NEO NEA #6 (July – September, 2012)

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

Activities

Past

Research

• On July 5th and 6th 2012, a research team from Stockholm University, Sweden, consisting of M.S. Martin Finné and M.S. Meighan Boyd (both Department of Physical Geography and Quaternary Geology) and Dr. Nikos Kalivitis and Mr. Giorgos Maneas (both Navarino Environmental Observatory, Messina) in collaboration with archaeologist M.A. Ilias Liakopoulos conducted field work in Kapsia cave, Arcadia prefecture. The permission had kindly been given by the Ephorate of Palaeoanthropology and Speleology of Southern Greece.

• A research team from Stockholm University, Sweden, consisting of M.S. Martin Finné and M.S. Meighan Boyd (both Department of Physical Geography and Quaternary Geology) and Dr. Nikos Kalivitis and Mr. Giorgos Maneas (both Navarino Environmental Observatory, Messina) in collaboration with archaeologist Panagiotis (Takis) Karkanas conducted field work in Alepotrypa cave, Laconia/Diros prefecture on July 9 and 10 2012, after permission had kindly been given by the Ephorate of Palaeoanthropology and Speleology of Southern Greece. Work with material sampling, analysis, and monitoring in the cave will proceed as part of Meighan Boyd’s PhD-project.

• Nikos Zacharias, Nikos Kalivitis and Karin Holmgren submitted a research proposal to Lathis foundation, entitled: Digging the Past of Crete During the Holocene: Proposing an Holistic Assessment of Archaeological, Environmental and Landscape Data.

• The ARGON intensive campaign (Aerosol and Trace Gases observational Campaign at NEO) took place in the period 7 June – 12 July 2012 at NEO premises in Costa Navarino. The campaign was organized by the Academy of Athens and the Stockholm University, with the participation of the National Observatory of Athens (NEO associate partner), the National Technical University of Athens and the University of Crete.
• Dr. Evangelos Gerasopoulos and Dr. Vasilis Amiridis visited NEO on 27-28 August in order to repair the Mutli-filter Rotational Shadowband Radiometer - MFR (Yankee Env. Syst. Inc.), which operates at the NEO spectroradiometric station for measuring diffuse and total radiation to extract columnar optical properties of aerosol over the area. Additionally, they packed the Aerodynamic Particle Sizer to send it for standard maintenance and calibration.

• NEO researchers, Johan Kleman and Ingmar Borgström were in Messinia to do field work on geomorphology for the period 17-22 September 2012.

Education

• Results from the course Landscape Ecology (Course Instructor Sara Cousins) – Theory and Design are made available on our web www.navarinoneo.gr (short version) and on the NEO Mondo site (long version).

• Results from the course Ecohydrology – A Mediterranean perspective (Course instructors: Steve Lyon and Todd Walter) are available in the paper: Lyon, S.W., M.T. Walter, E.J. Jantze, and J.A. Archibald, 2012, Training hydrologists to be ecohydrologists: a “how-you-can-do-it” example leveraging an active learning environment for studying plant-water interaction, Hydrol. Earth Syst. Sci. Discuss., 9, 9337–9360, doi:10.5194/hessd-9-9337-2012

Natura Hall

• The volunteers for Natura Hall for the period August-September EstelaRuiz de Azua Sudupe, Lidia Roncero Crespo and Miron Moraitopoulos arrived on 30 July. An introduction by Karin Holmgren, Giorgos Maneas, Vasilis Karakousis, Fotis Stavrianopoulos took place on 31 July-2 August and departed on 30 September. During their stay they also visited Archelon’s camp in Kyparrisia for two nights and took part to conservation activities for the protection of Caretta-Caretta sea turtle.

• The volunteers for Natura Hall for the period June-July, Karin Ekstedt, Karin Widström and Stathis Charitos departed on 3 August. During their stay they
also visited Archelon’s camp in Kyparrisia for two nights and took part to conservation activities for the protection of Caretta-Caretta sea turtle.

**Dissemination**

- Swedish journalists form the Swedish Radio Science Magazine called Klotet, have interviewed Karin Holmgren about the NEO initiative, visited Temes in Athens and the NEO office at Costa Navarino, 17-19 September. Giorgos Maneas demonstrated some of the on-going NEO activities and Johan Kleman and Ingmar Borgström informed about their research.

![Figure 2: Visit of a Swedish journalist at NEO office at Costa Navarino](image)

**NEO management**

- On 30 July, Giorgos Maneas was recruited as the new Station Manager of NEO following an announcement and recruitment process.
- The NEO Management has followed the completion of the NEO Research Station and among other things procured three bicycles that will be placed at the station.

**Upcoming Research**

- The 2nd NEO Research Workshop, to be held in the new NEO Research Facility. With more than 30 participants coming from several Institutes and Universities, it aims to be an international and multi-disciplinary platform for sharing latest research results and developing new research initiatives. The workshop, entitled Climate and Environmental Change in the Mediterranean Region will be held on 26-27 October 2012 in the NEO Research Station, Costa Navarino, Messinia, Greece. During the first day of the workshop the research themes will include Atmospheric Science, Hydrology and Geomorphology. The second day will include presentations on Past Climate and Environment. A session on educational issues will also take place on the 2nd day.
• A field work on Dendroclimatology is organized for the period 28 October – 11 November. Researcher Paul J. Krusic is planning to visit mountains in Crete, Peloponnesus and central Greece.

**Education**

• The 2nd training course in Air Pollution will take place during 7 and 8/11/2012 at NEO. The course will give the chance to 25 undergraduate students from the Physics Department of the University of Patras, Greece, to:

  - Be informed about the air pollution characteristics at NEO greater area (climatology, local and regional air pollution sources, extreme air pollution events).

  - Trained on chemical compound and aerosol measurements at the NEO Air Pollution Laboratory and the effects on radiative transfer in the atmosphere at the Solar Radiation Measurement Station

  - Be able to process, analyze station data and present their results.

The training course will be developed by Assistant Professor Andreas Kazantzidis (Laboratory of Atmospheric Physics, Physics Department, University of Patras, Greece).

![Figure 3. Students from the 1st training course in Air Pollution at NEO](image)

**Dissemination**

• A major event for the Inauguration of NEO Research Station will be held in Navarino Dunes, Costa Navarino, Messinia, Greece between 26th - 28th October 2012. During these three days, a variety of Cultural and Entertainment events will take place inside Costa Navarino. The Inauguration Ceremony will be held on the 27th of October by Professor Kåre Bremer, Vice-Chancellor of Stockholm University, Professor Gregoris Skalkeas, President of the Biomedical Research Foundation of the Academy of the Academy of Athens and Mr. Achilles Constantakopoulos, President of TEMES S.A.. The President and vice-President
of the Royal Swedish Academy of Sciences will honor the event with their presence.

**NEO management**

- NEO Steering Committee will take place on 29 – 30 October at TEMES offices in Athens.

**Visits to and from NEO**

- The Research Center for Atmospheric Physics and Climatology of the Academy of Athens is organizing a Colloquium on the general topic “The greenhouse effect in our planetary system” to be held at the Academy of Athens on Monday, 29 October 2012 from 09.00 am to 14.30 pm. The President and the Vice President of the Royal Swedish Academy of Sciences will address the Colloquium. NEO management and NEO researchers will attend the Colloquium.
- NEO Director Karin Holmgren was at Messinia from 23 July until 15 August and will be at NEO from 18 to 31 October.