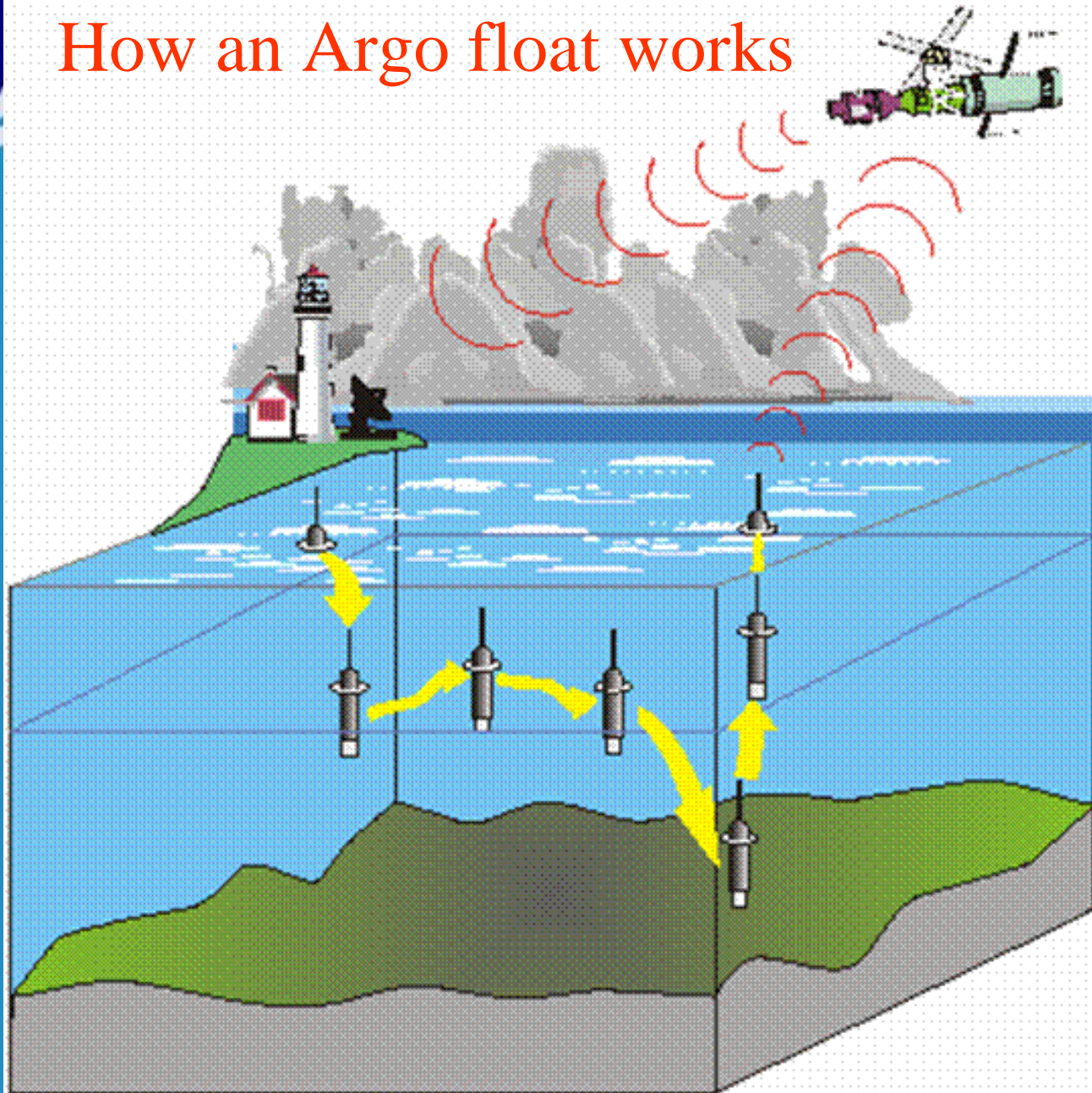


# USA Data Assembly Center & Atlantic Deployments at AOML

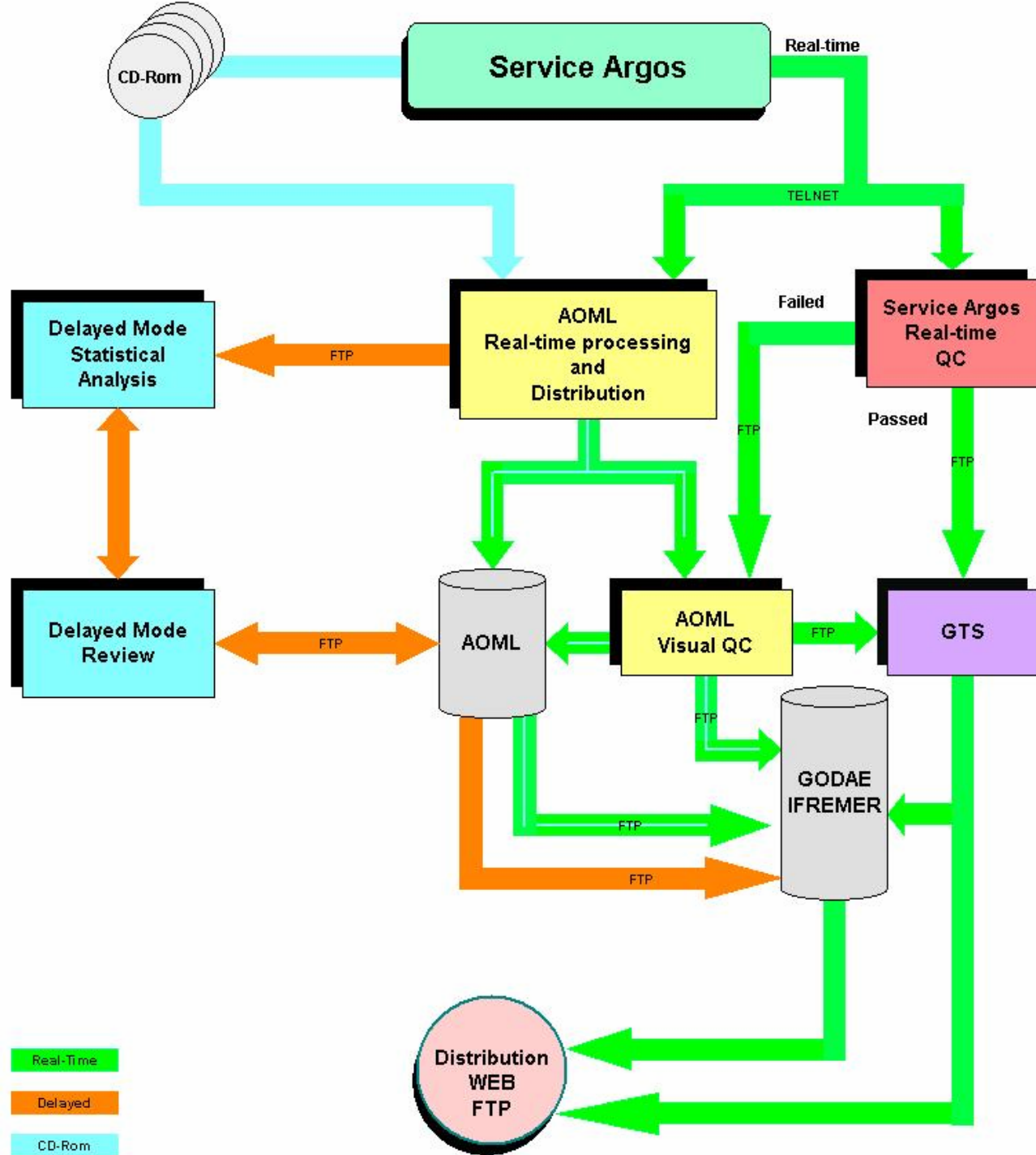
*(NOAA/AOML and CIMAS/UM)*

*presented by  
Claudia Schmid*

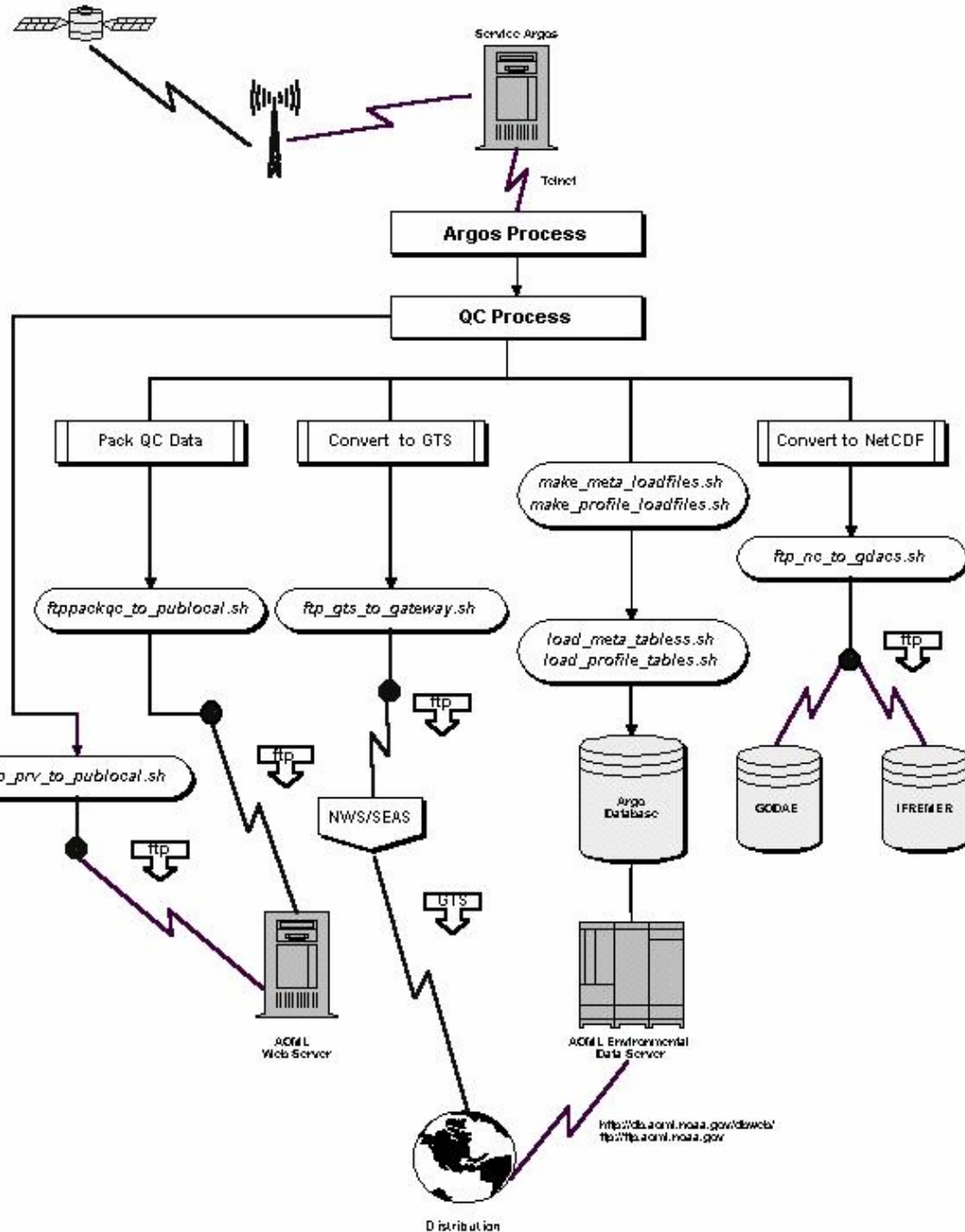
# How an Argo float works



# Data flow

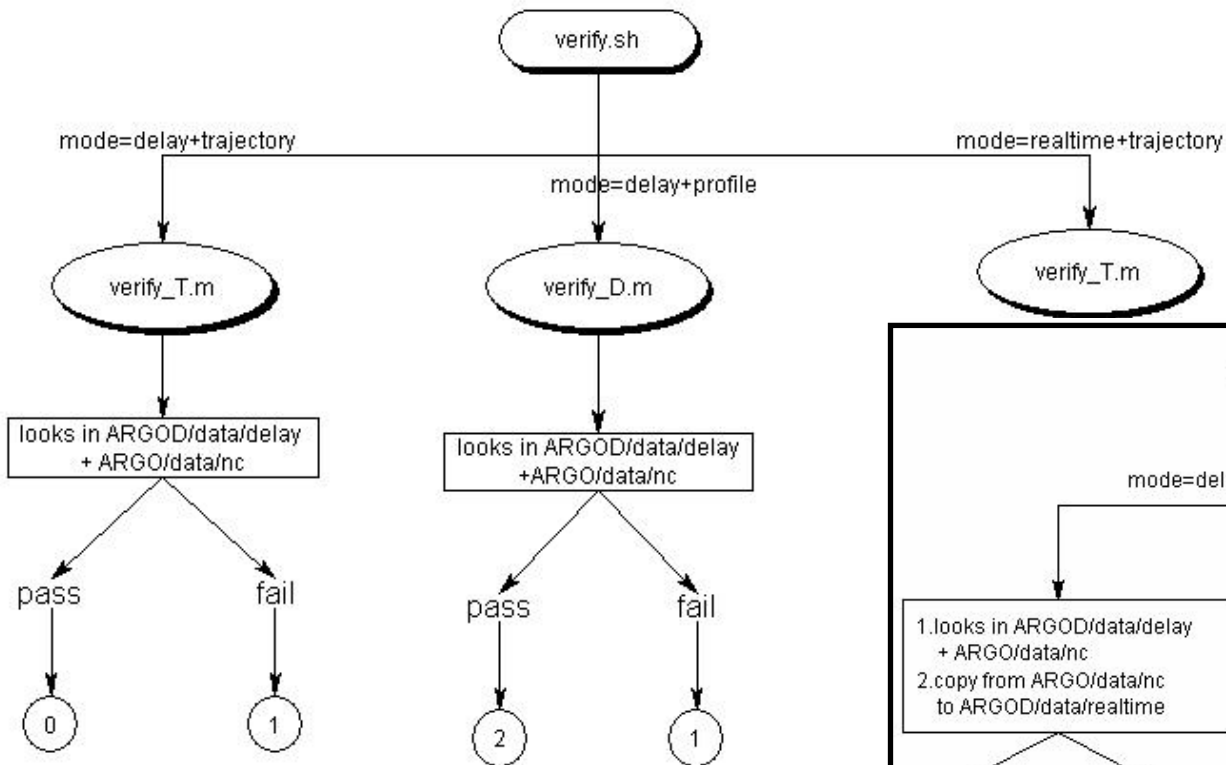


# US Argo Real-time Data Processing System



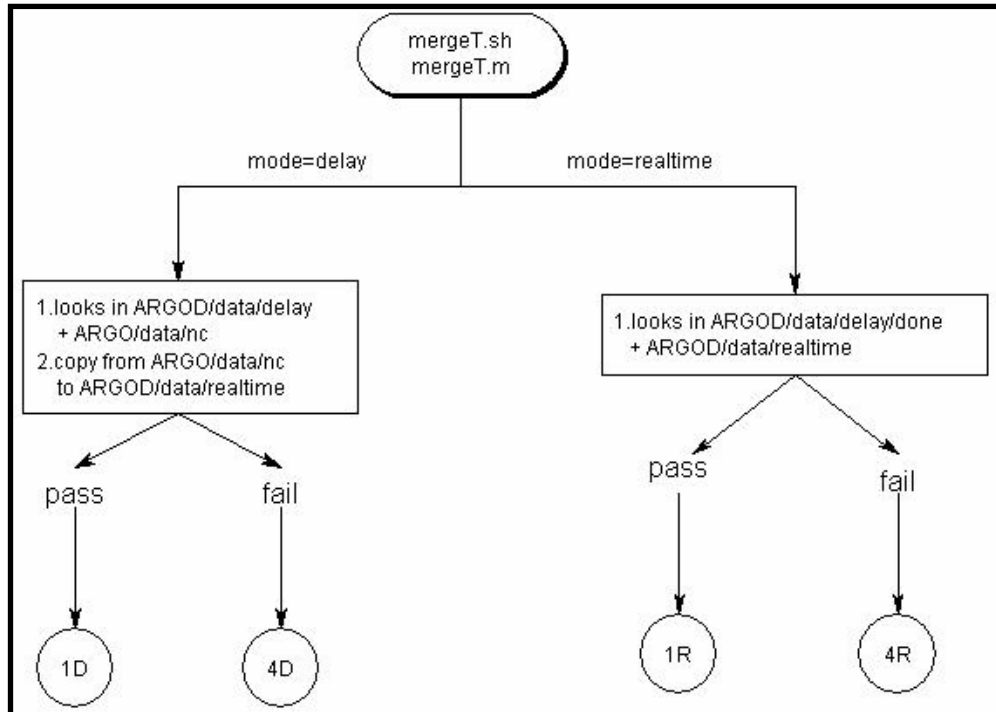
Real-time  
processing  
system

# Delayed-mode processing system



**Status**

- 0.no action
- 1.move file from ARGOD/data/delay to ARGOD/data/delay/failure\_verify
- 2.move file from ARGOD/data/delay to ARGOD/data/delay/done
- 3.move file from ARGOD/data/realtime to ARGOD/data/realtime/failure



**Status**

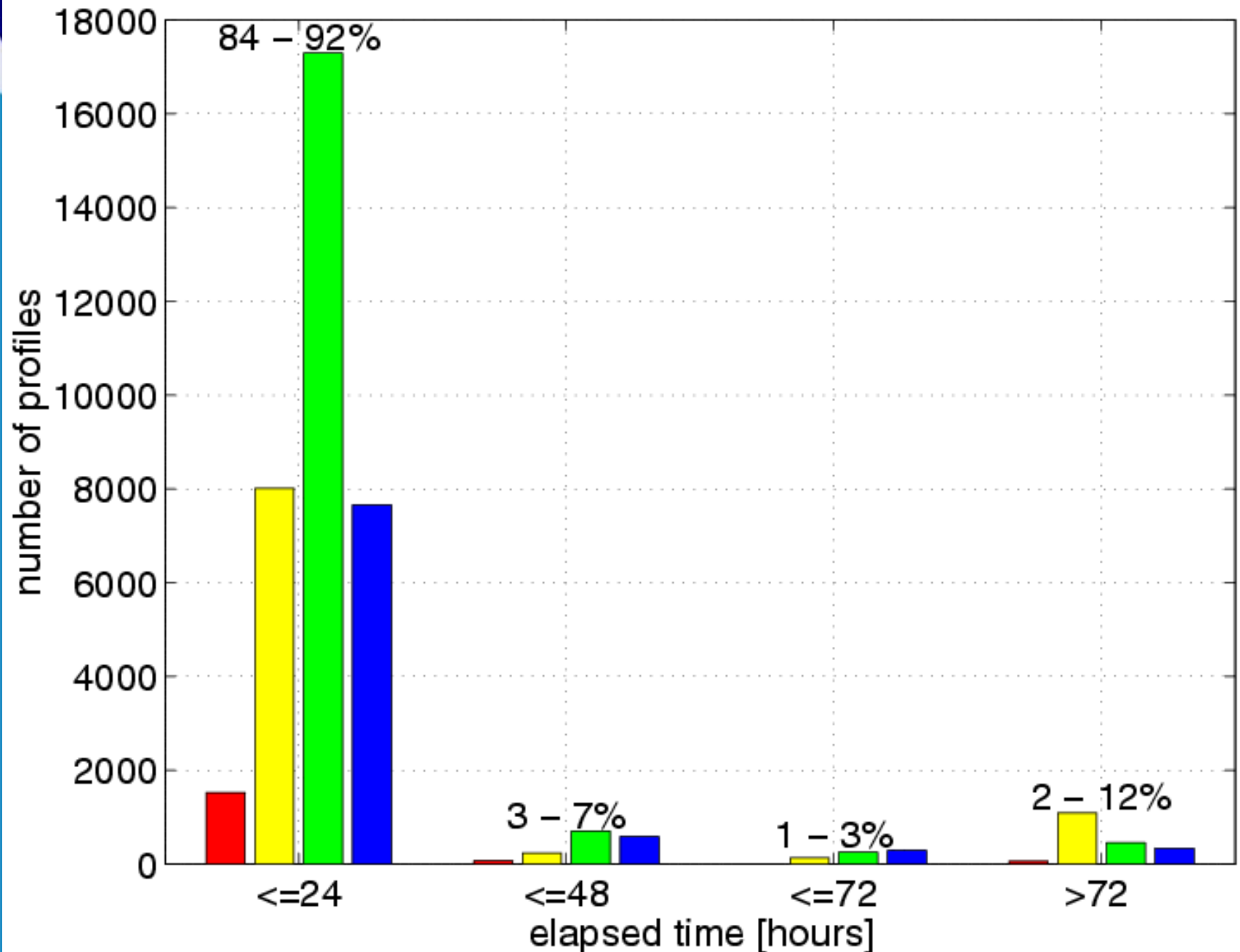
- 1D. move file from ARGOD/data/delay to ARGOD/data/delay/done and move file from ARGOD/data/realtime to ARGOD/data/nc and make a backup of the original realtime trajectory file to /a1/ARGO/data/nc/sav
- 4D. move file from ARGOD/data/delay to ARGOD/data/delay/failure\_merge and remove file from ARGOD/data/realtime
- 1R. move file from ARGOD/data/realtime to ARGOD/data/nc make a backup of the original realtime trajectory file to /a1/ARGO/data/nc/sav
- 4R. move file from ARGOD/data/realtime to ARGOD/data/realtime/failure



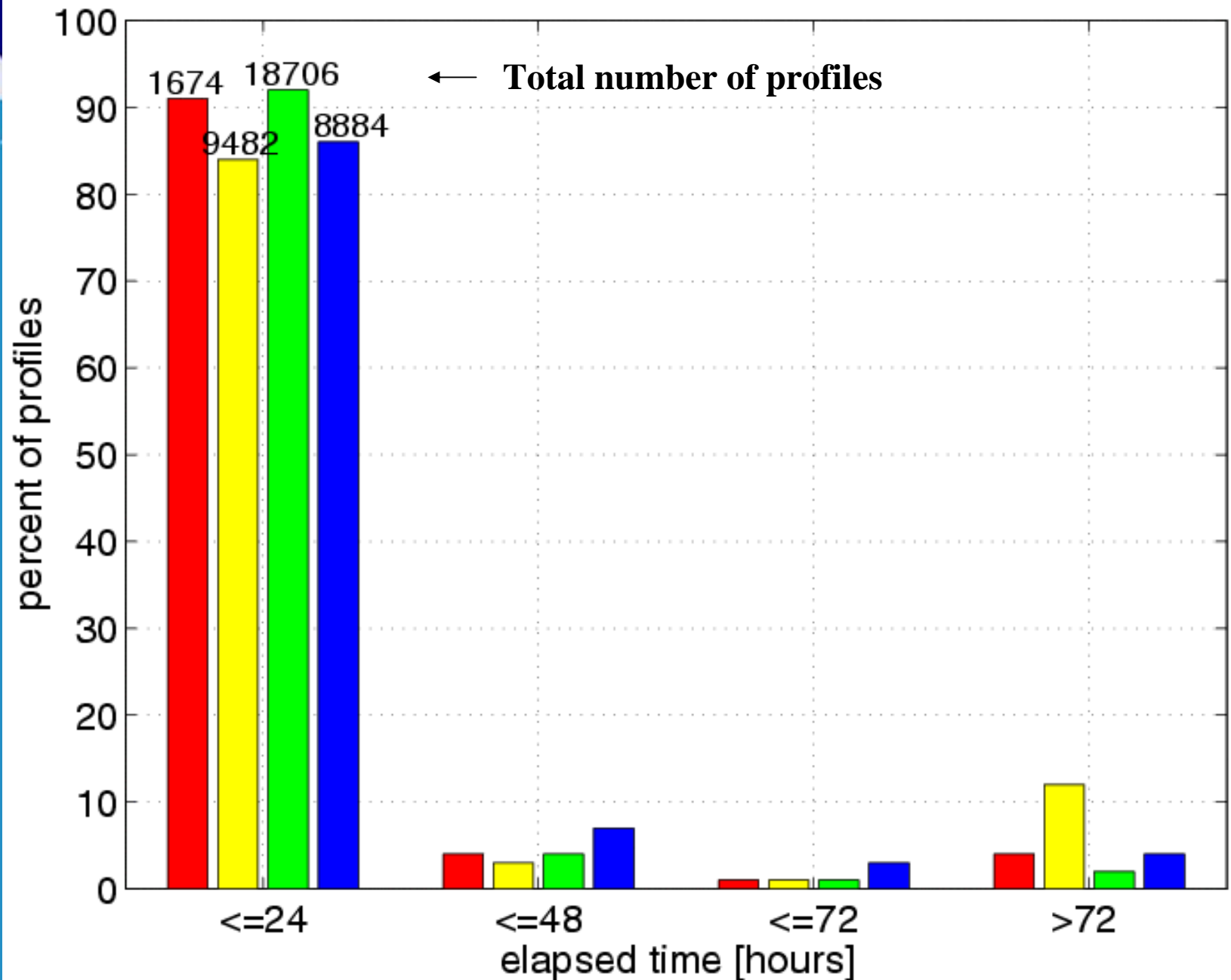
## **System Monitoring**

- **Short email reports from each process.**
- **Log files for problem solving.**
- **Web page for documentation, monitoring, visualization and data distribution:  
[www.aoml.noaa.gov/phod/ARGO//HomePage/](http://www.aoml.noaa.gov/phod/ARGO//HomePage/)**

# GTS statistic, status May 3, 2005

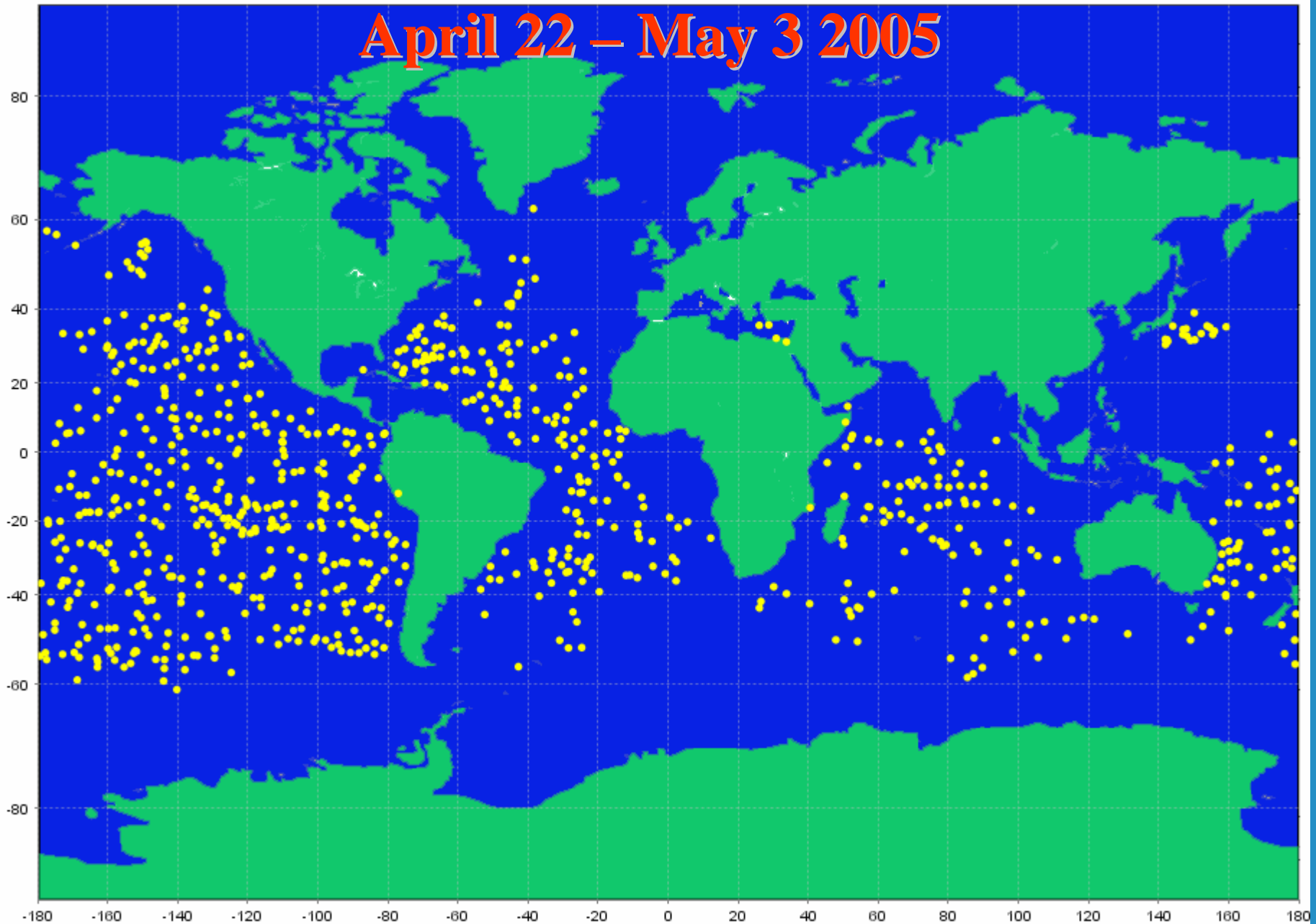


# GTS statistic, status May 3, 2005

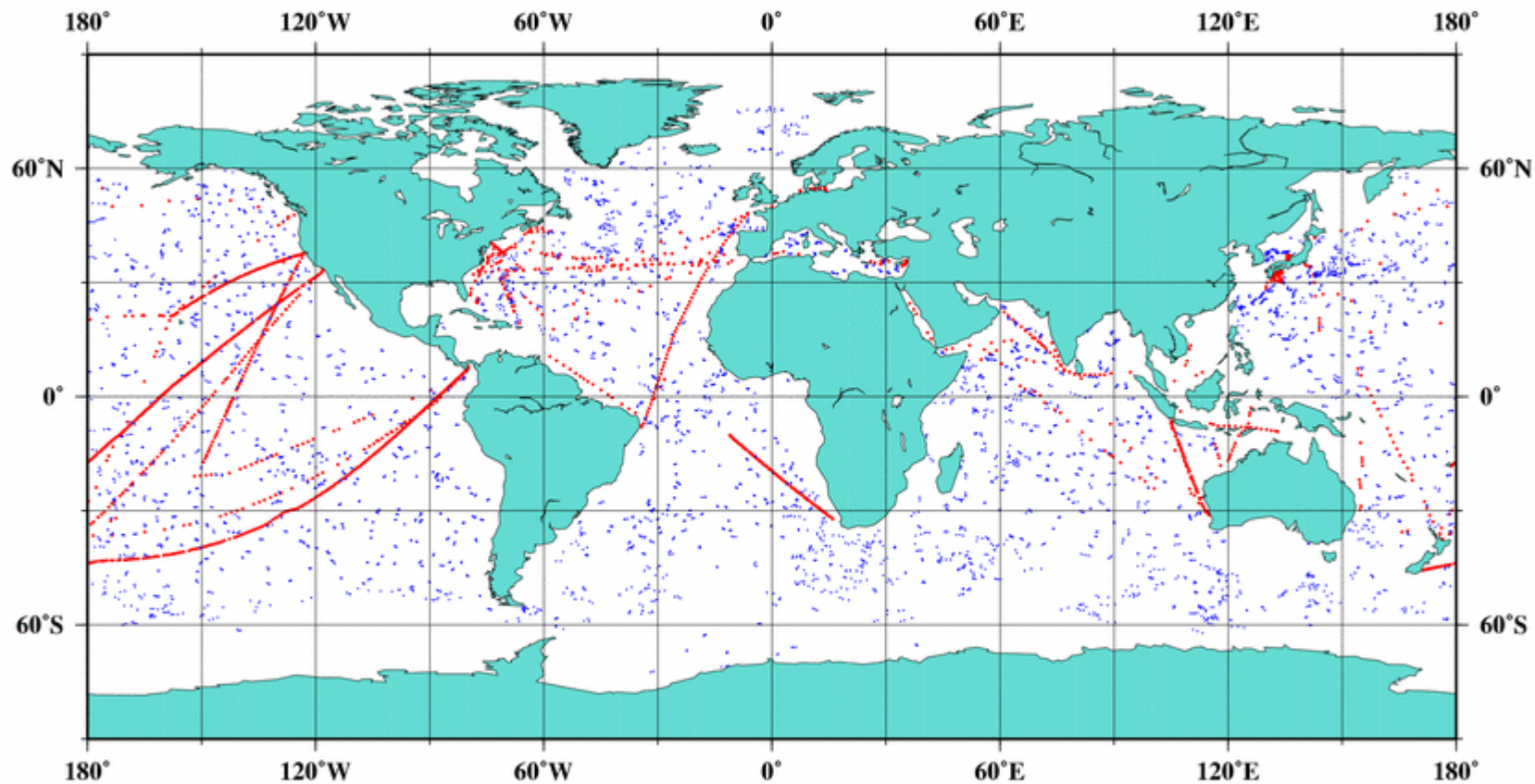




# Global US Argo profiles collected in April 22 – May 3 2005



### Number of Profiles Obtained in Mar-2005

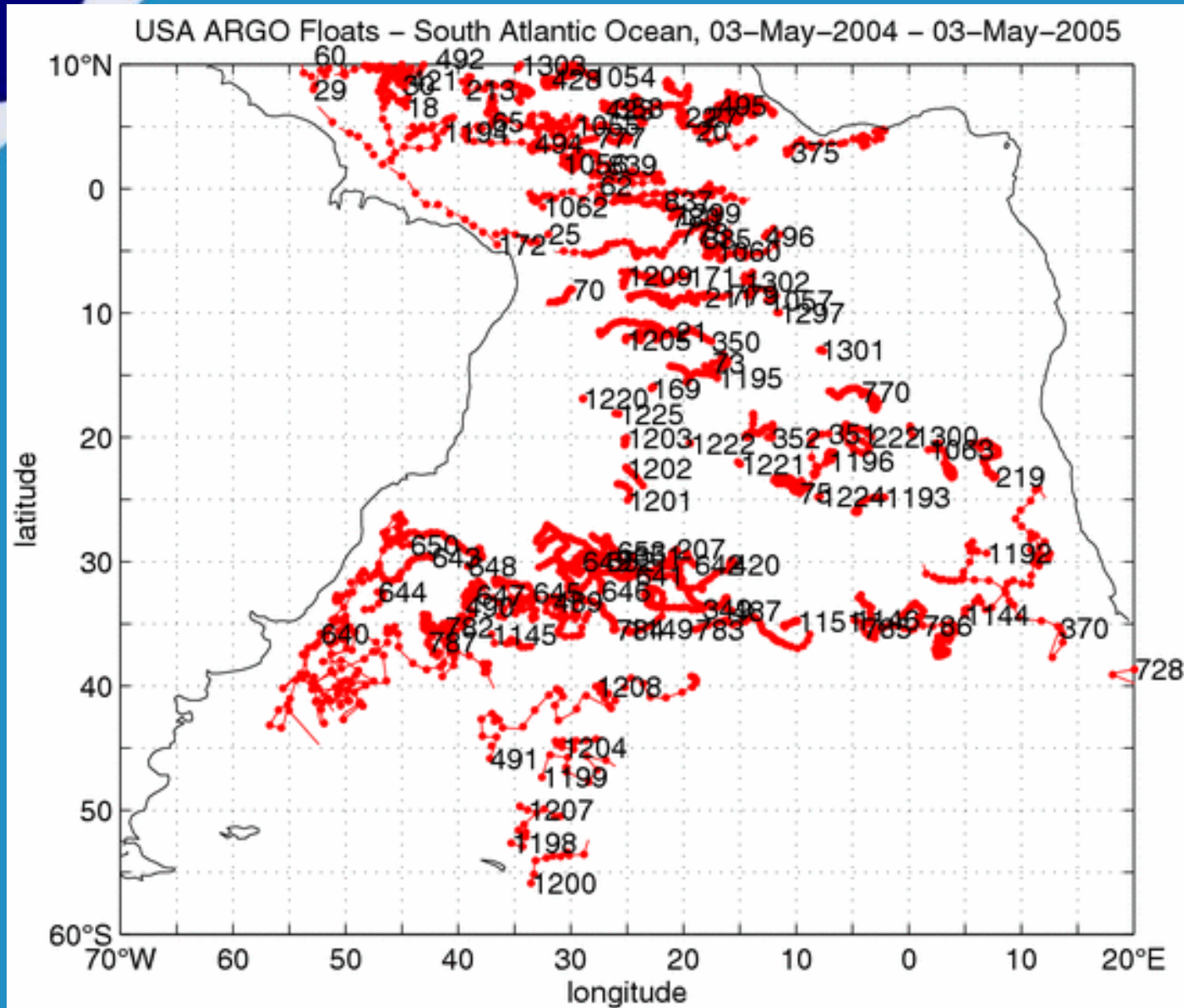


ARGO=5260

XBT=2173



# Trajectory plots



# Automatic quality control

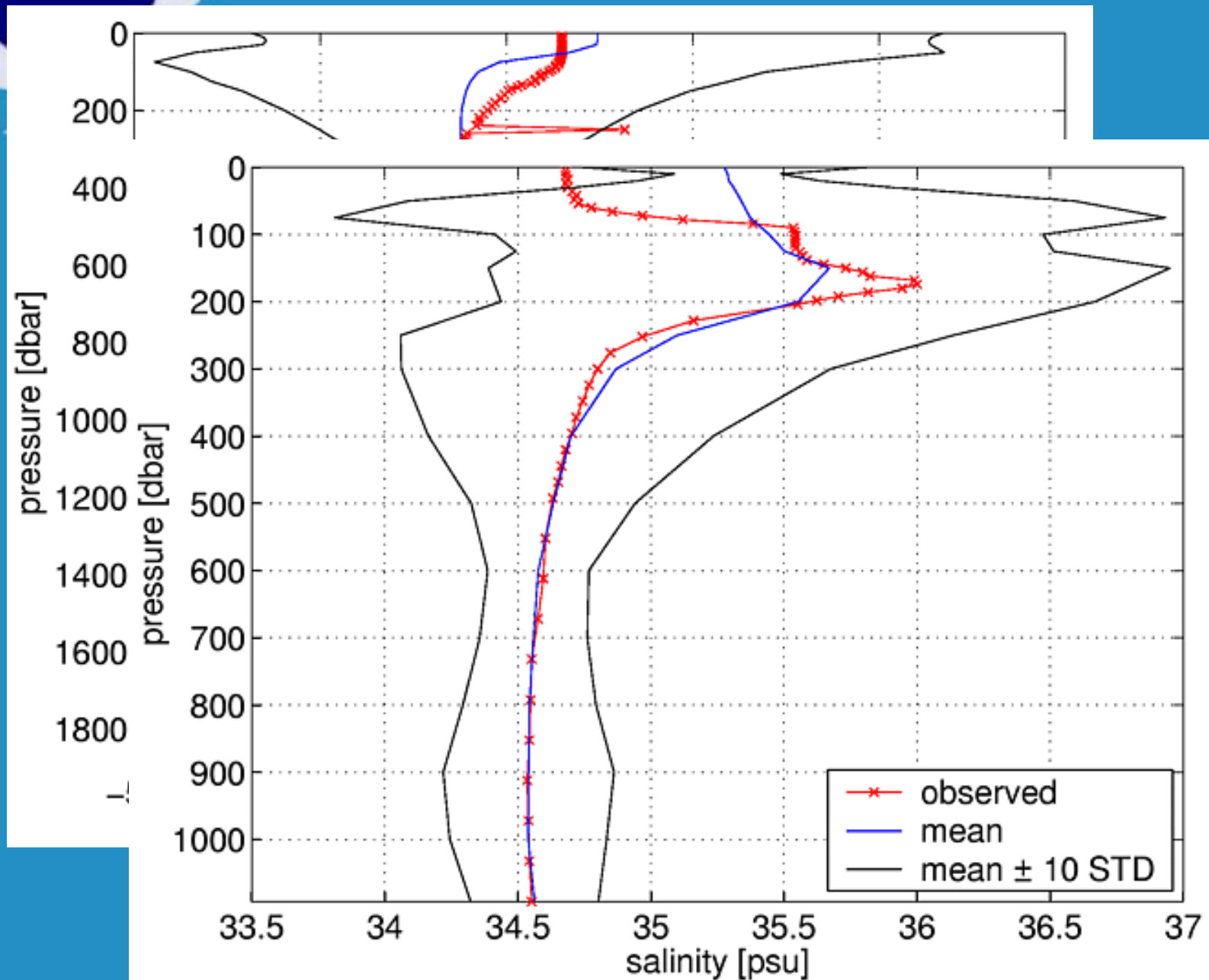
- 1. Platform Identification**
- 2. Impossible Date**
- 3. Impossible Location**
- 4. Position on Land**
- 5. Impossible Speed**
- 6. Global Range**
- 7. Regional Global Parameter (Red Sea, Mediterranean Sea)**
- 8. Pressure Increasing**

Documents are at [http://www.ifremer.fr/coriolis/cdc/argo\\_rfc.htm](http://www.ifremer.fr/coriolis/cdc/argo_rfc.htm)

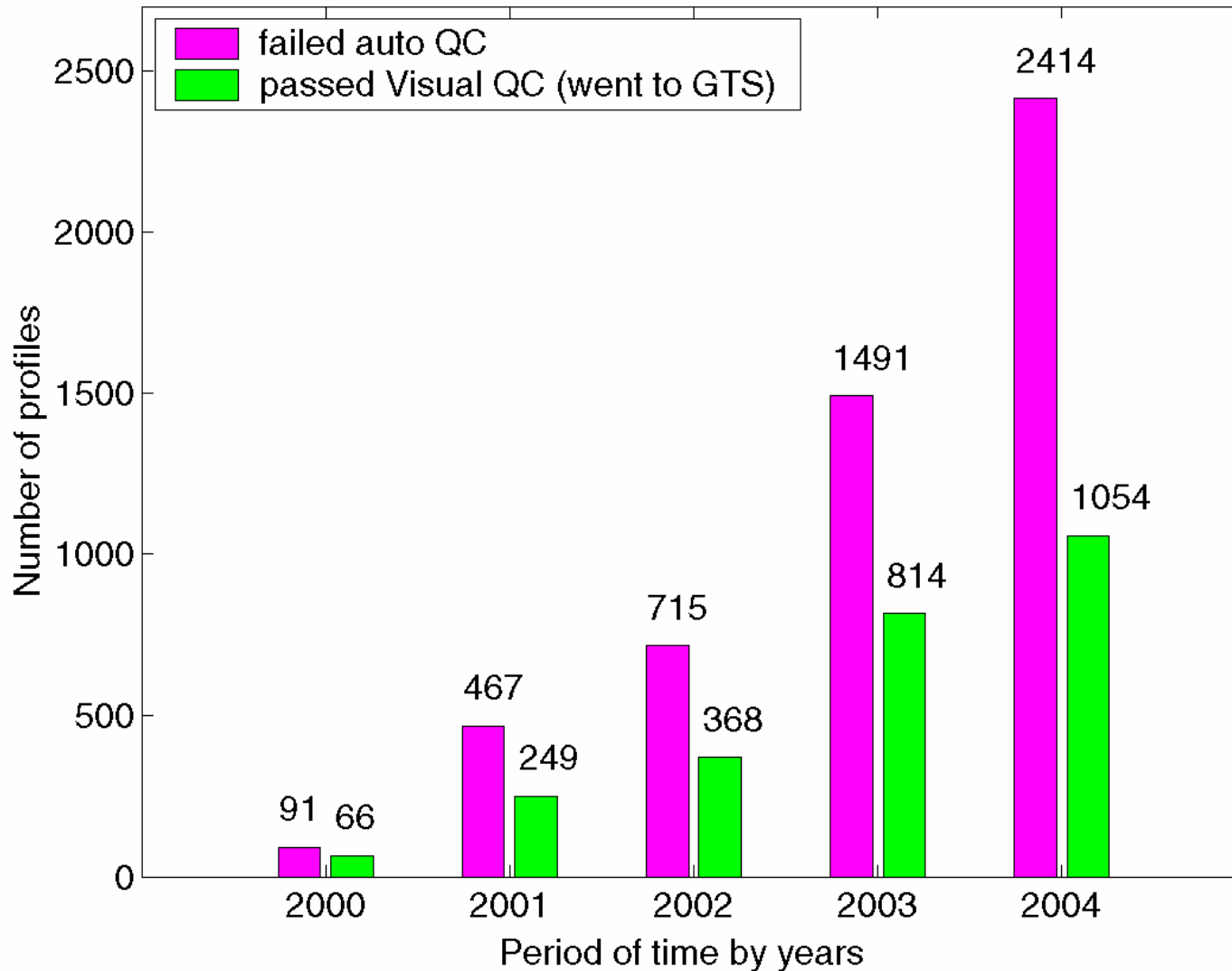
# **Automatic quality control**

- 9. Spike Test**
- 10. Top and Bottom Spike**
- 11. Gradient Test**
- 12. Digit Rollover test**
- 13. Stuck Value test**
- 14. Density Inversion test**
- 15. Grey List**
- 16. Gross Salinity or Temperature Sensor Drift Test**
- 17. Frozen profile test – to be adopted**

# Visual quality control



# Quality control statistics





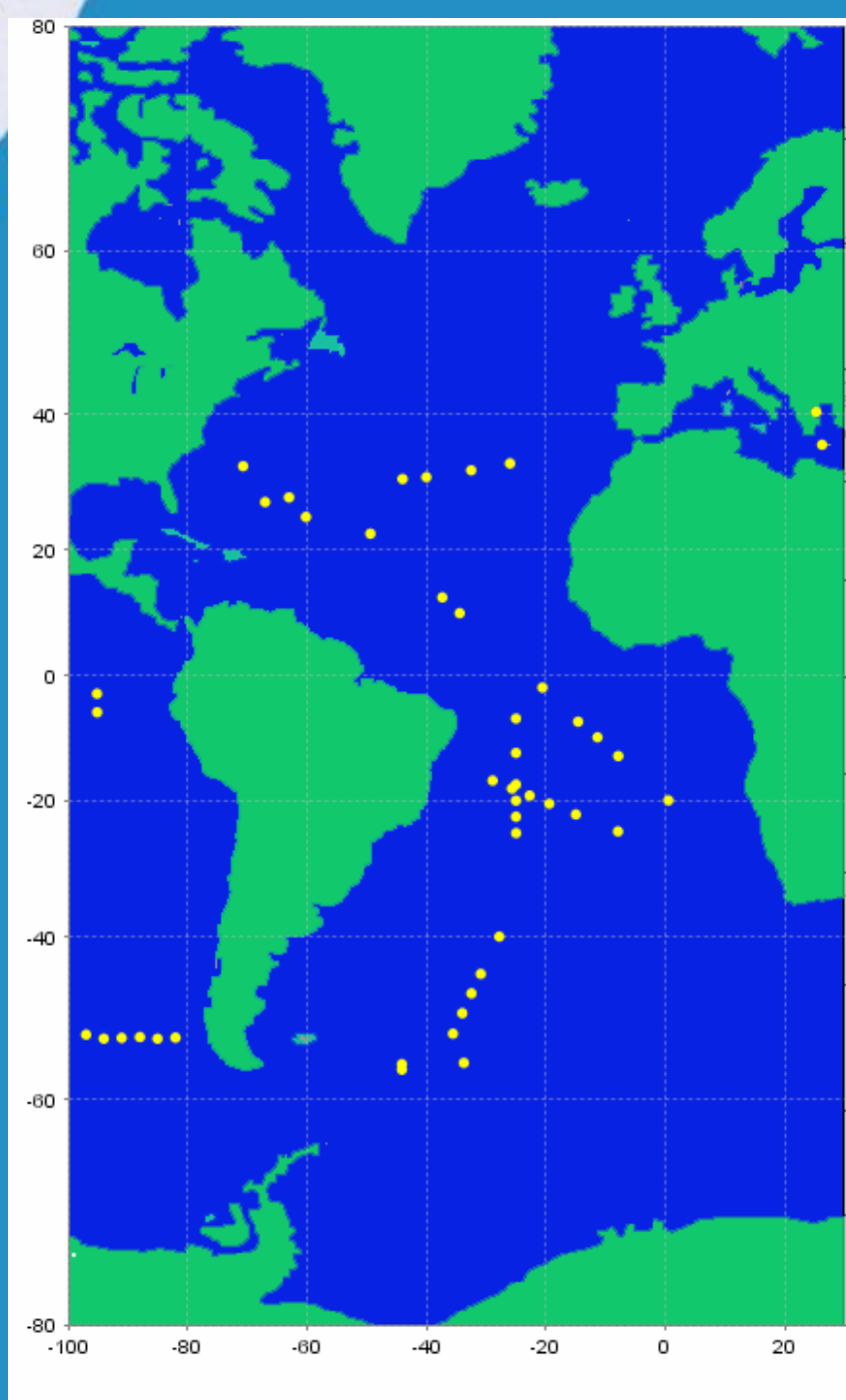


## Atlantic Ocean deployments

AOML is responsible for the deployment of the floats produced and provided by WHOI.

This includes:

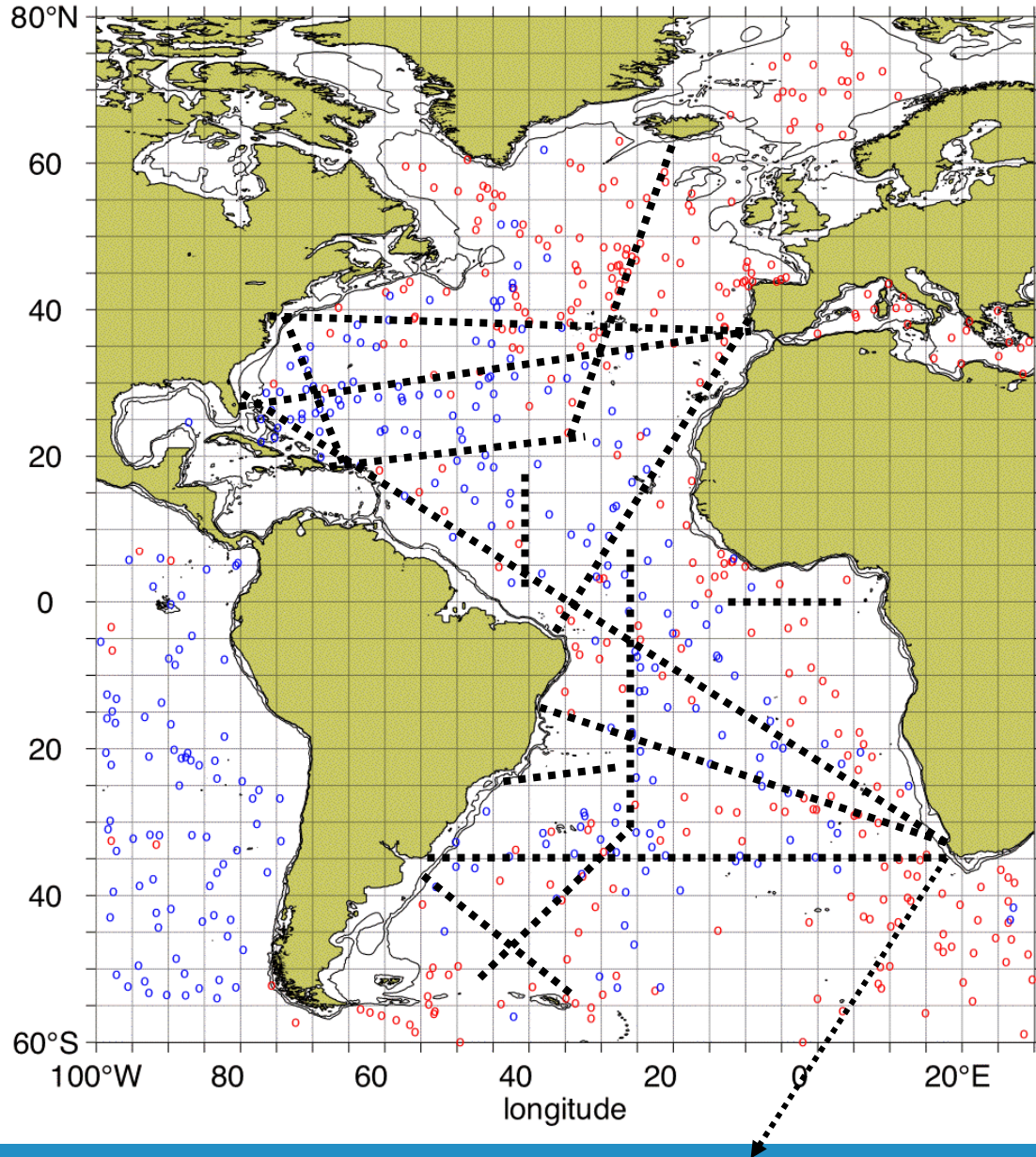
- Look for deployment opportunities (VOS and R/V)
- Choose the deployment sites
- Provide a rider to perform the deployments.



Atlantic Argo  
floats deployed by  
AOML since  
January 1, 2005

Plans for Atlantic  
deployments  
during 2005:  
100 floats.

ARGO May 5, 2005 Red: international; Blue: USA



# The positions of the active floats in the Atlantic Ocean (as of May 2005)

**Blue points** USA floats  
**Red points** All other countries.

The number of floats have increased gradually, at this moment there are about **500 floats** working in the Atlantic Ocean.

..... Lines available for Deployment in 2005