

### Carolyn Scheurle

### science communicator and outreach coordinator

Observatoire Océanologique de Villefranche-sur-Mer, OOV

- one of the missions of the OOV: dissemination and outreach
- projects and activities address a mainly non-scientific audience and in particular young people
- participative approach combining dissemination (one-way) and outreach (two-way), web-presence and face-to-face
- 70+ people from the OOV staff contribute regularly, participate to trainings; transversal activity
- one of the objectives is to promote ocean literacy



### overview

1/ project and its functioning

2/ feedback of people involved

3/ main challenges and perspectives





- school classes/groups of students adopt a BGC-Argo float and follow its trajectory
- access real-time data and get an idea of how to interpret them
- better understand the marine environment and the scientific approach
- to adopt and to accompany a profiling float also mean an engagement to share the acquired knowledge





- to share knowledge and tools
- to open a window for young people to discover the ocean

### interactive map



## beginning of the adventure

### Integrating profiling floats with extended capabilities in future education and outreach activities

Scheurle<sup>1</sup>, C., Claustre<sup>1</sup>, H., Antoine<sup>1</sup>, D., Boss<sup>2</sup>, E., Johnson<sup>3</sup>, K., Körtzinger<sup>4</sup>, A., Mangin<sup>5</sup>, A., Nolet<sup>6</sup>, G., Perry<sup>7</sup>, M.-J., Schofield<sup>8</sup>, O. and J. McDonnell<sup>9</sup> (2010).

<sup>1</sup>CNRS and University P. & M. Curie, Laboratoire d'Océanographie de Villefranche, 06230 Villefranche-sur-mer, France. <u>scheurle@gmail.com</u>, <u>claustre@obs-vlfr.fr</u>, <u>antoine@obs-vlfr.fr</u> <sup>2</sup>University of Maine, School of Marine Science, Orono, ME 04469, USA. <u>emmanuel.boss@maine.edu</u> <sup>3</sup>Monterey Bay Aquarium Research Institute, 7700 Sandholdt Road, Moss Landing, CA 95039, USA.

johnson@mbari.org

<sup>4</sup>Leibniz-Institut für Meereswissenschaften (IFM-GEOMAR) Chemische Ozeanographie Düsternbrooker Weg 20, 24105 Kiel, Germany. <u>akoertzinger@ifm-geomar.de</u>

<sup>5</sup>ACRI-ST, 260 route du Pin Montard, B.P. 234, 06904 Sophia-Antipolis cedex, France. <u>antoine.mangin@acri-st.fr</u>

<sup>6</sup>Geosciences Azur, 06560 Sophia-Antipolis, France. <u>nolet@geoazur.unice.fr</u>

<sup>7</sup>University of Maine, School of Marine Science, Walpole, ME 04573, USA. <u>perrymj@maine.edu</u> <sup>8</sup>Coastal Ocean Observation Laboratory, Institute of Marine and Coastal Sciences, School of Environmental and Biological Sciences, Rutgers University, New Brunswick, NJ 08901, USA. <u>oscar@marine.rutgers.edu</u>

<sup>9</sup>Department of Youth Development, Rutgers University, New Brunswick, NJ 08901, USA. <u>mcdonnell@njaes.rutgers.edu</u>

#### **General context**

The Argo program is a remarkable example of international collaboration to setup a system delivering oceanographic data in real-time. Launched in 1999, one decade later, this program is now mature with more than 3000 floats operationally delivering





Networked Ocean World

•••

## tandem approach



two participative projects started in 2011 with thematic contributions on ocean observation



project type public dissemination wider public with focus on young people

project type public educational school and master students

# functioning

- school classes/groups of students > ocean voyagers
- 2012-2013: three middle-school classes in Southern France
- 2016-2017: more than 15 classes and groups of students (more than 460 students and 30 teachers)
- primary and secondary educational level, master level
- different regions and countries

(e.g. Tahiti, UK, Italy, South Africa)

- some classes/teachers participate for several years
- co-adoption of floats
- registered classes and participation in freelance mode







# functioning

- exchanges via internet and visits within the school environments
- training for teachers
- training for school students to become science animators,
  e.g. during the annual French Science Festival
- active participation of PhD students at the OOV
- proposition of additional topics, e.g.: seasons in the ocean (2015-2016) polar oceans (2016-2017) deep oceans or Mediterranean Sea (2017-2018)
- pupils/students present their results at the end of each school year







feedback

... scientists

- + possibility to participate to an existing project
- + share moments with the young people

... PhD students
 + increase competences concerning outreach activities
 + network

### ... teachers

- + multidisciplinary aspects and accessible resources
- + scientists passion touches their students

... pupils/students

+ meet the scientists in person

+ real topics concerning an interesting environment

### ... school authority

impact will be discussed by Marie-Pascale Zugaj-Benteo

### ... outreach coordinator

+ connect people

... and connect them with the ocean



- language barriers
- different school programs in each country
- each school class/group of students has different needs
- guarantee implication of science colleagues over the years
- increasing efforts necessary in terms of organisation
- time-consuming



main challenges & perspectives

work on-going and foreseen:

- 1/ review, complete and translate scientific contents
- 2/ renew the web interface
- 3/ facilitate communication between all participants

(e.g. blog > twitter; done and tests on-going)

Do you have an idea? Do you wish to contribute/collaborate?





Thanks to the team and the financial support of ERC remOcean, PIA NAOS 3 projects EU FP7 (GROOM, SIDERI and OSS2015), Climate Initiative/Fondation BNP Paribas (SOCLIM), EU H2020 (BRIDGES), Conseil Départemental 06





@AdoptaFloat adoptafloat.com carolyn.scheurle@obs-vlfr.fr

