



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission

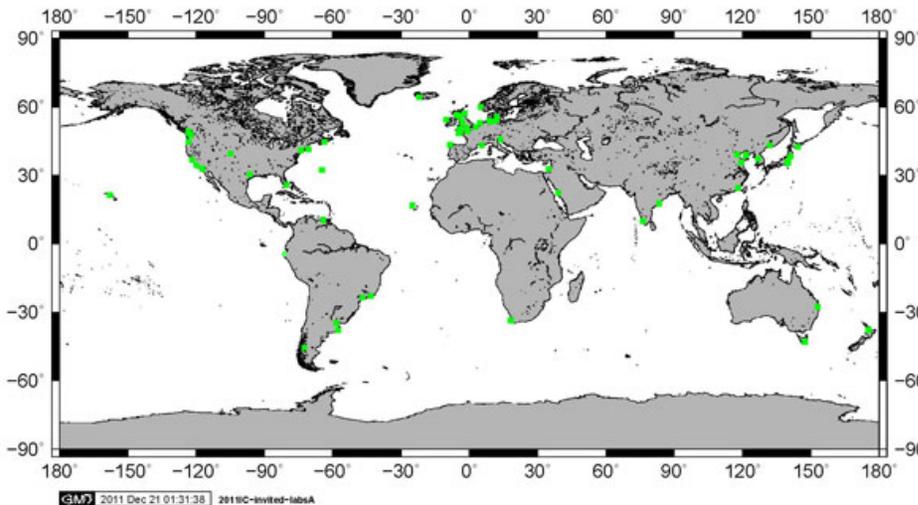
IOCCP update 2015
<http://www.ioccp.org/>





2014/15 RMNS Nutrient intercomparison activity (M. Aoyama)

- 71 labs in 28 countries



- SCOR WG147 “Establish mechanisms to ensure comparability of oceanic nutrient data”
- KANSO CRMs will be re-certified by joint measurements of JAMSTEC and KANSO; JAMSTEC will distribute the CRM's starting in 2016.
- Expected price per bottle (100 ml) ~\$60-90



Instrumenting our oceans for better observation: a training course on biogeochemical sensors

June 22-July 1, 2015

Sven Lovén Center for Marine Sciences
(Kristineberg, Sweden)





Biogeochemical Sensor Course - objectives

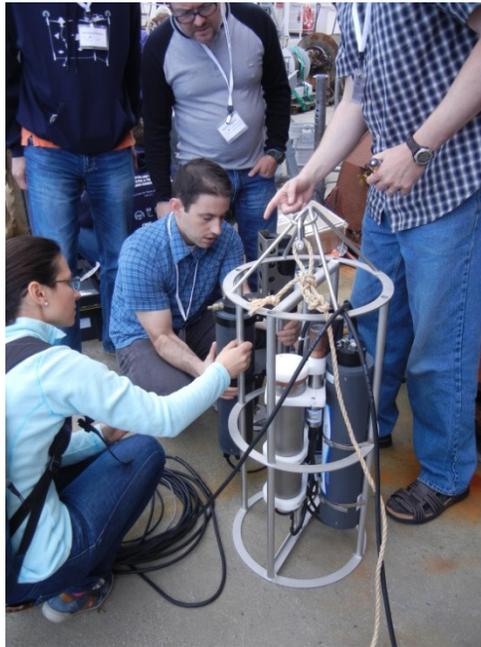
- Participant proficiency on biogeochemical sensors
- Recommendations on sensor data format and requirements
- 'Best practices' that includes a summary of experiences and expertise – *beyond a 'users' manual.*
- Dissemination of learned information beyond the course

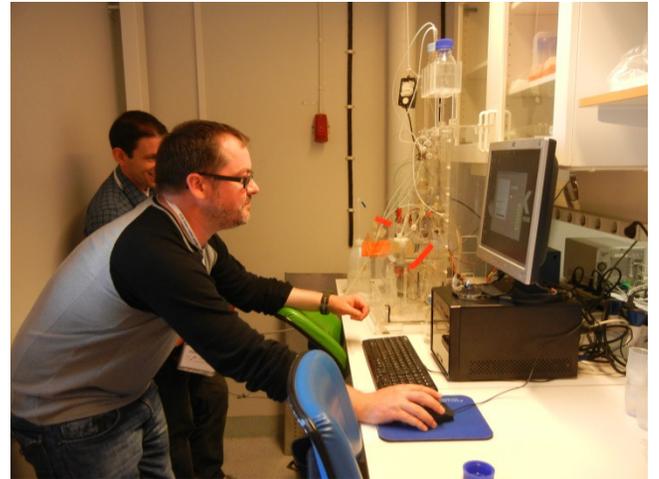
Strategies for sensor deployment: fixed vs. mobile, drifting vs. gliding, profiling vs. fixed-depth; geographic location (coastal vs. open ocean); timeframe: Long term vs. short term...



Biogeochemical Sensor Course









Report format

1. Variable (e.g. pH, Nitrate, pCO₂, O₂)

Short intro on the importance of this (1 paragraph)

1.1 Measurement principle (e.g. potentiometry)

examples of the sensor type and functioning principle; important details, strategies for sensor deployment (geography, platform, time), common applications.

1.1.1 Sensor (e.g. SeaFET)

1.1.1.1 Details on sensor, applications, data, interface, things to know (e.g. warmup time, mood swings, storage considerations, response times, etc.)

time,

1.1.1.2 Deploying this sensor (on moorings, profiling, flowthrough, etc.)

Report format

2 Calibration/Validation (includes in situ samples)

Consideration regarding pre/post calibrations, in situ samples (methods), tips for calibration (in lab/in field – e.g. check the forecast...). Sensor specific sections?

3 Data format and processing

Looking at the data (e.g. voltage), tips for examining the data, detecting and addressing drifts and offsets (e.g. what instrument requires gain corrections). Sensor specific sections?

4 Data reporting/metadata (requirements/recommendations)

5 General considerations/recommendations

Do's/do not's

Report format



OMG! I forgot my dummy plugs!

Don't panic! Depending on the deployment type, there are several options you may have. **If a deployment is critical**, you can makeshift dummy plugs with silicone grease and electrical tape or tubing (bent in two). If you have dummy plugs that partially can fit your plug, you can still use these and grease the unprotected holes.

If a deployment is not critical, you probably want to consider deploying at a later time.



Consider having a field kit to take with you whenever you go to a deployment. This kit should at the very least contain: dummy plugs (that match your instrument), silicone grease, electrical tape, wine, chocolate...

