

NAVARINO ENVIRONMENTAL OBSERVATORY

NEO Management

Thursday, 12 November 2015

NEO NEA #18 (July - September, 2015)

NEO stands for Navarino Environmental Observatory. But NEO in Greek (νέο) means news as well and NEA is its plural. So this is our news!

Foreword

Please receive number 18 of this small information letter with news from NEO for the period July to September 2015! We are humbly grateful that even though Greece is experiencing hard times and the whole world is in deep trouble, not the least due to the current refugee crisis, NEO is continuing its activities in a good spirit and with impressive appreciation. Good news, even if very small in the larger picture, can hopefully inspire and contribute to more good news!

Happy Reading!

Karin and Giorgos



Figure: From left to right, Voidokilia beach, Gialova lagoon and Navarino Bay in a panoramic view from Palaiokastros ruins in September

Activities

Research

- **Atmospheric group visit**

The pyranometer of the Hellenic Network of Solar Energy (HNSE) has been removed from Costa Navarino to Methoni, to be co-located with the air quality and meteorological stations of NEO. In this way, the quality control and maintenance of the station is better facilitated and the measurements can be used in synergy with the bouquet of the atmospheric measurements at that site. The pyranometer is part of the national ground based network with 14 monitoring stations across Greece. The aim of HNSE is to support applications of solar energy at different temporal and spatial scales with the combined use of ground-based measurements, satellite images and forecasting models.

- **Research discussions regarding a potential PhD-project**

Senior lecturer and Associate Profesor Håkan Berg visited NEO during a week for discussions with Giorgos Maneas regarding a potential PhD project focusing on “Co-adaptive management of ecosystem services for sustainable use and conservation of the Gialova Lagoon, Messinia, SW Greece.”

- **Scientific Publications**

Bring A, Asokan SM, Jaramillo F, Jarsjö J, Levi L, Pietroni J, Prieto C, Rogberg P, **Destouni G** (2015) Implications of freshwater flux data from the CMIP5 multi-model output across a set of Northern Hemisphere drainage basins, *Earth's Future*, 3 (6), 206–217, doi:10.1002/2014EF000296, 2015. Open access at: <http://onlinelibrary.wiley.com/doi/10.1002/2014EF000296/full>

- **EU Proposals**

Two EU Life project research proposals with NEO researchers as collaborators have been submitted:

- **In the first proposal entitled** “GIS MAPPING AND STUDYING OF ENDANGERED AND VULNERABLE SPECIES OF TAYGETOS MOUNTAIN AND CRUCIAL CONSERVATION ACTIONS”, the TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PELOPONNESE (TEIPEL) is the coordinator whilst Stockholm University (SU) and the National Observatory of Athens (NOA) will participate as Associate Beneficiaries under the umbrella of NEO.

- The second proposal entitled “LIFE SNOWMAN” (SNOW and fresh Water MANAGEMENT in Crete under climatic and human pressure) was submitted by the University of Crete, Stockholm University, National Observatory of Athens, Foundation of Research and Technology-Hellas and the Region of Crete and will focus on two significant facts regarding the snowmelt a) the potential for recharge of the aquifers and b) the contribution to supplementing the amount of surface water.

Education

Courses

- **"Climate, Climate Change Impacts: Greece"**
Master students' course, Justus-Liebig University of Giessen (September 26-30)

BSc students from the Department of Geography at the Justus-Liebig University of Giessen (JLU), Germany, visited NEO from 23-27 September 2015. It is the third year in a row that the visit is taking place and is now a milestone of the project-course "Climate, Climate Change Impacts: Greece" established in the JLU Geography studies curriculum. The group of geographers visited the sites of Gialova lagoon, Paleokastro and Archaia Messini, the Taygetos Mountain and the Polilimio site under the guidance of Mr. Giorgos Maneas. The project course is aiming at providing interdisciplinary knowledge on the climate of Greece and the Eastern Mediterranean, volcanism and impacts on climate and societies, the Mediterranean Sea circulation, palaeoproxies, climate reconstruction and methodologies, impacts of climate variability and change on ecosystems, hydrology and water resources, atmospheric monitoring, archaeology, plant eco-physiology. The project consists of three interrelated parts, theoretical, methodological and the field excursion. The students prepare a scientific report combining knowledge acquired from the theory and methods and knowledge obtained during the excursion.



Figure 1: Students and teachers from Justus-Liebig University of Giessen, up to Palaioakastro ruins

Dissemination

- **Honors and awards**

Navarino Environmental Observatory (NEO) was distinguished at this year's Hellenic Responsible Awards. Winning the GOLD medal in the category "Best Science-Business cooperation", NEO was acknowledged as a unique cooperation in the field of climate change research in the Mediterranean.



Figure 2: NEO Director Karin Holmgren and Vassilis Karakousis, from NEO Steering Committee (left) happy at the award ceremony.

The GOLD medal was presented at a formal ceremony in Athens on Tuesday 15 September. NEO Director Karin Holmgren and Vassilis Karakousis, from NEO Steering Committee, were there and received the award.

Gia Destouni has been selected to the 2015 American Geophysical Union Class of Fellows. As AGU states: “Being elected a Union Fellow is a tribute to those AGU members who have made exceptional contributions to Earth and space sciences as valued by their peers and vetted by section and focus group committees. This honor is bestowed on only 0.1% of the membership in any given year.” <https://eos.org/agu-news/2015-class-of-agu-fellows-announced>

Christos Zerefos will receive the 2015 Yoram J. Kaufman Unselfish Cooperation in Research Award at the 2015 American Geophysical Union Fall Meeting, to be held 14–18 December in San Francisco, Calif. “The award recognizes broad influence in atmospheric science through exceptional creativity, inspiration of younger scientists, mentoring, international collaborations, and unselfish cooperation in research.” <http://honors.agu.org/sfg-awardees/zerefos-receives-2015-yoram-j-kaufman-unselfish-cooperation-in-research-award/>

- **Swedish Ambassador visit, September 29**

Swedish Ambassador in Greece Charlotte Wrangberg visited NEO and met Professor and NEO Director Karin Holmgren, Håkan Berg (Lecturer at the Physical Geography department and NEO station manager Giorgos Maneas.



Figure 3: Hakan Berg, Charlotte Wrangberg and Karin Holmgren outside NEO station

The program included a visit to the NEO-center at Costa Navarino in Messinia and a presentation of various research fields for example in Gialova lagoon and the atmospheric laboratory in Methoni.



Figure 4: Charlotte Wrangberg, Giorgos Maneas, Theodor Karakassis and Karin Holmgren at Sgrapa monastery discussing about future research in the field of environmental management

- **Interviews/Press Releases**

- **Gia Destouni**, Professor at Stockholm University and member of NEO Steering Committee gave an interview to Greek media about NEO as well as her research on water resources

- <http://www.e-typos.com/perivallon/article/142356/kinduneuoume-na-poume-to-nero-neraki/>

- **Karin Holmgren** was interviewed by Swedish Radio regarding how the Greek economy crisis affects research and researchers in Greece.

- **Astronomy nights,
Costa Navarino, summer 2015**

"Astronomy nights" is an interactive experience at Costa Navarino organized by the Navarino Environmental Observatory where visitors are introduced to the stars and the constellations of the night sky and they become the astronomers deciding how the night unfolds.

Under the guidance of the National Observatory of Athens and with the excellent support from the Navarino Collections team, we have managed to organize this event on a weekly basis and we are happy to see that it is fully booked!

- **Navarionrummet**

The department of Physical Geography Stockholm University has created a new meeting room which has been giving the name "Navarionrummet" in honor of the NEO partnership. The room, decorated with photographs from Navarino and with the Costa Navarino Magazines in the book shelf was inaugurated in September.



Figure 5: "Navarionrummet", a new meeting room in honor of the NEO partnership

Associated Members

Two new associated members have joined NEO family:

- Dr. Valerie Trouet from the Laboratory of Tree-Ring Research at the University of Arizona
- Dr. Jan Esper from the Department of Geography at the Gutenberg University in Mainz.

NEO management

Giorgos Kosmopoulos was employed by NEO management for the period July 25 – August 25. Giorgos was entrusted with the tasks of Methoni atmospheric lab monitoring and implementation of Astronomy nights under the guidance of NEO Station Manager.

Upcoming

Research

- Karin Holmgren, Martin Finne, Martina Hättestrand from SU will carry out field work in a cave on Schiza Islan on 6 November 2015.
- Meighan Boyd will defend her thesis, entitled “Speleothems in warm climates. Holocene records from the Caribbean and Mediterranean regions, on 4th December 2015.

Education

- As part of a one semester Natural Science Specialization course a group of students from the upper secondary school, Värmdö Gymnasium, will visit NEO in October.
- The 3rd master course, on “**Water management issues from a social science and management perspective**”, will be held at NEO in November 2014.
- The 4th **training course in Air Pollution** for undergraduate students from the Physics Department of the University of Patras, Greece will take place in December at NEO. The training course is developed by Assistant Professor Andreas Kazantzidis (Laboratory of Atmospheric Physics, Physics Department, University of Patras, Greece).

Events

- A Research Workshop entitled “Human-environment interaction in the Peloponnese” will be held at NEO on 9-11 November 2015.

Dissemination

- The **Café-NEO** meetings, organized by Navarino Environmental Observatory, will take place at several coffee shops in the Peloponnese.

NEO management

NEO Steering Committee will be held in Athens, 23-24 November.