

Carbon Workshop 2015

Observatoire de Haute-Provence

This 10-day course will train **early career scientists** (including advanced PhD students, postdocs, and Junior Faculty) in the discovery and use of **in-situ data** to address emerging issues in **carbon cycle science** including atmospheric science, biogeochemistry and ecosystem science. World-class scientists will provide hands-on instruction in the use of 'big data' from the **ICOS and NEON** observatories while discussing the frontier of carbon science and promoting the discovery of new research opportunities.

ICOS-NEON GREENHOUSE GAS DATA TRAINING WORKSHOP

OHP, Haute-Provence, France

2-12 June 2015

extended deadline
22 April 2014

Program

Practical use cases and scientific hands-on approaches will be offered, focusing on emerging applications for data fusion across scales and regional boundaries. A field trip to visit the atmospheric ICOS station and the O3HP oak field is planned.

<p>Session 1. Overview <i>GHG measurements in the Atmosphere and Ecosystem, Remote Sensing, Global integration</i></p>	<p>Session 4. Carbon Portals <i>Importance of interoperability, ICOS Carbon Portal, NOAA Carbon Portal, NEON data portal, etc.</i></p>
<p>Session 2. Atmosphere approaches <i>Trend analysis, isotopic measurements, inverse modelling, data assimilation, Bayesian approaches</i></p>	<p>Session 5. New frontiers of carbon science <i>Urban Carbon, Lidar remote sensing of forest and biomass, Methane measurements, ...</i></p>
<p>Session 3. Ecosystem approaches <i>Data mining, parameterization and validation of models, data assimilation, Bayesian approaches</i></p>	<p>Session 6. Project <i>Small group collaborative projects and presentations.</i></p>

Venue

The Observatoire de Haute-Provence (OHP, <http://www.obs-hp.fr>) is an Observatory for atmospheric sciences and astronomy situated in Provence, southeast France, about 90 km east of Avignon, 100 km north of Marseille.

A shuttle will be organized to reach the very remote venue from Marseille (and return). The venue is not reachable by public transport.



Registration and detailed information <http://carbonws2015.sciencesconf.org>



Target Audience

This training workshop aims at inspiring early career scientists including advanced PhD students, postdocs, and Junior Faculty to use “big data” to address continental to global scale emerging issues in GHG science. We are seeking early-adopters who wish to broaden and deepen their knowledge or to identify new research opportunities dedicated to GHG research. This 10-day course will be offered to 20-24 participants, who are expected to know basic computer programming in at least one language.

Registration Deadline 22 April 2015 with statement of interest, CV and letter of support

Costs no fee, shared lodging & meals included **Language** English

Organised by **ICOS:** www.icos-infrastructure.eu and **NEON:** www.neoninc.org



Keynote Speakers

Steve Wofsy, Harvard, US
Euan Nisbet and David Lowry, RHUL, UK
Marcel van Oijen, CEH, UK
Eric Ceschia, CESBIO CNES, France
Phil DeCola, Sigma Space, US
Andy Fox, NEON, US
Christina Staudhammer and
Greg Starr, University of Alabama, US
Rebecca Koskela, DataONE, US
Philippe Peylin, LSCE, France
Sara Vicca, Uni Antwerp, Belgium

Organizers

Nadine Schneider, LSCE, France
Hank Loescher, NEON Inc., US
Jean-Daniel Paris, ICOS, France
Lindsay Powers, NEON Inc., US
Catherine Milcent, LSCE, France
Alex Vermeulen, ULUND, Sweden
Bert Gielen, ICOS, Belgium
Felix Vogel, LSCE, France
Irène Xueref-Remy, ICOS, France

About ICOS and NEON

ICOS and NEON research infrastructures are in-situ observation networks providing research data on greenhouse gas fluxes from ecosystems to the atmosphere. Together, ICOS and NEON aim to make these data available without technical, scientific or political barrier. These data typically include greenhouse gas (GHG) concentration, carbon and energy flux observations, and the surface micrometeorology surrounding these measurements. NEON is solely funded by the U.S. National Science Foundation (NSF).

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