

I nternational Q uality-controlled O cean D atabase

Friday 2/28/2014 | 11:00 | Room 317 AB

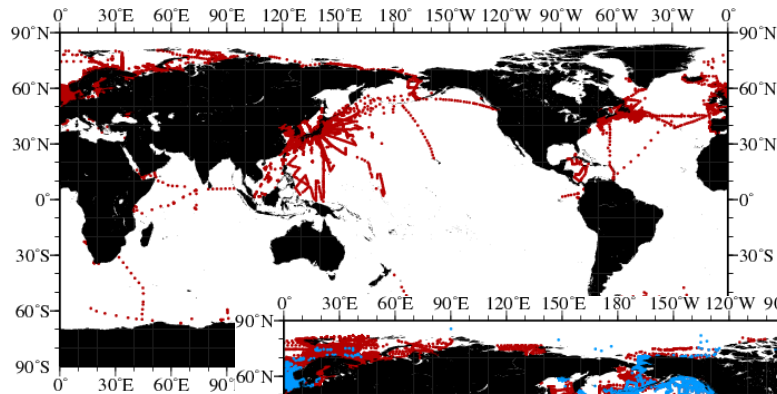
[IQUOD – INTERNATIONAL QUALITY CONTROLLED OCEAN DATABASE FOR DATA ASSIMILATION EFFORTS AND CLIMATE VARIABILITY AND CHANGE STUDIES](#)

Domingues, C. M., Antarctic Climate and Ecosystems Cooperative Research Centre, Australia, catia.domingues@csiro.au; on behalf of the CLIVAR GSOP workshop team.

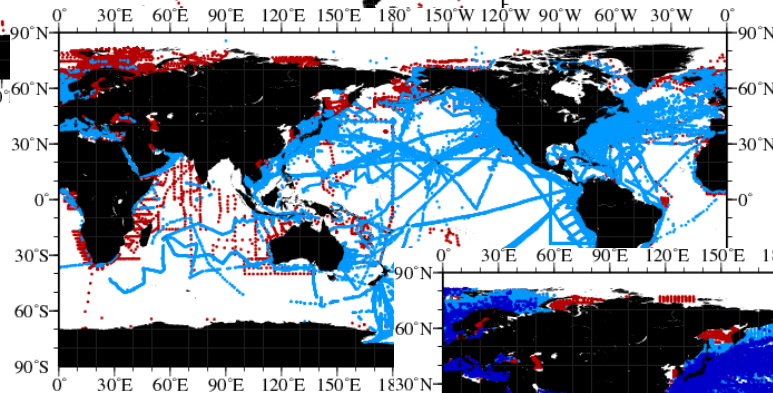
*An internationally-coordinated initiative to develop a
high-quality climate-standard
historical global subsurface ocean temperature
(salinity) database*

Temperature Data During Peak of Different Observing Systems

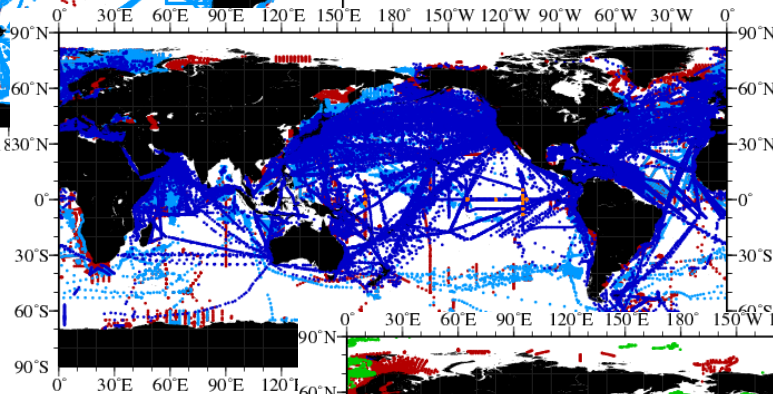
1934 : Nansen Cast



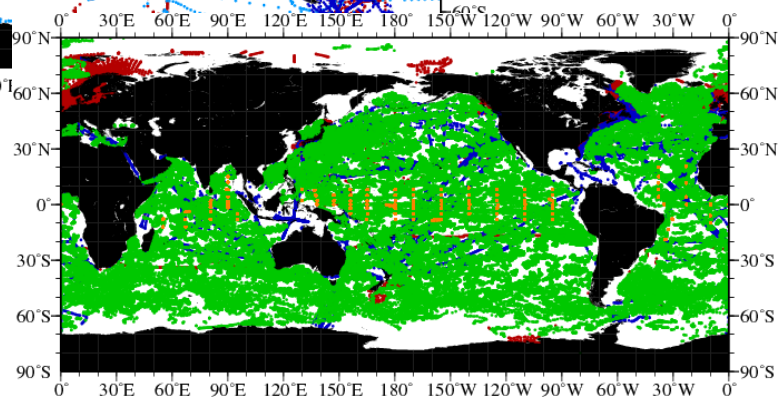
1960 : MBT



1985 : XBT



2009 :
Argo



Red=Nansen Cast /CTD[1890s/1964]

Light Blue=MBT [1939]

Dark Blue=XBT [1967]

Green=Argo float [2001]

Orange=Tropical buoy [1984]

Effects of observing systems on climate signals

Session 020:

2/24/2014 | 15:00 | Room 315

EFFECTS OF CLIMATOLOGY TEMPERATURE SHIFTS ON ESTIMATIONS OF GLOBAL OCEAN HEAT CONTENT

Lyman, J. M., JIMAR-PMEL, USA, John.Lyman@noaa.gov; Johnson, G. C., PMEL, USA, Gregory.C.Johnson@noaa.gov;

2/24/2014 | 15:30 | Room 315

THE IMPACTS OF OCEAN SUBSURFACE OBSERVATION SYSTEM ON ESTIMATING GLOBAL OCEAN HEAT CONTENT

Cheng, L., ICCES, Institute of Atmospheric Physics, Chinese Academy of Sciences, China, chenglij@mail.iap.ac.cn; Zhu, J., ICCES, Institute of Atmospheric Physics, Chinese Academy of Sciences, China, jzhu@mail.iap.ac.cn;

IQuOD goals over 5 years:

Bec Cowley

- To produce the highest-quality subsurface ocean temperature database
- Include uncertainties
- With complete metadata
- Want global coordination and support
 - Agreement on best standard QC practices
 - Obtaining new datasets
- Publically available
- Suitable for data assimilation and climate research.



Why are you here?

Catia Domingues

The IQuOD project needs:

Participation from

QC experts/data managers
& scientists & program managers

Examples:

- Additions of previously unavailable datasets to the global database.
- Identification of existing QC activities; QC experts in instrument type; statistical/artificial intelligent.
- Identification of funding sources.



First workshop outcomes

Catia Domingues

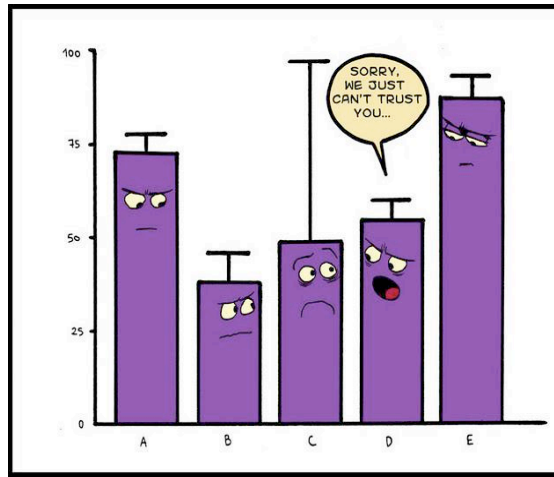
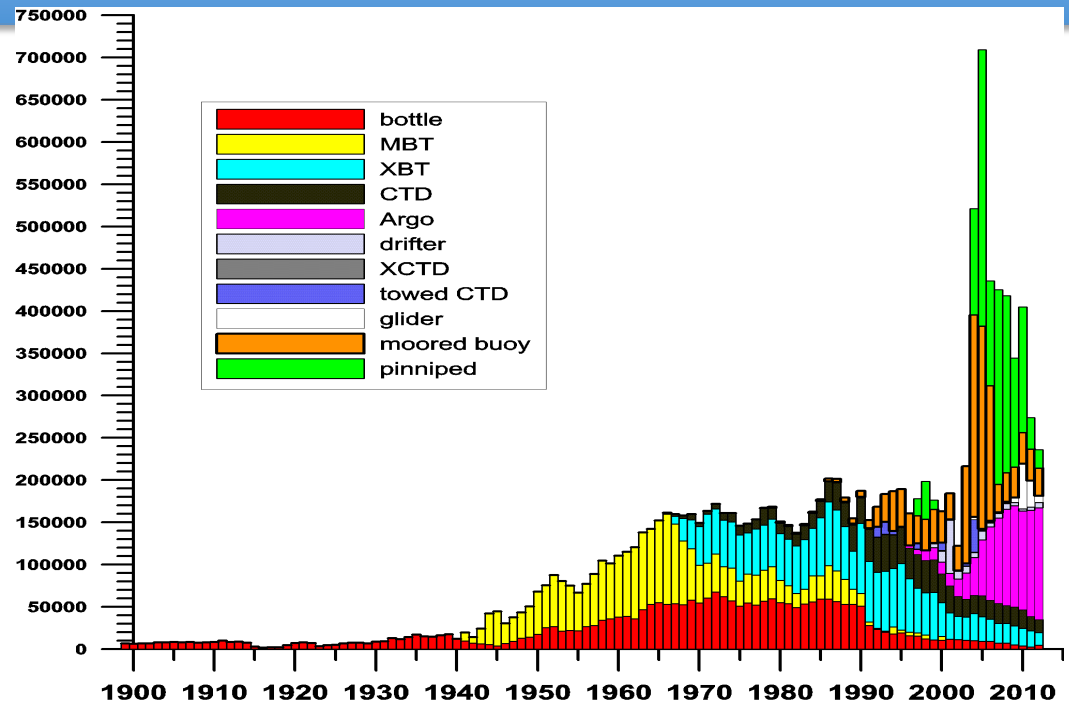
- Who is involved?
- Scientific/Implementation plan development.
- IQUOD timeline.



What is the process?

Tim Boyer

- Auto QC
- Expert/manual QC
- Uncertainty estimates
- New (intelligent) metadata/data
- Serving data



We need experts to:

Alison Macdonald & Gustavo Goni

Contribute:

- Time
- Knowledge
- Data
- Funding

Contact:

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Catia.Domingues@csiro.au

Are there still data to be rescued?

Alison Macdonald & Gustavo Goni

In a letter dated 11 May, 1990 from Lawrence Hall (Director of Ocean Programs, Sippican Inc.) to Greg Withee (director US NODC), it was noted that Sippican had manufactured > 4 million XBTs to date.

In the World Ocean Database, there are 1.3 million XBT profiles which are from drops prior to the end of 1990.

Funding

Steve Diggs

Want to use national
programs to fund this
international effort

Eg: Horizon2020



IQUOD meetings:

2nd workshop:

NOAA, Silver Spring/Washington DC

June 4-5, 2014

CLIMAR-IV, June 9-13, 2014

GTSP, Oostende, Belgium. ½ day session.

June 17-20, 2014.

Thanks!



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Russian Academy of Sciences
P.P.Shirshov Institute
of Oceanology



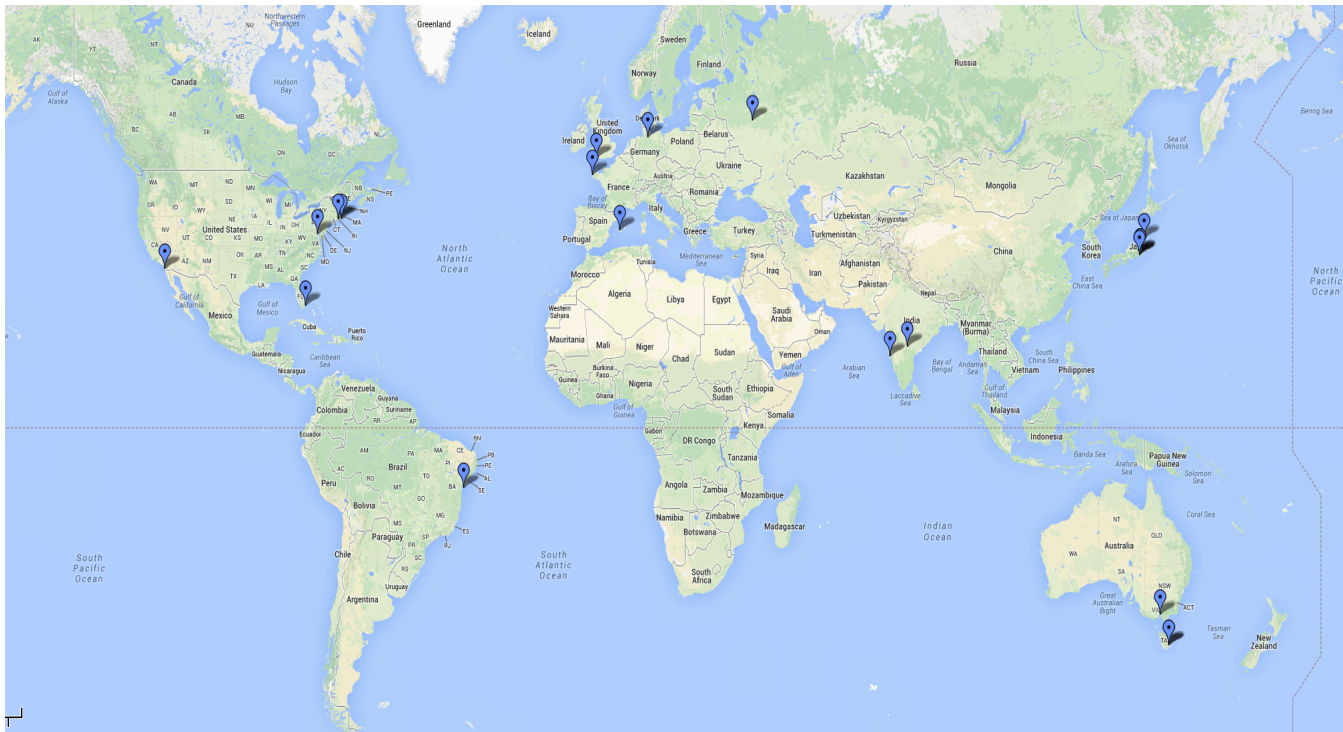
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Thanks!

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Illes Balears



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CSIRO

CSIRO

ACE CRC-UTAS

ACE CRC-UTAS

WCRP CLIVAR

GCOS/GOOS/WCRP/WMO



*CLIVAR Global Synthesis and Observations Panel (GSOP) panel/**Project Officer