



Educational and outreach activities of the Operational Oceanography team under HCMR's Educational Unit framework



Responsible: Dr. Dimitris Kassis





A brief history – general targets

The educational and outreach activities of the Hellenic Centre for Marine Research were initiated in 1995 with the organization of lectures and events for the public and young people

After 2000, the Education Unit in Athens was formed introducing educational programs for schools (Primary and Secondary Education), seminars for students and teachers, summer lectures, workshops, etc.

The Unit has been supported voluntarily by HCMR employees, who, in addition to their research or administrative activities, wish to convey their knowledge and love for the aquatic environment in the educational community



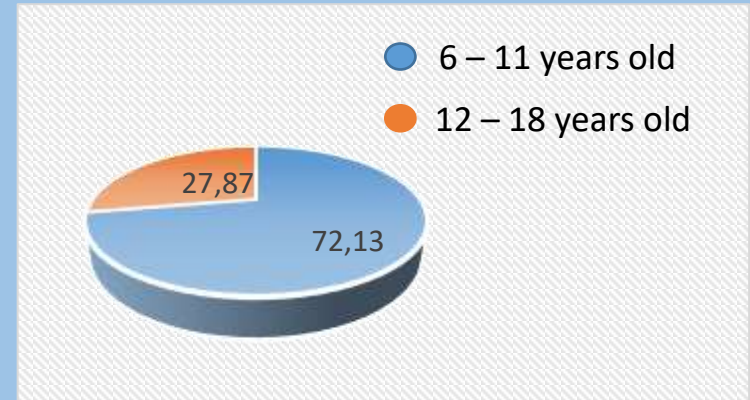
The Unit's main targets are:

- Creating environmental consciousness through knowledge transfer on aquatic ecosystems and processes that control life at sea, lakes and rivers.
- Preparation - inspiration of tomorrow's scientists, today's students, with the emergence of research activities and achievements
- Enhancing HCMR's outreach activities through actions for the general public



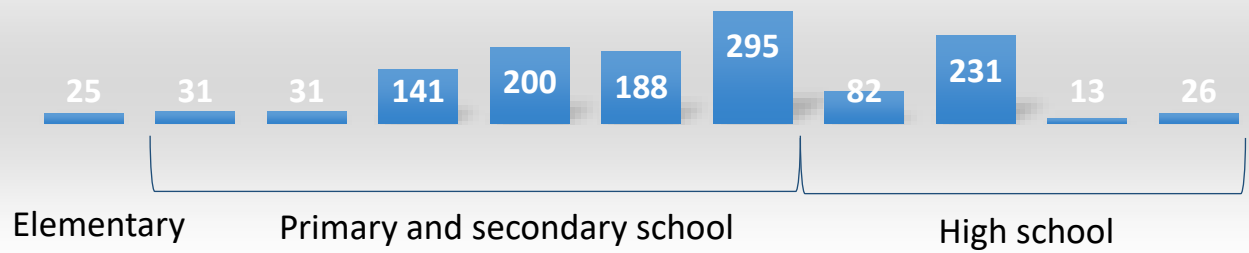


During the last 3 years the Education Unit receives approximately 2,000 students per year



- During October 2015 - July 2016, 1390 elementary and secondary school pupils attended HCMR’s educational program.
- 6 schools participated in the IRRESISTIBLE European training program investigating Plastics and Microplastics in the Oceans
- 15% of the students attended private schools, and 85% public school students, plus 20 students from Switzerland.

Number of students for each school level





Activities during 2015 - 2016 aimed at students of Primary and Secondary Education

1. Generally informative on the aquatic environment

2. Main topics:

- Marine biodiversity
- Biodiversity of river ecosystems
- Principles of Ichthyology and fishing practices
- Marine Pollution (plastics in the oceans)
- Archeology - underwater volcanoes - Seismology
- Forecasting systems and in-situ monitoring of the seas
- Climate changes

3. Raise issues of special interest for teachers

4. Especially suited for Environmental Education teams





Visits Structure



- ✓ Welcome students
- ✓ Presentations related to the topic to be developed including video projections
- ✓ Experimental actions, educational activities (games, pictiory, theatrical play, workshops, hand and mind activities, etc.) related to the subject presented, with a half-hour of intermission.
- ✓ Guided tour (eg. presentation of THETIS manned submersible, Super Achilleas underwater vehicle and the R/V AEGAEON model, as well as photographic exhibitions)
- ✓ All visits are for free, capability of 40 - 45 students/visit
- ✓ 3 - 5 colleagues/action
- ✓ 2,5 - 3 hours duration for each visit





Marine Biodiversity



Topics
2015-2016

Biodiversity of river ecosystems



Marine Pollution (plastics in the oceans)

Principles of Ichthyology and fishing practices

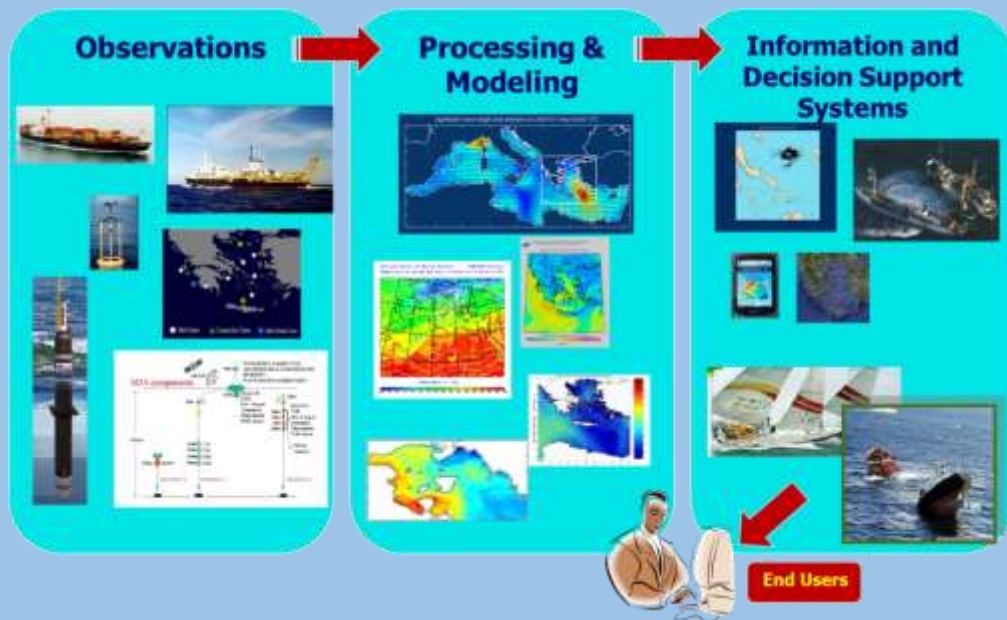


Archeology - underwater volcanoes - Seismology





Forecasting systems and in-situ monitoring of the seas - Climate changes

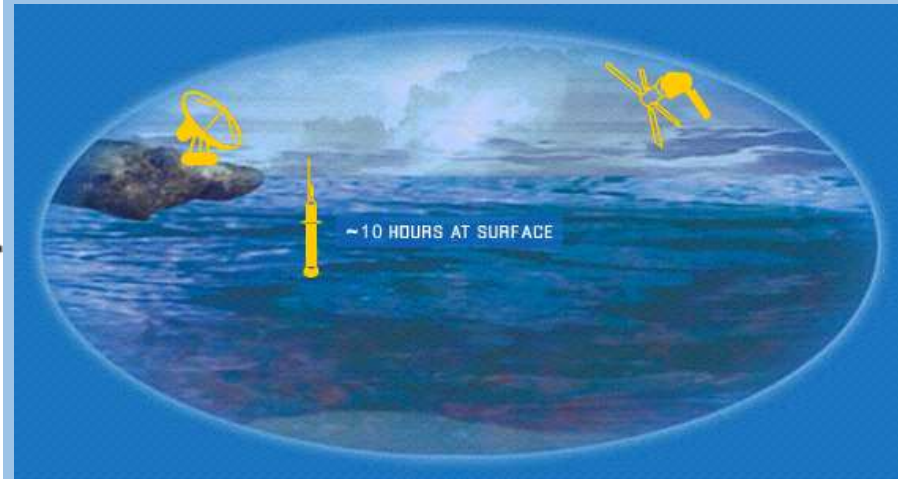
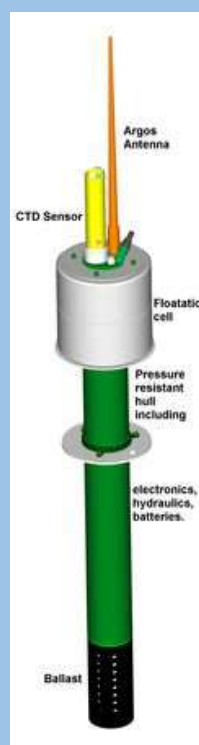
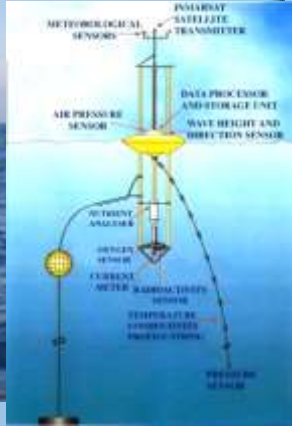
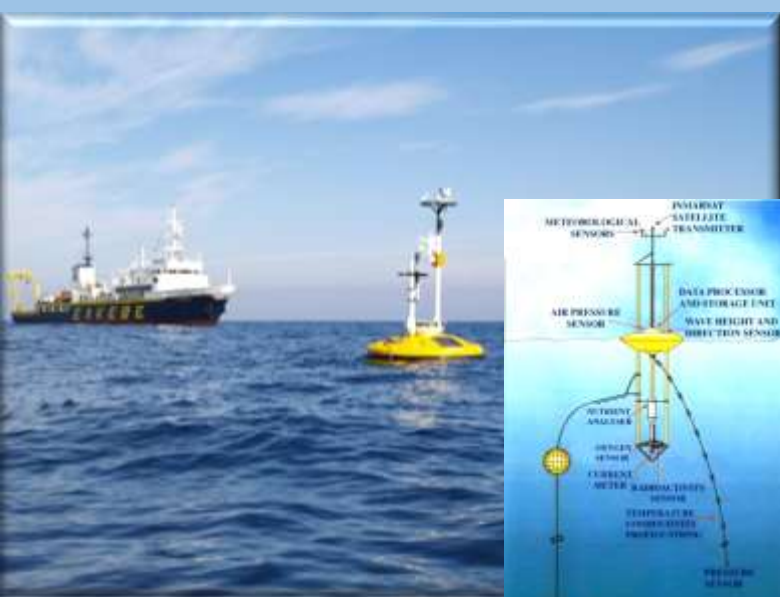


- Within this activity HCMR's monitoring infrastructures are presented with a focus on Operational Oceanography
- A presentation and a 10 min video of the two basic infrastructures, POSEIDON Fixed-point Stations and Greek - ARGO are shown. Reference is made to the measurement principles, the instruments used and the data collected



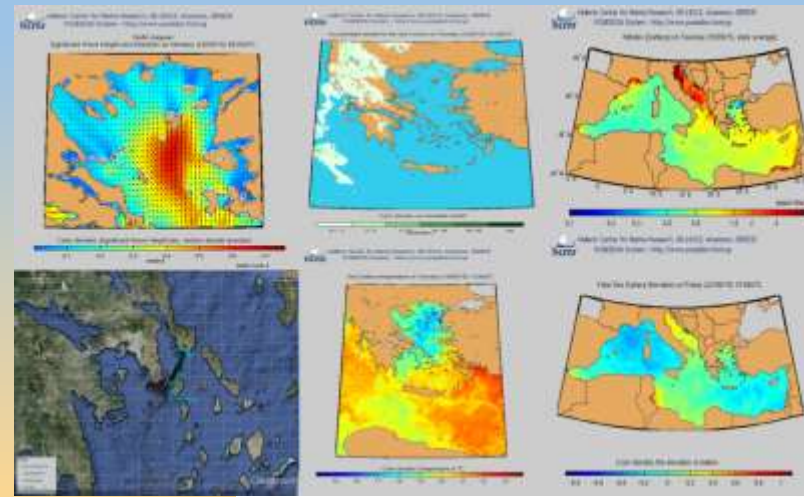
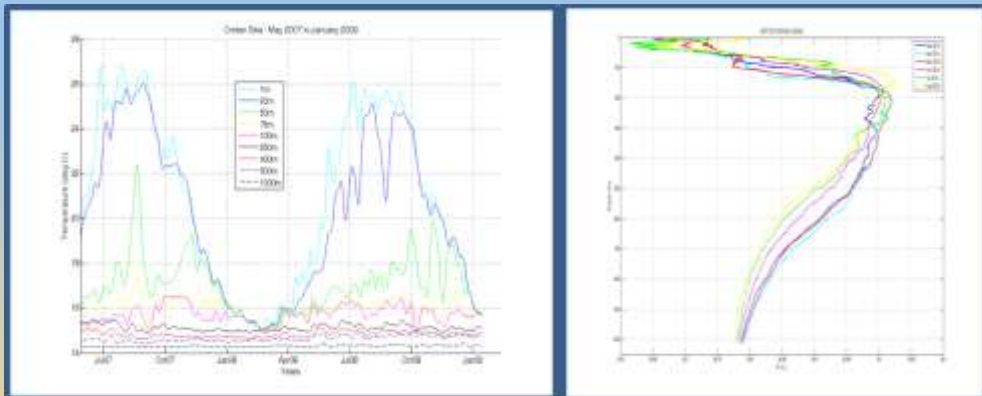
Greek Argo
Ελληνική Υποδομή Αργώ





Discussion regarding the moorings and Argo floats (instrumentation, cost, deployment, operation, etc.)

Discussion regarding the differences between timeseries and profile data



Discussion regarding the basic principles of numerical models

www.poseidon.hcmr.gr



POSEIDON Android Application



www.greekargo.gr

Home

Αργώ | Ελληνική ομοσπονδία του Euro Argo EPOC & του παγκοσμίου προγράμματος Argo | info@greekargo.gr | +30 22910 76414

Αρχική | Εν συντομία | Ελληνικό Πρόγραμμα Argo | Εκπαιδευτικό Υλικό | Ω/Κ Πλόες | Επικοινωνία | Ελληνικά

6901884

Institution: HCMR (Greece)
Latitude: 39.6813
Longitude: 23.5172
Last date: 2015-10-22 03:10:14
Platform parameters: 1, 5

Provider Countries

- France
- Germany
- Greece
- Italy
- Spain
- Turkey
- USA

Parameter



The presentation is followed by open discussion allowing the students to widen their views on operational oceanographic methods and techniques.



Several games also take place with the help of interactive applications and questionnaires. By the end of this process students learn how to use the web in order to query data, compare different sources, search model results, forecasts, etc.





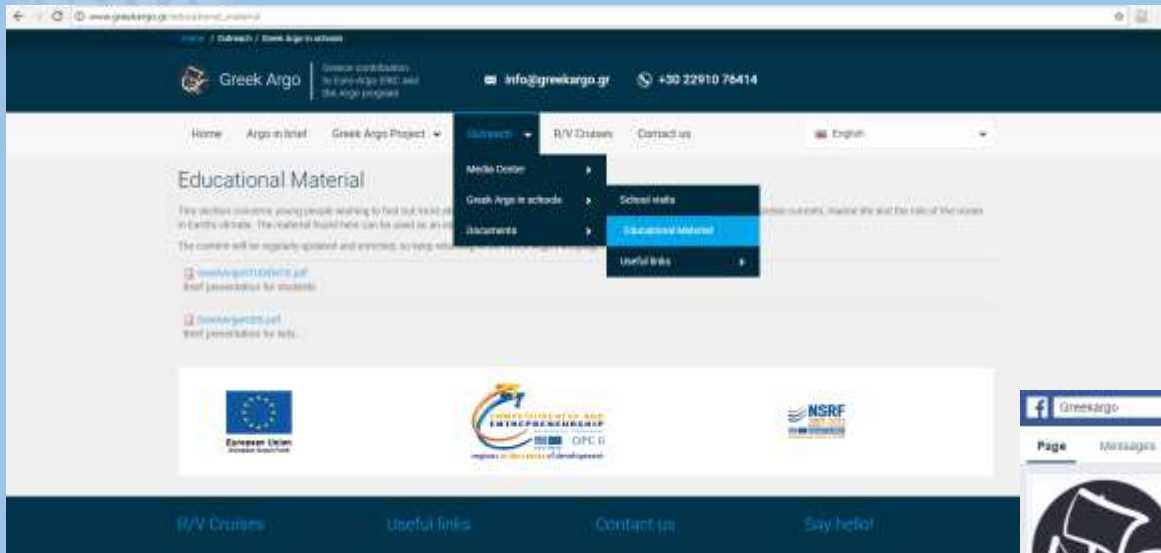
Finally, the program ends with a short guided tour at the POSEIDON's warehouse so that students get in touch with the oceanographic instrumentation





Outreach and
Dissemination

Web and Social Media



<https://www.facebook.com/pg/greekargo/>

http://www.greekargo.gr/educational_material



RESEARCHERS NIGHT 2014, 2015, 2016

Outreach and
Dissemination



ATHENS SCIENCE FESTIVAL 2016



CONFERENCES AND SCIENTIFIC WORKSHOPS





Thanks for your attention



HCMR Educational Unit

+302291076317

+302291076388

Application for attendance by email: education@hcmr.gr





A horizontal banner is positioned in the bottom right corner. The background is a photograph of a calm blue sea with a small, rocky island in the distance. In the foreground, there are some green and yellow floating objects. The text 'education@hcmr.gr' is centered in a white, sans-serif font. Below it, in a smaller white font, is the text 'Μονάδα Εκπαίδευσης ΕΛ.ΚΕ.Ο.Ε.'. In the bottom right corner of the banner, there is a circular logo with a sunburst or starburst pattern.