



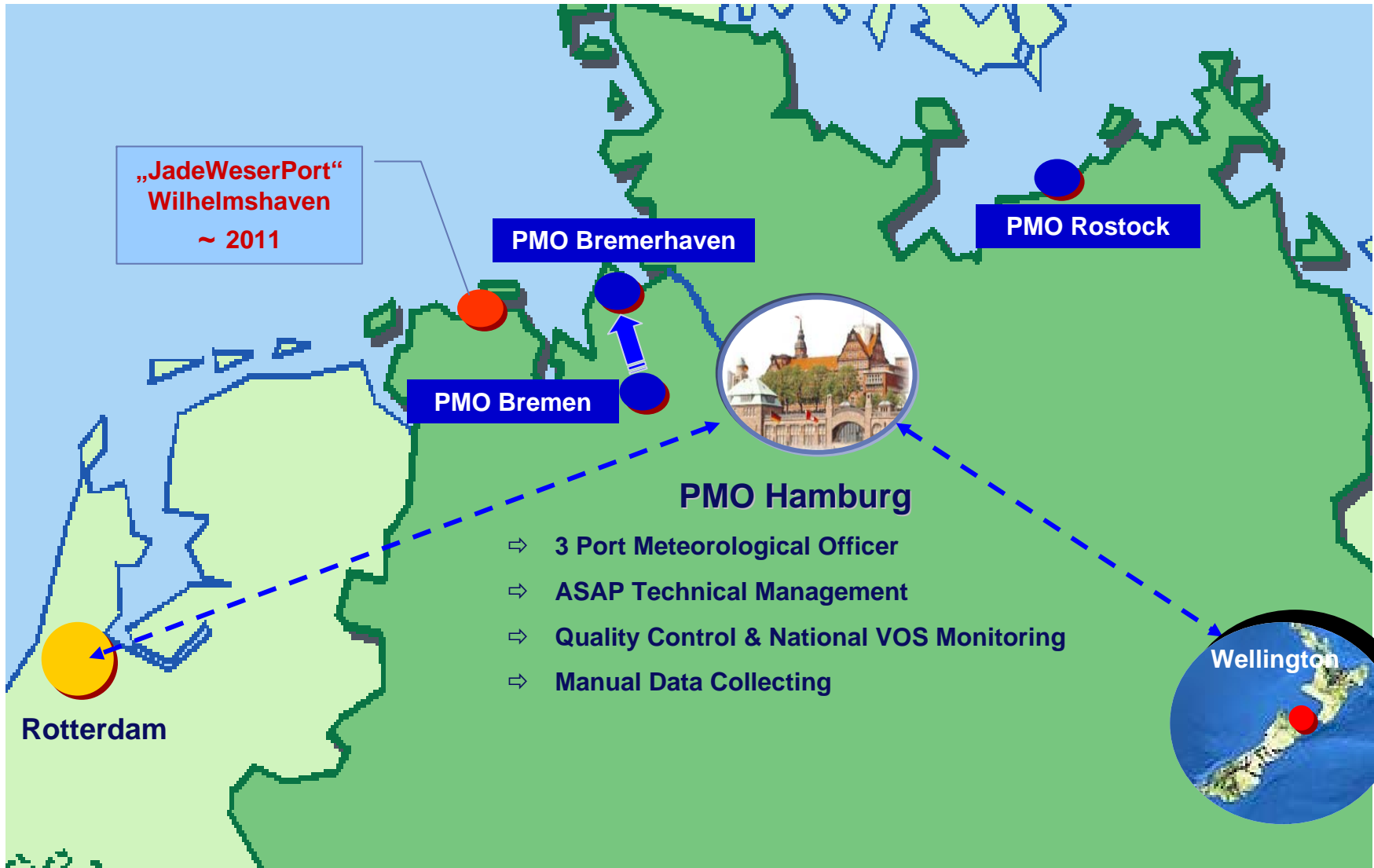
German VOS National Report 2008

Volker Weidner
PMO Advisor



Deutscher Wetterdienst

VOS – National Report



„JadeWeserPort“
Wilhelmshaven
~ 2011

PMO Bremerhaven

PMO Rostock

PMO Bremen

PMO Hamburg

- ⇒ 3 Port Meteorological Officer
- ⇒ ASAP Technical Management
- ⇒ Quality Control & National VOS Monitoring
- ⇒ Manual Data Collecting

Rotterdam

Wellington





German VOS Fleet 2008*

Selected	803
Supplementary:	2
Auxiliary:	26
Total	831

(* effective Dec 08)





Participating to VOSCLim:

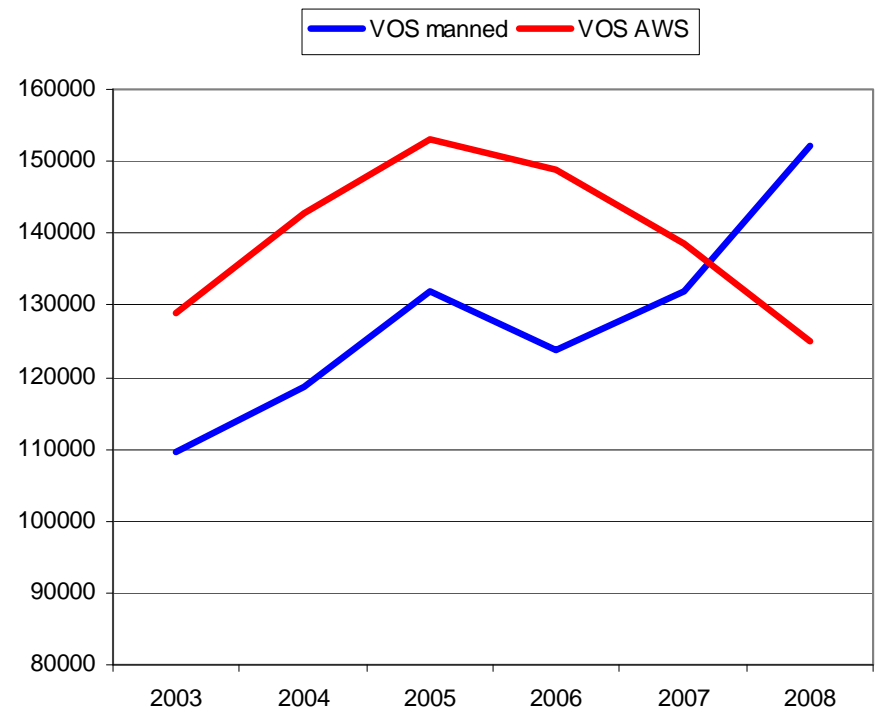
VOSCLim vessels at 31 December 2008	29
VOSCLim vessels recruited in 2008	4
VOSCLim de-recruitments in 2008	0
Target number not specified	



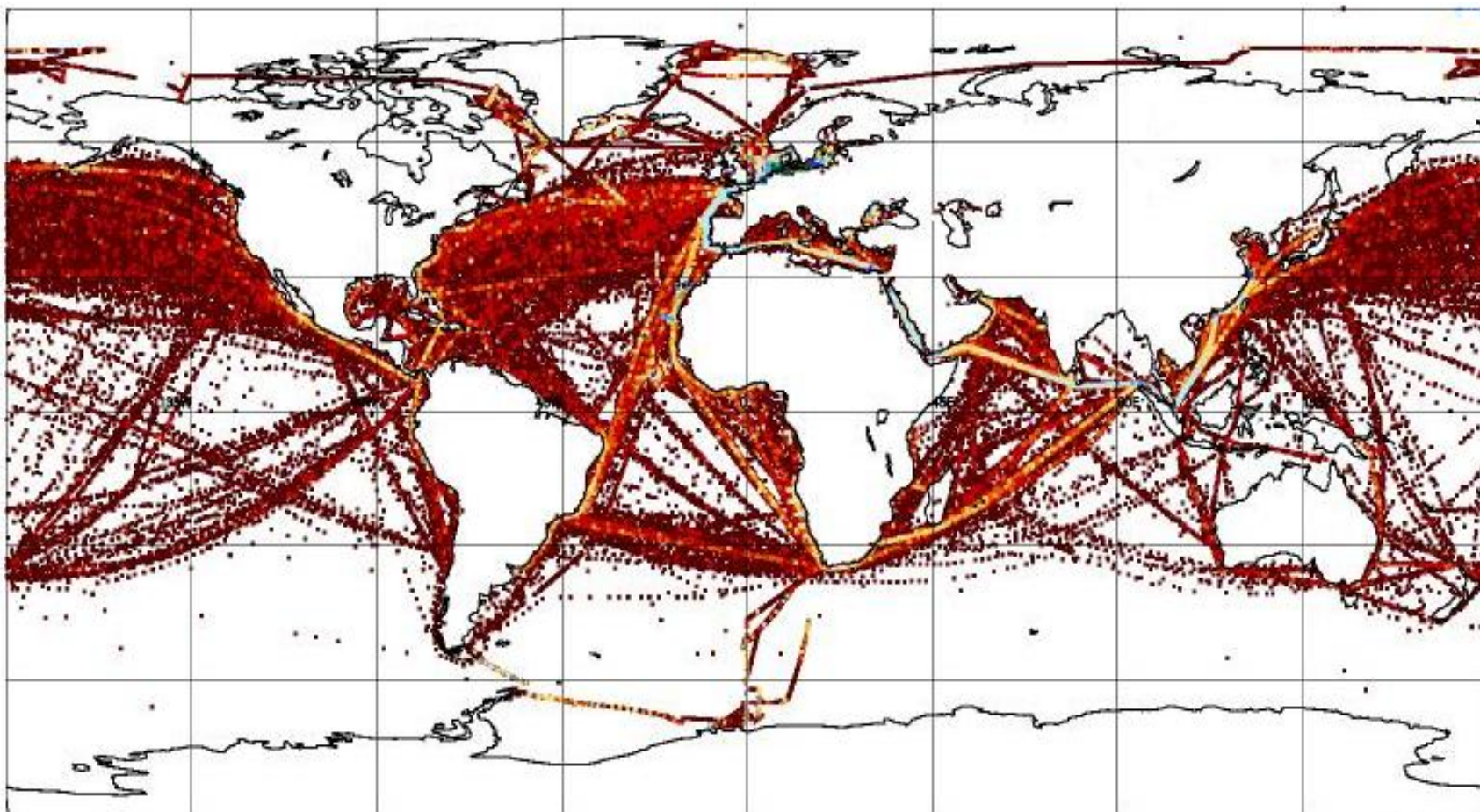


PMO / VOS activities 2008

Observations (total):	276.858
Manual observations:	152.300
AWS (MILOS / other)	19
Recruitments:	72
De-Recruitments:	93
Visits in German Ports:	1.239



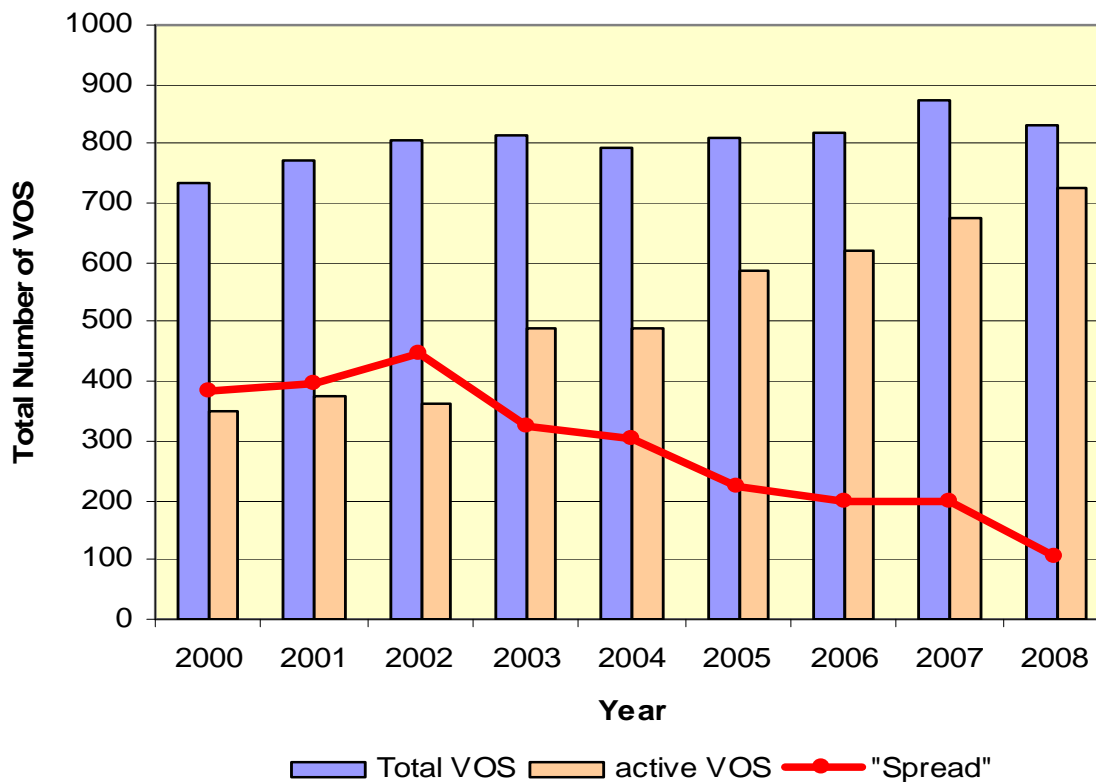
Distribution of German Observations in 2008



© DWD 22.04.2008



VOF Observational Performance





Data Management

- ▶ Internal monitoring of national VOS efficiency and data arrival
- ▶ Internal quality control and feedback to observers via PMO system
- ▶ Use of international monitoring products
- ▶ Data contribution to Responsible Members in MCSS via GCCs

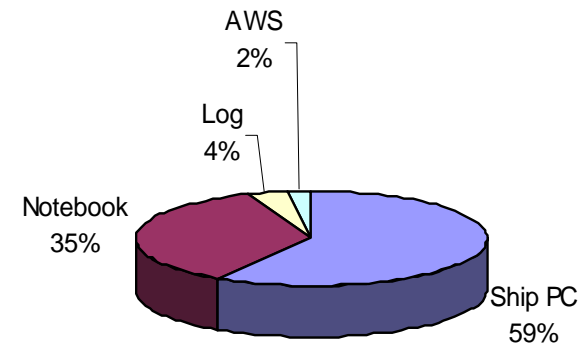
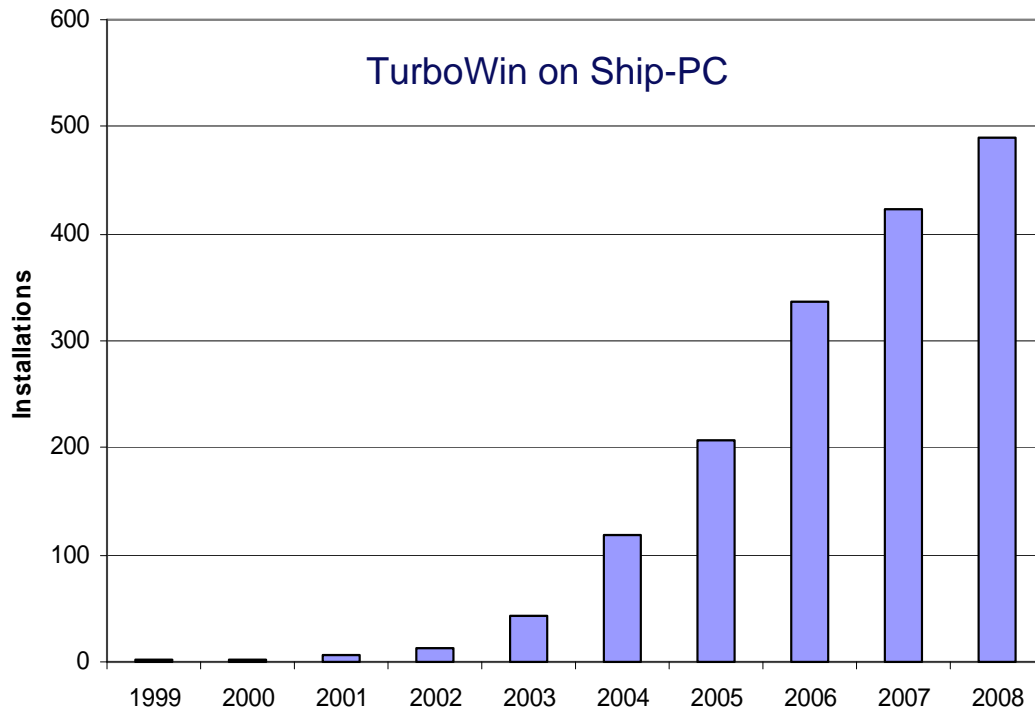


Quality-Management

1. Electronic Logbook

Notebook on ships 292

TurboWin on Ship-PC 490





Quality-Management (cont.)

2. Ongoing tasks

- ▶ Regular use of international monitoring results
- ▶ Continuing to improve observing activities and quality
- ▶ Calibration intervalls in conformance with QM-requirements



Quality-Management (cont.)

3. Motivation tools

- ▶ Personal presents for observers
- ▶ Certifications (e.g. SOT) for VOS and shipping companies
- ▶ Personal medal awarded by the Secretary of Traffic



Instrumentation: (VOS-Standard)



At the planning stage

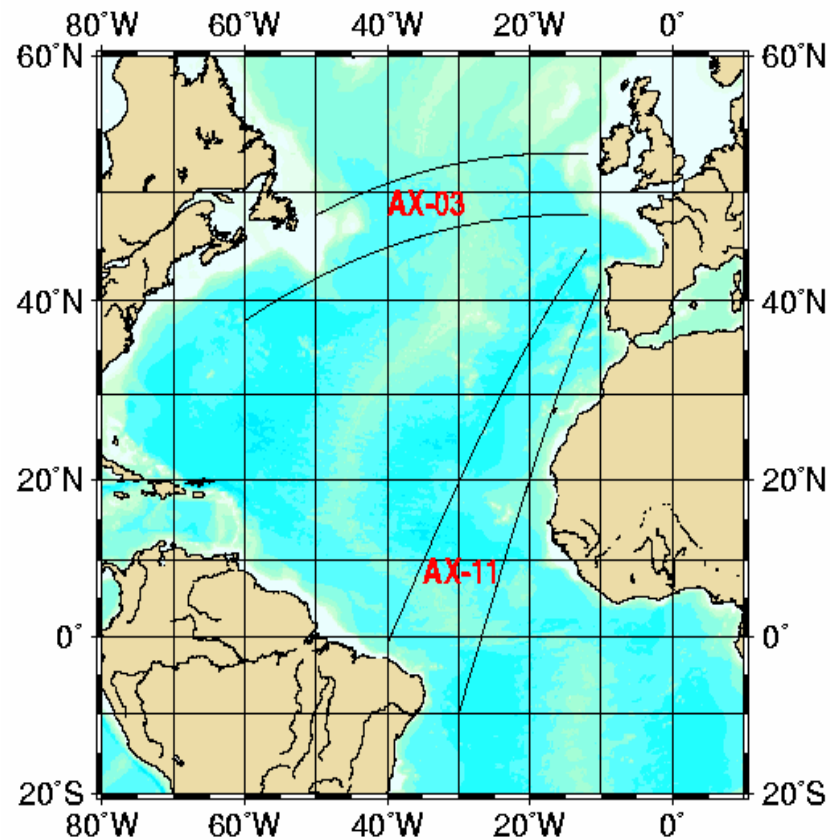
- ▶ **Long-term strategy to replace Hg-thermometer and mechanical barometer/barograph by electronic equipment**
 - ▶ Starting with new-recruited VOS and existing VOSCLim as soon as possible
 - ▶ Depending on available budget
- ▶ **Re-Installation of AWS on merchant ships**
 - ▶ Problem: Frequent changes of routes and charters



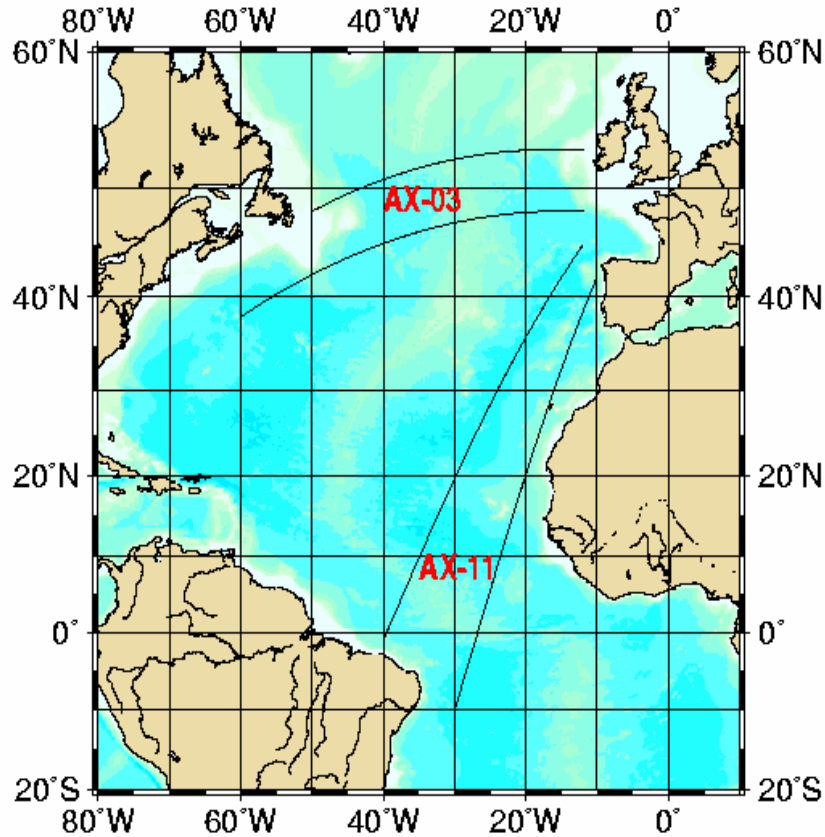
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HYDROGRAPHIE

SOOP Programme German contribution

Presented by
Birgit Klein (BSH)



Germany operates XBT lines along AX-03 and AX-11 with assistance from the shipping companies *Hamburg Süd* and *Rickmers*

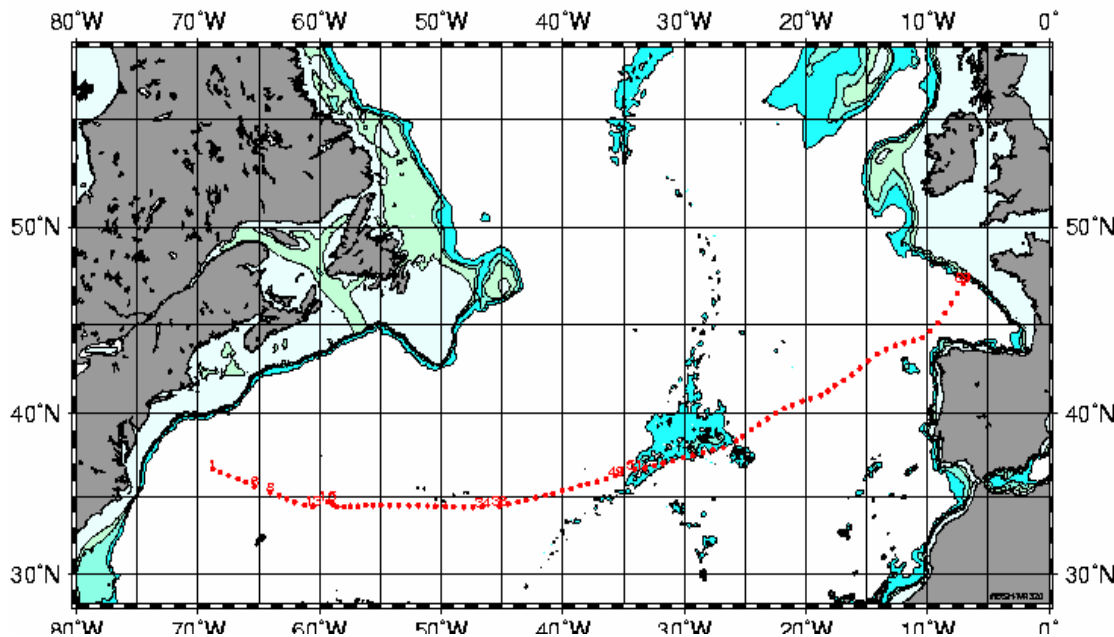


AX-03:
*Rickmers
Dalian*



AX-11
Monte Olivia

AX3: 2007/2008



„Rickmers Dalian“

2007: 3 cruises in January, June and October

2008: 2 cruises in March and July

Problem:

Section is often incomplete, crew changes rapidly, transfer of knowledge is difficult.

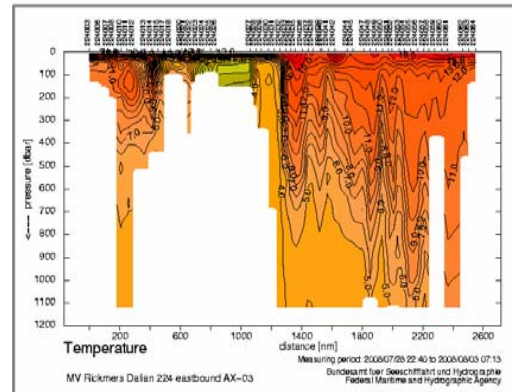
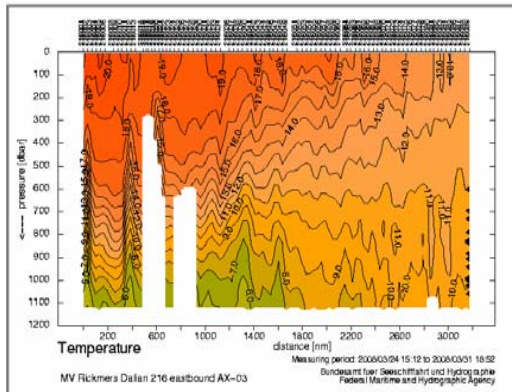
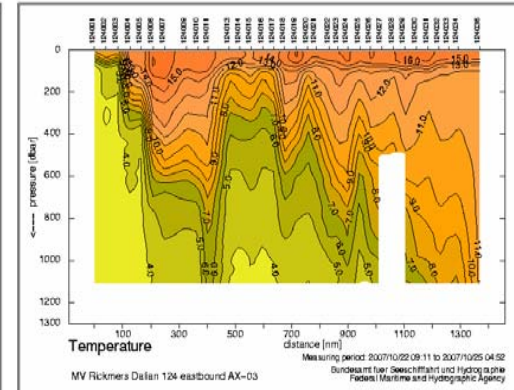
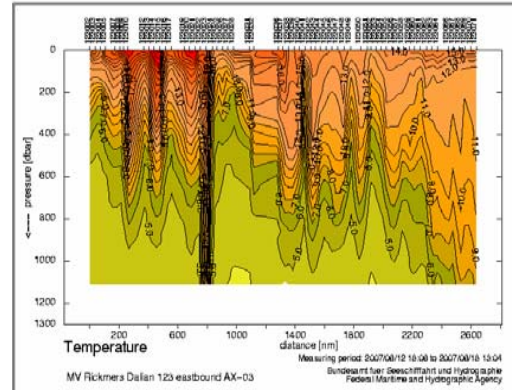
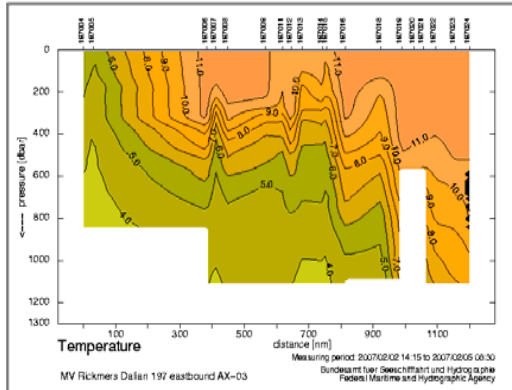
Shipping company is being contacted. It is anticipated to either look for a new ship or try to resolve problems through renewed training.

AX3: 2007/2008



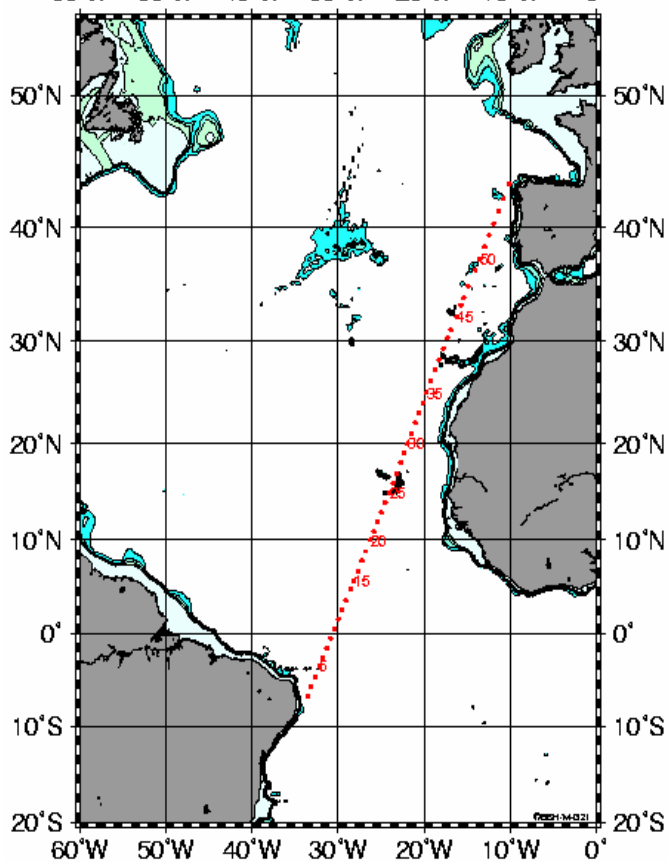
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2007



2008

AX11: 2007/2008



„Monte Olivia“

2007: 9 cruises

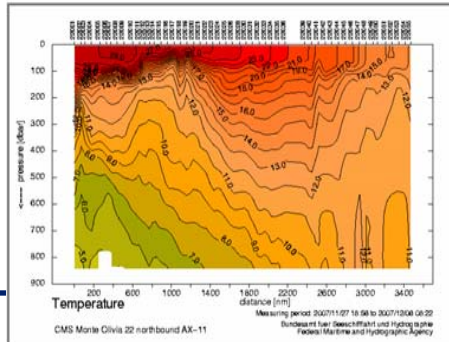
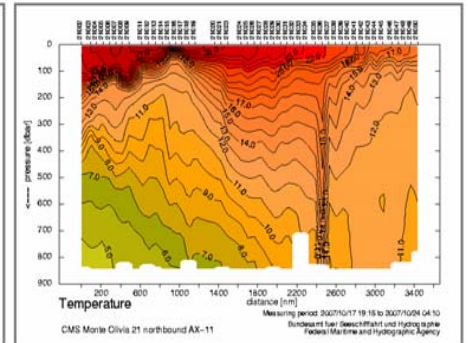
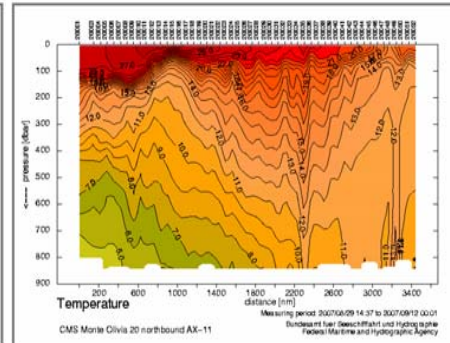
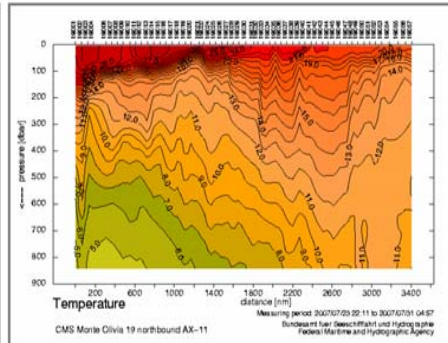
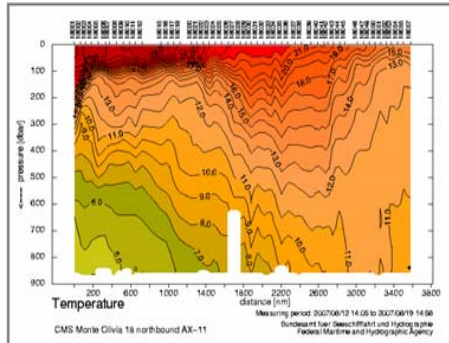
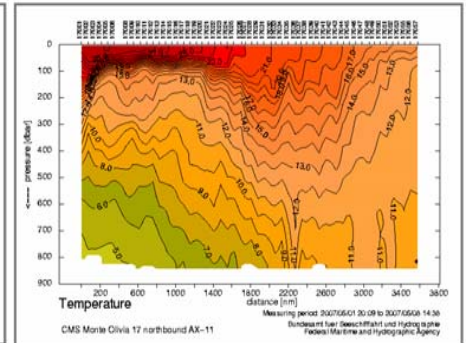
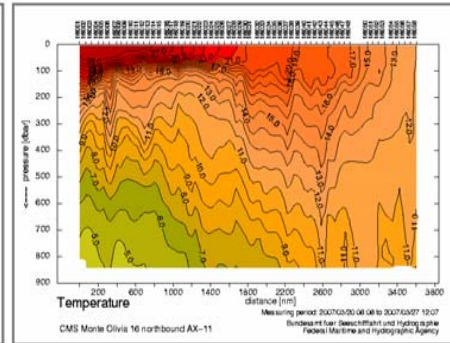
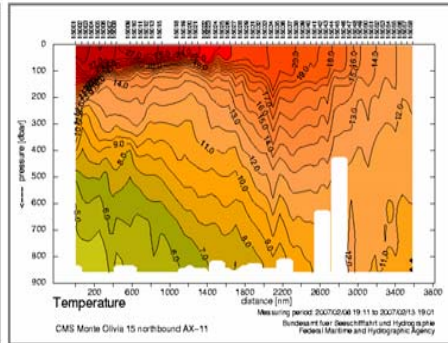
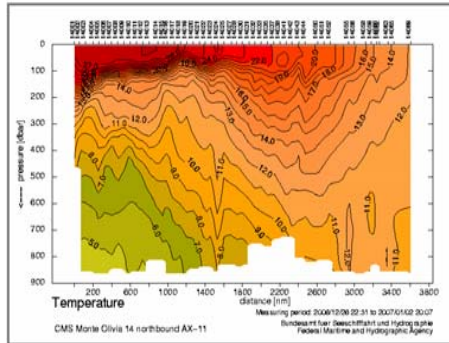
2008: 8 cruises

Very reliable ship crew, new Devil XBT device has been installed in 2008.

Problem:

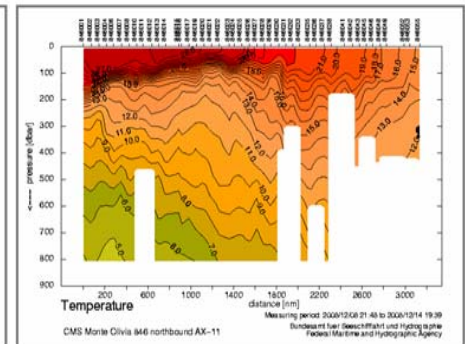
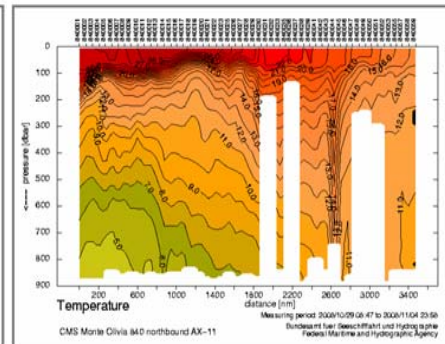
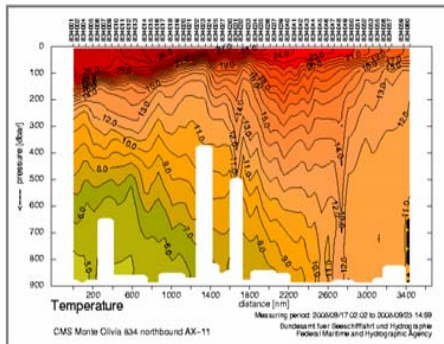
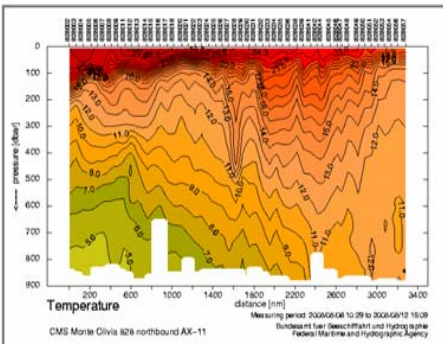
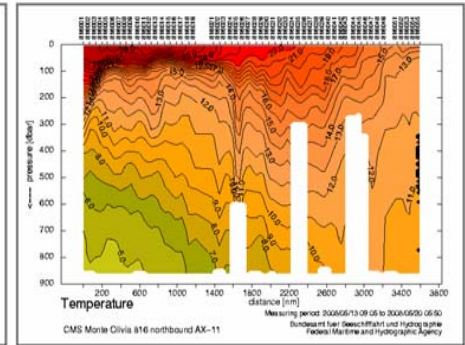
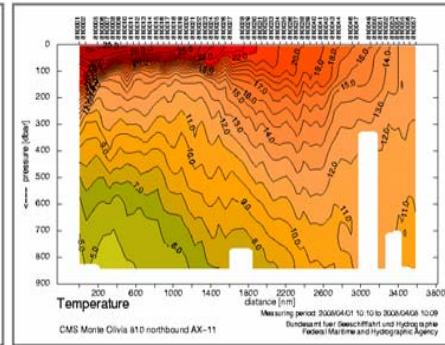
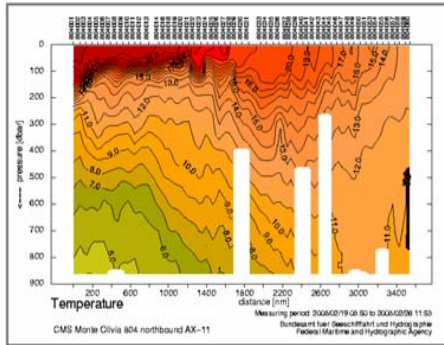
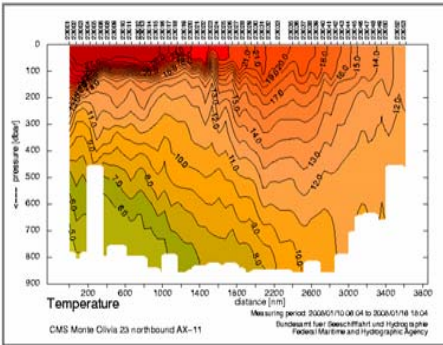
„Monte Olivia“ has been moved to another route. But *Hamburg Süd* offers a replacement ship. Will be equipped in August. Consultation with shipping company is scheduled.

AX11: 2007/2008



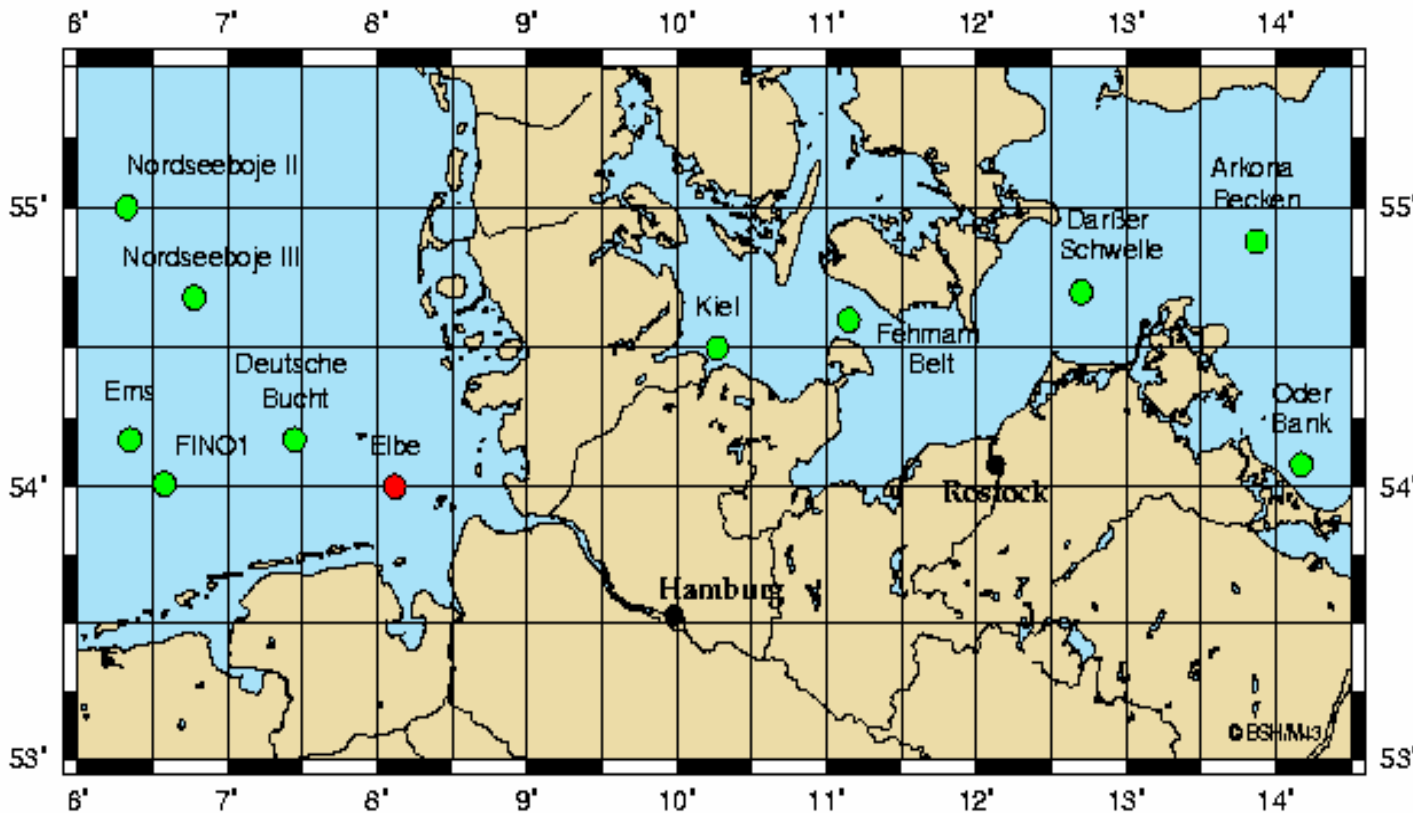
Temperature section for the nine
2007 repeats

AX11: 2007/2008



Temperature section for the eight
2008 repeats

GTS data from monitoring network

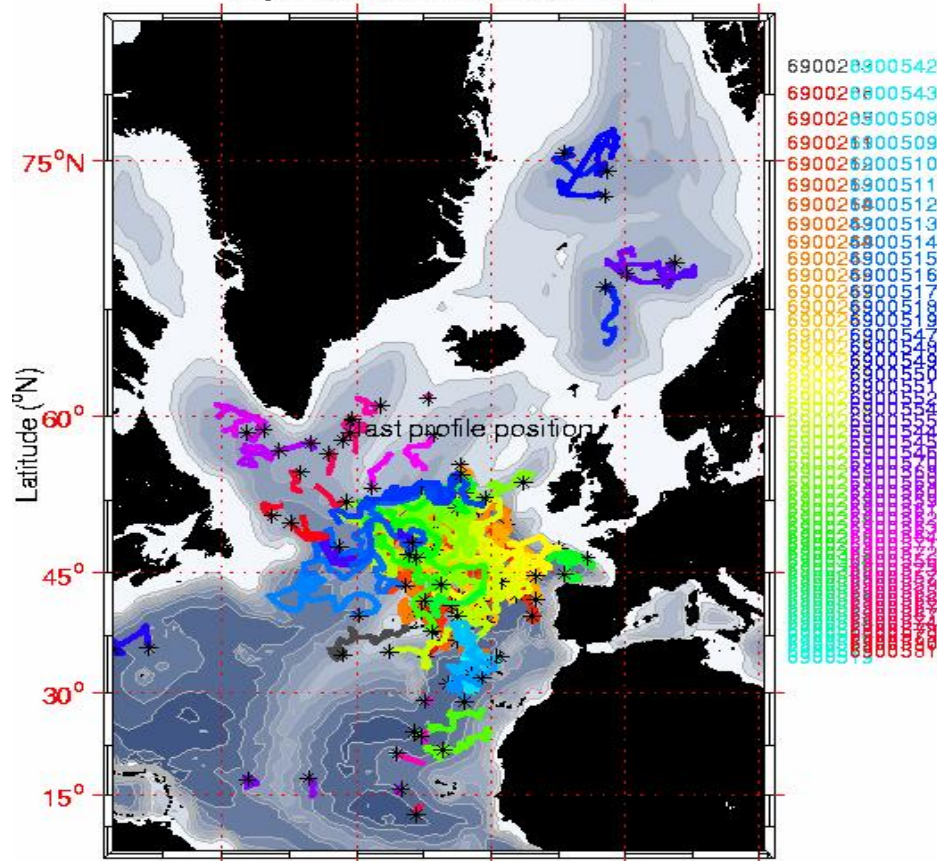


MARNET
monitoring network
transmits ~ 6500 JJVV
messages per year

**Marine Environmental
Monitoring Network
in the North Sea and
Baltic Sea**

GTS data from argo network

Trajectories of active BSH floats



Presently the BSH operates 103 active floats; data are sent into GTS through the DAC Coriolis in Brest



Thank you

