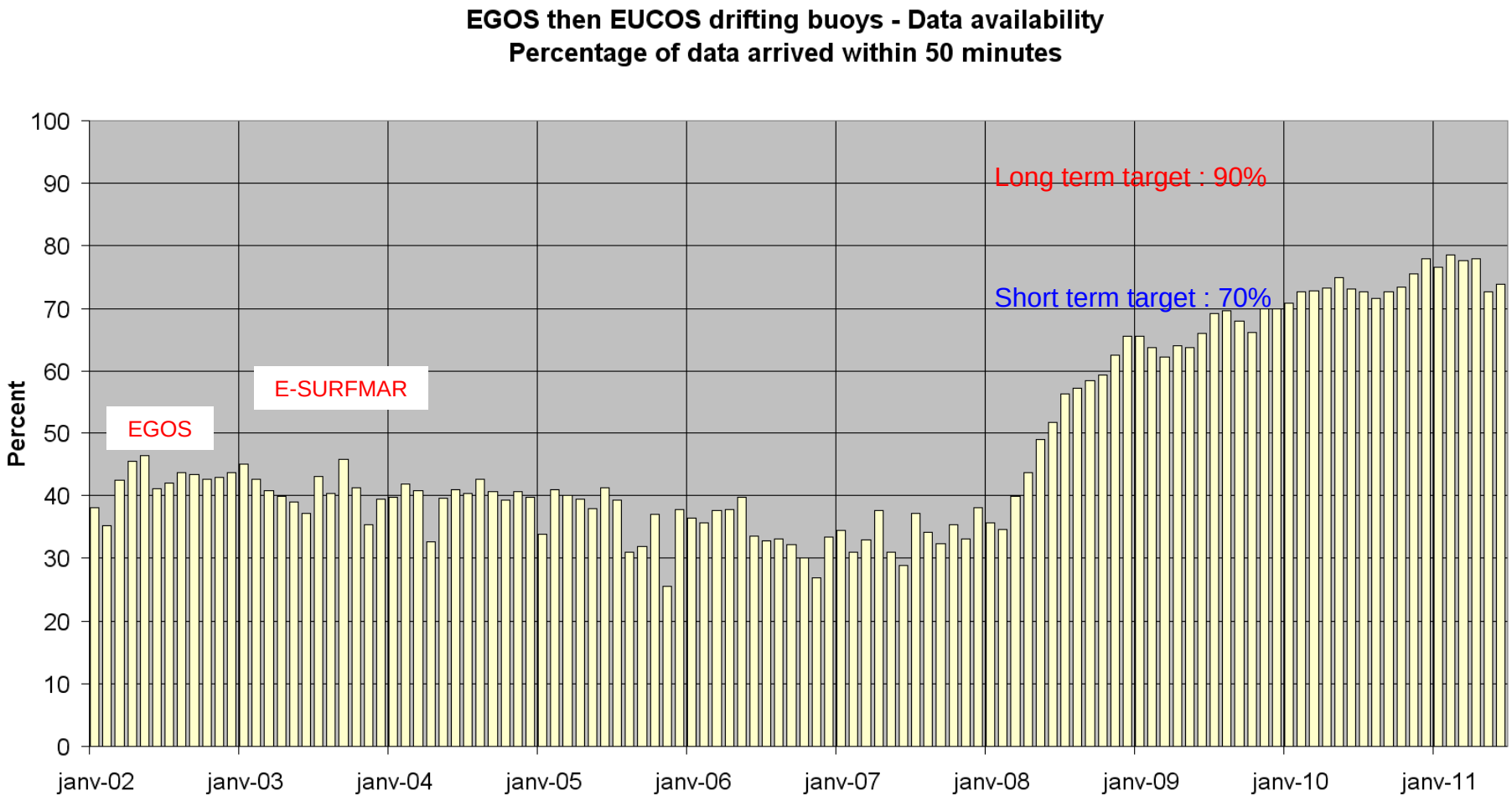
Drifting Buoys Number of observations



Drifting Buoys (Data availability)



Drifting Buoys (Data timeliness)



Contribution to IPY and EUCOS north area

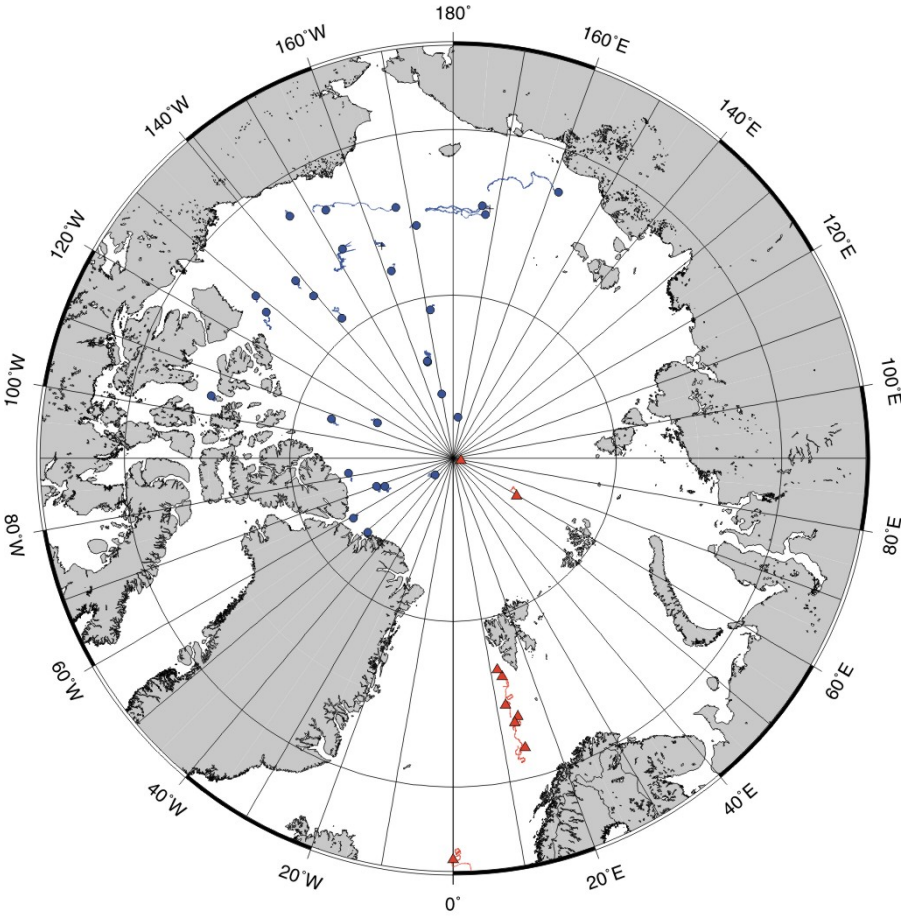
- Contribution through IABP

-2 IcexAir 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

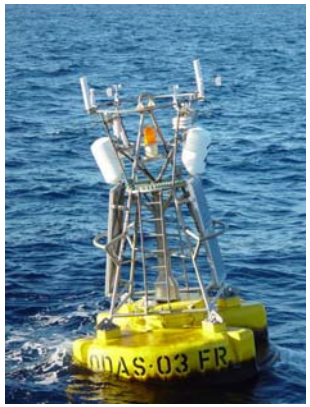
Non-Eumetnet drifting buoys in blue
Eumetnet drifting buoys in red

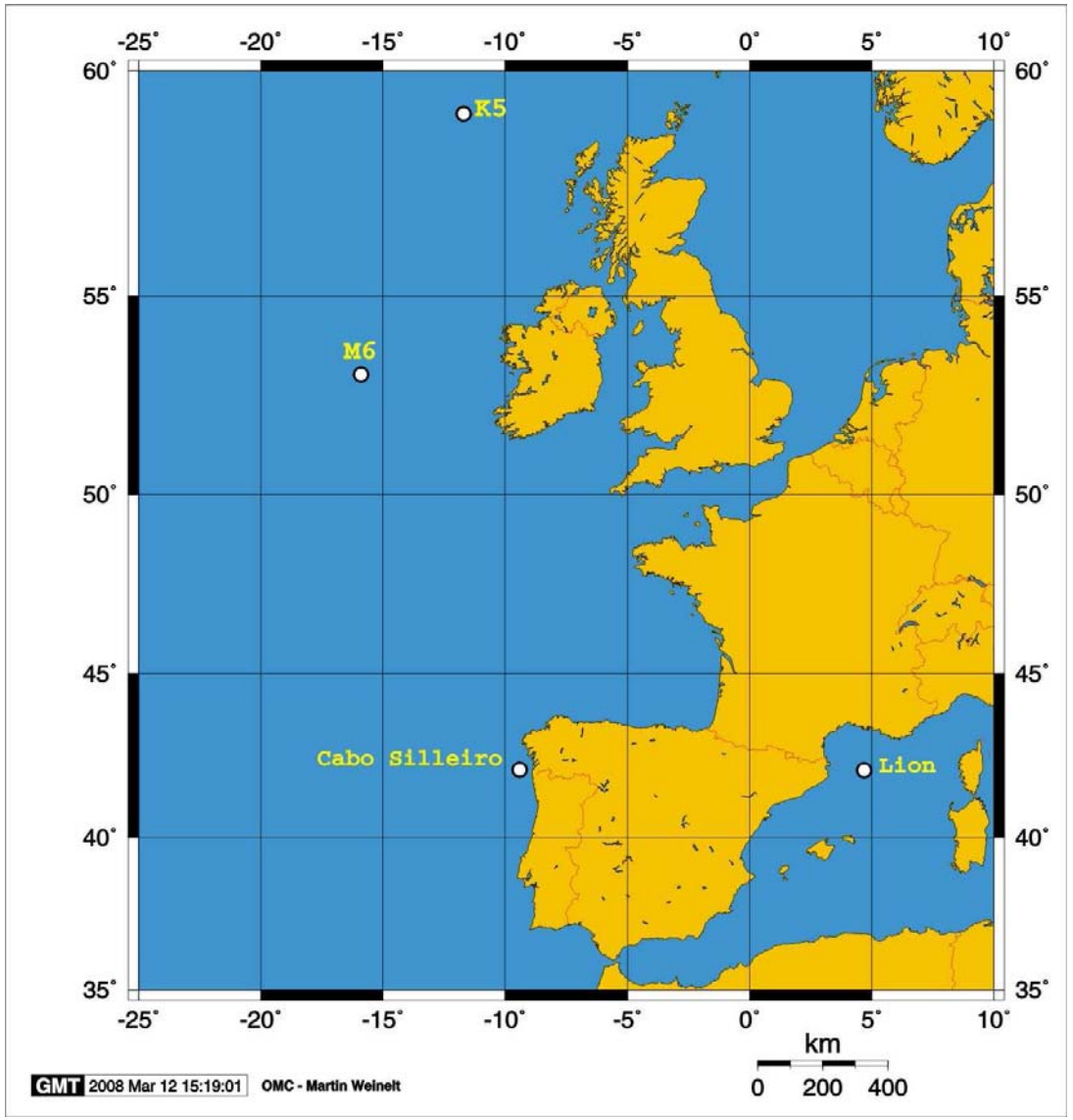


August 2011

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

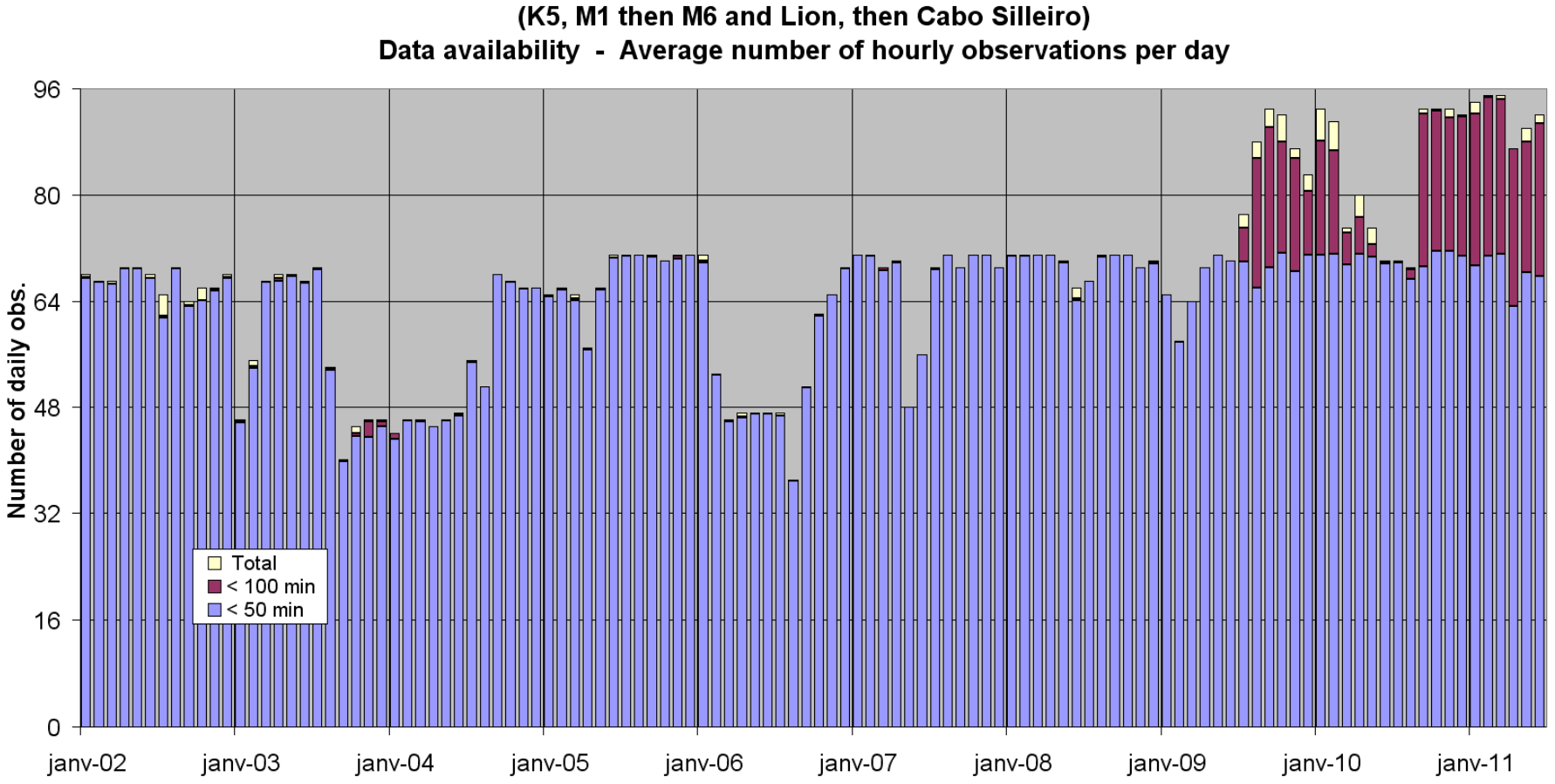
WMO	Name	Type	Country	GTS reports
64045	K5	K-pattern	UK	FM-13 SHIP
62095	M6	K-pattern	Ireland	FM-13 SHIP
62084	Cabo Silleiro	SeaWatch	Spain	FM-96 BUFR
61002	Lion	K-pattern	France	FM-13 SHIP FM-65 WAVEOB

Moored Buoys

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

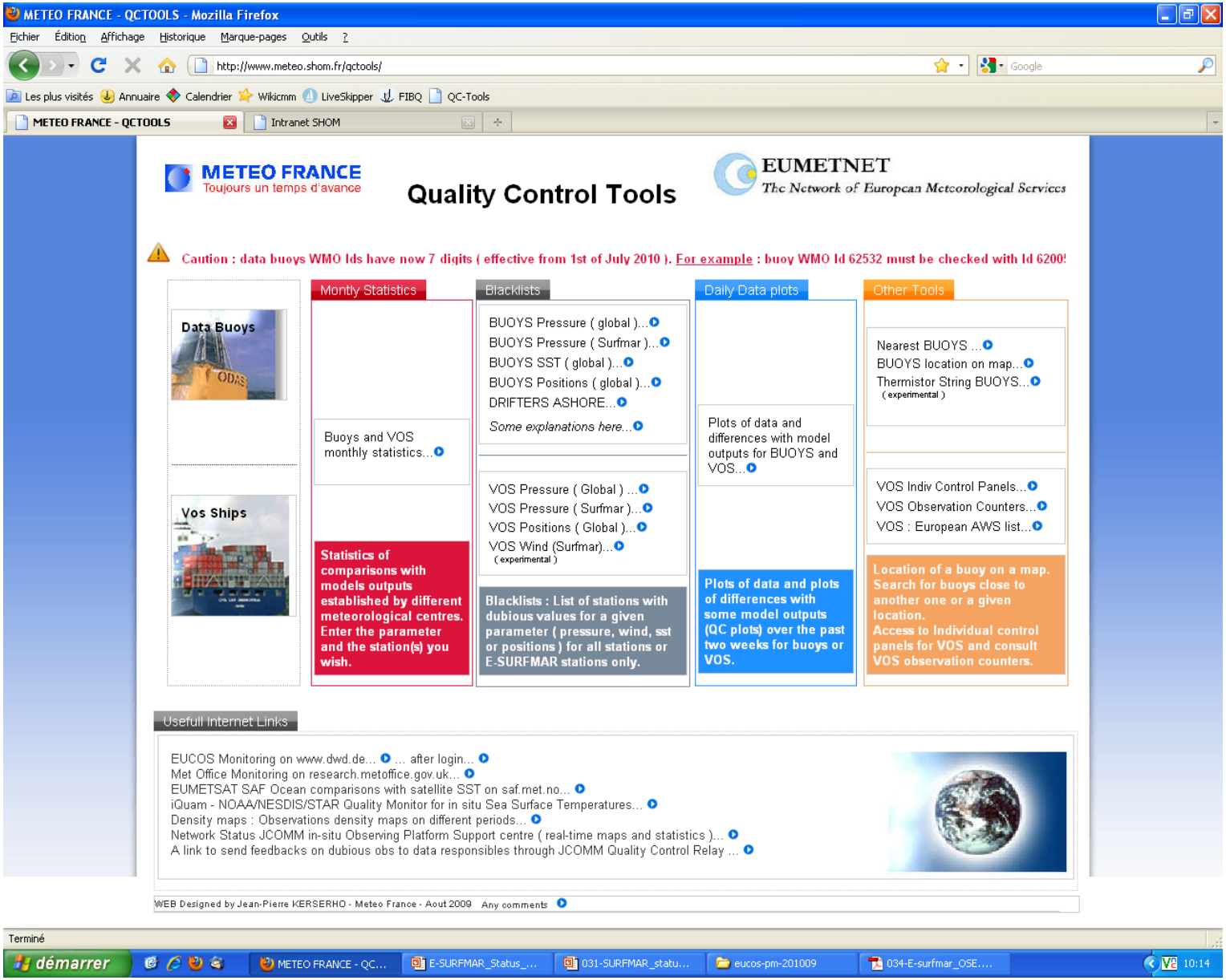
Country	Name	Nb of Buoys	Buoy Type and GTS transmission
France	**CETMEF**	~10	▪ Waveriders ▪ FM13 SHIP and FM65 WAVEOB
Germany	**BSH**	3+2	▪ Specific ▪ FM12 SYNOP and FM13 SHIP
Greece	**Poseidon (HCMR)**	10	▪ SeaWatch and WaveScan ▪ FM94 BUFR
Italy	**RON (Ispra)**	17	▪ WatchKeeper ▪ FM94 BUFR
UK	**Wavenet (CEFAS)**	18	▪ Waveriders ▪ FM94 BUFR
UK	**Jersey**	1	▪ Specific WMO 62027
UK	**PML**	2	▪ Hippo Marine Ltd ▪ FM13 SHIP

Moored Buoys data availability (EUCOS)



http://www.meteo.shom.fr/qctools/

Data Quality Control Tools



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/