



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

Laura Lorenzoni – IOCCP SSG Member for Time Series
Maciej Telszewski - Project Director

IOCCP UPDATE



IOCCP SSG 2011-13

Chair

Toste Tanhua (Germany)

Underway pCO₂ Observations:

Ute Schuster (UK)

Surface CO₂ Data:

Are Olsen (Norway)

Ocean Interior Observations:

Bernadette Sloyan (Australia)

Ocean Interior Data:

Masao Ishii (Japan)

Time Series Networks:

Laura Lorenzoni (US)

Instruments and Sensors:

Todd Martz (US)

Data Management:

Alex Kozyr (US)

Benjamin Pfeil (Norway)

Nutrients

Michio Aoyama (Japan)

Oxygen

To be announced

Ocean Acidification

Richard Feely (USA)

Project Director:

Maciej Telszewski (Poland)

Why IOCCP?

The IOCCP promotes the development of a global network of ocean carbon observations for research through technical coordination and communication services, international agreements on standards and methods, and advocacy and links to the global observing systems.



In the 8 years the IOCCP has:

- ✓ held 26 workshops and
- ✓ published 22 reports, guides, and strategy documents
- ✓ issued 33 newsletters (The IOCCP Conveyor)



Home

The IOCCP promotes the development of a global network of ocean carbon observations for research through technical coordination and communication services, international agreements on standards and methods, and advocacy and links to the global observing systems. The IOCCP is co-sponsored by the Scientific Committee on Oceanic Research and the Intergovernmental Oceanographic Commission of UNESCO. [Read more...](#)

[Underway CO₂ Observations](#)

[Ocean Interior Observations](#)

[Time Series Efforts](#)

[Synthesis Activities](#)

[Ocean Acidification](#)

[Nutrients](#)

[Oxygen](#)

[Data and Information Management](#)

[Instruments and Sensors](#)

[Related Projects](#)

Calendar

IOCCP meetings, IOCCP-related meetings as well as events related to a wider scope in marine biogeochemistry.

[VIEW](#)

IOCCP E-list

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Global Intercomparability in a Changing Ocean: An International Time-Series Methods Workshop

November 28-30, 2012
(Bermuda Institute of Ocean Sciences, St. Georges, Bermuda)
<http://www.whoi.edu/website/TS-workshop/>



Recommended citation:
Lorenson, L., Berney, H. M. (Editors), 2013. Report of Global Intercomparability in a Changing Ocean: An International Time-Series Methods Workshop, November 28-30, 2012. Ocean Carbon and Biogeochemistry (OCB) Program and International Ocean Carbon Coordination Project (IOCCP), 59 pp.

Report contributors: N. Bates, C. Carlson, C. Chandler, M. Church, M. Corina, K. Ikenoue, M. Ishii, K. Johnson, D. Kawka, A. Körtzinger, R. Lampitt, R. Letelier, M. Lomas, V. Lutz, F. Müller-Karger, M. Telszewski, L. Valdes

IOCCP and OCB gratefully acknowledge the support of IOC-UNESCO, SCOR, NSF, NASA, NOAA, and BIOS for this workshop.

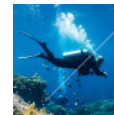


An International Time Series Methods Workshop Report Published

We are pleased to announce the publication of the full workshop report from the November 2012 Time Series Methods workshop, as well as the establishment of an international biogeochemical time-series network with a permanent web portal!

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News



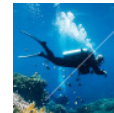
U.S. Ocean Carbon and Biogeochemistry (OCB) Summer Workshop 2013

Tuesday, 09 04 2013

This year's OCB summer workshop will take place July 22-25, 2013 at the Woods Hole Oceanographic Institution in Woods Hole, Massachusetts. Please visit the workshop website at <http://www.whoi.edu/workshops/ocbworkshop2013/> for more information and to register to attend. The registration deadline is **June 19, 2013**.

[more](#)

[+ more news](#)



POGO Visiting Fellowship for training on-board an Atlantic Meridional Transect (AMT) cruise in Oct-Nov 2013

Thursday, 04 04 2013

POGO is pleased to announce that it will once again offer a special POGO Visiting Fellowship for training on-board an Atlantic Meridional Transect (AMT) cruise in 2013.

[more](#)



Call for members for the new Ocean Acidification international Reference User Group (OA-iRUG) - reply before 6th May

Wednesday, 03 04 2013

The purpose of this message is to invite you to propose members for the new Ocean Acidification international Reference User Group (OA iRUG). Please forward this message as appropriate to your contacts.

[more](#)

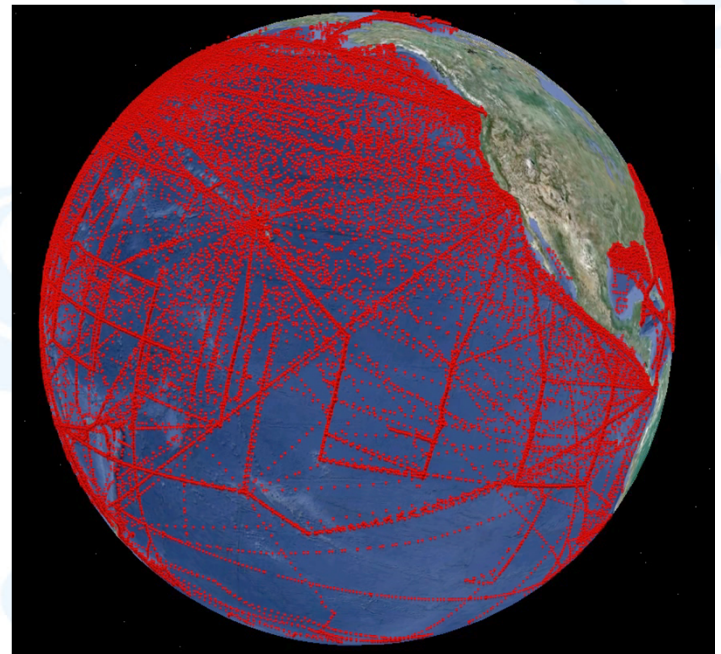
IOCCP future events

2nd Workshop to develop a Global Ocean Acidification Observing Network (GOA-ON)

<http://www.ioccp.org/>

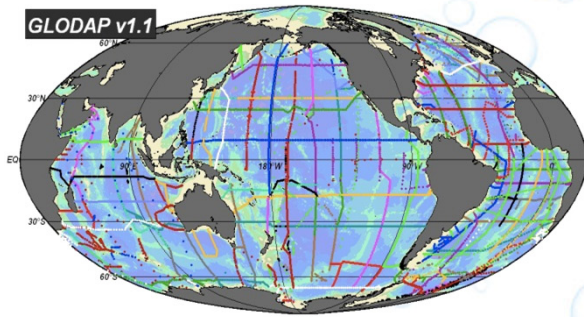
Release of Version 2

- SOCAT V.2 was released June 2013; V3 is in the works
- 10.1 million $f\text{CO}_2$ data (+60% over version 1.5) on > 2660 cruises (+55%) covering the years 1968-2011
- Improvements were made (more transparency, more consistency QCing data, better documentation)
- All data is citable using DOI (individual cruise files, synthesis products, gridded products)
- **SOCAT.info** for data and publications

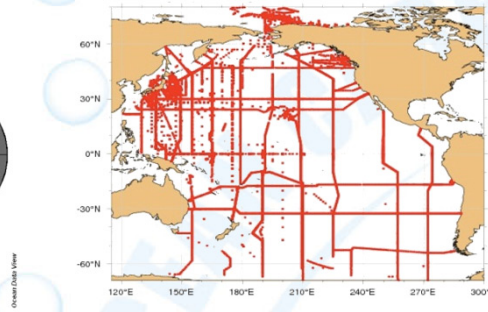


Interior Ocean Data

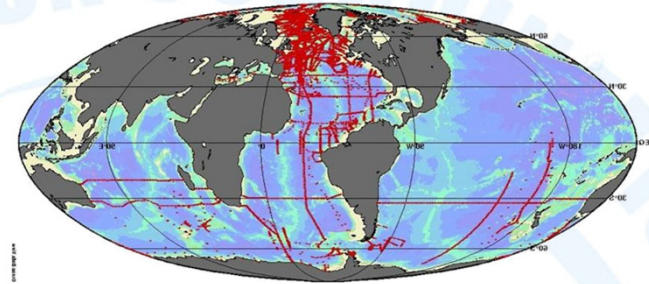
GLODAP



PACIFICA



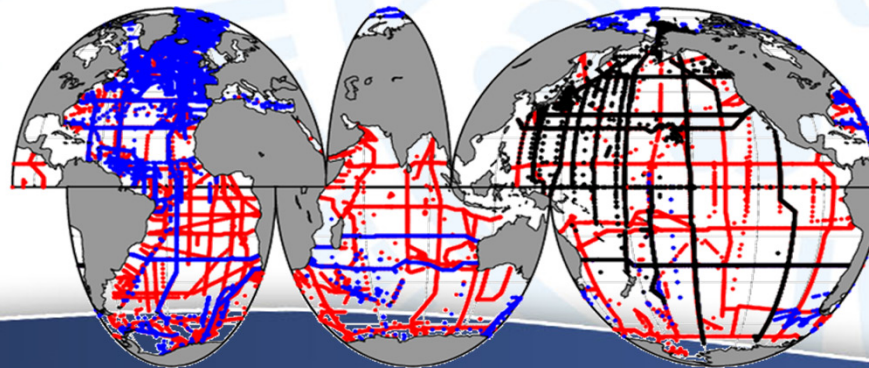
CARINA



Add new data

GLODAPv2

GLODAPv2 New product to be released by the end of 2013.

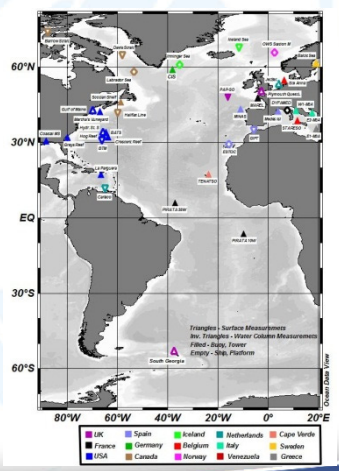
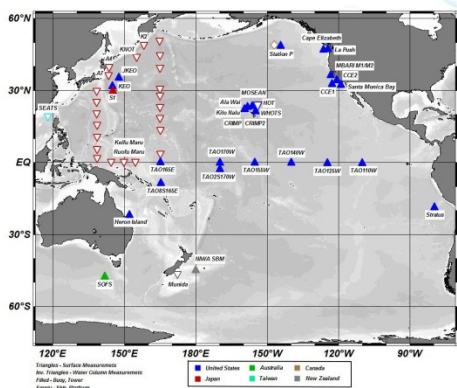


IOCCP Activities – Time Series stations

Long-term time series measurements are critical for characterizing the natural variability and trends in the ocean biogeochemistry and for determining the physical and biological mechanisms controlling the system. **No global strategy exists for networking ocean carbon time series stations.**

Currently, there are 38 sustained programs in 18 countries making ocean carbon time series measurements including 14 moorings, 7 fixed-point ship stations, 11 ship sections, several coastal stations and profiling floats.

The IOCCP and US OCB recently held an International Time Series Methods Workshop (28-30 November 2012, Bermuda) dedicated to unifying methodology and procedures applied by time series scientists worldwide.



Ocean Acidification

- Assist in the development of an international OA observational strategy
 - June of 2012 IOCCP co-sponsored international OA workshop in Seattle. Report available through IOCCP website
 - Second workshop being held in St Andrews, Scotland
- Nutrients and oxygen have been added to the IOCCP SSG

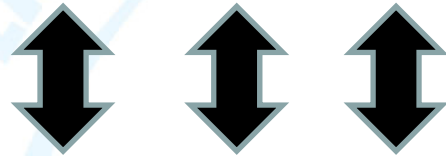


Framework for Ocean Observing

Approved governance structure

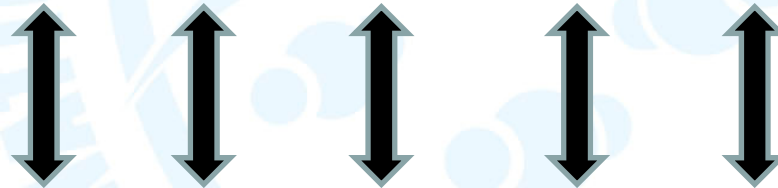
GOOS Steering Committee

(Peak Bodies, Sponsors, Observing Panel Chairs, Observing System leaders)



Observing System Panels

(focused on EOVs e.g. Physics, **Carbon/Biogeochemistry**, Biology/Ecosystems); Coordination for observing system elements

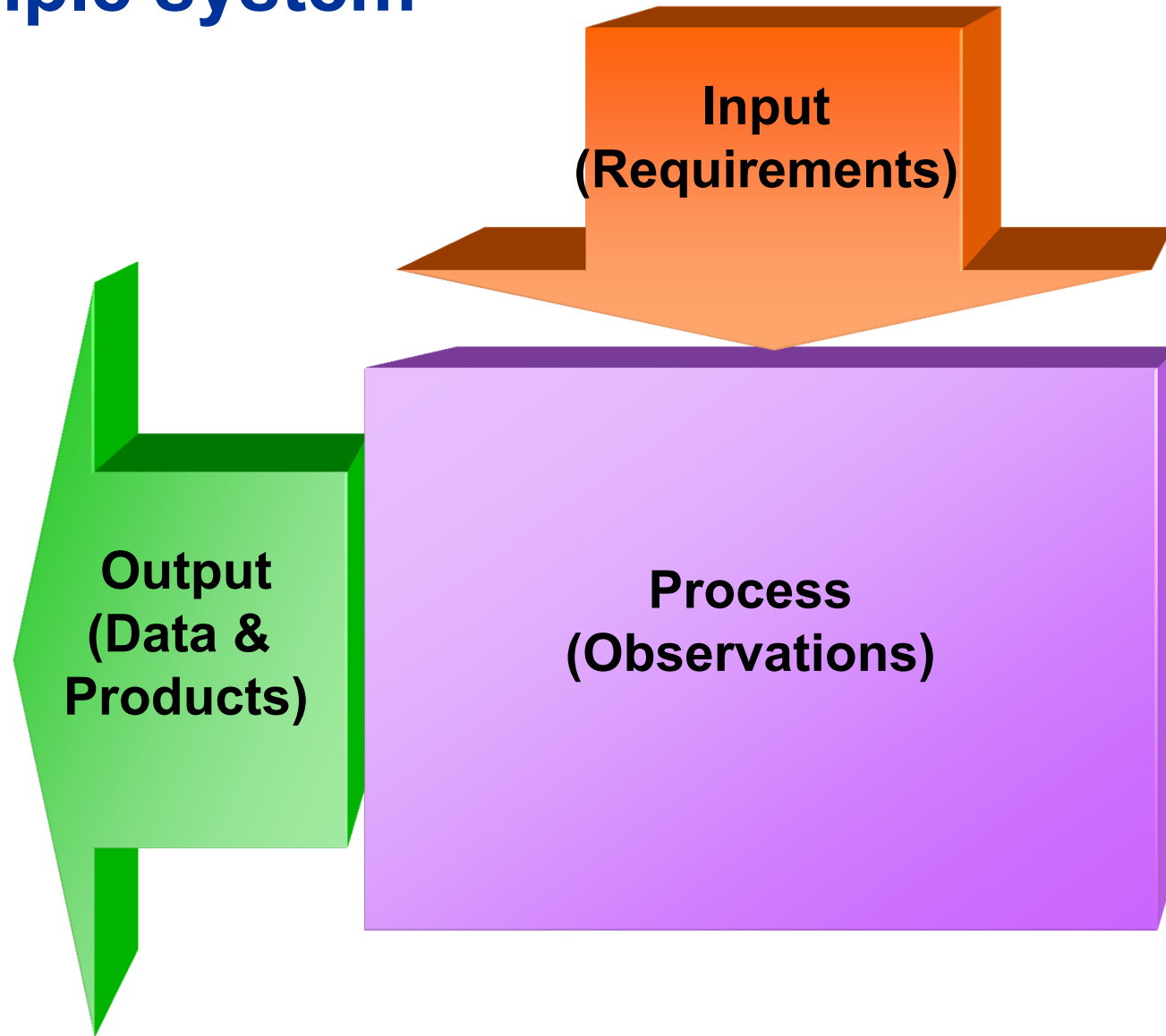


Technical Advisory Groups

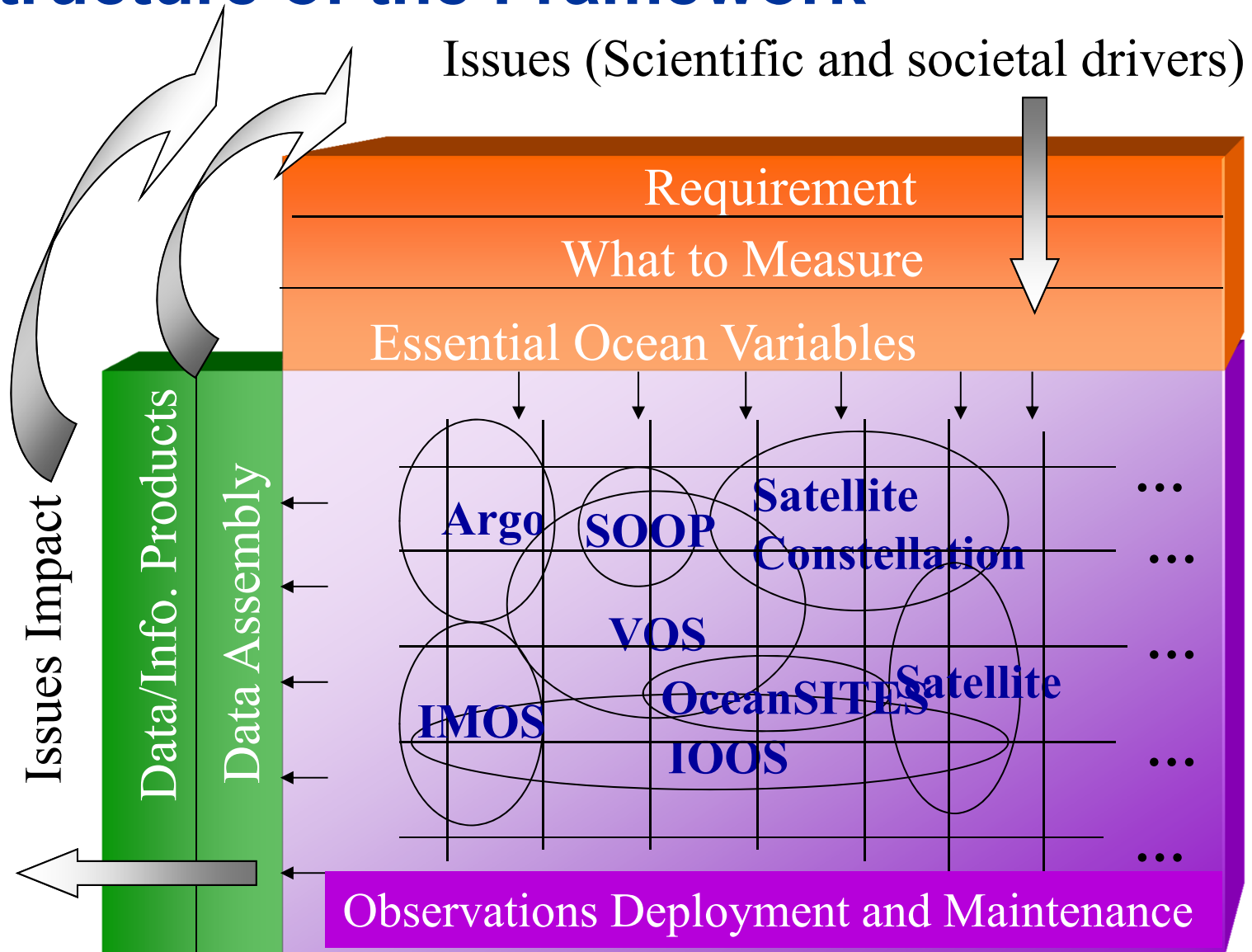
(Observing technologies and networks, Variable focus: data and products, synthesis, link to models)

Framework for Ocean Observing

A simple system



Structure of the Framework





Biogeochemistry Panel

Simplified Work Plan for the next 12 months

1. The IOCCP will collate the available information on **societal and scientific requirements** regarding the marine biogeochemistry parameters necessary for inclusion into the Framework for Ocean Observing (FOO) as Essential Ocean Variables.
2. The IOCCP will consult with programmatic and institutional partners on **their requirements (published and un-published)** for the multidimensional feasibility-assessment of the proposed parameters.
3. The **IOCCP will lead the initial** multidimensional feasibility **assessment** of the proposed parameters built on the FOO recommendations and summarize the results for inclusion into the Global Climate Observing System and other relevant strategies (to be defined).
4. The **IOCCP will produce a summary publication** of the multidimensional feasibility assessment of the marine biogeochemistry parameters necessary for inclusion into the Framework for Ocean Observing (FOO) as Essential Ocean Variables.
5. We think of holding a **workshop in fall 2013** to aid point 3 and a **town hall during OSM 2014** to promote the then current status of the activity

