A suggested approach to the management of UK glider data

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Outline

- BODC: An overview
- BODC and gliders
- Advantages of coordinated data management
- The Argo data management model
- A suggested approach for UK glider data management
- Summary
- Questions/Discussion

BODC's role

As the UK's national marine data centre:

- To provide data management support to national and international marine science
- To make high quality data readily available to research scientists in academia, government and industry
- To collaborate in the international exchange and management of oceanographic data – IOC, SeaDataNet.

Examples of BODC activities

- UK Tide Gauge Network
- RAPID Climate Change and RAPID-WATCH
- Seal tag data telemetry (SMRU)
- Argo

Gliders and BODC: The story so far

SAMS and BODC:

- Working closely with the glider team at the Scottish Association for Marine Science (SAMS)
- Providing real time off-site backup archive of Talisker Mission 1 data
- Still to handle delayed mode data

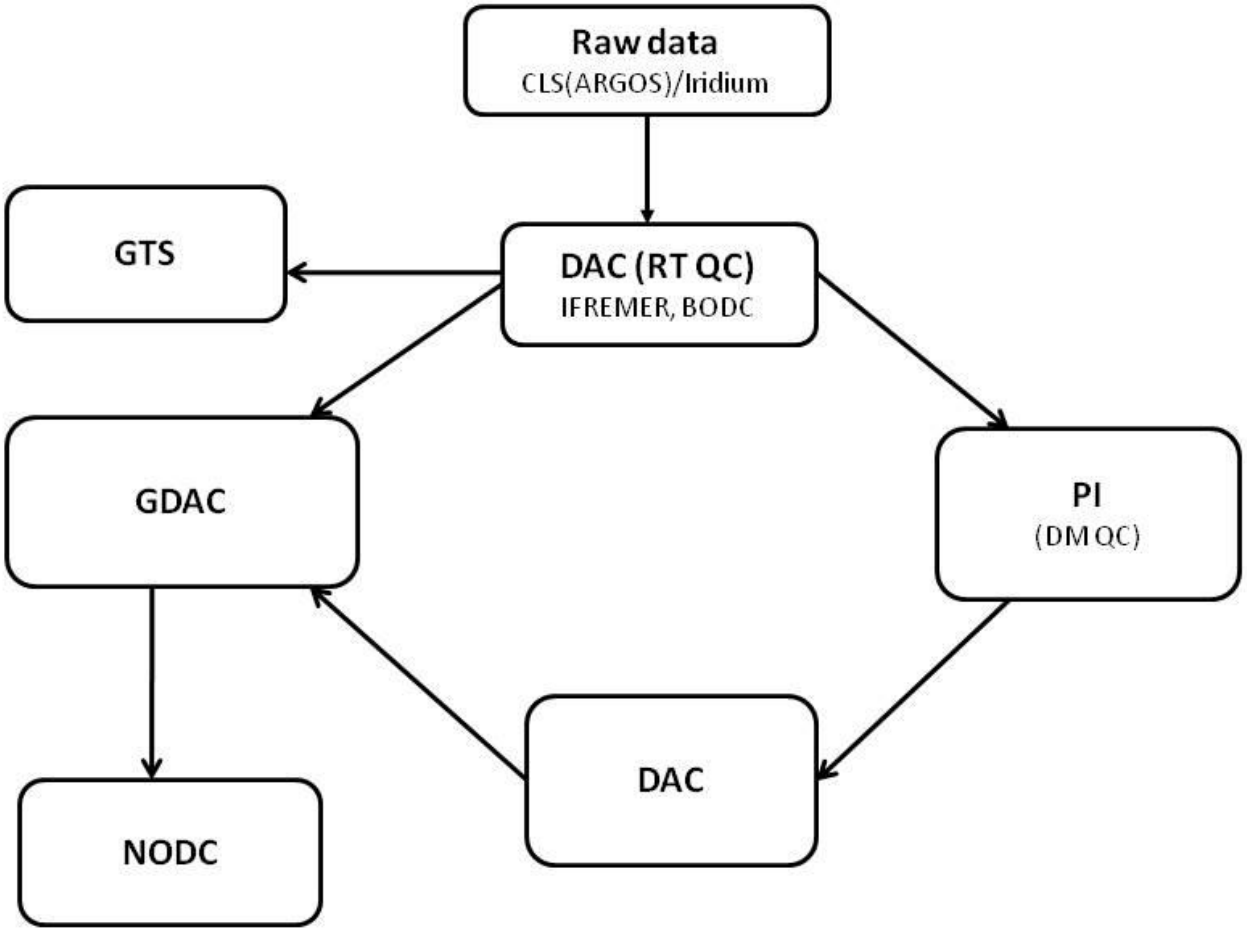
- A need for a coordinated UK approach to glider data management.

Advantages of coordinated data management

- Secure, centralised backup of data
- Efficient data delivery mechanisms
- Greater consistency of data exchange formats
- Ability to implement common metadata standards
- Avoids duplication of effort

= More time to do science.

The Argo model



Glider use in the UK

Broadly speaking, two distinct types of deployment:

1) ‘Process’ type studies – short duration, spatially restricted, typically associated with a cruise. Designed to answer a specific question.

2) ‘Sustained observation’ studies – longer duration, regional scale missions. Typically repeated sections. Of interest to the ocean modelling and forecasting community.

Suggested approach for UK glider data – Real Time

- Acquisition and archive by Data Assembly Centre (DAC)
- Automated QC checks on behalf of UK community (modified Argo routines) – flagging of suspect data
- Delivery of QC RT data from DAC to Principal Investigator

For sustained observations:

- Delivery of QC RT data to Global Telecommunication System (GTS) and Global Data Assembly Centre (GDAC).

Suggested approach for UK glider data – Delayed Mode

- Delivery of delayed mode data from Principal Investigator to DAC (processed, calibrated, QC'd)
- Transfer to agreed international exchange format by DAC (use of controlled vocabularies)
- Banking of data within the UK's National Oceanographic Database with supportive documentation
- Dissemination to GDAC as appropriate.

Summary

- Clear requirement for a coordinated approach to glider data management in the UK
- A data management model based on Argo would be appropriate
- A need to explore opportunities for collaboration.

Questions?

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